City of Miramar
Western Water Treatment Plant

5-Year Mechanical Integrity Testing
Injection Wells IW-1 and IW-2
Report

August 2010

MWH

Miramar EST. 1955
Beauty and Progress

MWH

BUILDING A BETTER WORLD

August 17, 2010

Mr. Joe May, P.G.
Program Manager
Florida Department of Environmental Protection
Underground Injection Control Division
400 North Congress Avenue
West Palm Beach, Florida 33401

SUBJECT: City of Miramar Western Water Treatment Plant
Injection Wells IW-1 and IW-2
Mechanical Integrity Testing Engineering Report
FDEP UIC Permit 125256-007-UO

Dear Mr. May:

In compliance with Chapter 62-528, Florida Administrative Code and Specific Condition 3-k of the above-referenced operating permit, this letter presents the Engineering Report for the Mechanical Integrity Test (MIT) for Concentrate Disposal Wells IW-1 and IW-2. This report is presented by MWH, on behalf of the City of Miramar.

If you have any questions regarding this submittal, please do not hesitate to call.

Respectfully submitted,

MWH

Susan Bodmann

Susan Bodmann, P.G.
Florida P.G. No. PG1575

Attachments: City of Miramar Certification Statement
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Certification

City of Miramar Western Water Treatment Plant
5-Year Mechanical Integrity Testing Injection Wells IW-1 and IW-2

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please let me know if you may have any comments or questions. I can be contacted at (954) 883-6825.

Respectfully submitted,
City of Miramar

Hong Guo, P. E.
Director of Utilities

8-16-2010

Date

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EXECUTIVE SUMMARY

In compliance with Chapter 62-528 Florida Administrative Code (FAC) and Specific Condition 5. d. of the July 18, 2005 modification to the Florida Environmental Protection Department (FDEP) Operating Permit (File: 153722-003-UC) "Full" Mechanical Integrity Tests (MITs) were performed on the two concentrate injection wells (IW-1 and IW-2) at the Western Water Treatment Plant (WTP) located at 4100 South Flamingo Road, Miramar, Florida. The MITs included the performance of a television survey and pressure test of the injection tubing and a Radioactive Tracer Survey (RTS) and High Resolution Temperature (HRT) Log to evaluate the mechanical integrity of the wells.

Both wells have 16-inch outside diameter final casings cemented in place with the IW-1 casing set to 3,095 feet below land surface (bls) and the IW-2 casing set to 3,040 feet bls. The 10.75-inch outside diameter (8.85-inch inside diameter) FRP injection tubings are set in IW-1 and IW-2 to depths of 3,033 and 2,973 feet bls, respectively. The tubings are suspended inside the casing with liner hanger packers. The annulus between casing and tubing is filled with cement.

Mechanical integrity was tested and verified using:

- **Television Survey**. No mechanical defects were observed in either tubing by the video survey performed in each well.
- **Injection Tubing Pressure Test.** Pressure test results were within FDEP criteria for a successful pressure test in both wells.
- **RTS Test**. No apparent movement of the radioactive tracer was observed behind the casing.
- **HRT Log**: No abnormal shifts of temperature within the well.

In addition to the above-mentioned tests, a review of the operational monitoring data from the dual zone monitor well collected over the past five years was performed. Water quality data from the dual zone monitor well and the concentrate stream were plotted for comparison. The injection wells had no visible effect on the water quality trends of either monitor well zone.

No mechanical defects were observed in either well using the prescribed MIT test methods. The water quality data review indicated that the concentrate was not influencing the upper or lower monitor zone. As a result of the tests and analyses performed during this project, both of the wells were determined to possess internal and external mechanical integrity.

The next regularly scheduled Interim MITs on the Western WTP injection wells are required to be completed as follows:

- IW-1 – November 15, 2012
- IW-2 – November 23, 2012

It is anticipated that the Interim MIT Test Plan will be submitted to FDEP before May 19, 2012.

BACKGROUND

The City of Miramar Western WTP injection wells IW-1 and IW-2 were tested for mechanical integrity between December 1999 and January 2000 (five years after well construction). At that time, the mechanical integrity of injection wells IW-1 and IW-2 was verified.

The second MIT work plan for the City of Miramar Western WTP was approved by FDEP on September 15, 2004. The internal mechanical integrity of IW-1 and IW-2 was tested between November and December 2004. Both concentrate injection wells failed the pressure test of the annular space between the final 16-inch OD casing and the 13.375-inch steel injection tubing. On July 18, 2005, FDEP issued the City of Miramar a Major Modification Permit (No. 153722-003-UC) for an alternative design to replace the injection tubing of IW-1 and IW-2 with Fiberglass Reinforced Plastic (FRP) tubing cemented in place.

Modification work on IW-1 began on June 20, 2005, and was completed on August 8, 2005. Modification of IW-1 consisted of removal of the existing 13.375-inch OD steel injection tubing, performance of a video survey and pressure test inside the 16-inch OD steel final casing, and replacement of the steel injection tubing with 10.75-inch nominal size (9.76-inch OD, 8.85-inch ID) FRP tubing that was cemented inside the 16-inch final casing. Modification work on IW-2 began on September 28, 2005 and was completed on November 1, 2005. Modification of IW-2 consisted of removal of the existing 13.375-inch OD steel injection tubing, performance of a video survey and pressure test inside the 16-inch OD steel final casing, and replacement of the steel injection tubing with 10.75-inch nominal FRP tubing cemented inside the 16-inch final casing.

The Notice of Modification Permit No. 153722-003-UC (July 18, 2005) required MITs for both injection wells prior to resuming normal operations. The 2005 MITs were performed between August and November. Pressure tests for IW-1 and IW-2 MITs were performed August 11, 2005, and November 4, 2005, respectively. Results of the last five-year MITs were submitted to FDEP on August 30, 2005 for IW-1 and December 5, 2005 for IW-2. The latest interim MITs were performed in February 2008 and FDEP acknowledged receipt of the Interim MITs Final Report in a letter to the City dated July 1, 2008.

The schedule basis for the current MIT Test Plan is the MITs performed in 2005 as part of the rehabilitation work; therefore, the test completion date for the two wells is August 11, 2010 (IW-1) and November 4, 2010 (IW-2). These dates were also prescribed in the last Interim MIT Final Report, submitted to FDEP on May 9, 2008. The 2010 MIT Test Plan was submitted to FDEP on September 10, 2009 and approved by FDEP on November 19, 2009. As stated in the FDEP Operating Permit No. 125256-007-UO, MIT test reports must be completed and submitted to the Florida Department of Environmental Protection (FDEP) within three months of the test completion dates.

INTRODUCTION

The City of Miramar Western Water Treatment Plant (WTP) is located at 4100 South Flamingo Road, in western Miramar, as shown on the location map in **Figure 1**. The injection wells and dual-zone monitor well are located on concrete pads near the water retention ponds on the East Side of the property as seen in **Figure 2**.

The City began MIT work on the Wastewater Treatment Plant effluent injection wells at the beginning of April 2010 and moved directly to the WTP concentrate injection wells in May 2010, in an effort to establish the same MIT schedule for both sets of injection wells. The below listed tests were performed in order to comply with the requirements specified in the City's Class I Injection Well Operating Permit for the WTP concentrate injection wells MITs:

1. A pressure test of the injection tubing, as required by Chapter 62-528.300(6)(b) 1, and 62-528.300(6)(e)FAC.

2. A video television survey through the entire length of each well from the surface to the base of the injection zone, as required by Chapter 62-528.425 (1)(d) Florida Administrative Code (FAC).

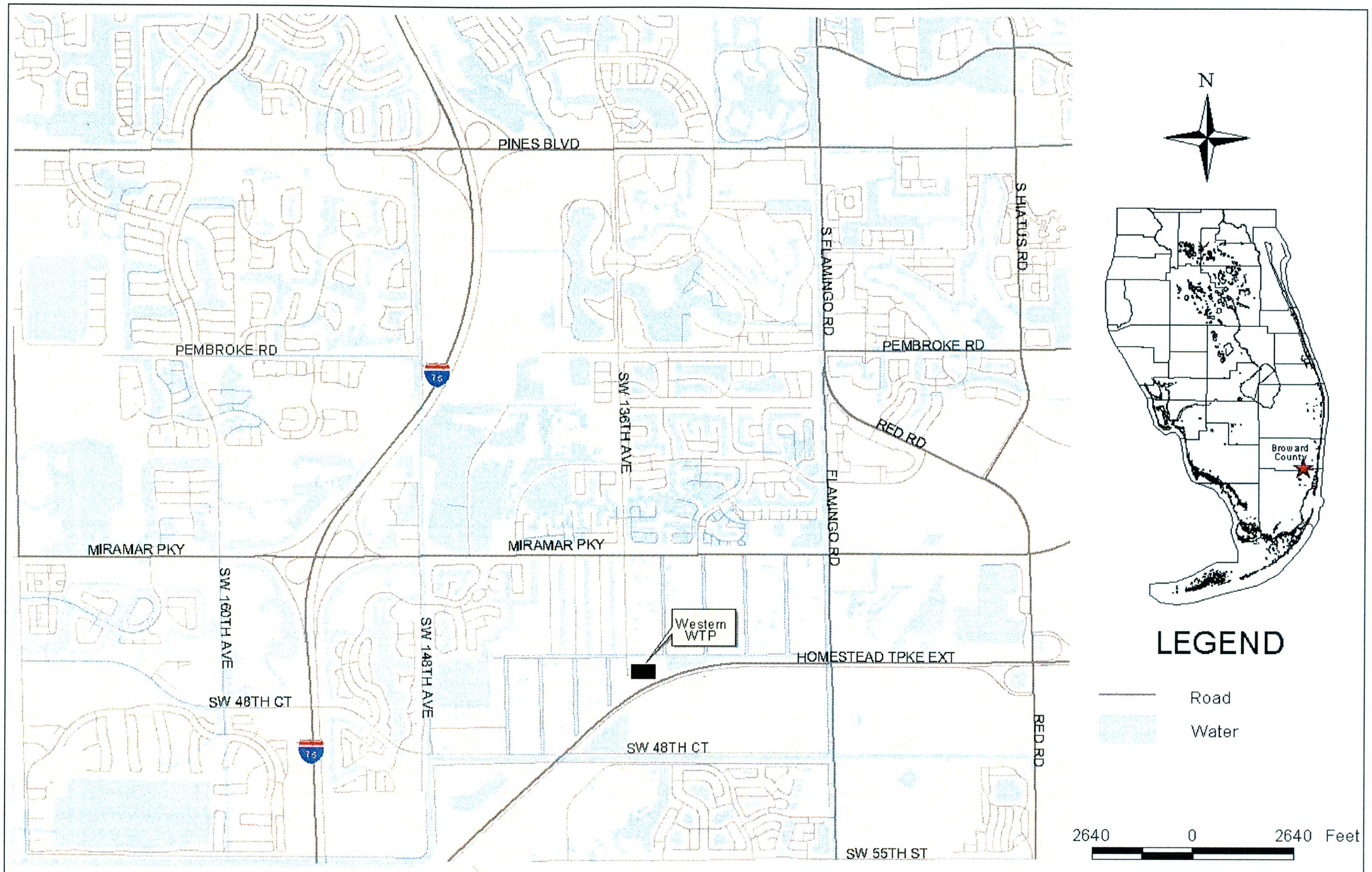
3. Geophysical logging including temperature log, gamma ray log, and radioactive tracer survey, as required by Chapter 62-528.300(6)(c)2 FAC.

CONCENTRATE INJECTION SYSTEM

The City of Miramar concentrate injection system currently consists of two operational injection wells, IW-1 (**Figure 3**) and IW-2 (**Figure 4**). The wells were constructed to Class I Industrial injection well standards and modified as an alternative design to the standard Class I injection well by cementing the replacement tubing inside the final casing. Each well has a 16-inch outside diameter steel casing lined with a nominal 10.75-inch (9.76-inch OD, 8.85-inch ID) fiberglass reinforced plastic (FRP) tubing. The tubing in both injection wells was cemented in place. The wells are currently permitted at a maximum injection rate of 2.08 mgd (1,444 gpm) each.

IW-1

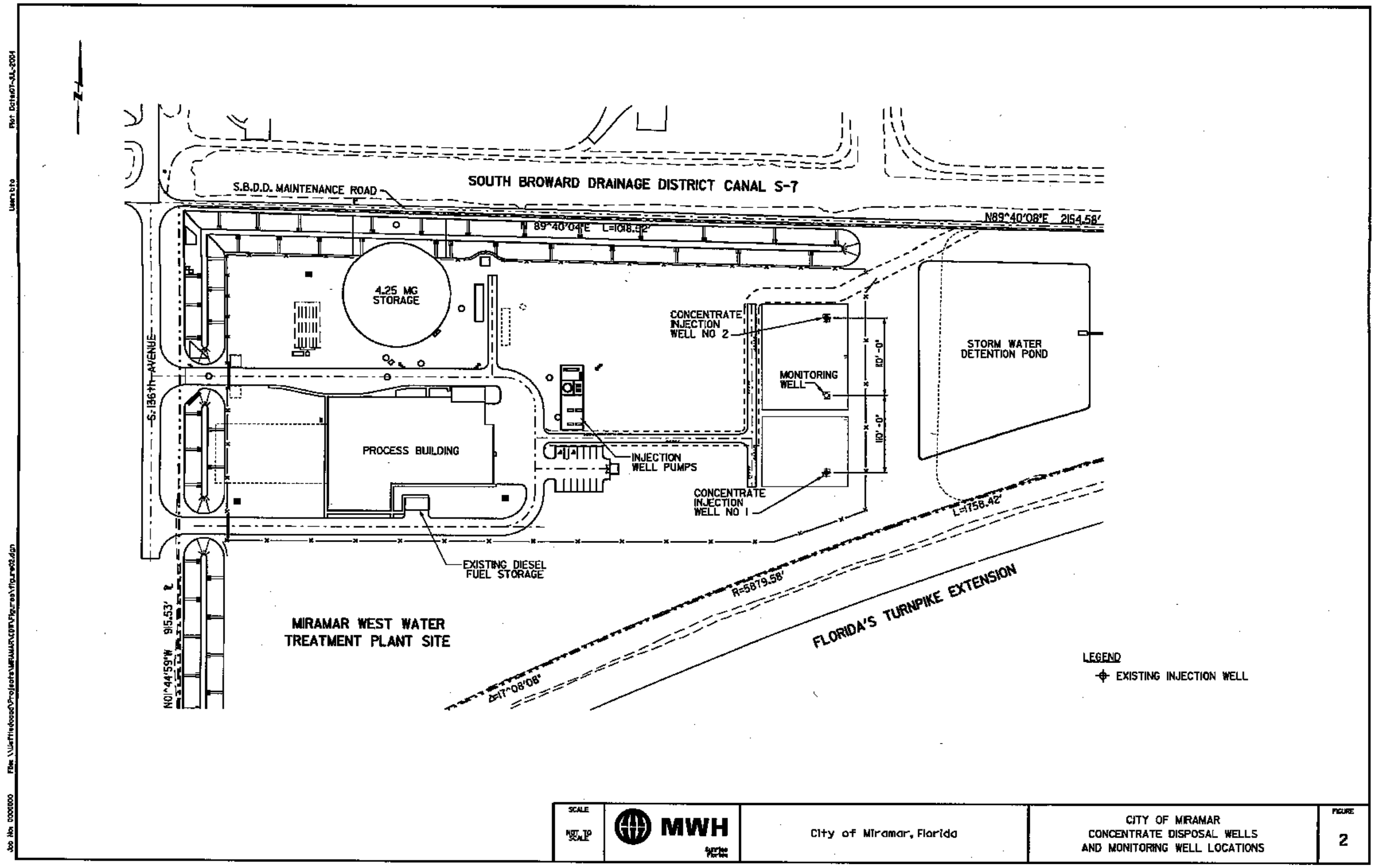
IW-1 has a final casing set and cemented to a total depth of 3,095 feet below land surface (bls). The injection tubing has a total depth of 3,033 feet bls. The well was originally completed with a nominal 16-inch diameter open borehole extending from the bottom of the final casing to approximately 3,500 feet bls. However, during the initial injection tubing run, the tubing was dropped, sealing the borehole below 3,179 feet bls. Based on information obtained during construction, the injection zone in IW-1 is located between 3,100 and 3,179 feet bls, and therefore the borehole below 3,179 feet was not reopened. The average wellhead pressure measured on July 19, 2009, during injection was approximately 44.5 psi, at an average injection rate of 1,082 gpm.



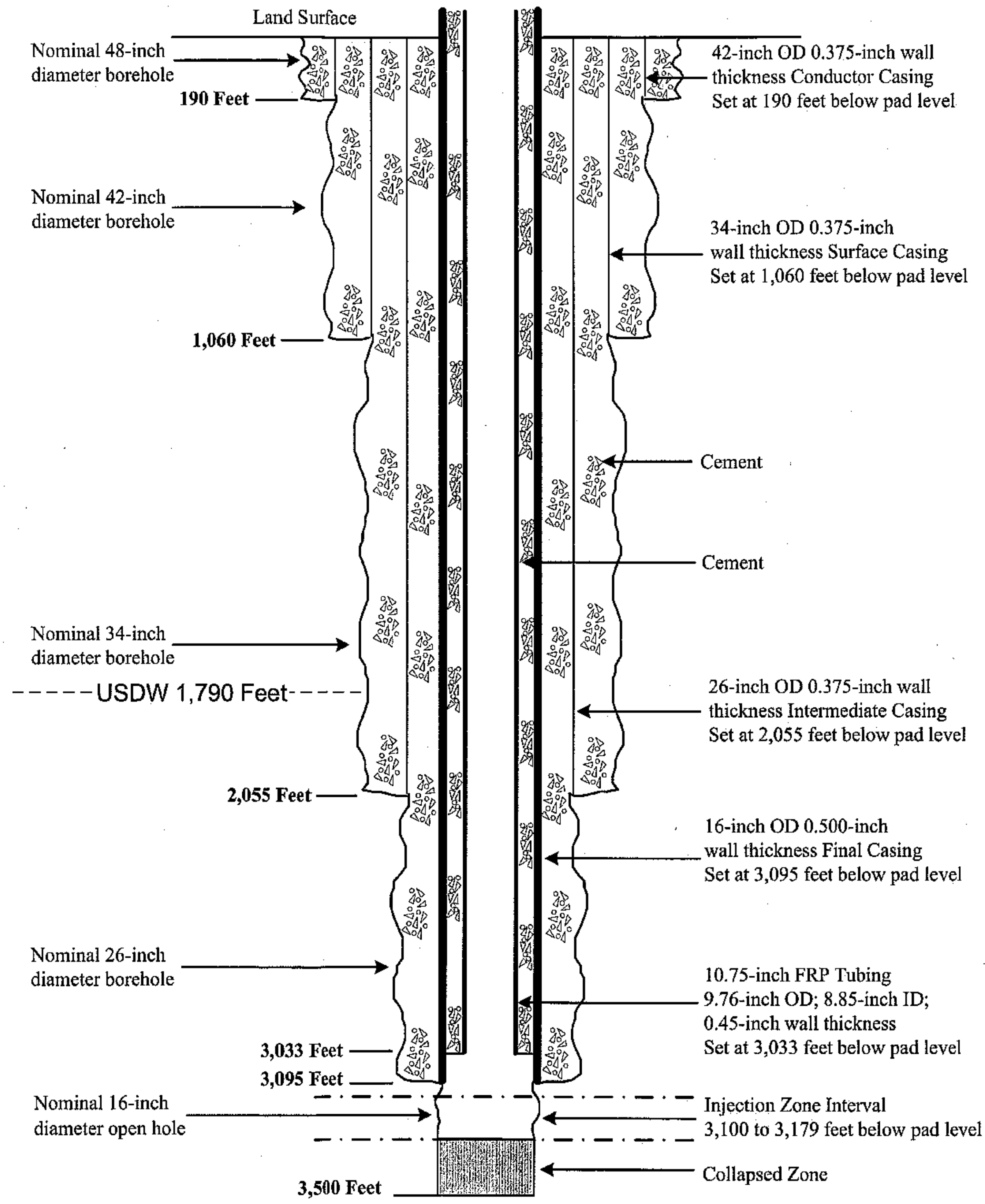
MWH

City of Miramar
Western Water Treatment Plant Location

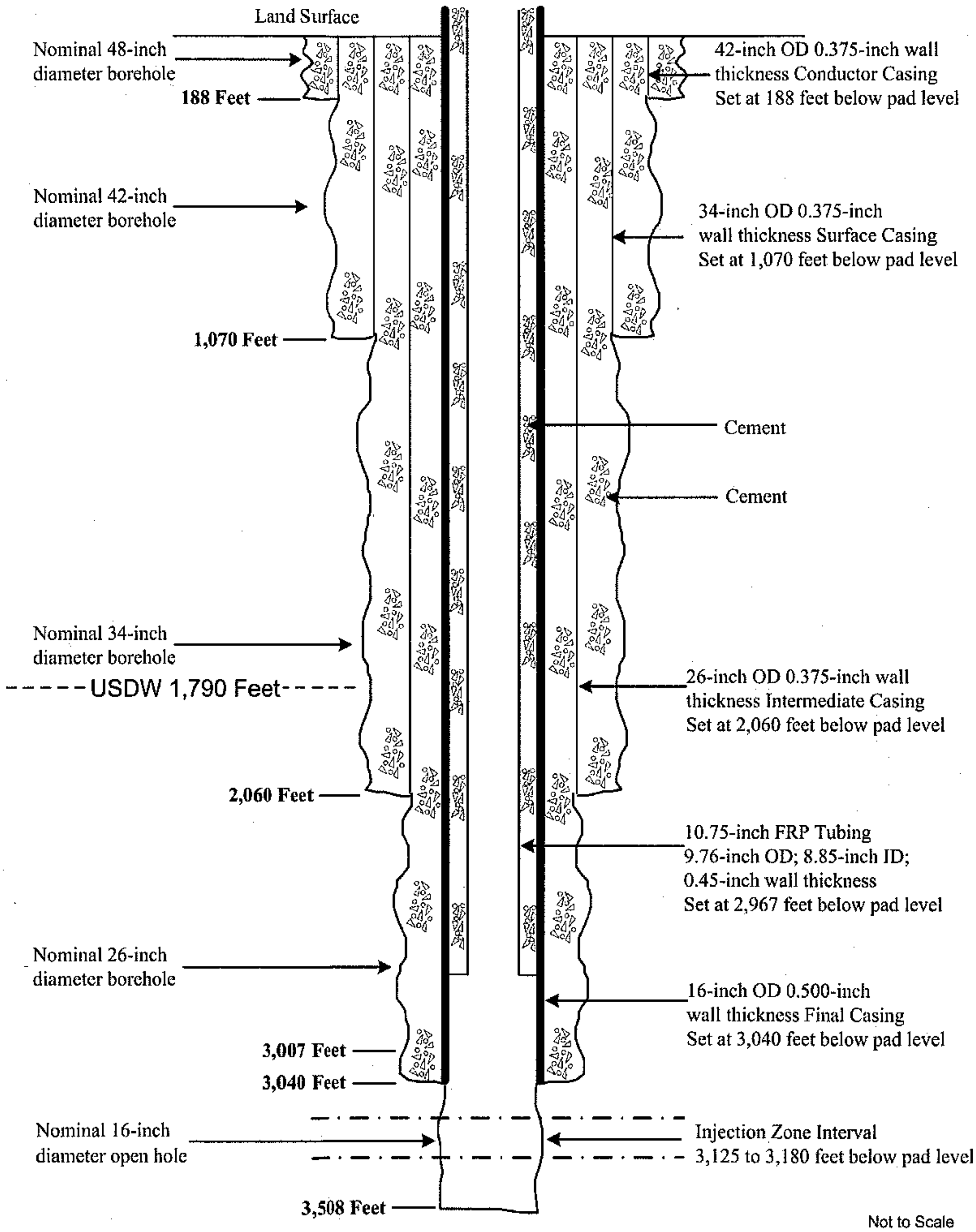
Figure 1



SOUTH BROWARD DRAINAGE DISTRICT CANAL S-7
S.B.D.D. MAINTENANCE ROAD
N89°40'08"E 2154.58'
N 89°40'04"E L=1018.82'
4.25 MG STORAGE
CONCENTRATE INJECTION WELL NO 2
MONITORING WELL
STORM WATER DETENTION POND
10'-0"
10'-0"
PROCESS BUILDING
INJECTION WELL PUMPS
CONCENTRATE INJECTION WELL NO 1
L=1758.42'
EXISTING DIESEL FUEL STORAGE
R=5879.58'
FLORIDA'S TURNPIKE EXTENSION
MIRAMAR WEST WATER TREATMENT PLANT SITE
S.W. 136th AVENUE
N01°44'59"W 915.53'
Δ=17°08'08"
LEGEND
EXISTING INJECTION WELL
SCALE
NOT TO SCALE
MWH
City of Miramar, Florida
CITY OF MIRAMAR
CONCENTRATE DISPOSAL WELLS
AND MONITORING WELL LOCATIONS
FIGURE
2



MWH	Miramar Beauty and Progress	City of Miramar WTP Injection Well - IW-1 Modified	Figure 3



MWH	Miramar	City of Miramar WTP Injection Well - IW-2 Modified	Figure 4

IW-2

IW-2 has a final casing set and cemented to a total depth of 3,046 feet bls. The injection tubing has a total depth of 2,967 feet bls. The well was completed with a nominal 16-inch diameter open borehole extending from the bottom of the final casing to approximately 3,508 feet bls. Based on information obtained during construction, the injection zone in IW-2 is located between 3,125 feet bls and 3,180 feet bls. The average wellhead pressure measured on July 19, 2009, during injection was approximately 46.6 psi, at an average injection rate of 1,163 gpm.

DZMW-1

DZMW-1 (**Figure 5**) was installed at the WTP site between IW-1 and IW-2. The DZMW-1 is located 110 feet north of IW-1, and 110 feet south of IW-2. The DZMW was completed with a nominal 6-inch diameter monitoring casing set at 1,930 feet bls. The upper monitor zone is completed in the interval between 1,639 feet bls and 1,738 feet bls. The lower monitor zone is completed in the interval between 1,930 feet bls, and 2,005 feet bls. The DZMW-1 was designed and constructed to monitor both IW-1 and IW-2.

MECHANICAL INTEGRITY

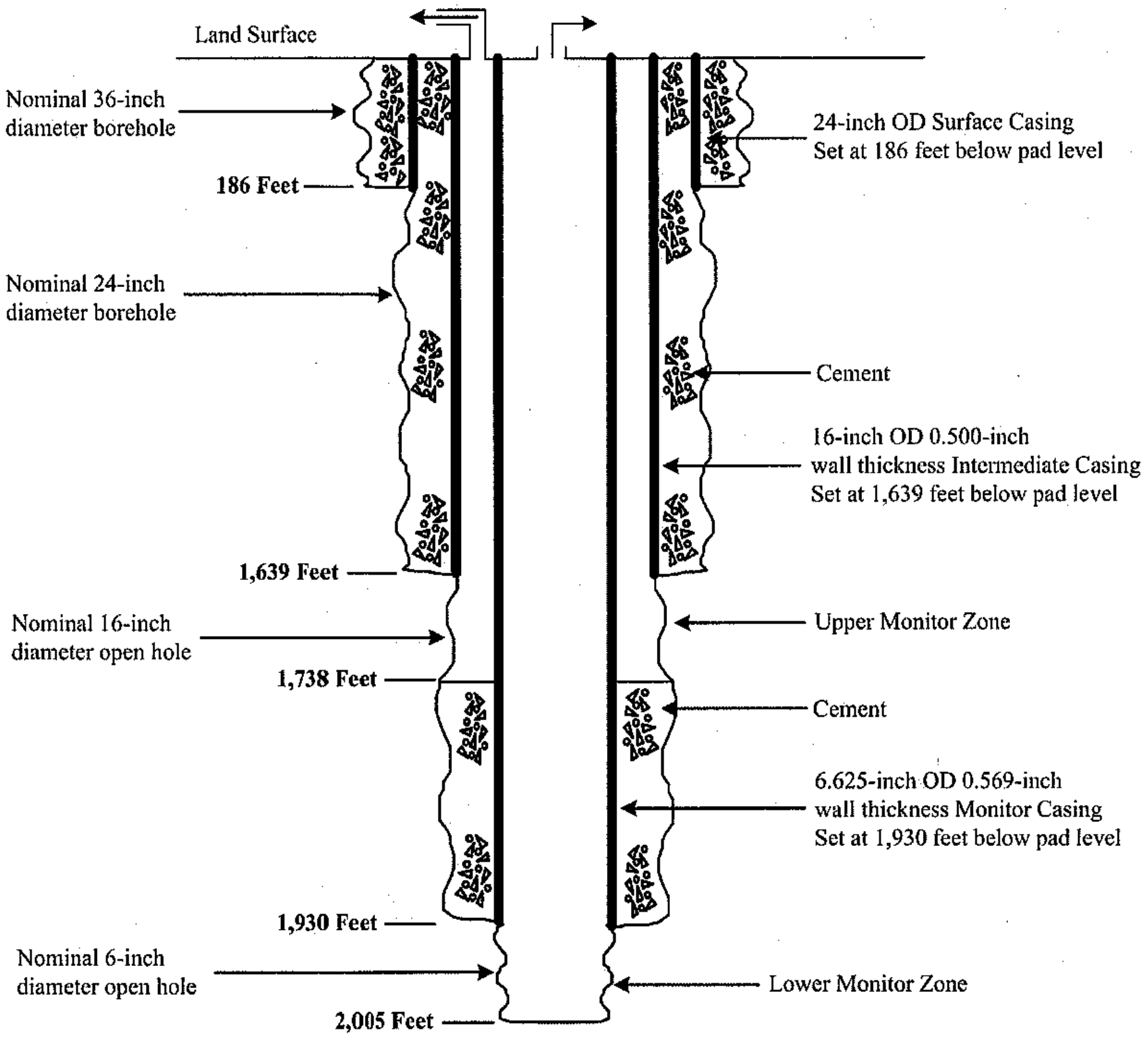
In accordance with Chapter 62-528, FAC, the concentrate injection wells at the City of Miramar WTP were tested for mechanical integrity. Testing consisted of a video survey and hydrostatic pressure test of the injection tubing, a high resolution temperature (HRT) log, and a radioactive tracer survey (RTS). The television survey provides visual verification of the injection tubing integrity. The hydrostatic pressure test was conducted at a pressure at least 50 percent greater than the maximum allowable operating pressure to confirm injection tubing integrity. The temperature log identifies temperature variations in the well. The RTS provides data on the external mechanical seal of the casing. The following describes the testing methods, results of the testing, and an interpretation of the data collected during the mechanical integrity tests. **Table 1** lists the test dates of the tests performed at each well.

Table 1
2010 MITs Testing Dates

Test	IW-1	IW-2
Video Survey	May 17, 2010	May 24, 2010
Pressure Test	May 19, 2010	May 26, 2010
HRT Log	May 21, 2010	May 28, 2010
RTS	May 21, 2010	May 28, 2010

Video Survey

Concentrate Injection Well IW-1 Video: A video survey of the 10.75-inch nominal FRP tubing and open hole in IW-1 was performed on May 17, 2010. The survey was performed from pad level to a depth of 3,119 feet bls. Water clarity was good, enabling the camera to capture clear



MWH	Miramar	**City of Miramar WTP** **Dual Zone Monitor Well** **DZMW-1**	**Figure** **5**

images of the tubing, tubing seat and open hole section of the well. The survey revealed that the injection tubing is in good condition. The bottom of the tubing was identified at 3,031.5 feet bls. The base of the 16-inch final casing was not distinguishable on the video. The cement basket used to cement the 16-inch final tubing is located at approximately 3,052 feet bls and the bottom of the navigable open hole was encountered at 3,119 feet bls where it is blocked by debris. A description of observations is included in **Appendix B.** The condition of IW-1 tubing indicates apparent internal mechanical integrity.

Concentrate Injection Well IW-2 Video: A video survey of the 10.75-inch nominal FRP tubing and open hole in IW-2 was performed on May 24, 2010. The video showed that the FRP tubing interior was in good condition over the entire length. The bottom of the tubing was observed at approximately 2,970 feet bls and the base of the 16-inch final casing was observed at approximately 3,045 feet bls. All of the joints were visible and there were no observable defects in the casing wall. A low visibility area in the open hole was encountered at 3,098 feet bls and flow past the camera was visible. Visibility cleared at approximately 3,107 feet bls and the bottom of the navigable hole was reached at 3,152 feet bls. The condition of the IW-2 tubing indicates apparent internal mechanical integrity.

Injection Tubing Pressure Test

Concentrate Injection Well IW-1 Pressure Test: On May 19, 2010, an inflatable packer was set at 3,013 feet bls, 18 feet above the bottom of the 10.75-inch FRP tubing. The packer was inflated and the tubing was internally pressurized to 147.2 psi. A pressure decrease of 3.8 psi was observed over the sixty-minute test period. This decrease represents a 2.6-percent change in the original pressure which is within the 5-percent limit specified by the regulation. Upon conclusion of the pressure test, the pressure held on the casing was bled-off and the fluid discharged was collected, measured, and recorded. The test was witnessed by Susan Bodmann, P.G., of MWH and Heidi Vandor, P.G., representing FDEP. A copy of the test gauge calibration certificate and the results of the hydrostatic pressure test are presented in **Appendix C.**

IW-2 Pressure Test

Concentrate Injection Well IW-2 Pressure Test: On May 26, 2010, an inflatable packer was set at 2,953 feet bls, 17 feet above the bottom of the 10.75-inch FRP tubing. The packer was inflated and the tubing was internally pressurized to 135.5 psi. A pressure decrease of 2.7 psi was observed over the sixty-minute test period. This decrease represents a 2.0-percent change in the original pressure which is within the 5-percent limit specified by the regulation. Upon conclusion of the pressure test, the pressure held on the casing was bled-off and the fluid discharged was collected, measured and recorded. The test was witnessed by John Largey of MWH and Heidi Vandor, P.G., representing FDEP. A copy of the test gauge calibration certificate and the results of the hydrostatic pressure test are presented in **Attachment C.**

Injection Well Temperature Log

Concentrate Injection Well IW-1 Temperature Log: On May 21, 2010 after a minimum of 12 hours of static conditions, a temperature log was conducted on IW-1 from the surface to a depth of 3,100 feet bls. The temperature log recorded a steady decrease in temperature from 80.4

degrees Fahrenheit at just bls to 73.7 degrees Fahrenheit at 2,400 feet bls. Beyond 2,400 feet bls the temperature increased to 78.4 degrees Fahrenheit to a depth of 2,650 feet bls. Temperature decreased slightly from 78.4 degrees Fahrenheit at 2,650 feet bls to 78.0 degrees Fahrenheit at approximately 2,900 feet bls and then increased over the remaining distance to 78.7 degrees Fahrenheit at the base of the navigable open hole.

Concentrate Injection Well IW-2 Temperature Log: On May 28, 2010 after a minimum of 12 hours of static conditions, a temperature log was conducted on IW-2 from the surface to a depth of 3,100 feet bls. The temperature log recorded a steady decrease in temperature from 79.2 degrees Fahrenheit at just bls to 72.6 degrees Fahrenheit at 2,350 feet bls. Beyond 2,350 feet bls the temperature increased to 75.1 degrees Fahrenheit at a depth of 2,450 feet bls and then decreased again to 74.4 degrees Fahrenheit over the next 100 feet (2,500 feet bls). Temperatures raised again from 74.4 degrees Fahrenheit at 2,500 feet bls to 77.6 degrees Fahrenheit at 2,600 feet bls. Temperatures then decreased from 77.6 degrees Fahrenheit at 2,600 feet bls to 76.5 degrees Fahrenheit at approximately 2,900 feet bls. Temperature from 2,900 feet bls to 3,100 feet bls increased from 76.5 degrees Fahrenheit to 78.1 degrees Fahrenheit.

Injection Well Radioactive Tracer Survey (RTS)

Concentrate Injection Well IW-1 RTS: On May 21, 2010, a RTS was conducted on IW-1. A description and interpretation of the RTS is presented in the following text. Youngquist Brothers, Inc., Geophysical Logging Division conducted a background Gamma Ray Log (GRL) and a casing collar locator (CCL) log on May 21, 2010. The background GRL, which was "memorized," was reprinted on each "out of position" logging run to serve as a means of comparison. A schematic diagram of the logging tool is represented at the top of the radioactive tracer survey log as is the title of the specific log type. The logging tool ejector was calibrated to 0.25 millicuries (mCi) per second discharge, and the reservoir was loaded with 6 mCi of radioactive Iodine-131. Copies of the flow meter calibration certificate and tracer (Iodine-131) assay are presented in **Appendix D**.

The first test (Dynamic Test #1) was conducted at an injection rate of 15 gallons per minute (gpm) using potable water. The test was conducted by positioning the tracer ejector five feet above the bottom of the casing (3,085 feet bls), setting the recorder in the time drive mode, and ejecting a 1 mCi slug of tracer material. The readings from the middle gamma ray detector began to increase from background within 50 seconds of ejection. The readings from the bottom detector increased from background approximately 5 minutes and 50 seconds after ejection. No increase in gamma detection by the top gamma ray detector was observed during the 60 minute monitoring period. The tool was then logged out of position (LOP#1) up to a depth of 2,850 feet bls. The tool reservoir leaked slightly going through the remnant of the cement basket at 3,052 feet bls. The results of the log out of position showed no indication of tracer material movement up hole. The final casing was then flushed with potable water. Following the flush, a log after flush was conducted (LAF#1) from below the casing to approximately 2,900 feet bls. This log showed that no tracer material had moved up behind the casing. The results are interpreted as providing evidence of external mechanical integrity.

A second test (Dynamic Test #2) was conducted at an injection rate of 15 gpm using potable water. The tracer ejector was positioned five feet above the bottom of the casing, the recorder was set in the time drive mode, and 1 mCi of tracer material was ejected. The readings from the middle gamma ray detector began to increase from background within 60 seconds of ejection. The readings from the bottom detector increased from background approximately 3 minutes and 40 seconds after ejection. No increase in gamma detection by the top gamma ray detector was observed during the 30-minute monitoring period. The tool was then logged out of position (LOP#2) up to a depth of 2,840 feet bls. The tool reservoir leaked slightly going through the remnant of the cement basket at 3,052 feet bls. The results of the log out of position showed no indication of tracer material movement up hole. The final casing was then flushed with potable water.

Following flushing, a gamma ray log was run to the total depth of the well. This log shows that all tracer material had been flushed out of the casing because the gamma ray levels on all three detectors returned to background levels. The background logs were recorded over traces of the initial background log and showed excellent repeatability on all detectors. The RTS was witnessed by Susan Bodmann, P.G., MWH and Heidi Vandor, P.G., representing FDEP. This log confirmed the conclusion of Dynamic Test #2. These results from the two Dynamic Tests are interpreted as providing evidence that the casing has integrity and there are no channels behind the casing.

Concentrate Injection Well IW-2 RTS: On May 28, 2010, a RTS was conducted on IW-2. A description and interpretation of the RTS is presented in the following text. Youngquist Brothers, Inc., Geophysical Logging Division conducted a background GRL and a CCL log on May 28, 2010. The background GRL was reprinted on each "out of position" logging run to serve as a means of comparison. The logging tool ejector was calibrated to 0.25 mCi per second discharge, and the reservoir was loaded with 6 mCi of radioactive Iodine-131. Copies of the flow meter calibration certificate and tracer (Iodine-131) assay are presented in **Appendix D**.

The first test (Dynamic Test #1) was conducted at an injection rate of 14 gpm using potable water. The test was conducted by positioning the tracer ejector five feet above the bottom of the casing (3,036 feet bls), setting the recorder in the time drive mode, and ejecting a 1 mCi slug of tracer material. The readings from the middle gamma ray detector began to increase from background within 1 minute and 20 seconds of ejection. The readings from the bottom detector increased from background approximately 4 minutes and 50 seconds after ejection. No increase in gamma detection by the top gamma ray detector was observed during the 60-minute monitoring period. The tools were then logged out of position (LOP#1) up to a depth of 2,840 feet bls. The results of the log out of position showed no indication of tracer material movement up hole. The final casing was then flushed with potable water. Following the flush, a Log after Flush (LAF#1) was conducted from below the casing to 2,850 feet bls. This log showed that no tracer material had moved up behind the casing.

A second test (Dynamic Test #2) was conducted at an injection rate of 14.5 gpm using potable water. The tracer ejector was positioned five feet above the bottom of the casing, the recorder was set in the time drive mode, and 1 mCi of tracer material was ejected. The readings from the middle gamma ray detector began to increase from background within 1 minute and 5 seconds of ejection. The readings from the bottom detector increased from background approximately 5 minutes and 43 seconds after ejection. No increase in gamma detection by the top gamma ray detector was observed during the 30-minute monitoring period. The tool was then logged out of position (LOP#2) up to a depth of 2,850 feet bls. The results of the log out of position showed no indication of tracer material movement up hole. The final casing was then flushed with potable water.

Following flushing, a final gamma ray log was run to the total depth of the well. This log shows that all tracer material had been flushed out of the casing because the gamma ray levels on all three detectors returned to background levels. The background logs were recorded over traces of the initial background log and showed excellent repeatability on all detectors. The RTS was witnessed by John Largey, MWH and Gardner Strasser, P.G., representing the FDEP. These results from the two Dynamic Tests are interpreted as providing evidence that the casing has integrity and there are no channels behind the casing.

TEST RESULTS SUMMARY

The video surveys did not reveal any structural defects in the casing, the pressure tests on both wells satisfied the 5-percent tolerance established by FDEP, the HRT log did not show indications of sharp temperature change inside the well casing, and the RTS results indicate that the casings in both wells show no fluid movement upward behind the casings. In summary, the tests indicated that both IW-1 and IW-2 demonstrated mechanical integrity.

OPERATING DATA REVIEW

Operating data corresponding to the past five years of well operation were reviewed. The operating data includes flow rates, and injection pressures for IW-1 and IW-2 and pressure data for the associated dual-zone monitor well upper and lower zones. A copy of the operating data is presented in tabular and graphic form in **Appendix E**.

The following is a brief summary of the operating data review findings:

Summary of IW-1 and IW-2 Operating Data

Well modification work began on IW-1 in June 2005 and was completed in August 2005. Modification of IW-1 consisted of removal of the existing 13.375-inch OD steel injection tubing and replacement with 10.75-inch nominal size (9.76-inch OD, 8.85-inch ID) FRP tubing cemented inside the 16-inch final casing. The well was tested for mechanical integrity following rehabilitation and a short injection test was performed in September 2005.

Well modification work on IW-2 began on September 28, 2005 and was completed on November 1, 2005. Modification of IW-2 consisted of removal of the existing 13.375-inch OD steel injection tubing and replacement of the steel injection tubing with 10.75-inch nominal FRP tubing cemented inside the 16-inch final casing. The well was tested for mechanical integrity following rehabilitation and a short injection test was performed in December 2005.

The City also initiated an expansion of the Western WTP with the addition of treatment capacity. Brackish water from the Floridan aquifer was developed as a water supply for the additional treatment capacity. Floridan Well 1 (F1) and Floridan Well 2 (F2) were drilled, developed and tested between January and October 2008. F1 was completed between 1,052 feet and 1,350 feet below ground surface (bgs) and F2 was completed between 1,052 feet and 1,350 feet bgs. Variable pumping tests were conducted in F1 and F2 in December and November 2008, respectively. The pumping rate for the Constant Rate test performed in F1 on December 15, 2008 over a 24-hour period was approximately 2,050 gallons per minute.

DZMW-1 Upper Monitor Zone Pressures

The upper monitor zone is completed within the interval from 1,639 to 1,738 feet bls. Reported pressures were erratic between January 1, 2005 through August 31, 2005 due to equipment issues. Monitoring systems were upgraded during the period of injection well repair. The upper monitor zone water levels have remained very stable at approximately 14 psi to 15 psi from September 1, 2005, to the end of the period of review. Between October and December 2008 there is a 1 psi depression in the upper monitor zone data. This may be a result of Floridan well development and testing.

DZMW-1 Lower Monitor Zone Pressures

The DZMW-1 lower zone is completed within the interval from 1,930 to 2,005 feet bls. Recorded pressures were very stable at approximately 14 psi from January 1, 2005 through August 2005. Between September 2005 and November 2006 the reported pressures appear to decrease to 1 psi, increase to a maximum of 11 psi, and decrease again to 1 psi. From November 2006 to June 2008 recorded pressures rose and leveled out around 2 psi. Pressures again increased and readings became erratic between June 2008 and the end of the reported period, averaging around 5 psi. The erratic nature of the pressure record over the period examined does not appear to correspond to the injection flows reported.

WATER QUALITY DATA REVIEW

The City's FDEP permit Special Condition 3.c.1) & 2) list the monthly and quarterly water quality parameters to be collected from the dual-zone monitor well upper and lower monitor zones and from the concentrate effluent. Collected samples are sent to a certified laboratory for analysis. Water quality laboratory results are included in the City's monthly operating reports submitted to FDEP. The water quality results are used to assess the mechanical integrity of the injection well system. The laboratory results are presented in both tabular and graphic format in **Appendix F**.

The following is a brief summary of the observed trends of the water quality data from each monitor zone within DZMW-1 and the concentrate stream:

Upper Zone (1,639 to 1,738 feet bls)

- Chlorides averaged around 3,500 mg/L and were constant over the 5-year review period.

- Specific Conductance averaged approximately 10,000 µmhos/cm and recorded laboratory results were generally constant over the 5-year review period.
- TDS results have averaged approximately 6,500 mg/L and have been relatively constant over the 5-years review period.
- Temperature readings have averaged 22° C over the reporting period with no significant trends evident in the data.
- Ammonia-Nitrogen values remained below 1.0 mg/L with consistent detections between February 2007 and August 2008. Spikes were also recorded in 2009 for the February, June, and September samples and for the February 2010 sample.
- TKN values average around 1.5 mg/L with detects occurring between February and August on most years. No other patterns were observed in the data.
- Nitrate, generally, has been reported below the detection limit.
- Phosphorus values fluctuated between non-detect and 2.8 mg/L. Detections occurred more often between 2005 and 2008. Since 2008, detections have been below 0.1 mg/L. No trends in the data were observed.
- pH values averaged around 8.0 standard units (su). No significant trends were observed in the data during the 5-years review period.
- Recorded sulfate concentrations average approximately 450 mg/L over the 5-year review period. No significant trends were observed in the data.

Lower Zone (1,930 to 2,005 feet bls)

- Chlorides averaged approximately 18,500 mg/L over the 5-year review period. From January 2005 to the first quarter of 2007, chloride concentrations appeared to dropoff from approximately 20,000 mg/L to 15,000 Mg/L. Between April and August 2007, chloride concentrations rose and appeared to stabilize at an average of 18,500 mg/L through the present.
- Specific Conductance values remained relatively steady throughout the 5-year review period at approximately 50,000 •mhos/cm. No trends were observed in the data.
- TDS concentrations appeared to be stable at approximately 32,500 mg/L from January 2005 through the end of 2006. Recorded readings became somewhat erratic from January 2007 through August 2008. Concentrations stabilized at around 31,500 mg/L through the present. No significant trend was observed in the data.
- Temperature readings have averaged 22° C over the reporting period with no significant trends evident in the data.
- Ammonia-Nitrogen concentrations were below detection for most of the 5-year review period. Detections from July 2007 through July 2008 appeared to be more frequent and averaged around 0.5 mg/L. No significant trends were observed in the data.
- TKN values average around 1.5 mg/L with detects occurring between February and August on most years. No other patterns were observed in the data.
- Nitrate, generally, has been reported below the detection limit.
- Low level (<0.5 mg/L) Phosphorus detections occurred between August 2006 and August 2007 and several additional detects occurred in June-August 2008. All other recorded data was generally below the method detection limit. No trends were observed in the data.
- pH values have averaged 7.5 su. No trends were observed in the data.

- Sulfate concentrations rose from approximately 2,000 mg/L to approximately 2,400 mg/L over the 5-year review period.

Concentrate Effluent

- Chlorides concentrations in the concentrate effluent increased slightly from 800 mg/L to 1,100 mg/L over the 5-year review period.
- Specific Conductance values remained relatively stable from January 2005 through the middle of 2008 averaging around 4,500 •mhos/cm. From the middle of 2008 through the present, a slight increase from 4,500 to an average of 6,000 mg/L.
- TDS concentrations remained steady averaging around 3,100 mg/L throughout the 5-year review period. No trends were observed in the data.
- Temperature readings for the concentrate effluent ranged between 21° and 23° C over the 5-year review period.
- Total Suspended Solids – Not reported
- Ammonia-Nitrogen concentrations rose from approximately 1.5 mg/L in January 2005 to approximately 2.5 mg/L in August 2007. From August 2008 to March 2009 concentrations dropped off rising again after March and ending the review period at an average concentration of 3.5 mg/L.
- TKN concentrations were steady averaging around 6 mg/L from January 2005 through January 2008. In 2008, TKN concentrations rose to and finished out the review period averaging around 8 mg/L.
- Nitrate, generally, has been reported below the detection limit.
- Phosphorus values rose slightly from approximately 0.2 mg/L to around 0.4 mg/L in April 2008. Readings were higher through the end of 2008 and then decreased averaging around 0.5 mg/L to the end of the 5-year review period.
- pH values averaged around 6.5 su through March 2008 when they increased to an average of 7.5 su through the end of the review period.
- Sulfate concentration averaged around 950 mg/L from January 2005 through April 2008. Values decreased sharply over the next few months to settle at an average concentration around 100 mg/L through the present.

Summary of Water Quality Data

The water quality data from DZMW-1 upper and lower monitor zones complement the television surveys, hydrostatic pressure tests and RTS tests performed in IW-1 and IW-2. The review of monitoring data did not indicate movement of concentrate or formation fluids into the monitor zones. While the data indicate that there have been some minor fluctuations over the 5-year period reviewed, none of the parameters examined for the upper and lower monitor zones have any correlation to the concentrate effluent parameter concentrations. Most of the water quality data examined show no discernable trends. No indication of the presence of concentrate in the upper or lower monitor zone was observed.

CONCLUSIONS

The video surveys did not reveal any structural defects in the casing and the results of the hydrostatic pressure tests conducted on IW-1 and IW-2 confirmed that the injection casings of both wells are sound and show internal mechanical integrity. The RTS results indicated that there was no apparent movement of fluid behind the final casings of either well and review of operating and water quality data provided no indication that upward migration of concentrate effluent fluids from the injection zone have occurred. Testing results validate that the concentrate injection well system at the City of Miramar western water treatment plant are mechanically intact.

FUTURE ACTIONS

The following items were noted during review of the operating and water quality data.

- Calibration and accurate data transmission should be verified for all flow and pressure meters. Deviations from operational changes should be noted on the monthly operating reports.
- Request to abandon shallow Pad Monitor Wells around Injection Well containment should be submitted to FDEP.

Appendices

Appendix A

MIT Plan and Approval Letter

Mechanical Integrity Testing Plan

MWH

September 9, 2009

Mr. Joe May, P.G.
Program Manager
Florida Department of Environmental Protection
Underground Injection Control Division
400 North Congress Avenue
West Palm Beach, Florida 33401

SUBJECT: City of Miramar Western Water Treatment Plant
Injection Wells IW-1 and IW-2
Test Plan for 5 Year Mechanical Integrity Test
UIC Permit 125256-007-UO

Dear Mr. May:

In compliance with Chapter 62-528 of the Florida Administrative Code and Specific Conditions Testing and Reporting Requirement 3(k) of the above-referenced operating permit, this letter presents a test plan for performing a Mechanical Integrity Test (MIT) for Concentrate Disposal Wells IW-1 and IW-2. This plan is presented by MWH, on behalf of the City of Miramar. It is the City's intent to implement this test plan upon approval by the Florida Department of Environmental Protection. The estimated schedule for the start of testing activities is March, 1 2010.

The MIT Plan is comprised of two attachments, in addition to the City's certification statement and this cover letter. Attachment A provides the MIT procedures and Attachment B provides a tentative schedule for testing implementation.

Should you have any questions regarding this submittal, please do not hesitate to contact us at 954-846-0401 or via email at susan.bodmann@mwhglobal.com.

Best Regards,

MWH Americas, Inc.

Susan Bodmann
Principal Hydrogeologist
Licensed Professional Geologist No. PG 0001575

Enclosed: City of Miramar Certification Statement
Attachment A - Test Plan
Attachment B - Schedule

cc: Distribution List
MWH File: 1007122/3.1.6 & 6.2

City of Miramar
Western Water Treatment Plant MIT Plan
Operating Permit 125256-007-UO
Technical Advisory Committee (TAC) / Distribution List

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Underground Injection Program
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West Palm Beach, FL 33401
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Fax Phone: 561/681-6760

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FDEP
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MIRAMAR
BEAUTY AND PROGRESS
EST 1955

City of Miramar
An Equal Opportunity Employer

Utilities Department
13900 Pembroke Road
Miramar, Florida 33027

Phone: (954) 883-6888
TDD: (954) 602-3802
Fax: (954) 602-4710

September 8, 2009

Mr. Joe May, P.G.
Program Manager
Florida Department of Environmental Protection
Underground Injection Control Division
400 North Congress Avenue
West Palm Beach, Florida 33401

RE: City of Miramar Western Water Treatment Plant
Injection Wells IW-1 and IW-2
MIT Test Plan UIC Permit 125256-007-UO

Dear Mr. May:

I have reviewed the Test Plan for the Mechanical Integrity Test of Injection Wells IW-1 and IW-2 prepared by MWH dated August 17, 2009, and in accordance with Rule 62-528.340(4), F.A.C, provide the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please let me know if you have any comments or questions. I can be contacted at (954) 883-6825.

Sincerely,

Hong Guo, P.E.
Director of Utilities

Enclosure

HG/knm

cc: Carol Vassell, City of Miramar
Sangeeta Dhulashia, MWH
Susan Bodmann, MWH
MWH File: 1007122/3.1.2

Mechanical Integrity Test Plan
City of Miramar Injection Wells No. 1 & No. 2

ATTACHMENT A
FIVE YEAR MECHANICAL INTEGRITY TEST PLAN
UIC PERMIT 125256-007-UO

The City of Miramar is required to perform Mechanical Integrity Tests (MIT's) to demonstrate the mechanical integrity of injection wells IW-1 and IW-2 at their Western Water Treatment Plant. The regular MIT's, also referred as full MIT's, are required to be performed at least once every five years during the life of the injection well. In addition, due to the major modifications of the injection wells in 2005; interim MIT's are also required every two and one half years. The modifications for each well consisted of removing the existing 13.375-inch outside diameter steel injection tubing with a fluid filled annulus and installing a fully cemented 10.75-inch Fiberglass Reinforced Plastic (FRP) tubing.

The Notice of Modification Permit number 153722-003-UC (July 18, 2005) required MIT's for both injection wells prior to resuming normal operations. The 2005 MIT's were performed between August and November. Pressure tests for IW-1 and IW-2 MIT's were performed August 11, 2005 and November 4, 2005, respectively. Results of the last five year MIT's were submitted to FDEP on August 30, 2005 for IW-1 and December 5, 2005 for IW-2. The latest interim MIT's were performed in February 2008 with the Interim MIT Final Report acknowledgment letter from FDEP dated July 1, 2008. The schedule basis for this MIT Test Plan is the MIT performed in 2005; therefore, the test completion date for the two wells is August 11, 2010 and November 4, 2010. These dates were also prescribed in the last Interim MIT Final Report, submitted to FDEP on May 9, 2008. As stated in the operating permit number 125256-007-UO, MIT test reports must be completed and submitted to the Florida Department of Environmental Protection (FDEP) within three months of the test completion dates.

The City of Miramar Water Treatment Plant (WTP) is located at 4100 South Flamingo Road, in western Miramar, as shown in the location map in **Figure 1.** The injection wells and monitor well are located on concrete pads near the water retention ponds on the East Side of the property as seen in **Figure 2.**

In an effort to have the MITs for the WTP concentrate injection wells in the same schedule to the Wastewater Treatment Plant effluent injection well; the City is planning to start testing by March 2010. The below listed tests will be performed in order to comply with requirement specified in the operating permit:

1. A pressure test of the injection tubing, as required by Chapter 62-528.300(6)(b) 1, and 62-528.300(6)(e)FAC.

2. A video television survey through the entire length of each well from the surface to the base of the injection zone, as required by Chapter 62-528.425 (1)(d) Florida Administrative Code (FAC).

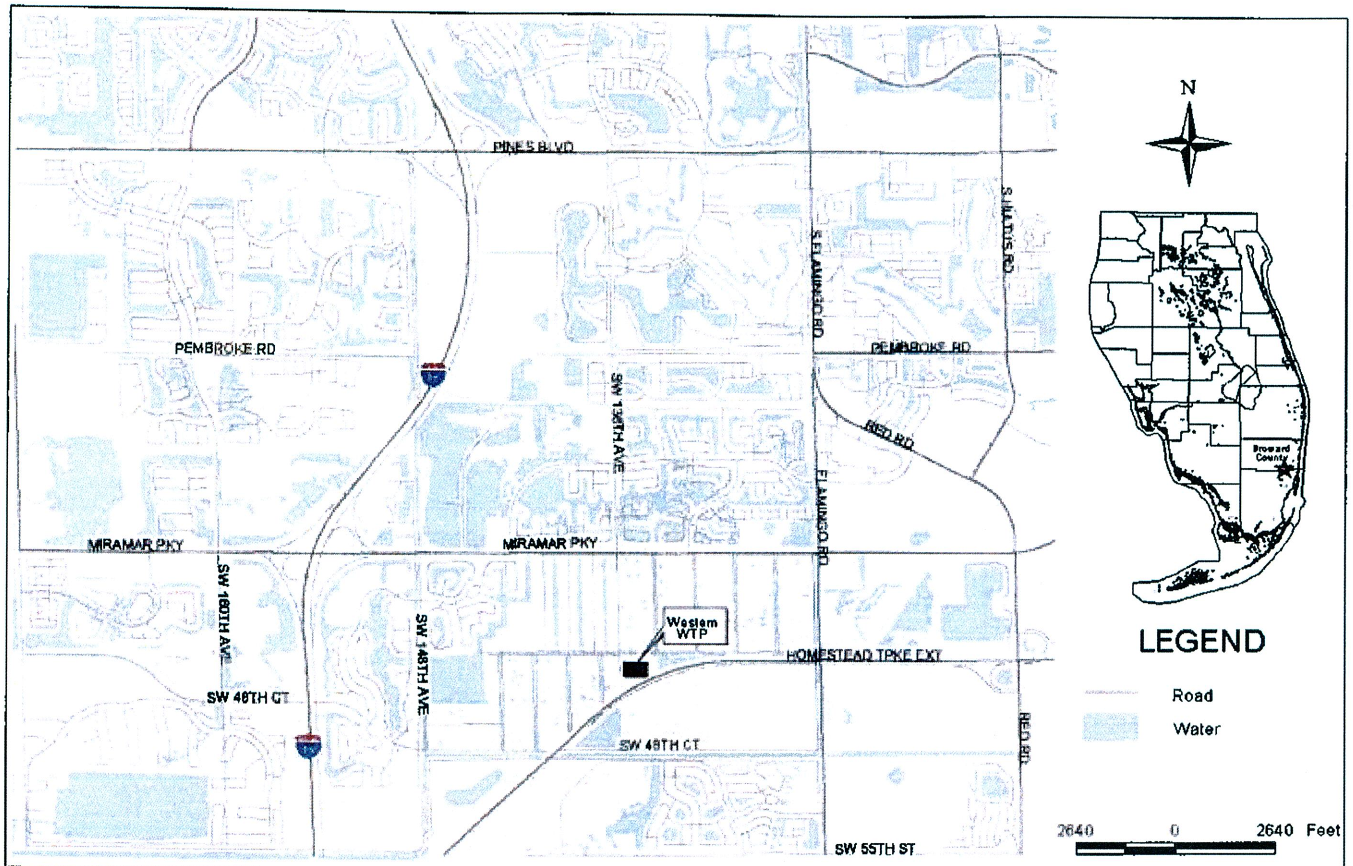
3. Geophysical logging including temperature log, gamma ray log, and radioactive tracer survey, as required by Chapter 62-528.300(6)(c)2 FAC.

4. Five years of collected monitoring data and results for the injection wells, effluent, and dual-zone monitor well will be submitted in tabular and graphical format. An interpretation of these data shall also be submitted as per Rule 62-528.300(6)(f), FAC.

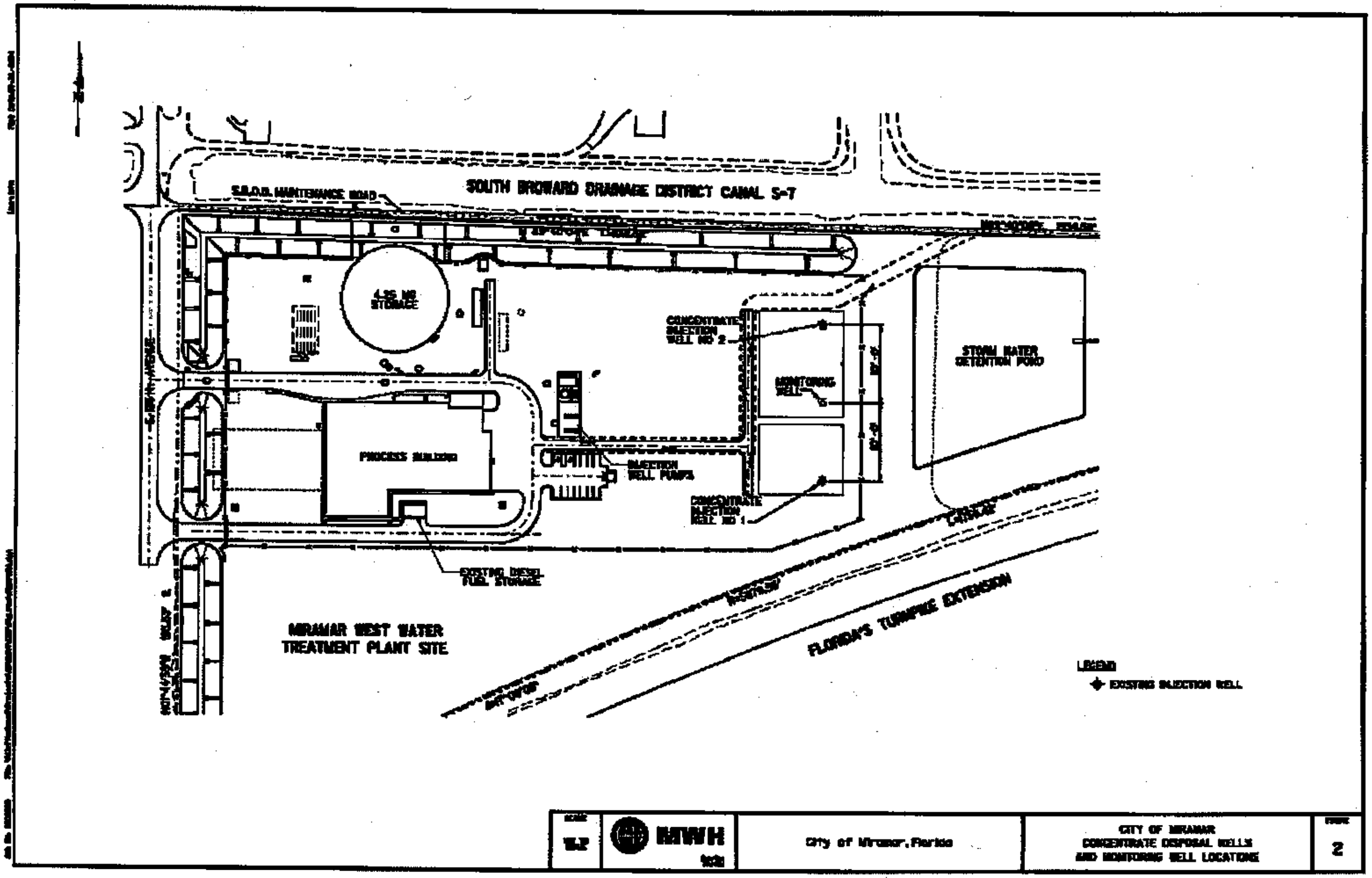
5. A report will be submitted to FDEP within three months of testing completion that will consist of a description of the mechanical integrity testing methods, results, and an interpretation of the results.

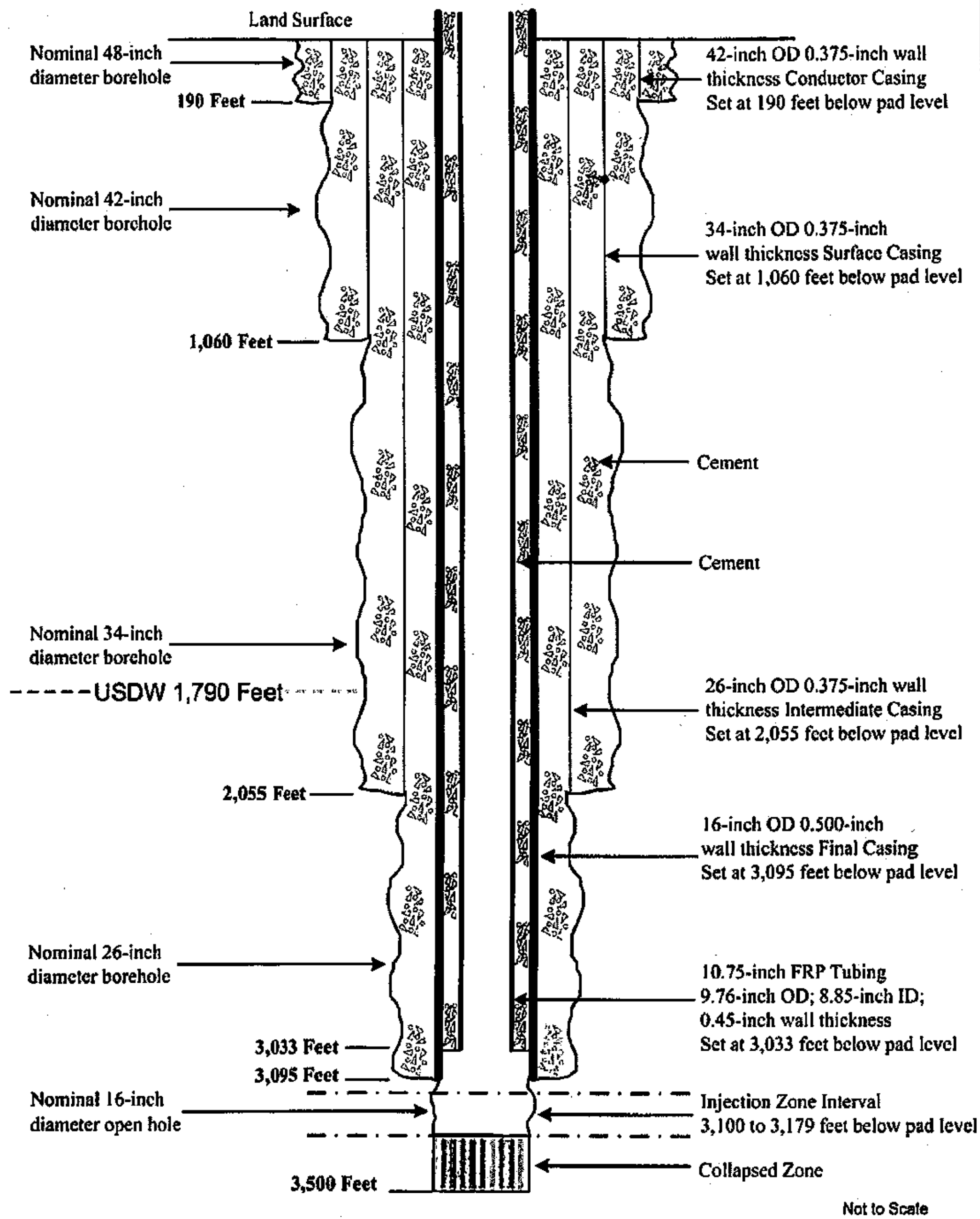
CONCENTRATE DISPOSAL SYSTEM

The City of Miramar concentrate disposal system currently consists of two operational injection wells, IW-1 (**Figure 3**) and IW-2 (**Figure 4**). The wells were constructed to Class I Industrial injection well standards; and modified as an alternative design to the standard Class I injection well by cementing the replacement tubing inside the final casing. Each well has a 16-inch outside diameter steel casing lined with a nominal 10.75-inch (9.76-inch OD, 8.85-inch ID) fiberglass reinforced plastic (FRP) tubing. The tubing in both injection wells was cemented in place. The wells are currently permitted at a maximum injection rate of 2.08 mgd (1,444 gpm).

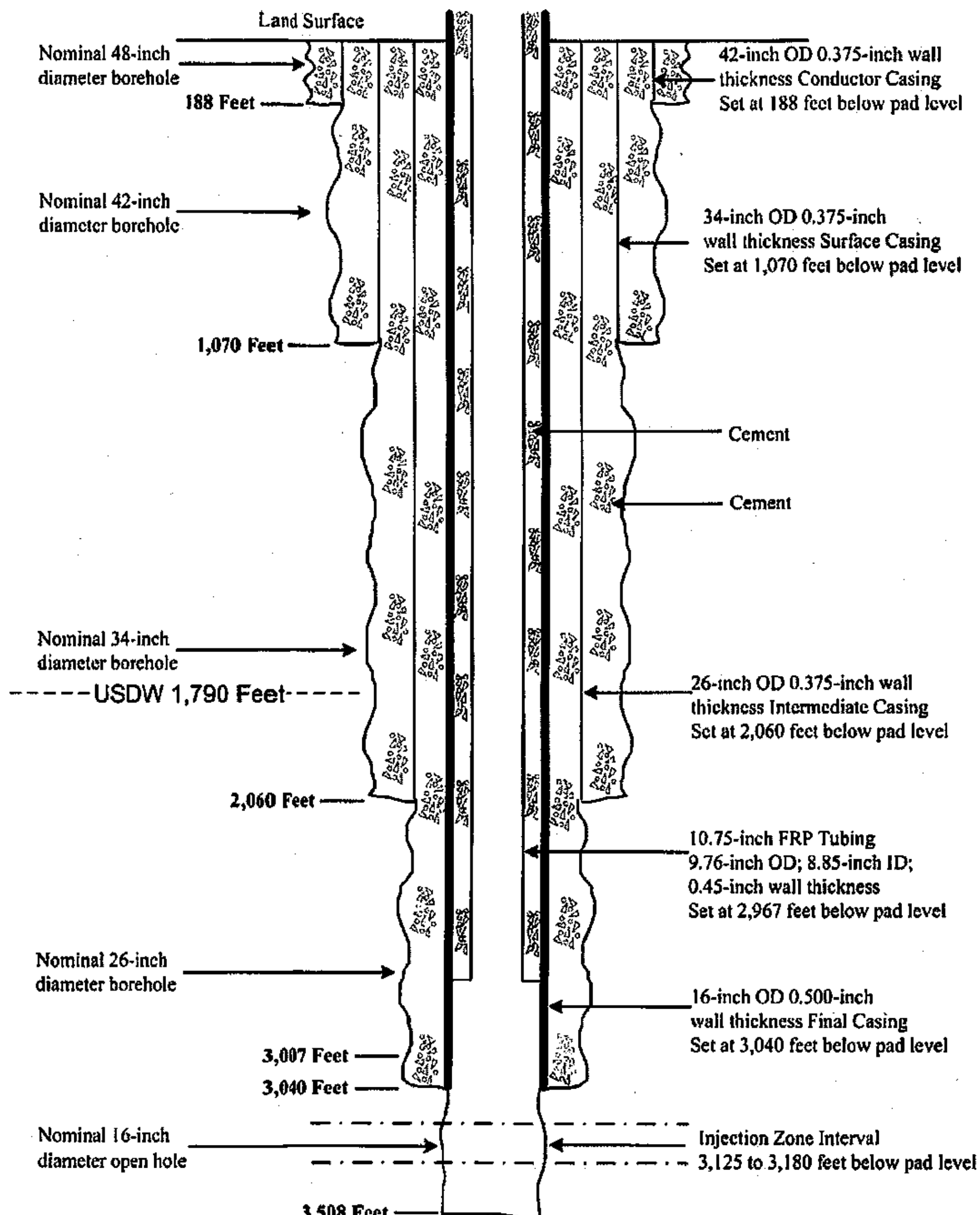


MWH	City of Miramar Western Water Treatment Plant Location	Figure 1


SOUTH BROWARD DRAINAGE DISTRICT CANAL S-7
S.B.D.D. MAINTENANCE ROAD
4.95 MG STORAGE
CONCENTRATE INJECTION WELL NO 2
MONITORING WELL
STORM WATER DETENTION POND
PROCESS BUILDING
INJECTION WELL PUMPS
CONCENTRATE INJECTION WELL NO 1
EXISTING DIESEL FUEL STORAGE
MIRAMAR WEST WATER TREATMENT PLANT SITE
FLORIDA'S TURNPIKE EXTENSION
LEGEND
EXISTING INJECTION WELL
MWH
City of Miramar, Florida
CITY OF MIRAMAR
CONCENTRATE DISPOSAL WELLS
AND MONITORING WELL LOCATIONS
2



MWH	Miramar	**City of Miramar WTP Injection Well - IW-1 Modified**	**Figure 3**



MWH	Miramar	City of Miramar WTP Injection Well - IW-2 Modified	Figure 4

IW-1

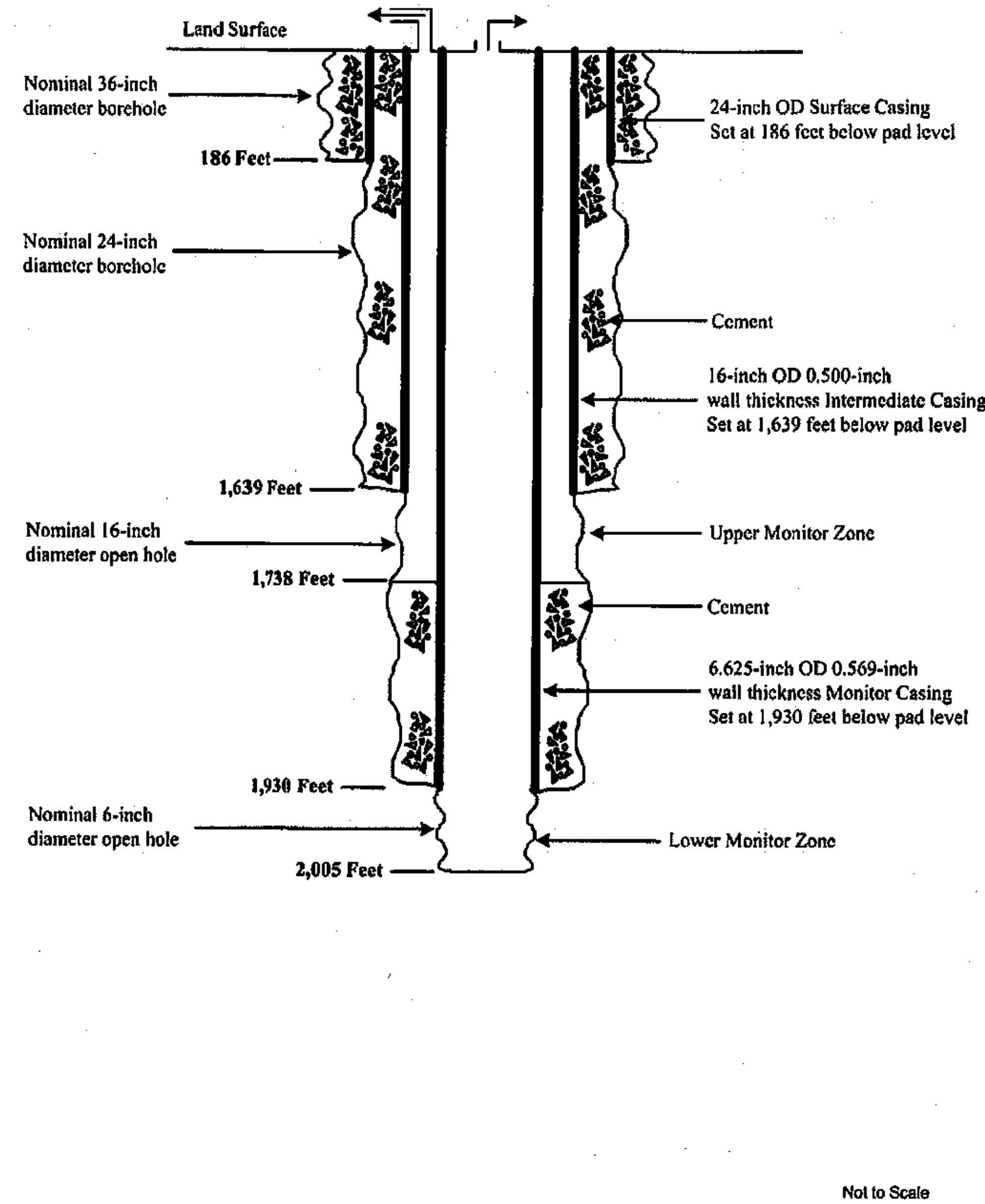
IW-1 has a final casing set and cemented to a total depth of 3,095 feet below land surface (bls). The injection tubing has a total depth of 3,033 feet bls. The well was originally completed with a nominal 16-inch diameter open borehole extending from the bottom of the final casing to approximately 3,500 feet bls. However, during the initial injection tubing run, the tubing was dropped, sealing the borehole below 3,179 feet bls. Based on information obtained during construction, the injection zone in IW-1 is located between 3,100 and 3,179 feet bls, and therefore the borehole below 3,179 feet was not reopened. The average wellhead pressure measured in July 19, 2009 during injection was approximately 44.5 psi, at an average injection rate of 1,082 gpm.

IW-2

IW-2 has a final casing set and cemented to a total depth of 3,046 feet bls. The injection tubing has a total depth of 2,967 feet bls. The well was completed with a nominal 16-inch diameter open borehole extending from the bottom of the final casing to approximately 3,508 feet bls. Based on information obtained during construction, the injection zone in IW-2 is located between 3,100 feet bls and 3,210 feet bls. The average wellhead pressure measured in July 19, 2009 during injection was approximately 46.6 psi, at an average injection rate of 1,163 gpm.

DZMW-1

DZMW-1 (**Figure 5**) was installed at the WTP site between IW-1 and IW-2. The DZMW-1 is located 110 feet north of IW-1, and 110 feet south of IW-2. The DZMW was completed with a nominal 6-inch diameter monitoring casing set at 1,930 feet bls. The upper monitor zone taps the interval between 1,639 feet bls and 1,738 feet bls. The lower monitor zone taps the interval between 1,930 feet bls, and 2,005 feet bls. The DZMW-1 was designed and constructed to monitor both IW-1 and IW-2.



MWH	Miramar	City of Miramar WTP Dual Zone Monitor Well DZMW-1	Figure 5

DETAILS OF THE TESTING

The testing of the two injection wells will include initial performance of a video television survey to determine if the injection wells need brushing. If the well does require brushing, a brush will be mounted below the packer and a second video will be conducted to inspect the casing and determine an appropriate location for the inflatable packer to be used in pressure testing the well.

After completion of the pressure test to evaluate internal casing integrity, a radioactive tracer survey (including background gamma ray log) will be conducted to verify the external mechanical integrity of the cement seal at the base of the casing. A temperature log also will be performed to evaluate mechanical integrity, as required.

Each well will be tested and completed individually, so at least one well will be kept in service at all times. A summary of testing is presented below:

- Performance of a video survey
- Tubing brushing (if necessary)
- Re-run video survey (if tubing brushing is performed)
- Perform pressure test
- Background temperature and gamma-ray logs
- Radioactive tracer survey (RTS)

After the geophysical logging is completed, the first well will be placed back in service and the testing procedure will be repeated on the second well.

1. **Video Television Survey:** The following procedure will be used for the video television survey of the injection wells. A 6-inch diameter stripper head assembly will be bolted to the well head assembly above the existing gate valve. The assembly will have the ability to house the television camera between the gate valve and the pack-off assembly mounted in the stripper head and will include a tee and a 2-inch diameter valve. The camera will be centralized using spring type centralizers to permit entry through the wellhead valves.

   Prior to performance of the survey, fresh water from a fire hydrant located on the plant property will be introduced into the well through the 2-inch diameter valve located on the stripper head assembly. A check valve and totalizing flowmeter (provided by the City) will be placed in line to prevent backflow from the well into the fresh water source utilized for testing. An estimated total of 30,000 gallons of potable water will be pumped into the well prior to testing (three well volumes) to provide clarity for the survey. If, upon entering the well with the TV camera and after pumping the specified quantity of potable water, the well is not clear, water will continue to be pumped during the video television survey.

A qualified service company will perform the video survey. The survey will be used to obtain information about the condition of the injection tubing. The video will also be used to observe the condition of areas where it would be inappropriate to inject the iodine tracer used in the radioactive tracer survey (RTS) test. Qualified personnel will witness the entire video survey.

2. **Tubing Cleaning (optional):** If during the performance of the video survey the concentrate well tubing is found to be covered with a deposit that will interfere with testing or with continued operation of the well, the tubing shall be cleaned using a hydro jet or casing brush. The procedure is summarized below:

    a. After the well has been taken out of service, the well shall be "killed" and the wellhead disassembled. A drill rig shall be mobilized over the well and the cleaning string assembled and inserted into the well. The tubing shall be cleaned from land surface to the base of the casing. During cleaning, the waste products generated by the operation shall be circulated out of the well and disposed in accordance with applicable waste management regulations.

    b. After the completion of tubing cleaning, the well will be purged by allowing the well to backflow under artesian pressure or by air development. Debris generated from the cleaning operation will be collected at land surface and disposed of in accordance with all applicable waste management regulations.

3. **Pressure Test.** The following procedure will be used for the pressure test of the injection well.

    a. The stripper head assembly used for the TV survey will be removed from the well, and the well will be "killed" by pumping dense saline fluid into the well below the valve to lower the artesian head created by the injected effluent. The remaining portion of the wellhead, including the tee, if necessary, can be removed to accommodate the drill rig.

    b. A temporary wellhead then will be placed on the well for use during pressure testing. The temporary wellhead will provide access to run the packer into the well, and also provide an airtight seal. A pressure gauge, measuring 0 to 200 psi with a maximum of 1 psi increments that is accurate to one quarter of one percent of full-scale deflection will be mounted on the temporary wellhead. The gauge will have previously been calibrated. Calibration will have been conducted on the gauge within a period of three months prior to the date of use. Calibration data will be submitted to FDEP prior to testing.

    c. The packer will be run as close to the bottom of the injection tubing as possible and seated against the tubing. Selected depths will be determined based upon the results of the television survey, but target depths have been selected. It is desired to install the packer within the lowermost joint of FRP tubing on each of the wells. On IW-1, the packer will be run to within 30 feet of the bottom of the FRP tubing (between 3,001 feet and 3,028 feet bls). On IW-2, the packer will be run to within 30 feet of the bottom of the tubing (between 2,937 feet and 2,967 feet bls). The final packer setting depths will be selected based upon the video television surveys.

d. The pressure in the well will be increased to approximately 130 psi, using a full column of fluid. The selected pressure is in excess of 1.5 times the maximum expected injection pressure of 86 psi. Pressure readings will be recorded every minute for a one-hour period. Qualified MWH personnel will record the readings. The results will be certified by a Licensed Florida Professional Engineer. MWH understands that the pressure must not vary by ± 5 percent during the one-hour testing period and that the FDEP expects to be present to witness the performance of the pressure test. The FDEP will be notified at least 72 hours prior to beginning the test and the testing will be performed during normal business hours (8AM to 5PM) Monday through Friday, except legal holidays.

e. Water will be collected from the wellhead during depressurization and the quantity of the recovered water will be recorded. The pressure gauge will be inspected to verify that the pressure reading has returned to 0 psi.

f. In the event that the pressure in the casing cannot be maintained, and after thoroughly investigating the accessory surface piping and appurtenances to assure that the leak is in the well, the packer will be placed at a different depth, and the test will be repeated. Upon completion of a successful pressure test, the testing assembly will be removed from the well and the annular pressure compensation system re-assembled.

g. Upon conclusion of pressure testing, the testing assembly and equipment will be disassembled and removed from the well and the wellhead re-assembled and prepared for return to service. The saline fluid used to "kill" the well will be flushed from the tubing.

4. **Radioactive Tracer Survey (RTS) and Temperature Log.** Geophysical logging services for the high resolution temperature log and radioactive tracer survey will be provided by a service company qualified and experienced in the performance of this work, possessing appropriate certifications for the handling and use of radioactive tracers. This service company will also be subcontracted to the drilling contractor. All depths in the discussion below, in connection with the radioactive tracer tool positioning, specifically refer to the location of the ejector port on the radioactive tracer tool.

FDEP staff will be notified in order to be present to witness the radioactive tracer survey. The RTS will be conducted during normal business hours, Monday through Friday, except legal holidays. FDEP will be notified at least 72 hours prior to the test and the start of testing will be in accordance with the timing requirements set out in the operating and operational testing permits. RTS and high resolution temperature log procedures will begin after "kill" fluids have been flushed from the well and the well has been shut down for a minimum of 12 hours.

a. **Background Geophysical Logging:** Background temperature and gamma ray logs will be run in the well. The logs will be run over the entire length of the well, including the open hole interval where obstructions do not preclude the tools passage. The temperature log will be run first, from the top to the bottom of the well, as so not to disturb the water column. The gamma ray log will either be run with the temperature log in the downward direction or may be run upward from the bottom of the well to the top. The logs will be used for comparison during radioactive tracer surveying. The high-resolution temperature log will include a plot of differential temperature for ease of comparison. As casing collar locator will also be run with these logs to accurately reference the bottom of the casing.

b. **RTS:** An RTS will be performed in the injection well after the above-described logs. The tool used for testing will be configured according to information to be supplied by the contractor performing the logs.

   Below is a list of the different phases of RTS that will be performed. Actual injection quantities will be determined in the field. In order to maintain buoyancy resulting from the "fresh water bubble" only potable water will be used for all casing flushes. The minimum volume of potable water to be used to flush the tubing is 4,800 gallons. This volume is equivalent to the volume of 500 linear feet of injection tubing and will adequately displace tracer material.

   1) **First Low Flow Dynamic Testing:** The low flow portion of the RTS will consist of the dynamic or pumping portion of the survey. A velocity of less than 5 feet per minute (fpm) is proposed for the dynamic portion of the test. This would require a rate of less than 11.78 gpm to be injected into the well during the survey. A totalizing flowmeter, measuring 0 to 500 gpm will be mounted on the water supply connected to the wellhead. The flowmeter will be accurate to 0.25 percent of full scale. The flowmeter will be calibrated within a three-month period before use and calibration records will be submitted to the FDEP. Potable water from the same source as the used for the video survey would be used for this

portion of the test. A backflow preventer would be placed in line before the point of injection into the well.

a) After establishing flow of water into the well, the RTS tool will be placed at a depth of approximately five feet inside the final casing (3,090 feet in IW-1 and 3,041 feet in IW-2), and a slug of 1 to 2 milliCuries (mCi) of medicinal-grade radioactive Iodine^{131} will be ejected. The iodine will be used within one half-life of its assay date. The tool will remain in place for a period of approximately one-hour and the three gamma ray detectors in the "time drive" mode will record the movement of the slug. The log will include the time of injection and the amount injected.

b) After the one-hour monitoring period, a log out-of-position (LOP-1) will be performed between the ejection point and a minimum of 200 feet above the highest point of detection.

c) Upon completion of logging, the casing will be completely flushed utilizing the injection well pumps.

d) After flushing, the tool will immediately be run to the base of casing, then the interval between the injection point and 200 feet above the highest point of detection of Iodine^{131} will be logged (the after flush pass).

2) **Second Low Flow Dynamic Testing:** The process described above for the low flow dynamic log will be repeated to include a second log out-of-position (LOP-2), a casing flush, and an after-flush pass. A slug of tracer of 1 to 2 mCi of radioactive Iodine^{131} will be used during this repeat dynamic test.

If during the testing of the well, no apparent anomalies appear that may indicate a lack of mechanical integrity in the injection well, the test will be concluded.

In the event that tracer is detected at the upper gamma ray detector during the one hour monitoring period (first low flow dynamic testing) the operator will immediately log out of position upward and note the top of the tracer migration. The upper detector will then be positioned approximately 20 feet above the indicated top of the tracer material and time-drive monitoring will be resumed for the remainder of the monitoring interval. This step will be repeated if the tracer slug is again detected by the upper gamma detector. This should enable the tracer slug to be followed as it moves uphole behind the final casing and keep the upper detector from being stained. At the end of the monitoring interval the tool will be raised at least 200 feet above the highest point where the tracer was detected for the log out of position and log after flush steps of the RTS.

If tracer movement is observed on the upper gamma ray detector during repeat time drive (second low flow dynamic testing), operator would then log out of position upward and note top of the tracer migration. The upper detector will then be positioned approximately 20 feet above the indicated top of the tracer material and time-drive monitoring will be resumed for the remainder of the monitoring interval. This step will be repeated if the tracer slug is again detected by the upper gamma detector. This should enable the tracer slug to be followed as it moves uphole behind the final casing and keep the upper detector from being stained. At the end of the monitoring interval the tool will be raised at least 200 feet above the highest point where the tracer was detected for the log out of position and log after flush steps of the RTS. The operator will log through the tracer as many times as needed to determine the extent of possible channeling. The last pass shall be run high enough to be sure the slug is no longer detectable.

After the RTS is complete, the remainder tracer material will be dumped below the base of the final casing and above the uppermost flow interval of the injection zone. A final gamma ray log will be conducted from the total depth of the well to land surface. The well will be flushed with 3 to 5 volumes of potable water. The wellhead assembly will be completely re-assembled and the well placed back in service.

Review of Monthly Operating Report Data

Five years of data collected from the initial background sampling to present including monitor well water quality, effluent water quality, effluent flow data, specific injectivity test data, and pressure information for both injection wells and the dual zone monitoring well will be presented in a tabular and graphical format as part of the MIT Report.

ATTACHMENT B
MECHANICAL INTEGRITY TESTING PLAN SCHEDULE

The estimated time of the performance for individual portions of the testing are as follows:

1. TV Survey

• Mobilize drill rig	1/2 day
• Prepare wellhead; set stripper head assembly; and pump water clear	1/2 day
• Perform television survey; disassemble	1 day
Total Time	**2 days**

2. Casing Cleaning (optional)

• Mobilize drill rig; prepare well head; "kill" well	1 day
• Clean casing	1 day
• Reassemble wellhead; place well back into service	1 day
• Re-Run TV Survey	1 day
Total Time	**4 days**

3. Pressure Test

• Inflate packer, perform preliminary pressure test	1 day
• Perform pressure test; de-pressurize and remove piping	1 day
• Reassemble wellhead; place well back into service	1 day
Total Time	**3 days**

4. Radioactive Tracer Test and Gamma Logs

• Set stripper head assembly	4 hours
• Rig up; perform temperature and Gamma logs	5 hours
• Perform static radioactive tracer survey (RTS)	2 hours
• Perform dynamic RTS	4 hours
• Flush, background check	2 hours
• Rig down; reassemble wellhead	4 hours
Total Time	**21 hours (2 days)**

For Each Well:

Total Estimated Testing Duration	**7 days**
Total Estimated Testing Duration including Casing Cleaning	**11 days**

FDEP Approval Letter

Florida Department of
Environmental Protection
Southeast District
400 North Congress Avenue, Suite 200
West Palm Beach, Florida 33401

ELECTRONIC CORRESPONDENCE

19 November 2009

Hong Guo, PE, DEE
Director of Utilities,
City of Miramar
13900 Pembroke Road
Miramar, FL 33027

BROWARD COUNTY
UIC - City of Miramar Western WTP
FILE: 125256-007-UO
Injection wells IW-1, IW-2

RE: Mechanical Integrity Testing (MIT) Plan
Deep Injection Wells, IW-1 and IW-2

Dear Ms Guo:

The Florida Department of Environmental Protection (Department or FDEP) acknowledges the receipt of your Mechanical Integrity Testing Plan for injection well IW-1, on September 10, 2009, for the above referenced facility.

Based on information provided and after review and receipt of comments from the UIC Technical Advisory Committee (TAC), the Department concurs with the plan submitted for the demonstration of mechanical integrity.

If you have any questions, please contact Heidi Vandor, PG at 561/681-6687 or myself at 561/681-6691. When referring to this letter, please reference the above date and file number. In addition, please provide a comprehensive distribution list with each submittal.

Sincerely,

Joseph May, PG
Program Manager
Underground Injection Control

JRM/HV

cc: Joe Haberfeld, FDEP/TLH
Heidi Vandor, FDEP/WPB
Cathy McCarty, FDEP/TLH
Susan Bodman, MWH

Appendix B

Video Surveys

Injection Well IW-1

Video Survey

MWH

CITY OF MIRAMAR

WESTERN WATER TREATMENT PLANT

INJECTION WELL IW-1

10.75-INCH FRP TUBING & OPEN HOLE VIDEO SURVEY

May 17, 20100 – 3,119 feet bls

Depth (feet bls)	Description
0	Begin video. Pad Level.
5.5	Tubing threaded connection to wellhead adapter
35.9	Tubing threaded connection. Visibility is fair to good. Minor buildup on tubing wall.
64.4	Tubing threaded connection. Visibility is fair to good. Minor buildup on tubing wall.
94.4	Tubing threaded connection. Visibility is fair to good. Minor buildup on tubing wall.
122.4	Tubing threaded connection. Visibility is fair to good. Minor buildup on tubing wall.
152.9	Tubing threaded connection. Visibility is fair to good. Minor buildup on tubing wall.
182.4	Tubing threaded connection. Visibility is good. Minor buildup on tubing wall.
210.8	Tubing threaded connection. Visibility is good. Minor buildup on tubing wall.
241.2	Tubing threaded connection. Visibility is good. Minor buildup on tubing wall.
270.4	Tubing threaded connection. Visibility is good. Minor buildup on tubing wall.
299.9	Tubing threaded connection. Visibility is good.
328.4	Tubing threaded connection. Visibility is good.
358.4	Tubing threaded connection. Visibility is good.
387.9	Tubing threaded connection. Visibility is good.
417.6	Tubing threaded connection. Visibility is good.

Depth (feet bls)	Description
447.9	Tubing threaded connection. Visibility is good.
476.1	Tubing threaded connection. Visibility is good.
505.8	Tubing threaded connection. Visibility is good.
534.5	Tubing threaded connection. Visibility is good.
564.6	Tubing threaded connection. Visibility is good.
594.4	Tubing threaded connection. Visibility is good.
623	Tubing threaded connection. Visibility is good.
652.9	Tubing threaded connection. Visibility is good.
681.9	Tubing threaded connection. Visibility is good.
711.5	Tubing threaded connection. Visibility is good.
740.3	Tubing threaded connection. Visibility is good.
770.2	Tubing threaded connection. Visibility is good.
798	Tubing threaded connection. Visibility is good.
824.9	Tubing threaded connection. Visibility is good.
858.7	Tubing threaded connection. Visibility is good.
888.2	Tubing threaded connection. Visibility is good.
917.9	Tubing threaded connection. Visibility is good.
947.6	Tubing threaded connection. Visibility is good.
976.8	Tubing threaded connection. Visibility is good.
1,005.7	Tubing threaded connection. Visibility is good.
1,035.8	Tubing threaded connection. Visibility is good.
1,064.4	Tubing threaded connection. Visibility is good.
1,094.9	Tubing threaded connection. Visibility is good.
1,123.4	Tubing threaded connection. Visibility is good.
1,152.9	Tubing threaded connection. Visibility is good.

Depth (feet bls)	Description
1,182.6	Tubing threaded connection. Visibility is good.
1,211.9	Tubing threaded connection. Visibility is good.
1,241.9	Tubing threaded connection. Visibility is good.
1,270.4	Tubing threaded connection. Visibility is good.
1,299.8	Tubing threaded connection. Visibility is good.
1,328.7	Tubing threaded connection. Visibility is good.
1,358.6	Tubing threaded connection. Visibility is good.
1,387.4	Tubing threaded connection. Visibility is good.
1,416.5	Tubing threaded connection. Visibility is good.
1,446.2	Tubing threaded connection. Visibility is good.
1,476.2	Tubing threaded connection. Visibility is good.
1,505.1	Tubing threaded connection. Visibility is good.
1,534.3	Tubing threaded connection. Visibility is good.
1,564.9	Tubing threaded connection. Visibility is good.
1,593.4	Tubing threaded connection. Visibility is good.
1,622.8	Tubing threaded connection. Visibility is good.
1,653	Tubing threaded connection. Visibility is good.
1,683	Tubing threaded connection. Visibility is good.
1,712	Tubing threaded connection. Visibility is good.
1,741	Tubing threaded connection. Visibility is good.
1,771	Tubing threaded connection. Visibility is good.
1,799.8	Tubing threaded connection. Visibility is good.
1,829.4	Tubing threaded connection. Visibility is good.
1,859	Tubing threaded connection. Visibility is good.
1,888.7	Tubing threaded connection. Visibility is good.

Depth (feet bls)	Description
1,917.8	Tubing threaded connection. Visibility is good.
1,947.5	Tubing threaded connection. Visibility is good.
1,977	Tubing threaded connection. Visibility is good.
2,006.2	Tubing threaded connection. Visibility is good.
2,035.8	Tubing threaded connection. Visibility is good.
2,065.7	Tubing threaded connection. Visibility is good.
2,094.8	Tubing threaded connection. Visibility is good.
2,124.5	Tubing threaded connection. Visibility is good.
2,153.9	Tubing threaded connection. Visibility is good.
2,183.5	Tubing threaded connection. Visibility is good.
2,212.9	Tubing threaded connection. Visibility is good.
2,242.7	Tubing threaded connection. Visibility is good.
2,271.9	Tubing threaded connection. Visibility is good.
2,301.4	Tubing threaded connection. Visibility is good.
2,332	Tubing threaded connection. Visibility is good.
2,360.2	Tubing threaded connection. Visibility is good.
2,389.1	Tubing threaded connection. Visibility is good.
2,418.9	Tubing threaded connection. Visibility is good.
2,450	Tubing threaded connection. Visibility is good.
2,477.6	Tubing threaded connection. Visibility is good.
2,507.1	Tubing threaded connection. Visibility is good.
2,536.9	Tubing threaded connection. Visibility is good.
2,568	Tubing threaded connection. Visibility is good.
2,596.4	Tubing threaded connection. Visibility is good.
2,625.9	Tubing threaded connection. Visibility is good.

Depth (feet bls)	Description
2,655.3	Tubing threaded connection. Visibility is good.
2,684.8	Tubing threaded connection. Visibility is good.
2,714.4	Tubing threaded connection. Visibility is good.
2,743.6	Tubing threaded connection. Visibility is good.
2,773.9	Tubing threaded connection. Visibility is good.
2,802.3	Tubing threaded connection. Visibility is good.
2,832.3	Tubing threaded connection. Visibility is good.
2,861.4	Tubing threaded connection. Visibility is good.
2,890.3	Tubing threaded connection. Visibility is good.
2,918.7	Tubing threaded connection. Visibility is good.
2,947.6	Tubing threaded connection. Visibility is good.
2,976.8	Tubing threaded connection. Visibility is good.
3,005.2	Tubing threaded connection. Visibility is good.
3,028.2	Minor cement on tubing sidewall
3,031.5	Bottom of FRP tubing. Side view shows clean FRP edge.
3,035.5	16-inch casing not readily identifiable.
3047	16-inch casing looks like a hole in the casing.
3,052.6	Remains of original tubing cement basket plastic across hole.
3,096	Bottom of 16-inch casing not identifiable.
3,119.5	Hole bridged with debris. Opening on side of hole.

Injection Well IW-2

Video Survey

MWH

CITY OF MIRAMAR
WESTERN WATER TREATMENT PLANT
INJECTION WELL IW-2
10.75-INCH FRP TUBING & OPEN HOLE VIDEO SURVEY
May 24, 2010
0 – 3,152 feet bls

Depth (feet bls)	Description
0	Begin video.
37.8	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
65.7	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
94.7	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
123.5	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
153.0	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
182.6	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
211.6	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
241.2	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
270.5	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
300.0	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
329.5	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
358.9	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
387.2	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
417.6	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.

Depth (feet bls)	Description
447.1	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
476.3	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
505.7	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
535.1	Tubing threaded connection. Visibility is good. Minor coating on tubing wall.
564.7	Tubing threaded connection. Visibility is good.
594.2	Tubing threaded connection. Visibility is good.
623.9	Tubing threaded connection. Visibility is good.
653.4	Tubing threaded connection. Visibility is good.
682.8	Tubing threaded connection. Visibility is good.
712.4	Tubing threaded connection. Visibility is good.
741.8	Tubing threaded connection. Visibility is good.
770.9	Tubing threaded connection. Visibility is good.
800.4	Tubing threaded connection. Visibility is good.
828.7	Tubing threaded connection. Visibility is good.
857.6	Tubing threaded connection. Visibility is good.
887.2	Tubing threaded connection. Visibility is good.
916.7	Tubing threaded connection. Visibility is good.
945.1	Tubing threaded connection. Visibility is good.
973.9	Tubing threaded connection. Visibility is good.
1,002.8	Tubing threaded connection. Visibility is good.
1,031.9	Tubing threaded connection. Visibility is good.
1,060.8	Tubing threaded connection. Visibility is good.
1,090.3	Tubing threaded connection. Visibility is good.
1,119.4	Tubing threaded connection. Visibility is good.

Depth (feet bls)	Description
1,147.2	Tubing threaded connection. Visibility is good.
1,176.4	Tubing threaded connection. Visibility is good.
1,206.3	Tubing threaded connection. Visibility is good.
1,235.5	Tubing threaded connection. Visibility is good.
1,265.2	Tubing threaded connection. Visibility is good.
1,294.8	Tubing threaded connection. Visibility is good.
1,323.8	Tubing threaded connection. Visibility is good.
1,353.1	Tubing threaded connection. Visibility is good.
1,382.8	Tubing threaded connection. Visibility is good.
1,412.6	Tubing threaded connection. Visibility is good.
1,441.8	Tubing threaded connection. Visibility is good.
1,471.6	Tubing threaded connection. Visibility is good.
1,500.9	Tubing threaded connection. Visibility is good.
1,530.1	Tubing threaded connection. Visibility is good.
1,559.8	Tubing threaded connection. Visibility is good.
1,588.9	Tubing threaded connection. Visibility is good.
1,618.9	Tubing threaded connection. Visibility is good.
1,647.9	Tubing threaded connection. Visibility is good.
1,677.3	Tubing threaded connection. Visibility is good.
1,707.3	Tubing threaded connection. Visibility is good.
1,736.3	Tubing threaded connection. Visibility is good.
1,765.8	Tubing threaded connection. Visibility is good.
1,795.3	Tubing threaded connection. Visibility is good.
1,825.6	Tubing threaded connection. Visibility is good.
1,854.3	Tubing threaded connection. Visibility is good.

Depth (feet bls)	Description
1,883.7	Tubing threaded connection. Visibility is good.
1,913.6	Tubing threaded connection. Visibility is good.
1,943.2	Tubing threaded connection. Visibility is good.
1,971.0	Tubing threaded connection. Visibility is good.
2,000.6	Tubing threaded connection. Visibility is good.
2,029.3	Tubing threaded connection. Visibility is good.
2,058.9	Tubing threaded connection. Visibility is good.
2,089.8	Tubing threaded connection. Visibility is good.
2,117.8	Tubing threaded connection. Visibility is good.
2,147.5	Tubing threaded connection. Visibility is good.
2,176.8	Tubing threaded connection. Visibility is good.
2,206.8	Tubing threaded connection. Visibility is good.
2,235.9	Tubing threaded connection. Visibility is good.
2,265.8	Tubing threaded connection. Visibility is good.
2,294.9	Tubing threaded connection. Visibility is good.
2,324.6	Tubing threaded connection. Visibility is good.
2,353.4	Tubing threaded connection. Visibility is good.
2,383.2	Tubing threaded connection. Visibility is good.
2,412.8	Tubing threaded connection. Visibility is good.
2,441.8	Tubing threaded connection. Visibility is good.
2,471.8	Tubing threaded connection. Visibility is good.
2,500.7	Tubing threaded connection. Visibility is good.
2,530.7	Tubing threaded connection. Visibility is good.
2,560.1	Tubing threaded connection. Visibility is good.
2,589.2	Tubing threaded connection. Visibility is good.

Depth (feet bls)	Description
2,618.9	Tubing threaded connection. Visibility is good.
2,647.8	Tubing threaded connection. Visibility is good.
2,676.8	Tubing threaded connection. Visibility is good.
2,706.7	Tubing threaded connection. Visibility is good.
2,735.7	Tubing threaded connection. Visibility is good.
2,765.7	Tubing threaded connection. Visibility is good.
2,794.8	Tubing threaded connection. Visibility is good.
2,823.7	Tubing threaded connection. Visibility is good.
2,852.9	Tubing threaded connection. Visibility is good.
2,882.4	Tubing threaded connection. Visibility is good.
2,911.8	Tubing threaded connection. Visibility is good.
2,941.9	Tubing threaded connection. Visibility is good.
2,970.4	Bottom of FRP tubing.
2,977.1	16-inch casing highly scaled.
2,995.7	Original liner packer hanger.
3,001	Threads visible.
3,006	Threads visible.
3,044.9	Bottom of 16-inch final casing.
3,061	Formation Opening.
3,067	Vertical Fractures.
3,098	Low visibility.
3,101	Flow visible. Fair to low visibility.
3,107	Flow visible. Good visibility.
3,151.8	Bottom of hole.

Appendix C

Hydrostatic Pressure Tests

Pressure Gauge Certificate of Calibration

Submitted 5-19-10
1007122

Certificate of Calibration

ØZONE
INDUSTRIES
CORPORATION
15465 PINE RIDGE ROAD
FORT MYERS, FL 33908

Ozone Industries, Inc.
Precision Measurement Equipment Division

Purchase Order #

Calibration Performed By:
OZONE INDUSTRIES, INC.
15551 PINE RIDGE RD.
FORT MYERS, FL 33908

For:
YOUNGQUIST BROTHERS, INC.
15465 PINE RIDGE RD.
FORT MYERS, FL 33908

EQUIPMENT INFORMATION:

Description: PRESSURE GAUGE
Manufacter: MCDANIELS
Model Number: 200PSI
Part Number: N/A
Range: 0-200 PSI

Serial Number: 040405-1
Customer I.D.:
Cust. Barcode: N/A
Cust. Location: N/A
Specifications: +/- 0.25% FS

Cal Date: 5/13/2010
Cal. Due Date: 11/13/2010
Cal. Interval 6 MONTHS
Received: IN TOLERANCE
Calibration Result: PASS
Environmental Conditions: 84 DEG F / 85% H
Performed By: C.L.W.

Procedure: STANDARD

This is to certify that the above listed instrument meets or exceeds all specifications as stated in the referenced procedure at the points tested (unless otherwise noted). It has been Calibrated using measurement standards traceable to the National Institute of Standards and Technology (NIST), or to NIST accepted intrinsic standards of measurement, or derived by the ratio type of self-calibration techniques. This calibration is in accordance with Ozone Industries, Inc Quality Assurance Manual. Any number of factors may cause the calibration item to drift out of calibration before the recommended interval has expired.

Calibration Remarks:
THIS UNIT WAS FOUND TO BE IN TOLERANCE AT THE TIME OF CALIBRATION.
PERFORMED ROUTINE CALIBRATION / CERTIFICATION.

Standards Used to Calibrate Equipment:

Company	I.D.	Description	Last Cal.	Cal. Due Date
OZONE	A1731	EATON UPC5000 PNEUMATIC CALIBRATOR	11/30/2009	11/30/2010

Signatures:

Certified by:
Print: Cody White
Date: 05/13/10

Approved by:
Print: Cody White
Date: 05/13/10

ØZONE
INDUSTRIES
CORPORATION
15465 PINE RIDGE ROAD
FORT MYERS, FL 33908

PH: 239-433-3400
FAX: 239-489-3877

CONTROL NO: 040405-1
CUSTOMER: YBI15465

CALIBRATION DATA FORM

MFR:	MCDANIELS	DESCRIPTION	PRESSURE GAUGE
MODEL NO:	200 PSI .25%	TECHNICIAN:	0030
SERIAL NO:	040405-1	CAL. DATE:	05/13/10
CUST. ID:		DUE DATE:	11/13/10

* IF NO "AS LEFT" READING IS SHOWN ON THIS CHART, IT MEANS THE UNIT WAS IN TOLERANCE AND THERE WERE NO ADJUSTMENTS MADE TO IT.

RANGE: 0-200 PSI

NOMINAL	AS FOUND	AS LEFT *	LOW LIMIT	HIGH LIMIT
40	39.8		39.5	40.5
80	80.45		79.5	80.5
120	120		119.5	120.5
160	159.6		159.5	160.5
200	200.4		199.5	200.5

Injection Well IW-1

Hydrostatic Pressure Test

MWH

IW-1 PRESSURE TEST DATA

DATE: May 19 ,2010

CITY OF MIRAMAR WTP CONCENTRATE INJECTION WELL SYSTEM

JOB NUMBER: 1007122

CONTRACTOR: Youngquist Brothers, Inc.

PROJECT MGR: Sangeeta Dhulashia

OWNER: City of Miramar

INITIAL PRESSURE: 147.2

START TIME: 0949

GAUGE SERIAL NUMBER: 040405-1

FINISH TIME: 1049

CALCULATED VOL.: 7gal

CASING SIZE: 10.75 FRP (8.85 ID)

OBSERVED VOL.: 7.5gal

TIME	TOTAL MINUTES	PRESSURE (PSI)	Tot. COMMENTS
0949	0	147.2	0.0
0954	5	147.0	0.2
0959	10	146.8	0.4
1004	15	146.5	0.7
1009	20	146.0	1.2
1014	25	146.0	1.2
1019	30	145.5	1.7
1024	35	145.0	2.2
1029	40	145.0	2.2
1034	45	144.8	3.0
1039	50	144.2	3.6
1044	55	144.0	3.8
1049	60	144.0	3.8

PRESSURE BLEED-OFF

TIME	PRESSURE	VOLUME (GAL)	CUMMULATIVE VOLUME (GAL)	COMMENTS
1050	144	0 gal	0	
	36	5gal	5gal	
1054	0	~~2~~.5 gal	7.5gal	

Witnessed by:

Heidi Vandor
FDEP

Susan Bodmann
MWH

Jeff Carter
YBI

H Vandor

Susan Bodmann

Jeff Carter

Injection Well IW-2

Hydrostatic Pressure Test

MWH

IW-2 PRESSURE TEST DATA

DATE: 5/26/2010

CITY OF MIRAMAR WTP CONCENTRATE INJECTION WELL SYSTEM

JOB NUMBER: 1007122

CONTRACTOR: Youngquist Brothers, Inc.

PROJECT MGR: Sangeeta Dhulashia

OWNER: City of Miramar

START TIME: 1245

FINISH TIME: 1345

CASING SIZE: 10.75 FRP (8.85 ID)

INITIAL PRESSURE: 135.5

GAUGE SERIAL NUMBER: 040405-1

CALCULATED VOL.: 7 gallons

OBSERVED VOL.: 6 gallons,

TIME	TOTAL MINUTES	PRESSURE (PSI)	COMMENTS
1245	0	135.5	℄ packer: 2953
1250	5	135.2	Packer 515 psi
1255	10	135.0	
1300	15	134.8	
1305	20	134.5	
1310	25	134.0	
1315	30	134.0	
1320	35	133.8	
1325	40	133.5	
1330	45	133.2	
1335	50	133.0	
1340	55	133.0	
1345	60	132.8	

PRESSURE BLEED-OFF

TIME	PRESSURE	VOLUME (GAL)	CUMMULATIVE VOLUME (GAL)	COMMENTS
1348	19	5	5	
1349	0	1	6	

Witnessed by:

Heidi Vandor — H Vandor
FDEP

John Largey — John Largey
MWH

Jeff Carter — Jeff Carter
YBI

Observer's Initials: JL

ORM NO. 03-03

Appendix D

Radioactive Tracer Survey

Flow Meter Certificate of Calibration and Radioactive Tracer (I131) Assays

Submitted 5-21-10

WATER METER
ACCURACY TEST REPORT

4/2/2010

#	MAKE	SERIAL #	LOW FLOW	INT.FLOW	HIGH FLOW
1	2"	*5528961*	98.4	100.5	100.1
2	USG				
3	MJ				
4	METERS				
5					
6					
7			2 GPM	8 GPM	65 GPM
8					
9		*USAGE*			
10					
11		*2285400*			
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
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32					
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34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					

MASTER METER

101 Regency Parkway
Mansfield, Texas
817-842-8000
(800) 765-6518
FAX# 817-842-8100

RMA# 23427

CUSTOMER: YOUNGQUIST BROS. INC

TEST DATE: 4/2/2010

TESTER: STEVE WHITE

NOTE:
Accuracy limits according to AWWA C708-96

*** 97% - 103% for Low Flows**

*** 98.5% - 101.5% for Intermediate and High Flows**

*** Accuracy limits for meters removed from service according to M-6 Manual Table 5-1**

***90% - 103.0% for Low Flows**

***98.5% - 101.5% for Intermediate and High Flows**

MWH

By SAB Date 5-21-10 Client Miramar MIT Sheet 1 of 1
Chkd. By ______ Description IW 1 RTS WTP Job No. 1007122

Submitted by John Cathey
Richard Fuller
Youngquist Brothers, Inc.

Triad Isotopes
patient focused | community driven.

RX#375682
I – 131 Liquid
Youngquist Brothers Inc.
12 mCi **11:00**
MEDICINAL GRADE
05/20/2010 11:00
Box: 06:00 – 2

RX#375682
I – 131 Liquid
12 mCi
Cal Date 05/20/2010
Cal Time 11:00
MEDICINAL GRADE

Triad Isotopes – Ft. Myers (800) 690 – 9098
1940 Boy Scout Drive, Unit A Fort Myers, FL 33907
RX#375682
Account Name: Youngquist Brothers Inc.
15465 Pine Ridge Road Fort Myers, FL 33908
Delivery D/T: 05/18/2010 06:00 Container:2
Patient ———: MEDICINAL GRADE
Product———: I – 131 Liquid
Procedure ——: Pipe Leak Test
Physician———: Edward X. Callahan
Ordered Amount: 12 mCi Quantity: 1 Adm. Amt: ________ mCi
Cal Date/Time–: 05/20/2010 11:00
Actual Amount–: 12.789 mCi Quantity: 1 Volume: 0.50 ml (25.58 mCi/ml)
Exp Date/Time –: 05/27/2010 14:00
Filled By: Paula Stevens
Lot #(s): 1042410 0.08
NOTES: BLUE, NA THIO. FINAL 10CC, MEDICINAL GRADE
CAUTION: TO BE USED UNDER THE SUPERVISION OF A PHYSICIAN

5-28-10 Miramar MIT 1007122
IW2 RTS WTP
Submitted by John Cathey
Richard Fuller
Youngquist Brothers, Inc.

Triad Isotopes
patient focused | community driven.

RX#377348
I-131 Liquid
Youngquist Brothers Inc.
12 mCi 10:00
MEDICINAL GRADE
05/28/2010 10:00
Box: 06:00-4

RX#377348
I-131 Liquid
12 mCi
Cal Date 05/28/2010
Cal Time 10:00
MEDICINAL GRADE

Triad Isotopes - Ft. Myers (800) 690-9098
1640 Boy Scout Drive, Unit A Fort Myers, FL 33907
RX#377348
Account Name: Youngquist Brothers Inc.
15465 Pine Ridge Road Fort Myers, FL 33908
Delivery D/T: 05/28/2010 06:00 Container:4
Patient-----: MEDICINAL GRADE
Product-----: I-131 Liquid
Procedure ---: Pipe Leak Test
Physician----: Edward X. Callahan
Ordered Amount: 12 mCi Quantity: 1 Adm. Amt: ______ mCi
Cal Date/Time--: 05/28/2010 10:00
Actual Amount--: 12.716 mCi Quantity: 1 Volume: 10.00 ml (1.27 mCi/ml)
Exp Date/Time -: 06/11/2010 23:59
Filled By: John Sackett BCNP
Lot #(s): 1050810 0.03
NOTES: BLUE, NA THIO, FINAL 10CC, MEDICINAL GRADE
CAUTION: TO BE USED UNDER THE SUPERVISION OF A PHYSICIAN

IW-1 High Resolution Temperature and RTS Log

YOUNGQUIST BROTHERS, Inc

GEOPHYSICAL LOGGING DIVISION

HIGH RESOLUTION TEMPERATURE LOG

Company	CITY OF MIRAMAR
Well	INJECTION WELL #1
Field	MIRAMAR WEST W. W. .T. P.
County	BROWARD
State	FLORIDA

Company: CITY OF MIRAMAR
Well: INJECTION WELL #1
Field: MIRAMAR WEST W. W. .T. P.
County: BROWARD State: FLORIDA

Location: API # :

Other Services: DHTVS, RTS

SEC TWP RGE

Permanent Datum: PAD Elevation
Log Measured From: PAD
Drilling Measured From: PAD

Elevation: K.B. D.F. G.L.

Date	20-MAY-2010
Run Number	MIT 2010
Depth Driller	3179'
Depth Logger	3119'
Bottom Logged Interval	3119'
Top Log Interval	SURFACE
Open Hole Size	NA
Type Fluid	WATER
Density / Viscosity	NA
Max. Recorded Temp.	76F
Estimated Cement Top	NA
Time Well Ready	ON ARRIVAL
Time Logger on Bottom	0900
Equipment Number	103
Location	FT. MEYERS
Recorded By	FULLER / CATHEY
Witnessed By	BODMAN, S

Borehole Record				Borehole Record			
Run Number	Bit	From	To	Run No	Bit	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	16"	.5 W.T	SURFACE	3090'
Prot. String				
Production String				
Liner	10.75"	FRP	SURFACE	3034'

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

YOUNGQUIST BROTHERS, Inc

GEOPHYSICAL LOGGING DIVISION

TEMPERATURE

Database File: miriw1ro.db
Dataset Pathname: miramar20/temp
Presentation Format: temp
Dataset Creation: Thu May 20 16:49:12 2010 by Log Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

-2 DELTA TEMPERATURE (degF) 2 | 70 TEMPERATURE (degF) 90

TEMPERATURE (degF)

-2 DELTA TEMPERATURE (degF) 2 | 70 TEMPERATURE (degF) 90

TEMPERATURE (degF)

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			TEMP-RTS (954)	25.50	1.69	70.00
TEMP	0.10					

Dataset: miriw1ro.db: field/well/miramar20/temp
Total Length: 25.50 ft
Total Weight: 70.00 lb
O.D. 1.69 in

Calibration Report

Database File: miriw1ro.db
Dataset Pathname: miramar20/temp
Dataset Creation: Thu May 20 16:49:12 2010 by Log Open-Cased 090629

Temperature Calibration Report

Serial Number: 954
Tool Model: RTS
Performed: Tue Feb 27 11:24:16 2007

Point #	Reading		Reference	
1	338.01	cps	34.00	degF
2	789.32	cps	78.00	degF
3	1553.26	cps	152.00	degF
4		cps		degF
5		cps		degF
6		cps		degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

Company	CITY OF MIRAMAR
Well	INJECTION WELL #1
Field	MIRAMAR WEST W. W. .T. P.
County	BROWARD
State	FLORIDA

YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

RADIOACITVE TRACER SURVEY LOG

Company CITY OF MIRAMAR
Well INJECTION WELL #1
Field MIRAMAR WEST W. W. .T. P.
County BROWARD State FLORIDA
Location: API #: Other Services DHTVS RTS

SEC	TWP	RGE	Elevation
Permanent Datum	PAD		K.B.
Log Measured From	PAD		D.F.
Drilling Measured From	PAD		G.L.

Date	20-MAY-2010	
Run Number	MIT 2010	
Depth Driller	3179'	
Depth Logger	3119'	
Bottom Logged Interval	3119'	
Top Log Interval	SURFACE	
Open Hole Size	NA	
Type Fluid	WATER	
Density / Viscosity	NA	
Max. Recorded Temp.	76F	
Estimated Cement Top	NA	
Time Well Ready	ON ARRIVAL	
Time Logger on Bottom	0900	
Equipment Number	103	
Location	FT. MEYERS	
Recorded By	FULLER	CATHEY
Witnessed By	BODMAN, S	

Borehole Record Run Number	Bit	From	To	Run No	Bit	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	16"	5 WT	SURFACE	3060'
Prot. String				
Production String	10.75"	FRP	SURFACE	3034'
Liner				

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

EJECTOR PORT 13.5' FROM BOTTOM OF TOOL

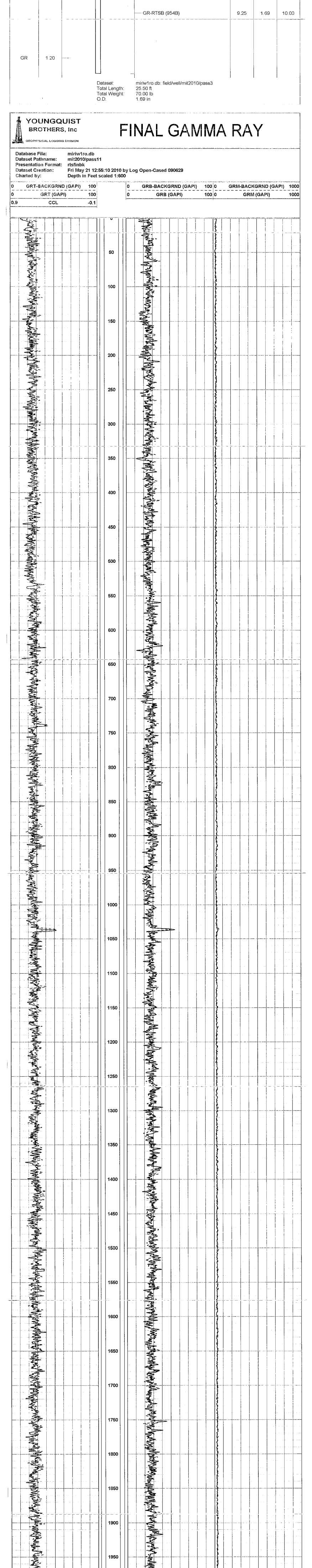
Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
GR#3	24.00				
		GR #3 -RTST (954T)	11.50	1.69	30.00
		TREJCT-A (954)	1.00	1.69	10.00
		GR #2 -RTSM (954M)	3.00	1.69	10.00
GR#2	10.50				
CCL	9.60	CCL-1.68GRRTS (954)	0.75	1.69	10.00
		GR-RTSB (954B)	9.25	1.69	10.00
GR	1.20				

Dataset: miriw1ro.db: field/well/mit2010/pass3
Total Length: 25.50 ft
Total Weight: 70.00 lb
O.D. 1.69 in

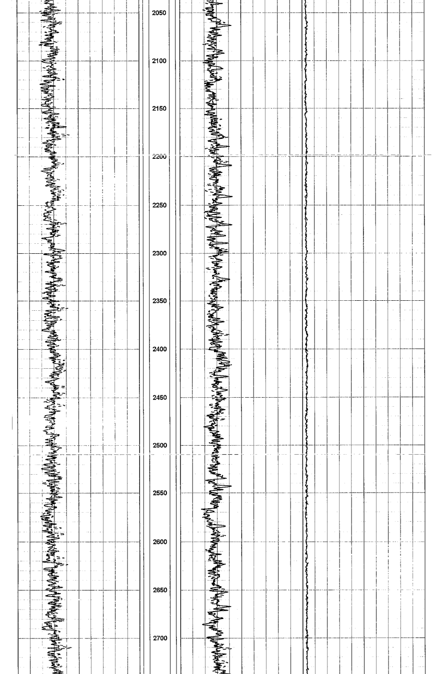
YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

FINAL GAMMA RAY

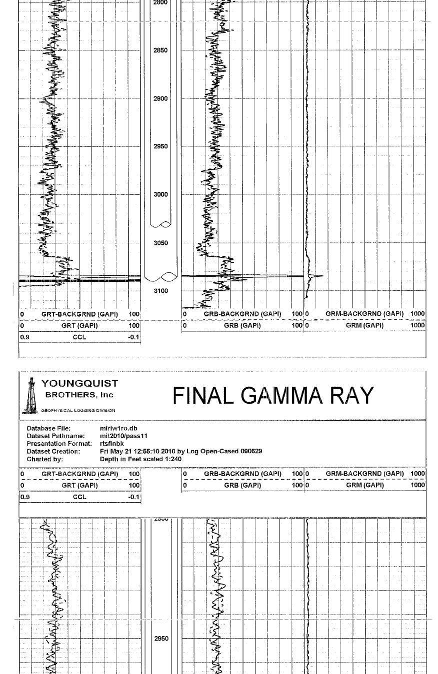
Database File: miriw1ro.db
Dataset Pathname: mit2010/pass11
Presentation Format: rtsfinbk
Dataset Creation: Fri May 21 12:55:10 2010 by Log Open-Cased 090629
Charted by: Depth in Feet scaled 1:600



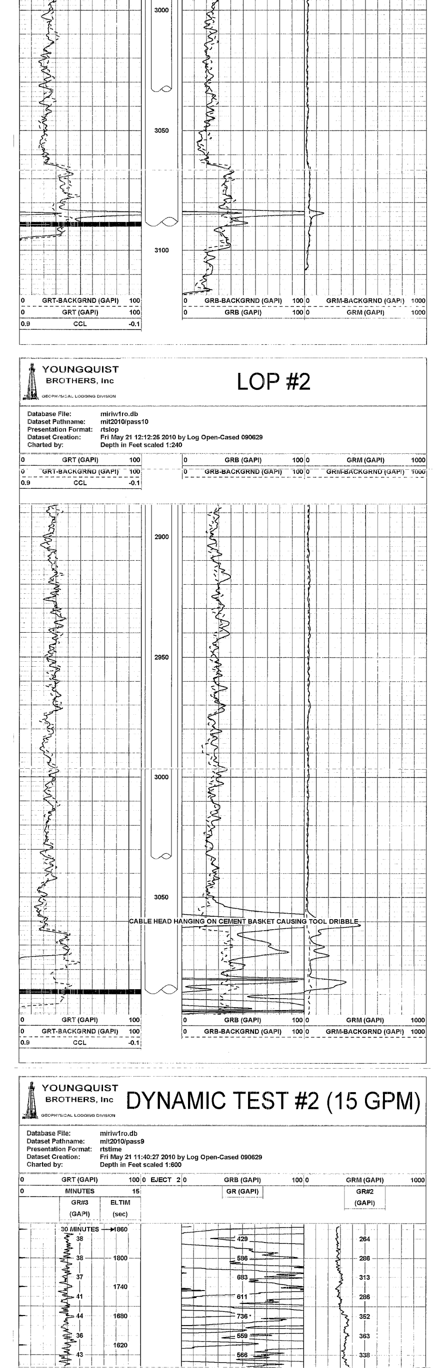
FINAL GAMMA RAY



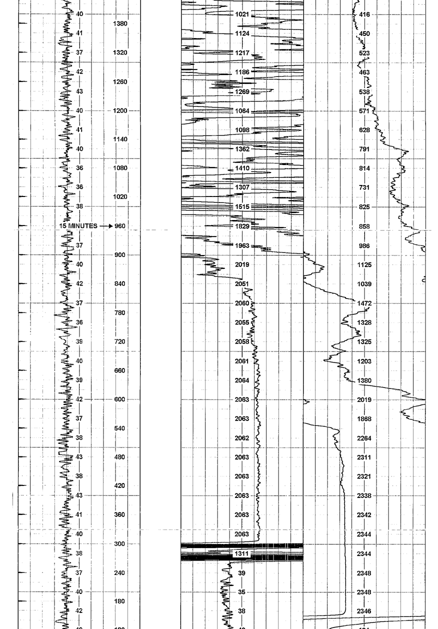
LOP #2



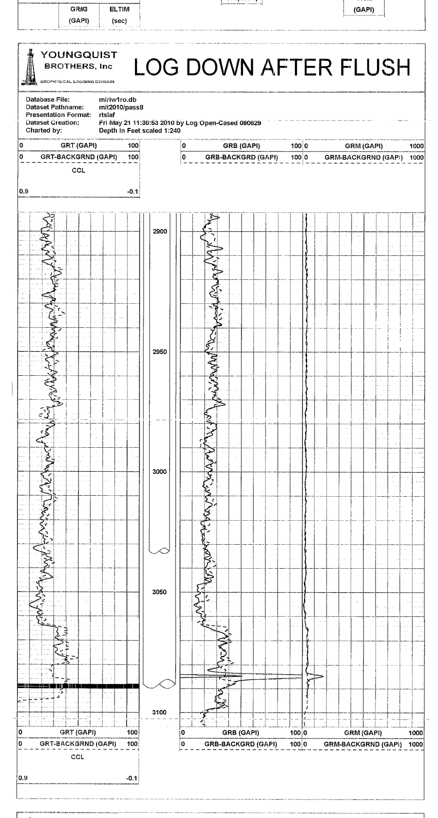
DYNAMIC TEST #2 (15 GPM)



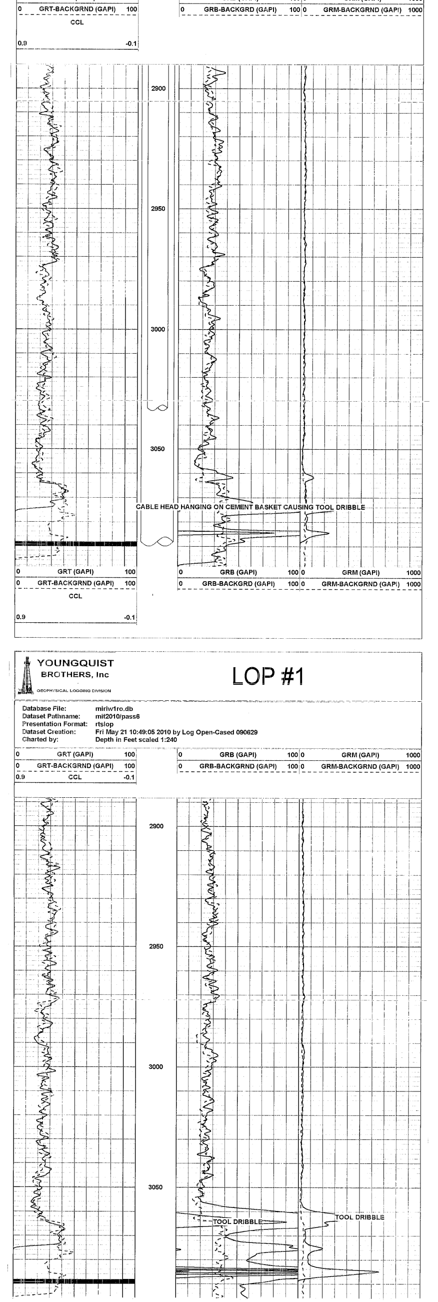
LOG DOWN AFTER FLUSH



LAF #1 (10000 GAL)



LOP #1



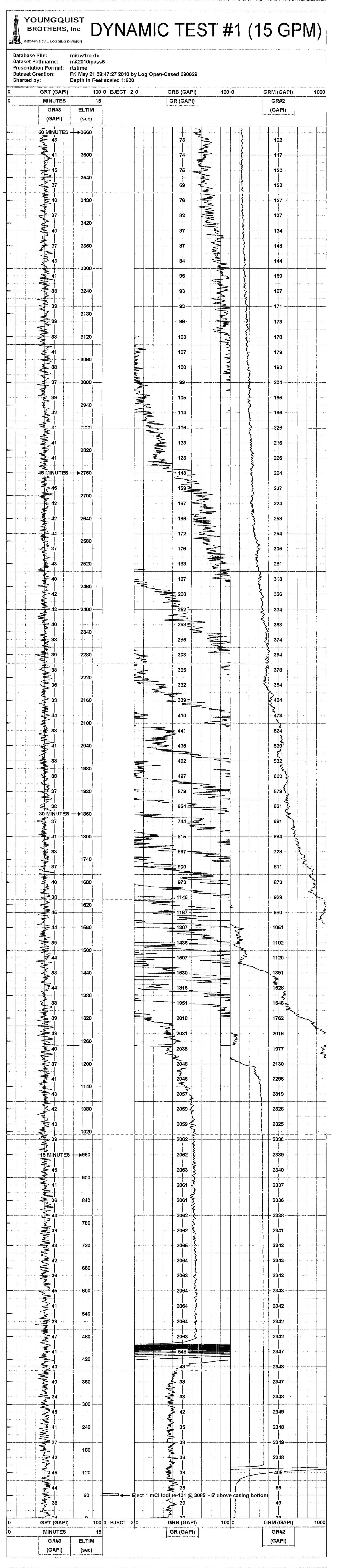
0	GRT (GAPI)	100	0	GRB (GAPI)	100
0	GRT-BACKGRND (GAPI)	100	0	GRB-BACKGRND (GAPI)	100
0.9	CCL	-0.1	0	GRM (GAPI)	1000
			0	GRM-BACKGRND (GAPI)	1000

YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

DYNAMIC TEST #1 (15 GPM)

Database File: miriw1ro.db
Dataset Pathname: mit2010/pass5
Presentation Format: rtstime
Dataset Creation: Fri May 21 09:47:27 2010 by Log Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

0 GRT (GAPI) 100 | 0 EJECT 2 | 0 GRB (GAPI) 100 | 0 GRM (GAPI) 1000
0 MINUTES 15 | GR (GAPI) | GR#2 (GAPI)
GR#3 (GAPI) | ELTIM (sec)



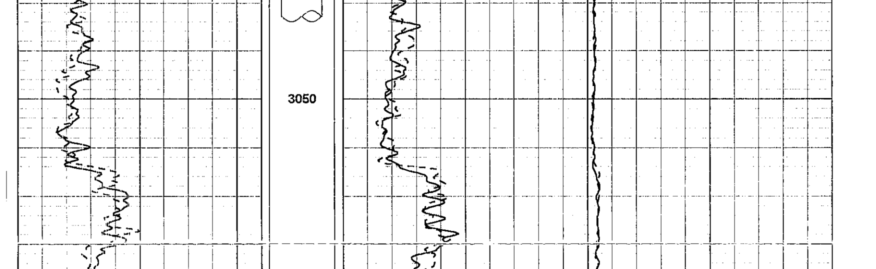
0 GRT (GAPI) 100 | 0 EJECT 2 | 0 GRB (GAPI) 100 | 0 GRM (GAPI) 1000
0 MINUTES 15 | GR (GAPI) | GR#2 (GAPI)
GR#3 (GAPI) | ELTIM (sec)

YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

CASING TIE-IN

Database File: miriw1ro.db
Dataset Pathname: mit2010/pass4
Presentation Format: rtstie
Dataset Creation: Fri May 21 08:22:02 2010 by Log Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0 GRT (GAPI) 100 | 0 GRB (GAPI) 100 | 0 GRM (GAPI) 1000
0.9 CCL -0.1 | 0 GRB-BACKGRD (GAPI) 100 | 0 GRM-BACKGRD (GAPI) 1000
0 GRT-BACKGRD (GAPI) 100



0 GRT (GAPI) 100 | 0 GRB (GAPI) 100 | 0 GRM (GAPI) 1000
0.9 CCL -0.1 | 0 GRB-BACKGRD (GAPI) 100 | 0 GRM-BACKGRD (GAPI) 1000
0 GRT-BACKGRD (GAPI) 100

YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

BACKGROUND GAMMA RAY

Database File: miriw1ro.db
Dataset Pathname: mit2010/pass3
Presentation Format: rtsbk
Dataset Creation: Thu May 20 17:40:28 2010 by Log Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

0 GRT-BACKGRND (GAPI) 100 | 0 GRB-BACKGRND (GAPI) 100 | 0 GRM-BACKGRND (GAPI) 1000
0.9 CCL -0.1

0 GRT-BACKGRND (GAPI) 100 | 0 GRB-BACKGRND (GAPI) 100 | 0 GRM-BACKGRND (GAPI) 1000
0.9 CCL -0.1

Calibration Report

Database File: miriw1ro.db
Dataset Pathname: mit2010/pass2
Dataset Creation: Thu May 20 17:36:13 2010 by Log Open-Cased 090629

Gamma Ray Calibration Report

Serial Number:	954B	
Tool Model:	RTSB	
Performed:	Thu May 20 06:41:52 2010	
Calibrator Value:	120.0	GAPI
Background Reading:	72.7	cps
Calibrator Reading:	271.8	cps
Sensitivity:	0.6428	GAPI/cps

Gamma Ray Calibration Report

Serial Number:	954M	
Tool Model:	RTSM	
Performed:	Thu May 20 06:42:03 2010	
Calibrator Value:	120.0	GAPI
Background Reading:	450.3	cps
Calibrator Reading:	610.4	cps
Sensitivity:	0.7296	GAPI/cps

Gamma Ray Calibration Report

Serial Number:	954T	
Tool Model:	RTST	
Performed:	Thu May 20 06:42:16 2010	
Calibrator Value:	120.0	GAPI
Background Reading:	69.6	cps
Calibrator Reading:	263.5	cps
Sensitivity:	0.6891	GAPI/cps

IW-2 High Resolution Temperature and RTS Log

HIGH RESOLUTION TEMPERATURE LOG

YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

Company	CITY OF MIRAMAR
Well	INJECTION WELL #2
Field	MIRAMAR WEST W. W. .T. P.
County	BROWARD
State	FLORIDA

Company CITY OF MIRAMAR
Well INJECTION WELL #2
Field MIRAMAR WEST W. W. .T. P.
County BROWARD State FLORIDA
Location: API # :
Other Services DHTVS RTS

SEC	TWP	RGE

		Elevation	Elevation
Permanent Datum	PAD		K.B.
Log Measured From	PAD		D.F.
Drilling Measured From	PAD		G.L.

Date	28-MAY-2010
Run Number	MIT 2010
Depth Driller	3179'
Depth Logger	3152'
Bottom Logged Interval	3152'
Top Log Interval	SURFACE
Open Hole Size	NA
Type Fluid	WATER
Density / Viscosity	NA
Max. Recorded Temp.	79F
Estimated Cement Top	NA
Time Well Ready	ON ARRIVAL
Time Logger on Bottom	0900
Equipment Number	103
Location	FT. MEYERS
Recorded By	FULLER CATHEY
Witnessed By	LARGEY, J

Borehole Record				Borehole Record			
Run Number	Bit	From	To	Run No	Bit	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	16"	.5 W.T	SURFACE	3040'
Prot. String				
Production String				
Liner	10.75"	FRP	SURFACE	2967'

<<< Fold Here >>>

Comments

YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

TEMPERATURE

Database File:	miriw2ro.db
Dataset Pathname:	mit2010/PASS3
Presentation Format:	temp
Dataset Creation:	Fri May 28 07:41:20 2010 by Log Open-Cased 090629
Charted by:	Depth in Feet scaled 1:600

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			TEMP-RTS (954)	25.50	1.69	70.00
TEMP	0.10					

Dataset:	miriw2ro.db: field/well/mit2010/PASS3
Total Length:	25.50 ft
Total Weight:	70.00 lb
O.D.	1.69 in

Calibration Report

Database File:	miriw2ro.db
Dataset Pathname:	mit2010/PASS3
Dataset Creation:	Fri May 28 07:41:20 2010 by Log Open-Cased 090629

Temperature Calibration Report

Serial Number:	954
Tool Model:	RTS
Performed:	Tue Feb 27 11:24:16 2007

Point #	Reading		Reference	
1	338.01	cps	34.00	degF
2	789.32	cps	78.00	degF
3	1553.26	cps	152.00	degF
4		cps		degF
5		cps		degF
6		cps		degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

RADIOACITVE TRACER SURVEY LOG

Company	CITY OF MIRAMAR
Well	INJECTION WELL #2
Field	MIRAMAR WEST W. W. T. P.
County	BROWARD
State	FLORIDA

Company CITY OF MIRAMAR
Well INJECTION WELL #2
Field MIRAMAR WEST W. W. .T. P.
County BROWARD State FLORIDA
Location: API # :
Other Services DHTVS RTS

SEC TWP RGE

		Elevation
Permanent Datum	PAD	K.B.
Log Measured From	PAD	D.F.
Drilling Measured From	PAD	G.L.

Date	28-MAY-2010
Run Number	MIT 2010
Depth Driller	3179'
Depth Logger	3152'
Bottom Logged Interval	3152'
Top Log Interval	SURFACE
Open Hole Size	NA
Type Fluid	WATER
Density / Viscosity	NA
Max. Recorded Temp.	79F
Estimated Cement Top	NA
Time Well Ready	ON ARRIVAL
Time Logger on Bottom	0900
Equipment Number	103
Location	FT. MEYERS
Recorded By	FULLER CATHEY
Witnessed By	LARGEY, J

Borehole Record				Borehole Record			
Run Number	Bit	From	To	Run No	Bit	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	18"	.5 W.T	SURFACE	3040'
Prot. String				
Production String				
Liner	10.75"	FRP	SURFACE	2967'

<<< Fold Here >>>

Comments

EJECTOR PORT 13.5' FROM BOTTOM OF TOOL

Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
GR#3	24.00				
		GR #3 -RTST (954T)	11.50	1.69	30.00
		TREJCT-A (954)	1.00	1.69	10.00
		GR #2 -RTSM (954M)	3.00	1.69	10.00
GR#2	10.50				
CCL	9.60	CCL-1.68GRRTS (954)	0.75	1.69	10.00
		GR-RTSB (954B)	9.25	1.69	10.00
GR	1.20				

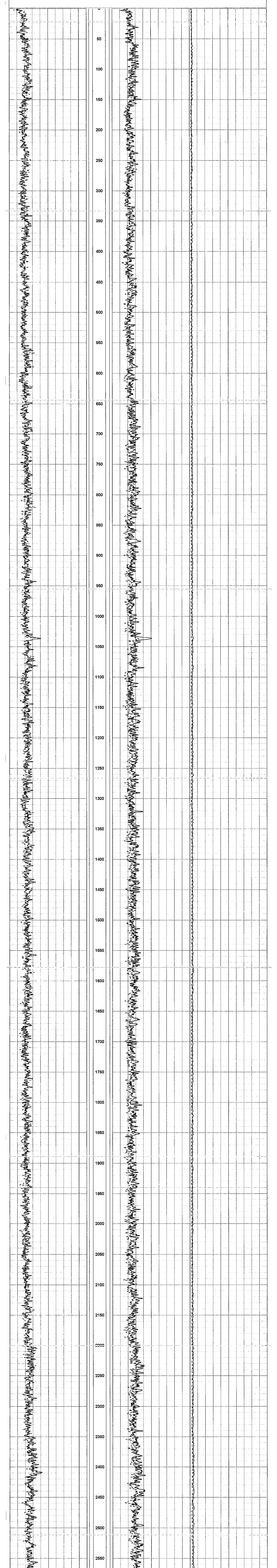
Dataset: miriw2ro.db: field/well/mit2010/PASS2
Total Length: 25.50 ft
Total Weight: 70.00 lb
O.D. 1.69 in

YOUNGQUIST BROTHERS, Inc — FINAL GAMMA RAY

GEOPHYSICAL LOGGING DIVISION

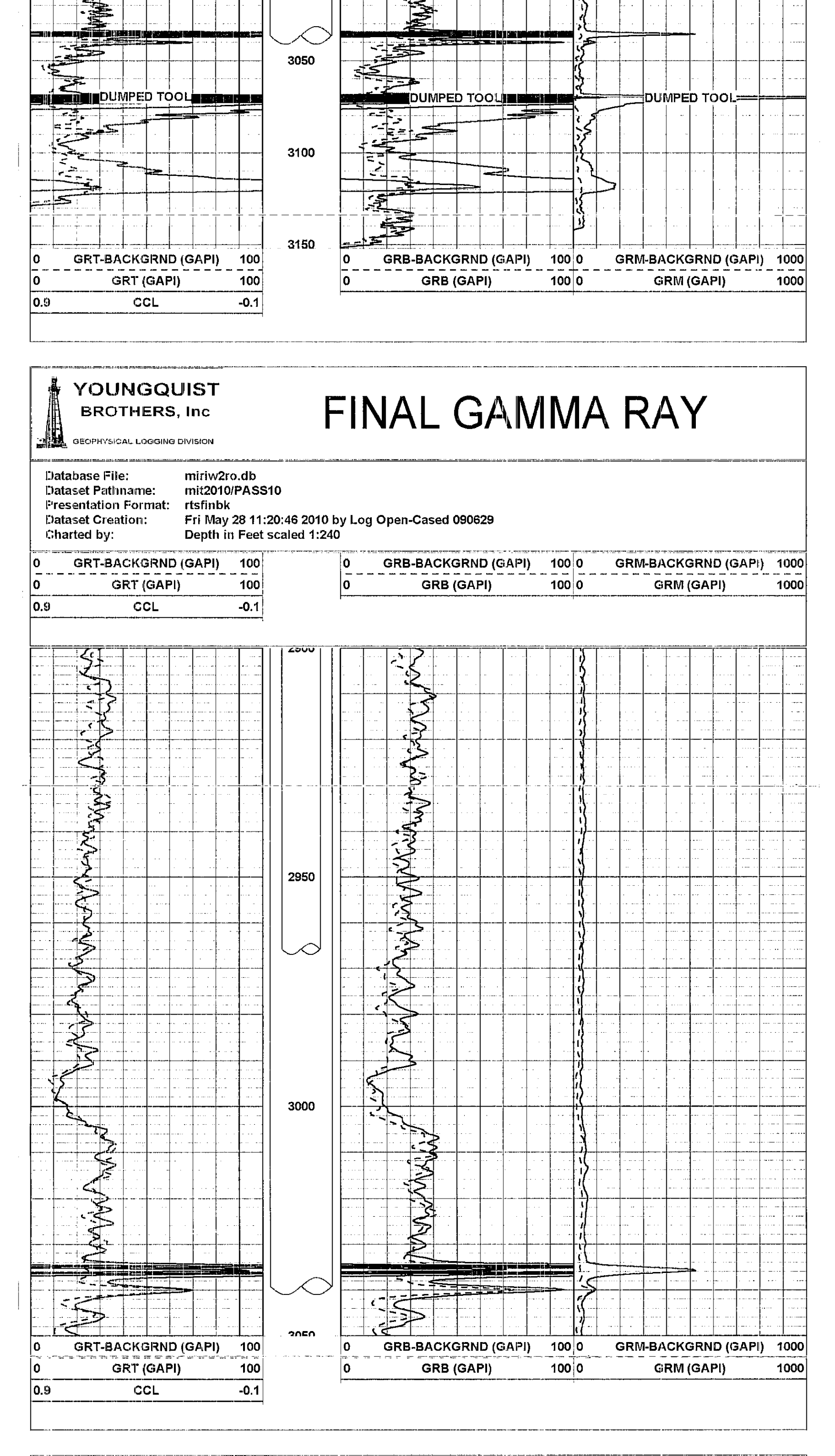
Database File: miriw2ro.db
Dataset Pathname: mit2010/PASS10
Presentation Format: rtsfinbk
Dataset Creation: Fri May 28 11:20:46 2010 by Log Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

0 GRT-BACKGRND (GAPI) 100	0 GRB-BACKGRND (GAPI) 100	0 GRM-BACKGRND (GAPI) 1000
0 GRT (GAPI) 100	0 GRB (GAPI) 100	0 GRM (GAPI) 1000
0.9 CCL -0.1		



0 GRT-BACKGRND (GAPI) 100	0 GRB-BACKGRND (GAPI) 100	0 GRM-BACKGRND (GAPI) 1000
0 GRT (GAPI) 100	0 GRB (GAPI) 100	0 GRM (GAPI) 1000
0.9 CCL -0.1		

YOUNGQUIST BROTHERS, Inc — FINAL GAMMA RAY



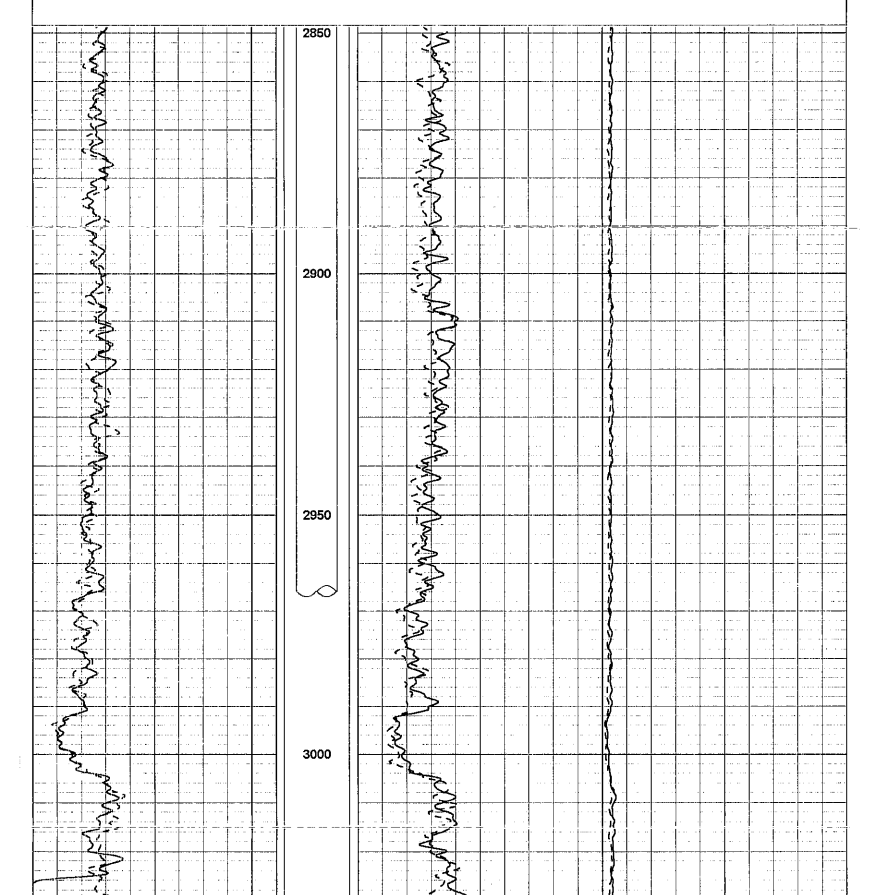
0 GRT-BACKGRND (GAPI) 100	0 GRB-BACKGRND (GAPI) 100	0 GRM-BACKGRND (GAPI) 1000
0 GRT (GAPI) 100	0 GRB (GAPI) 100	0 GRM (GAPI) 1000
0.9 CCL -0.1		

YOUNGQUIST BROTHERS, Inc — LOP #2

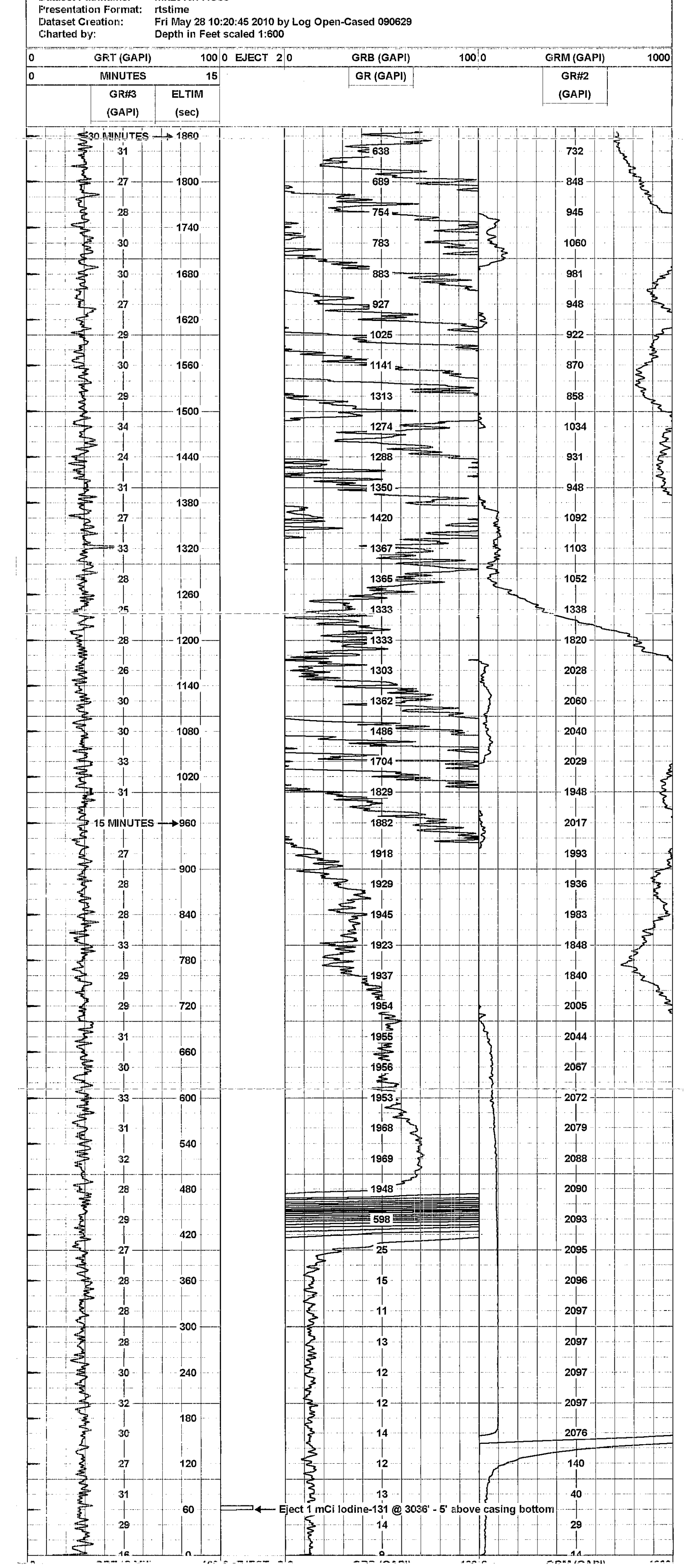
GEOPHYSICAL LOGGING DIVISION

Database File: miriw2ro.db
Dataset Pathname: mit2010/PASS9
Presentation Format: rtslop
Dataset Creation: Fri May 28 10:52:31 2010 by Log Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0 GRT (GAPI) 100	0 GRB (GAPI) 100	0 GRM (GAPI) 1000
0 GRT-BACKGRND (GAPI) 100	0 GRB-BACKGRND (GAPI) 100	0 GRM-BACKGRND (GAPI) 1000
0.9 CCL -0.1		



YOUNGQUIST BROTHERS, Inc — DYNAMIC TEST #2(14.5GPM)

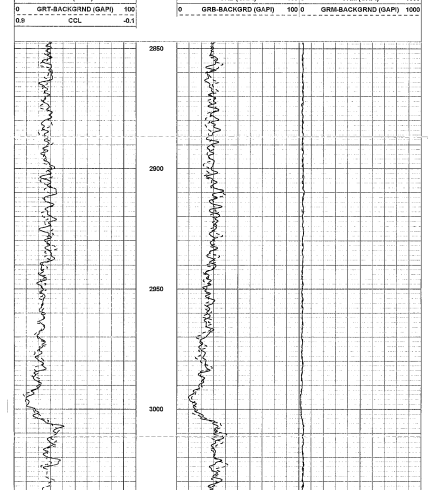


0	MINUTES	15		GR (GAPI)		GR#2 (GAPI)
	GR#3 (GAPI)	ELTIM (sec)				

YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

LAF #1 (5000 GPM)

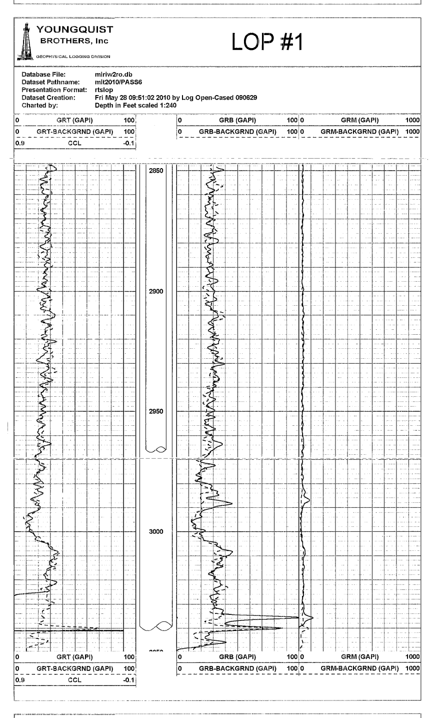
Database File: miriw2ro.db
Dataset Pathname: mit2010/PASS7
Presentation Format: rtslaf
Dataset Creation: Fri May 28 10:10:28 2010 by Log Open-Cased 090629
Charted by: Depth in Feet scaled 1:240



YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

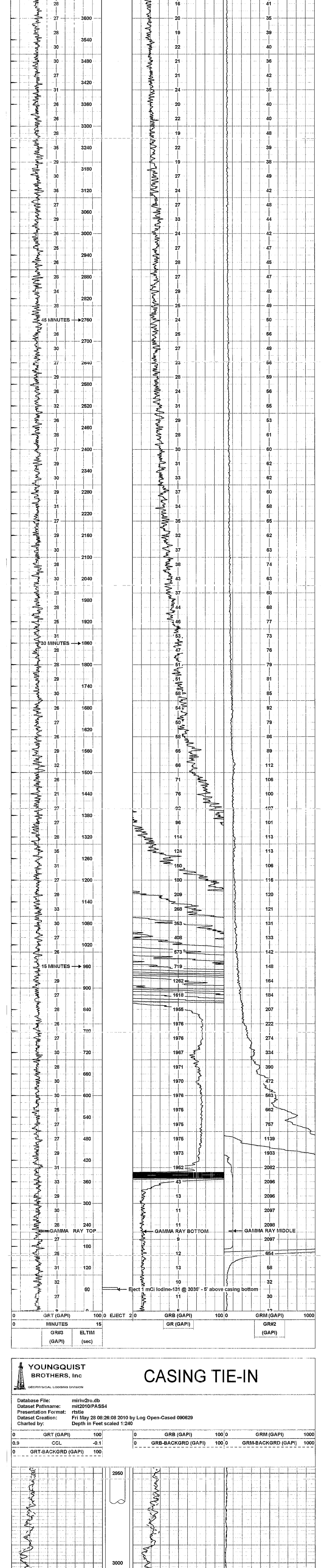
LOP #1

Database File: miriw2ro.db
Dataset Pathname: mit2010/PASS6
Presentation Format: rtslop
Dataset Creation: Fri May 28 09:51:02 2010 by Log Open-Cased 090629
Charted by: Depth in Feet scaled 1:240



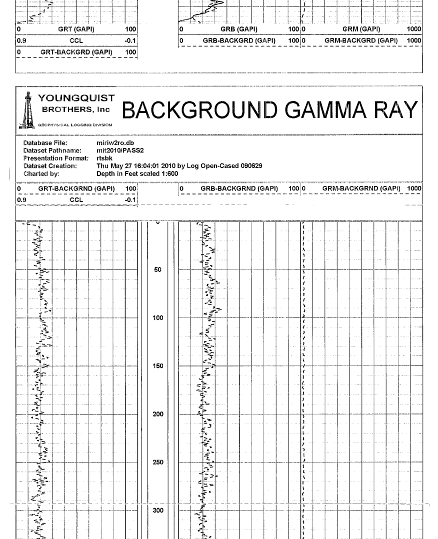
YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

DYNAMIC TEST #1 (14 GPM)



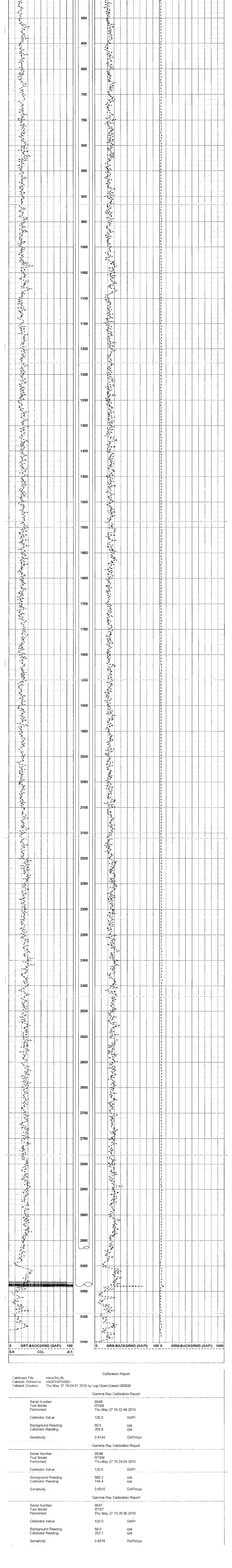
YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

CASING TIE-IN



YOUNGQUIST BROTHERS, Inc
GEOPHYSICAL LOGGING DIVISION

BACKGROUND GAMMA RAY



Calibration Report

Database File: miriw2ro.db
Dataset Pathname: mit2010/PASS2
Dataset Creation: Thu May 27 16:04:01 2010 by Log Open-Cased 090629

Gamma Ray Calibration Report

Serial Number:	954B	
Tool Model:	RTSB	
Performed:	Thu May 27 15:22:49 2010	
Calibrator Value:	120.0	GAPI
Background Reading:	60.5	cps
Calibrator Reading:	255.8	cps
Sensitivity:	0.6144	GAPI/cps

Gamma Ray Calibration Report

Serial Number:	954M	
Tool Model:	RTSM	
Performed:	Thu May 27 15:24:04 2010	
Calibrator Value:	120.0	GAPI
Background Reading:	560.2	cps
Calibrator Reading:	744.4	cps
Sensitivity:	0.6515	GAPI/cps

Gamma Ray Calibration Report

Serial Number:	954T	
Tool Model:	RTST	
Performed:	Thu May 27 15:25:30 2010	
Calibrator Value:	120.0	GAPI
Background Reading:	59.0	cps
Calibrator Reading:	252.1	cps
Sensitivity:	0.6216	GAPI/cps

Appendix E

Operating Data and Plots

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
1/1/2005	0.6	0.5	0.5	14.0	13.0	14.0								34	33	34	2136	926	1024	1.515	1.515
1/2/2005	0.7	0.6	0.6	14.0	13.0	14.0				IW-1 Out of Service				33	33	33	1311	916	1062	1.408	1.408
1/3/2005	0.6	0.5	0.5	14.0	13.0	14.0				Pending Modification to Permit				33	33	33	1100	913	969	1.417	1.417
1/4/2005	0.6	0.6	0.5	14.0	13.0	14.0								34	32	33	2227	883	964	1.439	1.439
1/5/2005	0.6	0.5	0.5	14.0	13.0	14.0								32	32	32	1476	857	1022	1.299	1.299
1/6/2005	0.8	0.7	0.6	14.0	13.0	13.0								32	32	32	1137	847	909	1.305	1.305
1/7/2005	0.6	0.5	0.5	14.0	13.0	13.0								33	32	33	2017	474	898	1.456	1.456
1/8/2005	0.6	0.5	0.5	14.0	13.0	13.0								34	33	34	1828	788	973	1.622	1.622
1/9/2005	0.5	0.5	0.5	14.0	13.0	13.0								34	32	33	2285	896	1133	1.518	1.518
1/10/2005	0.7	0.5	0.5	14.0	13.0	13.0								34	34	34	1845	539	1053	1.612	1.612
1/11/2005	0.6	0.5	0.5	14.0	13.0	13.0								33	33	33	2076	0	1132	1.345	1.345
1/12/2005	0.6	0.6	0.6	14.0	14.0	14.0								34	32	33	2590	877	936	1.189	1.189
1/13/2005	0.7	0.6	0.6	14.0	14.0	14.0								40	32	36	1805	0	833	1.347	1.347
1/14/2005	0.5	0.5	0.5	14.0	14.0	14.0				IW-1 Out of Service				34	34	34	2609	0	902	1.792	1.792
1/15/2005	0.6	0.5	0.5	14.0	14.0	14.0				Pending Modification to Permit				34	34	34	1424	873	1225	1.366	1.366
1/16/2005	0.6	0.5	0.5	14.0	14.0	14.0								33	33	33	1415	364	982	1.468	1.468
1/17/2005	0.7	0.5	0.6	14.0	14.0	14.0								34	33	34	1898	106	999	1.469	1.469
1/18/2005	0.7	0.5	0.5	14.0	14.0	14.0								34	34	34	1348	875	1034	1.722	1.722
1/19/2005	0.8	0.6	0.5	14.0	14.0	14.0								34	34	34	2269	906	1192	1.618	1.618
1/20/2005	0.6	0.6	0.5	14.0	14.0	14.0								33	32	33	1332	888	1130	1.330	1.330
1/21/2005	0.6	0.5	0.5	14.0	14.0	14.0								34	33	34	1126	830	918	1.412	1.412
1/22/2005	0.7	0.5	0.5	14.0	14.0	14.0								33	33	33	1267	1	975	1.527	1.527
1/23/2005	0.6	0.5	0.5	14.0	14.0	14.0								34	32	33	1335	817	1042	1.619	1.619
1/24/2005	0.7	0.6	0.6	14.0	14.0	14.0								34	34	34	1344	864	1131	1.624	1.624
1/25/2005	0.8	0.7	0.6	14.0	14.0	14.0								33	33	33	1298	868	1139	1.362	1.362
1/26/2005	0.6	0.5	0.6	14.0	14.0	14.0				IW-1 Out of Service				34	34	34	1157	868	941	1.721	1.721
1/27/2005	0.6	0.5	0.5	14.0	14.0	14.0				Pending Modification to Permit				34	33	34	1347	730	1187	1.406	1.406
1/28/2005	0.7	0.6	0.6	14.0	14.0	14.0								33	33	33	2101	0	989	1.406	1.406
1/29/2005	0.7	0.5	0.6	14.0	14.0	14.0								35	33	34	1080	923	970	1.612	1.612
1/30/2005	0.6	0.5	0.5	14.0	14.0	14.0								35	34	35	1426	677	1083	1.703	1.703
1/31/2005	0.6	0.5	0.5	14.0	14.0	14.0								35	34	35	1358	1160	1201	1.648	1.648
2/1/2005	0.6	0.5	0.5	14.0	14.0	14.0								33	33	33	1365	724	1159	1.362	1.362
2/2/2005	0.7	0.6	0.6	14.0	14.0	14.0								33	33	33	1334	663	944	1.590	1.590
2/3/2005	0.6	0.5	0.5	14.0	14.0	14.0								34	34	34	1321	419	1083	1.748	1.748
2/4/2005	0.6	0.6	0.5	14.0	13.0	13.0								34	33	33	1401	1155	1206	1.526	1.526
2/5/2005	0.6	0.5	0.5	14.0	13.0	14.0								33	33	3	1327	894	1078	1.360	1.360
2/6/2005	0.8	0.7	0.6	14.0	13.0	14.0								35	35	35	1127	898	938	1.715	1.715
2/7/2005	0.6	0.5	0.5	14.0	13.0	14.0				IW-1 Out of Service				35	35	35	1316	558	1177	1.712	1.712
2/8/2005	0.6	0.5	0.5	14.0	13.0	14.0				Pending Modification to Permit				34	34	34	1313	1149	1190	1.524	1.524
2/9/2005	0.5	0.5	0.5	14.0	13.0	14.0								33	33	33	2277	295	1064	1.397	1.397
2/10/2005	0.7	0.5	0.5	14.0	13.0	14.0								33	33	33	2209	397	966	1.410	1.410
2/11/2005	0.6	0.6	0.6	14.0	13.0	14.0								33	33	33	1118	923	960	1.342	1.342
2/12/2005	0.6	0.5	0.6	14.0	13.0	14.0								33	33	33	1103	914	959	1.390	1.390
2/13/2005	0.7	0.6	0.6	14.0	13.0	14.0								34	33	33	1103	919	957	1.382	1.382
2/14/2005	0.5	0.5	0.5	14.0	13.0	14.0								34	33	33	1069	377	952	1.453	1.453
2/15/2005	0.6	0.5	0.5	14.0	13.0	14.0								35	35	35	2358	0	991	1.751	1.751
2/16/2005	0.6	0.5	0.5	14.0	13.0	14.0								35	34	34	1333	1196	1217	1.756	1.756
2/17/2005	0.7	0.5	0.6	14.0	13.0	14.0								35	35	35	1288	1196	1214	1.777	1.777
2/18/2005	0.7	0.5	0.5	14.0	13.0	14.0								35	35	35	1332	1135	1218	1.733	1.733
2/19/2005	0.8	0.5	0.5	14.0	13.0	14.0				IW-1 Out of Service				35	35	35	2368	122	1212	1.739	1.739
2/20/2005	0.6	0.5	0.5	14.0	13.0	14.0				Pending Modification to Permit				35	35	35	1323	777	1208	1.600	1.600
2/21/2005	0.6	0.5	0.5	14.0	13.0	14.0								35	35	35	1348	825	1103	1.753	1.753
2/22/2005	0.7	0.5	0.5	14.0	13.0	14.0								35	34	34	1613	1001	1212	1.554	1.554
2/23/2005	0.6	0.5	0.5	14.0	13.0	14.0								34	33	33	1484	665	1109	1.402	1.402
2/24/2005	0.7	0.5	0.6	14.0	13.0	14.0								34	34	34	1242	861	953	1.352	1.352
2/25/2005	0.8	0.7	0.6	14.0	13.0	14.0								35	35	35	1963	0	955	1.554	1.554
2/26/2005	0.6	0.5	0.6	14.0	13.0	14.0								36	35	35	1328	250	1040	1.731	1.731
2/27/2005	0.6	0.5	0.5	14.0	13.0	14.0								36	35	35	1338	1129	1217	1.754	1.754
2/28/2005	0.7	0.6	0.6	14.0	13.0	14.0								36	36	36	1341	0	1207	1.647	1.647
3/1/2005	0.8	0.7	0.6	14.0	13.0	14.0								34	34	34	1916	0	1163	1.432	1.432
3/2/2005	0.6	0.5	0.5	14.0	13.0	14.0								34	34	34	2393	401	986	1.413	1.413
3/3/2005	0.6	0.5	0.5	14.0	13.0	14.0				IW-1 Out of Service				33	33	33	1162	700	982	1.373	1.373
3/4/2005	0.5	0.5	0.5	14.0	13.0	14.0				Pending Modification to Permit				33	33	33	1092	902	952	1.463	1.463
3/5/2005	0.7	0.5	0.5	14.0	13.0	14.0								35	35	35	1248	735	997	1.692	1.692
3/6/2005	0.6	0.5	0.5	14.0	13.0	14.0								35	33	34	1316	929	1181	1.517	1.517
3/7/2005	0.6	0.5	0.5	14.0	13.0	14.0								36	35	35	1330	735	1046	1.751	1.751
3/8/2005	0.6	0.5	0.5	14.0	13.0	14.0								36	35	36	1311	1113	1203	1.614	1.614
3/9/2005	0.7	0.5	0.6	14.0	13.0	14.0								34	34	34	1322	840	1149	1.346	1.346
3/10/2005	0.7	0.5	0.5	14.0	13.0	12.0								35	34	35	1074	835	929	1.326	1.326
3/11/2005	0.8	0.5	0.5	14.0	13.0	13.0								35	33	34	2476	0	928	1.569	1.569
3/12/2005	0.6	0.5	0.5	14.0	13.0	13.0								35	35	35	1323	902	1059	1.731	1.731
3/13/2005	0.7	0.6	0.6	14.0	13.0	13.0								35	35	35	1308	1168	1201	1.736	1.736
3/14/2005	0.5	0.5	0.5	14.0	13.0	13.0								36	35	36	1311	1177	1203	1.728	1.728
3/15/2005	0.6	0.5	0.5	14.0	13.0	13.0				IW-1 Out of Service				35	35	35	1314	1178	1198	1.764	1.764
3/16/2005	0.6	0.5	0.5	14.0	13.0	13.0				Pending Modification to Permit				35	35	35	2391	74	1205	1.722	1.722
3/17/2005	0.7	0.5	0.6	14.0	13.0	13.0								35	35	35	1341	0	1202	1.738	1.738
3/18/2005	0.7	0.5	0.5	14.0	13.0	13.0								35	35	35	1340	1108	1204	1.745	1.745
3/19/2005	0.8	0.5	0.5	14.0	13.0	13.0								35	35	35	1378	1110	1215	1.536	1.536
3/20/2005	0.6	0.5	0.5	14.0	13.0	13.0								36	35	36	1779	740	1092	1.411	1.411
3/21/2005	0.6	0.5	0.5	14.0	14.0	14.0								35	33	34	2214	0	968	1.588	1.588
3/22/2005	0.7	0.6	0.6	14.0	14.0	14.0								35	34	35	1381	0	1077	1.703	1.703
3/23/2005	0.6	0.5	0.6	14.0	14.0	14.0								35	34	35	1336	0	1176	1.765	1.765
3/24/2005	0.6	0.5	0.5	14.0	14.0	14.0								34	34	34	1370	460	1229	1.611	1.611
3/25/2005	0.7	0.6	0.6	14.0	14.0	14.0								35	35	35	2016	0	1109	1.793	1.793
3/26/2005	0.7	0.5	0.6	14.0	14.0	14.0								35	34	35	1386	1181	1225	1.748	1.748
3/27/2005	0.6	0.5	0.5	14.0	14.0	14.0				IW-1 Out of Service				34	34	34	1352	1182	1230	1.777	1.777
3/28/2005	0.6	0.5	0.5	14.0	14.0	14.0				Pending Modification to Permit				34	34	34	1371	1183	1227	1.776	1.776
3/29/2005	0.7	0.5	0.6	14.0	14.0	14.0								34	34	34	1377	1	1225	1.747	1.747
3/30/2005	0.7	0.6	0.5	14.0	14.0	14.0								34	34	34	2303	1137	1225	1.755	1.755
3/31/2005	0.6	0.5	0.5	14.0	14.0	14.0								35	34	35	1333	1163	1206	1.781	1.781
4/1/2005	0.6	0.5	0.5	14.0	13.0	13.0								34	34	34	1377	439	1228	1.754	1.754
4/2/2005	0.6	0.5	0.5	14.0	13.0	13.0								35	34	35	1369	1027	1225	1.773	1.773
4/3/2005	0.7	0.5	0.6	14.0	13.0	13.0								34	34	34	1984	349	1228	1.699	1.699
4/4/2005	0.7	0.5	0.5	14.0	13.0	13.0								34	34	34	1377	1190	1234	1.786	1.786
4/5/2005	0.8	0.5	0.6	14.0	13.0	13.0								35	34	35	1374	1189	1231	1.764	1.764
4/6/2005	0.6	0.5	0.5	14.0	13.0	13.0								34	34	34	1379	1194	1233	1.797	1.797
4/7/2005	0.6	0.5	0.5	14.0	14.0	14.0								34	34	34	1365	594	1234	1.730	1.730
4/8/2005	0.7	0.5	0.6	14.0	13.0	14.0				IW-1 Out of Service				34	34	34	1445	1062	1196	1.723	1.723

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Data Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)	
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot	
4/9/2005	0.7	0.5	0.5	14.0	13.0	12.0				Pending Modification to Permit				34	34	34	1440	524	1202	1.609	1.609	
4/10/2005	0.8	0.5	0.5	14.0	13.0	13.0								34	34	34	1337	760	1117	1.754	1.754	
4/11/2005	0.6	0.5	0.5	14.0	13.0	13.0								34	34	34	2761	0	1208	1.725	1.725	
4/12/2005	0.7	0.6	0.6	14.0	13.0	13.0								35	34	35	2126	694	1193	1.731	1.731	
4/13/2005	0.5	0.5	0.5	14.0	13.0	13.0								35	33	34	2373	1098	1201	1.678	1.678	
4/14/2005	0.6	0.5	0.5	14.0	13.0	13.0								34	34	34	2214	257	1168	1.741	1.741	
4/15/2005	0.6	0.5	0.5	14.0	13.0	13.0								34	34	34	2744	150	1184	1.620	1.620	
4/16/2005	0.7	0.5	0.6	14.0	13.0	13.0								34	34	34	2244	1	1136	1.731	1.731	
4/17/2005	0.7	0.5	0.5	14.0	13.0	13.0								35	33	34	1339	1162	1203	1.752	1.752	
4/18/2005	0.8	0.5	0.5	14.0	13.0	13.0								34	34	34	1447	1058	1095	1.953	1.953	
4/19/2005	0.7	0.5	0.5	14.0	13.0	14.0								34	33	34	2587	0	1354	1.671	1.671	
4/20/2005	0.6	0.5	0.5	14.0	13.0	14.0				IW-1 Out of Service				34	34	34	1344	1040	1156	1.743	1.743	
4/21/2005	0.6	0.5	0.5	14.0	13.0	14.0				Pending Modification to Permit				33	34	34	1389	1107	1210	1.735	1.735	
4/22/2005	0.6	0.5	0.5	14.0	13.0	14.0								34	34	34	2092	580	1184	1.726	1.726	
4/23/2005	0.7	0.5	0.6	14.0	13.0	14.0								34	34	34	1310	1109	1205	1.745	1.745	
4/24/2005	0.7	0.5	0.5	14.0	13.0	12.0								34	34	34	1344	1102	1209	1.742	1.742	
4/25/2005	0.8	0.5	0.5	14.0	13.0	13.0								34	34	34	1344	1108	1209	1.750	1.750	
4/26/2005	0.6	0.5	0.5	14.0	13.0	13.0								34	33	34	2166	652	1209	1.746	1.746	
4/27/2005	0.7	0.6	0.6	14.0	13.0	13.0								34	34	34	1340	1045	1207	1.729	1.729	
4/28/2005	0.5	0.5	0.5	14.0	13.0	13.0								34	33	34	1341	1064	1206	1.739	1.739	
4/29/2005	0.6	0.5	0.5	14.0	13.0	13.0								34	33	34	2262	816	1221	1.787	1.787	
4/30/2005	0.7	0.5	0.5	14.0	13.0	14.0								34	34	34	1351	1105	1210	1.727	1.727	
5/1/2005	0.6	0.6	0.6	14.0	13.0	14.0								34	33	34	1371	1116	1209	1.744	1.744	
5/2/2005	0.7	0.6	0.7	14.0	13.0	14.0				IW-1 Out of Service				33	33	33	1356	1116	1205	1.753	1.753	
5/3/2005	0.6	0.5	0.6	14.0	13.0	14.0				Pending Modification to Permit				33	33	33	1360	1111	1208	1.460	1.460	
5/4/2005	0.6	0.6	0.6	14.0	13.0	14.0								34	32	33	2449	0	1015	1.681	1.681	
5/5/2005	0.6	0.5	0.6	14.0	13.0	14.0								32	32	32	1305	957	1171	1.488	1.488	
5/6/2005	0.8	0.7	0.8	14.0	13.0	13.0								32	32	32	1188	0	1028	1.484	1.484	
5/7/2005	0.6	0.5	0.6	14.0	13.0	13.0								33	32	33	2398	243	1033	1.550	1.550	
5/8/2005	0.6	0.5	0.6	14.0	13.0	13.0								34	33	34	2238	981	1065	1.739	1.739	
5/9/2005	0.5	0.4	0.5	14.0	13.0	13.0								34	32	33	1376	1121	1209	1.746	1.746	
5/10/2005	0.7	0.5	0.6	14.0	13.0	13.0								34	34	34	1341	0	1207	1.611	1.611	
5/11/2005	1.2	0.5	0.9	14.0	13.0	13.0								33	33	33	2767	147	1140	1.729	1.729	
5/12/2005	1.4	0.5	1.0	14.0	14.0	14.0								34	32	33	2091	654	1163	1.740	1.740	
5/13/2005	0.7	0.6	0.7	14.0	14.0	14.0								40	32	36	1341	1117	1208	1.754	1.754	
5/14/2005	0.5	0.5	0.5	14.0	14.0	14.0				IW-1 Out of Service				34	34	34	1389	0	1203	1.723	1.723	
5/15/2005	1.6	0.5	1.1	14.0	14.0	14.0				Pending Modification to Permit				34	34	34	2299	790	1210	1.752	1.752	
5/16/2005	0.6	0.5	0.6	14.0	14.0	14.0								33	33	33	1351	1116	1209	1.740	1.740	
5/17/2005	1.2	0.5	0.9	14.0	14.0	14.0								34	33	34	1362	1117	1209	1.776	1.776	
5/18/2005	1.2	0.4	0.8	14.0	14.0	14.0								34	34	34	1261	0	1215	1.750	1.750	
5/19/2005	1.4	0.4	0.9	14.0	14.0	14.0								34	34	34			1207	1.738	1.738	
5/20/2005	1.2	0.4	0.8	14.0	14.0	14.0								33	32	33			1200	1.728	1.728	
5/21/2005	1.3	0.5	0.9	14.0	14.0	14.0								34	33	34			1230	1.771	1.771	
5/22/2005	0.7	0.5	0.6	14.0	14.0	14.0								33	33	33			1212	1.745	1.745	
5/23/2005	0.6	0.5	0.6	14.0	14.0	14.0								34	32	33			1109	1.598	1.598	
5/24/2005	0.7	0.5	0.6	14.0	14.0	14.0								34	34	34			1229	1.769	1.769	
5/25/2005	0.8	0.7	0.8	14.0	14.0	14.0								33	33	33			1212	1.745	1.745	
5/26/2005	1.4	0.5	1.0	14.0	14.0	14.0				IW-1 Out of Service				34	34	34			1206	1.736	1.736	
5/27/2005	0.6	0.5	0.6	14.0	14.0	14.0				Pending Modification to Permit				34	33	34			1216	1.751	1.751	
5/28/2005	0.7	0.6	0.7	14.0	14.0	14.0								33	33	33			1210	1.743	1.743	
5/29/2005	1.5	0.5	1.0	14.0	14.0	14.0								35	33	34			1153	1.661	1.661	
5/30/2005	1.1	0.5	0.8	14.0	14.0	14.0								35	34	35			1031	1.485	1.485	
5/31/2005	1.0	0.5	0.8	14.0	14.0	14.0								35	34	35			1138	1.639	1.639	
6/1/2005	23.0	0.0	11.5	16.0	16.0	16.0								35	34	34	1302	1300	1125	1.620	1.620	
6/2/2005	13.0	0.0	6.5	16.0	16.0	16.0								35	35	35	1307	1304	1199	1.727	1.727	
6/3/2005	7.0	0.0	3.5	16.0	16.0	16.0								35	35	35	1309	1312	1184	1.705	1.705	
6/4/2005	21.0	9.0	15.0	16.0	16.0	16.0								35	35	35	1317	1314	1204	1.734	1.734	
6/5/2005	5.0	0.0	2.5	16.0	16.0	16.0								35	35	35	1320	1319	1208	1.739	1.739	
6/6/2005	24.0	0.0	12.0	16.0	16.0	16.0								35	34	35	1323	1321	1213	1.747	1.747	
6/7/2005	56.0	0.0	28.0	16.0	16.0	16.0				IW-1 Out of Service				36	35	35	1326	1324	1218	1.755	1.755	
6/8/2005	30.0	0.0	15.0	16.0	14.0	15.0				Pending Modification to Permit				35	35	35	1328	1326	1188	1.710	1.710	
6/9/2005	30.0	0.0	15.0	14.0	14.0	14.0								35	34	35	1331	1330	1230	1.771	1.771	
6/10/2005	3.0	0.0	1.5	14.0	14.0	14.0								36	35	35	1336	1334	1204	1.734	1.734	
6/11/2005	0.0	0.0	0.0	14.0	14.0	14.0								35	35	35	1341	1339	506	1.763	1.763	
6/12/2005	18.0	0.0	9.0	14.0	14.0	14.0								35	35	35	1346	1344	1230	1.739	1.739	
6/13/2005	34.0	0.0	17.0	14.0	14.0	14.0								36	35	35	1350	1347	1202	1.734	1.734	
6/14/2005	40.0	0.0	20.0	14.0	14.0	14.0								34	34	34	1355	1352	1200	1.745	1.745	
6/15/2005	51.0	0.0	25.5	14.0	14.0	14.0								36	34	34	1358	1357	1203	1.713	1.713	
6/16/2005	73.0	0.0	36.5	14.0	14.0	14.0								35	34	34	1362	1360	1194	1.744	1.744	
6/17/2005	83.0	0.0	41.5	14.0	14.0	14.0								35	35	35	1365	1364	1198	1.734	1.734	
6/18/2005	81.0	0.0	40.5	14.0	14.0	14.0								35	34	35	1370	1367	1203	1.740	1.740	
6/19/2005	76.0	0.0	38.0	14.0	14.0	14.0				IW-1 Out of Service				35	35	35	1373	1371	1199	1.715	1.715	
6/20/2005	42.0	0.0	21.0	14.0	14.0	14.0				Pending Modification to Permit				35	35	35	1377	1375	1194	1.747	1.747	
6/21/2005	0.0	0.0	0.0	14.0	14.0	14.0								35	35	35	1381	1379	1210	1.590	1.590	
6/22/2005	35.0	0.0	17.5	14.0	14.0	14.0								35	35	35	1384	1382	1097	1.785	1.785	
6/23/2005	5.0	0.0	2.5	14.0	5.0	9.5								35	35	35	1388	1386	1222	1.738	1.738	
6/24/2005	54.0	0.0	27.0	14.0	14.0	14.0								35	35	35	1392	1389	1218	1.738	1.738	
6/25/2005	74.0	0.0	37.0	14.0	14.0	14.0								35	34	34	1394	577	1204	1.731	1.731	
6/26/2005	70.0	0.0	35.0	14.0	14.0	14.0								36	35	36	1399	1398	1200	1.729	1.729	
6/27/2005	39.0	0.0	19.5	14.0	14.0	14.0								35	35	35	1403	1401	1198	1.724	1.724	
6/28/2005	57.0	0.0	28.5	14.0	14.0	14.0								35	35	35	1407	1405	1195	1.733	1.733	
6/29/2005	30.0	0.0	15.0	14.0	14.0	14.0								35	35	35	1411	1409	1205	1.521	1.521	
6/30/2005	9.0	0.0	4.5	14.0	14.0	14.0								33	33	33	1416	1416	1042	1.552	1.552	
7/1/2005	1.4	1.3	1.4	14.7	13.9	14.3				IW-1 Out of Service				35	35	35	1420	1418	1419	1.741	1.741	
7/2/2005	1.4	1.3	1.4	14.0	14.0	14.0				Pending Modification to Permit				35	35	35	1425	1423	1424	1.753	1.753	10
7/3/2005	1.3	1.0	1.2	14.0	14.0	14.0								35	35	35	1429	1427	1428	1.728	1.728	
7/4/2005	1.0	1.0	1.0	14.0	14.0	14.0								35	35	35	1433	1431	1432	1.757	1.757	
7/5/2005	1.0	1.0	1.0	14.0	13.9	14.0								35	35	35	1437	1434	1436	1.735	1.735	
7/6/2005	1.1	1.0	1.1	14.0	13.9	14.0								35	34	35	1440	1439	1439	1.759	1.759	
7/7/2005	1.5	1.0	1.3	14.1	13.9	14.0								35	35	35	1444	1442	1443	1.753	1.753	
7/8/2005	1.4	1.3	1.4	14.0	13.9	13.9								35	35	35	1449	1447	1448	1.716	1.716	
7/9/2005	7.8	3.2	5.5	14.8	14.2	14.5								36	32	34	1454	1452	1453	1.342	1.342	
7/10/2005	7.7	7.7	7.7	14.7	14.0	14.3								35	35	32	1459	1457	1458	1.426	1.426	
7/11/2005	7.7	7.7	7.7	14.7	14.1	14.3								35	34	34	1463	1461	1462	1.741	1.741	
7/12/2005	7.6	7.6	7.6	14.8	14.1	14.4								35	35	35	1468	1466	1467	1.758	1.758	
7/13/2005	7.6	7.6	7.6	14.6	14.0	14.3				IW-1 Out of Service				35	35	35	1473	1470	1472	1.646	1.646	
7/14/2005	7.9	7.6	7.9	14.7	14.1	14.4				Pending Modification to Permit				33	35	34	1478	1476	1477	1.614	1.614	
7/15/2005	7.8	7.8	7.8	14.1	14.1	14.1								35	36	35	1482	1480	1481	1.719	1.719	

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
7/16/2005	7.7	7.7	7.7	14.1	14.0	14.0								35	35	35	1487	1485	1486	1.773	1.773
7/17/2005	7.7	7.6	7.7	14.0	14.0	14.0								35	35	35	1491	1489	1490	1.714	1.714
7/18/2005	7.6	7.6	7.6	14.1	14.0	14.0	MAJOR MODIFICATION PERMIT ISSUED							35	35	35	1495	1493	1494	1.728	1.728
7/19/2005	7.7	7.7	7.7	14.7	14.1	14.4								35	35	35	1500	1497	1499	1.760	1.760
7/20/2005	7.9	7.7	7.8	14.1	14.1	14.1								35	35	35	1505	1502	1503	1.730	1.730
7/21/2005	7.9	7.8	7.9	14.1	14.1	14.1								35	35	35	1510	1507	1508	1.736	1.736
7/22/2005	7.8	7.7	7.8	14.1	14.0	14.0								35	35	35	1515	1512	1514	1.724	1.724
7/23/2005	7.7	7.7	7.7	14.1	14.0	14.0								35	35	35	1519	1517	1518	1.739	1.739
7/24/2005	7.8	7.7	7.8	14.1	14.0	14.0								35	35	35	1523	1521	1522	1.727	1.727
7/25/2005	7.7	7.7	7.7	14.1	14.1	14.1	INJECTION WELL MODIFICATION ONGOING							35	35	35	1527	1525	1526	1.729	1.729
7/26/2005	7.8	7.7	7.8	14.1	14.0	14.0								35	35	35	1531	1529	1530	1.755	1.755
7/27/2005	7.9	7.8	7.9	14.1	14.1	14.1								35	35	35	1535	1533	1534	1.732	1.732
7/28/2005	7.7	7.7	7.7	14.1	14.1	14.1								35	35	35	1539	1537	1538	1.695	1.695
7/29/2005	7.7	7.7	7.7	14.1	14.1	14.1								34	34	34	1542	1541	1542	1.719	1.719
7/30/2005	7.6	7.6	7.6	14.1	14.0	14.0								35	35	35	1547	1545	1546	1.733	1.733
7/31/2005	7.6	7.6	7.6	14.1	14.0	14.0	INJECTION WELL MODIFICATION ONGOING							35	34	35	1551	1549	1550	1.724	1.724
8/1/2005	7.6	5.8	6.7	14.1	14.0	14.1						0		35	35	35	1554	1552	1553	1.729	1.729
8/2/2005	7.8	7.7	7.8	14.2	14.1	14.2								35	35	35	1558	1558	1556	1.754	1.754
8/3/2005	7.7	7.6	7.7	14.2	14.2	14.2								35	35	35	1562	1560	1561	1.293	1.293
8/4/2005	1.9	1.6	1.8	14.6	13.7	14.2								35	35	35	1565	1564	1565	1.738	1.738
8/5/2005	5.8	4.5	5.2	13.7	13.7	13.7								35	34	34	1568	1564	1566	1.699	1.699
8/6/2005	4.7	4.5	4.6	13.8	13.7	13.8	INJECTION WELL MODIFICATION ONGOING							35	35	35	1571	1569	1570	1.734	1.734
8/7/2005	7.8	7.7	7.8	13.8	13.7	13.8								35	34	35	1574	1572	1573	1.707	1.707
8/8/2005	7.9	7.9	7.9	14.0	13.7	13.9								35	35	35	1577	1575	1576	1.715	1.715
8/9/2005	7.7	3.5	5.6	13.7	13.5	13.6								35	35	35	1580	1578	1579	1.739	1.739
8/10/2005	3.8	3.6	3.7	13.7	13.6	13.7								35	35	35	1584	1582	1583	1.742	1.742
8/11/2005	4.0	3.7	3.9	13.9	13.7	13.8	PRESSURE TEST SUCCESSFUL							35	35	35	1587	1585	1586	1.730	1.730
8/12/2005	3.9	3.9	3.9	13.9	13.9	13.9								35	35	35	1591	1589	1590	1.703	1.703
8/13/2005	4.0	3.9	4.0	13.9	13.9	13.9								35	35	35	1595	1593	1594	1.727	1.727
8/14/2005	4.1	4.0	4.1	13.9	13.9	13.9								35	35	35	1598	1596	1597	1.737	1.737
8/15/2005	4.2	4.1	4.2	14.1	13.9	14.0											1601	1600	1601	1.726	1.726
8/16/2005	4.1		4.1	14.1		14.1											1603		1603	1.541	1.541
8/17/2005	2.4	0.3	1.4	13.8	13.7	13.8											1608	1606	1607	1.737	1.737
8/18/2005	0.8	0.7	0.8	13.9	13.9	13.9	RTS TEST SUCCESSFUL							35		35	1611	1609	1610	1.742	1.742
8/19/2005	0.7	0.7	0.7	13.9	13.8	13.9											1614	1613	1614	1.733	1.733
8/20/2005	1.0	0.8	0.9	13.8	13.7	13.8											1617	1615	1616	1.728	1.728
8/21/2005	1.7	1.2	1.5	13.9	13.6	13.8											1619	1618	1619	1.749	1.749
8/22/2005	2.0	1.6	1.8	14.0	13.9	14.0											1622	1620	1621	1.738	1.738
8/23/2005	2.0	1.9	2.0	14.0	13.9	14.0											1624	1623	1624	1.733	1.733
8/24/2005	2.1	1.8	2.0	14.8	14.1	14.5								34		34	1627	1626	1627	1.727	1.727
8/25/2005	2.1	1.6	1.9	14.0	14.0	14.0								35	35	35	1630	1629	1630	1.629	1.629
8/26/2005	5.1	5.1	5.1	14.1	14.1	14.1								33	32	33	1632	1631	1632	1.146	1.146
8/27/2005	5.6	5.3	5.5	14.1	14.1	14.1								33	33	33	1633	1633	1633	1.372	1.372
8/28/2005	6.2	6.1	6.2	14.1	14.1	14.1								35	33	34	1634	1634	1634	1.645	1.645
8/29/2005	6.2	6.2	6.2	14.1	14.1	14.1								35	35	35	1637	1635	1636	1.728	1.728
8/30/2005	6.2	6.2	6.2	14.1	14.1	14.1								36	35	35	1638	1637	1638	1.714	1.714
8/31/2005	6.3	6.1	6.2	14.1	14.1	14.1								35	34	35	1641	1639	1640	1.720	1.720
9/1/2005	14.2	14.1	14.2	7.1	7.1	7.1								35	35	34.8	1645	1642	1644	1.741	1.741
9/2/2005	14.2	14.1	14.2	7.5	7.3	7.4								35	34	34.4	1665	1647	1656	1.872	1.872
9/3/2005	14.2	14.1	14.2	7.5	7.4	7.5								34	34	34.1	1714	1688	1701	1.772	1.772
9/4/2005	14.1	14.1	14.1	7.7	7.7	7.7								35	34	34.5	1756	1736	1746	1.745	1.745
9/5/2005	14.1	14.1	14.1	7.7	7.6	7.7								34	34	34.2	1798	1777	1788	1.799	1.799
9/6/2005	14.1	14.1	14.1	7.6	7.6	7.6								35	34	34.5	1827	1819	1823	1.710	1.710
9/7/2005	14.1	14.1	14.1	7.7	7.6	7.7								34	34	34.2	1885	1834	1860	2.044	2 044
9/8/2005	14.1	13.8	13.9	7.6	1.5	4.6								36	34	34.9	1938	1891	1915	1.751	1.751
9/9/2005	13.7	13.6	13.7	6.5	1.5	4.0								34	34	34.3	1988	1962	1975	2.051	2.051
9/10/2005	13.9	13.7	13.8	6.0	5.9	6.0								35	35	34.8	2039	2015	2027	2.148	2.148
9/11/2005	13.9	13.8	13.9	7.8	7.8	7.8								35	35	34.8	2186	2060	2123	2.279	2.279
9/12/2005	14.0	13.8	13.9	7.8	7.8	7.8								35		34.8	2122	2105	2114	1.696	1.696
9/13/2005	14.0	13.9	14.0	7.8	7.8	7.8								35	36	34.5	2162	2142	2152	1.677	1.677
9/14/2005	14.0	13.9	14.0	7.8	6.5	7.2								35	35	34.7	2207	2187	2197	1.839	1.839
9/15/2005	14.0	13.9	14.0	6.4	6.3	6.4								35	35	34.6	2255	2237	2246	1.603	1.603
9/16/2005	14.0	13.9	14.0	6.4	6.3	6.4								35	35	34.8	2298	2277	2288	1.750	1.750
9/17/2005	14.0	13.8	13.8	6.4	6.3	6.4								35	35	34.7	2341	2320	2331	1.709	1.709
9/18/2005	14.0	13.9	14.0	6.4	6.3	6.4								35	34	34.6	2379	2350	2365	1.741	1.741
9/19/2005	14.0	14.0	14.0	6.4	6.3	6.4	SHORT TERM INJECTION TEST							68	35	51.1	2415	2397	2406	1.590	1.590
9/20/2005	14.0	14.0	14.0	6.4	6.4	6.4								38	36	36.5	2452	2431	2442	1.986	1.986
9/21/2005	14.1	14.1	14.1	6.4	6.4	6.4								46	35	40.7	2473		876	1.752	1.752
9/22/2005	14.6	14.1	14.4	6.9	6.4	6.7	IW-1 IN OPERATION							47	46	46.5				2.056	2 056
9/23/2005	14.1	14.0	14.1	6.4	6.4	6.4	51	47	45				1.981	INJECTION WELL MODIFICATION ONGOING							1.981
9/24/2005	14.1	14.1	14.1	6.4	6.3	6.4	47	42	47				2.209								2.209
9/25/2005	14.2	14.0	14.1	6.4	6.3	6.4	47	47	47	Instrumentation Issues			2.009								2.009
9/26/2005	14.2	14.0	14.1	6.5	6.4	6.5	47	46	46				1.725								1.725
9/27/2005	14.1	14.1	14.1	6.4	6.4	6.4	46	46	46				1.736								1.736
9/28/2005	14.7	14.4	14.6	6.3	6.3	6.3	46	46	46				2.316								2.316
9/29/2005	14.2	14.1	14.2	6.4	6.3	6.4	46	45	45				1.723	INJECTION WELL MODIFICATION ONGOING							1.723
9/30/2005	14.8	14.2	14.5	6.5	6.3	6.4	46	46	46				1.678								1.678
10/1/2005	14.8	14.2	14.5	6.4	6.3	6.4	46	46	46	988	907	948	1.709								1.709
10/2/2005	14.8	14.2	14.5	6.4	6.3	6.4	46	46	46	1005	920	963	1.706								1.706
10/3/2005	14.6	14.3	14.5	6.5	6.3	6.4	46	46	46	912	905	909	1.730								1.730
10/4/2005	14.3	14.2	14.3	6.5	4.2	5.4	46	46	46	1015	1011	1013	1.739								1.739
10/5/2005	14.3	14.2	14.3	5.7	5.0	5.4	46	46	46	1022	845	934	1.683	INJECTION WELL MODIFICATION ONGOING							1.683
10/6/2005	14.3	14.2	14.3	5.1	4.3	4.7	46	45	46	1012	991	1002	1.717								1.717
10/7/2005							46	46	46	1030.0	1025.0	1028	1.722								1.722
10/8/2005							46	45	45	1033.0	943.0	988	1.701								1.701
10/9/2005							46	46	46	1036.0	834.0	935	1.727								1.727
10/10/2005							46	46	46	1049.0	844.0	947	1.717								1.717
10/11/2005							50	46	48	1078.0	1055.0	1067	1.720	INJECTION WELL MODIFICATION ONGOING							1.720
10/12/2005							49	46	47	1318.0	1185.0	1252	1.484								1.484
10/13/2005	MONITORING WELL EQUIPMENT												1.693								1.693
10/14/2005	REPLACEMENT AND SCADA SYSTEM WORK						46	45	45	1440.0	1328.0	1384	1.716								1.716
10/15/2005							46	46	46	1472.0	1467.0	1470	1.735								1.735
10/16/2005							46	46	46	1471.0	1423.0	1447	1.704								1.704
10/17/2005							46	45	46	1474.0	1389.0	1432	1.725	INJECTION WELL MODIFICATION ONGOING							1.725
10/18/2005							46	46	46	1451.0	1440.0	1446	1.737								1.737
10/19/2005							48	46	47	1577.0	1439.0	1508	1.729								1.729
10/20/2005							46	45	45	1427.0	1352.0	1390	1.711								1.711
10/21/2005							49	46	47	1597.0	1418.0	1508	1.693								1.693

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
10/22/2005							46	46	46	1423.0	1389.0	1406	1.716								1.716
10/23/2005							46	46	46	1452.0	1391.0	1422	1.738	INJECTION WELL MODIFICATION ONGOING							1.738
10/24/2005							47	35	41				1.238								1.238
10/25/2005							45	40	43				1.402								1.402
10/26/2005	14.3	14.2	14.3	1.4	1.3	1.4	55	45	50				1.365								1.365
10/27/2005	14.3	14.2	14.3	1.5	1.2	1.4	55	55	55				1.351								1.351
10/28/2005	14.3	14.2	14.3	2.7	1.6	2.2	40	40	40				1.407								1.407
10/29/2005	14.2	14.1	14.2	2.3	1.5	1.9	56	55	56	Instrumentation Issues			1.328	INJECTION WELL MODIFICATION ONGOING							1.328
10/30/2005	14.2	14.2	14.2	1.4	1.4	1.4	41	41	41				1.412								1.412
10/31/2005	14.3	14.2	14.3	1.4	1.3	1.4	40	40	40				1.390								1.390
11/1/2005	14.3	14.3	14.3	1.4	1.3	1.4	45	45	45				1.684								1.684
11/2/2005	14.3	14.1	14.2	2.3	1.4	1.9	45	45	45				1.697								1.697
11/3/2005	14.2	14.0	14.1	2.3	2.3	2.3	45	44	45				1.716								1.716
11/4/2005	14.2	14.2	14.2	2.2	2.2	2.2	45	45	45				1.704	PRESSURE TEST SUCCESSFUL							1.704
11/5/2005	14.3	14.2	14.3	2.3	2.2	2.3	45	45	45	1535	1441	1488	1.695								1.695
11/6/2005	14.3	14.3	14.3	2.3	2.2	2.3	46	45	46	1520	1515	1518	1.698								1.698
11/7/2005	14.3	14.2	14.3	2.4	2.3	2.4	45	45	45	1528	1421	1476	1.696								1.696
11/8/2005	14.3	14.2	14.3	2.3	2.3	2.3	46	45	45	1471	1421	1446	1.672								1.672
11/9/2005	14.3	14.3	14.3	2.4	2.3	2.4	45	45	45	1512	1493	1503	1.559								1.559
11/10/2005	14.4	14.3	14.4	2.0	1.5	1.8	45	45	45	1516	1470	1493	1.679	RTS TEST SUCCESSFUL							1.679
11/11/2005	14.3		14.3	1.3		1.3	45		45	1506		1506	1.677								1.677
11/12/2005	14.3	14.3	14.3	1.1	1.0	1.1	46	45	46	1520	1494	1507	1.681								1.681
11/13/2005	14.3	14.3	14.3	1.1	1.1	1.1	45	45	45	1507	1496	1502	1.688								1.688
11/14/2005	14.3	14.3	14.3	1.1	1.0	1.1	45	45	45	1548	1492	1520	1.682								1.682
11/15/2005	14.3	14.3	14.3	1.2	1.1	1.2	45	45	45	1503	1502	1503	1.700								1.700
11/16/2005	14.4	14.4	14.4	1.3	1.2	1.3	45	45	45	1481	1452	1467	1.687								1.687
11/17/2005	14.4	14.3	14.4	1.2	1.1	1.2	45	44	45	1504	1486	1495	1.681								1.681
11/18/2005	14.3	14.3	14.3	1.8	1.1	1.5	45	45	45	1519	1482	1501	1.656								1.656
11/19/2005	14.4	14.2	14.3	2.2	1.9	2.1	45	45	45	1175	1159	1167	1.678								1.678
11/20/2005	14.3	14.3	14.3	2.2	2.1	2.2	45	45	45	1166	1143	1155	1.601								1.601
11/21/2005	14.4	14.4	14.4	2.3	2.2	2.3	45	45	45	1179	1163	1171	1.686								1.686
11/22/2005	14.4	14.4	14.4	1.7	0.4	1.1	45	44	45	1179	1148	1164	1.704								1.704
11/23/2005	14.3	14.3	14.3	0.1	0.1	0.1	45	45	45	1185	1172	1179	1.681								1.681
11/24/2005	14.3	14.3	14.3	0.0	0.0	0.0	49	45	47	1364	1189	1277	1.664								1.664
11/25/2005	14.4		14.4	0.2		0.2	45	45	45	1180	1151	1166	1.675								1.675
11/26/2005	14.3	14.3	14.3	0.2	0.0	0.1	49	45	47	1367	1159	1263	1.699								1.699
11/27/2005	14.3	14.3	14.3	0.0	0.1	0.1		45	45	1174	1163	1169	1.660								1.660
11/28/2005	14.4	14.3	14.4	0.0	0.2	0.1	46	45	45	1181	1159	1170	1.686								1.686
11/29/2005	14.3	14.3	14.3	0.1	0.0	0.1	45	45	45	1175	1173	1174	1.712								1.712
11/30/2005	14.3	14.3	14.3	0.2	0.1	0.2	46	45	45	1186	1166	1176	1.672								1.672
12/1/2005	14.3	14.3	14.3	0.2	0.1	0.2	45	45	45	1184	1177	1181	1.684								1.684
12/2/2005	14.3	14.3	14.3	0.2	0.0	0.1	59	44	52	1679	1163	1421	1.635								1.635
12/3/2005	14.4	14.3	14.4	0.1	0.0	0.1	45	45	45	1197	1170	1184	1.693								1.693
12/4/2005	14.4	14.3	14.4	0.2	0.0	0.1	45	44	45	1190	1152	1171	1.678								1.678
12/5/2005	14.3	14.3	14.3	0.2	0.1	0.2	45	44	45	1188	1150	1169	1.866								1.866
12/6/2005	14.3	14.3	14.3	0.2	0.1	0.2	45	45	45	1184	1163	1174	1.695								1.695
12/7/2005	14.2	14.2	14.2	7.7	7.7	7.7	45	45	45	1144	1144	1144	2.752								2.752
12/8/2005	14.3	14.2	14.3	8.5	7.3	7.9	45	45	45	1170	1157	1164	1.674								1.674
12/9/2005	14.4	14.3	14.4	7.1	7.0	7.1	45	45	45	1173	1145	1159	1.647								1.647
12/10/2005	14.4	14.3	14.4	7.0	6.8	6.9	45	45	45	1163	1147	1155	1.675								1.675
12/11/2005	14.4	14.3	14.4	6.6	6.4	6.5	45	45	45	1168	1156	1162	1.671								1.671
12/12/2005	14.4	14.3	14.4	2.7	1.2	2.0	45	45	45	1174	1161	1168	2.221								2.221
12/13/2005	14.3	13.6	14.0	5.5	0.8	3.2	45	45	45	1193	1171	1182	2.799								2.799
12/14/2005	13.9	13.7	13.8	1.0	0.3	0.7	45	45	45	1184	1167	1176	2.076								2.076
12/15/2005	14.0	13.9	14.0	1.1	1.1	1.1	45	45	45	1174	1091	1133	3.409								3.409
12/16/2005	14.0	14.0	14.0	1.2	1.1	1.2	45	44	45	1161	1158	1160	2.332								2.332
12/17/2005	14.0	14.0	14.0	1.2	1.1	1.2	45	45	45	1173	1161	1167	2.268								2.268
12/18/2005	14.0	14.0	14.0	1.1	1.0	1.1	45	44	45	1159	1098	1129	2.163								2.163
12/19/2005	14.0	14.0	14.0	1.9	1.9	1.9	44	44	44	1155	1150	1153	1.670								1.670
12/20/2005	14.0	14.0	14.0	1.8	1.3	1.6	45	45	45	1175	1163	1169	1.689								1.689
12/21/2005	14.0	14.0	14.0	1.2	0.6	0.9	45	45	45	1183	1175	1179	1.683	SHORT TERM INJECTION TEST							1.683
12/22/2005	14.0	14.0	14.0	0.9	0.4	0.7	45	45	45	1349	1191	1270	2.099								2.099
12/23/2005	14.0	14.0	14.0	0.7	0.6	0.7	45	44	44	1158	1148	1153	2.379								2.379
12/24/2005	14.1	14.0	14.1	0.7	0.6	0.7	49	46	47	1360	1180	1270	1.669								1.669
12/25/2005	14.1	14.1	14.1	0.8	0.7	0.8	45	45	45	1183	1170	1177	2.490								2.490
12/26/2005	14.1	14.1	14.1	0.7	0.6	0.7	50	49	49	1353	1345	1349	2.222								2.222
12/27/2005	14.1	14.0	14.1	0.7	0.5	0.6	45	45	45	1188	1170	1179	2.527								2.527
12/28/2005	14.1	14.0	14.1	0.4	0.4	0.4	45	46	46	1177	1176	1177	2.441								2.441
12/29/2005	14.1	14.1	14.1	0.5	0.4	0.5	50	46	48	1359	1173	1266	2.513								2.513
12/30/2005	14.1	14.1	14.1	0.5	0.3	0.4	46	46	46	1188	1153	1171	2.526								2.526
12/31/2005	14.1	14.0	14.1	0.5	0.3	0.4	46	46	46	1185	1169	1177	2.560								2.560
1/1/2006	N/A	N/A	N/A	N/A	N/A	N/A							1.720								1.720
1/2/2006	N/A	N/A	N/A	N/A	N/A	N/A							1.720								1.720
1/3/2006	N/A	N/A	N/A	N/A	N/A	N/A							1.740								1.740
1/4/2006	N/A	N/A	N/A	N/A	N/A	N/A							1.800	WAITING ON FDEP APPROVAL TO RESUME							1.800
1/5/2006	13.8	13.6	13.7	1.2	0.8	1.0	52	48	50	1334	1311	1323	1.870	NORMAL OPERATIONS							1.870
1/6/2006	13.9	13.8	13.9	0.8	0.8	0.8	48	47	47	1330	1314	1322	1.900								1.900
1/7/2006	13.8	13.8	13.8	0.6	0.5	0.6	52	47	49	1497	1320	1409	1.960								1.960
1/8/2006	13.8	13.8	13.8	0.4	0.2	0.3	47	47	47	1322	1305	1314	1.960								1.960
1/9/2006	13.9	13.8	13.9	0.4	0.2	0.3	51	46	49	1504	1301	1403	1.960								1.960
1/10/2006	13.9	13.8	13.9	0.2	0.2	0.2	46	43	44	1297	1169	1233	1.960								1.960
1/11/2006	14.0	13.9	14.0	0.2	0.2	0.2	63	50	57	1950	1464	1707	2.010								2.010
1/12/2006	14.0	13.9	14.0	0.2	0.2	0.2	51	46	48	1497	1307	1402	1.570								1.570
1/13/2006	14.0	13.9	14.0	0.1	0.1	0.1	46	45	45	1317	1283	1300	2.000								2.000
1/14/2006	14.0	13.9	14.0	1.1	0.8	1.0	45	45	45	1305	1278	1292	2.000								2.000
1/15/2006	14.0	13.9	14.0	0.3	0.2	0.3	50	50	50	1504	1503	1504	2.020								2.020
1/16/2006	14.0	13.9	14.0	0.3	0.2	0.3	51	47	49	1515	1306	1411	2.020								2.020
1/17/2006	14.0	14.0	14.0	0.2	0.2	0.2	53	47	50	1476	1306	1391	2.010								2.010
1/18/2006	14.0	13.9	14.0	0.2	0.2	0.2	53	48	51	1491	1316	1404	2.020								2.020
1/19/2006	13.9	13.9	13.9	0.1	0.1	0.1	52	48	50	1490	1309	1400	2.020	WAITING ON FDEP APPROVAL TO RESUME							2.020
1/20/2006	13.9	13.8	13.9	0.0	0.0	0.0	53	48	50	1487	1330	1409	2.030	NORMAL OPERATIONS							2.030
1/21/2006	13.9	13.8	13.9	0.2	0.1	0.2	53	48	50	1487	1313	1400	2.030								2.030
1/22/2006	13.9	13.8	13.9	0.2	0.0	0.1	52	48	50	1470	1315	1393	2.030								2.030
1/23/2006	14.0	13.9	14.0	0.2	0.2	0.2	52	48	50	1460	1322	1391	2.020								2.020
1/24/2006	13.9	13.9	13.9	0.2	0.2	0.2	48	48	48	1334	1328	1331	1.360								1.360
1/25/2006	14.0	14.0	14.0	0.3	0.2	0.3	58	48	53	1691	1334	1513	1.930								1.930
1/26/2006	13.9	13.9	13.9	0.2	0.2	0.2	48	48	48	1346	1323	1335	1.930								1.930
1/27/2006	13.9	13.9	13.9	0.2	0.2	0.2	48	47	48	1335	1333	1334	1.830								1.830

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
1/28/2006	13.9	13.9	13.9	0.2	0.2	0.2	48	48	48				1.950								1.950
1/29/2006	13.9	13.9	13.9	0.3	0.2	0.3	48	47	48				1.970								1.970
1/30/2006	14.0	14.0	14.0	0.0	0.3	0.2	48	48	48				1.890								1.890
1/31/2006	14.0	14.0	14.0	0.3	0.3	0.3	48	48	48	4000	1332	2666	1.770								1.770
2/1/2006	14.0		14.0	0.4		0.4	47		47	1248		1248	1.380								1.380
2/2/2006	14.0	14.0	14.0	0.4	0.3	0.4	47	44	46	1168		1168	1.500								1.500
2/3/2006	14.0	14.0	14.0	0.4	0.3	0.4	48	47	47				1.580	WAITING ON FDEP APPROVAL TO RESUME							1.580
2/4/2006	14.0		14.0	1.1		1.1	48		48				1.730	NORMAL OPERATIONS							1.730
2/5/2006	14.0	14.0	14.0	0.2	0.2	0.2	47	47	47				1.790								1.790
2/6/2006	14.0	14.0	14.0	0.2	0.1	0.2	48	47	47	Instrumentation Issues			1.880								1.880
2/7/2006	14.0	14.0	14.0	0.2	0.1	0.2	48	48	48				1.930								1.930
2/8/2006	14.0	14.0	14.0	0.2	0.2	0.2	48	48	48				1.960								1.960
2/9/2006	14.0		14.0	0.2		0.2	49	48	48				1.900								1.900
2/10/2006	14.0	14.0	14.0	0.2	0.2	0.2	49	49	49	1154		1154	2.050								2.050
2/11/2006	14.1	14.0	14.1	0.3	0.2	0.3	49	49	49	1172	1163	1168	1.695								1.695
2/12/2006	14.0	14.0	14.0	0.3	0.2	0.3	49	49	49	1185	1183	1184	1.714								1.714
2/13/2006	14.0	14.0	14.0	0.2	0.2	0.2	49	48	49	1183	1124	1154	1.700								1.700
2/14/2006	13.9	13.9	13.9	0.2	0.2	0.2	50	49	50	1190	1170	1180	1.708								1.708
2/15/2006	13.9	13.9	13.9	0.2	0.2	0.2	50	50	50	1177	1167	1172	1.703								1.703
2/16/2006	14.0	13.5	13.8	5.4	0.2	2.8	50	50	50	1174	1152	1163	1.714								1.714
2/17/2006	13.7	13.6	13.7	3.2	1.0	2.1	50	50	50	1175	1148	1162	1.684								1.684
2/18/2006	13.8	13.7	13.8	1.4	1.3	1.4	50	50	50	1174	1150	1162	1.633	WAITING ON FDEP APPROVAL TO RESUME							1.633
2/19/2006	13.8	13.8	13.8	1.4	1.3	1.4	50	50	50	1179	1157	1168	1.695	NORMAL OPERATIONS							1.695
2/20/2006	13.9	13.8	13.9	1.4	1.3	1.4	50	50	50	1180	1168	1174	1.700								1.700
2/21/2006	13.9	13.8	13.9	1.4	1.3	1.4	49	49	49	1653	1148	1401	1.753								1.753
2/22/2006	13.9	13.9	13.9	1.5	1.4	1.5	50	50	50	1285	1268	1277	1.835								1.835
2/23/2006	14.0	13.9	14.0	1.5	1.4	1.5	48	47	47	1215	1188	1202	1.759								1.759
2/24/2006	14.0	13.9	14.0	1.7	1.6	1.7	50	49	49	1265	1260	1263	1.859								1.859
2/25/2006	13.8		13.8	3.5		3.5	49		49	1276		1276	1.804								1.804
2/26/2006	14.0	14.0	14.0	4.0	3.6	3.8	48	48	48	1228	1214	1221	1.740								1.740
2/27/2006	13.9	13.9	13.9	0.6	0.6	0.6	47	47	47	1223	1196	1210	1.756								1.756
2/28/2006	14.0	13.9	14.0	0.6	0.6	0.6	48	47	47	1220	1167	1194	1.757								1.757
3/1/2006	14.0	13.9	14.0	0.9	0.8	0.9	48	47	47	1181	1165	1173	1.788								1.788
3/2/2006	14.0	14.0	14.0	0.9	0.8	0.9	48	48	48	1220	1180	1200	1.765								1.765
3/3/2006	14.0	14.0	14.0	0.9	0.9	0.9	54	48	51	1355	1210	1283	1.787								1.787
3/4/2006	14.0	14.0	14.0	0.9	0.8	0.9	49	49	49	1230	1219	1225	1.816								1.816
3/5/2006	14.0	14.0	14.0	0.8	0.8	0.8	50	49	49	1254	1201	1228	1.796	WAITING ON FDEP APPROVAL TO RESUME							1.796
3/6/2006	14.0	14.0	14.0	0.8	0.7	0.8	49	48	48	1226	1186	1206	1.765	NORMAL OPERATIONS							1.765
3/7/2006	14.0		14.0	0.7		0.7	48		48	1211		1211	1.938								1.938
3/8/2006	14.0	14.0	14.0	1.2	1.1	1.2	49	43	46	1256	984	1120	1.792								1.792
3/9/2006	14.0	13.5	13.8	5.2	1.1	3.2	49	49	49	1278	1256	1267	1.873								1.873
3/10/2006	13.7	13.7	13.7	5.4	5.3	5.4	50	49	49	1278	1268	1273	1.853								1.853
3/11/2006	13.8	13.7	13.8	5.4	5.4	5.4	49	49	49	1277	1259	1268	1.469								1.469
3/12/2006	13.8	13.7	13.8	5.5	5.4	5.5	49	49	49	1272	1250	1261	1.839								1.839
3/13/2006	13.9	13.8	13.9	5.6	5.5	5.6	49	48	49	1270	1235	1253	1.842								1.842
3/14/2006	13.9	13.9	13.9	5.6	5.5	5.6	48	44	46	1245	1232	1239	1.816								1.816
3/15/2006	13.9	13.9	13.9	5.6	5.5	5.6	48	48	48	1265	1216	1241	1.828								1.828
3/16/2006	13.9	13.8	13.9	5.5	2.2	3.9	49	49	49	1256	1240	1248	1.813								1.813
3/17/2006	13.9	13.9	13.9	1.9	1.9	1.9	48	48	48	1248	1224	1236	1.794								1.794
3/18/2006	13.9	13.9	13.9	1.9	1.9	1.9	49	48	48	1226	1207	1217	1.799								1.799
3/19/2006	14.0	13.9	14.0	1.9	1.9	1.9	53	48	51	1374	1240	1307	1.786								1.786
3/20/2006	14.0	13.9	14.0	1.9	1.9	1.9	53	48	50	1366	1230	1298	1.799	WAITING ON FDEP APPROVAL TO RESUME							1.799
3/21/2006	14.0	14.0	14.0	2.0	1.9	2.0	48	48	48	1219	1213	1216	1.967	NORMAL OPERATIONS							1.967
3/22/2006	14.0	14.0	14.0	2.0	1.9	2.0	53	53	53	1428	1367	1398	2.069								2.069
3/23/2006	14.0	13.9	14.0	1.9	1.8	1.9	53	53	53	1421	1412	1417	2.021								2.021
3/24/2006	14.0	14.0	14.0	1.9	1.9	1.9	53	53	53	1417	1403	1410	2.060								2.060
3/25/2006	14.0	13.9	14.0	1.2	0.8	1.0	53	52	52	1423	1392	1408	2.063								2.063
3/26/2006	13.9	13.9	13.9	0.7	0.7	0.7	54	52	53	1432	1430	1431	2.085								2.085
3/27/2006	13.9	13.9	13.9	0.7	0.6	0.7	58	53	55	1596	1405	1501	2.114								2.114
3/28/2006	13.9	13.9	13.9	0.6	0.6	0.6	53	53	53	1463	1423	1443	2.088								2.088
3/29/2006	13.9	13.9	13.9	0.6	0.7	0.7	54	53	54	1463	1438	1451	2.105								2.105
3/30/2006	13.9		13.9	0.7		0.7	57		57	1550		1550	2.104								2.104
3/31/2006	13.9	13.9	13.9	0.7	0.7	0.7	57	53	55	1576	1434	1505	2.086								2.086
4/1/2006	13.9	13.9	13.9	0.7	0.6	0.7	53	53	53	1445	1440	1443	2.124								2.124
4/2/2006	14.0		14.0	0.7		0.7	53		53	1472		1472	2.025								2.025
4/3/2006	13.9	13.9	13.9	0.7	0.6	0.7	53	53	53	1449	1412	1431	2.056	FDEP APPROVAL TO RETURN TO NORMAL OPERATION							2.056
4/4/2006	14.0	13.9	14.0	0.7		0.7	60	53	57	1651	1453	1552	2.304								2.304
4/5/2006	14.0	14.0	14.0	2.5	2.4	2.5	52	52	52	1435	1421	1428	2.074								2.074
4/6/2006	14.0	14.0	14.0	2.4	1.7	2.1	56	52	54	1576	1422	1499	2.165								2.165
4/7/2006	13.9	13.9	13.9	1.7	1.5	1.6	55	55	55	1559	1542	1551	2.069								2.069
4/8/2006	14.0	14.0	14.0	1.6	1.5	1.6	55	52	54	1568	1421	1495	2.069								2.069
4/9/2006	14.0	14.0	14.0	1.7	1.5	1.6	52	52	52	1446	1413	1430	2.090								2.090
4/10/2006	14.0	13.8	13.9	1.6	1.5	1.6	55	52	53	1574	1455	1515	2.113								2.113
4/11/2006	14.0	13.9	14.0	1.6	1.6	1.6	52	51	51	1453	1450	1452	2.082								2.082
4/12/2006	13.9	13.4	13.7	5.2	1.5	3.4	51	51	51	1449	1437	1443	2.113								2.113
4/13/2006	13.6	13.5	13.6	5.3	5.2	5.3	51	51	51	1443	1430	1437	2.052								2.052
4/14/2006	13.7	13.6	13.7	5.5	5.2	5.4	49	47	48	1341	1317	1329	1.950								1.950
4/15/2006	13.7	13.7	13.7	5.2	2.3	3.8	51	47	49	1484	1250	1367	1.924								1.924
4/16/2006	13.7	13.7	13.7	2.3	2.3	2.3	47	46	47	1280	1271	1276	1.854								1.854
4/17/2006	13.8	13.7	13.8	2.7	2.3	2.5	46	45	45	1245	1190	1218	1.795								1.795
4/18/2006	13.8	13.8	13.8	2.7	2.6	2.7	46	45	46	1241	1211	1226	1.748								1.748
4/19/2006	13.9	13.8	13.9	2.7	2.6	2.7	46	45	46	1238	1331	1285	1.844								1.844
4/20/2006	13.9	13.8	13.9	2.7	2.6	2.7	50	46	48	1364	1261	1313	1.780								1.780
4/21/2006	13.8	13.8	13.8	2.6	2.5	2.6	46	46	46	1247	1214	1231	1.820								1.820
4/22/2006	13.7	13.7	13.7	4.1	2.5	3.3	46	45	45	1243	1222	1233	1.792								1.792
4/23/2006	13.8	13.8	13.8	4.1	4.0	4.1	45	45	45	1220	1172	1196	1.764								1.764
4/24/2006	13.8	13.8	13.8	4.7	4.3	4.5	45	45	45	1239	1205	1222	1.803								1.803
4/25/2006	13.8		13.8	4.7		4.7	45		45	1231		1231	1.771								1.771
4/26/2006	13.8	13.8	13.8	4.8	4.8	4.8	46	45	45	2217	1188	1703	1.746								1.746
4/27/2006	13.8	13.8	13.8	4.8	4.8	4.8	45	45	45	1204	1186	1195	1.758								1.758
4/28/2006	13.8	13.8	13.8	4.8	4.1	4.5	45	45	45	1214	1172	1193	1.747								1.747
4/29/2006	13.8	13.8	13.8	3.9	3.9	3.9	45	45	45	1227	1216	1222	1.775								1.775
4/30/2006	13.8	13.8	13.8	3.9	3.8	3.9	45	45	45	1230	1213	1222	1.839								1.839
5/1/2006	13.8	13.8	13.8	3.8	1.9	2.9	44	44	44	1230	1181	1206	1.739								1.739
5/2/2006	13.8	13.8	13.8	1.9	1.8	1.9	45	44	44	1238	1170	1204	1.759								1.759
5/3/2006	13.8	13.8	13.8	1.8	1.8	1.8	44	44	44	1213	1187	1200	1.738								1.738
5/4/2006	13.8	13.8	13.8	1.9	1.8	1.9	45	44	44	1185	1182	1184	1.761								1.761
5/5/2006	13.8	13.8	13.8	1.9	1.8	1.9	44	44	44	1211	1174	1193	1.769								1.769

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
5/6/2006	13.8	13.8	13.8	1.9	1.8	1.9	44	44	44	1225	1181	1203	1.748								1.748
5/7/2006	13.8	13.8	13.8	1.9	1.8	1.9	44	44	44	1214	1189	1202	1.777								1.777
5/8/2006	13.8	13.8	13.8	1.9	1.8	1.9	44	44	44	1217	1180	1199	1.750								1.750
5/9/2006	13.8	13.8	13.8	1.9	1.8	1.9	44	44	44	1230	1200	1215	1.780								1.780
5/10/2006	13.8	13.8	13.8	4.9	2.1	3.5	45	44	45	1242	1222	1232	1.812								1.812
5/11/2006	13.5	13.5	13.5	5.3	5.2	5.3	44	44	44	1241	1222	1232	1.804								1.804
5/12/2006	13.6	13.6	13.6	5.3	5.3	5.3	44	44	44	1235	1218	1227	1.814								1.814
5/13/2006	13.6	13.6	13.6	5.3	5.3	5.3	44	44	44	1249	1245	1247	1.854								1.854
5/14/2006	13.6	13.6	13.6	5.2	5.1	5.2	45	44	44	1271	1219	1245	1.787								1.787
5/15/2006	13.6	13.6	13.6	4.9	4.8	4.9	44	44	44	1250	1246	1248	1.843								1.843
5/16/2006	13.7	13.6	13.7	7.0	5.2	6.1	44	44	44	1242	1233	1238	1.754								1.754
5/17/2006	13.7	13.7	13.7	9.7	7.9	8.8	45	44	44	1241	1231	1236	1.814								1.814
5/18/2006	13.7	13.7	13.7	8.2	8.2	8.2	44	44	44	1279	1245	1262	1.805								1.805
5/19/2006	13.7	13.7	13.7	8.1	8.1	8.1	59	44	52	1845	1204	1525	1.804								1.804
5/20/2006	13.7	13.7	13.7	8.2	8.0	8.1	44	44	44	1246	1224	1235	1.903								1.903
5/21/2006	13.7	13.7	13.7	8.2	8.1	8.2	45	44	44	2181	1231	1706	1.826								1.826
5/22/2006	13.7	13.7	13.7	8.4	8.4	8.4	44	44	44	1248	1226	1237	1.812								1.812
5/23/2006	13.7	13.7	13.7	8.4	8.4	8.4	44	44	44	1248	1238	1243	1.810								1.810
5/24/2006	13.7	13.7	13.7	8.6	8.4	8.5	44	43	44	1249	1200	1225	1.813								1.813
5/25/2006	13.7	13.6	13.7	8.8	8.5	8.7	44	44	44	1248	1245	1247	1.826								1.826
5/26/2006	13.7	13.7	13.7	8.7	8.6	8.7	48	44	46	1419	1240	1330	1.800								1.800
5/27/2006	13.7	13.7	13.7	8.9	8.9	8.9	59	44	51	1782	1234	1508	1.833								1.833
5/28/2006	13.8	13.7	13.8	8.8	8.8	8.8	44	44	44	1258	1207	1233	1.810								1.810
5/29/2006	13.8	13.8	13.8	8.8	8.7	8.8	44	44	44	1230	1220	1225	1.812								1.812
5/30/2006	13.8	13.8	13.8	8.6	8.5	8.6	44	43	43	1227	1208	1218	1.725								1.725
5/31/2006	13.8	13.8	13.8	8.0	7.8	7.9	43	43	43	1220	1210	1215	1.773								1.773
6/1/2006	13.8	13.8	13.8	9.1	8.7	8.9	44	44	44	1211	1208	1210	1.789								1.789
6/2/2006	13.8	13.8	13.8	8.6	8.5	8.6	49	44	46	1440	1230	1335	1.881								1.881
6/3/2006	13.8	13.8	13.8	8.4	7.9	8.2	43	43	43	1215	1207	1211	1.796								1.796
6/4/2006	13.8	13.8	13.8	8.0	7.7	7.9	48	44	46	1427	1228	1328	1.822								1.822
6/5/2006	13.9	13.9	13.9	8.0	7.7	7.9	44	44	44	1223	1216	1220	1.788								1.788
6/6/2006	13.9	13.7	13.8	7.9	4.8	6.4	44	43	43	1228	1197	1213	1.794								1.794
6/7/2006	13.8	13.7	13.8	4.9	4.9	4.9	47	44	45	1392	1229	1311	1.847								1.847
6/8/2006	13.8	13.8	13.8	4.9	4.9	4.9	44	43	43	1225	1222	1224	1.781								1.781
6/9/2006	13.8	13.8	13.8	5.0	5.0	5.0	43	43	43	1227	1223	1225	1.799								1.799
6/10/2006	13.8	13.8	13.8	11.4	11.4	11.4	43	43	43	1220	1216	1218	1.779								1.779
6/11/2006	13.8	13.8	13.8	11.3	11.0	11.2	43	43	43	1221	1216	1219	1.782								1.782
6/12/2006	13.8	13.8	13.8	11.0	10.9	11.0	43	43	43	1211	1138	1175	1.775								1.775
6/13/2006	13.9	13.5	13.7	10.7	4.7	7.7	43	43	43	1220	1210	1215	1.802								1.802
6/14/2006	13.7	13.7	13.7	4.9	4.9	4.9	43	43	43	1217	1204	1211	1.774								1.774
6/15/2006	13.9	13.7	13.8	4.9	4.7	4.8	43	43	43	1224	1212	1218	1.771								1.771
6/16/2006	13.8	13.7	13.8	5.0	4.9	5.0	43	43	43	1212	1215	1214	1.808								1.808
6/17/2006	13.8	13.8	13.8	4.9	4.9	4.9	43	43	43	1222	1212	1217	1.758								1.758
6/18/2006	13.8	13.8	13.8	4.9	4.9	4.9	44	44	44	1214	1208	1211	1.779								1.779
6/19/2006	13.8	13.8	13.8	4.9	4.9	4.9	44	43	43	1216	1205	1211	1.767								1.767
6/20/2006	13.8	13.8	13.8	4.9	4.8	4.9	43	43	43	1220	1211	1216	1.783								1.783
6/21/2006	13.8	13.8	13.8	4.9	4.9	4.9	44	43	44	1226	1207	1217	1.772								1.772
6/22/2006	13.8	13.8	13.8	4.9	4.9	4.9	44	43	43	1204	1184	1194	1.749								1.749
6/23/2006	13.9	13.8	13.9	4.9	4.9	4.9	44	43	43	1185	1184	1185	1.716								1.716
6/24/2006	13.9	13.9	13.9	5.0	4.9	5.0	44	43	43	1164	1163	1164	1.770								1.770
6/25/2006	13.9	13.9	13.9	5.0	5.0	5.0	44	44	44	1171	1167	1169	1.722								1.722
6/26/2006	13.9	13.9	13.9	5.1	5.0	5.1	44	44	44	1173	1157	1165	1.731								1.731
6/27/2006	13.9	13.9	13.9	5.3	4.9	5.1	52	44	48	1496	1170	1333	1.816								1.816
6/28/2006	13.9	13.9	13.9	7.4	7.0	7.2	49	41	45	1353	1053	1203	1.710								1.710
6/29/2006	13.9	13.9	13.9	6.3	5.9	6.1	41	39	40	1068	969	1019	1.676								1.676
6/30/2006	13.9	13.9	13.9	5.3	5.1	5.2	45	45	45	1272	1268	1270	1.847								1.847
7/1/2006	13.9	13.9	13.9	5.0	5.0	5.0	45	45	45	1282	1272	1277	1.870								1.870
7/2/2006	13.9	13.9	13.9	6.1	5.8	6.0	50	45	1465	1465	1278	1372	1.850								1.850
7/3/2006	14.0	13.9	14.0	5.0	5.0	5.0	46	45	46	1284	1275	1280	1.880								1.880
7/4/2006	13.9		13.9	4.9		4.9	45		45	1285	1284	1285	1.910								1.910
7/5/2006	13.4		13.4	4.9		4.9	45		45	1252		1252	1.960								1.960
7/6/2006	14.6		14.6	10.9		10.9	50		50	1470		1470	2.050								2.050
7/7/2006	13.6		13.6	11.1		11.1	46		46	1266		1266	2.120								2.120
7/8/2006	13.7	13.7	13.7	11.1	10.9	11.0	51	45	48	1416	1232	1324	1.810								1.810
7/9/2006	13.7	13.7	13.7	10.9	10.7	10.8	46	46	46	1242	1219	1231	1.790								1.790
7/10/2006	13.7	13.7	13.7	10.5	10.4	10.5	46	45	45	1214	1211	1213	1.790								1.790
7/11/2006	13.7		13.7	10.2		10.2	50		50	1404		1404	2.010								2.010
7/12/2006	13.8	13.8	13.8	11.1	11.0	11.1	60	46	53	1633	1222	1428	1.940								1.940
7/13/2006	13.8	13.8	13.8	10.7	10.3	10.5	48	47	47	1252	1241	1247	1.780								1.780
7/14/2006	13.8	13.8	13.8	10.0	9..9	10.0	52	47	50	1407	1240	1324	1.820								1.820
7/15/2006	13.9	13.9	13.9	9.1	8.6	8.9	47	47	47	1245	1237	1241	1.780								1.780
7/16/2006	13.9	13.8	13.9	6.4	5.0	5.7	53	47	50	1409	1231	1320	1.810								1.810
7/17/2006	14.0	13.9	14.0	4.3	3.6	4.0	47	47	47	1237	1224	1231	1.800								1.800
7/18/2006	14.0	13.9	14.0	5.5	5.0	5.3	47	47	47	1238	1224	1231	1.700								1.700
7/19/2006	14.0	13.9	14.0	4.3	3.5	3.9	47	47	47	1236	1229	1233	1.810								1.810
7/20/2006	13.9	13.9	13.9	3.5	2.7	3.1	52	47	50	1428	1233	1331	1.800								1.800
7/21/2006	14.0	14.0	14.0	12.2	8.4	10.3	52	52	52	1435	1423	1429	1.970								1.970
7/22/2006	14.0	14.0	14.0	8.4	8.3	8.4	47	47	47	1232	1224	1228	1.900								1.900
7/23/2006	14.0	14.0	14.0	8.4	8.2	8.3	57	47	52	1554	1222	1388	1.900								1.900
7/24/2006	14.0	14.0	14.0	8.3	8.1	8.2	46.7	45	45	1233	1165	1199	1.750								1.750
7/25/2006	14.0	14.0	14.0	8.2	7.4	7.8	46	46	46	1222	1183	1203	1.750								1.750
7/26/2006	14.0	14.0	14.0	7.5	7.4	7.5	47	46	46	1234	1189	1212	1.750								1.750
7/27/2006	14.0	14.0	14.0	7.4	7.3	7.4	47	47	47	1218	1215	1217	1.760								1.760
7/28/2006	14.0	14.0	14.0	8.0	7.2	7.6	47	46	46	1229	1201	1215	1.780								1.780
7/29/2006	14.0	13.9	14.0	8.0	7.8	7.9	47	46	47	1226	1212	1219	1.770								1.770
7/30/2006	14.0	14.0	14.0	7.7	7.6	7.7	47	47	47	1235	1229	1232	1.790								1.790
7/31/2006	14.0	14.0	14.0	7.5	7.4	7.5	47	47	47	1241	1231	1236	1.770								1.770
8/1/2006	14.0	14.0	14.0	7.4	7.4	7.4	47	47	47	1241	1239	1240	1.649								1.649
8/2/2006	14.0	14.0	14.0	7.4	7.3	7.4	46	46	46	1219	1216	1218	1.633								1.633
8/3/2006	14.0	14.0	14.0	7.3	7.2	7.3	47	45	46	1253	1211	1232	1.637								1.637
8/4/2006	14.0	14.0	14.0	7.2	7.2	7.2	46		46	1231		1231	1.611								1.611
8/5/2006	14.1	14.0	14.1	7.9	7.9	7.9	45	45	45	1222	1220	1221	1.644								1.644
8/6/2006	14.0	14.0	14.0	8.3	7.9	8.1	45	45	45	1230	1227	1229	1.643								1.643
8/7/2006	14.0	14.0	14.0	7.7	7.7	7.7	49	45	47	1411	1230	1321	1.631								1.631
8/8/2006	14.0	14.0	14.0	7.6	7.6	7.6	45	45	45	1229	1226	1228	1.637								1.637
8/9/2006	14.0	14.0	14.0	7.9	7.8	7.9	45	44	45	1261	1237	1249	1.655								1.655
8/10/2006	14.1	13.4	13.8	7.8	4.5	6.2	44	44	44	1234	1231	1233	1.647								1.647
8/11/2006	13.7	13.6	13.7	4.8	4.7	4.8	45	45	45	1237	1233	1235	1.618								1.618

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
8/12/2006	13.8	13.8	13.8	5.0	4.9	5.0	45	44	45	1260	1222	1241	1.650								1.650
8/13/2006	13.8	13.8	13.8	5.0	4.9	5.0	44	44	44	1226	1220	1223	1.612								1.612
8/14/2006	13.9	13.8	13.9	5.1	5.0	5.1	45	44	44	1259	1212	1236	1.625								1.625
8/15/2006	14.0	13.9	14.0	5.1	4.9	5.0	45	44	45	1259	1233	1246	1.657								1.657
8/16/2006	14.0	13.9	14.0	5.2	4.9	5.1	49	45	47	1438	1271	1355	1.603								1.603
8/17/2006	13.9		13.9	4.9		4.9	45		45	1265		1265	1.681								1.681
8/18/2006	14.0	14.0	14.0	5.0	4.9	5.0	45	44	44	1255	1197	1226	1.651								1.651
8/19/2006	14.0		14.0	4.9		4.9	45		45	1249		1249	1.650								1.650
8/20/2006	14.0	13.9	14.0	4.9	4.9	4.9	45	44	44	1250	1200	1225	1.661								1.661
8/21/2006	14.0	14.0	14.0	4.8	4.8	4.8	49	45	47	1428	1241	1335	1.664								1.664
8/22/2006	14.0	14.0	14.0	4.8	4.8	4.8	44	44	44	1208	1203	1206	1.664								1.664
8/23/2006	14.0	14.0	14.0	4.9	4.8	4.9	44	44	44	1216	1210	1213	1.626								1.626
8/24/2006	14.0	14.0	14.0	4.9	4.9	4.9	45	44	45	1255	1227	1241	1.671								1.671
8/25/2006	14.1	14.0	14.1	5.0	4.8	4.9	44	44	44	1220	1219	1220	1.639								1.639
8/26/2006	14.1	14.0	14.1	5.0	4.8	4.9	45	44	44	1227	1204	1216	1.650								1.650
8/27/2006	14.1	14.0	14.1	4.9	4.8	4.9	45	44	44	1380	1210	1295	1.664								1.664
8/28/2006	14.1	14.0	14.1	5.0	4.9	5.0	46	44	44	1240	1216	1228	1.648								1.648
8/29/2006	14.1	14.1	14.1	4.9	4.8	4.9	45	45	45	1263	1165	1214	1.651								1.651
8/30/2006	14.1	14.1	14.1	5.4	4.9	5.2	45	44	45	1163	1127	1145	1.669								1.669
8/31/2006	14.2	14.1	14.2	4.9	4.9	4.9	45	45	45	1160	1158	1159	1.664								1.664
9/1/2006	14.1	14.1	14.1	4.9	4.9	4.9	45	44	44	1161	1117	1139	1.716								1.716
9/2/2006	14.1	14.1	14.1	4.8	4.8	4.8	49	45	47	1350	1159	1255	1.904								1.904
9/3/2006	14.1	14.1	14.1	4.8	4.8	4.8	45	43	44	1163	1087	1125	1.657								1.657
9/4/2006	14.1	14.1	14.1	4.8	4.8	4.8	45	44	44	1156	1125	1141	1.650								1.650
9/5/2006	14.1	14.1	14.1	4.8	4.8	4.8	45	45	45	1169	1151	1160	1.675								1.675
9/6/2006	14.2	13.7	14.0	5.2	4.8	5.0	45	45	45	1164	1155	1160	1.669								1.669
9/7/2006	13.9	13.8	13.9	5.3	0.0	2.7	45	40	42	1153	913	1033	1.520								1.520
9/8/2006	13.9	13.9	13.9	0.0	0.0	0.0	45	44	44	1161	1140	1151	1.774								1.774
9/9/2006	14.0	14.0	14.0	0.0	0.0	0.0	45	44	45	1163	1123	1143	1.638								1.638
9/10/2006	14.0	13.9	14.0	0.0	0.0	0.0	45	44	45	1159	1138	1149	1.688								1.688
9/11/2006	14.0	14.0	14.0	0.0	0.0	0.0	45	44	45	1169	1126	1147	1.657								1.657
9/12/2006	14.0	12.6	13.3	0.0	0.0	0.0	45	44	45	1160	1128	1144	1.644								1.644
9/13/2006	8.6	3.5	6.1	0.0	0.0	0.0	58	44	50	1576	1127	1352	1.780								1.780
9/14/2006	0.3	0.2	0.3	0.2	0.0	0.1	49	49	49	1342	1330	1336	1.778								1.778
9/15/2006	0.5	0.1	0.3	2.0	0.0	1.0	58	50	54	1589	1339	1464	1.771								1.771
9/16/2006	0.5	0.3	0.4	1.2	0.9	1.1	46	45	46	1156	1140	1148	1.663								1.663
9/17/2006	4.3	0.2	2.3	15.5	1.0	8.3	13	6	9	1948	1440	1694	1.701								1.701
9/18/2006	0.3	0.2	0.3	13.8	0.9	7.4	45	7	26	1189	1134	1162	1.751								1.751
9/19/2006	0.2	0.0	0.1	1.1	0.9	1.0	46	46	46	1153	1119	1136	1.596								1.596
9/20/2006	0.2	0.1	0.2	0.9	0.9	0.9	46	46	46	1144	1130	1137	1.774	FIRST OPERATION OF IW-2							1.774
9/21/2006	0.4	0.2	0.3	0.9	0.8	0.9	46	44	45	1174	1153	1164	0.950							0.682	1.632
9/22/2006	0.2	0.1	0.2	0.8	0.7	0.8								43	43	43	1081	1074	1078	1.589	1.589
9/23/2006	0.2	0.2	0.2	0.9	0.7	0.8								44	44	44	1085	1077	1081	1.710	1.710
9/24/2006	0.2	0.2	0.2	0.8	0.8	0.8								44	44	44	1088	1082	1085	1.720	1.720
9/25/2006	0.4	0.2	0.3	0.9	0.7	0.8								44	44	44	1081	1086	1084	1.727	1.727
9/26/2006	0.5	0.2	0.4	1.0	0.7	0.9								44	44	44	1091	1090	1091	1.712	1.712
9/27/2006	0.3	0.2	0.3	0.9	0.8	0.9								44	43	44	1097	1085	1091	1.567	1.567
9/28/2006	0.3	0.2	0.3	0.9	0.8	0.9								43	43	43	1052	1048	1050	1.649	1.649
9/29/2006	0.3	0.2	0.3	0.9	0.8	0.9								43	43	43	1172	1165	1169	1.737	1.737
9/30/2006	0.2	0.2	0.2	0.8	0.8	0.8								44	43	43	1216	1171	1194	1.769	1.769
10/1/2006	0.3	0.2	0.3	0.8	0.8	0.8								43	43	43	1188	1170	1179	1.952	1.952
10/2/2006	0.2	0.2	0.2	9.0	0.7	4.9								43	43	43	1190	1184	1187	1.900	1.900
10/3/2006	0.2	0.1	0.2	0.8	0.8	0.8								43	43	43	1202	1193	1198	1.955	1.955
10/4/2006	0.3	0.2	0.3	1.1	0.8	1.0								43	43	43	1200	1163	1182	1.919	1.919
10/5/2006	0.4	0.2	0.3	1.3	1.2	1.3								43	43	43	1179	1169	1174	1.951	1.951
10/6/2006	0.2	0.1	0.2	1.4	0.9	1.2								44	43	43	1208	1191	1200	1.936	1.936
10/7/2006	0.3	0.2	0.3	0.8	0.7	0.8								43	43	43	1191	1180	1186	1.936	1.936
10/8/2006	0.4	0.2	0.3	0.9	0.8	0.9								43	43	43	1197	1172	1185	2.056	2.056
10/9/2006	0.3	0.3	0.3	0.8	0.8	0.8								43	43	43	1201	1170	1186	1.814	1.814
10/10/2006	0.3	0.2	0.3	0.9	0.8	0.9								43	43	43	1192	1169	1181	2.063	2.063
10/11/2006	0.2	0.2	0.2	0.9	0.8	0.9								44	43	43	1188	1162	1175	1.469	1.469
10/12/2006	0.3	0.2	0.3	3.6	0.9	2.3								44	43	43	1197	1166	1182	1.993	1.993
10/13/2006	0.3	0.3	0.3	2.9	2.8	2.9								44	43	43	1209	1183	1196	1.939	1.939
10/14/2006	0.3	0.2	0.3	2.9	2.9	2.9								43	43	43	1194	1178	1186	1.939	1.939
10/15/2006	0.3	0.2	0.3	2.8	2.8	2.8								43	43	43	1191	1190	1191	1.880	1.880
10/16/2006	14.0	13.0	13.5	2.8	2.8	2.8								43	43	43	1205	1201	1203	2.015	2.015
10/17/2006	14.0	14.0	14.0	2.9	2.9	2.9								43	43	43	1204	1200	1202	1.917	1.917
10/18/2006	14.0	14.0	14.0	2.9	2.9	2.9								43	43	43	1203	1201	1202	1.981	1.981
10/19/2006	14.0	14.0	14.0	3.0	2.9	3.0								47	43	45	1395	1172	1284	1.952	1.952
10/20/2006	14.1	14.0	14.1	3.0	2.9	3.0								43	43	43	1181	1162	1172	1.910	1.910
10/21/2006	14.1	14.0	14.1	3.0	3.0	3.0								47	47	47	1377	1159	1268	1.924	1.924
10/22/2006	14.1	14.0	14.1	3.0	2.9	3.0								43	42	43	1168	1163	1166	1.963	1.963
10/23/2006	14.1	14.0	14.1	3.1	2.9	3.0								43	43	43	1190	1187	1189	2.000	2.000
10/24/2006	14.0	14.0	14.0	3.0	2.9	3.0								43	43	43	1191	1188	1190	1.924	1.924
10/25/2006	14.0	14.0	14.0	3.1	2.8	3.0								43	42	42	1189	1170	1180	1.950	1.950
10/26/2006	14.0	13.9	14.0	2.9	2.8	2.9								43	41	42	1171	1141	1156	1.947	1.947
10/27/2006	14.0	14.0	14.0	2.9	2.8	2.9								43	42	42	1164	1123	1144	1.971	1.971
10/28/2006	14.0	13.9	14.0	2.9	2.9	2.9								42	42	42	1126	1124	1125	1.867	1.867
10/29/2006	14.0	14.0	14.0	2.9	2.9	2.9								46	42	44	1320	1132	1226	2.045	2.045
10/30/2006	14.0	14.0	14.0	2.9	2.9	2.9								42	42	42	1128	1128	1128	1.889	1.889
10/31/2006	14.0	14.0	14.0	2.9	2.9	2.9								42	42	42	1129	1120	1125	1.682	1.882
11/1/2006	14.0	14.0	14.0	2.9	2.9	2.9								42	42	42	1122	1119	1121	1.685	1.685
11/2/2006	14.0	14.0	14.0	2.9	2.9	2.9								42	42	42	1120	1119	1120	1.684	1.684
11/3/2006	14.0	14.0	14.0	2.9	2.9	2.9								42	42	42	1132	1127	1130	1.680	1.680
11/4/2006	14.0	14.0	14.0	2.9	2.9	2.9								43	42	42	1145	1140	1143	1.681	1.681
11/5/2006	14.0	14.0	14.0	2.9	2.8	2.9								42	41	42	1128	1125	1127	1.649	1.649
11/6/2006	14.0	14.0	14.0	2.9	2.8	2.9								42	41	42	1136	1126	1131	1.642	1.642
11/7/2006	14.1	14.1	14.1	2.9	2.9	2.9								42	42	42	1130	1117	1124	1.660	1.660
11/8/2006	14.1	14.1	14.1	3.0	3.0	3.0								42	42	42	1123	1121	1122	1.628	1.628
11/9/2006	14.1	14.0	14.1	3.0	2.9	3.0								42	42	42	1126	1116	1121	1.665	1.665
11/10/2006	14.0	14.0	14.0	2.9	2.9	2.9								43	42	42	1137	1133	1135	1.646	1.646
11/11/2006	14.0	14.0	14.0	3.0	2.9	3.0								42	42	42	1132	1123	1128	1.651	1.651
11/12/2006	14.1	14.0	14.1	2.9	2.9	2.9								42	42	42	1130	1126	1128	1.662	1.662
11/13/2006	14.0	14.0	14.0	3.0	2.9	3.0								42	42	42	1131	1122	1127	1.662	1.662
11/14/2006	14.0	13.4	13.7	2.9	0.8	1.9								55	46	51	1690	1326	1508	2.081	2.081
11/15/2006	13.8	13.7	13.8	0.8	0.6	0.7								52	49	50	1566	1449	1508	2.006	2.006
11/16/2006	13.8	13.8	13.8	0.8	0.6	0.7								57	43	50	1748	1184	1466	1.932	1.932
11/17/2006	13.8	13.8	13.8	0.8	0.6	0.7								43	42	42	1192	1092	1142	1.713	1.713

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
11/18/2006	13.9	13.8	13.9	0.8	0.6	0.7								47	43	45	1388	1205	1297	1.753	1.753
11/19/2006	13.9	13.8	13.9	0.7	0.6	0.7								43	43	43	1207	1196	1202	1.732	1.732
11/20/2006	13.9	13.8	13.9	0.7	0.6	0.7								44	43	43	1221	1204	1213	1.728	1.728
11/21/2006	13.9	13.8	13.9	0.7	0.6	0.7								43	43	43	1214	1210	1212	1.765	1.765
11/22/2006	13.9	13.7	13.8	0.7	0.6	0.7								43	43	43	1207	1207	1207	1.747	1.747
11/23/2006	13.9	13.8	13.9	0.8	0.6	0.7								43	43	43	1215	1207	1211	1.767	1.767
11/24/2006	13.9	13.8	13.9	0.8	0.6	0.7								43	43	43	1212	1211	1212	1.775	1.775
11/25/2006	13.9	13.9	13.9	0.8	0.7	0.8								47	44	45	1408	1215	1312	1.791	1.791
11/26/2006	13.9	13.9	13.9	0.8	0.7	0.8								44	43	44	1214	1211	1213	1.744	1.744
11/27/2006	13.9	13.9	13.9	0.8	0.7	0.8								44	43	43	1219	1207	1213	1.777	1.777
11/28/2006	13.9	13.9	13.9	0.8	0.7	0.8								47	43	45	1400	1202	1301	1.735	1.735
11/29/2006	13.9	13.9	13.9	0.7	0.7	0.7								46	44	45	1401	1206	1304	1.760	1.760
11/30/2006	13.9	13.9	13.9	0.7	0.9	0.8								44	43	43	1209	1192	1201	1.746	1.746
12/1/2006	13.9	13.9	13.9	0.7	0.7	0.7								43	43	43	1207	1199	1203	1.652	1.652
12/2/2006	13.9	13.9	13.9	0.7	0.6	0.7								47	43	45	1214	1207	1211	1.721	1.721
12/3/2006	13.9	13.9	13.9	0.7	0.6	0.7								43	43	43	1206	1206	1206	1.755	1.755
12/4/2006	13.9	13.8	13.9	0.8	0.6	0.7								43	43	43	1209	1200	1205	1.739	1.739
12/5/2006	13.9	13.9	13.9	0.8	0.6	0.7								45	43	44	1202	1175	1189	1.812	1.812
12/6/2006	13.9	13.8	13.9	0.8	0.6	0.7								45	43	44	1215	1211	1213	1.731	1.731
12/7/2006	13.9	13.5	13.7	0.8	0.7	0.8								43	38	40	1222	1222	1222	1.719	1.719
12/8/2006	13.6	13.5	13.6	0.8	0.8	0.8								44	44	44	1228	1191	1210	1.604	1.604
12/9/2006	13.7	13.6	13.7	0.8	0.8	0.8								43	34	39	1192	1181	1187	1.649	1.649
12/10/2006	13.7	13.7	13.7	0.8	0.7	0.8								43	43	43	1214	1208	1211	1.779	1.779
12/11/2006	13.7	13.7	13.7	0.8	0.7	0.8								43	43	43	1223	1207	1215	1.755	1.755
12/12/2006	13.7	13.7	13.7	0.8	0.7	0.8								43	43	43	1214	1206	1210	1.689	1.689
12/13/2006	13.8	13.7	13.8	0.8	0.7	0.8								43	42	42	1192	1120	1156	1.667	1.667
12/14/2006	13.8	13.7	13.8	0.7	0.6	0.7								43	43	43	1192	1139	1166	1.818	1.818
12/15/2006	13.9	13.8	13.9	0.7	0.7	0.7								46	42	44	1334	1128	1231	1.681	1.681
12/16/2006	13.9	13.8	13.9	0.7	0.7	0.7								43	43	43	1200	1184	1192	1.807	1.807
12/17/2006	13.9	13.8	13.9	0.7	0.6	0.7								47	44	45	1404	1213	1309	1.767	1.767
12/18/2006	13.9	13.8	13.9	0.7	0.6	0.7								43	43	43	1213	1179	1196	1.754	1.754
12/19/2006	13.9	13.8	13.9	0.7	0.6	0.7								44	43	43	1207	1199	1203	1.751	1.751
12/20/2006	13.9	13.9	13.9	0.7	0.6	0.7								43	43	43	1214	1207	1211	1.769	1.769
12/21/2006	13.9	13.8	13.9	0.7	0.7	0.7								43	43	43	1206	1206	1206	1.789	1.789
12/22/2006	13.9	13.9	13.9	0.7	0.7	0.7								43	43	43	1209	1200	1205	1.776	1.776
12/23/2006	13.9	13.9	13.9	0.7	0.7	0.7								43	43	43	1202	1175	1189	1.731	1.731
12/24/2006	13.9	13.9	13.9	0.7	0.6	0.7								43	43	43	1215	1211	1213	1.792	1.792
12/25/2006	14.0	13.9	14.0	0.7	0.6	0.7								44	43	43	1222	1222	1222	1.764	1.764
12/26/2006	14.0	13.9	14.0	0.6	0.6	0.6								44	43	43	1228	1191	1210	1.779	1.779
12/27/2006	13.9	13.9	13.9	0.6	0.6	0.6								43	43	43	1192	1181	1187	1.739	1.739
12/28/2006	13.9	13.9	13.9	0.7	0.5	0.6								43	42	43	1194	1190	1192	1.737	1.737
12/29/2006	13.9	13.9	13.9	0.6	0.4	0.5								43	43	43	1196	1187	1192	1.799	1.799
12/30/2006	14.0	13.9	14.0	0.7	0.5	0.6								43	43	43	1198	1185	1192	1.748	1.748
12/31/2006	14.0	13.9	14.0	0.7	0.5	0.6								43	43	43	1191	1188	1190	1.721	1.721
1/1/2007	14.0	13.9	14.0	0.6	0.5	0.6								43	42	43	1190	1188	1189	1.750	1.750
1/2/2007	14.0	13.9	14.0	0.6	0.5	0.6								43	43	43	1199	1186	1193	1.752	1.752
1/3/2007	13.9	13.9	13.9	0.6	0.5	0.6								46	43	44	1383	1182	1283	1.688	1.688
1/4/2007	14.0	13.9	14.0	0.6	0.5	0.6								43	43	43	1191	1159	1175	1.724	1.724
1/5/2007	14.0	13.9	14.0	0.6	0.5	0.6								43	43	43	1188	1166	1177	1.736	1.736
1/6/2007	14.0	14.0	14.0	0.7	0.5	0.6								43	42	43	1188	1142	1165	1.740	1.740
1/7/2007	14.0	13.9	14.0	0.6	0.5	0.6								44	43	44	1194	1190	1192	1.740	1.740
1/8/2007	14.0	14.0	14.0	0.7	0.5	0.6								43	43	43	1194	1189	1192	1.739	1.739
1/9/2007	14.0	14.0	14.0	0.6	0.6	0.6								43	43	43	1199	1195	1197	1.732	1.732
1/10/2007	14.0	13.9	14.0	0.9	0.8	0.9								43	43	43	1192	1169	1181	1.450	1.450
1/11/2007	13.9	13.9	13.9	0.9	0.9	0.9								43	43	43	1200	1193	1197	1.758	1.758
1/12/2007	13.9	13.9	13.9	1.0	0.9	1.0								43	43	43	1194	1189	1192	1.767	1.767
1/13/2007	14.0	13.9	14.0	1.0	0.9	1.0								43	43	43	1198	1193	1196	1.729	1.729
1/14/2007	14.0	14.0	14.0	1.0	0.9	1.0								43	43	43	1196	1183	1190	1.749	1.749
1/15/2007	14.0	14.0	14.0	1.1	1.0	1.1								45	43	44	1196	1191	1194	1.748	1.748
1/16/2007	14.0	14.0	14.0	1.1	1.0	1.1								43	43	43	1197	1195	1196	1.735	1.735
1/17/2007	14.0	13.5	13.8	1.0	0.9	1.0								48	43	45	1391	1189	1290	1.713	1.713
1/18/2007	13.7	13.5	13.6	0.9	0.8	0.9								47	43	45	1372	1182	1277	1.801	1.801
1/19/2007	13.8	13.7	13.8	0.8	0.7	0.8								47	46	47	1376	1364	1370	1.811	1.811
1/20/2007	13.8	13.7	13.8	0.8	0.7	0.8								48	43	45	1118	1117	1118	1.801	1.801
1/21/2007	13.8	13.8	13.8	0.8	0.7	0.8								43	43	43	1194	1183	1189	1.757	1.757
1/22/2007	13.9	13.8	13.9	0.8	0.8	0.8								43	43	43	1189	1188	1189	1.751	1.751
1/23/2007	13.9	13.9	13.9	0.9	0.8	0.9								43	43	43	1194	1191	1193	1.714	1.714
1/24/2007	13.9	13.9	13.9	0.8	0.8	0.8								43	43	43	1193	1189	1191	1.556	1.556
1/25/2007	14.0	13.9	14.0	0.8	0.8	0.8								43	43	43	1199	1192	1196	1.727	1.727
1/26/2007	13.9	13.9	13.9	0.8	0.8	0.8								43	43	43	1196	1194	1195	1.785	1.785
1/27/2007	14.0	13.9	14.0	0.8	0.7	0.8								44	43	43	1204	1178	1191	1.675	1.675
1/28/2007	14.0	14.0	14.0	0.6	0.6	0.6								43	43	43	1186	1182	1184	1.766	1.766
1/29/2007	13.9	13.9	13.9	0.6	0.5	0.6								43	43	43	1222	1192	1207	1.701	1.701
1/30/2007	13.9	13.9	13.9	0.5	0.4	0.5								43	43	43	1215	1129	1172	1.752	1.752
1/31/2007	14.0	13.9	14.0	0.6	0.5	0.6								47	43	45	1361	1210	1286	1.874	1.874
2/1/2007	14.0	13.9	14.0	0.7	0.5	0.6								44	43	43	1219	1209	1214	1.845	1.845
2/2/2007	14.0	14.0	14.0	0.7	0.6	0.7								44	44	44	1238	1222	1230	1.791	1.791
2/3/2007	14.0	14.0	14.0	0.7	0.6	0.7								44	43	44	1245	1213	1229	1.793	1.793
2/4/2007	14.0	13.8	13.9	0.5	0.5	0.5								44	44	44	1252	1251	1252	1.818	1.818
2/5/2007	13.9	13.9	13.9	0.5	0.5	0.5								44	44	44	1255	1217	1236	1.814	1.814
2/6/2007	13.9	13.9	13.9	0.6	0.5	0.6								47	44	46	1442	1284	1363	1.804	1.804
2/7/2007	14.0	13.9	14.0	0.7	0.5	0.6								44	44	44	1246	1345	1296	1.855	1.855
2/8/2007	13.9	13.5	13.7	1.2	0.5	0.9								48	44	46	1429	1254	1342	1.836	1.836
2/9/2007	13.7	13.6	13.7	1.1	0.8	1.0								44	44	44	1250	1233	1242	1.803	1.803
2/10/2007	13.8	13.7	13.8	0.8	0.8	0.8								44	44	44	1264	1260	1262	1.832	1.832
2/11/2007	13.8	13.8	13.8	0.8	0.7	0.8								44	44	44	1256	1244	1250	1.828	1.828
2/12/2007	13.8	13.7	13.8	0.8	0.7	0.8								48	28	38	1468	1268	1368	1.831	1.831
2/13/2007	14.0	13.9	14.0	0.8	0.8	0.8								44	25	34	1241	1231	1236	1.831	1.831
2/14/2007	14.0	13.9	14.0	0.8	0.8	0.8								44	44	44	1247	1228	1238	1.833	1.833
2/15/2007	14.0	13.9	14.0	0.8	0.7	0.8								44	43	44	1260	1238	1249	1.777	1.777
2/16/2007	13.9	13.9	13.9	0.6	0.5	0.6								45	44	44	1260	1228	1244	1.851	1.851
2/17/2007	13.9	13.9	13.9	0.6	0.5	0.6								45	44	44	1278	1256	1267	1.816	1.816
2/18/2007	13.9	13.9	13.9	0.5	0.3	0.4								44	44	44	1269	1229	1249	1.827	1.827
2/19/2007	13.9	13.8	13.9	0.4	0.3	0.4								48	44	46	1445	1263	1354	1.837	1.837
2/20/2007	13.9	13.9	13.9	0.6	0.4	0.5								44	44	44	1272	1253	1263	1.823	1.823
2/21/2007	14.0	13.9	14.0	0.6	0.4	0.5								44	44	44	1267	1241	1254	1.829	1.829
2/22/2007	14.0	14.0	14.0	0.6	0.4	0.5								44	44	44	1246	1245	1246	1.804	1.804
2/23/2007	14.0	14.0	14.0	0.6	0.5	0.6								44	44	44	1260	1245	1253	1.837	1.837

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Data Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
2/24/2007	14.0	13.9	14.0	0.6	0.4	0.5								45	44	44	1269	1226	1248	1.820	1.820
2/25/2007	14.0	14.0	14.0	0.6	0.5	0.6								44	44	44	1260	1252	1256	1.855	1.855
2/26/2007	14.0	14.0	14.0	0.6	0.5	0.6								44	44	44	1260	1234	1247	1.815	1.815
2/27/2007	14.0	14.0	14.0	0.7	0.5	0.6								44	44	44	1240	1232	1236	1.794	1.794
2/28/2007	14.0	14.0	14.0	0.6	0.5	0.6								48	44	46	1418	1253	1336	1.819	1.819
3/1/2007	14.0	14.0	14.0	0.7	0.5	0.6								48	45	46	1444	1248	1346	1.822	1.822
3/2/2007	14.0	14.0	14.0	0.7	0.6	0.7								44	44	44	1260	1235	1248	1.829	1.829
3/3/2007	14.0	6.0	10.0	0.1	0.0	0.1								48	44	46	1440	1258	1349	1.791	1.791
3/4/2007	13.9	13.8	13.9	0.0	0.0	0.0								43	43	43	1202	1200	1201	1.740	1.740
3/5/2007	13.9	13.9	13.9	0.0	0.0	0.0								43	38	41	1198	904	1051	1.733	1.733
3/6/2007	13.9	13.9	13.9	0.0	0.0	0.0								43	43	43	1202	1185	1194	1.750	1.750
3/7/2007	13.9	13.4	13.7	0.0	0.0	0.0								43	43	43	1201	1183	1192	1.755	1.755
3/8/2007	13.6	13.5	13.6	0.0	0.0	0.0								43	43	43	1200	1195	1198	1.749	1.749
3/9/2007	13.7	13.6	13.7	0.0	0.0	0.0								43	43	43	1198	1193	1196	1.723	1.723
3/10/2007	13.8	13.7	13.8	0.1	0.0	0.1								14	14	14	1198	1194	1196	1.761	1.761
3/11/2007	13.7	13.7	13.7	0.0	0.0	0.0								16	14	15	1190	1175	1183	1.649	1.649
3/12/2007	13.8	13.7	13.8	0.0	0.0	0.0								43	14	29	1200	1195	1198	1.736	1.736
3/13/2007	13.5	13.0	13.3	0.2	0.1	0.2								43	42	43	1205	1179	1192	1.781	1.781
3/14/2007	13.3	13.2	13.3	0.4	0.3	0.4								43	42	42	1181	1174	1178	1.728	1.728
3/15/2007	13.4	13.4	13.4	0.5	0.5	0.5								43	43	43	1181	1174	1178	1.727	1.727
3/16/2007	13.5	13.4	13.5	0.6	0.5	0.6								43	42	43	1182	1172	1177	1.694	1.694
3/17/2007	13.5	13.5	13.5	0.7	0.6	0.7								43	43	43	1181	1151	1166	1.730	1.730
3/18/2007	13.5	13.5	13.5	0.7	0.6	0.7								43	43	43	1178	1166	1172	1.725	1.725
3/19/2007	13.5	13.4	13.5	0.6	0.6	0.6								43	43	43	1185	1181	1183	1.720	1.720
3/20/2007	13.4	13.4	13.4	0.6	0.6	0.6								44	44	44	1224	1200	1212	1.785	1.785
3/21/2007	13.5	13.5	13.5	0.6	0.6	0.6								46	44	45	1337	1225	1281	1.858	1.858
3/22/2007	13.5	13.5	13.5	0.7	0.6	0.7								49	45	47	1501	1318	1410	1.876	1.876
3/23/2007	13.5	13.5	13.5	0.7	0.7	0.7								46	45	46	1331	1308	1320	1.891	1.891
3/24/2007	13.5	13.5	13.5	0.7	0.6	0.7								46	46	46	1324	1320	1322	1.922	1.922
3/25/2007	13.5	13.5	13.5	0.6	0.6	0.6								46	45	45	1327	1321	1324	1.903	1.903
3/26/2007	13.5	13.5	13.5	0.7	0.6	0.7								46	42	44	1330	1124	1227	1.758	1.758
3/27/2007	13.5	13.5	13.5	0.7	0.6	0.7								45	42	43	1317	1115	1216	1.739	1.739
3/28/2007	13.5	13.5	13.5	0.7	0.6	0.7								46	42	44	1323	1115	1219	1.750	1.750
3/29/2007	13.5	13.5	13.5	0.7	0.7	0.7								42	41	41	1104	1097	1101	1.855	1.855
3/30/2007	13.5	13.5	13.5	0.7	0.7	0.7								47	41	44	1378	1087	1233	1.736	1.736
3/31/2007	13.5	13.5	13.5	0.7	0.7	0.7								48	48	48	1263	1253	1258	1.822	1.822
4/1/2007	13.5	13.5	13.5	0.7	0.7	0.7							0.084	48	48	48	1291	1280	1286	1.790	1.874
4/2/2007	13.5	13.5	13.5	0.7	0.7	0.7							0.446	48	36	42	1305	635	970	1.407	1.853
4/3/2007	13.5	13.5	13.5	0.7	0.7	0.7								52	46	49	1459	1211	1335	1.656	1.656
4/4/2007	13.6	13.6	13.6	0.8	0.7	0.8								46	42	44	1033	1030	1032	1.641	1.641
4/5/2007	13.6	13.6	13.6	0.8	0.8	0.8								52	49	50	1426	1316	1371	1.867	1.867
4/6/2007	13.7	13.7	13.7	0.8	0.8	0.8								49	43	46	1307	1049	1178	1.662	1.662
4/7/2007	13.6	13.6	13.6	0.8	0.8	0.8								50	49	50	1345	1333	1339	1.893	1.893
4/8/2007	13.6	13.6	13.6	0.7	0.7	0.7								49	48	48	1449	1312	1381	1.851	1.851
4/9/2007	13.6	13.6	13.6	0.7	0.7	0.7								49	48	48	1488	1263	1376	1.896	1.896
4/10/2007	13.6	13.6	13.6	0.8	0.7	0.8								49	49	49	1325	1311	1318	1.897	1.897
4/11/2007	13.7	13.6	13.7	0.8	0.8	0.8								50	41	45	1338	906	1122	1.790	1.790
4/12/2007	13.6	13.6	13.6	0.8	0.8	0.8								45	41	43	1161	983	1072	1.544	1.544
4/13/2007	13.6	13.6	13.6	0.8	0.8	0.8								45	45	45	1153	1150	1152	1.679	1.679
4/14/2007	13.6	13.6	13.6	0.8	0.8	0.8								45	45	45	1160	1152	1156	1.681	1.681
4/15/2007	13.6	13.6	13.6	0.8	0.8	0.8								49	49	49	1319	1306	1313	1.875	1.875
4/16/2007	13.6	13.6	13.6	0.8	0.8	0.8								49	48	48	1312	1292	1302	1.806	1.806
4/17/2007	13.6	13.6	13.6	0.8	0.8	0.8								48	48	48	1298	1280	1289	1.822	1.822
4/18/2007	13.6	13.6	13.6	0.9	0.0	0.5								48	48	48	1277	1267	1272	1.772	1.772
4/19/2007	13.4	13.4	13.4	0.1	0.1	0.1								47	42	44	1237	1012	1125	1.737	1.737
4/20/2007	13.5	13.4	13.5	0.2	0.2	0.2								48	41	45	1278	990	1134	1.823	1.823
4/21/2007	13.5	13.4	13.5	0.2	0.2	0.2								48	47	47	1276	1252	1264	1.815	1.815
4/22/2007	13.4	13.4	13.4	0.2	0.2	0.2								48	48	48	1280	1272	1276	1.882	1.882
4/23/2007	13.5	13.4	13.5	0.2	0.2	0.2							0.857	49	48	49	1309	990	1150	1.006	1.863
4/24/2007	13.5	13.5	13.5	0.2	0.2	0.2							1.687	49	42	45	1372	937	1155	0.000	1.687
4/25/2007	13.5	13.5	13.5	0.2	0.2	0.2							1.531	46	42	44	1106	1044	1075	0.000	1.531
4/26/2007	13.5	13.5	13.5	0.2	0.2	0.2							1.665	50	42	46	1233	1034	1134	0.000	1.665
4/27/2007	13.5	13.5	13.5	0.3	0.2	0.3	35	35	35	613	605	609	1.371	49	49	49	1357	1129	1243	0.496	1.867
4/28/2007										887	578	733	0.847	43	35	39	877	615	746	0.941	1.788
4/29/2007	13.5	13.5	13.5	0.3	0.3	0.3	35	35	35	612	545	579	0.857	35	35	35	607	613	610	0.937	1.794
4/30/2007	13.6	13.6	13.6	0.3	0.3	0.3	35	35	35	624	514	569	0.859	35	35	35	615	613	614	0.943	1.802
5/1/2007	13.6	13.5	13.6	0.3	0.3	0.3	35	35	35	632	492	562	0.865	35	35	35	621	618	620	0.943	1.808
5/2/2007	13.6	13.6	13.6	0.3	0.3	0.3	35	35	35	643	569	606	0.876	35	35	35	617	615	616	0.943	1.819
5/3/2007	13.6	13.6	13.6	0.3	0.3	0.3	35	35	35	638	539	589	0.821	35	35	35	617	616	617	0.891	1.712
5/4/2007	13.6	13.6	13.6	0.3	0.3	0.3	35	33	34	612	476	544	0.747	35	33	34	617	467	542	0.856	1.603
5/5/2007	13.6	13.6	13.6	0.4	0.4	0.4	35	35	35	627	524	576	0.882	35	35	35	613	608	611	0.939	1.821
5/6/2007	13.6	13.6	13.6	0.4	0.4	0.4	35	35	35	635	501	568	0.885	35	35	35	613	610	612	0.952	1.837
5/7/2007	13.6	13.6	13.6	0.4	0.4	0.4	36	36	36	648	460	554	0.796	36	34	35	613	477	545	0.832	1.628
5/8/2007	13.7	13.6	13.7	0.4	0.4	0.4	34	34	34	514	449	482	0.732	34	34	34	478	478	478	0.777	1.509
5/9/2007	13.7	13.6	13.7	0.4	0.4	0.4	35	34	34	555	509	532	0.783	35	34	34	592	475	534	0.824	1.607
5/10/2007	13.7	13.7	13.7	0.4	0.4	0.4	35	33	34	620	402	511	0.741	35	33	34	589	448	519	0.792	1.533
5/11/2007	13.7	13.7	13.7	0.4	0.4	0.4	36	33	35	728	411	570	0.766	36	33	35	704	441	573	0.819	1.585
5/12/2007	13.7	13.6	13.7	0.4	0.4	0.4	35	33	34	534	471	503	0.837	35	33	34	584	445	515	0.887	1.724
5/13/2007	13.7	13.7	13.7	0.4	0.4	0.4	35	35	35	616	541	579	0.863	35	35	35	591	589	590	0.913	1.776
5/14/2007	13.6	13.6	13.6	0.4	0.4	0.4	36	35	36	686	622	654	0.818	36	35	36	713	600	657	0.858	1.676
5/15/2007	13.6	13.6	13.6	0.4	0.3	0.4	35	33	34	626	446	536	0.779	35	35	35	600	456	528	0.815	1.594
5/16/2007	13.6	13.6	13.6	0.4	0.4	0.4	35	34	34	610	449	530	0.778	35	34	34	589	486	538	0.827	1.605
5/17/2007	13.7	13.6	13.7	0.4	0.4	0.4	35	33	34	612	359	486	0.738	35	33	34	586	451	519	0.809	1.547
5/18/2007	13.7	13.6	13.7	0.4	0.4	0.4	35	34	34	564	493	529	0.595	35	34	34	608	468	538	0.723	1.318
5/19/2007	13.7	13.6	13.7	0.4	0.4	0.4	35	35	35	634	520	577	0.856	35	35	35	608	607	608	0.900	1.756
5/20/2007	13.6	13.3	13.5	0.4	0.4	0.4	34	33	33	494	484	489	0.719	34	34	34	474	468	471	0.754	1.473
5/21/2007	13.7	13.6	13.7	0.4	0.4	0.4	35	33	34	589	503	546	0.827	35	33	34	610	474	542	0.864	1.691
5/22/2007	13.7	13.7	13.7	0.4	0.4	0.4	35	33	34	640	479	560	0.702	35	34	34	613	471	542	0.790	1.492
5/23/2007	13.7	13.0	13.4	0.4	0.2	0.3	35	33	34	641	461	551	0.772	35	33	34	608	469	539	0.807	1.579
5/24/2007	13.2	13.0	13.1	0.2	0.2	0.2	35	35	35	641	598	620	0.829	35	35	35	610	606	608	0.858	1.687
5/25/2007	13.3	13.2	13.3	0.2	0.2	0.2	35	34	34	583	515	549	0.638	35	33	34	612	461	537	0.817	1.455
5/26/2007	13.4	13.3	13.4	0.3	0.2	0.3	35	35	35	634	606	620	0.927	35	35	35	611	603	607	0.949	1.876
5/27/2007	13.4	13.4	13.4	0.3	0.3	0.3	34	33	33	501	471	486	0.743	34	33	33	465	465	465	0.784	1.527
5/28/2007	13.4	13.4	13.4	0.4	0.3	0.4	34	33	33	496	430	463	0.763	34	33	33	472	468	470	0.806	1.569
5/29/2007	13.4	13.4	13.4	0.4	0.4	0.4	35	35	35	643	639	641	0.911	35	35	35	613	611	612	0.944	1.855
5/30/2007	13.5	13.4	13.5	0.4	0.4	0.4	34	33	33	493	443	468	0.716	34	33	33	465	462	464	0.763	1.479
5/31/2007	13.5	13.5	13.5	0.4	0.4	0.4	33	33	33	486	470	478	0.787	33	33	33	470	462	466	0.820	1.607
6/1/2007	13.5	13.5	13.5	0.5	0.4	0.5	34	33	33	512	490	501	0.728	34	34	34	487	470	479	0.754	1.482

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
6/2/2007	13.6	13.6	13.6	0.6	0.6	0.6	35	34	35	614	488	551	0.875	35	34	35	608	462	535	0.916	1.791
6/3/2007	13.6	13.6	13.6	0.6	0.6	0.6	35	35	35	625	518	572	0.716	35	35	35	603	584	594	0.785	1.501
6/4/2007	13.6	13.6	13.6	0.6	0.6	0.6	34	33	33	488	424	456	0.758	33	33	33	460	456	458	0.803	1.561
6/5/2007	13.6	13.6	13.6	0.6	0.6	0.6	34	34	34	509	474	492	0.686	34	30	33	468	460	464	0.747	1.433
6/6/2007	13.6	13.6	13.6	0.6	0.5	0.6	35	35	35	648	645	647	0.919	35	35	35	615	612	614	0.898	1.817
6/7/2007	13.6	13.6	13.6	0.5	0.5	0.5	34	33	33	507	467	487	0.734	34	34	34	472	463	468	0.757	1.491
6/8/2007	13.6	13.6	13.6	0.6	0.5	0.6	34	34	34	477	503	490	0.733	34	34	34	472	507	490	0.765	1.498
6/9/2007	13.6	13.6	13.6	0.6	0.6	0.6	33	33	33	495	448	472	0.788	34	33	33	462	461	462	0.820	1.608
6/10/2007	13.7	13.6	13.7	0.7	0.6	0.7	34	33	33	651	423	537	0.805	35	34	35	608	469	539	0.835	1.640
6/11/2007	13.7	13.6	13.7	0.6	0.6	0.6	36	34	35	657	468	563	0.737	36	34	35	613	476	545	0.797	1.534
6/12/2007	13.7	13.7	13.7	0.7	0.6	0.7	36	35	35	653		653	0.860	36	35	35	603		603	0.829	1.689
6/13/2007	13.7	13.7	13.7	0.7	0.7	0.7	34	33	34	597	422	510	0.885	34	33	34	538	392	465	0.873	1.758
6/14/2007	13.7	13.1	13.4	0.7	0.3	0.5	35	33	34	641	427	534	0.771	35	33	34	584	401	493	0.762	1.533
6/15/2007	13.4	13.4	13.4	0.5	0.5	0.5	34	33	33	553	529	541	0.748	33	32	33	467	422	445	0.736	1.484
6/16/2007	13.5	13.5	13.5	0.7	0.6	0.7	34	33	34	509	499	504	0.759	34	33	34	463	454	459	0.747	1.506
6/17/2007	13.5	13.5	13.5	0.7	0.7	0.7	35	35	35	659	638	649	0.934	35	35	35	603	603	603	0.914	1.848
6/18/2007	13.5	13.5	13.5	0.7	0.7	0.7	34	33	33	519	468	494	0.755	34	34	34	464	445	455	0.744	1.499
6/19/2007	13.6	13.6	13.6	0.7	0.7	0.7	34	34	34	521	502	512	0.755	34	33	33	465	460	463	0.744	1.499
6/20/2007	13.6	13.6	13.6	0.8	0.8	0.8	34	34	34	513	499	506	0.767	34	34	34	464	459	462	0.764	1.531
6/21/2007	13.6	13.6	13.6	0.8	0.8	0.8	34	34	34	522	517	520	0.781	34	34	34	470	461	466	0.755	1.536
6/22/2007	13.7	13.7	13.7	0.8	0.8	0.8	34	34	34	521	506	514	0.759	34	34	34	468	466	467	0.750	1.509
6/23/2007	13.7	13.7	13.7	0.8	0.8	0.8	34	35	34	649	518	584	0.885	34	35	34	459	412	436	0.867	1.752
6/24/2007	13.7	13.7	13.7	0.8	0.8	0.8	34	33	33	512	512	512	0.750	34	34	34	487	459	473	0.740	1.490
6/25/2007	13.7	13.6	13.7	0.8	0.8	0.8	35	34	34	673	523	598	0.879	36	34	34	606	473	540	0.839	1.718
6/26/2007	13.7	13.6	13.7	0.8	0.8	0.8	35	34	34	650	528	589	0.785	35	34	34	602	474	538	0.758	1.543
6/27/2007	13.7	13.6	13.7	0.9	0.8	0.9	35	33	34	669	519	594	0.844	35	33	34	607	464	536	0.819	1.663
6/28/2007	13.7	13.7	13.7	0.8	0.8	0.8	35	33	34	657	475	516	0.748	33	33	33	476	454	465	0.737	1.485
6/29/2007	13.7	13.7	13.7	0.9	0.8	0.9	34	33	34	514	506	510	0.755	33	33	33	465	460	463	0.743	1.498
6/30/2007	13.7	13.7	13.7	0.9	0.9	0.9	34	33	34	566	516	541	0.760	34	34	34	519	464	492	0.746	1.506
7/1/2007	13.7	13.7	13.7	0.9	0.9	0.9	35	35	35	667	662	665	0.964	34	26	29.5	608	599	604	0.934	1.898
7/2/2007	13.7	13.7	13.7	0.9	0.9	0.9	34	33	33	511	489	500	0.617	34	34	33.6	462	436	449	0.665	1.282
7/3/2007	13.7	13.7	13.7	0.9	0.9	0.9	35	33	34	656	521	589	1.611	35	34	34.5	604	465	535	0.386	1.997
7/4/2007	13.8	13.7	13.8	1.0	0.9	1.0	34	34	34	611	511	511	0.092	33	34	33.3	468	444	456	1.276	1.368
7/5/2007	13.8	13.8	13.8	1.0	1.0	1.0	34	34	34	530	517	524	0.751	33	34	33.4	472	467	470	0.738	1.489
7/6/2007	13.8		13.8	1.0		1.0	34		34	518		518	0.739	34		33.8	461		461	0.725	1.464
7/7/2007	13.8	13.8	13.8	1.1	1.0	1.1	35	35	35	668	665	667	0.888	35	35	35.4	607	604	606	0.861	1.749
7/8/2007	13.8	13.8	13.8	1.0	1.0	1.0	35	34	34	625	527	576	0.766	35	34	34.4	578	468	523	0.751	1.517
7/9/2007	13.2	13.2	13.2	1.0	0.4	0.7	35	34	34	662	509	586	0.835	35	33	34.0	613	456	535	0.815	1.650
7/10/2007	13.4	13.4	13.4	0.7	0.6	0.7	34	33	33	521	508	515	0.759	34	33	33.5	456	456	456	0.739	1.498
7/11/2007	13.6	13.5	13.6	0.8	0.8	0.8	33	33	33	522	508	515	0.836	34	33	33.5	458	456	457	0.812	1.648
7/12/2007	13.6	13.6	13.6	0.9	0.9	0.9	35	36	35	650	621	636	0.881	35	35	35.3	583	571	577	0.850	1.731
7/13/2007	13.7	13.6	13.7	1.0	0.9	1.0	35	35	35	632	627	630	0.784	35	35	34.8	569	574	572	0.763	1.547
7/14/2007	13.7	13.7	13.7	1.0	1.0	1.0	34	35	34	633	516	575	0.758	35	34	34.2	568	460	514	0.741	1.499
7/15/2007	13.7	13.7	13.7	1.2	1.0	1.1	34	34	34	547	513	530	0.754	34	33	33.5	461	447	454	0.735	1.489
7/16/2007	13.7	13.7	13.7	1.1	1.1	1.1	35	34	35	624	512	568	0.806	35	34	34.7	572	463	518	0.785	1.591
7/17/2007	13.7	13.7	13.7	1.1	1.1	1.1	34	34	34	614	521	568	0.791	35	34	34.5	564	454	509	0.774	1.565
7/18/2007	13.7	13.7	13.7	1.1	1.1	1.1	34	34	34	531	519	525	0.810	34	34	33.8	478	465	472	0.792	1.602
7/19/2007	13.7	13.7	13.7	1.1	1.1	1.1	34	34	34	529	523	526	0.755	34	34	33.8	473	463	468	0.739	1.494
7/20/2007	13.8	13.8	13.8	1.1	1.1	1.1	34	34	34	528	528	528	0.778	34	34	33.9	472	470	471	0.764	1.542
7/21/2007	13.8	13.8	13.8	1.0	1.0	1.0	34	34	34	529	526	528	0.810	34	34	33.9	481	466	474	0.793	1.603
7/22/2007	13.8	13.8	13.8	1.2	1.1	1.2	34	34	34	523	522	523	0.767	34	34	34.0	470	466	468	0.752	1.519
7/23/2007	13.8	13.8	13.8	1.1	1.1	1.1	38	34	36	708	524	616	0.821	38	34	35.7	674	473	574	0.806	1.627
7/24/2007	13.8	13.8	13.8	1.1	1.1	1.1	35	34	34	593	516	555	0.805	35	34	34.5	530	465	498	0.790	1.595
7/25/2007	13.8	13.8	13.8	1.1	1.1	1.1	36	34	35	628	525	577	0.773	35	34	34.5	585	469	527	0.759	1.532
7/26/2007	13.8	13.8	13.8	1.1	1.1	1.1	36	34	35	665	527	596	0.523	36	34	35.0	530	470	500	0.819	1.342
7/27/2007	13.8	13.8	13.8	1.2	1.1	1.2	36	34	35	630	526	578	1.120	36	34	34.9	589	474	532	0.799	1.919
7/28/2007	13.9	13.9	13.9	1.2	1.2	1.2	34	34	34	527	523	525	0.780	34	34	34.0	479	470	475	0.733	1.513
7/29/2007	13.9	13.9	13.9	1.2	1.2	1.2	34	34	34	536	523	530	0.771	34	34	34.0	486	478	482	0.793	1.564
7/30/2007	13.9	13.9	13.9	1.2	1.2	1.2	37	34	36	726	521	624	0.837	37	34	35.6	685	467	576	0.824	1.661
7/31/2007	13.9	13.9	13.9	1.2	1.2	1.2	36	35	36	634	628	631	0.827	36	35	35.5	582	580	581	0.813	1.640
8/1/2007	13.9		13.9	1.2		1.2	34		34	513		513	0.471	34		34	458		458	0.463	0.934
8/2/2007	13.9	13.9	13.9	1.2	1.2	1.2	36	34	35	619	505	562	0.814	36	34	35	573	452	513	0.799	1.613
8/3/2007	13.9	13.9	13.9	1.2	1.2	1.2	34	34	34	509	505	507	0.761	34	34	34	453	452	453	0.743	1.504
8/4/2007	13.9	13.9	13.9	1.2	1.2	1.2	39	34	36	792	507	650	0.813	39	34	36	744	449	597	0.791	1.604
8/5/2007	13.9	13.9	13.9	1.2	1.2	1.2	36	34	35	624	512	568	0.816	36	34	35	570	449	510	0.790	1.606
8/6/2007	13.9	13.9	13.9	1.2	1.2	1.2	36	34	35	640	531	586	0.848	36	34	35	588	458	523	0.815	1.663
8/7/2007	14.0	13.9	14.0	1.3	1.3	1.3	38	34	36	734	530	632	0.825	38	34	36	685	464	575	0.796	1.621
8/8/2007	13.9	13.9	13.9	1.2	0.8	1.0	34	34	34	525	521	523	0.792	34	34	34	462	462	462	0.767	1.559
8/9/2007	13.6	13.5	13.6	1.1	1.0	1.1	36	34	35	640	526	583	0.762	36	34	35	571	458	515	0.739	1.501
8/10/2007	13.7		13.7	1.1		1.1	34		34		519	519	0.814	34		34	459		459	0.790	1.604
8/11/2007	13.6	13.6	13.6	1.3	1.2	1.3	34	34	34	532	527	530	0.778	34	34	34	469	467	468	0.753	1.531
8/12/2007	13.7	13.6	13.7	1.4	1.3	1.4	39	34	37	810	535	673	0.844	39	34	37	764	467	616	0.818	1.662
8/13/2007	13.7	13.7	13.7	1.4	1.4	1.4	34	36	35	617	527	572	0.842	37	34	35	603	465	534	0.819	1.661
8/14/2007	13.8	13.7	13.8	1.4	1.4	1.4	38	34	36	750	531	641	0.856	38	34	36	698	464	581	0.829	1.685
8/15/2007	13.8	13.7	13.8	1.5	1.5	1.5	43	34	38	954	528	741	0.905	43	34	38	385	254	320	0.877	1.782
8/16/2007	13.8	13.8	13.8	1.5	1.5	1.5	38	34	36	728	522	625	0.946	38	34	36	673	441	557	0.914	1.860
8/17/2007	13.8	13.8	13.8	1.5	1.5	1.5	36	36	36	643	633	638	0.922	36	36	36	585	583	584	0.893	1.815
8/18/2007	13.8	13.8	13.8	1.5	1.5	1.5	36	36	36	643	641	642	0.945	36	36	36	581	577	579	0.607	1.552
8/19/2007	13.8	13.8	13.8	1.5	1.5	1.5	36	36	36	641	641	641	0.946	36	36	36	583	581	582	1.208	2.154
8/20/2007	13.5	13.8	13.7	1.5	1.5	1.5	36	36	36	646	643	645	0.936	36	36	36	583	576	580	0.897	1.833
8/21/2007	13.8	13.8	13.8	1.5	1.5	1.5	37	36	36	649	647	648	0.958	37	36	36	586	584	585	0.917	1.875
8/22/2007	13.8	13.8	13.8	1.5	1.5	1.5	45	37	41	1010	652	831	1.036	45	37	41	1065	586	826	1.055	2.091
8/23/2007	13.8	13.8	13.8	1.6	1.5	1.6	36	34	35	594	527	561	0.916	36	34	35	571	508	540	0.935	1.851
8/24/2007	13.9	13.8	13.9	1.6	1.6	1.6	35	34	35	629	537	583	0.784	35	34	35	594	498	546	0.787	1.571
8/25/2007	13.9	13.8	13.9	1.6	1.5	1.6	34	34	34	541	539	540	0.797	34	34	34	487	487	487	0.792	1.589
8/26/2007	13.9	13.8	13.9	1.6	1.6	1.6	34	34	34	543	535	539	0.803	35	34	34	494	490	492	0.797	1.600
8/27/2007	13.9	13.9	13.9	1.6	1.6	1.6	35	34	34	539	537	538	0.816	35	34	34	491	488	490	0.795	1.611
8/28/2007	13.8	13.8	13.8	1.6	1.6	1.6	35	34	35	570	541	556	0.919	35	34	35	518	487	503	0.890	1.809
8/29/2007	13.8	13.8	13.8	1.6	1.6	1.6	37	37	37	728	593	661	0.939	37	36	37	668	521	595	0.918	1.857
8/30/2007	13.9	13.9	13.9	1.6	1.6	1.6	36	36	36	528	504	516	0.974	36	36	36	616	567	592	0.867	1.841
8/31/2007	13.9	13.9	13.9	1.7	1.7	1.7	36	35	36	514	494	504	0.538	36	35	35	602	554	578	0.907	1.445
9/1/2007	13.9	13.9	13.9	1.7	1.6	1.7	38	38	38	633	628	631	0.924	39	38	38	743	737	740	1.126	2.050
9/2/2007	13.9	13.9	13.9	1.6	1.6	1.6	38	33	36	616	385	501	0.729	38	34	36	748	429	589	0.878	1.607
9/3/2007	13.9	13.9	13.9	1.6	1.6	1.6	37	23	35	648	385	517	0.841	38	34	36	749	429	589	1.011	1.852
9/4/2007	13.9	13.9	13.9	1.6	1.5	1.6	37	34	36	623	498	561	0.891	37	35	36	720	566	643	1.061	1.952
9/5/2007	14.0	13.9	14.0	1.6	1.6	1.6	37	35	36	637	522	580	0.790	37	35	36	729	584	657	0.858	1.648
9/6/2007	13.9	13.9	13.9	1.7	1.6	1.7	35	35	35	583	567	575	1.014	35	35	35	541	528	535	1.021	2.035
9/7/2007	13.7	13.6	13.7	1.0	0.8	0.9	37	36	36	703	698	701	1.012	37	36	36	674	602	638	1.015	2.027

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
9/8/2007	13.7	13.7	13.7	1.0	1.0	1.0	38	36	37	775	671	723	1.160	38	36	37	750	632	691	1.167	2.327
9/9/2007	13.7	13.7	13.7	1.1	1.1	1.1	39	38	38	766	764	765	1.052	39	38	38	757	749	753	1.073	2.125
9/10/2007	13.7	13.7	13.7	1.1	1.1	1.1	38	37	37	773	674	724	1.039	38	37	37	752	655	704	1.047	2.086
9/11/2007	13.8	13.7	13.8	1.1	1.1	1.1	37	35	36	689	545	617	0.917	37	35	36	659	504	582	0.909	1.826
9/12/2007	13.8	13.8	13.8	1.1	1.1	1.1	37	35	36	716	611	664	0.929	37	35	36	676	562	619	0.918	1.847
9/13/2007	13.8	13.8	13.8	1.2	1.1	1.2	35	35	35	605	600	603	0.903	36	35	35	561	561	561	0.892	1.795
9/14/2007	13.8	13.8	13.8	1.2	1.1	1.2	36	35	36	644	608	626	0.935	36	35	35	607	564	586	0.931	1.866
9/15/2007	13.9	13.8	13.9	1.2	1.2	1.2	36	36	36	643	641	642	0.950	36	36	36	621	603	612	0.949	1.899
9/16/2007	13.9	13.8	13.9	1.2	1.2	1.2	36	36	36	643	635	639	0.942	36	36	36	614	613	614	0.952	1.894
9/17/2007	13.9	13.9	13.9	1.3	1.2	1.3	36	36	36	638	632	635	0.917	38	36	37	617	611	614	0.936	1.853
9/18/2007	13.9	13.9	13.9	1.2	1.2	1.2	36	36	36	638	633	636	0.934	36	36	36	613	613	613	0.950	1.884
9/19/2007	13.9	13.8	13.9	1.3	1.2	1.3	36	36	36	645	615	630	0.851	36	35	35	618	613	616	0.863	1.714
9/20/2007	13.9	13.9	13.9	1.3	1.3	1.3	35	34	35	576	524	550	0.916	35	34	35	544	487	516	0.925	1.841
9/21/2007	13.9	13.9	13.9	1.3	1.2	1.3	38	37	37	784	674	729	1.020	38	37	37	748	634	691	1.015	2.035
9/22/2007	13.9	13.9	13.9	1.2	1.2	1.2	36	36	36	657	644	651	0.931	36	36	36	624	599	612	0.916	1.847
9/23/2007	13.9		13.9	1.2		1.2	39		39	776		776	0.991	39		39	754		754	1.000	1.991
9/24/2007	13.9	13.9	13.9	1.3	1.2	1.3	39	34	36	784	481	633	1.048	38	35	37	757	478	618	1.049	2.097
9/25/2007	14.0	13.9	14.0	1.3	1.3	1.3	39	35	37	798	586	692	0.949	39	35	37	764	554	659	0.954	1.903
9/26/2007	14.0	13.9	14.0	1.3	1.3	1.3	39	37	38	784	642	713	0.967	39	37	38	767	615	691	0.981	1.948
9/27/2007	14.0	14.0	14.0	1.4	1.4	1.4	37	37	37	634	633	634	0.872	37	37	37	621	616	619	0.891	1.763
9/28/2007	14.0	14.0	14.0	1.4	1.4	1.4	42	39	41	827	684	756	1.084	42	39	41	786	658	722	1.076	2.160
9/29/2007	14.0	14.0	14.0	1.5	1.4	1.5	41	38	40	787	666	727	1.089	41	38	40	738	634	686	1.081	2.170
9/30/2007	14.0		14.0	1.4		1.4	39	38	38	674	633	654	0.872	39	38	38	637	594	616	0.874	1.746
10/1/2007	14.1	14.0	14.1	1.5	1.4	1.5	40	40	40	776	763	770	1.082	40	39	40	752	751	752	1.096	2.178
10/2/2007	14.2	14.1	14.2	1.6	1.5	1.6	40	36	38	778	578	678	0.882	39	36	38	762	567	665	0.905	1.787
10/3/2007	14.1	13.6	13.9	1.9	1.6	1.8	35	35	35	534	525	530	0.788	35	35	35	507	503	505	0.808	1.596
10/4/2007	13.9	13.7	13.8	2.2	2.1	2.2	35	35	35	537	514	526	0.789	35	35	35	501	495	498	0.807	1.596
10/5/2007	14.0	13.9	14.0	2.3	2.2	2.3	35	35	35	531	528	530	0.850	35	35	35	499	498	499	0.863	1.713
10/6/2007	14.0	14.0	14.0	2.3	2.3	2.3	36	35	35	568	527	548	0.813	35	35	35	498	538	518	0.824	1.637
10/7/2007	14.0	14.0	14.0	2.4	2.3	2.4	37	35	36	688	535	612	0.904	37	35	36	654	500	577	0.914	1.818
10/8/2007	14.1	14.1	14.1	2.4	2.3	2.4	37	35	36	688	526	607	0.912	37	35	36	654	488	571	0.922	1.834
10/9/2007	14.1	14.1	14.1	2.4	2.4	2.4	37	35	36	692	548	620	0.856	37	35	36	661	504	583	0.864	1.720
10/10/2007	14.1	14.1	14.1	2.5	2.4	2.5	35	35	35	542	537	540	0.790	35	35	35	509	502	506	0.804	1.594
10/11/2007	14.1	14.1	14.1	2.5	2.4	2.5	35	35	35	540	537	539	0.801	35	35	35	509	503	506	0.812	1.613
10/12/2007	14.1	14.1	14.1	2.5	2.4	2.5	35	35	35	541	536	539	0.790	35	35	35	507	501	504	0.803	1.593
10/13/2007	14.1	14.1	14.1	2.5	2.4	2.5	35	35	35	541	529	535	0.795	35	35	35	504	499	502	0.805	1.600
10/14/2007	14.1	14.1	14.1	2.5	2.4	2.5	37	35	36	679	529	604	0.852	37	35	36	657	504	581	0.865	1.717
10/15/2007	14.1	14.1	14.1	2.4	2.4	2.4	39	36	38	792	569	681	0.861	39	36	38	773	539	656	0.875	1.736
10/16/2007	14.1	14.1	14.1	2.4	2.4	2.4	38	35	36	690	533	612	0.843	38	35	36	671	503	587	0.855	1.698
10/17/2007	14.2	14.1	14.2	2.5	2.4	2.5	35	35	35	541	528	535	0.782	35	35	35	501	500	501	0.792	1.574
10/18/2007	14.1	14.1	14.1	2.5	2.4	2.5	35	35	35	542	528	535	0.775	35	35	35	542	496	519	0.781	1.556
10/19/2007	14.2	14.1	14.2	2.5	2.4	2.5	38	35	36	687	489	588	0.859	38	35	37	648	496	572	0.858	1.717
10/20/2007	14.2	14.2	14.2	2.5	2.4	2.5	35	35	35	533	526	530	0.787	35	35	35	493	140	317	0.792	1.579
10/21/2007	14.1	14.1	14.1	2.4	2.4	2.4	35	35	35	537	531	534	0.897	35	35	35	9		9	0.899	1.796
10/22/2007	14.1	14.1	14.1	2.1	1.8	2.0	38	35	37	692	532	612	0.879	38	35	37	650	497	574	0.882	1.761
10/23/2007	14.2	14.1	14.2	2.3	2.2	2.3	35	35	35	541	531	536	0.784	35	35	35	504	496	500	0.788	1.572
10/24/2007	14.2	14.1	14.2	2.4	2.3	2.4	35	35	35	542	523	533	0.825	35	35	35	502	498	500	0.827	1.652
10/25/2007	14.2	14.2	14.2	2.4	2.3	2.4	35	35	35	563	537	550	0.806	36	35	35	503	489	496	0.769	1.575
10/26/2007	14.2	14.2	14.2	2.3	2.3	2.3	38	35	36	721	559	640	0.894	38	35	37	617	473	545	0.817	1.711
10/27/2007	14.2	14.1	14.2	2.4	2.3	2.4	35	35	35	561	546	554	0.823	35	35	35	470	449	460	0.735	1.558
10/28/2007	14.2	14.2	14.2	2.4	2.3	2.4	37	35	36	723	545	634	0.944	37	35	36	592	457	525	0.829	1.773
10/29/2007	14.2	14.2	14.2	2.4	2.3	2.4	37	35	36	724	545	635	0.890	37	35	36	591	449	520	0.783	1.673
10/30/2007	14.2	14.2	14.2	2.4	2.4	2.4	35	35	35	558	542	550	0.819	35	35	35	449	448	449	0.731	1.550
10/31/2007	14.2	14.2	14.2	2.4	2.4	2.4	36	35	35	539	507	523	0.728	36	35	35	429	405	417	0.637	1.365
11/1/2007	14.4	14.3	14.4	2.5	2.5	2.5	38	37	37	687	680	684	0.914	38	37	38	582	572	577	0.799	1.713
11/2/2007	14.4	14.3	14.4	2.5	2.5	2.5	37	36	37	711	622	667	1.002	37	36	37	572	534	553	0.881	1.883
11/3/2007	14.3	14.3	14.3	2.5	2.4	2.5	36		36	660		660	0.779	36		36	529		529	0.678	1.457
11/4/2007	14.3	14.2	14.3	2.5	2.4	2.5	40		40	893		893	0.442	49	40	44	1299	741	1020	1.756	2.198
11/5/2007	14.8	14.2	14.5	2.4	2.4	2.4							0.000	53	33	43	1451	134	793	1.467	1.467
11/6/2007	14.3	14.2	14.3	2.5	2.4	2.5	30		30	102		102	0.000	44	44	44	1100	1091	1096	1.595	1.595
11/7/2007	14.3	14.2	14.3	2.5	2.4	2.5	30		30	111		111	0.366	58	44	51	1663	1098	1381	1.287	1.653
11/8/2007	14.3	14.2	14.3	2.5	2.4	2.5	35	35	35	619	576	598	0.818	35	35	35	596	532	564	0.818	1.636
11/9/2007	14.3	14.2	14.3	2.5	2.4	2.5	35	34	35	585	543	564	0.833	35	35	35	560	534	547	0.832	1.665
11/10/2007	14.2	14.2	14.2	2.5	2.4	2.5	35	34	35	585	542	564	0.809	35	35	35	542	534	538	0.821	1.630
11/11/2007	14.2	14.2	14.2	2.4	2.4	2.4	35	35	35	593	571	582	0.854	35	35	35	550	545	548	0.863	1.717
11/12/2007	14.2	14.1	14.2	2.4	2.3	2.4	35	35	35	591	583	587	0.869	35	35	35	553	550	552	0.875	1.744
11/13/2007	14.1	14.1	14.1	2.4	2.3	2.4	36	35	35	597	586	592	0.787	36	35	35	549	545	547	0.790	1.577
11/14/2007	14.2	14.1	14.2	2.4	2.4	2.4	35	35	35	597	590	594	0.836	35	35	35	546	540	543	0.836	1.672
11/15/2007	14.2	14.2	14.2	2.5	2.4	2.5	40	35	37	745	594	670	0.895	40	35	37	778	544	661	0.910	1.805
11/16/2007	14.2	14.1	14.2	2.4	2.3	2.4	35	35	35	590	567	579	0.883	40	35	38	848	547	698	0.880	1.763
11/17/2007	14.2	14.1	14.2	2.4	2.3	2.4	40	35	38	889	595	742	0.971	40	35	38	848	588	718	0.965	1.936
11/18/2007	14.1	14.1	14.1	2.4	2.3	2.4	35	35	35	586	538	562	0.850	35	35	35	545	541	543	0.861	1.711
11/19/2007	14.1	13.6	13.9	2.3	1.7	2.0	35	35	35	584	558	571	0.859	35	35	35	549	542	546	0.863	1.722
11/20/2007	13.8	13.7	13.8	2.0	1.8	1.9	35	35	35	587	535	561	0.849	35	35	35	544	533	539	0.859	1.708
11/21/2007	13.9	13.8	13.9	2.1	2.0	2.1	38	35	36	736	556	646	0.911	38	35	36	701	550	626	0.916	1.827
11/22/2007	13.9	13.8	13.9	2.1	2.0	2.1	35	35	35	598	570	584	0.864	35	35	35	548	546	547	0.870	1.734
11/23/2007	14.0	13.9	14.0	2.2	2.0	2.1	41	35	38	921	596	759	0.719	41	35	38	925	547	736	0.729	1.448
11/24/2007	14.0	13.9	14.0	2.2	2.1	2.2	35	35	35	594	545	570	0.871	35	35	35	568	554	561	0.868	1.739
11/25/2007	14.0	13.9	14.0	2.2	2.1	2.2	37	35	36	695	596	646	0.790	37	35	36	671	556	614	0.798	1.588
11/26/2007	14.0	14.0	14.0	2.2	2.1	2.2	34	34	34	548	544	546	0.805	34	34	34	508	497	503	0.807	1.612
11/27/2007	14.0	13.9	14.0	2.2	2.1	2.2	35.5	34	34	659	548	604	0.745	35	34	35	615	508	562	0.756	1.501
11/28/2007	14.0	13.9	14.0	2.2	2.1	2.2	34	34	34	538	489	514	0.747	34	33..72	487	485	526	506	0.759	1.506
11/29/2007	14.0	14.0	14.0	2.2	2.1	2.2	36		36	668		668	0.900	36		36	624		624	0.906	1.806
11/30/2007	14.0	14.0	14.0	2.2	2.1	2.2	36	34	35	576	506	541	0.816	35	35	35	532	526	529	0.824	1.640
12/1/2007	14.0	14.0	14.0	2.3	2.2	2.3	37	35	36	752	530	641	0.871	37	34	36	691	517	604	0.872	1.743
12/2/2007	14.0	14.0	14.0	2.3	2.2	2.3	35	34	35	565	523	544	0.817	35	35	35	523	520	522	0.813	1.630
12/3/2007	14.0	14.0	14.0	2.3	2.2	2.3	35	34	35	630	553	592	0.842	35	34	35	580	532	556	0.841	1.683
12/4/2007	14.1	14.0	14.1	2.4	2.2	2.3	35	35	35	622	565	594	0.884	36	35	35	576	538	557	0.877	1.761
12/5/2007	14.1	14.0	14.1	2.4	2.3	2.4	35	35	35	628	603	616	0.908	35	35	35	600	545	573	0.895	1.803
12/6/2007	14.1	14.0	14.1	2.3	2.3	2.3	36	36	36	674	529	602	0.832	36	34	35	627	534	581	0.835	1.667
12/7/2007	14.0	14.0	14.0	2.3	2.2	2.3	35	34	35	603	575	589	0.856	35	34	34	537	532	535	0.851	1.707
12/8/2007	14.0	13.9	14.0	2.2	2.1	2.2	35	34	35	600	550	575	0.863	35	34	34	539	539	539	0.854	1.717
12/9/2007	14.0	13.9	14.0	2.3	2.2	2.3	34	34	34	598	563	581	0.868	35	34	34	545	537	541	0.862	1.730
12/10/2007	14.0	13.9	14.0	2.3	2.2	2.3	36	34	35	681	600	641	0.870	36	35	35	655	540	598	0.865	1.735
12/11/2007	13.9	13.9	13.9	2.2	2.2	2.2	37	36	36	717	690	704	0.873	37	36	36	659	638	649	0.865	1.738
12/12/2007	14.0	13.9	14.0	2.3	2.2	2.3	34	34	34	554	534	544	0.880	34	34	34	504	500	502	0.873	1.753
12/13/2007	14.0	14.0	14.0	2.3	2.2	2.3	35	34	34	553	551	552	0.851	34	34	34	500	493	497	0.844	1.695
12/14/2007	14.0	14.0	14.0	2.3	2.3	2.3	34	34	34	561	550	556	0.810	34	34	34	509	506	508	0.803	1.613

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
12/15/2007	14.1	14.0	14.1	2.3	2.3	2.3	35	34	35	559	531	545	0.878	34	34	34	507	495	501	0.865	1.743
12/16/2007	14.1	14.1	14.1	2.4	2.3	2.4	35	34	34	663	559	611	0.842	34	34	34	511	504	508	0.829	1.671
12/17/2007	14.0		14.0	2.2		2.2	34		34	573		573	0.600	34		34	501		501	0.576	1.176
12/18/2007	13.9	13.7	13.8	1.9	1.8	1.9	36	35	36	701	641	671	0.954	36	35	36	629	606	618	0.930	1.884
12/19/2007	13.8	13.4	13.6	2.0	1.9	2.0	35	34	35	668	600	634	0.937	35	35	35	601	574	588	0.922	1.859
12/20/2007	14.0	13.9	14.0	2.1	2.0	2.1	35	35	35	605	633	619	0.894	35	35	35	578	575	577	0.882	1.776
12/21/2007	14.1	14.0	14.1	2.1	2.1	2.1	34	34	34	563	548	556	0.832	34	34	34	518	499	509	0.823	1.655
12/22/2007	14.1	14.0	14.1	2.2	2.1	2.2	34	34	34	574	545	560	0.833	34	34	34	520	531	526	0.824	1.657
12/23/2007	14.1	14.0	14.1	2.2	2.1	2.2	34	34	34	592	544	568	0.835	34	34	34	534	528	531	0.833	1.668
12/24/2007	14.1	14.0	14.1	2.2	2.1	2.2	34	33	34	567	509	538	0.809	34	34	34	509	505	507	0.808	1.617
12/25/2007	14.0	14.0	14.0	2.2	2.1	2.2	34	34	34	562	545	554	0.816	34	34	34	510	507	509	0.803	1.619
12/26/2007	14.1	14.0	14.1	2.3	2.2	2.3	34	34	34	563	523	543	0.806	34	34	34	506	501	504	0.799	1.605
12/27/2007	14.1	14.0	14.1	2.3	2.2	2.3	34	34	34	564	515	540	0.820	34	34	34	505	501	503	0.809	1.629
12/28/2007	14.0	14.0	14.0	2.2	2.1	2.2	34	34	34	565	542	554	0.812	34	34	34	506	490	498	0.802	1.614
12/29/2007	14.1	14.0	14.1	2.2	2.1	2.2	34	34	34	562	531	547	0.852	34	34	34	508	503	506	0.836	1.688
12/30/2007	14.1	14.0	14.1	2.2	2.2	2.2	34	34	34	573	552	563	0.845	34	34	34	509	508	509	0.831	1.676
12/31/2007	14.1	14.0	14.1	2.3	2.1	2.2	35	34	35	619	573	596	0.775	36	34	35	612	509	561	0.766	1.541
1/1/2008	14.1	14.0	14.1	2.3	2.2	2.3	34	34	34	574	524	549	0.843	34	34	34	503	499	501	0.826	1.669
1/2/2008	14.0	13.9	14.0	2.1	2.1	2.1	34	34	34	572	571	572	0.838	34	34	34	508	507	508	0.797	1.635
1/3/2008	13.8	13.8	13.8	2.0	2.0	2.0	34	34	34	582	567	575	0.855	34	34	34	506	506	506	0.811	1.666
1/4/2008	13.8	13.8	13.8	2.0	2.0	2.0	39	34	37	902	539	721	0.936	39	33	36	824	486	655	0.891	1.827
1/5/2008	13.9	13.9	13.9	2.1	2.0	2.1	34	34	34	572	570	571	0.839	34	34	34	510	500	505	0.806	1.645
1/6/2008	14.0	0.9	7.5	2.1	2.0	2.1	34	34	34	569	515	542	0.800	34	34	34	508	498	503	0.782	1.582
1/7/2008	14.0	13.9	14.0	2.1	2.0	2.1	34	34	34	563	516	540	0.846	34	34	34	513	508	511	0.824	1.670
1/8/2008	14.0	13.9	14.0	2.1	2.0	2.1	34	34	34	570	530	550	0.838	34	34	34	513	513	513	0.823	1.661
1/9/2008	14.0	13.9	14.0	2.2	2.1	2.2	34	34	34	583	532	558	0.804	34	34	34	528	497	513	0.786	1.590
1/10/2008	14.0	13.9	14.0	2.2	2.1	2.2	34	34	34	560	545	553	0.825	34	34	34	503	502	503	0.805	1.630
1/11/2008	14.0	13.9	14.0	2.2	2.1	2.2	34	34	34	561	538	550	0.874	34	33	34	512	501	507	0.851	1.725
1/12/2008	14.0	14.0	14.0	2.2	2.2	2.2	38	34	36	768	532	650	0.838	34	34	34	700	496	598	0.855	1.693
1/13/2008	14.0	14.0	14.0	2.2	2.1	2.2	35	34	35	672	526	599	0.874	35	34	35	611	498	555	0.796	1.670
1/14/2008	14.0	13.9	14.0	2.2	2.1	2.2	34	34	34	560	533	547	0.819	34	34	34	501	496	499	0.796	1.615
1/15/2008	13.9	13.9	13.9	2.1	2.1	2.1	34	34	34	566	537	552	0.830	34	34	34	499	497	498	0.801	1.631
1/16/2008	13.9	13.9	13.9	2.1	2.1	2.1	34	34	34	568	544	556	0.818	34	34	34	494	494	494	0.792	1.610
1/17/2008	14.0	13.9	14.0	2.2	2.1	2.2	34	34	34	557	534	546	0.803	34	34	34	497	495	496	0.785	1.588
1/18/2008	14.0	13.9	14.0	2.2	2.1	2.2	34	34	34	555	531	543	0.804	35	34	35	495	494	495	0.796	1.600
1/19/2008	14.0	13.9	14.0	2.2	2.1	2.2	34	34	34	560	534	547	0.833	34	34	34	504	500	502	0.815	1.648
1/20/2008	13.9	13.9	13.9	2.1	2.1	2.1	34	34	34	564	562	563	0.877	34	34	34	503	494	499	0.843	1.720
1/21/2008	13.9	13.3	13.6	2.0	1.4	1.7	35	34	35	618	574	596	0.835	35	34	35	564	518	541	0.809	1.644
1/22/2008	13.6	13.5	13.6	1.5	1.5	1.5	34	34	34	570	559	565	0.834	34	34	34	519	507	513	0.814	1.648
1/23/2008	13.7	13.7	13.7	1.9	1.8	1.9	36	36	36	665	566	616	0.814	35	34	35	595	502	549	0.800	1.614
1/24/2008	13.8	13.7	13.8	1.9	1.8	1.9	34	34	34	566	529	548	0.814	35	34	35	506	503	505	0.801	1.615
1/25/2008	13.8	13.7	13.8	1.9	1.8	1.9	34	34	34	563	549	556	0.820	34	34	34	507	502	505	0.801	1.621
1/26/2008	13.8	13.7	13.8	1.9	1.8	1.9	34	34	34	568	520	544	0.748	34	34	34	503	498	501	0.738	1.486
1/27/2008	13.8	13.7	13.8	2.0	1.9	2.0	34	34	560	541	515	528	0.833	36	35	36	538	510	524	0.811	1.644
1/28/2008	13.8	13.8	13.8	2.0	1.9	2.0	34	34	34	574	545	560	0.818	34	34	34	513	511	512	0.800	1.618
1/29/2008	13.8	13.8	13.8	2.0	1.9	2.0	34	34	34	568	521	545	0.824	36	34	35	529	493	511	0.809	1.633
1/30/2008	13.9	13.8	13.9	2.0	1.9	2.0	34	34	34	562	533	548	0.807	34	34	34	497	495	496	0.799	1.606
1/31/2008	13.9	13.8	13.9	2.0	1.9	2.0	34	34	34	556	528	542	0.807	34	34	34	506	501	504	0.795	1.602
2/1/2008	13.9	13.8	13.9	2.0	1.9	2.0	34	34	34	566	528	547	0.825	34	34	34	506	504	505	0.816	1.641
2/2/2008	13.8	13.8	13.8	2.0	1.9	2.0	34	34	34	590	554	572	0.877	34	34	34	542	504	523	0.863	1.740
2/3/2008	13.8	13.8	13.8	2.0	1.9	2.0	34	34	34	595	581	588	0.925	34	34	34	549	539	544	0.896	1.821
2/4/2008	13.8		13.8	1.9		1.9	35		35	685		685	0.985	36		36	619		619	0.957	1.942
2/5/2008	13.8	13.8	13.8	2.1	1.9	2.0	35	35	35	684	665	675	0.999	35	35	35	624	622	623	0.970	1.969
2/6/2008	13.9	13.8	13.9	2.1	2.0	2.1	35	31	33	688		688	0.843	53	35	44	1506	622	1064	1.131	1.974
2/7/2008	13.8		13.8	2.0		2.0	37		37	800		800	0.299	37		37	738		738	1.684	1.983
2/8/2008	13.9	13.8	13.9	2.1	2.0	2.1								55	50	53	1572	1402	1487	2.075	2.075
2/9/2008	13.9	13.8	13.9	2.1	2.0	2.1								50	44	47	1386	1101	1244	1.558	1.558
2/10/2008	13.9	13.8	13.9	2.0	2.0	2.0								44	43	44	1125	1125	1125	1.662	1.662
2/11/2008	13.9	13.8	13.9	2.0	2.0	2.0								49	48	49	1370	1312	1341	1.904	1.904
2/12/2008	13.9	13.9	13.9	2.1	2.0	2.1								51	43	47	1422	1110	1266	1.771	1.771
2/13/2008	14.0	14.0	14.0	2.1	2.1	2.1								48	47	48	1279	1274	1277	1.675	1.675
2/14/2008	13.9	13.9	13.9	2.0	2.0	2.0								44	43	44	1124	1101	1113	1.623	1.623
2/15/2008	13.9	13.9	13.9	2.0	2.0	2.0	33		33	56		56	0.341	48	34	41	1310	506	908	1.321	1.662
2/16/2008	14.0		14.0	2.1		2.1	33		34	533		533	0.785	33		33	489		489	0.775	1.560
2/17/2008	14.0	13.9	14.0	2.1	2.0	2.1	34	33	34	551	547	549	0.819	33	33	33	496	495	496	0.809	1.628
2/18/2008	14.0	14.0	14.0	2.1	2.1	2.1	34		34	568		568	0.260	44	33	39	1117	498	808	1.382	1.642
2/19/2008	13.9	13.9	13.9	2.1	2.1	2.1							0.000	44	44	44	1126	1123	1125	1.699	1.699
2/20/2008	13.6	13.5	13.6	9.6	9.2	9.4							0.000	47	44	46	1237	1124	1181	1.631	1.631
2/21/2008	13.6	13.3	13.5	9.2	1.0	5.1							0.000	44	44	44	1129	1124	1127	1.666	1.666
2/22/2008	13.5		13.5	1.5		1.5	Interim MIT Pressure Test						0.302	44		44	1129		1129	1.249	1.551
2/23/2008	13.7	13.7	13.7	1.8	1.7	1.8	34	34	34	561	533	547	0.814	34	34	34	500	494	497	0.806	1.620
2/24/2008	13.7	13.7	13.7	1.8	1.8	1.8	34	34	34	558	543	551	0.813	34	34	34	502	501	502	0.796	1.609
2/25/2008	13.8	13.7	13.8	1.9	1.8	1.9	35	33	34	664	541	603	1.201	35	34	35	604	510	557	0.440	1.641
2/26/2008	13.8	13.8	13.8	2.0	1.9	2.0	44	43	44	1213	1180	1197	1.795							0.000	1.795
2/27/2008	13.8	13.8	13.8	2.0	1.9	2.0	49	43	46	1418	1206	1312	1.465	Interim MIT Pressure Test						0.268	1.733
2/28/2008	13.8	13.8	13.8	1.9	1.9	1.9	33	33	33	594	550	572	0.836	34	33	34	506	487	497	0.807	1.643
2/29/2008	13.8	13.7	13.8	1.9	1.8	1.9	36	34	35	672	587	630	0.828	35	34	35	611	498	555	0.808	1.636
3/1/2008	13.8	13.7	13.8	2.0	1.8	1.9	37	34	36	684	566	625	0.869	35	34	35	648	505	577	0.845	1.714
3/2/2008	13.8	13.8	13.8	2.0	1.9	2.0	35	34	34	678	582	630	0.894	37	35	36	633	540	587	0.878	1.772
3/3/2008	13.9	13.8	13.9	2.0	1.9	2.0	35	34	35	665	602	634	0.902	36	34	35	648	521	585	0.881	1.783
3/4/2008	13.9	13.8	13.9	2.0	2.0	2.0	36	35	36	705	597	651	0.940	37	34	36	681	539	610	0.938	1.878
3/5/2008	13.9	13.9	13.9	2.1	2.0	2.1	36	34	35	722	529	626	0.883	36	35	36	652	505	579	0.848	1.731
3/6/2008	13.9	13.9	13.9	2.1	2.0	2.1	37	34	36	739	589	664	0.858	37	34	36	707	513	610	0.842	1.700
3/7/2008	13.9	13.9	13.9	2.1	2.0	2.1	38	35	36	688	581	634	0.877	37	35	36	656	540	598	0.864	1.741
3/8/2008	13.9	13.9	13.9	2.1	2.0	2.1	34	33	34	624	581	603	0.912	35	34	35	596	540	568	0.890	1.802
3/9/2008	13.8	13.8	13.8	2.0	2.0	2.0	34	34	34	607	583	595	0.835	34	34	34	543	539	541	0.812	1.647
3/10/2008	13.9	13.8	13.9	2.0	1.9	2.0	34	34	34	614	556	585	0.872	35	34	35	550	541	546	0.854	1.726
3/11/2008	13.9	13.9	13.9	2.1	2.0	2.1	34	35	35	603	589	596	0.906	35	34	35	530	532	531	0.889	1.795
3/12/2008	14.0	13.9	14.0	2.1	2.1	2.1	34	34	34	601	580	591	0.874	35	34	35	566	545	556	0.860	1.734
3/13/2008	13.9	10.9	12.4	9.3	2.1	5.7	34	34	34	595	593	594	0.878	34	33	34	541	533	537	0.858	1.736
3/14/2008	13.6	13.5	13.6	9.2	9.1	9.2	34	34	34	654	589	622	0.866	35	34	35	581	541	561	0.881	1.727
3/15/2008	13.6	13.4	13.5	1.6	1.3	1.5	35	34	34	600	564	582	0.841	35	35	35	627	620	624	0.877	1.718
3/16/2008	13.7	13.6	13.7	1.7	1.6	1.7	35	34	34	595	589	592	0.845	35	34	35	610	610	610	0.884	1.729
3/17/2008	13.6	13.2	13.4	1.6	1.2	1.4	35	34	35	578	566	572	0.860	35	34	35	617	606	612	0.896	1.756
3/18/2008	13.5	13.4	13.5	1.5	1.4	1.5	35	34	35	591	574	583	0.857	34	34	34	609	601	605	0.893	1.750
3/19/2008	13.6	13.6	13.6	1.7	1.6	1.7	35	34	35	579	658	619	0.837	36	34	35	703	601	652	0.875	1.712
3/20/2008	13.7	13.7	13.7	1.8	1.7	1.8	35	34	35	582	578	580	0.798	35	34	35	607	603	605	0.835	1.633
3/21/2008	13.7		13.7	1.7		1.7	34		34	582		582	0.849	34		34	608		608	0.886	1.735

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
3/22/2008	13.7	13.7	13.7	1.8	1.7	1.8	34	34	34	579	566	573	0.831	34	34	34	603	599	601	0.860	1.691
3/23/2008	13.8	13.8	13.8	1.9	1.8	1.9	36	35	36	658	589	624	0.832	36	35	36	709	610	660	0.869	1.701
3/24/2008	13.8	13.8	13.8	1.8	1.8	1.8	35	34	35	586	575	581	0.838	35	34	35	602	602	602	0.875	1.713
3/25/2008	13.8	13.7	13.8	1.8	1.8	1.8	34	34	34	591	569	580	0.853	34	34	34	605	604	605	0.885	1.738
3/26/2008	13.7	13.7	13.7	1.8	1.7	1.8	34	34	34	582	564	573	0.819	34	34	34	610	602	606	0.854	1.673
3/27/2008	13.8	13.8	13.8	1.8	1.8	1.8	37	35	36	654	577	616	0.870	37	35	36	708	604	656	0.911	1.781
3/28/2008	13.8	13.8	13.8	1.9	1.8	1.9	34	34	34	557	524	541	0.790	34	34	34	572	562	567	0.824	1.614
3/29/2008	13.8	13.8	13.8	1.9	1.8	1.9	34	34	34	552	538	545	0.817	34	34	34	575	566	571	0.852	1.669
3/30/2008	13.8	13.8	13.8	1.9	1.8	1.9	36	34	35	683	558	621	0.847	36	34	35	707	596	652	0.877	1.724
3/31/2008	13.8	13.8	13.8	1.9	1.8	1.9	34	34	34	576	545	561	0.847	35	34	35	599	603	601	0.886	1.733
4/1/2008	13.8	13.8	13.8	1.9	1.8	1.9	34	34	34	631	574	603	0.840	35	35	35	665	600	633	0.880	1.720
4/2/2008	13.8	13.8	13.8	1.9	1.8	1.9	35	35	34	580	522	551	0.808	34	34	34	581	562	572	0.851	1.659
4/3/2008	13.8	13.8	13.8	1.9	1.8	1.9	35	34	35	649	528	589	0.782	35	34	35	679	572	626	0.823	1.605
4/4/2008	13.8	13.8	13.8	1.9	1.8	1.9	35	34	35	550	547	549	0.806	34	34	34	576	571	574	0.847	1.653
4/5/2008	13.9	13.8	13.9	1.9	1.9	1.9	35	34	35	548	520	534	0.859	34	34	34	590	588	589	0.906	1.765
4/6/2008	13.9	13.9	13.9	2.0	1.9	2.0	35	34	35	544	544	544	0.816	34	34	34	574	550	562	0.855	1.671
4/7/2008	13.9	13.9	13.9	2.0	2.0	2.0	37	36	37	699	666	683	0.850	36	36	36	710	707	709	0.885	1.735
4/8/2008	13.9	13.9	13.9	2.0	2.0	2.0	35	35	35	586	556	571	0.875	35	34	35	623	596	610	0.914	1.789
4/9/2008	13.9	13.9	13.9	2.0	2.0	2.0	35	34	35	595	572	584	0.844	35	34	35	615	596	606	0.883	1.727
4/10/2008	14.0	13.9	14.0	2.0	2.0	2.0	36	36	36	671	664	668	0.833	36	36	36	700	701	701	0.871	1.704
4/11/2008	13.9	13.9	13.9	2.0	2.0	2.0	35	35	35	566	380	473	0.830	35	35	35	592	589	591	0.862	1.692
4/12/2008	14.0	13.9	14.0	2.0	2.0	2.0	35	34	35	572	571	572	0.833	35	35	35	598	597	598	0.870	1.703
4/13/2008	14.0	13.9	14.0	2.1	2.0	2.1	35	34	35	577	571	574	0.818	35	34	35	599	597	598	0.853	1.671
4/14/2008	13.9	13.9	13.9	2.0	0.9	1.5	36	35	36	682	582	632	0.867	36	34	35	706	599	653	0.891	1.758
4/15/2008	14.0	14.0	14.0	1.8	1.8	1.8	34	34	34	607	597	602	0.882	34	34	34	624	608	616	0.904	1.786
4/16/2008	13.6	13.6	13.6	1.6	1.5	1.6	35	34	34	611	574	593	0.840	35	35	35	622	614	618	0.866	1.706
4/17/2008	13.7	13.7	13.7	1.7	1.6	1.7	35	34	35	604	555	580	0.870	35	34	35	617	603	610	0.898	1.768
4/18/2008	13.7	13.7	13.7	1.7	1.6	1.7	35	34	35	606	590	598	0.767	35	34	35	664	602	633	0.857	1.624
4/19/2008	13.8	13.7	13.8	1.8	1.7	1.8	35	34	35	586	561	574	0.901	35	34	35	601	599	600	0.872	1.773
4/20/2008	13.8	13.8	13.8	1.9	1.8	1.9	35	34	35	592	556	574	0.839	35	34	35	600	597	599	0.871	1.710
4/21/2008	13.9	13.8	13.9	1.9	1.8	1.9	36	35	36	680	580	630	0.909	36	35	36	737	596	667	0.947	1.856
4/22/2008	13.9	13.9	13.9	2.0	1.9	2.0	35	35	35	603	575	589	0.895	35	35	35	618	611	615	0.924	1.819
4/23/2008	13.9	13.9	13.9	1.9	1.9	1.9	34	34	34	595	562	579	0.830	34	34	34	592	589	591	0.860	1.690
4/24/2008	13.9	13.9	13.9	1.9	1.9	1.9	35	34	35	580	541	561	0.825	35	34	35	592	589	591	0.858	1.683
4/25/2008	13.9	13.9	13.9	1.9	1.9	1.9	35	34	35	585	568	577	0.849	35	34	35	604	597	601	0.882	1.731
4/26/2008	13.9		13.9	1.8		1.8	39		39	608		608	0.603	35		35	608		608	0.611	1.214
4/27/2008	13.9	13.9	13.9	1.9	1.8	1.9	38	38	38	811	788	800	1.009	38	38	38	838	837	838	1.052	2.061
4/28/2008	13.9	13.9	13.9	1.9	1.8	1.9	38	38	38	808	773	791	0.943	38	38	38	842	832	837	0.984	1.927
4/29/2008	13.9	13.9	13.9	1.9	1.8	1.9	34	33	34	535	529	532	0.825	34	34	34	559	546	553	0.861	1.686
4/30/2008	13.9	13.9	13.9	1.9	1.8	1.9	34		34	525	517	521	0.857	34	34	34	568	552	560	0.893	1.750
5/1/2008	13.9	13.9	13.9	1.9	1.8	1.9	37	36	37	727	684	706	0.838	37	36	37	780	703	742	0.870	1.708
5/2/2008	13.9	13.9	13.9	1.9	1.8	1.9	34	33	34	530	501	516	0.825	35	34	35	565	542	554	0.854	1.679
5/3/2008	13.9		13.9	1.9		1.9	35		35	570		570	0.856	34		34	597		597	0.889	1.745
5/4/2008	13.9	13.8	13.9	1.9	1.9	1.9	37	34	36	691	573	632	0.930	36	34	35	736	595	666	0.967	1.897
5/5/2008	13.9	13.9	13.9	1.9	1.9	1.9	37	35	36	727	564	646	0.924	36	35	36	746	602	674	0.964	1.888
5/6/2008	13.9	13.9	13.9	1.9	1.9	1.9	35	34	35	598	556	577	0.883	35	35	35	611	608	610	0.917	1.800
5/7/2008	13.9	13.9	13.9	1.9	1.9	1.9	35	34	35	617	552	585	0.885	36	34	35	601	591	596	0.915	1.800
5/8/2008	13.9	13.9	13.9	1.9	1.9	1.9	35	34	35	607	577	592	0.881	35	34	35	619	593	606	0.905	1.786
5/9/2008	13.9	13.9	13.9	2.0	1.9	2.0	36	34	35	705	564	635	0.884	36	34	35	716	591	654	0.910	1.794
5/10/2008	13.9	13.9	13.9	1.9	1.9	1.9	35	34	35	578	569	574	0.848	34	34	34	600	587	594	0.872	1.720
5/11/2008	13.9	13.9	13.9	1.9	1.9	1.9	38	36	37	800	688	744	1.001	38	36	37	817	717	767	1.029	2.030
5/12/2008	13.9	13.9	13.9	1.9	1.9	1.9	34	34	34	564	553	559	0.827	34	34	34	574	571	573	0.832	1.659
5/13/2008	13.9	13.8	13.9	1.9	1.8	1.9	36	34	35	711	568	640	0.930	36	34	35	744	575	660	0.950	1.880
5/14/2008	13.9	13.6	13.7	1.8	1.3	1.6	36	35	36	721	678	700	0.958	37	35	36	738	702	720	0.977	1.935
5/15/2008	13.7	13.7	13.7	1.6	1.5	1.6	36	30	33	724		724	0.429	44	36	40	1203	741	972	1.441	1.870
5/16/2008	13.7	13.7	13.7	1.7	1.6	1.7	30	30	30				0.000	49	45	47	1373	1221	1297	1.870	1.870
5/17/2008	13.8	13.8	13.8	1.8	1.7	1.8	30	30	30				0.000	45	45	45	1245	1207	1226	1.988	1.988
5/18/2008	13.9	13.8	13.9	1.8	1.8	1.8	30	30	30				0.000	51	45	48	1430	1428	1429	1.984	1.984
5/19/2008	13.8	13.8	13.8	1.8	1.8	1.8	50	48	49				0.000	50	48	49	1442	1340	1391	1.886	1.886
5/20/2008	13.8	13.8	13.8	1.8	1.8	1.8	30	30	30				0.000	54	45	50	1588	1196	1392	1.916	1.916
5/21/2008	13.9	13.8	13.9	1.8	1.8	1.8	30	30	30	Equipment Issues			0.000	61	49	50	1445	1349	1397	1.976	1.976
5/22/2008	13.9	13.8	13.9	1.8	1.8	1.8	30	30	30				0.000	48	48	48	1358	1349	1354	1.900	1.900
5/23/2008	13.9	13.8	13.9	1.8	1.8	1.8	30	30	30				0.000	44	43	44	1157	1143	1150	1.633	1.633
5/24/2008	13.9	13.8	13.9	1.9	1.8	1.9	30	30	30				0.000	49	43	46	1142	1398	1270	1.770	1.770
5/25/2008	13.9	13.9	13.9	1.8	1.8	1.8	30	30	30				0.000	44	43	44	1150	1150	1150	1.706	1.706
5/26/2008	13.9	13.8	13.9	1.8	1.8	1.8	30	30	30				0.000	44	44	44	1163	1162	1163	1.715	1.715
5/27/2008	13.9	13.8	13.9	1.8	1.8	1.8	30	29	30				0.000	48	48	48	1338	1317	1328	1.766	1.766
5/28/2008	13.9	13.8	13.9	1.8	1.8	1.8	30	29	30				0.000	51	44	48	1445	1171	1308	1.644	1.644
5/29/2008	13.8	13.8	13.8	1.8	1.7	1.8	29	29	29				0.000	50	32	41	1445		1445	1.210	1.210
5/30/2008	13.9	13.8	13.9	1.8	1.8	1.8	29	29	29				0.000	54	45	50	1576	1216	1396	1.910	1.910
5/31/2008	13.9	13.8	13.9	1.8	1.8	1.8	29	29	29				0.000	43	43	43	1150	1099	1125	1.615	1.615
6/1/2008	13.9	13.8	13.9	1.8	1.8	1.8	29	29	29	618	337	478	0.000	43	43	43	1148	1145	1147	1.658	1.658
6/2/2008	13.9	13.8	13.9	1.8	1.8	1.8	29	29	29	501	432	467	0.000	43	43	43	1146	1139	1143	1.679	1.679
6/3/2008	13.9	13.8	13.9	1.8	1.8	1.8	29	29	29	475	432	454	0.000	44	44	44	1152	1150	1151	1.682	1.682
6/4/2008	13.9	13.8	13.9	1.8	1.8	1.8	29	29	29	410	364	387	0.000	47	44	46	1309	1142	1226	1.700	1.700
6/5/2008	13.8	13.8	13.8	1.8	1.8	1.8	29	29	29	519	388	454	0.000	44	29	37	1148		1148	1.591	1.591
6/6/2008	13.8	13.7	13.8	1.8	1.8	1.8	29	29	29	611	472	542	0.000	47	44	46	1312	1151	1232	1.680	1.680
6/7/2008	13.8	13.7	13.8	1.8	1.8	1.8	29	29	29	631	571	601	0.000	44	44	44	1152	1150	1151	1.709	1.709
6/8/2008	13.8	13.8	13.8	1.8	1.8	1.8	29	29	29	761	670	716	0.000	47	43	45	1302	1144	1223	1.633	1.633
6/9/2008	13.8	13.8	13.8	1.9	1.8	1.9	29	29	29	769	494	632	0.000	44	43	44	1147	1139	1143	1.714	1.714
6/10/2008	13.8	13.8	13.8	1.9	1.8	1.9	29	29	29	747	584	666	0.000	44	44	44	1148	1145	1147	1.676	1.676
6/11/2008	13.8		13.8	1.8		1.8	29		29	763		763	0.000	47		47	1307		1307	1.397	1.397
6/12/2008	13.8	13.8	13.8	1.8	1.8	1.8	29	29	29	862	659	761	0.000	47	44	46	1301	1137	1219	1.749	1.749
6/13/2008	13.8	13.7	13.8	1.8	1.8	1.8	29	29	29	874	702	788	0.000	47	43	45	1304	1145	1225	1.655	1.655
6/14/2008	13.8	13.8	13.8	1.8	1.8	1.8	29	29	29	1179	798	989	0.000	43	43	43	1141	1141	1141	1.678	1.678
6/15/2008	13.8	13.8	13.8	1.8	1.8	1.8	29	29	29	1027	992	1010	0.000	43	43	43	1139	1130	1135	1.696	1.696
6/16/2008	13.8	13.8	13.8	1.9	1.8	1.9	29	29	29	971	689	830	0.000	43	43	43	1144	1136	1140	1.644	1.644
6/17/2008	13.8	13.8	13.8	1.8	1.8	1.8	45	29	37	1163	974	1069	1.101	43	30	37	1131		1131	0.629	1.730
6/18/2008	13.8	13.8	13.8	1.8	1.8	1.8	42	41	42	999	968	984	1.612	31	30	31				0.004	1.616
6/19/2008	13.8	13.8	13.8	1.9	1.9	1.9	38	38	38	820	780	800	1.202	30	30	30				0.000	1.202
6/20/2008	13.8	13.0	13.4	1.9	1.2	1.6	38	34	36	812	510	661	0.935	33	30	32	560		560	0.525	1.460
6/21/2008	13.4	13.3	13.4	1.5	1.4	1.5	35	34	35	603	543	573	0.783	34	33	34	665	559	612	0.815	1.598
6/22/2008	13.5	13.5	13.5	1.6	1.5	1.6	34	34	34	549	528	539	0.766	34	34	34	569	554	562	0.795	1.561
6/23/2008	13.5	13.5	13.5	1.7	1.6	1.7	36	34	35	650	522	586	0.742	35	34	35	674	560	617	0.768	1.510
6/24/2008	13.5	13.5	13.5	1.7	1.6	1.7	34	34	34	559	529	544	0.788	34	34	34	573	563	568	0.817	1.605
6/25/2008	13.5	13.5	13.5	1.7	1.6	1.7	36	34	35	563	550	557	0.822	34	34	34	595	562	579	0.844	1.666
6/26/2008	13.5	13.5	13.5	1.8	1.6	1.7	34	34	34	552	534	543	0.848	34	34	34	566	560	563	0.877	1.725
6/27/2008	13.6	13.6	13.6	1.8	1.7	1.8	34	34	34	556	524	540	0.798	34	34	34	561	564	583	0.825	1.623

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
6/28/2008	13.6	13.6	13.6	1.8	1.7	1.8	34	34	34	550	541	546	0.839	34	34	34	563	561	562	0.861	1.700
6/29/2008	13.6	13.6	13.6	1.8	1.7	1.8	34	34	34	551	544	548	0.797	34	34	34	564	560	562	0.810	1.607
6/30/2008	13.7	13.7	13.7	1.8	1.8	1.8	34	34	34	550	544	547	0.820	34	34	34	563	560	562	0.834	1.654
7/1/2008	13.7	13.7	13.7	1.8	1.7	1.8	34	34	34	555	548	552	0.859	34	34	34	581	562	572	0.868	1.727
7/2/2008	13.7	13.7	13.7	1.8	1.8	1.8	34	34	34	554	541	548	0.813	34	34	34	564	558	561	0.826	1.639
7/3/2008	13.7	13.7	13.7	1.8	1.8	1.8	34	34	34	558	543	551	0.852	35	34	35	571	565	568	0.862	1.714
7/4/2008	13.7	13.7	13.7	1.8	1.8	1.8	35	34	35	552	50	301	0.818	34	34	34	574	563	569	0.831	1.649
7/5/2008	13.7	13.7	13.7	1.9	1.8	1.9	35	34	35	569	541	555	0.832	34	34	34	576	564	570	0.845	1.677
7/6/2008	13.7	13.7	13.7	1.9	1.9	1.9	34	34	34	565	541	553	0.823	34	34	34	570	646	608	0.831	1.654
7/7/2008	13.7	13.6	13.7	1.9	1.8	1.9	35	35	35	563	555	559	0.833	35	34	35	575	562	569	0.844	1.677
7/8/2008	13.7	13.6	13.7	1.9	1.8	1.9	35	35	35	634	566	600	0.786	35	35	35	652	557	605	0.803	1.589
7/9/2008	13.6	13.6	13.6	1.9	1.9	1.9	35	34	35	565	558	562	0.812	35	34	35	686	565	626	0.823	1.635
7/10/2008	13.6	13.6	13.6	1.9	1.8	1.9	34	33	34	662	564	613	0.817	35	34	35	661	570	616	0.829	1.646
7/11/2008	13.6	13.6	13.6	1.9	1.9	1.9	34	34	34	551	554	553	0.824	34	34	34	563	558	561	0.835	1.659
7/12/2008	13.6	13.6	13.6	1.9	1.8	1.9	35	34	35	561	554	558	0.835	34	34	34	567	563	565	0.840	1.675
7/13/2008	13.7	13.7	13.7	1.9	1.9	1.9	35	34	35	562	557	560	0.806	34	34	34	570	570	570	0.813	1.619
7/14/2008	13.7	13.7	13.7	1.9	1.9	1.9	36	34	35	638	564	601	0.822	34	34	34	343	567	455	0.828	1.650
7/15/2008	13.7	13.7	13.7	1.9	1.9	1.9	34	34	34	560	555	558	0.841	34	34	34	567	565	566	0.848	1.689
7/16/2008	13.7	13.7	13.7	2.0	1.9	2.0	34	34	34	563	547	555	0.788	34	34	34	571	567	569	0.797	1.585
7/17/2008	13.7	13.7	13.7	2.0	2.0	2.0	35	34	35	567	555	561	0.814	34	34	34	573	566	570	0.823	1.637
7/18/2008	13.9	13.8	13.9	2.0	2.0	2.0	35	34	35	563	559	561	0.832	34	34	34	565	564	565	0.838	1.670
7/19/2008	13.8	13.8	13.8	2.1	2.0	2.1	34	34	34	572	564	568	0.820	34	34	34	577	572	575	0.824	1.644
7/20/2008	13.8	13.8	13.8	2.0	2.0	2.0	35	34	35	571	558	565	0.825	34	34	34	578	570	574	0.827	1.652
7/21/2008	13.9	13.8	13.9	2.1	2.0	2.1	35	34	35	654	565	610	0.849	35	34	35	577	569	573	0.855	1.704
7/22/2008	13.9	13.4	13.7	2.0	1.8	1.9	35	35	35	631	571	601	0.878	35	34	35	527	568	548	0.884	1.762
7/23/2008	13.6	13.6	13.6	2.1	2.0	2.1	36	35	36	619	612	616	0.889	35	35	35	615	615	615	0.895	1.784
7/24/2008	13.7		13.7	2.1		2.1	35		35	618		618	0.871	35		35	623		623	0.879	1.750
7/25/2008	13.7		13.7	2.2		2.2	35		35	558		558	0.821	34		34	560		560	0.830	1.651
7/26/2008	13.8	13.7	13.8	2.2	2.1	2.2	35	34	35	562	560	561	0.818	35	34	35	569	563	566	0.825	1.643
7/27/2008	13.8	13.8	13.8	2.2	2.2	2.2	35	34	35	560	558	559	0.817	34	34	34	565	565	565	0.824	1.641
7/28/2008	13.8	13.8	13.8	2.2	2.2	2.2	35	34	35	563	555	559	0.827	35	34	35	577	565	571	0.837	1.664
7/29/2008	13.8	13.8	13.8	2.2	2.2	2.2	35	35	35	566	564	565	0.852	34	34	34	569	561	565	0.857	1.709
7/30/2008	13.8	13.8	13.8	2.3	2.2	2.3	37	34	36	749	560	655	0.855	35	32	34	741	555	648	0.863	1.718
7/31/2008	13.8		13.8	2.3		2.3	35		35	571		571	0.853	35		35	594		594	0.860	1.713
8/1/2008	13.9	13.8	13.9	2.3	2.2	2.3	35	34	35	594	578	586	0.840	35	35	35	603	598	601	0.847	1.687
8/2/2008	13.9	13.8	13.9	2.3	2.3	2.3	37	35	34	692	578	635	0.859	36	35	36	706	593	650	0.864	1.723
8/3/2008	13.8	13.8	13.8	2.3	2.3	2.3	35	34	35	589	573	581	0.852	35	34	35	603	588	596	0.868	1.710
8/4/2008	13.9	13.8	13.9	2.3	2.3	2.3	35	35	35	591	590	591	0.856	35	34	35	584	579	582	0.865	1.721
8/5/2008	13.8	13.8	13.8	2.4	2.3	2.4	35	34	35	585	577	581	0.855	35	34	35	595	582	589	0.863	1.718
8/6/2008	13.8	13.8	13.8	2.3	2.3	2.3	35	34	35	589	576	583	0.841	35	34	35	593	585	589	0.847	1.688
8/7/2008	13.9	13.8	13.9	2.4	2.3	2.4	35	34	35	583	578	581	0.862	35	35	35	594	591	593	0.868	1.730
8/8/2008	13.8	13.8	13.8	2.3	2.3	2.3	35	34	35	626	577	602	0.841	35	34	35	623	582	603	0.846	1.687
8/9/2008	13.9	13.8	13.9	2.4	2.4	2.4	37	35	36	690	577	634	0.865	35	35	35	699	597	648	0.869	1.734
8/10/2008	13.8	13.8	13.8	2.4	2.3	2.4	35	34	35	584	577	581	0.816	35	34	35	598	594	596	0.820	1.636
8/11/2008	13.8	13.8	13.8	2.4	2.3	2.4	35	34	35	591	576	584	0.854	35	34	35	592	587	590	0.860	1.714
8/12/2008	13.8	13.8	13.8	2.4	2.3	2.4	36	36	36	687	681	684	0.868	36	36	36	698	695	697	0.877	1.745
8/13/2008	13.9	13.8	13.9	2.4	2.3	2.4	35	35	35	585	581	583	0.847	35	35	35	590	588	589	0.852	1.699
8/14/2008	13.9	13.8	13.9	2.4	2.4	2.4	35	35	35	615	583	599	0.854	35	35	35	619	590	605	0.860	1.714
8/15/2008	13.9		13.9	2.3		2.3	35		35	582		582	0.852	35		35	598		598	0.859	1.711
8/16/2008	14.0		14.0	2.4		2.4	35		35	590		590	0.867	35		35	589		589	0.868	1.735
8/17/2008	14.0	14.0	14.0	2.5	2.4	2.5	35	35	35	591	587	589	0.862	35	35	35	596	591	594	0.867	1.729
8/18/2008	14.0	14.0	14.0	2.4	2.4	2.4	35	35	35	602	594	598	0.878	35	34	35	588	582	585	0.884	1.762
8/19/2008	14.2	14.1	14.2	2.6	2.5	2.6	35	35	35	589	588	589	0.816	35	35	35	590	584	587	0.817	1.633
8/20/2008	14.1	14.1	14.1	2.6	2.6	2.6	37	35	36	728	569	649	0.858	37	35	36	737	581	659	0.871	1.729
8/21/2008	14.2	14.1	14.2	2.6	2.6	2.6	35	34	35	580	579	580	0.835	35	35	35	599	588	594	0.856	1.691
8/22/2008	14.2	14.1	14.2	2.6	2.6	2.6	35	34	35	574	567	571	0.845	35	35	35	585	584	585	0.868	1.713
8/23/2008	14.2	14.1	14.2	2.6	2.6	2.6	35	35	35	581	578	580	0.845	35	35	35	588	581	585	0.863	1.708
8/24/2008	14.2	14.2	14.2	2.6	2.5	2.6	35	35	35	576	575	676	0.823	35	35	35	588	588	588	0.838	1.661
8/25/2008	14.2	14.1	14.2	2.6	2.6	2.6	35	35	35	585	577	581	0.853	35	35	35	593	591	592	0.868	1.721
8/26/2008	13.9	13.8	13.9	1.9	1.7	1.8	35	35	35	580	584	582	0.855	35	35	35	694	586	640	0.864	1.719
8/27/2008	13.9	13.9	13.9	2.0	1.9	2.0	35	35	35	584	580	582	0.862	35	35	35	586	584	585	0.871	1.733
8/28/2008	14.0	14.0	14.0	2.1	2.0	2.1	35	35	35	589	573	581	0.887	35	35	35	593	587	590	0.908	1.795
8/29/2008	14.1	14.1	14.1	2.1	2.1	2.1	36	36	36	670	578	624	0.834	35	35	35	698	585	642	0.852	1.686
8/30/2008	14.1	14.1	14.1	2.1	2.1	2.1	35	35	35	577	577	577	0.849	36	35	36	586	585	586	0.867	1.716
8/31/2008	14.1	14.1	14.1	2.1	2.1	2.1	35	35	35	574	573	574	0.823	35	35	35	591	583	587	0.843	1.666
9/1/2008	14.1	14.0	14.1	2.2	2.1	2.2	35	35	35	577	573	575	0.853	35	35	35	585	582	584	0.875	1.728
9/2/2008	14.1	14.1	14.1	2.2	2.2	2.2	35	35	35	586	578	582	0.835	35	35	35	591	590	591	0.850	1.685
9/3/2008	14.1	14.1	14.1	2.3	2.2	2.3	35	35	35	572	570	571	0.858	35	35	35	590	587	589	0.875	1.733
9/4/2008	14.1	14.1	14.1	2.3	2.2	2.3	35	35	35	585	573	579	0.845	35	35	35	591	586	589	0.858	1.703
9/5/2008	14.1	14.1	14.1	2.2	2.2	2.2	42	35	39	968	559	764	0.849	43	35	39	1021	569	795	0.869	1.718
9/6/2008	14.1	14.0	14.1	2.2	2.2	2.2	35	35	35	555	552	554	0.801	35	35	35	571	568	570	0.821	1.622
9/7/2008	14.1	14.0	14.1	2.2	2.1	2.2	35	35	35	557	555	556	0.814	35	35	35	569	569	569	0.827	1.641
9/8/2008	14.1	14.1	14.1	2.2	2.2	2.2	35	35	35	559	555	557	0.808	35	35	35	568	565	567	0.823	1.631
9/9/2008	14.1	14.1	14.1	2.2	2.2	2.2	35	35	35	560	558	559	0.871	35	35	35	571	568	570	0.885	1.756
9/10/2008	14.1	14.1	14.1	2.2	2.2	2.2	35	35	35	558	557	558	0.821	35	35	35	568	567	568	0.827	1.648
9/11/2008	14.1	14.0	14.1	2.2	2.2	2.2	35	35	35	559	558	559	0.808	35	34	35	568	567	568	0.815	1.623
9/12/2008	14.0	13.9	14.0	2.2	2.1	2.2	35	35	35	560	560	560	0.815	35	34	35	566	563	565	0.819	1.634
9/13/2008	13.9	13.9	13.9	2.2	2.1	2.2	36	35	36	663	557	610	0.826	35	35	35	667	566	617	0.830	1.656
9/14/2008	14.0	14.0	14.0	2.2	2.1	2.2	35	35	35	564	559	562	0.818	35	35	35	573	566	570	0.823	1.641
9/15/2008	14.0	14.0	14.0	2.2	2.2	2.2	37	35	36	728	564	646	0.931	36	34	35	740	559	650	0.938	1.869
9/16/2008	14.0	14.0	14.0	2.2	2.2	2.2	35	35	35	569	561	565	0.854	35	34	35	573	559	566	0.860	1.714
9/17/2008	14.1	14.0	14.1	2.3	2.2	2.3	35	35	35	582	565	574	0.886	35	34	35	583	568	576	0.894	1.780
9/18/2008	14.1	14.1	14.1	2.2	2.2	2.2	35	35	35	583	580	582	0.851	35	35	35	595	592	594	0.856	1.707
9/19/2008	14.2	14.1	14.2	2.3	2.2	2.3	35	35	35	587	581	584	0.908	35	35	35	588	585	587	0.915	1.823
9/20/2008	14.2	14.2	14.2	2.2	2.2	2.2	35	35	35	586	584	585	0.858	35	35	35	594	592	593	0.863	1.721
9/21/2008	14.2	14.1	14.2	2.3	2.2	2.3	35	35	35	589	582	586	0.833	35	35	35	593	593	593	0.838	1.671
9/22/2008	14.2	14.2	14.2	2.2	2.2	2.2	35	35	35	586	579	583	0.846	35	35	35	596	594	595	0.856	1.702
9/23/2008	14.2	13.9	14.1	3.5	2.2	2.9	35	35	35	585	582	584	0.870	35	35	35	597	596	597	0.871	1.741
9/24/2008	14.1	14.0	14.1	3.8	3.7	3.8	35	35	35	588	585	587	0.846	35	35	35	597	586	592	0.852	1.698
9/25/2008	14.1	14.1	14.1	3.8	3.8	3.8	35	35	35	584	574	579	0.842	35	35	35	595	585	590	0.851	1.693
9/26/2008	14.2	14.1	14.2	3.9	3.8	3.9	35	35	35	582	577	580	0.856	35	35	35	594	588	591	0.862	1.718
9/27/2008	14.2	14.1	14.2	3.9	3.8	3.9	36	35	36	571	585	578	0.856	36	35	36	683	584	634	0.860	1.716
9/28/2008	14.2	14.2	14.2	3.9	3.8	3.9	38	35	36	593	582	588	0.896	35	34	35	597	578	588	0.907	1.803
9/29/2008	14.2	14.2	14.2	4.0	3.9	4.0	35	35	36	675	584	630	0.862	37	35	36	699	578	639	0.875	1.737
9/30/2008	14.2	14.2	14.2	4.0	3.9	4.0	35	35	35	577	574	576	0.860	35	35	35	590	584	587	0.872	1.732
10/1/2008	14.3	13.8	14.1	3.9	3.7	3.8	35	35	35	588	577	583	0.811	35	35	35	591	589	590	0.821	1.632
10/2/2008	14.0	14.0	14.0	4.0	3.9	4.0	35	34	35	574	559	567	0.807	35	35	35	590	573	582	0.817	1.624
10/3/2008	14.1	14.1	14.1	4.0	4.0	4.0	35	35	35	582	581	582	0.891	35	35	35	588	586	587	0.905	1.796

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
10/4/2008	14.1	14.1	14.1	4.0	4.0	4.0	35	35	35	584	572	578	0.869	35	35	35	595	584	590	0.880	1.749
10/5/2008	14.2	14.2	14.2	4.1	4.0	4.1	37	35	36	671	571	621	0.847	36	35	36	697	593	645	0.862	1.709
10/6/2008	14.3	14.2	14.3	4.1	4.0	4.1	35	35	35	575	571	573	0.844	35	35	35	591	584	588	0.860	1.704
10/7/2008	14.3	14.3	14.3	4.1	4.1	4.1	35	35	35	582	566	574	0.858	35	35	35	592	581	587	0.876	1.734
10/8/2008	14.3	14.3	14.3	4.2	4.1	4.2	35	35	35	584	580	582	0.843	35	35	35	589	586	588	0.857	1.700
10/9/2008	14.3	14.3	14.3	4.2	4.1	4.2	35	35	35	581	575	578	0.841	35	35	35	591	586	589	0.857	1.698
10/10/2008	14.4	14.3	14.4	4.2	4.1	4.2	36	35	36	677	584	631	0.848	36	35	36	687	581	634	0.856	1.704
10/11/2008	14.3	14.3	14.3	4.2	4.1	4.2	35	35	35	584	572	578	0.847	35	35	35	597	579	588	0.856	1.703
10/12/2008	14.3	14.3	14.3	4.2	4.1	4.2	35	35	35	593	573	583	0.851	35	35	35	587	584	586	0.860	1.711
10/13/2008	14.3	14.3	14.3	4.2	4.1	4.2	36	35	35	577	575	576	0.848	35	35	35	588	581	585	0.858	1.706
10/14/2008	14.3	14.3	14.3	4.2	4.1	4.2	36	35	36	670	576	623	0.939	36	35	36	697	588	643	0.954	1.893
10/15/2008	14.3	14.3	14.3	4.2	4.1	4.2	35	35	35	588	584	586	0.848	35	35	35	583	582	583	0.858	1.706
10/16/2008	14.3	14.3	14.3	4.2	4.1	4.2	35	35	35	586	585	586	0.853	35	35	35	583	581	582	0.863	1.716
10/17/2008	14.3	14.3	14.3	4.2	4.2	4.2	35	35	35	592	585	589	0.859	35	35	35	589	577	583	0.866	1.725
10/18/2008	14.4	14.3	14.4	4.2	4.1	4.2	35	35	35	591	551	571	0.852	35	34	35	597	588	593	0.860	1.712
10/19/2008	14.3	14.3	14.3	4.2	4.2	4.2	35	35	35	676	580	628	0.867	37	35	36	692	596	644	0.871	1.738
10/20/2008	14.3	14.3	14.3	4.1	4.1	4.1	35	35	35	582	571	577	0.881	35	35	35	592	588	590	0.871	1.732
10/21/2008	14.3	14.3	14.3	4.2	4.1	4.2	35	36	36	670	589	630	0.866	37	35	36	709	585	647	0.875	1.741
10/22/2008	14.3	14.1	14.2	4.1	4.1	4.1	35	33	34	580	391	486	0.775	35	33	34	582	397	490	0.776	1.551
10/23/2008	14.2	14.2	14.2	4.1	4.1	4.1	35	35	35	581	580	581	0.855	35	35	35	586	584	585	0.862	1.717
10/24/2008	14.2	14.2	14.2	3.8	4.1	4.1	36	35	36	665	570	618	0.689	37	35	36	697	579	638	0.687	1.376
10/25/2008	14.2	14.1	14.2	4.2	4.1	4.2	35	35	35	669	540	605	0.845	37	35	36	674	595	635	0.856	1.701
10/26/2008	14.2	14.2	14.2	4.2	4.1	4.2	35	35	35	677	564	621	0.840	36	35	36	600	689	645	0.854	1.694
10/27/2008	14.2	14.1	14.2	4.2	4.1	4.2	35	35	35	584	544	564	0.847	36	34	35	588	574	581	0.871	1.718
10/28/2008	14.1	14.1	14.1	4.1	4.0	4.1	35	35	35	567	584	576	0.884	35	35	35	592	590	591	0.901	1.785
10/29/2008	14.1	14.1	14.1	4.0	4.0	4.0	35	35	35	588	527	558	0.853	35	35	35	585	562	574	0.875	1.728
10/30/2008	14.1	14.0	14.1	4.0	4.0	4.0	35	35	35	563	536	550	0.804	34	34	34	567	559	563	0.824	1.628
10/31/2008	14.0	14.0	14.0	4.0	3.9	4.0	36	35	36	642	561	602	0.794	36	35	36	672	574	623	0.807	1.601
11/1/2008	14.1	14.1	14.1	4.0	3.9	4.0	34	34	34	555	536	546	0.771	35	34	35	593	571	582	0.795	1.566
11/2/2008	14.2	14.1	14.2	4.1	4.0	4.1	35	35	35	581	569	575	0.877	35	34	35	589	584	587	0.901	1.778
11/3/2008	14.2	14.2	14.2	4.1	4.0	4.1	36	35	36	618	568	593	0.840	36	35	36	682	594	638	0.873	1.713
11/4/2008	14.3	13.7	14.0	4.0	3.5	3.8	35	35	35	582	564	573	0.863	35	34	35	595	579	587	0.885	1.748
11/5/2008	14.0	13.9	14.0	3.8	3.7	3.8	35	35	35	569	547	558	0.815	35	34	35	593	588	591	0.842	1.657
11/6/2008	14.0	14.0	14.0	3.9	3.8	3.9	35	35	35	581	542	562	0.802	35	35	35	586	581	584	0.828	1.630
11/7/2008	14.0	14.0	14.0	4.0	3.8	3.9	35	34	35	580	530	555	0.842	35	35	35	595	593	594	0.874	1.716
11/8/2008	14.1	14.1	14.1	4.0	3.9	4.0	35	35	35	589	546	568	0.850	35	35	35	597	593	595	0.873	1.723
11/9/2008	14.1	14.1	14.1	4.0	3.9	4.0	35	35	35	578	544	561	0.834	35	35	35	599	591	595	0.863	1.697
11/10/2008	14.2	14.1	14.2	4.0	3.9	4.0	36	35	36	677	550	614	0.835	36	35	36	694	595	645	0.861	1.696
11/11/2008	14.2	14.1	14.2	4.0	3.9	4.0	35	35	35	569	568	569	0.832	35	35	35	589	582	586	0.853	1.685
11/12/2008	14.1	14.1	14.1	4.1	3.9	4.0	35	35	35	576	545	561	0.835	35	35	35	591	590	591	0.865	1.700
11/13/2008	14.0	13.9	14.0	4.1	3.9	4.0	35	35	35	571	546	559	0.823	35	35	35	585	581	583	0.856	1.679
11/14/2008	13.9	13.9	13.9	4.0	3.9	4.0	35	35	35	571	564	568	0.816	35	35	35	608	589	599	0.848	1.663
11/15/2008	13.9	13.9	13.9	4.1	3.9	4.0	36	35	36	686	561	624	0.929	37	35	36	580	733	657	0.966	1.895
11/16/2008	13.9	13.9	13.9	4.0	4.0	4.0	37	35	36	711	567	639	0.922	37	36	37	744	585	665	0.928	1.850
11/17/2008	13.9	13.9	13.9	3.9	3.8	3.9	35	35	35	580	537	559	0.819	35	35	35	592	582	587	0.846	1.665
11/18/2008	13.9	13.8	13.9	3.9	3.8	3.9	35	35	35	579	523	551	0.808	35	35	35	604	580	592	0.833	1.641
11/19/2008	13.9	13.8	13.9	3.9	3.8	3.9	36	35	36	575	544	560	0.786	35	35	35	590	581	586	0.809	1.595
11/20/2008	13.9	13.8	13.9	3.9	3.7	3.8	34	34	34	577	500	539	0.815	35	34	35	582	576	579	0.840	1.655
11/21/2008	13.8		13.8	3.8		3.8	35		35	544		544	0.795	34		34	563		563	0.815	1.610
11/22/2008	13.7	13.7	13.7	3.7	3.6	3.7	35	34	35	562	529	546	0.796	35	34	35	575	567	571	0.828	1.624
11/23/2008	13.7	13.7	13.7	3.7	3.6	3.7	34	35	35	564	563	564	0.829	34	34	34	579	561	570	0.861	1.690
11/24/2008	13.8	13.7	13.8	3.7	3.6	3.7	36	35	36	579	566	573	0.840	36	35	36	687	603	645	0.861	1.701
11/25/2008	13.7	13.7	13.7	3.8	3.7	3.8	34	34	34	543	516	530	0.809	35	34	35	557	553	555	0.840	1.649
11/26/2008	13.8	13.7	13.8	3.8	3.7	3.8	34	34	34	557	512	535	0.794	34	34	34	570	566	568	0.823	1.617
11/27/2008	13.7	13.7	13.7	3.7	3.6	3.7	37	34	36	665	569	617	0.975	37	34	36	727	567	647	1.010	1.985
11/28/2008	13.8	13.8	13.8	3.8	3.6	3.7	35	35	35	681	542	612	0.881	37	35	36	685	589	637	0.907	1.788
11/29/2008	13.9	13.8	13.9	3.8	3.6	3.7	35	35	35	582	541	562	0.835	35	35	35	592	591	592	0.859	1.694
11/30/2008	13.9	13.9	13.9	3.8	3.7	3.8	35	35	35	575	563	569	0.849	35	35	35	588	588	588	0.876	1.725
12/1/2008	13.9	13.9	13.9	3.7	3.7	3.7	35	35	35	580	571	576	0.848	35	35	35	591	585	588	0.869	1.717
12/2/2008	13.8	13.8	13.8	3.6	3.6	3.6	35	35	35	580	560	570	0.859	35	35	35	595	591	593	0.879	1.738
12/3/2008	13.7	13.7	13.7	3.5	3.5	3.5	35	32	34	591	299	445	0.761	35	32	34	593	309	451	0.760	1.521
12/4/2008	13.7	13.7	13.7	2.9	2.8	2.9	36	35	36	610	558	584	0.816	36	35	36	636	569	603	0.848	1.664
12/5/2008	13.7	13.7	13.7	2.9	2.8	2.9	34	34	34	577	542	560	0.832	35	34	35	585	581	583	0.863	1.695
12/6/2008	13.8	13.8	13.8	2.9	2.8	2.9	36	35	36	615	584	600	0.742	36	35	36	676	590	633	0.764	1.506
12/7/2008	13.8	13.8	13.8	3.0	3.0	3.0	35	35	35	571	571	571	0.862	35	35	35	586	585	586	0.881	1.743
12/8/2008	13.8	13.8	13.8	3.0	2.9	3.0	35	35	35	586	552	569	0.837	35	35	35	605	591	598	0.859	1.696
12/9/2008	13.7	13.7	13.7	3.0	2.9	3.0	35	35	35	582	546	564	0.839	35	35	35	588	587	588	0.864	1.703
12/10/2008	13.7	13.7	13.7	3.0	2.9	3.0	35	35	35	573	545	559	0.774	35	35	35	591	583	587	0.799	1.573
12/11/2008	13.7	13.1	13.4	2.9	2.7	2.8	35	35	35	573	568	571	0.861	35	35	35	589	589	589	0.888	1.749
12/12/2008	13.2	13.1	13.2	3.4	3.0	3.2	36	35	36	665	588	627	0.847	36	35	36	692	592	642	0.858	1.705
12/13/2008	13.1	13.1	13.1	3.8	3.4	3.6	35	35	35	586	556	571	0.765	35	35	35	586	581	584	0.777	1.542
12/14/2008	13.2	13.2	13.2	4.2	3.9	4.1	36	35	36	670	565	618	0.841	36	35	36	683	584	634	0.867	1.708
12/15/2008	13.3	13.2	13.3	4.5	4.2	4.4	35	35	35	572	539	556	0.829	35	35	35	586	582	584	0.862	1.691
12/16/2008	13.2	13.0	13.1	4.5	4.4	4.5	35	35	35	577	546	562	0.828	35	35	35	592	585	589	0.856	1.684
12/17/2008	13.0		13.0	3.9		3.9	35		35	579		579	0.841	35		35	592		592	0.872	1.713
12/18/2008	13.1	13.1	13.1	4.8	4.7	4.8	35	35	35	577	559	568	0.835	35	35	35	595	591	593	0.864	1.699
12/19/2008	13.2	13.2	13.2	4.8	4.7	4.8	35	35	35	576	555	566	0.838	35	35	35	591	589	590	0.865	1.703
12/20/2008	13.3	13.3	13.3	4.8	4.8	4.8	35	35	35	588	579	584	0.896	35	35	35	617	588	603	0.917	1.813
12/21/2008	13.3	13.3	13.3	4.9	4.8	4.9	36	36	36	618	613	616	0.909	35	35	35	623	623	623	0.939	1.848
12/22/2008	13.3	13.3	13.3	4.8	4.8	4.8	35	35	35	592	566	579	0.859	35	35	35	606	604	605	0.866	1.725
12/23/2008	13.3	13.3	13.3	4.8	4.7	4.8	36	35	36	667	591	629	0.857	36	35	36	701	598	650	0.876	1.733
12/24/2008	13.3	13.3	13.3	4.8	4.7	4.8	35	35	35	587	584	586	0.848	35	35	35	602	597	600	0.866	1.714
12/25/2008	13.3	13.3	13.3	4.8	4.7	4.8	36	35	36	686	533	610	0.837	36	35	36	595	580	588	0.864	1.701
12/26/2008	13.0	13.3	13.2	4.9	4.7	4.8	36	35	36	661	510	586	0.808	36	35	36	678	575	627	0.847	1.655
12/27/2008	13.3	13.3	13.3	4.9	4.8	4.9	35	35	35	561	531	546	0.757	35	35	35	580	578	579	0.785	1.542
12/28/2008	13.3	13.3	13.3	4.9	4.9	4.9	35	35	35	563	551	557	0.846	35	35	35	582	578	580	0.878	1.724
12/29/2008	13.3	13.3	13.3	5.7	5.4	5.6	35	35	35	569	555	662	0.837	35	[illegible]	35	584	582	583	0.866	1.703
12/30/2008	13.3	13.3	13.3	5.7	5.6	5.7	35	35	35	571	555	563	0.787	35	35	35	582	578	580	0.809	1.596
12/31/2008	13.4	13.4	13.4	5.7	5.6	5.7	35	35	35	562	546	554	0.814	35	35	35	588	571	580	0.840	1.654
1/1/2009	13.4	13.3	13.4	5.6	5.5	5.6	35	35	35	584	577	581	0.928	35	34	35	587	586	587	0.955	1.883
1/2/2009	13.4	13.3	13.4	5.4	5.4	5.4	35	34	35	589	560	575	0.873	36	35	[illegible]	598	584	591	0.892	1.765
1/3/2009	13.4	13.4	13.4	5.3	5.1	5.2	36	35	36	596	564	580	0.853	34	35	35	585	585	585	0.884	1.737
1/4/2009	13.4	13.4	13.4	5.1	5.0	5.1	36	35	36	691	549	620	0.864	37	36	37	690	599	645	0.890	1.754
1/5/2009	13.4	13.3	13.4	5.2	5.1	5.2	35	34	35	583	551	567	0.863	36	35	36	629	603	616	0.893	1.756
1/6/2009	13.4	13.4	13.4	5.4	5.2	5.3	36	36	36	608	588	598	0.876	35	34	35	615	602	609	0.908	1.784
1/7/2009	13.1	13.0	13.1	5.3	4.5	4.9	35	35	35	614	568	591	0.869	35	35	35	619	616	618	0.900	1.769
1/8/2009	13.2	13.1	13.2	8.7	8.6	8.7	35	35	35	607	577	592	0.788	35	35	35	621	615	618	0.806	1.594
1/9/2009	13.1	13.1	13.1	8.8	8.7	8.8	35	35	35	610	599	605	0.890	35	35	35	619	596	608	0.911	1.801

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
1/10/2009	13.1	13.1	13.1	8.5	8.7	8.6	35	35	35	596	575	586	0.808	35	35	35	614	613	614	0.826	1.634
1/11/2009	13.1	13.1	13.1	8.6	8.5	8.6	35	35	35	608	591	600	0.893	35	35	35	615	608	612	0.919	1.812
1/12/2009	13.1	13.1	13.1	8.6	8.6	8.6	35	35	35	602	590	596	0.886	35	35	35	613	611	612	0.908	1.794
1/13/2009	13.2	13.1	13.2	8.9	8.6	8.8	37	36	36	678	608	643	0.928	37	35	36	714	612	663	0.955	1.883
1/14/2009	13.1	13.1	13.1	8.7	8.5	8.6	37	35	36	691	607	649	0.908	37	35	36	710	616	663	0.925	1.833
1/15/2009	13.1	13.1	13.1	8.5	8.4	8.5	37	35	36	713	596	655	0.856	37	35	36	722	616	669	0.864	1.720
1/16/2009	13.0	13.0	13.0	8.4	8.2	8.3	36	34	35	647	584	616	0.900	36	34	35	645	574	610	0.910	1.810
1/17/2009	13.0	13.0	13.0	8.4	8.3	8.4	36	35	36	614	590	602	0.820	36	36	36	626	618	622	0.830	1.650
1/18/2009	13.1	13.1	13.1	8.3	8.1	8.2	36	35	36	613	587	600	0.894	36	35	36	626	615	621	0.908	1.802
1/19/2009	13.2	13.2	13.2	8.3	8.0	8.2	37	36	37	708	626	667	0.929	37	35	36	729	627	678	0.943	1.872
1/20/2009	13.2	13.2	13.2	8.3	8.1	8.2	38	35	37	715	612	664	0.933	37	36	37	716	623	670	0.940	1.873
1/21/2009	13.2	13.1	13.2	8.3	8.0	8.2	37	36	36	716	624	670	0.923	37	35	36	721	619	670	0.928	1.851
1/22/2009	13.1	13.1	13.1	8.1	7.8	8.0	36	35	36	618	612	615	0.815	36	36	36	638	617	628	0.817	1.632
1/23/2009	13.1	13.0	13.1	8.0	8.0	8.0	35	35	35	628	602	615	0.896	35	35	35	632	629	631	0.906	1.802
1/24/2009	13.1	13.1	13.1	8.0	8.0	8.0	35	35	36	626	589	608	0.888	36	35	36	637	621	629	0.912	1.800
1/25/2009	13.1	13.1	13.1	8.0	8.0	8.0	35	35	35	619	590	605	0.903	36	36	36	632	632	632	0.922	1.825
1/26/2009	13.1	13.0	13.1	8.0	8.0	8.0	35	35	35	613	585	599	0.920	35	35	35	636	624	630	0.943	1.863
1/27/2009	13.0	13.0	13.0	8.0	8.0	8.0	38	35	37	746	604	675	0.972	38	35	37	764	621	693	1.001	1.973
1/28/2009	13.0	13.0	13.0	8.0	8.0	8.0	37	35	36	704	613	659	0.873	37	35	36	747	617	682	0.901	1.774
1/29/2009	13.1	13.1	13.1	8.0	8.0	8.0	36	35	35	621	574	598	0.788	36	35	35	619	618	619	0.818	1.606
1/30/2009	13.1	13.1	13.1	8.1	8.0	8.1	37	35	36	753	581	667	0.945	37	35	36	777	616	697	0.967	1.912
1/31/2009	13.1	13.0	13.1	8.0	7.9	8.0	35	37	36	739	610	675	0.833	37	36	37	755	623	689	0.840	1.673
2/1/2009	13.0	13.0	13.0	8.0	7.8	7.9	36	35	36	616	613	615	0.808	35	35	35	618	615	617	0.822	1.630
2/2/2009	13.1	13.1	13.1	8.0	7.9	8.0	39	36	38	782	714	748	0.867	39	36	38	717	863	790	0.890	1.757
2/3/2009	13.1	13.1	13.1	8.0	8.0	8.0	36	35	36	615	592	604	0.893	36	35	36	632	627	630	0.909	1.802
2/4/2009	13.0	13.0	13.0	7.8	3.5	5.7	36	31	33	626	313	470	0.747	36	32	34	629	302	466	0.750	1.497
2/5/2009	13.2	13.2	13.2	4.0	3.6	3.8	35	32	34	627	303	465	0.729	34	32	33	628	294	461	0.726	1.455
2/6/2009	13.3	13.2	13.3	1.4	1.2	1.3	38	35	36	621	581	601	0.885	36	35	36	626	596	611	0.896	1.781
2/7/2009	13.3	13.3	13.3	1.4	1.4	1.4	36	35	36	695	615	655	0.911	37	35	36	721	622	672	0.924	1.835
2/8/2009	13.4	13.4	13.4	1.6	1.5	1.6	36	35	36	643	599	621	0.894	36	35	36	641	629	635	0.917	1.811
2/9/2009	13.5	13.5	13.5	1.6	1.5	1.6	36	36	36	638	620	629	0.892	36	35	36	697	653	675	0.918	1.810
2/10/2009	13.5	13.5	13.5	1.7	1.6	1.7	37	35	36	747	584	666	0.755	38	35	37	763	621	692	0.776	1.531
2/11/2009	13.5	13.6	13.5	1.8	1.7	1.8	36	36	36	670	575	623	0.794	36	36	36	692	622	657	0.827	1.621
2/12/2009	13.6	13.5	13.6	1.8	1.7	1.8	37	32	35	740	292	516	0.813	37	32	35	766	331	549	0.850	1.663
2/13/2009	13.6	13.6	13.6	1.9	1.8	1.9	37	36	35	745	581	663	0.945	37	36	37	763	581	672	0.994	1.939
2/14/2009	13.6	13.6	13.6	1.9	1.8	1.9	37	36	37	601	569	585	0.913	35	35	36	618	617	618	0.966	1.879
2/15/2009	13.7	13.6	13.7	1.9	1.8	1.9	39	36	38	715	607	661	1.001	39	35	37	783	616	700	1.061	2.062
2/16/2009	13.7	13.6	13.7	1.8	1.8	1.8	38	35	37	755	556	656	0.801	37	35	36	771	593	682	0.833	1.634
2/17/2009	13.6	13.6	13.6	1.8	1.8	1.8	38	35	37	750	581	666	0.861	38	35	37	766	619	693	0.897	1.758
2/18/2009	13.7	13.6	13.7	1.9	1.8	1.9	38	35	37	757	584	671	0.771	38	35	37	766	610	688	0.793	1.564
2/19/2009	13.7	13.7	13.7	1.9	1.8	1.9	37	37	37	749	663	706	0.827	37	36	37	779	722	751	0.862	1.689
2/20/2009	13.7	13.7	13.7	1.9	1.8	1.9	37	35	36	748	568	658	0.922	37	35	36	770	618	694	0.958	1.880
2/21/2009	13.6	13.6	13.6	1.8	1.8	1.8	35	35	35	623	587	595	0.806	35	36	35	634	626	630	0.835	1.641
2/22/2009	13.6	13.6	13.6	1.9	1.8	1.9	37	36	37	665	580	623	0.850	37	36	37	750	638	694	0.897	1.747
2/23/2009	13.6	13.6	13.6	1.9	1.8	1.9	37	37	37	754	672	713	0.913	37	37	37	777	718	748	0.951	1.864
2/24/2009	13.6	13.6	13.6	1.9	1.8	1.9	35	35	35	602	560	581	0.894	35	36	36	613	608	611	0.928	1.822
2/25/2009	13.6	13.6	13.6	1.9	1.8	1.9	37	35	36	639	602	621	0.860	37	35	36	716	617	667	0.891	1.751
2/26/2009	13.6	13.6	13.6	1.9	1.8	1.9	37	35	36	669	600	635	0.885	37	35	36	722	615	669	0.922	1.807
2/27/2009	13.7	13.6	13.7	2.0	1.9	2.0	35	35	35	604	571	588	0.863	35	35	35	637	623	630	0.897	1.760
2/28/2009	13.7	13.7	13.7	2.0	1.9	2.0	36	36	37	709	611	660	0.961	37	35	36	768	618	693	1.021	1.982
3/1/2009	13.7	13.7	13.7	2.1	2.0	2.1	35	35	35	613	556	585	0.868	35	35	35	627	624	626	0.909	1.777
3/2/2009	13.7	13.7	13.7	2.0	2.0	2.0	36	35	35	621	590	606	0.886	36	35	35	634	630	632	0.908	1.794
3/3/2009	13.7	13.7	13.7	1.9	1.9	1.9	36	35	36	621	563	592	0.872	36	35	36	670	613	642	0.910	1.782
3/4/2009	13.7	13.7	13.7	1.9	1.8	1.9	35	35	35	607	533	570	0.889	35	35	35	625	622	624	0.937	1.826
3/5/2009	13.7	13.6	13.7	1.9	1.8	1.9	35	35	35	598	597	598	0.913	35	35	35	623	614	619	0.958	1.871
3/6/2009	13.7	13.7	13.7	1.9	1.8	1.9	35	35	35	608	583	596	0.814	35	35	35	637	615	626	0.841	1.655
3/7/2009	13.7	13.7	13.7	1.9	1.9	1.9	35	35	35	615	560	588	0.893	35	35	35	610	604	607	0.899	1.792
3/8/2009	13.7	13.7	13.7	2.0	1.9	2.0	37	36	37	701	647	674	0.834	37	37	37	702	696	699	0.847	1.681
3/9/2009	13.7	13.7	13.7	2.0	1.9	2.0	38	35	37	759	552	656	0.945	37	35	36	750	604	677	0.949	1.894
3/10/2009	13.7	13.3	13.5	5.8	1.9	3.9	35	35	36	599	531	565	0.827	35	35	35	576	567	572	0.797	1.624
3/11/2009	13.6	13.6	13.6	6.0	5.9	6.0	38	35	37	742	565	654	0.912	38	35	37	727	563	645	0.880	1.792
3/12/2009	13.6	13.6	13.6	6.1	6.0	6.1	37	35	36	741	567	654	0.913	38	36	37	725	563	644	0.879	1.792
3/13/2009	13.7	13.7	13.7	6.1	6.1	6.1	36	35	36	591	589	590	0.862	35	35	35	575	569	572	0.826	1.688
3/14/2009	13.7	13.7	13.7	6.2	6.1	6.2	35	35	35	611	564	588	0.827	35	35	35	564	558	561	0.786	1.613
3/15/2009	13.7	13.7	13.7	6.2	6.1	6.2	36	36	36	603	574	589	0.913	35	35	35	582	558	570	0.883	1.796
3/16/2009	13.7	13.7	13.7	6.2	6.1	6.2	38	36	37	752	566	659	0.910	37	35	36	719	554	637	0.883	1.793
3/17/2009	13.7	13.7	13.7	6.3	6.1	6.2	37	36	37	762	532	647	0.889	37	35	36	749	555	652	0.870	1.759
3/18/2009	13.8	13.8	13.8	6.2	6.1	6.2	35	35	35	588	578	583	0.879	36	35	36	565	562	564	0.835	1.714
3/19/2009	13.8	13.8	13.8	6.3	6.2	6.3	35	32	34	565	350	458	0.753	36	32	34	555	285	420	0.718	1.471
3/20/2009	13.8	13.8	13.8	6.3	6.2	6.3	35	35	35	595	548	572	0.749	35	35	35	568	552	560	0.724	1.473
3/21/2009	13.8	13.8	13.8	6.2	6.2	6.2	35	32	34	607	308	458	0.753	35	32	34	560	243	402	0.710	1.463
3/22/2009	13.8	13.8	13.8	6.2	6.2	6.2	36	35	36	682	548	615	0.813	36	35	36	662	565	614	0.790	1.603
3/23/2009	13.8	13.8	13.8	6.2	6.2	6.2	36	35	35	606	544	575	0.893	36	35	36	561	560	561	0.865	1.758
3/24/2009	13.8	13.8	13.8	6.2	6.2	6.2	35	35	35	597	565	581	0.837	35	35	35	575	564	570	0.803	1.640
3/25/2009	13.8	13.8	13.8	6.2	6.2	6.2	35	32	34	560	393	477	0.723	35	33	34	564	358	461	0.687	1.410
3/26/2009	13.8	13.8	13.8	6.3	6.2	6.3	35	35	35	596	548	572	0.841	35	35	35	562	558	560	0.808	1.649
3/27/2009	14.0	13.9	14.4	6.3	6.3	6.3	35	32	34	571	311	441	0.799	35	32	34	553	242	398	0.766	1.565
3/28/2009	13.9	13.9	13.9	6.3	6.3	6.3	35	35	35	578	545	562	0.792	36	35	36	571	560	566	0.777	1.569
3/29/2009	13.9	13.9	13.9	6.3	6.3	6.3	37	35	36	676	579	628	0.781	36	36	36	665	564	615	0.769	1.550
3/30/2009	13.9	13.8	13.9	6.3	6.3	6.3	36	36	36	589	540	565	0.818	35	35	35	570	562	566	0.804	1.622
3/31/2009	13.9	13.8	13.9	6.3	6.3	6.3	36	35	36	589	519	554	0.670	36	35	36	561	560	561	0.646	1.316
4/1/2009	13.9	13.9	13.9	6.3	6.3	6.3	35	35	35	591	515	553	0.818	35	35	35	594	567	581	0.820	1.638
4/2/2009	13.9	13.9	13.9	6.3	6.3	6.3	36	35	36	558	587	573	0.771	36	36	36	594	571	583	0.763	1.534
4/3/2009	13.9	13.9	13.9	6.3	6.3	6.3	35	35	35	574	551	563	0.812	35	35	35	558	552	555	0.802	1.614
4/4/2009	13.9	13.9	13.9	6.3	6.3	6.3	35	35	35	572	549	561	0.729	35	35	35	559	550	555	0.710	1.439
4/5/2009	13.9	13.9	13.9	6.4	6.3	6.4	35	35	35	585	562	574	0.825	35	35	35	578	571	575	0.820	1.645
4/6/2009	13.9	13.9	13.9	6.3	6.3	6.3	36	35	36	586	566	576	0.821	35	35	35	559	553	556	0.811	1.632
4/7/2009	13.9	13.8	13.9	6.3	6.2	6.3	35	32	34	566	298	432	0.777	36	32	34	564	251	408	0.728	1.505
4/8/2009	13.9	13.8	13.9	6.2	6.1	6.2	37	32	35	703	277	490	0.767	37	32	35	681	246	464	0.723	1.490
4/9/2009	13.8	13.8	13.8	6.1	6.1	6.1	35	32	34	623	271	447	0.762	36	32	34	569	276	423	0.718	1.480
4/10/2009	13.8	13.8	13.8	6.1	6.1	6.1	36	35	36	703	560	632	0.855	37	35	36	665	571	618	0.819	1.674
4/11/2009	13.8	13.8	13.8	6.1	6.1	6.1	35	35	35	598	544	571	0.805	35	35	36	582	567	575	0.783	1.588
4/12/2009	13.9	13.8	13.9	6.2	6.1	6.2	37	35	36	687	594	641	0.905	38	35	37	728	567	648	0.892	1.797
4/13/2009	13.9	13.8	13.9	6.2	6.2	6.2	36	35	36	591	566	579	0.847	36	35	36	569	577	573	0.823	1.670
4/14/2009	13.9	13.4	13.7	6.1	4.3	5.2	35	35	35	582	548	565	0.839	35	35	35	560	557	559	0.818	1.657
4/15/2009	13.7	13.7	13.7	4.5	4.4	4.5	35	35	35	594	560	577	0.812	35	35	35	565	583	564	0.785	1.597
4/16/2009	13.7	13.7	13.7	4.6	4.5	4.6	38	36	37	595	545	570	0.856	35	35	35	569	559	564	0.835	1.691
4/17/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	599	558	579	0.858	35	35	35	577	568	573	0.824	1.682

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
4/18/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	602	569	586	0.869	35	35	35	580	562	571	0.834	1.703
4/19/2009	13.8	13.8	13.8	4.7	4.6	4.7	37	35	36	708	600	654	0.945	38	35	37	721	572	647	0.921	1.866
4/20/2009	13.8	13.8	13.8	4.7	4.6	4.7	39	37	38	838	707	773	1.056	39	37	38	820	712	766	1.038	2.094
4/21/2009	13.8	13.8	13.8	4.7	4.7	4.7	35	35	35	598	579	589	0.765	36	35	36	569	565	567	0.723	1.488
4/22/2009	13.8	13.7	13.8	4.6	4.6	4.6	37	33	35	693	337	515	0.764	37	32	35	728	273	501	0.731	1.495
4/23/2009	13.8	13.7	13.8	4.6	4.6	4.6	36	35	36	694	583	629	0.750	36	35	36	676	563	620	0.713	1.463
4/24/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	602	557	580	0.850	35	35	35	567	565	566	0.822	1.672
4/25/2009	13.7	13.7	13.7	4.6	4.6	4.6	37	37	37	686	596	641	0.854	36	35	36	658	564	611	0.820	1.674
4/26/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	591	571	581	0.852	35	35	35	569	569	569	0.821	1.673
4/27/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	608	555	582	0.856	35	35	35	568	564	566	0.825	1.681
4/28/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	602	552	577	0.843	35	35	35	571	562	567	0.813	1.656
4/29/2009	13.7	13.7	13.7	4.7	4.6	4.7	35	32	34	393	290	342	0.778	35	32	34	562	252	407	0.733	1.511
4/30/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	596	567	582	0.851	35	34	35	566	562	564	0.820	1.671
5/1/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	600	567	584	0.864	35	35	35	567	557	562	0.829	1.693
5/2/2009	13.7	13.7	13.7	4.7	4.6	4.7	37	35	36	702	600	651	0.991	37	35	36	727	573	650	0.977	1.968
5/3/2009	13.8	13.7	13.8	4.7	4.6	4.7	39	35	37	840	560	700	0.863	39	35	37	829	569	699	0.838	1.701
5/4/2009	13.8	13.7	13.8	4.7	4.6	4.7	35	35	35	605	552	579	0.852	35	35	35	560	553	557	0.824	1.676
5/5/2009	13.8	13.7	13.8	4.7	4.7	4.7	37	35	36	732	566	649	0.899	37	36	37	719	590	655	0.874	1.773
5/6/2009	13.8	13.2	13.5	4.6	3.1	3.9	39	35	37	733	576	655	0.873	37	35	36	719	569	644	0.844	1.717
5/7/2009	13.9	13.8	13.9	6.3	6.2	6.3	35	32	34	566	298	432	0.954	36	32	34	564	251	408	0.937	1.891
5/8/2009	13.9	13.8	13.9	6.2	6.1	6.2	37	32	35	703	277	490	0.902	37	32	35	681	246	464	0.881	1.783
5/9/2009	13.8	13.8	13.8	6.1	6.1	6.1	35	32	34	623	271	447	1.049	35	32	34	569	276	423	1.042	2.091
5/10/2009	13.8	13.8	13.8	6.1	6.1	6.1	36	35	36	703	560	632	0.863	37	35	36	665	571	618	0.842	1.705
5/11/2009	13.8	13.8	13.8	6.1	6.1	6.1	35	35	35	598	544	571	1.060	35	35	35	582	567	575	1.051	2.111
5/12/2009	13.9	13.8	13.9	6.2	6.1	6.2	37	35	36	687	594	641	0.920	38	35	37	728	567	648	0.888	1.808
5/13/2009	13.9	13.9	13.9	6.2	6.2	6.2	36	35	36	591	566	579	0.888	36	35	36	569	577	573	0.860	1.748
5/14/2009	13.9	13.4	13.7	6.1	4.3	5.2	35	35	35	582	548	565	0.897	35	35	35	560	557	559	0.869	1.766
5/15/2009	13.7	13.7	13.7	4.5	4.4	4.5	35	35	35	594	560	577	0.919	35	35	35	565	563	564	0.887	1.806
5/16/2009	13.7	13.7	13.7	4.6	4.5	4.6	38	36	37	595	545	570	0.885	36	35	36	569	559	564	0.861	1.746
5/17/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	599	558	579	1.033	36	35	35	577	568	573	1.024	2.057
5/18/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	602	569	586	0.876	35	35	35	580	562	571	0.844	1.720
5/19/2009	13.8	13.8	13.8	4.7	4.6	4.7	37	35	36	708	600	654	0.850	38	35	37	721	572	647	0.813	1.663
5/20/2009	13.8	13.8	13.8	4.7	4.6	4.7	39	37	38	838	707	773	0.812	39	37	38	820	712	766	0.785	1.597
5/21/2009	13.8	13.8	13.8	4.7	4.7	4.7	35	35	35	598	579	589	0.901	36	35	36	569	565	567	0.883	1.784
5/22/2009	13.8	13.7	13.8	4.6	4.6	4.6	37	33	35	693	337	515	0.829	37	32	35	728	273	501	0.794	1.623
5/23/2009	13.8	13.7	13.8	4.6	4.6	4.6	36	35	36	694	563	629	0.821	36	35	36	676	563	620	0.785	1.606
5/24/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	602	557	580	0.837	35	35	35	567	565	566	0.800	1.637
5/25/2009	13.7	13.7	13.7	4.6	4.6	4.6	37	37	37	686	596	641	0.860	36	35	36	658	564	611	0.822	1.682
5/26/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	591	571	581	0.893	35	35	35	569	569	569	0.852	1.745
5/27/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	608	555	582	0.782	35	36	35	568	564	566	0.724	1.506
5/28/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	602	552	577	0.854	35	35	35	571	562	567	0.811	1.665
5/29/2009	13.7	13.7	13.7	4.7	4.6	4.7	35	32	34	393	290	342	0.880	35	32	34	562	252	407	0.838	1.718
5/30/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	596	567	582	0.853	35	34	35	566	562	564	0.810	1.663
5/31/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	596	567	582	0.844	35	34	35	566	562	564	0.805	1.649
6/1/2009	13.9	13.9	13.9	4.1	4.0	4.1	35	35	35	597	578	588	0.862	36	35	35	554	548	551	0.818	1.680
6/2/2009	13.9	13.9	13.9	4.1	4.0	4.1	35	35	35	594	559	577	0.847	35	35	35	559	558	559	0.806	1.653
6/3/2009	14.0	13.9	14.0	4.1	4.0	4.1	35	35	35	566	609	588	0.852	36	35	36	566	554	560	0.814	1.666
6/4/2009	14.0	14.0	14.0	4.2	4.1	4.2	35	35	35	593	555	574	0.831	35	35	35	558	556	557	0.791	1.622
6/5/2009	14.0	14.0	14.0	4.2	4.2	4.2	35	35	35	593	566	580	0.930	36	35	36	560	551	556	0.873	1.803
6/6/2009	14.0	14.0	14.0	4.2	4.1	4.2	36	35	36	624	613	619	0.925	36	35	36	574	557	566	0.861	1.786
6/7/2009	14.0	14.0	14.0	4.2	4.2	4.2	35	35	35	607	585	596	0.874	35	35	35	564	564	564	0.814	1.688
6/8/2009	14.0	14.0	14.0	4.2	4.2	4.2	35	35	35	605	589	597	0.884	35	35	35	560	552	556	0.814	1.698
6/9/2009	14.1	13.7	13.9	4.2	3.5	3.9	36	36	36	607	600	604	0.917	36	35	36	557	510	534	0.842	1.759
6/10/2009	13.9	13.9	13.9	3.8	3.7	3.8	35	35	35	619	584	602	0.886	36	35	36	541	539	540	0.806	1.692
6/11/2009	14.0	14.0	14.0	3.9	3.8	3.9	36	35	36	630	613	622	0.880	36	35	36	558	541	550	0.805	1.685
6/12/2009	14.0	14.0	14.0	4.0	3.7	3.9	36	35	36	662	608	635	0.863	36	35	36	626	554	590	0.789	1.652
6/13/2009	14.0	14.0	14.0	4.0	3.9	4.0	36	35	36	675	552	614	0.842	36	34	35	630	481	556	0.765	1.607
6/14/2009	14.0	14.0	14.0	4.0	3.9	4.0	35	34	35	582	569	576	0.860	35	34	35	529	480	505	0.788	1.648
6/15/2009	14.1	14.0	14.1	4.0	3.9	4.0	35	35	35	605	594	600	0.910	35	35	35	558	537	548	0.837	1.747
6/16/2009	14.1	14.1	14.1	4.1	4.0	4.1	35	32	34	611	307	459	0.821	35	32	34	569	234	402	0.737	1.558
6/17/2009	14.1	14.0	14.1	4.0	4.0	4.0	35	35	35	599	507	553	0.889	36	36	35	582	544	563	0.813	1.702
6/18/2009	14.1	14.1	14.1	4.1	4.0	4.1	36	36	36	618	606	612	0.880	36	35	36	574	536	555	0.804	1.684
6/19/2009	14.1	14.1	14.1	4.1	4.0	4.1	35	35	35	589	584	587	0.891	36	35	36	566	529	548	0.811	1.702
6/20/2009	14.1	14.1	14.1	4.1	4.0	4.1	35	35	35	607	586	597	0.868	35	35	35	550	534	542	0.788	1.656
6/21/2009	14.2	14.1	14.2	4.1	4.1	4.1	35	35	35	589	586	588	0.852	35	35	35	534	532	533	0.776	1.628
6/22/2009	14.2	14.2	14.2	4.2	4.1	4.2	38	35	37	758	593	676	0.861	38	35	37	717	539	628	0.788	1.649
6/23/2009	14.3	14.2	14.3	4.2	4.2	4.2	36	35	36	595	593	594	0.900	36	35	36	546	543	545	0.820	1.720
6/24/2009	14.3	14.2	14.3	4.2	4.2	4.2	36	36	36	599	590	595	0.865	36	35	36	542	541	542	0.787	1.652
6/25/2009	13.7	13.7	13.7	4.6	4.6	4.6	37	37	37	686	596	641	0.864	36	35	36	658	564	611	0.788	1.652
6/26/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	591	571	581	0.853	35	35	35	569	569	569	0.753	1.606
6/27/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	608	555	582	0.729	35	36	35	568	564	566	0.670	1.399
6/28/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	602	552	577	0.852	35	35	35	571	562	567	0.777	1.629
6/29/2009	13.7	13.7	13.7	4.7	4.6	4.7	35	32	34	393	290	342	0.846	35	32	34	662	252	407	0.773	1.619
6/30/2009	13.7	13.7	13.7	4.6	4.6	4.6	35	35	35	596	567	582	0.787	35	34	35	566	562	564	0.712	1.499
7/1/2009	14.3	14.0	14.2	6.8	4.2	5.5	36	35	36	614	581	598	0.880	36	35	36	572	534	553	0.811	1.691
7/2/2009	14.1	14.1	14.1	6.9	6.8	6.9	35	35	35	586	582	584	0.848	35	35	35	536	535	536	0.779	1.627
7/3/2009	14.1	14.1	14.1	6.9	6.9	6.9	35	35	35	585	581	583	0.809	35	35	35	540	539	540	0.736	1.545
7/4/2009	14.2	14.2	14.2	7.0	6.9	7.0	35	35	35	593	585	589	0.853	35	35	35	542	536	539	0.783	1.636
7/5/2009	14.2	14.2	14.2	7.0	6.9	7.0	35	35	35	591	578	585	0.855	35	35	35	541	532	537	0.786	1.641
7/6/2009	14.2	14.2	14.2	7.0	7.0	7.0	35	35	35	589	578	584	0.862	35	35	35	543	533	538	0.789	1.651
7/7/2009	14.2	14.2	14.2	7.0	7.0	7.0	34	33	34	593	321	457	0.829	35	33	34	546	257	402	0.754	1.583
7/8/2009	14.2	14.2	14.2	7.0	7.0	7.0	36	36	36	598	590	594	0.875	36	35	36	552	546	549	0.803	1.678
7/9/2009	14.3	14.2	14.3	7.0	7.0	7.0	36	35	36	611	592	602	0.878	35	36	36	545	541	543	0.802	1.680
7/10/2009	14.2	14.2	14.2	7.0	7.0	7.0	35	35	35	602	598	600	0.869	35	35	35	550	545	548	0.796	1.665
7/11/2009	14.2	14.2	14.2	7.0	7.0	7.0	37	35	36	695	602	649	0.861	37	35	36	658	551	605	0.784	1.645
7/12/2009	14.2	14.2	14.2	7.1	7.0	7.1	35	35	35	700	604	652	0.881	37	35	36	665	350	508	0.813	1.694
7/13/2009	14.3	14.3	14.3	7.1	7.0	7.1	36	36	36	616	610	613	0.891	36	36	36	563	563	563	0.823	1.714
7/14/2009	14.3	14.2	14.3	7.1	7.0	7.1	36	36	36	608	605	607	0.871	36	36	36	559	554	557	0.796	1.667
7/15/2009	14.3	14.3	14.3	7.0	7.0	7.0	36	35	36	611	595	603	0.871	36	35	36	565	545	555	0.799	1.670
7/16/2009	14.3	14.3	14.3	7.1	7.0	7.1	36	35	36	598	595	597	0.906	35	35	35	552	547	550	0.832	1.738
7/17/2009	14.3	14.3	14.3	7.1	7.0	7.1	36	35	36	610	602	606	0.843	36	35	36	550	549	550	0.773	1.616
7/18/2009	14.3	14.3	14.3	7.0	7.0	7.0	35	35	35	602	596	599	0.899	35	35	35	555	550	553	0.832	1.731
7/19/2009	14.3	14.3	14.3	7.0	7.0	7.0	37	35	36	698	550	624	0.904	37	35	36	651	549	600	0.838	1.742
7/20/2009	14.3	14.2	14.3	7.1	7.0	7.1	35	35	35	598	593	598	0.865	35	35	35	548	544	546	0.794	1.659
7/21/2009	14.3	14.3	14.3	7.1	7.0	7.1	37	35	36	690	553	622	0.849	37	35	36	659	510	585	0.780	1.629
7/22/2009	14.3	14.3	14.3	7.1	7.1	7.1	35	33	34	597	303	450	0.755	36	32	34	547	244	396	0.680	1.435
7/23/2009	14.3	14.3	14.3	7.1	7.1	7.1	36	35	36	652	582	622	0.868	36	35	36	606	541	574	0.799	1.667
7/24/2009	14.3		14.3	7.1		7.1	35		35	598		598	0.860	35		35	555		555	0.797	1.657

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

Data Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
7/25/2009	14.3	14.3	14.3	6.5	6.4	6.5	37	36	37	669	607	638	0.875	37	35	36	632	558	595	0.810	1.685
7/26/2009	14.3	14.3	14.3	6.4	6.4	6.4	36	36	36	615	607	611	0.898	36	36	36	564	563	564	0.838	1.736
7/27/2009	14.3	14.3	14.3	6.5	6.4	6.5	36	36	36	612	607	610	0.891	36	36	36	560	559	560	0.826	1.717
7/28/2009	14.3	14.3	14.3	6.4	6.4	6.4	36	36	36	662	618	640	0.851	36	36	36	626	566	596	0.786	1.637
7/29/2009	14.3	14.3	14.3	6.4	6.4	6.4	36	36	36	606	597	602	0.851	36	36	36	564	560	562	0.782	1.633
7/30/2009	14.3	14.3	14.3	6.4	6.4	6.4	37	36	37	697	647	672	0.861	37	36	37	652	610	631	0.799	1.660
7/31/2009	14.3	14.3	14.3	6.4	6.4	6.4	36	35	36	609	596	603	0.893	35	35	35	560	555	558	0.828	1.721
8/1/2009	14.3	14.3	14.3	6.4	6.3	6.4	37	36	36	700	604	652	0.861	36	36	36	665	558	612	0.795	1.656
8/2/2009	14.3	14.3	14.3	6.4	6.4	6.4	36	35	36	620	616	618	0.896	36	35	36	564	563	564	0.818	1.714
8/3/2009	14.3	14.3	14.3	6.4	6.4	6.4	37	35	36	723	617	670	0.905	37	35	36	671	558	615	0.820	1.725
8/4/2009	14.3	14.3	14.3	6.4	6.4	6.4	37	35	36	701	608	655	0.799	37	35	36	649	545	597	0.726	1.525
8/5/2009	14.3	13.7	14.0	6.4	5.8	6.1	36	35	36	665	622	644	0.908	36	35	36	612	559	586	0.821	1.729
8/6/2009	14.0	13.9	14.0	6.2	6.1	6.2	36	36	36	675	623	649	0.837	36	36	36	625	558	592	0.742	1.579
8/7/2009	14.0	14.0	14.0	6.2	6.2	6.2	36	36	36	661	632	647	0.909	36	36	36	603	564	584	0.824	1.733
8/8/2009	14.1	14.0	14.1	6.3	6.2	6.3	35	35	35	619	613	616	0.897	35	35	35	551	550	551	0.805	1.702
8/9/2009	14.1	14.1	14.1	6.3	6.3	6.3	35	35	35	613	605	609	0.881	35	35	35	552	547	550	0.794	1.675
8/10/2009	14.1	14.1	14.1	6.3	6.3	6.3	35	35	35	616	613	615	0.891	35	35	35	553	551	552	0.802	1.693
8/11/2009	14.2	14.2	14.2	6.3	6.3	6.3	35	35	35	612	611	612	0.884	36	35	36	553	553	553	0.796	1.680
8/12/2009	14.2	14.2	14.2	6.3	6.3	6.3	37	36	37	710	605	658	0.856	37	36	37	660	555	608	0.767	1.623
8/13/2009	14.2	14.2	14.2	6.3	6.3	6.3	36	35	36	613	594	604	0.846	35	35	35	556	538	547	0.753	1.599
8/14/2009	14.2	14.2	14.2	6.3	6.3	6.3	36	35	36	666	600	633	0.862	36	35	36	600	539	570	0.769	1.631
8/15/2009	14.2	14.2	14.2	6.3	6.3	6.3	35	35	35	598	593	596	0.898	35	35	35	536	528	532	0.798	1.696
8/16/2009	14.2	14.2	14.2	6.4	6.3	6.4	37	35	36	699	605	652	0.830	37	35	36	632	526	579	0.787	1.617
8/17/2009	14.2	14.2	14.2	6.4	6.4	6.4	36	35	36	673	594	634	0.919	36	35	36	612	527	570	0.775	1.694
8/18/2009	14.3	14.3	14.3	7.0	7.0	7.0	35	32	34	610	589	600	0.758	35	35	35	555	550	553	0.628	1.386
8/19/2009	14.3	14.3	14.3	6.4	6.4	6.4	35	35	35	573	570	572	0.880	35	35	35		324	324	0.599	1.479
8/20/2009	14.3	14.3	14.3	6.4	6.4	6.4	36	35	36	549	543	546	0.835	36	40	38	307	289	298	0.472	1.307
8/21/2009	14.3	14.3	14.3	6.5	6.4	6.5	38	36	37	732	651	692	0.837	38	36	37	502	369	436	0.473	1.310
8/22/2009	14.3	14.3	14.3	6.5	6.5	6.5	35	35	35	566	562	564	0.834	35	35	35	313	312	313	0.467	1.301
8/23/2009	14.3	14.3	14.3	6.5	6.5	6.5	38	35	37	787	564	676	0.835	38	35	37	544	309	427	0.483	1.318
8/24/2009	14.3	14.3	14.3	6.5	6.5	6.5	35	35	35	592	580	586	0.872	35	35	35	341	289	315	0.476	1.348
8/25/2009	14.3	14.3	14.3	6.5	6.5	6.5	35	35	35	576	570	573	0.811	35	35	35	318	297	308	0.429	1.240
8/26/2009	14.4	14.3	14.4	6.5	6.5	6.5	35	35	35	566	561	564	0.871	35	35	35	313	295	304	0.498	1.369
8/27/2009	14.4	14.4	14.4	6.5	6.5	6.5	35	35	35	566	563	565	0.842	35	35	35	313	296	305	0.464	1.306
8/28/2009	14.4	14.4	14.4	6.5	6.5	6.5	36	35	35	567	564	566	0.825	35	35	35	308	296	302	0.451	1.276
8/29/2009	14.4	14.4	14.4	6.5	6.5	6.5	35	35	35	565	563	564	0.810	35	35	35	316	305	311	0.447	1.257
8/30/2009	14.4	14.3	14.4	6.5	6.5	6.5	35	35	35	656	512	584	0.816	35	35	35	313	306	310	0.454	1.270
8/31/2009	14.4	14.3	14.4	6.5	6.5	6.5	36	35	36	663	512	588	0.851	36	35	36	419	313	366	0.488	1.339
9/1/2009	14.4	14.3	14.4	6.5	6.5	6.5	35	35	35	569	544	557	0.846	35	35	35	319	291	305	0.486	1.332
9/2/2009	14.4	13.8	14.1	6.5	5.9	6.2	35	36	35	648	546	597	0.816	36	35	36	399	291	345	0.450	1.266
9/3/2009	14.2	14.1	14.2	6.3	6.1	6.2	13	13	13	544	543	544	0.792	35	35	35	295	289	292	0.433	1.225
9/4/2009	14.2	13.8	14.0	6.2	1.5	3.9	13	13	13	548	542	545	0.800	35	35	35	299	289	294	0.437	1.237
9/5/2009	14.0	14.0	14.0	2.0	1.9	2.0	13	13	13	548	544	546	0.796	35	35	35	297	297	297	0.433	1.229
9/6/2009	14.1	14.1	14.1	2.1	2.0	2.1	13	13	13	546	538	542	0.779	35	35	35	292	289	291	0.426	1.205
9/7/2009	14.2	14.2	14.2	2.2	2.1	2.2	13	13	13	544	542	543	0.788	35	35	35	296	294	295	0.429	1.217
9/8/2009	14.2	14.2	14.2	2.3	2.2	2.3	13	13	13	545	542	544	0.831	35	35	35	288	299	294	0.469	1.300
9/9/2009	14.2	14.2	14.2	2.3	2.2	2.3	13	13	13	548	543	546	0.788	35	35	35	303	299	301	0.486	1.274
9/10/2009	14.3	14.3	14.3	2.3	2.2	2.3	13	13	13	550	547	549	0.816	35	35	35	306	296	301	0.409	1.225
9/11/2009	14.3	14.3	14.3	2.3	2.2	2.3	13	13	13	544	540	542	0.797	35	35	35	297	297	297	0.440	1.237
9/12/2009	14.3	14.3	14.3	2.3	2.2	2.3	13	13	13	549	547	548	0.795	35	35	35	303	301	302	0.439	1.234
9/13/2009	14.3	14.3	14.3	2.3	2.3	2.3	13	13	13	549	543	546	0.809	35	35	35	303	297	300	0.463	1.272
9/14/2009	14.4	14.3	14.4	2.4	2.3	2.4	14	13	14	644	544	594	0.788	36	35	36	400	297	349	0.433	1.221
9/15/2009	14.3	14.3	14.3	2.4	2.4	2.4	13	13	13	545	537	541	0.800	35	35	35	296	286	291	0.445	1.245
9/16/2009	14.4	14.2	14.3	2.4	2.4	2.4	13	13	13	550	548	549	0.809	35	35	35	304	296	300	0.451	1.260
9/17/2009	14.4	14.4	14.4	2.5	2.4	2.5	14	14	14	656	564	610	0.843	38	35	37	441	319	380	0.487	1.330
9/18/2009	14.4	14.4	14.4	2.4	2.4	2.4	13	13	13	504	503	504	0.726	34	34	34	253	251	252	0.367	1.093
9/19/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	12	13	507	498	503	0.747	34	34	34	253	251	252	0.386	1.133
9/20/2009	14.4	14.4	14.4	2.5	2.4	2.5	14	13	14	541	541	541	0.773	35	34	35	300	267	284	0.415	1.188
9/21/2009	14.4	14.4	14.4	2.5	2.4	2.5	18	17	18	980	955	968	1.141	31	31	31	242	240	241	0.000	1.141
9/22/2009	14.4	14.4	14.4	2.5	2.4	2.5	17	17	17	956	950	953	1.396	31	31	31	244	241	243	0.000	1.396
9/23/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	13	13	490	489	490	0.944	34	34	34	247	242	245	0.382	1.326
9/24/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	12	13	489	487	488	0.767	34	34	34	242	237	240	0.409	1.176
9/25/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	13	13	587	574	581	0.861	35	35	35	341	323	332	0.503	1.364
9/26/2009	14.4	14.4	14.4	2.4	2.4	2.4	14	13	14	675	577	626	0.842	37	35	36	438	332	385	0.484	1.326
9/27/2009	14.4	14.4	14.4	2.4	2.4	2.4	13	13	13	582	576	579	0.835	35	35	35	332	329	331	0.481	1.316
9/28/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	13	13	581	577	579	0.845	35	35	35	336	332	334	0.488	1.333
9/29/2009	14.4		14.4	2.4		2.4	13		13	582		582	0.723	35		35	337		337	0.403	1.126
9/30/2009	14.5	14.4	14.5	2.5	2.4	2.5	13	13	13	589	579	584	0.774	35	35	35	339	335	337	0.413	1.187
10/1/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	13	13	590	582	586	0.856	35	35	35	347	340	344	0.500	1.356
10/2/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	13	13	585	581	583	0.847	35	35	35	338	36	187	0.490	1.337
10/3/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	13	13	592	581	587	0.864	35	35	35	340	337	339	0.497	1.361
10/4/2009	14.4	14.4	14.4	2.5	2.4	2.5	14	13	14	579	582	581	0.825	36	35	36	430	339	385	0.474	1.299
10/5/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	13	13	584	583	584	0.837	35	35	35	334	333	334	0.481	1.318
10/6/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	13	13	584	576	580	0.850	35	35	35	336	330	333	0.490	1.340
10/7/2009	14.4	14.4	14.4	2.5	2.4	2.5	13	13	13	588	587	588	0.832	35	35	35	341	339	340	0.468	1.300
10/8/2009	14.4	14.4	14.4	2.4	2.3	2.4	14	13	14	604	585	595	0.885	36	35	36	564	338	451	0.519	1.404
10/9/2009	14.4	14.3	14.4	2.6	2.6	2.6	13	13	13	606	600	603	0.854	35	35	35	355	353	354	0.505	1.359
10/10/2009	14.4	14.4	14.4	2.6	2.6	2.6	14	13	14	608	604	606	0.858	35	35	35	359	356	358	0.497	1.355
10/11/2009	14.4	14.3	14.4	2.6	2.5	2.6	13	13	13	606	602	604	0.873	35	35	35	359	353	356	0.516	1.389
10/12/2009	14.3	14.3	14.3	2.6	2.5	2.6	14	13	14	706	616	661	1.068	37	35	36	468	366	417	0.483	1.551
10/13/2009	14.3	13.0	14.1	6.0	2.5	4.3	15	14	15	726	700	713	0.923	37	36	37	490	456	473	0.568	1.491
10/14/2009	14.1	14.1	14.1	6.2	6.1	6.2	14	13	14	603	602	603	0.836	35	35	35	360	355	358	0.471	1.307
10/15/2009	14.2	14.2	14.2	6.3	6.3	6.3	13	13	13	611	607	609	0.889	35	35	35	356	353	355	0.514	1.403
10/16/2009	14.3	14.3	14.3	6.3	6.3	6.3	14	13	14	713	610	662	0.911	37	35	36	465	359	412	0.550	1.461
10/17/2009	14.3	14.3	14.3	6.3	6.3	6.3	13	13	13	610	599	605	0.831	35	35	35	358	347	353	0.458	1.289
10/18/2009	14.3	14.3	14.3	6.2	5.7	6.0	14	13	14	713	589	651	0.902	37	35	36	464	348	406	0.556	1.458
10/19/2009	14.3	14.2	14.3	5.8	5.7	5.8	13	13	13	593	585	589	0.875	35	35	35	345	341	343	0.515	1.390
10/20/2009	14.3	14.2	14.3	5.9	5.7	5.8	13	13	13	593	586	590	0.865	35	35	35	348	341	345	0.512	1.377
10/21/2009	14.3	14.3	14.3	6.1	6.1	6.1	15	13	14	715	564	640	0.867	36	35	36	518	346	432	0.513	1.380
10/22/2009	14.3	14.3	14.3	6.1	6.1	6.1	13		13	593		593	0.373	46	35	41	949	344	647	1.015	1.388
10/23/2009	14.3	14.3	14.3	6.1	6.1	6.1	13		13	588		588	0.549	49	35	42	1108	348	728	0.705	1.254
10/24/2009	14.3	14.3	14.3	6.1	6.1	6.1	13	13	13	592	586	589	0.857	35	35	35	349	340	345	0.510	1.367
10/25/2009	14.3	14.3	14.3	6.1	6.0	6.1	13	13	13	590	576	583	0.844	35	35	35	344	341	343	0.503	1.347
10/26/2009	14.3		14.3	6.0		6.0	13		13	585		585	0.843	35		35	340		340	0.501	1.344
10/27/2009	14.3		14.3	5.9		5.9	14		14	652		652	0.736	36		36	424		424	0.391	1.127
10/28/2009	14.3	14.3	14.3	6.0	5.9	6.0	13	13	13	660	584	622	0.870	36	35	36	434	340	387	0.530	1.400
10/29/2009	14.3	14.3	14.3	5.9	5.9	5.9	19	13	16	1007	613	810	0.792	43	35	39	807	365	586	0.500	1.292
10/30/2009	14.3	14.3	14.3	5.9	5.9	5.9	14	13	14	721	603	662	0.949	37	35	36	490	365	428	0.609	1.558

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

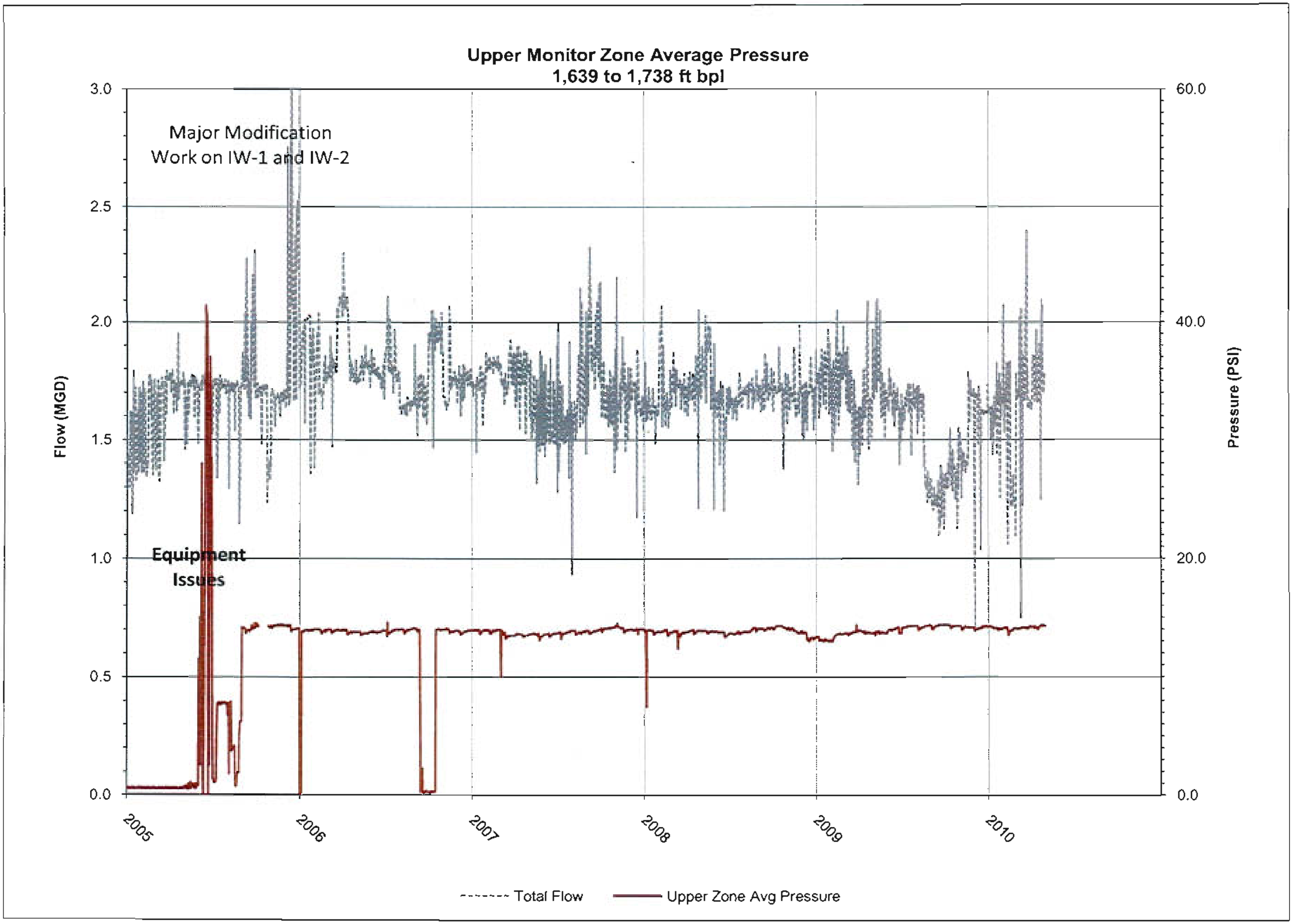
Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
10/31/2009	14.3	14.3	14.3	6.0	5.9	6.0	13	13	13	611	601	606	0.878	35	35	35	369	367	368	0.534	1.412
11/1/2009	14.3	14.3	14.3	5.9	5.9	5.9	13	13	13	609	603	606	0.931	35	35	35	367	364	366	0.568	1.499
11/2/2009	14.3	14.3	14.3	5.9	5.8	5.9	13	13	13	730	612	671	0.937	37	35	36	493	374	434	0.599	1.536
11/3/2009	14.3	14.3	14.3	6.3	6.3	6.3	13	13	13	712	710	711	0.915	37	37	37	489	488	489	0.572	1.487
11/4/2009	14.3	14.2	14.3	6.4	6.3	6.4	14	13	14	691	598	645	0.914	37	35	36	465	353	409	0.567	1.481
11/5/2009	14.2	13.8	14.0	6.3	5.7	6.0	13	12	13	597	476	537	0.802	35	34	35	360	232	296	0.454	1.256
11/6/2009	14.0	13.9	14.0	6.0	5.9	6.0	14	13	14	568	130	349	0.900	37	35	36	503	344	424	0.557	1.457
11/7/2009	14.1	14.0	14.1	6.1	6.0	6.1	13	13	13	586	585	586	0.860	35	35	35	347	344	346	0.515	1.375
11/8/2009	14.1	14.1	14.1	6.1	6.0	6.1	13	13	13	592	591	592	0.860	35	35	35	359	354	357	0.513	1.373
11/9/2009	14.1	14.1	14.1	6.1	6.0	6.1	14	13	14	679	595	637	0.876	37	35	36	459	356	408	0.537	1.413
11/10/2009	14.2	14.1	14.2	6.2	6.1	6.2	14	13	14	679	582	631	0.894	37	35	36	456	344	400	0.556	1.450
11/11/2009	14.2		14.2	6.1		6.1	13		13	586		586	0.876	35	35	35	349		349	0.535	1.411
11/12/2009	14.3	14.3	14.3	2.6	6.2	4.4	15	13	14	570	588	579	0.879	38	35	37	529	350	440	0.534	1.413
11/13/2009	14.2	14.2	14.2	5.6	5.6	5.6	14	13	14	672	594	633	0.876	36	35	36	433	351	392	0.517	1.393
11/14/2009	14.2	14.2	14.2	5.6	5.6	5.6	13	13	13	604	592	598	0.860	35	35	35	359	355	357	0.504	1.364
11/15/2009	14.2	14.2	14.2	5.6	5.6	5.6	13	13	13	607	598	603	0.873	35	35	35	362	357	360	0.521	1.394
11/16/2009	14.2	14.2	14.2	5.7	5.6	5.7	13	12	13	605	472	539	0.884	35	35	35	357	352	355	0.534	1.418
11/17/2009	14.2	14.2	14.2	5.7	5.6	5.7	13	13	13	601	593	597	0.870	35	35	35	357	352	355	0.517	1.387
11/18/2009	14.2	14.2	14.2	5.7	5.6	5.7	13	12	13	605	472	539	0.903	35	34	35	353	233	293	0.547	1.450
11/19/2009	14.3	14.2	14.3	5.8	5.7	5.8	20	13	17	1193	605	899	1.419	35	3	19	356	253	305	0.000	1.419
11/20/2009	14.2	14.1	14.2	5.6	5.6	5.6	21	21	21	1200	1181	1191	1.788								1.788
11/21/2009	14.2	14.2	14.2	5.6	5.6	5.6	20	20	20	1205	1193	1199	1.713								1.713
11/22/2009	14.2	14.2	14.2	5.6	5.2	5.4	22	20	21	1337	1199	1268	1.749								1.749
11/23/2009	14.2	14.1	14.2	5.6	5.6	5.6	20	20	20	1207	1171	1189	1.579								1.579
11/24/2009	14.2	14.1	14.2	5.6	5.6	5.6	20	20	20	1178	1166	1172	1.708								1.708
11/25/2009	14.2	14.2	14.2	5.7	5.6	5.7	20	19	20	1172	1152	1162	1.751								1.751
11/26/2009	14.2	14.2	14.2	5.7	5.7	5.7	20	20	20	1173	1158	1166	1.687								1.687
11/27/2009	14.2	14.2	14.2	5.6	5.6	5.6	22	20	21	1322	1152	1237	1.702								1.702
11/28/2009	14.2	14.2	14.2	5.6	5.5	5.6	22	20	21	1295	1185	1240	1.707								1.707
11/29/2009	14.2	14.2	14.2	5.6	5.4	5.5	20	19	20	1182	1159	1171	1.702								1.702
11/30/2009	14.2	14.2	14.2	5.6	5.4	5.5	20	20	20	1182	1143	1163	1.688								1.688
12/1/2009	14.2	14.2	14.2	5.6	5.5	5.6	20	20	20	1168	1153	1161	1.716	Equipment Issues						0.001	1.717
12/2/2009	14.2	13.7	14.0	8.9	5.6	7.3	20	20	20	1177	1151	1164	1.564							0.001	1.564
12/3/2009													0.692							0.001	0.693
12/4/2009	14.0	13.9	14.0	9.1	9.1	9.1	20	20	20	1170	1158	1164	1.695							0.001	1.696
12/5/2009				9.1		9.1	20	19	20	1163	1159	1161	1.693								1.693
12/6/2009	14.0	14.0	14.0	9.1	9.1	9.1	20	19	20	1174	1136	1155	1.694								1.694
12/7/2009	14.0	14.0	14.0	9.2	9.1	9.2	22	20	21	1328	1160	1244	1.698							0.001	1.698
12/8/2009	14.0	14.0	14.0	9.2	9.1	9.2	20	20	20	1167	1163	1165	1.685							0.001	1.686
12/9/2009	14.1	14.1	14.1	9.3	9.2	9.3	20	20	20	1175	1140	1158	1.693							0.002	1.696
12/10/2009	14.1	14.1	14.1	9.1	9.1	9.1	46	35	41	1168	886	1027	1.476							0.004	1.479
12/11/2009	14.1	14.1	14.1	9.1	9.1	9.1	46	46	46	1180	1163	1172	1.706								1.706
12/12/2009	14.1	14.1	14.1	9.1	9.0	9.1	51	46	49	1370	1160	1265	1.728								1.728
12/13/2009	14.1	14.1	14.1	9.1	9.1	9.1	46	46	46	1160	1139	1150	1.687								1.687
12/14/2009	14.1	14.1	14.1	9.1	9.1	9.1	46	46	46	1178	1141	1160	1.690								1.690
12/15/2009	14.2	14.1	14.2	9.2	9.1	9.2	46	46	46	1135	1171	1153	1.676								1.676
12/16/2009													0.508							0.529	1.038
12/17/2009	14.1	14.1	14.1	9.2	9.1	9.2	46	30	38	1144		1144	0.001							1.626	1.627
12/18/2009	14.3	14.2	14.3	9.3	9.2	9.3	46	30	38	1126		1126	0.001							1.622	1.623
12/19/2009	14.3	14.3	14.3	9.4	9.4	9.4	30	30	30					46	46	46	1128	1123	1126	1.615	1.615
12/20/2009	14.3	14.2	14.3	9.3	9.3	9.3	30	30	30					45	45	45	1123	1120	1122	1.613	1.613
12/21/2009	14.2	14.2	14.2	9.2	9.2	9.2	30	30	30					45		45	1115		1115	1.634	1.634
12/22/2009	14.2	14.2	14.2	9.3	9.2	9.3								45	45	45	1124	1106	1115	1.616	1.616
12/23/2009	14.3	14.3	14.3	9.3	9.2	9.3								45	45	45	1117	1119	1118	1.608	1.608
12/24/2009	14.3	14.3	14.3	9.4	9.3	9.4								45	43	44	1119	1117	1118	1.617	1.617
12/25/2009	14.3	14.3	14.3	9.4	9.3	9.4								45	45	45	1116	1115	1116	1.622	1.622
12/26/2009	14.3	14.3	14.3	9.3	9.3	9.3								45	45	45	1118	1117	1118	1.617	1.617
12/27/2009	14.3	14.3	14.3	9.3	9.3	9.3								45	45	45	1113	1110	1112	1.615	1.615
12/28/2009	14.3	14.3	14.3	9.3	9.3	9.3								45	45	45	1119	1114	1117	1.619	1.619
12/29/2009	14.2	14.2	14.2	9.2	5.5	7.4								45	45	45	1115	1114	1115	1.629	1.629
12/30/2009	14.2	14.2	14.2	5.6	5.5	5.6								45	45	45	1114	1100	1107	1.615	1.615
12/31/2009	14.2	14.2	14.2	5.6	5.6	5.6								67	44	56	1802	1090	1446	1.735	1.735
1/1/2010	14.3	14.2	14.3	5.6	5.5	5.6								45	45	45	1125	1111	1118	1.618	1.618
1/2/2010	14.3	14.3	14.3	5.5	5.5	5.5								45	45	45	1117	1108	1113	1.636	1.636
1/3/2010	14.3	14.3	14.3	5.6	5.5									45	45	45	1098	1095	1097	1.635	1.635
1/4/2010	14.3	14.3	14.3	5.6	5.5	5.6								45	45	45	1101	1099	1100	1.638	1.638
1/5/2010	14.3	14.2	14.3	5.6	5.5	5.6	Upgrade of IW-1 Equipment							45	45	45	1101	1097	1099	1.630	1.630
1/6/2010	14.2	14.2	14.2	5.5	5.5	5.5								45	45	45	1099	1095	1097	1.639	1.639
1/7/2010	14.2	14.2	14.2	5.5	5.5	5.5								48	45	47	1257	1096	1177	1.503	1.503
1/8/2010	14.3	14.2	14.3	5.6	5.5	5.6								45	45	45	1095	1096	1096	1.606	1.606
1/9/2010	14.3	14.2	14.3	5.5	5.5	5.5								48	45	47	1239	1099	1169	1.625	1.625
1/10/2010	14.2	14.2	14.2	5.4	5.4	5.4								45	45	45	1114	1112	1113	1.646	1.646
1/11/2010	14.1	14.1	14.1	5.4	5.3	5.4								45	43	44	1120	1057	1089	1.440	1.440
1/12/2010	14.1	14.1	14.1	5.4	5.3	5.4								45	44	45	1106	1098	1102	1.627	1.627
1/13/2010	14.1	14.1	14.1	5.5	5.3	5.4								45	44	45	1103	1097	1100	1.554	1.554
1/14/2010	14.1	14.1	14.1	5.5	5.3	5.4								45	44	45	1098	1092	1095	1.684	1.684
1/15/2010	14.1	14.1	14.1	5.5	5.4	5.5								45	45	45	1107	1097	1102	1.571	1.571
1/16/2010	14.1	14.1	14.1	5.5	5.4	5.5								45	45	45	1091	1086	1089	1.627	1.627
1/17/2010	14.2	14.1	14.2	5.4	5.4	5.4								45	45	45	1114	1094	1104	1.651	1.651
1/18/2010	14.2	14.1	14.2	5.5	5.4	5.5								45	46	45	1121	1116	1119	1.675	1.675
1/19/2010	14.1	14.1	14.1	5.5	5.4	5.5								53	46	49	1415	1117	1266	1.828	1.828
1/20/2010	14.1	14.1	14.1	5.6	5.4	5.5								76	46	61	2030	1147	1589	1.446	1.446
1/21/2010	14.2	13.7	14.0	5.5	4.7	5.1								46	45	46	1133	1117	1125	1.752	1.752
1/22/2010	14.0	13.9	14.0	5.0	4.9	5.0								45	45	45	1116	1110	1113	1.655	1.655
1/23/2010	14.0	14.0	14.0	5.0	5.0	5.0								45	45	45	1131	1123	1127	1.668	1.668
1/24/2010	14.1	14.1	14.1	5.1	5.0	5.1								46	46	46	1128	1128	1128	1.686	1.686
1/25/2010	14.1	14.1	14.1	5.1	5.1	5.1								46	46	46	1147	1142	1145	1.786	1.786
1/26/2010	14.1	14.0	14.1	5.0	5.0	5.0								46	31	39	1139		1139	1.260	1.260
1/27/2010	14.0	14.0	14.0	4.9	4.9	4.9								56	46	51	1153	1140	1147	1.736	1.736
1/28/2010	14.0	14.0	14.0	5.0	4.9	5.0								49	45	47	1254	1122	1188	1.603	1.603
1/29/2010	14.1	14.0	14.1	5.0	4.9	5.0								45	45	45	1122	1117	1120	1.684	1.684
1/30/2010	14.1	14.1	14.1	5.1	5.1	5.1								45	45	45	1127	1117	1122	1.666	1.666
1/31/2010	14.1	14.1	14.1	5.1	5.1	5.1								45	45	45	1124	1112	1118	1.672	1.672
2/1/2010	14.1	14.1	14.1	5.1	5.1	5.1								49	45	47	1279	1116	1198	1.661	1.661
2/2/2010	14.2	14.1	14.2	5.2	5.2	5.2								54	46	50	1432	1177	1305	2.076	2.076
2/3/2010	14.2	14.2	14.2	5.5	5.3									54	47	51	1420	1193	1307	1.708	1.708
2/4/2010	14.2		14.2	5.2		5.2								46		46	1141		1141	1.535	1.535
2/5/2010	14.1	14.1	14.1	5.3	5.2	5.3								49	47	48	1265	1186	1226	1.708	1.708

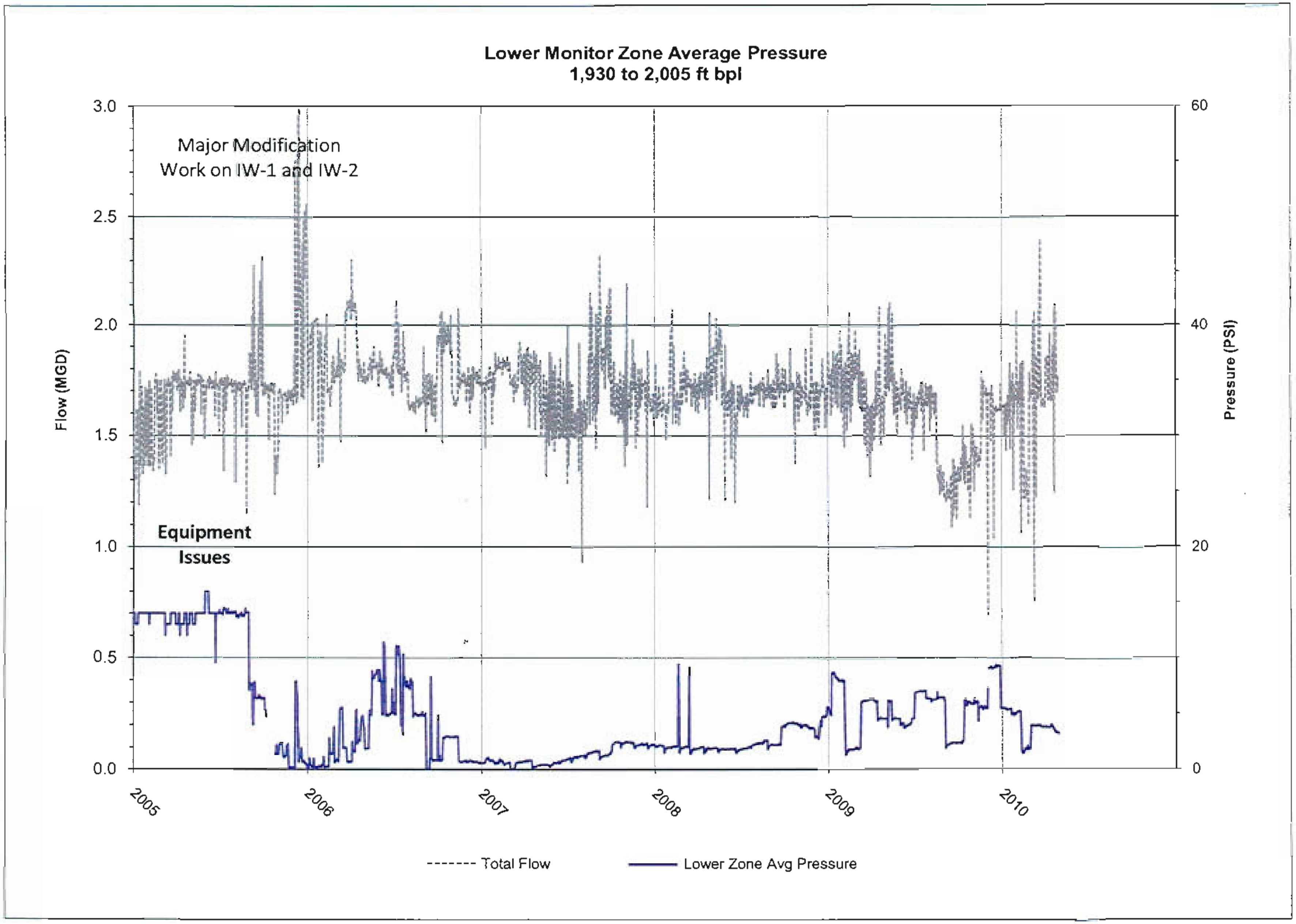
CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECITON WELL SYSTEM
PRESSURE AND FLOW DATA

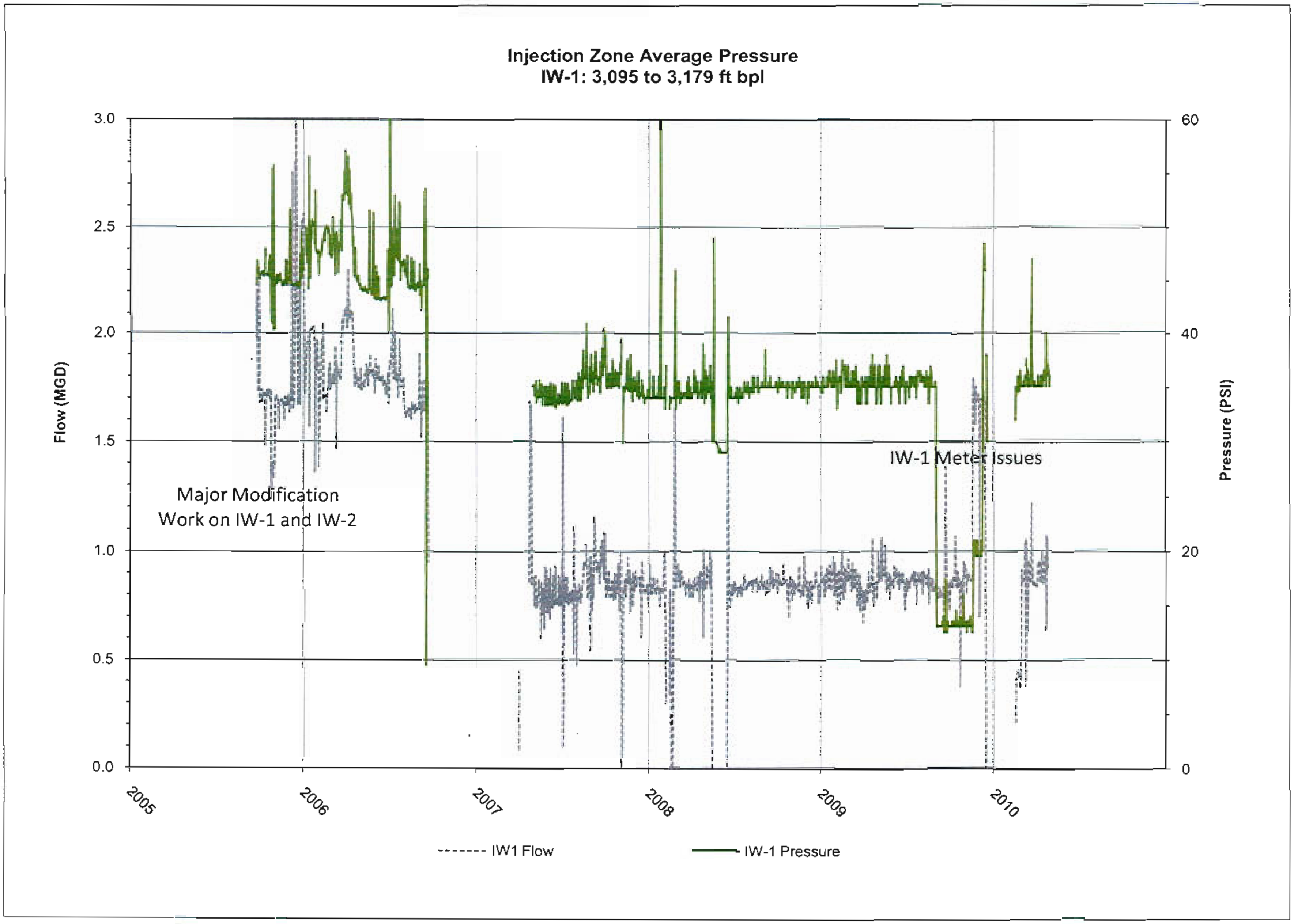
Date Collected	Upper Monitor Zone (PSI)			Lower Monitor Zone (PSI)			IW-1 Injection (PSI)			IW-1 Daily Flow Rate (GPM)			IW-1 Total (MG)	IW-2 Injection (PSI)			IW-2 Daily Flow Rate (GPM)			IW-2 Total (MG)	Total Injection Flow (MG)
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Tot	Max	Min	Avg	Max	Min	Avg	Tot	Tot
2/6/2010	14.3	14.1	14.2	5.3	5.3	5.3								45	45	45	1117	1109	1113	1.684	1.684
2/7/2010	14.2	14.2	14.2	5.2	5.2	5.2								46	45	46	1144	1116	1130	1.643	1.643
2/8/2010	14.2	14.2	14.2	5.2	5.2	5.2								45	45	45	1130	1104	1117	1.746	1.746
2/9/2010	14.2	14.2	14.2	5.2	5.2	5.2								45	45	45	1118	1112	1115	1.667	1.667
2/10/2010	14.2	13.7	14.0	5.2	1.8	3.5								53	45	49	1420	1119	1270	1.825	1.825
2/11/2010	13.9		13.9	1.9		1.9								46		46	1150		1150	1.063	1.063
2/12/2010	13.5		13.5	1.6		1.6								54		54	1433		1433	1.264	1.264
2/13/2010	13.7	13.7	13.7	1.8	1.5	1.7								52	45	49	1400	1125	1263	1.831	1.831
2/14/2010	13.8	13.8	13.8	1.5	1.4	1.5								46	45	46	1146	1118	1132	1.670	1.670
2/15/2010	13.9	13.8	13.9	1.6	1.5	1.6								49	45	47	1263	1108	1186	1.653	1.653
2/16/2010	13.9	13.9	13.9	1.6	1.6	1.6								46	46	46	1149	1148	1149	1.833	1.833
2/17/2010	13.9	13.9	13.9	1.7	1.6	1.7	32		32	304		304	0.210	45	32	39	1122	265	694	1.020	1.230
2/18/2010	13.9	13.9	13.9	1.9	1.9	1.9	35	35	35	584	571	578	0.411	35	35	35	560	541	551	0.810	1.221
2/19/2010	13.9	13.9	13.9	1.9	1.9	1.9	35	34	35	586	573	580	0.414	35	35	35	564	551	558	0.820	1.234
2/20/2010	13.9	13.9	13.9	1.9	1.9	1.9	35	35	35	587	584	586	0.413	35	35	35	564	548	556	0.820	1.233
2/21/2010	14.0	14.0	14.0	1.9	1.8	1.9	35	35	35	584	578	581	0.413	35	35	35	564	552	558	0.810	1.223
2/22/2010	14.1	14.0	14.1	2.0	1.9	2.0	37	35	36	736	587	662	0.453	37	35	36	714	564	639	0.900	1.353
2/23/2010	14.1	14.1	14.1	2.0	2.0	2.0	36	35	36	619	615	617	0.418	36	35	36	597	583	590	0.830	1.248
2/24/2010	14.1	14.1	14.1	2.3	2.0	2.2	35	34	35	581	574	578	0.415	36	35	36	556	547	552	0.820	1.235
2/25/2010	14.1	14.1	14.1	1.8	1.8	1.8	35	35	35	590	576	583	0.424	35	35	35	547	539	543	0.840	1.264
2/26/2010	14.1	14.1	14.1	1.9	1.8	1.9	37	36	37	691	602	647	0.411	36	35	36	663	573	618	0.810	1.221
2/27/2010	14.1	14.1	14.1	2.0	1.9	2.0	37	35	36	676	588	632	0.369	36	35	36	657	561	609	0.730	1.099
2/28/2010	14.1	14.1	14.1	1.9	1.9	1.9	35	35	35	588	581	585	0.413	35	35	35	564	551	558	0.810	1.223
3/1/2010	14.1	14.1	14.1	2.0	1.8	1.9	36	35	36	587	586	587	0.910	36	35	36	560	553	557	0.875	1.785
3/2/2010	14.2	13.9	14.1	4.0	2.1	3.1	35	35	35	584	563	574	0.863	35	35	35	573	551	562	0.827	1.690
3/3/2010	14.1	14.0	14.1	4.1	3.9	4.0	35	35	35	594	594	594	0.854	35	35	35	562	561	562	0.819	1.673
3/4/2010	14.1	14.0	14.1	4.0	4.0	4.0	35	35	35	586	583	585	0.859	35	35	36	560	544	552	0.825	1.684
3/5/2010	14.1	14.1	14.1	4.0	4.0	4.0	35	35	35	584	573	579	0.866	35	35	35	560	539	550	0.831	1.697
3/6/2010	14.1	14.0	14.1	4.0	4.0	4.0	36	35	36	605	597	601	0.874	35	35	35	578	566	572	0.839	1.713
3/7/2010	14.1	14.1	14.1	4.0	3.9	4.0	35	35	35	592	573	583	0.859	35	35	35	572	571	572	0.824	1.683
3/8/2010	14.1	14.1	14.1	4.0	4.0	4.0	35	35	35	593	589	591	0.967	36	35	36	552	549	551	0.932	1.899
3/9/2010	14.1	14.1	14.1	4.0	4.0	4.0	37	35	36	732	593	663	1.030	37	35	36	705	552	629	0.990	2.020
3/10/2010													0.380							0.370	0.750
3/11/2010	14.1	14.1	14.1	3.9	3.9	3.9	37	37	37	742	729	736	1.050	37	37	37	702	699	701	1.018	2.068
3/12/2010	14.2	14.2	14.2	4.0	3.9	4.0	38	37	38	738	728	733	0.977	37	37	37	716	704	710	0.939	1.915
3/13/2010	14.2	14.2	14.2	4.0	4.0	4.0	37	35	36	694	586	640	0.849	36	35	36	662	559	611	0.813	1.662
3/14/2010	14.2	14.2	14.2	4.0	3.9	4.0	35	35	35	582	580	581	0.817	35	35	35	560	556	558	0.785	1.602
3/15/2010	14.2	14.2	14.2	4.1	3.9	4.0	37	36	37	727	679	703	0.623	37	36	37	703	659	681	0.603	1.226
3/16/2010	14.2	14.1	14.2	4.0	3.9	4.0	37	35	36	726	584	655	0.951	37	35	36	704	558	631	0.915	1.866
3/17/2010	14.2	14.1	14.2	4.0	3.9	4.0	35	35	35	583	582	583	0.851	36	35	36	559	558	559	0.818	1.669
3/18/2010	14.2		14.2	4.0		4.0	35	35	35	602	575	589	0.856	35	35	35	602	560	581	0.823	1.679
3/19/2010	14.1	14.1	14.1	4.1	4.0	4.1	35	35	35	588	578	583	0.869	36	35	35	561	544	553	0.833	1.702
3/20/2010	14.2	14.1	14.2	4.1	3.9	4.0	35	35	35	589	587	588	0.850	35	35	35	562	559	561	0.819	1.669
3/21/2010	14.2	14.2	14.2	4.0	3.9	4.0	37	35	36	735	593	664	1.022	37	35	36	709	562	636	0.989	2.011
3/22/2010	14.2	14.1	14.2	4.0	4.0	4.0	38	35	37	735	592	664	1.135	37	35	36	720	566	643	1.103	2.238
3/23/2010	14.2	14.2	14.2	3.9	3.9	3.9	59	35	47	1632	584	1108	1.216	57	35	46	1590	561	1076	1.184	2.400
3/24/2010	14.1	14.0	14.1	3.9	3.9	3.9	39	36	38	606	570	588	0.864	36	35	36	588	545	567	0.829	1.693
3/25/2010	14.1	14.1	14.1	3.9	3.8	3.9	37	36	37	723	619	671	0.914	37	35	36	699	591	645	0.881	1.795
3/26/2010	14.2	14.2	14.2	3.9	3.8	3.9	35	35	35	572	571	572	0.842	35	35	35	548	544	546	0.806	1.648
3/27/2010	14.2	14.2	14.2	3.9	3.8	3.9	35	35	35	571	569	570	0.833	35	35	35	545	545	545	0.799	1.632
3/28/2010	14.2	14.2	14.2	3.8	3.8	3.8	35	35	35	586	577	582	0.839	36	36	35	564	350	457	0.807	1.646
3/29/2010	14.3	14.3	14.3	3.9	3.9	3.9	36	35	36	595	571	583	0.850	35	35	35	571	555	563	0.820	1.670
3/30/2010	14.3	14.2	14.3	3.9	3.9	3.9	35	35	35	596	553	575	0.848	35	35	35	574	541	558	0.819	1.665
3/31/2010	14.2	14.2	14.2	3.9	3.8	3.9	35	35	35	608	559	584	0.839	36	35	36	589	548	569	0.809	1.648
4/1/2010	14.2	14.2	14.2	3.9	3.8	3.9	35	35	35	599	588	594	0.842	35	36	36	565	565	565	0.808	1.650
4/2/2010	14.2	14.2	14.2	3.9	3.8	3.9	35	35	35	586	579	583	0.832	35	35	35	569	556	563	0.797	1.629
4/3/2010	14.3	14.2	14.3	4.0	3.8	3.9	35	35	35	619	582	601	0.847	35	35	35	599	563	581	0.813	1.660
4/4/2010	14.3	14.2	14.3	3.9	3.8	3.9	35	35	35	586	584	585	0.847	35	35	35	569	567	568	0.815	1.662
4/5/2010	14.2	14.2	14.2	3.8	3.8	3.8	35	35	35	584	573	579	0.945	35	35	35	560	539	550	0.912	1.857
4/6/2010	14.2	14.2	14.2	3.9	3.8	3.9	37	35	36	728	589	659	0.928	37	36	37	706	568	637	0.892	1.820
4/7/2010	14.3	14.2	14.3	3.9	3.8	3.9	35	35	35	586	584	585	0.934	35	35	35	563	562	563	0.900	1.834
4/8/2010	14.2	14.0	14.1	3.9	3.8	3.9	35	37	36	724	560	642	0.947	37	35	36	709	541	625	0.914	1.861
4/9/2010	14.3	14.3	14.3	3.9	3.8	3.9	35	35	35	599	551	575	0.893	35	35	35	578	541	560	0.855	1.748
4/10/2010	14.2	14.2	14.2	3.8	3.8	3.8	35	35	35	587	582	585	0.849	35	35	35	563	559	561	0.816	1.665
4/11/2010	14.2	14.2	14.2	3.8	3.8	3.8	35	35	35	586	583	585	0.865	35	35	35	564	562	563	0.831	1.696
4/12/2010	14.2	14.2	14.2	3.8	3.8	3.8	37	35	36	723	587	655	0.930	37	35	36	684	566	625	0.896	1.826
4/13/2010	14.2	14.2	14.2	3.9	3.8	3.9	37	35	36	712	589	651	0.999	37	35	36	700	550	625	0.966	1.965
4/14/2010	14.2	13.8	14.0	4.2	3.8	4.0	35	35	35	596	574	585	0.863	36	34	35	578	538	558	0.830	1.693
4/15/2010	14.1	14.0	14.1	4.1	4.1	4.1	35	35	35	592	528	560	0.848	36	34	35	572	538	555	0.813	1.661
4/16/2010	14.1	14.1	14.1	4.0	4.0	4.0	36	35	36	600	574	587	0.856	35	35	35	577	551	564	0.821	1.677
4/17/2010	14.2	14.2	14.2	3.9	3.9	3.9	36	36	36	600	587	594	0.849	35	35	35	571	550	561	0.814	1.663
4/18/2010	14.3	14.2	14.3	3.8	3.8	3.8	38	35	37	600	585	593	0.926	39	35	37	703	549	626	0.919	1.845
4/19/2010	14.3	14.3	14.3	3.8	3.7	3.8	37	35	36	722	577	650	0.965	37	35	36	700	548	624	0.904	1.869
4/20/2010	14.3	14.3	14.3	3.7	3.6	3.7	36	35	36	610	570	590	0.971	35	35	35	565	547	556	0.936	1.907
4/21/2010	14.3	14.3	14.3	3.6	3.6	3.6	37	35	36	712	592	652	0.911	37	35	36	694	551	623	0.875	1.786
4/22/2010	14.4		14.4	3.5		3.5	36		36	578		578	0.638	35		35	554		554	0.611	1.249
4/23/2010	14.3	14.3	14.3	3.5	3.4	3.5	43	37	40	942	738	840	1.070	41	37	39	914	711	813	1.031	2.101
4/24/2010	14.3	14.3	14.3	3.4	3.3	3.4	38	35	37	741	580	661	0.900	37	34	36	726	562	644	0.864	1.764
4/25/2010	14.3	14.3	14.3	3.4	3.4	3.4	38	35	37	738	587	663	1.053	37	35	36	719	560	640	1.020	2.073
4/26/2010	14.4	14.4	14.4	3.4	3.4	3.4	37		37	735	304	520	0.918	37	33	35	713	311	512	0.881	1.799
4/27/2010	14.4	14.4	14.4	3.4	3.3	3.4	37	35	36	679	574	627	0.912	37	35	36	668	541	605	0.876	1.788
4/28/2010	14.4	14.3	14.4	3.4	3.3	3.4	38	35	37	749	578	664	0.873	37	35	36	741	548	645	0.825	1.698
4/29/2010	14.3	14.3	14.3	3.3	3.2	3.3	35	35	35	580	577	579	0.870	35	35	35	558	548	553	0.847	1.717
4/30/2010	14.3	14.3	14.3	3.3	3.2	3.3	37	35	36	722	587	655	0.908	37	35	36	700	565	633	0.869	1.777

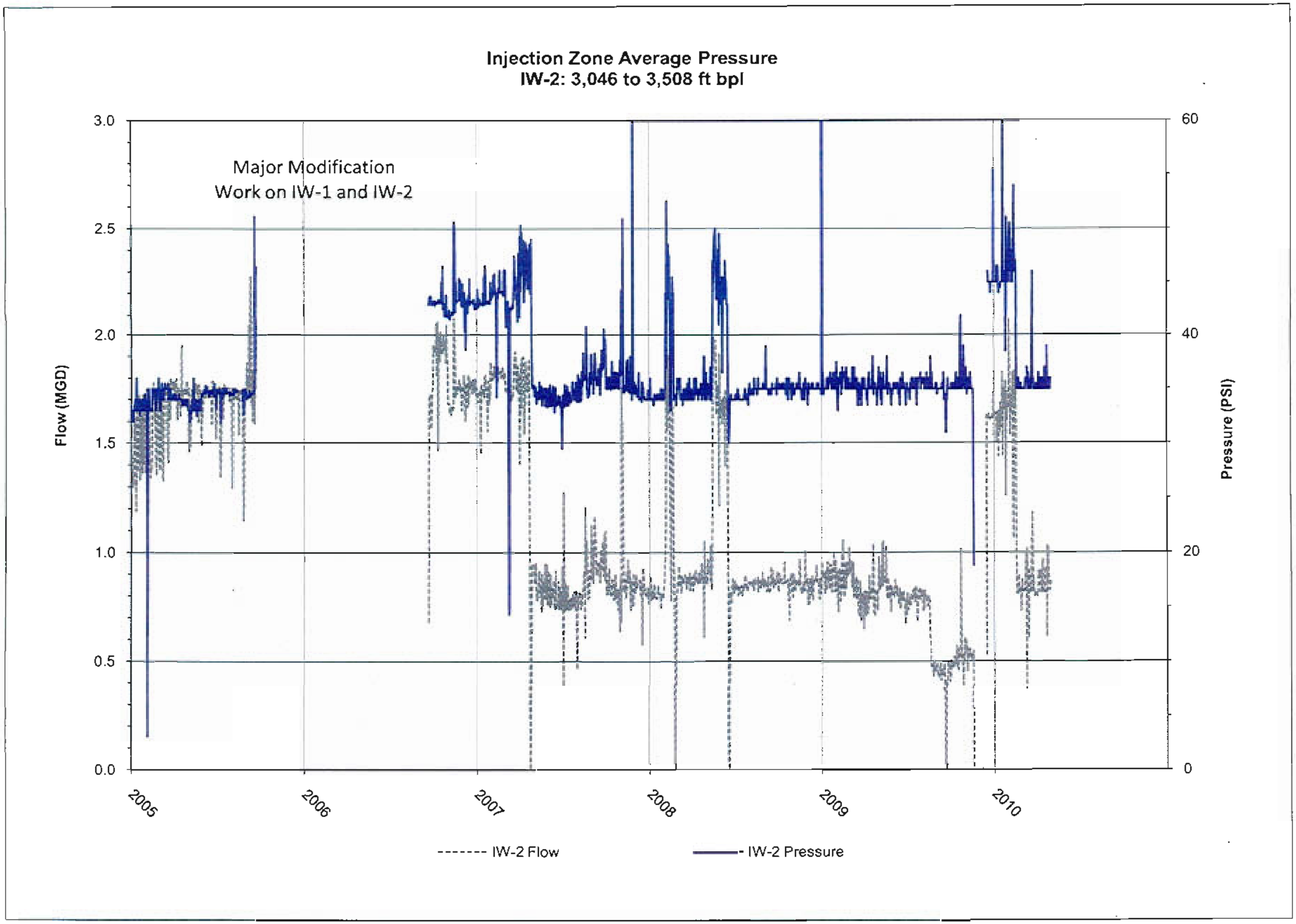
Injection Well IW-1 & IW-2

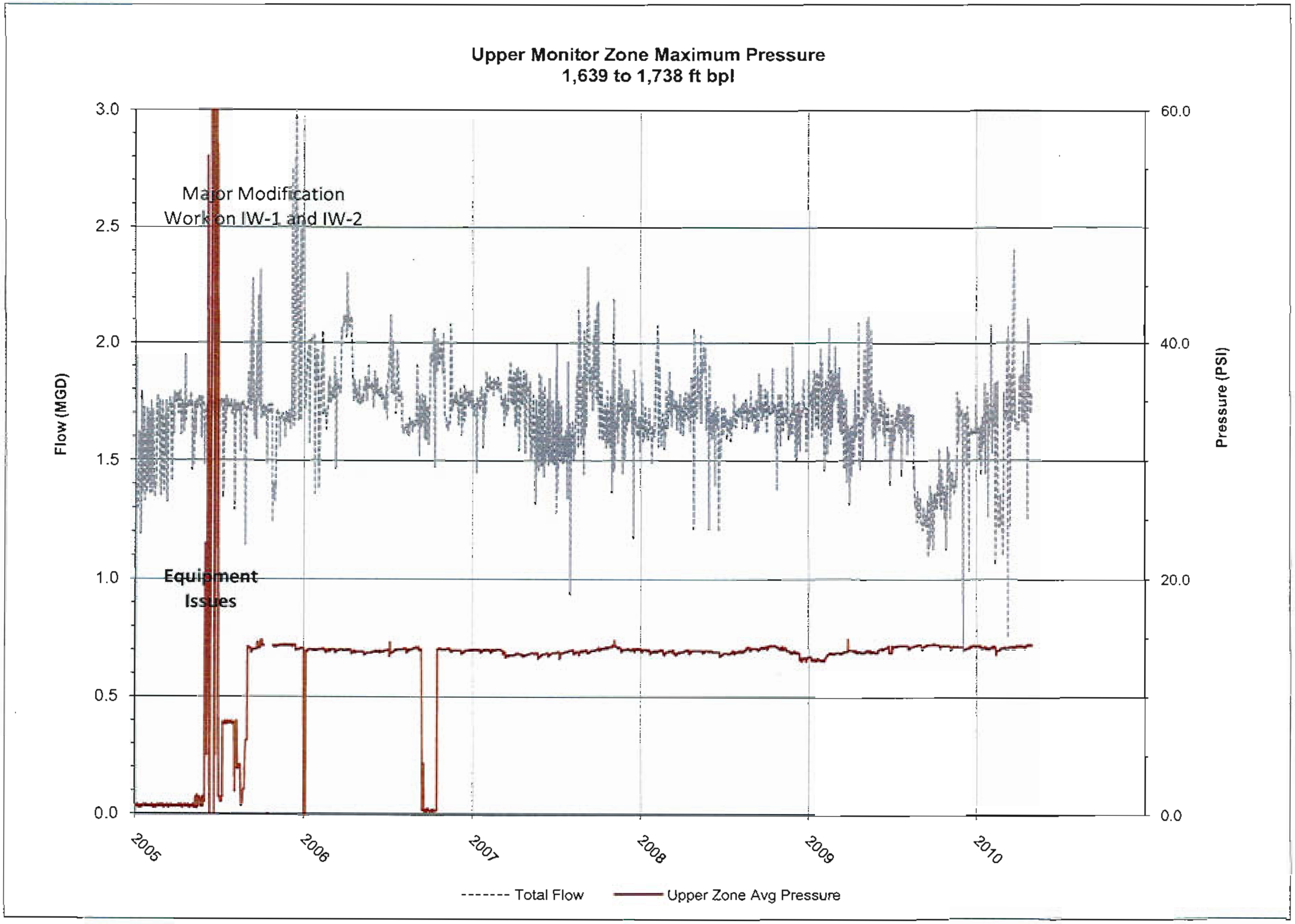
Flow and Pressure Charts


Upper Monitor Zone Average Pressure
1,639 to 1,738 ft bpl
Major Modification
Work on IW-1 and IW-2
Equipment
Issues
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60.0
40.0
20.0
0.0
2005
2006
2007
2008
2009
2010
Total Flow
Upper Zone Avg Pressure

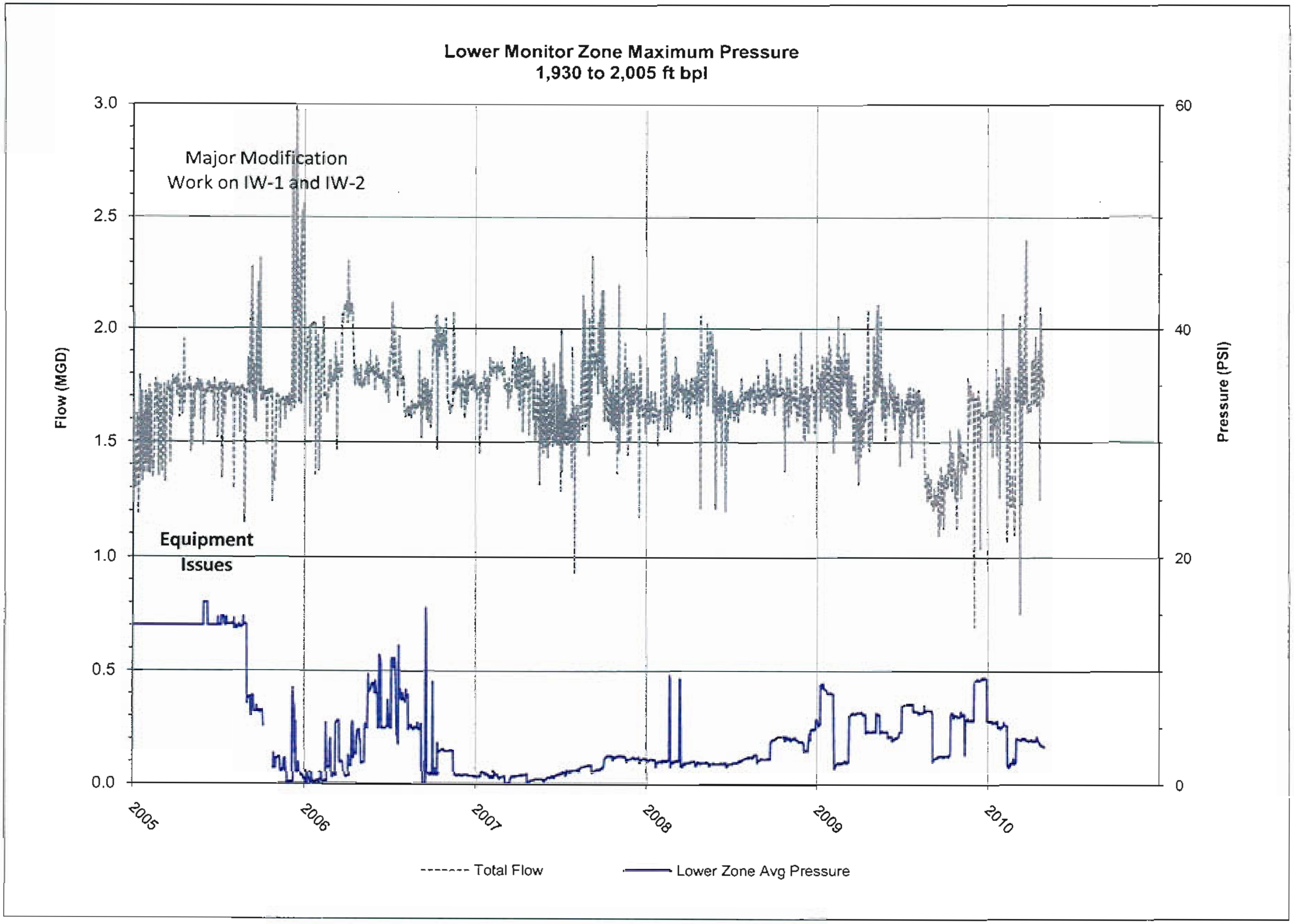

Lower Monitor Zone Average Pressure
1,930 to 2,005 ft bpl
Major Modification
Work on IW-1 and IW-2
Equipment
Issues
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60
40
20
0
2005
2006
2007
2008
2009
2010
Total Flow
Lower Zone Avg Pressure


Injection Zone Average Pressure
IW-1: 3,095 to 3,179 ft bpl
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60
40
20
0
2005
2006
2007
2008
2009
2010
Major Modification
Work on IW-1 and IW-2
IW-1 Meter Issues
IW1 Flow
IW-1 Pressure

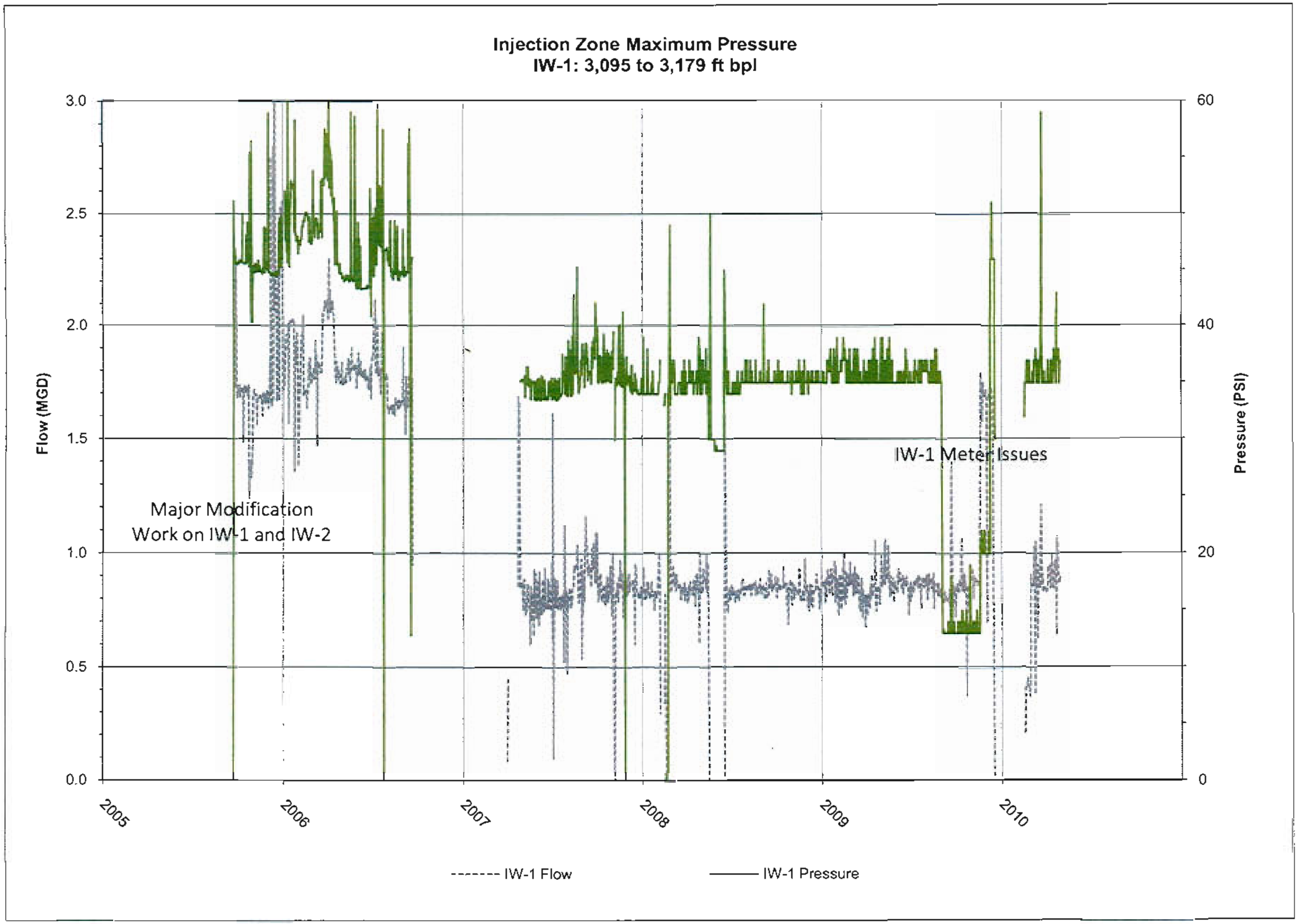

Injection Zone Average Pressure
IW-2: 3,046 to 3,508 ft bpl
Major Modification
Work on IW-1 and IW-2
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60
40
20
0
2005
2006
2007
2008
2009
2010
IW-2 Flow
IW-2 Pressure

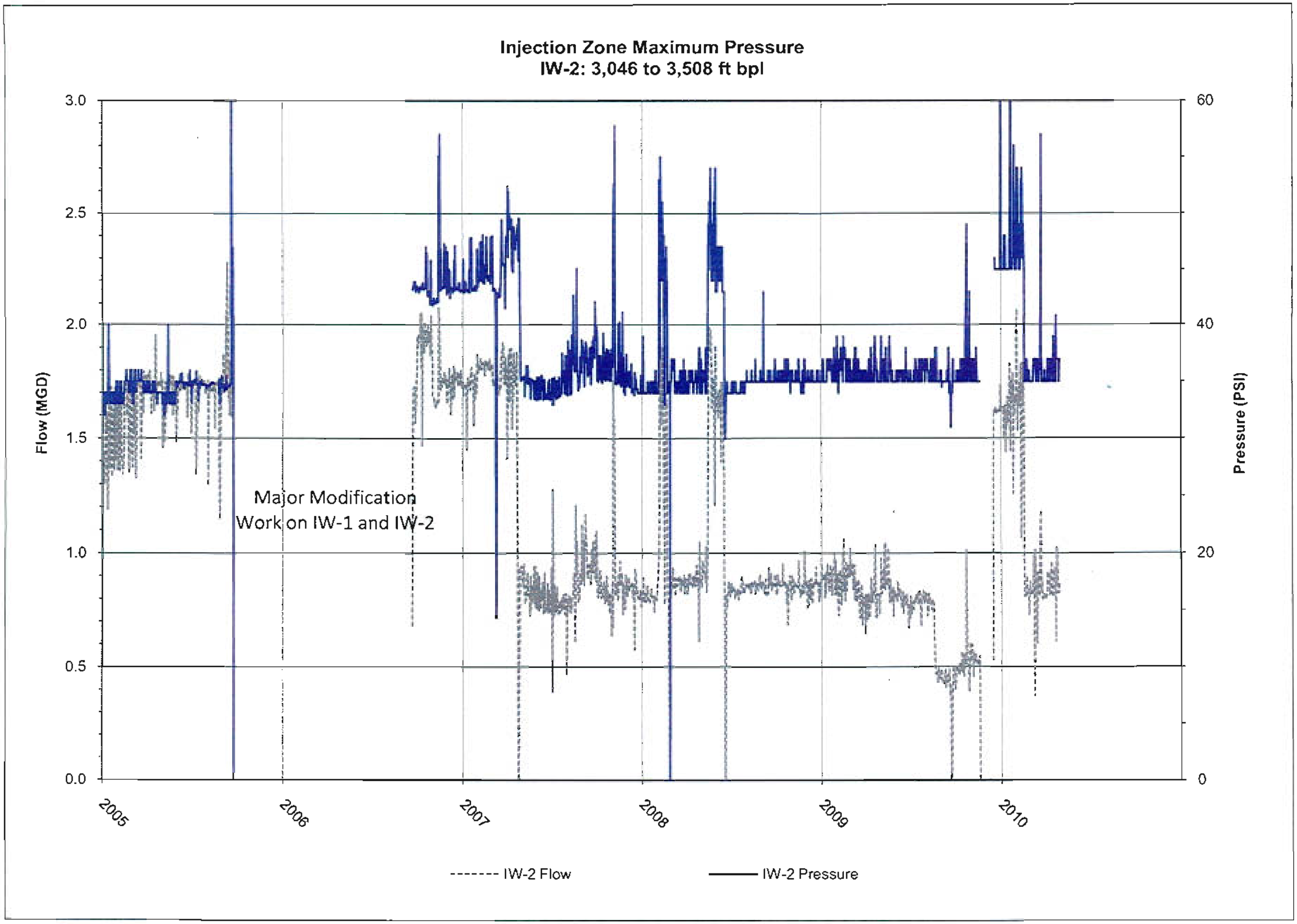


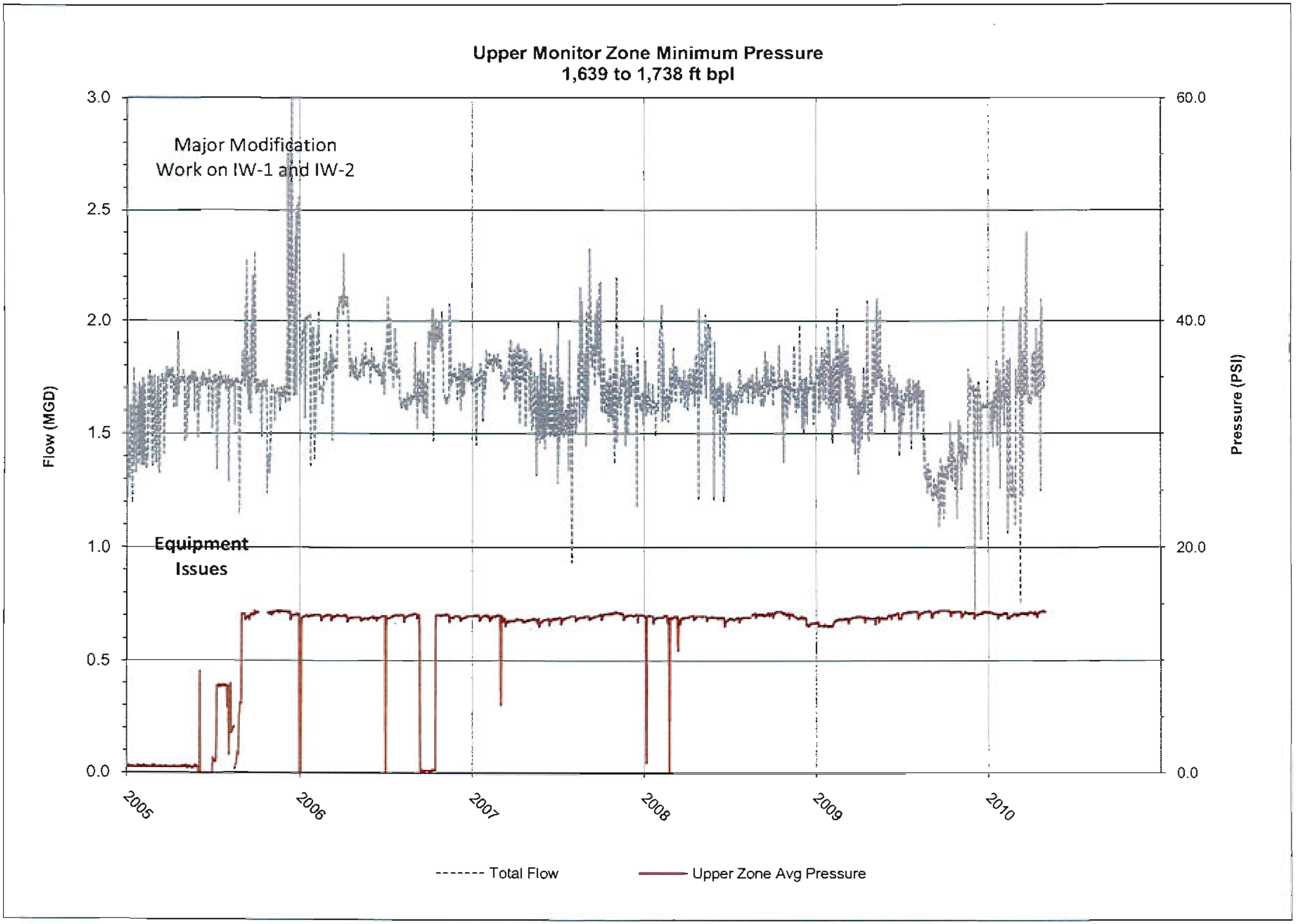
Upper Monitor Zone Maximum Pressure
1,639 to 1,738 ft bpl
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60.0
40.0
20.0
0.0
Major Modification
Work on IW-1 and IW-2
Equipment
Issues
2005
2006
2007
2008
2009
2010
Total Flow
Upper Zone Avg Pressure

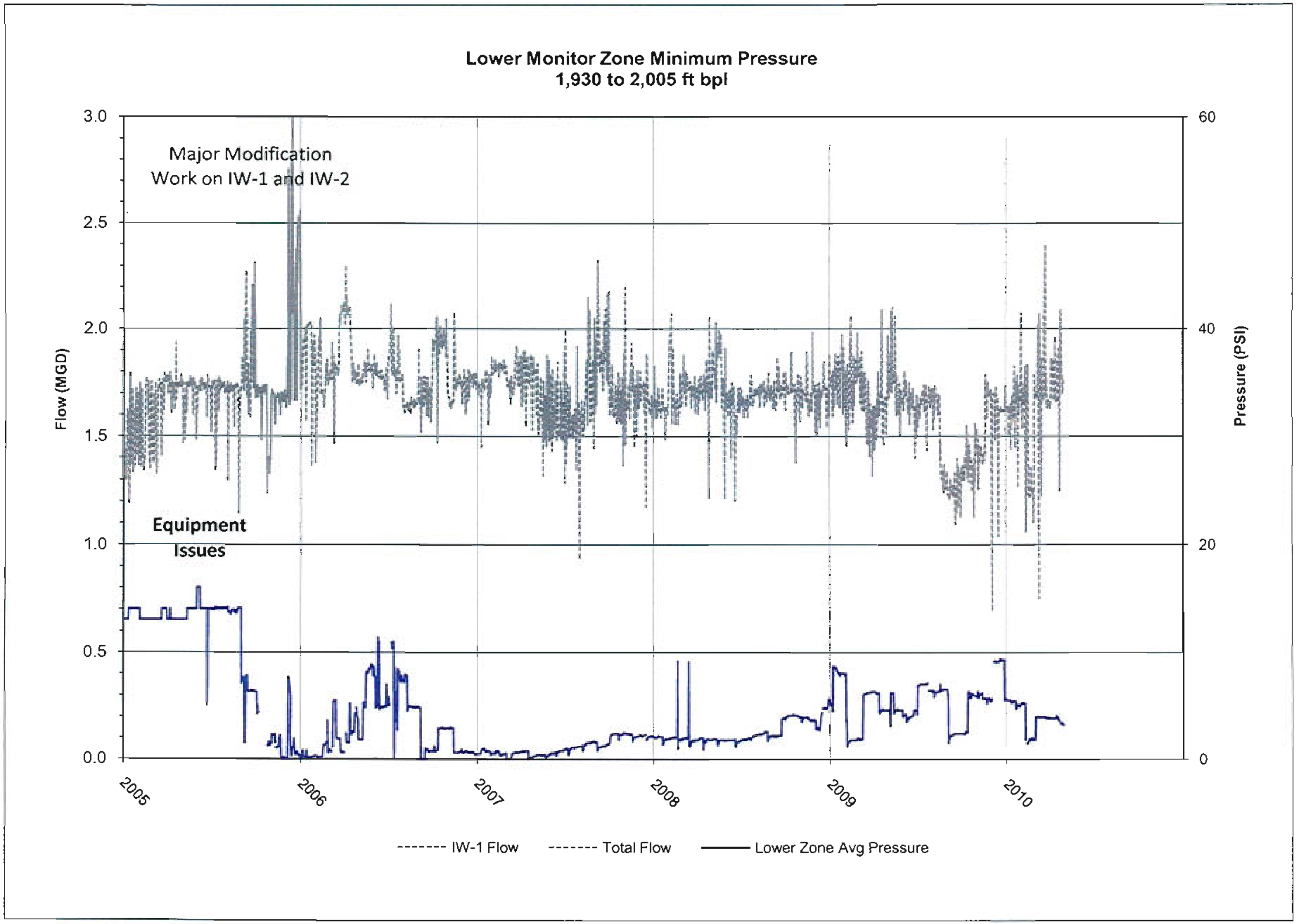


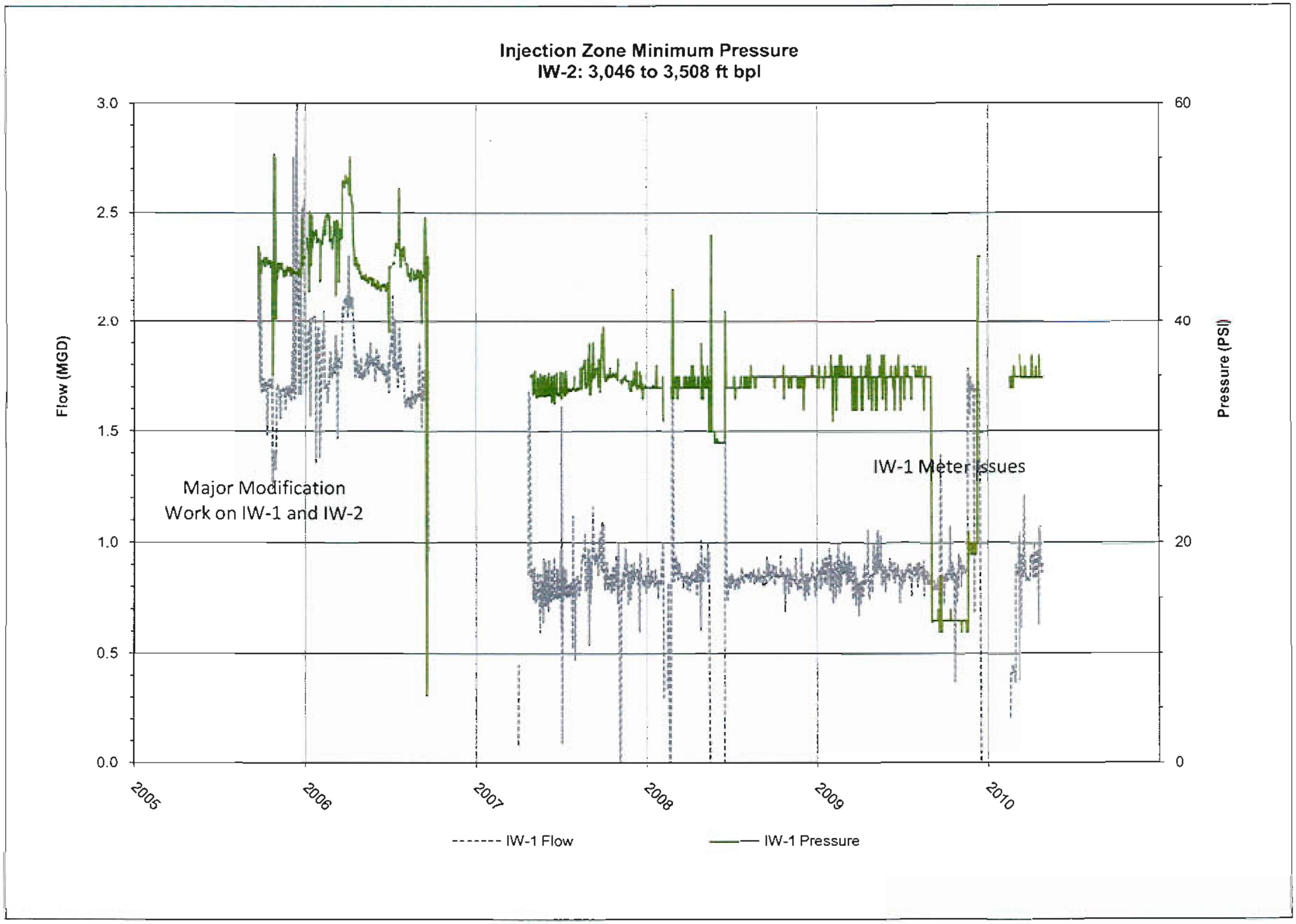
Lower Monitor Zone Maximum Pressure
1,930 to 2,005 ft bpl
Major Modification
Work on IW-1 and IW-2
Equipment
Issues
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60
40
20
0
2005
2006
2007
2008
2009
2010
Total Flow
Lower Zone Avg Pressure


Injection Zone Maximum Pressure
IW-1: 3,095 to 3,179 ft bpl
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60
40
20
0
2005
2006
2007
2008
2009
2010
Major Modification
Work on IW-1 and IW-2
IW-1 Meter Issues
IW-1 Flow
IW-1 Pressure

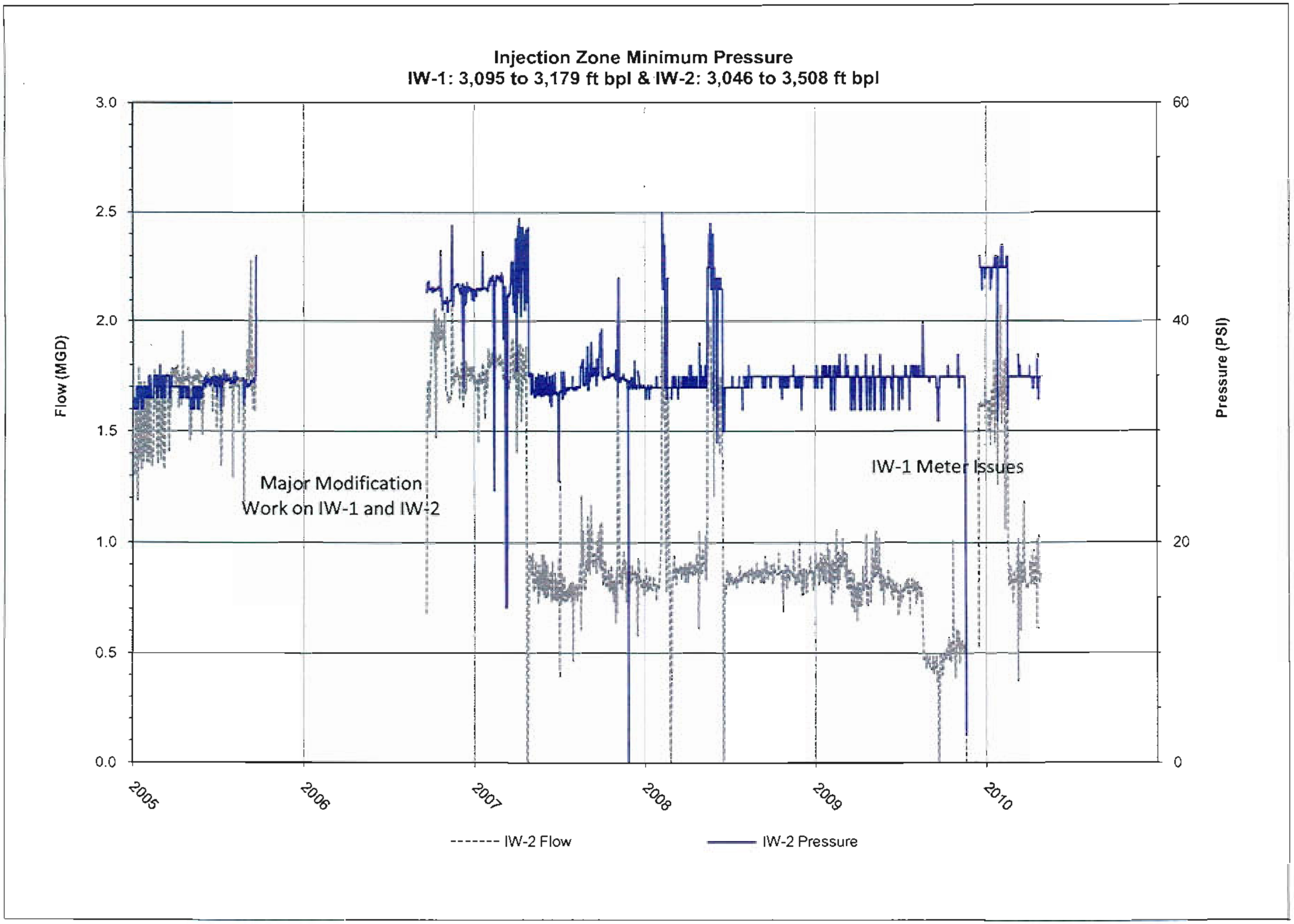

Injection Zone Maximum Pressure
IW-2: 3,046 to 3,508 ft bpl
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60
40
20
0
2005
2006
2007
2008
2009
2010
Major Modification
Work on IW-1 and IW-2
IW-2 Flow
IW-2 Pressure


Upper Monitor Zone Minimum Pressure
1,639 to 1,738 ft bpl
Major Modification
Work on IW-1 and IW-2
Equipment
Issues
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60.0
40.0
20.0
0.0
2005
2006
2007
2008
2009
2010
Total Flow
Upper Zone Avg Pressure


Lower Monitor Zone Minimum Pressure
1,930 to 2,005 ft bpl
Major Modification Work on IW-1 and IW-2
Equipment Issues
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60
40
20
0
2005
2006
2007
2008
2009
2010
IW-1 Flow
Total Flow
Lower Zone Avg Pressure



Injection Zone Minimum Pressure
IW-2: 3,046 to 3,508 ft bpl
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60
40
20
0
2005
2006
2007
2008
2009
2010
Major Modification
Work on IW-1 and IW-2
IW-1 Meter Issues
IW-1 Flow
IW-1 Pressure



Injection Zone Minimum Pressure
IW-1: 3,095 to 3,179 ft bpl & IW-2: 3,046 to 3,508 ft bpl
Flow (MGD)
Pressure (PSI)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
60
40
20
0
2005
2006
2007
2008
2009
2010
Major Modification
Work on IW-1 and IW-2
IW-1 Meter Issues
IW-2 Flow
IW-2 Pressure

Appendix F

Water Quality Data and Plots

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECTION WELL SYSTEM
DUAL-ZONE MONITOR WELL WATER QUALITY DATA

Date Collected	pH					Temp (F)					Chloride (mg/L)				
	Upper	Lower	IW-1	IW-2	IW-AVG	Upper	Lower	IW-1	IW-2	IW-AVG	Upper	Lower	IW-1	IW-2	IW-AVG
1/5/2005	8.0	7.6		6.3	6.3	20.0	21.0		23.0	23.0	2800.0	19500.0		1100.0	1100.0
2/3/2005	8.1	7.5		7.1	7.1	21.0	21.0		22.0	22.0	3300.0	22000.0		800.0	800.0
3/9/2005	7.7	7.6		6.8	6.8	20.0	20.0		22.0	22.0	2700.0	18000.0		96.0	96.0
4/7/2005	8.1	7.5		6.6	6.6	20.0	21.0		22.0	22.0	4100.0	18000.0		890.0	890.0
5/11/2005	7.9	7.5		6.9	6.9	23.0	22.0		24.0	24.0	3000.0	21000.0		800.0	800.0
6/22/2005	8.1	7.3		6.5	6.5	25.0	24.0		25.0	25.0	2800.0	18000.0		590.0	590.0
7/7/2005	8.3	7.6		6.5	6.5	24.0	24.0		25.0	25.0	3300.0	19000.0		280.0	280.0
8/9/2005	7.9	8.1		7.0	7.0	22.0	22.0		26.0	26.0	3400.0	22000.0		270.0	270.0
9/16/2005	7.8	7.6		6.8	6.8	21.0	21.0		24.0	24.0	3300.0	23000.0		900.0	900.0
10/9/2005	7.9	8.1		7.0	7.0	22.0	22.0		26.0	26.0	3400.0	22000.0		270.0	270.0
11/17/2005	8.1	7.5	6.6		6.6	20.0	21.0	22.0		22.0	4100.0	18000.0	890.0		890.0
12/9/2005	7.7	7.6		6.8	6.8	20.0	20.0		22.0	22.0	2700.0	18000.0		96.0	96.0
1/9/2006				7.0	7.0				26.0	26.0				270.0	270.0
2/16/2006	8.3	7.5	6.5		6.5	20.0	20.0	24.0		24.0	3300.0	21000.0	640.0		640.0
3/9/2006	8.1	7.5	6.4		6.4	20.0	20.0	22.0		22.0	3200.0	18000.0	700.0		700.0
4/9/2006	8.2	7.5		6.6	6.6	20.0	20.0		22.0	22.0	3200.0	17000.0		780.0	780.0
5/10/2006	8.3	7.4	6.5		6.5	23.0	23.0	24.0		24.0	2700.0	17000.0	1400.0		1400.0
6/13/2006	8.3	7.4	6.2		6.2	22.0	22.0	25.0		25.0	3200.0	17000.0	1300.0		1300.0
7/4/2006	8.1	7.5	6.3		6.3	22.0	21.0				3100.0	20000.0	780.0		780.0
8/10/2006	8.0	7.4	6.3		6.3	27.0	27.0	27.0		27.0	3300.0	15000.0	750.0		750.0
9/6/2006	8.0	7.3	6.4		6.4	23.0	22.0	23.0		23.0	3200.0	16000.0	850.0		850.0
10/4/2006	7.9	7.3		6.4	6.4	26.0	26.0		26.0	26.0	3200.0	16000.0		430.0	430.0
11/14/2006	8.0	7.5		6.1	6.1	22.0	22.0		23.0	23.0	2900.0	18000.0		920.0	920.0
12/7/2006	7.9	7.4		6.4	6.4	20.0	20.0		22.0	22.0	3500.0	17000.0		1700.0	1700.0
1/17/2007	8.0	7.5		7.3	7.3	20.0	20.0		25.0	25.0	3200.0	10400.0		99.0	99.0
2/28/2007	8.2	7.8		6.7	6.7	22.0	22.0		22.0	22.0	3300.0	20700.0		1300.0	1300.0
3/13/2007	8.0	7.6		6.7	6.7	21.0	21.0		21.0	21.0	3800.0	17000.0		840.0	840.0
4/18/2007	8.0	7.8		6.7	6.7	22.0	22.0		22.0	22.0	3300.0	7700.0		1400.0	1400.0
5/23/2007	8.0	7.8	6.6	6.5	6.6	23.0	23.0	23.0	23.0	23.0	3800.0	15000.0	1700.0	1500.0	1600.0
6/14/2007	8.1	7.6	6.6	6.5	6.6	21.0	21.0	21.0	22.0	21.5	3600.0	20000.0	530.0	490.0	510.0
7/9/2007	7.7	7.3	6.6	6.5	6.6	23.0	23.0	24.0	25.0	24.5	3300.0	18000.0	250.0	200.0	225.0
8/8/2007	7.8	7.5	6.3	6.3	6.3	22.0	22.0	23.0	23.0	23.0	3300.0	19000.0	1200.0	1300.0	1250.0
9/6/2007	7.9	7.5	6.5	6.4	6.5	21.0	21.0	22.0	23.0	22.5	3300.0	19000.0	1400.0	1100.0	1250.0
10/12/2007	7.7	7.2	6.8	7.7	7.3	23.4	23.3	23.8	21.8	22.8	3200.0	22000.0	1100.0	930.0	1015.0
11/12/2007	8.1	7.8	6.3	6.3	6.3	22.0	22.0	24	24.0	24.0	3500.0	19000.0	1500	1000.0	1000.0
12/17/2007			6.2	6.3	6.3			23.6	24.2	23.9			800.0	870	800.0
1/1/2008	8.3	7.9	6.5	6.6	6.6	23.0	23.0	25.0	24.0	24.5	3000.0	23000.0	770.0	890.0	830.0
2/1/2008	7.9	8.2		6.9	6.9	23.0	23.0		25.0	25.0	3400.0	21000.0		970.0	970.0
3/1/2008	7.9	7.8	6.4	7.9	7.2	20.3	20.3	24.4	24.4	24.4	3700.0	22000.0	1500.0	1900.0	1700.0
4/1/2008	8.0	7.6	6.7	6.7	6.7	22.3	23.0	22.4	24.9	23.7	3370.0	17900.0	1000.0	981.1	990.6
5/1/2008	7.4	7.1	7.3	7.3	7.3	23.4	23.1	24.8	24.7	24.8	3270.0	18500.0	922.0	936.0	929.0
6/20/2008	8.0	7.6	c	7.5	7.5	22.1	22.8	25.1	26.2	25.7	3200.0	19000.0	1300.0	1200.0	1250.0
7/22/2008	8.2	7.6	7.6	7.5	7.6	26.5	23.0	25.0	25.3	25.2	3200.0	18000.0	2200.0	1000.0	1600.0
8/26/2008	7.8	7.4	7.8	7.6	7.7	22.9	22.9	24.3	24.7	24.5	3400.0	18000.0	170.0	140.0	155.0
9/23/2008	8.2	7.6	7.4	7.4	7.4	23.0	25.0	25.0	25.0	25.0	3310.0	18700.0	1640.0	1530.0	1585.0
10/1/2008	8.1	7.5	7.5	7.5	7.5	23.7	23.5	25.4	25.4	25.4	3240.0	21300.0	840.0	315.0	577.5
11/4/2008	8.3	7.6	7.6	7.6	7.6	23.1	22.4	24.5	24.7	24.6	3040.0	17100.0	1280.0	1220.0	1250.0
12/11/2008	8.7	7.5	7.5	7.5	7.5	25.2	24.9	25.7	25.8	25.8	3250.0	18600.0	1500.0	1130.0	1315.0
1/7/2009	8.0	7.8	7.8	7.7	7.8	20.9	21.0	24.9	24.6	24.8	3490.0	18000.0	119.0	1250.0	684.5
2/4/2009	7.9	7.6	7.6	7.5	7.6	20.1	19.8	23.1	23.7	23.4	3600.0	19200.0	1300.0	2650.0	1975.0
3/10/2009	7.1	7.6	7.5	7.5	7.5	22.5	20.4	25.4	24.8	25.1	3310.0	27400.0	1010.0	2440.0	1725.0
4/14/2009	7.8	7.7	7.8	7.7	7.8	24.2	21.1	26.5	25.4	26.0	2390.0	15600.0	2230.0	1570.0	1900.0
5/6/2009	8.0	7.8	7.8	7.7	7.8	20.9	21.0	24.9	24.6	24.8	3490.0	18000.0	119.0	1250.0	684.5
6/9/2009	7.9	7.6	7.6	7.5	7.6	20.1	19.8	23.1	23.7	23.4	3600.0	19200.0	1300.0	2650.0	1975.0
7/1/2009	7.4	7.4	7.6	7.6	7.6	23.9	21.3	25.0	26.3	25.7	3400.0	21600.0	153.0	125.0	139.0
8/5/2009	8.0	7.8	7.6	7.6	7.6	26.3	26.3	28.1	26.8	27.5	3550.0	17800.0	714.0	135.0	424.5
9/2/2009	7.9	7.6	7.6	7.6	7.6	24.5	24.3	25.1	25.2	25.2	3420.0	19600.0	3720.0	1520.0	2620.0
10/13/2009	8.4	7.4	7.4	7.5	7.5	22.7	21.5	24.6	25.8	25.2	3380.0	19200.0	1530.0	359.0	944.5
11/5/2009	8.4	7.5	7.3	7.3	7.3	22.8	22.5	23.5	23.6	23.6	3150.0	8010.0	1440.0	1290.0	1365.0
12/2/2009	8.3	7.5	7.3		7.3	24.0	23.5	25.0		25.0	3740.0	24200.0	1480.0		1480.0
1/21/2010	7.4	7.4	7.6		7.6	23.5	23.5	24.9		24.9	21400.0	21400.0	1300.0		1300.0
2/12/2010	8.3	7.5		7.8	7.8	22.4	21.7		22.1	22.1	3220.0	17200.0		13200.0	13200.0
3/2/2010	8.6	7.6	7.5	7.5	7.5	24.4	23.4	25.0	26.0	25.5	3440.0	18400.0	1430.0	1380.0	1405.0
4/14/2010	8.6	7.6	7.5	7.5	7.5	25.6	25.3	26.3	26.4	26.4	3570.0	22300.0	219.0	2470.0	1344.5
5/10/2010	8.6	7.7	7.5	7.5	7.5	24.5	24.3	25.1	25.4	25.3	3330.0	19000.0	360.0	345.0	352.5
6/1/2010															

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECTION WELL SYSTEM
DUAL-ZONE MONITOR WELL WATER QUALITY DATA

Date	Cond (umhos/cm)					TDS (mg/L)					SO4 (mg/L)				
Collected	Upper	Lower	IW-1	IW-2	IW-AVG	Upper	Lower	IW-1	IW-2	IW-AVG	Upper	Lower	IW-1	IW-2	IW-AVG
1/5/2005	11000.0	48000.0		4300.0	4300.0	6900.0	34000.0		5800.0	5800.0	490.0	2200.0		960.0	960.0
2/3/2005	11000.0	48000.0		4500.0	4500.0	6400.0	33000.0		3000.0	3000.0	280.0	1500.0		900.0	900.0
3/9/2005	11000.0	48000.0		2500.0	2500.0	6600.0	31000.0		2400.0	2400.0	470.0	2200.0		860.0	860.0
4/7/2005	11000.0	48000.0		4400.0	4400.0	6400.0	34000.0		3100.0	3100.0	430.0	1900.0		920.0	920.0
5/11/2005	11000.0	50000.0		4600.0	4600.0	6800.0	32000.0		3200.0	3200.0	340.0	2000.0		740.0	740.0
6/22/2005	11000.0	49000.0		4000.0	4000.0	6000.0	30000.0		2800.0	2800.0	450.0	1600.0		780.0	780.0
7/7/2005	11000.0	49000.0		2900.0	2900.0	6400.0	33000.0		2400.0	2400.0	220.0	1700.0		620.0	620.0
8/9/2005	11000.0	50000.0		3800.0	3800.0	6500.0	32000.0		2800.0	2800.0	460.0	2000.0		450.0	450.0
9/16/2005	11000.0	50000.0		4900.0	4900.0	6700.0	34000.0		3600.0	3600.0	470.0	2400.0		980.0	980.0
10/9/2005	11000.0	50000.0		3800.0	3800.0	6500.0	32000.0		2800.0	2800.0	460.0	2000.0		450.0	450.0
11/17/2005	11000.0	48000.0	4400.0		4400.0	6400.0	34000.0	3100.0		3100.0	430.0	1900.0	920.0		920.0
12/9/2005	11000.0	48000.0		2500.0	2500.0	6600.0	31000.0		2400.0	2400.0	470.0	2200.0		860.0	860.0
1/9/2006				3800	#DIV/0!				2800.0	2800.0				450.0	450.0
2/16/2006	11400.0	50500.0	4600.0		4600.0	6300.0	33000.0	3200.0		3200.0	470.0	2300.0	760.0		760.0
3/9/2006	11200.0	51000.0	4600.0		4600.0	6100.0	32000.0	3100.0		3100.0	450.0	23000.0	1000.0		1000.0
4/9/2006	11400.0	50800.0		4300.0	4300.0	6200.0	33000.0		2800.0	2800.0	470.0	2100.0		1200.0	1200.0
5/10/2006	10600.0	50700.0	4600.0		4600.0	6000.0	33000.0	3100.0		3100.0	450.0	2300.0	970.0		970.0
6/13/2006	10900.0	48600.0	6100.0		6100.0	6200.0	32000.0	4200.0		4200.0	390.0	2200.0	1000.0		1000.0
7/4/2006	11400.0	49000.0	4800.0		4800.0	5800.0	33000.0	3330.0		3330.0	410.0	2200.0	850.0		850.0
8/10/2006	11100.0	49000.0	4400.0		4400.0	6500.0	32000.0	3200.0		3200.0	450.0	2100.0	990.0		990.0
9/6/2006	10900.0	51000.0	5100.0		5100.0	6000.0	33200.0	3900.0		3900.0	430.0	2000.0	770.0		770.0
10/4/2006	11000.0	49800.0		3500.0	3500.0	6700.0	33500.0		3100.0	3100.0	490.0	2100.0		900.0	900.0
11/14/2006	11000.0	52000.0		3500.0	3500.0	6300.0	33800.0		2750.0	2750.0	550.0	2500.0		870.0	870.0
12/7/2006	11300.0	52100.0		4700.0	4700.0	5900.0	31100.0		3600.0	3600.0	510.0	2200.0		910.0	910.0
1/17/2007	10500.0	50600.0		650.0	650.0	6070.0	32400.0		430.0	430.0	450.0	2200.0		18.0	18.0
2/28/2007	9600.0	42800.0		4200.0	4200.0	6200.0	35000.0		3800.0	3800.0	470.0	2400.0		900.0	900.0
3/13/2007	10700.0	48600.0		4500.0	4500.0	7500.0	37000.0		3800.0	3800.0	470.0	2100.0		850.0	850.0
4/18/2007	10000.0	48000.0		4500.0	4500.0	6200.0	32000.0		3400.0	3400.0	520.0	2400.0		920.0	920.0
5/23/2007	10400.0	49500.0	4500.0	5000.0	4750.0	6700.0	37000.0	3900.0	3600.0	3750.0	490.0	6800.0	1200.0	1100.0	1150.0
6/14/2007	10300.0	48200.0	3600.0	3400.0	3500.0	6200.0	33000.0	3600.0	2700.0	3150.0	470.0	2300.0	960.0	900.0	930.0
7/9/2007	10400.0	48600.0	2600.0	2400.0	2500.0	6500.0	33000.0	2300.0	2300.0	2300.0	500.0	2200.0	870.0	830.0	850.0
8/8/2007	10600.0	49000.0	5400.0	5200.0	5300.0	6090.0	32800.0	3920.0	3530.0	3725.0	510.0	2100.0	940.0	1100.0	1020.0
9/6/2007	10400.0	49000.0	4500.0	4400.0	4450.0	6700.0	33900.0	3000.0	3200.0	3100.0	500.0	2300.0	980.0	990.0	985.0
10/12/2007	10500.0	48600.0	5800.0	5100.0	5450.0	5670.0	32900.0	3240.0	3530.0	3385.0	500.0	2200.0	850.0	760.0	805.0
11/12/2007	11000.0	50000.0	4800	4800.0	4800.0	7000.0	33000.0	3300	3200.0	3200.0	510.0	2200.0	825	990.0	990.0
12/17/2007			4790.0	4350.0	4570.0			3740.0	3110.0	3425.0			880.0	1000.0	940.0
1/1/2008	10000.0	50000.0	4700.0	4600.0	4650.0	6460.0	36570.0	3510.0	3490.0	3500.0	430.0	2300.0	770.0	680.0	725.0
2/1/2008	11000.0	50000.0		3800.0	3800.0	6050.0	30570.0		2640.0	2640.0	530.0	2300.0		740.0	740.0
3/1/2008	11130.0	51100.0	4890.0	4350.0	4620.0	6600.0	34390.0	3510.0	3510.0	3510.0	560.0	2700.0	930.0	1100.0	1015.0
4/1/2008	10360.0	50800.0	4740.0	4640.0	4690.0	6060.0	35320.0	3400.0	3800.0	3500.0	489.0	2300.0	682.0	670.0	676.0
5/1/2008	10650.0	50800.0	4580.0	4640.0	4610.0	5710.0	31830.0	2710.0	3110.0	2910.0	398.0	U	251.0	249.0	250.0
6/20/2008	10820.0	51300.0	5100.0	5240.0	5170.0	6590.0	34590.0	3150.0	3140.0	3145.0	500.0	2100.0	170.0	150.0	160.0
7/22/2008	10140.0	50600.0	4490.0	4420.0	4455.0	5360.0	35500.0	3270.0	3390.0	3330.0	460.0	2400.0	140.0	130.0	135.0
8/26/2008	10500.0	50400.0	2630.0	2400.0	2515.0	6810.0	36000.0	2100.0	1900.0	2000.0	410.0	2400.0	51.0	42.0	46.5
9/23/2008	10100.0	49600.0	6170.0	6320.0	6245.0	5720.0	32300.0	4400.0	4000.0	4200.0	379.0	2550.0	209.0	223.0	216.0
10/1/2008	10200.0	50400.0	2460.0	2480.0	2470.0	5830.0	32300.0	2140.0	1740.0	1940.0	379.0	2200.0	35.9	35.4	35.7
11/4/2008	9870.0	49800.0	5550.0	5570.0	5560.0	5810.0	32100.0	3900.0	3560.0	3730.0	365.0	2230	176.0	171.0	173.5
12/11/2008	10100.0	50500.0	5210.0	5140.0	5175.0	5880.0	32200.0	3680.0	3250.0	3465.0	3250.0	2180.0	168.0	159.0	163.5
1/7/2009	9590.0	37600.0	2220.0	5380.0	3800.0	6280.0	31900.0	2050.0	3740.0	2895.0	486.0	2330.0	35.0	196.0	115.5
2/4/2009	10900.0	50600.0	4340.0	7390.0	5865.0	6470.0	31900.0	2680.0	4590.0	3635.0	509.0	2510.0	107.0	272.0	189.5
3/10/2009	9670.0	43300.0	8650.0	8730.0	8690.0	6640.0	32200.0	6230.0	5770.0	6000.0	400.0	2180	127.0	148.0	137.5
4/14/2009	9150.0	43500.0	2370.0	5730.0	4050.0	5700.0	32000.0	4070.0	3720.0	3895.0	U	U	178.0	168.0	173.0
5/6/2009	9590.0	37600.0	2220.0	5380.0	3800.0	6280.0	31900.0	2050.0	3740.0	2895.0	486.0	2330.0	35.0	196.0	115.5
6/9/2009	10900.0	50600.0	4340.0	7390.0	5865.0	6470.0	31900.0	2680.0	4590.0	3635.0	509.0	2510	107.0	272.0	189.5
7/1/2009	9480.0	44900.0	2190.0	2040.0	2115.0	5810.0	32600.0	1860.0	1440.0	1650.0	397.0	2290.0	30.6	30.7	30.7
8/5/2009	9750.0	49600.0	2690.0	2170.0	2430.0	5690.0	31700.0	2200.0	1470.0	1835.0	349.0	2570.0	81.6	65.6	73.6
9/2/2009	9940.0	50100.0	6420.0	5940.0	6180.0	6060.0	33000.0	3930.0	3770.0	3850.0	425.0	2400.0	215.0	206.0	210.5
10/13/2009	8980.0	41300.0	5920.0	2190.0	4055.0	6400.0	31390.0	3660.0	1560.0	2610.0	400.0	2190.0	186.0	33.7	109.9
11/5/2009	9870.0	50200.0	5760.0	5810.0	5785.0	5620.0	31100.0	3490.0	3580.0	3535.0	390.0	1060	177.0	33.7	105.4
12/2/2009	9940.0	50600.0	5610.0		5610.0	6090.0	32700.0	3840.0		3840.0	439.0	2490.0	149.0		149.0
1/21/2010	49800.0	49800.0	5390.0		5390.0	32250.0	32250.0	3310.0		3310.0	2530.0	2530.0	257.0		257.0
2/12/2010	10300.0	50600.0		29500.0	29500.0	6100.0	31600.0		17800.0	17800.0	472.0	2250.0		1180.0	1180.0
3/2/2010	10400.0	50700.0	6040.0	5980.0	6010.0	6170.0	31800.0	4310.0	3800.0	4055.0	517.0	2150	181.0	190.0	185.5
4/14/2010	10400.0	49600.0	2940.0	8690.0	5815.0	5920.0	31600.0	2150.0	5320.0	3735.0	380.0	2410.0	39.3	370.0	204.7
5/10/2010	9720.0	49400.0	2830.0	2710.0	2770.0	5720.0	31900.0	2330.0	1910.0	2120.0	337.0	2260.0	61.0	61.2	61.1
6/1/2010															

CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECTION WELL SYSTEM
DUAL-ZONE MONITOR WELL WATER QUALITY DATA

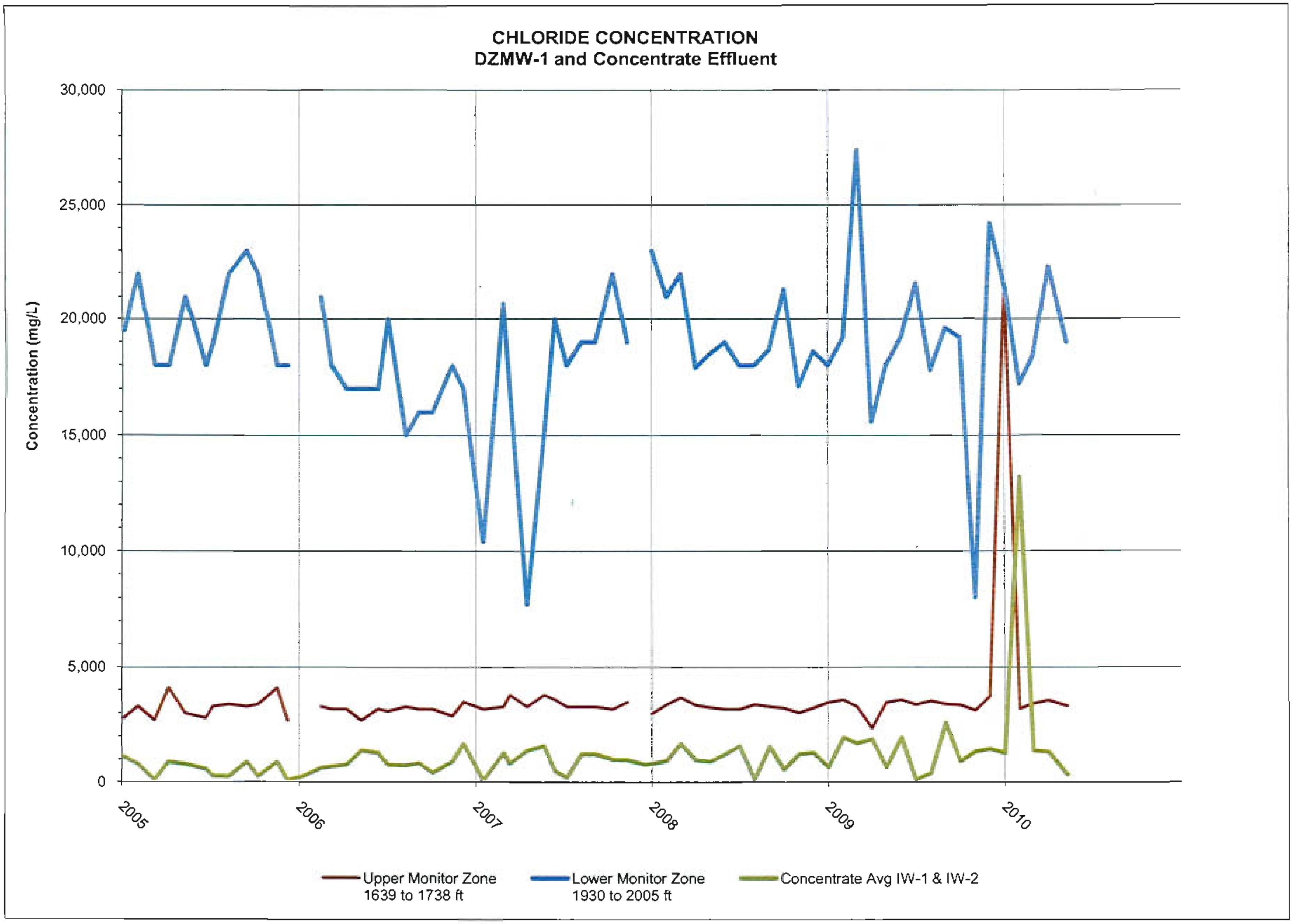
Date Collected	NH3 (mg/L)					Nitrate (mg/L)					TKN				
	Upper	Lower	IW-1	IW-2	IW-AVG	Upper	Lower	IW-1	IW-2	IW-AVG	Upper	Lower	IW-1	IW-2	IW-AVG
1/5/2005		0.5		1.2	1.2						1.4	2.0		2.6	2.6
2/3/2005				1.3	1.3						0.2	0.6		9.9	9.9
3/9/2005				1.6	1.6									6.5	6.5
4/7/2005				1.4	1.4						3.0	1.6		7.7	7.7
5/11/2005				2.0	2.0						1.2	4.2		11.0	11.0
6/22/2005				0.6	0.6						1.9	1.6		6.3	6.3
7/7/2005				0.9	0.9						1.5	1.1		4.9	4.9
8/9/2005	U	U		1.2	1.2						0.9	0.7		5.3	5.3
9/16/2005	U	U		1.3	1.3						0.6	0.5		4.6	4.6
10/9/2005	U	U		1.2	1.2						0.9	0.7		5.3	5.3
11/17/2005	U	U	1.4		1.4						3.0	1.6	7.7		7.7
12/9/2005	U	U		1.6	1.6						U	U		6.5	6.5
1/9/2006				1.2	1.2									5.3	5.3
2/16/2006	0.1	0.1	1.1		1.1						0.8	0.6	2.1		2.1
3/9/2006	U	U	2.1		2.1						0.5	0.5	6.9		6.9
4/9/2006	U	U		3.2	3.2						U	1.5		7.4	7.4
5/10/2006	U	U	1.9		1.9						U	U	7.1		7.1
6/13/2006	U	U	2.1		2.1						U	U	7.0		7.0
7/4/2006	0.2	0.9	1.3		1.3						2.0	6.9	9.0		9.0
8/10/2006	U	0.1	1.6		1.6						0.7	1.0	11.0		11.0
9/6/2006	U	U	13.9		13.9						U	U	5.8		5.8
10/4/2006	U	U		1.2	1.2						U	U		3.6	3.6
11/14/2006	U	U		2.1	2.1						U	U		3.9	3.9
12/7/2006	3.2	U		2.2	2.2						U	U		4.8	4.8
1/17/2007	U	U		1.9	1.9						U	U		4.2	4.2
2/28/2007	U	U		3.4	3.4						0.1	0.2		7.7	7.7
3/13/2007	U	U		1.3	1.3						0.4	0.0		9.3	9.3
4/18/2007	0.4	U		3.8	3.8						1.1	0.9		7.5	7.5
5/23/2007	0.2	0.1	2.6	2.9	2.8						0.5	0.3	0.3	0.1	0.2
6/14/2007	0.4	0.1	3.9	3.9	3.9						2.3	1.9	6.9	8.1	7.5
7/9/2007	0.4	0.9	2.0	3.2	2.6						2.3	1.7	10.1	8.7	9.4
8/8/2007	0.6	0.1	3.6	4.0	3.8						0.1	0.1	5.0	5.0	5.0
9/6/2007	0.3	U	3.2	3.4	3.3						0.6	0.7	0.5	0.4	0.5
10/12/2007	0.4	0.3	2.5	3.1	2.8						0.6	0.6	5.3	4.1	4.7
11/12/2007	0.4	0.1	2.45	2.4	2.4						0.6	0.2			
12/17/2007			2.0	2.02	2.0								8.4	6.61	8.4
1/1/2008	0.5	0.1	2.4	3.0	2.7						0.2	U	3.9	3.9	3.9
2/1/2008	0.3	0.4		2.1	2.1						U	U		5.4	5.4
3/1/2008	0.2	0.1	2.2	1.9	2.0						U	U	4.4	4.3	4.4
4/1/2008	0.4	0.2	3.7	3.9	3.8						0.4	0.3	8.7	9.8	9.3
5/1/2008	0.5	0.1	4.3	4.4	4.3						0.4	0.5	8.3	9.6	9.0
6/20/2008	0.8	U	4.1	4.6	4.3	U	U	U	U	U	0.4	U	7.0	7.9	7.5
7/22/2008	0.5	0.6	4.6	4.5	4.5	U	U	U	U	U	0.3	U	6.4	7.3	6.8
8/26/2008	U	U	2.1	2.0	2.1	U	U	U	U	U	U	U	5.5	4.5	5.0
9/23/2008	U	U	3.7	3.2	3.5	2.0	U	0.9	U	0.9	0.1	U	9.8	10.8	10.3
10/1/2008	U	U	6.1	5.5	5.8	U	U	U	U	U	U	U	7.7	12.7	10.2
11/4/2008	U	U	1.1	1.7	1.4	U	U	U	U	U	U	U	8.0	7.0	7.5
12/11/2008	U	U	4.2	3.8	4.0	U	U	U	U	U	U	U	6.4	6.3	6.3
1/7/2009	U	U	3.8	3.6	3.7	U	U	U	U	U	U	U	5.0	5.1	5.0
2/4/2009	0.4	U	5.0	4.0	4.5	U	U	U	U	U	1.2	1.1	11.7	11.0	11.4
3/10/2009	U	U	1.8	2.0	1.9	U	U	U	U	U	0.5	1.9	7.8	8.8	8.3
4/14/2009	U	U	4.5	4.2	4.3	U	U	U	U	U	U	0.4	7.4	7.6	7.5
5/6/2009	U	U	3.8	3.6	3.7	U	U	U	U	U	U	U	5.0	5.1	5.0
6/9/2009	0.4	U	5.0	4.0	4.5	U	U	U	U	U	1.2	1.1	11.7	11.0	11.4
7/1/2009	U	U	5.6	6.3	6.0	U	U	U	U	U	1.9	1.6	11.0	8.4	9.7
8/5/2009	U	U	7.0	5.3	6.1	U	U	U	U	U	U	U	8.2	7.6	7.9
9/2/2009	0.7	U	3.6	3.6	3.6	U	U	U	U	U	0.9	0.1	6.2	9.9	8.0
10/13/2009	0.3	U	4.5	5.4	4.9	U	U	U	U	U	4.0	8.5	13.2	15.9	14.6
11/5/2009	U	U	0.9	0.9	0.9	U	U	U	U	U	0.8	0.7	5.3	5.8	5.5
12/2/2009	U	U	3.8		3.8	U	U	U	U	U	0.5	U	10.1		10.1
1/21/2010	U	U	3.3		3.3	U	U		U	U	U	U	10.3		10.3
2/12/2010	0.3	U		U		U	U		U	U	0.6	0.2		1.5	1.5
3/2/2010	U	U	0.4	0.5	0.5	U	U	U	U	U	0.7	0.4	2.4	2.5	2.4
4/14/2010	U	U	0.7	0.8	0.7	U	U	U	U	U	0.8	0.8	5.4	6.3	5.8
5/10/2010	U	U	1.0	1.0	1.0	U	U	U	U	U	0.9	1.0	4.9	5.1	5.0
6/1/2010															

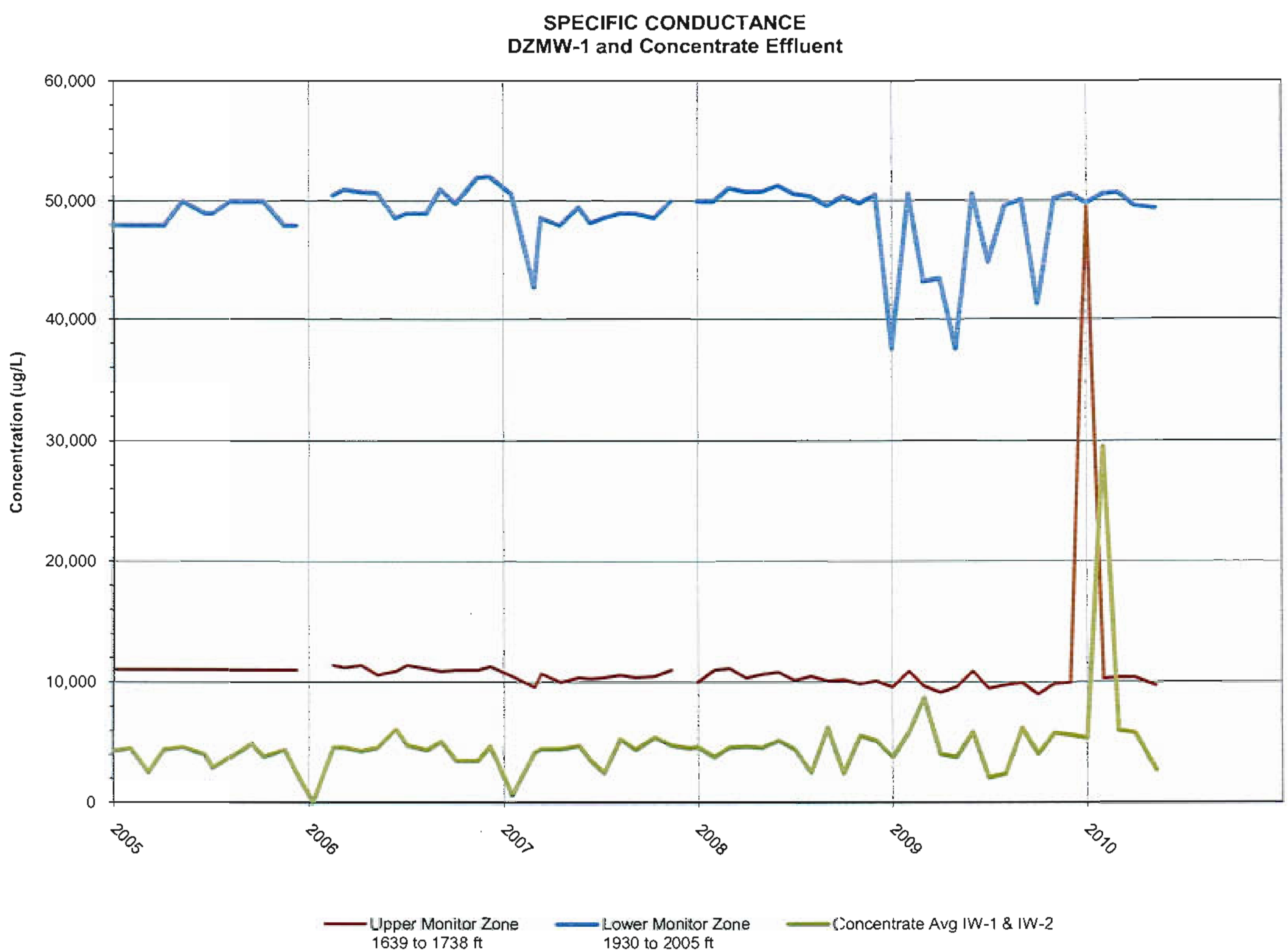
CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECTION WELL SYSTEM
DUAL-ZONE MONITOR WELL WATER QUALITY DATA

Date	Gross Alpha (pCi/L)					Radium-226 (pCi/L)				
Collected	Upper	Lower	IW-1	IW-2	IW-AVG	Upper	Lower	IW-1	IW-2	IW-AVG
1/5/2005										
2/3/2005										
3/9/2005	26.0	17.9		9	9	23.0	11.1		4	4
4/7/2005										
5/11/2005										
6/22/2005										
7/7/2005										
8/9/2005										
9/16/2005	1.8	13.0		7.8+-0.6		29+-1	30+-1			4.0+-0.3
10/9/2005										
11/17/2005										
12/9/2005	26.0	17.9		9	9	23.0	11.1		4	4
1/9/2006										
2/16/2006										
3/9/2006	60.0+-3	60.0+-5	14.7+-1.4			16.8+-1.9	12.2+-1.6	4.8+-1.2		
4/9/2006										
5/10/2006										
6/13/2006	28+-1	74+-9	67+-9			13+-1.6	11+-1.5	4.9+-1.1		
7/4/2006										
8/10/2006										
9/6/2006	12+-1.1	30+-2	40+-2			8.3+-0.5	23+-1	12.1+-0.6		
10/4/2006										
11/14/2006										
12/7/2006	12.0+-1.1	30+-2		40+-2		8.3+-0.5	23+-1		12.1+-0.6	
1/17/2007										
2/28/2007										
3/13/2007	24+-2	34+-6		17+-1		5.9+-0.4	11.2+-0.6		4.8+-0.4	
4/18/2007										
5/23/2007										
6/14/2007	40+-3	23+-3	11.6-1.6	13.6-0.8		16.5+-0.7	10.2-0.5	6.3+-0.4	5.0+-0.4	
7/9/2007										
8/8/2007										
9/6/2007	44+-2	33+-22	24+-2	22-2		17.5+-0.8	9.7+-0.6	4.5+-0.4	4.9+-0.4	
10/12/2007										
11/12/2007										
12/17/2007			15.6+-0.8	14.8+-0.8				5.2+-0.4	5.3-0.4	
1/1/2008										
2/1/2008										
3/1/2008	34+-1	23+-1	14.6+-0.6	10.4+-0.7		23+-3	14+-2.1	9.0+-1.6	6.0+-1.3	
4/1/2008										
5/1/2008										
6/20/2008	29+-2	15.7+-1.3	13.3+-1.2	9.1+-1.0		15.0+-0.7	8.6+-0.5	5.1+-0.4	6.7+-0.4	
7/22/2008										
8/26/2008										
9/23/2008	12.9	80.0	6.2	12	8.9	0.2	0.1	0.2	1	0.5
10/1/2008										
11/4/2008	24+-1	26+-1	13.6+-0.6	14.0+-0.8		11.7+-0.6	10.5+-0.6	5.5+-0.4	5.4+-0.4	
12/11/2008										
1/7/2009										
2/4/2009	39+/-1	25+/-1	13.1+-/-0.8	14.5+/-0.8		18.1+/-0.7	10+/-0.5	4.1+/-0.3	5.5+/-0.4	
3/10/2009										
4/14/2009										
5/6/2009										
6/9/2009	39+/-1	25+/-1	13.1+-/-0.8	14.5+/-0.8		18.1+/-0.7	10+/-0.5	4.1+/-0.3	5.5+/-0.4	
7/1/2009										
8/5/2009										
9/2/2009	14.8+/-3.4	13.1+/-3.2	3.40+/-1.7	3.90+/-1.8		15.1+/-0.6	9.90+/-0.5	1.20+/-0.2	4.20+/-0.4	
10/13/2009										
11/5/2009										
12/2/2009	16.6+/-0.8	14.6+/-0.8	7.7+/-0.6	6.6+/-0.6		12.8+/-1.9	12.3+/-1.9	3.9+/-1.0	4.2+/-1.0	
1/21/2010										
2/12/2010										
3/2/2010	26+/-0-1	15.7+/-0.8		10.8+/-0.7		9.5+/-0.8	8.7+/-0.4		3.5+/-0.3	
4/14/2010										
5/10/2010										
6/1/2010										

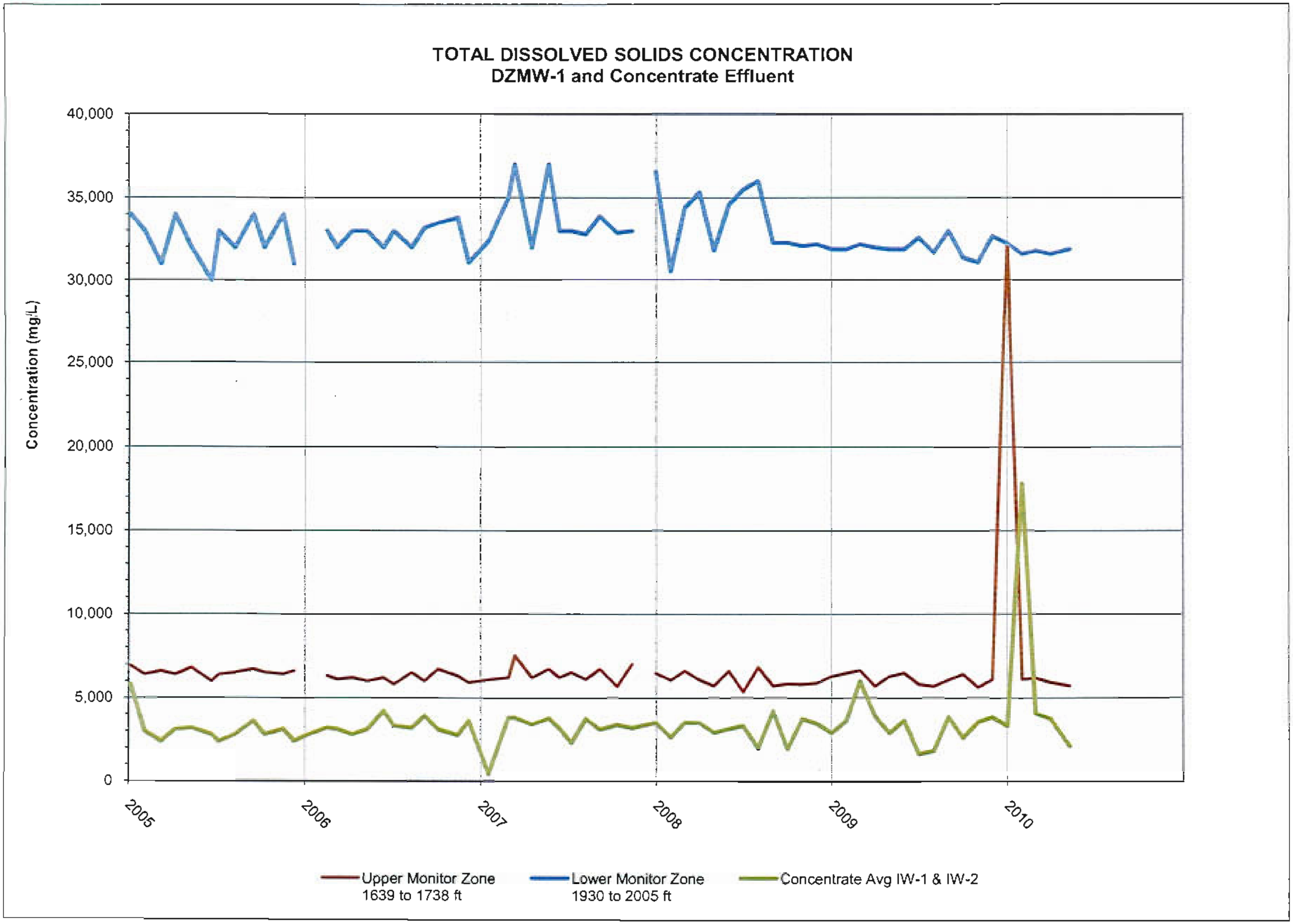
CITY OF MIRAMAR WEST WATER TREATMENT PLANT CONCENTRATE INJECTION WELL SYSTEM
DUAL-ZONE MONITOR WELL WATER QUALITY DATA

Date	Radium-228 (pCi/L)					Total Suspended Solids (mg/L)			Phosphorus, Total as P				
Collected	Upper	Lower	IW-1	IW-2	IW-AVG	IW-1	IW-2	IW-AVG	Upper	Lower	IW-1	IW-2	IW-AVG
1/5/2005												0.1	0.1
2/3/2005										0.1		0.0	0.0
3/9/2005	0.5	0.0		0	0							0.1	0.1
4/7/2005												0.1	0.1
5/11/2005												0.1	0.1
6/22/2005									0.1	0.3		0.3	0.3
7/7/2005									0.1				
8/9/2005										U		0.12	0.1
9/16/2005	0.3+-0.1	11.5+-0.6		0.0+-0.7					0.8	U		0.09	0.1
10/9/2005										U		0.12	0.1
11/17/2005									ND	ND	0.08		0.1
12/9/2005	0.5	0.0		0	0				1.5	U		0.08	0.1
1/9/2006												0.12	0.1
2/16/2006										U	U		
3/9/2006	0.2+-0.7	0.0+-0.6	6.6+-1.3						1.8	U	U		
4/9/2006										U		U	
5/10/2006										U	0.3		0.3
6/13/2006	1.1+-0.8	1.1+-0.8	0.7+-0.7						1.6	U	0.1		0.1
7/4/2006									U	U	0.4		0.4
8/10/2006									0.6	0.0	0.2		0.2
9/6/2006	0.0+-0.9	0.1+-0.9	1.6+-1.0						2.8	0.0	0.2		0.2
10/4/2006									0.1	0.1		0.2	0.2
11/14/2006									0.1	0.2		0.2	0.2
12/7/2006	0.0+-0.9	0.1+-0.9		1.6+-1.0					U	0.2		0.4	0.4
1/17/2007									0.2	0.2		0.1	0.1
2/28/2007									0.2	0.1		0.2	0.2
3/13/2007	0.0+-0.7	0.0+-0.7		0.5-0.8					1.1	0.2		0.2	0.2
4/18/2007									0.1	0.1		0.1	0.1
5/23/2007									0.2	0.1	0.3	0.1	0.2
6/14/2007	0.4+-0.8	0.5+-0.8	0.7+-0.8	0.2+-0.7					2.1	0.1	0.3	0.1	0.2
7/9/2007									0.1	0.0	0.3	0.3	0.3
8/8/2007									U	0.1	0.2	0.4	0.3
9/6/2007	0.0+-0.8	00+-0.7	0.2+-0.7	0.0+-0.8					2.1	U	0.3	0.4	0.4
10/12/2007									0.1	0.4	0.5	0.1	0.3
11/12/2007									0.0	0.0	0.14		
12/17/2007			0.0+-0.9	0.0+-0.8							0.1	0.1	0.1
1/1/2008									0.0	0.0	0.7	0.1	0.4
2/1/2008									U	U		0.3	0.3
3/1/2008	0.0+-0.7	0.0+-7	0.0+-0.7	0.0+-0.7					0.1	U	0.4	0.4	0.4
4/1/2008									U	U	U	0.2	0.2
5/1/2008									0.0	0.0	0.6	0.1	0.4
6/20/2008	0.0+-0.7	0.2+-0.7	0.0+-0.6	0.3+-0.7		19.0	11.0	15.0	U	U	0.5	0.6	0.5
7/22/2008						27.0	31.0	29.0	U	4.1	2.3	2.4	2.3
8/26/2008						31.0	28.0	29.5	U	U	0.6	0.6	0.6
9/23/2008	0.7	0.7	0.8	1	0.7	27.0	28.0	27.5	0.1	0.1	0.9	0.9	0.9
10/1/2008						8.0	6.0	7.0	0.1	0.1	1.3	1.3	1.3
11/4/2008	1.2+-0.8	0.6+-0.7	0.9+-0.4	0.7+-0.7		27.0	24.0	25.5	U	U	0.6	0.7	0.7
12/11/2008						15.0	19.0	17.0	U	U	0.6	0.6	0.6
1/7/2009						22.0	26.0	24.0	U	U	0.7	0.6	0.6
2/4/2009	0.9+/-0.8	0.3+/-0.7	0.4+/-0.7	1.4+/-0.8		20.0	20.0	20.0	U	U	0.5	0.4	0.4
3/10/2009						26.0	26.0	26.0	U	U	0.5	0.5	0.5
4/14/2009						21.0	22.0	21.5	U	U	0.5	0.5	0.5
5/6/2009						22.0	26.0	24.0	U	U	0.7	0.6	0.6
6/9/2009	0.9+/-0.8	0.3+/-0.7	0.4+/-0.7	1.4+/-0.8		20.0	20.0	20.0	U	U	0.5	0.4	0.4
7/1/2009						15.0	17.0	16.0	U	U	0.5	0.5	0.5
8/5/2009						17.0	21.0	19.0	U	U	0.3	0.3	0.3
9/2/2009	u+/-0.6	u+/-0.6	u+/-0.6	u+/-0.6		31.0	25.0	28.0	U	U	0.2	0.3	0.3
10/13/2009						21.0	19.0	20.0	U	U	0.4	0.5	0.5
11/5/2009						18.0	23.0	20.5	U	U	0.3	0.4	0.4
12/2/2009	0.3+/1.9	0.0+/-0.7	0.5+/-0.6	0.2+/0.7		21.0		21.0	U	U	0.5		0.5
1/21/2010						18.0		18.0	U	U	0.5		0.5
2/12/2010							54.0	54.0	U	U		0.5	0.5
3/2/2010	0.0+/-0.8	0.0_/-0.7		0.1+/0.7		24.0	26.0	25.0	U	U	0.6	0.5	0.5
4/14/2010						19.0	26.0	22.5	U	U	0.6	0.6	0.6
5/10/2010						20.0	22.0	21.0	U	U	0.6	0.6	0.6
6/1/2010													

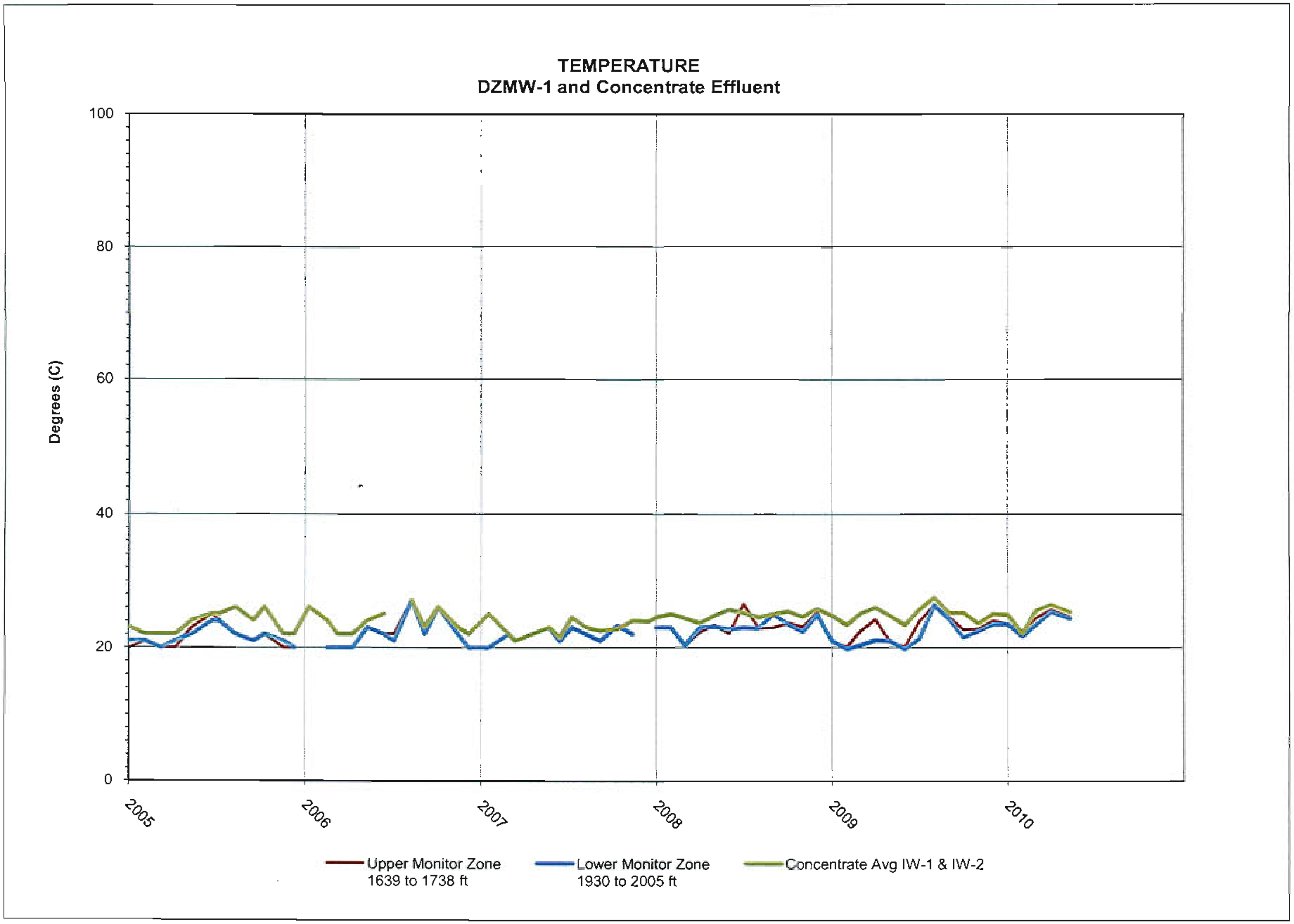

CHLORIDE CONCENTRATION
DZMW-1 and Concentrate Effluent
Concentration (mg/L)
30,000
25,000
20,000
15,000
10,000
5,000
0
2005
2006
2007
2008
2009
2010
Upper Monitor Zone 1639 to 1738 ft
Lower Monitor Zone 1930 to 2005 ft
Concentrate Avg IW-1 & IW-2



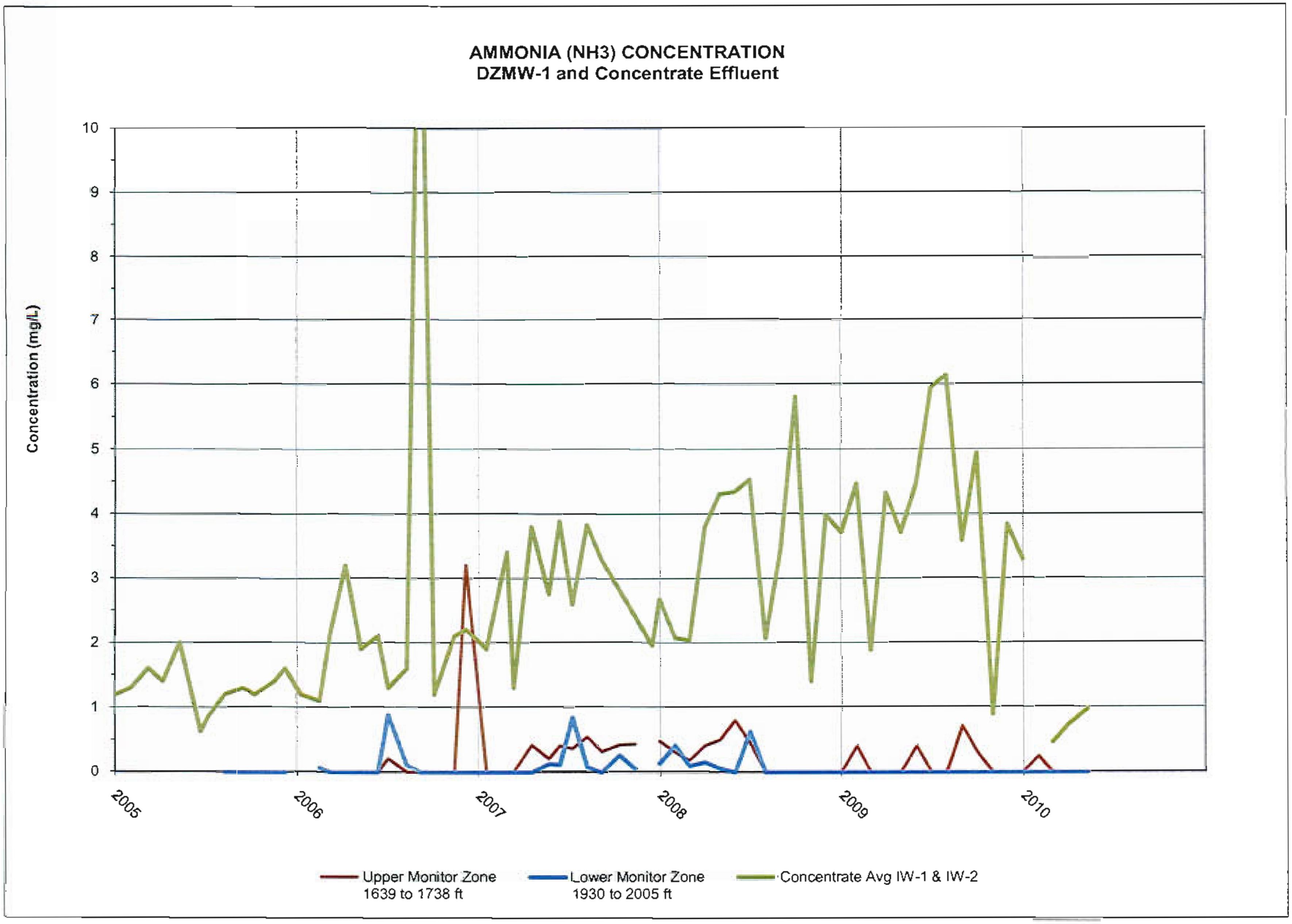
SPECIFIC CONDUCTANCE
DZMW-1 and Concentrate Effluent
60,000
50,000
40,000
30,000
20,000
10,000
0
Concentration (ug/L)
2005
2006
2007
2008
2009
2010
Upper Monitor Zone 1639 to 1738 ft
Lower Monitor Zone 1930 to 2005 ft
Concentrate Avg IW-1 & IW-2



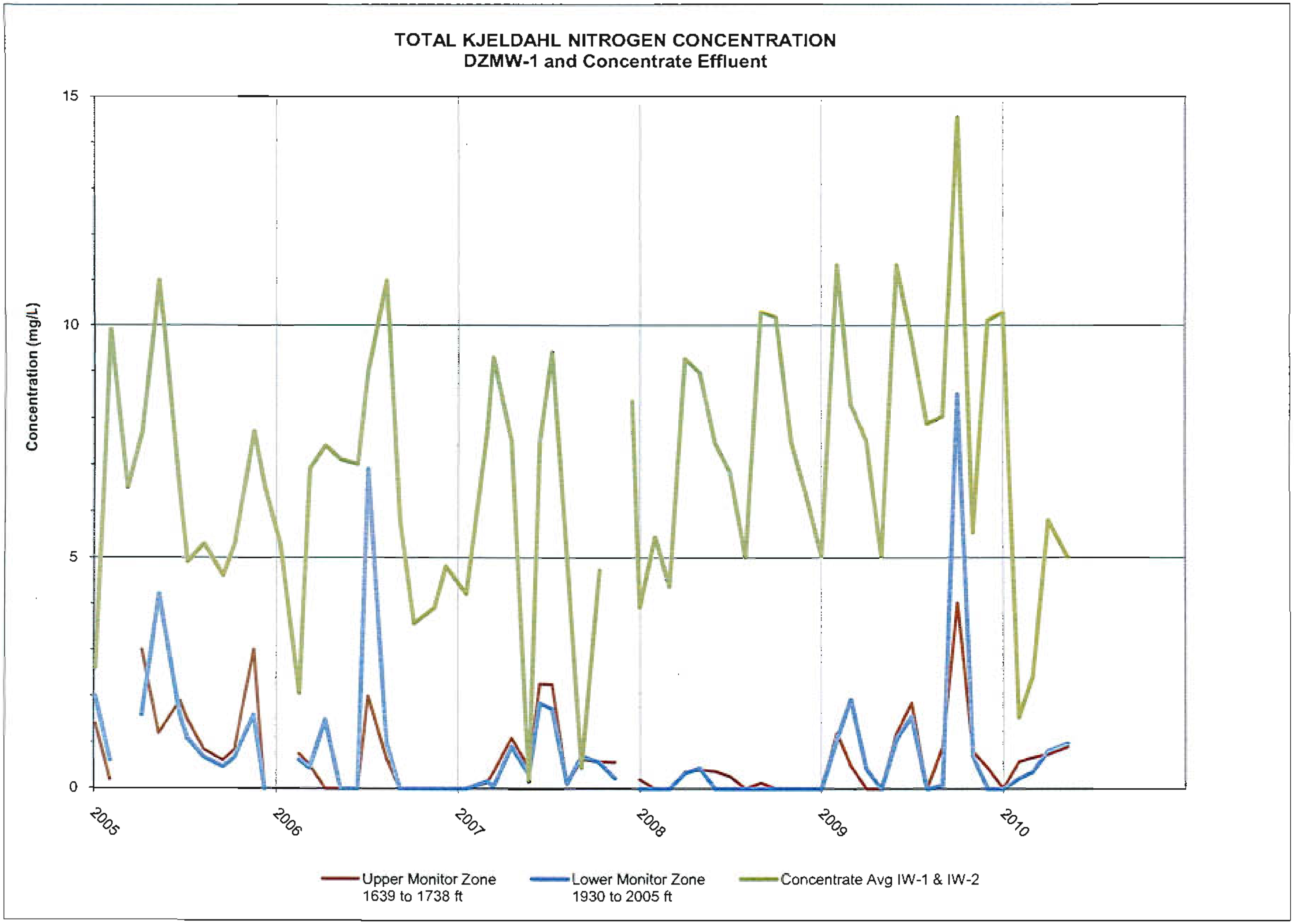
TOTAL DISSOLVED SOLIDS CONCENTRATION
DZMW-1 and Concentrate Effluent
Concentration (mg/L)
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
2005
2006
2007
2008
2009
2010
Upper Monitor Zone 1639 to 1738 ft
Lower Monitor Zone 1930 to 2005 ft
Concentrate Avg IW-1 & IW-2

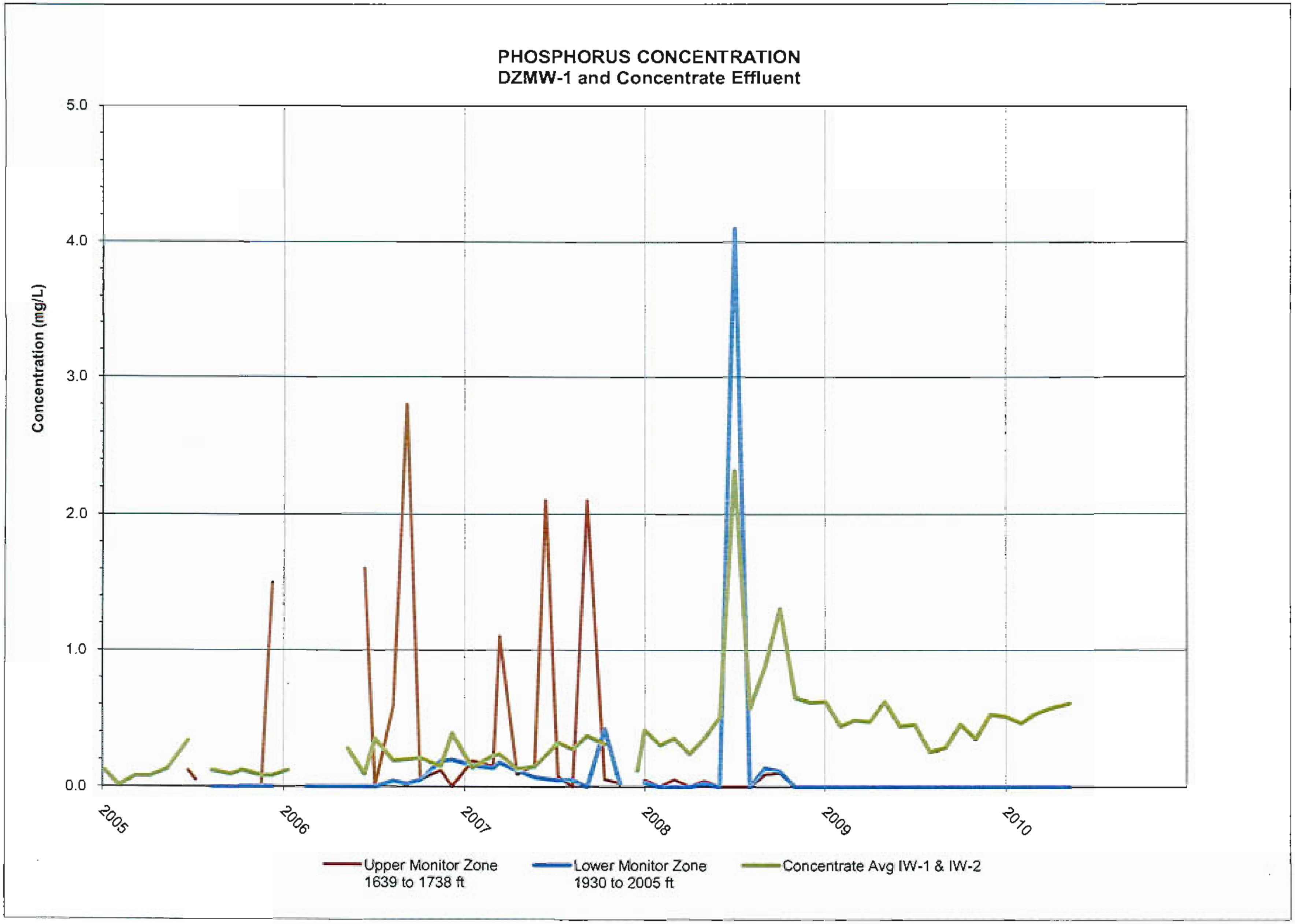


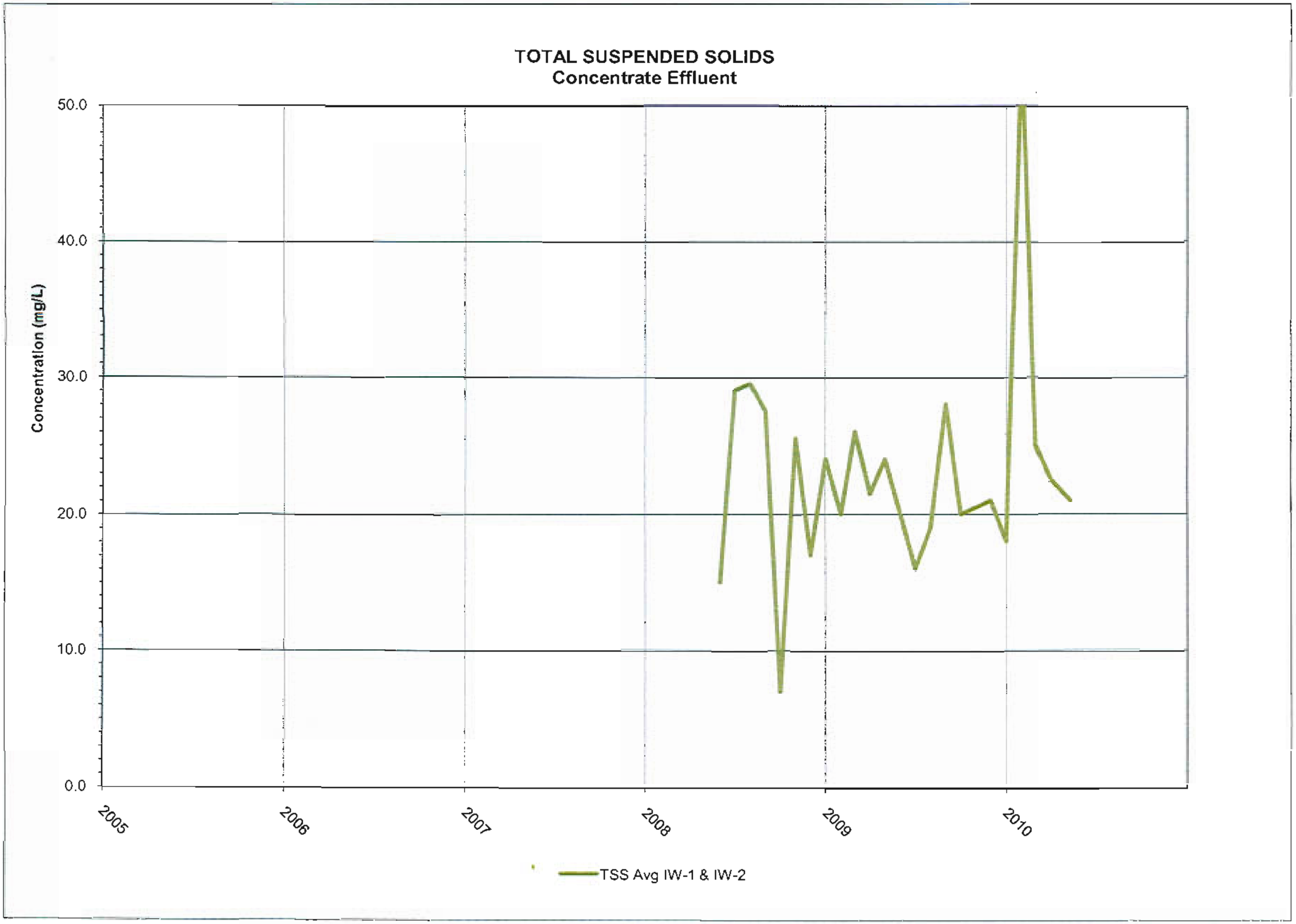
TEMPERATURE
DZMW-1 and Concentrate Effluent
Degrees (C)
100
80
60
40
20
0
2005
2006
2007
2008
2009
2010
Upper Monitor Zone 1639 to 1738 ft
Lower Monitor Zone 1930 to 2005 ft
Concentrate Avg IW-1 & IW-2



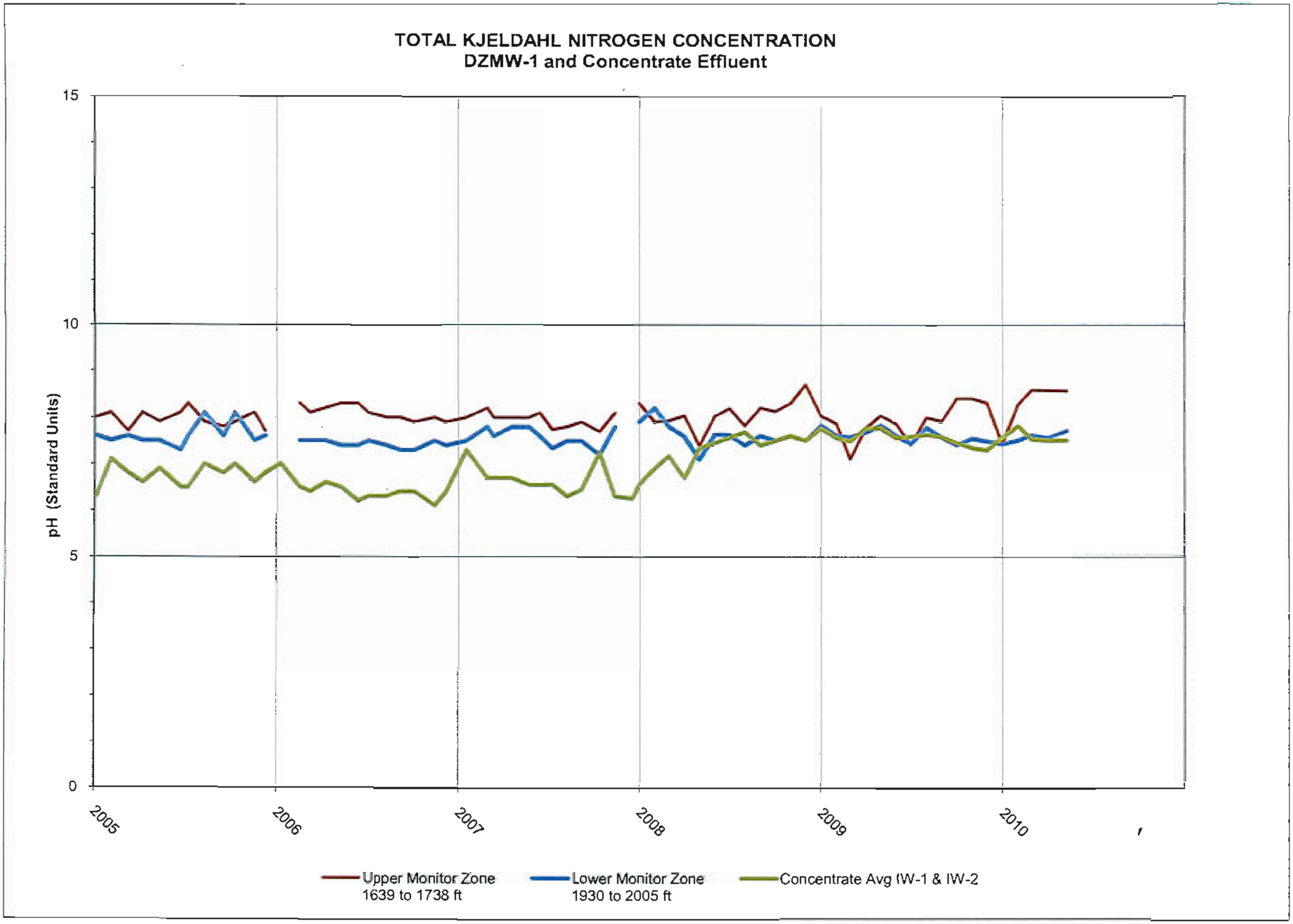
AMMONIA (NH3) CONCENTRATION
DZMW-1 and Concentrate Effluent
Concentration (mg/L)
10
9
8
7
6
5
4
3
2
1
0
2005
2006
2007
2008
2009
2010
Upper Monitor Zone 1639 to 1738 ft
Lower Monitor Zone 1930 to 2005 ft
Concentrate Avg IW-1 & IW-2

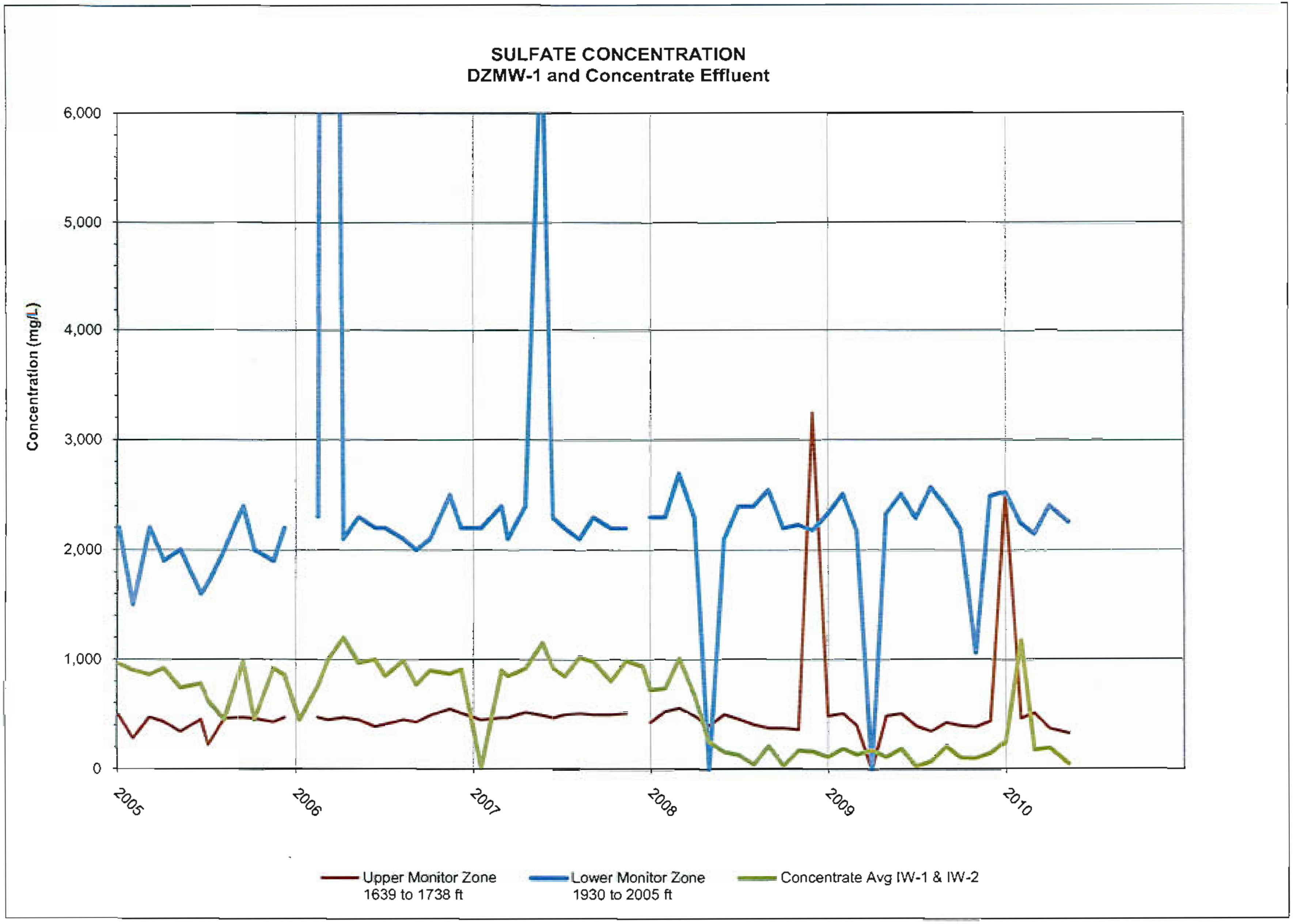

TOTAL KJELDAHL NITROGEN CONCENTRATION
DZMW-1 and Concentrate Effluent
Concentration (mg/L)
15
10
5
0
2005
2006
2007
2008
2009
2010
Upper Monitor Zone 1639 to 1738 ft
Lower Monitor Zone 1930 to 2005 ft
Concentrate Avg IW-1 & IW-2


PHOSPHORUS CONCENTRATION
DZMW-1 and Concentrate Effluent
Concentration (mg/L)
5.0
4.0
3.0
2.0
1.0
0.0
2005
2006
2007
2008
2009
2010
Upper Monitor Zone 1639 to 1738 ft
Lower Monitor Zone 1930 to 2005 ft
Concentrate Avg IW-1 & IW-2



TOTAL SUSPENDED SOLIDS
Concentrate Effluent
Concentration (mg/L)
50.0
40.0
30.0
20.0
10.0
0.0
2005
2006
2007
2008
2009
2010
TSS Avg IW-1 & IW-2


TOTAL KJELDAHL NITROGEN CONCENTRATION
DZMW-1 and Concentrate Effluent
15
10
5
0
pH (Standard Units)
2005
2006
2007
2008
2009
2010
Upper Monitor Zone
1639 to 1738 ft
Lower Monitor Zone
1930 to 2005 ft
Concentrate Avg IW-1 & IW-2


SULFATE CONCENTRATION
DZMW-1 and Concentrate Effluent
Concentration (mg/L)
6,000
5,000
4,000
3,000
2,000
1,000
0
2005
2006
2007
2008
2009
2010
Upper Monitor Zone 1639 to 1738 ft
Lower Monitor Zone 1930 to 2005 ft
Concentrate Avg IW-1 & IW-2