



March 20, 2015

Mr. Mark Harris
Supervisor, Power Plant NPDES Permitting
Florida Department of Environmental Protection
Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399

**RE: Renewal Application for NPDES Permit No. FL0002283
Gulf Power Company- Scholz Electric Generating Plant**

Dear Mr. Harris:

Gulf Power has enclosed the completed application and supporting documents to renew the NPDES permit for Scholz Electric Generating Plant pursuant to Section VIII.F.1 of permit FL0002283. The application consists of the following information:

- Attachment 1 – Form 1
- Attachment 2 – Form 2CS
- Attachment 3 – Form 2CG
- Attachment 4 – Plant Scholz Nutrient Study
- Attachment 5 – Form 2A for the onsite Domestic Wastewater Treatment Plant and Operation and Maintenance Performance Report
- Attachment 6 – Groundwater Summary Report as required by Condition III.8.

The required \$7,500 application fee is also enclosed.

Please feel free to contact Robert Jernigan of my staff at 850.444.6024 if you have any questions or need any additional information.

Sincerely,

James O. Vick
Environmental Affairs

cc: Kim Allen, FDEP Pensacola
Richard Markey, Gulf Power
Alan McLane, Gulf Power Plant Scholz
Roger Danley, Gulf Power Plant Scholz

RECEIVED

MAR 20 2015

Industrial Wastewater
Section

Scholz Electric Generating Plant

**NPDES Permit # FL0002283
Renewal Application**

March 2015



**Gulf Power Company
One Energy Place
Pensacola, Florida**

Attachment 1

Form 1



WASTEWATER FACILITY OR ACTIVITY PERMIT APPLICATION FORM 1 GENERAL INFORMATION

This form must be completed by all persons applying for a permit for a wastewater facility or activity under Chapter 62-620, F.A.C..

See Form 1 to determine which other application forms you will need.

DESCRIPTION OF PERMIT APPLICATION FORMS

Form 1 - General information. This booklet includes general information on applying for a permit for a wastewater facility or activity under Chapter 62-620, Florida Administrative Code (F.A.C.). **Form 1 is required for all permit applications.**

Form 2 - Specific information. This group of forms includes the specific information required for the type of wastewater facility or activity for which a permit is needed. Select the appropriate form(s) to be submitted with Form 1.

Form 2A - Domestic Wastewater Facilities.

Form 2B - Concentrated Animal Feeding Operations and Aquatic Animal Production Facilities.

Form 2CS -Industrial Wastewater Facilities (discharging process wastewater to surface waters).

Form 2CG -Industrial Wastewater Facilities (discharging process wastewater to ground water).

Form 2ES -Industrial Wastewater Facilities (discharging non-process wastewater to surface waters).

Form 2EG -Industrial Facilities (discharging non-process wastewater to ground water).

Form 2F - Stormwater Discharge Associated with Industrial Activity

Form 2CR -Non-Discharging/Closed Loop Recycle System.

SECTION A - GENERAL INSTRUCTIONS

Who Must Apply:

Persons who are or are going to discharge wastewater to waters of Florida or the United States must file for and be granted a permit under Sections 403.087, 403.088, or 403.0885, Florida Statutes (F.S.). Persons that discharge stormwater associated with industrial activity to surface waters of the state must file for and be granted a permit under Section 403.0885, F.S. There are severe penalties for discharging without a permit.

There are some exceptions to this requirement. Discharges of domestic sewage from vessels and discharges from properly operating marine engines are not required to have a permit under the laws listed above. However, discharges of rubbish, trash, garbage or other such materials discharged overboard do require permits. Vessels operated in a capacity other than as a means of transportation are required to have a permit if they are discharging to waters. These types include vessels used as an energy or mining facility, a storage facility, a seafood processing facility, or an anchored facility for the purpose of mineral or oil exploration or development.

The introduction of sewage, industrial wastes, or other pollutants into a domestic wastewater treatment facility does not need a permit under Sections 403.087, 403.088 or 403.0885, F.S. Persons discharging to permitted wastewater treatment facilities must comply with all applicable pretreatment standards. If a person has a plan or an agreement to switch from direct discharge into waters of the state to discharge to a domestic treatment facility, it does not relieve the person from obtaining a permit for the discharge until such time as the connection is made and the discharge is stopped.

Most discharges from agricultural and silvicultural activities to waters of the state do not require a permit under Sections 403.087, 403.088, or 403.0885, F.S. However, permits under those sections are required for discharges from concentrated animal feeding operations, concentrated aquatic animal production facilities, activities associated with approved aquaculture projects, and silvicultural point sources.

Where to Apply:

Permit applications must be filed with the Department of Environmental Protection (DEP) district office shown in Figure 1 for the county in which the wastewater facility or activity is located, except for permit applications for steam electrical generating power plants which are filed with the DEP office in Tallahassee. DEP offices are located at

Figure 1. State Map Showing DEP District Offices



NORTHWEST DISTRICT

160 Government Center, Ste 308
Pensacola, Florida 32501-5794
Phone No. (850) 595-8300

NORTHEAST DISTRICT

7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256-7577
Phone No. (904) 448-4300

SOUTHWEST DISTRICT

3804 Coconut Palm Drive
Tampa, Florida 33619-8318
Phone No. (813) 744-6100

CENTRAL DISTRICT

3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Phone No. (407) 894-7555

SOUTH DISTRICT

2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901
Phone No. (239) 332-6975

SOUTHEAST DISTRICT

400 North Congress Avenue
West Palm Beach, Florida 33401
Phone No. (561) 681-6600

When to Apply:

Applications must be filed with the appropriate DEP office 180 days before your current permit expires or 180 days before startup of a new or modified facility. If the submitted application is for a new facility or for a modification of an existing facility, the information required for describing the construction must be filed at least 90 days before construction begins. The DEP encourages applicants to file the materials describing the construction of a new facility or the modification of an existing facility as early as possible to avoid problems with delays in startup or facility redesign to achieve effluent limitations.

Federal regulations provide that a new source in the NPDES program may not be constructed or started to be constructed before the issuance of an operation permit. Because of this regulation, a permit application for a new source may need to be submitted well in advance of the required 180 days.

Fees:

Application fees are listed in Section 62-4.050, Florida Administrative Code (F.A.C.). An application will not be processed until the application fee has been paid. If the DEP determines that a permit should be issued for less than five years duration, the application fee will be pro rated.

If a permit is issued for a surface water discharge, the permittee will be assessed a regulatory and surveillance program fee annually. Those fees are listed in Section 62-4.052, F.A.C. Failure to pay the annual fee may result in revocation of the permit.

Availability of Information to the Public:

Information contained in these applications forms will, upon request, be made available to the public for inspection and copying. However, you may request confidential treatment for certain information which you may submit to supplement the information requested on these forms. Section 62-620.302, F.A.C., and 40 CFR 2 provide set forth the procedures for making the claim. No information on Forms 1 and 2A through 2EG may be claimed as confidential.

Completion of Forms:

Unless otherwise specified in instructions to the forms, each item in each form must be answered. To indicate that each item has been considered, enter "NA", for not applicable, if a particular item does not fit the circumstances or characteristics of your facility or activity.

If you have previously submitted information to the DEP which answers a question, you may either repeat the information in the space provided or attach a copy of the previous submission. **DO NOT WRITE "ON FILE"**. Some items in the form require narrative explanation. If more space is necessary to answer a question, attach a separate sheet entitled "Additional Information."

SECTION B - FORM 1 LINE-BY-LINE INSTRUCTIONS

This form must be completed by all applicants.

Completing This Form:

Please type or print in the underlined areas only. Some items have a limited number of spaces or characters so that your response may be entered into a computer program. Please do not exceed this maximum number with your response. Abbreviate if necessary to stay within the number of characters allowed for each item. Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response.

Item I

Space is provided at the upper right hand corner of Form 1 for insertion of your Facility Identification Number. If you have an existing facility, enter your identification number. If you don't know your identification number, please contact the appropriate DEP office which will provide you with your number. If your facility is new (not yet constructed), leave this item blank.

Item II

Answer each question to determine which supplementary forms you need to fill out. Be sure to check the glossary in Section C of these instructions for the legal definitions of any words you are not certain of their meaning.

If you answer "no" to every question, then you may not need a permit. However, you should call the appropriate district office to determine if you have made a correct determination. If you answer "yes" to any question, then you must complete and file the supplementary form by the deadline listed in Section A along with this form.

Item III

Enter the facility's official or legal name. Do not use a colloquial name.

Item IV

Give the name, title, and work telephone number of a person who is thoroughly familiar with the operation of the facility, with the facts reported in this application, and who can be contacted by reviewing offices if necessary.

Item V

Give the complete mailing address of the office where correspondence should be sent. This often is not the address used to designate the location of the facility or activity.

Item VI

Give the address or location of the facility identified in Item III of this form. If the facility lacks a street name or route number, give the most accurate alternative geographic information (for example, section number or quarter section number from county records or at intersection of Rts 426 and 22).

Item VII

List four, in descending order of significance, 4-digit standard industrial classification (SIC) codes which best describe your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words. These classifications may differ from the SIC codes describing the operation generating the discharge from the facility.

SIC code numbers are descriptions which may be found in the "Standard Industrial Classification Manual" prepared by the Executive Office of the President, Office of Management and Budget, which is available from the Government Printing Office, Washington, D.C. Your local library may have a copy of this publication which you may use. Use the current edition of the manual. If you have any questions concerning the appropriate SIC code for your facility, please contact the appropriate DEP district office.

Item VIII-A

Give the name, as it is legally referred to, of the person, firm, public organization, or any other entity which operates the facility described in this application. This may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation rather than the plant or site manager. Do not use a colloquial name.

Item VIII-B

Indicate whether the entity which operates the facility also owns it by marking the appropriate box.

Item VIII-C

Enter the appropriate letter to indicate the legal status of the operator of the facility. Indicate "public" for a facility solely owned by a local government, such as a city, town, county, etc.

Items VIII-D through H

Enter the telephone number and address of the operator identified in Item VIII-A.

Item IX

Indicate whether the facility is located on Indian Lands.

Item X

Give the number of each presently effective wastewater and stormwater permit issued to the facility listed in this application. List relevant federal, state, and local permits. **DO NOT LIST ALL YOUR PERMITS. LIST ONLY CURRENT ENVIRONMENTAL PERMITS RELATING TO THIS PROJECT.**

Item XI

Provide a topographic map or maps of the area extending at least to one mile beyond the property boundaries of the facility which clearly show the following:

The legal boundaries of the facility;

The location and serial number of each of your existing and proposed intake and discharge structures;

All hazardous waste management facilities;

Each well where you inject fluids underground; and

All springs and surface water bodies in the area, plus all drinking water wells within 1/4 mile of the facility which are identified in the public record or otherwise known to you.

If an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) map corresponding to the location.

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude at the nearest whole second. On all maps of rivers, show the direction of the current, and in tidal waters, show the directions of the ebb and flow tides. Use a 7-1/2 minute series map published by the U.S. Geological Survey. If a 7-1/2 minute series map has not been published for your facility site, then you may use a 15 minute series map from the U.S. Geological Survey. If neither a 7-1/2 nor 15 minute series map has been published for your facility site, use a plat map or other appropriate map, including all the requested information; in this case, briefly describe land uses in the map area (for example, residential, commercial).

You may trace your map from a geological survey chart, or other map meeting the above specifications. If you do, your map should bear a note showing the number or title of the map or chart from which it was traced. Include the names of nearby towns, water bodies, and other prominent points.

You may obtain a topographic map from:

Eastern Mapping Center
National Cartographic Information Center
U.S. Geological Survey
536 National Center
Reston, VA 22092

Item XII

Briefly describe the nature of your business (for example, products produced or services provided).

Item XIII

Section 403.161, F.S., provides severe penalties for submitting false information on this application form or any reports or records required by a permit, if issued. There are both civil and criminal penalties, in addition to the revocation of the permit.

Rule 62-620.305, F.A.C., requires that the application and any reports required by the permit, if issued, to be signed as follows:

- A. For a corporation, by a responsible corporate officer as described in Rule 62-620.305, F.A.C.;
- B. For partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- C. For a municipality, state, federal or other public facility, by a principal executive officer or elected official.

SECTION C - GLOSSARY

NOTE: This Glossary includes terms used in the instructions and in Forms 1, 2A through 2EG. If you have any questions concerning the meaning of any of these terms, please contact your DEP district office.

Activity means any action which results in a discharge of wastes into waters of the State or that is reasonably expected to be a source of water pollution.

Aliquot means a sample of specified volume used to make up a total composite sample.

Animal Feeding Operation means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

A. Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period; and

B. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

Two or more animal feeding operations under common ownership are a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

Animal Unit means a unit of measurement for any animal feeding operation calculated by adding the following number: The number of slaughter and feeder cattle multiplied by 1.0; plus the number of mature dairy cattle multiplied by 1.4; plus the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4; plus the number of sheep multiplied by 0.1; plus the number of horses multiplied by 2.0.

Application means the approved DEP standard forms for applying for a permit, including any approved additions, revisions, or modifications to the forms. Approved forms are numbered, Form 62-620.910, and have an effective date of October 1, 1994, or later.

Aquifer means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

Best Management Practices (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs include treatment requirements, operation procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Biological Monitoring Test means any test which include the use of aquatic algal, invertebrate, or vertebrate species to measure acute or chronic toxicity, and any biological or chemical measure of bioaccumulation.

Bypass means the intentional diversion of wastes from any portion of a treatment facility.

Concentrated Animal Feeding Operation means an animal feeding operation which meets the criteria set forth in Chapter 62-670, F.A.C.

Concentrated Aquatic Animal Production Facility means a hatchery, fish farm, or other facility which contains, grows or hold aquatic animals as set forth in Chapter 62-660, F.A.C.

Contact Cooling Water means water used to reduce temperature which comes into contact with a raw material, intermediate product, waste product other than heat, or finished product.

CWA means the Clean Water Act as amended, 33 U.S.C. 1251 et seq.

Dike means any embankment or ridge of either natural or manmade materials used to prevent the movement of liquids, sludges, solids, or other materials.

Discharge (of a Pollutant) means any addition of any pollutant or combination of pollutants to waters of the State from any point source; or any addition of any pollutant or combination of pollutants to the marine waters of the State from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes discharges into waters of the State from surface runoff which is collected or channelled by man; discharges through pipes, sewers, or other conveyances owned by the State, a municipality, or other person which do not lead to POTWs; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any indirect discharge.

Effluent Limitation mean any restriction imposed by the DEP on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the State.

Effluent Limitation Guideline means a regulation published under Section 304(b) of the Clean Water Act to adopt or revise effluent limitations.

EPA means the United States Environmental Protection Agency.

Existing Source or Existing Discharger means any source which is not a new source or a new discharger.

Facility or wastewater facility means any facility which can reasonably be expected to be a source of pollution and includes any or all of the following: a collection and transmission system, a wastewater treatment works, a reuse or disposal system, and a residuals management facility.

Ground Water means water below the land surface in a zone of saturation.

Indirect Discharger means an industrial discharger introducing pollutants to a publicly owned treatment works.

Injection Well mean a well into which fluids are injected.

MGD means millions of gallons per day.

Municipality means a city, village, town, borough, county, district, association, or other public body created by or under State law and have jurisdiction over disposal of sewage, industrial wastes, or other wastes.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, termination, monitoring and enforcing permits and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the CWA. The term includes a State program which has been authorized by EPA under 40 CFR Part 123.

New Discharger mean any building, structure, facility, or installation: (A) from which there is or may be a new or additional discharge of pollutants at a site at which on October 18, 1972, it had never discharged pollutants; (B) which has never received a finally effective NPDES permit for discharges at that site; and (C) which is not a "new source." This definition includes an indirect discharger which commences discharging into water of the State. It also includes any existing mobile point source, such as an offshore oil drilling rig, seafood processing vessel, or aggregate plant that begins discharging at a location for which it does not have an existing permit.

New Source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced: (A) after promulgation of standards of performance under Section 306 of the CWA which are applicable to such source; or (B) after proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

Non-Contact Cooling Water means water used to reduce temperature which does not come into direct contact with any raw material, intermediate produce, waste product (other than heat), or finished product.

Off-Site means any site which is not "on-site."

On-Site means on the same or geographically contiguous property which may be divided by public or private right(s)-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right(s)-of-way. Non-contiguous properties owned by the same person, but connected by a right-of-way which the person controls and to which the public does not have access, is also considered on-site property.

Operator means the person responsible for the overall operation of a facility.

Outfall means a point source.

Owner means the person who owns a facility or part of a facility.

Permit means an authorization, license, or equivalent control document issued by the State to implement the requirements of 40 CFR 122, 123, and 124 and Chapter 403, F.S.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended), heat, wrecked or discarded equipment, rocks, sand, cellar dirt and industrial, municipal, and agriculture waste discharged into water. It does NOT mean: (A) sewage from vessels; or (B) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

Privately Owned Treatment Works means any device or system which is used to treat domestic wastewater from any facility which is not a POTW.

Process Wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly Owned Treatment Works (POTW) means any device or system used in the treatment (including recycling and reclamation) of domestic sewage or industrial wastes of a liquid nature which is owned by a State or municipality. This definition includes any sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

Residuals means the solid, semisolid, or liquid residue generated during the treatment of domestic wastewater. Not included are solids removed from pump stations and lift stations, and screenings and grit removed from the headworks of domestic wastewater treatment facilities. Also not included are other solids removed prior to treatment of the residuals to meet the stabilization standards of Chapter 62-640, F.A.C., or ash generated during the incineration of residuals.

Sewage From Vessels means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under Section 312 of the CWA.

Sewage Sludge means residuals.

Silvicultural Point Source means any discernable, confined and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into water of the State.

Stormwater Discharge Associated with Industrial Activity is as defined in 40 CFR 122.26(b)(14).

Surface Impoundment or Impoundment means a facility or part of a facility which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

Toxic Pollutant means any pollutant listed as toxic under Section 307(a)(1) of the CWA.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Waters of the State means the waters defined in Section 403.031, F.S., and including waters of the United States to the seaward boundaries of the State.



WASTEWATER FACILITY OR ACTIVITY PERMIT APPLICATION FORM 1 GENERAL INFORMATION

I IDENTIFICATION NUMBER:

Facility ID FL0002283

II CHARACTERISTICS:

INSTRUCTIONS: Complete the questions below to determine whether you need to submit any permit application forms to the Department of Environmental Protection. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the blank in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements. See Section B of the instructions. See also, Section C of the instructions for definitions of the terms used here.

SPECIFIC QUESTIONS	YES	NO	FORM ATTACHED
A. Is this facility a domestic wastewater facility which results in a discharge to surface or ground waters?		X	
B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters?		X	
C. Does or will this facility (other than those describe in A. or B.) discharge process wastewater, or non-process wastewater regulated by effluent guidelines or new source performance standards, to surface waters?	X		2CS
D. Does or will this facility (other than those described in A. or B.) discharge process wastewater to ground waters?	X		2CG
E. Does or will this facility discharge non-process wastewater, not regulated by effluent guidelines or new source performance standards, to surface waters?		X	
F. Does or will this facility discharge non-process wastewater to ground waters?		X	
G. Does or will this facility discharge stormwater associated with industrial activity to surface waters?		X	
H. Is this facility a non-discharging/closed loop recycle system?		X	

III NAME OF FACILITY: (40 characters and spaces)

Scholz Electric Generating Plant

IV FACILITY CONTACT: (A. 30 characters and spaces)

A. Name and Title (Last, first, & title)	B. Phone (area code & no.)
Jernigan, Robert, Engineer	(850) 444-6024

V FACILITY MAILING ADDRESS: (A. 30 characters and spaces; B. 25 characters and spaces)

A. Street or P.O. Box: One Energy Place		
B. City or Town: Pensacola	State: FL	Zip Code: 32520

VI FACILITY LOCATION: (A. 30 characters and spaces; B. 24 characters and spaces; C. 3 spaces (if known); D. 25 characters and spaces; E. 2 spaces; F. 9 spaces)

A. Street, Route or Other Specific Identifier: 1460 Gulf Power Road		
B. County Name: Jackson	C. County Code (if known):	
D. City or Town: Sneads	E. State: FL	F. Zip Code: 32460

VII SIC CODES: (4-digit, in order of priority)

1. Code #: 4911	(Specify) Electric Serv	2. Code #:	(Specify)
3. Code #:	(Specify)	4. Code #:	(Specify)

VIII OPERATOR INFORMATION: (A. 40 characters and spaces; B. 1 character; C. 1 character (if other, specify); D. 12 characters; E. 30 characters and spaces; F. 25 characters and spaces; G. 2 characters; H. 9 characters)

A. Name: Gulf Power Company		B. Is the name in VIII A. the owner? ☒ Yes ☐ No	
C. Status of Operator: F = Federal; S = State; P = Private; O = Other; M = Public (other than F or S)	(code) P	(specify) Utility	D. Phone No.: 850-444-6024
E. Street or P. O. Box: One Energy Place			
F. City or Town: Pensacola		G. State: FL	H. Zip Code: 32520

IX INDIAN LAND: Is the facility located on Indian lands? ☐ Yes ☒ No

X EXISTING ENVIRONMENTAL PERMITS:

A. NPDES Permit No.	B. UIC Permit No.	C. Other (specify)	D. Other (specify)
FL0002283			

XI MAP: Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII NATURE OF BUSINESS (provide a brief description)

Electrical power generation

XIII CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

James O. Vick

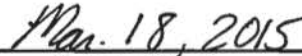
A. Name (type or print)



B. Signature

Environmental Affairs Director

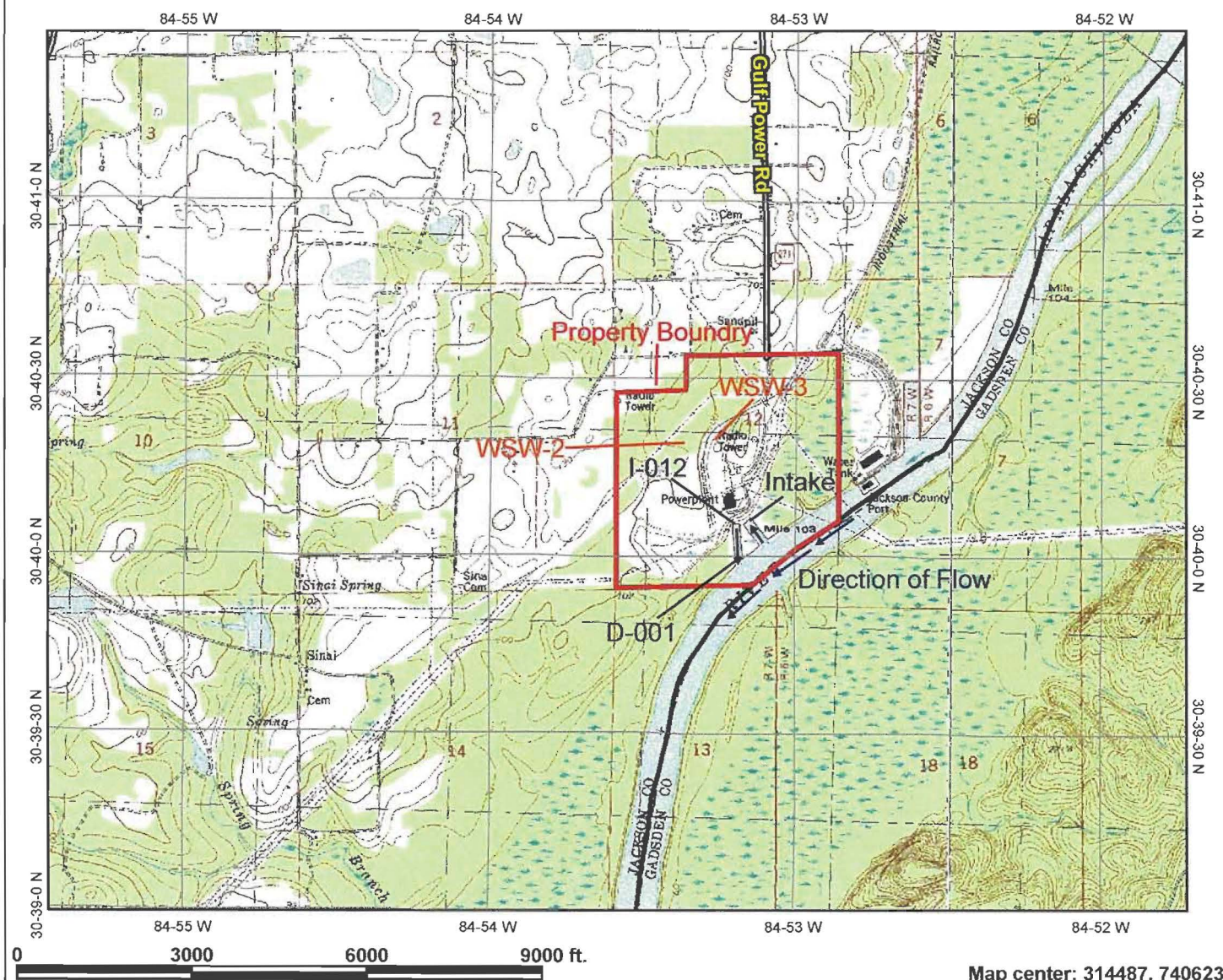
Official Title (type or print)



C. Date Signed



Scholz Boundary map



Legend

- Interstates
- US Highways
- State Highways
- Local Roads
- Cities (census places)
- Counties (generalized)

WSW-2: Water Supply Well #2

WSW-3: Water Supply Well #3

D-001: Combined Plant Discharge

I-012: Ashpond Flow to Discharge Canal



Scale: 1:32,044

Map center: 314487, 740623

[Florida Department of Environmental Protection] Disclaimer: This map is intended for display purposes only. It was created using data from different sources collected at different scales, with different levels of accuracy, and/or covering different periods of time.

Notes: Map produced on Mon Oct 19 10:43:32 EDT 2009

Attachment 2

Form 2CS



WASTEWATER APPLICATION FORM 2CS

PERMIT TO DISCHARGE PROCESS WASTEWATER
FROM NEW OR EXISTING
INDUSTRIAL WASTEWATER FACILITIES
TO SURFACE WATER

INSTRUCTIONS - FORM 2CS

This form must be completed by all applicants who check "yes" to Item II-C in DEP Form 62-620.910(1).

Public Availability of Submitted Information.

You may not claim as confidential any information required by this form or DEP Form 62-620.910(1), whether the information is reported on the forms or in an attachment. This information will be made available to the public upon request. Any information you submit to the Department which goes beyond that required by this form or DEP Form 62-620.910(1) you may claim as confidential, but claims for information which is effluent data will be denied. If you do not assert a claim of confidentiality at the time of submitting the information, the Department may make the information public without further notice to you. Claims of confidentiality must be in accordance with Rule 62-620.302, Florida Administrative Code.

Completeness

Your application will not be considered complete unless you answer every question on this form (DEP Form 62-620.910(5)) and on Form 1 (DEP Form 62-620.910(1)). If an item does not apply to you, enter "NA" (for "not applicable") to show that you considered the question. Also, you may need a Plan of Study (POS) to develop Water Quality Effluent Limitations (WQBEL) required by Rule 62-650, F.A.C. Please contact the Department for information.

Follow-up Requirements (for New or Substantially Modified Facilities)

Although you are now required to submit estimated data on this form, please note that no later than six months after you begin discharging from the proposed or substantially modified facility, you must complete and submit items VII and VIII of this Form 2CS (DEP Form 62-620.910(5)). However, you need not complete those portions of Item V requiring test which you have already performed under the discharge monitoring requirements of your permit.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

DEP ID Number

If you are applying for a renewal of an existing permit or for a substantial revision to an existing permit, fill in your DEP Identification Number at the top of each page of Form 2CS. You may copy this number directly from Item 1 of Form 1. If you are applying for a permit for a proposed facility, leave the DEP Identification Number blank. The Department will assign a number.

Item I

You may use the map you provided for Item XI of Form 1 to determine the latitude and longitude of each of your discharge locations.

Item II

Describe the design of each outfall, including construction materials used or to be used.

Item III

Describe the surface water body which will be or is receiving effluent from the wastewater facility.

Item IV

A. The line drawing should show generally the route taken by water in your facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and stormwater runoff. You may group similar operations into a single unit, labeled to correspond to the more detailed listing in Item III B. The water balance should show average flows. Show all significant losses of water to products, atmosphere, and discharge. You should use actual measurements whenever available; otherwise, use your best estimate.

B. List all sources of wastewater to each discharge point. Operations may be described in general terms (for example, "dye-making reactor" or "distillation tower"). You may estimate the flow contributed by each source if no data are available. For stormwater discharges you may estimate the average flow, but you must indicate the rainfall event upon which the estimate is based and the method of estimation. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Treatment units should be listed in order and you should select the proper code from Table 2CS-1 to fill in column 3-b for each treatment unit. Insert "XX" into column 3-b if no code corresponds to a treatment unit you list.

C. A discharge is intermittent unless it occurs without interruption during the operating hours of the facility, except for infrequent shut-downs for maintenance, process changes, or other similar activities. A discharge is seasonal if it occurs only during certain parts of the year. Fill in every applicable column in this item for each source of intermittent or seasonal discharges. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate and total volume in the "Max. Daily" columns (columns 4-a and 4-b). Report the average of all daily values measured during days when the discharge occurred within the last year in the "Long Term Avg." columns (columns 4-a and 4-b).

Item V

"Production" in this question refers to those goods which the proposed, substantially modified, or existing facility will produce or is producing, not to "wastewater" production. This information is only necessary where production-based new source performance standards (NSPS) or effluent guidelines apply to your facility. Your estimated production figures should be based on a realistic projection of actual daily production level (not design capacity) for each of the first three operating years of the facility. This estimate must be a long-term-average estimate (e.g., average production on an annual basis). If production will vary depending on long-term shifts in operating schedule or capacity, you may report alternate production estimates and the basis for the alternate estimates.

A. All NSPS and effluent guidelines promulgated by EPA appear in the Federal Register and are published annually in 40 CFR Subchapter N. A guideline applies to you if you have any operations contributing process wastewater in any subcategory covered by a BPT, BCT, or BAT guideline. If you are unsure whether you are covered by a promulgated NSPS or effluent guideline, check with your DEP district office (*Figure 1 in the Form 1 instructions*). You must check "yes" if an applicable NSPS or effluent guideline has been promulgated, even if the guideline limitations are being contested in court. If you believe that a promulgated NSPS or effluent guideline has been remanded for reconsideration by a court and does not apply to your operations, you may check "no."

B. An NSPS or effluent guideline is expressed in terms of production (*or other measure of operation*) if the limitation is expressed as mass of pollutant per operational parameter: for example, "pounds of BOD per cubic foot of logs from which bark is removed," or "pounds of TSS per megawatt hour of electrical energy consumed by smelting furnace." An example of a guideline not expressed in terms of a measure of operation is one which limits the concentration of pollutants.

C. This item must be completed only if you checked "yes" to Item V-B. The production information requested here is necessary to apply effluent guidelines to your facility and you cannot claim it as confidential. However, you do not have to indicate how the reported information was calculated. Report quantities in the units of measurement used in the applicable NSPS or effluent guideline. The production figures provided must be based on actual daily production and not on design capacity or on predictions of future operations. To obtain alternate limits under Rule 62-620.620(2)(b)3., F.A.C., you must define your maximum production capability and demonstrate to the Department that your actual production is substantially below maximum production capability and that there is a reasonable potential for an increase above actual production during the duration of the permit.

Item VI

- A. If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to the Department containing the same information.
- B. You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

Item VII (A, B, C, and D, including Tables VII-A, VII-B, and VII-C)

This item requires you to collect and report data on the pollutants discharged from each of your discharge points. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants, you may be required to mark "X" in the "Testing Required" column (*column 2-a, Part C*), and test (*sample and analyze*) and report the levels of the pollutants in your discharge whether or not you expect them to be present in your discharge. For all other, you must mark "X" in either the "Believe Present" column or the "Believe Absent" column (*columns 2-a or 2-b, Part B, and Columns 2-b or 2-c, Part C*) based on your best estimate, and test for those which you believe to be present. (*See specific instructions on the form and below for Parts A through D.*) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products and by-products, and any previous analyses known to you of your effluent or similar effluent. (*For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated stormwater runoff.*) If you would expect a pollutant to be present solely as a result of its presence in your intake water, you must mark "Believe Present" but you are not required to analyze for that pollutant. Instead, mark an "X" in the "Intake" column.

A. Reporting

All levels must be reported as concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages VII-1 to VII-10 if the separate sheets contain all the required information in a format which is consistent with pages VII-1 to VII-10 in spacing and in identification of pollutants and columns. (*For example, the data systems used in your GC/MS analysis may be able to print data in the proper format.*) Use the following abbreviations in the columns headed "Units" (*column 3, Part A, and Column 4, Parts B and C*).

Concentration
ppm - parts per million
mg/l - milligrams per liter
ppb - parts per billion
µg/l - micrograms per liter

Mass
lbs - pounds
ton - tons (English tons)
mg - milligrams
g - grams
kg - kilograms
T - tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless (1) an applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or (2) all approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium). If you measure only one daily value, complete only "Max. Daily Values" columns and insert "1" into the "Number of Analyses" column (*columns 2-a and 2-d, Part A, and column 3-a, 3-d, Parts B and C*). The Department may require you to conduct additional analyses to further characterize your discharges. For composite sample, the daily value is the total mass or average concentration found in a composite sample taken over the operating hours of the facility during a 24-hour period; for grab samples, the daily value is the arithmetic or flow-weighted total mass or average concentration found in a series of at least

four grab samples taken over the operating hours of the facility during a 24-hour period. If you measure more than one daily value for a pollutant and those values are representative of your waste stream, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Long Term Avg. Values" columns (*column 2-c, Part A, and column 3-c, Parts B and C*), and the total number of daily values under the "Number of Analyses" columns (*column 2-d, Part A, and columns 3-d, Parts B and C*). Also determine the average of all daily values taken during each calendar month, and report the highest average under the "Max. 30-day Values" columns (*column 2-c, Part A, and column 3-b, Parts B and C*).

B. Sampling

The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes which contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample. Sampling for metals that are hardness-dependent shall also include sampling for hardness.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples must be used. For all other pollutants 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds, or other impoundments with a retention period of greater than 24 hours. For stormwater discharges a minimum of one to four grab samples may be taken, depending on the duration of the discharge. One grab must be taken in the first hour (*or less*) of discharge, with one additional grab (*up to a minimum of four*) taken in each succeeding hour of discharge for discharges lasting four or more hours. The Department may waive composite sampling for any discharge point for which you demonstrate that use of an automatic sampler is infeasible and that a minimum of four grab samples will be representative of your discharge.

Grab and composite samples¹ are defined as follows:

Grab sample: An individual sample or at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

¹ Sampling requirements are periodically reviewed in light of recent research on testing methods. Upon completion of the review, changes to sampling requirements may be made. Before starting any required sampling or submitting past sampling to the Department, be sure that you have a current copy of 40 CFR Part 136 or Chapter 160, Florida Administrative Code.

Composite sample: A combination of at least 8 sample aliquots of a least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. For GC/MS Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. Four (4) (*rather than eight*) aliquots or grab samples should be collected for VOA. These four samples should be collected during actual hours of discharge over a 24-hour period and need not be flow proportioned. Only one analysis is required.

Data from samples taken in the past may be used if all data requirement are met; sampling was done no more than three years before submission; and all data are representative of the present discharge. Among the factors which would cause the data to be unrepresentative are significant changes in production level; changes in raw materials, processes, or final products; and changes in wastewater treatment. When EPA promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. The Department may promulgate new methods in Chapter 160, Florida Administrative Code, with the date when the new methods are to be used. Always be sure you have current copies of these two documents before you take samples or submit sampling data to the Department. If you have submitted data from past sampling, the Department may request additional information, including current quantitative data, if it is determined to be necessary to assess your discharges.

C. Analysis

You must use test methods promulgated in 40 CFR Part 136 or Chapter 160, Florida Administrative Code; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge if you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical discharge points, you may request permission from the Department to sample and analyze only one point and submit the results of the analysis for other substantially identical points. If your request is granted by the Department, or a separate sheet attached to the application form identify which point you did test, and describe why the other points you did not test are substantially identical to the point which you did test.

D. Reporting of Intake Data

You are not required to report data under the "Intake" columns unless you wish to demonstrate your eligibility for a "net" effluent limitation for one or more pollutants, that is, an effluent limitation adjusted by subtracting the average level of the pollutant(s) present in your intake water. To demonstrate your eligibility, under the "Intake" columns report the average of the results of analyses on your intake water (*If your water is treated before use, test the water after it is treated.*), and discuss the requirements for a new limitation with the appropriate district office.

Part VII-A

Part VII-A must be completed by all applicants for all discharge points including discharges of non-contact cooling water or storm runoff. However, at your request, the Department may waive the requirement to test for one or more of these pollutants, upon a determination that available information is adequate to support issuance of the permit with less stringent reporting requirements for these pollutants. Use composite samples for all pollutants in this Part, except use grab samples for pH and temperature. See the discussion in General Instructions to item VII for definitions of the columns in Part A. The "Long Term Avg. Values" column (*column 2-c*) and "Max. 30-day Values" column (*column 2-b*) are not compulsory but should be filled out if data are available.

Part VII-B

Part VII-B must be completed by all applicants for all discharge points, including points containing only non-contact cooling water or storm runoff. You must report quantitative data if the pollutant(s) in question is limited in an effluent limitation either directly or indirectly but expressly through a limitation on an indicator (*e.g., use of TSS as an indicator to control the discharge of iron and aluminum*). For other discharged pollutants you must provide quantitative data or explain their presence in your discharge. The Department will consider a request to eliminate the requirement to test for pollutants for an industrial category or subcategory. Your request must be supported by data representative of the industrial category or subcategory in question. The data must demonstrate that individual testing for each applicant is unnecessary, because the facilities in the category or subcategory discharge substantially identical levels of the pollutant or discharge the pollutant uniformly at sufficiently low levels. Use composite samples for all pollutants you analyze for in this part, except use grab samples for residual chlorine, oil and grease, and fecal coliform. The "Long Term Avg. Values" column (*column 2-c*) and "Max. 30-day Values" column (*column 2-b*) are not compulsory but should be filled out if data are available.

Part VII-C

Table 2CS-2 at the end of these instructions lists 34 primary industry categories. For each discharge point, if any of your processes which contribute wastewater falls into one of those categories, you must mark "X" in "Testing Required" column (*column 2-a*) and test for (1) all of the toxic metals, cyanide, and total phenols; and (2) the organic toxic pollutants contained in Table 2CS-3 as applicable to your category. The organic toxic pollutants are listed by GC/MS fractions on pages VII-4 to VII-10 in Part VII-C. The inclusion of total phenols in Part VII-C is not intended to classify total phenols as a toxic pollutant. When you determine which industry category you are in to find your testing requirements, you are not determining your category for any other purpose and you are not giving up your right to challenge your inclusion in that category before your permit is issued. For all other cases (*secondary industries, non-process wastewater discharge points, and GC/MS fractions that are not required*), you must mark "X" in either the "Believed Present" column or the "Believed Absent" column for each pollutant.

You must report quantitative data as follows:

For every pollutant you know or have reason to believe is present in your discharge in concentrations of 10 ppb or greater;

For acrolein; acrylonitrile; 2,4 dinitrophenol; and 2-methyl-4,6 dinitrophenol where you expect these four pollutants to be discharged in concentrations of 100 ppb or greater; and

For every pollutant expected to be discharged in concentrations less than the thresholds specified above. For pollutants in this last category, in lieu of quantitative data, you may briefly describe the reasons the pollutant is expected to be discharged.

You are required to mark "Testing Required" for dioxin if you use or manufacture one of the following compounds:

- (a) 2,4,5-trichlorophenoxy acetic acid, (2,4,5-T);
- (b) 2-(2,4,5-trichlorophenoxy) propanoic acid, (Silvex, 2,4,5-TP);
- (c) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate, (Erbon);
- (d) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate, (Ronnell);
- (e) 2,4,5-trichlorophenol, (TCP); or
- (f) hexachlorophene, (HCP).

If you mark "testing Required" or "Believed Present," you must perform a screening analysis for dioxin, using gas chromatography with an electron capture detector. A TCDD standard for quantitation is not required. Describe the results of this analysis in the space provided: for example, "no measurable baseline deflection at the retention time of TCDD" or "a measurable peak within the tolerances of the retention time of TCDD." The Department may require you to perform a quantitative analysis if you report a quantitative analysis if you report a positive result.

Part VII-D

List any pollutants in Table 2CS-3 that you believe to be present and explain why you believe them to be present. No analysis is required, but if you have analytical data, you must report it. For discharges of the hazardous substances listed in Table 2CS-4, you may be exempt from the reporting requirements of section 311 of the Clean Water Act. Please contact the Department for information.

Item VIII

This requirement applies to current use or manufacture of a toxic pollutant as an intermediate or final product or by-product. The Department may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Department has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item IX

This item is self explanatory.

Item X

This item is self explanatory.

Item XI

This item is self explanatory.

Item XII

There are severe penalties for submitting false information on this application form. Chapter 62-620, Florida Administrative Code, requires, in addition to the certification provided by a professional engineer, a certification from the owner or responsible authority of the facility as follows:

A. For a corporation: by a responsible corporate official. For purposes of this section, a responsible corporate official means (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 person or have gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

B. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

C. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. A principal executive officer includes the chief executive officer of the agency or a senior executive officer having the responsibility for the overall operations of a principal geographic unit of the agency, for example, a regional or district administrator.

**TABLE 2CS-1
CODES FOR TREATMENT UNITS**

PHYSICAL TREATMENT PROCESSES			
1-A	Ammonia Stripping	1-N	Microstraining
1-B	Dialysis	1-O	Mixing
1-C	Diatomaceous Earth Filtration	1-P	Moving Bed Filters
1-D	Distillation	1-Q	Multimedia Filtration
1-E	Electrodialysis	1-R	Rapid Sand Filtration
1-F	Evaporation	1-S	Reverse Osmosis (Hyperfiltration)
1-G	Flocculation	1-T	Screening
1-H	Flotation	1-U	Sedimentation (Settling)
1-I	Foam Fractionation	1-V	Slow Sand Filtration
1-J	Freezing	1-W	Solvent Extraction
1-K	Gas-Phase Separation	1-X	Sorption
1-L	Grinding (Comminutors)	1-Y	Percolation Pond
1-M	Grit Removal		
CHEMICAL TREATMENT PROCESSES			
2-A	Carbon Adsorption	2-G	Disinfection (<i>Ozone</i>)
2-B	Chemical Oxidation	2-H	Disinfection (<i>Other</i>)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (<i>Chlorine</i>)	2-L	Reduction
BIOLOGICAL TREATMENT PROCESSES			
3-A	Activated Sludge	3-E	Pre-Aeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application

Table 2CS-1, Codes for Treatment Units contd.

3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filter
OTHER PROCESSES			
4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection
SLUDGE TREATMENT AND DISPOSAL PROCESSES			
5-A	Aerobic Digestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Wet Oxidation
5-L	Gravity Thickening		

TABLE 2CS-2
TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY

INDUSTRY CATEGORY	GC/MS FRACTION ¹			
	Volatile	Acid	Base/Neutral	Pesticide
Adhesives and sealants	X	X	X	
Aluminum forming	X	X	X	
Auto and other laundries	X	X	X	X
Battery manufacturing	X		X	
Coal mining	X	X	X	X

Table 2CS-2, Testing Requirements for Organic Toxic Pollutants Industry Category contd.

Coil coating	X	X	X	
Copper forming	X	X	X	
Electric and electronic compounds	X	X	X	X
Electroplating	X	X	X	
Explosives manufacturing		X	X	
Foundries	X	X	X	
Gum and wood chemicals	X	X	X	X
Inorganic chemicals manufacturing	X	X	X	
Iron and steel manufacturing	X	X	X	
Leather tanning and finishing	X	X	X	X
Mechanical products manufacturing	X	X	X	
Nonferrous metals manufacturing	X	X	X	X
Ore mining	X	X	X	X
Organic chemicals manufacturing	X	X	X	X
Paint and ink formulation	X	X	X	X
Pesticides	X	X	X	X
Petroleum refining	X	X	X	X
Pharmaceutical preparations	X	X	X	
Photographic equipment and supplies	X	X	X	X
Plastic and synthetic materials manufacturing	X	X	X	X
Plastic processing	X			
Porcelain enameling	X		X	X
Printing and publishing	X	X	X	X
Pulp and paperboard mills	X	X	X	X
Rubber processing	X	X	X	
Soap and detergent manufacturing	X	X	X	
Steam electric power plants	X	X	X	
Textile mills	X	X	X	X
Timber products processing	X	X	X	X

¹The pollutants in each fraction are listed in Item VII-C . X = Testing required.

TABLE 2CS-3
TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES
REQUIRED TO BE IDENTIFIED BY APPLICANTS
IF EXPECTED TO BE PRESENT

<u>Toxic Pollutant</u>	<u>Hazardous Substances</u>	<u>Hazardous Substances</u>
Asbestos	2,2 Dichloropropionic acid	Monomethyl amine
	Dichlorvos	Naled
<u>Hazardous Substances</u>	Diethyl amine	Naphthenic acid
Acetaldehyde	Dimethyl amine	Nitrotoluene
Allyl alcohol	Dinitrobenzene	Parathion
Allylchloride	Diquat	Phenolsulfonate
Amyl acetate	Disulfoton	Phosgene
Aniline	Diuron	Propargite
Benzonitrile	Epichlorohydrin	Propylene oxide
Benzyl chloride	Ethion	Pyrethrins
Butyl acetate	Ethylene diamine	Quinoline
Butylamine	Formaldehyde	Resorcinol
Captan	Furfural	Strontium
Carbaryl	Guthion	Strychnine
Carbofuran	Isoprene	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
Carbon disulfide	Isopropanolamine	TDE (Terochlorodiphenyl ethane)
Chlopyrifos	dodecylbenzenesulfonate	2,4,5-TP [2-(2,4,5-Trichlorophenoxy)propanoic acid]
Coumpahos	Kelthane	Trichlorofon
Cresol	Kepone	Triethanolamine dodecylbenzenesulfonate
Crotonaldehyde	Malathion	Triethylamine
Cyclohexane	Mercaptodimethur	Uranium
2,4-D (2,4-Dichlorophenoxyacetic acid)	Methoxychlor	Vanadium
Diazinon	Methyl mercaptan	Vinyl acetate
Dicamba	Methyl methacrylate	Xylene
Dichlobenil	Methyl parathion	Xylenol
Dichlone	Mevinphos	Zirconium
	Mexacarbate	
	Monoethyl amine	

**TABLE 2CS-4
HAZARDOUS SUBSTANCES**

1. Acetaldehyde	49. Arsenic trisulfide	97. Cupric nitrate
2. Acetic acid	50. Barium cyanide	98. Cupric oxalate
3. Acetic anhydride	51. Benzene	99. Cupric sulfate
4. Acetone cyanohydrin	52. Benzoic acid	100. Cupric sulfate ammoniated
5. Acetyl bromide	53. Benzonitrile	101. Cupric tartrate
6. Acetyl chloride	54. Benzoyl chloride	102. Cyanogen chloride
7. Acrolein	55. Benzyl chloride	103. Cyclohexane
8. Acrylonitrile	56. Beryllium chloride	104. 2,4-D acid (2,4-Dichlorophenoxyacetic acid)
9. Adipic acid	57. Beryllium fluoride	105. 2,4-D esters (2,4-Dichlorophenoxyacetic acid esters)
10. Aldrin	58. Beryllium nitrate	106. DDT
11. Allyl alcohol	59. Butylacetate	107. Diazinon
12. Allyl chloride	60. n-Butylphthalate	108. Dicamba
13. Aluminum sulfate	61. Butylamine	109. Dichlobenil
14. Ammonia	62. Butyric acid	110. Dichlone
15. Ammonium acetate	63. Cadmium acetate	111. Dichlorobenzene
16. Ammonium benzoate	64. Cadmium bromide	112. Dichloropropane
17. Ammonium bicarbonate	65. Cadmium chloride	113. Dichloropropene
18. Ammonium bichromate	66. Calcium arsenate	114. Dichloropropene-Dichloropropane mix
19. Ammonium bifluoride	67. Calcium arsenite	115. 2,2-Dichloropropionic acid
20. Ammonium bisulfite	68. Calcium carbide	116. Dichlorvos
21. Ammonium carbamate	69. Calcium chromate	117. Dieldrin
22. Ammonium carbonate	70. Calcium cyanide	118. Diethylamine
23. Ammonium chloride	71. Calcium dodecylbenzenesulfonate	119. Dimethylamine
24. Ammonium chromate	72. Calcium hypochlorite	120. Dinitrobenzene
25. Ammonium citrate	73. Captan	121. Dinitrophenol
26. Ammonium fluoroborate	74. Carbaryl	122. Dinitrotoluene
27. Ammonium fluoride	75. Carbofuran	123. Diquat
28. Ammonium hydroxide	76. Carbon disulfide	124. Disulfoton
29. Ammonium oxalate	77. Carbon tetrachloride	125. Diuron
30. Ammonium silicofluoride	78. Chlordane	126. Dodecylbenzenesulfonic acid
31. Ammonium sulfamate	79. Chlorine	127. Endosulfan
32. Ammonium sulfide	80. Chlorobenzene	128. Endrin
33. Ammonium sulfite	81. Chloroform	129. Epichlorohydrin
34. Ammonium tartrate	82. Chloropyrifos	130. Ethion
35. Ammonium thiocyanate	83. Chlorosulfonic acid	131. Ethylbenzene
36. Ammonium thiosulfate	84. Chromic acetate	132. Ethylenediamine
37. Amyl acetate	85. Chromic acid	133. Ethylene dibromide
38. Aniline	86. Chromic sulfate	134. Ethylene dichloride
39. Antimony pentachloride	87. Chromous chloride	135. Ethylene Diaminetetracetic acid (EDTA)
40. Antimony potassium tartrate	88. Cobaltous bromide	136. Ferric ammonium citrate
41. Antimony tribromide	89. Cobaltous formate	137. Ferric ammonium oxalate
42. Antimony trichloride	90. Cobaltous sulfamate	138. Ferric chloride
43. Antimony trifluoride	91. Coumaphos	139. Ferric fluoride
44. Antimony trioxide	92. Cresol	140. Ferric nitrate
45. Arsenic disulfide	93. Crotonaldehyde	
46. Arsenic pentoxide	94. Cupric acetate	
47. Arsenic trichloride	95. Cupric acetoarsenite	
48. Arsenic trioxide	96. Cupric chloride	

HAZARDOUS SUBSTANCES (contd.)

141. Ferric sulfate
142. Ferrous ammonium sulfate
143. Ferrous chloride
144. Ferrous sulfate
145. Formaldehyde
146. Formic acid
147. Fumaric acid
148. Furfural
149. Guthion
150. Heptachlor
151. Hexachlorocyclopentadiene
152. Hydrochloric acid
153. Hydrofluoric acid
154. Hydrogen cyanide
155. Hydrogen sulfide
156. Isoprene
157. Isopropanolamine
dodecylbenzenesulfonate
158. Kelthane
159. Kepone
160. Lead acetate
161. Lead arsenate
162. Lead chloride
163. Lead fluoborate
164. Lead fluoride
165. Lead iodide
166. Lead nitrate
167. Lead stearate
168. Lead sulfate
169. Lead sulfide
170. Lead thiocyanate
171. Lindane
172. Lithium chromate
173. Malathion
174. Maleic acid
175. Maleic anhydride
176. Mercaptodimethur
177. Mercuric cyanide
178. Mercuric nitrate
179. Mercuric sulfate
180. Mercuric thiocyanate
181. Mercurous nitrate
182. Methoxychlor
183. Methyl mercaptan
184. Methyl methacrylate
185. Methyl parathion
186. Mevinphos
187. Mexacarbate
188. Monoethylamine
189. Monomethylamine
190. Naled
191. Naphthalene
192. Naphthenic acid
193. Nickel ammonium sulfate
194. Nickel chloride
195. Nickel hydroxide
196. Nickel nitrate
197. Nickel sulfate
198. Nitric acid
199. Nitrobenzene
200. Nitrogen dioxide
201. Nitrophenil
202. Nitrotoluene
203. Paraformaldehyde
204. Parathion
205. Pentachlorophenol
206. Phenol
207. Phosoene
208. Phosphoric acid
209. Phosphorus
210. Phosphorus oxychloride
211. Phosphorus pentasulfide
212. Phosphorus trichloride
213. Polychlorinated biphenyls (PCB)
214. Potassium arsenate
215. Potassium arsenite
216. Potassium bichromate
217. Potassium chromate
218. Potassium cyanide
219. Potassium hydroxide
220. Potassium permanganate
221. Propargite
222. Propionic acid
223. Propionic anhydride
224. Propylene oxide
225. Pyrethrins
226. Quinoline
227. Resorcinol
228. Selenium oxide
229. Silver nitrate
230. Sodium
231. Sodium arsenate
232. Sodium arsenite
233. Sodium bichromate
234. Sodium bifluoride
235. Sodium bisulfite
236. Sodium chromate
237. Sodium cyanide
238. Sodium dodecylbenzenesulfonate
239. Sodium fluoride
240. Sodium hydrosulfide
241. Sodium hydroxide
242. Sodium hypochlorite
243. Sodium methylate
244. Sodium nitrate
245. Sodium phosphate (dibasic)
246. Sodium phosphate (tribasic)
247. Sodium selenite
248. Strontium chromate
249. Strychnine
250. Styrene
251. Sulfuric acid
252. Sulfur monochloride
253. 2,4,5-T acid (2,4,5-
Trichlorophenoxy acetic acid)
254. 2,4,5-T amines (2,4,5-
Trichlorophenoxy acetic acid
amines)
255. 2,4,5-T esters (2,4,5-
Trichlorophenoxy acetic acid esters)
256. 2,4,5-T salts (2,4,5-
Trichlorophenoxy acetic acid salts)
257. 2,4,5-TP acid (2,4,5-
Trichlorophenoxy propanoic acid)
258. 2,4,5-TP acid esters (2,4,5-
Trichlorophenoxy propanoic acid
esters)
259. TDE (Tetrachlorodiphenyl ethane)
260. Tetraethyl lead
261. Tetraethyl pyrophosphate
262. Thallium sulfate
263. Toluene
264. Toxaphene
265. Trichlorofon
266. Trichloroethylene
267. Trichlorophenol
268. Triethanolamine
dodecylbenzenesulfonate
269. Triethylamine
270. Trimethylamine
271. Uranyl acetate
272. Uranyl nitrate
273. Vanadium pentoxide
274. Vanadyl sulfate
275. Vinyl acetate
276. Vinylidene chloride
277. Xylene
278. Xylenol
279. Zinc acetate
280. Zinc ammonium chloride

HAZARDOUS SUBSTANCES (contd.)

281. Zinc borate
282. Zinc bromide
283. Zinc carbonate
284. Zinc chloride
285. Zinc cyanide
286. Zinc fluoride

287. Zinc formate
288. Zinc hydrosulfite
289. Zinc nitrate
290. Zinc phenolsulfonate
291. Zinc phosphide
292. Zinc silcofluoride

293. Zinc sulfate
294. Zirconium nitrate
295. Zirconium potassium fluoride
296. Zirconium sulfate
297. Zirconium tetrachloride

FORM 2CS



WASTEWATER APPLICATION FOR PERMIT TO DISCHARGE PROCESS WASTEWATER FROM NEW OR EXISTING INDUSTRIAL WASTEWATER FACILITIES TO SURFACE WATERS

Facility I.D. Number: FL0002283

Please print or type information in the appropriate areas.

I OUTFALL LOCATION For each outfall, list the X,Y coordinates and the name of the receiving water.
(latitude/longitude to the nearest 15 seconds)

A. Outfall No. (List)	B. Latitude			C. Longitude			D. Name of Receiving Water
	Deg.	Min.	Sec.	Deg.	Min.	Sec.	
D-001	30	39	58	84	53	12	Apalachicola River
I-012	30	39	56	84	53	21	Internal Outfall
I-013	30	40	06	84	53	13	Internal Outfall

II OUTFALL DESIGN

A. Outfall No. (List)	B. Design Configuration and Construction Materials	C. Distance from shore	D. Diameter	E. Elevation of Discharge Invert (MSL)	F. Receiving Water Depth at POD (MSL)
D-001	Man-made canal	NA	NA	NA	NA
I-012	Ash Pond	Internal	Outfall	To D-001	NA
I-013	Domestic Wastewater Treatment Plant	Internal	Outfall	To I-012	NA

III RECEIVING WATER INFORMATION

For each surface water that will receive effluent, supply the following information:

A. Name of Receiving Water	B. Check One		C. Classification (See Ch. 62-302, F.A.C.)	D. Type of Receiving Water (canal, river, lake, etc.)
	Fresh	Salt or Brackish		
Apalachicola River	☒	☐	Class III	River
	☐	☐		
	☐	☐		
	☐	☐		
	☐	☐		
	☐	☐		

E. Minimum 7-day 10-year low flow of the receiving water at each outfall (if appropriate).

Not Applicable

F. Identify and describe the flow of effluent from each outfall to a major body of water. A suitably marked map or aerial photograph may be used.

Please see Attachment 2CS-1.

G. Do you request a mixing zone under Rule 62-4.244, F.A.C.? If yes, for what parameters or pollutants?

No mixing zone is requested.

IV FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B.

B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

Please see Attachment 2CS-1

B. For each outfall, provide a description of:

1. All operations contributing wastewater to the effluent; including process wastewater, sanitary wastewater, cooling water, and stormwater runoff;
2. The average flow contributed by each operation; and
3. The treatment received by the wastewater.

Use the space on the next page. Continue on additional sheets, if necessary.

(1) Outfall No. (List)	(2) Operation(s) Contributing Flow		(3) Treatment		
	(a) Operation (list)	(b) Avg. Flow & Units	(a) Description	(b) List Code from Table 2CS-1	
D-001	Once through condenser cooling water	43.9 MGD	Discharge to surface water	4-A	
	Ash Pond Overflow	0.62 MGD	sedimentation	1-U	
I-012	Ash sluice water	~0.54 MGD	Sedimentation	1-U	
	Building sumps	~0.36 MGD	sedimentation	1-U	
	Coal pile runoff/yard sumps	~0.38MGD	sedimentation	1-U	
	Treated domestic wastewater	~0.0004 MGD	Aerobic digestion,disinfection, dechlo	5-A, 2-F	2-E
I-013	Treated domestic wastewater	~0.0004 MGD	Aerobic digestion	5-A	
			Disinfection (chlorine)	2-F	
			Dechlorination	2-E	

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?
☐ Yes (complete the following table) ☒ No (go to D. below)

(1) Outfall No. (List)	(2)Operation(s) Contributing Flow(List)	(3) Frequency		(4) Flow					
		(a) Days per Week	(b) Months per Yr.	(a) Flow Rate (in mgd)		(b) Total Volume (specify with units)		(c) Duration (in days)	
		(specify avg.)	(specify avg.)	Long Term Avg.	Max. Daily	Long Term Avg.	Max. Daily		

D. Describe practices to be followed to ensure adequate wastewater treatment during emergencies such as power loss and equipment failures causing shutdown of pollution abatement equipment of the proposed/permitted facilities.

Please see Attachment 2CS-2

E. List the method(s) and location(s) of flow measurement.

Please see Attachment 2CS-2

V PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☒ Yes (complete Item V-B) ☐ No (go to Section VI)

B. Are the limitations in the applicable guideline expressed in terms of production (or other measure of operation)?

☐ Yes (complete Item V-C) ☒ No (go to Section VI)

C. If you answered "yes" to Item V-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. Affected Outfalls (list outfall nos.)
a. Quantity per Day	b. Units of Measure	c. Operation, Product, Materials, Etc. (specify)	

VI IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement order, enforcement compliance schedule letter, stipulations, court orders, and grant or loan conditions.

☐ Yes (complete the following table) ☒ No (go to Item VI-B)

1. Identification of Condition, Agreement, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	a. No.	b. Source of Discharge		a. Required	B. Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ Mark "X" if description of additional control programs is attached.

VII INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding--Complete one set of tables for each outfall -- Annotate the outfall number in the space provided. NOTE: Tables VII-A, VII-B, and VII-C are included on separate sheets number VII-1 through VII-9.

D. Use the space below to list any of the pollutants listed in Table 2CS-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. Pollutant	2. Source	1. Pollutant	2. Source

VIII POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item VII-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or by-product?

☐ YES (list all such pollutants below) ☒ NO (go to IX)

IX BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ YES (identify the test(s) and describe their purposes below) ☐ NO (go to Section X)

Chronic Toxicity tests were conducted at D-001 as part of the FDEP 5-year compliance inspection in February 2015.

X CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☒ YES (list the name, address, telephone number, and certification number of, and pollutants analyzed by each such laboratory or firm below) ☐ NO (go to Section XI)

A. Name	B. Address	C. Telephone (area code & no.)	D. Pollutants Analyzed (list)
Test America Laboratories, Inc. Cert# E81010	3355 McLemore Dr Pensacola, FL 32514	850.474.1001	All parameters except pH, TRC, temperature, And flow
TRAC Laboratories, Inc	14 S 14 th Street Pensacola, FL 32507	850.456.5836	Chronic Toxicity

XI CONNECTION TO REGIONAL POTW

- A. Indicate the relationship between this project and area regional planning for wastewater treatment. List steps to be taken for this industrial wastewater facility to become part of an area-wide wastewater treatment system.

Wastewater discharged from Plant Scholz consists mostly of once-through non-contact cooling water. The plant is located in a remote, rural location with no POTWs located in proximity to the plant. As a result, connection of Plant Scholz to a POTW is impractical.

XII-A CERTIFICATIONS FOR NEW OR MODIFIED FACILITIES

This is to certify the engineering features of this pollution control project have been designed by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department. It is also agreed that the undersigned, if authorized by the owner, will furnish the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

_____ Signature	_____ Company Name
_____ Name (please type)	_____ Address
_____ (Affix Seal)	_____ Florida Registration No.:
	_____ Telephone No.:
	_____ Date

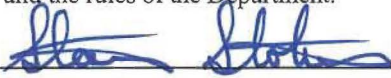
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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.

_____ Name & Official Title (Please type or print)	_____ Signature
_____ Telephone No. (area code & No.)	_____ Date Signed

XII-B CERTIFICATIONS FOR PERMIT RENEWALS

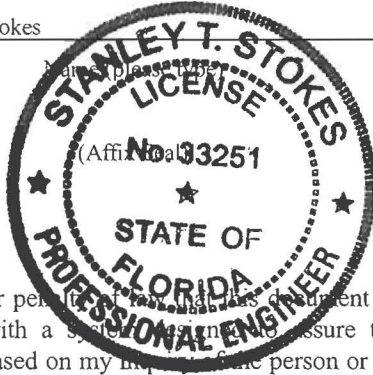
XII-B CERTIFICATIONS FOR PERMIT RENEWALS

This is to certify the engineering features of this pollution control project have been examined by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department.



Signature

Stanley T. Stokes



Environmental Consulting & Technology, Inc.

Company Name

Address 6440 Southpoint Parkway, Suite 130

Jacksonville, FL 32216

Florida Registration No.: 33251

Telephone No.: 904-296-0544

Date 3-16-2015

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 independent review of the information submitted, I am satisfied that 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.

James O. Vick, Director of Environmental Affairs

Name & Official Title (Please type or print)

850.444.6311

Telephone No. (area code & No.)



Signature

Mar. 18, 2015

Date Signed

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format. SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)					<2	366.69	1	mg/l	lbm/day	2.39	864.01	1
b. Chemical Oxygen Demand (COD)					18.1	6637.01	1	mg/l	lbm/day	17.7	6398.76	1
c. Total Organic Carbon (TOC)					3.97	1455.74	1	mg/l	lbm/day	3.99	1442.43	1
d. Total Suspended Solids (TSS)					3.2	1173.39	1	mg/l	lbm/day	<3.2	578.42	1
e. Total Nitrogen (as N)					0.754	276.48	1	mg/l	lbm/day	0.802	289.93	1
f. Total Phosphorus (as P)					0.03	11.00	1	mg/l	lbm/day	0.03	10.85	1
g. Ammonia (as N)					<0.016	2.93	1	mg/l	lbm/day	<0.016	2.89	1
h. Flow - actual or projected	Value		Value		Value 43.9 MGD		365			Value 43.3 MGD		365
i. Flow - design	Value		Value		Value					Value		
j. Specific Conductivity	Value		Value		Value					Value		
k. Temperature (winter)	Value		Value		Value 60.19		182	°C		Value 59.98		182
l. Temperature (summer)	Value		Value		Value 78.16		183	°C		Value 80.10		183
m. . pH	Min. 6.98	Max 8.10	Min.	Max.			53	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	☒	☐					<0.2	36.67	1	Mg/l	Lbm/day	<0.2	36.15	1
b. Chlorine, Total Residual	☐	☒								Mg/l	Lbm/day			
c. Color	☒	☐					1.5		1	Color units		27.6		1
d. Fecal Coliform	☐	☒					4		1	MPN/100 ml		6		1
e. Fluoride (16984-48-8)	☒	☐					<0.024	4.40	1	Mg/l	Lbm/day	<0.024	4.34	1
f. Nitrate-Nitrite (as N)	☒	☐					0.438	160.61	1	Mg/l	Lbm/day	0.443	160.15	1

: Item VII-B Contd.

Facility ID. Number FL0002283Outfall No. D-001

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	☒	☐					0.26	95.34	1	Mg/l	Lbm/day	0.26	93.99	1
h. Oil and grease	☐	☒					<2.44	447.36	1	Mg/l	Lbm/day	<2.24	404.89	1
i. Phosphorus, Total (as P) (7723-14-0)	☒	☐					0.03	11.00	1	Mg/l	Lbm/day	0.03	10.85	1
j. Radioactivity														
(1) Alpha, Total	☒	☐					<2.1 +/- 1.0		1	pCi/l		<2.2 +/- 1.1		1
(2) Beta, Total	☒	☐					4.4 +/- 2.1		1	pCi/l		<3.2 +/- 1.7		1
(3) Radium, Total	☒	☐					0.7 +/- 0.3		1	pCi/l		<0.3 +/- 0.2		1
(4) Radium 226, Total	☒	☐					<0.2 +/- 0.08		1	pCi/l		0.2 +/- 0.09		1
k. Sulfate (as SO ₄) (14808-79-8)	☒	☐					9.46	3468.85	1	mg/L	lbm/day	10.3	3723.57	1
l. Sulfide (as S)	☒	☐					<1	183.34	1	mg/L	lbm/day	<1	180.76	1
m. Sulfite (as SO ₃) (14265-45-3)	☒	☐					5	1833.43	1	mg/L	lbm/day	5	1807.56	1
n. Surfactants	☒	☐					<0.12	22.00	1	mg/l LAS MW 340	lbm/day	<0.12	21.69	1
o. Aluminum, Total (7429-90-5)	☒	☐					0.184	67.47	1	mg/L	lbm/day	0.167	60.37	1
p. Barium, Total (7440-39-3)	☒	☐					0.0193	7.08	1	mg/L	lbm/day	0.0189	6.83	1
q. Boron, Total (7440-42-8)	☒	☐					0.015	5.50	1	mg/L	lbm/day	0.015	5.42	1
r. Cobalt, Total (7440-48-4)	☐	☒					<0.003	0.55	1	mg/L	lbm/day	<0.003	0.54	1
s. Iron, Total (7439-89-6)	☒	☐					0.317	116.24	1	mg/L	lbm/day	0.288	104.12	1
t. Magnesium, Total (7439-95-4)	☒	☐					2.39	876.38	1	mg/L	lbm/day	2.41	871.24	1
u. Molybdenum, Total (7439-98-7)	☐	☒					<0.002	0.37	1	mg/L	lbm/day	<0.002	0.36	1
v. Manganese, Total (7439-96-5)	☒	☐					0.0512	18.77	1	mg/L	lbm/day	0.048	17.35	1
w. Tin, Total (7440-31-5)	☐	☒					<0.005	0.92	1	mg/L	lbm/day	<0.005	0.90	1
x. Titanium, Total (7440-32-6)	☒	☐					0.0015	0.55	1	mg/L	lbm/day	0.0015	0.54	1

Facility ID. Number: FL0002283 Outfall No. D-001

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	☒	☐	☐					<0.0023	0.42	1	mg/L	lbm/day	<0.0023	0.42	1
2M. Arsenic, Total (7723-14-0)	☒	☐	☐					<0.004	0.73	1	mg/L	lbm/day	<0.004	0.72	1
3M. Beryllium, Total (7440-41-7)	☒	☐	☐					<0.001	0.18	1	mg/L	lbm/day	<0.001	0.18	1
4M. Cadmium, Total (7440-43-9)	☒	☐	☐					<0.001	0.18	1	mg/L	lbm/day	<0.001	0.18	1
5M. Chromium, Total (7440-47-3)	☒	☐	☐					<0.002	0.37	1	mg/L	lbm/day	<0.002	0.36	1
6M. Copper, Total (7440-50-8)	☒	☐	☐					<0.002	0.37	1	mg/L	lbm/day	<0.002	0.362	1
7M. Lead, Total (7439-92-1)	☒	☐	☐					<0.002	0.37	1	mg/L	lbm/day	<0.002	0.36	1
8M. Mercury, Total (7439-97-6)	☒	☐	☐					0.000791	0.0003	1	ug/L	lbm/day	0.000544	0.0002	1
9M. Nickel, Total (7440-02-0)	☒	☐	☐					<0.003	0.55	1	mg/L	lbm/day	<0.003	0.54	1
10M. Selenium, Total (7782-49-2)	☒	☐	☐					<0.004	0.73	1	mg/L	lbm/day	<0.004	0.72	1
11M. Silver, Total (7440-22-4)	☒	☐	☐					<0.002	0.37	1	mg/L	lbm/day	<0.002	0.36	1
12M. Thallium, Total (7440-28-0)	☒	☐	☐					<0.0005	0.09	1	mg/L	lbm/day	<0.0005	0.09	1
13M. Zinc, Total (7440-66-6)	☒	☐	☐					<0.008	1.47	1	mg/L	lbm/day	<0.008	1.45	1
14M. Cyanide, Total (57-12-5)	☒	☐	☐					<0.005	0.92	1	mg/L	lbm/day	<0.005	0.90	1
15M. Phenols, Total	☒	☐	☐					0.0045	1.65	1	mg/L	lbm/day	0.0045	1.63	1
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	☐	☐	☒												
GC/MS FRACTION VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	☒	☐	☐					<10	1.83	1	ug/L	lbm/day	<10	1.81	1
2V. Acrylonitrile (107-13-1)	☒	☐	☐					<2.8	0.51	1	ug/L	lbm/day	<2.8	0.51	1

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1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
3V. Benzene (71-43-2)	☒	☐	☐					<0.38	0.07	1	ug/L	lbm/day	<0.38	0.07	1
4V. Bis (Chloromethyl) Ether (542-88-1)	☒	☐	☒												
5V. Bromoform (75-25-2)	☒	☐	☐					<0.71	0.13	1	ug/L	lbm/day	<0.71	0.13	1
6V. Carbon Tetrachloride (56-23-5)	☒	☐	☐					<0.5	0.09	1	ug/L	lbm/day	<0.5	0.09	1
7V. Chlorobenzene (108-90-7)	☒	☐	☐					<0.5	0.09	1	ug/L	lbm/day	<0.5	0.09	1
8V. Chlorodibromomethane (124-8-1)	☒	☐	☐					<0.5	0.09	1	ug/L	lbm/day	<0.5	0.09	1
9V. Chloroethane (74-00-3)	☒	☐	☐					<0.76	0.14	1	ug/L	lbm/day	<0.76	0.14	1
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	☒	☐	☐					<2	0.37	1	ug/L	lbm/day	<2	0.36	1
11V. Chloroform (67-86-3)	☒	☐	☐					<0.6	0.11	1	ug/L	lbm/day	<0.6	0.11	1
12V. Dichlorobromomethane (75-24-4)	☒	☐	☐					<0.5	0.09	1	ug/L	lbm/day	<0.5	0.09	1
13V. Dichlorodifluoromethane (75-71-8)	☒	☐	☐					<0.85	0.16	1	ug/L	lbm/day	<0.85	0.15	1
14V. 1,1-Dichloroethane (75-34-3)	☒	☐	☐					<0.5	0.09	1	ug/L	lbm/day	<0.5	0.09	1
15V. 1,2-Dichloroethane (107-06-2)	☒	☐	☐					<0.5	0.092	1	ug/L	lbm/day	<0.5	0.09	1
16V. 1,1-Dichloroethylene (75-35-4)	☒	☐	☐					<0.5	0.092	1	ug/L	lbm/day	<0.5	0.09	1
17V. 1,2-Dichloropropane (78-87-5)	☒	☐	☐					<0.5	0.09	1	ug/L	lbm/day	<0.5	0.09	1
18V. 1,3-Dichloropropylene (542-75-6)	☒	☐	☐					<1	0.18	1	ug/L	lbm/day	<1	0.181	1
19V. Ethylbenzene (100-41-4)	☒	☐	☐					<0.5	0.09	1	ug/L	lbm/day	<0.5	0.090	1
20V. Methyl Bromide (74-83-9)	☒	☐	☐					<0.98	0.18	1	ug/L	lbm/day	<0.98	0.18	1
21V. Methyl Chloride (74-87-3)	☒	☐	☐					<0.83	0.152	1	ug/L	lbm/day	<0.83	0.150	1
22V. Methylene Chloride (74-98-2)	☒	☐	☐					<3	0.550	1	ug/L	lbm/day	<3	0.542	1
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	☒	☐	☐					<0.5	0.092	1	ug/L	lbm/day	<0.5	0.09	1
24V. Tetrachloroethylene (127-18-4)	☒	☐	☐					<0.58	0.106	1	ug/L	lbm/day	<0.58	0.105	1

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Outfall No. D-001

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	☒	☐	☐					<0.7	0.128	1	ug/L	lbm/day	<0.7	0.127	1
26V. 1,2-Trans-Dichloroethylene (156-60-5)	☒	☐	☐					<0.5	0.092	1	ug/L	lbm/day	<0.5	0.090	1
27V. 1,1,2-Trichloroethane (71-55-6)	☒	☐	☐					<0.5	0.092	1	ug/L	lbm/day	<0.5	0.090	1
28V. 1,1,2-Trichloroethane (79-00-5)	☒	☐	☐					<0.5	0.092	1	ug/L	lbm/day	<0.5	0.090	1
29V. Trichloroethylene (79-01-6)	☒	☐	☐					<0.5	0.092	1	ug/L	lbm/day	<0.5	0.090	1
30V. Trichloro-fluoromethane (75-69-4)	☒	☐	☐					<0.52	0.095	1	ug/L	lbm/day	<0.52	0.094	1
31V. Vinyl Chloride (75-01-4)	☒	☐	☐					<0.5	0.092	1	ug/L	lbm/day	<0.5	0.090	1
1A. 2-Chlorophenol (95-57-8)	☒	☐	☐					<2.1	0.39	1	ug/L	lbm/day	<2.1	0.38	1
2A. 2,4-Dichlorophenol (120-83-2)	☒	☐	☐					<2.86	0.52	1	ug/L	lbm/day	<2.86	0.52	1
3A. 2,4-Dimethylphenol (105-67-9)	☒	☐	☐					<3.33	0.61	1	ug/L	lbm/day	<3.33	0.60	1
4A. 4,6-Dinitro-O-Cresol (534-53-1)	☒	☐	☐					<1.9	0.35	1	ug/L	lbm/day	<1.9	0.34	1
5A. 2,4-Dinitrophenol (51-28-5)	☒	☐	☐					<3.24	0.59	1	ug/L	lbm/day	<3.24	0.59	1
6A. 2-Nitrophenol (88-75-5)	☒	☐	☐					<0.619	0.11	1	ug/L	lbm/day	<0.619	0.11	1
7A. 4-Nitrophenol (100-02-7)	☒	☐	☐					<2	0.37	1	ug/L	lbm/day	<2	0.36	1
8A P-Chloro-M-Cresol (59-50-7)	☒	☐	☐					<3.62	0.66	1	ug/L	lbm/day	<3.62	0.65	1
9A Pentachlorophenol (87-86-5)	☒	☐	☐					<1.72	0.32	1	ug/L	lbm/day	<1.72	0.31	1
10A Phenol (108-95-2)	☒	☐	☐					<2.48	0.45	1	ug/L	lbm/day	<2.48	0.45	1
11A 2,4,5-Trichloro-phenol (88-06-2)	☒	☐	☐					<3.33	0.61	1	ug/L	lbm/day	<3.33	0.60	1
1B. Acenaphthene (63-32-9)	☒	☐	☐					<0.438	0.08	1	ug/L	lbm/day	<0.438	0.08	1
2B. Acenaphthylene (208-96-8)	☒	☐	☐					<0.533	0.10	1	ug/L	lbm/day	<0.533	0.10	1
3B. Anthracene (120-12-7)	☒	☐	☐					<0.4	0.07	1	ug/L	lbm/day	<0.4	0.07	1
4B. Benzidine (92-87-5)	☒	☐	☐					<19	3.48	1	ug/L	lbm/day	<19	3.43	1

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Outfall No. D-001

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	☒	☐	☐					<0.324	0.06	1	ug/L	lbm/day	<0.324	0.06	1
6B. Benzo (a) Pyrene (50-32-8)	☒	☐	☐					<0.41	0.08	1	ug/L	lbm/day	<0.41	0.07	1
7B. 3,4-Benzo-fluoranthene (205-99-2)	☒	☐	☐					<0.362	0.07	1	ug/L	lbm/day	<0.362	0.07	1
8B. Benzo (ghi) Perylene (191-24-2)	☒	☐	☐					<1.01	0.19	1	ug/L	lbm/day	<1.01	0.18	1
9B. Benzo (k) Fluoranthene (207-08-9)	☒	☐	☐					<0.514	0.09	1	ug/L	lbm/day	<0.514	0.09	1
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	☒	☐	☐					<0.657	0.12	1	ug/L	lbm/day	<0.657	0.12	1
11B. Bis (2-chloroethyl) Ether (111-44-4)	☒	☐	☐					<0.705	0.13	1	ug/L	lbm/day	<0.705	0.13	1
12B. Bis (2-Chloropropyl) Ether (102-60-1)	☒	☐	☐					<0.771	0.14	1	ug/L	lbm/day	<0.771	0.14	1
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	☒	☐	☐					<2.15	0.39	1	ug/L	lbm/day	<2.15	0.39	1
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	☒	☐	☐					<0.305	0.06	1	ug/L	lbm/day	<0.305	0.06	1
15B. Butyl Benzyl Phthalate (84-68-7)	☒	☐	☐					<0.657	0.12	1	ug/L	lbm/day	<0.657	0.12	1
16B. 2-Chloronaphthalene (91-58-7)	☒	☐	☐					<0.495	0.09	1	ug/L	lbm/day	<0.495	0.09	1
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	☒	☐	☐					<1.9	0.35	1	ug/L	lbm/day	<1.9	0.34	1
18B. Chrysene (218-01-9)	☒	☐	☐					<0.467	0.09	1	ug/L	lbm/day	<0.467	0.08	1
19B. Dibenzo (a,h) Anthracene (53-70-3)	☒	☐	☐					<1.11	0.20	1	ug/L	lbm/day	<1.11	0.20	1
20B. 1,2-Dichlorobenzene (95-50-1)	☒	☐	☐					<0.543	0.10	1	ug/L	lbm/day	<0.543	0.10	1
21B. 1,3-Dichlorobenzene (541-73-1)	☒	☐	☐					<0.448	0.08	1	ug/L	lbm/day	<0.448	0.08	1
22B. 1,4-Dichlorobenzene (106-46-7)	☒	☐	☐					<0.495	0.09	1	ug/L	lbm/day	<0.495	0.09	1
23B. 3,3'-Dichlorobenzidine (92-94-1)	☒	☐	☐					<2.48	0.45	1	ug/L	lbm/day	<2.48	0.45	1
24B. Diethyl Phthalate (84-66-2)	☒	☐	☐					<0.667	0.12	1	ug/L	lbm/day	<0.667	0.12	1
25B. Dimethyl Phthalate (131-11-3)	☒	☐	☐					<0.571	0.10	1	ug/L	lbm/day	<0.571	0.10	1
26B. Di-N-Butyl Phthalate (84-74-2)	☒	☐	☐					<2.57	0.47	1	ug/L	lbm/day	<2.57	0.46	1
27B. 2,4-Dinitrotoluene (121-14-2)	☒	☐	☐					<1.81	0.33	1	ug/L	lbm/day	<1.81	0.33	1
28B. 2,6-Dinitrotoluene (606-20-2)	☒	☐	☐					<1.81	0.33	1	ug/L	lbm/day	<1.81	0.33	1

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Outfall No. D-001

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	☒	☐	☐					<0.419	0.08	1	ug/L	lbm/day	<0.419	0.08	1
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	☒	☐	☐					<0.952	0.17	1	ug/L	lbm/day	<0.952	0.17	1
31B. Fluoranthene (206-44-0)	☒	☐	☐					<0.733	0.13	1	ug/L	lbm/day	<0.733	0.13	1
32B. Fluorene (86-73-7)	☒	☐	☐					<0.533	0.10	1	ug/L	lbm/day	<0.533	0.096	1
33B. Hexachlorobenzene (118-74-1)	☒	☐	☐					<0.238	0.04	1	ug/L	lbm/day	<0.238	0.04	1
34B. Hexachlorobutadiene (87-68-3)	☒	☐	☐					<3.43	0.63	1	ug/L	lbm/day	<3.43	0.62	1
35B. Hexachlorocyclopentadiene (77-47-4)	☒	☐	☐					<2.48	0.45	1	ug/L	lbm/day	<2.48	0.45	1
36B. Hexachloroethane (67-72-1)	☒	☐	☐					<4	0.73	1	ug/L	lbm/day	<4	0.72	1
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	☒	☐	☐					<0.971	0.18	1	ug/L	lbm/day	<0.971	0.18	1
38B. Isophorone (78-59-1)	☒	☐	☐					<0.543	0.10	1	ug/L	lbm/day	<0.543	0.10	1
39B. Naphthalene (91-20-3)	☒	☐	☐					<0.6	0.11	1	ug/L	lbm/day	<0.6	0.11	1
40B. Nitrobenzene (98-95-9)	☒	☐	☐					<0.524	0.10	1	ug/L	lbm/day	<0.524	0.09	1
41B. N-Nitrosodimethylamine (62-75-9)	☒	☐	☐					<3.33	0.61	1	ug/L	lbm/day	<3.33	0.60	1
42B. N-Nitrosodi-N-Propylamine (621-64-7)	☒	☐	☐					<3.14	0.58	1	ug/L	lbm/day	<3.14	0.57	1
43B. N-Nitro-sodiphenylamine (86-30-6)	☒	☐	☐					<0.448	0.08	1	ug/L	lbm/day	<0.448	0.08	1
44B. Phenanthrene (85-01-8)	☒	☐	☐					<0.39	0.07	1	ug/L	lbm/day	<0.39	0.07	1
45B. Pyrene (129-00-0)	☒	☐	☐					<1.04	0.19	1	ug/L	lbm/day	<1.04	0.19	1
46B. 1,2,4-Trichlorobenzene (120-82-1)	☒	☐	☐					<0.505	0.09	1	ug/L	lbm/day	<0.505	0.09	1
1P. Aldrin (309-00-2)	☒	☐	☐					<0.003	0.001	1	ug/L	lbm/day	<0.003	0.0005	1
2P. -BHC (319-84-6)	☒	☐	☐					<0.0036	0.001	1	ug/L	lbm/day	<0.0036	0.0007	1
3P. -BHC (319-85-7)	☒	☐	☐					<0.003	0.001	1	ug/L	lbm/day	<0.003	0.0005	1
4P. -BHC (58-89-9)	☒	☐	☐					<0.0027	0.000	1	ug/L	lbm/day	<0.0027	0.0005	1
5P. -BHC (319-86-8)	☒	☐	☐					<0.025	0.005	1	ug/L	lbm/day	<0.025	0.0045	1

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1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a . testing required	b. be- lieved present	c. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	☒	☐	☐					<0.13	0.024	1	ug/L	lbm/day	<0.13	0.0235	1
7P. 4,4'-DDT (50-29-3)	☒	☐	☐					<0.0039	0.001	1	ug/L	lbm/day	<0.0039	0.0007	1
8P. 4,4'-DDE (72-55-9)	☒	☐	☐					<0.004	0.001	1	ug/L	lbm/day	<0.004	0.0007	1
9P. 4,4'-DDD (72-54-8)	☒	☐	☐					<0.003	0.001	1	ug/L	lbm/day	<0.003	0.0005	1
10P. Dieldrin (60-57-1)	☒	☐	☐					<0.0059	0.001	1	ug/L	lbm/day	<0.0059	0.0011	1
11P. -Endosulfan (115-29-7)	☒	☐	☐					<0.003	0.001	1	ug/L	lbm/day	<0.003	0.0005	1
12P. -Endosulfan (115-29-7)	☒	☐	☐					<0.0074	0.001	1	ug/L	lbm/day	<0.0074	0.0013	1
13P. Endosulfan Sulfate (1031-07-8)	☒	☐	☐					<0.0021	0.0004	1	ug/L	lbm/day	<0.0021	0.0004	1
14P. Endrin (72-20-8)	☒	☐	☐					<0.003	0.001	1	ug/L	lbm/day	<0.003	0.0005	1
15P. Endrin Aldehyde (7421-92-4)	☒	☐	☐					<0.0028	0.001	1	ug/L	lbm/day	<0.0028	0.0005	1
16P. Heptachlor (76-44-8)	☒	☐	☐					<0.0031	0.001	1	ug/L	lbm/day	<0.0031	0.0006	1
17P. Heptachlor Epoxide (1024-57-3)	☒	☐	☐					<0.0032	0.001	1	ug/L	lbm/day	<0.0032	0.0006	1
18P. PCB-1242 (53469-21-9)	☒	☐	☐					<0.18	0.033	1	ug/L	lbm/day	<0.18	0.0325	1
19P. PCB-1254 (11097-69-1)	☒	☐	☐					<0.31	0.057	1	ug/L	lbm/day	<0.31	0.0560	1
20P. PCB-1221 (11104-28-2)	☒	☐	☐					<0.22	0.040	1	ug/L	lbm/day	<0.22	0.0398	1
21P. PCB-1232 (11141-16-5)	☒	☐	☐					<0.41	0.075	1	ug/L	lbm/day	<0.41	0.0741	1
22P. PCB-1248 (12672-29-6)	☒	☐	☐					<0.02	0.004	1	ug/L	lbm/day	<0.02	0.0036	1
23P. PCB-1260 (11096-82-5)	☒	☐	☐					0.034	0.012	1	ug/L	lbm/day	0.034	0.0123	1
24P. PCB-1016 (12674-11-2)	☒	☐	☐					<0.048	0.009	1	ug/L	lbm/day	<0.048	0.0087	1
25P. Toxaphene (8001-35-2)	☒	☐	☐					<0.4	0.073	1	ug/L	lbm/day	<0.4	0.0723	1

**Plant Scholz NPDES Permit Renewal Application
Attachment 2CS-1**

SECTION III-F (page 2CS-17): Identify and describe the flow of effluent from each outfall to a major body of water. A suitably marked map or aerial photograph may be used.

See attached map for outfall locations. The facility's combined plant discharge (Outfall D-001), which consists of once-through cooling water and ash pond overflow, is discharged to the Apalachicola River via a man-made, 850-foot long canal. Ash pond overflow (Outfall I-012) consists of ash sluice water, building sumps (including water softener regeneration wastewater, boiler blowdown, auxiliary equipment cooling water, and air preheater wash water), coal pile runoff, yard sumps, and treated domestic wastewater. Treated domestic wastewater enters the ash pond (Outfall I-013) following secondary treatment via the facility's package wastewater treatment plant.

SECTION III-G (page 2CS-17): Do you request a mixing zone under Rule 62-4.2444, F.A.C.? If yes, for what parameters or pollutants?

Gulf Power does not request a mixing zone.

**Plant Scholz NPDES Permit Renewal Application
Attachment 2CS-2**

SECTION IV-D (page 2CS-19): Describe practices to be followed to ensure adequate wastewater treatment during emergencies such as power loss and equipment failures causing shutdown of pollution abatement equipment of the proposed/permitted facilities.

Back up pumps are available for facility sumps. Question is not applicable for wastewater flows entering ash pond where the method of treatment is sedimentation.

SECTION IV-E (page 2CS-19). List the method(s) and location(s) of flow measurement.

Once-through cooling water flow is calculated using intake pumps logs. Ash pond overflow (Outfall I-012) is calculated using the v-notch weir located at the ash pond discharge weir. Domestic wastewater treatment plant effluent (Outfall I-013) is measured at the wastewater treatment outlet box via flow meter.

Plant Scholz – 2015 NPDES Permit Renewal Aerial

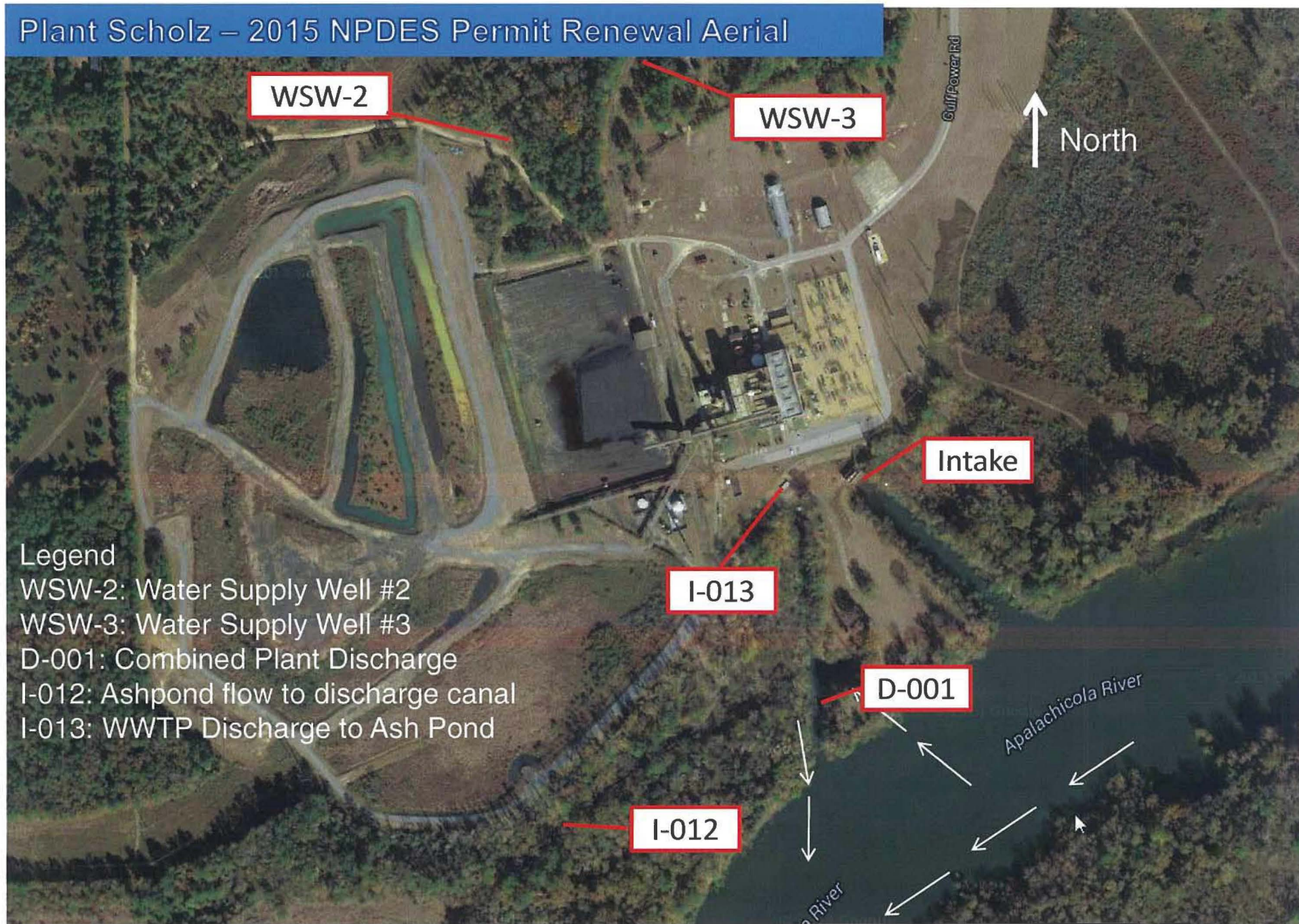


FIGURE 1. PLANT SCHOLZ SCHEMATIC CLEAR WATER FLOW DIAGRAM

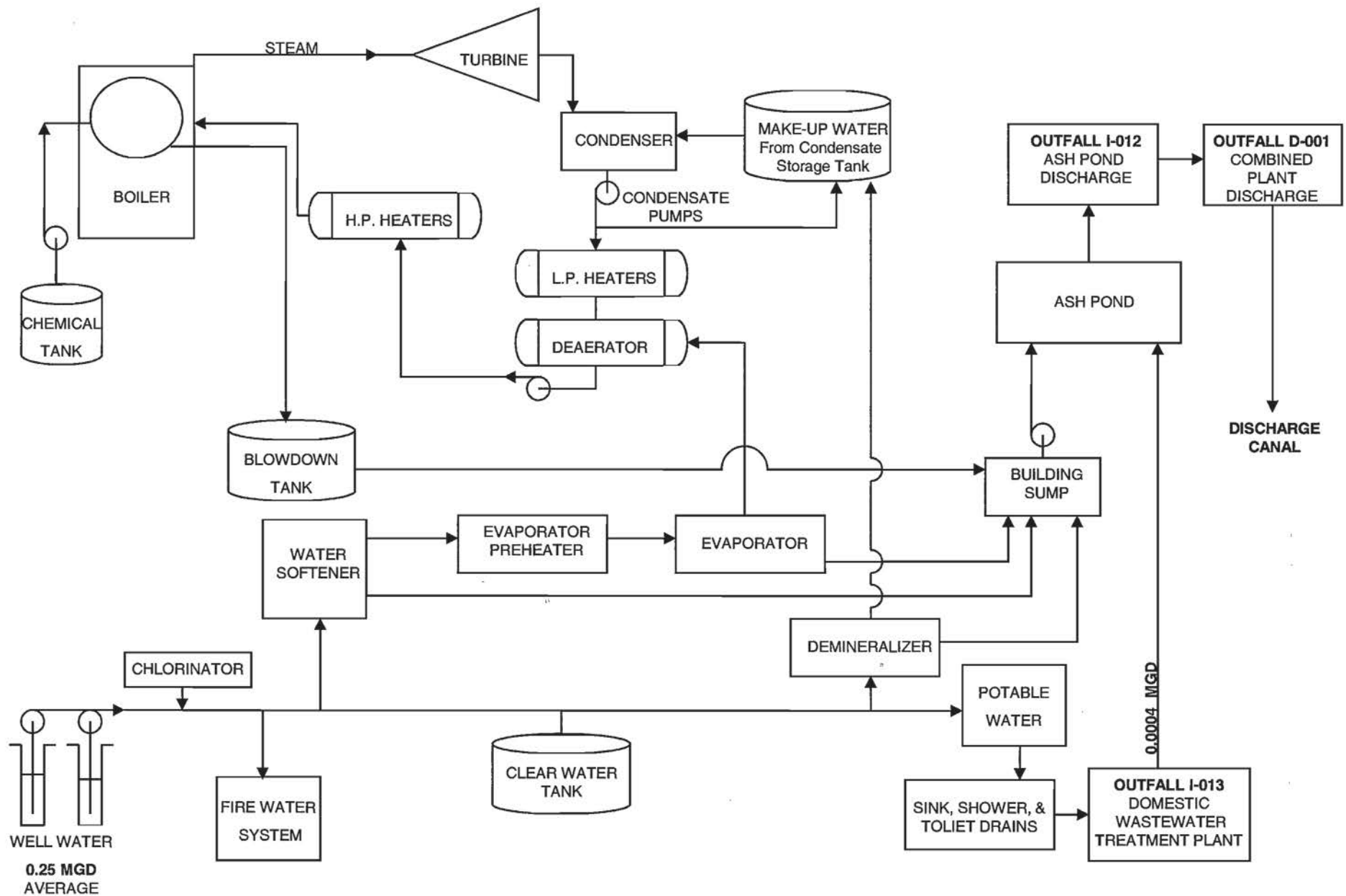
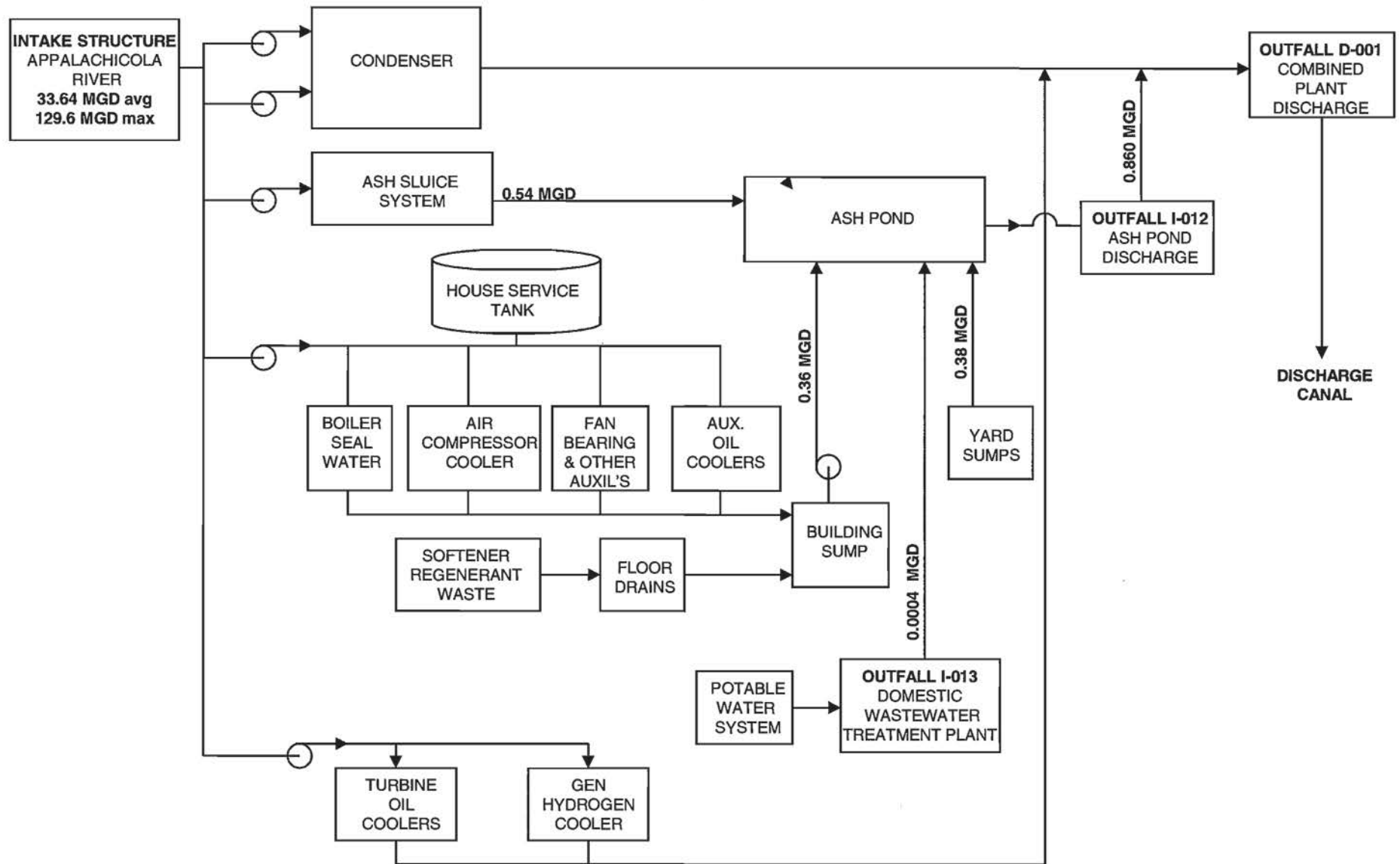


FIGURE 2. PLANT SCHOLZ RIVER WATER FLOW DIAGRAM



Attachment 3

Form 2CG



WASTEWATER APPLICATION FORM 2CG

PERMIT TO DISCHARGE PROCESS WASTEWATER
FROM NEW OR EXISTING
INDUSTRIAL WASTEWATER FACILITIES
TO GROUND WATER

INSTRUCTIONS - FORM 2CG

This form must be completed by all applicants who check "yes" to Item II-D in DEP Form 62-620.910(1) (Form 1).

Public Availability of Submitted Information.

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. This information will be made available to the public upon request. Any information you submit to the Department which goes beyond that required by this form or Form 1 you may claim as confidential, but claims for information which is effluent data will be denied. If you do not assert a claim of confidentiality at the time of submitting the information, the Department may make the information public without further notice to you. Claims of confidentiality must be in accordance with Rule 62-620.302, Florida Administrative Code.

Completeness

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" (for "not applicable") to show that you considered the question. Also, you may need a Ground Water Monitoring Plan (GWMP) required by Rule 62-522.600, Florida Administrative Code. Please contact the Department for more information.

Follow-up Requirements (for New or Substantially Modified Facilities)

Although you are now required to submit estimated data on this form, please note that no later than six months after you begin discharging from the proposed or substantially modified facility, you must complete and submit items V and VI of this Form 2CG. However, you need not complete those portions of Item V requiring test which you have already performed under the discharge monitoring requirements of your permit.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

DEP ID Number

If you are applying for a renewal of an existing permit or for a substantial revision to an existing permit, fill in your DEP Identification Number at the top of each page of Form 2CG. You may copy this number directly from Item 1 of Form 1. If you are applying for a permit for a proposed facility, leave the DEP Identification Number blank. The Department will assign a number.

Item I

You may use the map you provided for Item XI of Form 1 to determine the latitude and longitude of each of your discharge locations.

Item II

Describe any land application of effluent.

Item III

A. The line drawing should show generally the route taken by water in your facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and stormwater runoff. You may group similar operations into a single unit, labeled to correspond to the more detailed listing in Item III B. The water balance should show average flows. Show all significant losses of water to products, atmosphere, and discharge. You should use actual measurements whenever available; otherwise, use your best estimate.

B. List all sources of wastewater to each discharge point. Operations may be described in general terms (for example, "dye-making reactor" or "distillation tower"). You may estimate the flow contributed by each source if no data are available. For stormwater discharges you may estimate the average flow, but you must indicate the rainfall event upon which the estimate is based and the method of estimation. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Treatment units should be listed in order and you should select the proper code from Table 2CG-1 to fill in column 3-b for each treatment unit. Insert "XX" into column 3-b if no code corresponds to a treatment unit you list.

C. A discharge is intermittent unless it occurs without interruption during the operating hours of the facility, except for infrequent shut-downs for maintenance, process changes, or other similar activities. A discharge is seasonal if it occurs only during certain parts of the year. Fill in every applicable column in this item for each source of intermittent or seasonal discharges. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate and total volume in the "Max. Daily" columns (columns 4-a and 4-b). Report the average of all daily values measured during days when the discharge occurred within the last year in the "Long Term Avg." columns (columns 4-a and 4-b).

Item IV

A. If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to the Department containing the same information.

B. You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

Item V (A, B, C, and D, including Tables V-A, V-B, and V-C)

This item requires you to collect and report data on the pollutants discharged from each of your discharge points. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants, you may be required to mark "X" in the "Testing Required" column (*column 2-a, Part C*), and test (*sample and analyze*) and report the levels of the pollutants in your discharge whether or not you expect them to be present in your discharge. For all other, you must mark "X" in either the "Believe Present" column or the "Believe Absent" column (*columns 2-a or 2-b, Part B, and Columns 2-b or 2-c, Part C*) based on your best estimate, and test for those which you believe to be present. (*See specific instructions on the form and below for Parts A through D.*) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products and by-products, and any previous analyses known to you of your effluent or similar effluent. (*For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated stormwater runoff.*) If you would expect a pollutant to be present solely as a result of its presence in your intake water, you must mark "Believe Present" but you are not required to analyze for that pollutant. Instead, mark an "X" in the "Intake" column.

A. Reporting

All levels must be reported as concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages V-1 to V-10 if the separate sheets contain all the required information in a format which is consistent with pages V-1 to V-10 in spacing and in identification of pollutants and columns. (*For example, the data systems used in your GC/MS analysis may be able to print data in the proper format.*) Use the following abbreviations in the columns headed "Units" (*column 3, Part A, and Column 4, Parts B and C*).

Concentration
ppm - parts per million
mg/l - milligrams per liter
ppb - parts per billion
ug/l - micrograms per liter

Mass
lbs - pounds
ton - tons (English tons)
mg - milligrams
g - grams
kg - kilograms
T - tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless (1) an applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or (2) all approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium). If you measure only one daily value, complete only "Max. Daily Values" columns and insert "1" into the "Number of Analyses" column (*columns 2-a and 2-d, Part A, and column 3-a, 3-d, Parts B and C*). The Department may require you to conduct additional analyses to further characterize your discharges. For composite sample, the daily value is the total mass or average concentration found in a composite sample taken over the operating hours of the facility during a 24-hour period; for grab samples, the daily value is the arithmetic or flow-weighted total mass or average concentration found in a series of at least four grab samples taken over the operating hours of the facility during a 24-hour period. If you measure more than one daily value for a pollutant and those values are representative of your waste stream, you must report them. You

must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Long Term Avg. Values" columns (*column 2-c, Part A, and column 3-c, Parts B and C*), and the total number of daily values under the "Number of Analyses" columns (*column 2-d, Part A, and columns 3-d, Parts B and C*). Also determine the average of all daily values taken during each calendar month, and report the highest average under the "Max. 30-day Values" columns (*column 2-c, Part A, and column 3-b, Parts B and C*).

B. Sampling

The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes which contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample. Sampling for metals that are hardness-dependent shall also include sampling for hardness.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples must be used. For all other pollutants 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds, or other impoundments with a retention period of greater than 24 hours. For stormwater discharges a minimum of one to four grab samples may be taken, depending on the duration of the discharge. One grab must be taken in the first hour (*or less*) of discharge, with one additional grab (*up to a minimum of four*) taken in each succeeding hour of discharge for discharges lasting four or more hours. The Department may waive composite sampling for any discharge point for which you demonstrate that use of an automatic sampler is infeasible and that a minimum of four grab samples will be representative of your discharge.

Grab and composite samples¹ are defined as follows:

Grab sample: An individual sample or at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

Composite sample: A combination of at least 8 sample aliquots of a least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. For GC/MS Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. Four (4) (*rather than eight*) aliquots or grab samples should be collected for VOA. These four samples should be collected during actual hours of discharge over a 24-hour period and need not be flow proportioned. Only one analysis is required.

Data from samples taken in the past may be used if all data requirements are met; sampling was done no more than three years before submission; and all data are representative of the present discharge. Among the factors which would cause the data to be unrepresentative are significant changes in production level; changes in raw materials, processes, or final products; and changes in wastewater treatment. When EPA promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. The Department may promulgate new methods in Chapter 160, Florida Administrative Code, with the date when the new methods are to be used. Always be sure you have current copies of these two documents before you take samples or submit sampling data to the Department. If you have submitted data from past sampling, the Department may request additional information, including current quantitative data, if it is determined to be necessary to assess your discharges.

C. Analysis

You must use test methods promulgated in 40 CFR Part 136 or Chapter 160, Florida Administrative Code; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge if you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical discharge points, you may request permission from the Department to sample and analyze only one point and submit the results of the analysis for other substantially identical points. If your request is granted by the Department, or a separate sheet attached to the application form identify which point you did test, and describe why the other points you did not test are substantially identical to the point which you did test.

D. Reporting of Intake Data

You are not required to report data under the "Intake" columns unless you wish to demonstrate your eligibility for a "net" effluent limitation for one or more pollutants, that is, an effluent limitation adjusted by subtracting the average level of the pollutant(s) present in your intake water. To demonstrate your eligibility, under the "Intake" columns report the average of the results of analyses on your intake water (*If your water is treated before use, test the water after it is treated.*), and discuss the requirements for a new limitation with the appropriate district office.

¹ Sampling requirements are periodically reviewed in light of recent research on testing methods. Upon completion of the review, changes to sampling requirements may be made. Before starting any required sampling or submitting past sampling to the Department, be sure that you have a current copy of 40 CFR Part 136 or Chapter 62-160, Florida Administrative Code.

Part V-A

Part V-A must be completed by all applicants for all discharge points including discharges of non-contact cooling water or storm runoff. However, at your request, the Department may waive the requirement to test for one or more of these pollutants, upon a determination that available information is adequate to support issuance of the permit with less stringent reporting requirements for these pollutants. Use composite samples for all pollutants in this Part, except use grab samples for pH and temperature. See the discussion in General Instructions to item V for definitions of the columns in Part A. The "Long Term Avg. Values" column (*column 2-c*) and "Max. 30-day Values" column (*column 2-b*) are not compulsory but should be filled out if data are available.

Part V-B

Part V-B must be completed by all applicants for all discharge points, including points containing only non-contact cooling water or storm runoff. You must report quantitative data if the pollutant(s) in question is limited in an effluent limitation either directly or indirectly but expressly through a limitation on an indicator (*e.g., use of TSS as an indicator to control the discharge of iron and aluminum*). For other discharged pollutants you must provide quantitative data or explain their presence in your discharge. The Department will consider a request to eliminate the requirement to test for pollutants for an industrial category or subcategory. Your request must be supported by data representative of the industrial category or subcategory in question. The data must demonstrate that individual testing for each applicant is unnecessary, because the facilities in the category or subcategory discharge substantially identical levels of the pollutant or discharge the pollutant uniformly at sufficiently low levels. Use composite samples for all pollutants you analyze for in this part, except use grab samples for residual chlorine, oil and grease, and fecal coliform. The "Long Term Avg. Values" column (*column 2-c*) and "Max. 30-day Values" column (*column 2-b*) are not compulsory but should be filled out if data are available.

Part V-C

Table 2CG-2 at the end of these instructions lists 34 primary industry categories. For each discharge point, if any of your processes which contribute wastewater falls into one of those categories, you must mark "X" in "Testing Required" column (*column 2-a*) and test for (1) all of the toxic metals, cyanide, and total phenols; and (2) the organic toxic pollutants contained in Table 2CG-3 as applicable to your category. The organic toxic pollutants are listed by GC/MS fractions on pages V-4 to V-10 in Part V-C. The inclusion of total phenols in Part V-C is not intended to classify total phenols as a toxic pollutant. When you determine which industry category you are in to find your testing requirements, you are not determining your category for any other purpose and you are not giving up your right to challenge your inclusion in that category before your permit is issued. For all other cases (*secondary industries, non-process wastewater discharge points, and GC/MS fractions that are not required*), you must mark "X" in either the "Believed Present" column or the "Believed Absent" column for each pollutant.

You must report quantitative data as follows:

For every pollutant you know or have reason to believe is present in your discharge in concentrations of 10 ppb or greater;

For acrolein; acrylonitrile; 2,4 dinitrophenol; and 2-methyl-4,6 dinitrophenol where you expect these four pollutants to be discharged in concentrations of 100 ppb or greater; and

For every pollutant expected to be discharged in concentrations less than the thresholds specified above. For pollutants in this last category, in lieu of quantitative data, you may briefly describe the reasons the pollutant is expected to be discharged.

You are required to mark "Testing Required" for dioxin if you use or manufacture one of the following compounds:

(a) 2,4,5-trichlorophenoxy acetic acid, (2,4,5-T);

- (b) 2-(2,4,5-trichlorophenoxy) propanoic acid, (Silvex, 2,4,5-TP);
- (c) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate, (Erbon);
- (d) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate, (Ronnel);
- (e) 2,4,5-trichlorophenol, (TCP); or
- (f) hexachlorophene, (HCP).

If you mark "testing Required" or "Believed Present," you must perform a screening analysis for dioxins, using gas chromatography with an electron capture detector. A TCDD standard for quantitation is not required. Describe the results of this analysis in the space provided: for example, "no measurable baseline deflection at the retention time of TCDD" or "a measurable peak within the tolerances of the retention time of TCDD." The Department may require you to perform a quantitative analysis if you report a quantitative analysis if you report a positive result.

Part V-D

List any pollutants in Table 2CG-3 that you believe to be present and explain why you believe them to be present. No analysis is required, but if you have analytical data, you must report it. Table 2CG-4 lists certain hazardous substances which may be exempt from reporting requirements contained in section 311 of the Clean Water Act. If you discharge any of these substances, please contact the Department for further information.

Item VI

This requirement applies to current use or manufacture of a toxic pollutant as an intermediate or final product or by-product. The Department may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Department has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item VII

This item is self explanatory.

Item VIII

There are severe penalties for submitting false information on this application form. Chapter 62-620, Florida Administrative Code, requires, in addition to the certification provided by a professional engineer, a certification from the owner or responsible authority of the facility as follows:

A. For a corporation: by a responsible corporate official. For purposes of this section, a responsible corporate official means (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 person or have gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

B. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

C. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. A principal executive officer includes the chief executive officer of the agency or a senior executive officer having the responsibility for the overall operations of a principal geographic unit of the agency, for example, a regional or district administrator.

**TABLE 2CG-1
CODES FOR TREATMENT UNITS**

PHYSICAL TREATMENT PROCESSES			
1-A	Ammonia Strippin	1-N	Microstraining
2-B	Dialysis	1-O	Mixing
1-C	Diatomaceous Earth Filtration	1-P	Moving Bed Filters
1-D	Distillation	1-Q	Multimedia Filtration
1-E	Electrodialysis	1-R	Rapid Sand Filtration
1-F	Evaporation	1-S	Reverse Osmosis (Hyperfiltration)
1-G	Flocculation	1-T	Screening
1-H	Flotation	1-U	Sedimentation (Settling)
1-I	Foam Fractionation	1-V	Slow Sand Filtration
1-J	Freezing	1-W	Solvent Extraction
1-K	Gas-Phase Separation	1-X	Sorption
1-L	Grinding (Comminutors)	1-Y	Percolation Pond
1-M	Grit Removal		
CHEMICAL TREATMENT PROCESSES			
2-A	Carbon Adsorption	2-G	Disinfection (<i>Ozone</i>)
2-B	Chemical Oxidation	2-H	Disinfection (<i>Other</i>)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (<i>Chlorine</i>)	2-L	Reduction
BIOLOGICAL TREATMENT PROCESSES			
3-A	Activated Slludge	3-E	Pre-Aeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application
3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filter
OTHER PROCESSES			
4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection

Table 2CG-1, Codes for Treatment Units Contd.

SLUDGE TREATMENT AND DISPOSAL PROCESSES			
5-A	Aerobic Disgestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Wet Oxidation
5-L	Gravity Thickening		

TABLE 2CG-2
TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY

INDUSTRY CATEGORY	GC/MS FRACTION ²			
	Volatile	Acid	Base/Neutral	Pesticide
Adhesives and sealants	X	X	X	
Aluminum forming	X	X	X	
auto and other laundries	X	X	X	X
Battery manufacturing	X		X	
Coal mining	X	X	X	X
Coil coating	X	X	X	
Copper forming	X	X	X	
Electric and electronic compounds	X	X	X	X
Electroplating	X	X	X	
Explosives manufacturing		X	X	
Foundries	X	X	X	
Gum and wood chemicals	X	X	X	X
Inorganic chemicals manufacturing	X	X	X	
Iron and steel manufacturing	X	X	X	
Leather tanning and finishing	X	X	X	X
Mechanical products manufacturing	X	X	X	
Nonferrous metals manufacturing	X	X	X	X

² The pollutant in each fraction are listed in Item V-C
X - Testing required.

Table 2CG-2, Testing Requirements for Organic Toxic Pollutants Industry Category, contd.

INDUSTRY CATEGORY	GC/MS FRACTION ³			
	Volatile	Acid	Base/Neutral	Pesticide
Ore mining	X	X	X	X
Organic chemicals manufacturing	X	X	X	X
Paint and ink formulation	X	X	X	X
Pesticides	X	X	X	X
Petroleum refining	X	X	X	X
Pharmaceutical preparations	X	X	X	
Photographic equipment and supplies	X	X	X	X
Plastic and synthetic materials manufacturing	X	X	X	X
Plastic processing	X			
Porcelain enameling	X		X	X
Printing and publishing	X	X	X	X
Pulp and paperboard mills	X	X	X	X
Rubber processing	X	X	X	
Soap and detergent manufacturing	X	X	X	
Steam electric power plants	X	X	X	
Textile mills	X	X	X	X
Timber products processing	X	X	X	X

¹The pollutants in each fraction are listed in Item V-C
X = Testing required.

³ The pollutants in each fraction are listed in Item V-C.
X + Testing required.

TABLE 2CG-3
TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED
BY APPLICANTS IF EXPECTED TO BE PRESENT

<u>Toxic Pollutant</u>	<u>Hazardous Substances</u>	<u>Hazardous Substances</u>
Asbestos	2,2 Dichloropropionic acid	Monomethyl amine
	Dichlorvos	Naled
<u>Hazardous Substances</u>	Diethyl amine	Naphthenic acid
Acetaldehyde	Dimethyl amine	Nitrotoluene
Allyl alcohol	Dinitrobenzene	Parathion
Allylchloride	Diquat	Phenolsulfonate
Amyl acetate	Disulfoton	Phosgene
Aniline	Diuron	Propargite
Benzonitrile	Epichlorohydrin	Propylene oxide
Benzyl chloride	Ethion	Pyrethrins
Butyl acetate	Ethylene diamine	Quinoline
Butylamine	Formaldehyde	Resorcinol
Captan	Furfural	Strontium
Carbaryl	Guthion	Strychnine
	Isoprene	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
Carbofuran	Isopropanolamine dodecylbenzenesulfonate	TDE (Terochlorodiphenyl ethane)
Carbon disulfide	Kelthane	2,4,5-TP [2-(2,4,5-Trichlorophenosyl) pro-panic acide]
Chlopyrifos	Kepone	Trichlorofon
Coumpahos	Malathion	Triethanolamine
Cresol	Mercaptodimethur	dodecylbenzenesulfonate
Crotonaldehyde	Methoxychlor	Triethylamine
Cyclohexane	Methyl mercaptan	Uranium
2,4-D (2,4-Dichlorophenoxyacetic acid)	Methyl methacrylate	Vanadium
Diazinon	Methyl parathion	Vinyl acetate
Dicamba	Mevinphos	Xylene
Dichlobenil	Mexacarbate	Xylenol
Dichlone	Monoethyl amine	Zirconium

TABLE 2CG-4
HAZARDOUS SUBSTANCES

1. Acetaldehyde	64. Cadmium bromide	126. Dodecylbenzenesulfonic acid
2. Acetic acid	65. Cadmium chloride	127. Endosulfan
3. Acetic anhydride	66. Calcium arsenate	128. Endrin
4. Acetone cyanohydrin	67. Calcium arsenite	129. Epichlorohydrin
5. Acetyl bromide	68. Calcium carbide	130. Ethion
6. Acetyl chloride	69. Calcium chromate	131. Ethylbenzene
7. Acrolein	70. Calcium cyanide	132. Ethylenediamine
8. Acrylonitrile	71. Calcium dodecylbenzenesulfonate	133. Ethylene dibromide
9. Adipic acid	72. Calcium hypochlorite	134. Ethylene dichloride
10. Aldrin	73. Captan	135. Ethylene Diaminetetracetic acid (EDTA)
11. Allyl alcohol	74. Carbaryl	136. Ferric ammonium citrate
12. Allyl chloride	75. Carbofuran	137. Ferric ammonium oxalate
13. Aluminum sulfate	76. Carbon disulfide	138. Ferric chloride
14. Ammonia	77. Carbon tetrachloride	139. Ferric fluoride
15. Ammonium acetate	78. Chlordane	140. Ferric nitrate
16. Ammonium benzoate	79. Chlorine	141. Ferric sulfate
17. Ammonium bicarbonate	80. Chlorobenzene	142. Ferrous ammonium sulfate
18. Ammonium bichromate	81. Chloroform	143. Ferrous chloride
19. Ammonium bifluoride	82. Chloropyrifos	144. Ferrous sulfate
20. Ammonium bisulfite	83. Chlorosulfonic acid	145. Formaldehyde
21. Ammonium carbamate	84. Chromic acetate	146. Formic acid
22. Ammonium carbonate	85. Chromic acid	147. Fumaric acid
23. Ammonium chloride	86. Chromic sulfate	148. Furfural
24. Ammonium chromate	87. Chromous chloride	149. Guthion
25. Ammonium citrate	88. Cobaltous bromide	150. Heptachlor
26. Ammonium fluoroborate	89. Cobaltous formate	151. Hexachlorocyclopentadiene
27. Ammonium fluoride	90. Cobaltous sulfamate	152. Hydrochloric acid
28. Ammonium hydroxide	91. Coumaphos	153. Hydrofluoric acid
29. Ammonium oxalate	92. Cresol	154. Hydrogen cyanide
30. Ammonium silicofluoride	93. Crotonaldehyde	155. Hydrogen sulfide
31. Ammonium sulfamate	94. Cupric acetate	156. Isoprene
32. Ammonium sulfide	95. Cupric acetoarsenite	157. Isopropanolamine dodecylbenzenesulfonate
33. Ammonium sulfite	96. Cupric chloride	158. Kelthane
34. Ammonium tartrate	97. Cupric nitrate	159. Kepone
35. Ammonium thiocyanate	98. Cupric oxalate	160. Lead acetate
36. Ammonium thiosulfate	99. Cupric sulfate	161. Lead arsenate
37. Amyl acetate	100. Cupric sulfate ammoniated	162. Lead chloride
38. Aniline	101. Cupric tartrate	163. Lead fluoborate
39. Antimony pentachloride	102. Cyanogen chloride	164. Lead fluoride
40. Antimony potassium tartrate	103. Cyclohexane	165. Lead iodide
41. Antimony tribromide	104. 2,4-D acid (2,4-Dichlorophenoxyacetic acid)	166. Lead nitrate
42. Antimony trichloride	105. 2,4-D esters (2,4-Dichlorophenoxyacetic acid esters)	167. Lead stearate
43. Antimony trifluoride	106. DDT	168. Lead sulfate
44. Antimony trioxide	107. Diazinon	169. Lead sulfide
45. Arsenic disulfide	108. Dicamba	170. Lead thiocyanate
46. Arsenic pentoxide	109. Dichlobenil	171. Lindane
47. Arsenic trichloride	110. Dichlone	172. Lithium chromate
48. Arsenic trioxide	111. Dichlorobenzene	173. Malathion
49. Arsenic trisulfide	112. Dichloropropane	174. Maleic acid
50. Barium cyanide	113. Dichloropropene	175. Maleic anhydride
51. Benzene	114. Dichloropropene-Dichloropropane mix	176. Mercaptodimethur
52. Benzoic acid	115. 2,2-Dichloropropionic acid	177. Mercuric cyanide
53. Benzonitrile	116. Dichlorvos	178. Mercuric nitrate
54. Benzoyl chloride	117. Dieldrin	179. Mercuric sulfate
55. Benzyl chloride	118. Diethylamine	180. Mercuric thiocyanate
56. Beryllium chloride	119. Dimethylamine	181. Mercurous nitrate
57. Beryllium fluoride	120. Dinitrobenzene	182. Methoxychlor
58. Beryllium nitrate	121. Dinitrophenol	183. Methyl mercaptan
59. Butylacetate	122. Dinitrotoluene	184. Methyl methacrylate
60. n-Butylphthalate	123. Diquat	185. Methyl parathion
61. Butylamine	124. Disulfoton	186. Mevinphos
62. Butyric acid	125. Diuron	187. Mexacarbate
63. Cadmium acetate		188. Monoethylamine

189. Monomethylamine	244. Sodium nitrate
190. Naled	245. Sodium phosphate (dibasic)
191. Naphthalene	246. Sodium phosphate (tribasic)
192. Naphthenic acid	247. Sodium selenite
193. Nickel ammonium sulfate	248. Strontium chromate
194. Nickel chloride	249. Strychnine
195. Nickel hydroxide	250. Styrene
196. Nickel nitrate	251. Sulfuric acid
197. Nickel sulfate	252. Sulfur monochloride
198. Nitric acid	253. 2,4,5-T acid (2,4,5-Trichlorophenoxy acetic acid)
199. Nitrobenzene	254. 2,4,5-T amines (2,4,5-Trichlorophenoxy acetic acid amines)
200. Nitrogen dioxide	255. 2,4,5-T esters (2,4,5-Trichlorophenoxy acetic acid esters)
201. Nitrophenil	256. 2,4,5-T salts (2,4,5-Trichlorophenoxy acetic acid salts)
202. Nitrotoluene	257. 2,4,5-TP acid (2,4,5-Trichlorophenoxy propanoic acid)
203. Paraformaldehyde	258. 2,4,5-TP acid esters (2,4,5-Trichlorophenoxy propanoic acid esters)
204. Parathion	259. TDE (Tetrachlorodiphenyl ethane)
205. Pentachlorophenol	260. Tetraethyl lead
206. Phenol	261. Tetraethyl pyrophosphate
207. Phosgene	262. Thallium sulfate
208. Phosphoric acid	263. Toluene
209. Phosphorus	264. Toxaphene
210. Phosphorus oxychloride	265. Trichlorofon
211. Phosphorus pentasulfide	266. Trichloroethylene
212. Phosphorus trichloride	267. Trichlorophenol
213. Polychlorinated biphenyls (PCB)	268. Triethanolamine dodecylbenzenesulfonate
214. Potassium arsenate	269. Triethylamine
215. Potassium arsenite	270. Trimethylamine
216. Potassium bichromate	271. Uranyl acetate
217. Potassium chromate	272. Uranyl nitrate
218. Potassium cyanide	273. Vanadium pentoxide
219. Potassium hydroxide	274. Vanadyl sulfate
220. Potassium permanganate	275. Vinyl acetate
221. Propargite	276. Vinylidene chloride
222. Propionic acid	277. Xylene
223. Propionic anhydride	278. Xylenol
224. Propylene oxide	279. Zinc acetate
225. Pyrethrins	280. Zinc ammonium chloride
226. Quinoline	281. Zinc borate
227. Resorcinol	282. Zinc bromide
228. Selenium oxide	283. Zinc carbonate
229. Silver nitrate	284. Zinc chloride
230. Sodium	285. Zinc cyanide
231. Sodium arsenate	286. Zinc fluoride
232. Sodium arsenite	287. Zinc formate
233. Sodium bichromate	288. Zinc hydrosulfite
234. Sodium bifluoride	289. Zinc nitrate
235. Sodium bisulfite	290. Zinc phenolsulfonate
236. Sodium chromate	291. Zinc phosphide
237. Sodium cyanide	292. Zinc silcofluoride
238. Sodium dodecylbenzenesulfonate	293. Zinc sulfate
239. Sodium fluoride	294. Zirconium nitrate
240. Sodium hydrosulfide	295. Zirconium potassium fluoride
241. Sodium hydroxide	296. Zirconium sulfate
242. Sodium hypochlorite	297. Zirconium tetrachloride
243. Sodium methylate	

FORM 2CG



WASTEWATER APPLICATION FOR PERMIT TO DISCHARGE PROCESS WASTEWATER FROM NEW OR EXISTING INDUSTRIAL WASTEWATER FACILITIES TO GROUND WATER

Facility I.D. Number: FL0002283

Please print or type information in the appropriate areas.

I DISCHARGE LOCATION For each location, list the X,Y coordinates and, where applicable, the name of the land application site.

(latitude/longitude to the nearest 15 seconds)

A. Discharge Location No. (list)	B. Latitude			C. Longitude			D. Name of Land Application
	Deg.	Min.	Sec.	Deg.	Min.	Sec.	
I-012	30	39	56	84	53	21	Ash pond
Note:	I-012	Is the	surface	water	monitoring	point	
	For	The	Ash	Pond			

The ash pond is unlined and designed such that some of the ash pond water is released to groundwater, which generally flows east towards the Apalachicola River.

II LAND APPLICATION DESIGN

A. Discharge No.	B. Design Configuration and Construction Materials	C. Cover Crop	D. Application Rate	E. Land Application Area	F. Ground Water
NA	Groundwater zone of discharge	NA	NA	NA	NA

III FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B.
- B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and discharge points. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

Please see Attachment 2CG-1

- B. For each discharge location, provide a description of:

1. All operations contributing wastewater to the effluent; including process wastewater, sanitary wastewater, cooling water, and storm water runoff;
2. The average flow contributed by each operation; and
3. The treatment received by the wastewater.

Use the space below. Continue on additional sheets, if necessary.

(1) Discharge Location No.	(2) Operation(s) Contributing Flow		(3) Treatment		
	(a) Operation (list)	(b) Avg. Flow & Units	(a) Description	(b) List Code from Table 2CG-1	
I-012	Ash sluice water	~0.54 MGD	Sedimentation	1-U	
	Building sumps	~0.36 MGD	Sedimentation	1-U	
	Coal pile runoff/yard sumps	~0.38 MGD	Sedimentation	1-U	
	Treated domestic wastewater	~0.0004 MGD	Aerobic digestion, disinfect, dechlo	5-A, 2-F	2-E
I-013	Treated domestic wastewater	~0.0004 MGD	Aerobic digestion	5-A	
			Disinfection	2-F	
			dechlorination	2-E	

III Contd.

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ Yes (complete the following table)

☒ No (go to D. below)

(1) Outfall # (List)	(2) Operations(s) Contributing Flow (List)	(3) Frequency		(4) Flow				(c) Duration (in days)
		(a) Days per Week (specify avg.)	(b) Months per Yr. (specify avg.)	(a) Flow Rate (in mgd)		(b) Total Volume (specify with units)		
				Long Term Avg	Max. Daily	Long Term Avg.	Max. Daily	

*For land application systems, also include the Rest Period.

D. Describe practices to be followed to ensure adequate wastewater treatment during emergencies such as power loss and equipment failures causing shutdown of pollution abatement equipment of the proposed/permitted facilities.

Please see Attachment 2CG-1.

E. List the method(s) and location(s) of flow measurement.

Please see Attachment 2CG-1.

IV IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ Yes (complete the following table)

☒ No (go to Item VI-B)

1. Identification of Condition, Agreement, Etc.	2. Affected Discharge Locations		3. Brief Description of Project	4. Final Compliance Date	
	a. No.	b. Source of Discharge		a. Required	b. Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ Mark "X" if description of additional control programs is attached.

V INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding--Complete one set of tables for each discharge location -- Annotate the location number in the space provided. NOTE: Tables V-A, V-B, and V-C are included on separate sheets number V-1 through V-10.

D. Use the space below to list any of the pollutants listed in Table 2CG-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. Pollutant	2. Source	1. Pollutant	2. Source
NA			

VI POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or by-product?

☐ YES (list all such pollutants below) ☒ NO (go to VII)

--

VII CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ YES (list the name, address, telephone number, and certification number of, and pollutants analyzed by each such laboratory or firm below)
☐ NO (go to Section VIII)

A. Name	B. Address	C. Telephone (area code & no.)	D. Pollutants Analyzed (list)
Test America Laboratories, Cert# E87089	3355 McLemore Dr Pensacola, FL 32514	850.474.1001	All parameters except pH,TRC And temperature

VIII CONNECTION TO REGIONAL POTW

A. Indicate the relationship between this project and area regional planning for wastewater treatment. List steps to be taken for this industrial wastewater facility to become part of an area-wide wastewater treatment system.

Wastewater discharged from Plant Scholz consists mostly of once-through non-contact cooling water. The plant is located in a remote, rural location with no POTWs located in proximity to the plant. As a result, connection of Plant Scholz to a POTW is impractical.

IX-A CERTIFICATIONS FOR NEW OR MODIFIED FACILITIES

This is to certify the engineering features of this pollution control project have been designed by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department. It is also agreed that the undersigned, if authorized by the owner, will furnish the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

_____ Signature	_____ Company Name
_____ Name (please type)	_____ Address
_____ (Affix Seal)	_____ Florida Registration No.:
	_____ Telephone No.: _____ Date _____

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.

_____ Name (type or print)	_____ Signature
_____ Title	_____ Date Signed
_____ Telephone No. (area code & No.)	

IX-B CERTIFICATIONS FOR PERMIT RENEWALS

This is to certify the engineering features of this pollution control project have been examined by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department.



Signature

Stanley T. StokesEnvironmental Consulting & Technology, Inc.

Company Name

6440 Southpoint Parkway, S-130Jacksonville, FL 32216Florida Registration No.: 33251Telephone No.: 904-296-0544Date 3-16-2015

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.

James O. Vick

Name (type or print)

Director, Environmental Affairs

Title

850-444-6311

Telephone No. (area code & No.)



Signature

3/18/15

Date Signed

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format.

SEE INSTRUCTIONS.

V. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. BOD, Carbonaceous , 5-day, 20 Deg. C.					<6.4		1	mg/L				
b. Chemical Oxygen Demand (COD)					2.37		1	mg/L				
c. Total Organic Carbon (TOC)					<3.2		1	mg/L				
d. Total Suspended Solids (TSS)					<0.26		1	mg/L				
e. Total Nitrogen (as N)					0.125		1	mg/l				
f. Total Phosphorus (as P)					<0.016		1	mg/L				
g. Ammonia (as N)					<6.4		1	mg/L				
h. Flow - actual or projected	Value		Value		Value					Value		
i. Flow - design	Value		Value		Value					Value		
j. Specific Conductivity	Value		Value		Value					Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value		Value		Value			°C		Value		
m. pH	Min.	Max	Min.	Max.				STANDARD UNITS				

*Conc. = Concentration

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	☒	☐					0.2		1	mg/L				
b. Chlorine, Total Residual	☐	☒							1	Mg/l				
c. Color	☒	☐					8.5		1	Color Units				
d. Fecal Coliform	☒	☐					34		1	MPN/100 ml				
e. Fluoride (16984-48-8)	☒	☐					0.3		1	mg/L				
f. Nitrate-Nitrite (as N)	☒	☐					<0.018		1	mg/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	☒	☐					<0.26		1	mg/L				
h. Oil and grease	☒	☐					2.72		1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	☒	☐					0.125		1	mg/L				
j. Radioactivity														
(1) Alpha, Total	☒	☐					3.9 +/- 1.9		1	pCi/l				
(2) Beta, Total	☒	☐					7.3 +/- 1.9		1	pCi/l				
(3) Radium, Total	☒	☐					0.8 +/- 0.3		1	pCi/l				
(4) Radium 226, Total	☒	☐					0.2 +/- 0.09		1	pCi/l				
k. Sulfate (as SO ₄) (14808-79-8)	☒	☐					117		1	mg/L				
l. Sulfide (as S)	☐	☒					<1		1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	☒	☐					5		1	mg/L				
n. Surfactants	☐	☒					<0.12		1	Mg/l LAS MW				
o. Aluminum, Total (7429-90-5)	☒	☐					<0.04		1	mg/L				
p. Barium, Total (7440-39-3)	☒	☐					0.208		1	mg/L				
q. Boron, Total (7440-42-8)	☒	☐					1.26		1	mg/L				
r. Cobalt, Total (7440-48-4)	☐	☒					<0.003		1	mg/L				
s. Iron, Total (7439-89-6)	☒	☐					0.539		1	mg/L				
t. Magnesium, Total (7439-95-4)	☒	☐					11.8		1	mg/L				
u. Molybdenum, Total (7439-98-7)	☒	☐					0.0449		1	mg/L				
v. Manganese, Total (7439-96-5)	☒	☐					0.444		1	mg/L				
w. Tin, Total (7440-31-5)	☐	☒					<0.005		1	mg/L				
x. Titanium, Total (7440-32-6)	☐	☒					<0.0015		1	mg/L				

Facility ID. Number: FL0002283 Outfall No. I-012

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	☒	☐	☐					<0.0023		1	mg/L				
2M. Arsenic, Total (7723-14-0)	☒	☐	☐					0.133		1	mg/L				
3M. Beryllium, Total (7440-41-7)	☒	☐	☐					<0.001		1	mg/L				
4M. Cadmium, Total (7440-43-9)	☒	☐	☐					<0.001		1	mg/L				
5M. Chromium, Total (7440-47-3)	☒	☐	☐					<0.002		1	mg/L				
6M. Copper, Total (7440-50-8)	☒	☐	☐					<0.002		1	mg/L				
7M. Lead, Total (7439-92-1)	☒	☐	☐					0.00504		1	mg/L				
8M. Mercury, Total (7439-97-6)	☒	☐	☐					0.0002		1	ug/L				
9M. Nickel, Total (7440-02-0)	☒	☐	☐					<0.003		1	mg/L				
10M. Selenium, Total (7782-49-2)	☒	☐	☐					0.004		1	mg/L				
11M. Silver, Total (7440-22-4)	☒	☐	☐					<0.002		1	mg/L				
12M. Thallium, Total (7440-28-0)	☒	☐	☐					<0.0005		1	mg/L				
13M. Zinc, Total (7440-66-6)	☒	☐	☐					<0.008		1	mg/L				
14M. Cyanide, Total (57-12-5)	☒	☐	☐					<0.005		1	mg/L				
15M. Phenols, Total	☒	☐	☐					<0.0045		1	mg/L				
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)	☐	☐	☒												
GC/MS FRACTION-VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	☒	☐	☐					<10		1	ug/L				
2V. Acrylonitrile (107-13-1)	☒	☐	☐					<2.8		1	ug/L				

Facility ID. Number: FL0002283 Outfall No. I-012

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
3V. Benzene (71-43-2)	☒	☐	☐					<0.38		1	ug/L				
4V. Bis (Chloromethyl) Ether (542-88-1)	☒	☐	☒												
5V. Bromoform (75-25-2)	☒	☐	☐					<0.71		1	ug/L				
6V. Carbon Tetrachloride (56-23-5)	☒	☐	☐					<0.5		1	ug/L				
7V. Chlorobenzene (108-90-7)	☒	☐	☐					<0.5		1	ug/L				
8V. Chlorodi-bromomethane (124-8-1)	☒	☐	☐					<0.5		1	ug/L				
9V. Chloroethane (74-00-3)	☒	☐	☐					<0.76		1	ug/L				
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	☒	☐	☐					<2		1	ug/L				
11V. Chloroform (67-86-3)	☒	☐	☐					<0.6		1	ug/L				
12V. Dichloro-bromomethane (75-24-4)	☒	☐	☐					<0.5		1	ug/L				
13V. Dichloro-difluoromethane (75-71-8)	☒	☐	☐					<0.85		1	ug/L				
14V. 1,1-Dichloroethane (75-34-3)	☒	☐	☐					<0.5		1	ug/L				
15V. 1,2-Dichloroethane (107-06-2)	☒	☐	☐					<0.5		1	ug/L				
16V. 1,1-Dichloroethylene (75-35-4)	☒	☐	☐					<0.5		1	ug/L				
17V. 1,2,-Dichloropropane (78-87-5)	☒	☐	☐					<0.5		1	ug/L				
18V. 1,3-Dichloropropylene (542-75-6)	☒	☐	☐					<1		1	ug/L				
19V. Ethylbenzene (100-41-4)	☒	☐	☐					<0.5		1	ug/L				
20V. Methyl Bromide (74-83-9)	☒	☐	☐					<0.98		1	ug/L				
21V. Methyl Chloride (74-87-3)	☒	☐	☐					<0.83		1	ug/L				
22V. Methylene Chloride (74-98-2)	☒	☐	☐					<3		1	ug/L				
23V. 1,1,2,2-Tetra-chloroethane (79-34-5)	☒	☐	☐					<0.5		1	ug/L				
24V. Tetrachloroethylene (127-18-4)	☒	☐	☐					<0.58		1	ug/L				

Facility ID. Number: FL0002283 Outfall No. I-012

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b.Mass	a. Long Term Avg. Value		b. No. of Analyses	
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass		
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)																
25V. Toluene (108-88-3)	☒	☐	☐					<0.7		1	ug/L					
26V. 1,2-Trans-Dichloroethylene (156-60-5)	☒	☐	☐					<0.5		1	ug/L					
27V. 1,1,2-Trichloroethane (71-55-6)	☒	☐	☐					<0.5		1	ug/L					
28V. 1,1,2-Trichloroethane (79-00-5)	☒	☐	☐					<0.5		1	ug/L					
29V. Trichloroethylene (79-01-6)	☒	☐	☐					<0.5		1	ug/L					
30V. Trichloro-fluoromethane (75-69-4)	☒	☐	☐					<0.52		1	ug/L					
31V. Vinyl Chloride (75-01-4)	☒	☐	☐					<0.5		1	ug/L					
GC/MS FRACTION - ACID COMPOUNDS																
1A. 2-Chlorophenol (95-57-8)	☒	☐	☐					<2.1		1	ug/L					
2A. 2,4-Dichlorophenol (120-83-2)	☒	☐	☐					<2.86		1	ug/L					
3A. 2,4-Dimethylphenol (105-67-9)	☒	☐	☐					<3.33		1	ug/L					
4A. 4,6-Dinitro-O-Cresol (534-53-1)	☒	☐	☐					<1.9		1	ug/L					
5A. 2,4-Dinitrophenol (51-28-5)	☒	☐	☐					<3.24		1	ug/L					
6A. 2-Nitrophenol (88-75-5)	☒	☐	☐					<0.619		1	ug/L					
7A. 4-Nitrophenol (100-02-7)	☒	☐	☐					<2		1	ug/L					
8A P-Chloro-M-Cresol (59-50-7)	☒	☐	☐					<3.62		1	ug/L					
9A Pentachlorophenol (87-86-5)	☒	☐	☐					<1.72		1	ug/L					
10A Phenol (108-95-2)	☒	☐	☐					<2.48		1	ug/L					
11A 2,4,5-Trichloro-phenol (88-06-2)	☒	☐	☐					<3.33		1	ug/L					
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS																
1B. Acenaphthene (63-32-9)	☒	☐	☐					<0.438		1	ug/L					
2B. Acenaphthylene (208-96-8)	☒	☐	☐					<0.533		1	ug/L					
3B. Anthracene (120-12-7)	☒	☐	☐					<0.4		1	ug/L					
4B. Benzidine (92-87-5)	☒	☐	☐					<19		1	ug/L					

Facility ID. Number: FL0002283 Outfall No. I-012

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	☒	☐	☐					<0.324		1	ug/L				
6B. Benzo (a) Pyrene (50-32-8)	☒	☐	☐					<0.41		1	ug/L				
7B. 3,4-Benzo-fluoranthene (205-99-2)	☒	☐	☐					<0.362		1	ug/L				
8B. Benzo (ghi) Perylene (191-24-2)	☒	☐	☐					<1.01		1	ug/L				
9B. Benzo (k) Fluoranthene (207-08-9)	☒	☐	☐					<0.514		1	ug/L				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	☒	☐	☐					<0.657		1	ug/L				
11B. Bis (2-chloroethyl) Ether (111-44-4)	☒	☐	☐					<0.705		1	ug/L				
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)	☒	☐	☐					<0.771		1	ug/L				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	☒	☐	☐					<2.15		1	ug/L				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	☒	☐	☐					<0.305		1	ug/L				
15B Butyl Benzyl Phthalate (84-68-7)	☒	☐	☐					<0.657		1	ug/L				
16B. 2-Chloronaphthalene (91-58-7)	☒	☐	☐					<0.495		1	ug/L				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	☒	☐	☐					<1.9		1	ug/L				
18B. Chrysene (218-01-9)	☒	☐	☐					<0.467		1	ug/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)	☒	☐	☐					<1.11		1	ug/L				
20B. 1,2-Dichlorobenzene (95-50-1)	☒	☐	☐					<0.543		1	ug/L				
21B. 1,3-Dichlorobenzene (541-73-1)	☒	☐	☐					<0.448		1	ug/L				
22B. 1,4-Dichlorobenzene (106-46-7)	☒	☐	☐					<0.495		1	ug/L				
23B. 3,3'-Dichlorobenzidine (92-94-1)	☒	☐	☐					<2.48		1	ug/L				
24B. Diethyl Phthalate (84-66-2)	☒	☐	☐					<0.667		1	ug/L				
25B. Dimethyl Phthalate (131-11-3)	☒	☐	☐					<0.571		1	ug/L				
26B. Di-N-Butyl Phthalate (84-74-2)	☒	☐	☐					<2.57		1	ug/L				
27B. 2,4-Dinitrotoluene (121-14-2)	☒	☐	☐					<1.81		1	ug/L				
28B. 2,6-Dinitrotoluene (606-20-2)	☒	☐	☐					<1.81		1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	☒	☐	☐					<0.419		1	ug/L				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	☒	☐	☐					<0.952		1	ug/L				
31B. Fluoranthene (206-44-0)	☒	☐	☐					<0.733		1	ug/L				
32B. Fluorene (86-73-7)	☒	☐	☐					<0.533		1	ug/L				
33B. Hexachlorobenzene (118-74-1)	☒	☐	☐					<0.238		1	ug/L				
34B. Hexachlorobutadiene (87-68-3)	☒	☐	☐					<3.43		1	ug/L				
35B. Hexachlorocyclopentadiene (77-47-4)	☒	☐	☐					<2.48		1	ug/L				
36B. Hexachloroethane (67-72-1)	☒	☐	☐					<4		1	ug/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	☒	☐	☐					<0.971		1	ug/L				
38B. Isophorone (78-59-1)	☒	☐	☐					<0.543		1	ug/L				
39B. Naphthalene (91-20-3)	☒	☐	☐					<0.6		1	ug/L				
40B. Nitrobenzene (98-95-9)	☒	☐	☐					<0.524		1	ug/L				
41B N-Nitrosodimethylamine (62-75-9)	☒	☐	☐					<3.33		1	ug/L				
42B. N-Nitrosodi-N-Propylamine (621-64-7)	☒	☐	☐					<3.14		1	ug/L				
43B. N-Nitrosodiphenylamine (86-30-6)	☒	☐	☐					<0.448		1	ug/L				
44B Phenanthrene (85-01-8)	☒	☐	☐					<0.39		1	ug/L				
45B. Pyrene (129-00-0)	☒	☐	☐					<1.04		1	ug/L				
46B. 1,2,4-Trichlorobenzene (120-82-1)	☒	☐	☐					<0.505		1	ug/L				
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	☐	☐	☒					<0.003		1	ug/L				
2P. -BHC (319-84-6)	☐	☐	☒					<0.0036		1	ug/L				
3P -BHC (319-85-7)	☐	☐	☒					<0.003		1	ug/L				
4P. -BHC (58-89-9)	☐	☐	☒					<0.0027		1	ug/L				
5P. -BHC (319-86-8)	☐	☐	☒					<0.025		1	ug/L				

Facility ID. Number: FL0002283

Outfall No. I-012

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						d. No. of Analyses	4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)			a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	☐	☐	☒					<0.13		1	ug/L				
7P. 4,4'-DDT (50-29-3)	☐	☐	☒					<0.0039		1	ug/L				
8P. 4,4'-DDE (72-55-9)	☐	☐	☒					<0.004		1	ug/L				
9P. 4,4'-DDD (72-54-8)	☐	☐	☒					<0.003		1	ug/L				
10P. Dieldrin (60-57-1)	☐	☐	☒					<0.0059		1	ug/L				
11P. -Endosulfan (115-29-7)	☐	☐	☒					<0.003		1	ug/L				
12P. -Endosulfan (115-29-7)	☐	☐	☒					<0.0074		1	ug/L				
13P. Endosulfan Sulfate (1031-07-8)	☐	☐	☒					<0.0021		1	ug/L				
14P. Endrin (72-20-8)	☐	☐	☒					<0.003		1	ug/L				
15P. Endrin Aldehyde (7421-92-4)	☐	☐	☒					<0.0028		1	ug/L				
16P. Heptachlor (76-44-8)	☐	☐	☒					<0.0031		1	ug/L				
17P. Heptachlor Epoxide (1024-57-3)	☐	☐	☒					<0.0032		1	ug/L				
18P. PCB-1242 (53469-21-9)	☐	☐	☒					<0.18		1	ug/L				
19P. PCB-1254 (11097-69-1)	☐	☐	☒					<0.31		1	ug/L				
20P. PCB-1221 (11104-28-2)	☐	☐	☒					<0.22		1	ug/L				
21P. PCB-1232 (11141-16-5)	☐	☐	☒					<0.41		1	ug/L				
22P. PCB-1248 (12672-29-6)	☐	☐	☒					<0.02		1	ug/L				
23P. PCB-1260 (11096-82-5)	☐	☐	☒					0.034		1	ug/L				
24P. PCB-1016 (12674-11-2)	☐	☐	☒					<0.048		1	ug/L				
25P. Toxaphene (8001-35-2)	☐	☐	☒					<0.4		1	ug/L				

**Plant Scholz NPDES Permit Renewal Application
Attachment 2CG-1**

SECTION III-D (page 2CG-16): Describe practices to be followed to ensure adequate wastewater treatment during emergencies such as power loss and equipment failures causing shutdown of pollution abatement equipment of the proposed/permited facilities.

Back up pumps are available for facility sumps. Question is not applicable for wastewater flows entering ash pond where the method of treatment is sedimentation.

SECTION III-E (page 2CG-16). List the method(s) and location(s) of flow measurement.

Question is not applicable for wastewater flows entering ash pond or discharge to groundwater.

FIGURE 1. PLANT SCHOLZ SCHEMATIC CLEAR WATER FLOW DIAGRAM

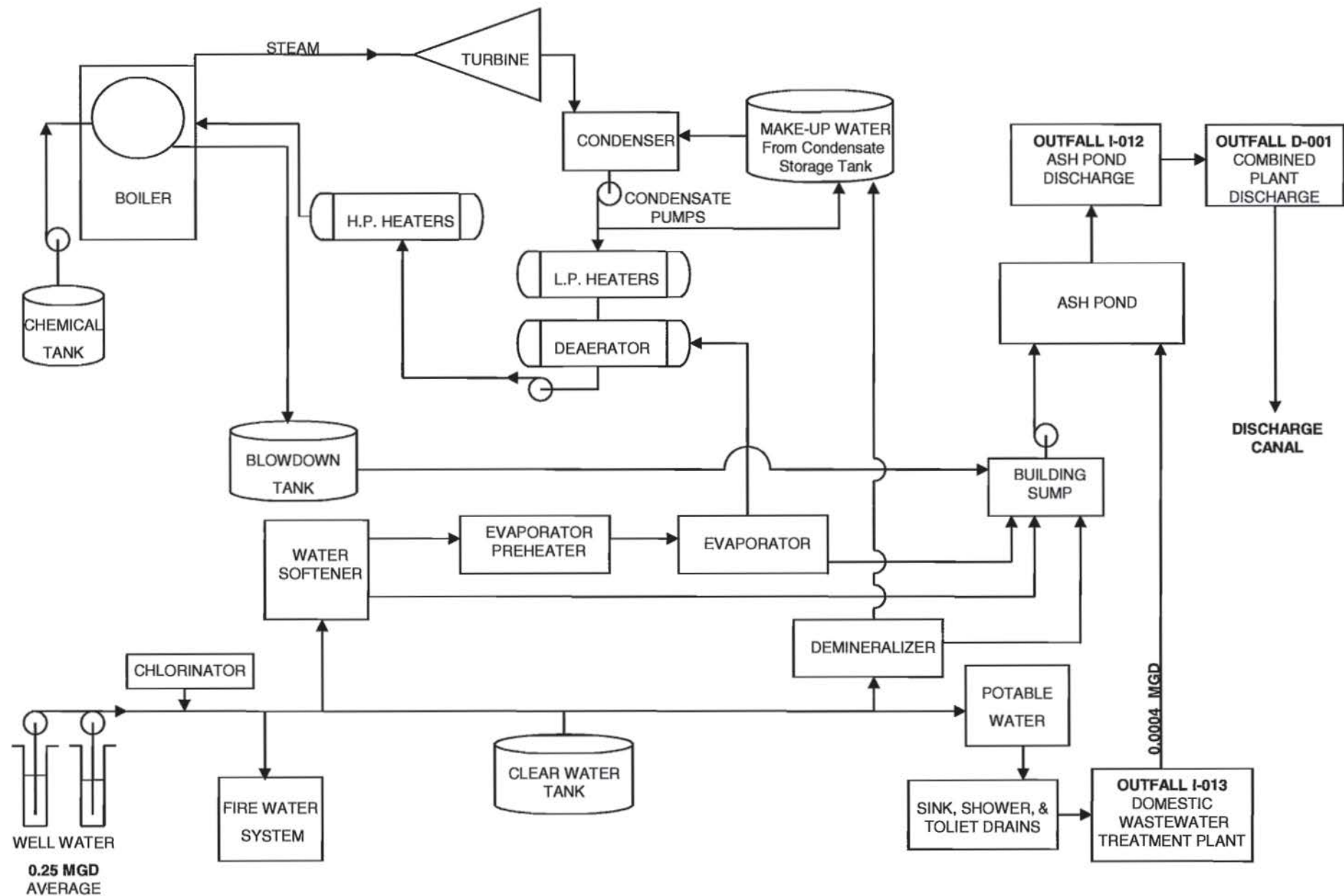
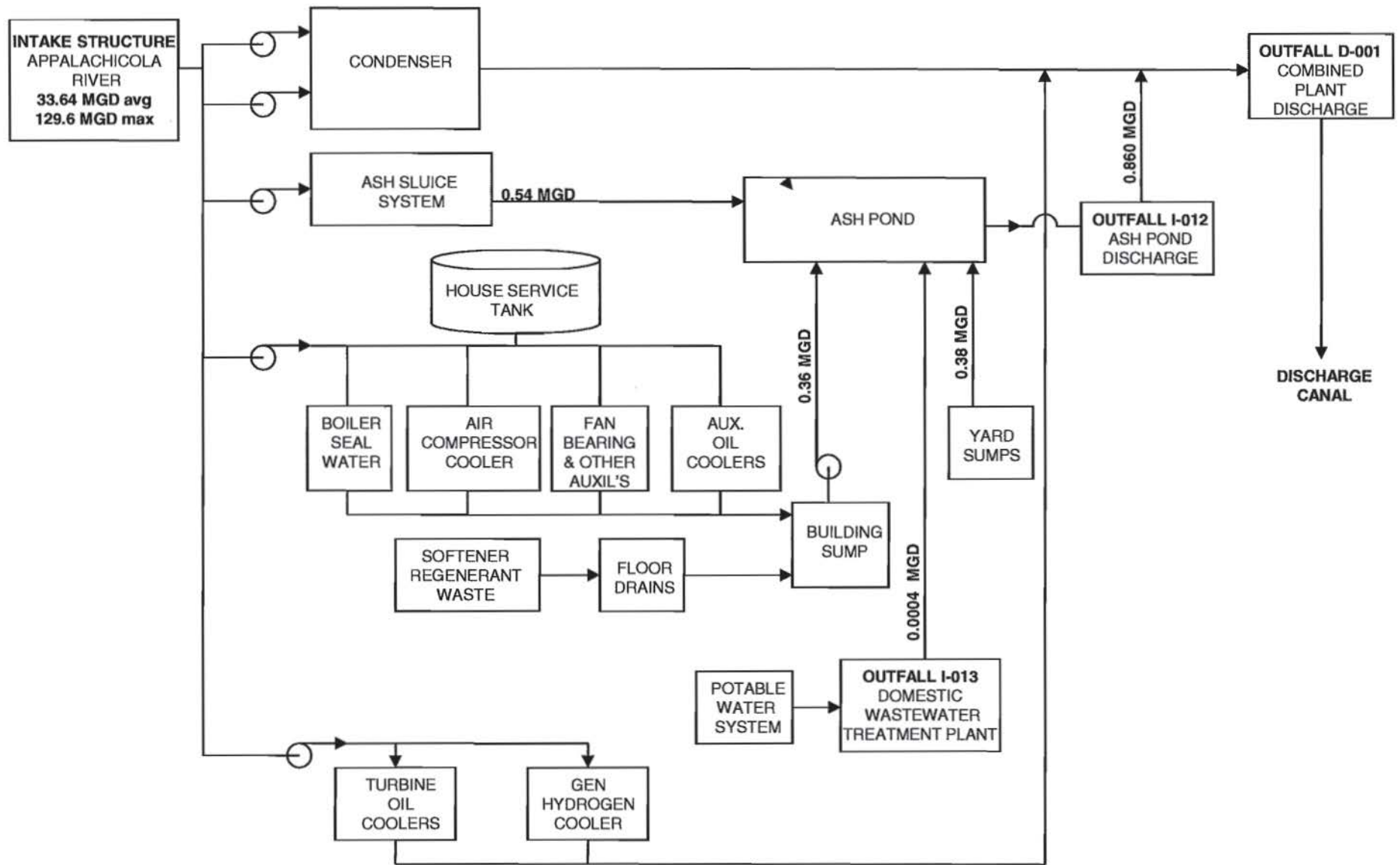


FIGURE 2. PLANT SCHOLZ RIVER WATER FLOW DIAGRAM



Attachment 4
Plant Scholz Nutrient Study

Plant Scholz
NPDES Permit #FL0002283
Issuance Date: September 23, 2010
Expiration Date: September 22, 2015
Renewal Application

Plant Scholz Nutrient Study

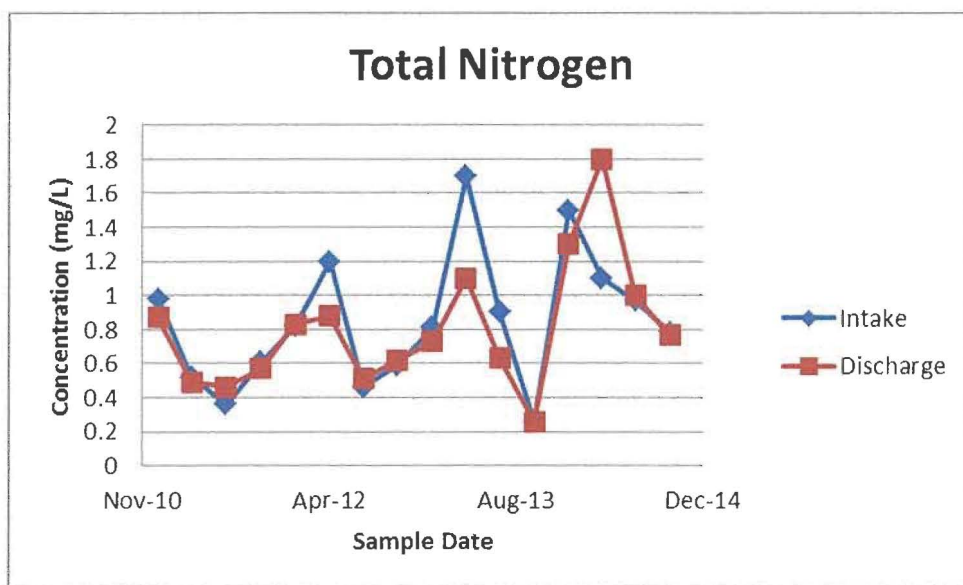
As part of Plant Scholz's routine monitoring program, nutrient data has been collected at both the intake and discharge of the plant quarterly since 2010. The below table presents the results of the quarterly sampling.

Summary of Scholz Nutrient Data								
2010								
Quarter	1st		2nd		3rd		4th	
	Intake	Discharge	Intake	Discharge	Intake	Discharge	NA	Discharge
Ammonia (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.024
Nitrogen, Kjeldahl (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.22
Nitrate Nitrite as N (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.3
ortho-Phosphate (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.036
Phosphorus, Total (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.026
Nitrogen, Total (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.52
2011								
Quarter	1st		2nd		3rd		4th	
	Intake	Discharge	Intake	Discharge	Intake	Discharge	Intake	Discharge
Ammonia (mg/L)	<0.024	<0.024	<0.024	<0.024	0.066	0.054	<0.024	0.024
Nitrogen, Kjeldahl (mg/L)	0.22	0.04	0.04	0.04	0.23	0.32	0.43	0.44
Nitrate Nitrite as N (mg/L)	0.75	0.75	0.37	0.37	0.13	0.14	0.18	0.13
ortho-Phosphate (mg/L)	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
Phosphorus, Total (mg/L)	0.026	0.026	0.026	0.026	0.026	0.026	<0.026	<0.026
Nitrogen, Total (mg/L)	0.98	0.87	0.52	0.49	0.36	0.46	0.61	0.57
2012								
Quarter	1st		2nd		3rd		4th	
	Intake	Discharge	Intake	Discharge	Intake	Discharge	Intake	Discharge
Ammonia (mg/L)	<0.024	<0.024	0.07	<0.024	<0.024	0.16	<0.024	<0.024
Nitrogen, Kjeldahl (mg/L)	0.28	0.27	0.52	0.37	0.28	0.29	0.38	0.37
Nitrate Nitrite as N (mg/L)	0.54	0.56	0.63	0.51	0.18	0.22	0.21	0.25
ortho-Phosphate (mg/L)	<0.036	<0.036	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026
Phosphorus, Total (mg/L)	<0.026	<0.026	0.14	0.1	<0.049	<0.049	<0.049	<0.049
Nitrogen, Total (mg/L)	0.82	0.83	1.2	0.88	0.46	0.51	0.59	0.62
2013								
Quarter	1st		2nd		3rd		4th	
	Intake	Discharge	Intake	Discharge	Intake	Discharge	Intake	Discharge
Ammonia (mg/L)	<0.024	<0.024	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Nitrogen, Kjeldahl (mg/L)	<0.26	<0.26	1.1	0.5	0.52	0.26	<0.26	<0.26
Nitrate Nitrite as N (mg/L)	0.55	0.47	0.61	0.62	0.38	0.37	0.386	0.422
ortho-Phosphate (mg/L)	<0.026	<0.026	<0.015	<0.015	NA	NA	<0.015	<0.015
Phosphorus, Total (mg/L)	0.03	0.03	0.17	0.14	0.03	0.03	<0.03	<0.03
Nitrogen, Total (mg/L)	0.81	0.73	1.7	1.1	0.9	0.63	0.26	0.26
2014								
Quarter	1st		2nd		3rd		4th	
	Intake	Discharge	Intake	Discharge	Intake	Discharge	Intake	Discharge
Ammonia (mg/L)	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Nitrogen, Kjeldahl (mg/L)	0.88	0.72	0.26	1.2	0.26	0.5	0.26	0.26
Nitrate Nitrite as N (mg/L)	0.57	0.56	0.63	0.63	0.51	0.51	0.353	0.375
ortho-Phosphate (mg/L)	0.015	0.015	0.015	0.015	<0.015	<0.015	<0.015	<0.015
Phosphorus, Total (mg/L)	<0.03	<0.03	0.03	0.12	<0.03	<0.03	<0.03	<0.03
Nitrogen, Total (mg/L)	1.5	1.3	1.1	1.8	0.97	1	0.79	0.77

Total Phosphorus

The graph displays the concentration of Total Phosphorus in mg/L over time. The Y-axis ranges from 0 to 0.18 mg/L with increments of 0.02. The X-axis shows sample dates from Nov-10 to Dec-14. Intake (blue line with diamond markers) and Discharge (red line with square markers) are plotted. Both series show low concentrations (around 0.02 mg/L) from Nov-10 to Feb-12. In April 2012, both peak at approximately 0.14 mg/L. In August 2013, Intake peaks at approximately 0.17 mg/L and Discharge at approximately 0.145 mg/L. In November 2013, Discharge peaks at approximately 0.12 mg/L while Intake is around 0.03 mg/L. From Dec-13 to Dec-14, both concentrations remain low, around 0.015 mg/L.

Sample Date	Intake (mg/L)	Discharge (mg/L)
Nov-10	0.025	0.025
Jan-11	0.025	0.025
Mar-11	0.025	0.025
May-11	0.01	0.01
Jul-11	0.01	0.01
Apr-12	0.14	0.10
Jun-12	0.025	0.025
Aug-12	0.025	0.025
Oct-12	0.03	0.03
Dec-12	0.03	0.03
Feb-13	0.03	0.03
Apr-13	0.03	0.03
Jun-13	0.03	0.03
Aug-13	0.17	0.145
Oct-13	0.03	0.03
Dec-13	0.03	0.03
Feb-14	0.015	0.015
Apr-14	0.015	0.015
Jun-14	0.015	0.015
Aug-14	0.015	0.015
Oct-14	0.015	0.015
Dec-14	0.015	0.015



As shown in the above graphs, total phosphorus at the discharge sample location is equal to or below the intake concentration in every quarterly sample event with the exception of the April 2014 sampling. Similarly, total nitrogen concentrations at the discharge and intake are routinely comparable, with the exception of the April 2014 sample event.

**OPERATION AND MAINTENANCE PERFORMANCE REPORT
GULF POWER COMPANY
SCHOLZ ELECTRIC GENERATING STATION WWTP**

JACKSON COUNTY, FLORIDA

**FDEP PERMIT No.
FDEP FILE No.
PERMIT EXPIRATION**

**FL0002283-004 (Major)
FL0002283-004-IWIS
September 22, 2015**

Prepared for:



**One Energy Place
Pensacola, FL 32520**

Prepared by



**449 W. MAIN STREET
PENSACOLA, FL 32502
(850) 438-9661
EB-0000340**

38518.02

MARCH 2015

**OPERATION MAINTENANCE AND PERFORMANCE REPORT
GULF POWER COMPANY
SCHOLZ ELECTRIC GENERATING STATION WWTP**

CERTIFICATIONS

A. PERMITTEE OR AUTHORIZED REPRESENTATIVE

I have reviewed and am fully aware of the recommendations and schedules included in this report.

James O. Vick 3/18/15
James O. Vick Date
Gulf Power Company
One Energy Pl.
Pensacola, FL 32520
(850) 444-6024

B. OPERATIONS

I have inspected the facility and have reviewed and am fully aware of the recommendations and schedules included in the report.

Roger A. Danley Date
Certified Operator
Certification No. D-0021118

C. AUTHORIZED ENGINEER

Baskerville-Donovan, Inc.
449 W. Main Street
Pensacola, FL 32502
Phone (850) 438-9661

The information as contained in this report is true and correct to the best of my knowledge; the report was prepared in accordance with sound engineering principles and I have discussed the recommendations and schedules with the permittee's delegated representative and the lead operator and I agree that if recommended schedules for corrective actions are met, the facilities, when properly operated and maintained, will comply with all applicable statutes of the State of Florida and rules of the Department of Environmental Protection.

Scott L. Jernigan
Scott L. Jernigan, P.E.
Reg. # 69170





*Gulf Power Company Scholz Plant WWTF
2015 Operation Maintenance and Performance Report*



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1 Introduction

The purpose of this report is to provide an evaluation of the operation and maintenance activities for the Gulf Power Company Scholz Electric Generating Station Wastewater Treatment Facility (Scholz WWTF) in support of an application for an operation permit renewal as required under Section 62-600.735 of the Florida Administrative Code (FAC). Overall goals of this requirement are to assess conditions that will provide reasonable assurances that the facility will meet the respective discharge permit requirements during the period requested for operation permit issuance. Required elements of this report include the following:

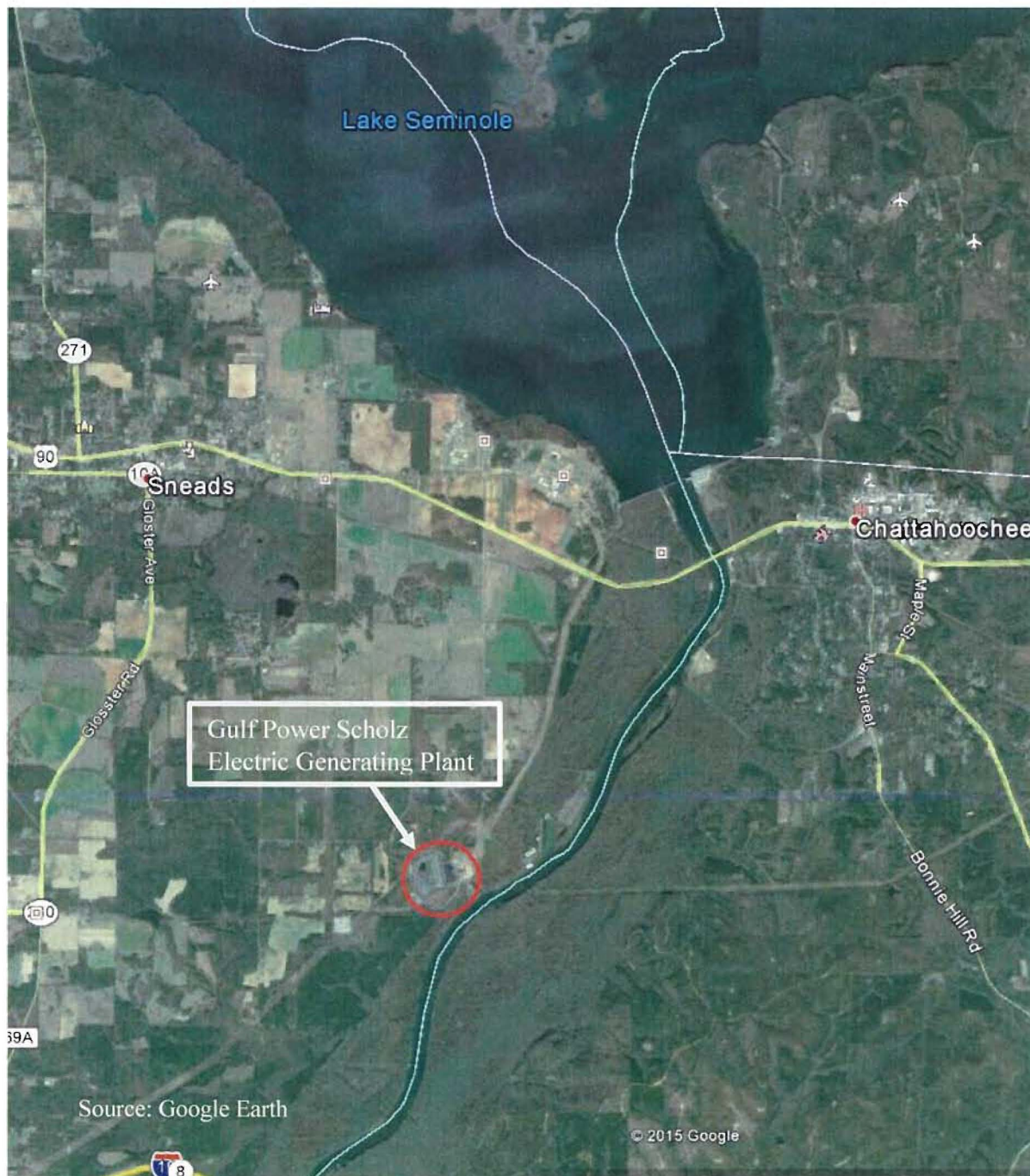
- Evaluating the physical condition of each treatment unit, treatment efficiencies, performance trends and the operation and maintenance programs in place.
- Identification of any physical, capacity, performance, and operation and maintenance problems and deficiencies needing immediate attention and any items observed which could potentially be problems.
- Describe the consequences if the problems noted are not corrected in a timely fashion.
- Provide recommendations and schedules for corrective actions.

Scholz WWTF provides domestic sewer service to the employees of the Gulf Power Scholz Electric Generating Station located in Sneads, Florida. Sneads is in Jackson County, just south of Lake Seminole. Figure 1 shows the location of Scholz Plant. The treatment facility consists of a surge tank, aeration basins, settling basins, aerobic sludge holding tank, chlorination basins, and dechlorination basins. The facility has a design capacity of 2,500 gallons per day (gpd).

The treatment facility is a Purestream Inc. factory-built Biological Wastewater Treatment System that provides secondary treatment of wastewater through an extended aeration package plant followed by sedimentation, disinfection, and residual treatment prior to discharge to an ash pond. Figure 2 provides a process flow schematic of the existing facility.



Figure 1 - Scholz Plant Location Map

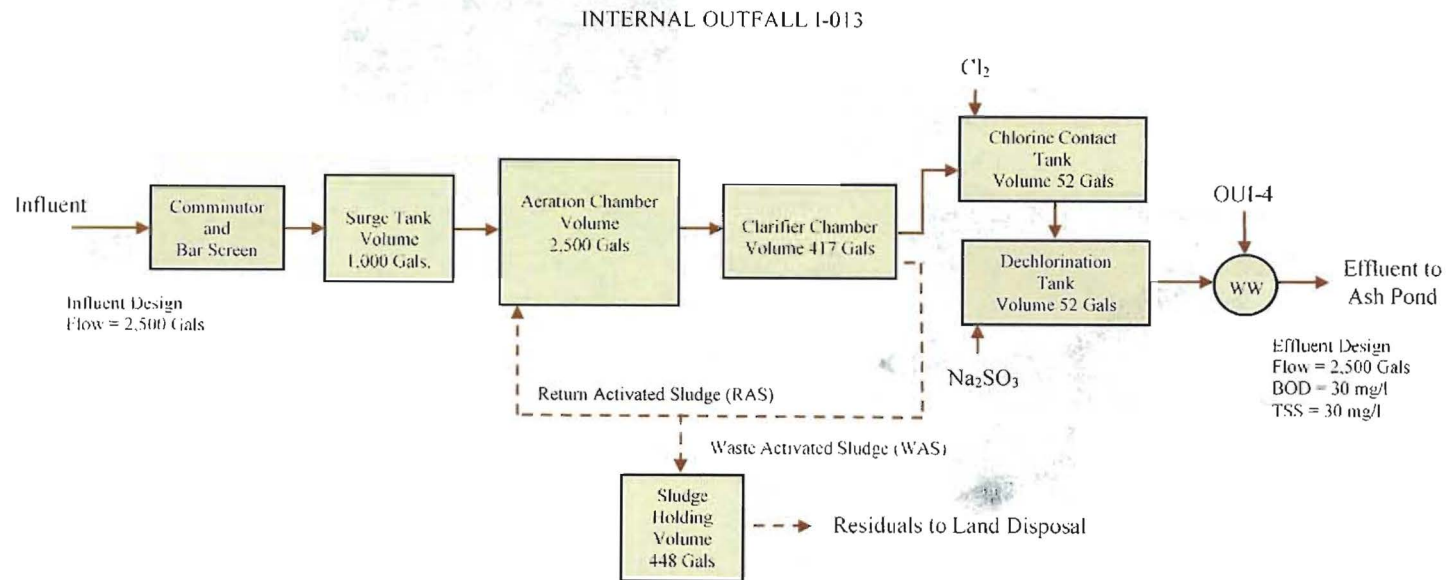




Gulf Power Company Scholz Plant WWTF
2015 Operation Maintenance and Performance Report



Figure 2 - Scholz Plant Process Flow Schematic



Legend:

— Process Flow

- - - WAS/RAS Flow

WW Discharge Wetwell



1.1 Permitted Capacities

Scholz WWTF is currently permitted for an Annual Average Daily Flow (AADF) capacity of 0.0025 MGD. Effluent is discharged to the on-site Ash Pond as Outfall I-013.

1.2 Effluent Limitations

The effluent limitations are shown below in Table 1:

Table 1 – Permit Discharge Limitations

		Discharge Limitation	Sampling Frequency
Flow	=	Report Only	1/Week
Biochemical Oxygen Demand (BOD)	=	60 mg/L (max daily) 30 mg/L (max monthly average)	1/Quarter 1/Quarter
Total Suspended Solids (TSS)	=	60 mg/L (max daily) 30 mg/L (max monthly average)	1/Quarter 1/Quarter

1.3 Descriptions of Treatment and Effluent Facilities

The pretreatment unit processes include flow equalization and screening. After primary treatment the process stream is sent to the extended aeration process, which occurs in the aeration chamber, and oxidizes the volatile material into gas, water, carbon and sludge. By the continued aeration of these concentrated solids, biological organisms are produced and grow in colonies. These colonies, known as flock, attach themselves to the volatile material breaking it down into water, carbon dioxide and ash. This results in a clear and odor-free effluent. The effluent flows through a chlorine contact chamber where disinfection is provided and is then discharged to the on-site ash pond of the electric generating plant.

1.4 Facility Service Date

The Scholz WWTF was placed into service in 1993.

1.5 Dates of Modifications

There have been no modifications to the Scholz WWTF.

1.6 Department Recommendations

FDEP conducted a compliance inspection on February 18, 2015. A copy of that inspection report is included in Attachment 1. All areas evaluated were stated as "In Compliance". There are no FDEP recommendations, administrative orders or consent orders on file for the wastewater treatment facility.



2 Physical Condition

On January 16, 2015, Baskerville-Donovan, Inc., (BDI), along with facility representatives, inspected the physical and operational conditions of each treatment process unit at the Scholz WWTF. Those present during the inspection were:

Scott Jernigan, P.E.	Baskerville-Donovan, Inc.
Ken Self, EI	Baskerville-Donovan, Inc.
Robert Jernigan	Gulf Power Company
Roger Danley	Gulf Power Company

The physical condition of each facility component was evaluated based on the following criteria:

1. Do facilities meet applicable requirements of Rules 62-600.400(1)(b), (2)(b), (4)(a), and (4)(b) Florida Administrative Code?
2. Is there evidence of hydraulic or organic overloading?
3. Is the general condition good, considering wear, corrosion, rust, etc.?
4. Are there physical signs that the treatment units and associated equipment are operating properly and are expected to continue to operate properly for the permit period?
5. Do treatment units have adequate safety features and are they operated properly?

Table 2 has the results of the evaluation:

Table 2 – Physical Condition Criteria

Facility Components	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5
Pump Station	N/A	No	Yes	Yes	Yes
Comminutor	Yes	No	Yes	Yes	Yes
Flow Meter	Yes	No	Yes	No	Yes
Surge Tank	Yes	No	Yes	Yes	Yes
Aeration Basin	Yes	No	Yes	Yes	Yes
Final Clarifiers	Yes	No	Yes	Yes	Yes
Chlorine Contact Tanks	Yes	No	Yes	Yes	Yes
Dechlorination	Yes	No	Yes	Yes	Yes
Aerobic Sludge Tank	Yes	No	Yes	Yes	Yes
Plant Air Supply	Yes	No	Yes	Yes	Yes
Effluent Pump Station	N/A	No	Yes	Yes	Yes



3 Treatment Efficiency

3.1 Treatment Units

The Scholz WWTF consists of the following components, systems, and processes:

1. Preliminary Treatment: comminutor and bar screen
2. Flow Equalization: surge tank
3. Biological treatment: one extended air type of treatment unit
4. Final sedimentation basin: one final clarifier
5. Disinfection: one chlorine contact tank and one dechlorination chamber
6. Residual treatment: one aerobic sludge holding tank

3.1.1 Preliminary Treatment Facility

Primary screening is accomplished with a comminutor and a manual bar screen with a one inch opening. The comminutor is designed to pass a maximum flow of 164 gallons per minute (gpm) and capable of reducing solids to 0.25 inches in size. The comminutor and bar screen were both in good condition. Applicable requirements of FAC 62-600.400 for this treatment unit have been met.

3.1.2 Surge Tank

In the case of hydraulic and organic shock loading, a 1,000 gallon aerated surge tank is provided. The surge tank is equipped with one blower. Two pumps capable of pumping 90 gallons per minute (gpm) are provided in order to transfer influent from the surge tank to the aeration basin. No influent or effluent data is available from the surge tank, therefore, no actual performance can be evaluated. Aside from surface corrosion on the pumps, the overall condition of the surge tank was good.

3.1.3 Biological Treatment

Following the surge tank is the aeration tank with an approximate volume of 2,500 gallons at 5 feet side water depth. The detention time is approximately 24 hours. Two positive displacement type blowers are installed to provide air. The two blowers alternate with only one running at any given time. Each blower is capable of producing an airflow 24 CFM. Applicable requirements of FAC 62-600.400 for this treatment have been met and the tank and blowers are in good condition.



3.1.4 Final Clarifier

In order to separate sludge from effluent, one clarifier with an approximate volume of 417 gallons is provided. The detention time at design flow for the clarifier is 4 hours. The clarifier is equipped with an airlift pump capable of returning 100 percent of treatment unit designed influent flow. Overall, the clarifier and pump are in good condition and the process meets all applicable requirements of FAC 62-600.400.

3.1.5 Chlorine Contact Tank

Disinfection is provided in a 52 gallon chlorine contact tank by use of pelletized chlorine. The tank provides a 30 minute detention time with the liquid depth at 9 inches and a design flow of 2,500 gpd. This process component meets all applicable requirements of FAC 62-600.400. With the exception of surface corrosion on the grating, the tank is in fair to good condition.

3.1.6 Dechlorination

Dechlorination is being accomplished in the 52 gallon dechlorination chamber with the use of sodium sulfite. Overall, the chamber is in fair to good condition and the process meets all applicable requirements of FAC 62-600.400. It should be noted that the grating in this area is showing significant corrosion and should be monitored closely.

3.1.7 Aerobic Sludge Holding Tank

Residual treatment is accomplished in a 448 gallon aerobic sludge holding tank. The facility produces little to no sludge and therefore sludge disposal has not been necessary. The sludge holding tank was well maintained and the process seemed to be operating efficiently. The structural condition of the basin was in good condition and the process meets all applicable requirements of FAC 62-600.400.

3.2 Overall Facility

Overall, the WWTF was in good condition and should be able to operate at the current design capacity of 2,500 gpd for the next 5 years at the current effluent parameters.



4 Performance Trends

4.1 Influent

Influent flow monitoring is not required by the permit for this treatment facility.

4.2 Effluent

The Gulf Power WWTF is required to report only weekly effluent flow. The only parameters that require quarterly monitoring are CBOD₅ and TSS. From January 2010 until November 2014, all measured CBOD₅ and TSS values were below the permitted effluent discharge limits and are tabulated in Table 3. These values are graphically shown in Figure 3, and Figure 4.

Table 3 – WWTF Flow and Effluent

Month	Monthly Average Flow (gallons)	CBOD ₅ (mg/L)	TSS (mg/L)
Jan-10	499	<2	19
Feb-10	211		
Mar-10	262		
Apr-10	243	14	12
May-10	311		
Jun-10	1607		
Jul-10	247	<2	7
Aug-10	319		
Sep-10	236		
Oct-10	141	<2	2
Nov-10	222		
Dec-10	226		
Jan-11	285	10	7
Feb-11	222		
Mar-11	192		
Apr-11	282	11	13
May-11	196		
Jun-11	384		
Jul-11	298	<2	11
Aug-11	305		
Sep-11	376		
Oct-11	345	9	11
Nov-11	158		
Dec-11	206		
Jan-12	157	7	15
Feb-12	208		
Mar-12	233		
Apr-12	182	3.7	19



*Gulf Power Company Scholz Plant WWTF
2015 Operation Maintenance and Performance Report*



Table 3 – WWTF Flow and Effluent

Month	Monthly Average Flow (gallons)	CBOD ₅ (mg/L)	TSS (mg/L)
May-12	459		
Jun-12	175		
Jul-12	478	5.6	5
Aug-12	151		
Sep-12	240		
Oct-12	237	2.5	7
Nov-12	117		
Dec-12	266		
Jan-13	174	<2	11
Feb-13	442		
Mar-13	315		
Apr-13	190	5.7	<3.2
May-13	221		
Jun-13	230		
Jul-13	314	<2	10
Aug-13	286		
Sep-13	245		
Oct-13	203	7.13	22
Nov-13	157		
Dec-13	285		
Jan-14	423	12	10
Feb-14	315		
Mar-14	286		
Apr-14	287	<2	7
May-14	655		
Jun-14	477		
Jul-14	348	16	9
Aug-14	293		
Sep-14	237		
Oct-14	158	3.38	10
Nov-14	199		



Figure 3 – Monthly ADF and CBOD₅

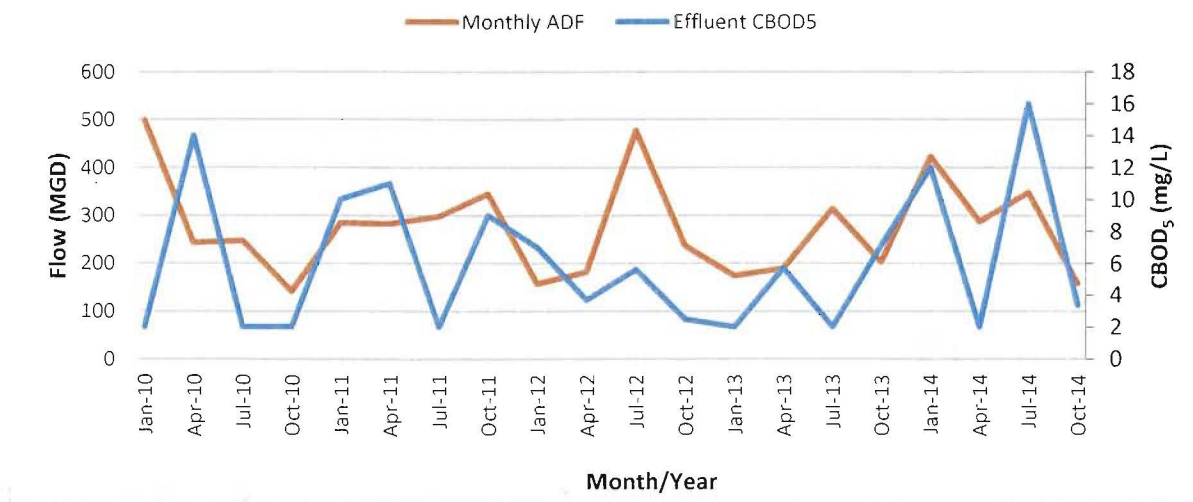
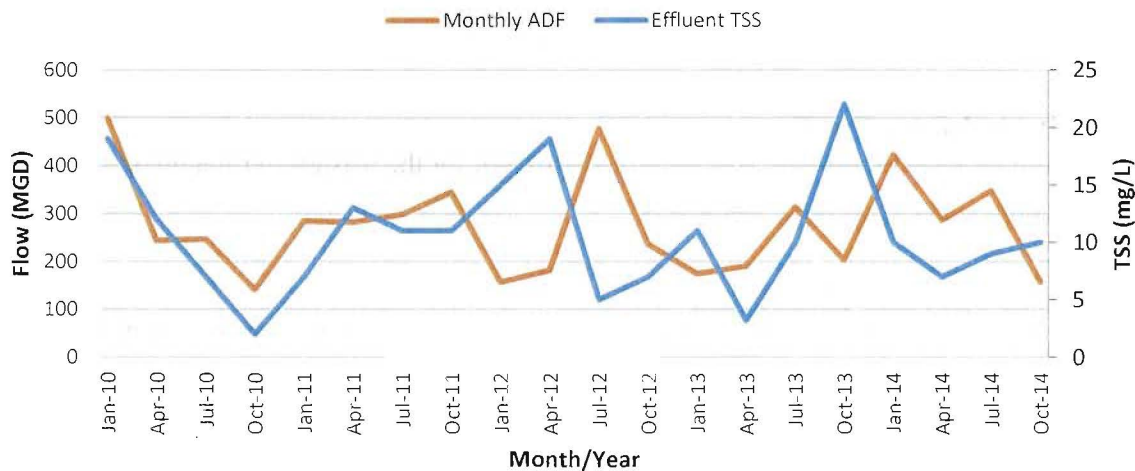


Figure 4 – Monthly ADF and TSS

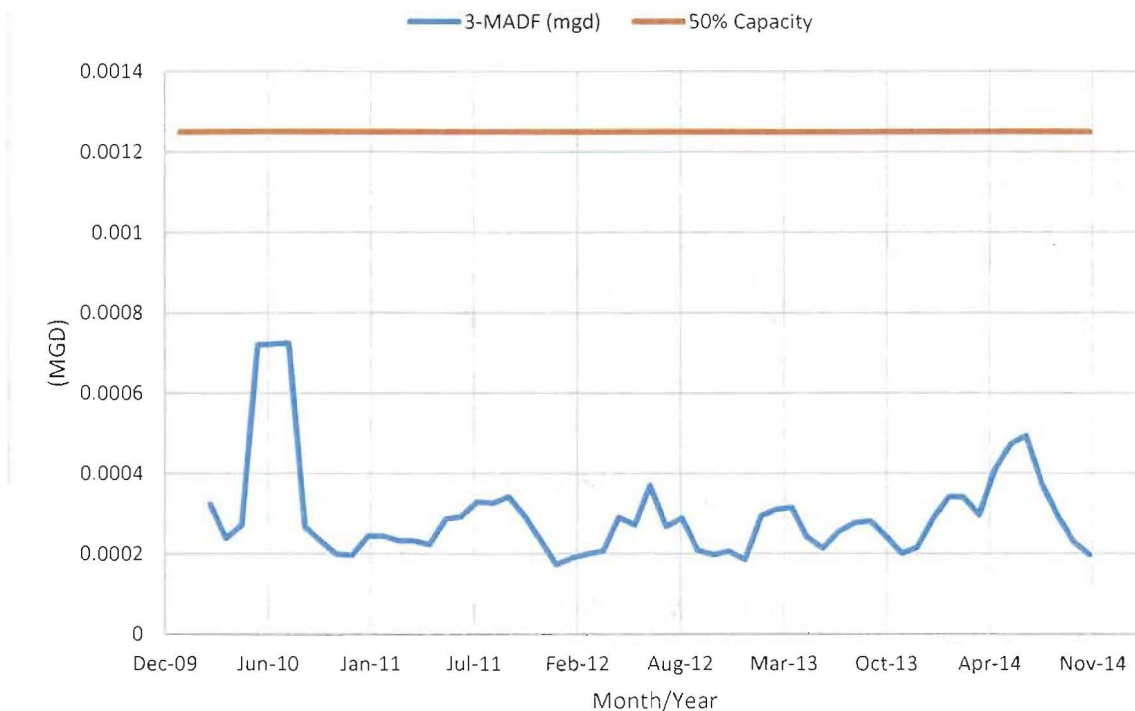


4.3 Three Month Average Daily Flow

The three month average daily flow between January 2010 and November 2014 never exceeded 50 percent of the permitted capacity of 2,500 gpd. Figure 5 graphically shows the 50 percent capacity and the three month average daily flow.



Figure 5 – 3 Month ADF and 50% Capacity



4.4 Groundwater Quality

There is no groundwater monitoring required by permit for the wastewater treatment facility and no efficiency evaluations were conducted.

4.5 Surface Water Quality

There is no surface water monitoring required by permit for the wastewater treatment facility and no efficiency evaluations were conducted.



5 Operation and Maintenance Program

The review of the operation and maintenance program indicates that the overall procedures followed are within the guidelines set by FDEP. Maintenance personnel are on staff to keep up with preventive maintenance needs as well as any required replacement of the process equipment to optimize the facility operation.

5.1 Record Drawings

The record drawings are located at the WWTF maintenance office. The drawings are up to date and are easily accessible by the operators at all times.

5.2 Operations and Maintenance Manual

The existing Operation and Maintenance (O&M) Manual is also available at the treatment facility maintenance office. The O&M Manual provides all of the appropriate information in accordance with FAC 62-600.720(1)(b) such as instructions and design data for operation of the facility processes, equipment operation and repair information, safety guidelines, emergency operations, and laboratory procedures. Each process unit's operational data includes troubleshooting guides.

5.3 Operation and Maintenance Log

The operators maintain an Operation and Maintenance Log at the treatment facility. This log contains process changes, routine maintenance, major repairs, and unusual activities. These different entries are recorded daily. All reports that are required by FDEP are completed in a timely manner and kept on record at the plant.

5.4 General

The WWTF is required by FDEP to have a certified operator visit the site twice per week. The certified operator information is in Table 4.

Table 4 – Operator Certification

Name	Class	Certification Number
Roger A. Danley	D	21118

Record keeping and effluent sampling and testing programs are adequate. Lab tests are performed by Test America Laboratories.



6 Problems, Deficiencies, and Corrective Actions

Overall, the Gulf Power WWTF is in good condition and will be able to operate at its design capacity of 2,500 gpd for the next 5 years. From an operation and maintenance standpoint, no problems which would affect effluent quality were indentified during the on-site inspection of the facility.

No urgent corrective actions pertinent to safe, reliable operation of the facility are required at this time.

It was previously noted that there is surface corrosion on the grating around the chlorine and dechlorination tanks. This corrosion should be monitored closely and the grating should be replaced should further deterioration occur.



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

470 HARRISON AVENUE
PANAMA CITY, FL 32401

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

March 4, 2015

Mr. James O. Vick
Manager of Environmental Affairs
Gulf Power Company
One Energy Place
Pensacola, Florida 32520
jovick@southernco.com

Re: Gulf Power Scholz Electric Generating Plant
FL0002283
Jackson County

Dear Mr. Vick:

Department personnel conducted a compliance inspection of the above-referenced facility on February 18, 2015. Based on the information provided during the inspection, the facility was determined to be in compliance with the Department's rules and regulations. A copy of the inspection report is attached for your records. This is a preliminary report and a final report form and summary will be sent to you in the future updated with any new information obtained through the Department's final analysis.

The Department appreciates your efforts to maintain this facility in compliance with state and federal rules. If you have any questions or comments, please contact C. Mark Sumner at (850) 767-0046 or by e-mail at mark.c.sumner@dep.state.fl.us.

Sincerely,

Josie Penton
Environmental Manager

JP/cms

Enclosures: Inspection Report Form
Inspection Report Summary

c: Robert Jernigan, Engineer III (rjjernig@southernco.com)
Roger Danley, Sr. Compliance Specialist, (radanley@southernco.com)
Kevin Beaty, Sr. Environmental Affairs Specialist, (klbeaty@southernco.com)

Scholz Electric Generating Plant

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March 4, 2015

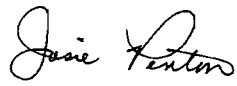
Kim Allen, DEP Pensacola Office (Kim.Allen@dep.state.fl.us)

Dawn Templin, FDEP Waste Management (Dawn.Templin@dep.state.fl.us)

COMET ENTRY DATE
3/2/2015

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

Name and Physical Location of Facility: Scholz Electric Generating Plant 1460 Gulf Power Road Sneads, Florida 32460		WAFR ID: FL0002283		County: Jackson		Entry Date/Time: 2/18/15 8:50 AM	
				Phone:		Exit Date/Time: 2/18/15 2:12 PM	
Name(s) of Field Representative(s): Robert Jernigan Kevin Beaty Roger Danley		Title: Engineer III Environmental Affairs Specialist Compliance Specialist		Phone: 850-444-6024 850-444-6551 850-522-3445			
Name and Address of Permittee or Designated Representative: Mr. James O. Vick Gulf Power Company One Energy Place Pensacola, Florida 32520-0328				Title: Manager of Environmental Affairs		Phone: (850) 444-6700	
Inspection Type:	F	Y	I	5	Samples Taken? (Y/N):	Y	Sample ID: RQ-2015-02-09-20-
					Samples Split? (Y/N):	N	
Domestic	X	Industrial			Were Photos Taken? (Y/N):	N	Logbook Volume: I
					Pages:	138-140	
Advance Notification Required (Security)					X	Facility Notified in Advance of Inspection	
FACILITY COMPLIANCE AREAS EVALUATED IC: In Compliance; MC: Minor Non-Compliance; NC: Out of Compliance; SC: Significantly Out of Compliance; NA: Not Applicable; NE or Blank: Not Evaluated Significant Non-Compliance Criteria Should be Reviewed When Out of Compliance Ratings Are Given in Areas Marked by a "♦"							
PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL	
IC	1. ♦ Permit	IC	3. Laboratory	IC	6. Facility Site Review	IC	9. ♦ Effluent Quality
IC	2. ♦ Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10. ♦ Effluent Disposal
		IC	5. ♦ Records & Reports	IC	8. ♦ Operation & Maintenance	IC	11. Biosolids/Sludge
						IC	12. Groundwater
NA	14. Other					NE	13. SSO Survey
Facility and/or Order Compliance Status:			X	In Compliance		Out of Compliance	Significantly Out of Compliance
Recommended Actions: See Inspection Report Summary below							
Name(s) and Signature(s) of Inspector(s) C. Mark Sumner 				District Office/Phone Number NWDP/(850) 767-0046		Date 3/2/2015	
Signature of Reviewer Josie Penton 				District Office/Phone Number NWDP/(850) 767-0045		Date 3/4/2015	
Single Event Violation Code(s):							

INSPECTION REPORT SUMMARY

Facility Name: Gulf Power Scholz Electric Generating Plant

Facility ID: FL0002283

Inspection Type: FY15

Inspection Date: 02/18/2015

FACILITY BACKGROUND:

Facility Address: 1460 Gulf Power Road, Sneads Florida 32460

Program/Permit Information: IW, permit issue date: 09/23/2010, expiration date: 09/22/2015

Treatment Summary: Non-contact once-through condenser cooling water (OTCW) discharges with chlorination to the on-site discharge canal, and thence to the Apalachicola River, a Class III fresh water. All other industrial and domestic wastewater streams discharge into the on-site ash pond. Discharges to the on-site ash pond consist of low volume wastes (LVW) (i.e. ash sluice water, water softener regeneration wastewater, boiler blowdown and air preheater wash), auxiliary equipment cooling water, coal pile runoff, yard sump runoff, and treated domestic wastewater. Domestic wastewater receives secondary treatment in a package treatment plant prior to discharging to the ash pond. Overflow from the ash pond discharges to the on-site discharge canal, and thence to the Apalachicola River.

Permitted Capacity: 129.6 MGD maximum permitted discharge

1. PERMIT: In Compliance

Observation: FDEP Permit # FL0002283 was issued on September 23, 2010 for the operation of this facility and it expires on September 22, 2015. At the time of this inspection, the facility was in operation and a copy of the permit was onsite and available for review.

Additional Comments: In accordance with Rule 62-620.335, Florida Administrative Code (FAC), to continue activities allowed in the current permit beyond the expiration date of the current permit, the permittee must apply with the Department for renewal of the permit, at least 180 days prior to its expiration, using the appropriate forms listed in Rule 62-620.910, FAC. Please submit permit renewal application by March 26, 2015.

2. COMPLIANCE SCHEDULES: In Compliance

Observation: Permit Condition VI: The facility has met the following required schedules:

1. Domestic Wastewater Plant Operation Certification. There are currently two class D or higher certified operators for the WWTP.
2. Continue implementing the existing BMP3 Plan. The Best Management Practices/Pollution Prevention (BMP3) Plan has been prepared and implemented in accordance with Part VI of the permit
3. Within six months of the effective date of the permit, the permittee shall schedule a meeting with the Department to discuss the contents of the aquatic organism return plan and shall submit the plan to the Department within 12 months of the effective date of this permit.

Facility staff has met with the Department and the aquatic organism return plan has been submitted.

4. When an application for renewal of this permit is submitted, no later than 180 days prior to permit expiration, the permittee shall submit a technical report on groundwater in accordance with the requirements of Condition III.8. This report is due by March 26, 2015 when the application for permit renewal is submitted.

3. LABORATORY: In Compliance

Observation: The facility's contract laboratory is Test America (Mobile, Alabama). They perform all effluent analysis except for pH. Test America also conducts the sampling and analysis for the groundwater monitoring wells. The operator performs effluent analyses for pH at the facility.

FDEP SOPs FT1000, FT2000, Section 3.2.5.2 of FT2000, and FT1900:

Observation: The calibration of the facility's hand-held chlorine meter is verified daily with a secondary gel standard.

The DPD, secondary standards that were on-site at the time of the inspection expire in November 2016. The DPD reagent packets in use were for Free Chlorine. The operator switched over to total chlorine after this was observed.

FDEP SOPs FT1000, FT1100, and FT1900:

Observation: The facility's hand-held pH meter is calibrated at least monthly, or more frequently as specified by the meter manufacturer, and the calibration of the meter is verified daily, with appropriate buffers.

The 4, 7, and 10 pH buffers that were on-site at the time of the inspection expire in July 2018, August 2015, and April 2015 respectively.

Additional Comments: During calibration verification of meters, if the values observed for chlorine, pH, turbidity, dissolved oxygen (DO) and specific conductance vary $\pm 10\%$ for chlorine (or 20% if verifying an inline meter against a calibrated hand-held meter), 0.1 standard units for pH, 10% for turbidity (or 20% if verifying an inline meter against a calibrated hand-held meter), 0.3 mg/L for DO or 5% for specific conductance, it shall be assumed that the calibration of the meters is unstable. The cause of the instability must be determined and corrective actions must be taken to bring the meters into stable calibration, such as maintenance, repair or replacement.

FDEP SOP FT1400:

Observation: At the time of this inspection, the facility was compliant with the requirements below:

The accuracy of each of the facility's thermometers used for ensuring wastewater compliance must be verified at least annually against a National Institute of Standards and Technology (NIST) traceable thermometer which has been recertified at least once every two years. Any temperature difference between the measurement thermometer and the NIST thermometer must be used as a correction factor in subsequent temperature readings taken with the measurement thermometer. Each thermometer must meet the minimum graduation requirement of 0.5°C, and have a temperature range of at least -5°C to +45°C (US Geological Survey, National Field Manual for the Collection of Water-Quality Data, Book 9, Chapter A6, Field Measurements, Section 6.1, Temperature).

4. SAMPLING: In Compliance

Observation: Permit Condition I.A.1: Time composite influent and effluent samples and grab samples are being taken at the facility, in accordance with the facility permit.

5. RECORDS AND REPORTS: In Compliance

Observation: Permit Condition I.C.3: A records review for the May 31, 2012 effluent monitoring and groundwater monitoring event indicated that information and data on chain of custody sheets, laboratory reports, Discharge Monitoring Reports (DMR) and Groundwater Monitoring Reports (GMR) were consistent. DMRs and GMRs are being submitted to the Department in a timely manner.

Daily activities are recorded along with the times in the operator's log book.

The Operation and Maintenance Manual for the plant was onsite and available for review.

The Best Management Practices/Pollution Prevention (BMP3) Plan was onsite and available for review.

The wet weather detention volume for the ash pond was last certified January 29, 2015. This is required annually. A copy of the certification was provided during the inspection.

6. FACILITY SITE REVIEW: In Compliance

The facility is secure and well maintained.

7. FLOW MEASUREMENT: In Compliance

Observation: The facility's flow meter was last calibrated on January 27, 2015.

8. OPERATION AND MAINTENANCE: In Compliance

Observation: Permit Conditions V.1-3: According to records reviewed during the inspection, the required operator site time of a Class D or higher operator 2 visits/week on nonconsecutive days for a total of 1 hour per week, is being met. Also, based on a discussion at the time of this

inspection the wastewater facilities are operated under the supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control.

9. EFFLUENT QUALITY: In Compliance

Observation: Permit Condition I.A.1: A review of the DMRs for the period from January 2014 to January 2015 indicated no violations of effluent quality requirements or permit limits.

Observation: Permit Condition I.A.1: Effluent samples were taken by the Department as part of this inspection and analyzed by the Department's Laboratories (NELAP #E31780). The lab results along with the Effluent Quality Assessment will be attached to the final report when completed.

10. EFFLUENT DISPOSAL: In Compliance

Observation: The facility has a 129.6 million gallon per day (MGD) maximum daily flow (MDF) permitted capacity discharging to Apalachicola River. Two internal outfalls, one permitted discharge to the discharge canal from the ash pond. The other permitted discharge to the on-site ash pond. The facility's outfalls were evaluated during this inspection, and no problems were noted.

11. BIOSOLIDS/SLUDGE: In Compliance

A. Domestic Residuals Management Requirements:

Observation: Permit Condition II.A.1-7: Biosolids generated at this facility are permitted to be transferred to a residuals management facility. Biosolids hauling records were complete, onsite and available for review during this inspection. This facility has not hauled any biosolids since this permit was issued in 2010.

Additional Comments: In accordance with Rule 62-640.880(1)(c), FAC, 30 days before transporting biosolids from the source facility to an alternative biosolids management or treatment facility, a copy of the written agreement between the source facility and the alternative biosolids management or treatment facility must be submitted to the Northwest District Office of the Department. It should be mailed to Bill Evans, Florida Department of Environmental Protection, 160 West Government Street, Suite 308, Pensacola, Florida 32502, or Bill.Evans@dep.state.fl.us.

B. Industrial Sludge Management Requirements:

Observation: The permittee is responsible for proper treatment, management, use or land application of its industrial sludges. According to facility personnel, no industrial sludges have been transported, or incinerated from this facility.

On February 18, 2015, an inspection of the ash ponds was performed by Department personnel. The ash ponds appeared to be in compliance with the Department's Solid Waste Management

rules at the time of the inspection. A copy of the solid waste compliance inspection report is attached to this report.

12. GROUNDWATER: In Compliance

Observation: Permit Condition III.1-18: A review of GMRs for the period from January 2014 to December 2014 indicated no violations of groundwater quality requirements or permit limits.

13. SANITARY SEWER OVERFLOW (SSO) SURVEY: Not Evaluated

Additional Comments: Sanitary sewer overflow regulations only apply to domestic wastewater facilities. All industrial or domestic facilities however must report any unauthorized releases of wastewater (spills) to the Department. This requirement is applicable to all facilities with a discharge. If a spill is less than 1,000 gallons, and is not expected to reach surface waters, the report may be made to the District Office at (850) 595-0659 or (850) 595-0673, or to the State Watch Office (SWO) at (800) 320-0519. If the spill is 1,000 gallons or more, and/or if the spill (of any size) reaches surface waters, the report must be made to the SWO. If there is a question whether or not a spill has reached (or will reach) surface waters, the facility should err on the side of safety and report the spill to the SWO.

14. OTHER: Not Applicable



FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

470 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

March 4, 2015

Richard M. Markey, P.G., Manager of Land and Water Programs
Gulf Power
One Energy Place
Pensacola, Florida 32520-0328
rmmarkey@southernco.com

Re: Gulf Power Company – Plant Scholz
WACS ID No.: 100464
Jackson County

Dear Mr. Markey:

Department personnel conducted a solid waste compliance inspection of the above-referenced facility on February 18, 2015. Based on the information provided during the inspection, the facility was determined to be in compliance with the Department's rules and regulations. A copy of the inspection report is attached for your records.

The Department appreciates your efforts to maintain this facility in compliance with state and federal rules. If you have any questions or comments, please contact Corinna Clanton at (850)767-0052 or by e-mail at Corinna.Clanton@dep.state.fl.us.

Sincerely,

Corinna Clanton, Environmental Specialist II
Northwest District
Florida Department of Environmental Protection

CC/cc/h

Enclosure: Inspection Report

c: Kevin Lee Beaty, Gulf Power Company: KLBEATY@southernco.com ;
Robert J. Jernigan, Gulf Power Company: RJERNIG@southernco.com ;
Roger A. Danley, Jr., Gulf Power Company: RADANLEY@southernco.com ;
Jim Byer, FDEP Pensacola: James.Byer@dep.state.fl.us ;
Josie Penton, FDEP Panama City: Josie.Penton@dep.state.fl.us



Florida Department of
Environmental Protection
Inspection Checklist

FACILITY INFORMATION:

Facility Name: GULF POWER COMPANY - PLANT SCHOLZ
On-Site Inspection Start Date: 02/18/2015
On-Site Inspection End Date: 02/18/2015
WACS No.: 100464
Facility Street Address: SCHOLZ ELECTRIC GENERATING PLANT
City: SNEADS
County Name: JACKSON
Zip: 32460

INSPECTION PARTICIPANTS:

(Include ALL Landfill and Department Personnel with Corresponding Titles)

Principal Inspector: Corinna Clanton, Inspector
Other Participants: Roger A. Danley, Jr., Senior Compliance Specialist; C. Mark Sumner, Environmental Specialist; Richard M. Markey, Environmental Supervisor; Robert J. Jernigen, Engineer III; Kevin Lee Beaty, Senior Environmental Affairs Specialist

INSPECTION TYPE:

Routine Operation Inspection for Other (user defined) facility

ATTACHMENTS TO THE INSPECTION CHECK LIST:

This Cover Page to the Inspection Checklist may include any or all of the following attachments as appropriate.

COMMENTS:

03/02/2015

An inspection was performed at the Gulf Power Scholz facility on February 18, 2015. Kevin Beaty, Robert Jernigan, Roger Danley and Mike Markey provided an overview of the site. The ashponds appeared to be in compliance with the Department's Solid Waste Management rules at the time of the inspection.

ATTACHMENTS:

Inspection Date: 02/18/2015

Southern Access Road Facing NE



Base of Berm with Outfall



SW Access Road facing NE



Monitoring Wells



Western Access Road facing E



Maintenance repairs



Inspection Date: 02/18/2015

Stockpile of materials

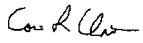


Additional materials stockpile



Inspection Date: 02/18/2015

Signed:

Corinna Clanton PRINCIPAL INSPECTOR NAME	Inspector PRINCIPAL INSPECTOR TITLE
 PRINCIPAL INSPECTOR SIGNATURE	FDEP ORGANIZATION
	3/4/2015 DATE
C. Mark Sumner INSPECTOR NAME	Environmental Specialist INSPECTOR TITLE
NO SIGNATURE INSPECTOR SIGNATURE	FDEP ORGANIZATION
Roger A. Danley, Jr. REPRESENTATIVE NAME	Senior Compliance Specialist REPRESENTATIVE TITLE
NO SIGNATURE REPRESENTATIVE SIGNATURE	Gulf Power ORGANIZATION
Richard M. Markey REPRESENTATIVE NAME	Environmental Supervisor REPRESENTATIVE TITLE
NO SIGNATURE REPRESENTATIVE SIGNATURE	Gulf Power ORGANIZATION
Robert J. Jernigen REPRESENTATIVE NAME	Engineer III REPRESENTATIVE TITLE
NO SIGNATURE REPRESENTATIVE SIGNATURE	Gulf Power ORGANIZATION
Kevin Lee Beaty REPRESENTATIVE NAME	Senior Environmental Affairs Specialist REPRESENTATIVE TITLE
NO SIGNATURE REPRESENTATIVE SIGNATURE	Gulf Power ORGANIZATION
Supervisor: James Byer	

Inspection Date: 02/18/2015

NOTE: By signing this document, the Site Representative only acknowledges receipt of this Inspection Report and is not admitting to the accuracy of any of the items identified by the Department as "Not Ok" or areas of concern.

ATTACHMENT 2

FIELD EVALUATION FORM FOR
OPERATION AND MAINTENANCE PERFORMANCE REPORTS FOR
DOMESTIC WASTEWATER FACILITIES

Florida Department of Environmental Regulation

July 1992

FIELD EVALUATION FORM FOR
OPERATION AND MAINTENANCE PERFORMANCE REPORTS FOR
DOMESTIC WASTEWATER FACILITIES

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PHYSICAL CONDITION

Hydraulic and Organic Overloading

1. Is there evidence of past spills at the plant or through nearby (upstream) manholes? (Discoloration of the ground or a strong smell may indicate past spills at the plant.) ☐ yes ☒ no
2. Are raw sewage pumping stations, influent lines, overflow weirs, or other structures surcharged? ☐ yes ☒ no
3. Is there flow through bypass channels? ☐ yes ☒ no
4. Are there old high water lines or are the weirs on the clarifier flooded? ☐ yes ☒ no
5. Are there overflows at alternative discharge points, channels, or other areas? ☐ yes ☒ no
6. Are there any open-ended pipes that appear to originate in a process or storage area and periodically contain flows to the ground or to surface water? (Although these pipes have been disconnected from a closed system or otherwise removed from service, they can still be connected to a discharge source.) ☐ yes ☒ no
7. Is the facility receiving excessive septage dumping from septic tanks? ☐ yes ☐ no **N/A**
8. Are checks for overflows performed routinely? ☒ yes ☐ no

General Condition

1. Is there evidence of corrosion problems at the treatment plant and in the collection system? ☒ yes ☐ no **The metal structure around the grates on top of the plant are showing signs of surface corrosion.**
2. Do any of the units or associated equipment show signs of excessive wear? ☐ yes ☒ no

Rule Requirements

1. Does each component, system, or process meet the applicable reliability standards required by Rule 17-600.400(1)(b), F.A.C.? ☒ yes ☐ no
2. Does the facility have adequate alarm systems for power or equipment failures as recommended by standard design references? ☒ yes ☐ no
The plant has two power generators
Are they working properly? ☒ yes ☐ no
3. Is standby power or other equivalent provisions provided for all components, systems, and processes as recommended by standard design references? ☒ yes ☐ no
No alarm at WWTF, but plant staff do a daily check for proper operation

4. Are there adverse effects resulting from odors, noise, aerosol drift, and lighting at the facility? () yes (X) no
5. Are there piles of collected screenings, slurries, residuals, or by-products of treatment? (Their disposal, including run-off of any water, must be such that none enters surface waters or their tributaries.) () yes (X) no

Operating Problems

1. Are all components, systems, or processes (including associated equipment such as pumps, blowers, air compressors, oxygen systems, scum collection systems, residuals collection systems, diffusers, mechanical aerators, mechanical drives, mechanical mixers, motors, residuals heater, feed systems, backwash systems, control systems, flow measurement devices, automatic valves, ventilation fans, and other miscellaneous equipment) operating properly? (X) yes () no

If no, explain.

2. Are any components, systems, or processes out of service? () yes (X) no

If yes, complete the following table for each component, system, or process that is not operating.

Name	Date Out of Service	Type of Failure	Expected Date to Return to Service
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. Are there excessive noises associated with any component, system, or process? () yes (X) no
4. Is there any unusual equipment intended to correct operational problems (e.g. special pumps, floating aerators in diffused air systems, chemical feeders, temporary construction or structures, or any improvised systems)? () yes (X) no

5. Are all components, systems, and processes expected to continue to operate properly for the permit period? (X) yes () no

If no, explain. _____

Safety Features

1. Are proper safety precautions used for each component, system, and process?
(X) yes () no

If no, explain. _____

2. Is a written set of safety rules available to all employees? (X) yes () no
3. Is the plant generally clean and free from open trash areas? (X) yes () no
4. Is the plant site enclosed with a fence or otherwise designed with appropriate features that discourage the entry of animals or unauthorized persons? (X) yes () no
5. Are wastewater pipes clearly distinguished from product pipes?
(X) yes () no
6. Are there any cross connections between a potable water supply and non-potable source? () yes (X) no
7. Does the plant have the following recommended safety equipment?
- a. Portable air blower (gas motor or electric motor operated)
(X) yes () no
 - b. Electric explosion-proof lantern (X) yes () no
 - c. Safety harness (X) yes () no
 - d. Hose mask with hand blower and 50-foot hose (X) yes () no
 - e. Self contained breathing apparatus for plants using chlorine
(X) yes () no () not applicable
 - f. Explosion and oxygen meters (X) yes () no
8. Is personal protective clothing provided (safety helmets, ear protectors, goggles, gloves, rubber boots with steel toes, etc.)? (X) yes () no
9. Are portable hoists available for equipment removal? (X) yes () no

10. Are ladders provided to enter manholes of wetwells (fiberglass or wooden for electrical work)? ☒ yes () no
11. Are life preservers and throwlines provided adjacent to all basins, ponds, and lagoons? () yes () no **N/A**
12. Are handrails provided and in-place around all basins and openings? ☒ yes () no
13. Are all stairs, walkways, and platforms free of grease, oil, and debris and are nonskid surfaces used when needed? ☒ yes () no
14. Is adequate lighting provided? ☒ yes () no
15. Are all components, systems, and processes adequately ventilated? ☒ yes () no
16. Are protective guards provided and in-place on all rotating machinery? ☒ yes () no
17. Is all electrical circuitry enclosed and identified? ☒ yes () no
18. Are appropriate warning signs posted (no smoking, high voltage, non-potable water, chlorine hazard, toxic and flammable gases, etc.)? () yes ☒ no
19. Are emergency shower and eye wash facilities provided where needed? () yes () no **N/A**
20. Are appropriate fire extinguishers provided where needed? () yes ☒ no **Recommend One**
21. Is instrumentation provided and operational for the detection of toxic and flammable gases and low oxygen levels? ☒ yes () no
22. Do pressure vessels operate within their design rating and have a functional pressure relief? () yes () no ☒ not applicable
23. Are chemicals stored properly? ☒ yes () no
24. Are undiked oil/chemical storage tanks used at the facility? () yes () no ☒ not applicable
25. Are chemical storage tanks designed to handle the particular chemical? () yes () no ☒ not applicable
26. Are storage bins provided with dust collectors and vents? () yes () no ☒ not applicable
27. Are storage bins large enough to avoid continuous filling which requires the presence of an operator all the time? () yes () no ☒ not applicable
28. Are access points for sampling dry points which can be reached safely? ☒ yes () no

OPERATION AND MAINTENANCE PROGRAM

Staffing

1. Is the facility adequately staffed with certified operators in accordance with the requirements of Rule 17-602, F.A.C.? (X) yes () no

Maintenance Management

1. Is there an identification system to locate and identify all items of equipment? (X) yes () no
2. Does the facility maintain a records system which includes the following?
 - a. Preventive and corrective maintenance work performed (X) yes () no
 - b. Maintenance man-hours (X) yes () no
 - c. Spare parts used in the repair (X) yes () no
 - d. Name of the person performing the work (X) yes () no
 - e. Maintenance related costs (X) yes () no
3. Is routine and preventive maintenance scheduled and performed on time? (X) yes () no
4. Are adequate spare parts and supply inventories maintained for each component, system, and process? (X) yes () no
5. Is the maintenance program adequate? (X) yes () no

If no, explain. _____

Records Keeping

1. Are records required by the permit maintained for a period of five years? (X) yes () no
2. Is the information required by the permit available, complete, and current? (X) yes () no
3. Are analytical results consistent with the data reported in the following?
 - a. Monthly operating report (X) yes () no
 - b. Limited wet weather discharge report () yes () no N/A

- c. Ground water monitoring report ☐ yes ☐ no N/A
- d. Reclaimed water or effluent analysis report ☐ yes ☐ no N/A
4. Do sampling and analyses data include the following?
- a. Dates, times, and location of the sampling ☒ yes ☐ no
- b. The name of the individual performing the sampling
☒ yes ☐ no
- c. The analytical methods and techniques used ☒ yes ☐ no
- d. The results of the analyses and calibration ☒ yes ☐ no
- e. The dates of the analyses ☒ yes ☐ no
- f. The name of the person performing the analyses ☒ yes ☐ no
- g. The instantaneous flow at the grab sample station
☐ yes ☒ no
5. Do monitoring records include records for all parameters that must be monitored in accordance with the permit? ☒ yes ☐ no
6. Are flow meter calibration records available?
☒ yes ☐ no
7. Are laboratory equipment calibration and maintenance records adequate?
☒ yes ☐ no
8. Are plant records adequate and do they include the following?
- a. A copy of the Department permit ☒ yes ☐ no
- b. An up-to-date operation and maintenance manual ☒ yes ☐ no
- c. Record drawings ☒ yes ☐ no
- d. Schedules and dates of equipment maintenance repairs
☐ yes ☒ no
- e. Equipment suppliers manual ☒ yes ☐ no
- f. Equipment data cards or equal ☒ yes ☐ no
9. Are operating records adequate? ☒ yes ☐ no

10. Have all untreated bypasses and discharges or overflows been reported to the Department? () yes () no **None**

If no, explain. _____

Sampling

1. Are samples taken at the sites specified in the permit? (X) yes () no
2. Is sampling and analysis completed for each parameter specified by the permit? (X) yes () no
3. Is the frequency of sampling in accordance with the permit? (X) yes () no
4. Is the method of sample collection (grab or composite) in accordance with the permit? (X) yes () no
5. Are sample collection procedures in accordance with the approved test procedures referenced in Rule 17-601.400(1)(a), F.A.C.? (X) yes () no
6. For flows of 100,000 gallons per day or greater, are recording flow meters and totalizers used? () yes () no (X) not applicable
7. Are flow recording devices calibrated at least annually? (X) yes () no

Laboratory Analysis

1. Are all laboratory tests required by Department rules performed by a laboratory that has been certified by HRS, or, for on-site tests for dissolved oxygen, pH, and total chlorine residual, are all tests performed by a certified laboratory or under the direction of an operator certified in accordance with Chapter 17-602, F.A.C.? () yes () no **Outside Lab**

INDIVIDUAL COMPONENTS, SYSTEMS, AND PROCESSES

PUMPING

Raw Wastewater

1. What is the location of the pump station? Inside the facility
2. What are the design flows to the pump station? Unknown gpm average
_____ gpm peak
3. What are the actual flows to the pump station? Unknown gpm average
_____ gpm peak
4. What type of pump control system is used?
() variable speed () constant speed Air pressure
5. If the control system is variable speed, what type of controller is used?
_____ (X) not applicable
6. If multiple pumps are used, how is each unit operated?
() about 15-20% apart () equally () not alternated
() not applicable Single Pump
- Is the system remotely monitored? () yes (X) no () not applicable
7. Does the pump station have a bypass? () yes (X) no

If yes, can the bypass flow be disinfected?
() yes () no () not applicable
8. Can the wet well be isolated into a minimum of two separate basins for maintenance? () yes () no No wetwell
9. If one wet well basin is down for maintenance, how many pumps are operable?
Unknown
10. Does the wet well design provide for equal division of flow to each of the pumps? () yes () no Unknown
11. What is the condition of the sump pump?
(X) good () fair () poor () not applicable
12. What is the condition of the water seal systems?
() good () fair () poor (X) not applicable
13. How often is the pump station checked? (X) daily () other

14. What is the downtime of the pumps? None
15. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual

16. If the pump station is constant speed, do sudden surges affect the operation of the treatment facility when each pump is activated?
() yes (X) no () not applicable
17. What is the general condition of the raw wastewater pump station?
(X) good () fair () poor
18. What are the most common problems that the operator has had with the pump station? If there are problems with the screens, use the section on screens.

None

PUMPING

Raw Wastewater

1. What is the location of the pump station? Surge Tank
2. What are the design flows to the pump station? 90 gpm average
N/A gpm peak
3. What are the actual flows to the pump station? Unknown gpm average
_____ gpm peak
4. What type of pump control system is used?
() variable speed (X) constant speed
5. If the control system is variable speed, what type of controller is used?
_____ (X) not applicable
6. If multiple pumps are used, how is each unit operated?
() about 15-20% apart (X) equally () not alternated
() not applicable
- Is the system remotely monitored? () yes (X) no () not applicable
7. Does the pump station have a bypass? () yes (X) no

If yes, can the bypass flow be disinfected?
() yes () no () not applicable
8. Can the wet well be isolated into a minimum of two separate basins for maintenance? () yes (X) no
9. If one wet well basin is down for maintenance, how many pumps are operable?
N/A
10. Does the wet well design provide for equal division of flow to each of the pumps? (X) yes () no
11. What is the condition of the sump pump?
(X) good () fair () poor () not applicable
12. What is the condition of the water seal systems?
() good () fair () poor (X) not applicable
13. How often is the pump station checked? (X) daily () other

14. What is the downtime of the pumps? None
15. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual

16. If the pump station is constant speed, do sudden surges affect the operation of the treatment facility when each pump is activated?
() yes (X) no () not applicable
17. What is the general condition of the raw wastewater pump station?
() good (X) fair () poor
18. What are the most common problems that the operator has had with the pump station? If there are problems with the screens, use the section on screens.

None

PUMPING

Effluent

~~Raw Wastewater~~

1. What is the location of the pump station? Effluent PS
2. What are the design flows to the pump station? 500 gpm average
N/A gpm peak
3. What are the actual flows to the pump station? .00028 gpd gpm average
.00114 gpd gpm peak
4. What type of pump control system is used?
() variable speed (X) constant speed
5. If the control system is variable speed, what type of controller is used?
 (X) not applicable
6. If multiple pumps are used, how is each unit operated?
() about 15-20% apart (X) equally () not alternated
() not applicable
- Is the system remotely monitored? () yes (X) no () not applicable
7. Does the pump station have a bypass? () yes (X) no

If yes, can the bypass flow be disinfected?
() yes () no () not applicable
8. Can the wet well be isolated into a minimum of two separate basins for maintenance? () yes (X) no
9. If one wet well basin is down for maintenance, how many pumps are operable?
N/A
10. Does the wet well design provide for equal division of flow to each of the pumps? (X) yes () no
11. What is the condition of the sump pump?
() good (X) fair () poor () not applicable
12. What is the condition of the water seal systems?
() good () fair () poor (X) not applicable
13. How often is the pump station checked? (X) daily () other
14. What is the downtime of the pumps? None
15. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual

16. If the pump station is constant speed, do sudden surges affect the operation of the treatment facility when each pump is activated?
() yes () no (X) not applicable
17. What is the general condition of the raw wastewater pump station?
() good (X) fair () poor
18. What are the most common problems that the operator has had with the pump station? If there are problems with the screens, use the section on screens.

None

PUMPING

Residuals

1. What is the design residuals pumping rate? 2500 gallons/day
2. What is the actual residuals pumping rate? Unknown gallons/day
3. What types of residuals are pumped? () primary
(X) return activated sludge (X) waste activated sludge
() other _____
4. How are residuals pumped? () manually (X) automatically
5. How often do the residuals pumps run? Variable
6. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual
7. What is the general condition of the residuals pump station?
() good (X) fair () poor
8. What are the most common problems that the operator has had with the pump station? None

FLOW MEASUREMENT

1. What type of flow meter is used? () propeller meter
() magnetic meter () venturi tube () flow tube
() positive displacement () diaphragm meter () weir
() Parshall flume () rotameter (X) other Ultra-sonic
2. What is the design capacity of the flow measurement device?
unknown mgd
3. What is the present wastewater flow measured? 0.00011 mgd Measured on 11/30/2014
4. Where is the flow meter located? Chlorine Contact Chamber
5. Are the flow measurement device and associated instruments
totalizers, recorders, etc.) properly installed? (X) yes () no
6. Is there adequate straight length of pipe or channel before and after
the flowmeter? () yes () no N/A
7. Is the flow entering the flume reasonably well-distributed across the
channel and free of turbulence, boils, or other disturbances?
() yes () no (X) not applicable
8. Is the flow measurement system capable of measuring the entire range
of wastewater flow? (X) yes () no
9. Are flow measurements being properly made by plant personnel?
(X) yes () no
10. Are flow records properly kept? (X) yes () no
11. Are sharp drops or increases in flow records accounted for?
(X) yes () no
12. Does the flow chart exhibit uniform flow? () yes (X) no
13. Do any plant return flows discharge upstream from the meter?
() yes (X) no
14. Are float and bubble wells clean and free of grease and debris?
() yes () no (X) not applicable
15. Are weirs free of debris? () yes () no (X) not applicable
16. Are weirs or flumes broken or cracked?
() yes () no (X) not applicable
17. Are weir plates corroded or damaged, not sharp edged ($\leq 1/8"$), or not
level? () yes () no (X) not applicable
18. Are stilling wells clogged or broken?
() yes () no (X) not applicable

19. What is the frequency of calibration of the flow meter?
Annually /~~month~~
20. What date was the flow meter last calibrated? 1/27/15
21. Who performed the calibration? Florida Rural Water
22. What is the frequency of routine inspections for proper operation?
Once /day Visual
23. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual
24. What is the general condition of the flow measurement facilities?
(☒) good () fair () poor
25. What are the most common problems that the operator has had with the flow meter? None
- _____
- _____
- _____

PRELIMINARY TREATMENT

Screens

1. What is the design flows of the screens? 164 ^{gpm}~~mgd~~ average
_____ mgd peak
2. What is the actual plant flow? .00028 mgd average
.00114 mgd peak
3. What type of screens are used? ☒ manual () mechanical
4. How many screens are there? 1
5. What is the capacity of each screen? _____ mgd N/A
6. How large are the screen openings? 1 ~~millimeters~~ inch
7. What are the dimensions of the channels? N/A
8. What is the total daily volume of screenings? Unknown cubic feet
9. What is the unit volume of screenings?
Unknown cubic feet/million gallons
10. Is there excessive screen clogging or build-up of debris against the screens? () yes ☒ no
11. Is there a bypass channel? () yes ☒ no

Does the bypass channel have a screen?
() yes () no ☒ not applicable
12. Does the influent channel design provide equal division of flow to each screen? ☒ yes () no
13. How are screenings disposed? If any, then hauled off-site
14. What is the frequency of routine inspections for proper operation?
once /day
15. What is the frequency of maintenance inspections by plant personnel?
365 /year
16. What is the downtime of the screens? None
17. What is the general condition of the screening facilities?
☒ good () fair () poor
18. What are the most common problems that the operator has had with the screening facilities? None

PRELIMINARY TREATMENT

Shredding and Grinding (Comminution)

1. How many shredding and grinding units are there? 1
2. What is the design capacity of each unit? 164 ~~mgd~~ gpm
3. What is the actual flow to each unit? .00028 mgd average
.00114 mgd peak
4. If multiple units are used, is the flow evenly distributed?
() yes () no N/A
5. What are the dimensions of the channels? N/A
6. Is there a bypass channel? () yes (X) no
7. What is the general condition of the shredding and grinding facilities? (X) good () fair () poor
8. What is the frequency of routine inspections for proper operation?
1 /day
9. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual
10. What is the downtime of the shredding and grinding facilities?
None
11. What are the most common problems that the operator has had with the shredding and grinding facilities? None

PRELIMINARY TREATMENT

Grit Removal

1. What is the design capacity of the grit removal system?
_____ mgd average _____ mgd peak
2. What is the actual plant flow? _____ mgd average
_____ mgd peak
3. What type of grit removal system is used? ☐ velocity controlled
☐ aerated ☐ constant head ☐ other _____
4. How many grit removal units are there? _____
5. What is the capacity of each unit? _____
6. What are the dimensions of the unit? _____ cubic feet
7. What is the daily volume of grit? _____ cubic feet
8. What is the unit volume of grit? _____ cubic feet/million gallons
9. How is the grit collection equipment operated?
☐ manually ☐ time clock ☐ continuous duty
10. Is the grit system clogged? ☐ yes ☐ no
11. Is the grit system subject to odors? ☐ yes ☐ no
12. Is the organic content of the grit excessive? ☐ yes ☐ no
13. Is there a bypass channel? ☐ yes ☐ no
14. Does the influent channel design provide equal division of flows to each grit removal unit? ☐ yes ☐ no
15. How is the grit disposed? _____
16. What is the frequency of routine inspections for proper operation?
_____ /day
17. What is the frequency of maintenance inspections by plant personnel?
_____ /year
18. What are the most common problems that the operator has had with the grit removal facilities? _____

BIOLOGICAL TREATMENT

Activated Sludge

1. How many aeration basins are there? 1
2. What is the design capacity of each basin? 2500 ~~mgd~~ gpd
3. What is the actual flow to each basin? .00028 mgd average
.00114 mgd peak
4. What is the flow regime? () conventional () step aeration
() complete mix () pure oxygen (X) other Extended air
5. What type of aeration equipment is used?
(X) diffused air () mechanical aerators () other _____
6. What are the dimensions of each aeration basin? 6' x 11' x 5'
7. What is the color of the activated sludge? () black (X) dark brown
() light brown () other _____
8. What is the odor of the activated sludge? () septic () earthy
(X) none () other _____
9. What characteristics most accurately describe the foam?
() light, crisp () thick, dark () heavy, white () other None
10. Are the tank contents mixed thoroughly? (X) yes () no
11. Are there excessive air leaks in the compressed air piping?
() yes (X) no () not applicable
12. Is the dissolved oxygen level in the aeration tank low (<1.0 mg/l)?
() yes () no Unknown
13. Does mixing appear excessive? () yes (X) no
14. Does air rise in clumps? () yes (X) no
15. Do there appear to be dead spots in the aeration basin?
() yes (X) no
If yes, at what location? _____
16. What is the depth of the sand and grit layer? Unknown feet
17. What is the active capacity of the aeration basin?
2500 ~~cubic feet~~ gallons
18. Is the process operating in its design mode? (X) yes () no
If no, explain. _____

19. Are the return activated sludge pumps operating? ☒ yes () no
If no, what is the reason? _____
20. Are there flow measurement devices for the return activated sludge and waste activated sludge systems? () yes ☒ no
21. Does the aeration basin have a foam control system? () yes ☒ no
22. If multiple basins are operating, is the flow distributed equally?
() yes () no ☒ not applicable
How is it distributed? _____
23. Are the characteristics of the basin contents different in the various units? () yes () no ☒ not applicable
24. How is the system operated? () manually () semi-automatically
☒ automatically () computer-controlled () other _____
25. What is the frequency of routine inspections for proper operation?
Once /day
26. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual
27. What is the general condition of the activated sludge facilities?
☒ good () fair () poor
28. What are the most common problems that the operator has had with the activated sludge system? None

BIOLOGICAL TREATMENT

Trickling Filters

1. How many trickling filter units are there? _____
2. What is the design capacity of each unit? _____ mgd
3. What is the actual flow to each unit? _____ mgd average
_____ mgd peak
4. What is the recycle flow? _____ mgd
5. How is the flow recycled? () continuously () intermittently
6. What is the filter classification? () low rate
() intermediate rate () high rate () super-high rate
7. What type of media is used? _____
8. What is the depth of the media? _____ feet
9. What is the diameter of each unit? _____ feet
10. What is the color of the filter? () black () dark brown
() light brown () other _____
11. What is the odor of the filter? () septic () earthy () none
() other _____
12. Is there evidence of uneven flow distribution from the trickling filter arms or on the trickling filter surface? () yes () no
13. Is there clogging of the trickling filter distribution arm orifices? () yes () no
14. Is there evidence of filter clogging (e.g., ponding)? () yes () no
If yes, explain. _____
15. Is there evidence of filter flies? () yes () no
Is there evidence of snails? () yes () no
Is there evidence of roaches? () yes () no
16. Is there a leak at the center column of the trickling filter distribution arms? () yes () no
17. Is there restricted rotation of the distribution arms? () yes () no

18. Is there grass or other vegetative material growing on the filter?
☐ yes ☐ no

If yes, what? _____

19. Are there flow measurement devices for the recirculation flow?
☐ yes ☐ no

20. Are the recirculation pumps operating? ☐ yes ☐ no

If no, why? _____

21. If multiple filters are operating, is the flow distributed equally?
☐ yes ☐ no ☐ not applicable

How is it distributed? _____

22. Are the characteristics of the filter contents different in the various units? ☐ yes ☐ no ☐ not applicable

If yes, describe. _____

23. How is the system operated? ☐ manually ☐ semi-automatically
☐ automatically ☐ computer-controlled ☐ other _____

24. What is the frequency of routine inspections for proper operation?
_____/day

25. What is the frequency of maintenance inspections by plant personnel?
_____/year

26. What is the general condition of the trickling filter facilities?
☐ good ☐ fair ☐ poor

27. What are the most common problems that the operator has had with the trickling filter system? _____

BIOLOGICAL TREATMENT

Rotating Biological Contactors (RBCs)

1. How many RBC units (shafts) are there? _____
2. What is the design capacity of each unit? _____ mgd
3. What is the actual flow to each unit? _____ mgd average
_____ mgd peak
4. What type of RBC media is used? _____
5. What type of RBC drive is used? _____
6. What is the surface area of each unit? _____
7. What is the color of the biomass? ☐ black ☐ dark brown
☐ light brown ☐ other _____
8. What is the odor of the unit? ☐ septic ☐ earthy ☐ none
☐ other _____
9. Is there excessive breakage of rotating disks or shafts?
☐ yes ☐ no
10. Is rotation of the media uniform? ☐ yes ☐ no
11. Is the flow distributed equally to parallel shafts? ☐ yes ☐ no
How is it distributed? _____
12. Are the characteristics of the tank contents different in the various units? ☐ yes ☐ no ☐ not applicable
If yes, describe. _____
13. Are RBC units housed in a building? ☐ yes ☐ no
Or does each unit have a cover? ☐ yes ☐ no
14. What is the frequency of routine inspections for proper operation?
_____ /day
15. What is the frequency of maintenance inspections by plant personnel?
_____ /year
16. What is the general condition of the RBC facilities?
☐ good ☐ fair ☐ poor
17. What are the most common problems that the operator has had with the RBC system?

NITROGEN REMOVAL

Suspended Growth Nitrification

1. How many aeration basins are there? _____
2. What is the design capacity of each basin? _____ mgd
3. What is the actual flow to each basin? _____ mgd average
_____ mgd peak
4. How many stages does the nitrification system have? _____
What type of flow regime (e.g., conventional) does each stage have?

5. What type of aeration equipment (e.g., diffused air or mechanical aerators) does each stage have? _____

6. What are the aeration basin(s) dimensions? _____
7. Characteristics of the Carbonaceous Oxidation Basin:
What is the color of the activated sludge? ☐ black ☐ dark brown
☐ light brown ☐ other _____
What is the odor of the activated sludge? ☐ septic ☐ earthy
☐ none ☐ other _____
What characteristics most accurately describe the foam?
☐ light, crisp ☐ dark, thick ☐ heavy, white
☐ other _____
8. Characteristics of the Nitrification Basin:
What is the color of the activated sludge? ☐ black ☐ dark brown
☐ light brown ☐ other _____
What is the odor of the activated sludge? ☐ septic ☐ earthy
☐ none ☐ other _____
What characteristics most accurately describe the foam?
☐ light, crisp ☐ dark, thick ☐ heavy, white
☐ other _____
9. Are the tank(s) contents mixed thoroughly? ☐ yes ☐ no
10. Are there excessive air leaks in the compressed air piping?
☐ yes ☐ no ☐ not applicable
11. Is the dissolved oxygen level in the aeration tank(s) low
(<1.0 mg/l)? ☐ yes ☐ no

12. Does mixing appear excessive? ☐ yes ☐ no
13. Does air rise in clumps? ☐ yes ☐ no
14. Do there appear to be dead spots in tank(s)? ☐ yes ☐ no
If yes, at what location? _____
15. What is the depth of the sand and grit layer? _____ feet
16. What is the active capacity of the aeration basin?
_____ cubic feet
17. Is the process operating in its design mode? ☐ yes ☐ no
If no, explain _____
18. Are the RAS pumps operating? ☐ yes ☐ no
If no, what is the reason? _____
19. Are there flow measurement devices for the RAS and WAS systems?
☐ yes ☐ no
20. Does the aeration basin(s) have a foam control system?
☐ yes ☐ no
21. If multiple basins for each step are operating, is the flow distributed equally? ☐ yes ☐ no ☐ not applicable
How is it distributed? _____
22. Are the characteristics of the basin contents for each step different?
☐ yes ☐ no
If yes, describe. _____

23. Is there an alkaline buffer added? ☐ yes ☐ no
If yes, what is it? _____
If yes, what is the dose? _____
24. How is the system operated? ☐ manually ☐ semi-automatically
☐ automatically ☐ computer-controlled ☐ other _____
25. What is the frequency of routine inspections for proper operation?
_____ /day
26. What is the frequency of maintenance inspections by plant personnel?
_____ /year

27. What is the general condition of the nitrification facilities?
 () good () fair () poor
28. What are the most common problems that the operator has had with the nitrification system? _____

NITROGEN REMOVAL

Nitrifying Trickling Filters

1. How many stages does the nitrification system have? _____
2. How many trickling filter units are there in each stage? _____
3. What is the design capacity of each unit? _____ mgd
4. What is the actual flow to each unit? _____ mgd average
_____ mgd peak
5. What is the recycle flow to each stage? _____
How is the flow recycled? () continuously () intermittently
6. What type of media is used? _____
7. What is the depth of the media? _____ feet
8. What is the diameter of each unit? _____
9. Characteristics of the Oxidation Tower:
What is the color of the filter? () black () dark brown
() light brown () other _____
What is the odor of the filter? () septic () earthy
() none () other _____
10. Characteristics of the Nitrification Tower:
What is the color of the filter? () black () dark brown
() light brown () other _____
What is the odor of the filter? () septic () earthy
() none () other _____
11. Is there evidence of uneven flow distribution from the trickling filter arms or on the trickling filter surface? () yes () no
12. Is there clogging of the trickling filter distribution arm orifices? () yes () no
13. Is there evidence of filter clogging (e.g., ponding)? () yes () no
If yes, explain. _____

14. Is there evidence of filter flies? ☐ yes ☐ no
Is there evidence of snails? ☐ yes ☐ no
Is there evidence of roaches? ☐ yes ☐ no
15. Is there a leak at the center column of the trickling filter distribution arms? ☐ yes ☐ no
16. Is there restricted rotation of the distribution arms?
☐ yes ☐ no
17. Is there grass or other vegetative material growing on the filter?
☐ yes ☐ no
If yes, what? _____
18. Are there flow measurement devices for the recirculation flow?
☐ yes ☐ no
19. Are the recirculation pumps operating? ☐ yes ☐ no
If no, why? _____
20. If multiple filters are operating for each stage, is the flow distributed equally? ☐ yes ☐ no ☐ not applicable
How is it distributed? _____
21. Are the characteristics of the filter contents different in the various units of each stage? ☐ yes ☐ no ☐ not applicable
If yes, describe. _____
22. How is the system operated? ☐ manually ☐ semi-automatically
☐ automatically ☐ computer-controlled ☐ other _____
23. Is there an alkaline buffer added? ☐ yes ☐ no
If yes, what is it? _____
If yes, what is the dose? _____
24. What is the frequency of routine inspections for proper operation?
_____/day
25. What is the frequency of maintenance inspections by plant personnel?
_____/year
26. What is the general condition of the nitrification facilities?
☐ good ☐ fair ☐ poor

N/A

27. What are the most common problems that the operator has had with the nitrification facilities? _____

NITROGEN REMOVAL

Nitrifying Rotating Biological Contactors

1. How many stages does the nitrification system have? _____
2. How many RBC units (shafts) are there in each stage? _____
3. What is the design capacity of each unit? _____ mgd
4. What is the actual flow to each unit? _____ mgd average
_____ mgd peak
5. What type of RBC media is used? _____
6. What type of RBC drive is used? _____
7. What is the surface area of each unit? _____
8. What is the color of the biomass? ☐ black ☐ dark brown
☐ light brown ☐ other _____
9. What is the odor of the unit? ☐ septic ☐ earthy ☐ none
☐ other _____
10. Is there excessive breakage of rotating disks or shafts?
☐ yes ☐ no
11. Is rotation of the media uniform? ☐ yes ☐ no
12. Is the flow distributed equally to parallel shafts? ☐ yes ☐ no
How is it distributed? _____
13. Are the characteristics of the tank contents different in the various
units? ☐ yes ☐ no ☐ not applicable
If yes, describe. _____
14. Is there an alkaline buffer added? ☐ yes ☐ no
If yes, what is it? _____
If yes, what is the dose? _____
15. Are RBC units housed in a building? ☐ yes ☐ no
Or does each unit have a cover? ☐ yes ☐ no
16. What is the frequency of routine inspections for proper operation?
_____ /day
17. What is the frequency of maintenance inspections by plant personnel?
_____ /year

N/A

18. What is the general condition of the nitrification facilities?
() good () fair () poor
19. What are the most common problems that the operator has had with the nitrification facilities? _____

NITROGEN REMOVAL

Denitrification

1. How many denitrification units are there? _____
2. What is the design capacity of each unit? _____ mgd
3. What is the actual flow to each unit? _____ mgd average
_____ mgd peak
4. What is the type of denitrification system? ☐ suspended growth
☐ attached growth ☐ other _____
5. What type of mixing equipment or media is used? _____
6. What are the tank (or column) dimensions? _____
7. Are the tank contents mixed thoroughly? ☐ yes ☐ no
8. Does mixing appear excessive so as to cause oxygenation?
☐ yes ☐ no
9. Do there appear to be dead spots in the tank? ☐ yes ☐ no
If yes, at what location? _____
10. Is the process operating in its design mode? ☐ yes ☐ no
If no, explain. _____
11. How is the system operated? ☐ manually ☐ semi-automatically
☐ automatically ☐ computer controlled ☐ other _____
12. Is the wastewater temperature below 15°C? ☐ yes ☐ no
13. Is the wastewater pH below 6.0 or above 8.0? ☐ yes ☐ no
14. Is there excessive methanol? ☐ yes ☐ no
15. What is the frequency of routine inspections for proper operation?
_____ /day
16. What is the frequency of maintenance inspections by plant personnel?
_____ /year
17. What is the general condition of the denitrification facilities?
☐ good ☐ fair ☐ poor
18. What are the most common problems that the operator has had with the
denitrification facilities? _____

CHEMICAL TREATMENT

Chemical Feeding and Conditioning

This chemical feeding checklist relates to the liquid phase only. For the chemical feeds for residuals processing, refer to the individual residuals processes.

1. What are the actual plant flows? _____ mgd average _____ mgd peak
2. What chemicals are used? ☐ lime ☐ alum ☐ ferric chloride
☐ sodium hydroxide ☐ other _____
3. Where is the chemical added? ☐ primary sedimentation
☐ aeration basin ☐ secondary sedimentation ☐ chemical
treatment facilities ☐ other _____
4. What is the chemical dose? _____ mg/l _____ lbs/mgd
5. What is the principal purpose of the chemical addition? _____
6. Is the chemical feed system automatically controlled?
☐ yes ☐ no

If yes, what is the method of control? ☐ pH of the waste stream
☐ dose rate ☐ concentration per million gallons
☐ other _____
7. What type of feed system is used? ☐ volumetric
☐ belt gravimetric ☐ loss-in-weight gravimetric
☐ metering pump ☐ other
8. Is there a portion-measuring device at the feed unit? ☐ yes ☐ no
9. Is pH being measured at the pH adjustment tank? ☐ yes ☐ no
10. Are chemicals left in the open atmosphere? ☐ yes ☐ no
11. Are chemicals outdated? ☐ yes ☐ no
12. Are chemicals stored, moved, and handled properly? ☐ yes ☐ no
13. Is there evidence of chemical spills between the storage area and the
feed units? ☐ yes ☐ no
14. Are empty chemical containers properly disposed of? ☐ yes ☐ no
15. Are there appropriately sized berms or dikes at the liquid chemical
feed units and storage areas? ☐ yes ☐ no ☐ not applicable
16. Is chemical dust present at the feed unit area or storage and transfer
areas? ☐ yes ☐ no ☐ not applicable

17. Is a reserve supply of chemicals maintained? () yes () no

How many days of supply is maintained? _____

18. What is the frequency of routine inspections for proper operation?
_____ /day

19. What is the frequency of maintenance inspections by plant personnel?
_____ /year

20. What is the general condition of the chemical feed facilities?
() good () fair () poor

21. What are the most common problems that the operator has had with the
chemical feed systems? _____

CHEMICAL TREATMENT

Rapid Mix, Flocculation, and Chemical Clarification

1. What is the actual plant flow? _____ mgd average _____ mgd peak
2. What is the total flow through the chemical treatment system?
_____ mgd
3. How many units are there for each operation? _____

4. What is the flow through each unit? _____ mgd
5. If multiple units are used, is the flow divided equally?
() yes () no () not applicable

If no, what is the problem? _____
6. What type of rapid mixer is used? () turbine () propeller
() pneumatic () other _____
7. What type of flocculator is used? () turbine () paddles
() other _____
8. What are the dimensions of the rapid mixing tank? _____
9. What are the dimensions of the flocculation tank? _____
10. What are the dimensions of the clarifier? _____
11. What is the depth of the sand and grit layer? _____ feet
12. What is the chemical coagulant? () lime () alum
() ferric chloride () ferric sulfate
() other _____
13. What is the chemical dose? _____ mg/l
14. What is the detention time for rapid mixing? _____ seconds

What is the detention time for flocculation? _____ minutes

What is the detention time for clarification? _____ hours
15. What is the overflow rate of the clarifier? _____ gpd/ft²
16. What is the volume of residuals pumped? _____ gallons/day
17. What is the solids concentration of the residuals pumped? _____ %

18. Is there an automatic chemical feed control system? () yes () no

If yes, what is the method of control? () pH of waste stream
() dose rate () concentration per million gallons () other

19. What is the frequency of routine inspections for proper operation?
_____ /day

20. What is the frequency of maintenance inspections by plant personnel?
_____ /year

21. What is the general condition of the rapid mix, flocculation, and
clarification facilities? () good () fair () poor

22. What are the most common problems that the operator has had with the
rapid mix, flocculation, and clarification facilities? _____

SEDIMENTATION

Primary

1. How many primary sedimentation basins are there? _____
2. What is the design capacity of each basin? _____ mgd average
_____ mgd peak
3. What is the actual flow to each basin? _____ mgd average
_____ mgd peak
4. What are the dimensions of the basins? _____
5. Is the wastewater black or odorous? ☐ yes ☐ no
6. Is there an excessive accumulation of scum, grease, foam, or floating residuals in the clarifier? ☐ yes ☐ no
7. Are there excessive gas bubbles on the surface of the clarifier?
☐ yes ☐ no
8. Is there scum overflow, lack of adequate scum disposal, or is the scum pit full? ☐ yes ☐ no
9. Does the tank surface indicate improper residuals withdrawal (i.e., excessive floating solids, gas, etc.)? ☐ yes ☐ no
10. What volume of residuals are pumped? _____ gallons/day
11. What is the solids concentration of the residuals? _____ %
12. Are there settleable solids in the effluent? ☐ yes ☐ no
13. How are residuals pumped? ☐ manually ☐ automatically
14. How often do residuals pumps run? _____ number of times each day
How long do residuals pumps run? _____ number of minutes each time
15. Does the residuals collection system show any signs of mechanical failure? ☐ yes ☐ no
16. Are there excessive residuals on the bottom of the basin (i.e., inadequate residuals removal)? ☐ yes ☐ no
17. Are residuals withdrawal ports clogged? ☐ yes ☐ no
18. Does the influent baffle system accomplish its purpose?
☐ yes ☐ no
19. Does the effluent baffle system accomplish its purpose?
☐ yes ☐ no

20. Does the unit show signs of short circuiting and/or overloads?
() yes () no
21. Are the effluent weirs level? () yes () no
22. Are the effluent weirs kept clean? () yes () no
23. If multiple units are used, is the flow distributed evenly?
() yes () no () not applicable
24. What is the frequency of routine inspections for proper operation?
_____ /day
25. What is the frequency of maintenance inspections by plant personnel?
_____ /year
26. What is the general condition of the primary sedimentation facilities?
() good () fair () poor
27. What are the most common problems that the operator has had with the
primary sedimentation facilities? _____

SEDIMENTATION

Final

1. How many final sedimentation basins are there? 1
2. What is the design capacity of each basin? 2,500 ^{gpd}~~mgd~~ average
2,750 ~~mgd~~ ^{gpd} peak
3. What is the actual flow to each basin? .00028 mgd average
.00114 mgd peak
4. What are the dimensions of the basins? 6' x 1' x 5'
5. Is chemical addition used to improve settling? () yes (X) no
If yes, what chemical(s) are added? _____
6. Is there an excessive accumulation of scum, grease foam, or floating residuals in the clarifier? () yes (X) no
7. Are there excessive gas bubbles on the surface of the clarifier?
() yes (X) no
8. Is there scum overflow, lack of adequate scum disposal, or is the scum pit full? () yes (X) no
9. Does the tank surface indicate improper residuals withdrawal (i.e., excessive floating solids, gas, etc.)? () yes (X) no
10. What volume of residuals is pumped? _____ gpd total **Unknown**
_____ gpd RAS _____ gpd WAS
11. What is the solids concentration of the residuals? Unknown %
12. Are there settleable solids in the effluent? () yes (X) no
13. How are residuals pumped? () manually (X) automatically
14. How often do residuals pumps run? 12 number of times each day
How long do residuals pumps run? 15 number of minutes each time
15. Does the residuals collection system show any signs of mechanical failure? () yes (X) no
16. Is there excessive residuals on the bottom of the basin (i.e., inadequate residuals removal)? () yes (X) no
17. Is there excessive solids build-up in the center well of the clarifier? () yes () no **N/A**
18. What is the depth of the sand and grit layer? Unknown feet

19. Are residuals withdrawal ports clogged? () yes (X) no
20. Is the residuals blanket too high? () yes (X) no
21. Is there deflocculation in the clarifier? () yes (X) no
22. Is there pin floc in the overflow? () yes (X) no
23. Is there billowing sludge in the clarifier? () yes (X) no
24. Does the influent baffle system accomplish its purpose?
() yes () no None
25. Does the effluent baffle system accomplish its purpose?
(X) yes () no
26. Does the unit show signs of short circuiting and/or overloads?
() yes (X) no
27. Are the effluent weirs level? (X) yes () no
28. Are the effluent weirs clean? (X) yes () no
29. If multiple units are used, is the flow distributed evenly?
() yes () no (X) not applicable
30. What is the frequency of routine inspections for proper operation?
1 /day
31. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual
32. What is the general condition of the final sedimentation facilities?
(X) good () fair () poor
33. What are the most common problems that the operator has had with the final sedimentation facilities? None

FILTRATION

1. How many filter units are there? _____
2. What is the design capacity of each unit? _____ mgd average
_____ mgd peak
3. What is the actual flow to each unit? _____ mgd average
_____ mgd peak
4. What type of filters are used? () gravity () pressure
5. What type of filter media is used? () sand () dual media
() mixed media () multi-media () diatomaceous earth
() other _____
6. What is the surface loading rate? _____ gpm/ft²
7. What is the backwash rate? _____ gpm/ft²
8. What is the surface wash rate? _____ gpm/ft²
What is the pressure of the surface wash? _____ psi
9. What type of control system is used? () constant flow
() headloss () time () turbidity of effluent
() total gallons filtered () other _____
10. Are the valves sequencing (opening and closing in order) correctly?
() yes () no
11. Is there a coagulant aid (filtration aid) system? () yes () no
If yes, what type? _____
12. What are the dimensions of the filter? _____
13. How is the filter system operated? () automatically () manually
() semi-automatically () other _____
14. Is the filter surface clogged? () yes () no
15. Is the filter run short? () yes () no
16. Is there gravel displacement of the filter media? () yes () no
17. Is there formation of mud balls in the filter media? () yes () no
18. Is there air binding of the filter media? () yes () no
19. Is there a loss of filter media during backwashing? () yes () no

20. Is there recycled filter backwash water in excess of five percent of the wastewater flow treated? () yes () no
21. What is the frequency of routine inspections for proper operation?
_____ /day
22. What is the frequency of maintenance inspections by plant personnel?
_____ /year
23. What is the general condition of the filtration facilities?
() good () fair () poor
24. What are the most common problems that the operator has had with the filtration facilities? _____

DISINFECTION

Chlorination

1. How many chlorine contact basins are there? 1
2. What is the design capacity of each basin? 2,500 ~~mgd~~ average
2,750 ~~mgd~~ peak hourly flow gpd
3. What is the actual flow to each basin? .00028 mgd average
.00114 mgd peak hourly flow
4. What are the dimensions of the basins? 1'8" x 6' x 9"
5. What is the detention time of each contact basin at peak hourly flow?
27 minutes
6. What chlorine dosage is applied? 0.5 mg/l
7. What is the normal level of chlorine residual in the basin effluent?
0.5 mg/l
8. Are disinfection standards being met? ☒ yes () no
9. What type of chlorination system is being used? () chlorine cylinders () on-site sodium hypochlorite generation () sodium chlorine tablets hypochlorite solution () calcium hypochlorite solution
10. What is the design capacity of the chlorination system?
Unknown lbs/day
What is the maximum capacity of the chlorination system?
Unknown lbs/day
11. What is the configuration of the chlorine contact basin? () round
☒ rectangular () other _____
12. Is the contact basin adequately baffled to minimize short-circuiting?
☒ yes () no
13. How is chlorine introduced into the wastewater entering the contact basin? () perforated diffusers () injector with single entry point
☒ other Chlorine tablets are added
14. Are mechanical mixing provisions incorporated in the chlorine contact basins design? () yes ☒ no
15. Is there an adequate reserve supply of chlorine? ☒ yes () no
How many days of supply is maintained? _____
16. Are there high temperatures in the chlorination rooms?
() yes () no N/A

17. Is there a build-up of residuals in the basin? () yes (X) no
18. Are there gas bubbles in the basin? () yes (X) no
19. Is there floating scum and/or solids in the basin? () yes (X) no
20. Is there excessive foaming downstream? () yes (X) no
21. Is there evidence of toxicity (dead fish, other dead organisms) downstream? () yes (X) no
22. What is the frequency of routine inspections for proper operation?
 1 /day
23. What is the frequency of maintenance inspections by plant personnel?
 365 /year Visual
24. What is the general condition of the chlorination facilities?
 (X) good () fair () poor
25. What are the most common problems that the operator has had with the chlorination process? None
-
-
-

RESIDUALS TREATMENT

Chemical Conditioning

1. What is the actual volume of residuals conditioned?
_____ gallons/day average
2. What is the design residuals volume?
_____ gallons/day average
3. What type of residuals are conditioned? () primary () waste
activated () other _____
4. What type of chemical is used for conditioning? () lime () ferric
chloride () polymer () other _____
5. What is the chemical dosage? _____ lbs/ton dry solids average
6. How are chemicals purchased? () dry () liquid
7. What chemical storage volume is provided? _____ days
8. How are the chemicals fed? () automatically () manually
9. If dry feeders are used, what type of feeder is used? () volumetric
() gravimetric () not applicable
10. Are chemical feeders automatically paced? () yes () no
11. If lime is used, how is the lime purchased? () bags () bulk ()
not applicable
12. If lime feeding is used, is a vapor and dust collection system
installed? () yes () no () not applicable
13. Does the unit show signs of inadequate mixing? () yes () no
14. What is the frequency of routine inspections for proper operation?
_____ /day
15. What is the frequency of maintenance inspections by plant personnel?
_____ /year
16. What is the general condition of the residuals chemical conditioning
facilities? () good () fair () poor
17. What are the most common problems that the operator has had with the
residuals chemical conditioning facilities? _____

RESIDUALS TREATMENT

Gravity Thickening

1. How many gravity thickeners are there? _____
2. What is the design influent flow to each thickener?
_____ gallons/day average
3. What is the actual influent flow to the thickener?
_____ gallons/day average
4. What type of residuals are fed to the thickener? ☐ primary
☐ waste activated ☐ other _____
5. What are the dimensions of the thickener(s)? _____
6. How much thickened residuals are pumped? _____ gallons/day average
7. What is the solids concentration in the influent residuals? _____ %
8. What is the solids loading rate? _____ lbs/day/sq ft
9. What is the solids concentration in the thickened residuals? _____ %
10. What is the settleable solids concentration in the supernatant?
_____ mg/l
11. How are the influent residuals fed? ☐ intermittently
☐ continuously
12. How are the thickened residuals pumped? ☐ manually
☐ automatically
13. How often do the thickened residuals pumps run? _____
minutes/hour
14. How much downtime is there? _____ days/year
15. What is the frequency of cleaning? _____ /year
16. Does the influent baffle system accomplish its purpose?
☐ yes ☐ no
17. Does the residuals collection system show any signs of mechanical
failure? ☐ yes ☐ no
18. Does the tank surface indicate improper residuals withdrawal (i.e.,
excessive floating solids, gas, etc.)? ☐ yes ☐ no
19. Does the effluent baffle system accomplish its purpose?
☐ yes ☐ no
20. Are the effluent weirs level? ☐ yes ☐ no

21. Are surfaces and the effluent weirs clean? ☐ yes ☐ no
22. If multiple units are used, is the flow distributed evenly?
☐ yes ☐ no ☐ not applicable
23. Does the unit show signs of short circuiting and/or overloads?
☐ yes ☐ no
24. What is the frequency of routine inspections for proper operation?
_____ /day
25. What is the frequency of maintenance inspections by plant personnel?
_____ /year
26. What is the general condition of the gravity thickening facilities?
☐ good ☐ fair ☐ poor
27. What are the most common problems that the operator has had with the gravity thickening facilities? _____

RESIDUALS TREATMENT

Flotation Thickening

1. How many air flotation thickening units are there? _____
2. What is the design influent flow to each thickener?
_____ gallons/day average
3. What is the actual influent flow to each thickener?
_____ gallons/day average
4. What are the dimensions of the thickener(s)? _____
5. What shape are the flotation tanks? () circular () rectangular
6. What type of residuals are fed to the thickener? () waste activated
() other _____
7. What is the volume of thickened residuals pumped?
_____ gallons/day
8. What is the solids concentration in the influent residuals? _____ %
9. What is the solids loading rate? _____ lb/hour/sq ft
10. What is the air solids ratio? _____
11. What is the hydraulic loading or overflow rate? _____ gpm/sq ft
12. What is the solids concentration in the thickened residuals? _____ %
13. What is the suspended solids concentration in the supernatant? _____ mg/l
14. What is the solids removal efficiency? _____ %
15. Are flotation aids used? () yes () no
If yes, what type? _____
16. What is the average dosage of flotation aid? _____ lbs/ton dry solids
17. What is the thickness of the floating residuals blanket? _____ inches
18. How are influent residuals fed? () intermittently () continuously
19. What is the effluent recycle ratio as a percentage of the influent flow? _____
20. Are primary and secondary effluent readily available for auxiliary recycle? () yes () no
21. How are thickened residuals pumped? () manually () automatically

22. How often do thickened residuals pumps run? _____ minutes/hour
23. How much downtime is there? _____ days/year
24. What is the frequency of cleaning? _____ /year
25. Does the influent baffle system accomplish its purpose?
☐ yes ☐ no
26. Do the residuals collection systems show any signs of mechanical failure? ☐ yes ☐ no
27. Does the effluent baffle system accomplish its purpose?
☐ yes ☐ no
28. Are the effluent weirs level? ☐ yes ☐ no
29. Are surfaces and the effluent weirs clean? ☐ yes ☐ no
30. If multiple units are used, is the flow distributed evenly?
☐ yes ☐ no ☐ not applicable
31. Does the unit show signs of short circuiting and/or overloads?
☐ yes ☐ no
32. What is the frequency of routine inspections for proper operation?
_____ /day
33. What is the frequency of maintenance inspections by plant personnel?
_____ /year
34. What is the general condition of the flotation thickening facilities?
☐ good ☐ fair ☐ poor
35. What are the most common problems that the operator has had with the flotation thickening facilities? _____

RESIDUALS TREATMENT

Thermal Treatment

1. How many thermal treatment units are there? _____
2. What is the design residuals flow? _____ gpm
What is the design temperature? _____ °F
What is the design pressure? _____ lbs/sq in
3. What is the influent residuals flow? _____ gpm
What is the operating temperature? _____ °F
What is the operating pressure? _____ lb/sq in
4. What is the influent residuals solids concentration? _____ %
5. What is the volume of the treated residuals? _____ gal/day
6. What is the recycle liquor flow? _____ gal/day
7. What is the solids concentration of the treated residuals? _____ %
8. What is the BOD of the recycle liquor? _____ mg/l
9. What is the COD of the recycle liquor? _____ mg/l
10. What is the suspended solids concentration of the recycle liquor?
_____ mg/l
11. How is the recycle or decant liquor treated? _____
12. Does treatment of the recycle liquor upset the plant?
() yes () no
13. How are the off-gases handled? _____
14. Are excessive odors present from off-gases? () yes () no
15. How frequently is the system operated? _____ /day
How long is the system operated each time? _____ hours
16. How frequently is the system acid washed? _____ /year
17. What is the frequency of scale build-up inspections for the following items?
heat exchanger _____ /year
reactor _____ /year
piping _____ /year
oxidized residuals decant tank _____ /year
other _____ /year

18. What is the frequency of system pressure checks to insure the integrity of pressure piping and fittings? _____ /year
19. If multiple units are used, is the flow distributed evenly?
() yes () no () not applicable
20. Does the unit show signs of overload? () yes () no
21. Does the method of stabilization comply with either the Process to Further Reduce Pathogens (PFRP) or the Process to Significantly Reduce Pathogens (PSRP) as described in Title 40 Code of Federal Regulation's Part 257? () yes () no

If yes, which one? () PFRP () PSRP

If no, explain. _____

22. What is the downtime of the thermal treatment units? _____
23. What is the frequency of routine inspections for proper operation?
_____ /day
24. What is the frequency of maintenance inspections by plant personnel?
_____ /year
25. What is the general condition of the thermal treatment units?
() good () fair () poor
26. What are the most common problems that the operator has had with the thermal treatment units? _____

RESIDUALS TREATMENT

Anaerobic Stabilization

1. How many anaerobic digesters are there? _____
2. What is the design influent flow to each digester?
_____ gallons/day average
3. What is the actual influent flow to each digester?
_____ gallons/day average
4. What type of digester is used? () high rate () low rate
() primary tank () primary and secondary tank
5. What type of residuals are digested? () primary
() waste activated () other
6. What type of covers are used? () fixed () floating () none
7. What is the volume of the digester? _____ cubic feet
8. What is the influent solids concentration? _____ %
9. What is the volatile solids content of the influent residuals?
_____ %
10. What is the design volatile solids loading?
_____ lb/cu ft/day
11. How frequently do the residuals feed pumps run? _____
12. What is the duration of each run? _____
13. What is the depth of the scum blanket? _____ feet
14. What is the depth of the sand and grit layer? _____ feet
15. What is the active capacity of the digester? _____ cubic feet
16. What is the actual volatile solids loading? _____ lb/cu ft/day
17. What is the hydraulic loading? _____ days
18. What is the gas production rate? _____ cu ft/lb VS destroyed
19. What is the average CO₂ content of the gas? _____ %
20. What is the average CH₄ (methane) content of the gas? _____ %
21. What is the average reduction in volatile solids? _____ %
22. What type of mixing is used in the primary tank? _____

23. What provisions are made for heating? _____
24. What is the solids concentration of the residuals withdrawn from the digester? _____ %
25. What is the average pH of the digester? _____
26. What is the average temperature? _____ °F
27. What is the average alkalinity? _____ mg/l
28. What is the average volatile acids content? _____ mg/l
29. At what point in the plant is the supernatant returned? _____
30. Is the supernatant treated before it is return to the plant?
() yes () no
31. Are there metering provisions for return of the supernatant?
() yes () no
32. What is the average return flow rate of the supernatant?
_____ gal/day
33. What is the average BOD of the supernatant? _____ mg/l
34. What is the average suspended solids content of the supernatant?
_____ mg/l
35. Are the floating covers tilting? () yes () no
36. Is gas production adequate? () yes () no
37. Is the gas burner burning? () yes () no
38. Is the supernatant exuding a sour odor from either the primary or the secondary digesters? () yes () no
39. How frequently is the tank cleaned? _____
40. Does the method of stabilization comply with either the Process to Further Reduce Pathogens (PFRP) or the Process to Significantly Reduce Pathogens (PSRP) as described in Title 40 Code of Federal Regulation's Part 257? () yes () no
- If yes, which one? () PFRP () PSRP
- If no, explain. _____

41. What is the frequency of routine inspections for proper operation?
_____ /day

42. What is the frequency of maintenance inspections by plant personnel?
_____ /year
43. What is the general condition of the anaerobic digesters?
() good () fair () poor
44. What are the most common problems that the operator has had with the
anaerobic digesters? _____

RESIDUALS TREATMENT

Aerobic Stabilization

1. How many aerobic digesters are there? 1
2. What is the design influent flow to each digester?
Unknown gallons/day average
3. What is the actual influent flow to each digester?
Unknown gallons/day average
4. What are the dimensions of each unit? 2' x 6' x 5'
5. How many units are presently operating? 1
6. What type of residuals are treated in the aerobic digester?
☒ waste activated ☐ primary ☐ primary and waste activated
☐ other _____
7. How often are residuals applied to the digester? 12 /day
8. What is the total duration of influent pumping? 3 hours/day
9. How are influent residuals pumped? ☐ manually ☒ automatically
10. What is the solids concentration in the influent residuals? Unknown %
11. What is the solids concentration in the aerobic digesters? Unknown %
12. What type of aeration equipment is used? ☒ diffused air
☐ mechanical mixers ☐ combination ☐ other _____
13. If diffused aeration is used, do air diffusers require frequent cleaning? ☐ yes ☒ no ☐ not applicable
14. What type of aerobic digesters are used? ☒ open ☐ closed
15. What type of aeration is provided? ☒ conventional ☐ pure oxygen
16. What is the residuals retention time? Unknown days
17. What is the volatile suspend solids (VSS) loading?
_____ lb VSS/cu ft/day Unknown
18. What type of feed system is used? ☐ continuous ☒ batch
19. What is the solids concentration of the residuals following settling?
Unknown %
20. How much waste residuals are pumped? Unknown gallons/day
21. How often do waste residuals pumps run? 15 minutes/hour

22. How are residuals wasted? () manually (X) automatically
23. What volume of residuals are recycled back to the aerobic digester?
Unknown gallons/day average
24. What percentage of the influent residuals flow is the recycle residuals flow? _____ % Unknown
25. Are the contents of the tanks well mixed and relatively free of odors?
(X) yes () no
26. Is there a foaming problem? () yes (X) no
27. What is the dissolved oxygen (DO) concentration in the aerobic digestion units? _____ mg/l Unknown
28. Are there provisions for pH adjustment by the addition of lime, sodium hydroxide, or sodium bicarbonate? () yes (X) no
29. What is the volume of supernatant flow? Unknown gallons/day average
30. What is the BOD of the supernatant flow? Unknown mg/l
31. What is the suspended solids concentration of the supernatant?
Unknown mg/l
32. What is the nitrate nitrogen concentration of supernatant?
_____ mg/l Unknown
33. What is the ammonia nitrogen concentration of the supernatant?
_____ mg/l Unknown
34. Is there excessive foaming in the tank? () yes (X) no
35. Are there objectionable odors in the aerobically digested residuals?
() yes (X) no
36. Is the digester overloaded? () yes (X) no
37. Is there clogging of diffusers in the digester?
() yes (X) no () not applicable
38. What is the depth of the sand and grit layer? Unknown feet
39. What is the active capacity of the digester? 448 ~~cubic feet~~
gallons
40. Is there adequate supernatant removal? (X) yes () no
41. If multiple units are used, is the flow distributed evenly?
() yes () no (X) not applicable
42. Does the unit show signs of short circuiting and/or overloads?
() yes (X) no

43. Does the method of stabilization comply with either the Process to Further Reduce Pathogens (PFRP) or the Process to Significantly Reduce Pathogens (PSRP) as described in Title 40 Code of Federal Regulation's Part 257? () yes (X) no

If yes, which one? () PFRP () PSRP

If no, explain. Solids are hauled off-site for disposal as necessary

44. What is the frequency of routine inspections for proper operation?
1 /day
45. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual
46. What is the general condition of the aerobic digesters?
() good (X) fair () poor
47. What are the most common problems that the operator has had with the aerobic digesters? None

RESIDUALS TREATMENT

Centrifugation

1. How many centrifuges are there? _____
2. What is the design influent flow to each centrifuge?
_____ gallons/minute
3. What is the actual influent flow to each centrifuge?
_____ gallons/minute
4. How much cake is produced? _____ lb/day
5. What is the solids concentration of the influent residuals? _____ %
6. What type of centrifuges are used? () solid bowl () disc
() basket () other _____
7. What is the solids recovery? _____ %
8. What is the solids concentration in the discharge cake? _____ %
9. How are the centrifuges, conveyers, and residuals feed pumping facilities operated? () manually () automatically
10. How often does each centrifuge operate? _____ /hour
How long does each centrifuge operate each run? _____ minutes
11. Are metering provisions available for the return of the centrate?
() yes () no
12. Are there excessive solids in the fluid phase after centrifugation?
() yes () no
13. Is the centrifugation residuals cake adequately dry? () yes () no
14. If multiple units are used is the influent flow distributed evenly?
() yes () no
15. For multiple units are there provisions for equalization of the centrate flow? () yes () no
16. What type of conditioning chemicals are used? () lime () alum
() ferric chloride () other _____
17. What amounts of chemicals are fed? _____ lbs/day
18. How often are chemicals fed? _____ cycles/hour
What is the feed time per cycle? _____ minutes/cycle
19. Does the unit show signs of overloading? () yes () no

20. What is the frequency of routine inspections for proper operation?
_____ /day
21. What is the frequency of maintenance inspections by plant personnel?
_____ /year
22. What is the general condition of the centrifuges?
() good () fair () poor
23. What are the most common problems that the operator has had with the centrifuges? _____

RESIDUALS TREATMENT

Vacuum Filtration

1. How many vacuum filters are there? _____
2. What is the design influent flow to each filter?
_____ gallons/minute
3. What is the actual influent flow to each filter?
_____ gallons/minute
4. What is the percent solids of the influent residuals? _____ %
5. What is the effective area of each vacuum filter? _____ sq ft
6. What is the design loading rate? _____ lb/sq ft/hr
7. What is the percent solids in the discharge cake? _____ %
8. Are there settleable solids in the filtrate? () yes () no
If yes, what is the solids concentration? _____ mg/l
9. How often does each vacuum filter run? _____ /hour
How long does each vacuum filter operate each run? _____ minutes
10. What type of conditioning chemicals are used? () lime () alum
() ferric chloride () other _____
11. What amount of chemicals are fed? _____ lbs/day
12. How are residuals pumped? () manually () automatically
13. How are chemicals fed? () manually () automatically
14. How often do residuals pumps run? _____ /hour
How long do residuals pumps run each cycle? _____ minutes
15. How often does conditioning equipment run? _____ /hour
How long does conditioning equipment run each cycle?
_____ minutes
16. If multiple units are used, is the flow distributed evenly?
() yes () no
17. Does the unit show signs of short circuiting and/or overloads?
() yes () no
18. Is there a high level of solids in the filtrate? () yes () no

19. Is the filter cake thin? () yes () no
20. Is the filter cloth binding? () yes () no
21. Is there a low vacuum on the filter? () yes () no
22. Is the vacuum filter media cleaned properly? () yes () no
23. What is the frequency of routine inspections for proper operation?
_____ /day
24. What is the frequency of maintenance inspections by plant personnel?
_____ /year
25. What is the general condition of the vacuum filters?
() good () fair () poor
26. What are the most common problems that the operator has had with the
vacuum filters? _____

RESIDUALS TREATMENT

Pressure Filtration

1. How many pressure filters are there? _____
2. What is the design influent flow to each filter?
_____ gallons/minute
3. What is the actual influent flow to each filter?
_____ gallons/minute
4. What is the percent solids of the influent residuals? _____ %
5. What is the filter press volume? _____ cubic feet
6. What is the percent solids in the discharge cake? _____ %
7. Are there settleable solids in the filtrate? ☐ yes ☐ no
If yes, what is the solids concentration? _____ mg/l
8. How often does each pressure filter run? _____ /hr
How long does each pressure filter operate each run? _____ minutes
9. If acid washing is provided, is a recirculating system included?
☐ yes ☐ no ☐ not applicable
10. What type of conditioning chemicals are used? ☐ lime ☐ alum
☐ ferric chloride ☐ other _____
11. What amount of conditioning chemicals are pumped? _____ lb/day
12. How are residuals pumped? ☐ manually ☐ automatically
13. How are chemicals fed? ☐ manually ☐ automatically
14. How often do residuals pumps run? _____ /hour
How long do residuals pumps run each cycle? _____ minutes
15. How often does conditioning equipment run? _____ /hour
How long does conditioning equipment run each cycle? _____ minutes
16. If multiple units are used, is the flow distributed evenly?
☐ yes ☐ no ☐ not applicable
17. Does the unit show signs of short circuiting and/or overloads?
☐ yes ☐ no
18. Is there a high level of solids in the filtrate? ☐ yes ☐ no
19. Is the filter cake thin? ☐ yes ☐ no

20. Is there a residuals build-up on the belts and/or rollers of the filter press? () yes () no
21. Is there excessive moisture in the belt filter press residuals cake? () yes () no
22. Is there difficult cake discharge from the filter presses? () yes () no
23. Does the filter cake stick to the solids-conveying equipment of the filter press? () yes () no
24. Is there frequent media binding of the filter press? () yes () no
25. What is the frequency of routine inspections for proper operation?
_____ /day
26. What is the frequency of maintenance inspections by plant personnel?
_____ /year
27. What is the general condition of the pressure filters?
() good () fair () poor
28. What are the most common problems that the operator has had with the pressure filters? _____

RESIDUALS TREATMENT

Drying Beds

1. How many drying beds are there? _____
2. What is the design flow to each bed? _____ gallons/day average
3. What is the actual flow to each bed? _____ gallons/day average
4. What are the dimensions of the drying beds? _____
5. Are the residuals digested before they are applied to the drying bed?
() yes () no
6. What types of residuals are applied to the drying beds?
() digested primary () waste activated () other _____
7. What is the solids concentration of the residuals applied to the drying beds? _____ %
8. What is the solids loading rate? _____ lbs/yr/sq ft
9. What is the population served by the treatment plant? _____
10. What is the drying area provided? _____ sq ft/capita
11. What is the solids concentration of the dewatered residuals?
_____ %
12. What is the typical drying time required? _____ days
13. Are there problems with flies or other insects? () yes () no
14. Are there problems with weeds? () yes () no
15. Is there an underdrain system? () yes () no
16. Are there provisions for the return of drainage waters to the plant?
() yes () no
17. What is the typical sand depth? _____ inches
18. Are there any beds with sand depths less than 3 or 4 inches?
() yes () no
19. Are vehicles and equipment operated on permanent vehicle treadways or on planks or plywood laid on tops of the beds? () yes () no
20. Are splash plates or diffusion devices in place when residuals are applied to the beds? () yes () no

21. Are partitions between and around the bed tight so that residuals will not flow from one compartment to another or outside the beds?
() yes () no
22. Are residuals distributed evenly on the drying beds? () yes () no
23. Are there dry residuals remaining in the drying beds? () yes () no
24. Are all drying beds used? () yes () no
25. Are dry residuals stacked around drying beds where run-off may enter navigable waters? () yes () no
26. Is the drying time excessive? () yes () no
27. Is the filtrate from the drying beds returned to the front of the plant? () yes () no
28. What is the frequency of routine inspections for proper operation?
_____ /day
29. What is the frequency of maintenance inspections by plant personnel?
_____ /year
30. What is the general condition of the drying beds?
() good () fair () poor
31. What are the most common problems that the operator has had with the drying beds? _____

DISPOSAL SYSTEMS

Outfalls

1. How many outfalls are there? 1
2. What type of receiving waters does the outfall(s) discharge to?
() ocean () estuary () lake () river (X) other Ash Pond
3. What is the design capacity of each outfall?
2,500 ~~mgd~~ average 2,750 ~~mgd~~ peak
gpd gpd
4. What is the present discharge at each outfall?
.00028 mgd average .00114 mgd peak
5. What are the diameter and length of each outfall? N/A
6. Are the outfall diffusers functioning properly?
() yes () no (X) not applicable
7. Is the outfall(s) operating so that the discharge limitations specified in the permit are consistently met? (X) yes () no
8. How does the effluent flow in the outfall? () gravity (X) pressure

If the flow is by gravity and if the outfall(s) extends into the receiving waters, is a manhole provided at the shore end of the outfall? () yes () no () not applicable
9. Is adequate corrosion control provided (i.e., pipe coatings, cathodic protection, etc.)? (X) yes () no
10. For outfalls subject to tidal or high water backup, are flap valves or automatically closing gates functioning properly?
() yes () no (X) not applicable
11. Does the outfall(s) exhibit signs of scour or undercutting?
() yes (X) no
12. Is the outfall(s) adequately protected from floodwaters, tides, and other hazards so as to reasonably ensure structural stability and prevent stoppage? (X) yes () no
13. Can effluent samples be obtained at a point after the final treatment process and before discharge to or mixing with the receiving waters?
(X) yes () no
14. Are outfall and diffuser pipes routinely inspected for breakage and corrosion? (X) yes () no
15. What is the frequency of maintenance inspections by plant personnel?
365 /year Visual

16. What is the general condition of the outfall facilities?
(X) good () fair () poor
17. What are the most common problems that the operator has had with the plant outfall(s)? None
-
-
-

DISPOSAL SYSTEMS

Injection Wells

1. What is the name and address of the facility where the injection well(s) is located? _____

2. Are additional facilities served by the injection well(s)?
() yes () no

If yes, what is the name and address of each additional facility?

3. How many injection wells are there? _____
4. What is the maximum permitted flow to each injection well?
_____ gpm/mgd (circle one)
5. How many days during the last year has the actual maximum flow to the well exceeded the maximum permitted flow? _____
6. What was the average daily flow to each well during the last year?
_____ gpm/mgd (circle one)
7. What is the inside diameter of each well? _____ inches
8. Is there a fluid-filled annulus? () yes () no

If yes, what type? () tubing and packer () fluid seal
() other (specify) _____
9. What percentage of the total flow to the domestic wastewater treatment plant is from non-domestic sources? _____ percent
10. Are there any wastestream sources that bypass the wastewater treatment plant and discharge directly to the wet well? () yes () no

If yes, what percentage of the total flow to the well do these untreated wastes represent? _____ percent
11. Does the fluid in the wet well appear to be free of solids/floatables? () yes () no

12. What instrumentation is found at each well head?
() injection pressure () injection flow
() annulus pressure (fluid-filled annulus)
() annulus temperature (fluid-filled annulus)
() other (specify) _____
13. What were the instrument readings during the inspection and the appropriate adjustment factors, if any?
- a. Injection pressure _____ psi
Adjustment factor: _____
- b. Injection flow _____ gpm/mgd (circle one)
Adjustment factor: _____
- c. Annulus pressure _____ psi
Adjustment factor: _____
- d. Other (specify) _____ units _____
Adjustment factor: _____
14. What is the general condition of the well head instruments?
() good () fair () poor
15. How often are the instruments calibrated? _____ /year
16. When were the instruments last calibrated (date)?
- a. Injection pressure ____/____/____
- b. Injection flow ____/____/____
- c. Annulus pressure ____/____/____
- d. Other (specify type) ____/____/____ Type: _____
17. Is there surge and water hammer control equipment present?
() yes () no
- If yes, what is the general condition of the surge and water hammer control equipment? () good () fair () poor
- If poor, what is the problem? _____

18. Has mechanical integrity testing been conducted within the last five years? () yes () no

If yes, complete the following:

- a. Pressure test date ____/____/____

Test pressure _____ psi

Pressure loss _____ psi

Test duration _____ hours/minute (circle one)

- c. Temperature log date ____/____/____

Is there any anomalous temperature data?

() yes () no

If yes, explain. _____

- d. Radioactive tracer survey date ____/____/____

Was fluid movement indicated? () yes () no

19. What is the predetermined acceptable limits for annulus pressure? _____ psi

Is the annulus pressure within the predetermined limits?

() yes () no

20. How many monitoring wells are there associated with the injection system? _____

21. Where are the monitoring wells located relative to the injection well(s) (distance/direction)? _____

22. Is each monitoring well functional? () yes () no

If no, what is the problem? _____

23. Which zones are the monitoring wells designed to monitor?

Well Number	Monitoring Interval
_____	_____
_____	_____
_____	_____
_____	_____

24. What volume of water is purged from each monitoring well prior to sampling? _____ gallons

25. How is the purge water disposed of?
☐ returned to wet well ☐ returned to head of treatment plant
☐ surface water discharge (may require separate permit)
☐ on well pad or ground (not acceptable)
☐ other (specify) _____
26. What chemical parameters are monitored and at what frequency are these parameters monitored?

Parameter	Frequency
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

27. Have any water quality trends been observed in the monitoring data? ☐ yes ☐ no
- If yes, which parameters are affected and what trend has been observed (increase/decrease)?

Parameter	Trend Observed
_____	_____
_____	_____
_____	_____

28. What type of monitoring well instrumentation is present?
☐ pressure ☐ water level
29. When was the monitoring well instrumentation last calibrated?
 ____/____/____
30. Does the water level/pressure data show a trend? ☐ yes ☐ no
- If yes, what is the trend? _____
31. Are there any fluid leaks, or evidence of fluid leaks, at the injection or monitoring well heads? ☐ yes ☐ no
32. Do the well heads, valves, and other surface appurtenances appear to be in good working order and well maintained?
☐ yes ☐ no
33. What is the general condition of the injection and monitoring well heads and other surface appurtenances?
☐ good ☐ fair ☐ poor
34. What is the emergency discharge method?
☐ other well(s) ☐ surface waters ☐ percolation ponds
☐ other (specify) _____

N/A

- 35. Are facilities in place to use the specified emergency discharge method? ☐ yes ☐ no
- 36. Are the injection and monitoring well heads fenced or otherwise protected from accidental damage by heavy equipment? ☐ yes ☐ no
- 37. Are plant operators familiar with procedures for emergency shut down of the injection system? ☐ yes ☐ no
- 38. Is an emergency procedures manual located on-site?
☐ yes ☐ no

REUSE SYSTEMS

Part II Slow Rate Land Application Systems; Restricted Public Access

1. Is at least secondary treatment provided? ☐ yes ☐ no
2. Is at least basic disinfection provided? ☐ yes ☐ no
3. If a subsurface application system is used, does the reclaimed water never exceed 10 mg/l of TSS? ☐ yes ☐ no ☐ not applicable
4. Does the treatment facility have a permitted capacity of at least 0.1 mgd? ☐ yes ☐ no
5. Are ground water monitoring facilities provided and is monitoring regularly performed (normally quarterly)? ☐ yes ☐ no
6. Are background, intermediate, and compliance wells provided and monitored? ☐ yes ☐ no ☐ not applicable
7. Are monitoring wells well marked? ☐ yes ☐ no ☐ not applicable
8. Are monitoring wells operational and well maintained?
☐ yes ☐ no ☐ not applicable
9. Are there any violations of ground water standards at the compliance wells? ☐ yes ☐ no ☐ not applicable
10. Is there evidence of potential ground water quality problems at the intermediate wells? ☐ yes ☐ no ☐ not applicable
11. Are system storage facilities provided and do they have adequate capacity? ☐ yes ☐ no ☐ not applicable
12. Are the storage facilities lined? ☐ yes ☐ no ☐ not applicable
13. Is there evidence of seepage through the berms?
☐ yes ☐ no ☐ not applicable
14. Is there evidence of discharge over the tops of the berms, erosion of the berms, or of any illegal discharge devices?
☐ yes ☐ no ☐ not applicable
15. Are piping, control, and pumping facilities operational and well maintained? ☐ yes ☐ no ☐ not applicable
16. Is there evidence that the storage facilities are used?
☐ yes ☐ no ☐ not applicable
17. Are the berms well maintained (including vegetation control)?
☐ yes ☐ no ☐ not applicable
18. Is a mosquito control program in place?
☐ yes ☐ no ☐ not applicable

19. Is there evidence of mosquito problems?
☐ yes ☐ no ☐ not applicable
20. Is an emergency overflow structure provided and is it well maintained and usable? ☐ yes ☐ no ☐ not applicable
21. Are storage facilities enclosed with a fence or other facilities that preclude public access? ☐ yes ☐ no ☐ not applicable
22. Are any features provided that enable reduction in setback distances?
☐ yes ☐ no

If yes, specify:

- ☐ High-level disinfection
☐ Class I reliability
☐ Subsurface application systems
☐ Continuous vegetated barrier at least 5 feet high
☐ Low trajectory, low pressure nozzles or surface application
23. Are adequate setback distances provided from the wetted area to the property lines or buildings? ☐ yes ☐ no ☐ not applicable
24. Are adequate setback distances provided to potable water supply wells, Class I waters, and Class II waters?
☐ yes ☐ no ☐ not applicable
25. Is the wetted area at least 100 feet from outdoor public eating, drinking, and bathing facilities? ☐ yes ☐ no ☐ not applicable
26. Are transmission facilities located at least 100 feet from public water supply wells? ☐ yes ☐ no ☐ not applicable
27. Is there evidence of hydraulic problems such as ponding or run-off from the site? ☐ yes ☐ no ☐ not applicable
28. Is public access adequately restricted by fencing or posting of advisory signs? ☐ yes ☐ no ☐ not applicable
29. Are distribution piping, pumping, and other appurtenances well maintained and operational? ☐ yes ☐ no ☐ not applicable
30. Is there evidence of clogging of nozzles or other facilities?
☐ yes ☐ no ☐ not applicable
31. Is there evidence of or public complaints about aerosol drift off of the site, odors, or other nuisance conditions?
☐ yes ☐ no ☐ not applicable
32. Are the distribution facilities labeled?
☐ yes ☐ no ☐ not applicable
33. Are above ground hose bibbs present?
☐ yes ☐ no ☐ not applicable

34. Are supplemental fertilizers or residuals applied to the site?
☐ yes ☐ no ☐ not applicable
35. If fertilizers or residuals are applied, are they applied in moderate amounts such that the nutrient needs of the crops are not exceeded?
☐ yes ☐ no ☐ not applicable
36. Is there evidence that fertilizer or residuals application results in ground water quality problems (nitrogen is main concern)?
☐ yes ☐ no ☐ not applicable
37. What crops are grown? _____
38. Are the crops routinely harvested and removed from the site?
☐ yes ☐ no ☐ not applicable
39. Are underdrains or perimeter drainage features provided?
☐ yes ☐ no ☐ not applicable
- If yes, specify:
- ☐ Underdrains
☐ Perimeter drains
40. Does the water collected in underdrains or perimeter drainage features meet appropriate effluent limits? ☐ yes ☐ no ☐ not applicable
41. What is the average annual hydraulic loading rate (based on the total wetted area)? _____ inches/week
42. Are cattle allowed to graze on the site? ☐ yes ☐ no
- If yes, what type?
- ☐ Beef cattle
☐ Dairy cattle
☐ Others _____
43. If dairy cattle graze on the site, are they kept off the site for at least 15 days after application of reclaimed water?
☐ yes ☐ no ☐ not applicable
44. If edible food crops are grown, please complete the checklists for Part III reuse systems and for edible crop irrigation.

REUSE SYSTEMS

Part III Slow Rate Land Application Systems; Public Access; Residential Irrigation; and Edible Crops

1. Is at least secondary treatment provided? ☐ yes ☐ no
2. Is high-level disinfection provided? ☐ yes ☐ no
3. Do the treatment facilities have permitted capacities in excess of the minimum system size requirements (0.1 mgd for public access systems, 0.5 mgd for residential irrigation, 0.5 mgd for edible crop irrigation)? ☐ yes ☐ no
4. Is there a DER-approved cross-connection control program covering the areas served by reclaimed water? ☐ yes ☐ no
5. Is there a uniform system for color coding and/or marking reclaimed water pipes? ☐ yes ☐ no
6. Does the utility inspect all new connections to the reclaimed water system? ☐ yes ☐ no
7. Does the utility provide routine inspections of existing connections to the reclaimed water system? ☐ yes ☐ no
8. Is an approved industrial pretreatment program in-place?
☐ yes ☐ no ☐ not needed
9. Is the industrial pretreatment program enforced? ☐ yes ☐ no
10. Is there a DER-approved operating protocol on-site and available to the operators? ☐ yes ☐ no ☐ not needed
11. Has the operating protocol been updated and approved annually?
☐ yes ☐ no
12. What set points are contained in the operating protocol for the following items?

Turbidity: _____ NTU

Chlorine Residual: _____ mg/l

Other Parameter (specify): Parameter: _____

Limit: _____ mg/l
13. Are the operators familiar with the operating protocol?
☐ yes ☐ no
14. Does the operator use the operating protocol to control the facility and to make judgments on the quality of the reclaimed water being produced? ☐ yes ☐ no

15. Is the 5.0 mg/l TSS limit met at all times for reclaimed water sent to the reuse system? ☐ yes ☐ no
16. Are the high-level disinfection criteria for fecal coliforms met at all times for reclaimed water sent to the reuse system?
☐ yes ☐ no
17. Have the operators simulate a case where turbidity or chlorine residuals violate the limits set in the operating protocol. Is the reclaimed water of "unacceptable quality" diverted to the reject storage system or permitted alternative discharge system?
☐ yes ☐ no
18. Are continuous monitoring devices provided for measuring turbidity (after filter/before chlorination) and chlorine residual (after contact chamber)? ☐ yes ☐ no
19. Are these instruments in good repair and used in the operation and control of the facilities? ☐ yes ☐ no
20. Are the filters in operation and in good repair? ☐ yes ☐ no
21. Are chemical feed facilities provided? ☐ yes ☐ no
22. What chemicals can be added? _____
23. Are the chemical feed facilities in operation and in good repair?
☐ yes ☐ no
24. Can the high-level disinfection criteria be met without chemical addition? ☐ yes ☐ no
25. Is the reclaimed water flowing out of the filters and chlorination system very clear? ☐ yes ☐ no
26. Is the turbidity measurement being reported consistent with the appearance of the reclaimed water? ☐ yes ☐ no
27. Are system storage facilities provided to store reclaimed water of acceptable quality? ☐ yes ☐ no
28. Are system storage facilities used? ☐ yes ☐ no
29. Are system storage facilities well maintained and fully operational?
☐ yes ☐ no
30. Are system storage facilities (including golf course lakes) used for temporary storage (as opposed to being used as "percolation ponds" with no effort to pump out of them for irrigation purposes)?
☐ yes ☐ no
31. Are lined reject storage facilities provided to store reclaimed water of unacceptable quality? ☐ yes ☐ no

32. Is there evidence that reject storage facilities are used?
☐ yes ☐ no
33. Is the reject storage system well maintained and fully operational?
☐ yes ☐ no
34. If automatic control and diversion are provided, are the systems operational, well maintained, and used?
☐ yes ☐ no ☐ not applicable
35. Is reclaimed water released to the system storage and reuse system only during periods when an operator is present?
☐ yes ☐ no ☐ not applicable (other reliability measures provided)
36. Is stored reject water returned to the treatment facilities for additional treatment and disinfection?
☐ yes ☐ no ☐ not applicable
37. Are the facilities for return of reject water to the treatment facilities well maintained, operational, and in use?
☐ yes ☐ no ☐ not applicable
38. Are reclaimed water pipes and appurtenances appropriately marked and color coded? ☐ yes ☐ no
39. Are advisory signs posted alerting the public that reclaimed water is being used? ☐ yes ☐ no
40. Are there illegal surface water discharge points? ☐ yes ☐ no
41. Is there evidence of abuse of the system, such as significant run-off off-site, or severe ponding? ☐ yes ☐ no
42. Are low trajectory nozzles used within 100 feet of outdoor public eating, drinking, or bathing facilities? ☐ yes ☐ no
43. Is reclaimed water applied within 75 feet of potable water supply wells? ☐ yes ☐ no
44. Are distribution systems and pumps operational and well maintained?
☐ yes ☐ no
45. Are ground water monitoring facilities provided and is monitoring regularly performed (normally quarterly)? ☐ yes ☐ no
46. Are background, intermediate, and compliance wells provided and monitored? ☐ yes ☐ no ☐ not applicable
47. Are monitoring wells well marked? ☐ yes ☐ no ☐ not applicable
48. Are monitoring wells operational and well maintained?
☐ yes ☐ no ☐ not applicable

N/A

- 49. Are there any violations of ground water standards at the compliance wells? ☐ yes ☐ no ☐ not applicable
- 50. Is there evidence of potential ground water quality problems at the intermediate wells? ☐ yes ☐ no ☐ not applicable
- 51. Are above ground hose bibbs present on reclaimed water lines?
☐ yes ☐ no ☐ not applicable
- 52. Is there evidence of or public complaints about aerosol drift, odors, or other nuisance conditions? ☐ yes ☐ no ☐ not applicable

REUSE SYSTEMS

Part III Slow Rate Land Application Systems; Edible Crops

1. Does the treatment facility have a permitted capacity of at least 0.5 mgd? ☐ yes ☐ no

Note: The minimum system size is reduced to 0.1 mgd if the following conditions are met:

- a. A direct contact method of irrigation is not used.
 - b. The crop produced is processed before human consumption.
 - c. Public access to the site is restricted.
2. What edible crops are grown? _____
3. What edible crops are commercially processed (thermal processing) before being sent to commercial markets? _____
4. List the edible crops produced that are **always** peeled, skinned, or cooked by consumers? _____
5. What types of application methods are used when irrigating with reclaimed water? _____
6. Does the DER permit accurately describe the crops grown, processing provided, and application methods?
☐ yes ☐ no ☐ not applicable
7. Is a direct contact method (spray irrigation) used on crops that are not peeled, skinned, cooked, or thermally processed before human consumption (does not include irrigation of citrus or tobacco)?
☐ yes ☐ no ☐ not applicable
8. Is public access to the site restricted by fencing or by posting of advisory signs? ☐ yes ☐ no ☐ not applicable
9. Are the farm workers aware of the fact that reclaimed water is being used for irrigation? ☐ yes ☐ no ☐ not applicable

REUSE SYSTEMS

Part IV Rapid Rate Land Application Systems

1. Is at least secondary treatment provided? ☐ yes ☐ no
2. Is at least basic disinfection provided? ☐ yes ☐ no
3. Does the reclaimed water never exceed 12 mg/l of nitrate (as N)?
☐ yes ☐ no ☐ not applicable
4. Does the treatment facility have a permitted capacity of at least 0.1 mgd? ☐ yes ☐ no
5. Are ground water monitoring facilities provided and is monitoring regularly performed (normally quarterly)? ☐ yes ☐ no
6. Are background, intermediate, and compliance wells provided and monitored? ☐ yes ☐ no ☐ not applicable
7. Are monitoring wells well marked? ☐ yes ☐ no ☐ not applicable
8. Are monitoring wells operational and well maintained?
☐ yes ☐ no ☐ not applicable
9. Are there any violations of ground water standards at the compliance wells? ☐ yes ☐ no ☐ not applicable
10. Is there evidence of potential ground water quality problems at the intermediate wells? ☐ yes ☐ no ☐ not applicable
11. Are system storage facilities provided and do they have adequate capacity? ☐ yes ☐ no ☐ not applicable
12. Are the storage facilities lined? ☐ yes ☐ no ☐ not applicable
13. Is there evidence of seepage through the berms?
☐ yes ☐ no ☐ not applicable
14. Is there evidence of discharge over the tops of the berms, erosion of the berms, or of any illegal discharge devices?
☐ yes ☐ no ☐ not applicable
15. Are piping, control, and pumping facilities operational and well maintained? ☐ yes ☐ no ☐ not applicable
16. Is there evidence that the storage facilities are used?
☐ yes ☐ no ☐ not applicable
17. Are the berms well maintained (including vegetation control)?
☐ yes ☐ no ☐ not applicable
18. Is a mosquito control program in place?
☐ yes ☐ no ☐ not applicable

19. Is there evidence of mosquito problems?
☐ yes ☐ no ☐ not applicable
20. Is an emergency overflow structure provided and is it well maintained and usable? ☐ yes ☐ no ☐ not applicable
21. Are storage facilities enclosed with a fence or other facilities that preclude public access? ☐ yes ☐ no ☐ not applicable
22. Are any features provided that enable reduction in setback distances?
☐ yes ☐ no
- If yes, specify:
- ☐ High-level disinfection
☐ Class I reliability
☐ Site adjacent to a right-of-way
23. Are adequate setback distances provided from the wetted area to the property lines or buildings? ☐ yes ☐ no ☐ not applicable
24. Are adequate setback distances provided to potable water supply wells, Class I waters, and Class II waters? ☐ yes ☐ no ☐ not applicable
25. Are transmission facilities located at least 100 feet from public water supply wells? ☐ yes ☐ no ☐ not applicable
26. Is there evidence of a reduction in infiltration rates over the last permit period? ☐ yes ☐ no
27. Is there evidence of hydraulic problems such as ponding or run-off from the site? ☐ yes ☐ no ☐ not applicable
28. Is public access to the overall site adequately restricted by fencing or posting of advisory signs? ☐ yes ☐ no ☐ not applicable
29. Are the infiltration basins surrounded by a fence or other features that preclude public access? ☐ yes ☐ no ☐ not applicable
30. Are distribution piping, pumping, and other appurtenances well maintained and operational? ☐ yes ☐ no ☐ not applicable
31. Is there evidence of clogging of distribution or other facilities?
☐ yes ☐ no ☐ not applicable
32. Is there evidence of or public complaints about odors, excessive ground water mounding, or other nuisance conditions?
☐ yes ☐ no ☐ not applicable
33. Are the distribution facilities labeled?
☐ yes ☐ no ☐ not applicable

34. Are above ground hose bibbs present?
☐ yes ☐ no ☐ not applicable
35. Are two or more infiltration basins provided?
☐ yes ☐ no ☐ not applicable
36. Is the system operated with an alternating wetting and drying cycle?
☐ yes ☐ no ☐ not applicable

If yes, basin is wetted for ____ days and is dried for ____ days.

37. Are the basins allowed to fully dry before being reloaded?
☐ yes ☐ no ☐ not applicable

Note: If the basins are not allowed to dry, the system is subject to regulation as an other system under Part VII of Chapter 17-610, F.A.C. This will require higher levels of treatment and reliability.

38. Are the berms well maintained? ☐ yes ☐ no ☐ not applicable
39. Are the basin bottoms routinely scarified or otherwise maintained to maintain percolation rates? ☐ yes ☐ no ☐ not applicable
40. Is adequate freeboard provided (3 feet from normal maximum fill line to the top of the berm)? ☐ yes ☐ no ☐ not applicable
41. Is an emergency overflow or discharge device provided to ensure that water in the basin will not reach within 1 foot of the top?
☐ yes ☐ no ☐ not applicable
42. Are the emergency overflow or discharge facilities well maintained and operational? ☐ yes ☐ no ☐ not applicable
43. Are underdrains or perimeter drainage features provided?
☐ yes ☐ no ☐ not applicable

If yes, specify:

- ☐ Underdrains
☐ Perimeter drains

44. Does the water collected in underdrains or perimeter drainage features meet appropriate effluent limits? ☐ yes ☐ no ☐ not applicable
45. What is the average annual hydraulic loading rate (as applied to the total bottom area of all infiltration basins)?
_____ inch/day

REUSE SYSTEMS

Part V Absorption Field Systems

1. Is at least secondary treatment provided? ☐ yes ☐ no
2. Is at least basic disinfection provided? ☐ yes ☐ no
3. Does the reclaimed water never exceed 12 mg/l of nitrate (as N)?
☐ yes ☐ no ☐ not applicable
4. Does the reclaimed water never exceed 10 mg/l TSS?
☐ yes ☐ no ☐ not applicable
5. Does the treatment facility have a permitted capacity of at least 0.1 mgd? ☐ yes ☐ no
6. Are ground water monitoring facilities provided and is monitoring regularly performed (normally quarterly)? ☐ yes ☐ no
7. Are background, intermediate, and compliance wells provided and monitored? ☐ yes ☐ no ☐ not applicable
8. Are monitoring wells well marked? ☐ yes ☐ no ☐ not applicable
9. Are monitoring wells operational and well maintained?
☐ yes ☐ no ☐ not applicable
10. Are there any violations of ground water standards at the compliance wells? ☐ yes ☐ no ☐ not applicable
11. Is there evidence of potential ground water quality problems at the intermediate wells? ☐ yes ☐ no ☐ not applicable
12. Are system storage facilities provided and do they have adequate capacity? ☐ yes ☐ no ☐ not applicable
13. Are the storage facilities lined? ☐ yes ☐ no ☐ not applicable
14. Is there evidence of seepage through the berms?
☐ yes ☐ no ☐ not applicable
15. Is there evidence of discharge over the tops of the berms, erosion of the berms, or of any illegal discharge devices?
☐ yes ☐ no ☐ not applicable
16. Are piping, control, and pumping facilities operational and well maintained? ☐ yes ☐ no ☐ not applicable
17. Is there evidence that the storage facilities are used?
☐ yes ☐ no ☐ not applicable
18. Are the berms well maintained (including vegetation control)?
☐ yes ☐ no ☐ not applicable

19. Is a mosquito control program in place?
☐ yes ☐ no ☐ not applicable
20. Is there evidence of mosquito problems?
☐ yes ☐ no ☐ not applicable
21. Is an emergency overflow structure provided and is it well maintained and usable? ☐ yes ☐ no ☐ not applicable
22. Are storage facilities enclosed with a fence or other facilities that preclude public access? ☐ yes ☐ no ☐ not applicable
23. Are any features provided that enable reduction in setback distances?
☐ yes ☐ no
- If yes, specify:
- ☐ High-level disinfection
☐ Class I reliability
☐ Site adjacent to a right-of-way
24. Are adequate setback distances provided from the wetted area to the property lines or buildings? ☐ yes ☐ no ☐ not applicable
25. Are adequate setback distances provided to potable water supply wells, Class I waters, and Class II waters?
☐ yes ☐ no ☐ not applicable
26. Are transmission facilities located at least 100 feet from public water supply wells? ☐ yes ☐ no ☐ not applicable
27. Is there evidence of a reduction in infiltration rates over the last permit period? ☐ yes ☐ no
28. Is there evidence of hydraulic problems such as wetness at the ground surface, ponding, or run-off from the site?
☐ yes ☐ no ☐ not applicable
29. Are adequate advisory signs posted around the site?
☐ yes ☐ no ☐ not applicable
30. Are distribution piping, pumping, and other appurtenances well maintained and operational? ☐ yes ☐ no ☐ not applicable
31. Is there evidence of clogging of distribution or other facilities?
☐ yes ☐ no ☐ not applicable
32. Is there evidence of or public complaints about odors, run-off, excessive ground water mounding, or other nuisance conditions?
☐ yes ☐ no ☐ not applicable
33. Are the distribution facilities labeled?
☐ yes ☐ no ☐ not applicable

34. Are above ground hose bibbs present?
☐ yes ☐ no ☐ not applicable
35. Are two or more distribution systems provided?
☐ yes ☐ no ☐ not applicable
36. Is the system operated with an alternating wetting and drying cycle?
☐ yes ☐ no ☐ not applicable

If yes, system is wetted for ____ days and is dried for ____ days.

37. Are the distribution systems rested before being reloaded?
☐ yes ☐ no ☐ not applicable

Note: If the distribution systems are not allowed to rest, the system is subject to regulation as an other system under Part VII of Chapter 17-610, F.A.C. This will require higher levels of treatment and reliability.

38. Is the property well maintained? ☐ yes ☐ no ☐ not applicable
39. Is the absorption field operated such as to use the overlying vegetation? ☐ yes ☐ no
40. Is the vegetation routinely cut and the cuttings removed from the site? ☐ yes ☐ no ☐ not applicable
41. Are underdrains or perimeter drainage features provided?
☐ yes ☐ no ☐ not applicable

If yes, specify:

- ☐ Underdrains
☐ Perimeter drains

42. Does the water collected in underdrains or perimeter drainage features meet appropriate effluent limits? ☐ yes ☐ no ☐ not applicable
43. What is the average annual hydraulic loading rate (as applied to the total bottom area of all distribution systems' trenches)?
_____ inch/day

WETLAND SYSTEMS

1. What is the acreage of the wetland? _____ acres
2. What is the annual average discharge to the wetland? _____ mgd
3. What is the average annual hydraulic loading to the wetland?
_____ inches/week
4. What is the maximum annual hydraulic loading to the wetland?
_____ inches/week
5. What is the minimum annual hydraulic loading to the wetland?
_____ inches/week
6. What is the annual loading rate of total phosphorus to the wetland?
_____ grams per square meter per year
7. What is the annual loading rate of total nitrogen to the wetland?
_____ grams per square meter per year
8. Who is responsible for operating the spreader structure(s) which discharges the effluent into the wetland?
() wastewater treatment plant operator () consulting firm _____
() other _____
9. What operational criteria are used to determine needed adjustments to the spreader structure(s)? _____

10. Does the spreader structure(s) distribute the effluent effectively over the discharge point into the wetland? () yes () no
11. Are there any signs of erosion or ponding at the initial discharge into the wetland? () yes () no
12. Is there a build-up of foreign materials which evaded screening at the wastewater treatment plant? () yes () no
13. How does the effluent flow through the wetland?
() channels () sheets () other _____

Does the effluent sheet flow through with even coverage in all parts of the wetland or does it tend to channelize in certain areas?

14. Is the perimeter of the wetland posted with signs indicating that effluent is being applied to the area? () yes () no
15. Is the public allowed access to the wetland? () yes () no

If no, how is access prevented? _____

16. Is a holding pond on-site? () yes () no

If yes, what is the capacity of the holding pond?
_____ million gallons

17. Has any effluent not meeting pretreatment requirements been discharged into the wetland system? () yes () no

How are such discharges typically avoided? _____

18. Is the odor in the wetland system offensive? () yes () no

19. Has the discharge to the wetland impacted the type, nature, or function of the wetland? () yes () no

Explain. _____

20. What portion of the year is the wetland predominantly dry? _____

21. Has the discharge to the wetland affected historic water levels, periods of time the wetland is predominantly dry, or periods of time the wetland is predominantly wet? () yes () no

22. Have there been die-offs or shifts in vegetative composition at either the initial discharge into the wetland or other points throughout the wetland? () yes () no

23. Have there been changes in fish or amphibian populations since the discharge to the wetland was initiated? () yes () no

24. Have there been any shifts in pH, dissolved oxygen, or other water quality parameters since the discharge was initiated? () yes () no

If yes, why? _____

25. Are threatened or endangered species (e.g., ospreys, eagles, alligators, etc.) present? ☐ yes ☐ no

If yes, please list species, locations, and approximate dates seen.

26. What is the general condition of the wetland?
☐ good ☐ fair ☐ poor

27. What is the frequency of routine inspections of the wetland?
_____ /year

28. Who is responsible for each aspect of operational monitoring of the receiving/treatment wetland required by the permit?

29. Are all wetland stations permanently marked? ☐ yes ☐ no

If yes, how are they marked? _____

30. What type of stage monitor is used at each site? _____

31. Is each stage monitor operating properly? ☐ yes ☐ no

32. Are wetland samples taken at the sites specified in the permit?
☐ yes ☐ no

33. Is sampling and analysis completed for each parameter specified by the permit? ☐ yes ☐ no

34. Is the frequency and methodology of sampling in accordance with the permit? ☐ yes ☐ no

35. Is laboratory analysis conducted in accordance with the permit?
☐ yes ☐ no

N/A

36. Are copies of current and past wetland reports kept at the wastewater treatment plant? () yes () no

Is the amount of information and the detail provided in these reports consistent with that required by the permit? () yes () no

37. What are the most common problems with the wetland? _____

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FLORIDA RURAL WATER ASSOCIATION

2970 Wellington Circle West, Suite 101

Tallahassee, FL 32308

1-800-872-8207

WEIR OR FLUME CALIBRATION

Flow Values Obtained by Using a Weir or Flume

FACILITY NAME & ID: Gulf Power Scholz Steam/FL0002283

FACILITY LOCATION: End of Hwy 217 (off of US 90) Sneads, FL Gadsden County

PRIMARY DEVICE

V-NOTCH WEIR	FLUME	RECTANGULAR WEIR
DEGREE OF V-NOTCH	WIDTH OF THROAT (IN)	CREST LENGTH (FT)
22.5		

Gauge setting comparison using yardstick or carpenters rule:

x ☐ Satisfactory ☐ Unsatisfactory

Physical inspection of primary device approach, device and discharge:

x ☐ Satisfactory ☐ Unsatisfactory

SECONDARY DEVICE

TYPE: Ultrasonic

MAKE/MODEL/SERIAL: Invetron

DATE OF LAST CALIBRATION: 2/27/13

	LOW FLOW	MODERATE FLOW	HIGH FLOW
STAFF GAGE READING (ft)	0.22	0.22	0.22
ACTUAL FLOW (gpm)	5.065	5.065	5.065
TOTALIZER OR RECORDER READING (gpm)	5.070	5.075	5.1
PERCENT DIFFERENCE (%)	<1%	<1%	2%

Physical Inspection of Secondary Device:

x ☐ Satisfactory ☐ Unsatisfactory

COMMENTS: _____

I hereby certify that the above test was performed in accordance with the best available technology.

TECHNICIAN SIGNATURE: *Scott Phillips* DATE: 1/27/15

Scott Phillips FRWA 1-800-872-8207



WASTEWATER APPLICATION FORM 2A FOR A DOMESTIC WASTEWATER FACILITY PERMIT

Instructions for selected items are included in the "INSTRUCTIONS FOR FORM 2A". Refer to these instructions before filling out each item.

SECTION 1. APPLICANT AND FACILITY DESCRIPTION

1. Application Type

- ☐ New
☐ Substantial Modification
☒ Permit Renewal

2. Facility Type

- ☒ Wastewater Treatment
☐ Reuse or Disposal
☐ Limited Wet Weather Discharge
☐ Residuals/Septage Management

3. Treatment Facility Information

a. Name

Scholz Electric Generating Plant

b. Facility Identification Number

FL0002283

c. Location

Number and Street

1460 Gulf Power Road

City/State/Zip Code

Sneads, Fl. 32460

Telephone

850-593-6421

Latitude

30 ° 40 ' 9.41 "N

Longitude

84 ° 53 ' 12.04 "W

Dates Coordinates Determined

1/12/15

Method Used to Obtain Coordinates

Google Earth

d. Ownership Type

- ☐ Municipal
☐ County
☐ State
☒ Private

e. Contact

Name	Robert J. Jernigan
Title	Engineer I
Telephone	850-444-6024

f. Facility Mailing Address

Number and Street	One Energy Place
City/State/Zip Code	Pensacola, Florida 32520

g. Year Facility Began Operation	WWTP - 1993
----------------------------------	-------------

4. Applicant or Authorized Representative

Legal Name	Gulf Power Company
Number and Street	1 Energy Place
City/State/Zip Code	Pensacola, Florida, 32520
Telephone	850-444-6024
Contact Person	Robert J. Jernigan
Title	Engineer I
Telephone Number	850-444-6024

Is the applicant the owner or operator (or both) of the facility? ☒ Owner ☐ Operator

Indicate whether correspondence regarding this facility should be directed to the facility or the applicant.
☐ Facility ☒ Applicant

5. Project Name and Description

N/A

6. Municipalities or Areas Served

Name of Municipality or Area	Ownership	Population Served
none		
Total Population Served		

7. Reclaimed Water Reuse and Effluent Disposal

Method of Reuse or Disposal	Number of Reuse or Disposal Points	Total Design Capacity (mgd)	Basis of Design Flow
Surface Waters - Excluding Ocean Outfalls and Wetlands (Rule 62-600.510, F.A.C.)			
Ocean Outfalls (Rule 62-600.520, F.A.C.)			
Wetlands (Rule 62-600.620, F.A.C.)			
Reuse of Reclaimed Water and Land Application (Rule 62-600.530, F.A.C.)	1 Effluent is onsite reuse	.0025	Annual Average
Ground Water Disposal by Underground Injection (Rule 62-600.540, F.A.C.)			
Other (Describe)			
Total	1	.0025	Annual Average

8. Flows to Another Wastewater Facility

- a. Does the facility discharge or transport treated or untreated wastewater to another treatment facility?

☐ Yes ☒ No

- b. If yes, describe the mean(s) by which the wastewater from the treatment facility is discharged or transported to the other treatment facility (e.g., collection/transmission system, reclaimed water distribution system)?

N/A

If transport is by a party other than the applicant, provide the following:

Transporter name: N/A

Mailing Address:

Contact person:

Title:

Telephone number:

- c. For each treatment facility that receives this discharge, provide the following:

Name:

Mailing Address:

Contact person:

Title:

Telephone number:

d. Facility Identification Number of Facility Which
Receives the Flow

e. Average Daily Flow Rate to the Receiving Facility

_____ mgd

9. Residuals Use or Disposal

a. Amount of Residuals Generated by the Facility

0 _____ dry tons/year

b. Does this facility receive residuals from another
facility for further treatment and disposal?

☐ Yes ☒ No

c. Method of Residuals Use or Disposal

Method	Number of Sites or Number of Receiving Facilities	Dry Tons Used or Disposed per Year
Land Application (Chapter 62-640, F.A.C.)		
Distribution and Marketing (Chapter 62-640, F.A.C.)		
Landfill Disposal (Chapter 62-701, F.A.C.)		
Incineration (Chapter 62-200 Series, F.A.C.)		
Transport to Another Treatment Facility	1	0
Other (Describe)		
Total		

d. If residuals are transported to another facility
for landfill disposal, incineration, or treatment,
provide the facility name, Facility identification
number and address.

Name

Facility Identification Number

Number and Street

City/State/Zip Code

County

Telephone

Treatment Processes Used by Receiving Facility

10. Permits and Applications

a. Expiration Date of Current NPDES Permit September 22, 2015

b. Expiration Date of Current DEP Permit September 22, 2015

c. Permit Number of Any Existing Environmental Permits

NPDES	<u>FL000283</u>	PSD	<u>N/A</u>
UIC	<u>N/A</u>	Other	<u></u>
RCRA	<u></u>	Other	<u></u>

d. Orders and Notices

Type or Order or Notice	Issuing Agency	Date of Order or Notice
Notice or Violation	N/A	
Consent Order	N/A	
Administrative Order	N/A	
Other (Describe.)		

SECTION 2. TREATMENT FACILITY DESCRIPTION

1. Flow

a. Design Capacity

Current Design Capacity	.0025	mgd
Proposed Incremental Design Capacity	+	0
Proposed Total Design Capacity	=	.0025

b. Basis of Design Flow

- ☒ Annual Average Daily Flow
☐ Maximum Monthly Average Daily Flow
☐ Three-Month Average Daily Flow
☐ Other. If other, specify.

	Two Years Ago	Last Year	This Year	
c. Annual Average Daily Flow Rate	.00024	.00025	.00034	mgd
d. Maximum Daily Flow Rate	.00590	.00369	.00575	mgd

2. Design Treatment Levels

Parameter	Effluent Concentration	Units	Basis	Percent Removal
pH	6.0 - 8.5	Standard Units		
CBOD ₅	30.0	mg/L	Monthly Average	
TSS	30.0	mg/L	Monthly Average	

3. Disinfection Level Provided

- ☐ Low-level
☐ Basic
☐ Intermediate
☒ High-level
☐ High-level Alternative

If the facility disinfects by chlorination and the discharge is to surface waters, is dechlorination provided?

- ☒ Yes ☐ No

4. Residuals Treatment

a. Class of Residuals

- ☐ Class AA (Rule 62-640.850, F.A.C.)
☐ Class A (Rule 62-640.600, F.A.C.)
☐ Class B (Rule 62-640.600, F.A.C.)
☒ Other

If other, describe

The solids loading at this facility is very low. The facility does not have a significant amount of residuals.

b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

- ☐ Option 1 (Minimum 38 percent reduction in volatile solids)
☐ Option 2 (Anaerobic process, with bench-scale demonstration)
☐ Option 3 (Aerobic process, with bench-scale demonstration)
☐ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
☐ Option 5 (Aerobic processes plus raised temperature)
☐ Option 6 (Raise pH to 12 and retain at 11.5)
☐ Option 7 (75 percent solids with no unstabilized solids)
☐ Option 8 (90 percent solids with unstabilized solids)
☐ Option 9 (Injection below land surface)
☐ Option 10 (Incorporation into soil within 6 hours)
☐ Option 11 (Covering active sewage sludge unit daily)
☒ None or unknown

d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:

e. Parameter Concentrations

POLLUTANT	CONC.	UNITS
Total Nitrogen	N/A	% dry weight
Total Phosphorus		% dry weight
Total Potassium		% dry weight
Arsenic		mg/kg dry weight
Cadmium		mg/kg dry weight
Chromium		mg/kg dry weight
Copper		mg/kg dry weight
Lead		mg/kg dry weight
Mercury		mg/kg dry weight
Molybdenum		mg/kg dry weight
Nickel		mg/kg dry weight
Selenium		mg/kg dry weight
Zinc		mg/kg dry weight
pH		standard units
Total Solids		%
Other Parameters		

Date of Sample _____

5. Reliability Class

- ☐ Class I
☐ Class II
☐ Class III
☐ Other Equivalent Reliability

SECTION 3. A. DISCHARGES TO SURFACE WATERS (including wetlands)

1. Discharge Serial Number and Name

Discharge Serial Number

N/A

2. Discharge Location

County

Street or Description

City or Town (if applicable)

Zip Code

Latitude

Longitude

Dates Coordinates Determined

Method Used to Obtain Coordinates

°

'

"N

°

'

"W

3. Design Capacity of the Outfall

Current Design Capacity

Proposed Incremental Design Capacity

Proposed Total Design Capacity

mgd

+

mgd

=

mgd

4. Basis of Design Flow

☐

Annual Average Daily Flow

☐

Maximum Monthly Average Daily Flow

☐

Three-Month Average Daily Flow

☐

Other

If other, specify

5. Basis for Effluent Limitations

☐

TBEL

☐

Level I WQBEL

☐

Level II WQBEL

☐

Other

If other, specify

Date Effluent Limitations Established

6. Description of Receiving Waters

a. Name of Receiving Water

b. Type of Receiving Waterbody

☐

Fresh

☐

Brackish or Marine

c. Classification of Receiving Waterbody

☐

Class I

☐

Class II

☐

Class III

☐

Class IV

☐

Class V

Is the receiving waterbody contiguous to,
or identified as, an Outstanding Florida Water
(OFW) or an Outstanding National Resource Water?

☐ Yes ☐ No

If yes, name and locate on a USGS map.

Does this facility discharge to a receiving water that is either in Indian Country or that is upstream from (and
eventually flow through) Indian Country? ☐ Yes ☐ No

d. Name of Watershed (if known)

United States Soil Conservation Service 14-digit
Watershed Code (if known)

e. Name of State Management/River Basin (if known)

United States Geological Survey 8-digit Hydrologic
Cataloging Unit Code (if known)

f. Critical low flow of receiving stream (if applicable)

acute _____ cfs chronic _____ cfs

g. Total hardness of receiving stream at critical low flow (if applicable) _____ mg/l of CaCO₃

7. Outfall Information

Description of Outfall and Diffuser

Construction Materials

Length From Shore

Diameter

Discharge Depth Below Water Surface

Receiving Water Bottom Depth Below Water Surface

Is the outfall equipped with a diffuser?

☐ Yes ☐ No

_____ feet

_____ inches

_____ feet

_____ feet

8. Surface Water Improvement and Management (SWIM)

a. Will the discharge affect any SWIM
plan waterbodies?

☐ Yes ☐ No

b. If yes, name the waterbody

c. Has the SWIM plan been approved by a water
management district and the Department?

☐ Yes ☐ No

d. If yes, attach documentation that the proposed
discharge is consistent with the SWIM plan.

9. Additional Information Required for Intermittent or Periodic Discharges

Frequency
Duration
Volume
Occurrence

_____ Times Per Year
_____ Days
_____ Thousand Gallons Per Incident

	Jan		May		Sep
	Feb		Jun		Oct
	Mar		Jul		Nov
	Apr		Aug		Dec

10. Additional Information Required for Limited Wet Weather Discharges Permitted in Accordance with Rule 62-610.860, F.A.C.

a. Downstream Waterbody

Name of nearest downstream lake, estuary, reservoir, OFW, or Class I water. Show location on a USGS map.

Classification of Downstream Waterbody

- ☐ Class I
☐ Class II
☐ Class III
☐ Class IV
☐ Class V

Distance Downstream

_____ miles

Average Flow Velocity During Anticipated Periods of Discharge

_____ feet per second

Travel Time During Anticipated Periods of Discharge

_____ hours

b. Rainfall Information

Rainfall Gauging Station Location

Period of Record Analyzed:

Beginning Year

Ending Year

Number of Years

Average Annual Rainfall

_____ inches per year

c. Simulation of Operation of the Reuse,
Storage, and Limited Wet Weather Discharge
for an Average Rainfall Year

Year Simulated

Annual Rainfall During Average Year

_____ inches

Number of Days Limited Wet Weather Discharge
is Used During Average Rainfall Year (N)

_____ days

Percent of the Days of the Year that the
Limited Wet Weather Discharge will Occur
During Average Rainfall Year (P)

_____ %

Note:

$$P = [(N) / (365)] \times 100\%.$$

P cannot exceed 25% or be less than 1%.

d. Reclaimed Water Quality (maximum monthly average)

CBOD₅

_____ mg/L

TKN (as Nitrogen)

_____ mg/L

e. Minimum Acceptable Stream Dilution Factor (SDF)

Note:

$$SDF = P(0.085 \times CBOD_5 + 0.272 \times TKN - 0.484)$$

The values for CBOD₅ and TKN should be in terms
of maximum monthly average limitations as
provided in 14.d. above. The value of P should
be as calculated in 14.c. above.

f. Adjusted Stream Dilution Factor

Note:

If the travel time shown in 14.a., above,
is less than 24 hours, provide the adjusted
minimum acceptable stream dilution factor.

$$\text{Adjusted SDF} = SDF \times (24 \text{ hours}) / (\text{travel time in hours})$$

11. Additional Information Required for Wetland Discharges

- a. Is the wetland a jurisdictional wetland
(i.e. within the landward extent of waters
as defined in Rule 62-301.400, F.A.C., or
isolated and not owned entirely by one
person, or owned entirely by the State)?

☐ Yes ☐ No

- b. Will the wetland be used as a treatment wetland or receiving wetland?

☐ Treatment
☐ Receiving

If the wetland is to be used as a treatment wetland, attach documentation showing ownership or the applicant's legal interest in the treatment wetland.

- c. If the wetland is to be used for treatment, identify the type.

☐ Man-made
☐ Hydrologically Altered
☐ Unaltered

- d. Is the wetland herbaceous or woody?

☐ Herbaceous
☐ Woody

- e. Identify the classification of surface waters within the wetland.

☐ Class I
☐ Class II
☐ Class III
☐ Class IV
☐ Class V

- f. Are the waters within the wetland part of an OFW?

☐ Yes ☐ No

12. Effluent Testing Information.

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)		s.u.	-	-	-
pH (Maximum)		s.u.	-	-	-
Flow Rate					
Temperature (Winter)					
Temperature (Summer)					

* For pH, please report a minimum and maximum daily value.

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	MDL/ PQL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
CARBONACEOUS BIOCHEMICAL OXYGEN DEMAND (CBOD)							
TOTAL SUSPENDED SOLDS (TSS)							
FECAL COLIFORM							

13. Additional Application Information for Applicants with a Design Flow Greater Than or Equal to 0.1 mgd

a. Effluent Testing Data

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	MDL/ PQL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)							
CHLORINE (TOTAL RESIDUAL TRC)							
DISSOLVED OXYGEN							
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE							
NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER PARAMETERS							

b. Inflow and Infiltration

Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration _____ gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

c. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☐ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

Telephone Number: _____

Responsibilities of Contractor: _____

14. Expanded Effluent Testing Data: 1.0 mgd and Pretreatment Treatment Works.

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS CaCO ₃)											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CHLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYL VINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLORO-ETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											

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DI-N-OCTYL PHTHALATE												
DIBENZO(A,H) ANTHRACENE												
1,2- DICHLOROBENZENE												
1,3- DICHLOROBENZENE												
1,4- DICHLOROBENZENE												
3,3- DICHLOROBENZIDIN E												
DIETHYL PHTHALATE												
DIMETHYL PHTHALATE												
2,4- DINITROTOLUENE												
2,6- DINITROTOLUENE												
1,2-DIPHENYL- HYDRAZINE												
FLUORANTHENE												
FLUORENE												
HEXACHLORO- BENZENE												
HEXACHLORO- BUTADIENE												
HEXACHLORO- CYCLO-PENTADIENE												
HEXACHLORO- ETHANE												
INDENO(1,2,3- CD)PYRENE												
ISOPHORONE												
NAPHTHALENE												
NITROBENZENE												
N-NITROSODI-N- PROPYLAMINE												
N-NITROSODI- METHYLAMINE												
N-NITROSODI- PHENYLAMINE												
PHENANTHRENE												
PYRENE												
1,2,4-TRICHLORO- BENZENE												
Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.												
Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.												

SECTION 3. B. REUSE AND LAND APPLICATION SYSTEMS

1. Reuse or Land Application System Serial Number and Name

Reuse or Land Application System Serial Number

I-013

All effluent is sent to an ash pond holding area that is onsite.

2. Reuse or Land Application System Location

County

Jackson

City or Town (if applicable)

Sneads

Street or Description

Sholtz Electric Generating Plant

1460 Gulf Power Road

Latitude

30 ° 40 ' 9.41 "N

Longitude

84 ° 53 ' 12.04 "W

Dates Coordinates Determined

1/12/15

Method Used to Obtain Coordinates

Google Earth

3. Design Capacity of the Reuse or Land Application System

Current Design Capacity

.0025 mgd

Proposed Incremental Design Capacity

+ mgd

Proposed Total Design Capacity

= mgd

4. Basis of Design Flow

- ☒ Annual Average Daily Flow
☐ Maximum Monthly Average Daily Flow
☐ Three-Month Average Daily Flow
☐ Other

If other, specify

5. Is land application continuous or intermittent?

☐ Continuous ☒ Intermittent

6. Underdrains and Perimeter Ditches

a. Is the reuse or land application system underdrained?

☐ Yes ☒ No

b. Are perimeter ditches used?

☐ Yes ☒ No

If yes, will they be excavated to a depth which will intersect the seasonal high ground water table or the ground water mound during any portion of the year?

☐ Yes ☐ No

7. Type of Reuse or Land Application System

- ☐ Slow-rate land application system/restricted public access (Chapter 62-610, F.A.C., Part II)
☐ Slow-rate land application system/public access areas, residential irrigation, and edible crop irrigation (Chapter 62-610, F.A.C., Part III)
☐ Rapid-rate land application system (Chapter 62-610, F.A.C., Part IV)
☐ Absorption field system (Chapter 62-610, F.A.C., Part V)
☐ Overland flow system (Chapter 62-610, F.A.C., Part VI)
☐ Other land application system with additional levels of preapplication treatment (Rule 62-610.660, F.A.C.)
☒ Other land application system with lower levels of preapplication treatment (Rule 62-610.670, F.A.C.)

8. Application Areas and Rates

Site/Use Type/Major User	Area (acres)	Rate (inches/week)	Capacity (mgd)
N/A			
Total			

9. Additional Information Required for Reuse Systems Permitted Under Part III of Chapter 62-610, F.A.C.

a. Areas Irrigated

- ☐ Residential lawns
☐ Golf courses
☐ Cemeteries
☐ Parks, playgrounds
☐ Landscape areas
☐ Highway medians, rights-of-way
☐ Edible crops
☐ Others

If other, specify _____

b. Other Uses of Reclaimed Water

- ☐ Toilet flushing
☐ Fire protection
☐ Construction dust control
☐ Aesthetic purposes (decorative ponds, fountains, etc.)
☒ Others

If other, specify. Onsite industrial use (Discharge to ash pond)

- c. How many hours per day, seven days per week, is or will an operator be on-site at the wastewater treatment facility?

8 _____ hours per day

If the treatment facility is or will be staffed by an operator less than 24 hrs/day, describe the additional levels of reliability included within the treatment or reuse systems
(See Rule 62-610.462, F.A.C.)

- d. For permit renewals, list the dates on which the operating protocols (as described in Rule 62-610.463, F.A.C.) were submitted to the Department and the date of the Department's approvals during the last five years.

Date Submitted	Date Approved

- e. For each site where edible crops are or will be irrigated with reclaimed water, describe the crops grown; the type of application system used; provisions for crop washing and for processing, if any; and provisions for control of public access, if any. (See Rule 62-610.475, F.A.C.)

SECTION 3. C. GROUND WATER DISPOSAL BY UNDERGROUND INJECTION

1. Underground Injection Well Facility Serial Number and Name

Underground Injection Well Facility Serial Number

N/A

2. Underground Injection Well Facility Location

County

City or Town (if applicable)

Street or Description

Latitude

Longitude

Dates Coordinates Determined

Method Used to Obtain Coordinates

°

'

"N

°

'

"W

3. Underground Injection Well Facility DEP Identification Number or Permit Application Number

4. Design Capacity of the Underground Injection Well Facility

Current Design Capacity

Proposed Incremental Design Capacity

Proposed Total Design Capacity

+ _____ mgd

= _____ mgd

= _____ mgd

5. Basis of Design Flow

☐ Annual Average Daily Flow

☐ Maximum Monthly Average Daily Flow

☐ Three-Month Average Daily Flow

☐ Other

If other, specify.

6. Is injection continuous or intermittent?

☐ Continuous ☐ Intermittent

SECTION 4. SCHEDULED IMPROVEMENTS AND SCHEDULES OF IMPLEMENTATION

1. Improvements Required

- a. Discharge Serial Numbers, Reclaimed Water Reuse or Land Application System Serial Numbers, and Underground Injection Well Facility Serial Numbers Affected

None _____

- b. Authority Imposing Requirement

- ☐ Local
☐ State
☐ Federal
☐ Developed by Applicant
☐ Other

If other, specify. _____

2. Implementation Schedule and Actual Completion Dates

Implementation Steps	Schedule	Actual Completion
a. Preliminary Plans Complete	NA	
b. Final Plans and Specifications Complete	NA	
c. Financing Complete	NA	
d. Site Acquired	NA	
e. Begin Construction	NA	
f. End Construction	NA	
g. Begin Reuse or Disposal	NA	
h. Operational Level Attained	NA	

3. Have appropriate permits/clearances concerning other Federal/State requirements been obtained?

☐ Yes ☐ No

If so, describe briefly:

NA

SECTION 5. INDUSTRIAL WASTEWATER CONTRIBUTIONS

1. Does the treatment works have, or is it subject to, an approved pretreatment program? ☐ Yes ☒ No

2. Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. _____

b. Number of CIUs. _____

3. Significant Industrial User Information

Name _____
Number and Street _____
City/State/Zip Code _____
County _____

4. Industrial processes Affecting or Contributing to the SIU's Discharge

5. Principal Product(s) and Raw Material(s)

Principal product(s): _____

Raw material(s): _____

6. Flow Rate

a. Process wastewater flow rate.

_____ gpd ☐ Intermittent ☐ Continuous

b. Non-process wastewater flow rate.

_____ gpd ☐ Intermittent ☐ Continuous

7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ☐ Yes ☐ No

b. Categorical pretreatment standards ☐ Yes ☐ No

If subject to categorical pretreatment standards, which category and subcategory?

8. **Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g. upsets, interference) at the treatment works in the past three years?

☐ Yes ☐ No

If yes, describe each episode.

9. **RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?

☐ Yes ☐ No If no, go to question 12.

10. **Waste Transport.** Method by which RCRA waste is received (check all that apply):

☐ Truck ☐ Rail ☐ Dedicated Pipe

11. **Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

<u>EPA Hazardous Waste Number</u>	<u>Amount</u>	<u>Units</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

12. **Remediation Waste.** Does the treatment works currently (or has it been modified that it will) receive waste from remedial activities?

☐ Yes (complete 13. through 15.) ☐ No

Provide a list of sites and the requested information (13. – 15.) for each current and future site.

13. **Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

14. **Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

15. Treatment.

- a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

- b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous ☐ Intermittent

If intermittent, describe discharge schedule.

SECTION 6. ADDITIONAL INFORMATION REQUIRED FOR PERMIT RENEWALS

1. Have there been any modifications to the treatment facilities or reuse or disposal system, since the issuance of the current permit? If yes, describe on a separate sheet and attach. ☐ Yes ☒ No

2. For limited wet weather discharges, have any modifications been made to the operation, frequency of discharge, or stream hydrology since the original limited wet weather discharge permit or the most recent permit. If yes, describe on a separate sheet and attach. ☐ Yes ☐ No ☒ NA

3. Have there been any violations during the last six months? If yes, describe on a separate sheet and attach. ☐ Yes ☒ No

4. Have there been any treatment facility interferences due to the discharge of industrial wastewater to the treatment facility during the last six months? If yes, describe on a separate sheet and attach. ☐ Yes ☒ No

5. Is there any enforcement action pending against these treatment, reuse, or disposal facilities? If yes, describe on a separate sheet and attach. ☐ Yes ☒ No

6. Have all previous permit conditions, including pretreatment requirements, monitoring requirements, and operator attendance been complied with? If no, describe on a separate sheet and attach. ☒ Yes ☐ No

7. For permit renewals involving a limited wet weather discharge permitted under Rule 62-610.860, F.A.C., list the number of days during each of the last five years that the limited wet weather discharge was used. Also, list the total annual rainfall for each year.

Year	Number of Days Used	P (%)	Annual Rainfall (inches)
1. N/A			
2.			
3.			
4.			
5.			
Total/Average			

8. For permit renewals involving a limited wet weather discharge permitted under Rule 62-610.860, F.A.C., provide the number of days during each of the last five years that the actual dilution ratio, as defined in Rule 62-610.860, F.A.C., was less than the minimum SDF and the number of months in which the monthly average CBOD₅ or TKN in the limited wet weather discharge exceeded the permit limitations.

Year	Number of Days the Dilution Ratio Was Less Than SDF	Number of Months the Limits Were Exceeded	
		CBOD ₅	TKN
1. N/A			
2.			
3.			
4.			
5.			

SECTION 7. ADDITIONAL INFORMATION REQUIRED FOR RESIDUALS/SEPTAGE MANAGEMENT FACILITIES

1. Location of Residuals Treatment Processes N/A

(Describe in relation to the wastewater treatment processes.)

2. Type and Amount of Waste Treated at this Facility

Type	Amount (dry tons/day)	Amount (gallons/day)
Residuals	or	
Septage		
Food Establishment Sludge		
Portable Toilet Waste		
Holding Tank Waste		
Boat or Marina Waste		
Other (Describe.)	or	
Total	or	

Is the total amount estimated or actual?

☐ Estimated
☐ Actual

3. Information on Treatment Facilities Transporting Residuals

a. DEP Permit Number

b. Facility Name

Number and Street
City/State/Zip Code
County
Telephone

c. Facility Type

☐ Type I
☐ Type II
☐ Type III

d. Amount of Residuals Received From This Facility

_____ dry tons/day or _____ gpd

Is this amount estimate or actual?

☐ Estimated
☐ Actual

e. Describe the treatment provided by this facility before transport

f. Parameter Concentrations

POLLUTANT	CONC.	UNITS
Total Nitrogen		% dry weight
Total Phosphorus		% dry weight
Total Potassium		% dry weight
Arsenic		mg/kg dry weight
Cadmium		mg/kg dry weight
Chromium		mg/kg dry weight
Copper		mg/kg dry weight
Lead		mg/kg dry weight
Mercury		mg/kg dry weight
Molybdenum		mg/kg dry weight
Nickel		mg/kg dry weight
Selenium		mg/kg dry weight
Zinc		mg/kg dry weight
pH		standard units
Total Solids		%
Other Parameters		

Date of Sample _____

4. Describe the manifest system used for tracking residuals during transport from the facilities.

SECTION 8. DOCUMENTATION SUBMITTED

1. General Application Requirements	Attached	
	Yes	No
a. Process Flow Diagram	☒	☐
b. Site Plan	☒	☐
c. Location Map	☒	☐
d. Agricultural Use Plan or Dedicated Site Plan	☐	☒
e. Capacity Analysis Report	☐	☒
f. Results of Whole Effluent Biological Toxicity Testing	☐	☒
g. Reuse Feasibility Study	☐	☒
h. Binding Agreements and Documentation of Controls on Individual Users of Reclaimed Water	☐	☒

2. Additional Application Requirements for New Facilities and Modifications to Existing Facilities	Yes	No
a. Preliminary Design Report	☐	☒
b. Documentation of Compliance with Antidegradation Requirements	☐	☒
c. Public Service Commission Certification Number and Copy of Certificate or Order Number and Copy of Order	☐	☒
d. Letter from the Management and Storage of Surface Waters Permitting Agency	☐	☒
e. Request for Approval of Monitoring Plans for Discharge of Domestic Wastewater to Wetlands	☐	☒
f. Concurrent Application for Ground Water Disposal by Underground Injection	☐	☒
g. Application for Monitoring Plan Approval	☐	☒

3. Additional Application Requirements for Permit Renewals	Yes	No
a. Operation and Maintenance Performance Report	☒	☐
b. Reclaimed Water or Effluent Analysis Report	☐	☒
c. Technical Evaluation of Need to Revise Local Pretreatment Limits	☐	☒
d. Results of Mechanical Integrity Testing	☐	☒

SECTION 9. CERTIFICATIONS

1. Certifications for Construction of New Facilities or Modifications to Existing Facilities

a. Applicant or Authorized Representative

I certify that the statements made in this application for a permit and all attachments are true, correct, and complete to the best of my knowledge and belief. I agree to retain the design engineer, or another professional engineer registered in Florida, to conduct on-site observation of construction, to prepare a notification of completion of construction, and to review record drawings for adequacy as referenced in Rule 62-620.630, F.A.C. Further, I agree to provide an appropriate operation and maintenance manual for the facilities pursuant to Rule 62-620.630, F.A.C., and to retain a professional engineer registered in Florida to examine (or to prepare or revise, if necessary) the manual. For projects regulated by Chapter 62-610, F.A.C., I agree to provide the additional operation requirements of that Chapter.

_____ (Signature of Applicant or Authorized Representative ¹)	_____ Date
_____ Name (please type)	_____ Company Name
_____ Title	_____ Company Street Address or P O Box
_____ Telephone No. (including area code)	_____ City, State, Zip Code

b. Professional Engineer Registered in Florida

I certify that the engineering features of this domestic wastewater project have been (designed) (examined) by me and found to conform to engineering principles applicable to such projects. In my professional judgment, this facility, when properly constructed, operated, and maintained, will comply with all applicable statutes of the State of Florida and rules of the Department.

_____ Name (please type):	_____ Company Name:
_____ Florida Registration Number:	_____ Company Street Address or P O Box
_____ Telephone No. (including area code)	_____ City/State/Zip Code:
_____	(Seal, Signature, Date, Registration No.)

¹ If signed by the authorized representative, attach a letter of authorization.

c. Professional Engineer Registered in Florida

I certify that this firm or individual has been retained by the applicant to prepare a notification of completion of construction, to prepare operation and maintenance manuals, and to review record drawings for adequacy as referenced in Rules 62-620.630, 62-600.717, and 62-600.720, F.A.C.

Name (please type):	Company Name:
Florida Registration Number:	Company Street Address or P O Box
Telephone No. (including area code)	City/State/Zip Code:
(Seal, Signature, Date, Registration No.)	

2. Certifications for Permit Renewals

a. Applicant or Authorized Representative

I certify that the statements made in this application for a permit and all attachments are true, correct and complete to the best of my knowledge and belief. I agree to operate and maintain these wastewater facilities in such a manner as to comply with the provisions of Chapter 403, F.S., Chapter 62-600, F.A.C., and all other applicable rules of the Department. Further, an appropriate operation and maintenance manual which has been examined by a professional engineer as certified below is available and located at 1460 Gulf Power Road, Sneads, Florida and can be submitted upon request as part of the permit procedure. A copy of the record drawings or other plans (as applicable) showing modifications to existing facilities, as referenced in Rule 62-600.717, F.A.C., is available at the same location. I also understand that a permit if granted by the Department, is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C., and I will notify the Department in accordance with this rule upon sale or legal transfer of the permitted facilities. In the event of abandonment or inactivation of the facilities, I will notify the Department and ensure that public health and safety are protected as required by Rule 62-620.610, F.A.C.

 (Signature of Applicant or Authorized Representative ²) James O. Vick	<u>3/18/15</u> Date
Name (please type) Director, Environmental Affairs	Company Name Gulf Power Company
Title 850-444-5311	Company Street Address or P O Box One Energy Place
Telephone No. (including area code)	City, State, Zip Code Pensacola, FL 32520-0328

² If signed by the authorized representative, attach a letter of authorization.

b. Professional Engineer

I certify that the engineering features of these domestic wastewater facilities have been examined by me and found to conform to engineering principles applicable to such projects. I certify that the operation and maintenance manual for these wastewater facilities has been prepared or examined by me or by individual(s) under my direct supervision and that there is reasonable assurance, in my professional judgement, that the facilities, when properly operated and maintained in accordance with this manual, will comply with all applicable statutes of the State of Florida and rules of the Department.

Scott L. Jernigan

Name (please type):

69170

Florida Registration Number:

850-438-9661

Telephone No. (including area code)

St Jernigan 3/9/15

Baskerville-Donovan, Inc.

Company Name:

449 W. Main Street

Company Street Address or P O Box

Pensacola, Florida 32502

City/State/Zip Code:

(Seal, Signature, Date, Registration No.)



**Groundwater Summary Report
Gulf Power Company
Scholz Electrical Generating Plant
Sneads, Florida**

March 2015



**Prepared by:
Gulf Power Company
Environmental Affairs
One Energy Place
Pensacola, FL 32520**

CERTIFICATION

**PROFESSIONAL GEOLOGIST LICENSED IN THE STATE OF
FLORIDA**

This is to certify that I have reviewed and approve the contents of this 2015 Gulf Power Plant Scholz Groundwater Submittal for the Gulf Power Company, Scholz Electric Generating Plant, Pensacola, Florida.

**Richard M. Markey
State of Florida License
#0000265
Gulf Power Company
One Energy Place
Pensacola, FL. 32520-0328
(850) 444-6573**

Introduction

On September 23, 2010, the Florida Department of Environmental Protection issued a renewal to Industrial Wastewater Permit FL0002283. Section III.8 of this renewed permit requires the following:

The permittee shall develop a written technical report pursuant to the schedule in Condition VI.4; to summarize and interpret the water quality data and water levels obtained from permit issuance to the date of renewal application submittal. The report shall be submitted by a qualified professional and shall contain the following items at a minimum:

- A. Tables and graphs of water quality data, including hydrographs, for all monitoring wells. Rainfall data should be included with the hydrographs.
- B. A comparison of water quality results between background wells and downgradient wells.
- C. A summary of all violations of applicable water standards.
- D. Ground water contour maps for each sampling event.
- E. A discussion of any data that is thought to be inconsistent or suspect.
- F. A summary of the physical condition of the monitoring system. This should be based on visual observation and sampling records.

As a result of this renewal, this groundwater summary report provides an evaluation of groundwater data from 2010-2014. A copy of Section III.8 from the Industrial Wastewater Permit No. FL0002283 is included in Appendix A. The tasks described above are included in Appendices B through H.

The current groundwater monitoring plan was developed by ViroGroup in July 1993, based on the 1984 groundwater monitoring plan by SCS, and has adequately monitored groundwater since it was implemented by Gulf Power. The current monitoring network consists of: (i) 10 monitoring wells for determining water quality and trend analysis; and (ii) four piezometers to assist with determining groundwater flow. The wells and piezometers are located in the two separate and distinct aquifer zones that are described in the permit as the surficial aquifer and the Floridan aquifer. The current monitoring network consists of the following:

Surficial Aquifer (Unit 1):

<u>Monitoring Well ID</u>	<u>Designation</u>
MWB-2051	Background
MWC-2031	Compliance
MWI-204S	Intermediate
MWI-210S	Intermediate

Floridan Aquifer (Unit 2):

<u>Monitoring Well ID</u>	<u>Designation</u>
MWC-2	Compliance
MWC-203	Compliance
MWC-204	Compliance
MWB-205	Background

MWC-210	Compliance
MWC-212	Compliance
MWP-103	Piezometer
MWP-105	Piezometer
MWP-110	Piezometer
MWP-112	Piezometer

A. Tables and Graphs of Groundwater Quality Including Hydrographs:

As required in Industrial Wastewater permit FL0002283-004, tables and graphs of groundwater quality, including hydrographs, are included in this report. The tables of water quality are located in Appendix B. The graphs of water quality are located in Appendices G (surficial aquifer monitoring wells) and H (Floridan aquifer monitoring wells).

Hydrographs for the surficial and Floridan zones are included in Appendix D. The tables of rainfall data and water levels in graphical form are also located in Appendix D. Both zones that are being monitored for water quality are visibly affected by increases and decreases in rainfall.

B. A Comparison of Water Quality Results Between Background Wells and Downgradient Wells:

In order to compare background wells versus intermediate and compliance wells, all water quality data was placed in tabular form for each aquifer zone. These tables are located in Appendix C.

Surficial Aquifer (Unit 1):

Unit 1's monitoring system consists of a background monitoring well (MWB-2051), two intermediate wells (MWI-204S and MWI-210S), and one compliance well (MWC-2031). The following describes the comparisons between the background, compliance, and intermediate wells with respect to the parameters listed in Section III.3 of Industrial Wastewater Permit FL0002283-004.

Aluminum, cadmium, chloride, chromium, mercury, and selenium concentrations were consistent with background well MWB-2051. TDS and specific conductivity levels were higher than the background well. Iron and arsenic concentrations were slightly elevated in MWC-2031 and MWI-204S. Lead concentrations were slightly elevated in MWI-210S and MWC-2031. Sulfate and magnesium levels were higher in MWC-2031, MWI-204S, and MWI-210S. The pH levels were higher in comparison with the background well. All parameters were below their applicable compliance limit.

Floridan Aquifer (Unit 2):

Unit 2's monitoring system consists of a background monitoring well (MWB-205) and five compliance wells (MWC-2, MWC-203, MWC-204, MWC-210, and MWC-212). The following

describes the comparisons between the background and compliance wells with respect to the parameters listed in Section III.3 of Industrial Wastewater Permit FL0002283-004.

Aluminum, cadmium, chromium, lead, mercury, and selenium concentrations were consistent with the background monitoring well. TDS and magnesium were higher in MWC-210. Specific conductivity was higher in wells MWC-212, MWC-210, and MWC-203. Sulfate showed slightly higher concentrations in all wells when compared to the background well. Chloride levels were higher in MWC-210 and MWC-2. Arsenic concentrations were slightly higher in MWC-203. Iron concentrations were higher in MWC-203, MWC-204, and MWC-210. The pH levels remained stable, with the background well having a more basic level than the compliance wells. All parameters were below their applicable compliance limit.

C. A Summary of All Violations of Applicable Water Standards:

Water quality data for the monitoring well network has been collected since the beginning of the current monitoring period in October 2010. All data was reviewed to determine whether violations in applicable water quality standards occurred. There were no violations of applicable water quality standards.

A trend analysis was conducted on all applicable parameters. The graphs used to evaluate trends are included in Appendices G and H.

D. Groundwater Contour Maps for Each Sampling Event:

Two potentiometric maps have been prepared for each annual sampling event. The Units 1 and 2 potentiometric maps are included in Appendices E and F, respectively. Figures 1 through 10 illustrate all available water level data for the two Units.

Figures 1 through 5 (Appendix E) depict the groundwater flow directions in the surficial Aquifer (Unit 1). Flow direction is towards the southeast during the 2010-2014 sampling events.

Figures 6 through 10 (Appendix F) depict the groundwater flow direction in the Floridan Aquifer (Unit 2). Flow direction is towards the southeast during the 2010-2014 sampling events.

E. A Discussion of Any Data that is Thought to be Inconsistent or Suspect:

Lead concentrations in all wells, including background, increased during the 2014 sampling event. Concentrations in compliance wells were below the groundwater standard.

F. A Summary of the Physical Condition of the Monitoring System:

The physical condition of the current water quality testing system has been evaluated. All wells appear to be in good working order. MWI-210S was dry from October 2010 to March 2012 and MWC-2031 was dry in March 2011 due to a lack of recharge to these wells.

APPENDIX A
PERMIT CONDITION III
GROUNDWATER REQUIREMENTS

PERMITTEE: Gulf Power Company
FACILITY: Scholz Electric Generating Plant

PERMIT NUMBER: FL0002283-004 (Major)
EXPIRATION DATE: September 22, 2015

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Latitude			Longitude			Depth (Feet)	Aquifer Monitored	New or Existing
		°	'	"	°	'	"			
MWI-210S	MWI-210S, Intermediate	30	40	6	84	53	14	-	Surficial	Existing
MWP-103	MW-103; Monitoring Piezometer well.	30	39	59	84	53	15	-	Floridan	Existing
MWP-105	MW-105; Monitoring Piezometer well.	30	40	17	84	53	35	-	Floridan	Existing
MWP-110	MW-110A; Monitoring Piezometer well.	30	40	7	84	53	13	-	Floridan	Existing
MWP-112	MW-112; Monitoring Piezometer well.	30	39	55	84	53	22	-	Floridan	Existing

MWC = Compliance; MWB = Background; MWI = Intermediate; MWP = Piezometer

[62-520.600]

- The following parameters shall be analyzed for each monitoring well identified in Permit Condition III.2. Results shall be reported on the permittee's Discharge Monitoring Report in accordance with Condition I.C.3.:

Parameter	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Water Level Relative to NGVD	Report	ft	In Situ	Annually
pH	Report	s.u.	Grab	Annually
Specific Conductance	Report	umhos/cm	Grab	Annually
Aluminum, Total Recoverable	Report	mg/L	Grab	Annually
Arsenic, Total Recoverable	Report	mg/L	Grab	Annually
Cadmium, Total Recoverable	0.005	mg/L	Grab	Annually
Chloride (as Cl)	Report	mg/L	Grab	Annually
Chromium, Total Recoverable	0.100	mg/L	Grab	Annually
Iron, Total Recoverable	Report	mg/L	Grab	Annually
Lead, Total Recoverable	0.015	mg/L	Grab	Annually
Magnesium, Total Recoverable	Report	mg/L	Grab	Annually
Mercury, Total Recoverable	0.002	mg/L	Grab	Annually
Selenium, Total Recoverable	0.050	mg/L	Grab	Annually
Sulfate, Total	Report	mg/L	Grab	Annually
Solids, Total Dissolved (TDS)	Report	mg/L	Grab	Annually
Alpha, Gross Particle Activity	15	pCi/L	Grab	Once Every 5 Years
Radium 226 + Radium 228, Total	5	pCi/L	Grab	Once Every 5 Years

For piezometers, monitoring and reporting is required only for water level information.

[62-520.600(11)(b)]

- The zone of discharge for the ash pond shall extend horizontally along the ground surface to the facility's property line and vertically from the land surface to the base of the surficial aquifer. [62-520.200(26)] [62-520.465]
- A complete sampling record shall be provided for each monitoring well. This record shall include water level, total depth of the well, volume of water in the well, volume of water removed, stabilization documentation including pH, conductivity, and temperature; time interval of purging; time sample is taken; and device(s) used for purging (including discharge rate) and sampling.
- When Gross Alpha Particle Activity is detected above 5.0 pCi/L, then combined Radium 226 and 228 shall be tested and reported.
- In the event the water quality monitoring shows a violation of the applicable water quality standards, the permittee shall arrange for a confirmation re-sampling within 15 days after the permittee's receipt of laboratory results. In the event that the permittee chooses not to conduct the reconfirmation sampling, the Department shall consider the initial analysis to be representative of the current water quality conditions at this facility. If the initial results demonstrate or the re-sampling confirms ground water contamination, the permittee shall notify the Department in writing within 14 days of this finding.
- The permittee shall develop a written technical report pursuant to the schedule in Condition VI.4 to summarize and interpret the water quality data and water levels obtained from permit issuance to the date of renewal application

PERMITTEE: Gulf Power Company
FACILITY: Scholz Electric Generating Plant

PERMIT NUMBER: FL0002283-004 (Major)
EXPIRATION DATE: September 22, 2015

submittal. The report shall be submitted by a qualified professional and shall contain the following items at a minimum:

- a. Tables and graphs of water quality data, including hydrographs, for all monitoring wells. Rainfall data should be included with the hydrographs.
 - b. A comparison of water quality results between background well and downgradient wells.
 - c. A summary of all violations of applicable water quality standards.
 - d. Ground water contour maps for each sampling event.
 - e. A discussion of any data that is thought to be inconsistent or suspect.
 - f. A summary of the physical condition of the monitoring system. This should be based on visual observation and sampling records.
9. The permittee's discharge to ground water shall not cause a violation of water quality standards for ground waters at the boundary of the zone of discharge, in accordance with Rules 62-520.400 and 62-520.420, F.A.C.
 10. The ground water minimum criteria specified in Rule 62-520.400 F.A.C., shall be met within the zone of discharge. *[62-520.400 and 62-520.420(4)]*
 11. If the concentration for any constituent listed in Condition III.3 in the natural background quality of the ground water is greater than the stated maximum, or in the case of pH is also less than the minimum, the representative background quality shall be the prevailing standard. *[62-520.420(2)]*
 12. Water levels shall be recorded before evacuating each well for sample collection. Elevation references shall include the top of the well casing and land surface at each well site (NAVD allowable) at a precision of plus or minus 0.01 foot. *[62-520.600(11)(c)]*
 13. Ground water monitoring wells shall be purged prior to sampling to obtain representative samples. *[62-160.210]*
 14. Analyses shall be conducted on unfiltered samples, unless filtered samples have been approved by the Department's Northwest District Office as being more representative of ground water conditions. *[62-520.310(5)]*
 15. If any monitoring well becomes damaged or inoperable, the permittee shall notify the Department's Northwest District Office immediately and a detailed written report shall follow within seven days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent recurrence. All monitoring well design and replacement shall be approved by the Department's Northwest District Office prior to installation. *[62-520.600][62-620.320(6)]*
 16. All piezometers and monitoring wells not part of the approved ground water monitoring plan are to be plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C., unless future use is intended. *[62-532.500(4)]*
 17. The permittee shall provide verbal notice to the Department as soon as practical after discovery of a sinkhole within an area for the management or application of wastewater or sludge. The permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department in a written report within 7 days of the sinkhole discovery.
 18. Ground water monitoring test results shall be submitted on Part D of Form 62-620.910(10) in accordance with Condition I.C.3. *[62-520.600(11)(b)]*

IV. ADDITIONAL LAND APPLICATION REQUIREMENTS

1. When the three-month average daily flow for the most recent three consecutive months exceeds 50 percent of the permitted capacity of the treatment plant or reuse and disposal systems, the permittee shall submit to the Department a capacity analysis report. This initial capacity analysis report shall be submitted within 180 days after the last day of the last month of the three-month period referenced above. The capacity analysis report shall be prepared in accordance with Rule 62-600.405, F.A.C. *[62-600.405(4)]*

APPENDIX B

SUMMARY OF GROUNDWATER DATA

SCHOLZ PLANT GROUNDWATER MONITORING PLAN

Table 1B. Plant Scholz Summary of Groundwater Data

	Sample Date	Groundwater Elevation (ft NGVD)	TDS (Total) mg/L	pH (field)	Specific Conductance umhos/cm	Aluminum (Total) mg/L	Arsenic (Total) mg/L	Cadmium (Total) mg/L	Chloride (Total) mg/L	Chromium (Total) mg/L	Iron (Total) mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Mercury (Total) mg/L	Selenium (Total) mg/L	Sulfate (Total) mg/L	Alpha (Gross Partic Activity) PC/L	Radium 226 + Radium 228 (Total) PC/L
MWC-2	10/16/2010	NA	130	7.44	298	0.0445	0.00025	0.0006	14	0.00055	0.017	0.000285	15	0.0000355	0.00015	8.2	MNR	MNR
MWC-2	5/20/2011	NA	170	7.09	290	0.025	0.00066	0.000295	15	0.00062	0.00135	0.000085	16	0.000042	0.00033	8.2	0.0 +/- 0.5	0.6 +/- 0.8
MWC-2	3/27/2012	NA	150	7.83	305	0.025	0.00033	0.000295	23	0.000315	0.00135	0.000085	13	0.000083	0.00033	0.93	MNR	MNR
MWC-2	3/15/2013	NA	150	8.28	295	0.02	0.00066	0.000295	15	0.000315	0.025	0.000085	15	0.000035	0.000165	6.2	MNR	MNR
MWC-2	2/21/2014	NA	158	6.97	341	0.02	0.002	0.0005	25.1	0.001	0.025	0.002	14.9	0.000035	0.002	1.4	MNR	MNR
MWC-203	10/16/2010	42.53	320	6.4	601	0.0445	0.011	0.0006	5.3	0.00055	4.9	0.00057	28	0.0000355	0.00015	49	MNR	MNR
MWC-203	5/19/2011	42.83	350	6.47	615	0.025	0.021	0.000295	5.9	0.00031	6.6	0.000085	27	0.000042	0.000165	50	1.5 +/- 0.8	0.2 +/- 0.8
MWC-203	3/27/2012	45.56	290	6.49	572	0.025	0.0048	0.000295	7.1	0.000315	4	0.000085	23	0.000083	0.000165	51	MNR	MNR
MWC-203	3/16/2013	52.47	350	6.63	578	0.02	0.0023	0.000295	6.8	0.00063	1.6	0.000085	31	0.000035	0.000165	57	MNR	MNR
MWC-203	2/19/2014	53.91	242	6.73	539	0.02	0.002	0.0005	6.5	0.001	0.025	0.00726	25.8	0.000035	0.002	31.9	MNR	MNR
MWC-204	10/15/2010	46.15	130	7.82	266	0.0455	0.0005	0.0006	3.4	0.0011	0.52	0.000285	15	0.0000355	0.00015	0.93	MNR	MNR
MWC-204	5/19/2011	46.25	160	7.84	273	0.05	0.00066	0.000295	5.9	0.0026	0.25	0.00017	15	0.000042	0.000165	0.93	0.7 +/- 0.7	0.3 +/- 0.79
MWC-204	3/27/2012	48.15	130	7.17	266	0.3	0.00033	0.000295	4.6	0.0049	0.8	0.000085	13	0.0000415	0.000165	7	MNR	MNR
MWC-204	3/15/2013	53.16	130	7.8	268	0.02	0.00066	0.000295	4.1	0.0065	0.6	0.000085	15	0.000035	0.000165	1.4	MNR	MNR
MWC-204	2/18/2014	56.74	120	7.87	285	0.02	0.002	0.0005	4.8	0.002	0.05	0.002	15.8	0.000035	0.002	1.4	MNR	MNR
MWC-210	10/15/2010	42.91	1800	6.29	1798	0.0455	0.0005	0.0006	11	0.00055	30	0.000285	100	0.0000355	0.00015	1100	MNR	MNR
MWC-210	5/20/2011	43.29	1900	6.48	2127	0.025	0.00066	0.000295	11	0.00062	27	0.00017	95	0.000042	0.00033	1100	3.0 +/- 0.5	1.1 +/- 0.88
MWC-210	3/26/2012	45.42	1600	6.37	1956	0.05	0.00033	0.000295	11	0.000315	12	0.000085	85	0.0000415	0.000165	1000	MNR	MNR
MWC-210	3/16/2013	51.2	880	6.88	1177	0.02	0.00033	0.000295	9.1	0.000315	0.4	0.000085	60	0.000035	0.000165	430	MNR	MNR
MWC-210	2/22/2014	51.3	1610	6.34	1915	0.02	0.002	0.0005	16.5	0.001	11.8	0.0101	103	0.000035	0.002	995	MNR	MNR
MWC-212	10/16/2010	45.66	220	7.34	411	0.0455	0.0005	0.0006	4.7	0.00055	0.017	0.000285	22	0.0000355	0.0003	26	MNR	MNR
MWC-212	5/20/2011	45.63	290	6.88	482	0.025	0.00066	0.000295	5.7	0.00062	0.0027	0.00017	26	0.000042	0.00033	32	1.7 +/- 0.8	1 +/- 0.8
MWC-212	3/27/2012	47	250	7.21	512	0.025	0.0017	0.000295	6.8	0.000315	0.0027	0.000085	23	0.000083	0.000165	31	MNR	MNR
MWC-212	3/15/2013	52.62	250	7.38	460	0.02	0.0018	0.000295	6.4	0.000315	0.05	0.000085	26	0.000035	0.00033	26	MNR	MNR
MWC-212	2/19/2014	54.84	244	7.33	502	0.02	0.002	0.0005	7.77	0.001	0.025	0.00773	27.2	0.000035	0.002	32.4	MNR	MNR
MWC-2031	10/16/2010	44.6	200	6.36	405	0.089	0.0026	0.0006	6.3	0.00055	40	0.000285	12	0.0000355	0.00015	17	MNR	MNR
MWC-2031	5/20/2011	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MNR	MNR
MWC-2031	3/27/2012	49.11	200	6.48	538	0.025	0.0028	0.000295	6.4	0.000315	38	0.000085	10	0.000083	0.000165	13	3.7 +/- 1.1	1.1 +/- 1.3
MWC-2031	3/16/2013	57.43	180	6.59	458	0.02	0.0024	0.000295	7.3	0.000315	47	0.000085	11	0.000035	0.000165	10	MNR	MNR
MWC-2031	2/21/2014	56.27	204	6.24	545	0.02	0.002	0.0005	9.25	0.001	52.1	0.00531	13	0.000035	0.002	15.8	MNR	MNR
MWB-205	10/22/2010	117.7	89	8.35	204	0.0445	0.00025	0.0006	3.3	0.0011	0.017	0.000285	12	0.0000355	0.00015	0.93	MNR	MNR
MWB-205	5/19/2011	118.4	88	8.05	168	0.05	0.0013	0.000295	4	0.0038	0.0027	0.00017	11	0.000042	0.00033	0.465	0.2 +/- 0.6	1.4 +/- 0.8
MWB-205	3/26/2012	123.27	90	8.8	200	0.025	0.00033	0.000295	4.5	0.00063	0.0027	0.00017	11	0.000083	0.000165	0.465	MNR	MNR
MWB-205	3/15/2013	125.14	120	8.6	222	0.02	0.00066	0.000295	4.6	0.0029	0.025	0.000085	14	0.000035	0.000165	1.4	MNR	MNR
MWB-205	2/18/2014	122.34	122	8.86	230	0.02	0.002	0.0005	4.5	0.002	0.025	0.02	12.5	0.000035	0.004	1.4	MNR	MNR
MWB-2051	10/15/2010	117.7	30	5.11	37	0.0445	0.00025	0.0006	3.4	0.0011	0.034	0.000285	0.79	0.0000355	0.00015	0.93	MNR	MNR
MWB-2051	5/19/2011	118.4	28	4.79	33	0.05	0.00033	0.000295	5.3	0.00062	0.058	0.00017	0.96	0.000042	0.000165	0.465	0.0 +/- 0.3	1.9 +/- 1.1
MWB-2051	3/26/2012	123.27	9	5.03	31	0.05	0.00033	0.000295	5.6	0.000315	0.0027	0.000085	0.7	0.000083	0.000165	0.465	MNR	MNR
MWB-2051	3/15/2013	125.14	20	5.36	35	0.12	0.00033	0.000295	4.3	0.000315	0.05	0.00017	0.67	0.000035	0.00033	1.4	MNR	MNR
MWB-2051	2/18/2014	122.34	10	5.23	38	0.02	0.002	0.0005	6.42	0.001	0.025	0.001	0.932	0.000035	0.004	0.0007	MNR	MNR
MWI-204	10/15/2010	97.24	370	6.54	704	0.0455	0.003	0.0006	9.7	0.00055	11	0.000285	18	0.0000355	0.00015	29	MNR	MNR
MWI-204	5/19/2011	97.79	360	6.73	728	0.025	0.0032	0.000295	9.6	0.00031	18	0.000085	16	0.000042	0.000165	23	2.2 +/- 1.2	1.6 +/- 1.0
MWI-204	3/27/2012	98.64	350	6.52	654	0.025	0.0017	0.000295	12	0.000315	9.2	0.000085	14	0.000083	0.000165	31	MNR	MNR
MWI-204	3/15/2013	99.24	390	7.25	744	0.02	0.002	0.000295	13	0.000315	14	0.000085	18	0.000035	0.000165	31	MNR	MNR
MWI-204	2/19/2014	99.23	332	6.71	690	0.02	0.002	0.0005	4.8	0.001	7.39	0.00718	16.1	0.000035	0.002	27.5	MNR	MNR
MWI-210S	10/15/2012	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MNR	MNR
MWI-210S	5/20/2011	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MNR	MNR
MWI-210S	3/26/2012	83.92	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MNR	MNR
MWI-210S	3/16/2013	84.61	340	7.19	529	0.04	0.00033	0.000295	5.8	0.000295	0.05	0.000085	15	0.000035	0.00033	65	MNR	MNR
MWI-210S	2/22/2014	85.24	298	7.04	603	0.02	0.002	0.0005	7.15	0.001	0.025	0.00728	15.5	0.000035	0.002	52.9	4.0 +/- 1.4	1.6 +/- 1.4

MNR=Monitoring Not Required

NA=Not Available

APPENDIX C

**COMPARISON BETWEEN BACKGROUND
AND DOWNGRADIENT WELL DATA**

SCHOLZ PLANT GROUNDWATER MONITORING PLAN

Table 1C, Unit 1 Comparison of Water Quality Data Between Background and Downgradient Wells

	Sample Date	Groundwater Elevation (ft NGVD)	TDS (Total) mg/L	pH (field)	Specific Conductance umhos/cm	Aluminum (Total) mg/L	Arsenic (Total) mg/L	Cadmium (Total) mg/L	Chloride (Total) mg/L	Chromium (Total) mg/L	Iron (Total) mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Mercury (Total) mg/L	Selenium (Total) mg/L	Sulfate (Total) mg/L	Alpha (Gross Partic Activity) PCI/L	Radium 226 + Radium 228 (Total) PCI/L
MWB-2051	10/15/2010	117.7	30	5.11	37	0.0445	0.00025	0.0006	3.4	0.0011	0.034	0.000285	0.79	0.0000355	0.00015	0.93	MNR	MNR
MWB-2051	5/19/2011	118.4	28	4.79	33	0.05	0.00033	0.000295	5.3	0.00062	0.058	0.00017	0.96	0.000042	0.000165	0.465	0.0 +/- 0.3	1.9 +/- 1.1
MWB-2051	3/26/2012	123.27	9	5.03	31	0.05	0.00033	0.000295	5.6	0.000315	0.0027	0.000085	0.7	0.000083	0.000165	0.465	MNR	MNR
MWB-2051	3/15/2013	125.14	20	5.36	35	0.12	0.00033	0.000295	4.3	0.000315	0.05	0.00017	0.67	0.000035	0.00033	1.4	MNR	MNR
MWB-2051	2/18/2014	122.34	10	5.23	38	0.02	0.002	0.0005	6.42	0.001	0.025	0.001	0.932	0.000035	0.004	0.0007	MNR	MNR
MWI-204	10/15/2010	97.24	370	6.54	704	0.0455	0.003	0.0006	9.7	0.00055	11	0.000285	18	0.0000355	0.00015	29	MNR	MNR
MWI-204	5/19/2011	97.79	360	6.73	728	0.025	0.0032	0.000295	9.6	0.00031	18	0.000085	16	0.000042	0.000165	23	2.2 +/- 1.2	1.6 +/- 1.0
MWI-204	3/27/2012	98.64	350	6.52	654	0.025	0.0017	0.000295	12	0.000315	9.2	0.000085	14	0.000083	0.000165	31	MNR	MNR
MWI-204	3/15/2013	99.24	390	7.25	744	0.02	0.002	0.000295	13	0.000315	14	0.000085	18	0.000035	0.000165	31	MNR	MNR
MWI-204	2/19/2014	99.23	332	6.71	690	0.02	0.002	0.0005	4.8	0.001	7.39	0.00718	16.1	0.000035	0.002	27.5	MNR	MNR
MWI-210S	10/15/2012	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MNR	MNR
MWI-210S	5/20/2011	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MNR	MNR
MWI-210S	3/26/2012	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MNR	MNR
MWI-210S	3/16/2013	84.61	340	7.19	529	0.04	0.00033	0.000295	5.8	0.000295	0.05	0.000085	15	0.000035	0.00033	65	MNR	MNR
MWI-210S	2/22/2014	85.24	298	7.04	603	0.02	0.002	0.0005	7.15	0.001	0.025	0.00728	15.5	0.000035	0.002	52.9	4.0 +/- 1.4	1.6 +/- 1.4
MWC-2031	10/16/2010	44.6	200	6.36	405	0.089	0.0026	0.0006	6.3	0.00055	40	0.000285	12	0.0000355	0.00015	17	MNR	MNR
MWC-2031	5/20/2011	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MNR	MNR
MWC-2031	3/27/2012	49.11	200	6.48	538	0.025	0.0028	0.000295	6.4	0.000315	38	0.000085	10	0.000083	0.000165	13	3.7 +/- 1.1	1.1 +/- 1.3
MWC-2031	3/16/2013	57.43	180	6.59	458	0.02	0.0024	0.000295	7.3	0.000315	47	0.000085	11	0.000035	0.000165	10	MNR	MNR
MWC-2031	2/21/2014	56.27	204	6.24	545	0.02	0.002	0.0005	9.25	0.001	52.1	0.00531	13	0.000035	0.002	15.8	MNR	MNR

MNR=Monitoring Not Required

SCHOLZ PLANT GROUNDWATER MONITORING PLAN

Table 2C. Unit 2 Comparison of Water Quality Data Between Background and Downgradient Wells

	Sample Date	Groundwater Elevation (ft NGVD)	TDS (Total) mg/L	pH (field)	Specific Conductance umhos/cm	Aluminum (Total) mg/L	Arsenic (Total) mg/L	Cadmium (Total) mg/L	Chloride (Total) mg/L	Chromium (Total) mg/L	Iron (Total) mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Mercury (Total) mg/L	Selenium (Total) mg/L	Sulfate (Total) mg/L	Alpha (Gross Particulate Activity) PC/L	Radium 226 + Radium 228 (Total) PC/L
MWB-205	10/22/2010	117.7	89	8.35	204	0.0445	0.00025	0.0006	3.3	0.0011	0.017	0.000285	12	0.0000355	0.00015	0.93	MNR	MNR
MWB-205	5/19/2011	118.4	88	8.05	168	0.05	0.0013	0.000295	4	0.0038	0.0027	0.00017	11	0.000042	0.00033	0.465	0.2 +/- 0.6	1.4 +/- 0.8
MWB-205	3/26/2012	123.27	90	8.8	200	0.025	0.00033	0.000295	4.5	0.00063	0.0027	0.00017	11	0.000083	0.000165	0.465	MNR	MNR
MWB-205	3/15/2013	125.14	120	8.6	222	0.02	0.00066	0.000295	4.6	0.0029	0.025	0.000085	14	0.000035	0.000165	1.4	MNR	MNR
MWB-205	2/18/2014	122.34	122	8.86	230	0.02	0.002	0.0005	4.5	0.002	0.025	0.02	12.5	0.000035	0.004	1.4	MNR	MNR
MWC-2	10/16/2010	NA	130	7.44	298	0.0445	0.00025	0.0006	14	0.00055	0.017	0.000285	15	0.0000355	0.00015	8.2	MNR	MNR
MWC-2	5/20/2011	NA	170	7.09	290	0.025	0.00066	0.000295	15	0.00062	0.00135	0.000085	16	0.000042	0.00033	8.2	0.0 +/- 0.5	0.6 +/- 0.8
MWC-2	3/27/2012	NA	150	7.83	305	0.025	0.00033	0.000295	23	0.000315	0.00135	0.000085	13	0.000083	0.00033	0.93	MNR	MNR
MWC-2	3/15/2013	NA	150	8.28	295	0.02	0.00066	0.000295	15	0.000315	0.025	0.000085	15	0.000035	0.000165	6.2	MNR	MNR
MWC-2	2/21/2014	NA	158	6.97	341	0.02	0.002	0.0005	25.1	0.001	0.025	0.002	14.9	0.000035	0.002	1.4	MNR	MNR
MWC-203	10/16/2010	42.53	320	6.4	601	0.0445	0.011	0.0006	5.3	0.00055	4.9	0.00057	28	0.0000355	0.00015	49	MNR	MNR
MWC-203	5/19/2011	42.83	350	6.47	615	0.025	0.021	0.000295	5.9	0.00031	6.6	0.000085	27	0.000042	0.000165	50	1.5 +/- 0.8	0.2 +/- 0.8
MWC-203	3/27/2012	45.56	290	6.49	572	0.025	0.0048	0.000295	7.1	0.000315	4	0.000085	23	0.000083	0.000165	51	MNR	MNR
MWC-203	3/16/2013	52.47	350	6.63	578	0.02	0.0023	0.000295	6.8	0.00063	1.6	0.000085	31	0.000035	0.000165	57	MNR	MNR
MWC-203	2/19/2014	53.91	242	6.73	539	0.02	0.002	0.0005	6.5	0.001	0.025	0.00726	25.8	0.000035	0.002	31.9	MNR	MNR
MWC-204	10/15/2010	46.15	130	7.82	266	0.0455	0.0005	0.0006	3.4	0.0011	0.52	0.000285	15	0.0000355	0.00015	0.93	MNR	MNR
MWC-204	5/19/2011	46.25	160	7.84	273	0.05	0.00066	0.000295	5.9	0.0026	0.25	0.00017	15	0.000042	0.000165	0.93	0.7 +/- 0.7	0.3 +/- 0.79
MWC-204	3/27/2012	48.15	130	7.17	266	0.3	0.00033	0.000295	4.6	0.0049	0.8	0.000085	13	0.0000415	0.000165	7	MNR	MNR
MWC-204	3/15/2013	53.16	130	7.8	268	0.02	0.00066	0.000295	4.1	0.0065	0.6	0.000085	15	0.000035	0.000165	1.4	MNR	MNR
MWC-204	2/18/2014	56.74	120	7.87	285	0.02	0.002	0.0005	4.8	0.002	0.05	0.002	15.8	0.000035	0.002	1.4	MNR	MNR
MWC-210	10/15/2010	42.91	1800	6.29	1798	0.0455	0.0005	0.0006	11	0.00055	30	0.000285	100	0.0000355	0.00015	1100	MNR	MNR
MWC-210	5/20/2011	43.29	1900	6.48	2127	0.025	0.00066	0.000295	11	0.00062	27	0.00017	95	0.000042	0.00033	1100	3.0 +/- 0.5	1.1 +/- 0.88
MWC-210	3/26/2012	45.42	1600	6.37	1956	0.05	0.00033	0.000295	11	0.000315	12	0.000085	85	0.0000415	0.000165	1000	MNR	MNR
MWC-210	3/16/2013	51.2	880	6.88	1177	0.02	0.00033	0.000295	9.1	0.000315	0.4	0.000085	60	0.000035	0.000165	430	MNR	MNR
MWC-210	2/22/2014	51.3	1610	6.34	1915	0.02	0.002	0.0005	16.5	0.001	11.8	0.0101	103	0.000035	0.002	995	MNR	MNR
MWC-212	10/16/2010	45.66	220	7.34	411	0.0455	0.0005	0.0006	4.7	0.00055	0.017	0.000285	22	0.0000355	0.0003	26	MNR	MNR
MWC-212	5/20/2011	45.63	290	6.88	482	0.025	0.00066	0.000295	5.7	0.00062	0.0027	0.00017	26	0.000042	0.00033	32	1.7 +/- 0.8	1 +/- 0.8
MWC-212	3/27/2012	47	250	7.21	512	0.025	0.0017	0.000295	6.8	0.000315	0.0027	0.000085	23	0.000083	0.000165	31	MNR	MNR
MWC-212	3/15/2013	52.62	250	7.38	460	0.02	0.0018	0.000295	6.4	0.000315	0.05	0.000085	26	0.000035	0.00033	26	MNR	MNR
MWC-212	2/19/2014	54.84	244	7.33	502	0.02	0.002	0.0005	7.77	0.001	0.025	0.00773	27.2	0.000035	0.002	32.4	MNR	MNR

MNR= Monitoring Not Required

APPENDIX D

**HYDROGRAPHS, WATER LEVEL
SUMMARY, AND RAINFALL DATA**

Table 1D. Plant Scholz Rainfall Data

Month	Inches	Month	Inches
Sep-10	1.25	Jul-12	7.42
Oct-10	0.04	Aug-12	7.66
Nov-10	5.59	Sep-12	4.6
Dec-10	0.65	Oct-12	0.95
Jan-11	5.11	Nov-12	1.35
Feb-11	4.4	Dec-12	2.62
Mar-11	4.97	Jan-13	1.27
Apr-11	3.39	Feb-13	13.6
May-11	2	Mar-13	4.89
Jun-11	2.15	Apr-13	2.59
Jul-11	7.17	May-13	1.11
Aug-11	2.26	Jun-13	3.66
Sep-11	3.94	Jul-13	13.29
Oct-11	5.84	Aug-13	7.68
Nov-11	1.53	Sep-13	6.01
Dec-11	4.82	Oct-13	1.08
Jan-12	3.26	Nov-13	4.24
Feb-12	5.34	Dec-13	4.56
Mar-12	5.5	Jan-14	4.14
Apr-12	2.78	Feb-14	6.39
May-12	1.53	Mar-14	10.56
Jun-12	3.7	Apr-14	16

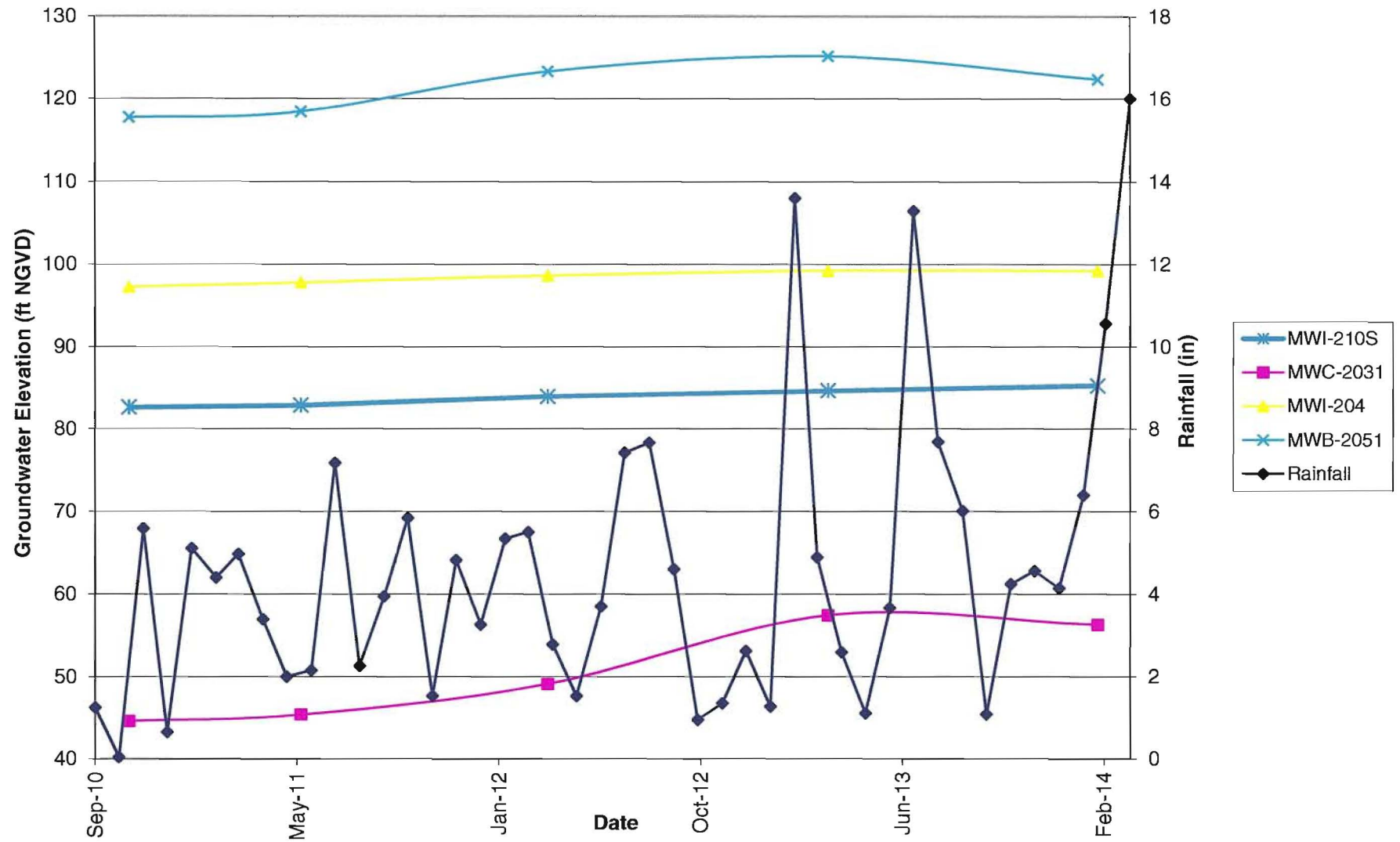
Table 2D. Unit 1 monitoring well groundwater levels (ft NGVD).

Well	10/14/2010	5/19/2011	3/26/2012	3/15/2013	2/19/2014
MWC-2031	44.6	45.37	49.11	57.43	56.16
MWI-204	97.24	97.79	98.64	99.24	99.3
MWB-2051	117.7	118.4	123.27	125.14	122.26
MWI-210S	82.6	82.85	83.92	84.61	84.6

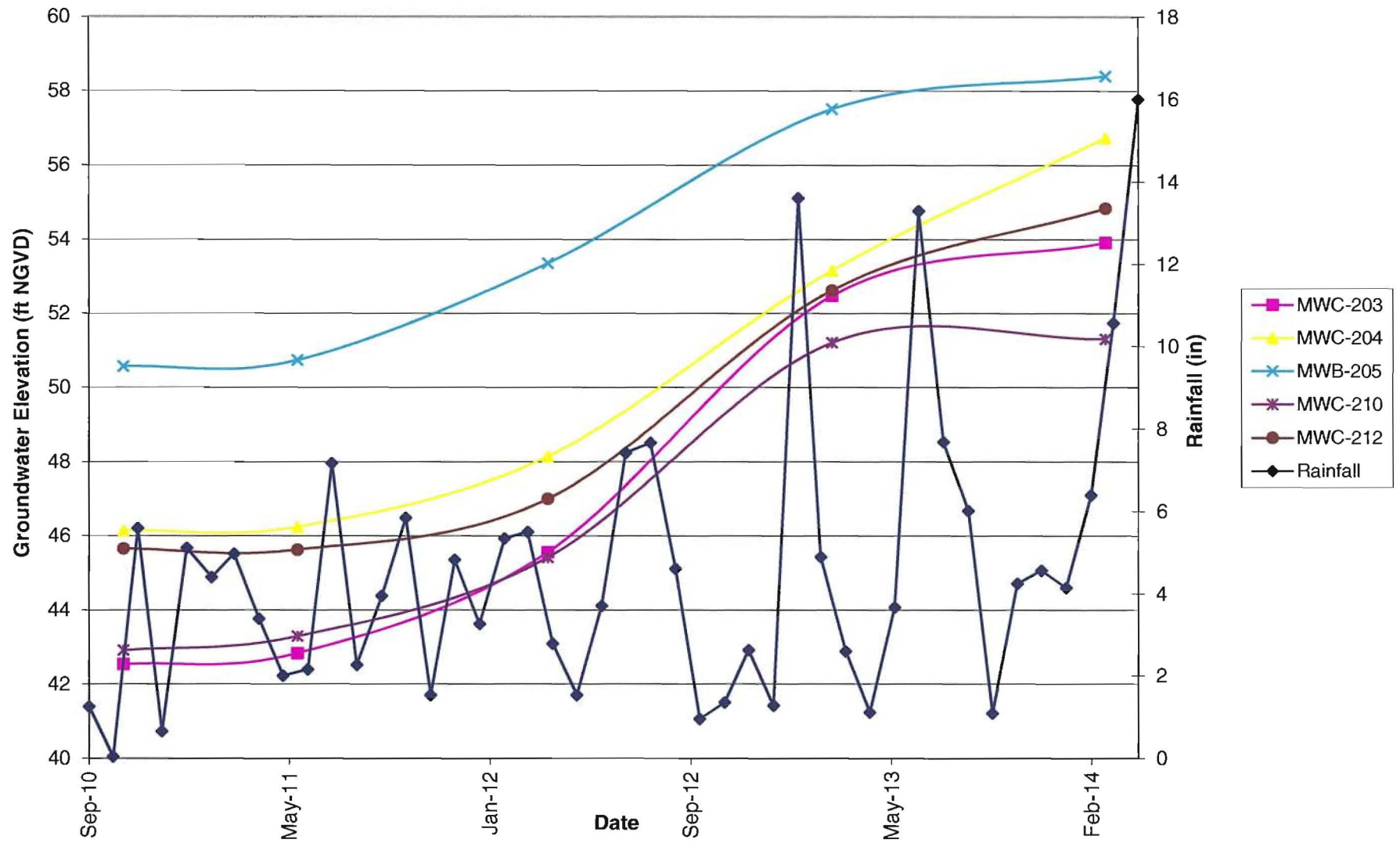
Table 3D. Unit 2 monitoring well groundwater levels (ft NGVD).

Well	10/14/2010	5/19/2011	3/26/2012	3/15/2013	2/19/2014
MWC-203	42.53	42.83	45.56	52.47	56.85
MWC-204	46.15	46.25	48.15	53.16	57.62
MWB-205	50.56	50.73	53.35	57.51	58.38
MWC-210	42.91	43.29	45.42	51.2	56.86
MWC-212	45.66	45.63	47	52.62	56.88
MWP-103	NA	42.34	45.97	53.42	56.3
MWP-105	49.6	49.85	52.38	56.66	57.48
MWP-110	41.47	41.84	44.43	50.95	56.74
MWP-112	45.78	45.94	47.78	53.76	58.14

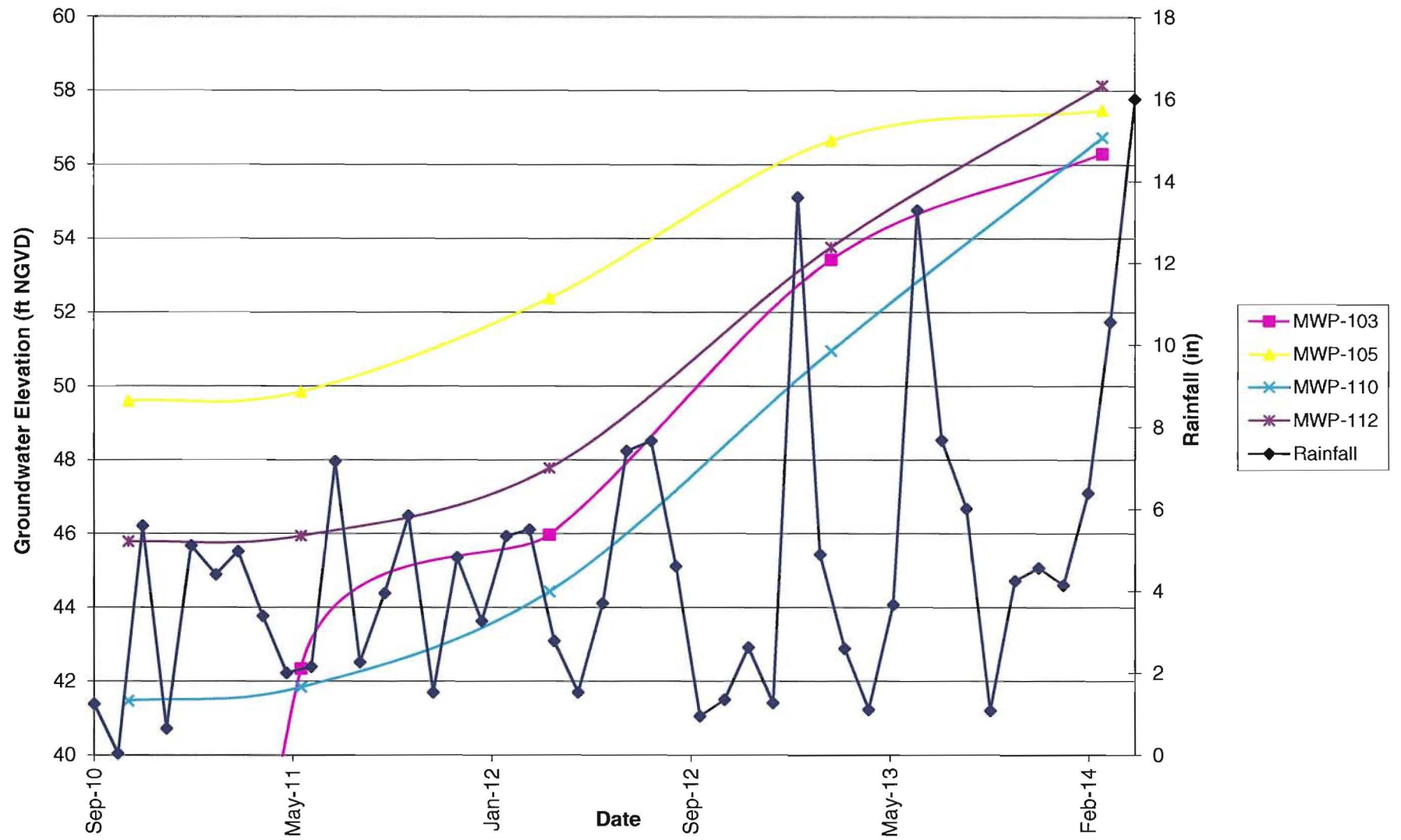
Unit 1 Hydrograph



Unit 2 Hydrograph (Part 1)



Unit 2 Hydrograph (Part 2)



APPENDIX E

UNIT 1 POTENTIOMETRIC MAPS



0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Notes:
1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
2. Arrow represents the approximate groundwater flow direction.

Legend

- ⊕ Monitoring Well (Surficial)
- Potentiometric Surface Contours (ft NAVD88)
- ▭ Property Boundary



0 200 400 800 Feet
1 inch = 400 feet

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FIGURE 1
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE SURFICIAL AQUIFER - MAY 2010
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number S1 - Rev 2015



0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Notes:

1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
2. Arrow represents the approximate groundwater flow direction.

Legend

-  Monitoring Well (Surficial)
-  Potentiometric Surface Contours (ft NAVD88)
-  Property Boundary



0 200 400 800 Feet
1 inch = 400 feet

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FIGURE 2
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE SURFICIAL AQUIFER - MAY 2011
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

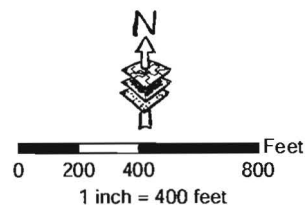
Drawing Number ES2017S1 (Rev 2015)



Notes:
 1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
 2. Arrow represents the approximate groundwater flow direction.

Legend

- ⊕ Monitoring Well (Surficial)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 3
 PLANT SCHOLZ POTENTIOMETRIC MAP
 OF THE SURFICIAL AQUIFER - MARCH 2012
 SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
 Earth Science and Environmental Engineering

FOR

Gulf Power Company

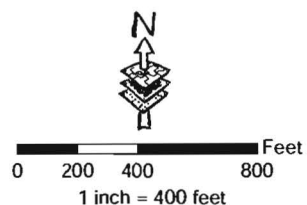
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- Notes:
1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
 2. Arrow represents the approximate groundwater flow direction.

Legend

-  Monitoring Well (Surficial)
-  Potentiometric Surface Contours (ft NAVD88)
-  Property Boundary



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FIGURE 4
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE SURFICIAL AQUIFER - MARCH 2013
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering
FOR

Gulf Power Company

Drawing Number ES2249S1 (Rev 2015)



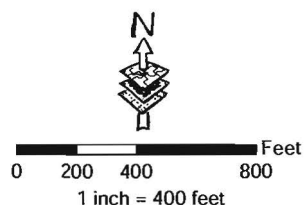
0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Notes:

1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
2. Arrow represents the approximate groundwater flow direction.

Legend

- Monitoring Well (Surficial)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 5
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE SURFICIAL AQUIFER - FEBRUARY 2014
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number **ES2386S1 (Rev 2015)**

APPENDIX F

UNIT 2 POTENTIOMETRIC MAPS



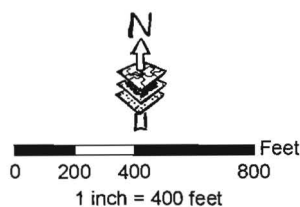
0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Notes:

1. NM indicates not measured.
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-205, MWC-203, MWC-204, MWC-210, and MWC-212.
4. Arrow represents the approximate groundwater flow direction.

Legend

- Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 6
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDAN AQUIFER - MAY 2010
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number S2 - Rev 2015



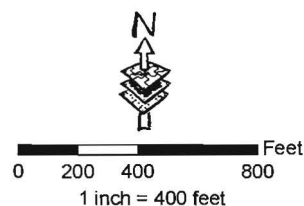
0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Notes:

1. NM indicates not measured.
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-205, MWC-203, MWC-204, MWC-210, and MWC-212.
4. Arrow represents the approximate groundwater flow direction.

Legend

- Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 7
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDIAN AQUIFER - MAY 2011
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number ES2017S2 (Rev 2015)



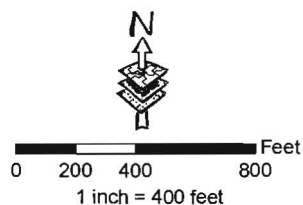
0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Notes:

1. NM indicates not measured.
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-205, MWC-203, MWC-204, MWC-210, and MWC-212.
4. Arrow represents the approximate groundwater flow direction.

Legend

- Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 8
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDAN AQUIFER - MARCH 2012
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number ES2146S2 (Rev 2015)



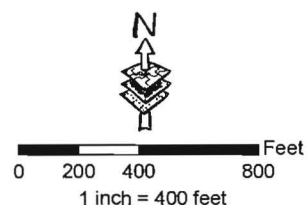
0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Notes:

1. NM indicates not measured.
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-205, MWC-203, MWC-204, MWC-210, and MWC-212.
4. Arrow represents the approximate groundwater flow direction.

Legend

- Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 9
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDAN AQUIFER - MARCH 2013
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number ES2249S2 (Rev 2015)



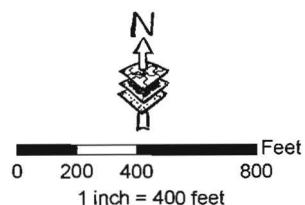
0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Notes:

1. NM indicates not measured.
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-205, MWC-203, MWC-204, MWC-210, and MWC-212.
4. Arrow represents the approximate groundwater flow direction.

Legend

- Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 10
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDAN AQUIFER - FEBRUARY 2014
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

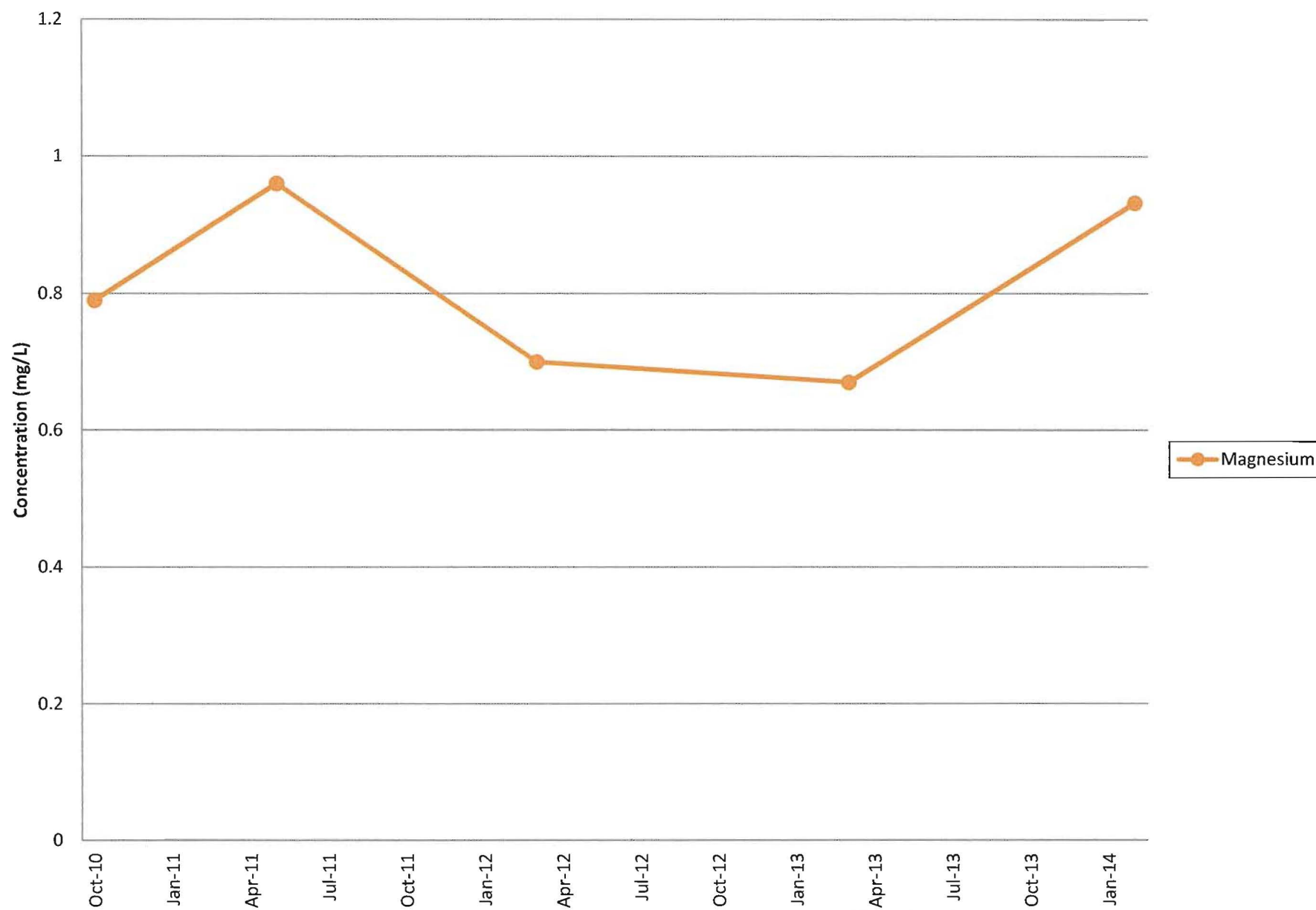
Gulf Power Company

Drawing Number ES2386S2 (Rev 2015)

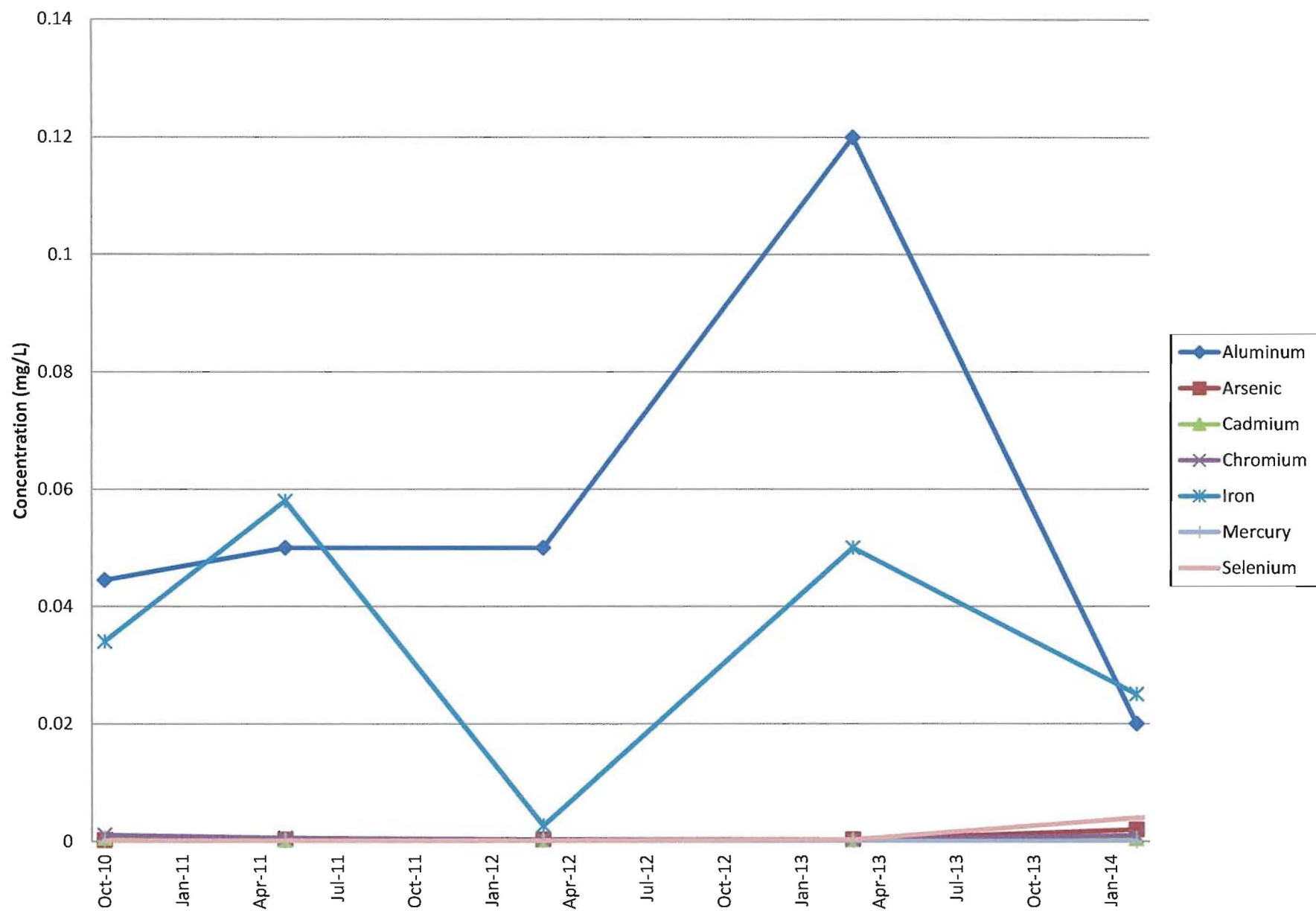
APPENDIX G

UNIT 1 WATER QUALITY GRAPHS

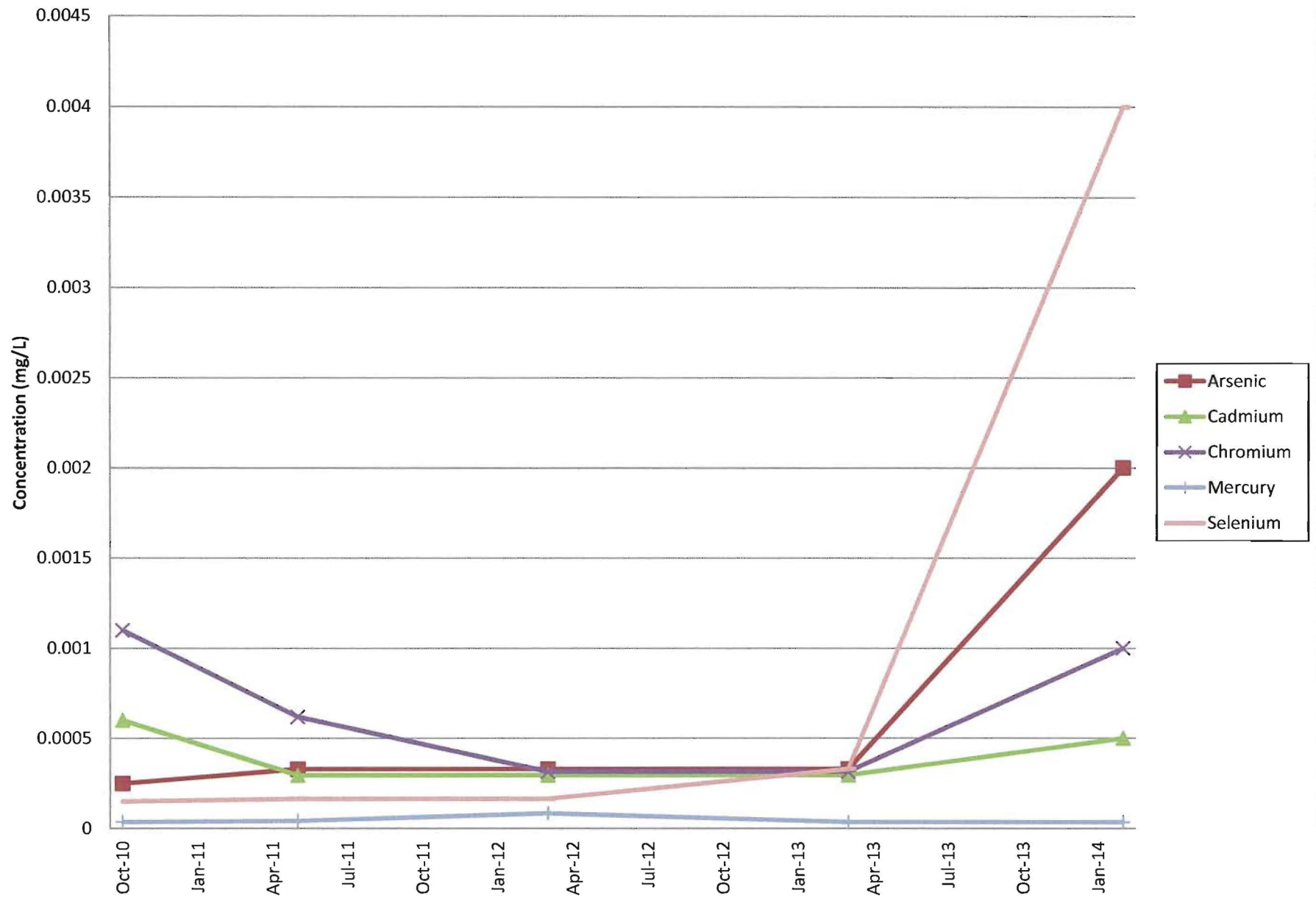
MWB-2051 Metals (Part 1)



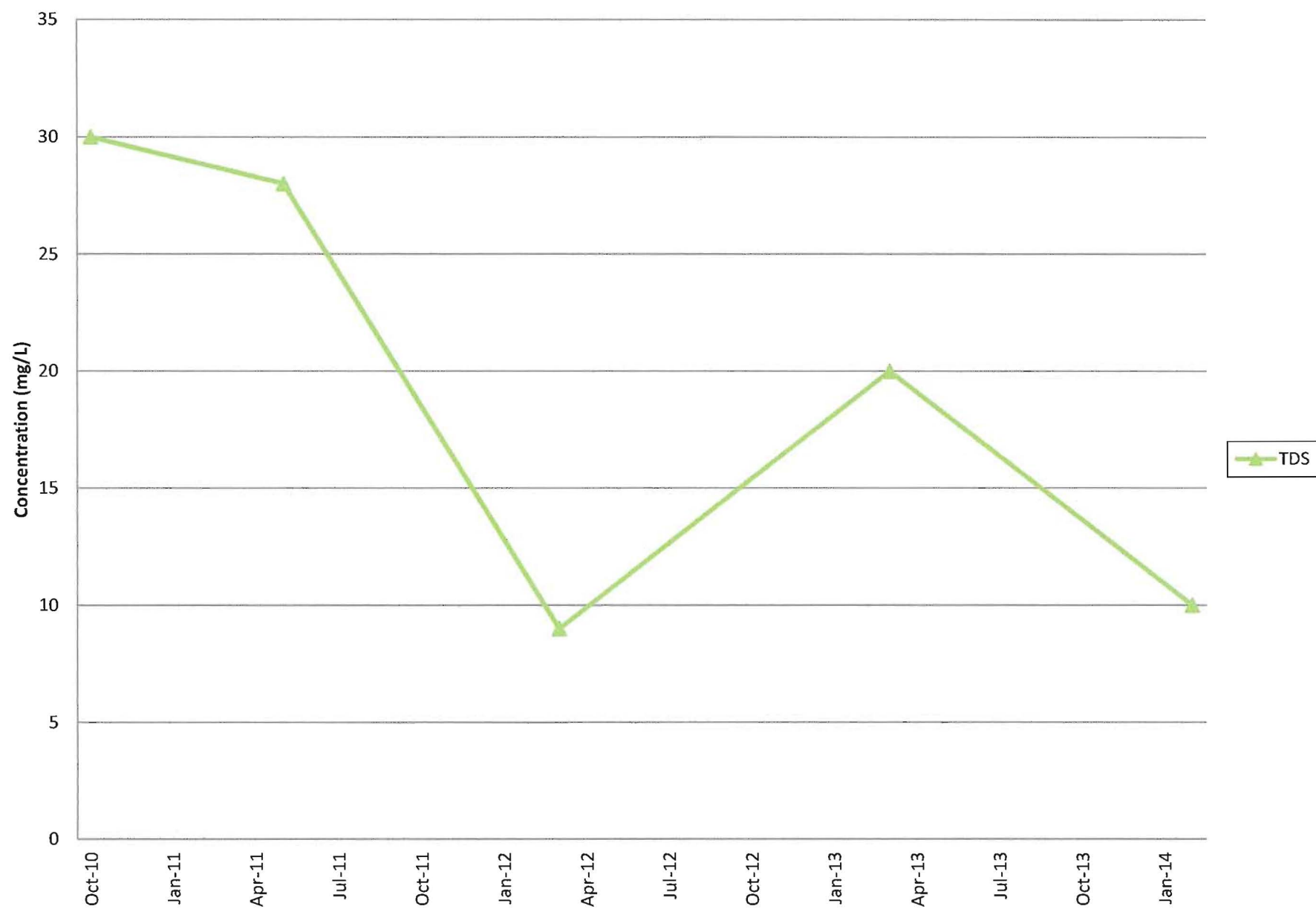
MWB-2051 Metals (Part 2)



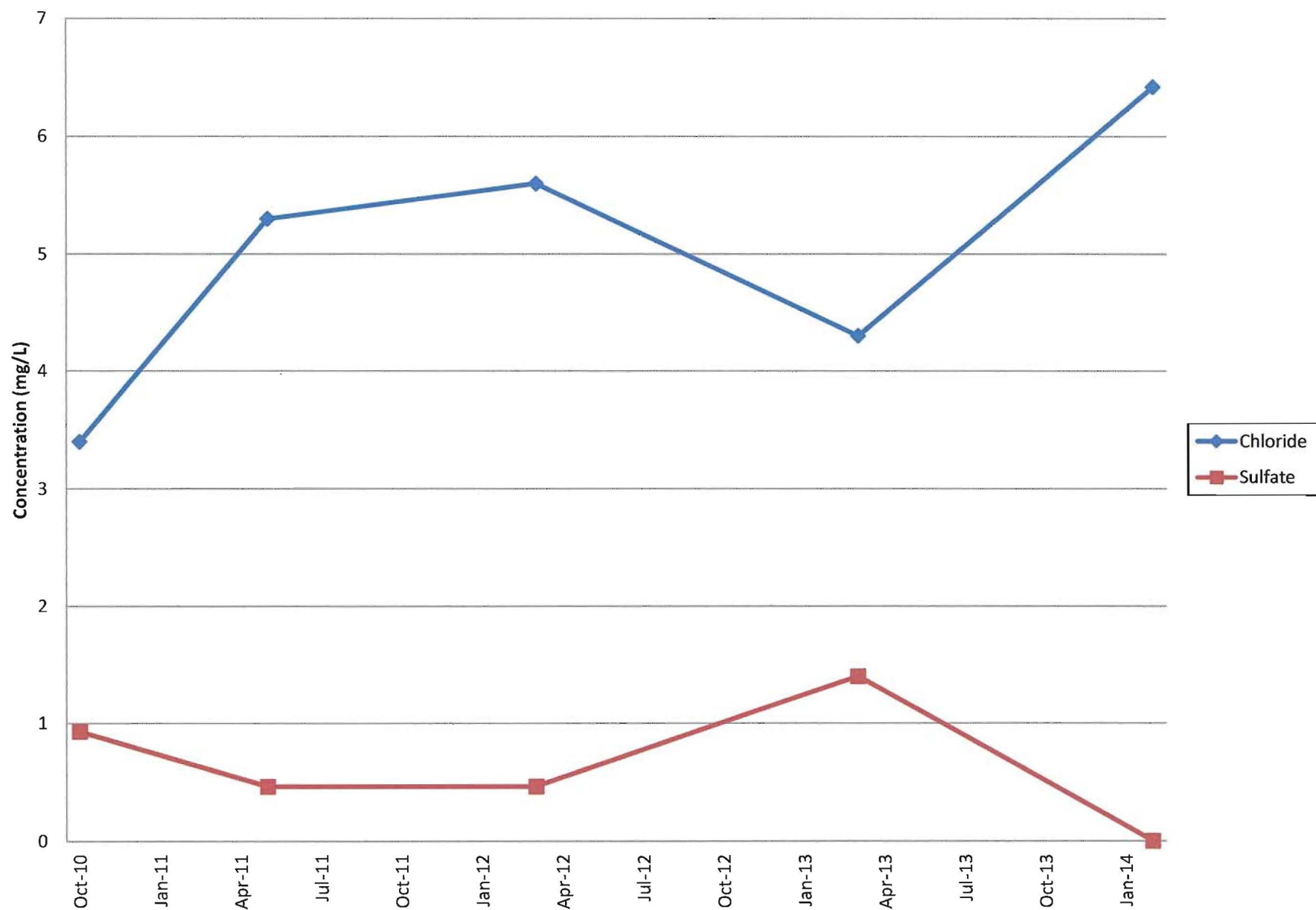
MWB-2051 Metals (Part 3)



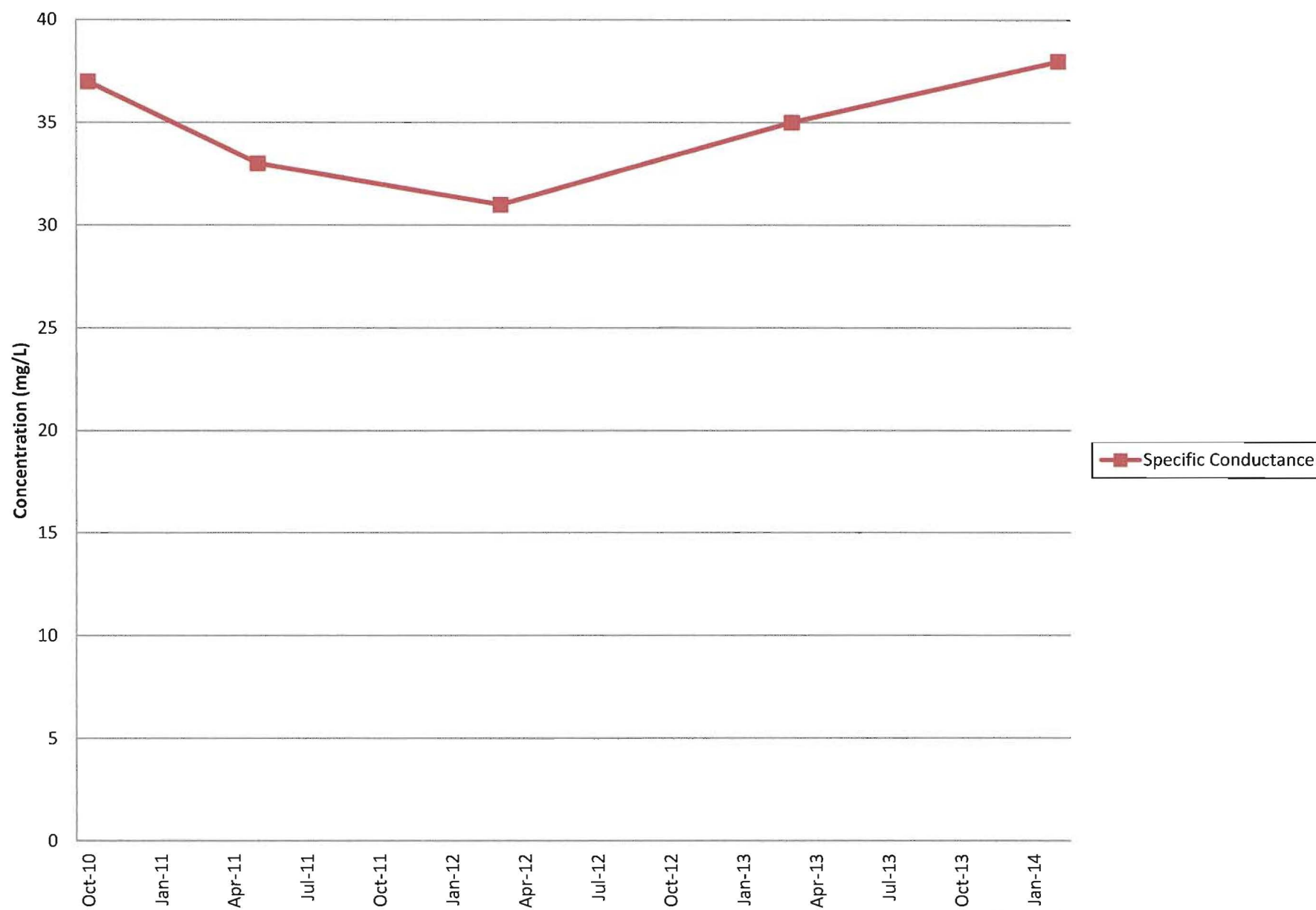
MWB-2051 General Chemistry (Part 1)



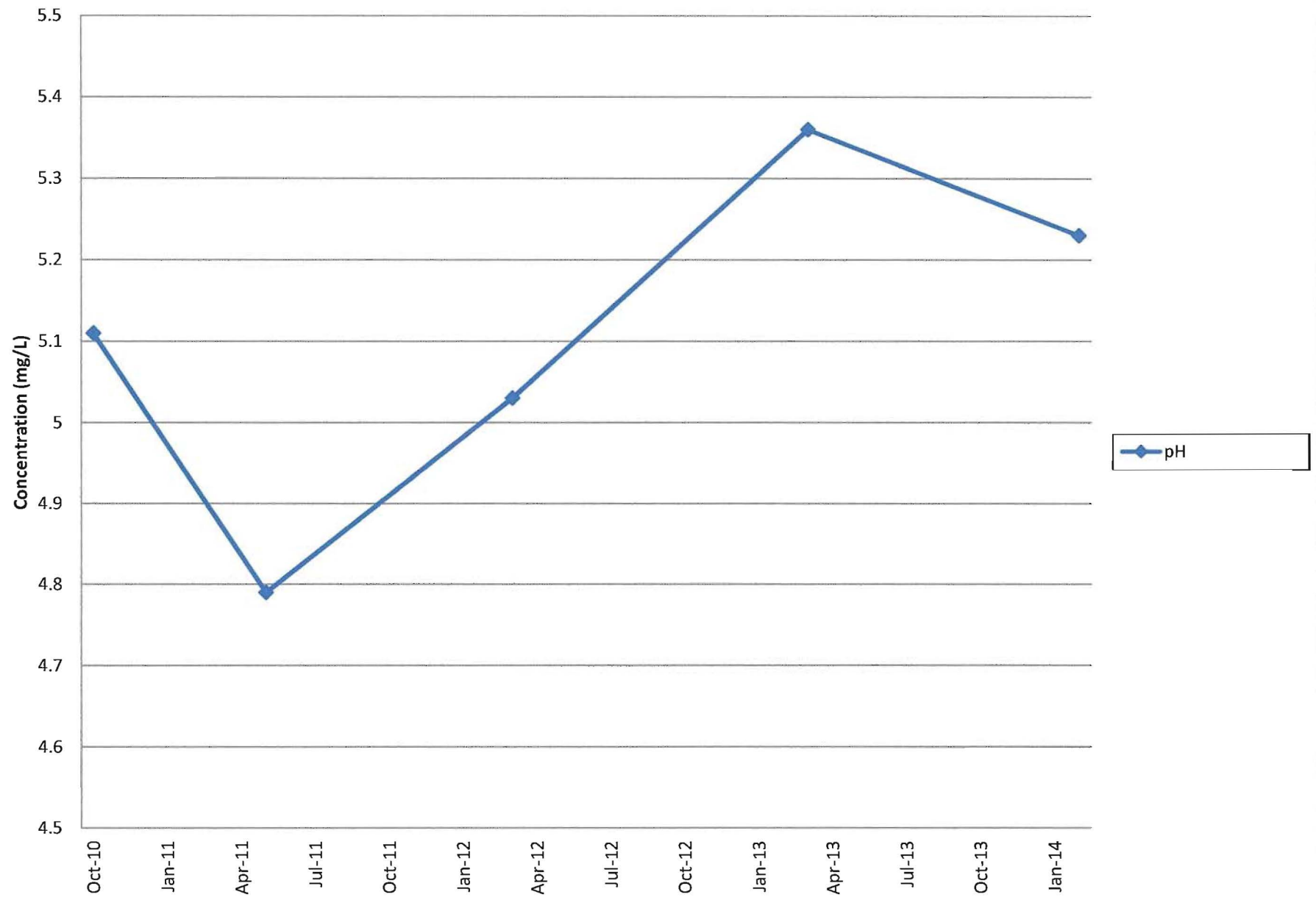
MWB-2051 General Chemistry (Part 2)



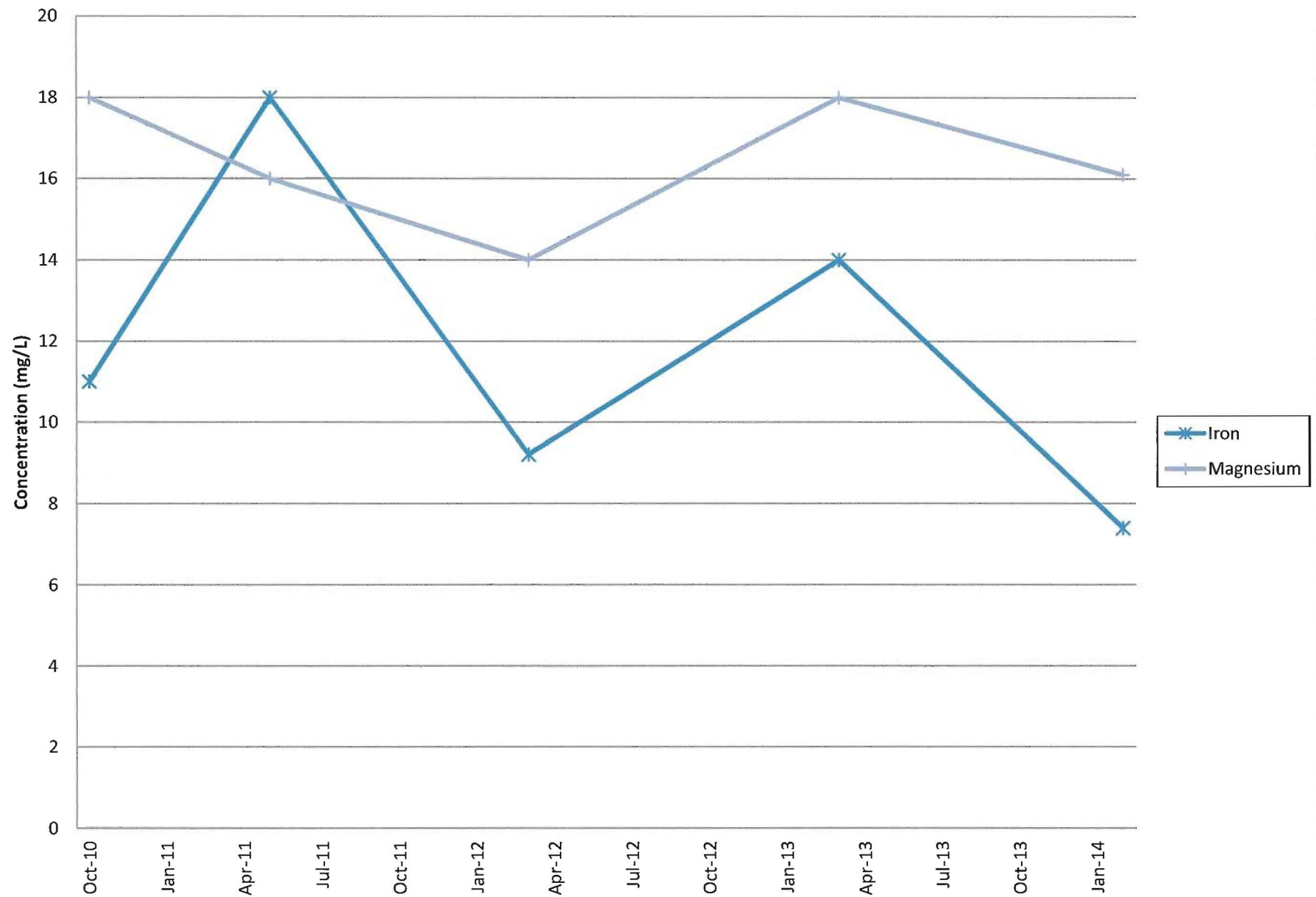
MWB-2051 Field Parameters (Part 1)



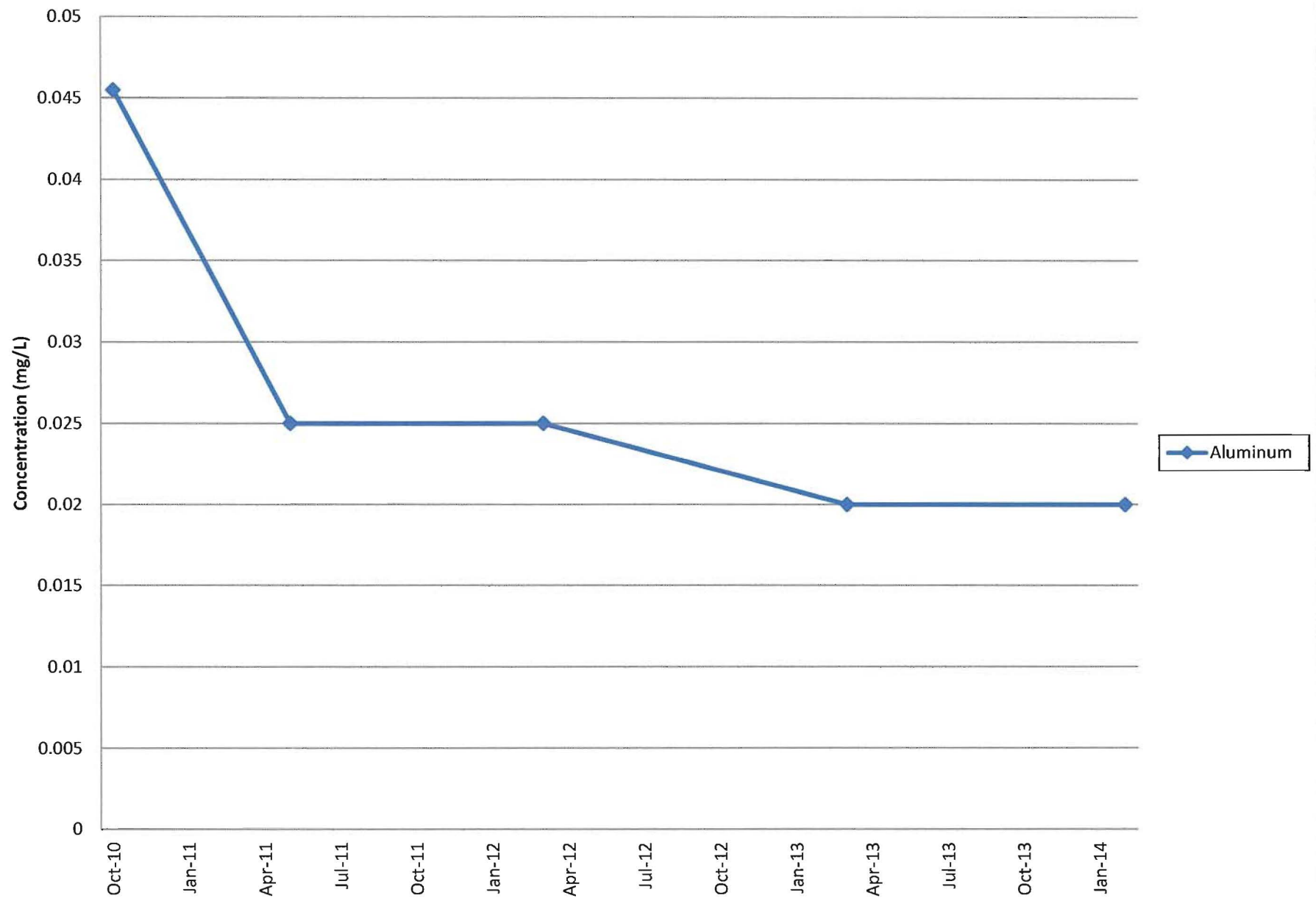
MWB-2051 Field Parameters (Part 2)



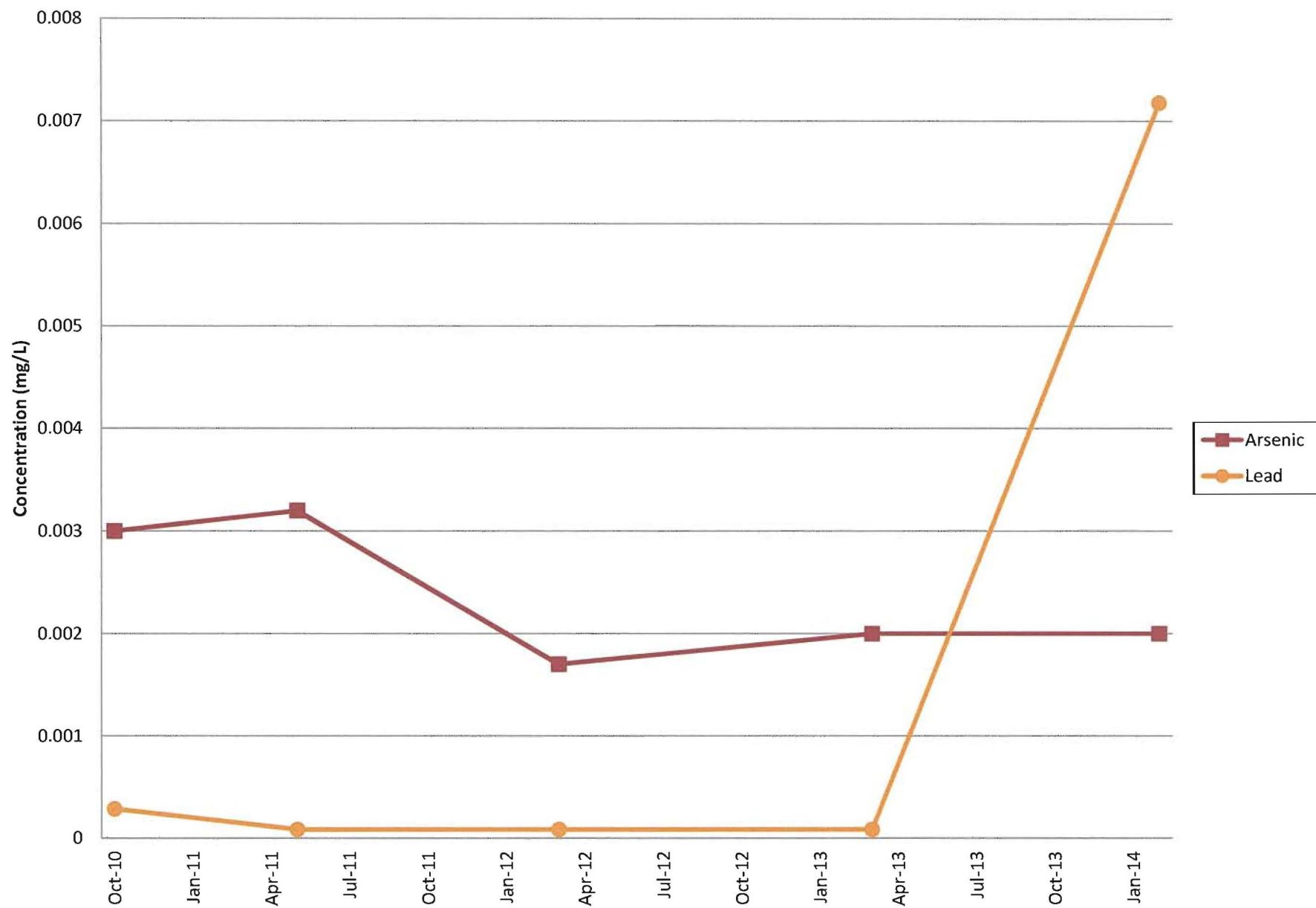
MWI-204 Metals (Part 1)



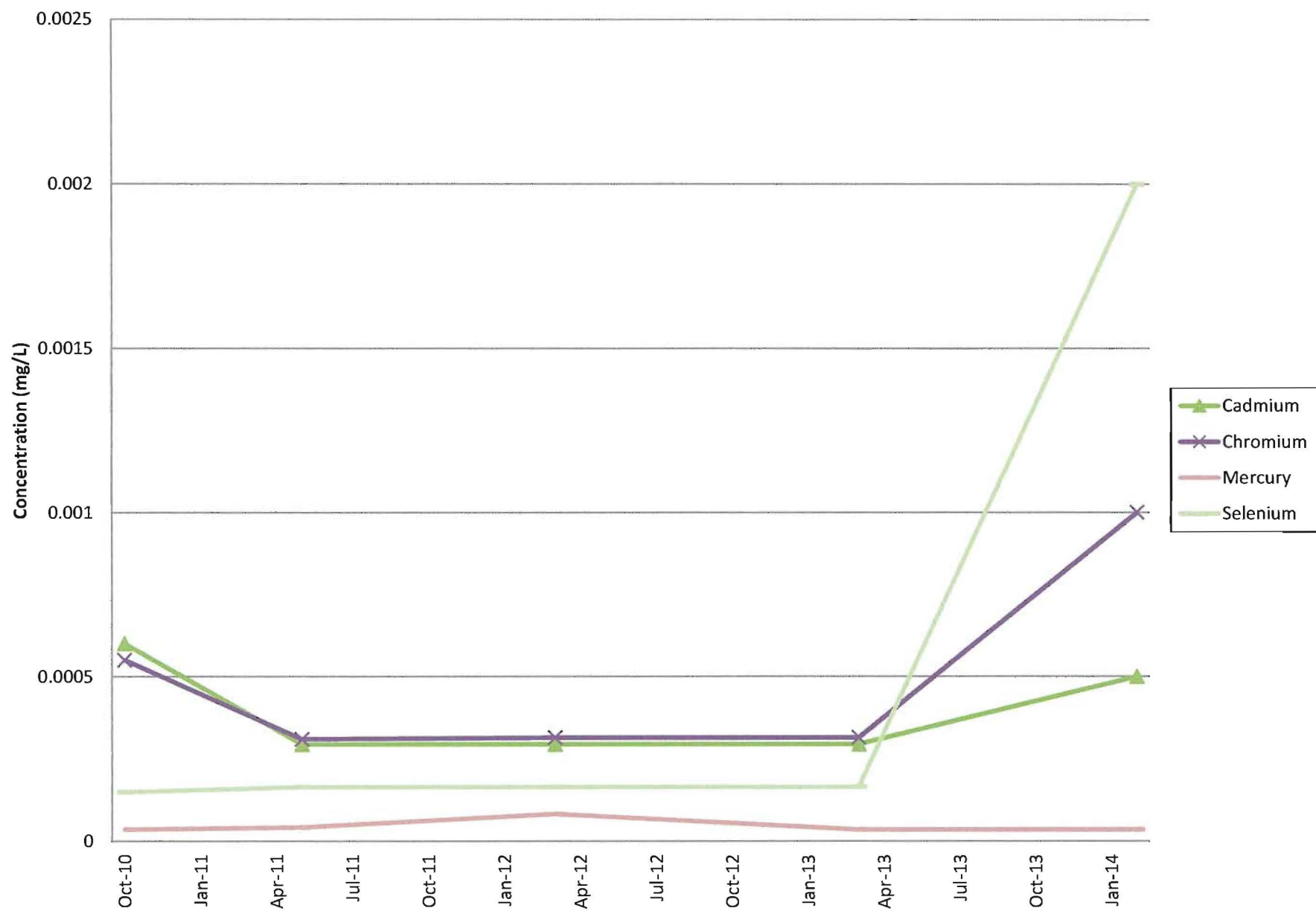
MWI-204 Metals (Part 2)



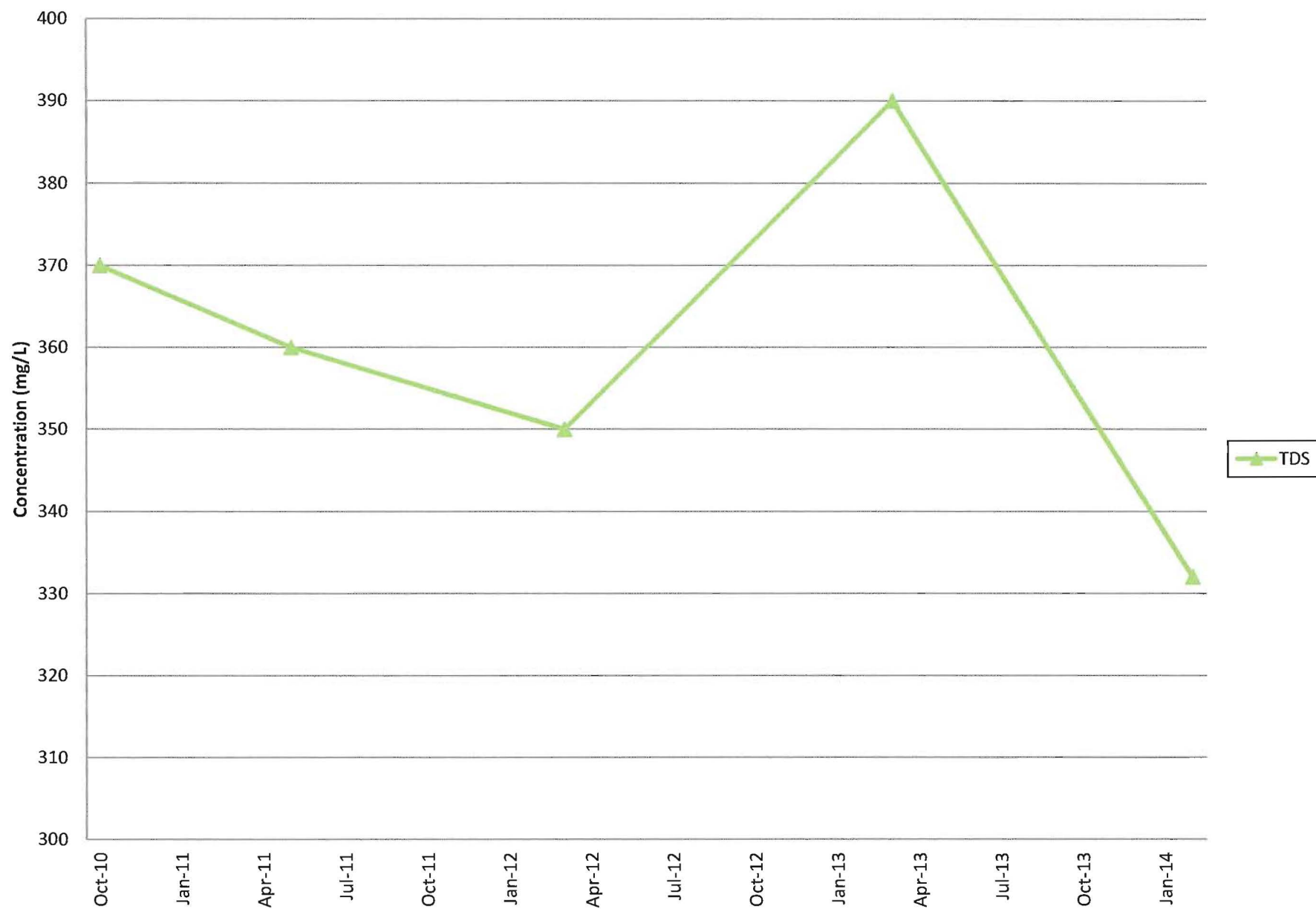
MWI-204 Metals (Part 3)



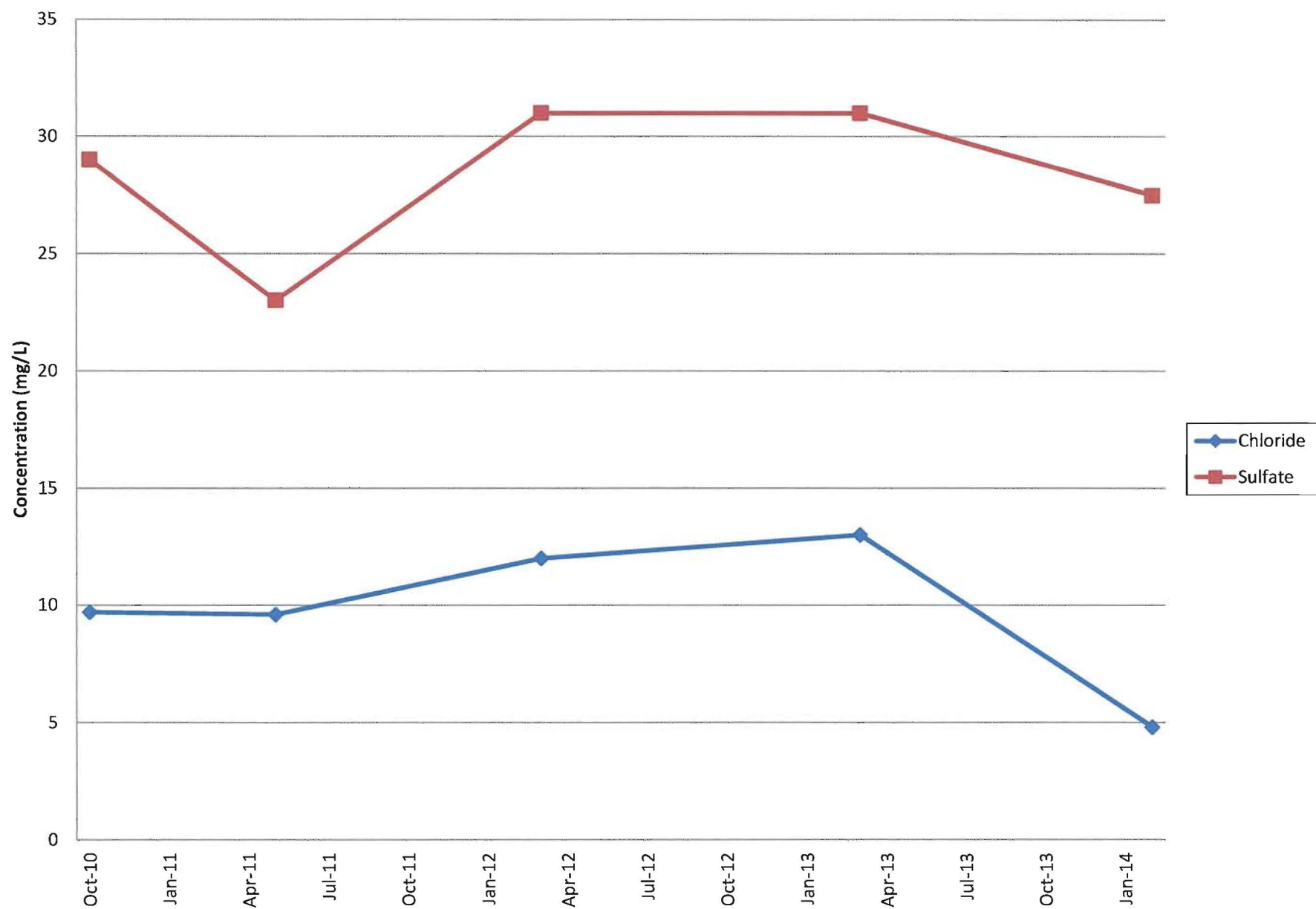
MWI-204 Metals (Part 4)



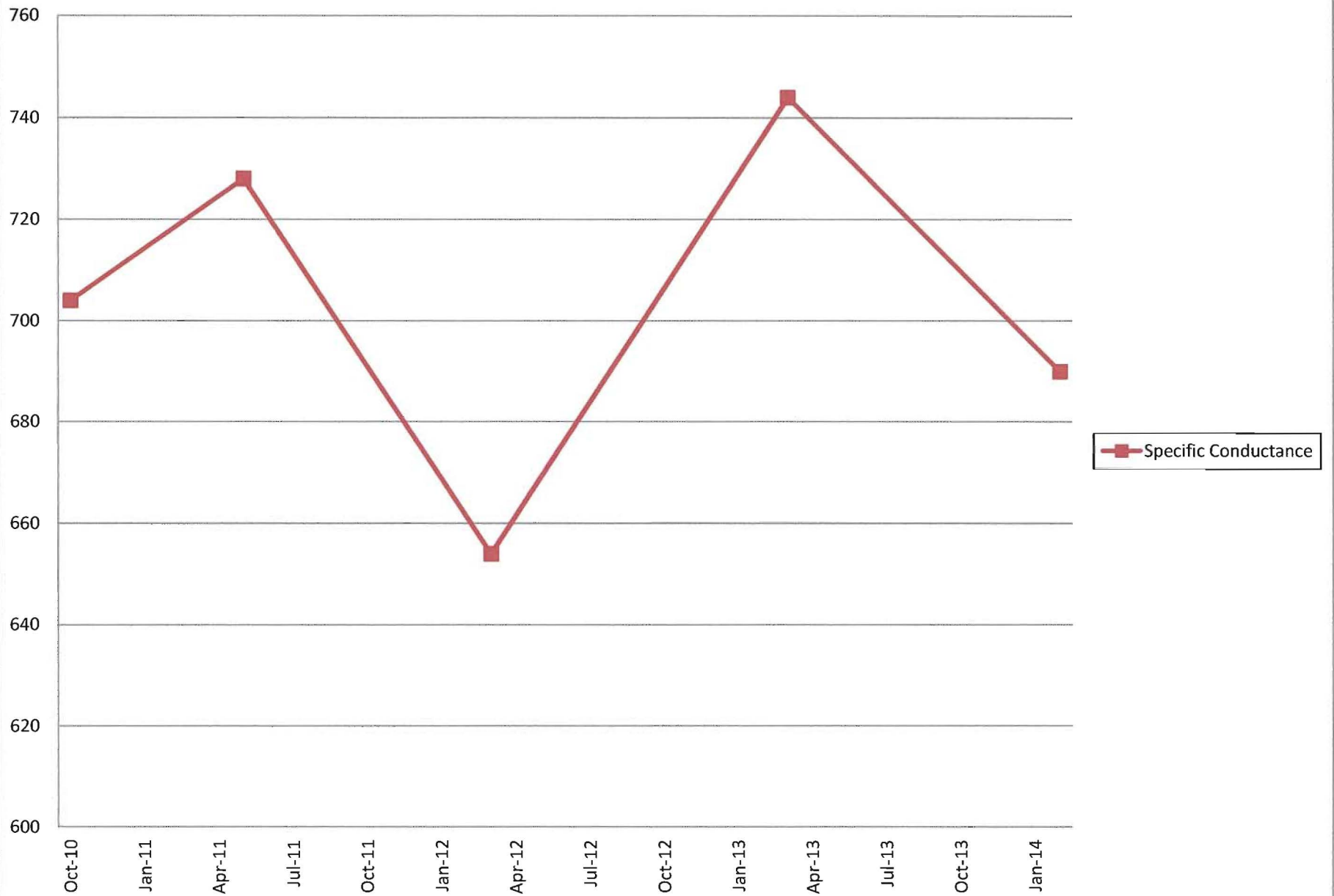
MWI-204 General Chemistry (Part 1)



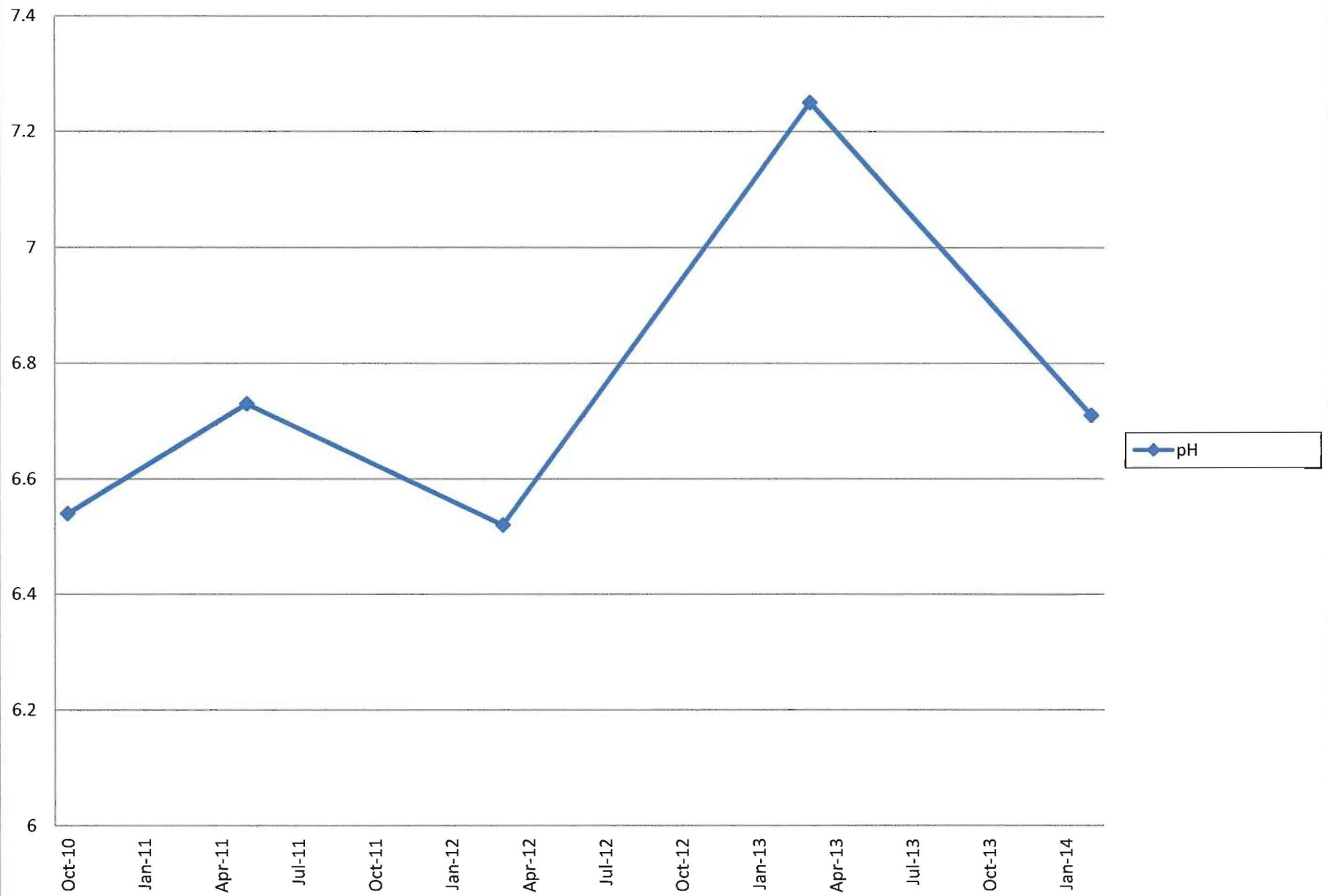
MWI-204 General Chemistry (Part 2)



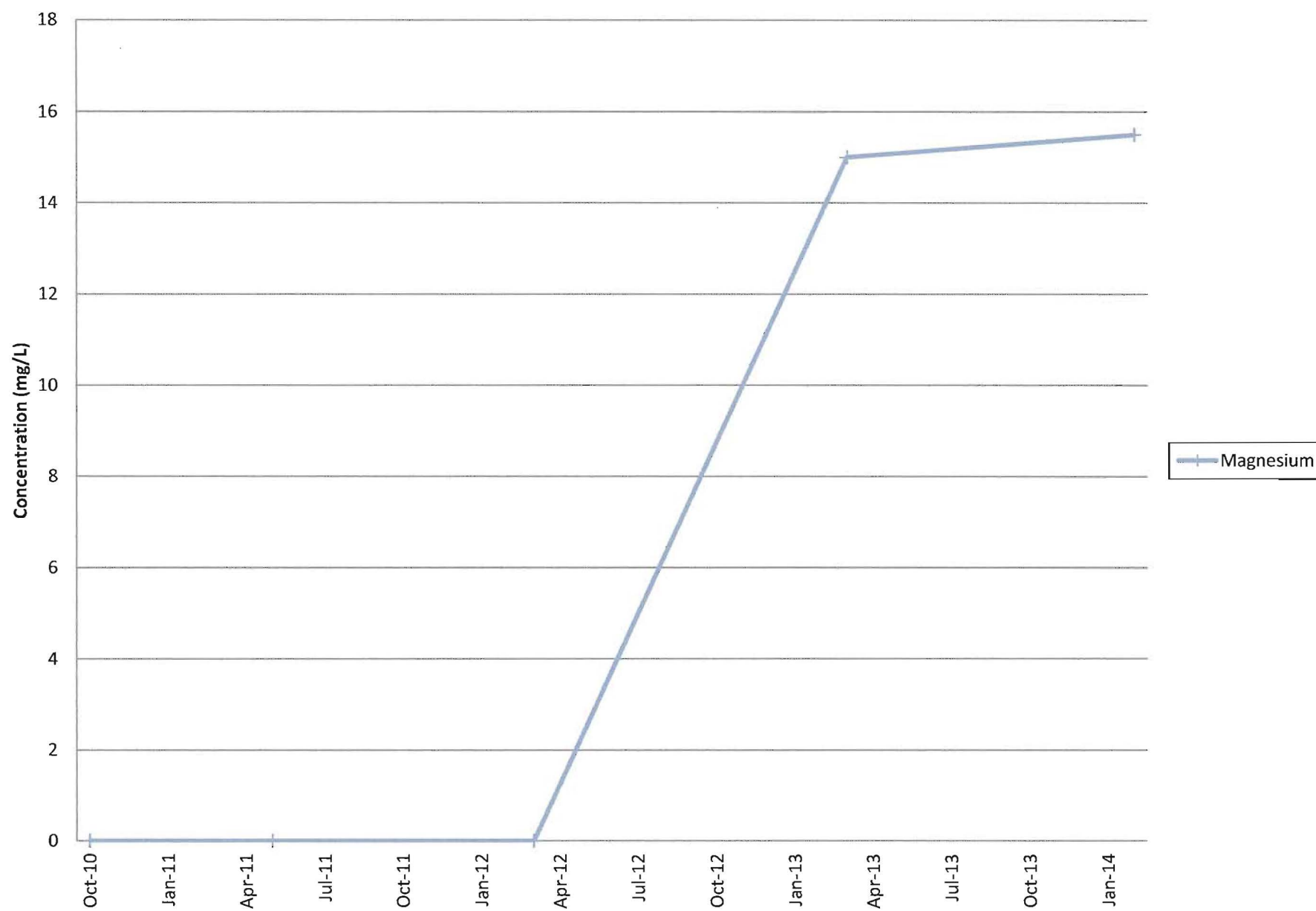
MWI-204 Field Parameters (Part 1)



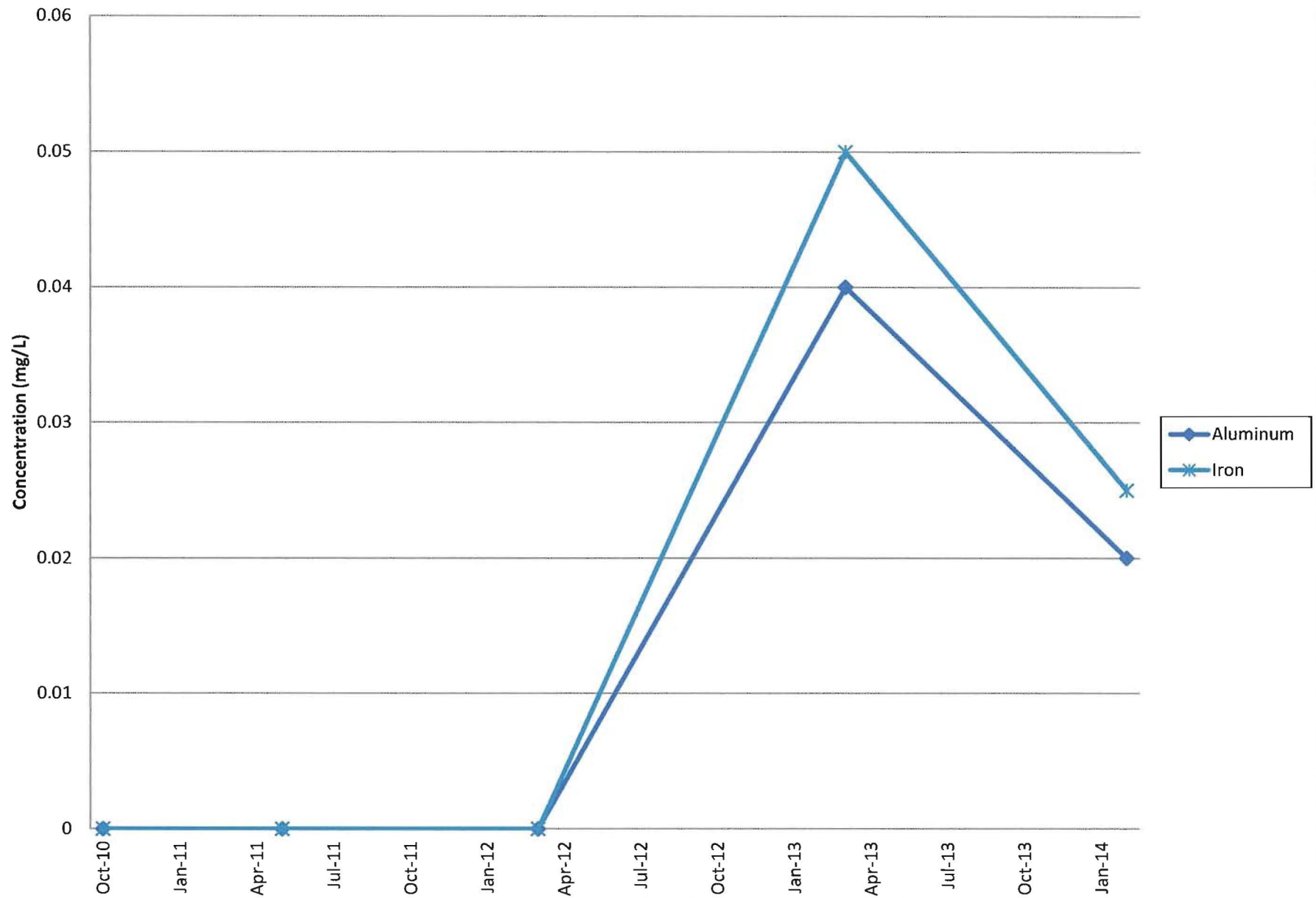
MWI-204 Field Parameters (Part 2)



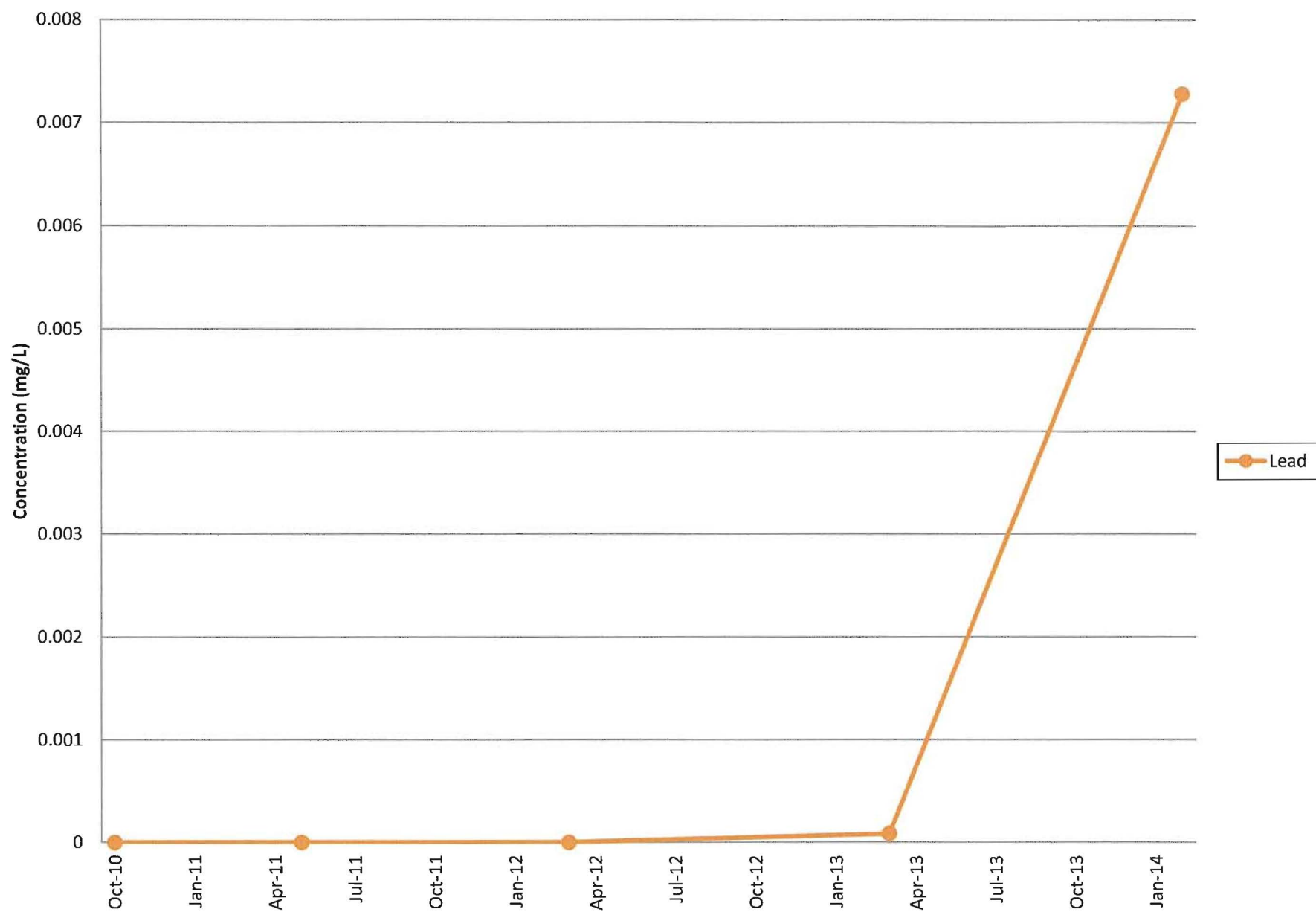
MWI-210S Metals (Part 1)



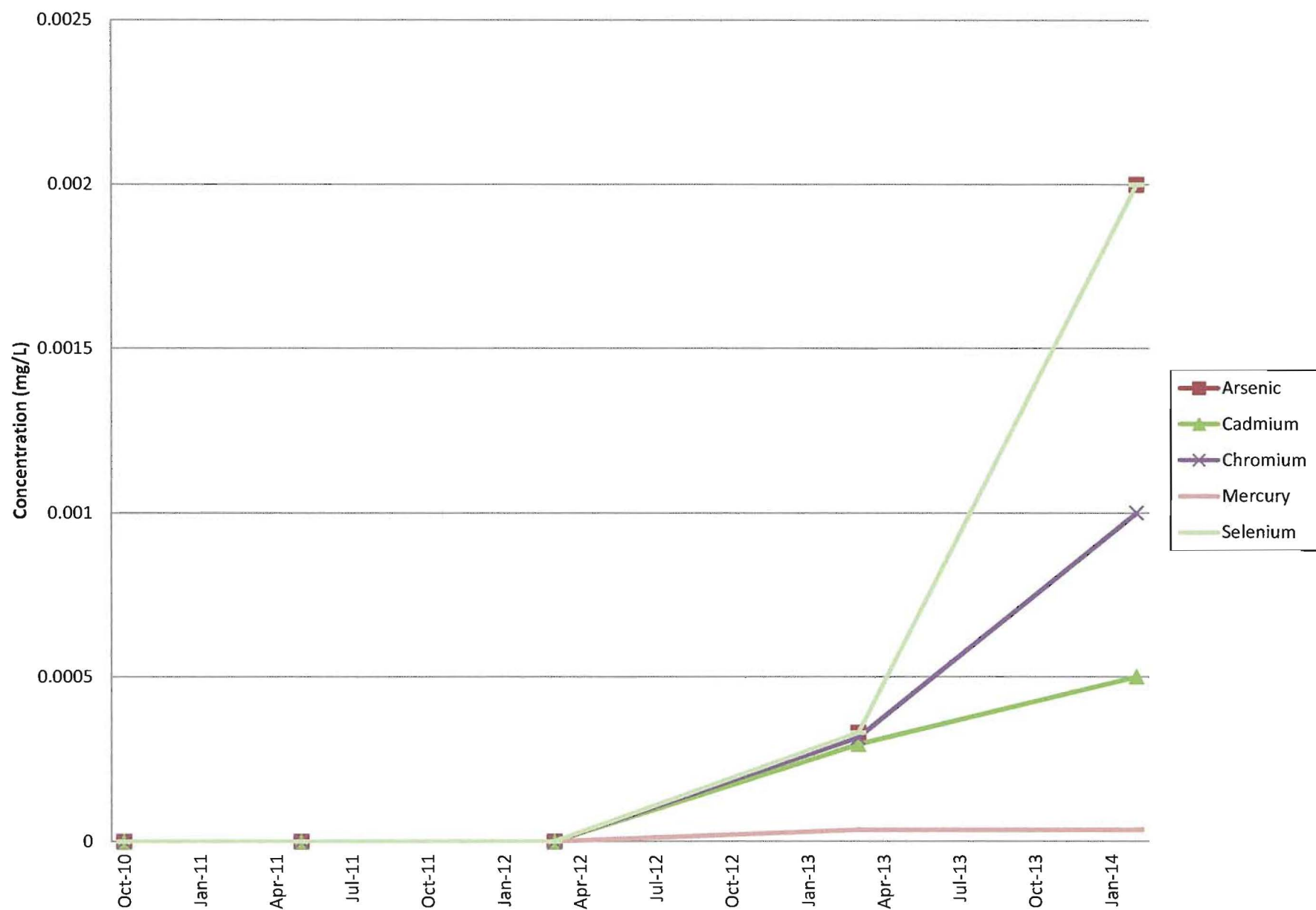
MWI-210S Metals (Part 2)



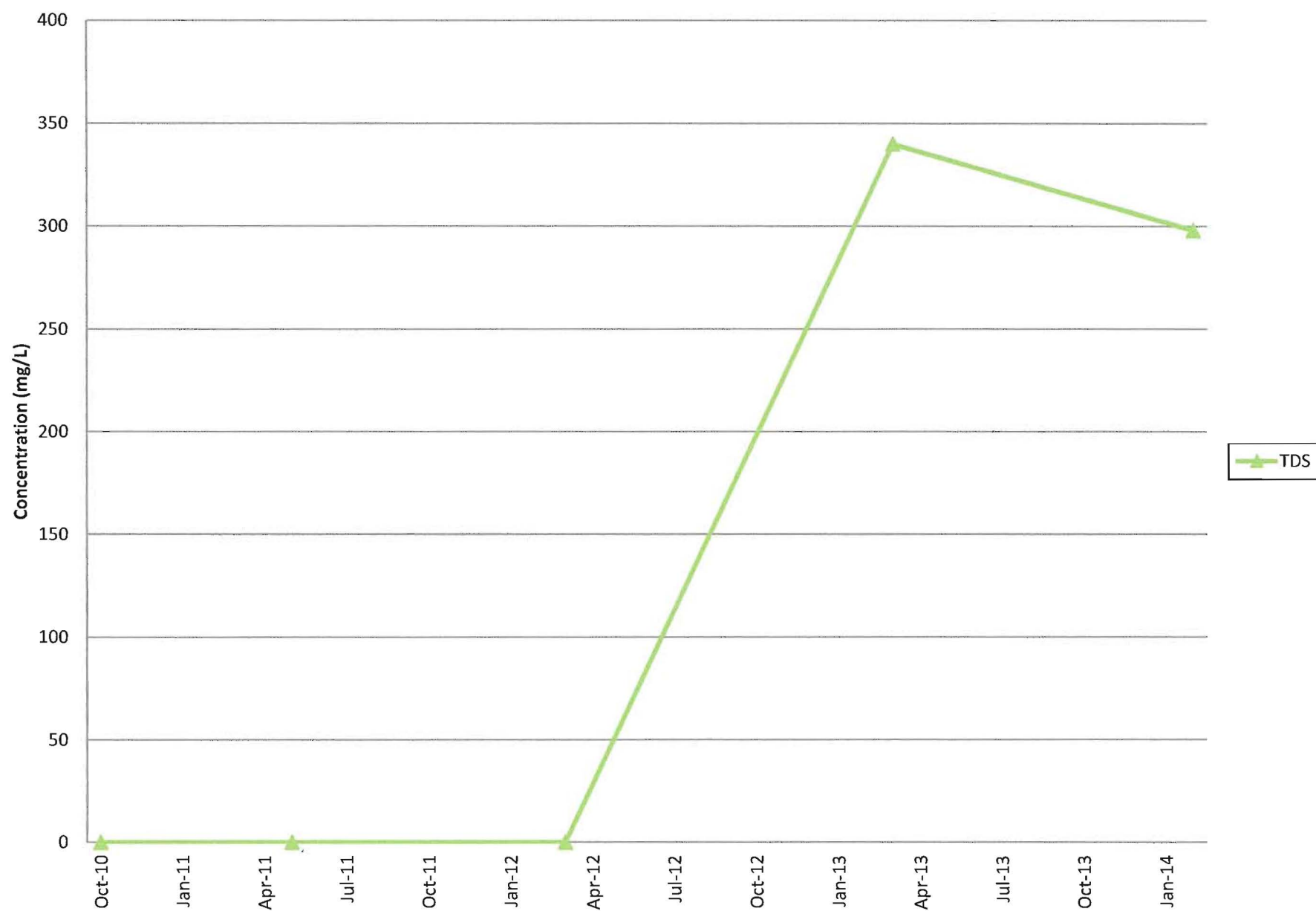
MWI-210S Metals (Part 3)



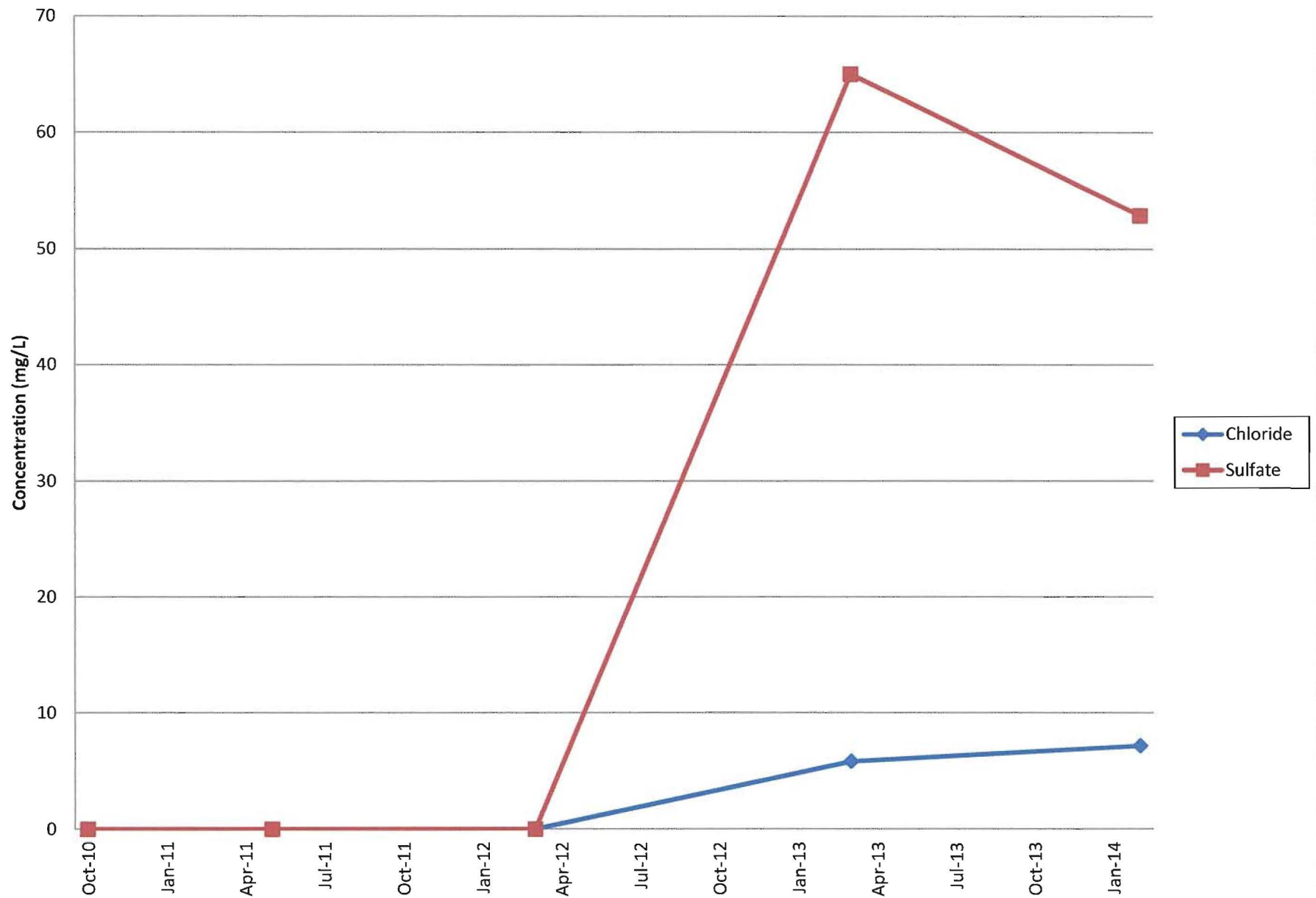
MWI-210S Metals (Part 3)



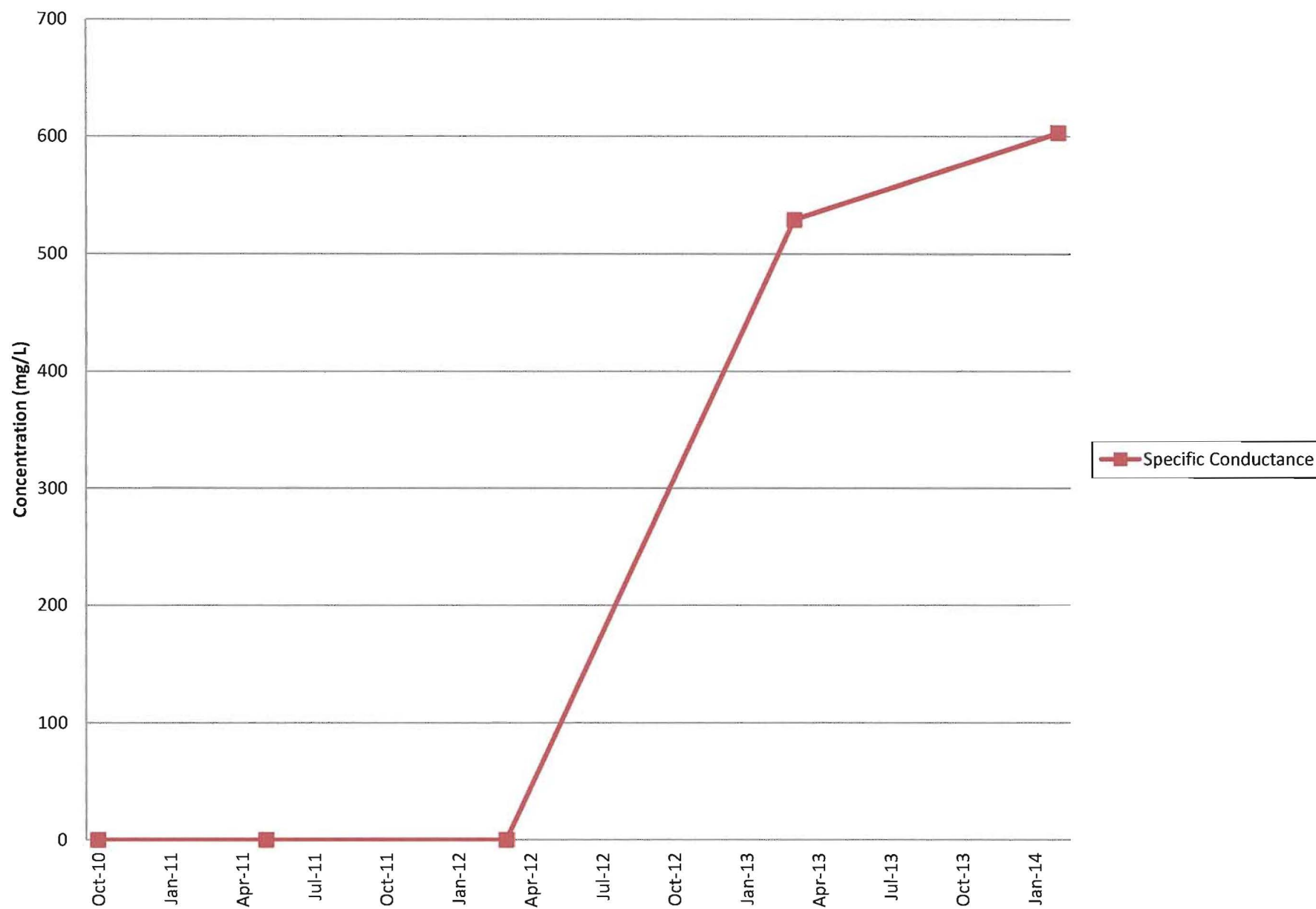
MWI-210S General Chemistry (Part 1)



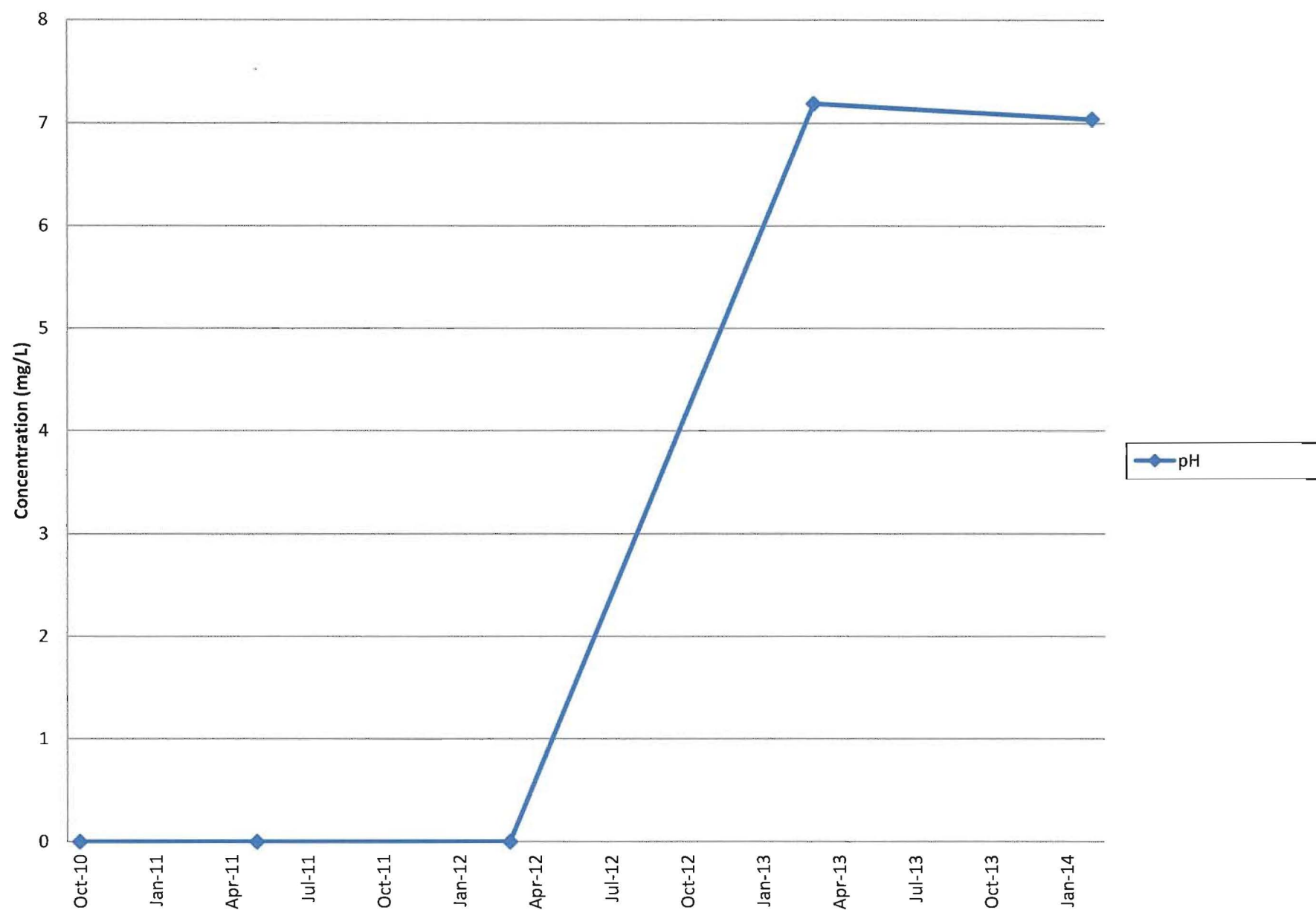
MWI-210S General Chemistry (Part 2)



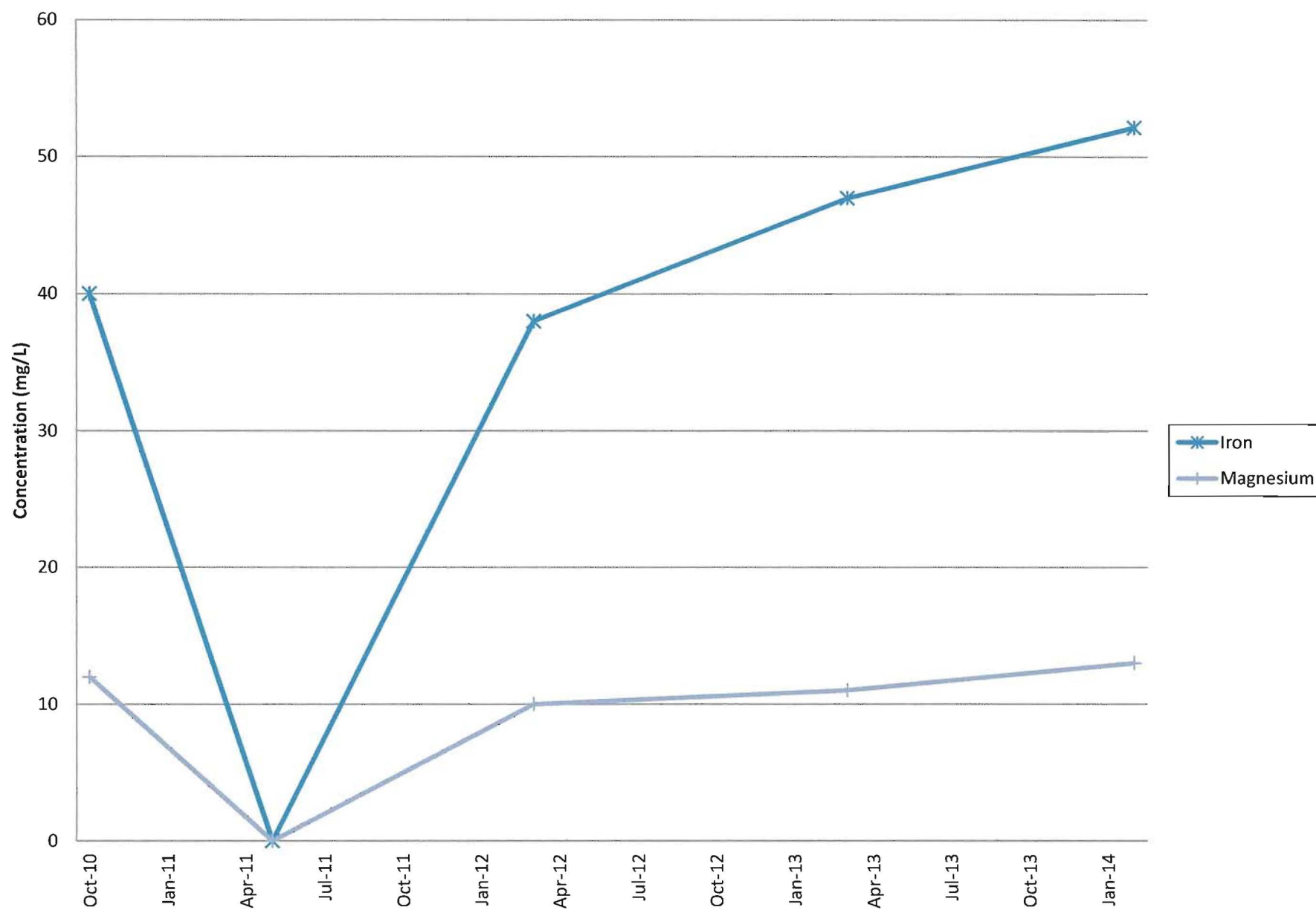
MWI-210S Field Parameters (Part 1)



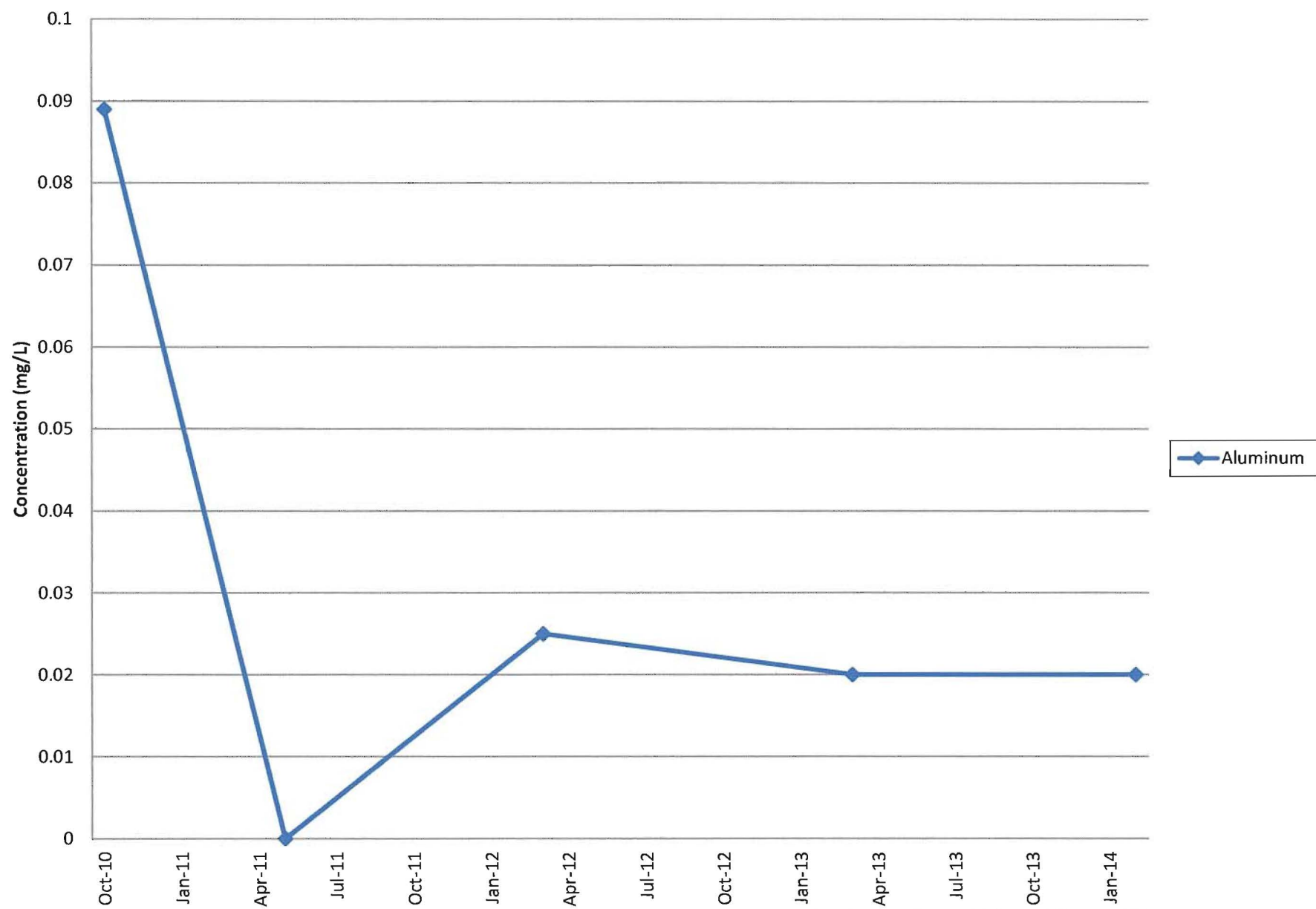
MWI-210S Field Parameters (Part 2)



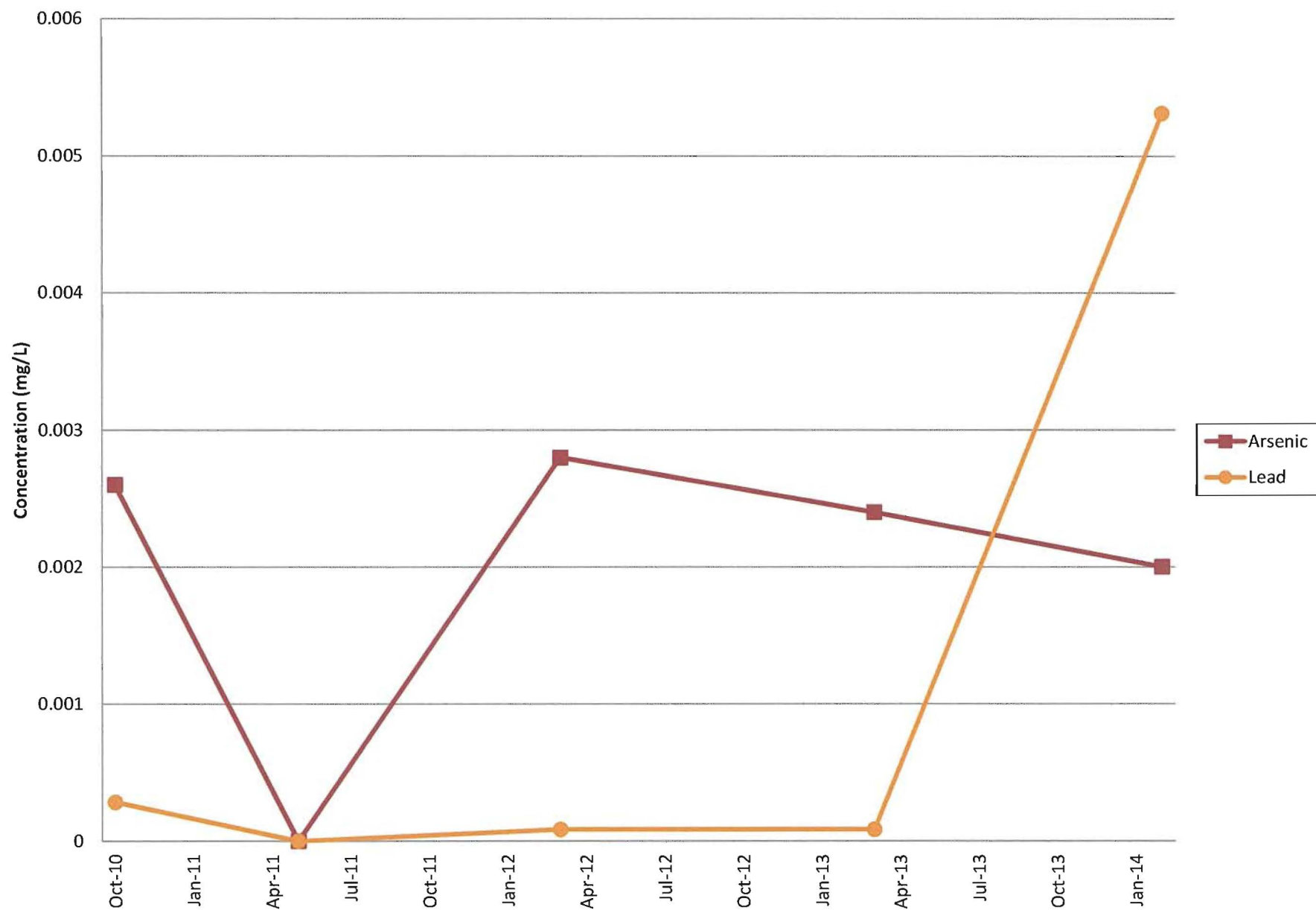
MWC-2031 Metals (Part 1)



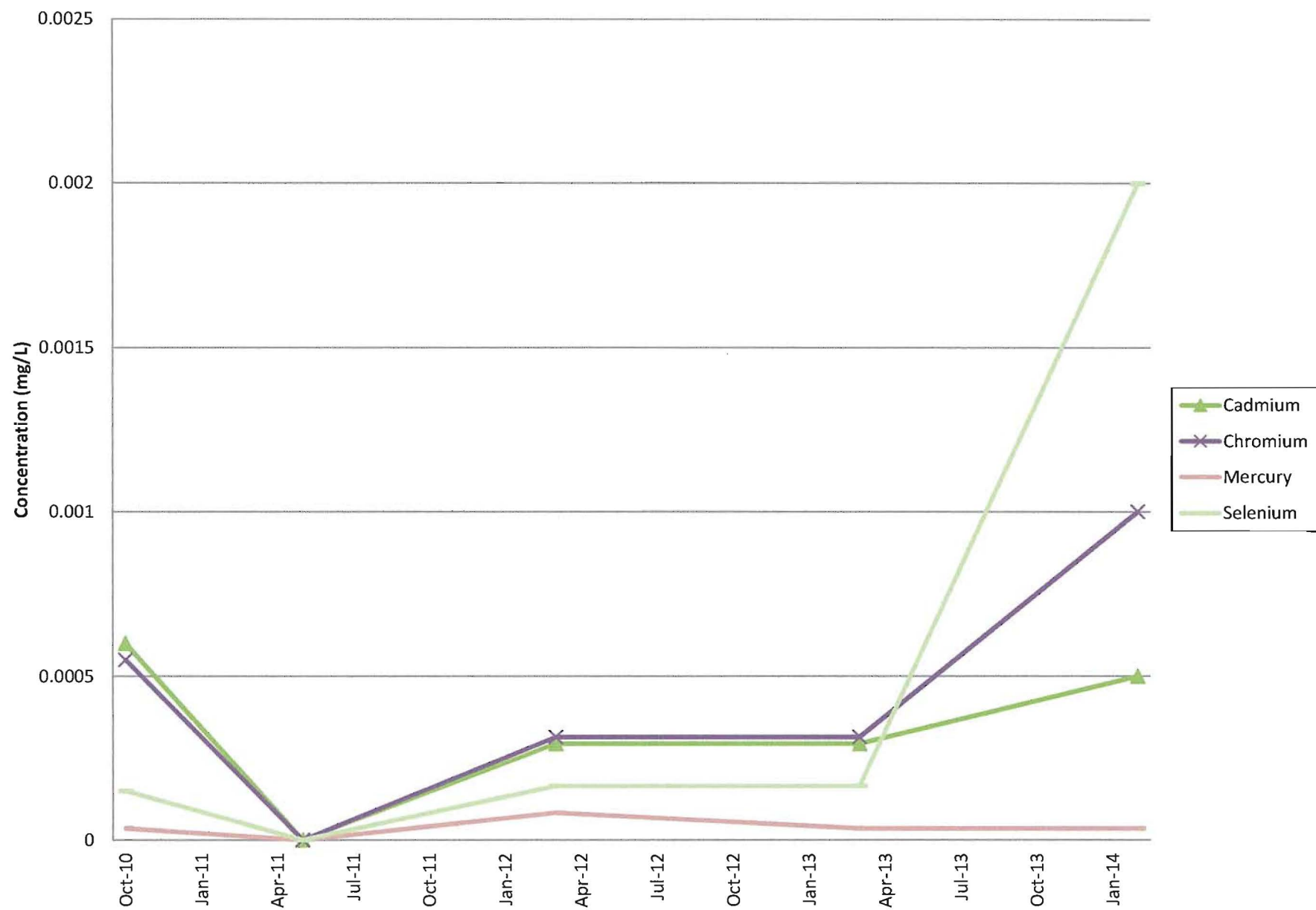
MWC-2031 Metals (Part 2)



MWC-2031 Metals (Part 3)



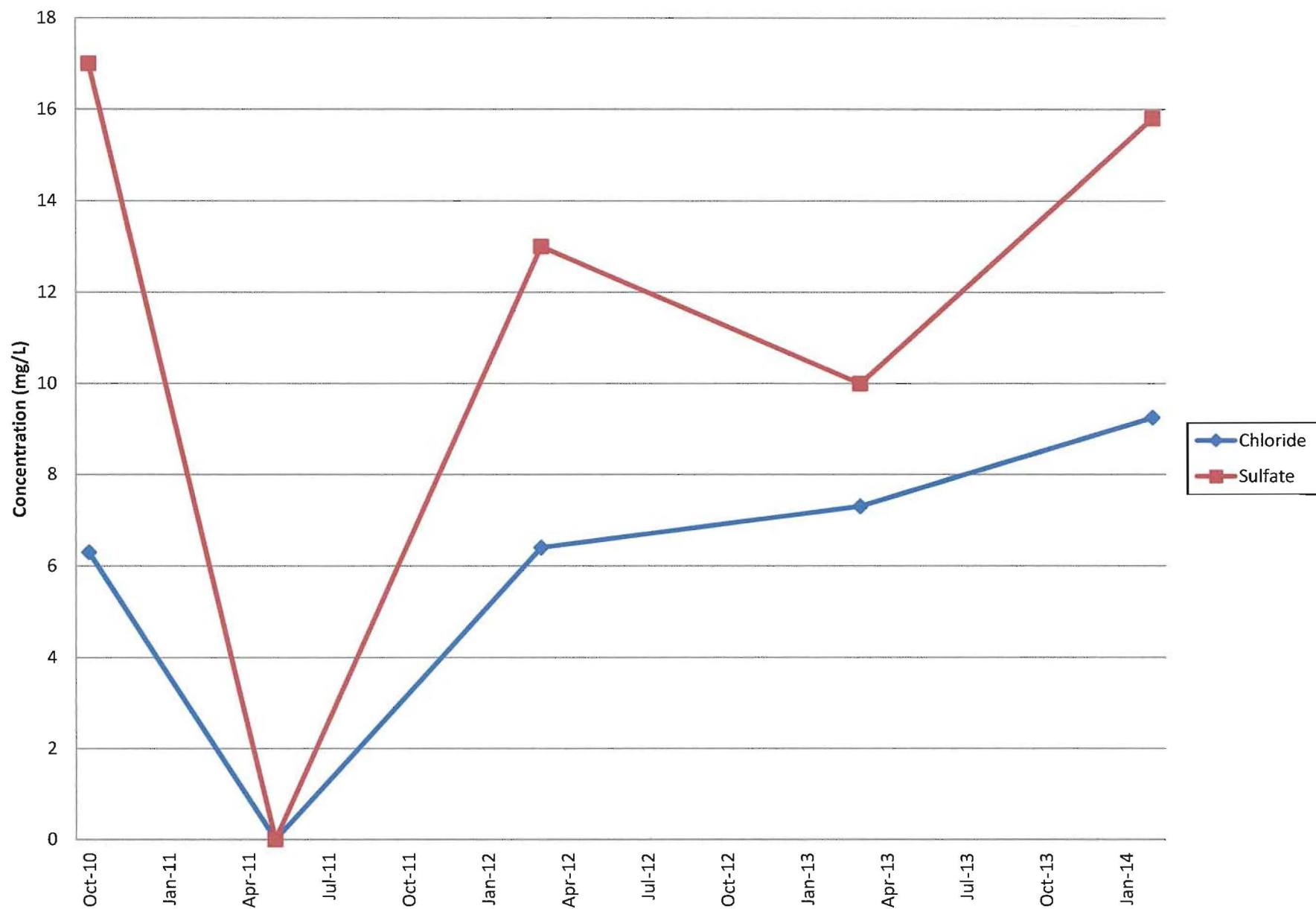
MWC-2031 Metals (Part 4)



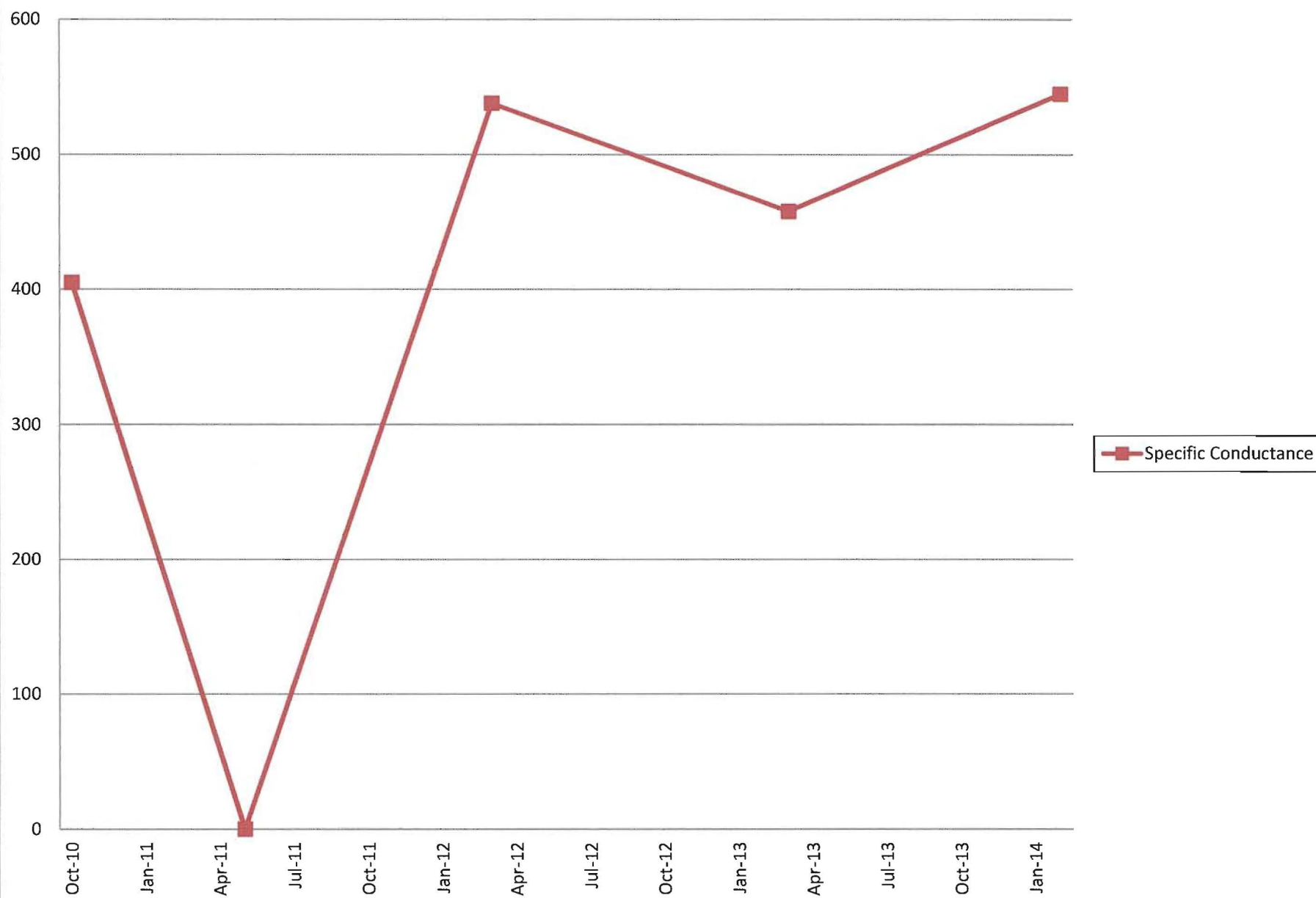
MWC-2031 General Chemistry (Part 1)



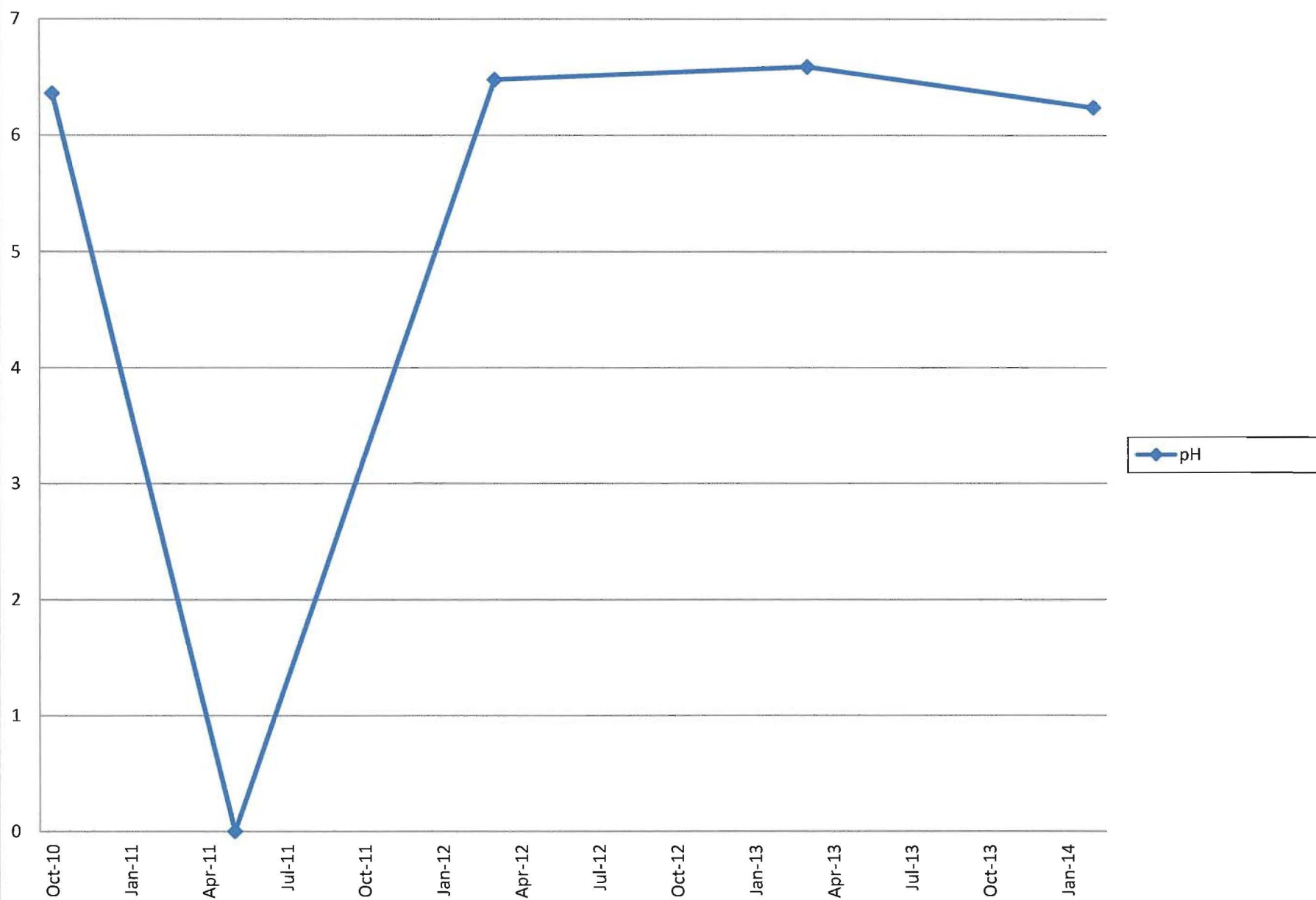
MWC-2031 General Chemistry (Part 2)



MWC-2031 Field Parameters (Part 1)



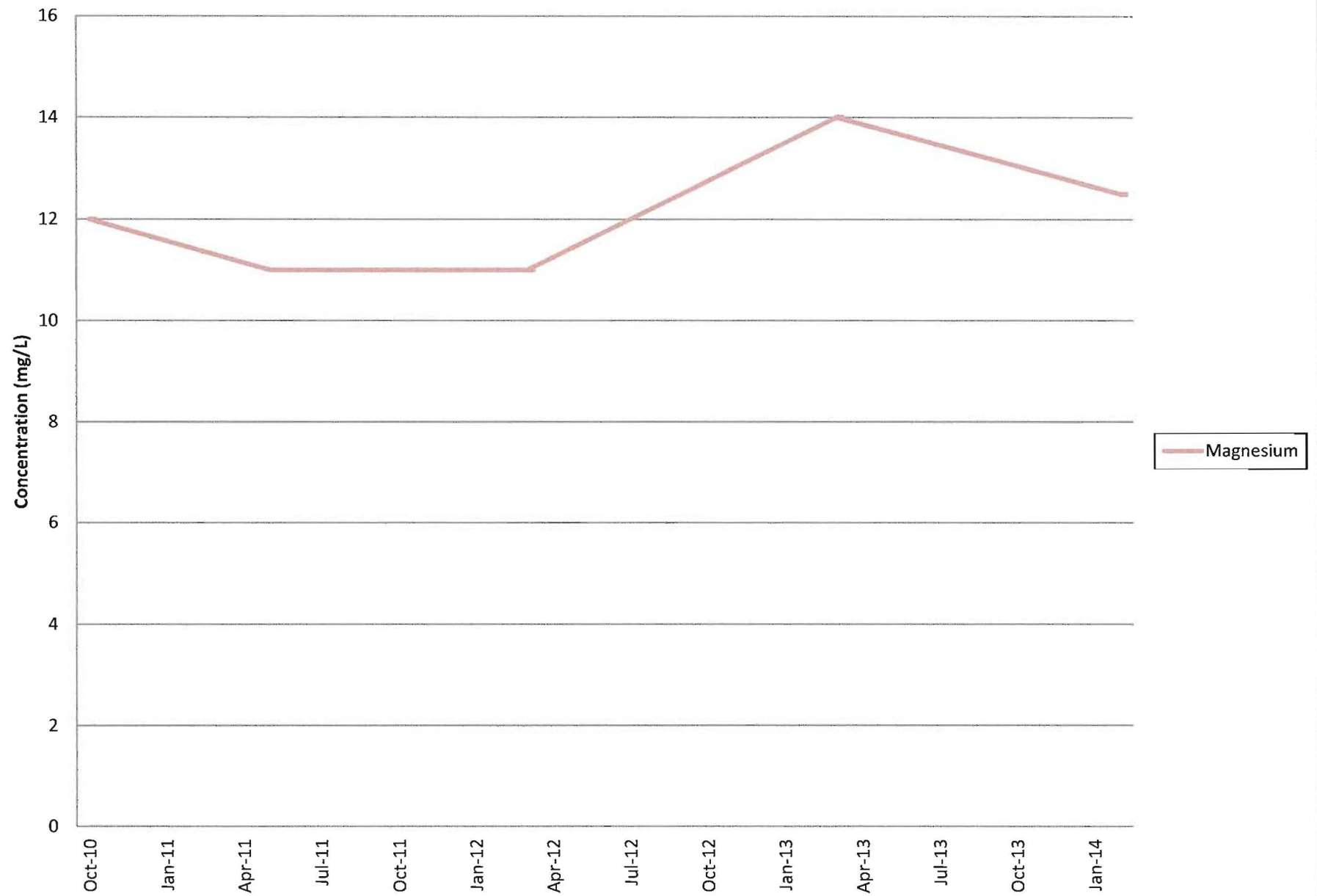
MWC-2031 Field Parameters (Part 1)



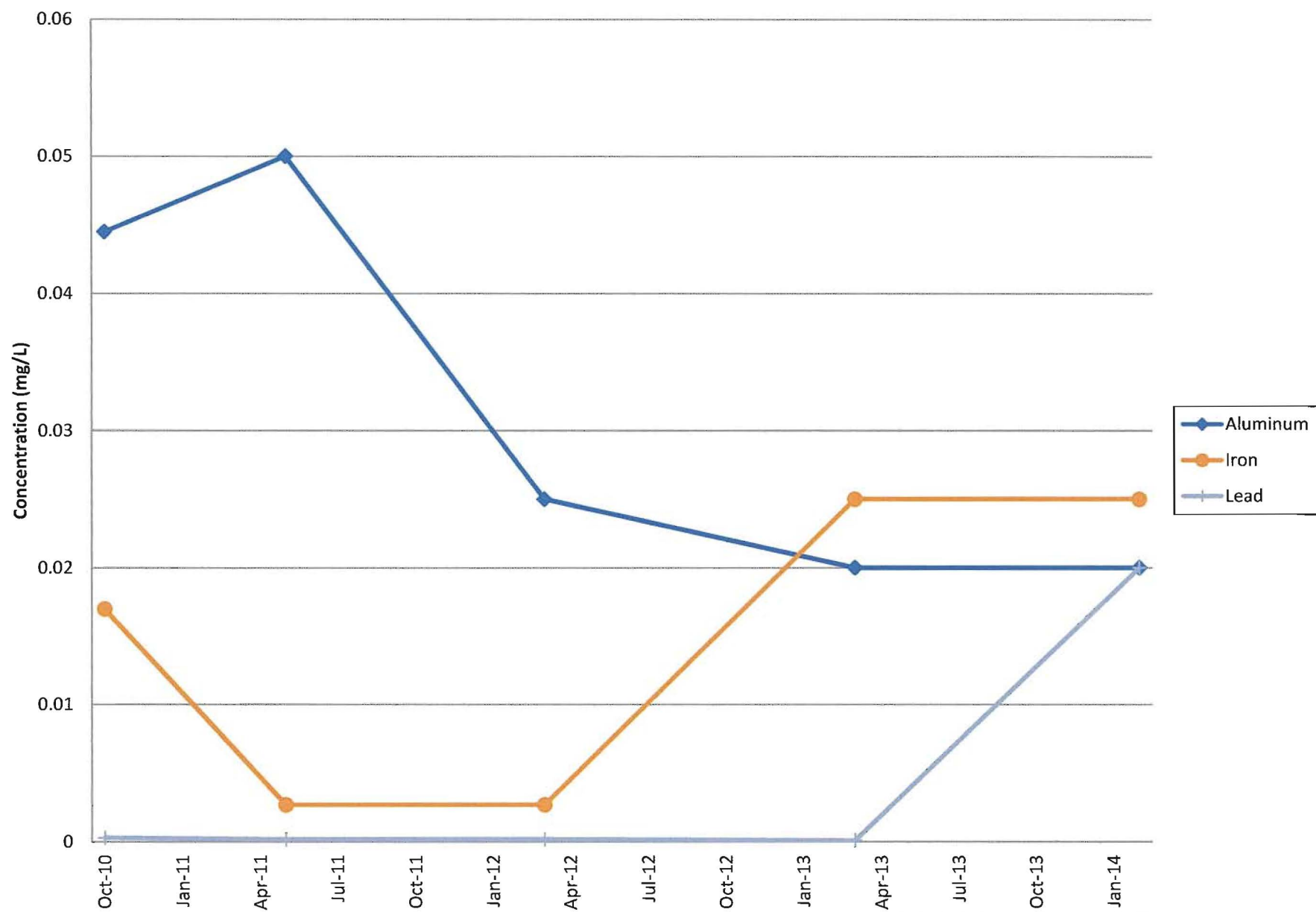
APPENDIX H

UNIT 2 WATER QUALITY GRAPHS

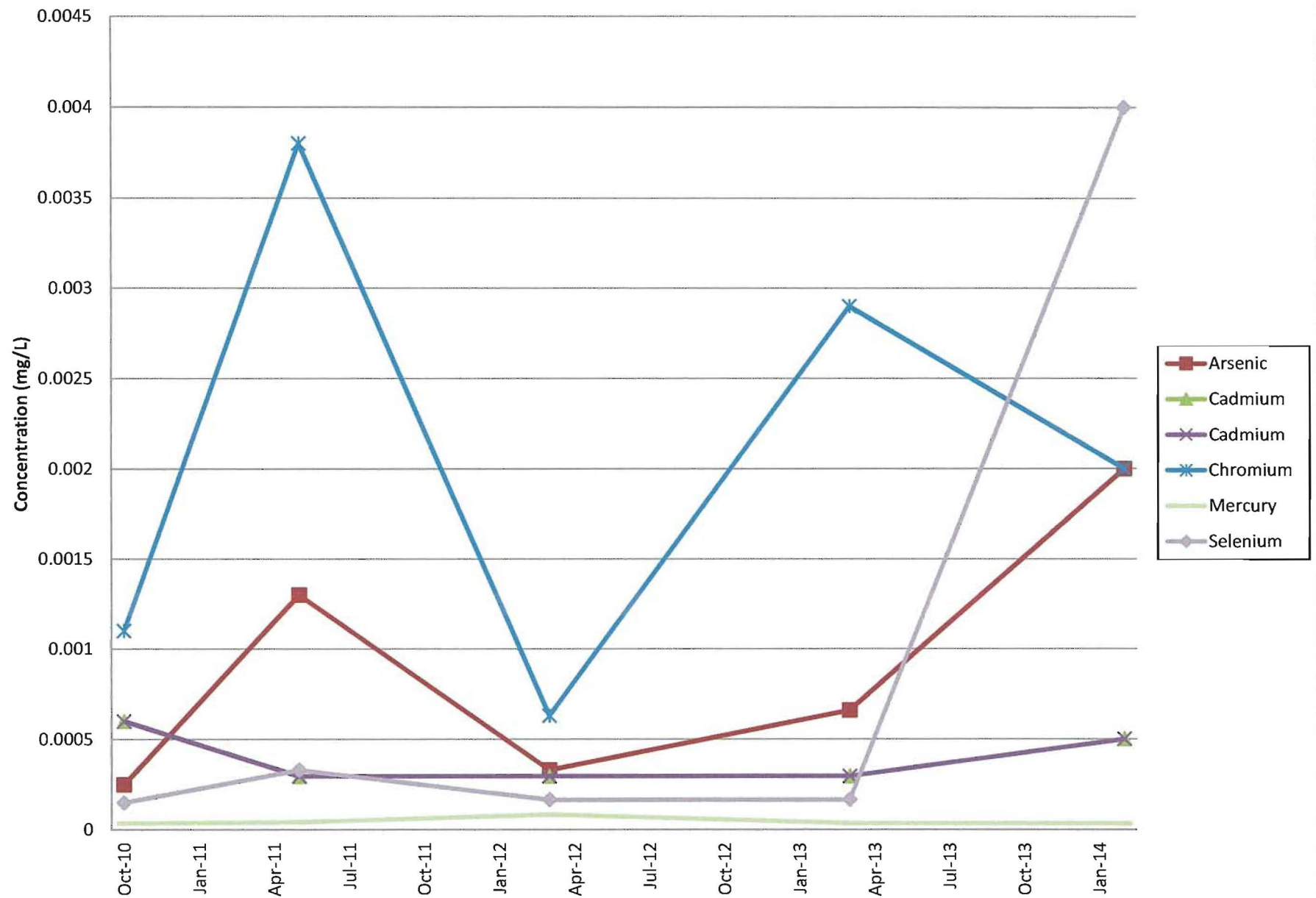
MWB-205 Metals (Part 1)



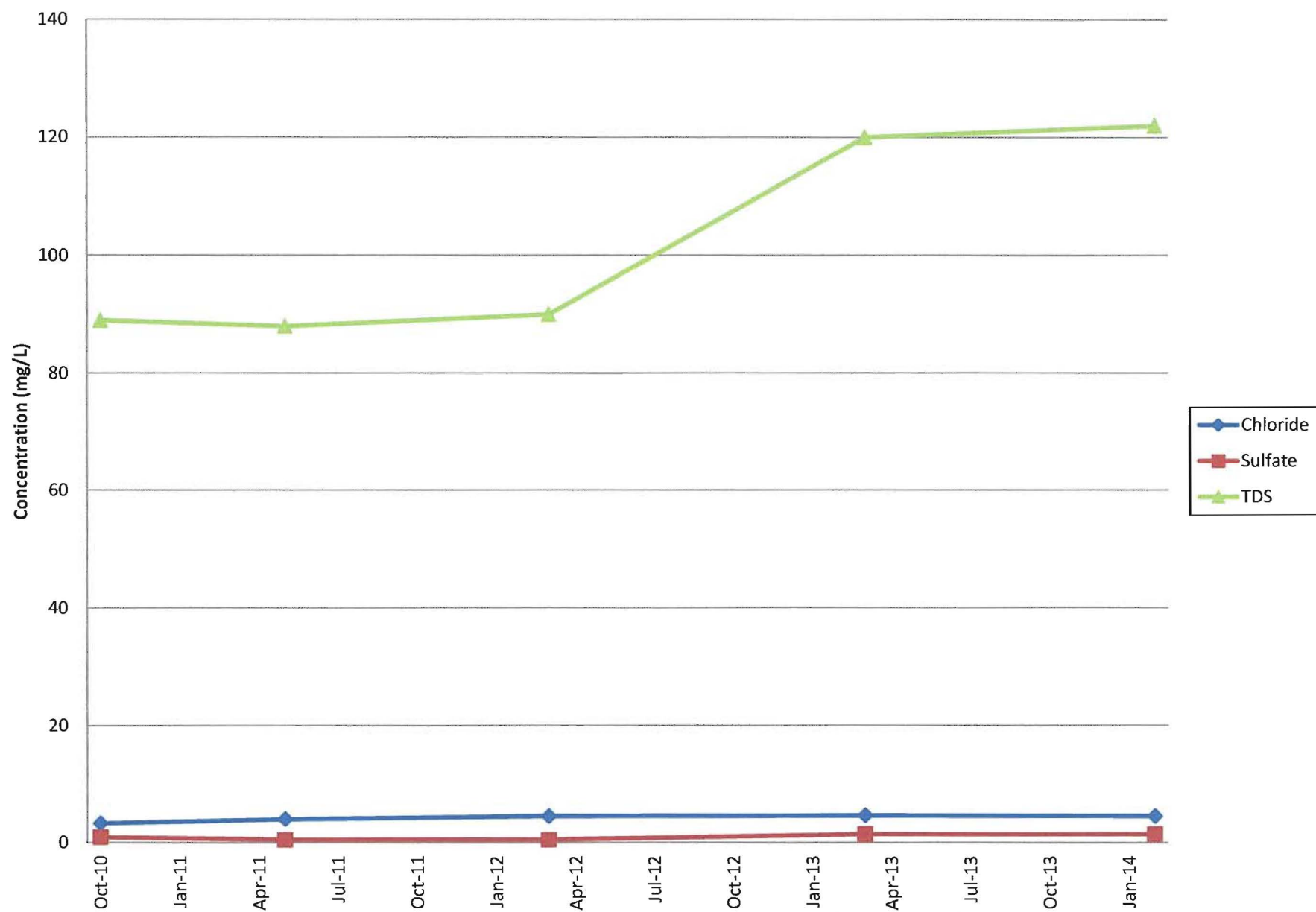
MWB-205 Metals (Part 2)



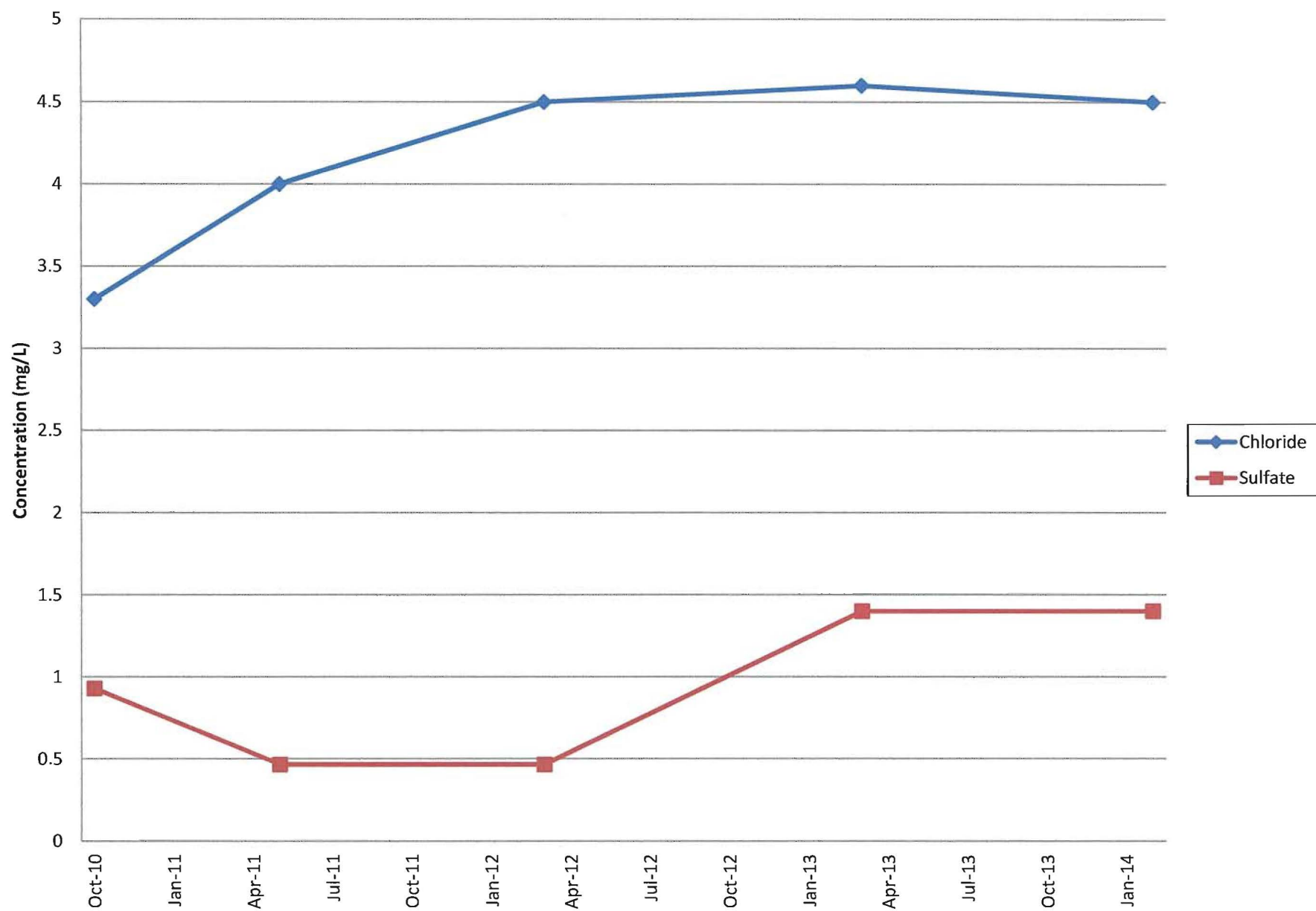
MWB-205 Metals (Part 3)



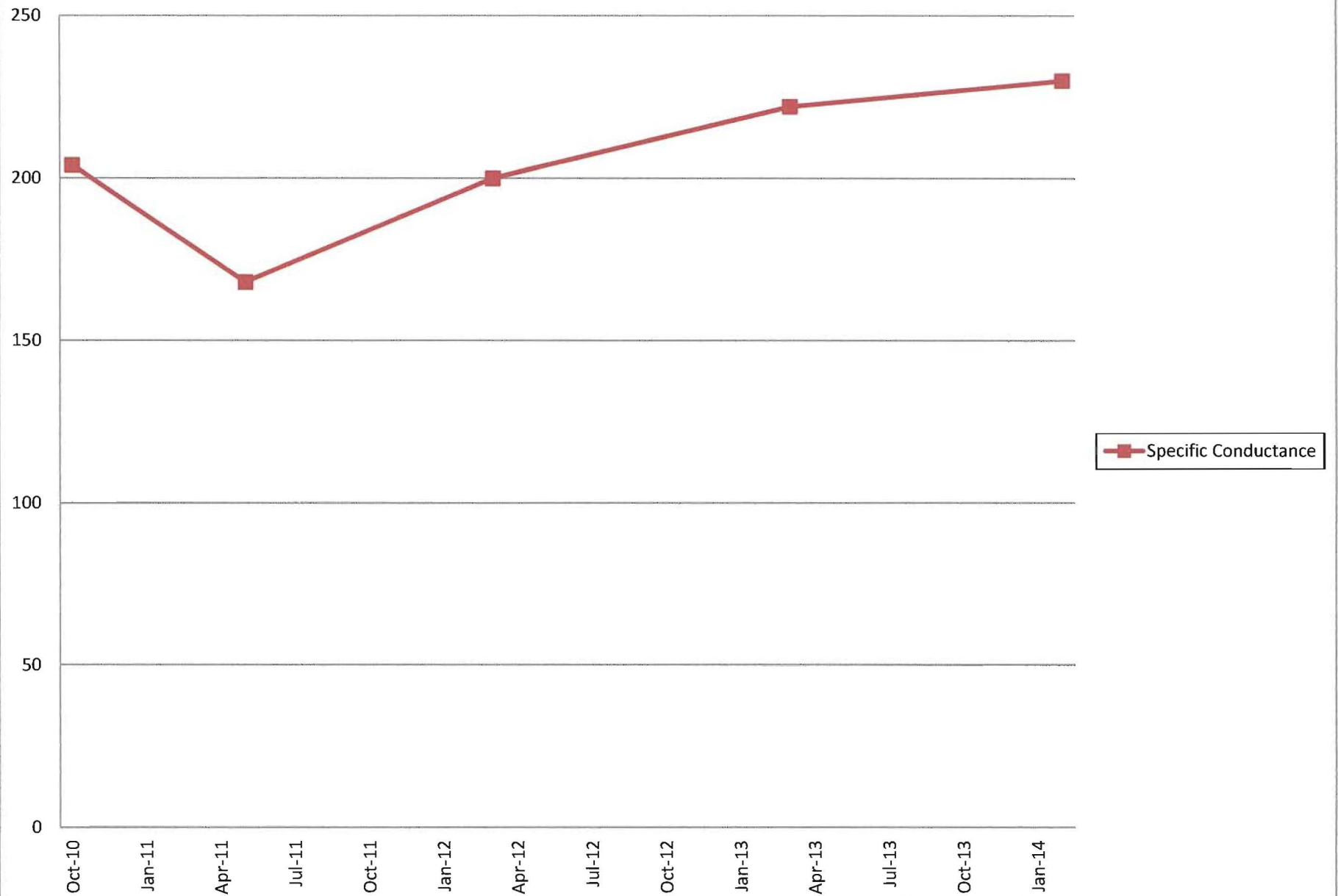
MWB-205 General Chemistry (Part 1)



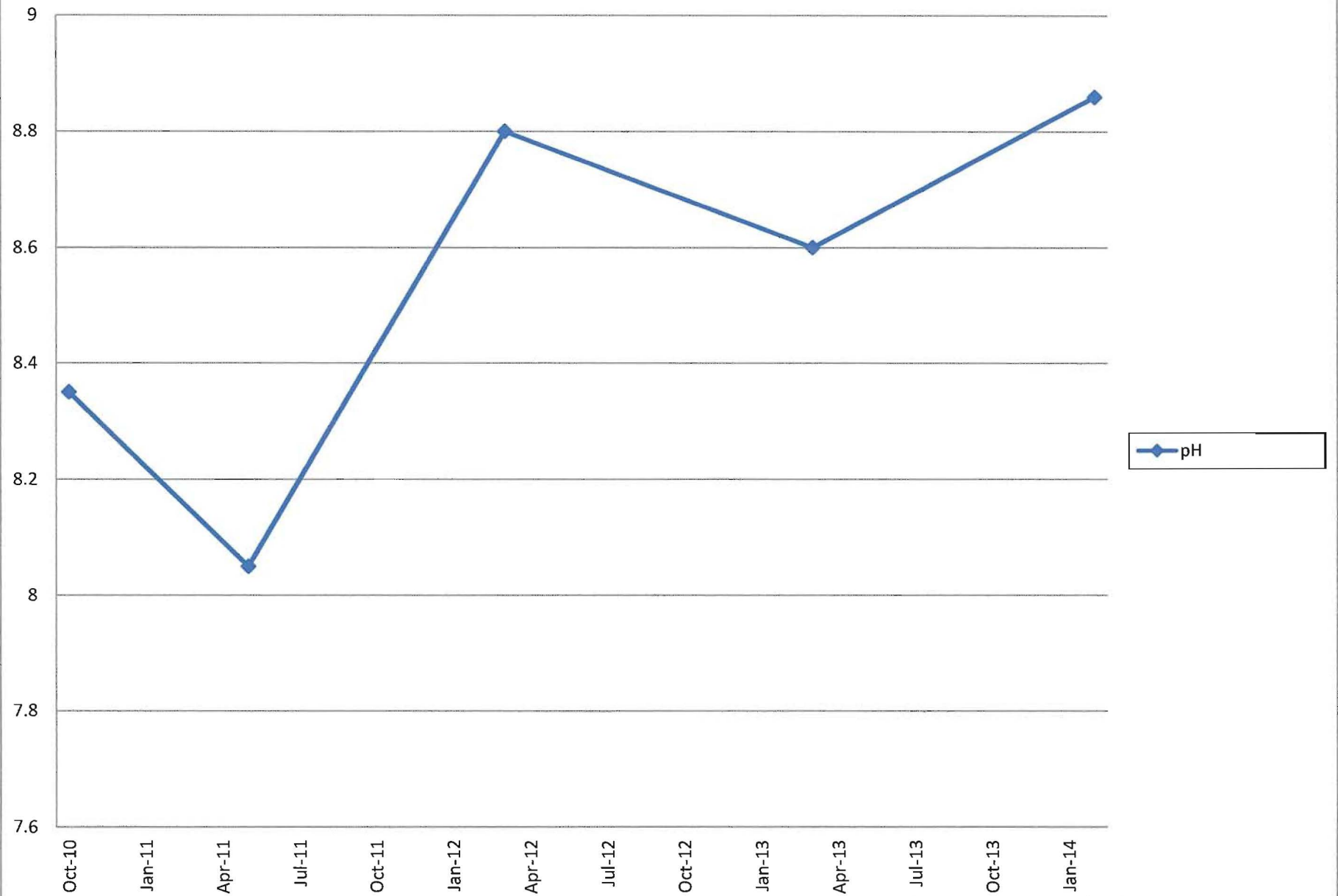
MWB-205 General Chemistry (Part 2)



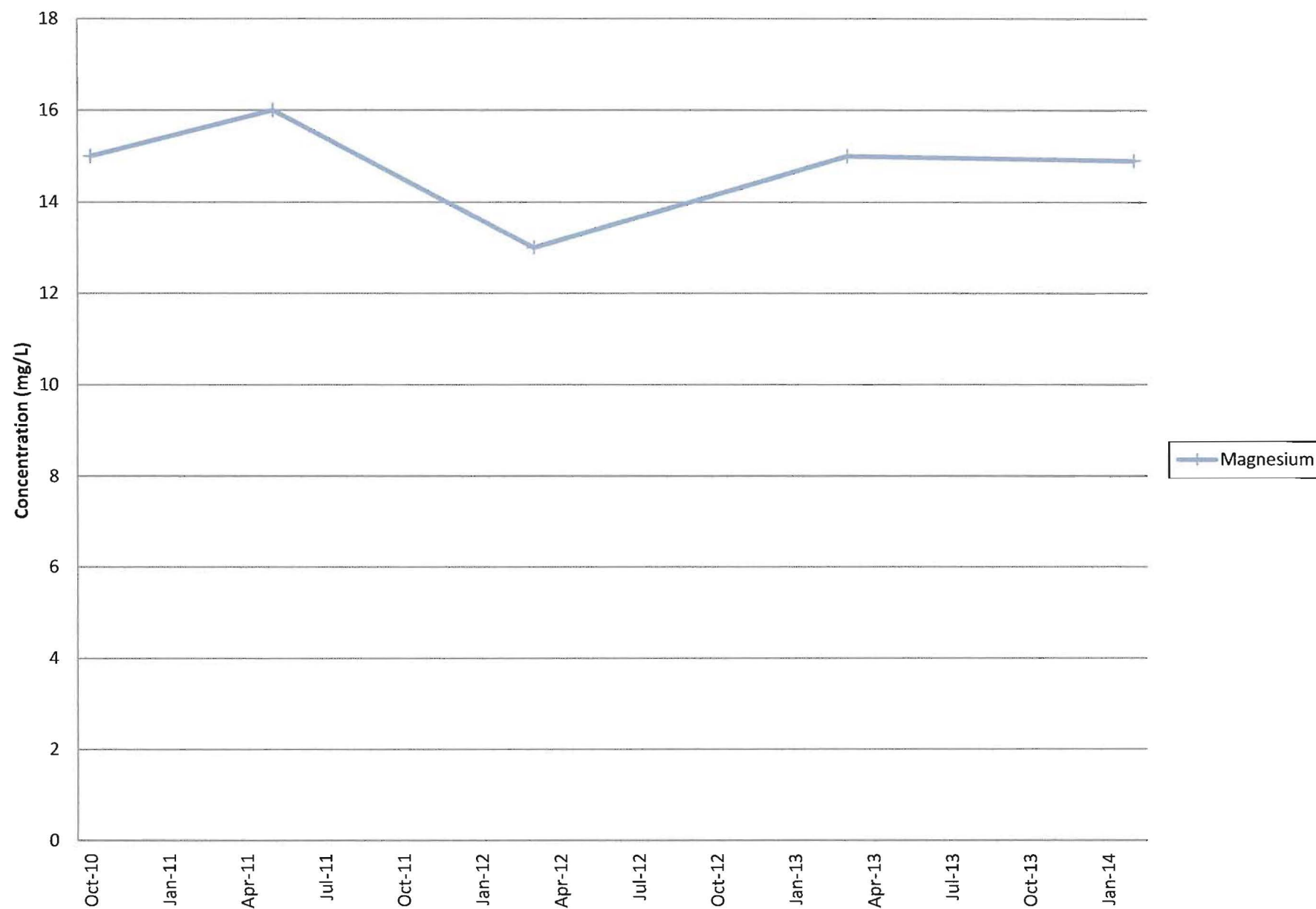
MWB-205 Field Parameters (Part 1)



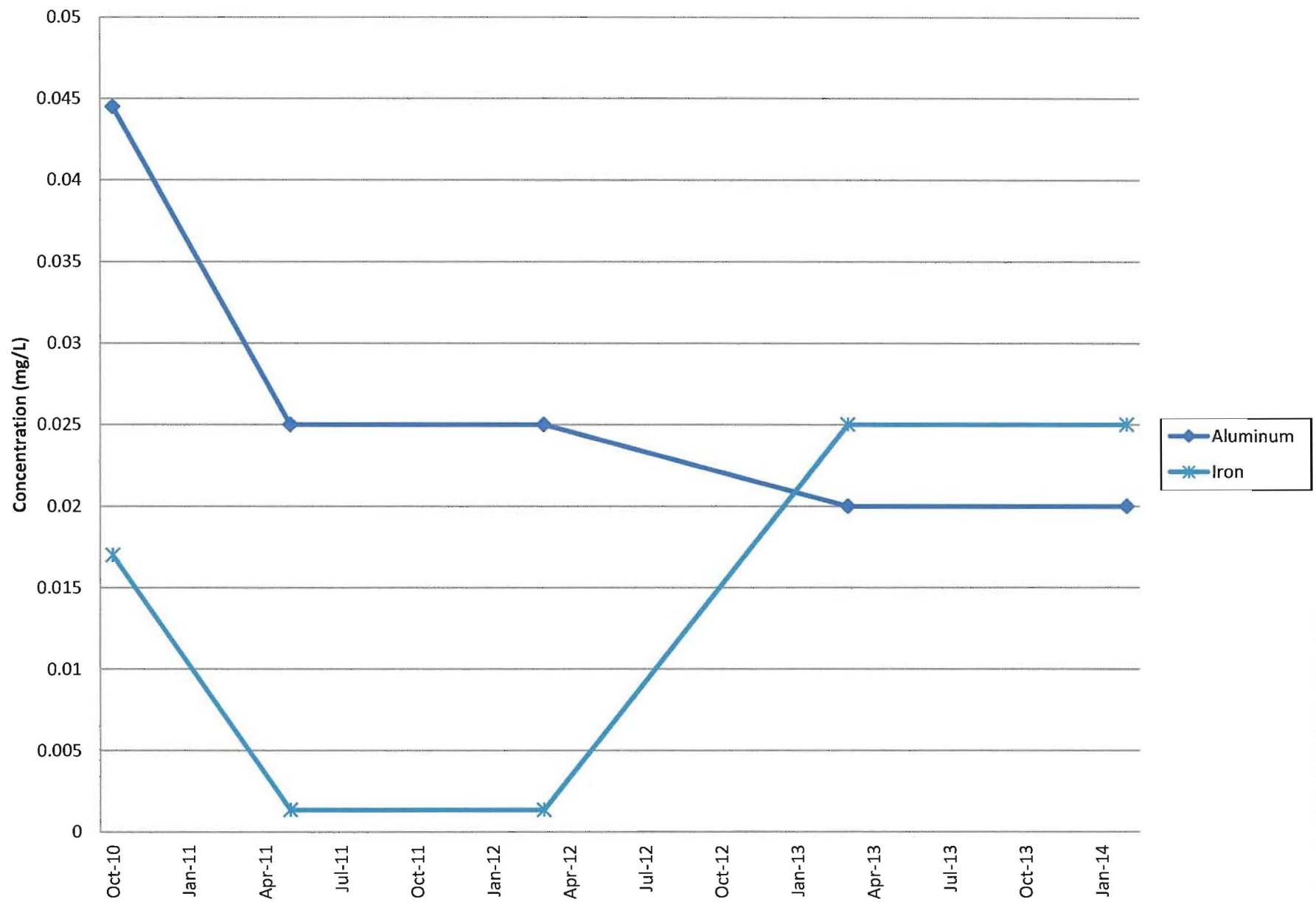
MWB-205 Field Parameters (Part 2)



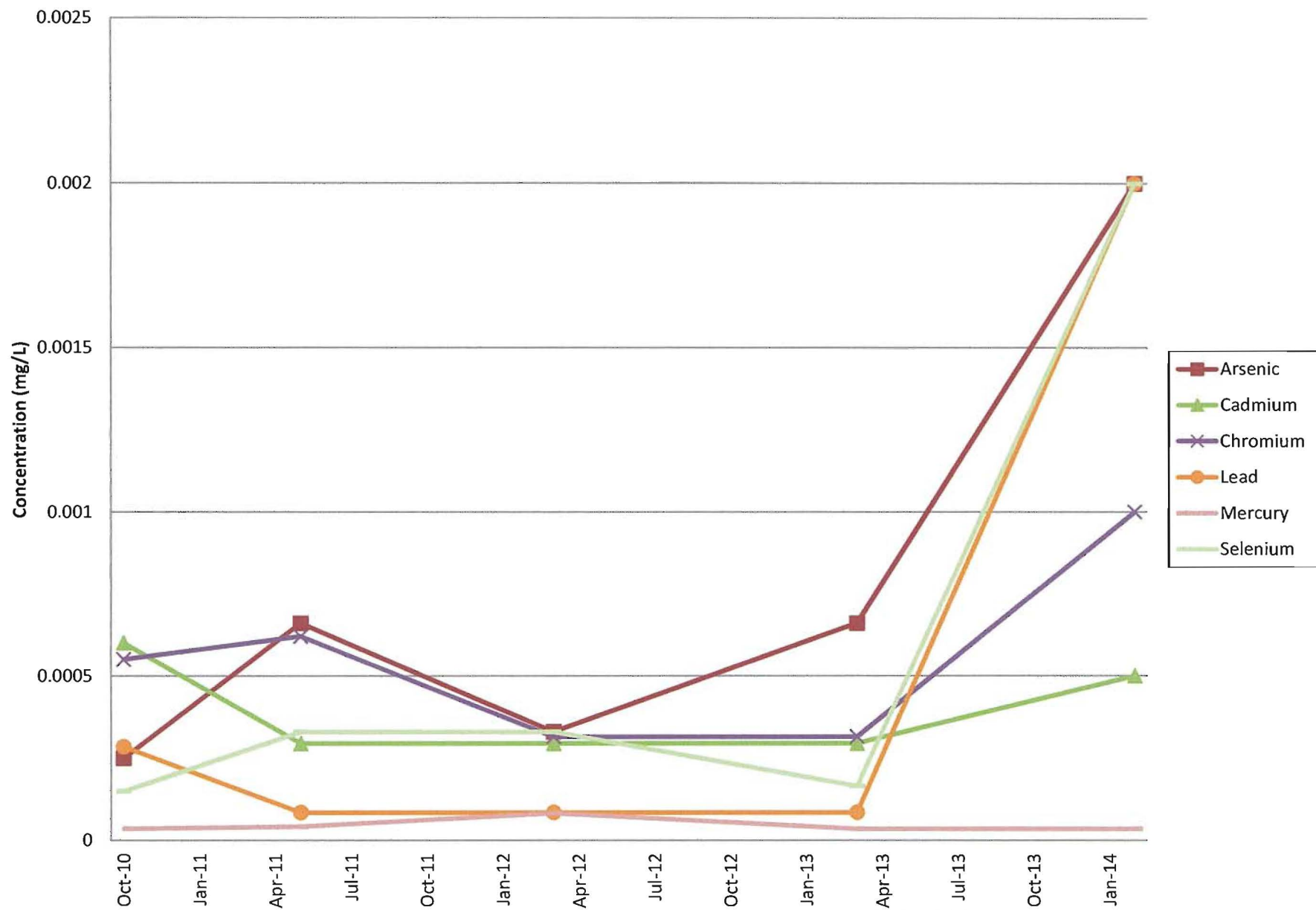
MWC-2 Metals (Part 1)



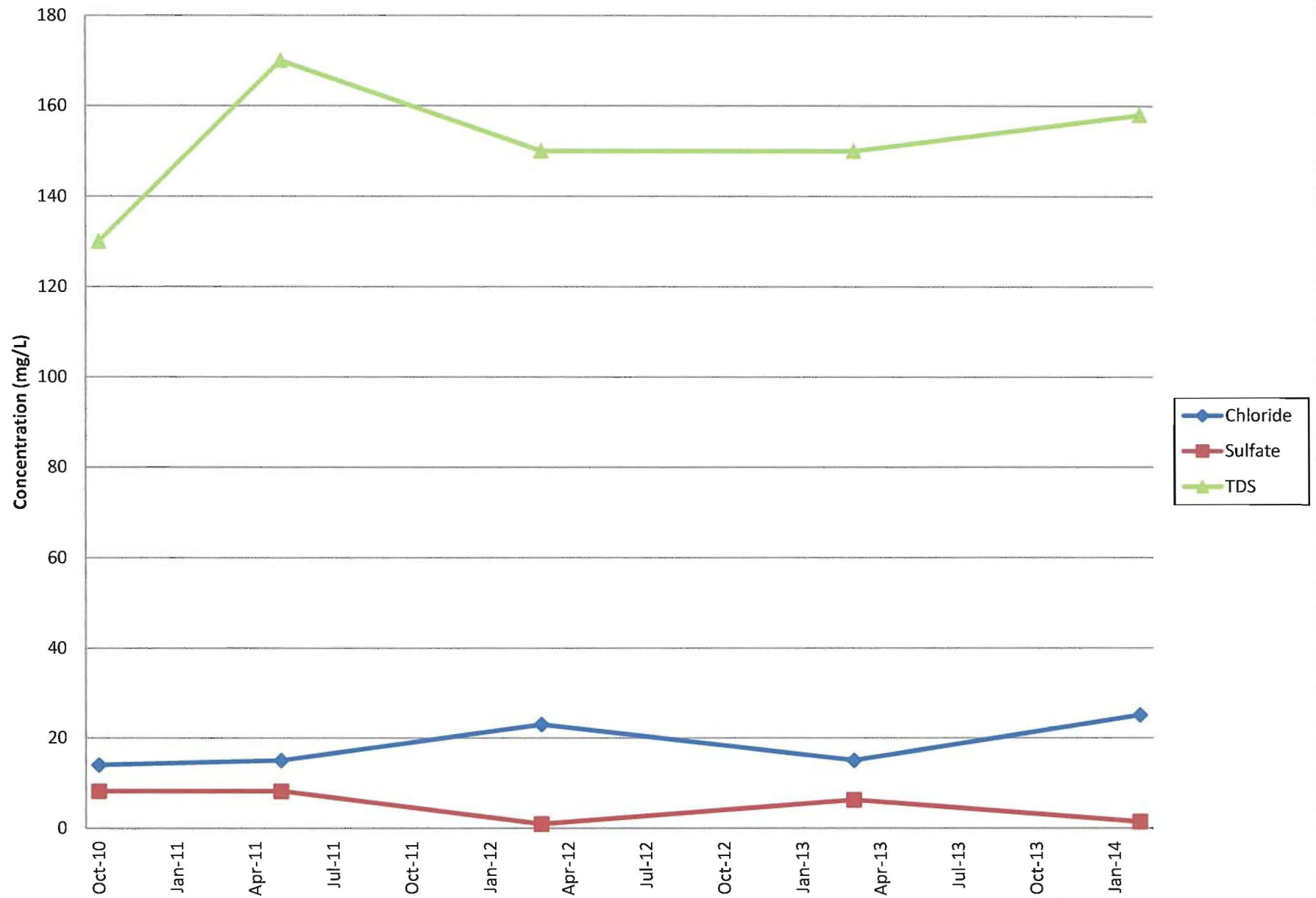
MWC-2 Metals (Part 2)



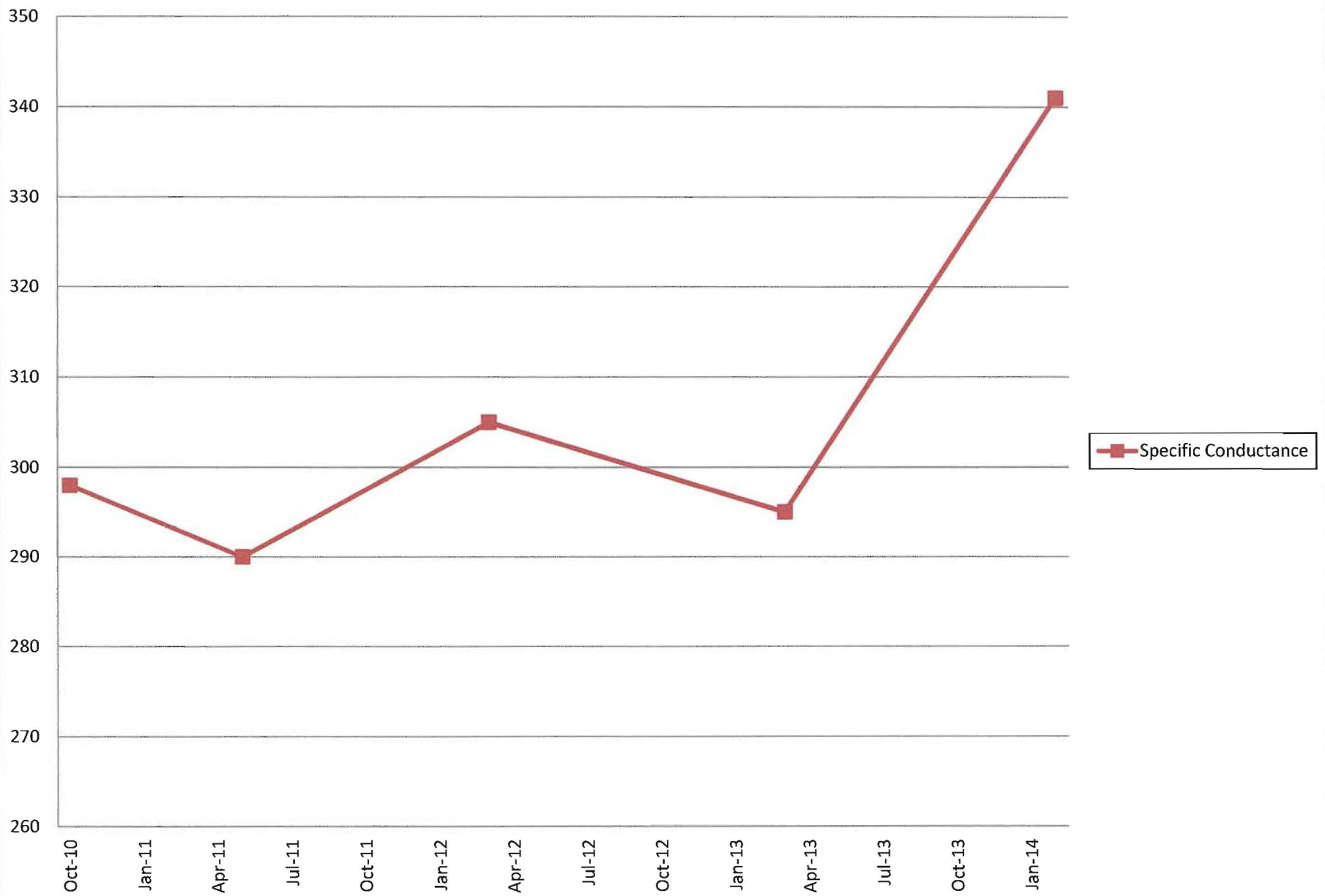
MWC-2 Metals (Part 3)



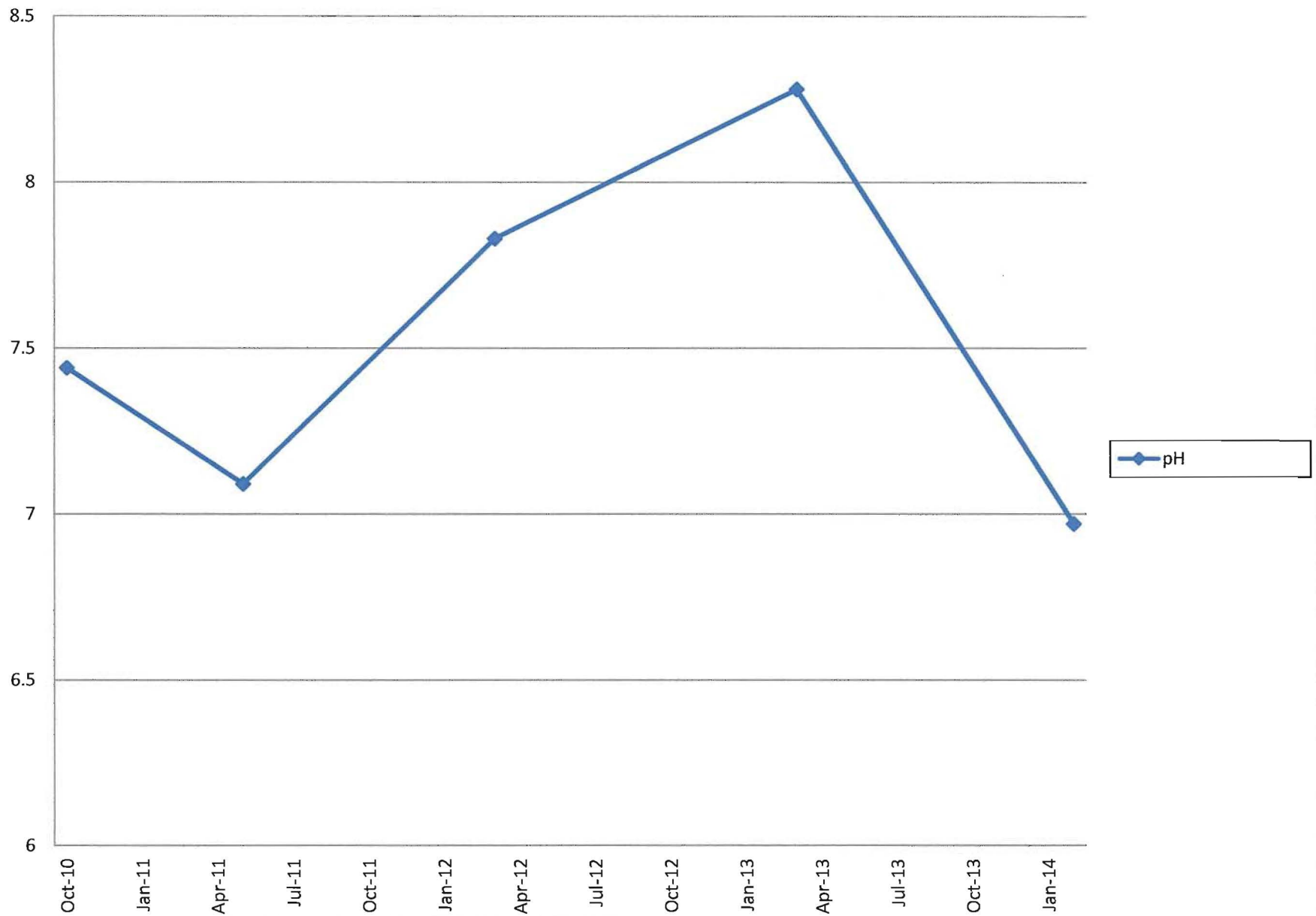
MWC-2 General Chemistry (Part 1)



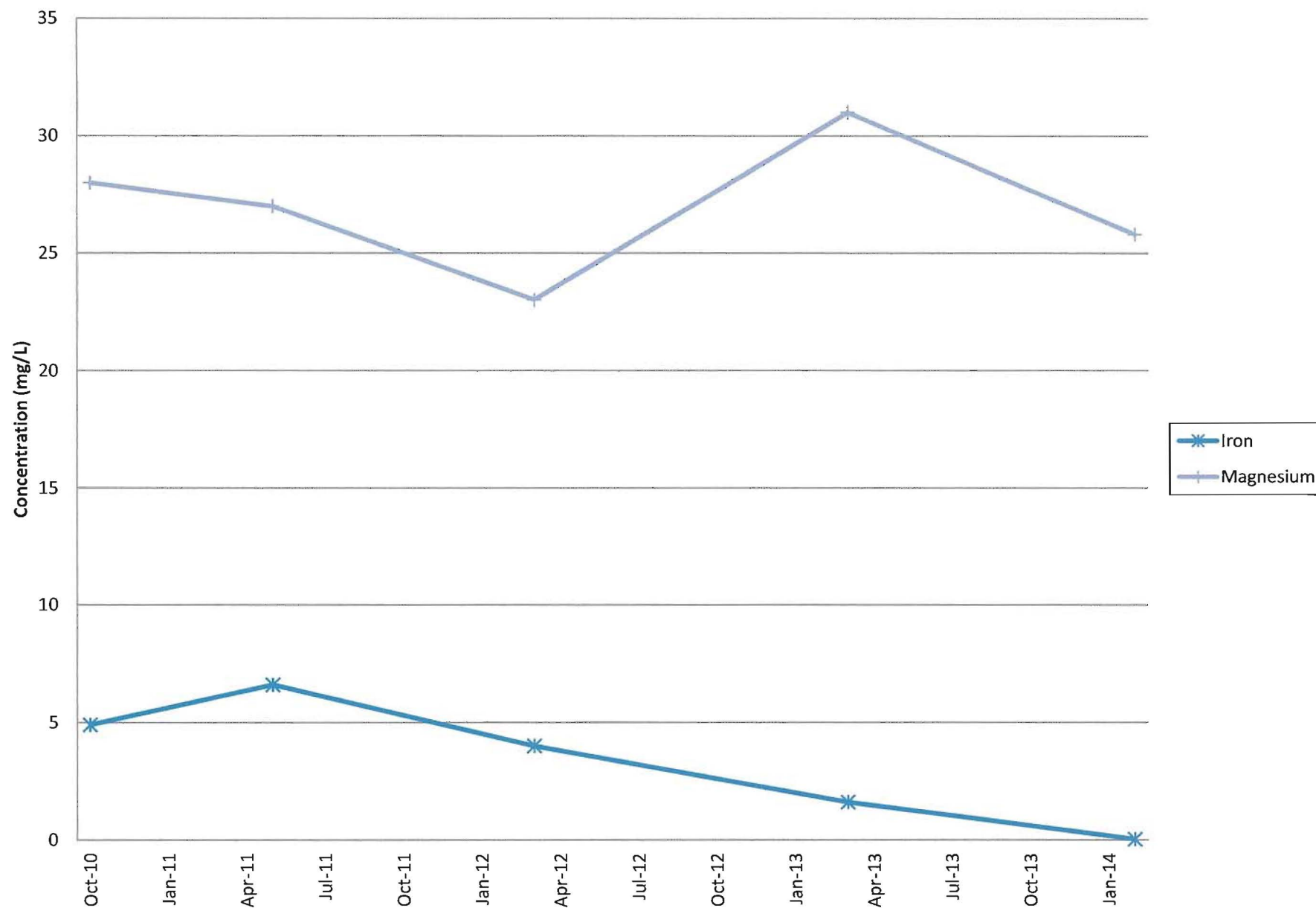
MWC-2 Field Parameters (Part 1)



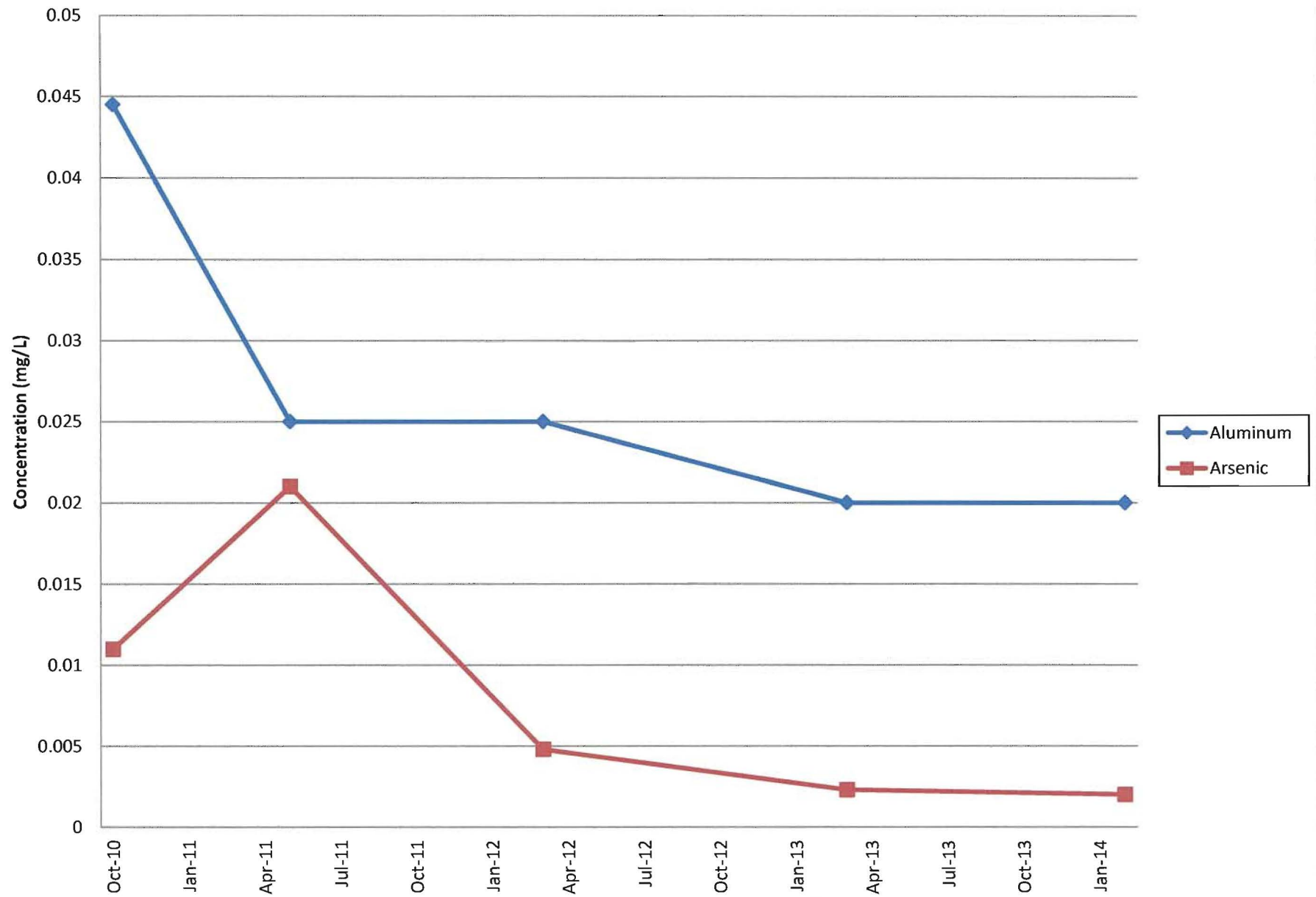
MWC-2 Field Parameters (Part 2)



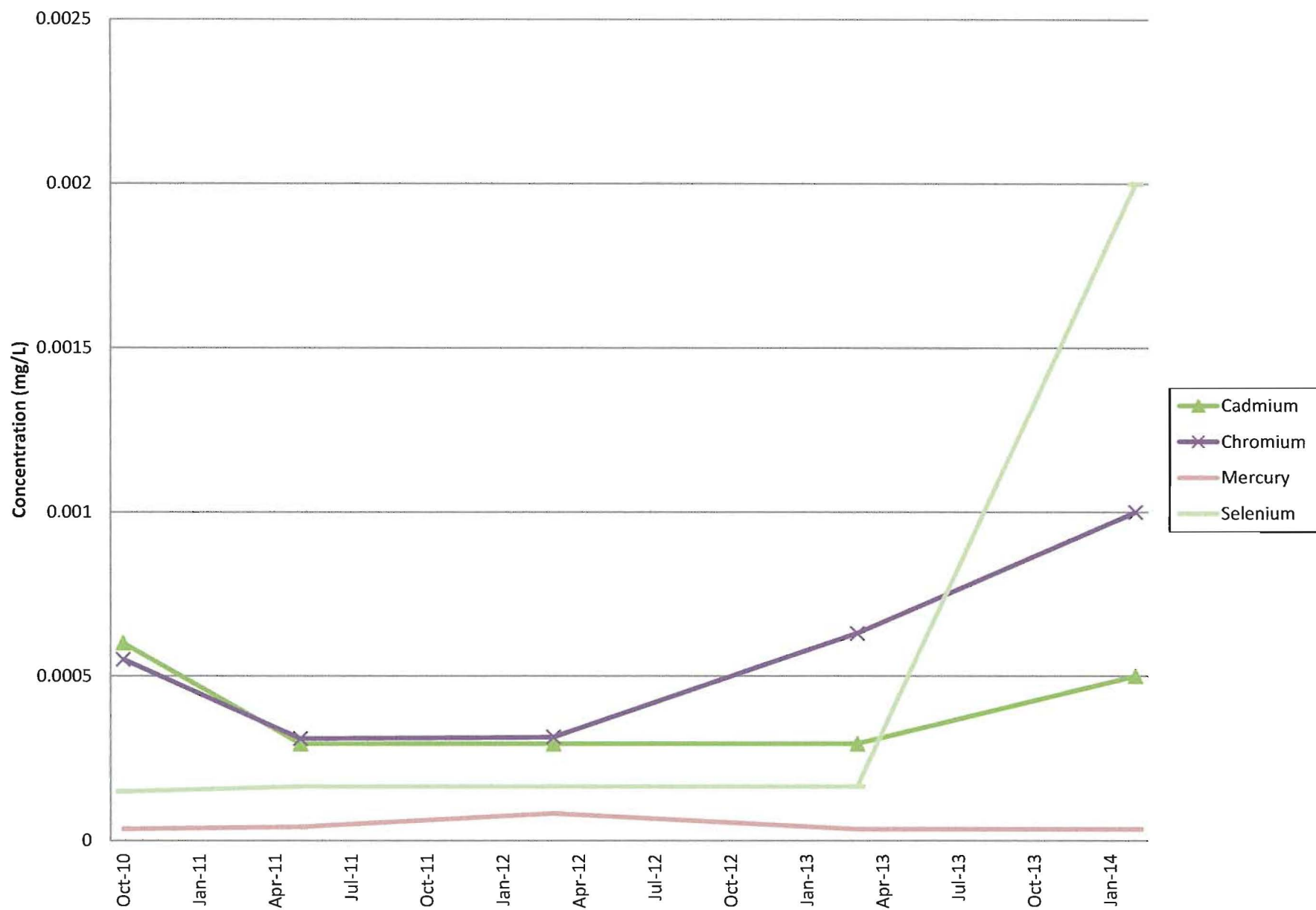
MWC-203 Metals (Part 1)



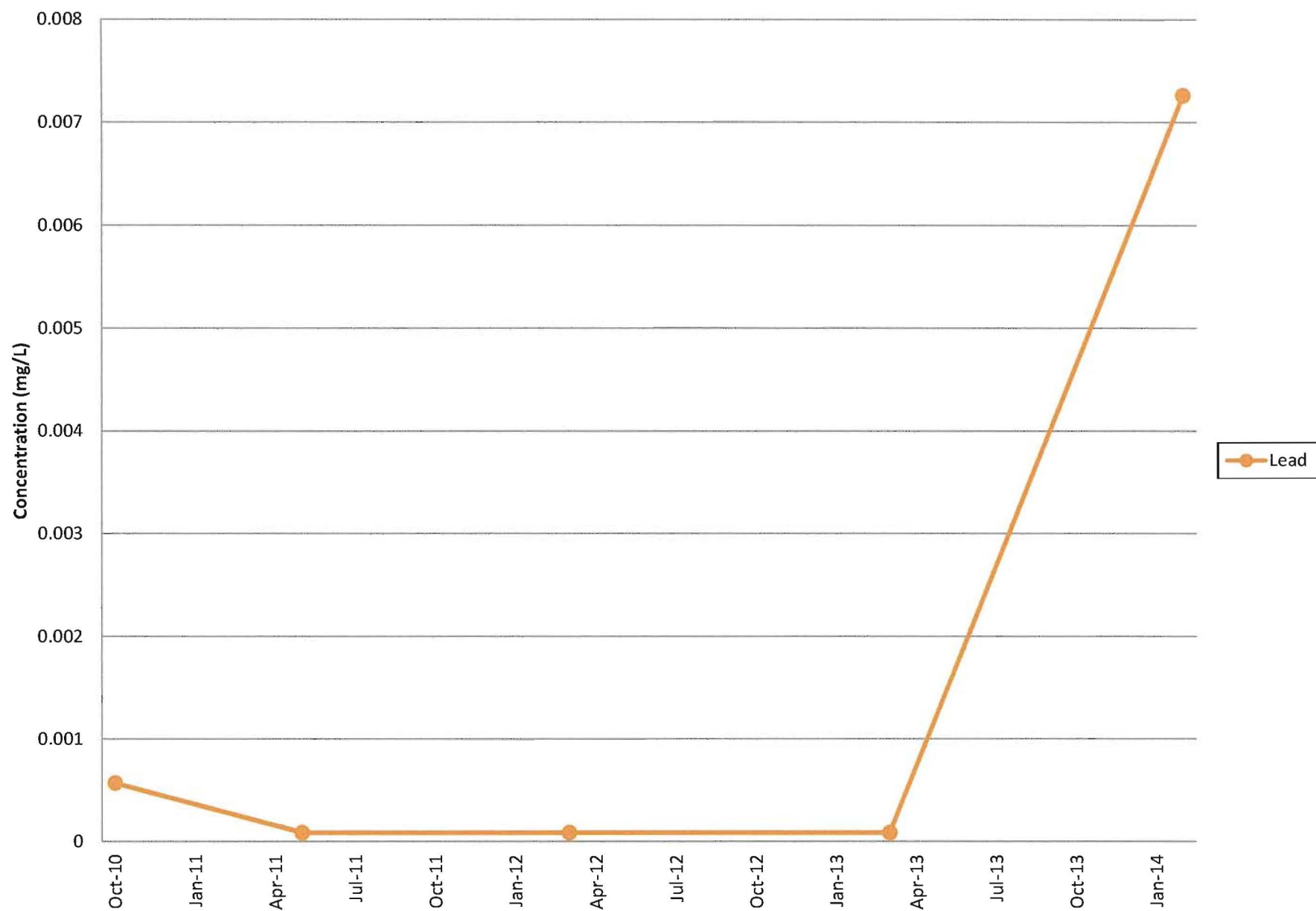
MWC-203 Metals (Part 2)



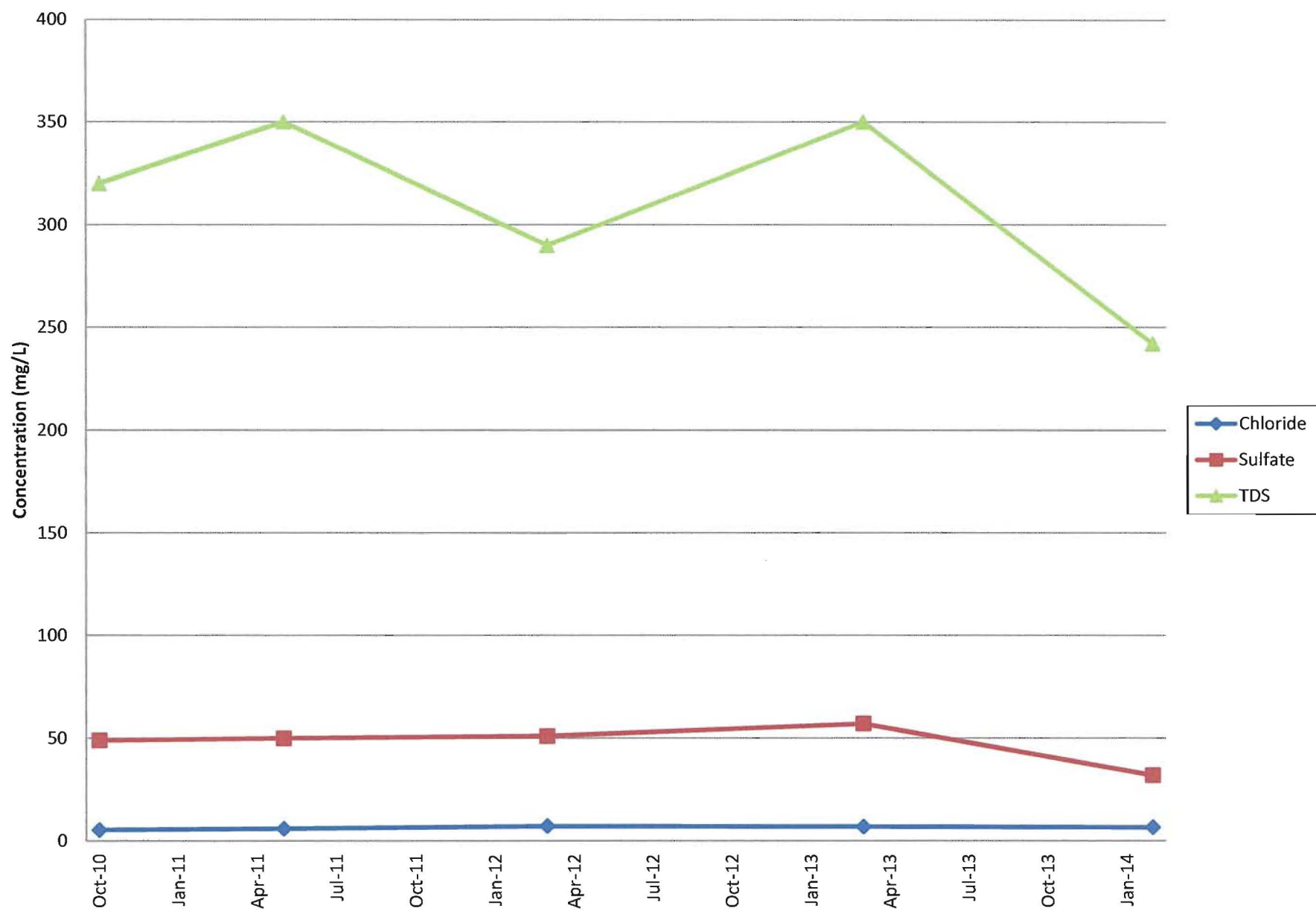
MWC-203 Metals (Part 3)



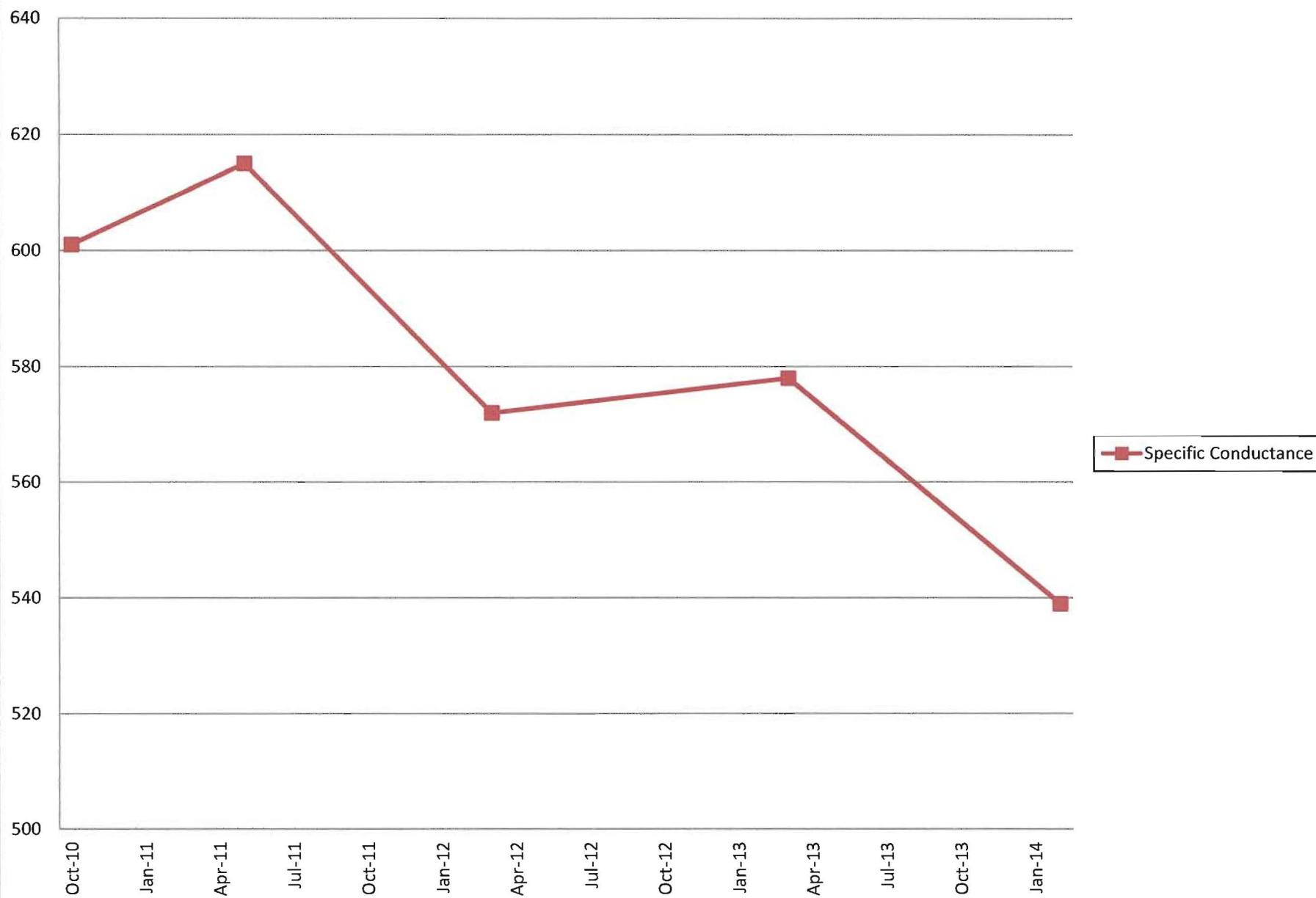
MWC-203 Metals (Part 4)



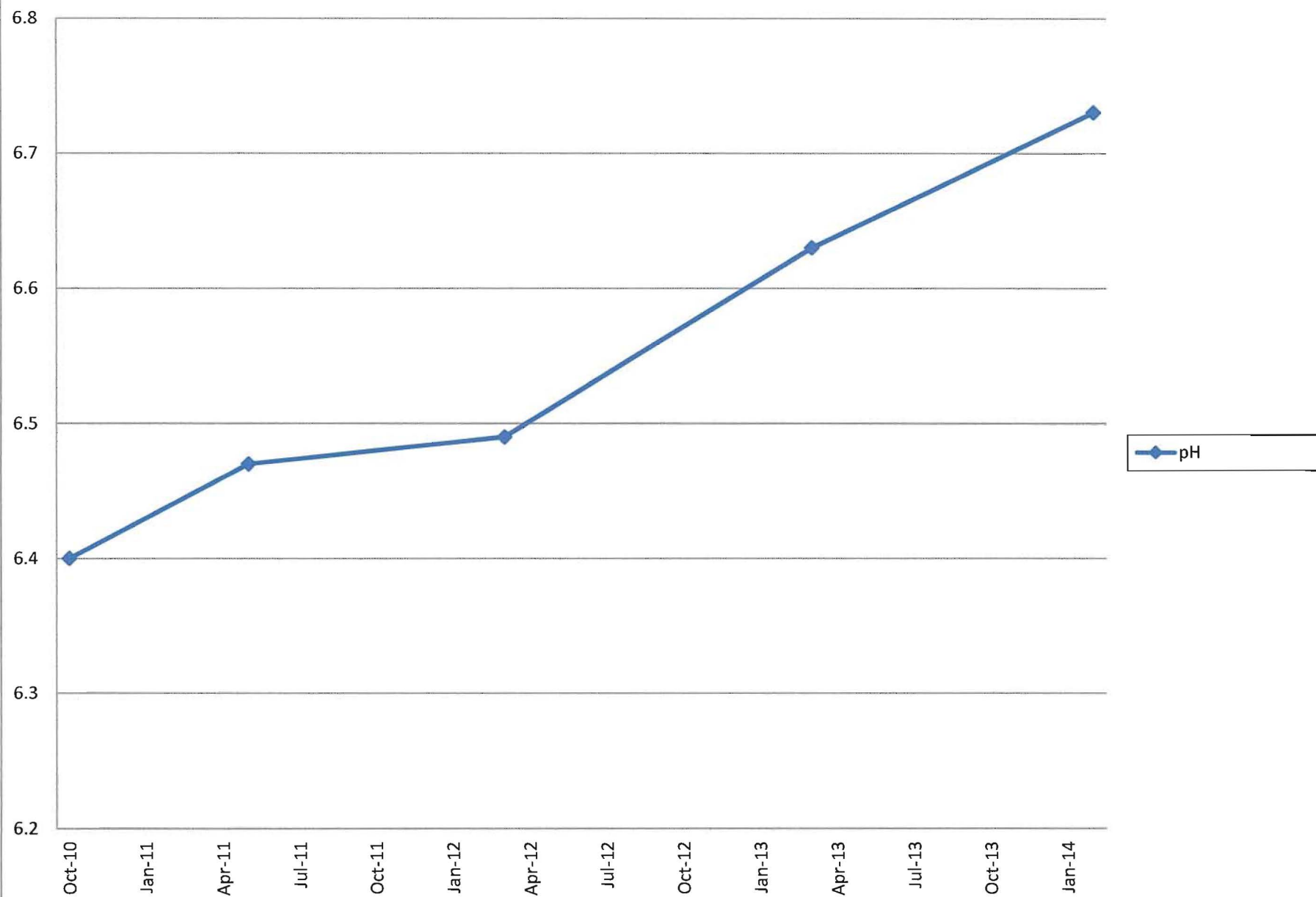
MWC-203 General Chemistry (Part 1)



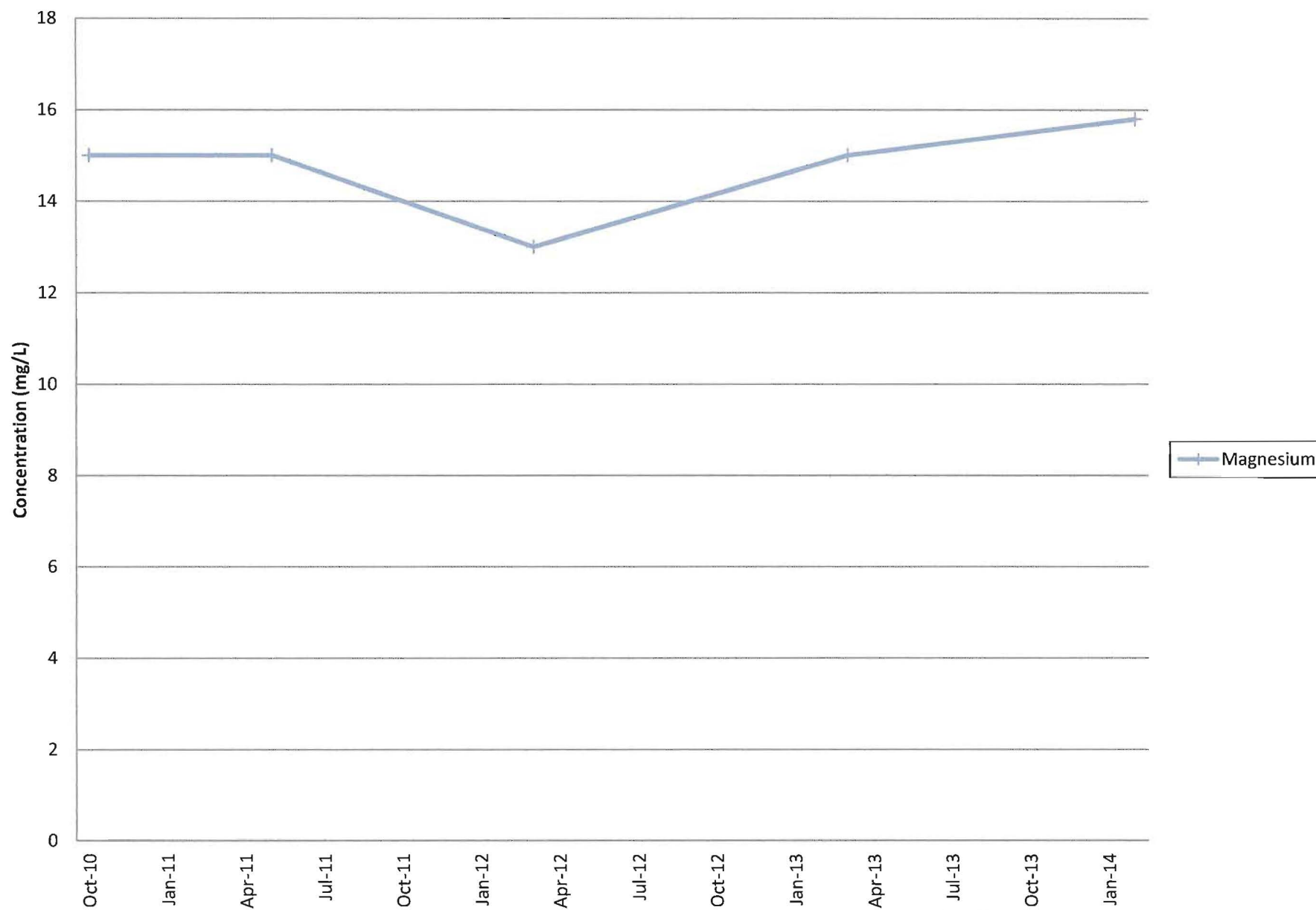
MWC-203 Field Parameters (Part 1)



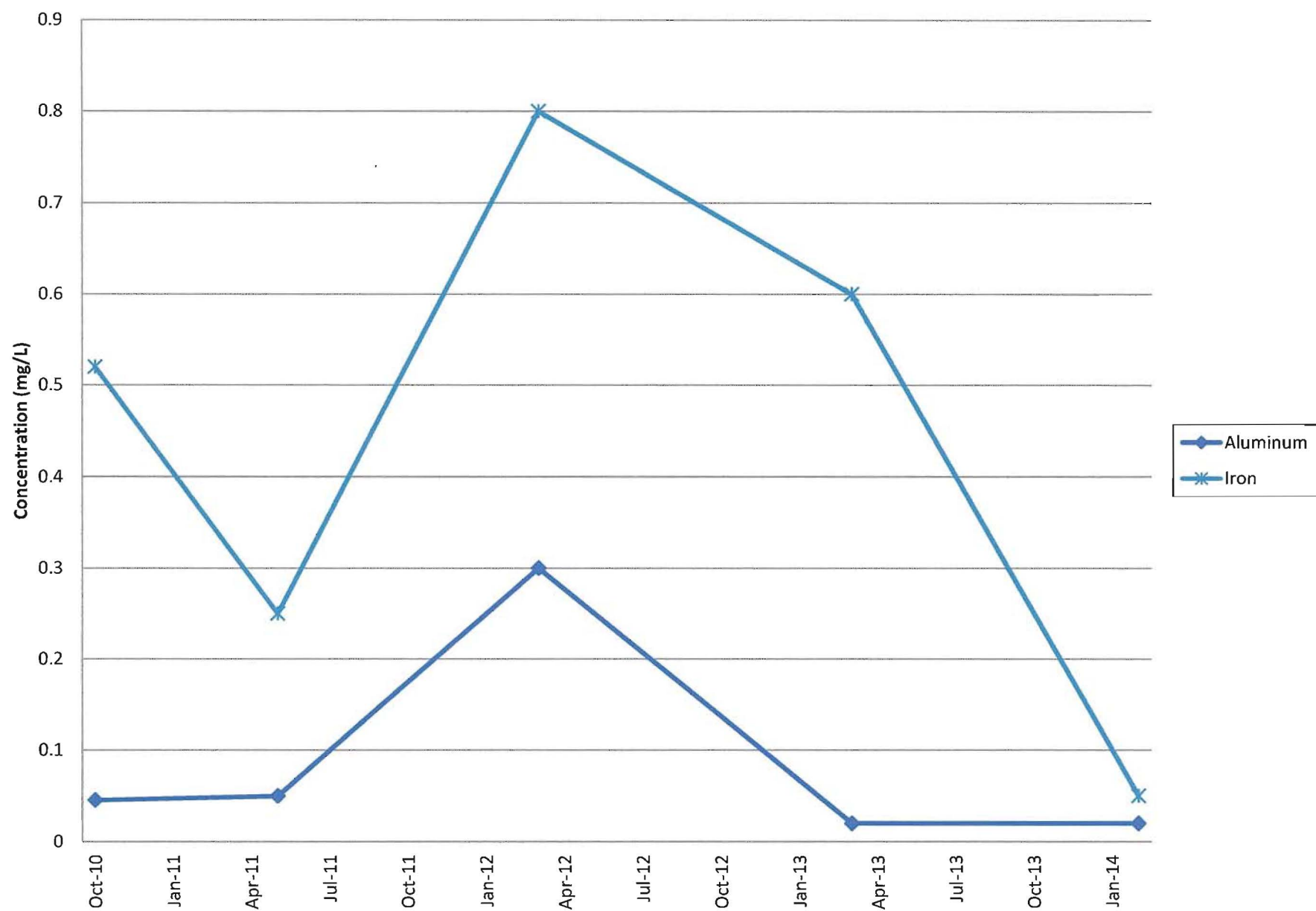
MWC-203 Field Parameters (Part 2)



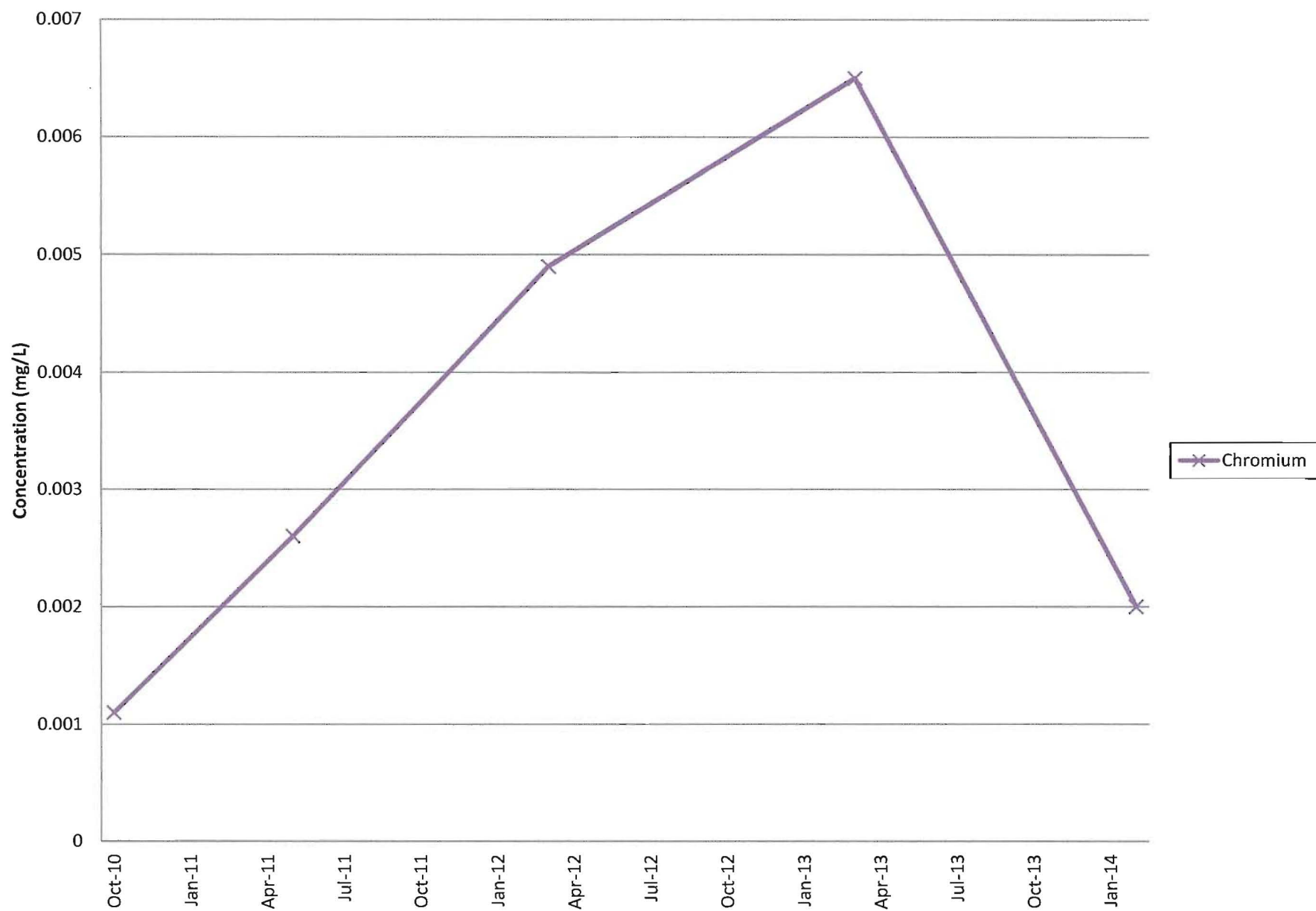
MWC-204 Metals (Part 1)



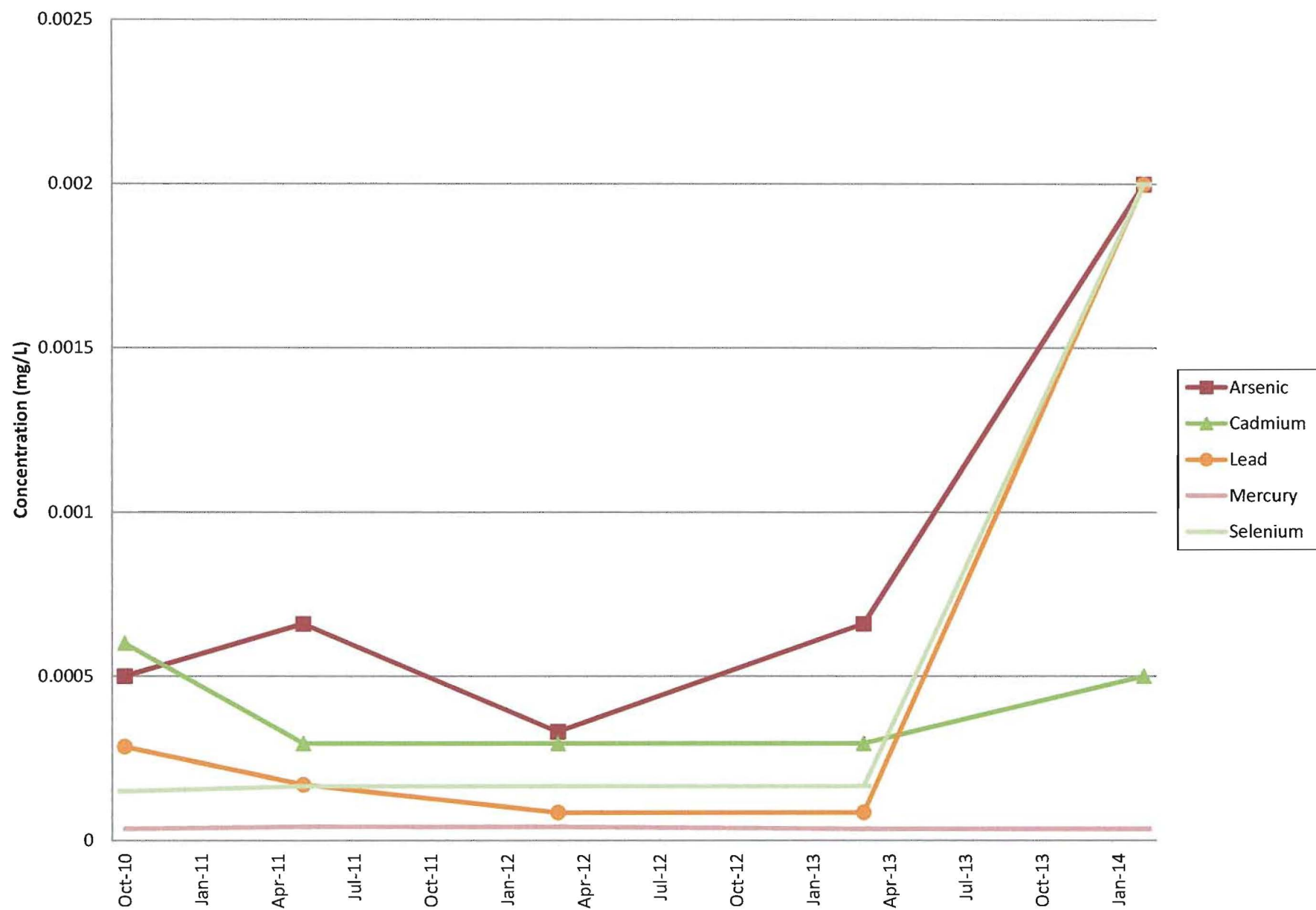
MWC-204 Metals (Part 2)



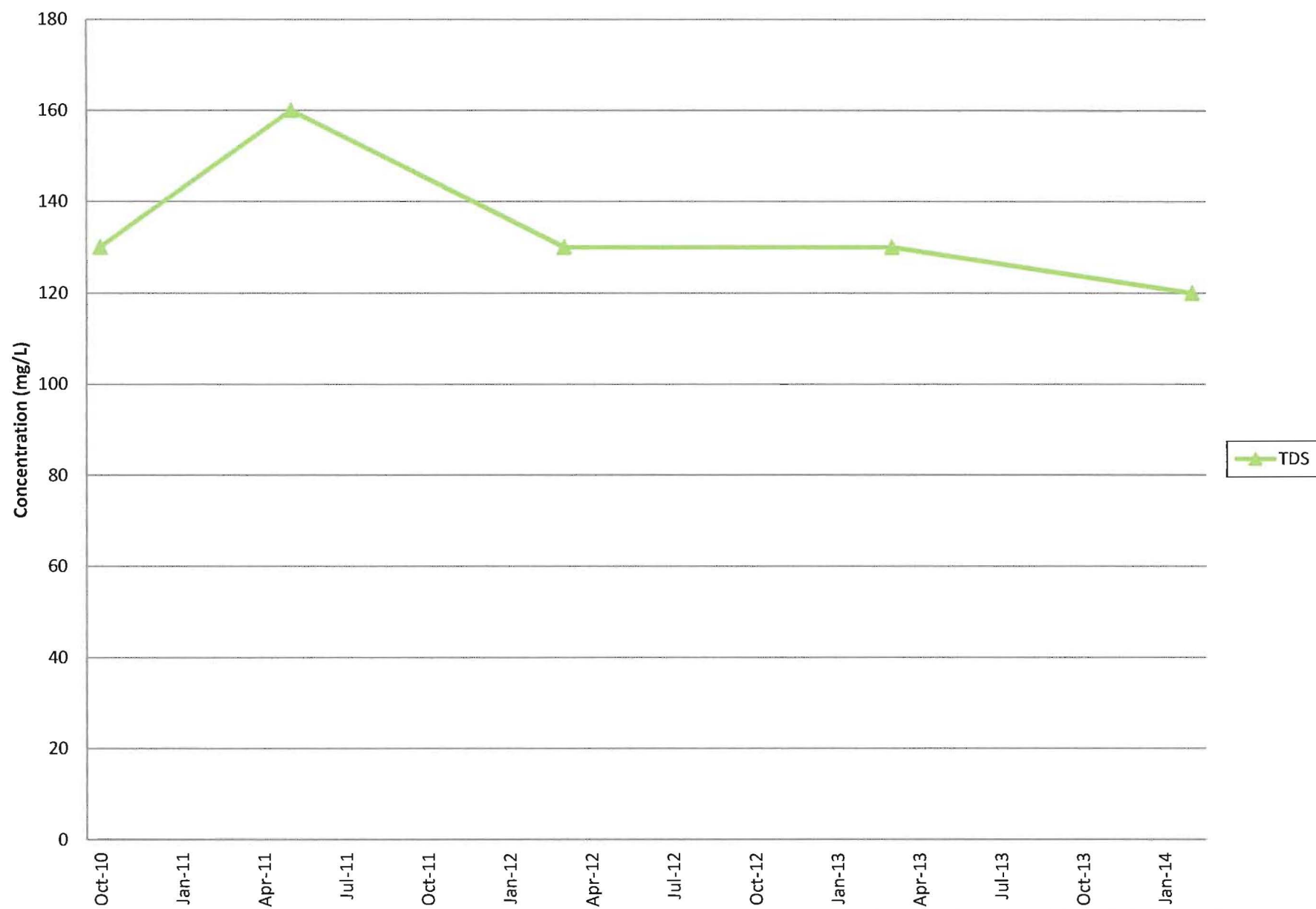
MWC-204 Metals (Part 3)



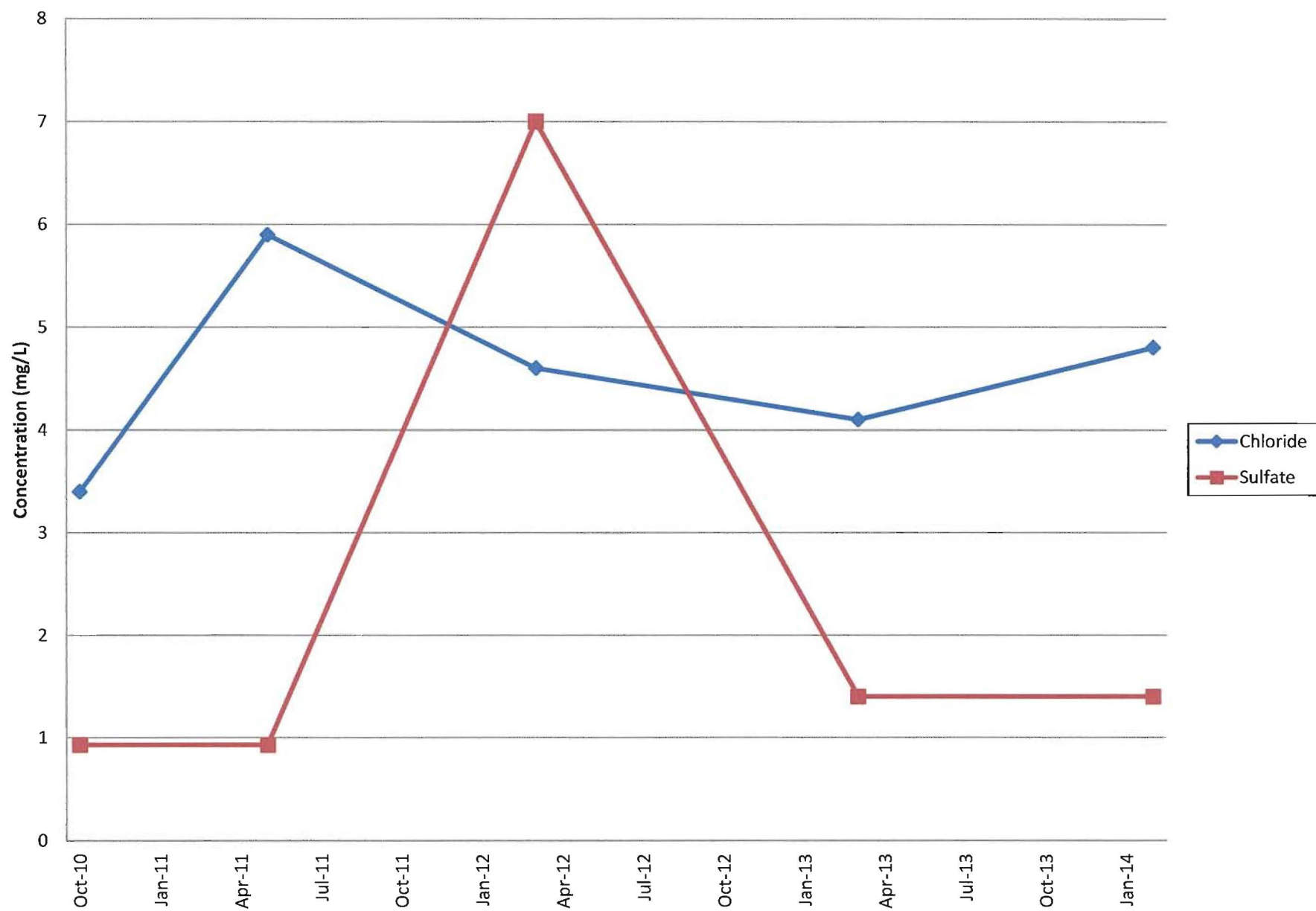
MWC-204 Metals (Part 4)



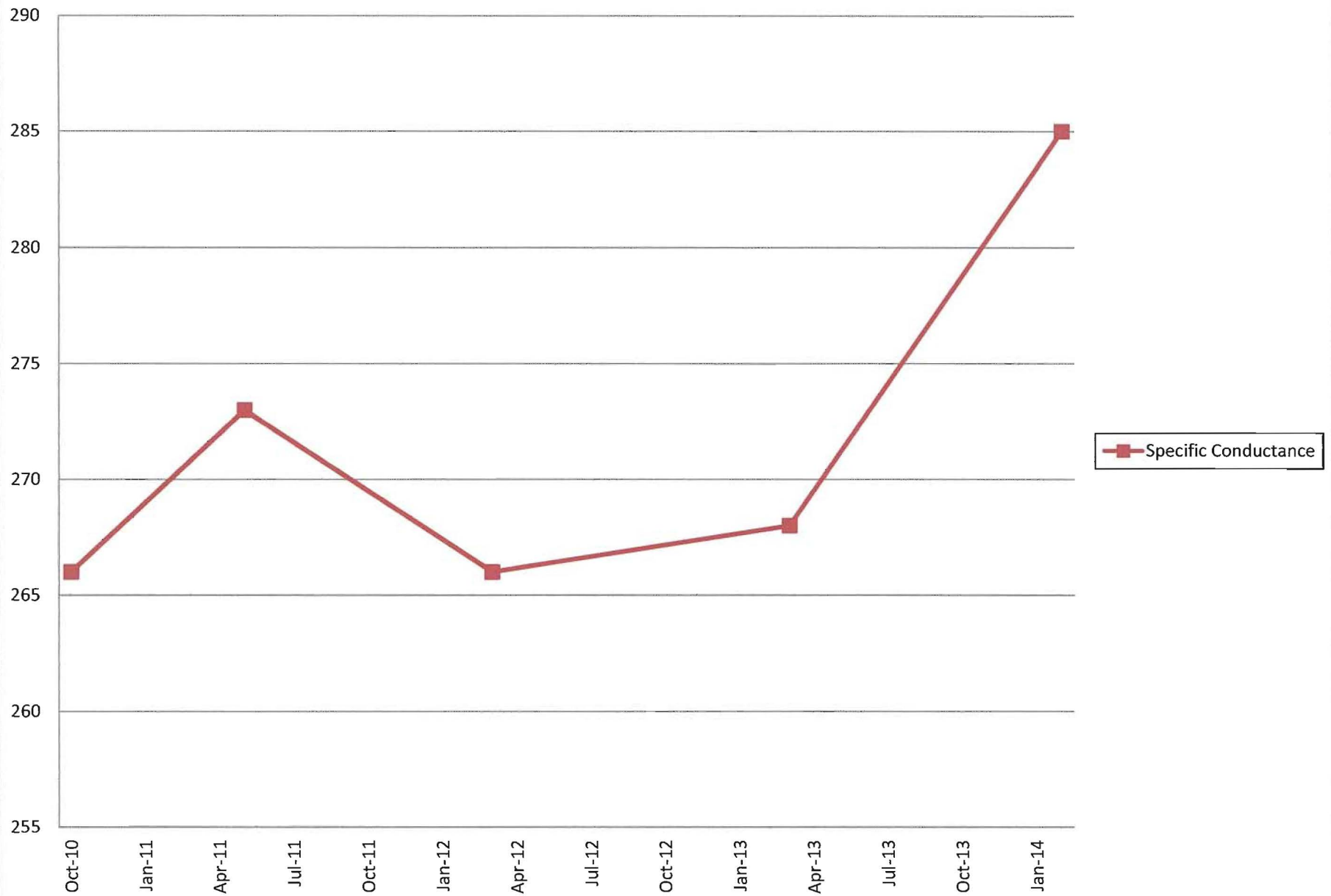
MWC-204 General Chemistry (Part 1)



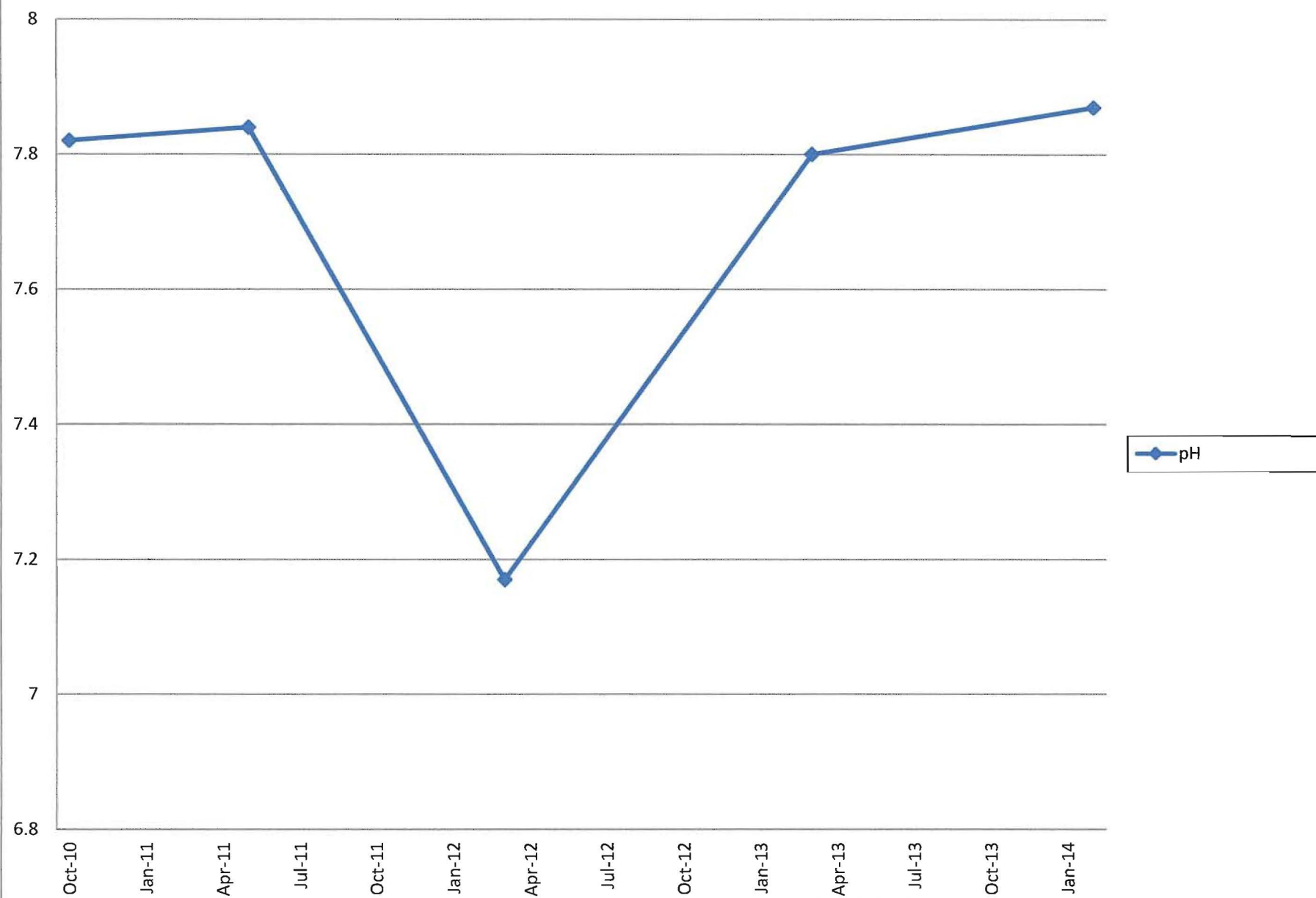
MWC-204 General Chemistry (Part 2)



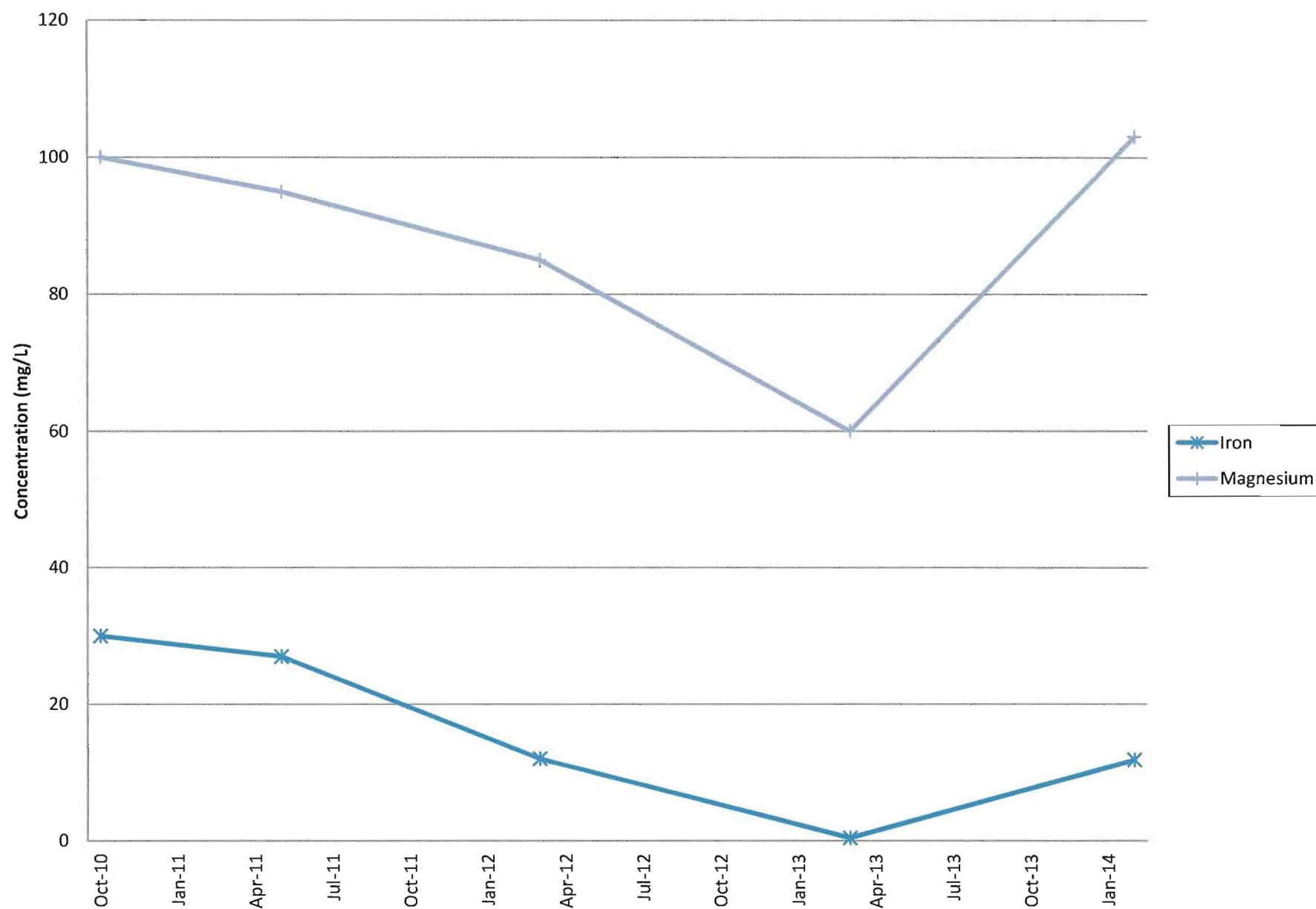
MWC-204 Field Parameters (Part 1)



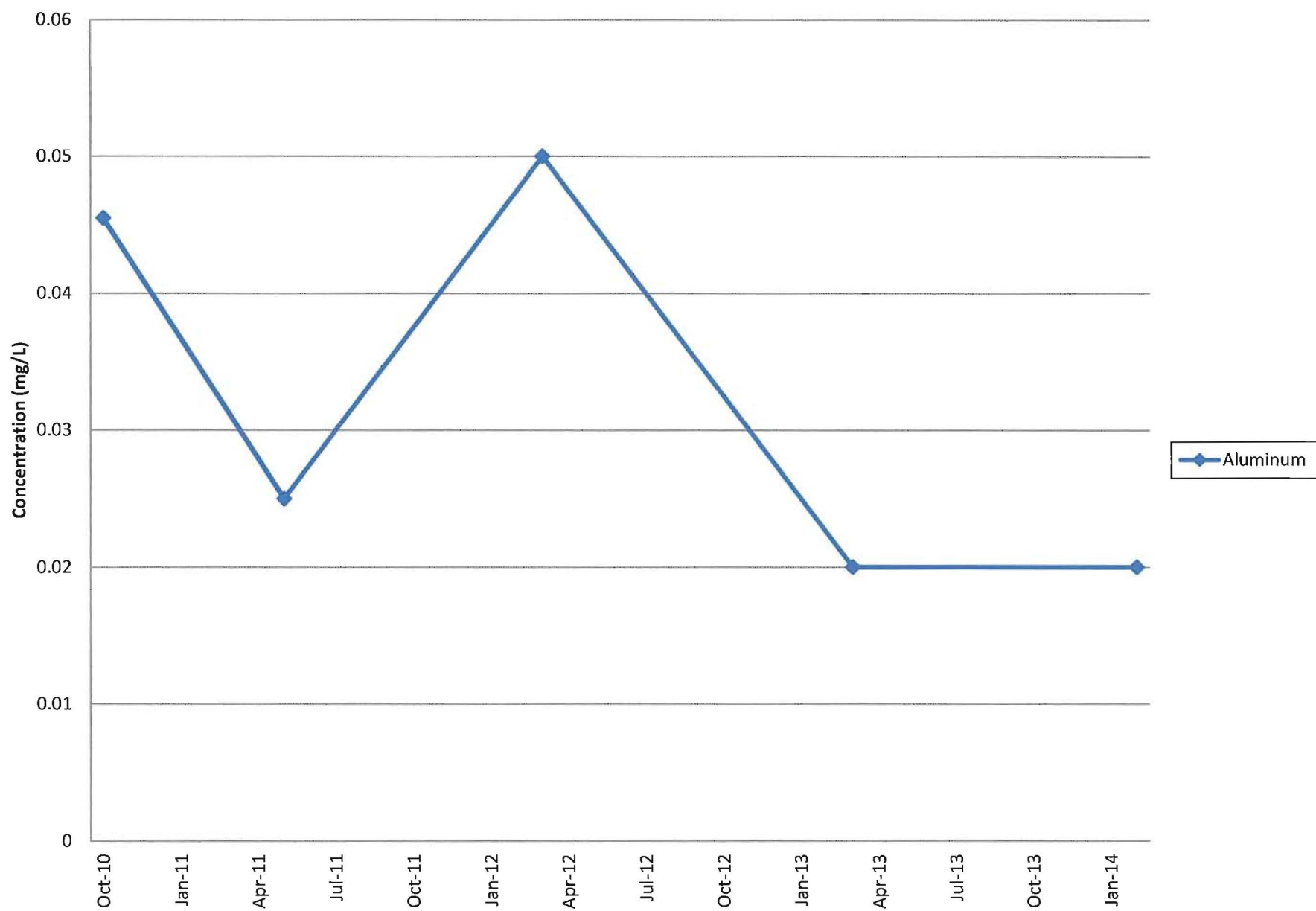
MWC-204 Field Parameters (Part 2)



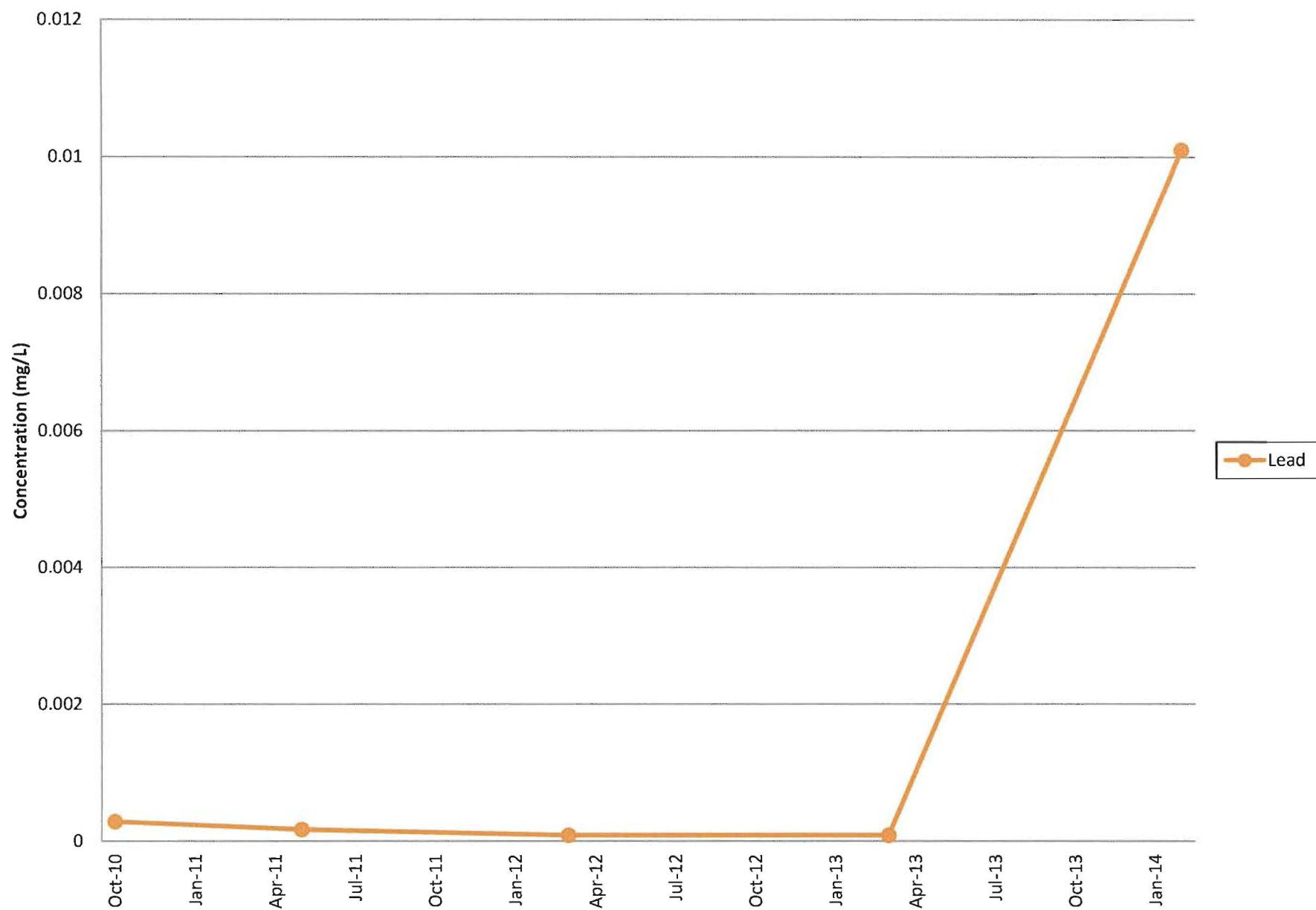
MWC-210 Metals (Part 1)



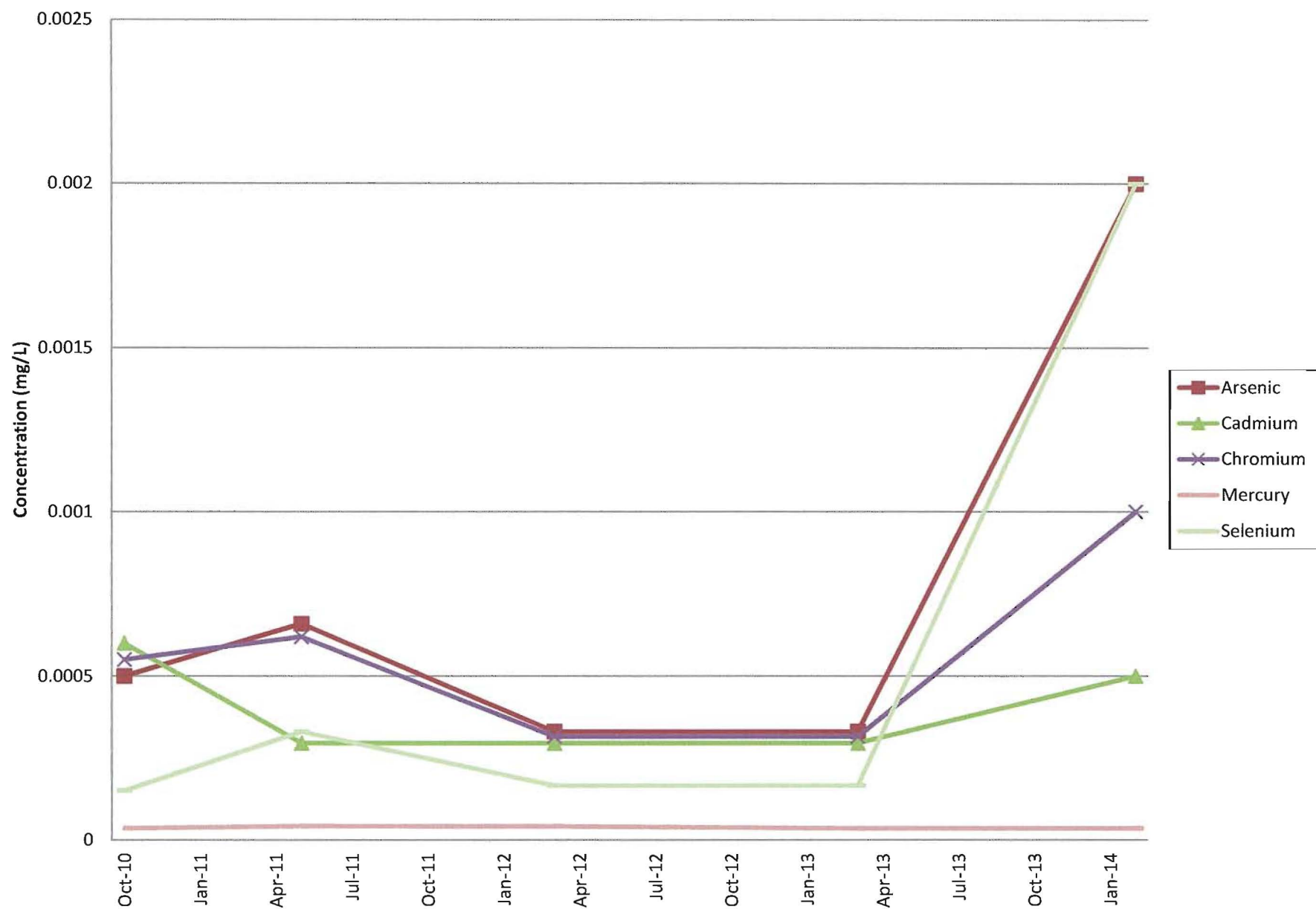
MWC-210 Metals (Part 2)



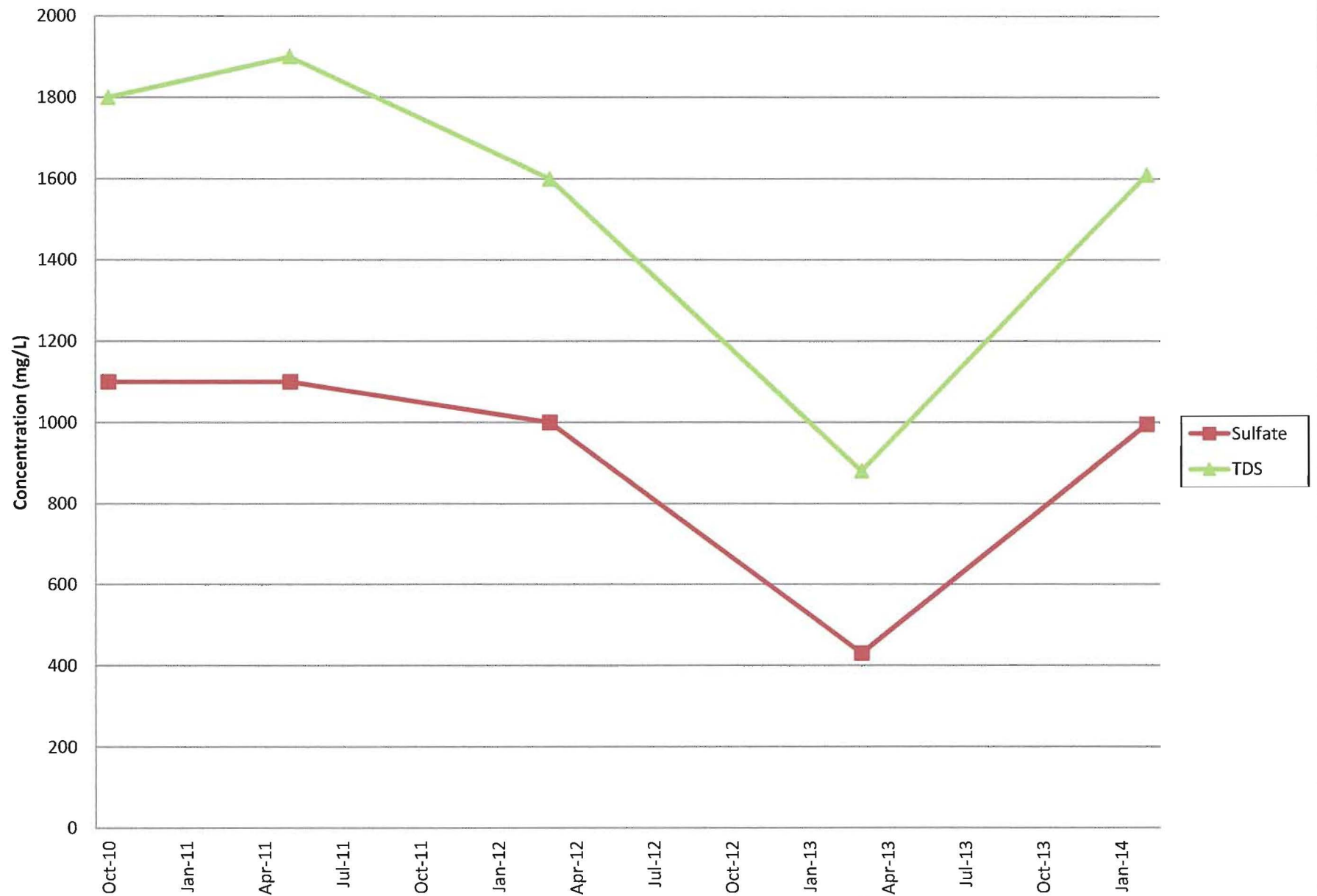
MWC-210 Metals (Part 3)



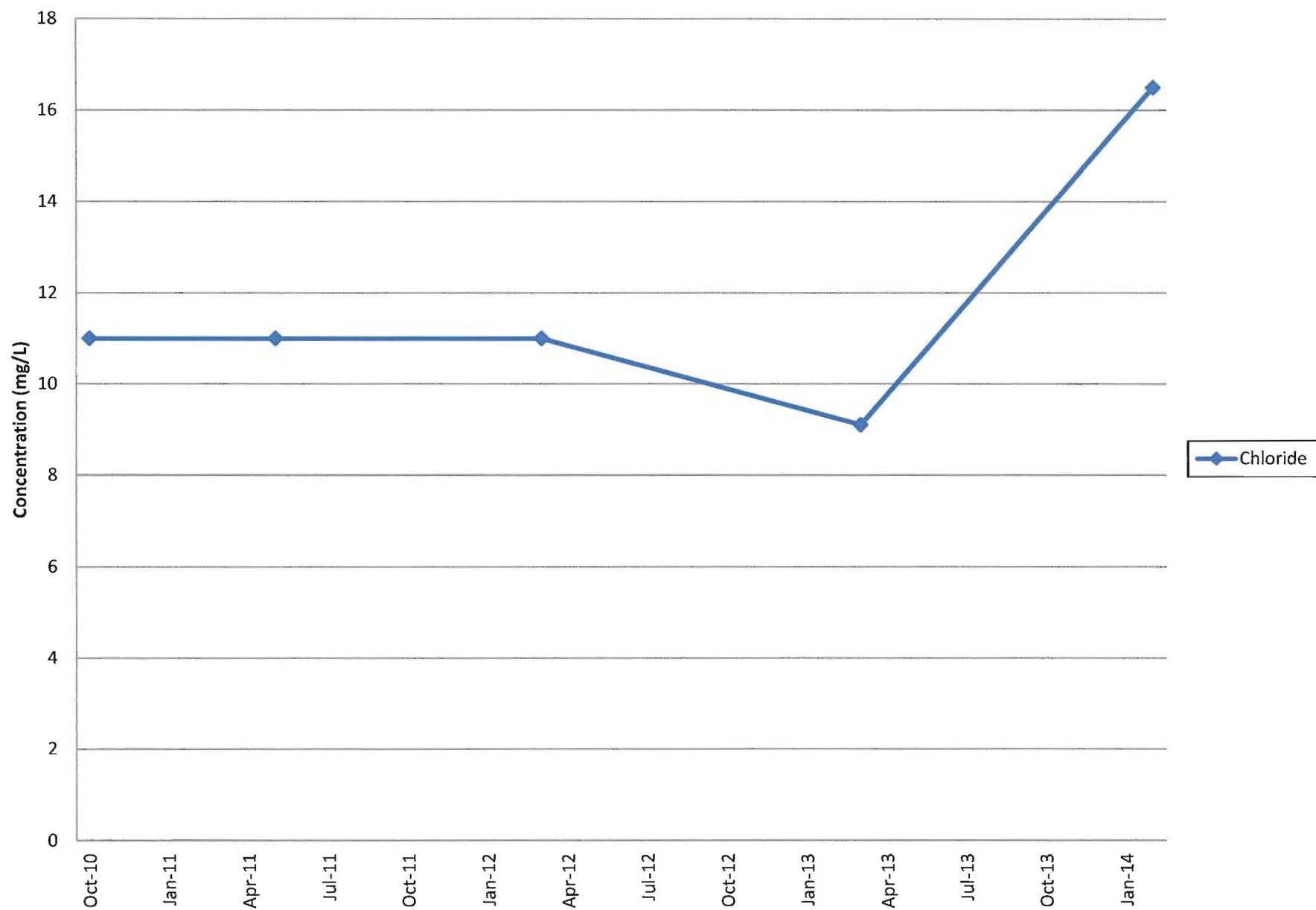
MWC-210 Metals (Part 4)



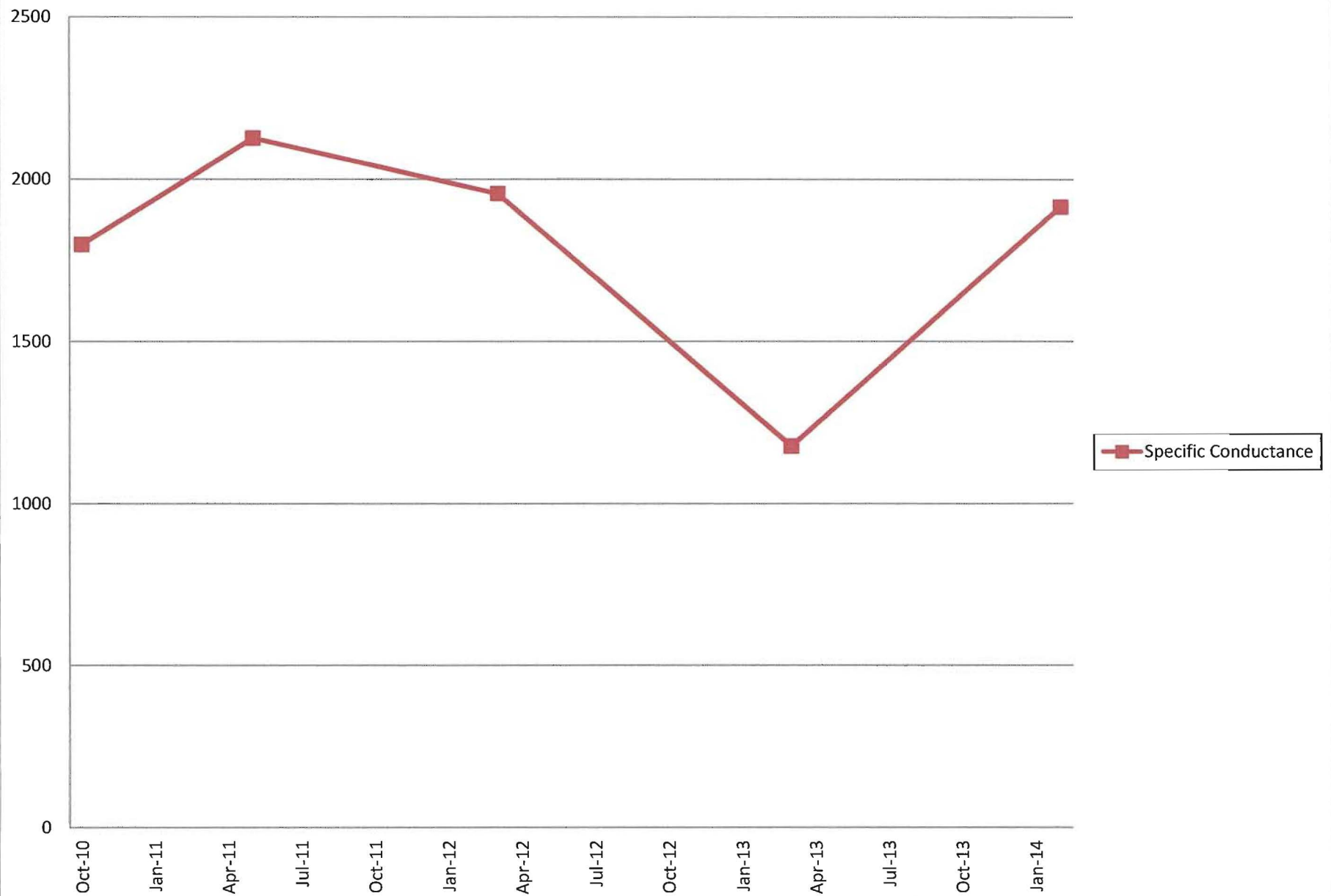
MWC-210 Chemistry General (Part 1)



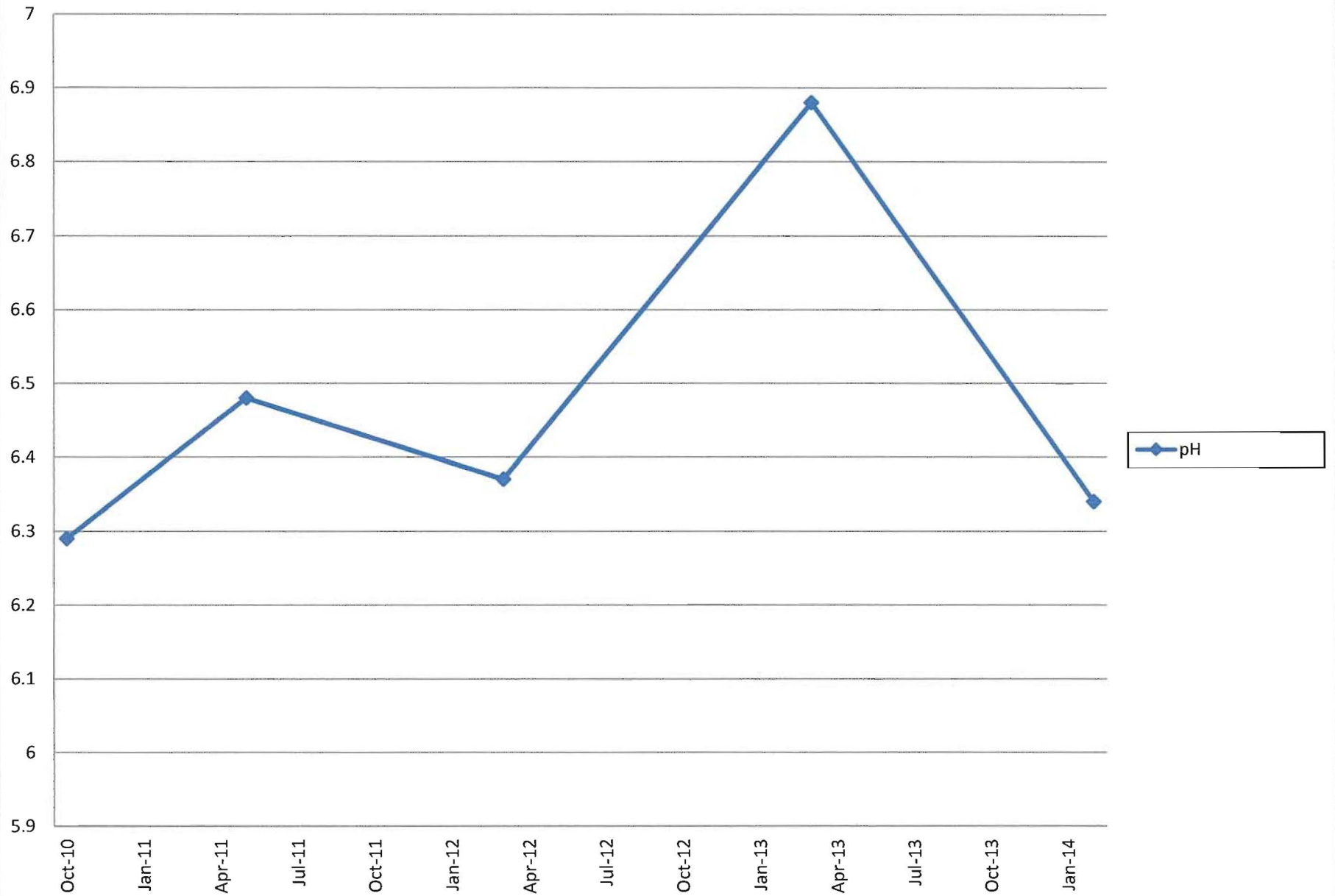
MWC-210 Chemistry General (Part 2)



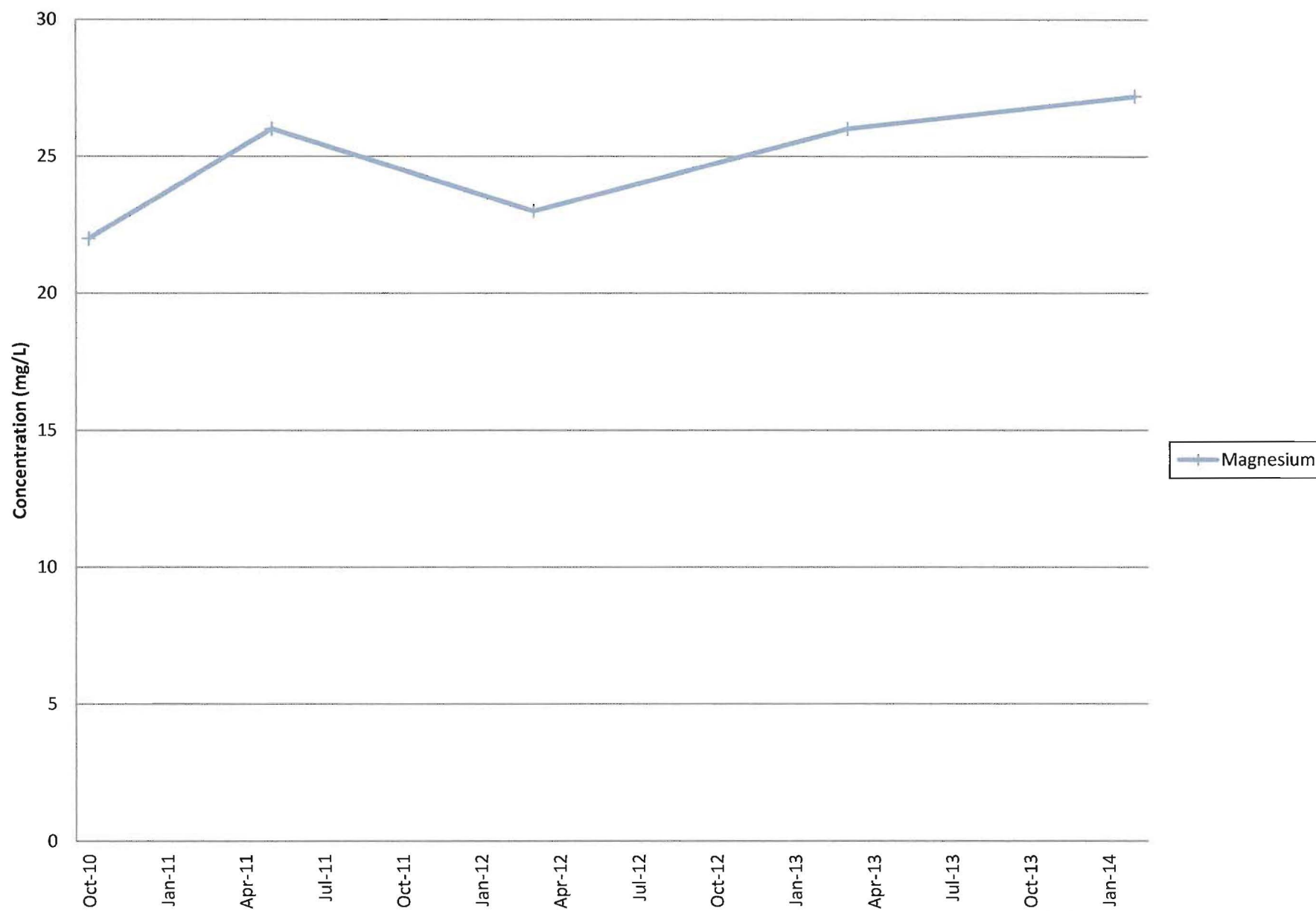
MWC-210 Field Parameters (Part 1)



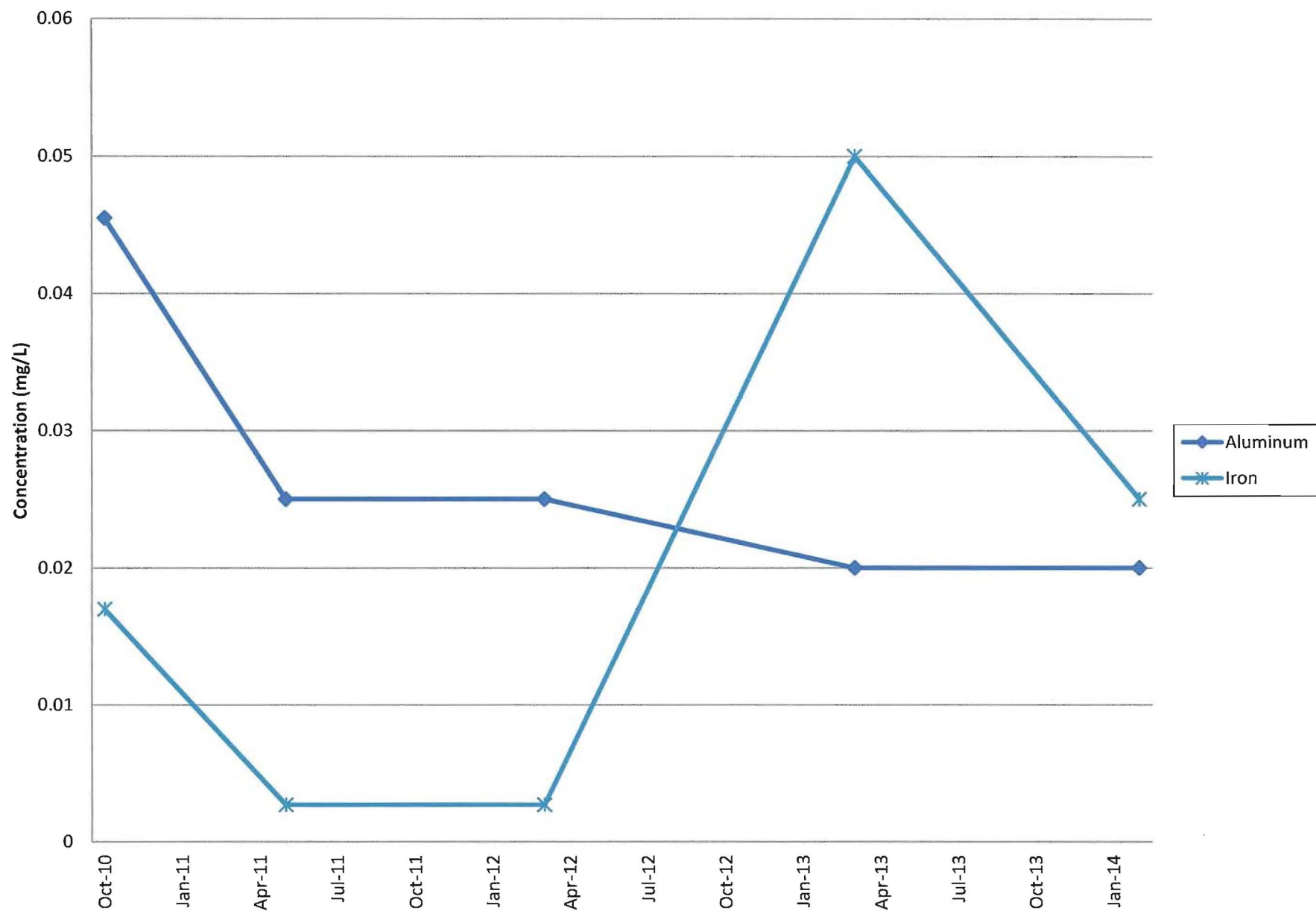
MWC-210 Field Parameters (Part 2)



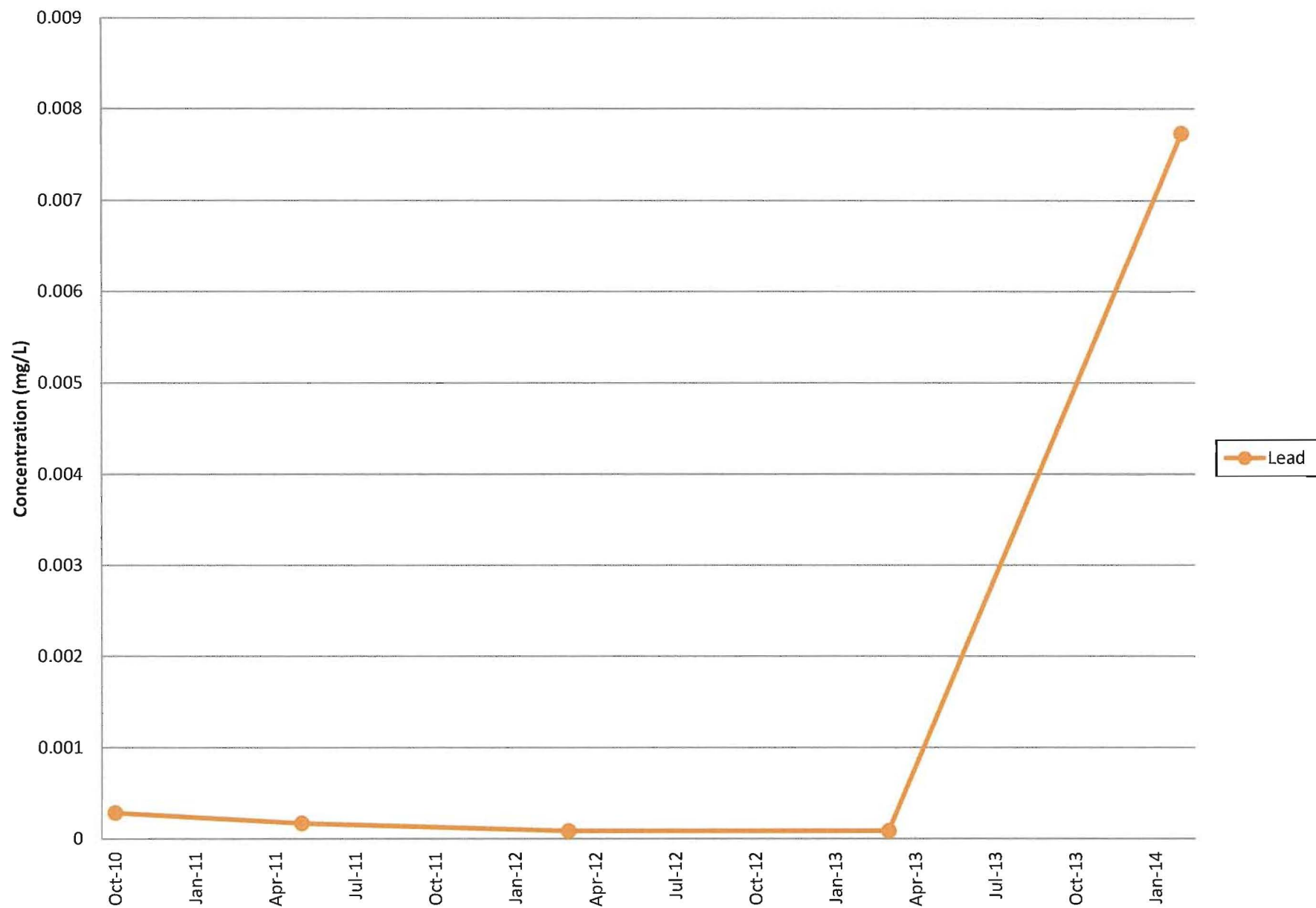
MWC-212 Metals (Part 1)



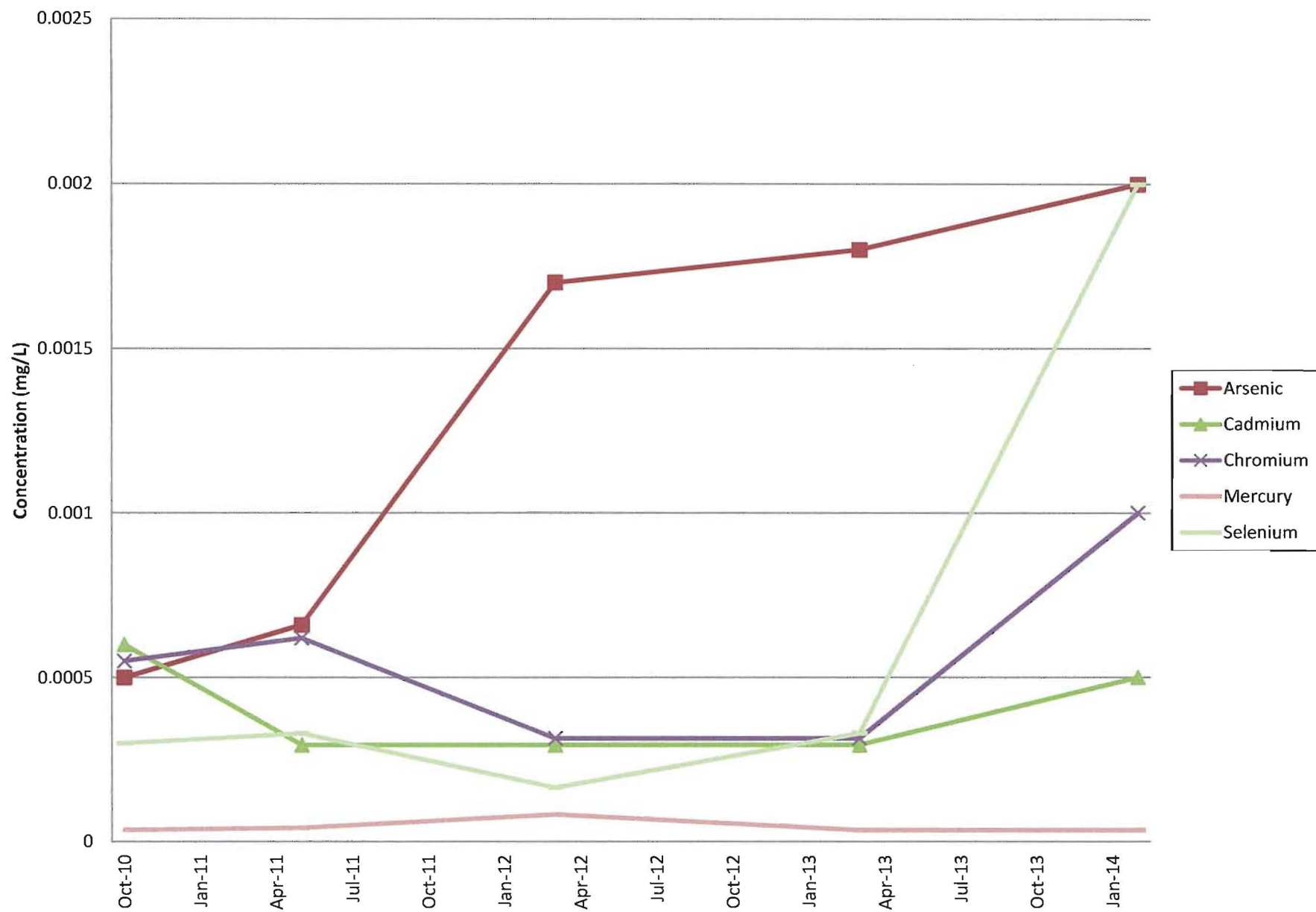
MWC-212 Metals (Part 2)



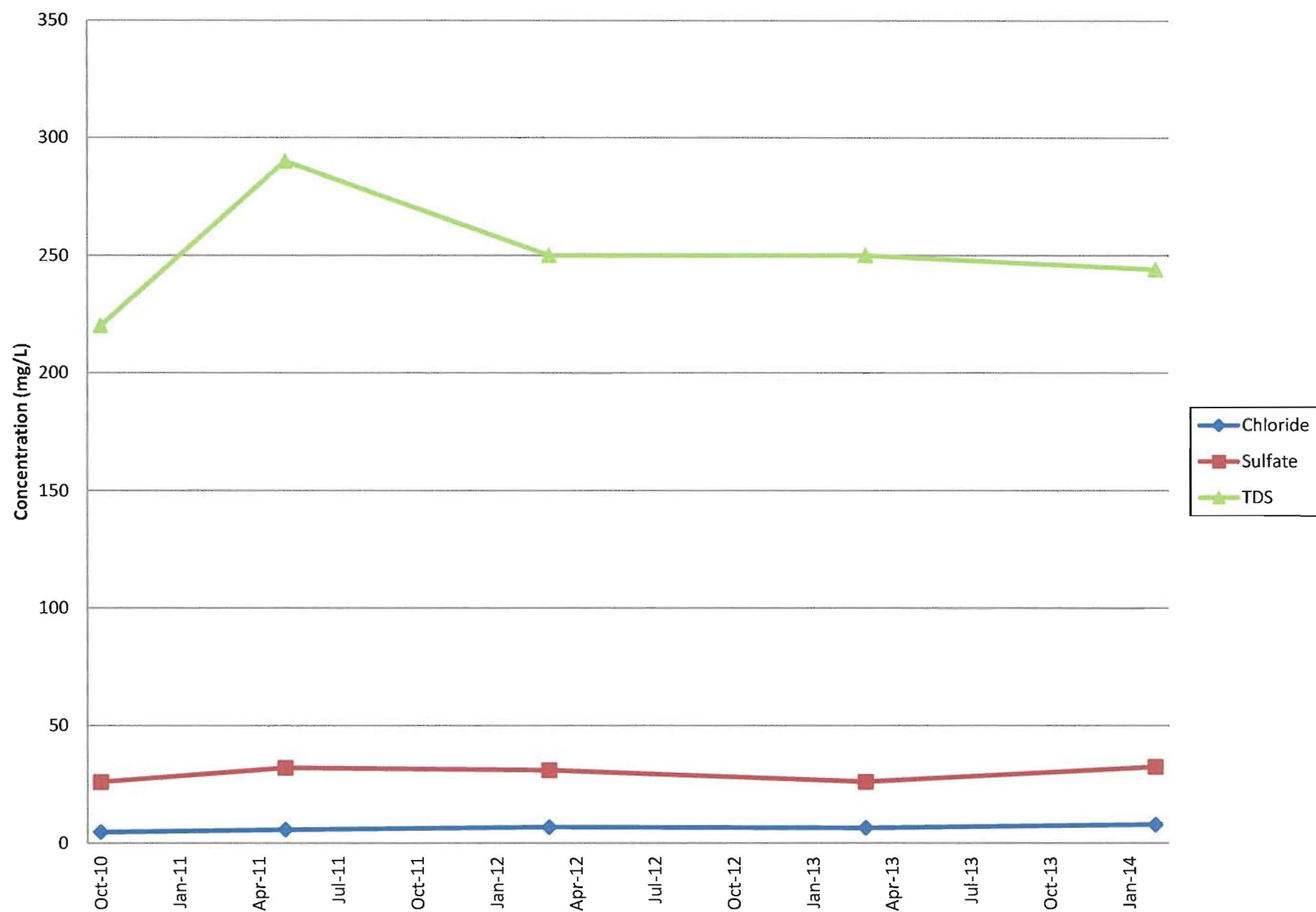
MWC-212 Metals (Part 3)



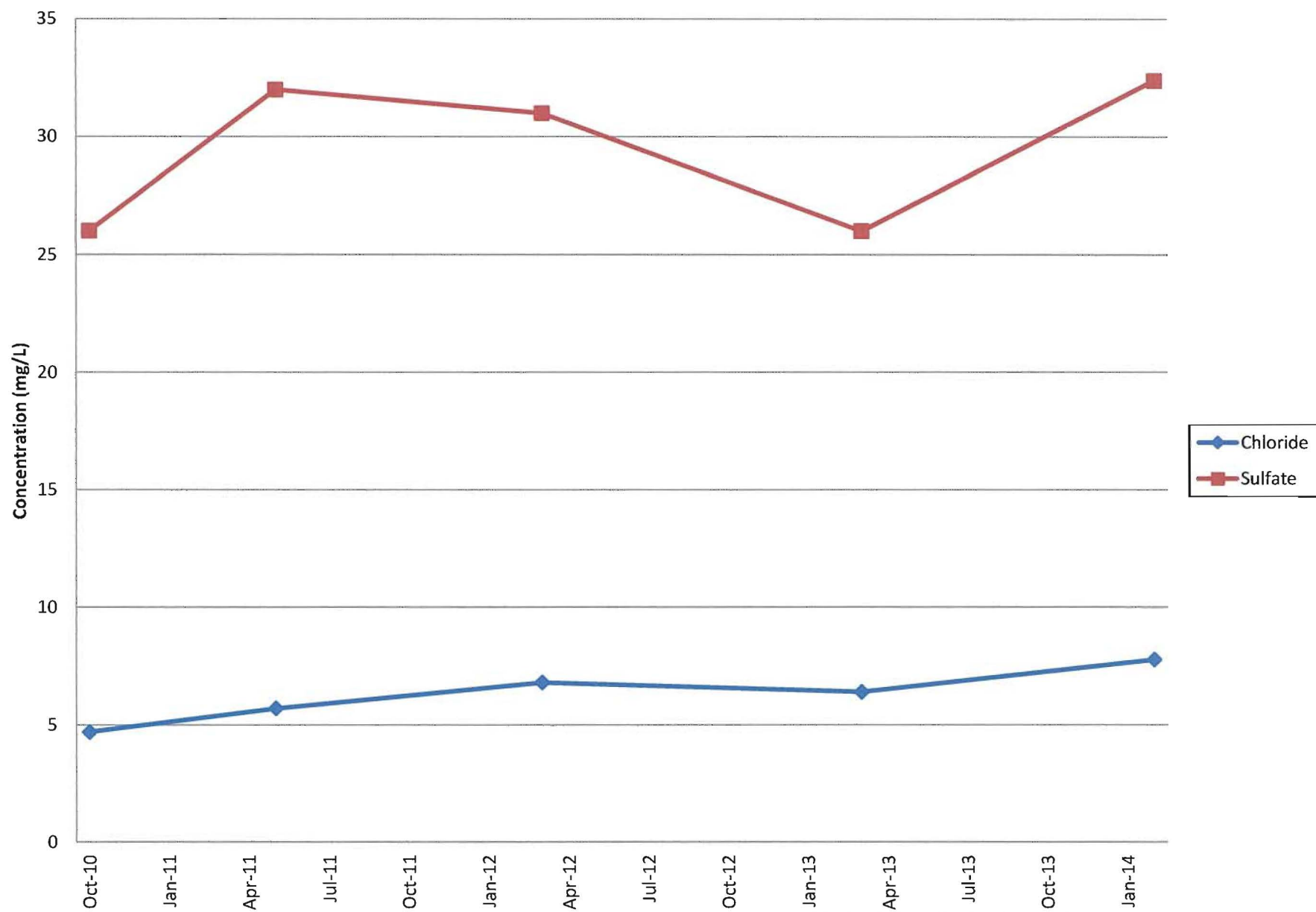
MWC-212 Metals (Part 4)



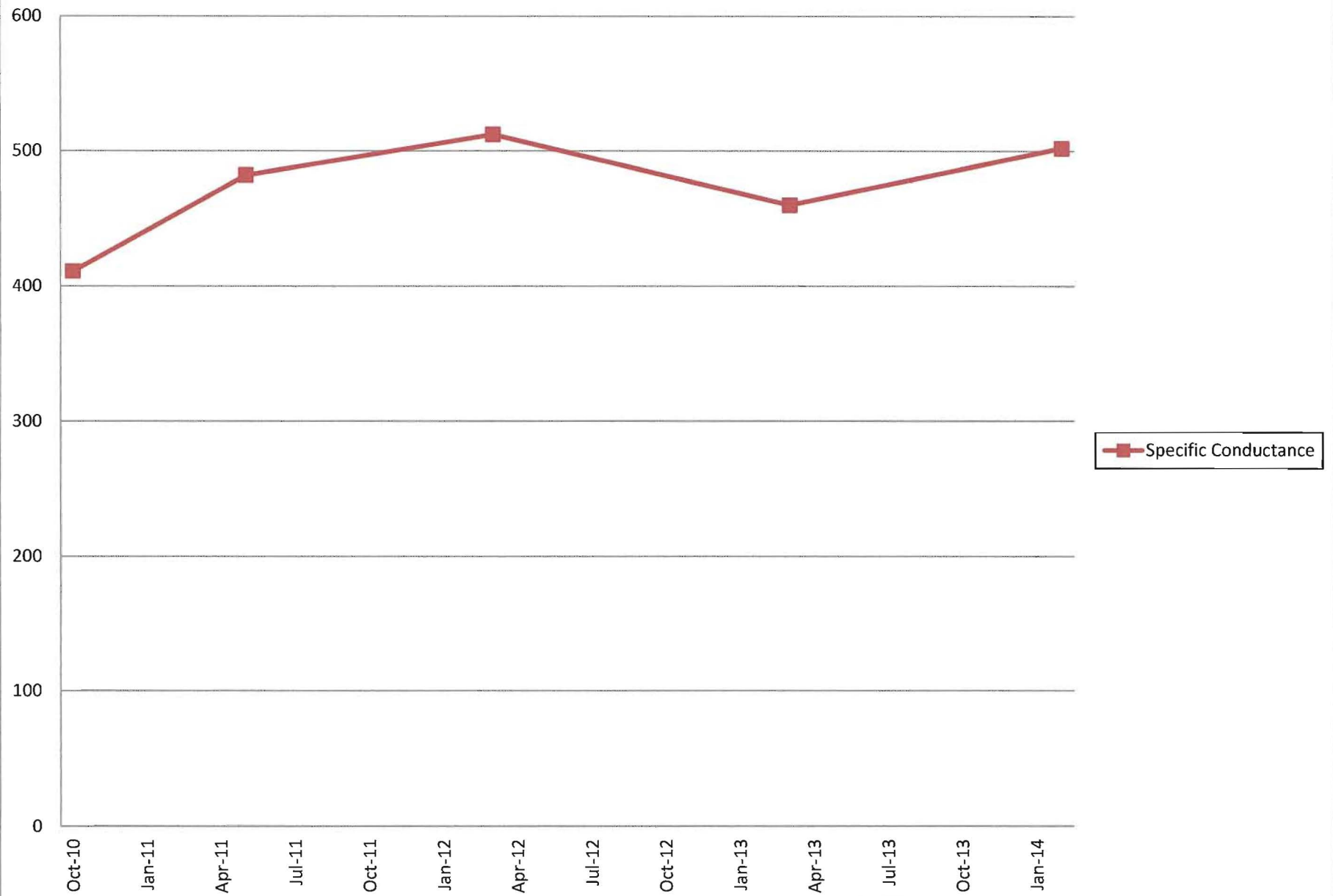
MWC-212 General Chemistry (Part 1)



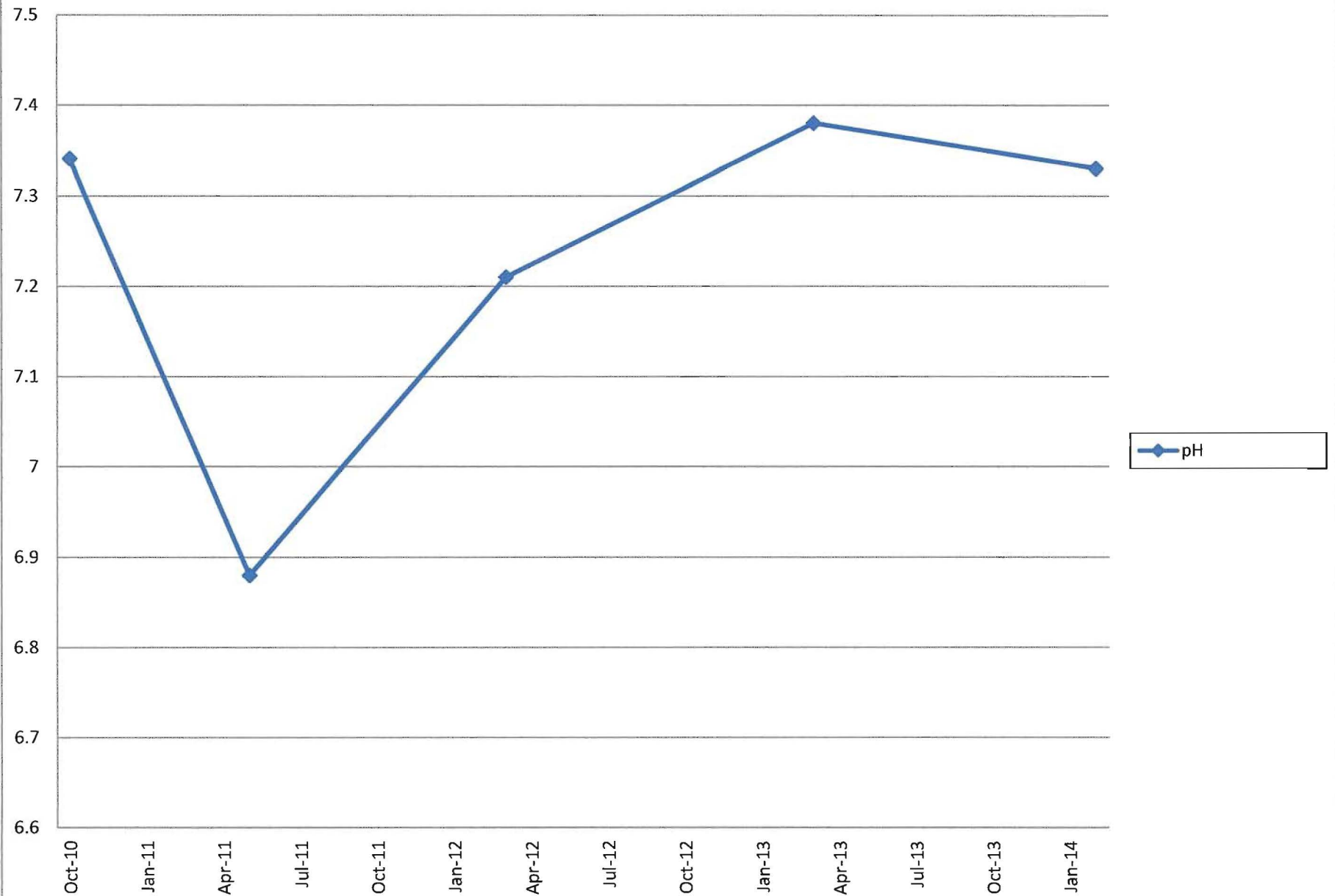
MWC-212 General Chemistry (Part 2)



MWC-212 Field Parameters (Part 1)



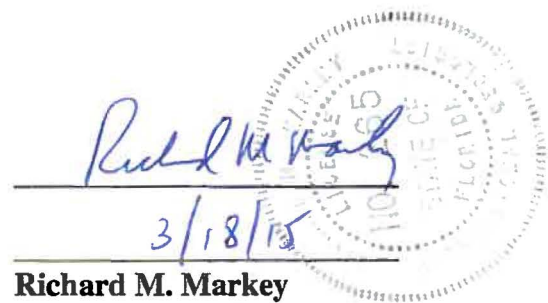
MWC-212 Field Parameters (Part 2)



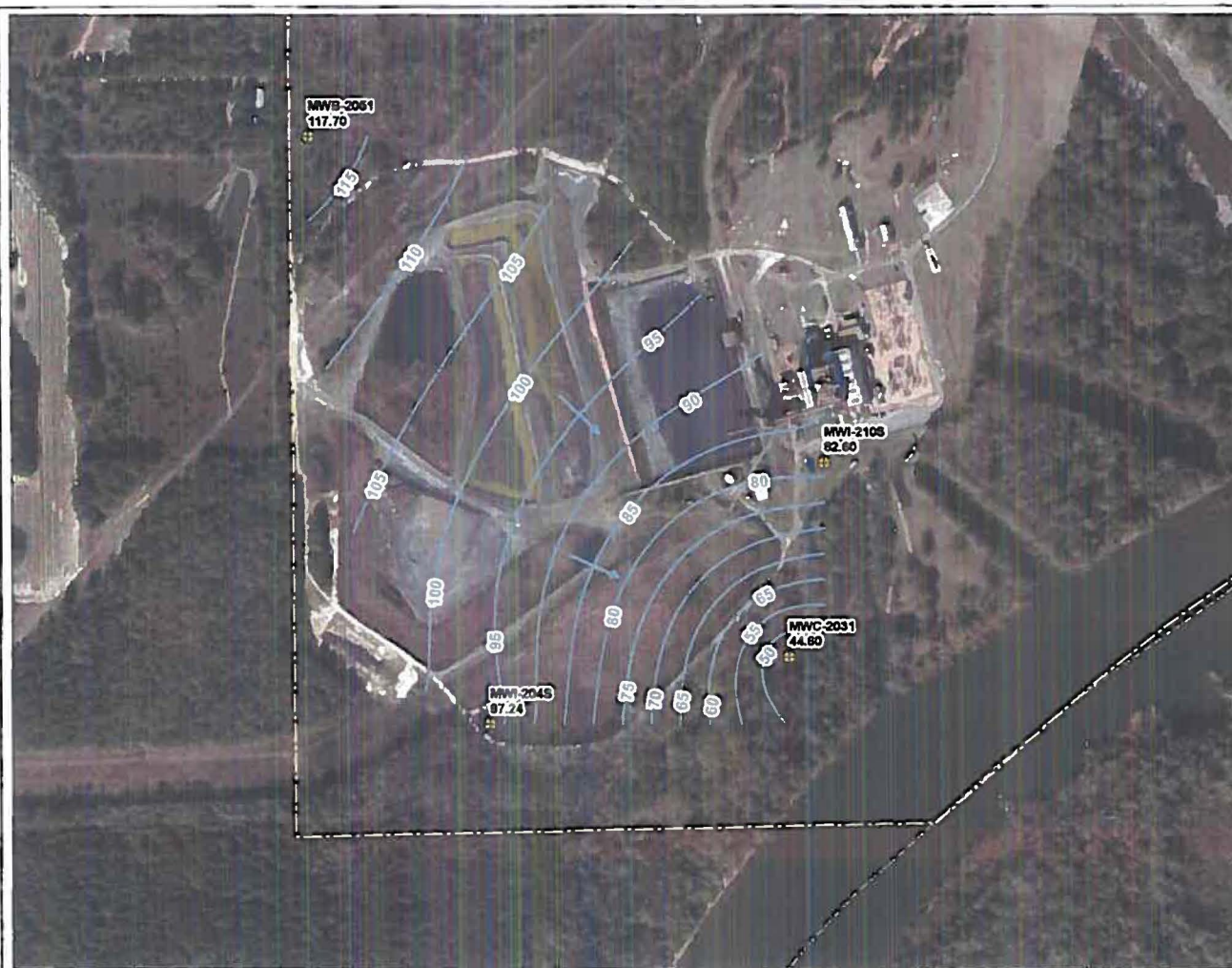
CERTIFICATION

**PROFESSIONAL GEOLOGIST LICENSED IN THE STATE OF
FLORIDA**

This is to certify that I have reviewed and approve the contents of this 2015 Gulf Power Plant Scholz Groundwater Submittal for the Gulf Power Company, Scholz Electric Generating Plant, Pensacola, Florida.


The signature is in blue ink and is written over a circular professional seal. The seal contains the text "STATE OF FLORIDA" and "PROFESSIONAL GEOLOGIST". The date "3/18/15" is handwritten in blue ink below the signature.

**Richard M. Markey
State of Florida License
#0000265
Gulf Power Company
One Energy Place
Pensacola, FL. 32520-0328
(850) 444-6573**



0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Richard H. Mandy
3/18/15

Notes:

1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
2. Arrow represents the approximate groundwater flow direction.

Legend

- ⊕ Monitoring Well (Surficial)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



0 200 400 800 Feet
1 inch = 400 feet

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FIGURE 1
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE SURFICIAL AQUIFER - MAY 2010
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number S1 - Rev 2015



0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Revised in map
3/18/15

Notes:

1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
2. Arrow represents the approximate groundwater flow direction.

Legend

- Monitoring Well (Surficial)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



0 200 400 800 Feet
1 inch = 400 feet

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FIGURE 2
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE SURFICIAL AQUIFER - MAY 2011
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number ES2017S1 (Rev 2015)



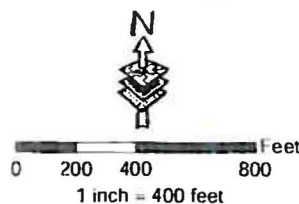
0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Richard M. Mundy
3/18/15

- Notes:
1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
 2. Arrow represents the approximate groundwater flow direction.

Legend

- ⊕ Monitoring Well (Surficial)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 3
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE SURFICIAL AQUIFER - MARCH 2012
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number ES2146S1 (Rev 2015)



0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

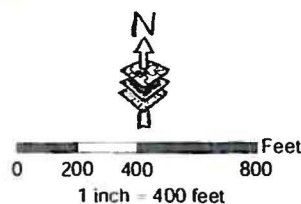
Richard M. Maly
3/18/15

Notes:

1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
2. Arrow represents the approximate groundwater flow direction.

Legend

- ⊕ Monitoring Well (Surficial)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 4
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE SURFICIAL AQUIFER - MARCH 2013
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number **ES2249S1 (Rev 2015)**



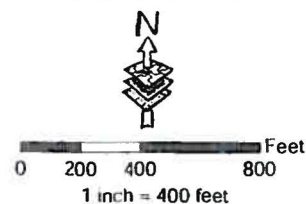
0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Richard M. Murphy
3/18/15

- Notes:
1. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
 2. Arrow represents the approximate groundwater flow direction.

Legend

- ⊕ Monitoring Well (Surficial)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 5
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE SURFICIAL AQUIFER - FEBRUARY 2014
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering
FOR

Gulf Power Company

Drawing Number ES2386S1 (Rev 2015)



0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

Rudolph M. Kromy
3/18/15

Notes:

1. NM indicates not measured
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-205, MWC-203, MWC-204, MWC-210, and MWC-212.
4. Arrow represents the approximate groundwater flow direction.

Legend

- ⊙ Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- - - Property Boundary



0 200 400 800 Feet
1 inch = 400 feet

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FIGURE 6
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDAN AQUIFER - MAY 2010
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number S2 - Rev 2015



0 1,000 2,000 4,000 6,000 8,000 Feet

1 inch = 2,000 feet

Ruled M. Mandy
3/18/15

Notes:

1. NM indicates not measured
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-205, MWC-203, MWC-204, MWC-210, and MWC-212.
4. Arrow represents the approximate groundwater flow direction.

Legend

- ⊕ Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



0 200 400 800 Feet
1 inch = 400 feet

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FIGURE 7
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDAN AQUIFER - MAY 2011
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number ES2017S2 (Rev 2015)



0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

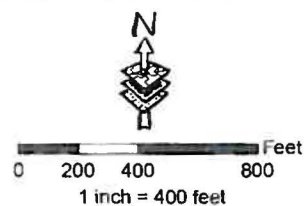
Richard M. Manby
3/18/15

Notes:

1. NM indicates not measured.
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-205, MWC-203, MWC-204, MWC-210, and MWC-212.
4. Arrow represents the approximate groundwater flow direction.

Legend

- Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 8
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDAN AQUIFER - MARCH 2012
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number **ES2146S2 (Rev 2015)**



0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

*Revised by [Signature]
3/18/15*

Notes:

1. NM indicates not measured.
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88).
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-205, MWC-203, MWC-204, MWC-210, and MWC-212.
4. Arrow represents the approximate groundwater flow direction.

Legend

- ⊕ Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- - - Property Boundary



0 200 400 800 Feet
1 inch = 400 feet

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FIGURE 9
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDAN AQUIFER - MARCH 2013
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number ES2249S2 (Rev 2015)



0 1,000 2,000 4,000 6,000 8,000 Feet
1 inch = 2,000 feet

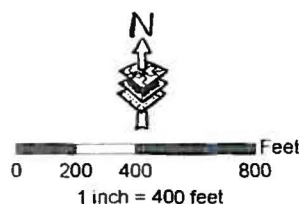
Richard M. Manly
3/18/15

Notes

1. NM indicates not measured
2. Groundwater elevations shown under well names are in feet (ft) relative to the North American Vertical Datum of 1988 (NAVD88)
3. Potentiometric surface contours were generated using groundwater elevation data from MWB-203, MWC-204, MWC-210, and MWC-212
4. Arrow represents the approximate groundwater flow direction

Legend

- Monitoring Well (Floridan)
- Potentiometric Surface Contours (ft NAVD88)
- Property Boundary



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FIGURE 10
PLANT SCHOLZ POTENTIOMETRIC MAP
OF THE FLORIDAN AQUIFER - FEBRUARY 2014
SNEADS, JACKSON COUNTY, FLORIDA

Southern Company Services
Earth Science and Environmental Engineering

FOR

Gulf Power Company

Drawing Number ES2386S2 (Rev 2015)