



TEL (352) 672-6867

FAX (352) 692-5930

4140 NW 37th Place, Suite A,
Gainesville, FL 32606
www.locklearconsulting.com

May 7, 2018

Mr. Steve Morgan
Florida Department of Environmental Protection
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

RE: Angelo's Aggregate Materials, Ltd.
Enterprise Road Class III Recycling & Disposal Facility, Pasco County
Operations Permit 177982-020-SO/T3 and
Construction Permit No.: 177982-019-SC/T3 Renewal Application
WACS Facility ID: 87895
WACS No.: SWD/29/41084

Dear Mr. Morgan,

On behalf of Angelo's Aggregate Materials, Ltd., we are submitting one (1) copy of Florida Department of Environmental Protection (Department) form 62-701.900(1) Application to Construct, Operate, Modify, or Close a Solid Waste Management Facility along with supporting documents to renew the existing operations and construction permits for the Enterprise Road Class III Landfill in Dade City, Florida. Checks for operations (\$4,000) and construction (\$1,000) are enclosed. The requested construction permit duration is 10 months. Therefore, the 5-year permit fee of \$6,000 has been pro-rated accordingly to \$1,000. The fees are in accordance with the fee schedule in Rules 62-701.320(4)(b), F.A.C. and 62-4.050(4)(s)5, F.A.C.

A Notice of Application for a permit to renew operations and construction of a solid waste management facility will be published in a local newspaper of general circulation, upon receipt of notification from the Department to publish the notification. We will mail the published Notice of Application to the Chair of the Pasco County Board of County Commissioners, and each State Senator and Representative serving the jurisdiction in which the project is located. Proof of notification will be provided to the Department under separate cover.



Please contact me at (352) 672-6867 if you have any questions or comments regarding this submittal.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Locklear', with a long horizontal line extending to the right.

John Locklear, P.G.
Locklear & Associates, Inc.

Enclosures

Xc: John Arnold, Angelo's Aggregate Materials, Ltd.

**PERMIT RENEWAL APPLICATION
FOR THE
ENTERPRISE ROAD CLASS III RECYCLING AND DISPOSAL FACILITY**

WACS Facility ID: 87895
WACS No.: SWD/29/41084
Construction Permit No.: 177982-019-SC/T3
Operation Permit No.: 177982-020-SO/T3

Prepared for:

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th Street South
St. Petersburg, Florida 33712

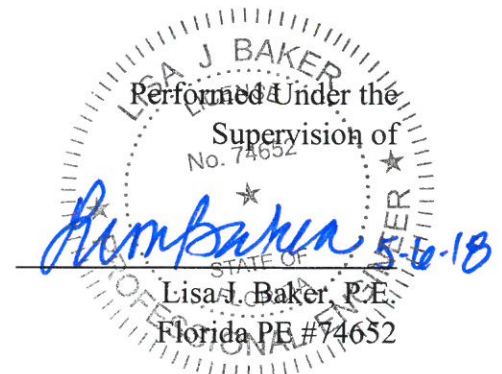
Presented to:

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOLID WASTE SECTION**
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Prepared by:

LOCKLEAR AND ASSOCIATES, INC.
4140 NW 37 Place, Suite A
Gainesville, Florida 32606
Certificate of Authorization #30066

APRIL 2018



Contents

NOTE: Contents page is from the 2012 Permit Renewal Application submitted by Kelner Engineering, Inc., 2015 Permit Modification Application submitted by Locklear & Associates, Inc., and 2016 Permit Modification submitted by Locklear & Associates, Inc. Only items in **BOLD** are provided in the current application package. The remaining items are unchanged.

INTRODUCTION

SECTION 1 PERMIT APPLICATION

FDEP FORM 62-701.900(1) *Application to Construct, Operate, Modify or Close a Solid Waste Management Facility*

S-1 LETTER OF AUTHORIZATION

SECTION 2 CHECKLIST SUPPORT

PART C PROHIBITIONS [2012]

C-1 WELL INVENTORY

PART D SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL

D-1 PROPERTY OWNERSHIP DOCUMENTATION

D-2 PROOF OF PUBLICATION

PART E LANDFILL PERMIT REQUIREMENTS [2012]

E-1 GROUNDWATER MONITORING LAB CERTIFICATION

E-2 TOPOGRAPHIC SURVEY

PART F GENERAL CRITERIA FOR LANDFILLS [2012]

PART G LANDFILL CONSTRUCTION REQUIREMENTS [2012]

G-1 LINER SYSTEM REQUIREMENTS EVALUATION [2016]

PART H HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS [2016]

PART I GEOTECHNICAL INVESTIGATION REQUIREMENTS [2016]

I-1	UNIVERSAL ENGINEERING SCIENCES REPORT [2016]
I-2	SLOPE STABILITY ANALYSIS [2016]
PART J	VERTICAL EXPANSION OF LANDFILLS [2016]
PART K	LANDFILL OPERATION REQUIREMENTS [2012]
PART L	WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS [2012]
PART M	SPECIAL WASTE HANDLING REQUIREMENTS [2012]
PART N	GAS MANAGEMENT SYSTEM REQUIREMENTS [2012]
PART O	LANDFILL FINAL CLOSURE REQUIREMENTS [2012]
PART P	OTHER CLOSURE PROCEDURES [2012]
PART Q	LONG-TERM CARE [2012]
PART R	FINANCIAL ASSURANCE [2012]
SECTION 3	ENGINEERING REPORT
APPENDIX 3-A	OPERATIONS PLAN
APPENDIX 3-B	CONTINGENCY PLAN
APPENDIX 3-C	FIGURES
APPENDIX 3-D	WELL ABANDONMENT DOCUMENTATION
SECTION 4	2016 PLAN SET (2016)
SECTION 5	GROUNDWATER MONITORING PLAN
SECTION 6	WATER QUALITY MONITORING PLAN EVALUATION
SECTION 7	CLOSURE AND RECLAMATION PLAN
APPENDIX 7-A	FINANCIAL ASSURANCE COST ESTIMATES
SECTION 8	ENVIRONMENTAL RESOURCE PERMIT [2012]

INTRODUCTION

INTRODUCTION

Locklear & Associates, Inc. (L&A) is submitting this application for renewal of Solid Waste Construction Permit 177982-19-SC/T3 and Solid Waste Operations Permit 177982-20-SO/T3 on behalf of Angelo's Aggregate Materials, LTD for the Enterprise Road Class III Recycling and Disposal Facility located in Pasco County, Florida. L&A has been authorized by Angelo's Aggregate Materials to act on its behalf in the preparation and submittal of this document. A letter of authorization from Angelo's Aggregate Materials has been attached to the permit application form (Part S) in Section 1.

The Enterprise Road Class III Recycling and Disposal Facility solid waste Construction Permit 177982-19-SC/T3 currently authorizes construction of Cell 16 of the Class III Landfill. The design and construction documents for Cell 16 of the Enterprise Class III Recycling and Disposal Facility were prepared by L&A. Angelo's is not requesting any changes to the currently permitted design as part of this application.

In accordance with Rule 62-701.320(10)(c), facility information that was submitted to the Department to support the expiring permits, and which is still valid, has not been re-submitted for permit renewal. This permit renewal application lists and reaffirms the information that was previously provided to the Department and is still valid. Other information has been revised/consolidated/updated and is being resubmitted as discussed herein.

SECTION 1

PERMIT APPLICATION



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form #: 62-701.900(1), F.A.C.

Form Title: Application to Construct, Operate, Modify, or
Close a Solid Waste Management Facility

Effective Date: February 15, 2015

Incorporated in Rule: 62-701.330(3), F.A.C.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION TO CONSTRUCT, OPERATE, MODIFY, OR CLOSE A SOLID WASTE MANAGEMENT FACILITY

APPLICATION INSTRUCTIONS AND FORMS

Northwest District
160 Governmental Street
Suite 308
Pensacola, FL 32502-5794
850-595-8300

Northeast District
7777 Baymeadows Way West
Suite 100
Jacksonville, FL 32256-7590
904-256-1700

Central District
3319 Maguire Boulevard
Suite 232
Orlando, FL 32803-3767
407-897-4100

Southwest District
13051 North Telecom Pkwy
Temple Terrace, FL 33637
813-470-5700

South District
2295 Victoria Ave, Suite 364
P.O. Box 2549
Fort Myers, FL 33901-3881
239-344-5600

Southeast District
3301 Gun Club Road
MSC 7210-1
West Palm Beach, FL 33406
561-681-6600

INSTRUCTIONS TO APPLY FOR A SOLID WASTE MANAGEMENT FACILITY PERMIT

I. General

Solid Waste Management Facilities shall be permitted pursuant to Section 403.707, Florida Statutes (FS) and in accordance with Florida Administrative Code (FAC) Chapter 62-701. A permit application shall be submitted in accordance with the requirements of Rule 62-701.320(5)(a), F.A.C., to the appropriate Department office having jurisdiction over the facility. The appropriate fee in accordance with Rule 62-701.315, FAC, shall be submitted with the application by check made payable to the Department of Environmental Protection (DEP).

Complete appropriate sections for the type of facility for which application is made. Entries shall be typed or printed in ink. All blanks shall be filled in or marked "Not Applicable" or "No Substantial Change". Information provided in support of the application shall be marked "Submitted" and the location of this information in the application package indicated. The application shall include all information, drawings, and reports necessary to evaluate the facility. Information required to complete the application is listed on the attached pages of this form.

II. Application Parts Required for Construction and Operation Permits

- A. Landfills and Ash Monofills - Submit Parts A through S
- B. Asbestos Monofills - Submit Parts A, B, C, D, E, F, I, K, M, O through S
- C. Industrial Solid Waste Disposal Facilities - Submit Parts A through S

NOTE: Portions of some Parts may not be applicable.

NOTE: For facilities that have been satisfactorily constructed in accordance with their construction permit, the information required for A, B and C type facilities does not have to be resubmitted for an operation permit if the information has not substantially changed during the construction period. The appropriate portion of the form should be marked "no substantial change".

III. Application Parts Required for Closure Permits

- A. Landfills and Ash Monofills - Submit Parts A, B, L, N through S
- B. Asbestos Monofills - Submit Parts A, B, M, O through S
- C. Industrial Solid Waste Disposal Facilities - Submit Parts A, B, L through S

NOTE: Portions of some Parts may not be applicable.

IV. Permit Renewals

The above information shall be submitted at time of permit renewal in support of the new permit. However, facility information that was submitted to the Department to support the expiring permit, and which is still valid, does not need to be re-submitted for permit renewal. Portions of the application not re-submitted shall be marked "no substantial change" on the application form.

V. Application Codes

S	-	Submitted
LOCATION	-	Physical location of information in application
N/A	-	Not Applicable
N/C	-	No Substantial Change

VI. Listing of Application Parts

PART A:	GENERAL INFORMATION
PART B:	DISPOSAL FACILITY GENERAL INFORMATION
PART C:	PROHIBITIONS
PART D:	SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL
PART E:	LANDFILL PERMIT REQUIREMENTS
PART F:	GENERAL CRITERIA FOR LANDFILLS
PART G:	LANDFILL CONSTRUCTION REQUIREMENTS
PART H:	HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS
PART I:	GEOTECHNICAL INVESTIGATION REQUIREMENTS
PART J:	VERTICAL EXPANSION OF LANDFILLS
PART K:	LANDFILL OPERATION REQUIREMENTS
PART L:	WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS
PART M:	SPECIAL WASTE HANDLING REQUIREMENTS
PART N:	GAS MANAGEMENT SYSTEM REQUIREMENTS
PART O:	LANDFILL CLOSURE REQUIREMENTS
PART P:	OTHER CLOSURE PROCEDURES
PART Q:	LONG-TERM CARE
PART R:	FINANCIAL ASSURANCE
PART S:	CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
APPLICATION FOR A PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE A
SOLID WASTE MANAGEMENT FACILITY**

Please Type or Print

PART A. GENERAL INFORMATION

1. Type of disposal facility (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> Class I Landfill | <input type="checkbox"/> Ash Monofill |
| <input checked="" type="checkbox"/> Class III Landfill | <input type="checkbox"/> Asbestos Monofill |
| <input type="checkbox"/> Industrial Solid Waste | |
| <input type="checkbox"/> Other (describe): | |
-
-
-

NOTE: Waste Processing Facilities should apply on Form 62-701.900(4), FAC;
Yard Trash Disposal Facilities should notify on Form 62-701.900(3), FAC;
Compost Facilities should apply on Form 62-709.901(1), FAC; and
C&D Disposal Facilities should apply on Form 62-701.900(6), FAC

2. Type of application:

- ☐ Construction
☐ Operation
☒ Construction/Operation
☐ Closure
☐ Long-term Care Only

3. Classification of application:

- | | |
|---|--|
| <input type="checkbox"/> New | <input type="checkbox"/> Substantial Modification |
| <input checked="" type="checkbox"/> Renewal | <input type="checkbox"/> Intermediate Modification |
| | <input type="checkbox"/> Minor Modification |

4. Facility name: Enterprise Road Class III Recycling and Disposal Facility

5. DEP ID number: SWD/51/87895 County: Pasco

6. Facility location (main entrance):

The main entrance gate is on the north side of Enterprise Road, 1.5 miles east
C.R. 35 Alt. The address is 41111 Enterprise Road in Dade City, Florida 33525.

7. Location coordinates:

Section: 5 and 8 Township: 25 S Range: 22 E
Latitude: 28 ° 19 ' 53 " Longitude: 82 ° 08 ' 06 "
Datum: NGVD 29 Coordinate method: State Plane West

Collected by: Professional Land Surveyor Company/Affiliation: Picket Surveying and Photogrammetry

8. Applicant name (operating authority): Angelo's Aggregate Materials, Ltd.
- Mailing address: 855 28th St. South St. Petersburg FL 33712
Street or P.O. Box City State Zip
- Contact person: John Arnold, P.E. Telephone: (813) 477-1719
- Title: Director of Engineering & Facilities
- john.phillip.arnold@gmail.com
E-Mail address (if available)
9. Authorized agent/Consultant: Locklear & Associates, Inc.
- Mailing address: 4140 NW 37th Place, Suite A Gainesville FL 32606
Street or P.O. Box City State Zip
- Contact person: Lisa Baker, P.E. Telephone: (352) 672-6867
- Title: Engineering Division Director
- lisa@locklearconsulting.com
E-Mail address (if available)
10. Landowner (if different than applicant): Same as Applicant
- Mailing address: _____
Street or P.O. Box City State Zip
- Contact person: _____ Telephone: (____) _____
- _____
E-Mail address (if available)
11. Cities, towns, and areas to be served:
Pasco County and surrounding areas

12. Population to be served:
 Current: 495,868 (Pasco County 2016 Census Est) Five-Year Projection: 534,807 (Pasco County 2020 Projections)
13. Date site will be ready to be inspected for completion: N/A
14. Expected life of the facility: 10+ years
15. Estimated costs:
 Total Construction: \$ N/A Closing Costs: \$ _____
16. Anticipated construction starting and completion dates:
 From: Ongoing To: 2018
17. Expected volume or weight of waste to be received:
 _____ yds³/day 550 +/- tons/day _____ gallons/day

PART B. DISPOSAL FACILITY GENERAL INFORMATION

1. Provide brief description of disposal facility design and operations planned under this application:

This application is submitted as a renewal of construction and operations
for an existing, permitted Class III landfill. Please refer to the introduction
for details on changes and updates submitted as part of this application.

2. Facility site supervisor: Alfredo "Freddie" Martinez

Title: Landfill Manager Telephone: (352) 567-7676

N/A

E-Mail address (if available)

3. Disposal area: Total acres: 67.0 Used acres: 50.5 Available acres: 16.5

4. Weighing scales used: ☒ Yes ☐ No

5. Security to prevent unauthorized use: ☒ Yes ☐ No

6. Charge for waste received: +/- \$9.00 \$/yds³ _____ \$/ton _____

7. Surrounding land use, zoning:

☐ Residential

☐ Industrial

☒ Agricultural

☐ None

☐ Commercial

☐ Other (describe):

Surrounding zoning is AC (Agricultural Commercial) and AR (Agricultural Residential).

8. Types of waste received:

☐ Household

☒ C & D debris

☐ Commercial

☒ Shredded/cut tires

☐ Incinerator/WTE ash

☒ Yard trash

☐ Treated biomedical

☐ Septic tank

☐ Water treatment sludge

☐ Industrial

☐ Air treatment sludge

☐ Industrial sludge

☐ Agricultural

☐ Domestic sludge

☒ Asbestos

☒ Other (describe):

Class III waste

9. Salvaging permitted: ☐ Yes ☒ No

10. Attendant: ☒ Yes ☐ No Trained operator: ☒ Yes ☐ No

11. Trained spotters: ☒ Yes ☐ No Number of spotters used: 1 - 2

12. Site located in: ☐ Floodplain ☐ Wetlands ☒ Other (describe):
Orange groves

13. Days of operation: Monday through Friday, Saturday

14. Hours of operation: 7 am to 6 pm (M-F); 7 am - 2 pm (Sat)

15. Days working face covered: Once per week

16. Elevation of water table: 55 - 70 ft. Datum Used: NGVD 29

17. Number of monitoring wells: 34

18. Number of surface monitoring points: 0

19. Gas controls used: ☒ Yes ☐ No Type controls: ☐ Active ☒ Passive

Gas flaring: ☐ Yes ☒ No Gas recovery: ☐ Yes ☒ No

20. Landfill unit liner type:

<input type="checkbox"/> Natural soils	<input type="checkbox"/> Double geomembrane
<input checked="" type="checkbox"/> Single clay liner	<input type="checkbox"/> Geomembrane & composite
<input type="checkbox"/> Single geomembrane	<input type="checkbox"/> Double composite
<input type="checkbox"/> Single composite	<input type="checkbox"/> None
<input type="checkbox"/> Slurry wall	<input type="checkbox"/> Other (describe):

21. Leachate collection method:

<input type="checkbox"/> Collection pipes	<input type="checkbox"/> Double geomembrane
<input type="checkbox"/> Geonets	<input type="checkbox"/> Gravel layer
<input type="checkbox"/> Well points	<input type="checkbox"/> Interceptor trench
<input type="checkbox"/> Perimeter ditch	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Other (describe):	

Gravity drainage to temporary stormwater pond and to toe drain in Cell 16 which is pumped to the adjacent IW pond.

22. Leachate storage method:

<input type="checkbox"/> Tanks	<input type="checkbox"/> Surface impoundments
<input type="checkbox"/> Other (describe):	

None

23. Leachate treatment method:

<input type="checkbox"/> Oxidation	<input type="checkbox"/> Chemical treatment
<input type="checkbox"/> Secondary	<input type="checkbox"/> Settling
<input type="checkbox"/> Advanced	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Other (describe):	

As described in the IW permit, the leachate will be treated by dilution and evaporation.

24. Leachate disposal method:

<input type="checkbox"/> Recirculated	<input type="checkbox"/> Pumped to WWTP
<input type="checkbox"/> Transported to WWTP	<input type="checkbox"/> Discharged to surface water/wetland
<input type="checkbox"/> Injection well	<input checked="" type="checkbox"/> Percolation ponds
<input type="checkbox"/> Evaporation	<input type="checkbox"/> Spray irrigation
<input type="checkbox"/> Other (describe):	

A portion of the leachate will be disposed in a percolation pond.

25. For leachate discharged to surface waters:

Name and Class of receiving water:

N/A

26. Storm Water:

Collected: ☒ Yes ☐ No

Type of treatment:

100 year, 24-hour storm event retained on-site without discharge.

Name and Class of receiving water:

None

27. Environmental Resources Permit (ERP) number or status:

ERP 51-0172489-006

PART C. PROHIBITIONS (62-701.300, FAC)

LOCATION

- S ☐ _____ Section 2 Part C 2012 Permit Renewal N/A ☐ N/C ☒ 1. Provide documentation that each of the siting criteria will be satisfied for the facility; (62-701.300(2), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 2. If the facility qualifies for any of the exemptions contained in Rules 62-701.300(12), (13) and (16) through (18), FAC, then document this qualification(s);
- S ☐ _____ N/A ☐ N/C ☒ 3. Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 4. Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 5. Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 6. Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 7. Provide documentation that the facility will be in compliance with the Class I surface water restrictions; (62-701.300(7), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 8. Provide documentation that the facility will be in compliance with the special waste for landfills restrictions; (62-701.300(8), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 9. Provide documentation that the facility will be in compliance with the liquid restrictions; (62-701.300(10), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 10. Provide documentation that the facility will be in compliance with the used oil and oily waste restrictions; (62-701.300(11), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 11. Provide documentation that the facility will be in compliance with the CCA treated wood restrictions; (62-701.300(14), FAC)
- S ☐ _____ N/A ☐ N/C ☒ 12. Provide documentation that the facility will be in compliance with the dust control restrictions; (62-701.300(15), FAC)

PART D. SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL (62-701.320, FAC)

LOCATION

- | | |
|---|--|
| <p>S <input checked="" type="checkbox"/> <u>Section 1</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>1. A minimum of one completed electronic application form, all supporting data and reports; (62-701.320(5)(a), FAC)</p> |
| <p>S <input checked="" type="checkbox"/> <u>Sections 1, 3, 4 & 5</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>2. Engineering and/or professional certification (signature, date, and seal) provided on the applications and all engineering plans, reports, and supporting information for the application; (62-701.320(6), FAC)</p> |
| <p>S <input checked="" type="checkbox"/> <u>Cover Letter</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>3. A letter of transmittal to the Department; (62-701.320(7)(a), FAC)</p> |
| <p>S <input checked="" type="checkbox"/> <u>Section 1</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>4. A completed application form dated and signed by the applicant; (62-701.320(7)(b), FAC)</p> |
| <p>S <input checked="" type="checkbox"/> <u>Cover Letter</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>5. Permit fee specified in Rule 62-701.315, FAC in check or money order, payable to the Department; (62-701.320(7)(c), FAC)</p> |
| <p>S <input checked="" type="checkbox"/> <u>Section 3</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>6. An engineering report addressing the requirements of this rule and with the following format: a cover sheet, text printed on 8 ½ inch by 11 inch consecutively numbered pages, a table of contents or index, the body of the report and all appendices including an operation plan, contingency plan, illustrative charts and graphs, records or logs of tests and investigations, engineering calculations; (62-701.320(7)(d), FAC)</p> |
| <p>S <input checked="" type="checkbox"/> <u>Sec. 3, App 3-A & Sec. 7</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>7. Operation Plan and Closure Plan; (62-701.320(7)(e)1, FAC)</p> |
| <p>S <input checked="" type="checkbox"/> <u>Section 3, App 3-B</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>8. Contingency Plan; (62-701.320(7)(e)2, FAC)</p> |
| <p>S <input checked="" type="checkbox"/> <u>Section 4</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>9. Plans or drawings for the solid waste management facilities in appropriate format (including sheet size restrictions, cover sheet, legends, north arrow, horizontal and vertical scales, elevations referenced to NGVD 1929) showing: (62-701.320(7)(f), FAC)</p> |
| <p>S <input checked="" type="checkbox"/> <u>Section 4</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>a. A regional map or plan with the project location in relation to major roadways and population centers;</p> |
| <p>S <input checked="" type="checkbox"/> <u>Section 4</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>b. A vicinity map or aerial photograph no more than one year old showing the facility site and relevant surface features located within 1000 feet of the facility;</p> |
| <p>S <input checked="" type="checkbox"/> <u>Section 4</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>c. A site plan showing all property boundaries certified by a Florida Licensed Professional Surveyor and Mapper;</p> |
| <p>S <input checked="" type="checkbox"/> <u>Section 4</u> N/A <input type="checkbox"/> N/C <input type="checkbox"/></p> | <p>d. Other necessary details to support the engineering report, including referencing elevations to a consistent, nationally recognized datum, and identifying the method used for collecting latitude and longitude data;</p> |

LOCATION**PART D CONTINUED**S ☒ Section 2, D-1 N/A ☐ N/C ☐

10. Documentation that the applicant either owns the property or has legal authority from the property owner to use the site; (62-701.320(7)(g), FAC)

S ☐ _____ N/A ☒ N/C ☐

11. For facilities owned or operated by a county, provide a description of how, if any, the facilities covered in this application will contribute to the county's achievement of the waste reduction and recycling goals contained in Section 403.706, FS; (62-701.320(7)(h), FAC)

S ☒ _____ N/A ☐ N/C ☐

12. Provide a history and description of any enforcement actions taken by the Department against the applicant for violations of applicable statutes, rules, orders, or permit conditions relating to the operation of any solid waste management facility in the state; (62-701.320(7)(i), FAC)

S ☒ Section 2, Part D-2 N/A ☐ N/C ☐

13. Proof of publication in a newspaper of general circulation of notice of application for a permit to construct or substantially modify a solid waste management facility; (62-701.320(8), FAC)

S ☒ Section 3, App 3-C N/A ☐ N/C ☐

14. Provide a description of how the requirements for airport safety will be achieved, including proof of required notices if applicable. If exempt, explain how the exemption applies; (62-701.320(13), FAC)

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

15. Explain how the operator and spotter training requirements and special criteria will be satisfied for the facility; (62-701.320(15), FAC)

PART E. LANDFILL PERMIT REQUIREMENTS (62-701.330, FAC)**LOCATION**S ☒ Section 3, App 3-C N/A ☐ N/C ☐

1. Regional map or aerial photograph no more than five years old showing all airports that are located within five miles of the proposed landfill; (62-701.330(3)(a), FAC)

S ☒ Section 4 N/A ☐ N/C ☐

2. Plot plan with a scale not greater than 200 feet to the inch showing: (62-701.330(3)(b), FAC)

S ☒ Section 4 N/A ☐ N/C ☐

a. Dimensions;

S ☒ Section 5 N/A ☐ N/C ☐

b. Locations of proposed and existing water quality monitoring wells;

S ☒ Section 2 Part I-1 N/A ☐ N/C ☐

c. Locations of soil borings;

S ☒ Section 4 N/A ☐ N/C ☐

d. Proposed plan of trenching or disposal areas;

S ☒ Section 4 N/A ☐ N/C ☐

e. Cross sections showing original elevations and proposed final contours which shall be included either on the plot plan or on separate sheets;

LOCATION**PART E CONTINUED**S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 1 N/A ☐ N/C ☐S ☒ Section 1 N/A ☐ N/C ☐S ☒ Section 1 N/A ☐ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☒ Section 2, Part E-1 N/A ☐ N/C ☐S ☒ Section 7, App 7-A N/A ☐ N/C ☐

f. Any previously filled waste disposal areas;

g. Fencing or other measures to restrict access;

3. Topographic maps with a scale not greater than 200 feet to the inch with five foot contour intervals showing: (62-701.330(3)(c), FAC)

a. Proposed fill areas;

b. Borrow areas;

c. Access roads;

d. Grades required for proper drainage;

e. Cross sections of lifts;

f. Special drainage devices if necessary;

g. Fencing;

h. Equipment facilities;

4. A report on the landfill describing the following: (62-701.330(3)(d), FAC)

a. The current and projected population and area to be served by the proposed site;

b. The anticipated type, annual quantity, and source of solid waste expressed in tons;

c. Planned active life of the facility, the final design height of the facility, and the maximum height of the facility during its operation;

d. The source and type of cover material used for the landfill;

5. Provide evidence that an approved laboratory shall conduct water quality monitoring for the facility in accordance with Chapter 62-160, FAC; (62-701.330(3)(g), FAC)

6. Provide a statement of how the applicant will demonstrate financial responsibility for the closing and long-term care of the landfill; (62-701.330(3)(h), FAC)

PART F. GENERAL CRITERIA FOR LANDFILLS (62-701.340, FAC)

LOCATION

S ☒ Section 3, App 3-C N/A ☐ N/C ☐

1. Describe (and show on a Federal Insurance Administration flood map, if available) how the landfill or solid waste disposal unit shall not be located in the 100 year floodplain where it will restrict the flow of the 100 year flood, reduce the temporary water storage capacity of the floodplain unless compensating storage is provided, or result in a washout of solid waste; (62-701.340(3)(b), FAC)

S ☒ Section 4 N/A ☐ N/C ☐

2. Describe how the minimum horizontal separation between waste deposits in the landfill and the landfill property boundary shall be 100 feet, measured from the toe of the proposed final cover slope; (62-701.340(3)(c), FAC)

PART G. LANDFILL CONSTRUCTION REQUIREMENTS (62-701.400, FAC)

LOCATION

S ☒ Section 3 N/A ☐ N/C ☐

1. Describe how the landfill shall be designed so the solid waste disposal units will be constructed and closed at planned intervals throughout the design period of the landfill, and shall be designed to achieve a minimum factor of safety of 1.5 using peak strength values to prevent failures of side slopes and deep-seated failures; (62-701.400(2), FAC)

S ☒ Section 3 N/A ☐ N/C ☐

2. Landfill liner requirements; (62-701.400(3), FAC)

S ☐ _____ N/A ☒ N/C ☐

a. General construction requirements; (62-701.400(3)(a), FAC)

S ☐ _____ N/A ☒ N/C ☐

(1) Provide test information and documentation to ensure the liner will be constructed of materials that have appropriate physical, chemical, and mechanical properties to prevent failure;

S ☐ _____ N/A ☒ N/C ☐

(2) Document foundation is adequate to prevent liner failure;

S ☐ _____ N/A ☒ N/C ☐

(3) Constructed so bottom liner will not be adversely impacted by fluctuations of the ground water;

S ☐ _____ N/A ☒ N/C ☐

(4) Designed to resist hydrostatic uplift if bottom liner located below seasonal high ground water table;

S ☐ _____ N/A ☒ N/C ☐

(5) Installed to cover all surrounding earth which could come into contact with the waste or leachate;

LOCATIONS ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐**PART G CONTINUED**

b. Composite liners; (62-701.400(3)(b), FAC)

- (1) Upper geomembrane thickness and properties;
- (2) Design leachate head for primary leachate collection and removal system (LCRS) including leachate recirculation if appropriate;
- (3) Design thickness in accordance with Table A and number of lifts planned for lower soil component;

c. Double liners; (62-701.400(3)(c), FAC)

- (1) Upper and lower geomembrane thickness and properties;
- (2) Design leachate head for primary LCRS to limit the head to one foot above the liner;
- (3) Lower geomembrane sub-base design;
- (4) Leak detection and secondary leachate collection system minimum design criteria ($k \geq 10$ cm/sec, head on lower liner ≤ 1 inch, head not to exceed thickness of drainage layer);

d. Standards for geosynthetic components; (62-701.400(3)(d), FAC)

- (1) Factory and field seam test methods to ensure all geomembrane seams achieve the minimum specifications;
- (2) Geomembranes to be used shall pass a continuous spark test by the manufacturer;
- (3) Design of 24-inch-thick protective layer above upper geomembrane liner;
- (4) Describe operational plans to protect the liner and leachate collection system when placing the first layer of waste above a 24-inch-thick protective layer;
- (5) HDPE geomembranes, if used, meet the specifications in GRI GM13, and LLDPE geomembranes, if used, meet the specifications in GRI GM17;
- (6) PVC geomembranes, if used, meet the specifications in PGI 1104;

LOCATIONS ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐**PART G CONTINUED**

- (7) Interface shear strength testing results of the actual components which will be used in the liner system;
- (8) Transmissivity testing results of geonets if they are used in the liner system;
- (9) Hydraulic conductivity testing results of geosynthetic clay liners if they are used in the liner system;
- e. Geosynthetic specification requirements; (62-701.400(3)(e), FAC)
- (1) Definition and qualifications of the designer, manufacturer, installer, QA consultant and laboratory, and QA program;
- (2) Material specifications for geomembranes, geocomposites, geotextiles, geogrids, and geonets;
- (3) Manufacturing and fabrication specifications including geomembrane raw material and roll QA, fabrication personnel qualifications, seaming equipment and procedures, overlaps, trial seams, destructive and non-destructive seam testing, seam testing location, frequency, procedure, sample size, and geomembrane repairs;
- (4) Geomembrane installation specifications including earthwork, conformance testing, geomembrane placement, installation personnel qualifications, field seaming and testing, overlapping and repairs, materials in contact with geomembranes, and procedures for lining system acceptance;
- (5) Geotextile and geogrids specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials;
- (6) Geonet and geocomposites specifications including handling and placement, conformance testing, stacking and joining, repair, and placement of soil materials and any overlying materials;
- (7) Geosynthetic clay liner specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials;

LOCATIONS ☒ Section 3 N/A ☐ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐**PART G CONTINUED**

f. Standards for soil liner components; (62-701.400(3)(f), FAC)

- (1) Description of construction procedures including over-excavation and backfilling to preclude structural inconsistencies and procedures for placing and compacting soil components in layers;
- (2) Demonstration of compatibility of the soil component with actual or simulated leachate in accordance with EPA Test Method 9100, or an equivalent test method;
- (3) Procedures for testing in situ soils to demonstrate they meet the specifications for soil liners;
- (4) Specifications for soil component of liner including at a minimum:
 - (a) Allowable particle size distribution, and Atterberg limits including shrinkage limit;
 - (b) Placement moisture and dry density criteria;
 - (c) Maximum laboratory-determined saturated hydraulic conductivity using simulated leachate;
 - (d) Minimum thickness of soil liner;
 - (e) Lift thickness;
 - (f) Surface preparation (scarification);
 - (g) Type and percentage of clay mineral within the soil component;
- (5) Procedures for constructing and using a field test section to document the desired saturated hydraulic conductivity and thickness can be achieved in the field;

g. If a Class III landfill is to be constructed with a bottom liner system, provide a description of how the minimum requirements for the liner will be achieved;

LOCATION**PART G CONTINUED**S ☒ Section 3 N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ Section 3 N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐

3. Leachate collection and removal system (LCRS); (62-701.400(4), FAC)

a. The primary and secondary LCRS requirements; (62-701.400(4)(a), FAC)

- (1) Constructed of materials chemically resistant to the waste and leachate;
- (2) Have sufficient mechanical properties to prevent collapse under pressure;
- (3) Have granular material or synthetic geotextile to prevent clogging;
- (4) Have a method for testing and cleaning clogged pipes or contingent designs for reducing leachate around failed areas;

b. Other LCRS requirements; (62-701.400(4)(b), (c) and (d), FAC)

- (1) Bottom 12 inches having hydraulic conductivity $\geq 1 \times 10^{-3}$ cm/sec;
- (2) Total thickness of 24 inches of material chemically resistant to the waste and leachate;
- (3) Bottom slope design to accommodate for predicted settlement and still meet minimum slope requirements;
- (4) Demonstration that synthetic drainage material, if used, is equivalent or better than granular material in chemical compatibility, flow under load, and protection of geomembranes liner;
- (5) Schedule provided for routine maintenance of LCRS.

4. Leachate recirculation; (62-701.400(5), FAC)

a. Describe general procedures for recirculating leachate;

b. Describe procedures for controlling leachate runoff and minimizing mixing of leachate runoff with storm water;

c. Describe procedures for preventing perched water conditions and gas buildup;

LOCATION**PART G CONTINUED**S ☒ Section 3 N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐

d. Describe alternate methods for leachate management when it cannot be recirculated due to weather or runoff conditions, surface seeps, wind-blown spray, or elevated levels of leachate head on the liner;

e. Describe methods of gas management in accordance with Rule 62-701.530, FAC;

f. If leachate irrigation is proposed, describe treatment methods and standards for leachate treatment prior to irrigation over final cover, and provide documentation that irrigation does not contribute significantly to leachate generation;

5. Leachate storage tanks and leachate surface impoundments; (62-701.400(6), FAC)

a. Surface impoundment requirements; (62-701.400(6)(b), FAC)

(1) Documentation that the design of the bottom liner will not be adversely impacted by fluctuations of the ground water;

(2) Designed in segments to allow for inspection and repair, as needed, without interruption of service;

(3) General design requirements;

(a) Double liner system consisting of an upper and lower 60-mil minimum thickness geomembrane;

(b) Leak detection and collection system with hydraulic conductivity ≥ 1 cm/sec;

(c) Lower geomembrane placed on subbase ≥ 6 inches thick with $k \leq 1 \times 10^{-5}$ cm/sec or on an approved geosynthetic clay liner with $k \leq 1 \times 10^{-7}$ cm/sec;

(d) Design calculation to predict potential leakage through the upper liner;

(e) Daily inspection requirements, and notification and corrective action requirements if leakage rates exceed that predicted by design calculations;

(4) Description of procedures to prevent uplift, if applicable;

LOCATIONS ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐**PART G CONTINUED**

(5) Design calculations to demonstrate minimum two feet of freeboard will be maintained;

(6) Procedures for controlling vectors and off-site odors;

b. Above-ground leachate storage tanks; (62-701.400(6)(c), FAC)

(1) Describe tank materials of construction and ensure foundation is sufficient to support tank;

(2) Describe procedures for cathodic protection for the tank, if needed;

(3) Describe exterior painting and interior lining of the tank to protect it from the weather and the leachate stored;

(4) Describe secondary containment design to ensure adequate capacity will be provided and compatibility of materials of construction;

(5) Describe design to remove and dispose of stormwater from the secondary containment system;

(6) Describe an overfill prevention system, such as level sensors, gauges, alarms, and shutoff controls to prevent overfilling;

(7) Inspections, corrective action, and reporting requirements;

(a) Weekly inspection of overfill prevention system;

(b) Weekly inspection of exposed tank exteriors;

(c) Inspection of tank interiors when tank is drained, or at least every three years;

(d) Procedures for immediate corrective action if failures detected;

(e) Inspection reports available for Department review;

c. Underground leachate storage tanks; (62-701.400(6)(d), FAC)

LOCATIONS ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐**PART G CONTINUED**

(1) Describe materials of construction;

(2) A double-walled tank design system to be used with the following requirements:

(a) Interstitial space monitoring at least weekly;

(b) Corrosion protection provided for primary tank interior and external surface of outer shell;

(c) Interior tank coatings compatible with stored leachate;

(d) Cathodic protection inspected weekly and repaired as needed;

(3) Describe an overfill prevention system, such as level sensors, gauges, alarms, and shutoff controls to prevent overfilling, and provide for weekly inspections;

(4) Inspection reports available for Department review;

6. Liner systems construction quality assurance (CQA); (62-701.400(7), FAC)

a. Provide CQA Plan including:

(1) Specifications and construction requirements for liner system;

(2) Detailed description of quality control testing procedures and frequencies;

(3) Identification of supervising professional engineer;

(4) Identify responsibility and authority of all appropriate organizations and key personnel involved in the construction project;

(5) State qualifications of CQA professional engineer and support personnel;

LOCATION**PART G CONTINUED**S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ **Section 3** _____ N/A ☐ N/C ☐S ☒ **Section 3** _____ N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐

(6) Description of CQA reporting forms and documents;

b. An independent laboratory experienced in the testing of geosynthetics to perform required testing;

7. Soil liner CQA; (62-701.400(8), FAC)

a. Documentation that an adequate borrow source has been located with test results, or description of the field exploration and laboratory testing program to define a suitable borrow source;

b. Description of field test section construction and test methods to be implemented prior to liner installation;

c. Description of field test methods, including rejection criteria and corrective measures to insure proper liner installation;

8. For surface water management systems at aboveground disposal units, provide documentation showing the design of any features intended to convey stormwater to a permitted or exempted treatment system; (62-701.400(9), FAC)

9. Gas control systems; (62-701.400(10), FAC)

a. Provide documentation that if the landfill is receiving degradable wastes, it will have a gas control system complying with the requirements of Rule 62-701.530, FAC;

10. For landfills designed in ground water, provide documentation that the landfill will provide a degree of protection equivalent to landfills designed with bottom liners not in contact with ground water; (62-701.400(11), FAC)

PART H. HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS (62-701.410(2), FAC)**LOCATION**S ☒ Section 2 Part G-1 _____ N/A ☐ N/C ☐S ☒ Section 2 Part G-1 _____ N/A ☐ N/C ☐S ☒ Section 2 Part G-1 & Section 6 _____ N/A ☐ N/C ☐

1. Submit a hydrogeological investigation and site report including at least the following information:

a. Regional and site specific geology and hydrology;

b. Direction and rate of ground water and surface water flow including seasonal variations;

LOCATION

- S ☒ Section 2 Part G-1 & Section 6 N/A ☐ N/C ☐
- S ☒ Section 2 Part G-1 N/A ☐ N/C ☐
- S ☒ Section 2 Part G-1 N/A ☐ N/C ☐
- S ☒ Section 2 Part G-1 N/A ☐ N/C ☐
- S ☒ Section 2 C-1 N/A ☐ N/C ☐
- S ☐ _____ N/A ☒ N/C ☐
- S ☒ Section 3, App 3-C N/A ☐ N/C ☐
- S ☒ Section 2 Part G-1 N/A ☐ N/C ☐

PART H CONTINUED

- c. Background quality of ground water and surface water;
- d. Any on-site hydraulic connections between aquifers;
- e. Site stratigraphy and aquifer characteristics for confining layers, semi-confining layers, and all aquifers below the site that may be affected by the disposal facility;
- f. Description of topography, soil types, and surface water drainage systems;
- g. Inventory of all public and private water wells within a one mile radius of the site including, where available, well top of casing and bottom elevations, name of owner, age and usage of each well, stratigraphic unit screened, well construction technique, and static water level;
- h. Identify and locate any existing contaminated areas on the site;
- i. Include a map showing the locations of all potable wells within 500 feet of the waste storage and disposal areas;

2. Report signed, sealed, and dated by P.E. and/or P.G.

PART I. GEOTECHNICAL INVESTIGATION REQUIREMENTS (62-701.410(3) and (4), FAC)**LOCATION**

- S ☒ Section 2 Part I-1 N/A ☐ N/C ☐
- S ☒ Section 2 Part I-1 N/A ☐ N/C ☐
- S ☒ Section 2 Part I-1 N/A ☐ N/C ☐
- S ☒ Section 2 Part I-1 N/A ☐ N/C ☐
- S ☒ Section 2 Part I-1 N/A ☐ N/C ☐
- S ☒ Section 2 Part I-2 N/A ☐ N/C ☐

1. Submit a geotechnical site investigation report defining the engineering properties of the site including at least the following:

- a. Description of subsurface conditions including soil stratigraphy and ground water table conditions;
- b. Investigate for the presence of muck, previously filled areas, soft ground, and lineaments;
- c. Estimates of average and maximum high water table across the site;
- d. Evaluation of potential for fault areas and seismic impact zones;
- e. Foundation analysis including:

LOCATION**PART I CONTINUED**S ☒ Section 2 Part I-2 N/A ☐ N/C ☐

(1) Foundation bearing capacity analysis;

S ☒ Section 2 Part I-2 N/A ☐ N/C ☐

(2) Total and differential subgrade settlement analysis;

S ☒ Section 2 Part I-2 N/A ☐ N/C ☐

(3) Slope stability analysis;

S ☒ Section 2, Part I-1 N/A ☐ N/C ☐

f. Evaluation of potential for sinkholes and sinkhole activity at the site that is based upon the investigations required in Rule 62-701.410(3)(f), F.A.C.;

S ☒ Section 2, Part I N/A ☐ N/C ☐

g. A geotechnical report providing a description of methods used in the investigation, and includes soil boring logs, laboratory results, analytical calculations, cross sections, interpretations, conclusions, and a description of any engineering measures proposed for the site;

S ☒ Sec. 2 Part G-1 & I-2 N/A ☐ N/C ☐

2. Report signed, sealed, and dated by P.E. and/or P.G.

PART J. VERTICAL EXPANSION OF LANDFILLS (62-701.430, FAC)**LOCATION**S ☐ _____ N/A ☒ N/C ☐

1. Describe how the vertical expansion shall not cause or contribute to any violations of water quality standards or criteria, shall not cause objectionable odors, or adversely affect the closure design of the existing landfill;

S ☐ _____ N/A ☒ N/C ☐

2. Describe how the vertical expansion over unlined landfills will meet the requirements of Rule 62-701.400, FAC with the exceptions of Rule 62-701.430(1)(c), FAC;

S ☐ _____ N/A ☒ N/C ☐

3. Provide foundation and settlement analysis for the vertical expansion;

S ☐ _____ N/A ☒ N/C ☐

4. Provide total settlement calculations demonstrating that the final elevations of the lining system, gravity drainage, and no other component of the design will be adversely affected;

S ☐ _____ N/A ☒ N/C ☐

5. Minimum stability factor of safety of 1.5 for the lining system component interface stability and for deep stability;

S ☐ _____ N/A ☒ N/C ☐

6. Provide documentation to show the surface water management system will not be adversely affected by the vertical expansion;

S ☐ _____ N/A ☒ N/C ☐

7. Provide gas control designs to prevent accumulation of gas under the new liner for the vertical expansion;

PART K. LANDFILL OPERATION REQUIREMENTS (62-701.500, FAC)

LOCATION

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

1. Provide documentation that the landfill will have at least one trained operator during operation and at least one trained spotter at each working face; (62-701.500(1), FAC)

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

2. Provide a landfill operation plan including procedures for: (62-701.500(2), FAC)

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

a. Designating responsible operating and maintenance personnel;

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

b. Emergency preparedness and response, as required in subsection 62-701.320(16), FAC;

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

c. Controlling types of waste received at the landfill;

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

d. Weighing incoming waste;

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

e. Vehicle traffic control and unloading;

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

f. Method and sequence of filling waste;

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

g. Waste compaction and application of cover;

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

h. Operations of gas, leachate, and stormwater controls;

S ☒ **Section 5** N/A ☐ N/C ☐

i. Water quality monitoring;

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

j. Maintaining and cleaning the leachate collection system;

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

3. Provide a description of the landfill operation record to be used at the landfill, details as to location of where various operational records will be kept (i.e. DEP permit, engineering drawings, water quality records, etc.); (62-701.500(3), FAC)

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

4. Describe the waste records that will be compiled monthly and provided to the Department annually; (62-701.500(4), FAC)

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

5. Describe methods of access control; (62-701.500(5), FAC)

S ☒ Section 3, App 3-A N/A ☐ N/C ☐

6. Describe load checking program to be implemented at the landfill to discourage disposal of unauthorized waste at the landfill; (62-701.500(6), FAC)

LOCATION

S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>
S	<input checked="" type="checkbox"/>	Section 3, App 3-A	N/A	<input type="checkbox"/>	N/C	<input type="checkbox"/>

PART K CONTINUED

7. Describe procedures for spreading and compacting waste at the landfill that include: (62-701.500(7), FAC)

- a. Waste layer thickness and compaction frequencies;
- b. Special considerations for first layer of waste placed above the liner and leachate collection system;
- c. Slopes of cell working face and side grades above land surface, and planned lift depths during operation;
- d. Maximum width of working face;
- e. Description of type of initial cover to be used at the facility that controls:
 - (1) Vector breeding/animal attraction;
 - (2) Fires;
 - (3) Odors;
 - (4) Blowing litter;
 - (5) Moisture infiltration;
- f. Procedures for applying initial cover, including minimum cover frequencies;
- g. Procedures for applying intermediate cover;
- h. Time frames for applying final cover;
- i. Procedures for controlling scavenging and salvaging;
- j. Description of litter policing methods;
- k. Erosion control procedures;

LOCATION**PART K CONTINUED**S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ **Section 3** N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐

8. Describe operational procedures for leachate management including: (62-701.500(8), FAC)

a. Leachate level monitoring;

b. Operation and maintenance of leachate collection and removal system, and treatment as required;

c. Procedures for managing leachate if it becomes regulated as a hazardous waste;

d. Identification of treatment or disposal facilities that may be used for off-site discharge and treatment of leachate;

e. Contingency plan for managing leachate during emergencies or equipment problems;

f. Procedures for recording quantities of leachate generated in gal/day and including this in the operating record;

g. Procedures for comparing precipitation experienced at the landfill with leachate generation rates and including this information in the operating record;

h. Procedures for water pressure cleaning or video inspecting leachate collection systems;

9. Describe how the landfill receiving degradable wastes shall implement a gas management system meeting the requirements of Rule 62-701.530, FAC; (62-701.500(9), FAC)

10. Describe procedures for operating and maintaining the landfill stormwater management system to comply with the requirements of Rule 62-701.400(9), FAC; (62-701.500(10), FAC)

11. Equipment and operation feature requirements; (62-701.500(11), FAC)

a. Sufficient equipment for excavating, spreading, compacting, and covering waste;

b. Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown;

c. Communications equipment;

LOCATION

- S ☒ Section 3, App 3-A N/A ☐ N/C ☐
- S ☒ Section 3, App 3-A N/A ☐ N/C ☐
- S ☒ Section 3, App 3-A N/A ☐ N/C ☐
- S ☒ Section 3, App 3-A N/A ☐ N/C ☐
- S ☒ Section 3, App 3-A N/A ☐ N/C ☐
- S ☒ Section 3, App 3-A N/A ☐ N/C ☐
- S ☒ Section 3, App 3-A N/A ☐ N/C ☐
- S ☒ Section 3, App 3-A N/A ☐ N/C ☐
- S ☒ Section 3, App 3-A N/A ☐ N/C ☐

PART K CONTINUED

- d. Dust control methods;
- e. Fire protection capabilities and procedures for notifying local fire department authorities in emergencies;
- f. Litter control devices;
- g. Signs indicating operating authority, traffic flow, hours of operation, and disposal restrictions;

12. Provide a description of all-weather access road, inside perimeter road, and other on-site roads necessary for access at the landfill; (62-701.500(12), FAC)

13. Additional record keeping and reporting requirements; (62-701.500(13), FAC)

- a. Records used for developing permit applications and supplemental information maintained for the design period of the landfill;
- b. Monitoring information, calibration and maintenance records, and copies of reports required by permit maintained for at least 10 years;
- c. Maintain annual estimates of the remaining life of constructed landfills, and of other permitted areas not yet constructed, and submit this estimate annually to the Department;
- d. Procedures for archiving and retrieving records which are more than five years old;

PART L. WATER QUALITY MONITORING REQUIREMENTS (62-701.510, FAC)**LOCATION**

- S ☒ Section 5 N/A ☐ N/C ☐
- S ☒ Section 5 N/A ☐ N/C ☐

1. A water quality monitoring plan shall be submitted describing the proposed ground water and surface water monitoring systems, and shall meet at least the following requirements:

- a. Based on the information obtained in the hydrogeological investigation and signed, dated, and sealed by the P.G. or P.E. who prepared it; (62-701.510(2)(a), FAC)

LOCATIONS ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐**PART L CONTINUED**

b. All sampling and analysis performed in accordance with Chapter 62-160, FAC; (62-701.510(2)(b), FAC)

c. Ground water monitoring requirements; (62-701.510(3), FAC)

- (1) Detection wells located downgradient from and within 50 feet of disposal units;
- (2) Downgradient compliance wells as required;
- (3) Background wells screened in all aquifers below the landfill that may be affected by the landfill;
- (4) Location information for each monitoring well;
- (5) Well spacing no greater than 500 feet apart for downgradient wells and no greater than 1500 feet apart for upgradient wells, unless site specific conditions justify alternate well spacings;
- (6) Properly selected well screen locations;
- (7) Monitoring wells constructed to provide representative ground water samples;
- (8) Procedures for properly abandoning monitoring wells;
- (9) Detailed description of detection sensors, if proposed;

d. Surface water monitoring requirements; (62-701.510(4), FAC)

- (1) Location of and justification for all proposed surface water monitoring points;
- (2) Each monitoring location to be marked and its position determined by a registered Florida land surveyor;

e. Initial and routine sampling frequency and requirements; (62-701.510(5), FAC)

- (1) Initial background ground water and surface water sampling and analysis requirements;

LOCATION**PART L CONTINUED**S ☒ Section 5 N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐S ☒ Section 5 N/A ☐ N/C ☐

(2) Routine monitoring well sampling and analysis requirements;

(3) Routine surface water sampling and analysis requirements;

f. Describe procedures for implementing evaluation monitoring, prevention measures, and corrective action as required; (62-701.510(6), FAC)

g. Water quality monitoring report requirements; (62-701.510(8), FAC)

(1) Semi-annual report requirements; (see paragraphs 62-701.510(5)(c) and (d), FAC for sampling frequencies)

(2) Documentation that the water quality data shall be provided to the Department in an electronic format consistent with requirements for importing into Department databases, unless an alternate form of submittal is specified in the permit;

(3) Two and one-half year, or annual, report requirements, or every five years if in long-term care, signed dated, and sealed by P.G. or P.E.;

PART M. SPECIAL WASTE HANDLING REQUIREMENTS (62-701.520, FAC)**LOCATION**S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☐ _____ N/A ☒ N/C ☐S ☐ _____ N/A ☒ N/C ☐

1. Describe procedures for managing motor vehicles; (62-701.520(1), FAC)

2. Describe procedures for landfilling shredded waste; (62-701.520(2), FAC)

3. Describe procedures for asbestos waste disposal; (62-701.520(3), FAC)

4. Describe procedures for disposal or management of contaminated soil; (62-701.520(4), FAC)

5. Describe procedures for disposal of biological wastes; (62-701.520(5), FAC)

PART N. GAS MANAGEMENT SYSTEM REQUIREMENTS (62-701.530, FAC)

LOCATION

S ☒ Section 3 N/A ☐ N/C ☐

1. Provide documentation for a gas management system that will: (62-701.530(1), FAC)

S ☒ Section 3 N/A ☐ N/C ☐

a. Be designed to prevent concentrations of combustible gases from exceeding 25% the LEL in structures and 100% the LEL at the property boundary;

S ☒ Section 3 N/A ☐ N/C ☐

b. Be designed for site specific conditions;

S ☒ Section 3 N/A ☐ N/C ☐

c. Be designed to reduce gas pressure in the interior of the landfill;

S ☒ Section 3 N/A ☐ N/C ☐

d. Be designed to not interfere with the liner, leachate control system, or final cover;

S ☒ Section 3 N/A ☐ N/C ☐

2. Provide documentation that will describe locations, construction details, and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes; (62-701.530(2), FAC)

S ☐ _____ N/A ☒ N/C ☐

3. Provide documentation describing how the gas remediation plan and odor remediation plan will be implemented; (62-701.530(3), FAC)

S ☐ _____ N/A ☒ N/C ☐

4. Landfill gas recovery facilities; (62-701.530(5), FAC)

S ☐ _____ N/A ☒ N/C ☐

a. Provide information required in Rules 62-701.320(7) and 62-701.330(3), FAC;

S ☐ _____ N/A ☒ N/C ☐

b. Provide information required in Rule 62-701.600(4), FAC, where relevant and practical;

S ☐ _____ N/A ☒ N/C ☐

c. Provide estimates of current and expected gas generation rates and description of condensate disposal methods;

S ☐ _____ N/A ☒ N/C ☐

d. Provide description of procedures for condensate sampling, analyzing, and data reporting;

S ☐ _____ N/A ☒ N/C ☐

e. Provide closure plan describing methods to control gas after recovery facility ceases operation, and any other requirements contained in Rule 62-701.400(10), FAC;

PART O. LANDFILL FINAL CLOSURE REQUIREMENTS (62-701.600, FAC)

LOCATION

S ☒ Section 7 N/A ☐ N/C ☐

S ☒ Section 7 N/A ☐ N/C ☐

S ☒ Section 7 N/A ☐ N/C ☐

S ☒ Section 7 N/A ☐ N/C ☐

S ☒ Section 7 N/A ☐ N/C ☐

S ☒ Section 7 N/A ☐ N/C ☐

S ☒ Section 7, App. 7-A N/A ☐ N/C ☐

S ☒ Section 4 N/A ☐ N/C ☐

S ☒ Section 4 N/A ☐ N/C ☐

S ☒ Section 4 N/A ☐ N/C ☐

S ☒ Section 4 N/A ☐ N/C ☐

S ☒ Section 4 N/A ☐ N/C ☐

S ☒ Section 4 N/A ☐ N/C ☐

S ☐ To be submitted at time of closure N/A ☒ N/C ☐

S ☐ To be submitted at time of closure N/A ☒ N/C ☐

S ☐ To be submitted at time of closure N/A ☒ N/C ☐

S ☐ To be submitted at time of closure N/A ☒ N/C ☐

1. Closure permit requirements; (62-701.600(2), FAC)

a. Application submitted to the Department at least 90 days prior to final receipt of wastes;

b. Closure plan shall include the following:

(1) Closure design plan;

(2) Closure operation plan;

(3) Plan for long-term care;

(4) A demonstration that proof of financial assurance for long-term care will be provided;

2. Closure design plan including the following requirements: (62-701.600(3), FAC)

a. Plan sheet showing phases of site closing;

b. Drawings showing existing topography and proposed final grades;

c. Provisions to close units when they reach approved design dimensions;

d. Final elevations before settlement;

e. Side slope design including benches, terraces, down slope drainage ways, energy dissipaters, and description of expected precipitation effects;

f. Final cover installation plans including:

(1) CQA plan for installing and testing final cover;

(2) Schedule for installing final cover after final receipt of waste;

(3) Description of drought resistant species to be used in the vegetative cover;

LOCATIONS ☐ To be submitted at time of closure N/A ☒ N/C ☐S ☐ N/A ☒ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☒ Section 4 N/A ☐ N/C ☐S ☐ N/A ☒ N/C ☐S ☐ N/A ☒ N/C ☐S ☒ Section 2 Part I-2 N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☒ Section 3, App 3-A N/A ☐ N/C ☐S ☒ Section 7 N/A ☐ N/C ☐S ☒ Section 7 N/A ☐ N/C ☐S ☒ Section 7 N/A ☐ N/C ☐S ☒ Section 7 N/A ☐ N/C ☐S ☒ Section 7 N/A ☐ N/C ☐S ☒ Section 7 N/A ☐ N/C ☐**PART O CONTINUED**

(4) Top gradient design to maximize runoff and minimize erosion;

(5) Provisions for cover material to be used for final cover maintenance;

g. Final cover design requirements;

(1) Protective soil layer design;

(2) Barrier soil layer design;

(3) Erosion control vegetation;

(4) Geomembrane barrier layer design;

(5) Geosynthetic clay liner design, if used;

(6) Stability analysis of the cover system and the disposed waste;

h. Proposed method of stormwater control;

i. Proposed method of access control;

j. Description of the proposed or existing gas management system which complies with Rule 62-701.530, FAC;

3. Closure operation plan shall include: (62-701.600(4), FAC)

a. Detailed description of actions which will be taken to close the landfill;

b. Time schedule for completion of closing and long-term care;

c. Describe proposed method for demonstrating financial assurance for long-term care;

d. Operation of the water quality monitoring plan required in Rule 62-701.510, FAC;

e. Development and implementation of gas management system required in Rule 62-701.530, FAC;

LOCATION**PART O CONTINUED**

- | | | | |
|---------------------------------------|------------------|---|--|
| S <input checked="" type="checkbox"/> | <u>Section 7</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | 4. Certification of closure construction completion and final reports including: (62-701.600(6), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 7</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | a. Survey monuments; (62-701.600(6)(a), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 7</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | b. Final survey report; (62-701.600(6)(b), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 7</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | c. Closure construction quality assurance report; (62-701.400(7), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 7</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | 5. Declaration to the public; (62-701.600(7), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 7</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | 6. Official date of closing; (62-701.600(8), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 7</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | 7. Justification for and detailed description of procedures to be followed for temporary closure of the landfill, if desired; (62-701.600(9), FAC) |

PART P. OTHER CLOSURE PROCEDURES (62-701.610, FAC)**LOCATION**

- | | | | |
|----------------------------|-------|--|--|
| S <input type="checkbox"/> | _____ | N/A <input checked="" type="checkbox"/> N/C <input type="checkbox"/> | 1. Describe how the requirements for use of closed solid waste disposal areas will be achieved; (62-701.610(1), FAC) |
| S <input type="checkbox"/> | _____ | N/A <input checked="" type="checkbox"/> N/C <input type="checkbox"/> | 2. Describe how the requirements for relocation of wastes will be achieved; (62-701.610(2), FAC) |

PART Q. LONG-TERM CARE (62-701.620, FAC)**LOCATION**

- | | | | |
|---------------------------------------|--------------------------|---|--|
| S <input checked="" type="checkbox"/> | <u>Section 2, Part Q</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | 1. Maintaining the gas collection and monitoring system; (62-701.620(5), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 2, Part Q</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | 2. Stabilization report requirements; (62-701.620(6), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 2, Part Q</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | 3. Right of access; (62-701.620(7), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 2, Part Q</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | 4. Requirements for replacement of monitoring devices; (62-701.620(8), FAC) |
| S <input checked="" type="checkbox"/> | <u>Section 2, Part Q</u> | N/A <input type="checkbox"/> N/C <input type="checkbox"/> | 5. Completion of long-term care signed and sealed by professional engineer; (62-701.620(9), FAC) |

PART R. FINANCIAL ASSURANCE (62-701.630, FAC)

LOCATION

S ☒ Section 7, App 7-A N/A ☐ N/C ☐

1. Provide cost estimates for closing, long-term care, and corrective action costs estimated by a P.E. for a third party performing the work, on a per unit basis, with the source of estimates indicated; (62-701.630(3) & (7), FAC)

S ☒ Section 7, App 7-A N/A ☐ N/C ☐

2. Describe procedures for providing annual cost adjustments to the Department based on inflation and changes in the closing, long-term care, and corrective action plans; (62-701.630(4) & (8), FAC)

S ☒ Section 7, App 7-A N/A ☐ N/C ☐

3. Describe funding mechanisms for providing proof of financial assurance and include appropriate financial assurance forms. (62-701.630(5), (6), & (9), FAC)

PART 5.

CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

1.

The undersigned applicant or authorized representative of

are an application for a renewal

John Arnold, P.E., Director of Engineering & Facilities

John.Phillip.Arnold@gmail.com

Mailing Address

City, State, Zip Code

Telephone Number _____

Attach letter of authorization if agent is not a government official, owner, or corporate officer.

2.

This is to certify that the engineering features of this solid waste management facility have been designed/examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, this facility, when properly maintained and operated, will comply with all applicable statutes of the State of Florida and rules of the Department. It is agreed that the undersigned will provide the applicant with a set of instructions of proper maintenance and operation of the facility.

Lisa Baker, P.E., Engineering Division Director

— ★ —

74652

Florida Registration Number (please affix seal)

Mailing Address

City, State, Zip Code

E-Mail Address (if available)

Telephone Number

Date: 5-6-18

SECTION 1

S-1

LETTER OF AUTHORIZATION

June 19, 2013

Dominic Iafrate, Vice President
Angelo's Aggregate Materials, LLC
855 28th Street South
St. Petersburg, FL 33712

RE: Angelo's Aggregate Materials, LLC (d/b/a Angelo's Recycled Materials)
Agent Authorization

To Whom It May Concern,

Mr. John Arnold, P.E. is authorized by Angelo's Aggregate Materials, LLC to act on its behalf for all matters related to our existing and contemplated facilities in the state of Florida. Such authorization includes permitting, construction, operations, closure activities, and dealings as may be necessary in the pursuit of Angelo's Aggregate Materials, LLC interests. This authorization shall remain in effect until rescinded in writing by an authorized agent of Angelo's Aggregate Materials, LLC.

Sincerely,



Dominic Iafrate, Vice President
Angelo's Aggregate Materials, LLC

Witness Signature: 

Witness Name (printed): NEIRO DE RUBEIS

Date: 6/20/2013

July 25, 2014


Angelo's Aggregate Materials, LLC
John Arnold, P.E.
41111 Enterprise Road
Dade City, FL 33525

RE: Engineer of Record Authorization

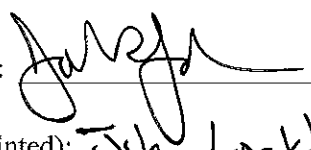
To Whom It May Concern,

Locklear and Associates, Inc. is authorized to act as the engineer of record on behalf of Angelo's Aggregate Materials, LLC for solid waste facilities located at 41111 Enterprise Road, Dade City, FL 33525. This authorization shall remain in effect until rescinded in writing by an authorized agent of Angelo's Aggregate Materials, LLC.

Sincerely,



John Arnold, P.E.
Manager
Angelo's Aggregate Materials, LLC

Witness Signature: 

Witness Name (printed): John Locklear
Date: 7/25/14

SECTION 2

C-1

WELL INVENTORY

Attachment C-1

SWFWMD WMIS WATER WELLS - SECTION 8

TOWNSHIP 25, RANGE 22 (2007 - 2018)

REFERENCE DATE: APRIL 25, 2018

Permit #	Permit Status	Owner	Well Location Street	Well Use	County	Section	TownshipId	Range	Diameter	Static Water Level	Casing Depth	Well Depth	Well Completion Dt	Comment
759125	Completed	Angelos Aggregate Matl	41111 Enterprise rd	DOMESTIC	Pasco	8	25	22	4	0	84	200	04/22/2007	
800703	Completed	Cal-Maine Foods, Inc. / Attn: Emily Lastowski	11230 SINGLETARY RD	PUBLIC SUPPLY	Pasco	8	25	22	4	26	89	140	11/09/2009	

SECTION 2

D-1

PROPERTY OWNERSHIP DOCUMENTATION

9, 42C

2001040224
Rept: 488384 Rec: 10.50
DS: 13220.50 TT: 0.00
04/12/01 JED PITTMAN, PASCO COUNTY CLERK

R

Prepared by and return to:
Mandy Baldwin-Luffman
Employee
Johnson, Auvil & Brock, P.A.
37837 Meridian Avenue Suite 314
Dade City, Florida 33525

JED PITTMAN, PASCO COUNTY CLERK
04/12/01 02:10pm 1 of 2
OR BK 4583 PG 960

File Number: 01-03-47

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this 12th day of April, 2001, between Sid Larkin & Son, Inc., a Florida corporation whose post office address is P.O. Box 1747 Dade City, FL 33526, grantor, and Angelo's Aggregate Materials, LTD, a Florida limited partnership whose post office address is 26400 Sherwood, Warren, Michigan 48091, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Pasco County, Florida to-wit:

The South 1/2 of the SW 1/4 of Section 5 Lying West of the Right-of-Way on Auton Road; And the South 30.0 feet of the NE 1/4 of the SW 1/4 of Section 5, Lying West of the Right-of-Way on Auton Road; Less the East 50.0 feet thereof; And the SW 1/4 of the NW 1/4 of Section 5, all in Section 5, Township 25 South, Range 22 East.

The South 1/2 of the NE 1/4 of Section 6; And the North 1/2 of the SE 1/4 of Section 6; Less the South 281.0 feet of the West 181.0 feet thereof; And the NE 1/2 of the NE 1/4 of the SE 1/4 of the SE 1/4 of Section 6; All in Township 25 South, Range 22 East.

The North 1/2 of the NW 1/4 of Section 8 Lying West of the Right-of-Way on Auton Road; Less the South 25.0 feet thereof; All in Township 25 South, Range 22 East.

All lying in and being in Pasco County, Florida.

Subject to maintained right-of-way on Duck Lake Canal Road

Parcel Identification Number: 05-25-22-0000-00500-0030

Together with all the tenements, hereditaments, easements and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes and solid waste assessments accruing subsequent to December 31, 2000, zoning and/or restrictions imposed by governmental authority.

DoubleTimes

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written

Signed, sealed and delivered in our presence:

Long A. J.
Witness Name: Long A. J.
Monica Baldwin Hoffman
Witness Name: Monica Baldwin Hoffman

Sid Larkin & Son, Inc.
a Florida corporation

By: Jon S. Larkin II
Jon S. Larkin, II
President

(Corporate Seal)



State of Florida
County of Pasco

The foregoing instrument was acknowledged before me this 17th day of April, 2001 by Jon S. Larkin, II, President of Sid Larkin & Son, Inc., a Florida corporation, on behalf of the corporation. He ☐ is personally known to me or ☒ has produced a driver's license as identification

[Notary Seal]

Elizabeth A. Baldwin
Notary Public

Printed Name: Elizabeth A. Baldwin

My Commission Expires: _____



Elizabeth A. Baldwin
MY COMMISSION # CCS29381 EXPIRES
November 30, 2001
NOTARY PUBLIC - PASCO COUNTY, FL

3
7497,425

R

Prepared by and return to:
Josephine Lee Larkin, For
Meridian Title Company, Inc.
37837 Meridian Avenue Suite 100
Dade City, FL 33525

File Number: 05-07-67



2005266480
Rcpt: 952030 Rec: 27.00
DS: 52482.50 IT: 0.00
12/15/05 *AK* Dpty Clerk

JED PITTMAN, PASCO COUNTY CLERK
12/15/05 04:31pm 1 of 3
OR BK 6749 PG 432

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this 14 day of December, 2005, between Sid Larkin and Son, Inc., a Florida corporation, whose post office address is 39651 LARKIN LAKE DRIVE, Dade City, FL 33525, grantor, and Angelo's Aggregate Materials, LTD., a Florida Limited Partnership, whose post office address is 26400 Sherwood, Warren, MI 48091, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Pasco County, Florida to-wit:

SEE EXHIBIT "A" ATTACHED HERETO & MADE A PART HEREOF FOR A MORE PARTICULAR DESCRIPTION OF SAID PROPERTY.

Parcel Identification Number: 082522 0000 00100 0000
and
Parcel Identification Number: 082522 0000 00100 0100
and
Parcel Identification Number: 072522 0000 00100 0000

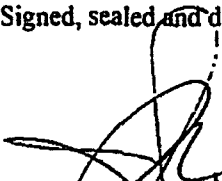
Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.


To Have and to Hold, the same in fee simple forever.

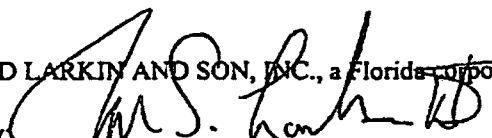
And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2005, zoning and/or restrictions imposed by governmental authority, and easements, restrictions and reservations of record, if any, however this reference shall not serve to reimpose same.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

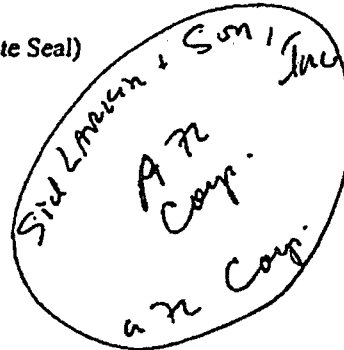
Signed, sealed and delivered in our presence:


Witness Name: Josephine Lee Larkin


Witness Name: Linda Breaker

SID LARKIN AND SON, INC., a Florida corporation
By: 
Jon S. Larkin, II, President

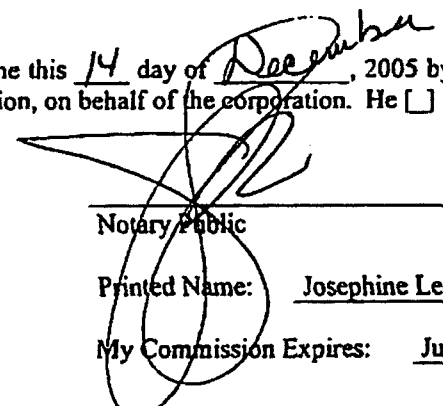
(Corporate Seal)



State of Florida
County of Pasco

The foregoing instrument was acknowledged before me this 14 day of December, 2005 by Jon S. Larkin, II, President of SID LARKIN AND SON, INC., a Florida corporation, on behalf of the corporation. He ☐ is personally known to me or ☒ has produced a driver's license as identification.

[Notary Seal]


Notary Public

Printed Name: Josephine Lee Larkin

My Commission Expires: July 16, 2007



Josephine Lee Larkin
MY COMMISSION # DD206215 EXPIRES
July 16, 2007
BONDED - RUTROY FARM INSURANCE, INC.

Exhibit A

OR BK 6749 PG 434
3 of 3

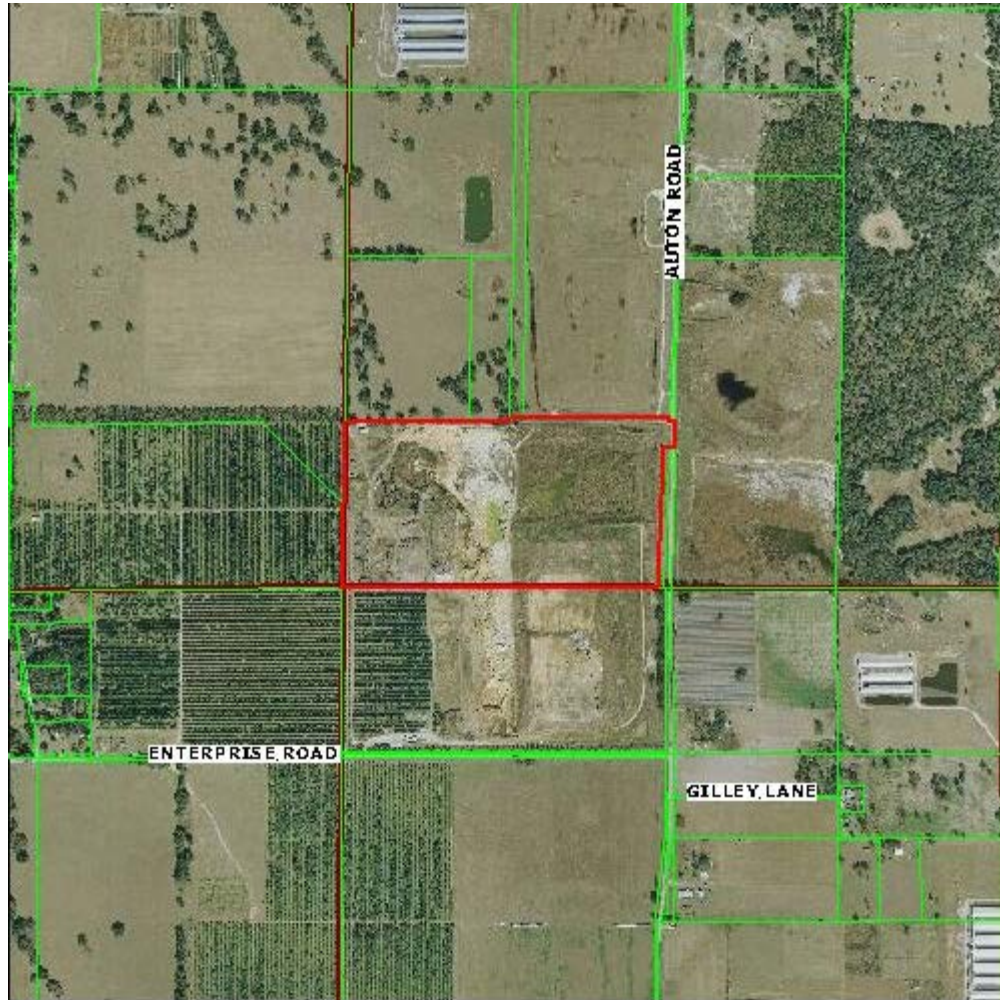
A PORTION OF SECTIONS 7 AND 8, TOWNSHIP 25 SOUTH, RANGE 22 EAST, PASCO COUNTY, FLORIDA, FURTHER DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF SECTION 7, TOWNSHIP 25 SOUTH, RANGE 22 EAST, BEING ALSO THE SOUTHWEST CORNER OF SECTION 8, TOWNSHIP 25 SOUTH, RANGE 22 EAST, THENCE ALONG THE SOUTH LINE OF THE SOUTHEAST 1/4 OF SECTION 7, RUN S-89°26'48"-W, 2425.00 FEET, THENCE N-00°12'51"-W, 3948.82 FEET TO THE INTERSECTION OF THE SOUTHERLY RIGHT-OF-WAY LINE OF ENTERPRISE ROAD, THENCE ALONG SAID RIGHT-OF-WAY LINE THE FOLLOWING COURSES: N-89°43'20"-E, 792.52 FEET; N-89°10'39"-E, 934.87 FEET; N-89°29'16"-E, 710.53 FEET; N-89°58'25"-E, 821.74 FEET; N-89°44'06"-E, 1769.79 FEET; TO THE INTERSECTION OF THE WESTERLY RIGHT-OF-WAY LINE OF SINGLETARY ROAD, THENCE ALONG SAID RIGHT-OF-WAY LINE THE FOLLOWING COURSES: S-00°13'53"-E, 609.68 FEET; S-07°39'10"-W, 656.12 FEET; S-00°13'53"-E, 50.00 FEET TO THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 8, THENCE ALONG SAID LINE AND CONTINUING ALONG SAID RIGHT-OF-WAY LINE N 89°49'11"-E, 6.00 FEET; TO A POINT IN THE CENTER OF SINGLETARY ROAD AS NOW LOCATED; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING ALONG THE CENTERLINE OF SINGLETARY ROAD, S-00°27'46"-W, 2629.32 FEET, THENCE LEAVING SAID RIGHT-OF-WAY LINE S-89°38'12"-W, 557.00 FEET, THENCE S-89°47'10"-W, 1878.44 FEET, THENCE S-81°47'17"-W, 54.85 FEET TO THE POINT OF BEGINNING.

Parcel Identification Number: 082522 0000 00100 0000
and
Parcel Identification Number: 082522 0000 00100 0100
and
Parcel Identification Number: 072522 0000 00100 0000

Pasco County, Florida
3.7 miles N of Richland

Prepared by the Office of Mike Wells, Pasco County Property Appraiser.

Map Created on 10/1/2011 at 5:52:58 PM.

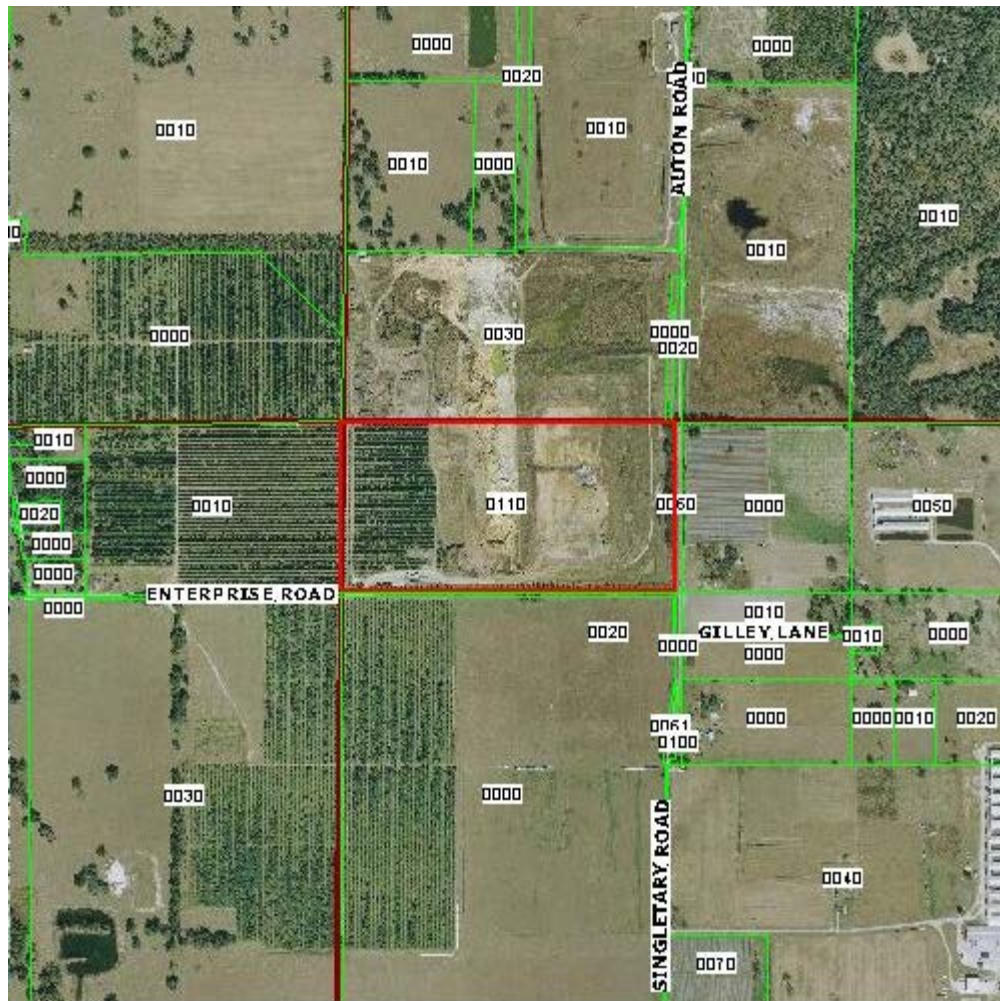


Data Current as Of:	Weekly Archive - Saturday, September 24, 2011							
Parcel ID	05-25-22-0000-00500-0030 (Card: 001 of 001)							
Classification	66 - Orchard Groves							
Mailing Address ANGELO'S AGGREGATE MATERIALS LTD PO BOX 1493 LARGO FL 33779-1493 Physical Address Physical Address N/A				Property Value Ag Land \$1,510,541 Land \$1,556,688 Building \$0 Extra Features \$3,968 Market Value \$1,514,509 Assessed (Non-School Amendment 1) \$1,514,509 Taxable Value \$1,514,509				
Legal Description (First 4 Lines) SOUTH 1/2 OF SW1/4 OF SECTION 5 LYING WEST OF RIGHT-OF-WAY OF AUTON ROAD & SOUTH 30.00 FT OF NE1/4 OF SW1/4 OF SECTION								
Land Detail (Card: 001 of 001)								
Line	Use	Description	Zoning	Units	Type	Price	Condition	Value
1	6601	CIT.GRV.LD	00AC	10.50	AC	\$1,000.00	1.00	\$10,500
2	6610	ORANGE GRV	00AC	10.50	AC	\$3,300.00	0.85	\$29,453
3	9200	MINING	00AC	31.78	AC	\$8,200.00	4.50	\$1,172,682
4	9200	MINING	00AC	36.33	AC	\$8,200.00	1.00	\$297,906
5	9910	MKT.VAL.AG	00AC	31.78	AC	\$8,200.00	4.50	\$1,172,682
6	9910	MKT.VAL.AG	00AC	46.83	AC	\$8,200.00	1.00	\$384,006
Additional Land Information								
Acres	78.61	Tax Area	21MF	FEMA Code	X	Residential Code	3EDC.S1	
Building Information (Card: 001 of 001)								
Unimproved Parcel 00 - Unimproved								
Extra Features (Card: 001 of 001)								
Line	Description	Year	Units	Value				
1	CLFENCE	2003	9,380	\$3,968				
Sales History								
Previous Owner		SID LARKIN & SON INC						
Year	Month	Book/Page	Type	Amount				
2001	04	4583 / 0960	WD	\$0				
1986	06	1509 / 0998	WD	\$0				
1983	04	1256 / 0292	WD	\$0				

Pasco County, Florida
3.5 miles N of Richland

Prepared by the Office of Mike Wells, Pasco County Property Appraiser.

Map Created on 10/1/2011 at 6:01:33 PM.



Data Current as Of:	Weekly Archive - Saturday, September 24, 2011		
Parcel ID	08-25-22-0000-00100-0110 (Card: 001 of 002)		
Classification	66 - Orchard Groves		

<p style="text-align: center;">Mailing Address</p> <p style="text-align: center;">ANGELO'S AGGREGATE MATERIALS LTD PO BOX 1493 LARGO FL 33779-1493</p> <p style="text-align: center;">Physical Address - See All 3 addresses (First Shown)</p> <p style="text-align: center;">41111 ENTERPRISE RD DADE CITY FL 33525-1589</p>	<p style="text-align: center;">Property Value</p> <table style="width: 100%;"> <tr><td>Ag Land</td><td style="text-align: right;">\$1,115,538</td></tr> <tr><td>Land</td><td style="text-align: right;">\$1,282,398</td></tr> <tr><td>Building</td><td style="text-align: right;">\$44,695</td></tr> <tr><td>Extra Features</td><td style="text-align: right;">\$39,224</td></tr> </table> <p style="text-align: center;">Market Value \$1,199,457</p> <p>Assessed (Non-School Amendment 1) \$1,199,457</p> <p style="text-align: center;">Taxable Value \$1,199,457</p>	Ag Land	\$1,115,538	Land	\$1,282,398	Building	\$44,695	Extra Features	\$39,224
Ag Land	\$1,115,538								
Land	\$1,282,398								
Building	\$44,695								
Extra Features	\$39,224								

<p style="text-align: center;">Legal Description (First 4 Lines)</p> <p style="text-align: center;">N1/2 OF NW1/4 OF SECTION 8 LYING WEST OF AUTON ROAD LESS SOUTH 25.00 FT THEREOF OR 4583 PG 960</p>
--

Land Detail (Card: 001 of 002)								
Line	Use	Description	Zoning	Units	Type	Price	Condition	Value
1	6601	CIT.GRV.LD	00AC	31.00	AC	\$1,000.00	1.00	\$31,000
2	6610	ORANGE GRV	00AC	18.00	AC	\$1,150.00	1.00	\$20,700
3	6610	ORANGE GRV	00AC	12.00	AC	\$3,300.00	0.90	\$35,640
4	9200	MINING	00AC	22.22	AC	\$8,200.00	4.50	\$819,918
5	9200	MINING	00AC	25.40	AC	\$8,200.00	1.00	\$208,280
6	9910	MKT.VAL.AG	00AC	22.22	AC	\$8,200.00	4.50	\$819,918

Additional Land Information							
Acres	78.62	Tax Area	21ME	FEMA Code	--	Residential Code	3EDC.S1

Building Information - Use 02 - Mobile Home (Card: 001 of 002)			
Year Built	2001	Stories	1.0
Exterior Wall 1	Above Average	Exterior Wall 2	None
Roof Structure	Gable or Hip	Roof Cover	Asphalt or Composition Shingle
Interior Wall 1	Drywall	Interior Wall 2	None
Flooring 1	Sheet Vinyl	Flooring 2	Carpet
Fuel	Electric	Heat	Forced Air - Ducted
A/C	None	Baths	2.0

Line	Description	Sq. Feet	Repl. Cost New
1	BAS	1,536	\$44,360

Extra Features (Card: 001 of 002)				
Line	Description	Year	Units	Value
1	CAC-4	2003	1	\$616
2	CLFENCE	2003	21,000	\$8,883
3	PAV CON	2003	4,620	\$5,544
4	PAV ASP	2003	24,388	\$15,804
5	BARN	2005	1	\$6,552
Sales History				
Previous Owner		N/A		
Year	Month	Book/Page	Type	Amount
2001	04	4583 / 0960	WD	\$0

SECTION 2

D-2

PROOF OF PUBLICATION

(The following page contains the text to be published upon the permit renewal acceptance by the Department.)

State of Florida
Department of Environmental Protection
Notice of Application

The Department announces receipt of applications for construction and operation permit renewal from Angelo's Aggregate Materials, Ltd. for vertical and lateral expansion of a Class III landfill, subject to Department rules, at the Enterprise Class III Recycling and Disposal Facility, located at 41111 Enterprise Road, Dade City, Pasco County, Florida.

This application is being processed and is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, Southwest District Office, 13051 North Telecom Parkway, Suite 101 Temple Terrace, Florida 33637-0926.

SECTION 2

E-1

GROUNDWATER MONITORING LAB CERTIFICATION

[DEP Home](#)[About DEP](#)[Programs](#)[Contact](#)[Site Map](#)[Search](#)

Florida Department of Environmental Protection



Resources for

- » [Ombudsman and Public Services](#)
- » [Regulatory Plans](#)
- » [Public Notices, Outreach & Education Calendar](#)
- » [Contact Us](#)

NELAP-Certified Organizations - Location Results

Laboratories Certified Under NELAP by the Florida Department of Health

Organization Name and Location Query Results

Database Version: 04/21/2018 08:30:01

LAB ID	DOH ID	Organization	Type	Street Address	City	State	Zip	County	Phone
5823	E83182	Environmental Conservation Laboratories, Inc. (ENCO) - Orlando	Commercial	10775 Central Port Drive	Orlando	FL	32824	Orange	(407) 826-5314

Hits: 1

**Sign Up
for News & Info**



Unless indicated, documents on this Web site are Adobe Acrobat files, and require the free [reader software](#).





State of Florida

Department of Health, Bureau of Public Health Laboratories

This is to certify that



E83182

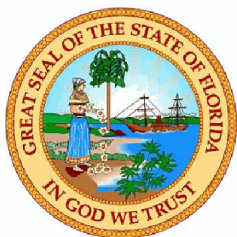
ENVIRONMENTAL CONSERVATION LABORATORIES, INC. (ENCO) -
ORLANDO
10775 CENTRAL PORT DRIVE
ORLANDO, FL 32824-7009

has complied with Florida Administrative Code 64E-1,
for the examination of environmental samples in the following categories

DRINKING WATER - MICROBIOLOGY, DRINKING WATER - PRIMARY INORGANIC CONTAMINANTS, DRINKING WATER - SECONDARY INORGANIC CONTAMINANTS, NON-POTABLE WATER - EXTRACTABLE ORGANICS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER - MICROBIOLOGY, NON-POTABLE WATER - PESTICIDES-HERBICIDES-PCB'S, NON-POTABLE WATER - VOLATILE ORGANICS, SOLID AND CHEMICAL MATERIALS - EXTRACTABLE ORGANICS, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS - PESTICIDES-HERBICIDES-PCB'S, SOLID AND CHEMICAL MATERIALS - VOLATILE ORGANICS

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Public Health Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

Date Issued: March 21, 2018 Expiration Date: June 30, 2018



Susanne Crowe, MHA

Acting Chief, Bureau of Public Health Laboratories

DH Form 1697, 7/04

NON-TRANSFERABLE E83182-43-03/21/2018

Supersedes all previously issued certificates

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Drinking Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Bromide	EPA 300.0	Primary Inorganic Contaminants	NELAP	7/30/2009
Chloride	EPA 300.0	Secondary Inorganic Contaminants	NELAP	5/30/2013
Color	SM 2120 B	Secondary Inorganic Contaminants	NELAP	7/30/2009
Dissolved organic carbon (DOC)	SM 5310 B	Primary Inorganic Contaminants	NELAP	7/30/2009
Escherichia coli	COLISURE	Microbiology	NELAP	10/1/2008
Fluoride	EPA 300.0	Primary Inorganic Contaminants	NELAP	3/30/2010
Nitrate	EPA 300.0	Primary Inorganic Contaminants	NELAP	7/30/2009
Nitrite	EPA 300.0	Primary Inorganic Contaminants	NELAP	7/30/2009
Nitrite as N	SM 4500-NO2-B	Primary Inorganic Contaminants	NELAP	5/30/2013
Odor	SM 2150 B	Secondary Inorganic Contaminants	NELAP	7/30/2009
Orthophosphate as P	EPA 300.0	Primary Inorganic Contaminants	NELAP	7/30/2009
Orthophosphate as P	EPA 365.1	Primary Inorganic Contaminants	NELAP	7/30/2009
pH	SM 4500-H+-B	Secondary Inorganic Contaminants	NELAP	7/30/2009
Sulfate	EPA 300.0	Primary Inorganic Contaminants	NELAP	3/30/2010
Surfactants - MBAS	SM 5540 C	Secondary Inorganic Contaminants	NELAP	7/30/2009
Total coliforms	COLISURE	Microbiology	NELAP	10/1/2008
Total nitrate-nitrite	EPA 300.0	Primary Inorganic Contaminants	NELAP	7/30/2009
Total organic carbon	SM 5310 B	Primary Inorganic Contaminants	NELAP	7/30/2009

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,1-Trichloroethane	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,2,2-Tetrachloroethane	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260	Volatile Organics	NELAP	11/17/2006
1,1,2-Trichloroethane	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1-Dichloroethane	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1-Dichloroethylene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,3-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2,4-Trichlorobenzene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2,4-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1	Volatile Organics	NELAP	4/27/2006
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8011	Volatile Organics	NELAP	7/1/2003
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 504.1	Volatile Organics	NELAP	4/27/2006
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8011	Volatile Organics	NELAP	7/1/2003
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichlorobenzene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,2-Dichlorobenzene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2-Dichloroethane	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichloropropane	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3,5-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 3 of 27

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	Extractable Organics	NELAP	6/18/2009
1,3-Dichlorobenzene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,3-Dichlorobenzene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,3-Dinitrobenzene (1,3-DNB)	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Dichlorobenzene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
1,4-Dichlorobenzene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270	Volatile Organics	NELAP	11/19/2015
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Phenylenediamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
1-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	5/30/2013
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4,5-T	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
2,4,5-T	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4,6-Trichlorophenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-D	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
2,4-D	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
2,4-DB	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
2,4-DB	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
2,4-Dichlorophenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dimethylphenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dinitrophenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dinitrotoluene (2,4-DNT)	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,6-Dinitrotoluene (2,6-DNT)	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Chloroethyl vinyl ether	EPA 624.1	Volatile Organics	NELAP	3/21/2018
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Chloronaphthalene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Chlorophenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Hexanone	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Methyl-4,6-dinitrophenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Methylphenol (o-Cresol)	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Naphthylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Nitrophenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	7/1/2003
3,3'-Dichlorobenzidine	EPA 625.1	Extractable Organics	NELAP	3/21/2018
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
3,5-Dichlorobenzoic acid	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
3/4-Methylphenols (m/p-Cresols)	EPA 625.1	Extractable Organics	NELAP	3/21/2018
3/4-Methylphenols (m/p-Cresols)	EPA 8270	Extractable Organics	NELAP	11/17/2006
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4,4'-DDD	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
4,4'-DDD	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009****Matrix: Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
4,4'-DDE	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
4,4'-DDE	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
4,4'-DDT	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
4,4'-DDT	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Bromophenyl phenyl ether	EPA 625.1	Extractable Organics	NELAP	3/21/2018
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chloro-3-methylphenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chlorophenyl phenylether	EPA 625.1	Extractable Organics	NELAP	3/21/2018
4-Chlorophenyl phenylether	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
4-Dimethyl aminoazobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	7/1/2003
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Nitrophenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
4-Nitrophenol	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
a,a-Dimethylphenethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acenaphthene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Acenaphthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acenaphthylene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acetic acid	ENCO VGC-13/HPLC-UV	Extractable Organics	NELAP	11/19/2015
Acetone	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acetonitrile	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acetophenone	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acidity, as CaCO ₃	SM 2310 B	General Chemistry	NELAP	2/4/2008
Acifluorfen	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Acrolein (Propenal)	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acrylonitrile	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	7/1/2003

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 6 of 27

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009****Matrix: Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aldrin	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Aldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Alkalinity as CaCO ₃	EPA 310.2	General Chemistry	NELAP	10/30/2002
Alkalinity as CaCO ₃	SM 2320 B	General Chemistry	NELAP	2/4/2008
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	7/1/2003
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
alpha-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aluminum	EPA 200.8	Metals	NELAP	4/14/2006
Aluminum	EPA 6020	Metals	NELAP	4/14/2006
Ammonia as N	EPA 350.1	General Chemistry	NELAP	2/13/2002
Aniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
Anthracene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Antimony	EPA 200.8	Metals	NELAP	4/14/2006
Antimony	EPA 6020	Metals	NELAP	4/14/2006
Aramite	EPA 8270	Extractable Organics	NELAP	7/1/2003
Aroclor-1016 (PCB-1016)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1221 (PCB-1221)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1232 (PCB-1232)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1242 (PCB-1242)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1248 (PCB-1248)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1254 (PCB-1254)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1260 (PCB-1260)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1262 (PCB-1262)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	5/30/2013
Aroclor-1268 (PCB-1268)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	5/30/2013
Arsenic	EPA 200.8	Metals	NELAP	4/14/2006
Arsenic	EPA 6020	Metals	NELAP	4/14/2006
Atrazine	EPA 8270	Extractable Organics	NELAP	10/1/2008

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

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State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009****Matrix: Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Azinphos-methyl (Guthion)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Barium	EPA 200.8	Metals	NELAP	4/14/2006
Barium	EPA 6020	Metals	NELAP	4/14/2006
Bentazon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Benzaldehyde	EPA 8270	Extractable Organics	NELAP	5/30/2013
Benzene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Benzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Benzidine	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Benzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(a)anthracene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(a)pyrene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(b)fluoranthene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(g,h,i)perylene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(k)fluoranthene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzoic acid	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	7/1/2003
Beryllium	EPA 200.8	Metals	NELAP	4/14/2006
Beryllium	EPA 6020	Metals	NELAP	4/14/2006
beta-BHC (beta-Hexachlorocyclohexane)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Biochemical oxygen demand	SM 5210 B	General Chemistry	NELAP	2/4/2008
Biphenyl	EPA 8270	Extractable Organics	NELAP	5/30/2013
bis(2-Chloroethoxy)methane	EPA 625.1	Extractable Organics	NELAP	3/21/2018
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	7/1/2003
bis(2-Chloroethyl) ether	EPA 625.1	Extractable Organics	NELAP	3/21/2018
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	7/1/2003
Bolstar (Sulprofos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Bromide	EPA 300.0	General Chemistry	NELAP	2/13/2002
Bromide	EPA 9056	General Chemistry	NELAP	7/1/2003
Bromobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003

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State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009****Matrix: Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Bromodichloromethane	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromoform	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Bromoform	EPA 8260	Volatile Organics	NELAP	7/1/2003
Butyl benzyl phthalate	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Butyric acid (Butanoic acid)	ENCO VGC-13/HPLC-UV	Extractable Organics	NELAP	11/19/2015
Cadmium	EPA 200.8	Metals	NELAP	4/14/2006
Cadmium	EPA 6020	Metals	NELAP	4/14/2006
Calcium	ENCO SOP MET/15.0/ICP-MS	Metals	NELAP	11/17/2006
Calcium	EPA 6020	Metals	NELAP	4/14/2006
Caprolactam	EPA 8270	Extractable Organics	NELAP	5/30/2013
Carbazole	EPA 8270	Extractable Organics	NELAP	7/1/2003
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	7/1/2003
Carbon tetrachloride	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	7/1/2003
Carbonaceous BOD (CBOD)	SM 5210 B	General Chemistry	NELAP	2/13/2002
Chemical oxygen demand	EPA 410.4	General Chemistry	NELAP	2/13/2002
Chemical oxygen demand	SM 5220 D	General Chemistry	NELAP	5/30/2013
Chloramben	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Chlordane (tech.)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Chlordane (tech.)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Chloride	EPA 300.0	General Chemistry	NELAP	2/13/2002
Chloride	EPA 9056	General Chemistry	NELAP	7/1/2003
Chlorobenzene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chlorobenzilate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Chloroethane	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Chloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chloroform	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Chloroform	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chlorophylls	SM 10200 H	General Chemistry	NELAP	10/1/2008
Chloroprene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chlorpyrifos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Chromium	EPA 200.8	Metals	NELAP	4/14/2006
Chromium	EPA 6020	Metals	NELAP	4/14/2006

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 9 of 27

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009****Matrix: Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Chromium VI	EPA 7196	General Chemistry	NELAP	7/1/2003
Chromium VI	SM 3500-Cr B (20th/21st/22nd Ed.)/UV-VIS	General Chemistry	NELAP	5/30/2013
Chrysene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Chrysene	EPA 8270	Extractable Organics	NELAP	7/1/2003
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
cis-1,3-Dichloropropene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Cobalt	EPA 200.8	Metals	NELAP	4/14/2006
Cobalt	EPA 6020	Metals	NELAP	4/14/2006
Color	SM 2120 B	General Chemistry	NELAP	2/4/2008
Conductivity	EPA 120.1	General Chemistry	NELAP	2/13/2002
Copper	EPA 200.8	Metals	NELAP	4/14/2006
Copper	EPA 6020	Metals	NELAP	4/14/2006
Coumaphos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Cyanide	SM 4500-CN E	General Chemistry	NELAP	2/4/2008
Cyclohexane	EPA 8260	Volatile Organics	NELAP	5/30/2013
Dacthal (DCPA)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Dalapon	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Dalapon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
delta-BHC	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
delta-BHC	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Di(2-ethylhexyl) phthalate (DEHP)	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Di(2-ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	7/1/2003
Diallate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Diazinon	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Dibenz(a,h)anthracene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Dibenz(a,h)anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dibromochloromethane	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dibromomethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dicamba	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Dicamba	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dichlorofenthion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 10 of 27

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State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Dichloroprop (Dichlorprop)	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Dichloroprop (Dichlorprop)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Dichlorovos (DDVP, Dichlorvos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Dieldrin	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Dieldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Diethyl phthalate	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Diethylene glycol	EPA 8015	Extractable Organics	NELAP	11/19/2015
Dimethoate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Dimethyl phthalate	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Di-n-butyl phthalate	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Di-n-octyl phthalate	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Disulfoton	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/1/2008
Endosulfan I	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Endosulfan I	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endosulfan II	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Endosulfan II	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endosulfan sulfate	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Endosulfan sulfate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endrin	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Endrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endrin aldehyde	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Endrin aldehyde	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endrin ketone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
EPN	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Ethion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Ethylbenzene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 11 of 27

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Ethylene glycol	EPA 8015	Volatile Organics	NELAP	11/19/2015
Famphur	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Fecal coliforms	SM 9222 D	Microbiology	NELAP	7/30/2009
Fensulfothion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Fenthion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Ferric iron (calc.)	SM 3500-Fe B (20th/21st Ed.)/UV-VIS	General Chemistry	NELAP	5/30/2013
Ferrous iron	SM 3500-Fe B (20th/21st Ed.)/UV-VIS	General Chemistry	NELAP	5/30/2013
Fluoranthene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Fluorene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Fluorene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Fluoride	EPA 300.0	General Chemistry	NELAP	2/13/2002
Fluoride	EPA 9056	General Chemistry	NELAP	7/1/2003
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
gamma-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Hardness	SM 2340 B	General Chemistry	NELAP	2/4/2008
Hardness	SM 2340 C	General Chemistry	NELAP	7/30/2009
Heptachlor	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Heptachlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Heptachlor epoxide	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Heptachlor epoxide	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Hexachlorobenzene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachlorobutadiene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachlorocyclopentadiene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachloroethane	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachlorophene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexanoic acid	ENCO VGC-13/HPLC-UV	Extractable Organics	NELAP	11/19/2015

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State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Indeno(1,2,3-cd)pyrene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Iron	ENCO SOP MET/15.0/ICP-MS	Metals	NELAP	11/17/2006
Iron	EPA 6020	Metals	NELAP	4/14/2006
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Isodrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Isodrin	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Isohexanoic acid (4-methyl-pentanoic acid)	ENCO VGC-13/HPLC-UV	Extractable Organics	NELAP	11/19/2015
Isopentanoic acid (3-methyl-butanoic acid, Isovaleric acid)	ENCO VGC-13/HPLC-UV	Extractable Organics	NELAP	11/19/2015
Isophorone	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Isophorone	EPA 8270	Extractable Organics	NELAP	7/1/2003
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Isosafrole	EPA 8270	Extractable Organics	NELAP	7/1/2003
Kepone	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Kjeldahl nitrogen - total	EPA 351.2	General Chemistry	NELAP	2/13/2002
Lactic acid+2-Hydroxyisobutyric acid (coelute)	ENCO VGC-13/HPLC-UV	Extractable Organics	NELAP	11/19/2015
Lead	EPA 200.8	Metals	NELAP	4/14/2006
Lead	EPA 6020	Metals	NELAP	4/14/2006
m+p-Xylenes	EPA 8260	Volatile Organics	NELAP	10/1/2008
Magnesium	ENCO SOP MET/15.0/ICP-MS	Metals	NELAP	11/17/2006
Magnesium	EPA 6020	Metals	NELAP	4/27/2006
Malathion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Manganese	EPA 200.8	Metals	NELAP	4/14/2006
Manganese	EPA 6020	Metals	NELAP	4/14/2006
MCPA	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
MCPA	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
MCPP	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
MCPP	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Mercury	EPA 245.1	Metals	NELAP	8/28/2006
Mercury	EPA 7470	Metals	NELAP	4/27/2006
Merphos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methapyrilene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Methoxychlor	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 13 of 27

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009****Matrix: Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Methoxychlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Methyl acetate	EPA 8260	Volatile Organics	NELAP	5/30/2013
Methyl bromide (Bromomethane)	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methyl chloride (Chloromethane)	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Methyl parathion (Parathion, methyl)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methylcyclohexane	EPA 8260	Volatile Organics	NELAP	5/30/2013
Methylene chloride	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Methylene chloride	EPA 8260	Volatile Organics	NELAP	7/1/2003
Mevinphos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Mirex	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Molybdenum	EPA 200.8	Metals	NELAP	4/14/2006
Molybdenum	EPA 6020	Metals	NELAP	4/14/2006
Monocrotophos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Naled	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Naphthalene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Naphthalene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Naphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Nickel	EPA 200.8	Metals	NELAP	4/14/2006
Nickel	EPA 6020	Metals	NELAP	4/14/2006
Nitrate	EPA 9056	General Chemistry	NELAP	7/1/2003
Nitrate as N	EPA 300.0	General Chemistry	NELAP	2/13/2002
Nitrate-nitrite	EPA 300.0	General Chemistry	NELAP	2/13/2002
Nitrite	EPA 9056	General Chemistry	NELAP	7/1/2003
Nitrite	SM 4500-NO2-B	General Chemistry	NELAP	2/4/2008
Nitrite as N	EPA 300.0	General Chemistry	NELAP	2/13/2002
Nitrobenzene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodimethylamine	EPA 625.1	Extractable Organics	NELAP	3/21/2018

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 14 of 27

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State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodi-n-propylamine	EPA 625.1	Extractable Organics	NELAP	3/21/2018
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodiphenylamine	EPA 625.1	Extractable Organics	NELAP	3/21/2018
n-Nitrosodiphenylamine/Diphenylamine (analyte pair)	EPA 8270	Extractable Organics	NELAP	5/30/2013
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Propylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
o,o,o-Triethyl phosphorothioate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Organic nitrogen	EPA 351.2 - EPA 350.1	General Chemistry	NELAP	2/13/2002
Orthophosphate as P	EPA 365.1	General Chemistry	NELAP	10/30/2002
Orthophosphate as P	EPA 365.3	General Chemistry	NELAP	2/13/2002
o-Toluidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
o-Xylene	EPA 8260	Volatile Organics	NELAP	11/17/2006
Parathion, ethyl	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	3/12/2010
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pentachloroethane	EPA 8270	Extractable Organics	NELAP	5/30/2013
Pentachloronitrobenzene (Quintozene)	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pentachlorophenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Pentachlorophenol	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pentanoic acid (Valeric acid)	ENCO VGC-13/HPLC-UV	Extractable Organics	NELAP	11/19/2015
pH	EPA 9040	General Chemistry	NELAP	7/1/2003
pH	SM 4500-H+-B	General Chemistry	NELAP	2/4/2008
Phenacetin	EPA 8270	Extractable Organics	NELAP	7/1/2003
Phenanthrene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Phenanthrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Phenol	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Phenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Phosphorus, total	EPA 365.4	General Chemistry	NELAP	2/13/2002
Picloram	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
p-Isopropyltoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003

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State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009****Matrix: Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Potassium	ENCO SOP MET/15.0/ICP-MS	Metals	NELAP	11/17/2006
Potassium	EPA 6020	Metals	NELAP	4/14/2006
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	7/1/2003
Propionic acid (Propanoic acid)	ENCO VGC-13/HPLC-UV	Extractable Organics	NELAP	11/19/2015
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Propylene glycol	EPA 8015	Volatile Organics	NELAP	11/19/2015
Pyrene	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Pyrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pyridine	EPA 625.1	Extractable Organics	NELAP	3/21/2018
Pyridine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pyruvic acid	ENCO VGC-13/HPLC-UV	Extractable Organics	NELAP	11/19/2015
Reactive cyanide	Sec. 7.3 SW-846	General Chemistry	NELAP	5/30/2013
Reactive sulfide	Sec. 7.3 SW-846	General Chemistry	NELAP	5/30/2013
Residue-filterable (TDS)	SM 2540 C	General Chemistry	NELAP	2/4/2008
Residue-nonfilterable (TSS)	SM 2540 D	General Chemistry	NELAP	2/4/2008
Residue-total	SM 2540 B	General Chemistry	NELAP	2/4/2008
Residue-total	SM 2540 G	General Chemistry	NELAP	11/17/2006
Residue-volatile	EPA 160.4	General Chemistry	NELAP	2/13/2002
Ronnel	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Safrole	EPA 8270	Extractable Organics	NELAP	7/1/2003
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Selenium	EPA 200.8	Metals	NELAP	4/14/2006
Selenium	EPA 6020	Metals	NELAP	4/14/2006
Silver	EPA 200.8	Metals	NELAP	4/14/2006
Silver	EPA 6020	Metals	NELAP	4/14/2006
Silvex (2,4,5-TP)	EPA 615	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Silvex (2,4,5-TP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Sodium	ENCO SOP MET/15.0/ICP-MS	Metals	NELAP	11/17/2006
Sodium	EPA 6020	Metals	NELAP	4/27/2006
Styrene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Sulfate	EPA 300.0	General Chemistry	NELAP	2/13/2002
Sulfate	EPA 9056	General Chemistry	NELAP	7/1/2003
Sulfide	EPA 9030/9034	General Chemistry	NELAP	5/30/2013
Sulfide	SM 4500-S F	General Chemistry	NELAP	5/30/2013
Sulfotep	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 16 of 27

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Surfactants - MBAS	SM 5540 C	General Chemistry	NELAP	2/4/2008
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Tetrachloroethylene (Perchloroethylene)	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Tetrachlorvinphos (Stirophos, Gardona)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Tetraethyl pyrophosphate (TEPP)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Thallium	EPA 200.8	Metals	NELAP	4/14/2006
Thallium	EPA 6020	Metals	NELAP	4/14/2006
Thionazin (Zinophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Tin	ENCO SOP MET/15.0/ICP-MS	Metals	NELAP	11/17/2006
Tin	EPA 6020	Metals	NELAP	4/14/2006
Titanium	EPA 6020	Metals	NELAP	10/1/2008
Tokuthion (Prothiophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Toluene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Toluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Total coliforms	SM 9222 B	Microbiology	NELAP	7/30/2009
Total cyanide	EPA 9010/9014	General Chemistry	NELAP	7/1/2003
Total demeton	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	7/1/2003
Total nitrate-nitrite	SM 4500-NO3 H	General Chemistry	NELAP	2/4/2008
Total nitrogen	TKN + Total nitrate-nitrite	General Chemistry	NELAP	7/30/2009
Total organic carbon	EPA 9060	General Chemistry	NELAP	11/17/2006
Total organic carbon	SM 5310 B	General Chemistry	NELAP	2/4/2008
Total Petroleum Hydrocarbons (TPH)	FL-PRO	Extractable Organics	NELAP	7/1/2003
Total phenolics	EPA 420.1	General Chemistry	NELAP	2/13/2002
Total, fixed, and volatile residue	SM 2540 G	General Chemistry	NELAP	10/30/2002
Toxaphene (Chlorinated camphene)	EPA 608.3	Pesticides-Herbicides-PCB's	NELAP	3/21/2018
Toxaphene (Chlorinated camphene)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
trans-1,2-Dichloroethylene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
trans-1,3-Dichloropropene	EPA 624.1	Volatile Organics	NELAP	3/21/2018
trans-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	7/1/2003
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Trichloroethene (Trichloroethylene)	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Trichlorofluoromethane	EPA 624.1	Volatile Organics	NELAP	3/21/2018

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**



Laboratory Scope of Accreditation

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**

EPA Lab Code: **FL00288**

(407) 826-5314

E83182

Environmental Conservation Laboratories, Inc. (ENCO) - Orlando

10775 Central Port Drive

Orlando, FL 32824-7009

Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Triethylene glycol	EPA 8015	Volatile Organics	NELAP	11/19/2015
Turbidity	EPA 180.1	General Chemistry	NELAP	2/13/2002
Un-ionized Ammonia	DEP SOP 10/03/83	General Chemistry	NELAP	2/13/2002
Vanadium	EPA 200.8	Metals	NELAP	4/14/2006
Vanadium	EPA 6020	Metals	NELAP	4/14/2006
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Vinyl chloride	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	7/1/2003
Xylene (total)	EPA 624.1	Volatile Organics	NELAP	3/21/2018
Xylene (total)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Zinc	EPA 200.8	Metals	NELAP	4/14/2006
Zinc	EPA 6020	Metals	NELAP	4/14/2006

**Laboratory Scope of Accreditation**

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State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260	Volatile Organics	NELAP	11/17/2006
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,2,3-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	2/13/2002
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	2/13/2002
1,2,4-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	10/30/2002
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	2/13/2002
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	10/30/2002
1,3,5-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	Extractable Organics	NELAP	6/18/2009
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	2/13/2002
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,3-Dinitrobenzene (1,3-DNB)	EPA 8270	Extractable Organics	NELAP	6/18/2009
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	2/13/2002
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8260	Volatile Organics	NELAP	10/30/2002
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270	Volatile Organics	NELAP	1/29/2018
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	2/13/2002
1,4-Phenylenediamine	EPA 8270	Extractable Organics	NELAP	2/13/2002
1-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	5/30/2013
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	2/13/2002

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,4,5-T	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,4-D	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
2,4-DB	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	2/13/2002
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	2/13/2002
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	2/13/2002
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	2/13/2002
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	2/13/2002
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	2/13/2002
2-Hexanone	EPA 8260	Volatile Organics	NELAP	2/13/2002
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	2/13/2002
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	10/30/2002
2-Naphthylamine	EPA 8270	Extractable Organics	NELAP	2/13/2002
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	2/13/2002
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	2/13/2002
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	2/13/2002
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	10/30/2002
3,5-Dichlorobenzoic acid	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
3/4-Methylphenols (m/p-Cresols)	EPA 8270	Extractable Organics	NELAP	11/17/2006
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	10/30/2002
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	2/13/2002
4,4'-DDD	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
4,4'-DDE	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
4,4'-DDT	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

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State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	2/13/2002
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	2/13/2002
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	2/13/2002
4-Chlorophenyl phenylether	EPA 8270	Extractable Organics	NELAP	2/13/2002
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	2/13/2002
4-Dimethyl aminoazobenzene	EPA 8270	Extractable Organics	NELAP	10/30/2002
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	10/30/2002
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	2/13/2002
4-Nitrophenol	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	2/13/2002
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	2/13/2002
a,a-Dimethylphenethylamine	EPA 8270	Extractable Organics	NELAP	10/30/2002
Acenaphthene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Acetone	EPA 8260	Volatile Organics	NELAP	2/13/2002
Acetonitrile	EPA 8260	Volatile Organics	NELAP	10/30/2002
Acetophenone	EPA 8270	Extractable Organics	NELAP	2/13/2002
Acifluorfen	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	2/13/2002
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	2/13/2002
Aldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Alkalinity as CaCO ₃	EPA 310.2	General Chemistry	NELAP	11/17/2006
Alkalinity as CaCO ₃	SM 2320 B	General Chemistry	NELAP	7/30/2009
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	10/30/2002
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
alpha-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Aluminum	EPA 6020	Metals	NELAP	4/14/2006
Ammonia as N	EPA 350.1	General Chemistry	NELAP	11/17/2006
Aniline	EPA 8270	Extractable Organics	NELAP	2/13/2002
Anthracene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Antimony	EPA 6020	Metals	NELAP	4/14/2006
Aramite	EPA 8270	Extractable Organics	NELAP	10/30/2002
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/13/2002

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 21 of 27

Attachment to Certificate #: E83182-43, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Aroclor-1262 (PCB-1262)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	5/30/2013
Aroclor-1268 (PCB-1268)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	5/30/2013
Arsenic	EPA 6020	Metals	NELAP	4/14/2006
Atrazine	EPA 8270	Extractable Organics	NELAP	10/1/2008
Azinphos-methyl (Guthion)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Barium	EPA 6020	Metals	NELAP	4/14/2006
Bentazon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Benzaldehyde	EPA 8270	Extractable Organics	NELAP	5/30/2013
Benzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Benzidine	EPA 8270	Extractable Organics	NELAP	2/13/2002
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Benzoic acid	EPA 8270	Extractable Organics	NELAP	10/30/2002
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	2/13/2002
Beryllium	EPA 6020	Metals	NELAP	4/14/2006
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Biphenyl	EPA 8270	Extractable Organics	NELAP	5/30/2013
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	2/13/2002
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	2/13/2002
Bolstar (Sulprofos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Bromide	EPA 9056	General Chemistry	NELAP	2/13/2002
Bromobenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	10/30/2002
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
Bromoform	EPA 8260	Volatile Organics	NELAP	2/13/2002
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	2/13/2002
Cadmium	EPA 6020	Metals	NELAP	4/14/2006
Calcium	EPA 6020	Metals	NELAP	4/27/2006

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Issue Date: 3/21/2018**Expiration Date: 6/30/2018**

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State Laboratory ID: **E83182**EPA Lab Code: **FL00288****(407) 826-5314****E83182****Environmental Conservation Laboratories, Inc. (ENCO) - Orlando****10775 Central Port Drive****Orlando, FL 32824-7009**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Caprolactam	EPA 8270	Extractable Organics	NELAP	5/30/2013
Carbazole	EPA 8270	Extractable Organics	NELAP	10/30/2002
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	2/13/2002
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	2/13/2002
Chloramben	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Chlordane (tech.)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Chloride	EPA 9056	General Chemistry	NELAP	2/13/2002
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Chlorobenzilate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Chloroethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
Chloroform	EPA 8260	Volatile Organics	NELAP	2/13/2002
Chloroprene	EPA 8260	Volatile Organics	NELAP	10/30/2002
Chlorpyrifos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Chromium	EPA 6020	Metals	NELAP	4/14/2006
Chromium VI	EPA 7196	General Chemistry	NELAP	10/7/2002
Chrysene	EPA 8270	Extractable Organics	NELAP	2/13/2002
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	2/13/2002
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Cobalt	EPA 6020	Metals	NELAP	4/14/2006
Copper	EPA 6020	Metals	NELAP	4/14/2006
Coumaphos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Cyclohexane	EPA 8260	Volatile Organics	NELAP	5/30/2013
Dacthal (DCPA)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Dalapon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
delta-BHC	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Di(2-ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	2/13/2002
Diallate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Diazinon	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Dibenz(a,h)anthracene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	2/13/2002
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
Dibromomethane	EPA 8260	Volatile Organics	NELAP	10/30/2002
Dicamba	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
Dichlorofenthion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Dichloroprop (Dichlorprop)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002

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Analyte	Method/Tech	Category	Certification Type	Effective Date
Dichlorovos (DDVP, Dichlorvos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Dieldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	2/13/2002
Diethylene glycol	EPA 8015	Extractable Organics	NELAP	11/19/2015
Dimethoate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	2/13/2002
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	2/13/2002
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	2/13/2002
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Disulfoton	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	5/5/2010
Endosulfan I	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Endosulfan II	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Endosulfan sulfate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Endrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Endrin aldehyde	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Endrin ketone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
EPN	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Ethion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	10/30/2002
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	2/13/2002
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Ethylene glycol	EPA 8015	Volatile Organics	NELAP	11/19/2015
Famphur	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Fensulfothion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Fenthion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Fluoranthene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Fluorene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Fluoride	EPA 9056	General Chemistry	NELAP	2/13/2002
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
gamma-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Heptachlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Heptachlor epoxide	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	10/30/2002
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	2/13/2002

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Analyte	Method/Tech	Category	Certification Type	Effective Date
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	2/13/2002
Hexachlorophene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	10/30/2002
Iron	EPA 6020	Metals	NELAP	4/14/2006
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	10/30/2002
Isodrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Isodrin	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Isophorone	EPA 8270	Extractable Organics	NELAP	2/13/2002
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Isosafrole	EPA 8270	Extractable Organics	NELAP	2/13/2002
Kepone	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Kjeldahl nitrogen - total	EPA 351.2	General Chemistry	NELAP	11/17/2006
Lead	EPA 6020	Metals	NELAP	4/14/2006
m+p-Xylenes	EPA 8260	Volatile Organics	NELAP	11/17/2006
Magnesium	EPA 6020	Metals	NELAP	4/14/2006
Malathion	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Manganese	EPA 6020	Metals	NELAP	4/14/2006
MCPA	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
MCPP	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Mercury	EPA 7471	Metals	NELAP	8/28/2006
Merphos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	10/30/2002
Methapyrilene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Methoxychlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Methyl acetate	EPA 8260	Volatile Organics	NELAP	5/30/2013
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	2/13/2002
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	2/13/2002
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	10/30/2002
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	2/13/2002
Methyl parathion (Parathion, methyl)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	2/13/2002
Methylcyclohexane	EPA 8260	Volatile Organics	NELAP	5/30/2013
Methylene chloride	EPA 8260	Volatile Organics	NELAP	2/13/2002

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Analyte	Method/Tech	Category	Certification Type	Effective Date
Mevinphos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Mirex	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Molybdenum	EPA 6020	Metals	NELAP	4/14/2006
Monocrotophos	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Naled	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Naphthalene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Naphthalene	EPA 8270	Extractable Organics	NELAP	2/13/2002
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Nickel	EPA 6020	Metals	NELAP	4/14/2006
Nitrate	EPA 9056	General Chemistry	NELAP	2/13/2002
Nitrite	EPA 9056	General Chemistry	NELAP	2/13/2002
Nitrite	SM 4500-NO2-B	General Chemistry	NELAP	7/30/2009
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	10/30/2002
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	10/30/2002
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	2/13/2002
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	2/13/2002
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	2/13/2002
n-Nitrosodiphenylamine/Diphenylamine (analyte pair)	EPA 8270	Extractable Organics	NELAP	5/30/2013
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	10/30/2002
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	10/30/2002
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	2/13/2002
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	2/13/2002
n-Propylbenzene	EPA 8260	Volatile Organics	NELAP	2/13/2002
o,o,o-Triethyl phosphorothioate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Organic nitrogen	TKN minus AMMONIA	General Chemistry	NELAP	11/17/2006
o-Toluidine	EPA 8270	Extractable Organics	NELAP	2/13/2002
o-Xylene	EPA 8260	Volatile Organics	NELAP	11/17/2006
Parathion, ethyl	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	5/5/2010
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Pentachloroethane	EPA 8270	Extractable Organics	NELAP	5/30/2013
Pentachloronitrobenzene (Quintozene)	EPA 8270	Extractable Organics	NELAP	10/30/2002
Pentachlorophenol	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
pH	EPA 9045	General Chemistry	NELAP	2/13/2002
Phenacetin	EPA 8270	Extractable Organics	NELAP	2/13/2002

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Analyte	Method/Tech	Category	Certification Type	Effective Date
Phenanthrene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Phenol	EPA 8270	Extractable Organics	NELAP	2/13/2002
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	5/5/2010
Phosphorus, total	EPA 365.4	General Chemistry	NELAP	11/17/2006
Picloram	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
p-Isopropyltoluene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Potassium	EPA 6020	Metals	NELAP	4/14/2006
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	10/30/2002
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	10/30/2002
Propylene glycol	EPA 8015	Volatile Organics	NELAP	11/19/2015
Pyrene	EPA 8270	Extractable Organics	NELAP	2/13/2002
Pyridine	EPA 8270	Extractable Organics	NELAP	2/13/2002
Reactive cyanide	Sec. 7.3 SW-846	General Chemistry	NELAP	5/30/2013
Reactive sulfide	Sec. 7.3 SW-846	General Chemistry	NELAP	5/30/2013
Residue-total	EPA 160.3	General Chemistry	NELAP	11/17/2006
Residue-total	SM 2540 G	General Chemistry	NELAP	11/17/2006
Residue-volatile	EPA 160.4	General Chemistry	NELAP	11/17/2006
Ronnel	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Safrole	EPA 8270	Extractable Organics	NELAP	2/13/2002
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	10/30/2002
Selenium	EPA 6020	Metals	NELAP	4/14/2006
Silver	EPA 6020	Metals	NELAP	4/14/2006
Silvex (2,4,5-TP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Sodium	EPA 6020	Metals	NELAP	4/27/2006
Styrene	EPA 8260	Volatile Organics	NELAP	10/30/2002
Sulfate	EPA 9056	General Chemistry	NELAP	2/13/2002
Sulfotep	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Synthetic Precipitation Leaching Procedure	EPA 1312	General Chemistry	NELAP	2/13/2002
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	10/30/2002
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	2/13/2002
Tetrachlorvinphos (Stirophos, Gardona)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Tetraethyl pyrophosphate (TEPP)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Thallium	EPA 6020	Metals	NELAP	4/14/2006
Thionazin (Zinophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/30/2002
Tin	EPA 6020	Metals	NELAP	4/14/2006
Titanium	EPA 6020	Metals	NELAP	4/14/2006

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Analyte	Method/Tech	Category	Certification Type	Effective Date
Tokuthion (Prothiophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Toluene	EPA 8260	Volatile Organics	NELAP	2/13/2002
Total cyanide	EPA 9010/9014	General Chemistry	NELAP	2/13/2002
Total demeton	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	1/29/2018
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	2/13/2002
Total nitrate-nitrite	SM 4500-NO3 H	General Chemistry	NELAP	7/30/2009
Total nitrogen	TKN + Total nitrate-nitrite	General Chemistry	NELAP	11/17/2006
Total organic carbon	WALKLEY-BLACK	General Chemistry	NELAP	5/5/2010
Total Petroleum Hydrocarbons (TPH)	FL-PRO	Extractable Organics	NELAP	10/30/2002
Total phenolics	EPA 9065	General Chemistry	NELAP	5/30/2013
Toxaphene (Chlorinated camphene)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/13/2002
Toxicity Characteristic Leaching Procedure	EPA 1311	General Chemistry	NELAP	2/13/2002
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	2/13/2002
trans-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	2/13/2002
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	10/30/2002
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	2/13/2002
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	2/13/2002
Triethylene glycol	EPA 8015	Volatile Organics	NELAP	11/19/2015
Vanadium	EPA 6020	Metals	NELAP	4/14/2006
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	2/13/2002
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	2/13/2002
Xylene (total)	EPA 8260	Volatile Organics	NELAP	2/13/2002
Zinc	EPA 6020	Metals	NELAP	4/27/2006

SECTION 2

E-2

TOPOGRAPHIC SURVEY

(The topographic survey will be provided to the Department under separate cover.)

SECTION 3

ENGINEERING REPORT

**ENTERPRISE ROAD CLASS III RECYCLING AND DISPOSAL FACILITY
PERMIT RENEWAL
ENGINEERING REPORT**

Prepared for:

ANGELO'S AGGREGATE MATERIALS, LTD

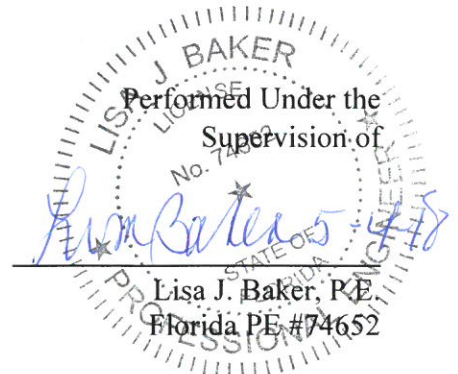
855 28th Street South
St. Petersburg, Florida 33712

Prepared by:

LOCKLEAR & ASSOCIATES, INC.

4140 NW 37th Place, Suite A
Gainesville, Florida 32606

APRIL 2018



**ENTERPRISE RECYCLING AND DISPOSAL FACILITY
ENGINEERING REPORT
TABLE OF CONTENTS**

3.1	GENERAL.....	1
3.2	SITE LOCATION AND DESCRIPTION	1
3.2.1	Prohibition Compliance.....	2
3.3	SURROUNDING LAND USES AND ZONING	2
3.4	TOPOGRAPHY.....	3
3.4.1	100-Year Flood Prone Areas	3
3.5	SOILS.....	3
3.6	LANDFILL SITE IMPROVEMENTS.....	4
3.6.1	Entrance Facilities.....	4
3.6.2	Roads	4
3.6.3	Effective Barrier.....	4
3.6.4	Weighing or Measuring Incoming Waste	5
3.6.5	Vehicle Traffic Control and Unloading	5
3.7	EXCAVATION OPERATIONS AND CELL CONSTRUCTION.....	5
3.8	METHOD OF CELL SEQUENCE.....	8
3.8.1	Vertical Expansion / Conceptual Closure.....	10
3.8.2	Erosion Control.....	10
3.8.3	Life Expectancy	11
3.9	WASTE COMPACTION AND APPLICATION OF COVER	12
3.10	DESIGN OF GAS, LEACHATE AND STORMWATER CONTROLS	12
3.10.1	Gas Monitoring and Control.....	12
3.10.2	Leachate Control.....	15

3.10.3	Stormwater Controls.....	16
3.11	EROSION CONTROL	16
3.12	FINAL GRADE PLAN.....	17
3.13	SETBACKS AND VISUAL BUFFERS.....	17
3.14	FOUNDATION ANALYSIS	17
3.15	CERTIFICATION.....	18
3.16	OPERATIONS PLAN	19
3.17	CONTINGENCY PLAN	19

APPENDICES

APPENDIX 3-A	OPERATIONS PLAN
APPENDIX 3-B	CONTINGENCY PLAN
APPENDIX 3-C	KELNER 2013 PERMIT RENEWAL APPLICATION FIGURES
APPENDIX 3-D	WELL ABANDONMENT DOCUMENTATION

SECTION 3 ENGINEERING REPORT

3.1 GENERAL

This Engineering Report is part of a comprehensive Florida Department of Environmental Protection (FDEP or Department) permit modification application for the Enterprise Road Class III Recycling and Disposal Facility (Facility) submitted by Locklear & Associates, Inc. (L&A) in March 2016 and revised in July and December, 2016 on behalf of Angelo's Aggregate Materials, Ltd. (Applicant). The Engineering Report is designed to meet the requirements of Rule 62-701, F.A.C. and Pasco County's Land Development Code (LDC) and includes the following major components (and their respective location within this Engineering Report):

- Plan Set dated December 2016, titled 2016 Plan Set, by Locklear & Associates, Inc. (Section 4);
- Figures (Appendix 3-C);
- An evaluation of the applicability of bottom liner and leachate collection system requirements (Section 2, Part G, G-1);
- Updated report evaluating geotechnical site conditions (Section 2, Part I, I-1);
- Updated Groundwater Monitoring Plan (Section 5);
- An analysis of slope stability (Section 2, Part I, I-2);
- Updated Closure and Reclamation Plan (Section 7);
- Updated financial assurance cost estimates (Section 7 Appendix 7-A);
- Updated Operations Plan (Section 3 Appendix 3-A);
- Updated Contingency Plan (Section 3 Appendix 3-B).

3.2 SITE LOCATION AND DESCRIPTION

The facility receives approximately 550 tons per day of Class III waste, which includes Construction and Demolition debris, from Pasco County and other surrounding Counties (including Pinellas, Hernando, Hillsborough and Polk). The Facility was originally permitted by the Department on October 5, 2001.

The subject site is located in Sections 5 and 8, Township 25 South, Range 22 East, in Pasco County, Florida, as shown on the United States Geological Survey (USGS) quadrangle map presented in Figure 3-1 in Appendix 3-C. More specifically, the Facility is located at the northwest corner of the intersection of Enterprise Road and Auton Road, southeast of Dade City, Florida (Figure 3-1 in Appendix 3-C). The site occupies approximately 160 acres of land on the

north side of Enterprise Road. The square property is approximately 2,640 feet on a side and is located in the southwest quarter of Section 5 and the northwest quarter of Section 8.

There are no airports within 5 miles of the site, see Figure S-4 (Appendix 3-C).

3.2.1 Prohibition Compliance

In order to comply with Rule 62-701.300, F.A.C., the Facility will abide by the following:

- The Facility will not dispose of solid waste at the proposed site until proper permitting is obtained.
- Disposal of solid waste will not occur in areas that are: unable to provide support for the waste; geological formation or subsurface features that would allow unimpeded discharge to surface water on groundwater; are within 500 feet of an existing potable water well (Figure S-1 in Appendix 3-C); are within a dewatered pit; are in a frequently flooded area; are in a body of water; are within 200 feet of a surface water body that discharges offsite (Figure S-2 in Appendix 3-C); are on a right of way; are within 1,000 feet of an existing community potable water; or are within 3,000 ft. of Class I surface waters (Figure S-3 in Appendix 3-C).
- Open burning will not occur on the site unless the burning takes place in a permitted air curtain incinerator.
- Hazardous wastes, PCB's, biohazardous wastes, special wastes, liquids, and oily wastes will not be disposed of at the Facility. Random load checks and the use of spotters at the working face will ensure that these wastes are not placed for disposal at the Facility.

3.3 SURROUNDING LAND USES AND ZONING

Figure 3-2A in Appendix 3-C presents an aerial photograph map depicting the surrounding land uses and designated FDOT FLUCCS codes in the site vicinity. Open land, pastureland, row crop, tree crop, and upland hardwood forest land uses surround the site. A few scattered residences also surround the site. All adjoining properties are zoned AC. To the north is the East Pasco County Class I Sanitary Landfill, which is closed. To the east is an old borrow pit and agricultural land. South of the site is agricultural land and orange groves, and to the west are orange groves. Figure 3-2A in Appendix 3-C presents an aerial photograph map with future land use classifications.

Current site zoning designation, AC with a conditional use, is consistent with the Class III Landfill use. Revised Figure 5 depicts the locations of five (5) water wells proximate to the landfill limit. The well north of Cell 13 has been abandoned. The on-site non-potable Supply Well is operated and maintained by the facility and only utilized to flush on-site toilets. The well approximately 1000' south of the southeast corner of the facility is identified as "irrigation" by SWFWMD. The 500-foot setback from the approved landfill footprint to potable wells complies with the setback requirements of Rule 62-701.300(2)(C), F.A.C.

3.4 TOPOGRAPHY

The USGS 7.5 minute quadrangle map shown in Figure 3-1 in Appendix 3-C shows the land surface of the subject site has elevations ranging from 85 feet to 175 feet National Geodetic Vertical Datum (NGVD). Natural land surface generally slopes to the northeast on the northern half of the property and southeast on the southern half of the site. A 2013 site-specific topographic survey is shown on Sheets 1 and 2 of the 2016 Plan Set provided in Section 4.

3.4.1 100-Year Flood Prone Areas

Figure S-5 of the 2013 permit renewal application (which refers to the July 2006 Enterprise Recycling and Disposal Class III Landfill Response to 2nd Request for Additional Information, dated July 5, 2006 prepared by Jones Edmunds), depicts a 100-year flood prone area map from the U.S. Federal Emergency Management Administration for the subject vicinity. As shown, the site is not within and would not be impacted by an estimated 100-year storm flood.

3.5 SOILS

According to the Soil Survey of Pasco County, Florida, published by the U.S. Department of Agriculture Soil Conservation Services (USDA-SCS), the majority of the subject site and surrounding areas are covered by fine sands. A copy of the USDA-SCS Soils Survey Map showing the mapped areas of the major soil types at the subject site and its vicinity is presented in Figure 3-5 Soil Survey Map, as referred to in the 2013 permit renewal application as submitted as part of the 2005 Enterprise Recycling and Disposal Facility Class III Landfill Permit Renewal Application, Pasco County, dated August 2005, prepared by Tetra-Tech HAI (TTHAI).

USDA-SCS soil type 12- Astatula fine sands encompass a small portion in the northeast portion of the site. Astatula sands are nearly level to gently sloping, and excessively drained mainly in the sandhills. Seasonal high water table (SHWT) is typically at a depth of 72 inches in Astatula

soil. The permeability is very rapid throughout the soil. Both the available water capacity and natural fertility of the Astatula soil are low.

USDA soil type 32 - Lake fine sands comprise the majority of the soils found on the property. These soils are nearly level to gently sloping and excessively well drained. They occur along ridgetops and on low hillsides in the uplands. Permeability is rapid throughout the soil and the water table is below a depth of 120 inches. The available water capacity is very low in all layers and the natural fertility and organic matter content are both low.

USDA soil type 72 - Orlando fine sands are found in a small area in the northeast portion of the property. These soils are nearly level to gently sloping and well drained. The water table is typically at a depth greater than 72 inches with permeability of the soil rapid throughout. The available water capacity is low in the surface layer and very low in the other layers.

3.6 LANDFILL SITE IMPROVEMENTS

Portions of the 160-acre landfill site are also currently being operated as orange groves. The following site improvements have been installed to meet landfill operational requirements.

3.6.1 Entrance Facilities

An office trailer (gatehouse) is located onsite for the gate attendant. This trailer has hand washing and toilet facilities. Potable bottled water is supplied to the trailer. Electric and telephone services are available to the trailer office. Site entrance improvements also include an all-weather entrance roadway, scales and perimeter road as shown in Sheet C0.02 of the 2016 Plan Set provided in Section 4.

3.6.2 Roads

The primary haul route servicing the Facility is Enterprise Road. Enterprise Road is serviced by Clinton Avenue and C.R. 35A.

Enterprise Road has been improved to an all-weather access roadway from C.R. 35A to the entrance of the Facility. All on-site roads are maintained by the Applicant to allow for all weather access. Access roads to the working face are constructed from on-site soils and/or recovered materials such as concrete and asphalt. This is done on an as needed basis

3.6.3 Effective Barrier

A 6-foot high security fence has been constructed along the south and east boundaries. The

security fence consists of a 6-foot high-galvanized chain link fence, hereafter referred to as the "security fence." A five-foot wire fence runs along the north and west property boundaries. The chain link fence has been installed in accordance with the permit issued October 2001. Three (3) foot square "NO TRESPASSING" signs with 5-inch letters have been installed at no less than 500-foot spacing and at all corners to notice unauthorized access. The only point of access into the facility will be through the gate at the entrance. This gate will be locked during closed hours.

An 8-foot high landscape berm has been constructed along the site's frontage to Enterprise and Auton Roads, see Sheet C0.02 of the 2016 Plan Set provided in Section 4.

3.6.4 Weighing or Measuring Incoming Waste

A scale system is used to keep records of materials received at the Facility. The scales are calibrated every six (6) months. Vehicles are weighed when they enter the Facility, and based upon the tare weight of the vehicle, the waste tonnage will be determined. Prior to unloading debris, the tonnage or volume of waste materials received will be determined and the appropriate fee assessed.

3.6.5 Vehicle Traffic Control and Unloading

Generally, truck traffic will be controlled on a first-in, first-out basis, as directed by the spotter at the working face. There is adequate space for truck staging at the site's entrance gate (7-8 trucks) to mitigate any queuing onto Enterprise Road. The Facility will discourage any truck staging prior to landfill opening. Signs will be posted at the entrance gate and on interior roads to guide truck traffic.

3.7 EXCAVATION OPERATIONS AND CELL CONSTRUCTION

On-site soils will be excavated according to the Pasco County Class I Mining Permit. The soils will be excavated and removed for various uses, including construction, roadways, and in landfilling operations. The County permit allows an excavation up to within a 200-foot setback from the property boundary and an excavation slope of 6H:1V. The Class I Mine will be "reclaimed" as a Class III landfill. The 6H:1V excavation slopes are associated with the mining of the existing soil. Once the landfill is ready to accept waste, the mine side slopes will be excavated to 2H:1V side slopes (cell slopes). Waste will be placed against this excavated slope and then built above existing grade. Drawing Sheets C1.00 and C1.10 of the 2016 Plan Set (Section 4) show the phasing of the cell construction and filling operation at the Facility.

Excavation slopes will not exceed 6H:1V pursuant to the Pasco County permit; however, once an excavation phase is complete and construction commences on a new cell, the slopes will be

excavated to 2H:1V. A portion of the excavated soils from the mining operation will be used as landfill construction material. Excavated soils will be reserved to provide adequate cover material for the landfill operation. Cell construction will follow the sequence described in Section 3.8.

As new cells are excavated and constructed, the cells will be overexcavated to approximately three-feet below the approved excavation base grade to allow for the construction of a 3' clay layer. If limerock is encountered during construction, the following actions will be taken:

Where limerock is encountered at or below the elevation of the cell clay layer:

- In the event that limerock is encountered during clay layer excavation or construction activities, the excavation / construction activities shall cease and the Department shall be notified by email within 24 hours of discovery.
- Excavation / construction activities related to determining location, elevation, and extent of limestone or to remediation in accordance with these procedures will resume no sooner than 24 hours after notice, unless otherwise directed by the Department
- Written notification will be submitted within 7 days of discovery.
- The written notification shall include the location, elevation, and extent of limestone noted on a plan sheet, a description of the materials encountered, and a description of the completion of excavation / clay backfill in the identified area or the anticipated timeframe for completion of these activities.
- The limerock will be over-excavated (5-feet laterally beyond limerock boundary and 3-feet vertically below the bottom of the compacted clay layer) and the area backfilled with clay meeting the specifications in the FDEP Operation/Construction permit and Engineering Report.
- Excavation / construction activities will resume no sooner than 24 hours after notice, unless otherwise directed by the Department

Where limerock is encountered during mining operations at elevations above the elevation of the cell clay layer and do not extend into the clay layer:

- Document on the limerock observation log the location, elevation, and extent of limestone noted on a plan sheet, and a description of the materials encountered
- Submit limerock observation log to FDEP within 7 days of discovery
- Where limerock is encountered within 10-feet of the design elevation of the top of compacted clay layer, in addition to the procedures noted above, overexcavate 1-foot vertically and laterally around the exposed limerock and backfill with compacted clay to temporarily prevent infiltration during mining operations.

If limerock encountered during mining operations at elevations above the cell clay layer extends to or below the elevation of the cell clay layer, the procedures identified above under the heading *“Where limerock is encountered at or below the elevation of the cell clay layer”* shall be followed.

Stockpiled clay, obtained from on-site excavation, will be sampled for laboratory proctor testing for use as cell floor and cell side slope material to construct a three-foot thick clay barrier layer. Material with acceptable permeability and proctor test results will be placed onto the constructed cell floor in lifts, and compacted by multiple passes with a 40,000 lb, D-6 Dozer, or equivalent.

A three-foot thick clay layer will also be placed on the 2H:1V side slopes of the exterior excavation side slopes of each cell to complete the continuous clay barrier layer. Due to the steepness of the slope, clay placement and compaction will require an iterative process consisting of several horizontal lifts, stepped up progressively until the base elevation of the landfill is reached. In order to achieve the required compaction and hydraulic conductivity, as well as to achieve a constant three feet of clay along the slope, each lift along the cell wall will need to exceed three feet wide and be wide enough for the compacting equipment. Construction of the clay side slopes is shown on Drawing C3.00 of the 2016 Plan Set provided in Section 4. Soil in excess of three feet wide on the slopes may be removed after compaction and compliance testing have been approved. Acceptable test results means the results of the laboratory proctor and permeability tests indicate that the permeability of the material meets the requirements of the construction permit (1×10^{-8} cm/s), and the optimum moisture content is not too high for the equipment to manage. Optimum moisture content for the on-site stockpiles has been approximately 13 to 20 percent.

The dozer will compact the material in the bottom of the excavation and up the side slopes into the dozer track marks. After each lift is compacted with the dozer, a 12-ton, 84-inch vibratory sheeps-foot roller, or equivalent, will be used to roll the material. The daily activities will be recorded, including any tie-in locations, thickness of each compacted lift, verification of the compaction and moisture content testing, verification of equipment used for compaction, and verification of dozer tracks at the tie-in surfaces (no smooth surfaces). Field logs and photographs documenting the field work will be provided to the Department. A topographic survey will confirm the top of excavation and top of clay grades.

Excavation will be such that 2H:1V slopes will only be encountered on the outer edge boundaries of each cell. A 3H:1V working face slope, beginning at the 2H:1V slope face, will be used for landfilling the waste.

A berm will be constructed along the northern outer edge boundaries of Cells 6B and 7 to account for mining excavation in this area. Stockpiled clay obtained from on-site excavation to

be utilized for berm construction shall be sampled consistent with the procedures described for the clay barrier layer and demonstrate acceptable test results, as described above. A detail of the berm and tie-in is provided on sheet C-5 of the 2012 permit modification Plan Set provided by Kelner Engineering and on sheet C1.00 of the 2016 Plan Set in Section 4.

A temporary stormwater and leachate diversion swale will be constructed immediately north of Cell 15. The swale will extend east to west the full width of Cell 16 and slope to the west to the temporary stormwater pond in the future Cell 14 area. Leachate generated in existing cells 1-7 and 15 will move to the remaining temporary stormwater pond in the future Cell 14 area. Once Cell 16 construction is complete, the swale will remain in place while the initial lift of waste is placed across the entire floor of Cell 16. Once Cell 16 is “floored out”, the swale will be removed for the remainder of operations. Leachate generated in existing cells 1-7 and 15 will then move to a temporary stormwater pond in the future Cell 14 area as it did prior to removal of the swales. The remainder of the leachate generated in cells 1-7, 15 and all leachate generated in Cell 16 will move to a toe drain extending east to west along the northern perimeter of Cell 16. The toe drain will slope west to east and terminate in a manhole located between Cell 16 and Pond 3. The toe drain will “daylight” approximately 3 feet above the bottom of the manhole. Staff will observe the level of leachate in the manhole every morning the facility is open. When leachate levels are observed to be equal to the invert of the toe drain, a pump will be used to drain the manhole into Pond 3. Leachate levels in the manhole will be periodically inspected throughout the day and pumping will be performed as needed

3.8 METHOD OF CELL SEQUENCE

Angelo’s Aggregate Materials is currently (as of November 2016) filling in Cells 1 – 6 and 15 of the Class III Landfill, while construction of Cell 7 is being completed. The cell construction and filling sequence operations will be as follows:

Phasing Sequence 1	As shown in Drawing Sheets C1.00 and C1.01 Continue filling Cells 1, 2, 3, 4, 5, 6, 6B, 7 and 15 in 10 – 12 foot lifts to waste elevation of 172’ Maximum slope is 3H:1V from base grade to waste elevation 122’; 4H:1V from waste elevation 122’ to 167’; 1% to 2% grade from waste elevation 167’ to 172’ 10-ft wide stormwater benches are to be constructed at waste elevations 122’ and 147’ Sideslope berms and stormwater appurtenances are to be constructed at final closure. Construct Cell 16 in accordance with permitted design
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Phasing Sequence 2

As shown in Drawing Sheets C1.10 and C1.11

Begin filling Cell 16 with 4 – 6 feet lift north of the temporary stormwater and leachate diversion swale until cell is floored out. Remove temporary swale and fill with 4 – 6 feet lift.

Continue filling Cell 16 in 10 – 12 foot lifts from base grade to waste elevation 147', including filling over Cell 15. Maximum slope is 3H:1V from base grade to waste elevation 122'; 4H:1V from waste elevation 122' to 147'.

A 10-ft wide stormwater bench is to be constructed at elevation 122'.

Sideslope berms and stormwater appurtenances are to be constructed at final closure.

Phasing Sequence 3

As shown in Drawing Sheets C2.00 and C2.10

Construct final closure cover system over Cells 1, 2, 3, 4, 5, 6, 6B, 7, 15 and 16 in accordance with the permitted closure design.

Construct sideslope berms and stormwater appurtenances.

Construct landfill gas vents.

Lift height includes cover material. Due to the landfill bottom elevation, some lifts may not be a full 10 feet in height.

As each sequence is active, the following procedures will be followed.

- The access road to the working face will be constructed and graded as necessary.
- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length.
- Avoid channelizing stormwater flows
- Use mulch, grass, and maintain intermediate covers
- Weekly cover of six (6) inches of soil will be placed on the working face.
- Intermediate cover of 12 inches of soil will be placed in areas that will not receive waste within 180 days. The cover may be removed immediately prior to placement of new waste.

- Stormwater runoff from the interior of the excavation and filling area will be diverted to the onsite temporary storage pond using a temporary interior swale and 6-foot berm. Perimeter berms will direct stormwater away from excavation and filling areas. The temporary stormwater pond will receive runoff until Pond 3 is developed.

3.8.1 Vertical Expansion / Conceptual Closure

The landfill is permitted to be completed to a maximum height of 175 feet, NGVD. The final grading plan is shown on Drawing C2.00 of the 2016 Plan Set provided in Section 4. The Conceptual Closure Plan includes permitted Cells 1-7 and 15, and Cell 16.

The Conceptual Closure Plan includes construction of berms on the stormwater benches that will direct stormwater to drop inlets and downcomer pipes spaced approximately every 400 – 500 feet along the benches. The downcomer pipes will discharge through an energy dissipater to the existing stormwater system. The facility's overall stormwater management system is governed by the mining operations and ERP Permits. Grades and elevation vary based on ongoing mining operations and topography. A detailed design that will tie the conceptual closure plan into the facility's stormwater management system will be submitted at the time of closure.

The top (1% to 2% grade) and side slope (4H:1V and 3H:1V) designs provide for proper drainage and minimize rainfall infiltration into the landfill surface.

3.8.2 Erosion Control

The following engineering controls will be used to minimize erosion at the working face:

- Regrade a maximum of 100 linear feet of the outer edge slopes at a time to 2H:1V. The purpose of this recommendation is that a relatively small area will be subjected to surface erosion at any given time.
- Construct a berm along the top of the slope during the regrading to redirect any rainfall runoff away from the face of the slope. The area along the berm should be graded so as to allow rapid runoff along the top of the slope. Ponding of water near the top of the slope should not be allowed, since seepage through the slope may initiate slope erosion.
- As soon as possible following the construction of the clay layer, begin to fill against the Cell 7 2H:1V slope with the landfill material.
- For Cell 16 construction, filling shall begin immediately north of the east-west trending

berm to be located near the southern boundary of Cell 16. The fill sequencing of Cell 16 is described in Section 3.8.

- Avoid channelizing stormwater flows
- Use mulch, grass, and maintain intermediate covers

3.8.3 Life Expectancy

The cell capacity and lifespan estimates for Cells 1 – 7, 15 and 16 have been estimated using the November 2013 topographic survey performed by Pickett and Associates (Sheets 1 and 2 of Section 4); and recent and projected tonnages.

Using the November 2013 topographic survey as a base, a three-dimensional AutoCAD model of Cells 1 – 7, 15 and 16 at closure was generated, using the following assumptions:

- For all cells except Cell 16, 3H:1V side slopes from base grade to waste elevation 122'; 4H:1V from waste elevation 122' to 167'; 1% to 2% grade from waste elevation 167' to 172'
- For Cell 16, 3H:1V from base grade to waste elevation 122'; 4H:1V from waste elevation 122' to 147'.
- 10-foot inset for benches at waste elevations 122-ft and 147-ft NGVD
- 36 inches of cover over the 67.0 acre 2D surface was subtracted from the maximum volume

The airspace volume remaining as of July 2016 was calculated to be approximately 2,535,047 yd³ after accounting for the final cover volume of 322,829 yd³.

The following design parameters were used to compute landfill design life remaining:

- **Density:** An in-place density of 1,350 lb/yd³ (0.675 tons/ yd³) was used for the design life estimate and is a typical density for Class III waste.
- **Waste acceptance rate:** a waste acceptance rate of 550 tons per day was used based on facility records.

The remaining life in Cells 1 – 7, 15 and 16 was calculated to be 13 years from the survey date, or 2026.

3.9 WASTE COMPACTION AND APPLICATION OF COVER

Waste received will be segregated based on compactibility. Bulky, incompressible items, such as concrete, asphalt, and tree debris, will be separated and stockpiled for future processing. Tree debris may be separated from the waste and periodically mulched on-site. The remaining debris is disposed of in designated cells using onsite equipment to place the debris and a Caterpillar 826 Compactor, or equivalent, to weekly compact the waste. Initial cover material is planned to be excavated from onsite areas and placed weekly in approximately 6-inch layers on the compacted lifts to control vectors, reduce rain infiltration and provide a more stable working face area. An intermediate cover of one (1) foot of compacted soil will be applied if final cover or an additional lift is not to be applied within 180 days of cell completion. Cell closure will occur when all permitted cells are filled. For final buildout grade and closure detail, see Drawing Sheets C2.00 and C2.10 of the 2016 Plan Set provided in Section 4, respectively. The Conceptual Closure Plan includes permitted Cells 1-7 and 15, and Cell 16. Fill grades shall be such that final cover elevations are not exceeded on all slopes.

Final cover consisting of 18 inches of compacted soil barrier layer and 18 inches of soil that will sustain vegetative growth, as specified in the Closure and Reclamation Plan provided in Section 7. Cell closure shall generally conform to the lines and maximum grades specified on Drawing Sheet C2.00 (2016 Plan Set provided in Section 4 and the requirements of Rule 62-701.600 F.A.C., Rule 62-701.400 (7), F.A.C., and Rule 62-701.400(8), F.A.C.. Pesticides when deemed necessary to control rodents, insects and other vectors shall be used as specified by the Florida Department of Agriculture and Consumer Services. Uncontrolled and unauthorized scavenging shall not be permitted at the landfill site. Controlled recycling may be permitted by the Landfill Manager. Temporary storage of soil fill or recycling materials may occur within the inactive, or closed cell areas.

3.10 DESIGN OF GAS, LEACHATE AND STORMWATER CONTROLS

3.10.1 Gas Monitoring and Control

The type of materials to be disposed of in the Class III Landfill are not expected to generate significant amounts of methane or other gases since the landfill's design prevents groundwater contact. Therefore, no active gas control systems or venting is proposed. However, because some biodegradable waste may be accepted, a passive gas control system is proposed, see Section 3.10.1.5. The Landfill Manager will conduct daily and weekly inspections of the landfill and will check for objectionable odors or gas around the perimeter of the site. The Manager will notify the FDEP of any exceedances and immediately take corrective actions. Corrective actions will include placement of additional cover material or mulch, or lime containing materials such as crushed concrete that is documented to abate the odors. Quarterly gas point monitoring is

currently conducted. The facility only accepts Class III debris for disposal and accepts no putrescible household wastes. Surface water and groundwater contact with the Class III wastes will be prevented by the approved facility design. Other best management practices to prevent odors include: 1) closure of each cell as it is completed; 2) weekly soil cover application; and, 3) immediate corrective actions to abate any detected onsite odors.

3.10.1.1 Gas Probe Locations

Gas monitoring points are spaced approximately 600 linear feet apart surrounding the landfill. Sheet C0.03 of the 2016 Plan Set provided in Section 4 presents these locations of the gas probes surrounding the landfill. Gas Probes (GP) 6 through 15 are existing, GP 1 through 5 and 16 are proposed and will be installed as part of future cell construction completion certification at closure. The remaining gas probes are to be installed in accordance with the following schedule in Table 3.10:

Table 3.10 Gas Probe Installation Schedule	
Gas Probe	Cell Construction Completion
GP-1	Future Cell 10 or closure
GP-2	Future Cell 11 or closure
GP-3	Future Cell 12 or closure
GP-4	Future Cell 13 or closure
GP-5	Future Cell 14 or closure
GP-16	Future Cell 9 or closure

One remaining gas probe on the eastern portion of the property is currently located immediately adjacent to the disposal area rather than at the property boundary as required by Rule. Probe GP -14 will be relocated to the property boundary as part of the construction activities for Cell 16. Probes GP-6, -7, -8, -11, -12 and -13 were abandoned and replaced with GP-6R, -7R, -8R, -11R, -12R and -13R along the property boundary in 2013 and 2017.

3.10.1.2 Gas Probe Design

Figure 3-14 (provided in Appendix 3-C of the 2012 permit renewal application submitted by Kelner Engineering) presents the gas probe design for the subject landfill site. These gas probes are designed to be surface sealed and to provide a greater permeability than the surrounding sediments to act as collector points for any methane gas, if present. Based on the landfill design, all of the gas probes are designed to be approximately 20-foot in depth with an 18-foot open screen for the monitoring point, or to depth of adjacent waste. Table 3.10.1.2 presents supplemental information related to the anticipated total depths of gas monitoring probe GP-14R. These depths will allow the screened interval to intercept the full cross-section of the

landfilled waste that could potentially generate methane.

Table 3.10.1.2

Well	Elevation of the Bottom of Waste in the Adjacent Disposal Cell (ft., NGVD)	Elevation at Surface (ft., NGVD)	Total Depth (ft.)	Top of Perforated Section (ft., NGVD)	Bottom of Perforated Section (ft., NGVD)
GP-14R	86	115	30	113	85

The groundwater table may be encountered at depths of approximately 50-foot, or more below land surface (bls) across most of the site. Accordingly, gas probes are not designed to intercept the groundwater table. The gas probes are constructed of Schedule-40 polyvinyl chloride plastic pipe (PVC). The PVC casing and screen will be flush-threaded and have a screen slot size large enough to accommodate easy methane extraction from the monitoring point. The sand/bentonite slurry proposed for a surface seal will be a blend of 4 parts of sand to one part of granular bentonite. The sand and the bentonite will be mixed dry and hydrated immediately prior to placing it in the annular space of the borehole. The gas probe points are proposed to be installed by hollow-stem auger to construct an eight-inch borehole to be filled with pea gravel. The pea gravel will meet the requirements of FDOT standard size No. 10 aggregate washed pea gravel. Each gas probe will be protected by a surface mounted well protector and locked for security purposes. Each gas probe will terminate at the surface with a PVC ball valve to accommodate easy monitoring of methane levels, with a portable meter. The ball valve will remain closed between monitoring events and pre-purge measurements will be recorded. In the event of a positive gas measurement, the post-purge measurement will also be recorded.

3.10.1.3 Methane Gas Measurement

In accordance with the requirements of the current FDEP permits, methane gas levels are monitored at each of the active gas monitoring points quarterly, with results submitted to the FDEP. A lower explosive limit (LEL) meter will be used to measure methane levels from each of the gas probes. LEL meters, such as the MSA Model 260 or GEM 500 or equivalent, will be used to conduct this monitoring. These meters are capable of measuring percent volume of methane in air and the percent LEL level of the methane by volume. The meter will be calibrated in accordance with manufacturer's specifications prior to each methane monitoring event. Attachment 4 of the Operations Plan provided in Appendix H presents the proposed gas monitoring probe survey form to be used to conduct the quarterly monitoring at the subject site. This form will document at the time of each gas probe reading, air temperature in degrees Fahrenheit, methane levels in percent volume in air and percent LEL. The reporting action level for methane in air will be considered 5 percent by volume in air as measured by the lower explosive limit. The reporting action limit for methane in structures is 25% of the LEL, or

1.25% methane by volume. The results of each quarterly gas probe survey will be submitted to the Department on the presented form within two weeks of each monitoring event. These events are planned to be coordinated with the semi-annual groundwater monitoring at the subject site.

3.10.1.4 Gas Contingency Plan

The following Contingency Plan will be implemented if any of the measured gas monitoring points methane levels are detected above the 100% LEL of greater than 5 percent methane in air, or if 25% of the LEL or higher is measured in a structure. If this level of methane or greater is detected in any of the probes, the Facility operator will institute measurement of methane in nearby, at, or below grade structures, i.e., stormwater collection points, or any maintenance or office buildings within 100 feet of the subject gas probe on a weekly basis until these levels go below the 100% LEL at the subject probe. If methane levels measured in any on-site building exceed 25% of the LEL, building windows and/or doors will be opened for ventilation and all personnel evacuated until methane readings are maintained below 25% of the LEL for methane. The monitoring report for any event that detects methane above the LEL will also report methane levels from nearby structures, as indicated above, until the levels go below the methane LEL level or until corrective actions are conducted to reduce methane levels. The FDEP will be notified within seven days of any gas monitoring levels that exceed the reporting action levels.

3.10.1.5 Passive Gas Vents

Within 90 days of closure of each landfill cell, a passive landfill gas vent will be installed at the highest point of the cell to prevent explosions, fires and damages to vegetation from methane gas buildup. Sheet C2.00 shows the location of the 10 gas vents and Figure 3-16 (provided in Appendix 3-C of the 2012 permit renewal application submitted by Kelner Engineering) presents the design of a typical vent. The facility's gas emissions are expected to be far below the threshold of a Title V or an NSPS permit.

3.10.2 Leachate Control

Any leachate that may be produced at the landfill will be controlled with the use of a continuous 3-foot thick clay layer (1×10^{-7} cm/s) that will be placed on the bottom of the cells. The clay layer beneath each individual cell will form a continuous barrier layer that will be graded to direct leachate to the remaining portion of the temporary stormwater pond in future Cell 14 and/or a toe drain extending east to west along the northern perimeter of Cell 16. The toe drain will slope from west to east and terminate in a manhole between Cell 16 and Pond 3. The toe drain will "daylight" approximately 3 feet above the bottom of the manhole. A pump will be used to transfer leachate from the manhole to Pond 3 as needed. During Cell 7 construction, leachate

will continue to flow along the continuous bottom barrier layer towards the northern landfill boundary, and into the existing stormwater pond in future Cell 17 and Cell 16. During excavation of proposed Cell 16, a temporary stormwater and leachate diversion swale shall be constructed along the perimeter of Cell 16 to divert leachate generated in Cells 1-7 and 15 to flow west to the temporary stormwater pond.

The controlled method of screening waste also supplements the leachate control. Because the Applicant privately owns the Enterprise Class III Landfill facility, most of the haulers, waste generators, and sources of waste are known to Angelo's and the scale house attendants. For those haulers that are unfamiliar to the Applicant, the scale house attendants question the haulers more intensely to determine the contents of their loads. The spotters and operators add additional monitoring at the active disposal location. The addition of video surveillance to the monitoring process of incoming wastes helps to identify fires or smoking loads. Combined methods of screening waste is an effective method to reduce any possible threat to public health or the environment.

3.10.3 Stormwater Controls

The approved Stormwater Management Plan for the landfill consists of berms, swales, and ponds constructed within the 200-foot landscape buffer zone to divert, collect and contain stormwater runoff from the completed site. These stormwater facilities are designated to retain the 100-year, 24-hour storm volume as required by Pasco County and the FDEP. During excavation, construction and waste disposal, stormwater will be controlled by a series of berms that direct stormwater to the temporary stormwater pond located in the northeast corner of the site. A 6-foot berm adjacent to active and filled cells retains stormwater from the filling area and diverts stormwater from the excavation area to the temporary stormwater pond. A portion of the temporary stormwater pond will be filled as part of the construction of Cell 16. A new stormwater Pond 3 is being proposed and submitted to be permitted as an Industrial Wastewater Pond through FDEP. Additional details concerning the stormwater management system are provided in Drawing Sheets C1.00, C1.10, C2.00 and C2.10.

3.11 EROSION CONTROL

The perimeter swales and ponds surrounding the landfill prevent stormwater from leaving the property. The series of berms described in Section 3.10.3 above will help prevent erosion.

Additionally, landfill side slopes will be constructed at 3H:1V from base grade to elevation 125' NGVD and 4H:1V from 125' to 170' NGVD and will receive intermediate cover to be maintained until final landfill closure that will occur when all existing and proposed cells are filled. See the Reclamation and Closure Plan provided in Section 7 for further details.

3.12 FINAL GRADE PLAN

The filling sequence of the landfill is shown on Sheets C1.00 through C2.10 of the 2016 Plan Set provided in Section 4. The excavated areas will be certified to the approved bottom grades prior to accepting any waste material. The finished elevation after all fill material has been placed and final cover provided is designed to reclaim excavated areas.

3.13 SETBACKS AND VISUAL BUFFERS

The following setbacks (buffers) shall be used:

1. Minimum of 200 feet from the property boundary to landfill footprint.
2. Minimum of 500 feet setback from surrounding potable residential wells to landfill footprint.

Buffer areas maintain visual screening of the landfill by the following methods.

1. 8-foot high berms along the frontage of Enterprise and Auton roads.
2. Landscaping and trees to provide visual buffers within setback areas
3. Existing trees within the setbacks will be maintained.

3.14 FOUNDATION ANALYSIS

A Geotechnical analysis was conducted on the landfill site to evaluate if the base and geologic setting are capable of providing structural support. Universal Engineering Sciences, Inc. completed the Geotechnical Report included as Section 4 to the September 2005 Enterprise Recycling and Disposal Facility Class III Landfill Permit Renewal Application, prepared by TetraTech HAI, and updated as the January 25, 2006. Universal Engineering Sciences *Geotechnical Exploration – Update*, provided as an appendix to the February 2006 letter from Jennifer Diehl, P.E. to Mr. Steve Morgan Subject: Angelo's Aggregate Materials, Ltd. Enterprise Recycling and Disposal Class III Landfill Pending Permit Nos.: 177982-007-SC and 177982-008-SO Pasco County. The report concludes that the landfill base will adequately support the Class III landfill wastes without excessive settlement. It also states that the potential for sinkhole development on the site is low. In the event a sinkhole is discovered on-site, or within 500-feet of the site, the Department will be notified within 24 hours. A reclamation plan of action will be submitted to the Department within seven days. Please see Appendix G-1,

Attachment 1 for Universal Engineering Sciences' Geotechnical Services / Documentation Review dated May 31, 2016_for a signed and sealed review and evaluation of historical site related geotechnical records which includes a recent site reconnaissance visit.

An updated foundation bearing capacity analysis was performed by Civil Design Services, Inc. and is provided in Section 2, Part I, I-2. The analysis demonstrates that the Cell 16 has sufficient additional bearing capacity to accommodate the proposed design.

3.15 CERTIFICATION

Laboratory testing and observation of cell floor conditions during cell construction completion shall consist of the following:

- In-place density testing for each 12-inch thick soil lift, based on laboratory proctor test results for the construction material, will be recorded by a properly trained technician. These are to be conducted at the location of each permeability test.
- Thickness testing of each lift will be recorded at a minimum frequency of two tests per acre, per lift.
- Confirmation hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell floor material will be performed at a minimum frequency of one test per lift, per acre.
- Observance for unstable areas such as limestone, sink holes and soft ground will be performed for each cell.

If the test data from a cell floor section does not meet the requirements of the anticipated conditions of the hydrogeological and geotechnical reports and the requirements of the facility construction permit, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity meets the requirements, the cell will be considered acceptable. If not, that cell will be reworked or reconstructed so that it will meet these requirements.

Upon completion of construction of any cell within the disposal facility, the certification of construction completion will be provided to the FDEP on form 62-701.900(2), F.A.C. The applicant will provide the completed form to the FDEP, along with the quality assurance test results described above, and arrange for an inspection prior to acceptance of Class III wastes into the constructed disposal area.

3.16 OPERATIONS PLAN

The Landfill's Operations Plan is included as Appendix 3-A.

3.17 CONTINGENCY PLAN

The Landfill's Contingency Plan is included as Appendix 3-B.

SECTION 3

APPENDIX 3-A OPERATIONS PLAN

**ENTERPRISE ROAD CLASS III RECYCLING AND DISPOSAL FACILITY
PERMIT RENEWAL
LANDFILL OPERATIONS PLAN**

Prepared for:

ANGELO'S AGGREGATE MATERIALS, LTD
855 28th Street South
St. Petersburg, Florida 33712

Prepared by:

LOCKLEAR & ASSOCIATES, INC.
4140 NW 37th Place, Suite a
Gainesville, Florida 32606

APRIL 2018



**ENTERPRISE RECYCLING AND DISPOSAL FACILITY
OPERATIONS PLAN
TABLE OF CONTENTS**

1.0	DESIGNATION OF RESPONSIBLE PERSON(S).....	1
2.0	LANDFILL SITE IMPROVEMENTS.....	1
2.1	FACILITIES	1
2.2	PRIMARY HAUL ROUTES	1
2.3	EFFECTIVE BARRIER.....	2
3.0	OPERATING HOURS	2
4.0	CONTINGENCY OPERATIONS.....	2
5.0	WASTE STREAM QUALITY CONTROL PLAN	3
5.1	VISUAL INSPECTION	3
5.2	DOCUMENTATION OF WASTE RECEIVED	3
5.3	CONTINGENCY FOR UNACCEPTABLE MATERIALS	4
5.4	ACCEPTABLE AND UNACCEPTABLE CLASS III LANDFILL WASTE MATERIALS.....	4
5.5	RANDOM LOAD INSPECTION.....	6
5.6	ASBESTOS WASTE DISPOSAL	7
5.7	INCIDENTAL RECYCLING OPERATIONS.....	8
5.7.1	<i>Reports</i>	8
5.8	WOOD ACCEPTANCE AREA	8
5.9	CCA TREATED WOOD MANAGEMENT PLAN	8
6.0	WEIGHING OR MEASURING INCOMING WASTE.....	10
6.1	FEE SCHEDULE	10
7.0	VEHICLE TRAFFIC CONTROL AND UNLOADING	10
8.0	METHOD OF CELL SEQUENCE AND LIFE EXPECTANCY	10
8.1	CELL SEQUENCE.....	11
8.2	EROSION CONTROL	12

8.3	LIFE EXPECTANCY.	13
9.0	WASTE COMPACTION AND APPLICATION OF COVER.....	13
10.0	OPERATION OF GAS, LEACHATE AND STORMWATER CONTROLS.....	13
10.1	GAS MONITORING AND CONTROL	13
10.1.1	<i>Methane Gas Measurement</i>	14
10.1.2	<i>Gas Contingency Plan</i>	15
10.2	LEACHATE CONTROL	15
10.3	STORMWATER CONTROL	16
11.0	SIGNS.....	17
12.0	DUST ABATEMENT PLAN	17
13.0	DUST, LITTER, AND VECTOR CONTROL PLAN	17
14.0	FIRE PROTECTION AND FIRE FIGHTING FACILITIES	18
14.1	HOT LOADS AND SPILLS.....	18
15.0	LANDFILL PERSONNEL	19
15.1	TRAINING PLAN.....	20
16.0	COMMUNICATIONS FACILITIES	21
17.0	EQUIPMENT INVENTORY	21
17.1	EQUIPMENT MAINTENANCE	21
18.0	SAFETY DEVICES.....	22
19.0	RECORDS, PERMITS AND REPORTS	22
19.1	WATER QUALITY MONITORING	22
19.2	LANDFILL OPERATING RECORDS.....	23
20.0	EROSION CONTROL	23
21.0	FINAL GRADE PLAN.....	24
22.0	CLOSURE AND LONG TERM CARE.....	24
23.0	CERTIFICATION	24
24.0	HISTORY OF ENFORCEMENT ACTION	25

ATTACHMENTS

ATTACHMENT 1	FACILITY ENTRANCE SIGN
ATTACHMENT 2	RANDOM LOAD INSPECTION FORM
ATTACHMENT 3	FACILITY TRAINING LOG
ATTACHMENT 4	GAS MONITORING SURVEY FORM
ATTACHMENT 5	LIST OF APPROVED COURSES
ATTACHMENT 6	TRAINING CERTIFICATES
ATTACHMENT 7	SOURCE-SEPARATED ORGANICS PROCESSING FACILITY REGISTRATION

1.0 DESIGNATION OF RESPONSIBLE PERSON(S) AND REFERENCES

Mr. John Arnold, P.E. is designated by Angelo's Aggregate Materials, LTD. (Applicant) as the individual responsible for operation and maintenance of the Enterprise Road Class III Recycling and Disposal Facility (Facility) in accordance with Rule 62-701.500, F.A.C. All correspondence and inquiries concerning the Facility permits and operation should be addressed to him at:

Mr. John Arnold, P.E.
Angelo's Aggregate Materials, LTD.
855 28th Street South
St. Petersburg, Florida 33712
Telephone: (813) 477-1719

Updated plan sheets and figures are provided in Sections 4 and 3 respectively of the March 2016 permit modification application RAI 1 response dated July 2016.

2.0 LANDFILL SITE IMPROVEMENTS

The 160 acre landfill site is also permitted by Pasco County to be a Class I mine (Pasco County Petition #CU04-26, approved 9/23/2004). The following site improvements have been installed to continue operation of the Class III Landfill.

2.1 Facilities

An office trailer (gate house) is located onsite for the gate attendant. This trailer has hand washing and toilet facilities. Bottled potable water is used to provide drinking water for the trailer. Electric and telephone services are available to the trailer office. Site entrance improvements also include an all-weather entrance roadway, scales and perimeter road as shown on the Sheet C0.02 of the 2016 Plan Set provided in Section 4 of the March 2016 permit modification application RAI 1 response dated July 2016.

2.2 Primary Haul Routes

The primary haul routes used to reach the Facility are U.S. 301, S.R. 52, C.R. 35A, U.S. 98, and Clinton Avenue. These routes lead to Enterprise Road, which is used to access the facility.

Enterprise Road was improved by the Applicant to an all-weather, paved access roadway from C.R. 35A to Auton Road. Enterprise Road is a Pasco county owned roadway that is maintained by the county. The Facility has an all-weather, paved access roadway that will be maintained by the Applicant to provide adequate access at all times.

2.3 Effective Barrier

The existing Facility property previously had a five-foot high wire fence along the perimeter of the site. A 6-foot security fence has been constructed along the south and east boundaries. The security fence consists of a 6-foot high galvanized chain link fence, hereafter referred to as the “security fence.” The five-foot wire fence still exists along the north and west property boundaries. The chain link fence has been installed in accordance with permit issuance in October, 2001. Three (3) foot square “NO TRESPASSING” signs with five-inch letters has been installed at no less than 500-foot spacing and at all corners to notice unauthorized access. The only point of access into the landfill site will be through the ticket gate at the entrance. This gate will be locked during closed hours.

An 8-foot high landscape berm has been constructed along the frontages of Enterprise and Auton roads as a visual and noise buffer.

3.0 OPERATING HOURS

The landfill will have the following operating hours:

Day	Hours of Operation
Monday through Friday	7:00 am to 6:00 pm
Saturday	7:00 am to 2:00 pm

Operational hours may be extended periodically to meet special requests of customers, but at no time will normal operating hours extend beyond 7:00 A.M. to 7:00 P.M. Monday through Saturday. Waste will not be accepted during non-daylight hours.

4.0 CONTINGENCY OPERATIONS

If a natural disaster occurs at the facility rendering it unusable, the waste accepted at the Facility would be rerouted to another permitted landfill. If a storm occurs within the surrounding community, storm debris waste will also be accepted at the facility, providing additional staff if required. In terms of equipment breakdown, there will be two operating pieces of equipment for all stages of landfill operation. Currently, Angelo's has on-site two compactors [Cat 826 (2)], two loaders (Cat 950, Cat 980), two dozers (Cat D5, Cat D8), four excavators [John Deere 450 (2), Komatsu PC1100, Komatsu PC300], and two articulated dump trucks (Volvo). If both should breakdown, replacements can be rented or substituted from onsite or offsite within 24 hours.

The site access roads will be constructed to allow passage of vehicles under all expected weather conditions. See Appendix 3-A for the Contingency Plan.

5.0 WASTE STREAM QUALITY CONTROL PLAN

5.1 Visual Inspection

An estimated 550 tons of Class III waste material is currently received at the facility daily. Materials brought onto the Enterprise Road Class III RDF site will be inspected three times. The first inspection takes place at the site entrance. The site will only accept Class III debris (which includes construction and demolition debris by definition); therefore, any vehicles hauling unacceptable waste can be turned away by the attendant at the ticket gate. The gate attendant will question all waste carriers as to the character and origination of their wastes. A mirror is installed overhead and angled to allow gate inspection of all loads after they are untarped. A video camera has been installed over the scale location that allows the gate attendant to visually screen all carrier loads prior to disposal, mainly to identify fire or smoking loads. For loads that are not accepted, a Rejected Load Form will be completed.

The second inspection is a visual inspection that will occur at the working face by a certified, trained spotter. The spotter stationed at the working face will be responsible for spotting trucks bringing in disposal loads. The spotter will show the drivers where to unload, and will also inspect the trucks to make sure unacceptable materials are not unloaded. The spotter will have the authority to ensure that unacceptable materials are reloaded on the truck the material was brought in on.

The third inspection will occur as the waste is spread by the equipment operator. Any unacceptable wastes observed will be placed in the appropriate container located at the working face. The equipment operator may also serve as the spotter and will perform both visual inspections - as the waste is unloaded and as the waste is spread.

The facility will deploy and use spotters based on the volume of waste disposed at the working face. No more than two loads will be allowed to dump simultaneously per spotter at the working face.

5.2 Documentation of Waste Received

Documentation includes recording the name of the company disposing of the waste, driver's signature/information, all vehicle identification numbers, quantity of waste (tons), and type of waste (to meet FDEP and Pasco County's requirements). All vehicles entering the landfill will be weighed. The type of material and location from which the waste was generated will be

recorded. This provides a record for tracing ownership of individual loads. See Landfill Operating Records, Section 19.2 for more details.

5.3 Contingency for Unacceptable Materials

If unacceptable waste materials are delivered to the landfill, the truck will be refused entry after inspection at the gate. If the unacceptable waste materials are observed by a spotter while unloading, they will be reloaded onto the delivery vehicle. Should the vehicle leave before the unacceptable waste has been discovered, Enterprise Road Class III RDF personnel will place the unacceptable material into an appropriate container located at the working face. A maximum of 20 cubic yards of covered dumpster storage for Class I waste will be provided near the active face of the landfill, as shown on Drawing C0.03 of the 2016 Plan Set provided in Section 4 of the March 2016 permit modification application RAI 1 response dated July 2016. These containers are transported by Central Carting Disposal (or other qualified vendor) to a disposal facility permitted to accept Class I material. The covered storage containers will control vectors and odors and Class I waste will be removed within 30 days of discovery. If the storage containers cannot be secured to control vectors and odors, the putrescible waste will be stored no longer than 48-hours.

Unacceptable nonputrescible, non-hazardous wastes, such as batteries, paint, chemicals or similar items that are inadvertently accepted will be removed when observed and stored in a roll-off container or pile at the working face and removed daily to a lockable storage unit. A maximum of 40 cubic yards of stored unacceptable, nonputrescible, non-hazardous wastes may be provided near the active face of the landfill, as shown on Drawing C0.03 of the 2016 Plan Set provided in Section 4 of the March 2016 permit modification application RAI 1 response dated July 2016. These materials will be removed from the site at least every 30 days (sooner if required) by City Environmental (or other qualified vendor) and taken to their facility for processing and proper disposal. This plan should meet the inspection needs for the site to prevent disposal of unacceptable wastes.

If suspect regulated hazardous wastes are identified by operators or spotters by random load inspection or discovered deposited at the landfill, the FDEP will be notified promptly, as well as the hauler and generator of the wastes, if known. The area where the hazardous wastes are stored will immediately be secured from public access. If the generator or hauler cannot be identified, Enterprise Road Class III RDF will assume the cleanup, transportation and disposal of the waste at a permitted hazardous waste management facility.

5.4 Acceptable and Unacceptable Class III Landfill Waste Materials

The Enterprise Road Class III RDF will accept only those solid wastes as defined in Rule 62-701.200 (14), F.A.C. as Class III wastes, except as allowed otherwise by permit.

Acceptable Class III waste materials include the following:

- Land clearing debris
- Demolition debris
- Glass
- Carpet
- Cardboard
- Asbestos
- Plastic
- Automobiles and parts without visible contamination from petroleum products or other chemicals
- Construction debris
- Non-Treated Wood Pallets
- Unpainted, painted and untreated wood scraps from manufacturing
- Waste Tires (Processed)*
- Paper
- Furniture other than appliances
- Yard trash

* Processed waste tires are acceptable for disposal in the Class III Landfill provided that they have been cut into sufficiently small parts. The processed waste tire parts may be disposed of or used as initial cover at a permitted landfill. For use as initial cover, a sufficiently small part means that 70 percent of the waste tire material is cut into pieces of 4 square inches or less and 100 percent of the waste tire material is 32 square inches or less. For purposes of disposal, a sufficiently small part means that the tire has been cut into at least eight substantially equal pieces. Any processed tire which is disposed of in a landfill and which does not meet the size requirement of subsection (a) above must receive initial cover, as defined in subsection 62-701.200(53), F.A.C., once every week.

The following is a compilation of unacceptable Class III waste materials:

- Putrescible Household Waste
- Paint (liquid)
- Any toxic or hazardous Materials (i.e., batteries, solvents, oils, etc.)
- Contaminated soils
- Electronics
- Refrigerators, freezers, air conditioners (white goods)
- Biomedical waste
- Automobiles or parts that are contaminated with petroleum products or other chemicals.
- Septic tanks and pumping
- Whole waste tires (except at the waste tire processing facility)
- CCA Treated wood

The site has a visible sign at the site entrance on Enterprise Road as provided in Attachment 1. The sign identifies the accepted wastes, hours of operation, landfill classification, and site's 24-hour emergency contact and telephone number. Industrial or excavated waste will be considered for acceptance on a case by case basis, only with prior consent of the Department.

5.5 Random Load Inspection

In accordance with Rule 62-701.500(6)a., F.A.C., the owner or operator will implement a load-checking program to detect and discourage attempts to dispose of unauthorized wastes at the landfill. The load checking program will consist of the following minimum requirements:

1. The landfill operator will examine at least three random loads of solid waste delivered to the landfill per week. The waste collection vehicle drivers selected by the inspector will be directed to discharge their loads at a designated location in the landfill. A detailed inspection of the discharged material will be made for any unauthorized wastes. The landfill operator will assure the random inspections will be distributed between both loads originating from the transfer facility and other private waste haulers delivering waste to the landfill.
2. If unauthorized wastes are found, the facility will contact the generator, hauler, or other party responsible for shipping the waste to the landfill to determine the identity of the waste sources.

The following procedures will be followed when inspecting the load:

- A. The load will be "broken apart" by both the spotter and equipment operator to allow for a thorough inspection.
- B. The inspectors will be searching and removing de minimis amounts of unauthorized waste contained in the load.
- C. If the load contains more than de minimis amounts of unauthorized materials, they will immediately be reloaded onto the customer's vehicle for removal from the site. In the event that the transporter will not remove the unacceptable materials, the materials will be loaded into an appropriate container and removed from the site. The customer/generator will be contacted and notified of the site policies as well as charged for the off-site disposal services.

- D. In all cases, if more than minimal unacceptable wastes are found during the inspection, the customer will be notified to assure the prevention of future occurrences.

All inspection will be documented on the site's "Random Load Inspection Form," signed by the inspector, and kept in a current Log Book, see Attachment 2. Log books will be maintained at the landfill for at least 3 years. Inspections will be performed by trained site personnel.

5.6 Asbestos Waste Disposal

Asbestos-containing materials (ACM's) will be accepted for disposal in accordance with 40 CFR Part 61.154. Arrangements for disposal of ACM's between the Facility and the waste generator/hauler will be recorded in the operations record as to the quantity and date of shipment to the landfill. The loads are accepted at pre-arranged times during operational hours.

To ensure that all waste deposited at the Facility meets state and local requirements, all facility personnel will receive training from their supervisor on the identification of unacceptable materials, which is any waste other than properly labeled and bagged ACM. Unregulated, non-friable asbestos containing materials are not required to be bagged, but all other requirements are unchanged.

Each load of ACM arriving at the facility must be accompanied by a completed Waste Shipment Record (WSR) in accordance with 40 CFR 61.150. Each load will be inspected to insure that it is properly bagged, that bags are intact and properly sealed, and that the required warning labels and generator labels are affixed. Bags will not be opened prior to disposal.

ACM arriving at the Facility for disposal will be visually screened by facility personnel a minimum of two times. The first screening will be at the scales, controlling access to the Facility, where the truck drivers will be questioned as to the contents of the load and the shipping documents will be reviewed. The gate attendant will direct the drivers to the appropriate disposal area.

The second screening will be at the working face where a trained inspector/spotter will again question the driver and make a visual examination of the load prior to dumping and as it is dumped. This examination will insure the ACM is properly bagged, the bags are intact and properly sealed, and that the warning labels and generator labels are affixed.

Facility personnel will direct the waste hauler to the designated ACM disposal location in each cell, to be determined by the Operator. The ACM will be covered with 6-inches of soil at the end of any day that ACM is accepted. This designated ACM location will be recorded and updated by the annual topographic survey in accordance with 40 CFR 61.154. ACM disposal records will

be maintained for the life of the landfill and disposal locations documented in the Closure Report.

5.7 Incidental Recycling Operations

The Class III landfill does have a separate, dedicated materials recycling area. However, if recyclable wastes are incidentally received, such as metals, concrete rubble, asphalt, and wood wastes, the facility will separate them in stockpiles or in roll-off containers. Concrete and asphalt will be periodically transported to an appropriate location for crushing. Yard and wood wastes may be chipped for use onsite or be placed in roll-off containers for shipment to a wood recycler. These materials will be removed from the site approximately every 6 months. However, if the storage capacity is exceeded, the materials will be removed sooner. Incidental recyclable materials that are identified at the disposal area will be placed in containers located near the working face, as follows and as shown on Drawing C0.03 of the 2016 Plan Set provided in Section 4 of the March 2016 permit modification application RAI 1 response dated July 2016.

TYPE	MAX. QTY	STORAGE
Ferrous Metal	500 CY	Roll-off or pile
Aluminum	300 CY	Roll-off or pile
Stainless Steel	300 CY	Roll-off or pile
Copper	25 CY	Trash pail, roll-off or pile
Asphalt	300 CY	Roll-off or pile
Concrete / Rubble	300 CY	Roll-off or pile
Recyclable electronics	8 CY	Covered dumpster

Trucks identified at the entrance as carrying primarily recyclable products, (i.e., concrete, metal, wood, paper) will be refused entrance into the landfill.

5.7.1 Reports

A Recovered Materials report will be submitted by type of waste recovered and tonnage to the FDEP and Pasco County Solid Waste Department. These reports will also be compiled into an annual report to the FDEP.

5.8 Wood Acceptance Area

The facility is a registered Source-Separated Organics Processing Facility and in compliance with the requirements specified in Rule 62-709.320 and Rule 62-709.330. Initial inspection will be performed at the scalehouse by the attendant. Wood wastes are stockpiled until processing takes place every 180 days. Personnel trained to identify and remove any unacceptable wastes

will be present during processing. Unacceptable wastes, if found, will be removed prior to wood processing.

5.9 CCA Treated Wood Management Plan

The following serves as the CCA-treated wood management plan required by 62-701.730(20), F.A.C. Employees will be trained in the proper management of CCA-treated wood. CCA-treated (chromate-copper arsenate) wood must be stored in the temporary storage container for waste destined to go to a lined facility. CCA-treated wood is not allowed to be disposed of in the Enterprise Class III Recycling and Disposal Facility.

The following is strictly prohibited:

- Disposal of CCA-treated wood in any unlined landfill or disposal facility
- Burning of CCA-treated wood in an open burn or an air curtain incinerator
- Mulching of CCA-treated wood or use of CCA-treated wood in other soil amendment products

There are several ways for employees to identify CCA-treated wood: 1) determining the place of origin, 2) identification by shape – typically large, dimensioned pieces of wood and 3) identification by color. CCA-treated wood has been used in a variety of applications including fencing, docks, outdoor decks and stairs, playground equipment and landscaping. The wood is typically large – dimensioned 4-inches or larger.

The most common method for visually identifying treated wood among lumber, timber and plywood is to look at the color of the wood. Untreated wood and borate-treated wood typically have a light yellow color. Wood treated with copper varies in color from a very light green to an intense green color depending on the degree of treatment. A higher degree of treatment is typical for marine applications and for structure with a high load-bearing support. Once the wood treated with copper has been in-service and has weathered, the green color is generally converted to a silver color. It still may be difficult to visually distinguish weathered treated wood from weathered untreated wood.

Employees are cautioned against handling CCA-treated wood. Workers handling wood preserved with CCA should be sure to wash their hands before eating or smoking. CCA-treated wood splinters in the hands and fingers of workers are reported to be very problematic and should be removed as soon as possible. It is important to make sure that the entire splinter is removed. Removal may require medical attention.

The most efficient way to minimize CCA-treated wood disposal in the facility is to communicate with landfill customers. Dedicated, separate suitable temporary container for CCA-treated wood at demolition and construction job sites can be used. At the scale house, personnel will question

transporters on the type of wood and direct customers to dispose CCA-treated wood at a Class I landfill. Personnel will also perform a visual inspection at the scale house if necessary especially for loads originating from the construction and demolition of fences and decks.

The facility shall incorporate CCA-treated wood into its spot-checking program. Spotters visually inspect and determine if any dimensioned wood is in the load, such as railroad ties and fence posts or building materials. If CCA-treated wood is found, the load will be diverted to a Class I landfill for disposal. Tipped loads will be spread and inspected for the presence of CCA-treated wood. CCA-treated wood will be adequately protected from rain to prevent leaching of contaminants.

6.0 WEIGHING OR MEASURING INCOMING WASTE

A scale system is used to weigh incoming waste. The scales will be calibrated every six (6) months. Vehicles will be weighed when they enter the disposal site, and based upon the tare weight of the vehicle, the waste tonnage will be determined. Prior to unloading debris, the tonnage or volume of the waste material disposed will be determined and the appropriate fee assessed. Weigh tickets will be kept on-site for a minimum of 5 years.

6.1 Fee Schedule

The fee schedule for disposal varies depending on the client, type of waste and volume received.

Waste Type	Unit	Fee per Unit
Class III	CY	Variable

This fee schedule will be periodically revised according to the prevailing market for waste disposal. The Operator will notify clients immediately in writing of all fee schedule changes.

7.0 VEHICLE TRAFFIC CONTROL AND UNLOADING

Generally, truck traffic will be controlled by first-in, first-out, as directed by the spotter located at the working. There will be adequate space for truck staging at the site's entrance (7-8 trucks) to mitigate any queuing onto Enterprise Road. Enterprise Road Class III RDF will discourage any truck staging prior to landfill opening. Signs will be posted at the entrance gate and on interior roads to guide mining truck traffic vs. landfill truck traffic to their appropriate areas of the site.

8.0 METHOD OF CELL SEQUENCE AND LIFE EXPECTANCY

8.1 Cell Sequence

Angelo's Aggregate Materials is currently (as of ~~March~~ November 2016) filling in Cells 1 – 6 and 15 of the Class III Landfill, while construction of Cell 7 is being completed. The cell construction and filling sequence operations will be as follows:

- Phasing Sequence 1 As shown in Drawing Sheets C1.00 and C1.01
Continue filling Cells 1, 2, 3, 4, 5, 6, 6B, 7 and 15 in 10 – 12 foot lifts to waste elevation of 172'
Maximum slope is 3H:1V from base grade to waste elevation 122'; 4H:1V from waste elevation 122' to 167'; 1% to 2% grade from waste elevation 167' to 172'
10-ft wide stormwater benches are to be constructed at waste elevations 122' and 147'
Sideslope berms and stormwater appurtenances are to be constructed at final closure.
Construct Cell 16 in accordance with permitted design
- Phasing Sequence 2 As shown in Drawing Sheets C1.10 and C1.11
Begin filling Cell 16 with 4 – 6 feet lift north of the temporary stormwater and leachate diversion swale until cell is floored out. Remove temporary swale and fill with 4 – 6 feet lift.
Continue filling Cell 16 in 10 – 12 foot lifts from base grade to waste elevation 147', including filling over Cell 15. Maximum slope is 3H:1V from base grade to waste elevation 122'; 4H:1V from waste elevation 122' to 147'.
A 10-ft wide stormwater bench is to be constructed at elevation 122'.
Sideslope berms and stormwater appurtenances are to be constructed at final closure.
- Phasing Sequence 3 As shown in Drawing Sheets C2.00 and C2.10
Construct final closure cover system over Cells 1, 2, 3, 4, 5, 6, 6B, 7, 15 and 16 in accordance with the permitted closure design.
Construct sideslope berms and stormwater appurtenances.
Construct landfill gas vents.

Lift height includes cover material. Due to the landfill bottom elevation, some lifts may not be a full 10 feet in height.

As each sequence is active, the following procedures will be followed

- The access road to the working face will be constructed and graded as necessary
- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length
- Avoid channelizing stormwater flows
- Use mulch, grass, and maintain intermediate covers
- Weekly cover of six (6) inches of soil will be placed on the working face
- Intermediate cover of 12 inches of soil will be placed in areas that will not receive waste within 180 days. The cover may be removed immediately prior to placement of new waste

Stormwater runoff from the interior of the excavation and filling area will be diverted to the onsite temporary storage pond using a temporary interior swale and 6-foot berm. Perimeter berms will direct stormwater away from excavation and filling areas. The temporary stormwater pond will receive runoff until Pond 3 is developed.

8.2 Erosion Control

The following engineering controls will be used to minimize erosion at the working face:

- Regrade a maximum of 100 linear feet of the outer edge slopes at a time to 2H:1V. The purpose of this recommendation is that a relatively small area will be subjected to surface erosion at any given time.
- Construct a berm along the top of the slope during the regrading to redirect any rainfall runoff away from the face of the slope. The area along the berm should be graded so as to allow rapid runoff along the top of the slope. Ponding of water near the top of the slope should not be allowed, since seepage through the slope may initiate slope erosion.
- As soon as possible following the construction of the clay layer, begin to fill against the 2H:1V slope with the landfill material.
- Avoid channelizing stormwater flows

- Use mulch, grass, and maintain intermediate covers

8.3 Life Expectancy.

The capacity and lifespan estimates are provided in Section 3.8.3 of the Engineering Report.

9.0 WASTE COMPACTION AND APPLICATION OF COVER

Waste received will be segregated based on compatibility. Bulky, incompressible items, such as concrete and tree debris, will be separated and stockpiled for future processing. Tree debris is separated from the waste and periodically mulched for on-site uses. The remaining debris is disposed of in designated "cells" using a CAT 826G Compactor, or equivalent to place, spread the waste daily and compact the debris weekly. Initial cover material is planned to be excavated from onsite areas and placed weekly in approximately 6-inch layers on the compacted lifts to control vectors, reduce rain infiltration and provide a more stable working face area. The facility may also use a 50/50 mixture of mulch and soil as cover in accordance with Policy Memo # SWM-05.4 dated April 25, 2001. An intermediate cover of one (1) foot of compacted soil will be applied if final cover or an additional lift is not to be applied within 180 days of cell completion. Cell closure will occur when all permitted cells are filled. For final buildout grade and closure details, see Drawing Sheets C2.00 and C2.10 of the 2016 Plan Set provided in Section 4 of the December 2016 permit modification application RAI 2 response dated July 2016. The Conceptual Closure Plan includes permitted Cells 1-7 and 15, and Cell 16.

Cell closure will generally conform to the lines and grades specified in the Landfill Conceptual Closure Plan. The grading plan will conform to the rules and regulation specified in 62-701.600, as well as 62-701.400(7) and 62-701.400(8), Florida Administrative Code. Pesticides when deemed necessary to control rodents, insects and other vectors will be used as specified by the Florida Department of Agriculture and Consumer Services. Uncontrolled and unauthorized scavenging will not be permitted at the landfill site. Controlled recycling may be permitted by the Site Manager responsible for the operation of the landfill facility. Temporary storage of soil fill or recycling materials may occur in the closed cell areas.

10.0 OPERATION OF GAS, LEACHATE AND STORMWATER CONTROLS

10.1 Gas Monitoring and Control

The type of materials to be disposed in the Class III Landfill are not expected to generate significant amounts of methane or other toxic gases since the landfill's design prevents groundwater contact therefore, a passive gas control system is proposed. The Landfill Manager will conduct daily and weekly inspections of the landfill and will check for objectionable odors or gas by driving around the perimeter of the site, record the results, and notify the FDEP and County of any positive detection and immediately take corrective actions. Corrective actions will include placement of additional soil cover, or mulch, or lime containing materials such as crushed concrete that is documented to abate the odors. Quarterly gas monitoring is currently conducted.

Within 30 days of being notified by the Department that objectionable odors per Rule 62-701.200(77), F.A.C. have been confirmed off-site, the Facility will submit to the Department for approval an odor remediation plan. The plan will describe the nature and extent of the problem and the proposed long-term solution, which will be implemented within 30 days of approval. The plan will include procedures to implement a routine odor monitoring program to determine the timing and extent of objectionable odors and a means of evaluating the effectiveness of the remedy.

The facility only accepts Class III debris for disposal and accepts no putrescible household wastes. Surface water and groundwater contact with the Class III wastes will be prevented by the approved facility design thus preventing possible odor operation. Other best management practices to prevent odors include: 1) closure of each cell as it is completed; 2) weekly soil cover application; and, 3) immediate corrective actions to abate odors.

A system of passive gas vents will be installed to manage landfill gas. The location of the gas vents is shown on Sheet C2.00 of the 2016 Plan Set provided in Section 4 of the December 2016 permit modification application RAI 2 response dated July 2016. The construction details of the vents are shown on Figure 3-14 (provided in Appendix 3-C of the 2012 permit renewal application submitted by Kelner Engineering). The vents will be installed during the final closure and installation of the final cover over each landfill cell.

A system of 16 gas monitoring points will be installed to monitor gas at the site, see Sheet C0.03 of the 2016 Plan Set provided in Section 4 of the March 2016 permit modification application RAI 1 response dated July 2016. The construction details of a typical gas probe are shown on Figure 3-14 (provided in Appendix 3-C of the 2012 permit renewal application submitted by Kelner Engineering).

10.1.1 Methane Gas Measurement

In accordance with the requirements of the current FDEP permits, methane gas levels are

monitored at each of the active gas monitoring points quarterly, with results submitted to the FDEP. A lower explosive limit (LEL) meter will be used to measure methane levels from each of the gas probes. LEL meters, such as the MSA Model 260 or GEM 500 or equivalent, will be used to conduct this monitoring. These meters are capable of measuring percent volume of methane in air and the percent LEL level of the methane by volume. The meter shall be calibrated in accordance with manufacturer's specifications prior to each methane monitoring event. Attachment 4 of the Operations Plan provided in Appendix 3A of the Engineering Report presents the proposed gas monitoring probe survey form to be used to conduct the quarterly monitoring at the subject site. This form will document at the time of each gas probe reading, air temperature in degrees Fahrenheit, methane levels in percent volume in air and percent LEL. The reporting action level for methane in air will be considered 5 percent by volume in air as measured by the lower explosive limit. The reporting action limit for methane in structures is 25% of the LEL, or 1.25% methane by volume. The results of each quarterly gas probe survey will be submitted to the Department on the presented form within two weeks of each monitoring event. These events are planned to be coordinated with the semi-annual groundwater monitoring at the subject site.

10.1.2 Gas Contingency Plan

The following Contingency Plan will be implemented if any of the measured gas monitoring points methane levels are detected above the 100% LEL of greater than 5 percent methane in air, or if 25% of the LEL or higher is measured in a structure. If this level of methane or greater is detected in any of the probes, the Facility operator will institute measurement of methane in nearby, at, or below grade structures, i.e., stormwater collection points, or any maintenance or office buildings within 100 feet of the subject gas probe on a weekly basis until these levels go below the 100% LEL at the subject probe. If methane levels measured in any on-site building exceed 25% of the LEL, building windows and/or doors will be opened for ventilation and all personnel evacuated until methane readings are maintained below 25% of the LEL for methane. The monitoring report for any event that detects methane above the LEL will also report methane levels from nearby structures, as indicated above, until the levels go below the methane LEL level or until corrective actions are conducted to reduce methane levels. The FDEP will be notified within seven days of any gas monitoring levels that exceed the reporting action levels.

10.2 Leachate Control

Any leachate that may be produced at the landfill will be controlled with the use of a continuous 3-foot thick clay layer (1×10^{-7} cm/s) that will be placed on the bottom of the cells. The clay layer beneath each individual cell will form a continuous barrier layer that will be graded to direct leachate to the remaining portion of the temporary stormwater pond in future Cell 14 and/or the proposed stormwater Pond 3. During Cell 7 construction, leachate will continue to flow along the

continuous bottom barrier layer towards the northern landfill boundary, and into the existing stormwater pond in future Cell 14 and Cell 16. Prior to starting construction in Cell 16, a temporary stormwater and leachate diversion swale will be constructed immediately north of Cell 15. The swale will extend east to west the full width of Cell 16 and slope to the west to the temporary stormwater pond in the future Cell 14 area. Leachate generated in existing cells 1-7 and 15 will move to the remaining temporary stormwater pond in the future Cell 14 area. Once Cell 16 construction is complete, the swale will remain in place while the initial lift of waste is placed across the entire floor of Cell 16. Once Cell 16 is “floored out”, the swale will be removed for the remainder of operations. Leachate generated in existing cells 1-7 and 15 will then move to temporary stormwater pond in the future Cell 14 area as it did prior to removal of the swales. The remainder of the leachate generated in cells 1-7, 15 and all leachate generated in Cell 16 will move to a toe drain extending east to west along the northern perimeter of Cell 16. The toe drain will slope west to east and terminate in a manhole located between Cell 16 and Pond 3. The toe drain will “daylight” approximately 3 feet above the bottom of the manhole. Staff will observe the level of leachate in the manhole every morning the facility is open. When leachate levels are observed to be equal to the invert of the toe drain, a pump will be used to drain the manhole into Pond 3. Leachate levels in the manhole will be periodically inspected throughout the day and pumping will be performed as needed. Under no circumstances will waste be placed in water. In the event that water is present above the clay barrier layer at the time waste is to be placed, the operator will utilize pumps to remove the water to Pond 3. Once Cell 16 and any future Cells that would connect to the leachate collection system have been filled to their final design grades and closed, the pumping of leachate into Pond 3 will be vacated.

The controlled method of screening waste also supplements the leachate control. Because the Applicant privately owns the Enterprise Class III Landfill facility, most of the haulers, waste generators, and sources of waste are known to Angelo’s and the scale house attendants. For those haulers that are unfamiliar to the Applicant, the scale house attendants question the haulers more intensely to determine the contents of their loads. The spotters and operators add additional monitoring at the active disposal location. The addition of video surveillance to the monitoring process of incoming wastes helps to identify fires or smoking loads. Combined methods of screening waste is an effective method to reduce any possible threat to public health or the environment.

10.3 Stormwater Control

The approved Stormwater Management Plan for the landfill consists of berms, swales, and ponds constructed within the 200-foot landscape buffer zone to divert, collect and contain stormwater runoff from the completed site. These stormwater facilities are designated to retain the 100-year, 24-hour storm volume as required by Pasco County and the FDEP. During

excavation, construction and waste disposal, stormwater will be controlled by a series of berms that direct stormwater to the temporary stormwater pond located in the northeast corner of the site. A 6-foot berm adjacent to active and filled cells retains stormwater from the filling area and diverts stormwater from the excavation area to the temporary stormwater pond. A new stormwater Pond 3 is being proposed and submitted to be permitted as an Industrial Wastewater Pond through FDEP. Additional details concerning the stormwater management system are provided in Drawing Sheets C1.00, C1.10, C2.00 and C2.10.

The site manager will perform weekly inspections of the storm water management system. Any areas in need of maintenance will be repaired within seven days.

11.0 SIGNS

Signs will be posted at the entrance to the Facility site which will list the following information:

- The operating entity;
- Hours of operation;
- No scavenging allowed;
- No hazardous waste accepted;
- List of acceptable and unacceptable waste; and,
- 24-hour phone number of emergency contact.

The scalehouse attendant will direct each driver to the area appropriate to unload wastes. Signs will also be posted to direct trucks to either the borrow pit or the landfill working face.

12.0 DUST ABATEMENT PLAN

The Facility will provide a water tanker to water the landfill access roads if and when dust becomes a problem. This will also be done whenever the County receives complaints about dust or when a dust problem is observed during a County or State inspection.

13.0 DUST, LITTER, AND VECTOR CONTROL PLAN

The nature of the waste to be disposed in the landfill does not typically create litter and vector problems. Daily placement of waste and/or compaction will be the primary means utilized to control litter and vectors. The facility personnel will perform daily inspections of the facility and the access road to assure litter is controlled. As needed, laborers will pick up blowing debris and dispose of it in appropriate containers and/or on site. Temporary fencing to contain litter at the working face of the landfill may be used as needed. These litter controls will also be

implemented whenever the County or State receives a complaint from adjacent landowners or a litter problem is observed during an inspection.

If vectors (rodents, insects, and domestic animals) become a nuisance at the Facility, the Operator may obtain the services of a licensed pest management company to review the operations and recommend control measures.

14.0 FIRE PROTECTION AND FIRE FIGHTING FACILITIES

Fires that originate in landfills are primarily extinguished by soil application. Supplemental fire protection will be furnished by the Dade City Fire Department (Station No. 1). The Fire Department will be notified immediately of all landfill fires. An emergency contact list will be posted at the scalehouse with contact phone numbers.

During a fire, incoming trucks will be directed toward another area of the landfill so that a temporary active face can be established. Once the fire is extinguished, appropriate cover will be applied to the waste and operations will continue at the original active face. If the fire is extensive and a temporary active face cannot be established, incoming trucks will be redirected to another landfill.

Onsite fire prevention facilities will include:

- Fire extinguishers mounted in the cab of all heavy equipment and in the office/scalehouse;
- Telephones to notify personnel of a fire;
- Onsite equipment (dozer) and fill dirt to extinguish fires on working face; and
- Site water truck

Soil for firefighting purposes will be borrowed from the closest unexcavated area of the site to the fire. Details of all firefighting episodes will be recorded in the landfill operating record.

14.1 Hot Loads and Spills

Any hot load (of authorized material) found will be dumped on an area at least 500 feet away from the active working face. The load will immediately be covered with soil if a fire is imminent. Once the fire is extinguished, the load will be pushed and spread using a dozer,

allowing for the load to be inspected by a spotter. The waste will not be disposed of until it has cooled completely, and the fire hazard has been mitigated.

In the event of a fire at the working face, waste acceptance will cease until the fire has been completely extinguished and additional cover material compacted in the area of the fire. If the fire is located elsewhere in the landfill, waste acceptance operations may continue at the manager's discretion.

Since liquid disposal is prohibited in a Class III landfill, spills from waste vehicles are not anticipated. In the case of a fuel spill or leak, the contaminated soil will be collected to the extent possible, contained in a drum or roll off container, and taken offsite within thirty (30) days for proper disposal or treatment.

15.0 LANDFILL PERSONNEL

The scalehouse attendant and certified landfill operator will be onsite during all operating hours. In addition, there will be a minimum of one (1) other person (spotter) onsite, for a total of three (3). The state certified landfill operator will be assigned to manage the daily landfill operations. The personnel will be stationed at the landfill ticket gate and active disposal face. Additional personnel will be assigned to the landfill operation as the demand necessitates. Two spotters are generally located at the working face at all times that waste is accepted. However, there are up to eight spotter-trained or in-house trained spotter employees on-site each day and therefore; additional trained employees can be relocated to the working face as necessary to inspect the incoming waste. Certificates for current trained personnel are attached as Attachment 6 to this plan.

At least one (1) spotter will be at the working face at all times the facility is accepting waste. The spotter will direct vehicle traffic around the working face and will direct drivers where to empty their vehicles. The loads will be inspected as described in Section 5.0. If the load is acceptable, the waste will be spread and compacted as necessary. If the load is unacceptable, the spotter will direct the driver to reload the waste into the vehicle, if possible. If the driver is unable to reload the material, on-site personnel will reload the material for the driver using onsite equipment. The spotter will also discourage scavenging by the public.

The equipment operator spreading waste at the working face may also act as a spotter in accordance with the following:

1. The heavy equipment operator must be trained as a spotter;
2. When unauthorized waste is discovered, the heavy equipment operator must either move the unauthorized waste away from the active area for later removal and proper

management, or must stop operation and notify another person on the ground or on other equipment who will come to the active area and remove the unauthorized waste before operations are resumed;

3. Each load of waste must be visually inspected for unauthorized waste prior to being compacted or loaded into a transfer vehicle.

A typical work schedule is as follows:

Day	Operating Hours	Scalehouse Attendant	Certified Operator	Spotter(s)	Equipment Operator*
M-F	7 am – 6 pm	1 (7 am – 6 pm)	1 (7 am – 6 pm)	Min. 1 (7 am – 6 pm) For 2 or more (7 am – 4 pm), (12 pm – 6 pm)	Min. 1 (7 am – 6 pm)
S	7 am – 2 pm	1 (7 am – 3pm)	1 (7 am – 3 pm)		Min. 1 (7 am – 2 pm)

* - Equipment Operator may also serve as a spotter

15.1 Training Plan

The Facility will implement an employee training plan to properly train their landfill operators and spotters to operate the landfill in accordance with this Operations Plan, state and local regulations, and accepted disposal practices and to properly manage any hazardous or prohibited materials which are received at the landfill.

A trained operator will be at the site during all times that the landfill receives waste. All facility operators will be trained at an approved FDEP training course. Each operator will submit proof of training and documentation to the FDEP upon receipt of their certificates.

Landfill operators must have at least one year of work experience in landfill operation and a high school diploma; or have at least two (2) years' experience at a Class I, II, or III landfill. Each operator will complete at least 24 hours of initial training in an FDEP-approved training course, and will pass an examination as part of that training. Sixteen (16) hours of continuing training will be completed within three (3) years of each operator's initial training from an approved course documented by the form in Attachment 3. A list of FDEP approved training courses for operators and spotters are included in Attachment 5.

The Facility spotters will complete an initial eight (8) hour FDEP-approved course and four (4) hours of continuing training every three (3) years. Records documenting each employee's training course completion and schedule will be maintained and kept at the landfill office at all times.

Interim operators must become trained operators within one year of employment as an interim operator and interim spotters must become trained spotters within 3 months of employment as an interim spotter

16.0 COMMUNICATIONS FACILITIES

The landfill scalehouse will have both telephone and facsimile facilities. In addition, all landfill operating areas (gate house, working face etc.) will have radio communication or cell phones with the base station at the gate house.

17.0 EQUIPMENT INVENTORY

Equipment currently planned for use at the landfill site includes:

- A. D-8 Caterpillar bulldozer, CAT 826 G Compactor; two 2.5 cud loaders, water truck, 590 John Deer backhoe, or equivalent are sufficient for adequate operation of the facility. A wood chipper/grinding machine (Hogzilla), or equivalent, will be moved to the site periodically (approximately once every six months) to process wood wastes as needed. Additional equipment, such as a grader may be rented as needed.
- B. Arrangements will be made to provide alternate equipment within 24 hours following an equipment breakdown.

Equipment rental companies that may be used to obtain reserve equipment include the following:

Ring Power - Brooksville, Florida
Contact: 352-796-4978

Flagler Equipment - Tampa, Florida
Contact: 813-630-0077

- C. There will be safety devices present on equipment to shield and protect the operators from potential hazards during operation.

17.1 Equipment Maintenance

The Facility will conduct routine heavy equipment and vehicle maintenance onsite. Maintenance includes fueling of heavy equipment with diesel fuel, lubrication, oil changes and, antifreeze changes. Tire repairs will be handled by an outside service company.

A permanent equipment fueling facility will be installed and registered in accordance with F.A.C. 62-761. Pasco County will be copied on the registration.

Oil and antifreeze changes will be contained by large drip pans to catch the waste oils. These wastes will then be transferred either to a 250-gallon waste oil skid tank or to a 55-gallon drum for waste antifreeze, which will be located in a containment area. The containment area is a covered metal storage shed. Enterprise RDF plans to enter into contracts with licensed recyclers to periodically pick up the waste oil and antifreeze. Records of these pickups will be maintained by Enterprise RDF. All virgin lubricants will be stored undercover within the gate house building or suitable enclosure.

18.0 SAFETY DEVICES

All operating equipment which will be utilized at the landfill site will be fitted with rollover protection and fire extinguishers. All landfill personnel will be required to wear safety helmets, safety shoes, eye protective glasses, gloves, and safety vests. The onsite heavy equipment will meet OSHA safety requirements. First aid equipment will be kept in the office trailer and in the operating equipment.

19.0 RECORDS, PERMITS AND REPORTS

A copy of any Florida Department of Environmental Protection (FDEP) and Pasco County approved engineering drawings, permits and supporting information will be kept at the facility for reference and inspections. Permits will be posted at site per ordinance. A waste type and quantity intake (in tons) log will be kept daily, compiled monthly and a report will be submitted annually to Pasco County and the FDEP.

An annual estimate of the remaining life and capacity in cubic yards of the landfill will be reported annually to the FDEP.

19.1 Water Quality Monitoring

The Facility will conduct the required initial and semi-annual groundwater monitoring at the sites' monitoring wells as described in the Facility's Groundwater Monitoring Plan. Semi-annual reports of this monitoring will be submitted to Pasco County and FDEP in accordance with this

plan. Quarterly monitoring will also be conducted and reported at specific wells per Pasco County conditions.

19.2 Landfill Operating Records

The operating record for the landfill will document daily as a minimum the following activities:

- Self-inspections of landfill conditions, safety equipment and unacceptable waste received, any odor detected;
- Records used to develop permit applications;
- Change in construction, operation or closure permits and supporting designs;
- Water quality sampling events, analytical reports, well installation or repair;
- Employee training;
- Random load checks;
- Facility construction, major maintenance, or demolition;
- Other activities that significantly affect facility operations.

Self-inspections of the landfill conditions are conducted daily, and more extensive inspections are included weekly. Daily inspections include general inspection of site access, site security, and conditions of intermediate cover. Weekly inspections include more detailed inspections of the conditions of the surface water and stormwater management systems and groundwater monitoring wells.

The Operating Record will be kept at the landfill and be accessible to the landfill operators to maintain and for FDEP or Pasco County inspection at reasonable times.

Operational records will be maintained for the design life of the landfill, with the exception of weigh tickets which will be kept at least 5 years. Water quality monitoring information, maintenance records, and permit reports will be maintained for a minimum of 10 years. Background water quality records will be maintained for the design period of the landfill.

20.0 EROSION CONTROL

The site's inherent design as an excavation pit will prevent stormwater from leaving the property. Stabilization by seeding and mulching of the final fill areas will occur as the fill operations progress from cell to cell.

21.0 FINAL GRADE PLAN

Interim grades of the cells are shown on the plans (Drawings C1.00 and C2.00 of the 2016 Plan Set provided in Section 4 of the March 2016 permit modification application RAI 2 response dated December 2016) and in the cross-sections (Drawings C1.10 and C2.10). Permitted mining activities will continue in accordance with the site's Class I mining permit. The final elevations after construction of future cells is planned to reclaim excavated areas back to the grade which existed prior to the site being opened as a mine with allowance for positive drainage. The Landfill Conceptual Closure Plan is provided in Drawing C2.00 (Section 4 of the March 2016 permit modification application RAI 2 response dated December 2016).

22.0 CLOSURE AND LONG TERM CARE

The site's Reclamation and Closure Plan details the procedures to properly close and maintain the landfill during the 30-year post-closure period. A Closure Report will be prepared for the landfill that details the site-specific limitations for land use based on geotechnical stability (settlement), potential gas migration, and site access. Long-term maintenance of erosion controls, storm water controls and monitoring devices is discussed in the Closure Plan (Section 7 of the March 2016 permit modification application RAI 2 response dated December 2016).

23.0 CERTIFICATION

Laboratory testing and observation of cell floor conditions during cell construction completion will consist of the following:

- In-place density testing for each 12-inch thick soil lift, based on laboratory proctor test results for the construction material, will be recorded by a properly trained technician. These tests will be conducted in the location of each permeability test.
- Thickness testing of each lift will be recorded at a minimum frequency of two tests per acre, per lift.
- Confirmation hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell floor material will be performed at a minimum frequency of one test per lift, per acre.

- Observance for unstable areas such as limestone, sinkholes and soft ground will be performed for each cell.

If the test data from a cell floor section does not meet the requirements of the anticipated conditions of the hydrogeological and geotechnical reports and the requirements of the facility construction permit, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity meets the requirements, the cell will be considered acceptable. If not, that cell will be reworked or reconstructed so that it will meet these requirements.

Upon completion of construction of any cell (or cell increment) within the disposal facility, the Applicant will provide the FDEP with the necessary reports, documents, and form 62-701.900(2), F.A.C. demonstrating that the approved construction is complete and in accordance with the submitted plans. The operator will provide the completed form to the FDEP in accordance with Rule 62-701.320(9)a., F.A.C., along with the quality assurance test results described above.

24.0 HISTORY OF ENFORCEMENT ACTION

In 2000, OGC Case No. 00-0009 was opened against the applicant for the Frontier Recycling facility (now Angelo's Recycling Facility) in Largo, Florida. A model consent order was used to resolve the issues of the case. The DEP's database did not include information regarding the subject of the enforcement.

In 2004, OGC Case No. 04-0887 (solid waste) and No. 04-0426 (stormwater) were opened against the applicant for Angelo's Recycling facility in Largo, Florida. ARM requested a minor permit modification to resolve the solid waste enforcement case. Formal enforcement was not taken to resolve the stormwater case. Instead, it was handled through submittal of a new permit application.

In 2006, OGC Case No. 06-0783 was opened against the applicant for the Enterprise Class III Landfill and Recycling Facility in Pasco County, Florida. ARM performed the corrective actions that were required to bring the facility into compliance and the assessed civil penalties were paid.

In 2007, OGC Case No. 07-1985 was opened against the applicant for the Angelo's C&D Recycling Waste Processing Facility in Apopka, Florida. ARM performed the corrective actions that were required to bring the facility into compliance and the assessed civil penalties were paid.

In 2007, Warning Letter #WL07-0019SW51SWD was issued to Angelo's Aggregate Materials, Ltd. for the Enterprise Class III Landfill. The Warning Letter was settled June 5, 2008 for total

finest of \$18,397. In the “Proposed Settlement of Warning Letter WL07-0019SW51SWD”, the Department acknowledged that Angelo’s would not be considered “irresponsible” under FDEP Rule 62-701.320, FAC, as a result of the enforcement action.

In 2007, Warning Letter # WL07-0008SW52SWD was issued to Angelo’s Aggregate Materials, Ltd. for the Recycling Waste Processing Facility in Largo, FL. The Warning Letter was settled April, 2009 for total fines of \$24,986. In the “Proposed Settlement of Amended Warning Letter WL07-0008SW52SWD”, the Department acknowledged that Angelo’s would not be considered “irresponsible” under FDEP Rule 62-701.320, FAC, as a result of the enforcement action.

ATTACHMENT 1
FACILITY ENTRANCE SIGN



Angelo's Recycled Materials

ENTERPRISE CLASS III LANDFILL



OPERATING HOURS: MONDAY - FRIDAY 7:00 am 5:00 pm

24 Hour Emergency Contacts:
Manager (352) 302-8934

ALL CUSTOMERS MUST CHECK IN AT GATE HOUSE

ACCEPTABLE WASTE:

Construction and demolition debris, yard waste, land clearing, glass, carpet, cardboard, plastic, asbestos, paper, furniture, wood pallets, scrap and shredded tires.

UNACCEPTABLE WASTE: Household garbage, toxic and hazardous waste, batteries, appliances, automobile, paint, solvents, drums, septic tanks and pumping, whole tires.

WARNING:

We will be sorting all loads for prohibited waste. Any unacceptable waste/loads may be reloaded onto a vehicle to be taken to an appropriate disposal facility at your expense.

FDEP/SWN PERMIT NUMBER: 177982-002-SO

ERP PERMIT NUMBER: 51-0172489-001

NO SCAVENGING

ATTACHMENT 2
RANDOM LOAD INSPECTION FORM

ENTERPRISE RECYCLING AND DISPOSAL FACILITY

RANDOM LOAD INSPECTION FORM

1. DATE: _____
2. TIME: _____
3. HAULING COMPANY: _____
4. VEHICLE INFORMATION: A) TRUCK # _____
 B) LICENSE PLATE # _____
5. NAME OF DRIVER: _____
6. SOURCE OF WASTE MATERIAL: _____
7. DESCRIPTION OF WASTE MATERIAL: _____

8. DOES THE LOAD CONTAIN UNACCEPTABLE WASTE MATERIALS? YES: ___ NO: ___
IF YES, WHAT MATERIALS WERE FOUND, AND WHAT PROCEDURES WERE
FOLLOWED? _____

9. OTHER OBSERVATIONS: _____

10. INSPECTOR SIGNATURE: _____

SIGNED

Note: Forms must be maintained in Inspection Log Book

ENTERPRISE CLASS III LANDFILL**Load Rejection Form**

Date: _____ Time: _____ am/pm

CUSTOMER/GENERATOR

Name _____

Address _____

City/State/Zip _____

TRANSPORTER/HAULER☐ Same as Customer/Generator

Name _____

Address _____

City/State/Zip _____

Vehicle License and State _____

REASON FOR REJECTION☐ Suspected Special Waste☐ Suspected Medical Waste☐ Non-Processable☐ Suspected Hazardous Waste☐ Suspected Asbestos☐ Other (Explain below)

Explanation _____

ACKNOWLEDGEMENT☐ Rejected prior to dumping☐ Rejected After Load was Dumped

Comments _____

Driver's Signature _____ Operator's Signature _____

Customer/Generator Notified? ☐ YES ☐ NOTransporter/Hauler Notified? ☐ YES ☐ NO

If yes, name of person contacted

If yes, name of person contacted

ATTACHMENT 3
FACILITY TRAINING LOG

ENTERPRISE RECYCLING AND DISPOSAL FACILITY

TRAINING LOG

COURSE	TRAINED OPERATOR INSTRUCTOR	HRS. ATTENDED	SIGNATURES/ DATE

ATTACHMENT 4
GAS MONITORING SURVEY FORM

**ENTERPRISE RECYCLING & DISPOSAL FACILITY
CLASS III LANDFILL
GAS MONITORING SURVEY FORM**

Date: _____
Instrument: _____
Sampler: _____

GAS PROBE NO.	TIME OF READING	AMBIENT AIR TEMP (°F)	AMBIENT AIR OXYGEN CONTENT (%)	AMBIENT AIR METHANE (%) OF LEL	METHANE LEVEL Pre-Purge Measurement			METHANE LEVEL Post-Purge Measurement		
					% O ₂	% by vol.	% of LEL	% O ₂	% by vol.	% of LEL
1	Not installed									
2	Not installed									
3	Not installed									
4	Not installed									
5	Not installed									
6R										
7R										
8R										
9R										
10R										
11R										
12R										
13R										
14R										
15										
16										
Scale house					N/A	N/A	N/A	N/A	N/A	N/A

NR -Not required, no methane indicated in pre-purge measurement

Notes: (wind direction, weather conditions damage to gas probes, adjacent off-site activity observed, etc.)

ATTACHMENT 5
LIST OF APPROVED COURSES

Florida's Solid Waste Operators & Spotters

University of Florida

[Home](#)[Tracks](#)[Courses](#)[Providers](#)[Participants](#)[Reports](#)[Login](#)

Track Detail

Class I, III Landfill Operator

Is a solid waste facility that accepts Class I waste that is not hazardous waste and can be disposed in a lined landfill. The landfill may also accept yard trash, construction and demolition debris, processed tires, asbestos, carpet, cardboard, paper, glass, plastic, furniture other than appliances, or other materials approved by the FDEP that are not expected to produce leachate which poses a threat to public health or the environment. Operators required 24 hours initial course and pass exam with 70% proficiency, then 16 hours of continuing education every 3-year period.

Requirements

Initial Courses

- 24-Hour Initial Training Course for Landfill Operators (Class I, II, III and C&D Sites)
- Initial Training Course for Landfill Operators and C&D Sites - 24 Hour
- SWANA - Manager of Landfill Operations [MOLO] & Exam
- SWANA-Management of Landfill Operations
- SWANA-Manager of Landfill Operations (MOLO) Course and Exam

Hours

Hours Required	Effective Date
15	01/01/1800
16	05/27/2001

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Gainesville, FL 32608tel: (352) 392-9570
fax: (352) 392-6910train@treeo.ufl.edu
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 UNIVERSITY of FLORIDA

Florida's Solid Waste Operators & Spotters

University of Florida

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Track Detail

Spotter / Waste Screener

Is a person employed at a solid waste management facility whose job it is to inspect incoming waste and to identify and properly manage any hazardous or prohibited materials, which are received at the facility. Spotter required 8 hours initial course, then 4 hours of continuing education every 3-year period.

Requirements

Initial Courses

- 8-Hour Initial Training Course for Spotters at Class I, II, III Facilities, Waste Processing Facilities and C&D Facilities
- 8-hour Initial Training for Spotters
- 8-Hour Spotter Training for Class I II III Landfill C&D Sites and Transfer Facilities
- 8-Hour Training Course for Spotters at Landfills, C&D Sites and Transfer Stations
- Environmental Management Systems: An Introduction
- Spotter Training
- Spotter Training for Solid Waste Facilities
- Spotter Training for Solid Waste Facilities - Spanish
- Spotter Training for Solid Waste Management Staff with Elements of a Solid Waste Operations Plan
- Waste Screening and Identification for Landfill Operators and Spotters
- Waste Screening at MSW Mgmt Facilities [Onsite Delivery]

Hours

Hours Required	Effective Date
4	01/01/1800

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Florida's Solid Waste Operators & Spotters

University of Florida

Home	Tracks	Courses	Providers	Participants	Reports	Login
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Course Information

<u>Course #</u>	<u>Name</u> /	<u>Status</u>
582	16-Hour Initial Training Course for Transfer Station and MRF Operators	Active
575	2010 North American Environmental Field Conference and Expo	Active
516	24 Hour HazMat Technician Level	Active
608	24-Hour Initial Training Course for Landfill Operators (Class I, II, III and C&D Sites)	Active
478	40 Hour HazWoper	Active
507	40-Hour HazWoper	Active
626	40-Hour HazWoper Course in Accordance to 29 CFR 1910.120	Active
646	40-Hour OSHA HazWoper	Active
69	40-hour OSHA HAZWOPER Training Course	Active
450	40hr General Site Worker Hazardous Waste Operations	Active
463	4-Hour Refresher Course for Spotters at Landfills, C&D Sites and Transfer Stations	Active
616	6-Hour DOT Regulations	Active
601	8 Hour General Site Worker Refresher Training	Active
623	8 Hour HazWoper Refresher Training	Active
203	8-Hour Initial Training Course for Spotters at Class I, II, III Facilities, Waste Processing Facilities and C&D Facilities	Active
219	8-hour Initial Training for Spotters	Active
62	8-Hour OSHA HazWoper Annual Refresher	Active
644	8-Hour OSHA HazWoper Refresher	Active
488	8-Hour Spotter Training for Class I II III Landfill C&D Sites and Transfer Facilities	Active
462	8-Hour Training Course for Spotters at Landfills, C&D Sites and Transfer Stations	Active
410	Adult CPR	Active
0	Adult CPR	Active
675	Air Regulations and How They Impact MSW Facilities	Active
624	ANSI/AIHA Z10-2006 Occupational Safety and Health Management Systems Training Course Construction Standard	Active
652	Asbestos: Awareness (Class IV)	Active
630	Basic Life Support	Active
639	Bird and Wildlife Management for Utilities	Active
550	Bloodborne Pathogens	Active
618	Carbon Markets, Offsets & Project Level GHG Accounting	Active
614	Chemical Spill Response Training for Hazardous Materials Operations/OSHA Level II	Active
386	Community Hurricane Preparedness - online	Active
525	Composting Wastewater Residuals (Biosolids) in Charlotte County	Active
656	Confined Space Awareness	Active
657	Confined Space Competent Person Training	Active
436	Confined Space Entry Safety Course	Active
440	Construction and Demolition Debris Workshop	Active
485	Contemporary Techniques of Supervision/Management	Active
357	CPR and First Aid	Active

Course Information - Florida's Solid Waste Operators and Spotters

520	Design of Waste Containment Liners and Closure Systems	Active
457	Disaster Debris Management	Active
544	EIA/NSWMA Safety Seminar	Active
542	Electrical Troubleshooting & Preventive Maintenance	Active
596	Emergency Response and Recovery Training	Active
557	Environmental Quality Training Workshop	Active
563	Environmental Safety Occupational Health [EOSH] 2009 Training Symposium	Active
568	Environmental Sampling Field Course	Active
679	Environmental Studies	Active
500	Excavation and Trenching Safety Procedures	Active
100	Excavation and Trenching: Competent Person Training	Active
228	FDEP 8 Hour HazWoper OSHA Refresher	Active
435	FDEP 8 Hour HazWoper OSHA Refresher [DeHate]	Active
433	FDEP Annuals SQG Workshop [5/3-5/06]	Active
434	FDEP Household Hazardous Waste Workshop [5/1-3/06]	Active
445	FEMA Debris Management Course	Active
678	FEMA Debris Management Course - G202	Active
484	Fires at Landfills and Other Solid Waste Management Facilities	Active
411	First Aid (Standard) Workplace Training	Active
634	Florida Composting Facility Operator Training Course: Introduction to Handling Source Separated Organics	Active
491	Florida Construction & Demolition Debris & Management Workshop - May 2008	Active
451	Florida Water & Pollution Control Operators Association Short School - Stormwater Section	Active
579	Food Recycling and Composting Workshop	Active
521	Foundations of Project Management	Active
156	Four Hour Spotter Refresher for Class I, II and III Landfills, Waste Processing Facilities and C&D Facilities	Active
591	Fundamentals of Emergency Management	Active
638	General Site Worker 8-hour Refresher Course Hazardous Waste Operations & Emergency Response	Active
423	Geosynthetic Testing and Landfill Design Issues Short Course	Active
629	Getting Back to Basics With Landfill Gas	Active
545	GHG Reporting for Landfill & Wastewater Treatment - Webinar	Active
558	Greenhouse Gas Accounting	Active
0	Greenhouse Gas Accounting- Measuring an Organization's Carbon Footprint	Active
604	Greenhouse Gas Recovery at Solid Waste Landfills	Active
224	Hazardous Materials in Construction and Demolition Waste OnLine	Active
503	Hazardous Materials Incident & Waste Training - 24 Hours	Active
356	Hazardous Materials Incident Response Operations-40hr	Active
469	Hazardous Materials Operations / OSHA Level II	Active
439	Hazardous Materials Training	Active
510	Hazardous Waste Management Course	Active
535	Hazardous Waste Management: The Complete Course - 16 hour	Active
541	Hazardous Waste Management: The Complete Course - 8 hour	Active
540	Hazardous Waste Operations with Emergency Response	Active
63	Hazardous Waste Regulations for Generators	Active
514	Hazardous/Chemical Safety Training	Active
555	HazMat IQ	Active
216	HazWoper 40-Hour Health & Safety Online	Active
421	HazWoper 40-Hour OSHA Course	Active

Course Information - Florida's Solid Waste Operators and Spotters

218	HazWoper 8-Hour Refresher Online	Active
422	HazWoper 8-Hour Refresher OSHA Course	Active
659	HazWoper Refresher	Active
617	HazWoper Training for Escambia County	Active
170	Health & Safety Issues for Solid Waste Management Facilities	Active
498	Health and Safety for Solid Waste Workers-4 Hours	Active
281	Health and Safety for Solid Waste Workers-8 Hours	Active
149	Health and Safety Training for Landfill Operations	Active
495	Heavy Equipment Safety	Active
492	Hurricane Debris Management Workshop	Active
683	Hydraulic Excavator Operator Training	Active
613	Identification of Unknowns	Active
476	Improving Landfill Operations	Active
517	Improving Transfer Station Efficiency	Active
442	Initial Training Course for Landfill Operators and C&D Sites - 24 Hour	Active
443	Initial Training Course for Transfer Station Operators and Material Recovery Facilities - 16 Hour	Active
628	Innovative Recycling Grant Workshop at Polk County Landfill	Active
574	Integrated Waste Management Workshop	Active
645	Introduction to Debris Operations in FEMA Public Assistance Program IS-632	Active
212	Introduction to Electrical Maintenance	Active
527	Introduction to Heavy Equipment and Skill Testing	Active
0	Introduction to Wastescreening for Spotters-Spanish	Active
546	IS-700.a NIMS An Introduction	Active
472	Landfill and Transfer Station Operators: Waste Acceptability and Safety Issues Review	Active
676	Landfill Design and Construction	Active
518	Landfill Gas Collection and Re-Use	Active
686	Landfill Gas Collection System Operations and Compliance Training Course	Active
511	Landfill Gas Control and Compliance Seminar	Active
650	Landfill Operations	Active
399	Landfill Operator and MRF Operator Training	Active
589	Landfill Operator Training - 2007 Certified Operators Class	Active
588	Landfill Operator Training 2008 - Certified Operators Class	Active
553	Landfills and Transfer Stations: Past, Present and Future	Active
552	Landfills: Past, Present and Future	Active
441	Laws and Rules	Active
277	Laws and Rules for Florida Engineers	Active
677	Leachate and Landfill Gas Management System Design	Active
684	Linear Construction - Stormwater Compliance for Road and Utility Construction	Active
538	Maintenance of Traffic Training	Active
654	Mathematics for Landfill Operators	Active
523	Maximizing Beneficial Use of Disaster Debris	Active
674	Measurement and Improvement of Performance at Solid Waste Management Facilities ("If you Can't Measure it, You Can't Manage It")	Active
3	Military Service Active Duty	Active
528	NAHAMMA Conf HHW / SQG Workshop - 2009 - HazMat IQ Training	Active
528	NAHAMMA Conference HHW / SQG Workshop - 2009 - General Session	Active
609	NAHMMA 2010 Annual Conference	Active
653	NAHMMA 2011 Florida Chapter Annual Conference	Active
424	National Incident Management System [NIMS] and Introduction IS-00700	Active

Course Information - Florida's Solid Waste Operators and Spotters

454	North American Hazardous Materials Management Association Conference 2007 - FL Chapter	Active
489	North American Hazardous Materials Management Association Conference 2008- FL Chapter	Active
670	North Carolina Landfill Manager Course	Active
1001	OK per "Current" Class I II III Transcript	Active
621	Online Laws and Rules	Active
438	Operating Considerations for Transfer Stations	Active
655	Operational Techniques and Compliance Inspections for Landfills	Active
412	Operator Certification for Caterpillar Landfill Equipment	Active
0	OSHA 10-Hour General Industry Course	Active
547	OSHA 10-Hour General Industry Outreach Course	Active
619	OSHA 10-Hour Industrial Outreach Safety Training Program	Active
592	OSHA 1910 General Industry 10-Hour Course	Active
0	OSHA 24 Hour Emergency Response Course (Technician Level)	Active
0	OSHA 8-hour HazWoper Refresher Training	Active
561	OSHA Annual Refresher at KSC	Active
515	OSHA Operations Level Course	Active
532	Paint Filter Test - 1 Hour	Active
192	Pedestrian, Vehicles and Equipment Safety at Transfer Stations	Active
494	Permit Required Confined Space Awareness	Active
104	Permit Required Confined Space Entry	Active
0	Permit Required Confined Space Entry Supervisor	Active
497	Personal Protection Equipment (PPE) and Safety Procedures	Active
602	Personal Radiation Detector Course [PRD] PER-243	Active
533	Principles of Landfill Fires E-Course	Active
468	Project Risk Management	Active
603	Recycle Florida Today - 2010 Annual Conference	Active
651	Recycle Florida Today - 2011 Annual Conference	Active
432	Recycle Florida Today 2006 Annual Conf	Active
431	Recycle Florida Today 2006 Issues Forum 1/2006	Active
414	Recycle Florida Today 2006 Issues Forum 1/23-24/06	Active
460	Recycle Florida Today 2007 Annual Conference - 6/4-7/2007	Active
512	Recycle Florida Today 2008 Annual Conference	Active
554	Recycle Florida Today Conference [June 2009]	Active
479	Recycled Florida Today 2007 Issues Forum 1/2007	Active
0	Recycled Florida Today 2007 Issues Forum 1/2007	Active
661	Refresher Training Course for Experienced Solid Waste Operators-16 Hours	Active
663	Refresher Training Course for Experienced Solid Waste Operators-4 Hours	Active
662	Refresher Training Course for Experienced Solid Waste Operators-8 Hours	Active
627	RFT / SWANA FL Winter Meeting & Issues Forum 2011	Active
687	RFT / SWANA FL Winter Meeting & Issues Forum 2012	Active
581	RFT/SWANA-FL Winter Wonderland in Waste - 2010 Issues Forum	Active
565	Sanitary Landfill Design	Active
690	Sector L: Landfills & Land Application Sites	Active
4811	Solid Waste Operator & Spotter Refresher Training - Spring 2008 a	Active
584	Southeast Recycling 2010 Conference & Trade Show	Active
640	Southeast Recycling 2011 Conference & Trade Show	Active
692	Southeast Recycling 2012 Conference & Trade Show	Active
580	Southwest Partners Meeting	Active

Course Information - Florida's Solid Waste Operators and Spotters

605	SPCC - Spill Prevention Control Act - online	Active
526	Spill Prevention, Control, and Countermeasure Regulation Seminar	Active
400	Spotter Training	Active
0	Spotter Training	Active
214	Spotter Training	Active
437	Spotter Training Course for Waste Processing and Transfer Stations	Active
248	Spotter Training for Solid Waste Facilities	Active
378	Spotter Training for Solid Waste Facilities - Spanish	Active
474	Spotter Training for Solid Waste Management Staff with Elements of a Solid Waste Operations Plan	Active
471	Spotters at Landfills and Transfer Stations: Safety Awareness Review	Active
506	Storage Tank Conference - Central Florida 18th Annual	Active
505	Storage Tank Conference - North Florida 14th Annual	Active
578	Storage Tank Conference -16th Annual Central Florida State Conference	Active
453	Storage Tank Conference 17th Annual	Active
475	Storage Tank Conference Central Florida State 13th Annual	Active
647	Stormwater Erosion And Sedimentation Control Inspector Training Program	Active
202	Stormwater Inspector Certification Course	Active
594	Stormwater Matters	Active
632	Supervisor Safety Training for Solid Waste Operations Staff	Active
586	Sustainability and Recycling	Active
429	SWANA - Compost on Subtitle D Landfills - Webinar	Active
416	SWANA - eCourse - Litter Management at Landfills	Active
567	SWANA – Groundwater Monitoring, Sampling, Analysis and Well Construction	Active
636	SWANA - Integrated Solid Waste Management	Active
693	SWANA - Landfill Gas Basics 1-Day Course	Active
635	SWANA - Landfill Gas Systems Operation and Maintenance	Active
694	SWANA - Landfill Gas Systems Operation and Maintenance - 1 day	Active
537	SWANA - Landfill Operations E- Course	Active
543	SWANA - Landfill Symposium 14th Annual (June 2009)	Active
597	SWANA - Manager of Landfill Operations [MOLO]	Active
598	SWANA - Manager of Landfill Operations [MOLO] & Exam	Active
560	SWANA - Manager of Recycling Course	Active
413	SWANA 2006 Recycling and Special Waste Conference	Active
562	SWANA E-Course Just the Math	Active
556	SWANA e-Course Operation Efficiency at Landfills	Active
599	SWANA e-course: Bioreactor Landfill Research & Development Agencies	Active
577	SWANA e-course: Carbon Credit and Production Tax Credits for LFG Projects	Active
576	SWANA e-course: Financing Solid Waste Facilities: The Roller Coaster to Oblivion?	Active
691	SWANA e-course: Traumatic Injury and Fatality Risks in Solid Waste	Active
564	SWANA- Health & Safety E-Study (Home Study Course)	Active
566	SWANA- Managing Landfill Gas at MSW Landfills	Active
297	SWANA Online - Health & Safety at MSW Landfills	Active
296	SWANA Online - Training Sanitary Landfill Operation Personnel	Active
298	SWANA Online - Wastescreening at MSWS Facilities	Active
345	SWANA-Bioreactor Landfill Course	Active
404	SWANA-Bioreactor Landfill Manager	Active
250	SWANA-Construction and Demolition Debris Course	Active
685	SWANA-e Course: Groundwater Monitoring	Active

Course Information - Florida's Solid Waste Operators and Spotters

643	SWANA-e Course: Landfill Gas & Solid Waste Air Contaminant Hazards	Active
252	SWANA-FEMA's Debris Management	Active
425	SWANA-FL 2006 Spring Tri-State Conference [4/2-5/06]	Active
426	SWANA-FL 2006 Summer Conference [7/23-26/06]	Active
447	SWANA-FL 2007 Summer Conference [7/15-18/07]	Active
480	SWANA-FL 2008 Senior Managers Conference [1/2008]	Active
551	SWANA-FL 2009 Summer Symposium	Active
607	SWANA-FL 2010 Summer Conference	Active
658	SWANA-FL 2011 Summer Conference	Active
534	SWANA-FL Managers Meeting - 2009 Winter	Active
606	SWANA-FL Road-e-o: Heavy Equipment Safety Training	Active
94	SWANA-Health & Safety at MSW Landfills	Active
244	SWANA-Landfill Gas Basics	Active
428	SWANA-Landfill Gas Symposium 29th Annual [3/27-30/06]	Active
446	SWANA-Landfill Gas Symposium 30th Annual [3/4-8/07]	Active
483	SWANA-Landfill Gas Symposium 31st Annual [3/2008]	Active
536	SWANA-Landfill Gas Symposium 32nd	Active
689	SWANA-Landfill Gas Symposium 35th Annual - 2012	Active
231	SWANA-Landfill Gas System Operation and Maintenance	Active
539	SWANA-Landfill Gas System Operations Workshop	Active
93	SWANA-Landfill Operational Issues	Active
681	SWANA-Landfill Symposium (16th Annual - 2011)	Active
427	SWANA-Landfill Symposium 11th Annual [6/5-7/06]	Active
465	SWANA-Landfill Symposium 12th Annual [6/25-28/07]	Active
30	SWANA-Management of Landfill Operations	Active
1	SWANA-Manager of Landfill Operations (MOLO) - Exam Only	Active
1600	SWANA-Manager of Landfill Operations (MOLO) Course	Active
160	SWANA-Manager of Landfill Operations (MOLO) Course and Exam	Active
243	SWANA-Managing Composting Programs	Active
251	SWANA-Managing MSW Collection Systems	Active
234	SWANA-Managing MSW Recycling Systems	Active
222	SWANA-Managing Transfer Station Systems	Active
444	SWANA-Transfer Station Design & Operations	Active
42	SWANA-Transfer Station Design & Operations	Active
448	SWANA-WasteCon 2006 [9/19-21/06]	Active
455	SWANA-WasteCon 2007 [10/16-18/07]	Active
509	SWANA-WasteCon 2008	Active
559	SWANA-WasteCon 2009	Active
660	SWANA-WasteCon 2011	Active
570	The Complete Ground Water Monitoring Field Course	Active
572	The Complete Ground Water Monitoring Well Design, Construction and Development Course	Active
569	The Complete Ground Water Sampling Field Course	Active
116	The Complete Ground-Water Monitoring Course	Active
571	The Complete Surface Water and Sediment Field Course	Active
573	The Florida Stormwater Construction Permit-Contractor's Short Course	Active
530	The Original Environmental Bootcamp	Active
406	The Sense of Smell, Odor, Theory and Odor Control	Active
612	Things That Go Boom	Active

625	Topics in Solid Waste Management for Landfill Operators, MRF Operators and Transfer Station Operators	Active
477	Tractor/Mower Operator Safety Training Program	Active
187	Traffic and Equipment Safety at Landfills	Active
680	Train the Trainer: How to Design & Deliver Effective Training	Active
641	Train-the-Trainer for Operator of Heavy Equipment	Active
642	Trenching Shoring Services Safety in Excavation Course	Active
112	U.S. DOT Hazardous Materials/Waste Transportation	Active
519	Understanding Hazardous Waste in Solid Waste Operations	Active
419	Waste Expo [4/4-6/06]	Active
549	Waste Expo 2007	Active
595	Waste Expo 2010	Active
36	Waste Screening and Identification for Landfill Operators and Spotters	Active
9	Waste Screening at MSW Mgmt Facilities [Onsite Delivery]	Active
51	Waste Screening at Municipal Solid Waste [5/23/94, 12/5/01]	Active
0	Waste Screening Introduction-Spanish	Active
524	Waste Screening Refresher for Supervisors and Managers	Active
418	Waste Tech 2006 [2/27-28/06]	Active
508	Waste Tech 2007	Active
587	Waste-to-Fuels 2010 Conference	Active
622	Wet Weather Operations	Active
449	Wetlands Variance Training	Active
673	Wildlife and Plants at Florida Solid Waste Management Facilities	Active
482	Workzone Safety Training	Active

ATTACHMENT 6
TRAINING CERTIFICATES

Kohl Consulting Inc.

Is Proud to Certify That

Alfanso Victor Santos

**Has Successfully Completed the 24 Hour Initial Training Course for
Solid Waste Management Facility Operators Entitled :**

***24 Hour Initial Training Course for
Landfill Operators***

(Class I, III and C&D Sites) #608

August 31, September 2 and 4, 2015

**And Has Successfully Completed the Required Examination
in Accordance with the Training Requirements
for Landfill Operators in Florida**

Signed this 15th day of September, 2015

Melody Kohl

Melody Kohl

President

TSW

Kohl Consulting Inc.

Is Proud to Certify That

John Arnold

**Has Successfully Completed the
16 Hour Continuing Training Course for
Landfill Operators Entitled :**

**16-Hour Landfill Operator Refresher Course
#703**

August 31 and September 2, 2015

**And Has Successfully Completed 16 hours of Continuing Training
for Landfill Operators in Florida**

Signed this 15th day of September, 2015

Melody Kohl
Melody Kohl
President

MSW

Kohl Consulting Inc.

Is Proud to Certify That

Alfredo T. Martinez

**Has Successfully Completed the
16 Hour Continuing Training Course for
Landfill Operators Entitled :**

**16-Hour Landfill Operator Refresher Course
#703**

August 31 and September 2, 2015

**And Has Successfully Completed 16 hours of Continuing Training
for Landfill Operators in Florida**

Signed this 15th day of September, 2015

Melody Kohl

Melody Kohl

President

ISW

Kohl Consulting, Inc

Is Proud to Certify That

Saturnino Martinez

**Has Successfully Completed the
4 Hour Continuing Training Course for
Landfill Operators Entitled :**

**4-Hour Spotter Refresher for Class I, III
Landfills, Waste Processing Facilities and
C&D Facilities #742**

**And has completed 4 hours of Continuing Training
for Landfill Operators, Transfer Station/MRF Operators
and Spotters in Florida**

August 31, 2015

Signed this 15th day of September, 2015

Melody Kohl
**Melody Kohl
President**

MSW

Kohl Consulting Inc.

Is Proud to Certify That

David Cooner

**Has Successfully Completed the
Initial Training Course for
Transfer Station and MRF Operators Entitled :**

**16-hour Initial Training for Transfer Station
and Materials Recovery
Facility Operators (with Exam) #582
November 14 and 15, 2013**

**And Has Successfully Completed the Required Examination
in Accordance with the Initial Training Requirements
for both Transfer Station and MRF Operators in Florida**

Signed the 18th day of November, 2013

Melody Kohl
Melody Kohl

ATTACHMENT 7
SOURCE-SEPARATED ORGANICS PROCESSING
FACILITY REGISTRATION



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Stevenson
Secretary

July 10, 2016

John Arnold
Angelo's Aggregate Materials, LTD.
855 28th Street, S.
St. Petersburg, FL 33712

Dear John Arnold:

Your registration application for Angelo's Recycled Materials - Dade City, located at 41111 Enterprise Road, Dade City, in Pasco County has been received. The application indicated this facility is operating as a:

- ☒ Yard Trash Transfer Station
- ☒ Yard Trash Recycling Facility
- ☐ Manure Blending Operation
- ☐ Vegetative, Animal Byproducts or Manure Composting Facility

And processing the following:

- ☒ Yard trash (including clean wood)
- ☐ Manure
- ☐ Animal byproducts (composting)
- ☐ Vegetative wastes (composting)
- ☐ Pre-consumer vegetative (composting)

The registration application is complete, and is valid until August 1, 2017. The WACS identification number for this facility is 00087895. The receipt number for the registration fee you paid is 911551.

You must comply with the requirements specified in Rule 62-709.320, and Rules 62-709.330 or 62-709.350, Florida Administrative Code (F.A.C.), in order to maintain qualification for the registration program. A summary of the operating requirements is enclosed.

July 10, 2016
John Arnold
Page 2 of 2

If you need further information, please contact the Division of Waste Management, Waste Registration Section at the above address, Mail Station 4550, telephone (850) 245-8707, or email Lauren.OConnor@dep.state.fl.us.

Sincerely,

A handwritten signature in blue ink that reads "Lauren O'Connor". The signature is written in a cursive style with a large, stylized "L" and "O".

Planner I
Waste Registration Section

Enclosure

cc: Melissa Madden, Southwest District
Steven Tafuni, Southwest District

Requirements for source-separated organics facilities qualifying for registration - Chapter 62-709, F.A.C.

Rule/Referenced Rule	Provision
Specific to all	
62-709.300(7)(a)	No person shall cause or allow objectionable odor in violation of Chapter 62-296, F.A.C.
62-709.300(7)(b)	Rule 62-701.300, and subsection 62-701.320(13) apply to facilities regulated under 62-709.
62-701.300(1)(b)	Stored or processed in a way or location that does not violate air quality or water quality standards.
62-701.300(2)(a)	Geological formations or subsurface features must provide support for the facility
62-701.300(2)(c)	Not in a dewatered pit unless permanent leachate containment and special design techniques used.
62-701.300(2)(d)	Not in any natural or artificial water body(e.g., ground water and wetlands within DEP jurisdiction).
62-701.300(2)(f)	Not be placed on the right of way of any public highway, road, or alley.
62-701.300(3)	No open burning in the recycling area of the facility and controlled burning complies with DEP rules.
62-701.300(14)	No CCA treated wood in material applied as a ground cover, soil or soil amendment.
62-701.300(15)	No unconfined emissions of particulate matter in violation of paragraph 62-296.320(4)(c), F.A.C.
62-709.320(2)(a)	Have the necessary operational features and equipment - unless otherwise specified, including
62-709.320(2)(a)1.	effective barrier to prevent unauthorized entry and dumping
62-709.320(2)(a)2.	Dust and litter control methods
62-709.320(2)(a)3.	Fire protection and control provisions to deal with accidental burning of solid waste, including
62-709.320(2)(a)3.a.	20-foot all-weather access road all around the perimeter
62-709.320(2)(a)3.b.	No material shall be mechanically compacted
62-709.320(2)(a)3.c.	No material shall be more than 50 feet from access by motorized firefighting equipment
62-709.320(2)(b)	Operate in a manner to control vectors
62-709.320(2)(c)	Operate in a manner to control objectionable odors per with Rule 62-296.320(2), F.A.C.
62-709.320(2)(d)	Keep any installed drains and leachate or condensate conveyances cleaned
62-709.320(2)(e)	Process received solid waste timely as follows
62-709.320(2)(e)1.	Size-reduce or remove yard trash within 6 months or time needed to receive 3,000 tons or 12,000 cubic yards, whichever is greater. Separated logs with 6 inch diameter or greater can be stored for up to 12 months before being size-reduced or removed.
62-709.320(2)(e)2.	Putrescible waste (e.g., vegetative wastes, animal byproducts or manure) shall be processed and incorporated into the composting material, or removed from the facility, within 48 hours.
62-709.320(2)(f)	Containerized and removed immediately any treated or untreated biomedical waste; hazardous waste; or any materials having (PCB) concentration of 50 ppm or greater.
62-709.320(2)(g)	All residuals, solid waste and recyclable materials removed and recycled or disposed upon ceasing operations. Any remaining processed material shall be properly used or disposed.
62-709.320(4)(a)	Keep monthly records of incoming and outgoing material for at least three years..
62-709.320(4)(b)	If temperature used to show disinfection or vector attraction achieved, keep records for 3 years.
Specific to yard trash only facilities	
62-709.300(7)(b)	Rule 62-701.300, and subsection 62-701.320(13) apply to facilities regulated under 62-709.
62-701.300(12)(a)	At least 100 feet from off-site potable water well that existed before facility registered.
62-701.300(12)(b)	At least 50 feet from any body of water, including wetlands. Not including parts of permitted stormwater system, or water bodies totally within facility with no discharge to surface waters.
62-709.330(2)	Processed material gone from facility within 18 months, unless longer storage authorized by permit.
62-709.330(3)	Accept only yard trash, and bags used to collect yard trash. Containerized any other material
Specific to composting of vegetative wastes, animal byproducts or manure, or blending manure	
62-709.300(7)(b)	Rule 62-701.300, and subsection 62-701.320(13) apply to facilities regulated under 62-709.
62-701.300(2)(b)	Be more than 500 feet off-site potable water well that existed before facility registered
62-701.300(2)(e)	Within 200 feet from any body of water, including wetlands. Not including parts of permitted stormwater system, or water bodies totally within facility with no discharge to surface waters.
62-701.320(13)(b)	Not within 10,000 feet of any licensed and operating airport runway used by turbine powered aircraft, or within 5,000 feet of any licensed and operating airport runway used only by piston engine aircraft, unless applicant demonstrates that the facility is designed and will be operated so that it does not pose a bird hazard to aircraft.
62-709.350(2)	Carbon:nitrogen ratio of the blended feedstocks shall be greater than 20.
62-709.350(3)	Piles do not exceed 12 feet in height.
62-709.350(5)	All material removed within 18 months, unless longer storage authorized by permit.
62-709.350(6)	Show that disinfection achieved. not required if made from only pre-consumer vegetative waste
62-709.350(7)	Vector attraction reduction controls shall include either (a) or (b) below:
62-709.350(7)(a)	Composted for at least 14 days, with temperature no lower than 40 degrees Celsius and average temperature of the material being composted higher than 45 degrees Celsius; or
62-709.350(7)(b)	Specific oxygen uptake rate (SOUR) for material being composted or blended shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius

SECTION 3

APPENDIX 3-B

CONTINGENCY PLAN

**ENTERPRISE ROAD CLASS III RECYCLING AND DISPOSAL FACILITY
PERMIT RENEWAL
EMERGENCY AND CONTINGENCY OPERATIONS**

Prepared for:

ANGELO'S AGGREGATE MATERIALS, LTD

855 28th Street South
St. Petersburg, Florida 33712

Presented to:

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHWEST DISTRICT – SOLID WASTE DIVISION**

13051 N. Telecom Parkway
Temple Terrace, Florida 33637

Prepared by:

LOCKLEAR & ASSOCIATES, INC.

4140 NW 37 Place, Suite A
Gainesville, Florida 32606
Certificate of Authorization #30066

Project No.: 02000-144-15

APRIL 2018

TABLE OF CONTENTS

1.0	EMERGENCY AND CONTINGENCY OPERATIONS	1
1.1	Communications.....	1
1.2	Major Storm or Disaster.....	1
1.3	Fire	2
1.3.1	Equipment and Structural Fires	2
1.3.2	Waste Fires	2
1.3.3	Buffer Zone Fires.....	3
1.3.4	Hot Load Fires	3
1.3.5	Fire-Fighting Equipment	3
1.4	Spills.....	3
1.5	Discovery of Hazardous Wastes	4
1.6	Equipment Failure	4
1.7	Landfill Shutdown.....	4

1.0 EMERGENCY AND CONTINGENCY OPERATIONS

Angelo's Aggregate Materials, LTD (Applicant) is the Owner and Operator of the Enterprise Road Class III Recycling and Disposal Facility (Facility). Emergency conditions that may require a contingency operation plan may be created by a natural disaster (i.e., hurricane, tornado, and/or flooding), or fire. During emergency conditions normal waste acceptance procedures will continue, as feasible. The following procedures are to be initiated at the onset of a site emergency or major storm:

1.1 Communications

The designated emergency coordinator for the Facility is Mr. Fred Martinez, who may be reached at (352) 303-5618. Mr. Martinez is responsible for implementing emergency and contingency operations or designating an alternate coordinator.

As necessary the emergency coordinator will notify the appropriate emergency response personnel including:

- 911 - Fire/Police/Medical
- Dade City Fire Department- (352) 521-1492
- Dade City Police Department- (352) 521-1493
- Pasco County Hospital - Dade City - (352) 521-1100
- Florida Department of Environmental Protection (813) 470-5700
- Pasco County (727) 847-2411

If needed, the Operator will coordinate with emergency response and Pasco County personnel to notify neighbors and / or local government officials of emergency and contingency conditions that may affect them.

1.2 Major Storm or Disaster

1. All personnel understand their role in an emergency situation. At least one office employee will monitor the telephone. Radio or telephone communication is provided between the office and all operating areas of the landfill at all times.
2. All lightweight signs and equipment are to be collected and stored in a secure area.
3. All depressed and eroded areas are to be protected and the stormwater management system is to be inspected and maintained, as necessary.

4. Work is to begin in dry areas only when operations are resumed; waste materials are not to be deposited in standing water.
5. On-site emergency equipment locations, such as first aid and eye wash stations, are shown on Site Plan.

1.3 Fire

Although open burning is strictly prohibited, several types of fires could occur at the Facility including equipment fires, structure fires, waste fires, buffer zone fires, and receipt of hot loads. The Operator will provide a truck mounted water tank on-site for use in firefighting purposes. A stockpile of soil will be located near the active disposal area at all times for use in smothering waste fires and hot loads. During a fire, incoming trucks will be directed toward another area of the landfill so that a temporary active face can be established. Once the fire is extinguished, appropriate cover will be applied to the waste and operations will continue at the original active face. If the fire is extensive and a temporary active face cannot be established, incoming trucks will be redirected to another landfill.

For all fires, the Florida Department of Environmental Protection (FDEP) and Pasco County will be notified of the fire control plan being implemented if the fire cannot be extinguished or controlled within an hour. If the fire cannot be extinguished or controlled within 48 hours, the emergency coordinator will notify the local Fire Department listed above for assistance and will also notify Pasco County and any neighbors likely to be affected by the fire.

The Operator will take the following procedures if a fire occurs at the Facility:

1.3.1 Equipment and Structural Fires

If the fire is minor in nature, site personnel will attempt to extinguish the fire using available on-site fire fighting equipment. The local Fire Department listed above will be summoned for assistance if site personnel and equipment cannot extinguish the fire.

1.3.2 Waste Fires

Burning waste will be separated from the fill area and immediately covered with soil stockpiled near the disposal area. If necessary, water will also be applied to the burning waste using the on-site truck mounted water tank. The local Fire Department listed above will be summoned for assistance if the site personnel and equipment cannot extinguish the fire.

1.3.3 Buffer Zone Fires

The local Fire Department listed above will be immediately summoned to control and extinguish the fire. Available site personnel will create and maintain fire breaks between the active disposal area and the oncoming fire, and water down areas between the fire and the disposal area using the water tank. Available site personnel will assist the Fire Department as requested.

1.3.4 Hot Load Fires

If a hot load has not been unloaded, the driver will be directed to an isolated area of the Facility and site personnel will use available fire fighting equipment in an attempt to extinguish the load. If a hot load has been unloaded, the load will be spread out and separated from the active disposal area and immediately covered with soil stockpiled near the area. If necessary, water will also be applied to the load using the on-site water tank.

The local Fire Department listed above will be summoned for assistance if site personnel and equipment cannot extinguish the load.

1.3.5 Fire-Fighting Equipment

Fire extinguishers are located in locations indicated below.

- Office / Scale House
- Heavy Equipment Cabs

1.4 Spills

In the event of a spill, the site manager will determine whether on site personnel are capable of the cleanup. For example, if oil is spilled while performing vehicle maintenance, the site manager will direct landfill personnel to use a sorbent material to clean up the spill if spill occurred on an impervious surface. For spills on unpaved areas of the facility, the contaminated soil will be removed and placed in an appropriate container. All cleanup materials will be placed in a drum, stored in the shipping/storage container on-site for proper disposal. If unknown or hazardous chemicals are spilled, the site manager will contact the Department (813-470-5700) and Pasco County (727-847-2411) for direction.

1.5 Discovery of Hazardous Wastes

The operator will take the following steps if hazardous wastes are discovered at the active disposal area that may pose a serious health and safety risk to site personnel, the public, or the environment. Site personnel will establish a minimum 50-foot perimeter around the suspect waste using pylons and "Caution" and/or "Do Not Enter" tape. The driver and other customers will not be allowed closer than 50 feet to the suspect waste. Site personnel will immediately contact their supervisor. The supervisor will contact a hazardous waste materials response team to coordinate cleanup and disposal of the hazardous materials.

1.6 Equipment Failure

Arrangements with equipment rental companies will be maintained in order to provide for additional equipment during unanticipated breakdowns.

Equipment rental companies that may be used to obtain reserve equipment include the following:

Ring Power - Brooksville, Florida
Contact: 352-796-4978

Flagler Equipment - Tampa, Florida
Contact: 813-630-0077

1.7 Landfill Shutdown

1. If the landfill should need to be shut down, the Department will be notified and haulers will be directed to another properly permitted facility.
2. Initial cover of six (6) inches will be placed on all waste exposed areas.

The stormwater management system will allow for disposal operations to continue during periods of inclement weather. Temporary berms, ditches, and grading are to be used to drain stormwater away from the active face of the landfill. The following actions should be taken at the landfill following a severe storm, hurricane, or other natural disaster:

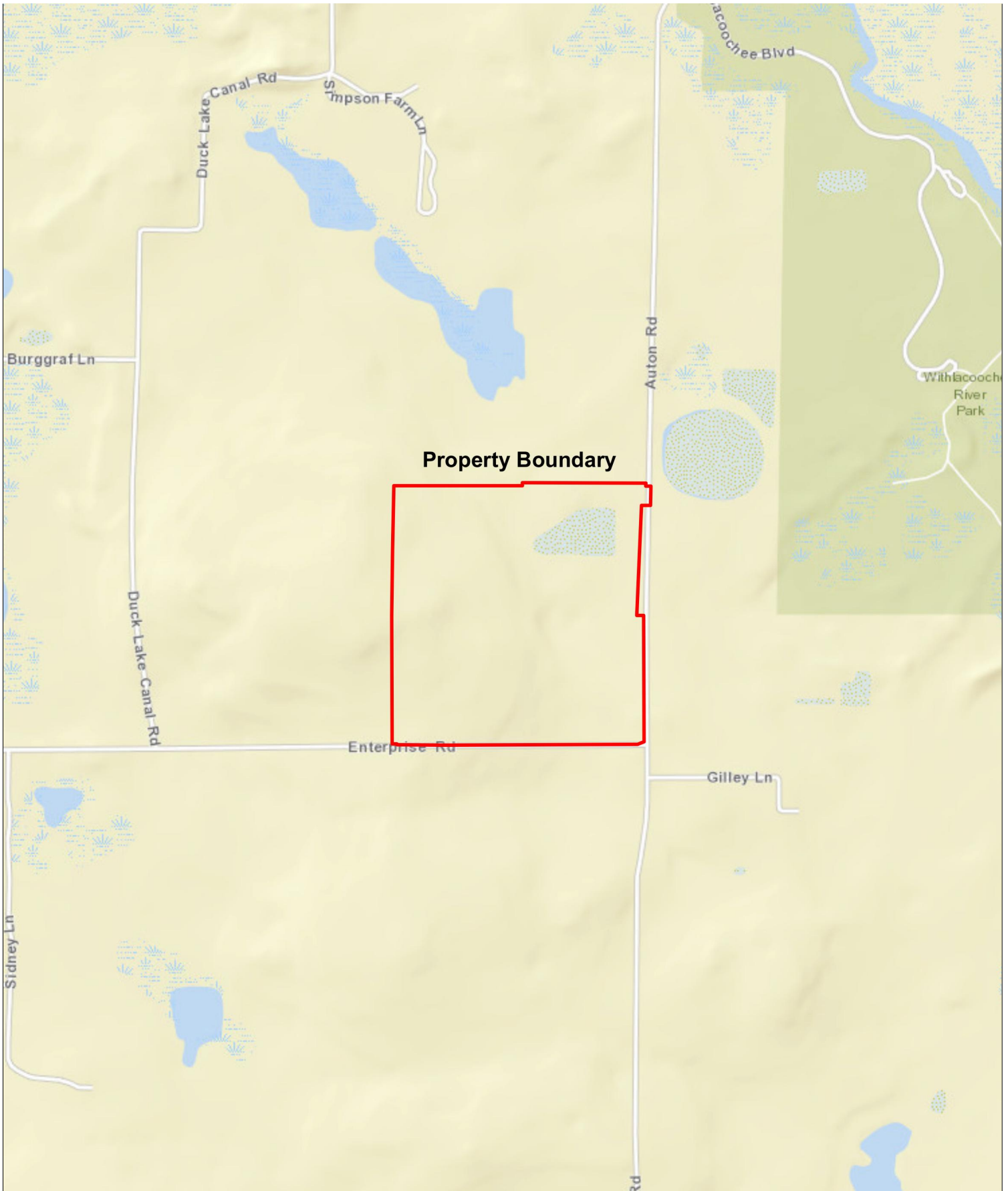
- FDEP and Pasco County are to be notified by telephone immediately should any need for emergency and contingency operations arise. The phone number for the Department's Solid Waste Section is (813) 470-5700. The phone number for Pasco County is (727) 847-2411. The calls are to be confirmed by letter.

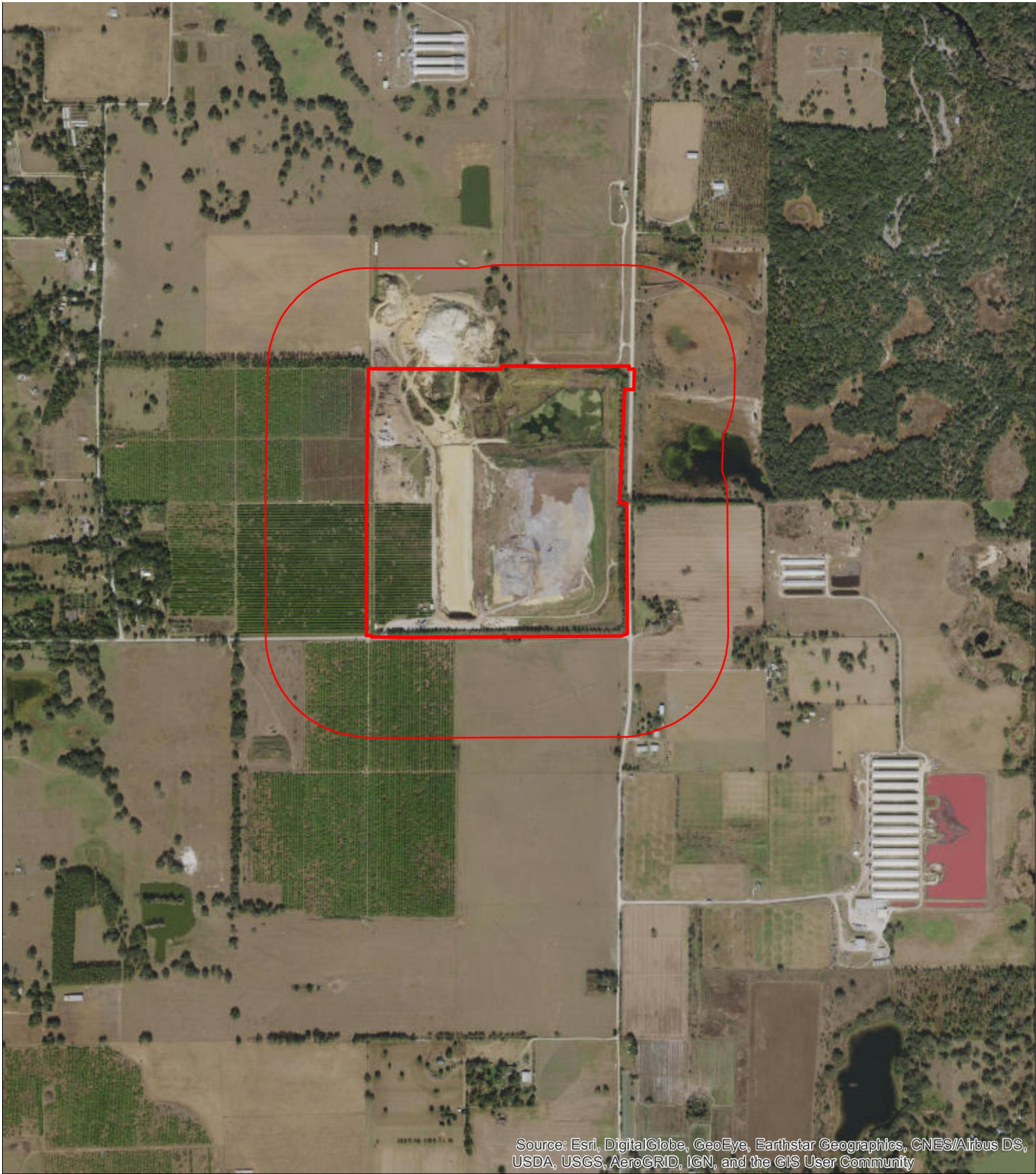
- Operational hours of the landfill may be extended at the landfill to meet the needs of the community. Pasco County and the Department will be consulted prior to changes in the hours of operation of the landfill.
- Necessary additional equipment, if required, will be rented. Arrangements are in place between the operator of the Landfill and equipment rental companies to facilitate this activity.
- If required, additional equipment operators and/or other personnel will be contracted. Arrangements are in place between the operator of the Landfill and temporary staffing companies to facilitate this activity.
- Appropriate public notices will be issued, including notification of the landfill's customer's by telephone and other media
- Contacts with local governmental bodies and local emergency agencies such as fire and rescue have been established in order to coordinate emergency activities. Fire and rescue personnel responsible for this district have visited the site in order to discuss emergency procedures.
- Site personnel may be trained in CPR and First Aid.

SECTION 3

APPENDIX 3-C

FIGURES





Property Boundary



1000 ft. Buffer

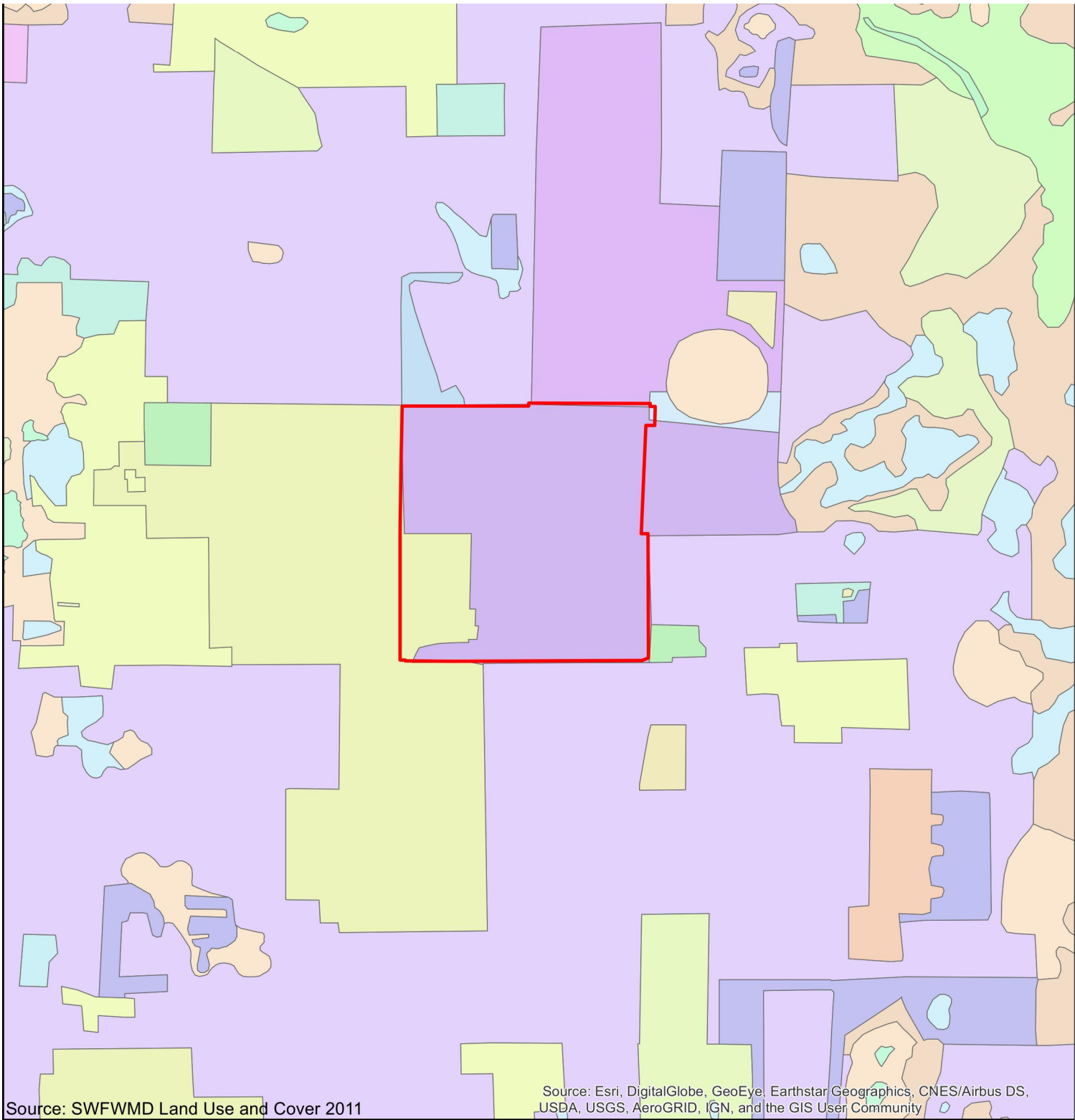


Aerial Map
Enterprise Class III Recycling and Disposal
Facility 2018 Permit Renewal
Dade City, Pasco County, Florida

FIGURE 3-2



0 100 200 300 400 500 600 700 800 900 1000



Property Boundary	4400-Tree Plantations	5300-Reservoirs	4120-Longleaf Pine-Xeric Oak	1600-Extractive
6300-Wetland Forested Mixed	2200-Tree Crops	1800-Recreational	5200-Lakes	6440-Emergent Aquatic Vegetation
6200-Wetland Coniferous Forest	8100-Transportation	4110-Pine Flatwoods	6530-Intermittent Ponds	6210-Cypress
6430-Wet Prairies	5100-Streams and Waterways	2600-Rural	1500-Industrial	2100-Cropland/Pastureland
8300-Utilities	6150-Stream and Lake Swamps	1900-Open Land	4340-Hardwood Conifer Mixed	1400-Commercial Services
4200-Upland Hardwood Forest	2500-Specialty Farms	2400-Nurseries and Vineyards	6410-Freshwater Marshes	
4100-Upland Coniferous Forest	1100-Residential Low Density	3300-Mixed Rangeland	2300-Feeding Operations	



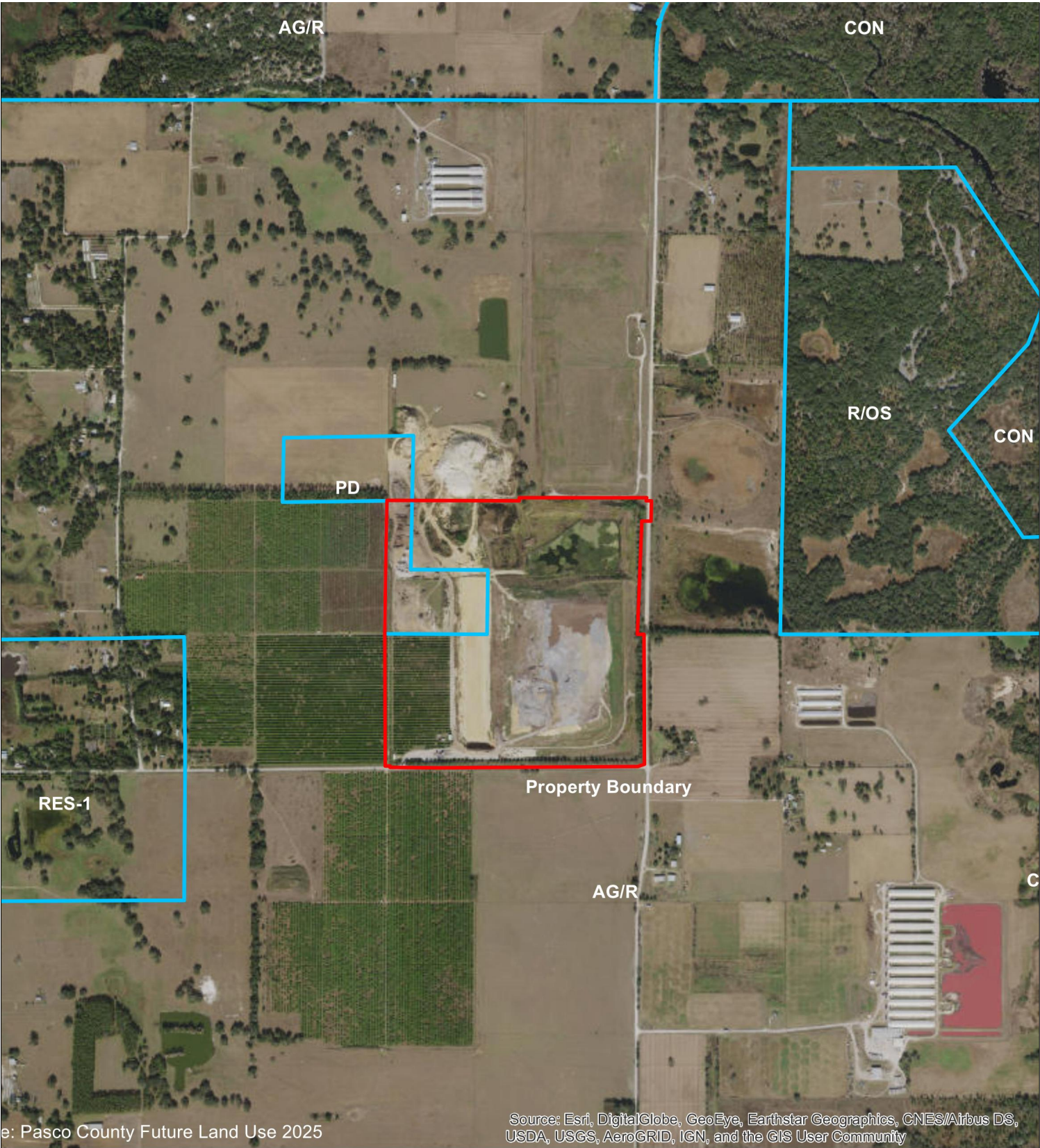
**Locklear
& Associates**

Existing Land Use Map
Enterprise Class III Recycling and Disposal
Facility 2018 Permit Renewal
Dade City, Pasco County, Florida

FIGURE 3-2a



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



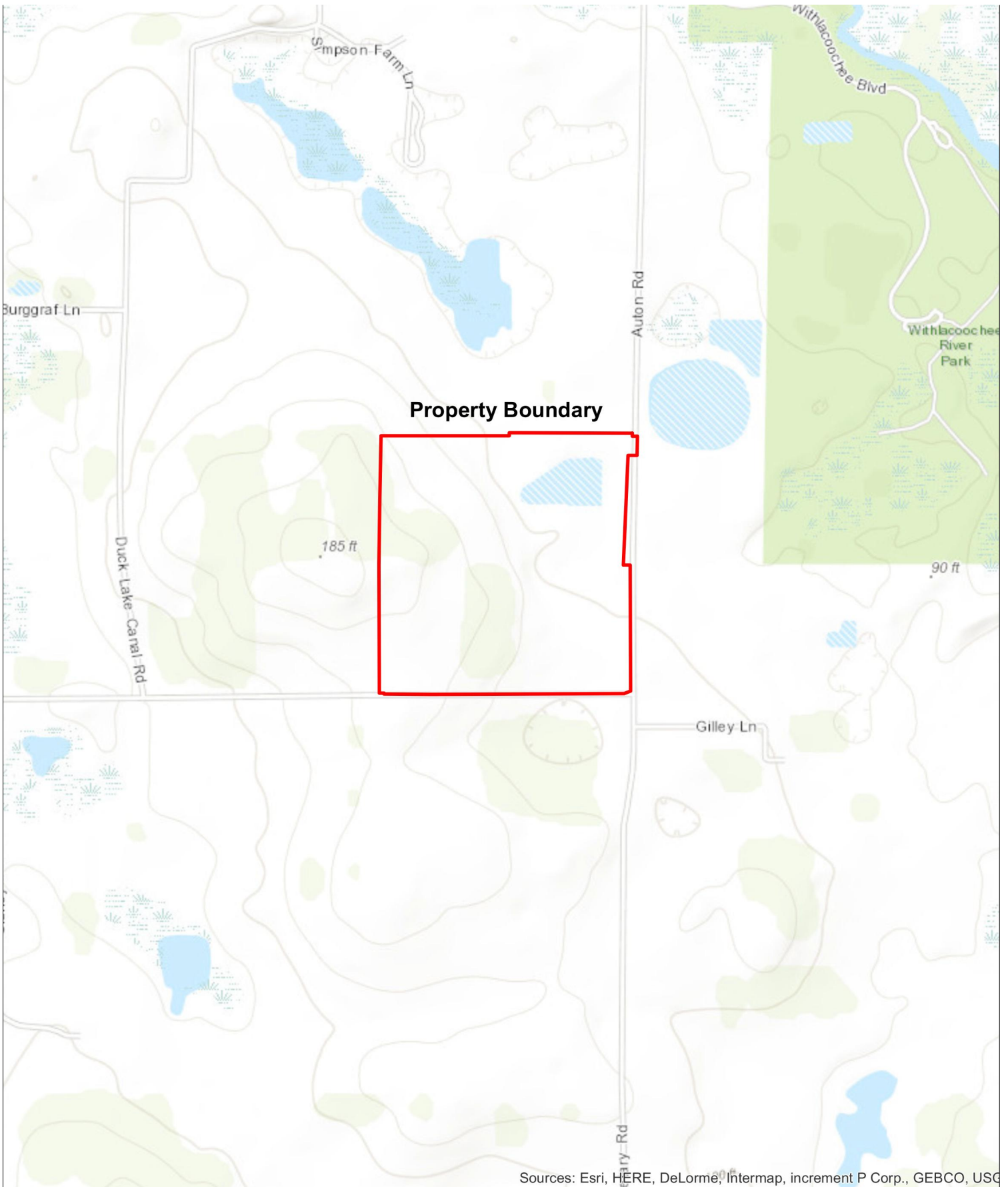
e: Pasco County Future Land Use 2025

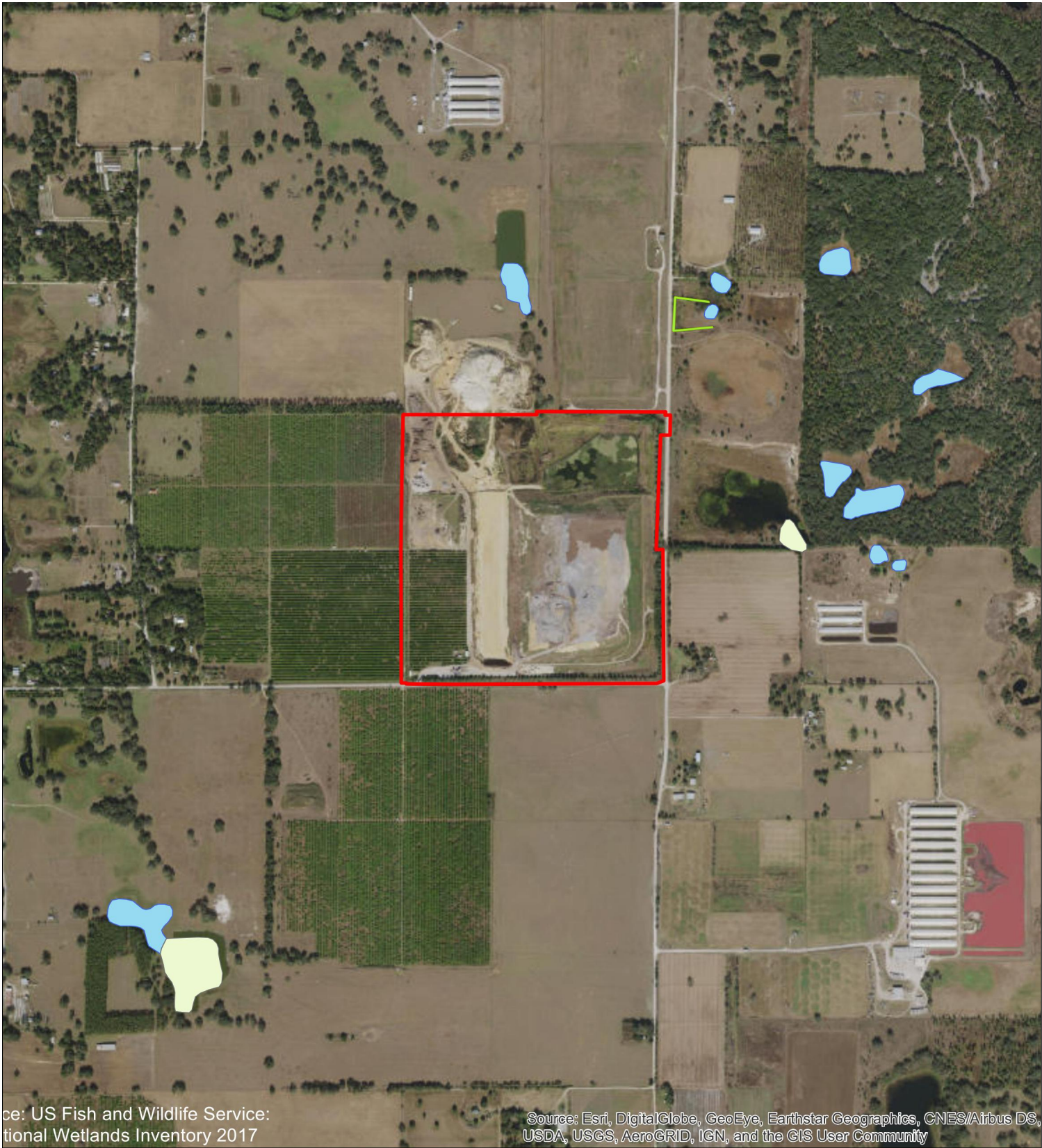
AG/R - Agricultural/Rural, 0.2 du/ga*
 CON - Conservation
 PD - Planned Development

R/OS - Major Recreation/Open Space
 RES-1 - Residential - 1 du/ga*
 *du/ga = dwelling units per gross acre



Future Land Use Map
Enterprise Class III Recycling and Disposal
Facility 2018 Permit Renewal
Dade City, Pasco County, Florida






- | | | | |
|---|-------------------|---|-----------------------------|
|  | Property Boundary |  | Freshwater Pond |
|  | Riverine |  | Freshwater Emergent Wetland |

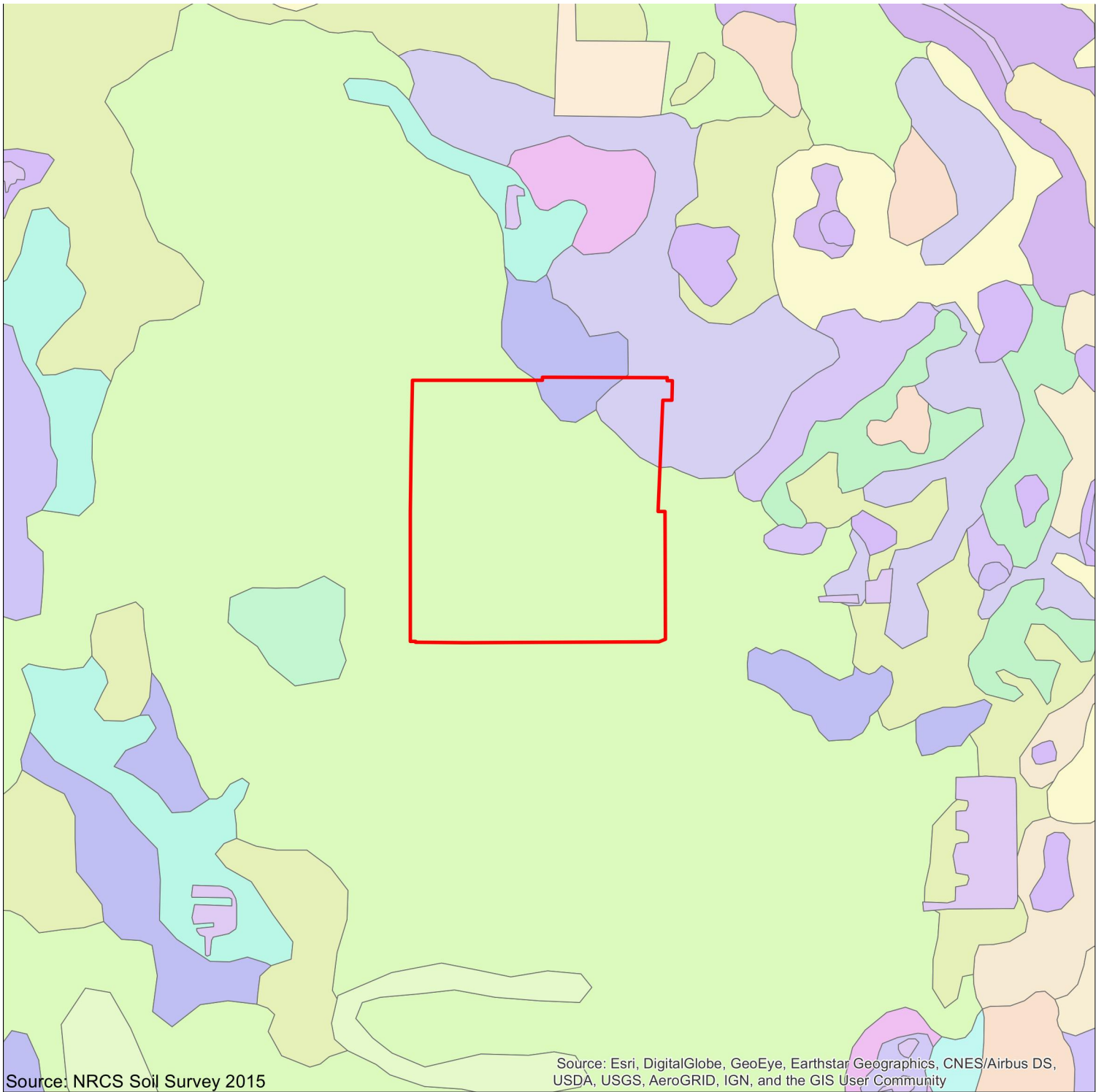


Wetlands Map
Enterprise Class III Recycling and Disposal
Facility 2018 Permit Renewal
Dade City, Pasco County, Florida

FIGURE 3-4



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



Property Boundary	Samsula Muck	Newnan Fine Sand, 0-5%	Candler Fine Sand, 0-5%
Zolfo Fine Sand, 0-2%	Pomona Fine Sand	Narcoossee Fine Sand, 0-2%	Basinger Fine Depressional, 0-1%
Water	Pomello Fine Sand, 0-5%	Myakka-Myakka, Wet, Fine, 0-2%	Basinger Fine Sand
Udalfic Arents-Urban Land Complex	Placid Fine Sand	Lochloosa Fine Sand, 0-5%	Astatula Fine Sand, 0-5%
Tavares Sand, 0-5%	Pits	Lake Fine Sand, 5-8%	Arredondo Fine Sand, 0-5%
Sparr Fine Sand, 0-5%	Palmetto-Zephyr-Sellers Complex	Lake Fine Sand, 0-5%	Anclote-Tavares-Pomello Association
Smyrna Fine Sand	Orlando Fine Sand, 0-5%	Chobee, Frequently Flooded	Adamsville Fine Sand, 0-2%
Sellers Mucky Loamy Fine Sand	Ona Fine Sand	Candler Fine Sand, 5-8%	

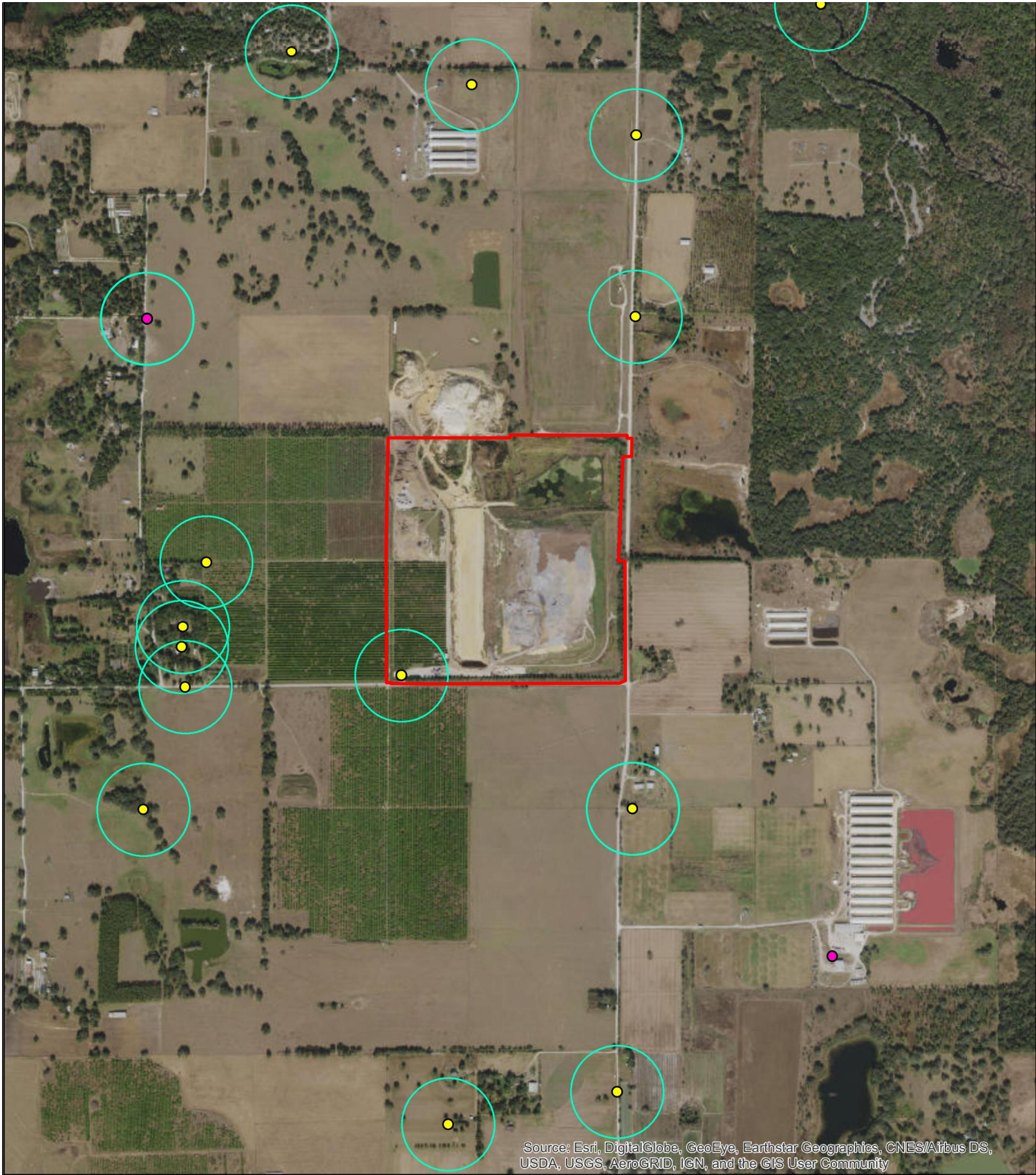
Soils Map

Enterprise Class III Recycling and Disposal Facility 2018 Permit Renewal

Dade City, Pasco County, Florida

FIGURE 3-5

0 100 200 300 400 500 Feet



Source: SWFWMD Well Construction Permits 2016

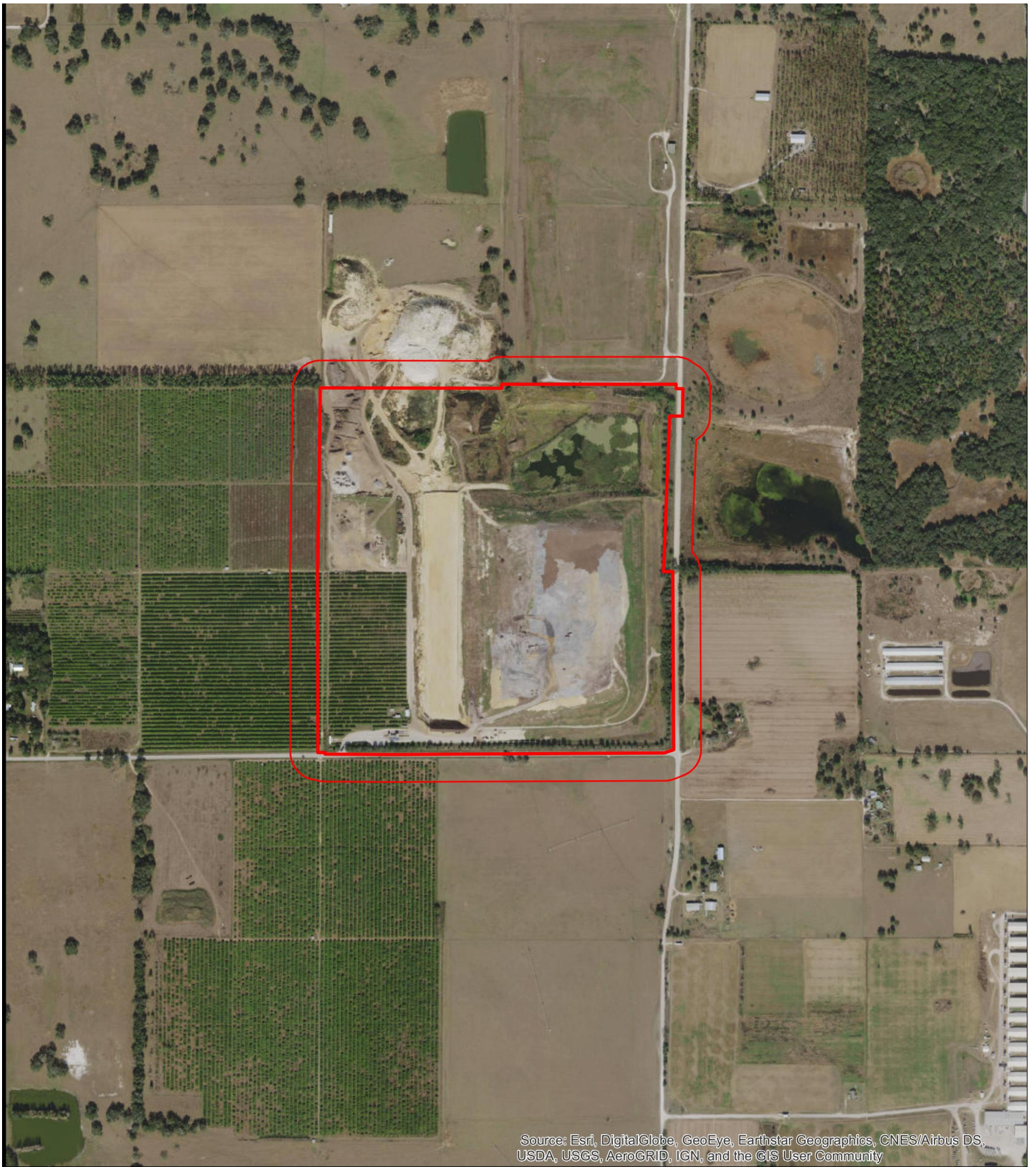
Property Boundary
 ● Public Supply Well
 ● Domestic Well
 500 ft. Buffer



Potable Well Survey
Enterprise Class III Recycling and Disposal
Facility 2018 Permit Renewal
Dade City, Pasco County, Florida

FIGURE S-1





Property Boundary

200ft Buffer



200 ft. Buffer
Enterprise Class III Recycling and Disposal
Facility 2018 Permit Renewal
Dade City, Pasco County, Florida

FIGURE S-2



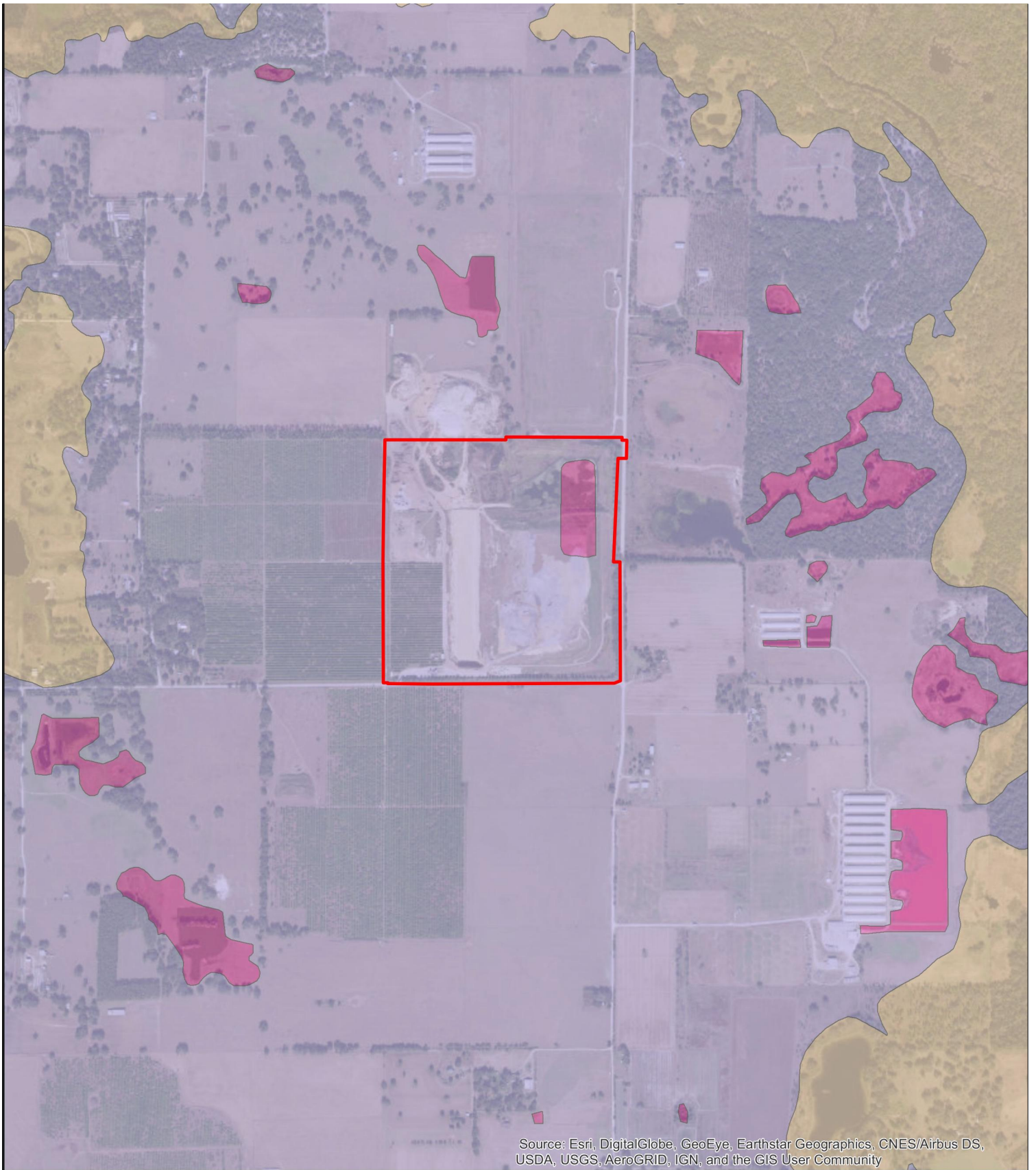
0 100 200 300 400 500 Feet



Property Boundary

 300ft Buffer





Source: FEMA Flood Hazard Zones 2017

Property Boundary
 Zone A
 Zone AE
 Zone X

Flood Zones

**Enterprise Class III Recycling and Disposal
Facility 2018 Permit Renewal
Dade City, Pasco County, Florida**

FIGURE S-5



0 1 2 3 4 5 6 7 8 9 10 00'



SECTION 3

APPENDIX 3-D

WELL ABANDONMENT DOCUMENTATION



STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT,
REPAIR, MODIFY, OR ABANDON A WELL

- ☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River
☐ DEP
☐ Delegated Authority (If Applicable)

PLEASE FILL OUT ALL APPLICABLE FIELDS
(*Denotes Required Fields Where Applicable)

The water well contractor is responsible for completing
this form and forwarding the permit application to the
appropriate delegated authority where applicable.

Permit No. **855634**
Florida Unique ID _____
Permit Stipulations Required (See Attached)
04
62-524 Quad No. **Q3518** Delineation No. _____
CUP/WUP Application No. _____

ABOVE THIS LINE FOR OFFICIAL USE ONLY

1. **Angelo's Aggregate Materials Lt** **855 28th Street South** **St. Petersburg** **FL** **33712** _____
*Owner, Legal Name if Corporation *Address *City *State *ZIP *Telephone Number
2. **41111 ENTERPRISE RD** **N/A**
*Well Location - Address, Road Name or Number, City
3. **2225080000001000110** _____
*Parcel ID No. (PIN) or Alternate Key (Circle One) Lot Block Unit
4. **8** **25** **22** **Pasco** _____
*Section or Land Grant *Township *Range *County Subdivision Check if 62-524: Yes ☒ No
5. **James P Hinst** **9311** **(407) 426-7885** **jim@drillprollc.com**
*Water Well Contractor *License Number *Telephone Number E-mail Address
6. **2300 SILVER STAR RD** **ORLANDO** **FL** **32804**
*Water Well Contractor's Address City State ZIP

7. *Type of Work: Construction Repair Modification ☒ Abandonment **Not needed**
8. *Number of Proposed Wells **2**
9. *Specify Intended Use(s) of Well(s):
Domestic Landscape Irrigation Agricultural Irrigation Site Investigation
Bottled Water Supply Recreation Area Irrigation Livestock Monitoring
Public Water Supply (Limited Use/DOH) Nursery Irrigation Test
Public Water Supply (Community or Non-Community/DEP) Commercial/Industrial Earth-Coupled Geothermal
Class I Injection Golf Course Irrigation HVAC Supply
Class V Injection: Recharge Commercial/Industrial Disposal Aquifer Storage and Recovery Drainage
Remediation: Recovery Air Sparge Other (Describe) _____
☒ Other (Describe) **PLUGGED** (Note: Not all types of wells are permitted by a given permitting authority)

Date Stamp
Received:
Nov 9, 2016 12:32 pm
Official Use Only

10. *Distance from Septic System if ≤ 200 ft. _____ 11. Facility Description _____ 12. Estimated Start Date **11/14/2016**
13. *Estimated Well Depth **100** ft. *Estimated Casing Depth **95.0** ft. *Primary Casing Diameter **2** in. Open Hole: From _____ To _____ ft.
14. Estimated Screen Interval: From _____ To _____ ft.
15. *Primary Casing Material: Black Steel Galvanized ☒ PVC Stainless Steel
Not Cased Other: _____
16. Secondary Casing: Telescope Casing Liner Surface Casing Diameter _____ in.
17. Secondary Casing Material: Black Steel Galvanized PVC Stainless Steel Other _____
18. *Method of Construction, Repair, or Abandonment: Auger Cable Tool Jetted Rotary Sonic
Combination (Two or More Methods) Hand Driven (Well Point, Sand Point) Hydraulic Point (Direct Push)
Horizontal Drilling ☒ Plugged by Approved Method Other (Describe) _____
19. Proposed Grouting Interval for the Primary, Secondary, and Additional Casing:
From _____ To _____ Seal Material (Bentonite Neat Cement Other)
From _____ To _____ Seal Material (Bentonite Neat Cement Other)
From _____ To _____ Seal Material (Bentonite Neat Cement Other)
From _____ To _____ Seal Material (Bentonite Neat Cement Other)
20. Indicate total number of existing wells on site **2** List number of existing unused wells on site **2**
21. *Is this well or any existing well or water withdrawal on the owner's contiguous property covered under a Consumptive/Water Use Permit (CUP/WUP)
or CUP/WUP Application? Yes ☒ No If yes, complete the following: CUP/WUP No. _____ District Well ID No. _____
22. Latitude **28 19 54.50** Longitude **82 08 08.85**
23. Data Obtained From: GPS ☒ Map Survey Datum: NAD 27 ☒ NAD 83 WGS 84

I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code, and that a water
use permit or artificial recharge permit, if needed, has been or will be obtained prior to commencement of well
construction. I further certify that all information provided in this application is accurate and that I will obtain
necessary approval from other federal, state, or local governments, if applicable. I agree to provide a well
completion report to the District within 30 days after completion of the construction, repair, modification, or
abandonment authorized by this permit, or the permit expiration, whichever occurs first.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my
responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well, or I certify that I am
the agent for the owner, that the information provided is accurate, and that I have informed the owner of his
responsibilities as stated above. Owner consents to allowing personnel of this WMD or Delegated Authority access to
the well site during the construction, repair, modification, or abandonment authorized by this permit.

Digitally Signed **9311** Digitally Signed **11/9/2016**
*Signature of Contractor *License No. *Signature of Owner or Agent *Date

DO NOT WRITE BELOW THIS LINE - FOR OFFICIAL USE ONLY

Approval Granted By **Automatically Issued** Issue Date **11/09/2016** Expiration Date **02/07/2017** Hydrologist Approval _____
Fee Received **\$.00** Receipt No. _____ Check No. _____

THIS PERMIT IS NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD OR DELEGATED AUTHORITY. THE
PERMIT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL CONSTRUCTION, REPAIR, MODIFICATION, OR ABANDONMENT ACTIVITIES.



STATE OF FLORIDA WELL COMPLETION REPORT

☒ Southwest

☐ Northwest

☐ St. Johns River

☐ South Florida

☐ Suwannee River

☐ DEP

☐ Delegated Authority (If Applicable) _____

PLEASE, FILL OUT ALL APPLICABLE FIELDS
(* Denotes Required Fields Where Applicable)

Date Stamp

Received:

Dec 6, 2016 10:38 am

Official Use Only

1. *Permit Number **855634** *CUP/WUP Number _____ *DID Number _____ 62-524 Delineation No. _____

2. *Number of permitted wells constructed, repaired, or abandoned **2** *Number of permitted wells not constructed, repaired, or abandoned **0**

3. *Owner's Name **Angelo's Aggregate Materials Lt** 4. *Completion Date **11/17/2016** 5. Florida Unique ID _____

6. **41111 ENTERPRISE RD** **N/A**

*Well Location - Address, Road Name or Number, City, ZIP

7. *County **Pasco** *Section **8** Land Grant _____ *Township **25** *Range **22**

8. Latitude **28 19 51.92** Longitude **82 08 08.44**

9. Data Obtained From: ☐ GPS ☒ Map ☐ Survey Datum: ☐ NAD 27 ☒ NAD 83 ☐ WGS 84

10. *Type of Work: ☐ Construction ☐ Repair ☐ Modification ☒ Abandonment

11. *Specify Intended Use(s) of Well(s):

☐ Domestic ☐ Landscape Irrigation ☐ Agricultural Irrigation ☐ Site Investigation
☐ Bottled Water Supply ☐ Recreation Area Irrigation ☐ Livestock ☐ Monitoring
☐ Public Water Supply (Limited Use/DOH) ☐ Nursery Irrigation ☐ Test
☐ Public Water Supply (Community or Non-Community/DEP) ☐ Commercial/Industrial ☐ Earth-Coupled Geothermal
☐ Class I Injection ☐ Golf Course Irrigation ☐ HVAC Supply
☐ Class V Injection: ☐ Recharge ☐ Commercial/Industrial Disposal ☐ Aquifer Storage and Recovery ☐ Drainage
☐ Remediation: ☐ Recovery ☐ Air Sparge ☐ Other (Describe) _____
☒ Other (Describe) **PLUGGED**

12. *Drill Method: ☐ Auger ☐ Cable Tool ☐ Rotary ☐ Combination (Two or More Methods) ☐ Jetted ☐ Sonic
☐ Horizontal Drilling ☐ Hydraulic Point (Direct Push) ☒ Other **PLUGGED BY APPROVED METHOD**

13. *Measured Static Water Level **0.0** ft. Measured Pumping Water Level _____ ft. After _____ Hours at _____ GPM

14. *Measuring Point (Describe) _____ Which is _____ ft. Above Below Land Surface *Flowing: ☐ Yes ☐ No

15. *Casing Material: ☐ Black Steel ☐ Galvanized ☒ PVC ☐ Stainless Steel ☐ Not Cased ☐ Other _____

16. *Total Well Depth **39.0** ft. Cased Depth **39.0** ft. *Open Hole: From _____ To _____ ft. *Screen: From _____ To _____ ft. Slot Size _____

17. *Abandonment: ☒ Other (Explain) **PLUGGED**

2" From **0.00** ft. To **39.00** ft. No. of Bags **0.78** Seal Material (Check One): ☒ Neat Cement ☐ Bentonite ☐ Other _____

From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

18. *Surface Casing Diameter and Depth:

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

19. *Primary Casing Diameter and Depth:

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

20. *Liner Casing Diameter and Depth:

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

21. *Telescope Casing Diameter and Depth:

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

22. Pump Type (If Known): ☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine

Horsepower _____ Pump Capacity (GPM) _____

Pump Depth _____ ft. Intake Depth _____ ft. _____ Laboratory Test _____ Field Test Kit

24. Water Well Contractor:

*Contractor Name **James P Hinst** *License Number **9311** E-mail Address **jim@drillprollc.com**

*Contractor's Signature **Digitally Signed** *Driller's Name (Print or Type) **Dave Longino**

(I certify that the information provided in this report is accurate and true.)

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WWW.SFWMD.GOV

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From _____ ft. To _____ ft. Color _____

Grain Size (F, M, C)_____

Material

GP WO 1116039 MW 15B



FORM LEG-R.005.02 (06/10) Rule 40D-3.411 (1)(a), F.A.C. EFFECTIVE DATE: 9/12/2010



STATE OF FLORIDA WELL COMPLETION REPORT

☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River
☐ DEP
☐ Delegated Authority (If Applicable) _____

PLEASE, FILL OUT ALL APPLICABLE FIELDS
(* Denotes Required Fields Where Applicable)

Date Stamp

Received:

Dec 6, 2016 10:38 am

Official Use Only

1. *Permit Number 855634		*CUP/WUP Number _____		*DID Number _____		62-524 Delineation No. _____	
2. *Number of permitted wells constructed, repaired, or abandoned 2		*Number of permitted wells not constructed, repaired, or abandoned 0					
3. *Owner's Name Angelo's Aggregate Materials Lt		4. *Completion Date 11/17/2016		5. Florida Unique ID _____			
6. 41111 ENTERPRISE RD		N/A					
*Well Location - Address, Road Name or Number, City, ZIP							
7. *County Pasco		*Section 8		Land Grant _____		*Township 25 *Range 22	
8. Latitude 28 19 55.79		Longitude 82 08 08.64					
9. Data Obtained From: <input type="checkbox"/> GPS <input checked="" type="checkbox"/> Map <input type="checkbox"/> Survey Datum: <input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 <input type="checkbox"/> WGS 84							
10. *Type of Work: <input type="checkbox"/> Construction <input type="checkbox"/> Repair <input type="checkbox"/> Modification <input checked="" type="checkbox"/> Abandonment							
11. *Specify Intended Use(s) of Well(s):							
<input type="checkbox"/> Domestic		<input type="checkbox"/> Landscape Irrigation		<input type="checkbox"/> Agricultural Irrigation		<input type="checkbox"/> Site Investigation	
<input type="checkbox"/> Bottled Water Supply		<input type="checkbox"/> Recreation Area Irrigation		<input type="checkbox"/> Livestock		<input type="checkbox"/> Monitoring	
<input type="checkbox"/> Public Water Supply (Limited Use/DOH)		<input type="checkbox"/> Nursery Irrigation		<input type="checkbox"/> Commercial/Industrial		<input type="checkbox"/> Test	
<input type="checkbox"/> Public Water Supply (Community or Non-Community/DEP)		<input type="checkbox"/> Golf Course Irrigation		<input type="checkbox"/> Earth-Coupled Geothermal		<input type="checkbox"/> HVAC Supply	
<input type="checkbox"/> Class I Injection				<input type="checkbox"/> HVAC Return			
Class V Injection: <input type="checkbox"/> Recharge <input type="checkbox"/> Commercial/Industrial Disposal <input type="checkbox"/> Aquifer Storage and Recovery <input type="checkbox"/> Drainage							
Remediation: <input type="checkbox"/> Recovery <input type="checkbox"/> Air Sparge <input type="checkbox"/> Other (Describe) _____							
<input checked="" type="checkbox"/> Other (Describe) PLUGGED							
12. *Drill Method: <input type="checkbox"/> Auger <input type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary <input type="checkbox"/> Combination (Two or More Methods) <input type="checkbox"/> Jetted <input type="checkbox"/> Sonic							
<input type="checkbox"/> Horizontal Drilling <input type="checkbox"/> Hydraulic Point (Direct Push) <input checked="" type="checkbox"/> Other PLUGGED BY APPROVED METHOD							
13. *Measured Static Water Level 0.0 ft. Measured Pumping Water Level _____ ft. After _____ Hours at _____ GPM							
14. *Measuring Point (Describe) _____ Which is _____ ft. Above Below Land Surface *Flowing: <input type="checkbox"/> Yes <input type="checkbox"/> No							
15. *Casing Material: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galvanized <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Stainless Steel <input type="checkbox"/> Not Cased <input type="checkbox"/> Other _____							
16. *Total Well Depth 48.0 ft. Cased Depth 48.0 ft. *Open Hole: From _____ To _____ ft. *Screen: From _____ To _____ ft. Slot Size _____							
17. *Abandonment: <input checked="" type="checkbox"/> X Other (Explain) PLUGGED							
2" From 0.00 ft. To 48.00 ft.		No. of Bags 0.96		Seal Material (Check One): <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
18. *Surface Casing Diameter and Depth:							
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
19. *Primary Casing Diameter and Depth:							
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
20. *Liner Casing Diameter and Depth:							
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
21. *Telescope Casing Diameter and Depth:							
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
22. Pump Type (If Known):							
<input type="checkbox"/> Centrifugal <input type="checkbox"/> Jet <input type="checkbox"/> Submersible <input type="checkbox"/> Turbine							
Horsepower _____ Pump Capacity (GPM) _____							
Pump Depth _____ ft. Intake Depth _____ ft.							
23. Chemical Analysis (When Required):							
Iron _____ ppm Sulfate _____ ppm Chloride _____ ppm							
<input type="checkbox"/> Laboratory Test <input type="checkbox"/> Field Test Kit							
24. Water Well Contractor:							
*Contractor Name James P Hinst *License Number 9311 E-mail Address jim@drillprollc.com							
*Contractor's Signature Digitally Signed *Driller's Name (Print or Type) Dave Longino							
(I certify that the information provided in this report is accurate and true.)							

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[illegible]

GP WO 1116039 MW 16B



FORM LEG-R.005.02 (06/10) Rule 40D-3.411 (1)(a), F.A.C. EFFECTIVE DATE: 9/12/2010

SECTION 5

GROUNDWATER MONITORING PLAN

Enterprise Class III Landfill Groundwater Monitoring Plan

APRIL 2018

Prepared for:

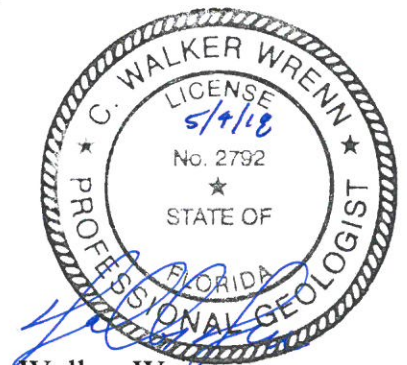
ANGELO'S RECYCLED MATERIALS, LTD.

41111 Enterprise Road
Dade City, Florida 33525

Prepared by:

LOCKLEAR & ASSOCIATES, INC.

4140 NW 37th Place, Suite A
Gainesville, FL 32606



Walker Wrenn
FL PG 2792

This Groundwater Monitoring Plan (GWMP) has been prepared in accordance with the provisions of Rule 62-701.510, F.A.C., and any non-conflicting provisions of Chapter 62-520, F.A.C. The GWMP was developed based upon an extensive evaluation of site data provided in the March 2012 (Revised March 2013) Water Quality Monitoring Plan Evaluation Report prepared by Locklear & Associates, Inc. The recently submitted 2015 – 2017 Water Quality Technical Report (Monitoring Plan Evaluation) is provided in Section 6. Analytical data tables and graphs as well as groundwater contour maps are provided in Section 6.

1. Water Quality Monitoring Plan

The groundwater monitoring network is shown in Table 1 and in Figure 1.

- a. All groundwater monitoring well installations and abandonments shall be performed in accordance with ASTM D 5092-04, Rule 62-532.500(5), F.A.C. and the rules of Southwest Florida Water Management District.

- b. Sign and Seal

The reports shall be signed and sealed in accordance with Chapter 471, Florida Statutes and Chapter 61G15, FAC for engineers or with Chapter 492 for professional geologists.

- c. Sampling and Analysis

All sampling and analysis shall be performed in accordance with Chapter 62-160, FAC; 62-701.510(2)(b), FAC; the DEP Standard Operating Procedures for Field Activities (DEP-SOP-001/01); and the DEP Standard Operating Procedures for Laboratory Activities (DEP-SOP-002/01).

- d. Groundwater Monitoring Requirements

The groundwater monitoring network consists of detection monitoring wells located downgradient from and within 50 feet of the disposal units and compliance wells located downgradient from 50 feet and within 100 feet of the disposal units. The detection and compliance wells are located no more than 500 feet apart. The network also includes background monitoring wells BW-1A and BW-1B screened within the surficial and Floridan aquifers, respectively. Downgradient compliance monitoring wells will be installed if warranted based on the results of detection monitoring results and Evaluation

Monitoring as discussed in Section 1.h. Compliance wells will be located at or immediately adjacent to the compliance line of the zone of discharge.

Monitoring wells shall be constructed to provide representative groundwater samples from the surficial aquifer, where present, and the Floridan aquifer system. Well screen placement will be determined from lithologic information collected at the time of well installation and historic water level elevations as discussed below.

New and replacement wells shall be constructed in accordance with the details provided to the Department and based on field observations. Documentation of well construction shall be submitted within 30 days of installation using Department Form #62-701.900(30).

Wells which become damaged, shall be plugged and abandoned in accordance with Rule 62-532.500(5), F.A.C. and the rules of the Southwest Florida Water Management District. Documentation of abandonment shall be submitted to the Department within 30 days of abandonment.

The location(s) of all new or replacement monitoring wells, in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing to the nearest 0.01 foot, using a consistent, nationally recognized datum, shall be determined by a Florida Licensed Professional Surveyor and Mapper. Wells will be marked with their identification label in the field.

e. Surface Water Monitoring Requirements

Ponds 1, 2 and 3 do not have off-site discharge associated with the 100-year flood event. Therefore, surface water sampling is not required as part of the solid waste operating permit. In the unexpected event of a surface water discharge event, surface water monitoring will occur per Appendix 3, Para. 8.a. and Para. 8.b. of #177982-024-SO/T3. However, surface water in Pond 3 will be sampled in accordance with the Industrial Wastewater pond permit.

f. Leachate Monitoring Requirements

(1) Leachate monitoring is not applicable to this facility.

g. Sampling Frequency and Requirements

- (1) Water samples from all newly installed monitoring wells will be collected to determine background groundwater quality. Groundwater samples from the initial sampling of any new wells will be analyzed for parameters listed in Rule 62-701.510(7)(a) and (7)(c), F.A.C. (Table 2).

Table 2 Initial Groundwater Sampling Parameters	
Field Parameters	Laboratory Parameters
Static Water Levels	Total Ammonia – N
Specific Conductivity	Chlorides
pH	Iron
Dissolved Oxygen	Mercury
Turbidity	Nitrate
Temperature	Sodium
Colors and Sheens	Total Dissolved Solids (TDS)
	Those Parameters listed in 40 CFR Part 258, Appendices I and II

- (2) Groundwater samples from all monitoring wells (background and detection) and the on-site supply well shall be sampled and analyzed semiannually for the parameters listed in Table 3. A semiannual sampling frequency is adequate to detect potential groundwater quality standard exceedances based upon the flow velocities provided in Section 2.2 of the 2015 and 2018 Groundwater Monitoring Quality Technical Reports. Maximum groundwater flow velocities were less than 50 feet per six months within the Floridan aquifers. As stated in the 2012 permit renewal – Water Quality Monitoring Plan Evaluation, the surficial wells are constructed in areas where perched, non-continuous water is trapped. Because these trapped areas do not communicate, groundwater flows are not reliably calculated for the surficial aquifer at the site. Semiannual sampling is adequate for the surficial wells. The first semiannual sampling event shall be performed between January 1 and June 30. The second semiannual sampling event shall be performed between July 1 and December 31.

Table 3 Routine Groundwater Sampling Parameters	
Field Parameters	Laboratory Parameters

Static Water Level	Total Ammonia – N
Specific	Chlorides
Conductivity	Iron
pH	Mercury
Dissolved Oxygen	Nitrate
Turbidity	Sodium
Temperature	Total Dissolved Solids (TDS)
Colors, Sheens	Those Parameters listed in 40 CFR Part 258, Appendix I

(3) Surface water sampling shall be conducted at Pond 3 in accordance with the requirements of the separate Industrial Wastewater pond permit.

(4) Leachate sampling is not applicable to this facility.

h. Evaluation Monitoring, Prevention Measures, and Corrective Action

If parameters are detected in detection wells at concentrations that are significantly above background water quality, or that are at concentrations above the FDEP's water quality standards or criteria specified in 62-520, F.A.C., the well will be resampled within 30 days after the initial analytical data are received to confirm the data. If the data are confirmed or the well is not resampled, the FDEP will be notified in writing within 14 days of detection. Evaluation monitoring shall be initiated as follows:

- Routine monitoring of all monitoring wells will continue according to the GWMP.
- Within 90 days of initiating evaluation monitoring and annually thereafter, the background wells and all affected detection wells will be sampled for the parameters listed in 62-701.510(7)(c), F.A.C. Any new parameter detected and confirmed in the downgradient wells will be added to the routine groundwater monitoring parameter list.
- Within 90 days of initiating evaluation monitoring compliance monitoring wells will be installed at the compliance line of the zone of discharge and downgradient of the affected detection wells. The compliance wells will be installed in accordance with 62-701.510(3)(d), F.A.C. Compliance wells and affected detection wells shall be sampled quarterly for analysis of the

parameters listed in Rule 62-701.510(7)(a), F.A.C. and any other parameters detected in the affected detection and downgradient wells sampled in accordance with Rule 62-701.510(6)(a)2, F.A.C. Compliance wells and affected detection wells shall be sampled annually for analysis of the parameters listed in Rule 62-701.510(7)(c), F.A.C.

- Within 180 days of initiating evaluation monitoring, a contamination evaluation plan will be submitted to the FDEP. The contamination evaluation plan will be designed to delineate the extent and cause contamination and to predict the probability that FDEP water quality standards are not violated outside the zone of discharge and to evaluate methods to prevent any violations. Upon agreement with the FDEP that the plan is so designed, the plan shall be implemented and a contamination evaluation report will be submitted to the FDEP. All reasonable efforts will be made to prevent further degradation of water quality from the landfill activities.
- If the contamination evaluation report indicates that water quality standards or criteria are likely to be violated outside the zone of discharge, a prevention measures plan shall be submitted to the Department. Upon approval, the prevention measures shall be initiated.
- Evaluation monitoring shall not be discontinued until authorization to return to routine monitoring only is received from the Department.

i. Water Quality Monitoring Report Requirements

- (1) All representative water quality monitoring results shall be reported to the Department within 60 days from completion of laboratory analyses. In accordance with subsections 62-160.240(3) and 62-160.340(4), F.A.C., water quality data contained in the report shall be provided to the Department in an electronic format consistent with requirements for importing into Department databases.

At a minimum the semiannual report shall include the following:

- The facility name and identification number, sample collection dates, and analysis dates;
- All analytical results, including all peaks even if below maximum contaminant levels;

- Identification number and designation of all groundwater monitoring points;
 - Applicable water quality standards;
 - Quality assurance, quality control notations;
 - Method detection limits;
 - STORET code numbers for all parameters;
 - Water levels recorded prior to evaluating wells or sample collection. Elevation reference shall include the top of well casing and the land surface at each well site at a precision of plus or minus 0.01 foot, National Geodetic Vertical Datum (NGVD);
 - Department Form 62-701.900(31);
 - An updated groundwater table contour map signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, with contours at no greater than one-foot intervals unless site-specific conditions dictate otherwise, which indicates groundwater elevations and flow directions; and
 - A summary of any water quality standards or criteria that are exceeded.
- (2) A technical report will be submitted every two and one-half years summarizing and interpreting the water quality monitoring results and water level measurements collected during that period. The report will be in accordance with Rule 62-701.510(8)(b) and signed and sealed by Florida licensed Professional Geologist or Professional Engineer. The report shall contain, at a minimum, the following:
- Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected (such as pH, specific conductance, TDS, TOC, sulfate, chloride, sodium and iron), including hydrographs for all monitoring wells;
 - Trend analyses of any monitoring parameters consistently detected;
 - Comparison among shallow, middle, and deep zone wells;
 - Comparisons between background water quality and the water quality in detection and compliance wells;
 - Correlations between related parameters such as total dissolved solids and specific conductance;
 - Discussion of erratic and/or poorly correlated data;
 - An interpretation of the groundwater contour maps, including an evaluation of groundwater flow rates; and
 - An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based on site conditions.

TABLE 1

Well ID	Well Type	Aquifer	Existing or Future	Notes
BW-1A	Background	Surficial	Existing	
BW-1B	Background	Floridan	Existing	
MW-1A	Water Level	Surficial	Existing	
MW-1B	Water Level	Floridan	Existing	
MW-3	Detection	Surficial	Existing	To be abandoned in conjunction with Cell 17 construction
MW-3B	Detection	Floridan	Existing	To be abandoned in conjunction with Cell 17 construction
MW-4	Detection	Surficial	Existing	
MW-4B	Detection	Floridan	Existing	
MW-5AR	Compliance	Surficial	Existing	
MW-5BR	Compliance	Floridan	Existing	
MW-6	Detection	Surficial	Existing	
MW-6B	Detection	Floridan	Existing	
MW-7A	Detection	Surficial	Existing	
MW-7BR	Detection	Floridan	Existing	
MW-8	Detection	Surficial	Existing	
MW-8B	Detection	Floridan	Existing	
MW-9	Detection	Surficial	Existing	
MW-9B	Detection	Floridan	Existing	
MW-10	Detection	Surficial	Existing	
MW-10B	Detection	Floridan	Existing	
MW-11	Water Level	Surficial	Existing	
MW-11B	Water Level	Floridan	Existing	
MW-12A	Water Level	Surficial	Existing	
MW-12B	Water Level	Floridan	Existing	
MW-17B	Detection	Floridan	Existing	To be abandoned in conjunction with Cell 17 construction
Water Supply	Supply	Floridan	Existing	
MW-18B	Compliance	Floridan	Existing	
MW-19A	Compliance	Surficial	Existing	
MW-20B	Compliance	Floridan	Existing	
MW-21A*	Detection	Surficial	Existing	To be installed in conjunction with Cell 17 construction
MW-21B	Detection	Floridan	Existing	To be installed in conjunction with Cell 17 construction
MW-22A*	Detection	Surficial	Existing	To be installed in conjunction with Cell 17 construction
MW-22B	Detection	Floridan	Existing	To be installed in conjunction with Cell 17 construction
MW-23A*	Compliance	Surficial	Existing	To be installed in conjunction with Cell 17 construction
MW-23B	Detection	Floridan	Existing	To be installed in conjunction with Cell 17 construction
P-6	Piezometer	Surficial	Existing	
P-8	Piezometer	Floridan	Existing	
P-10	Piezometer	Floridan	Existing	
P-11	Piezometer	Surficial	Existing	

* To be installed only if water bearing sediments are encountered above the clay units confining the Floridan aquifer system.

P:\P Drive Files\ANGELOS (FLORIDA)\Enterprise Class III (COMPLIANCE MONITORING)\Permit Renewal\SECTION 5 - Groundwater Monitoring Plan\CAD\Figure 1.dwg PLOT DATE 5/4/2018 9:37 AM BY UB

LEGEND

- BW-1B

BACKGROUND MONITORING WELL LOCATION
- MW-7A

DETECTION MONITORING WELL LOCATION
- MW-21A

PROPOSED DETECTION MONITORING WELL LOCATION
- SUPPLY WELL LOCATION
- P-11

SOLID WASTE PIEZOMETER WELL LOCATION
- MW-5AR

SCHEDULED COMPLIANCE MONITORING WELL LOCATION
- MW-12A

WATER LEVEL ONLY WELL LOCATION
- MW-3

PROPOSED TO BE ABANDONED
- MW-5B

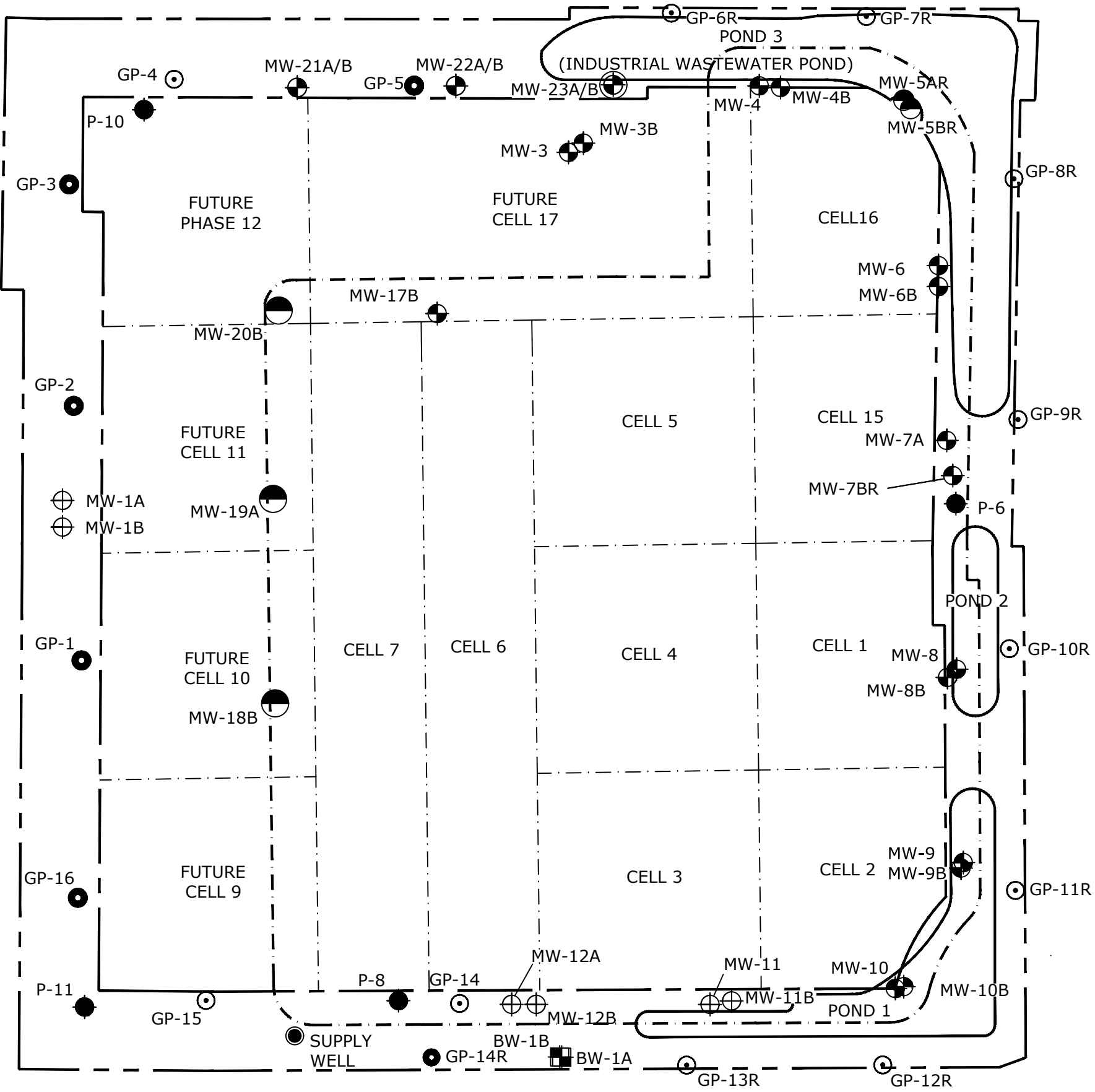
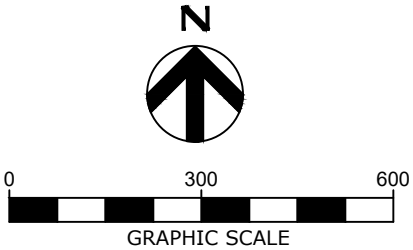
SCHEDULED TO BE ABANDONED
- MW-19B

COMPLIANCE MONITORING WELL LOCATION
- MW-23B

PROPOSED COMPLIANCE MONITORING WELL LOCATION
- GP-1

GAS PROBE LOCATION
- GP-8R

FUTURE GAS PROBE LOCATION
- PROPERTY BOUNDARY
- LANDFILL LIMITS
- CELL BOUNDARY
- ZONE OF DISCHARGE



NO.	DATE	REVISION DESCRIPTION	BY



4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066

PROJECT TITLE:
**ENTERPRISE ROAD CLASS III
RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA**

LISA J. BAKER	DESIGNED BY	LJB
	DRAWN BY	LJB
	CHECKED BY	JDL
	APPROVED BY	LJB
FL PE NO. 74652		

SHEET TITLE: SITE MONITORING NETWORK	PROJECT NO.: 02000-144-14
	SCALE: AS SHOWN
	DATE: APRIL 2018
	DRAWING: FIGURE 1

SECTION 6

WATER QUALITY MONITORING EVALUATION

TABLE OF CONTENTS

1.0	<u>INTRODUCTION</u>
2.0	<u>GROUNDWATER FLOW</u>
3.0	<u>GROUNDWATER QUALITY</u>
4.0	<u>CORRELATION OF RELATED PARAMETERS</u>
5.0	<u>ADEQUACY OF MONITORING NETWORK</u>
6.0	<u>CONCLUSIONS & RECOMENDATIONS</u>

ATTACHMENT 1	SITE MAP
ATTACHMENT 2	GROUNDWATER CONTOUR MAPS
ATTACHMENT 3	HYDROGRAPH
ATTACHMENT 4	DETECTED PARAMETER EXCEEDANCES COMPARED TO GROUNDWATER AND SURFACE WATER STANDARDS
ATTACHMENT 5	GROUNDWATER CHEMISTRY GRAPHS
ATTACHMENT 6	HISTORICAL DATA SUMMARY
ATTACHMENT 7	CORRELATION PLOT CHARTS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER QUALITY TECHNICAL REPORT 2015-2017

DEP Permit No. 177982-023-SC/T3 & 177982-024-SO/T3
WACS No. 87895

1.0 INTRODUCTION

Enterprise Class III Landfill and Recycling Facility (Facility) is an active collection and recycling facility located approximately four miles southeast of Dade City, in Pasco County, Florida. The approximate center of the landfill is located at 28° 19' 53" N and 82° 08' 06" W.

The Landfill is located in eastern Pasco County, approximately four miles southeast of Dade City and five and a half miles northeast of Zephyrhills. More specifically, the site is located at the northeastern corner of the intersection of Enterprise Road and Auton Road.

The property is located on the eastern edge of the Brooksville Ridge physiographic province near the Western Valley. This ridge is wide with an irregular surface and extends through the north-central portion of Pasco County. The topography varies across the subject site, generally sloping slightly to the northeast in the northern half of the property and to the southeast or southwest in the southern half of the property.

The Brooksville ridge is characterized by a thin layer of sand and clayey sand underlain by a clayey unit that varies from 10 to 30 feet in thickness of Pliocene to recent age. This clayey unit ranges in thickness from about 0 to 50 feet in Pasco County. Below the sands and clays which comprise the surficial aquifer system is a thick sequence of sedimentary rock comprised mainly of limestone and dolomite, which comprise the Floridan aquifer system. From youngest to oldest, the sedimentary units include the Oligocene age Suwannee Limestone, the Eocene age Ocala Limestone, and the Eocene age Avon Park Formation. The Suwannee Limestone generally thins to the east and is thin or absent beneath the Brooksville Ridge. The limestone surface in the ridge area is irregular and may vary more than 100 feet in elevation over a short distance. The limestone surface elevation varies from -10 feet NGVD near the coast to around 140 feet NGVD on the crest of the Brooksville Ridge (SWFWMD, 1988).

This report summarizes data from the Facility from the Second Semiannual Compliance Monitoring Event – 2015 (15S2) through the Second Semiannual Compliance Monitoring Event – 2017 (17S2) and conforms with the requirements outlined in FAC Rule 62-701.510(8)(b). The following is a summary of the rule including the location of the associated information (if applicable) within this report:

- Tabular displays of any data which shows that a monitoring parameter has been detected (**Attachments 4 through 7**), including hydrographs for all monitoring wells (**Attachment 3**)
- Trend analyses of any monitoring parameters consistently detected. (**Section 3.0 and Attachment 5**)
- Comparison among shallow, middle, and deep zone wells. (**Section 3.0**)

- Comparisons between background water quality and the water quality in compliance wells. **(Section 3.0)**
- Correlations between related parameters, discussion of erratic or poorly correlated data. **(Sections 3.0 & 4.0)**
- An interpretation of the groundwater contour maps, including an evaluation of groundwater flow rates. **(Section 2.0 and Attachments 2 and 3)**
- An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based on site conditions. **(Section 5.0)**

The five sampling events summarized in this report were conducted on the dates listed in Table 1.1. The sampling events 15S2 through 17S2 are referred to as the “report period” throughout this document.

Table 1.1 Summary of Sampling Events during Report Period

<u>Sampling Event</u>	<u>Sampling Dates</u>
Second Semiannual 2015 (15S2)	September 21, 22 and 23, 2015
First Semiannual 2016 (16S1)	February 15 and 16, 2016
Second Semiannual 2016 (16S2)	December 27 and 28, 2016
First Semiannual 2017 (17S1)	March 27 and 28, 2017
Second Semiannual 2017 (17S2)	November 20 and 21, 2017

The monitoring network consists of the following:

Background Well: BW-1A and BW-1B

Detection Wells: MW-3, MW-3B, MW-4, MW-4B, MW-5AR, MW-5BR, MW-6, MW-6B, MW-7A, MW-7BR, MW-8, MW-8B, MW-9, MW-9B, MW-10, MW-10B, MW-17B, MW-18B, MW-19A and MW-20B

Other Supply Well

Piezometers: MW-1A, MW-1B, MW-11, MW-11B, MW-12A, MW-12B, P-4, P-6, P-8, P-10 and P-11

A current Site Plan map of the landfill is presented in Attachment 1.

2.0 GROUNDWATER FLOW

2.1 Groundwater Contouring

Groundwater contour maps are presented in Attachment 2. The direction of groundwater flow within the Floridan aquifer at the Facility is predominantly toward the northwest and west, with variations to the east. The surficial aquifer beneath the Facility is not considered to be laterally continuous, therefore, is not reliable for mapping groundwater flow directions. Additionally, a surficial aquifer hydrograph is ~~not~~ included in this report.

Table 2.1 presents recorded fluctuations of groundwater elevation in the surficial and Floridan aquifer.

The Floridan hydrograph is presented in Attachment 3. Groundwater elevations of the Floridan aquifer varied from approximately 63.60 feet to 74.36 feet NGVD throughout the groundwater monitoring network during the report period.

Table 2.1 Maximum/Minimum Groundwater Elevations

Groundwater Elevation (NGVD, FT)					
Monitoring Well	Top of Casing	Top of Screen	Bottom of Screen	Maximum Groundwater Elevation	Minimum Groundwater elevation
Surficial Aquifer Wells					
BW-1A	122.50	68	48	73.01	73.01
MW-1A	173.77	127	107	NA	NA
MW-3	85.39	91	71	74.15	72.35
MW-4	100.59	94	74	82.24	76.75
MW-5A	86.74	76	56	78.43	70.07
MW-6	88.65	78	58	75.41	63.60
MW-7A	100.72	79	59	74.58	67.72
MW-8	100.10	84	64	NA	NA
MW-9	108.00	98	78	NA	NA
MW-10	111.62	94	74	NA	NA
MW-11	104.45	82	62	74.55	68.42
MW-12A	121.43	79	59	73.84	68.31
MW-19A	146.88	77	57	89.22	85.63

Floridan Aquifer Wells					
BW-1B	122.82	38	18	74.07	67.94
MW-1B	174.11	67	57	73.97	67.78
MW-3B	84.80	56	41	74.14	67.99
MW-4B	100.87	57	42	74.17	68.04
MW-5B	85.70	48	38	74.06	67.89
MW-6B	89.10	52	32	74.19	63.18
MW-7BR	103.27	57	42	74.13	67.97
MW-8B	101.55	60	45	74.15	68.05
MW-9B	109.75	76	61	74.33	68.19
MW-10B	110.00	63	48	74.30	68.2
MW-11B	106.11	39	24	74.07	67.93
MW-12B	121.84	47	32	74.36	68.22
MW-17B	87.21	28	8	74.30	68.1
MW-18B	152.58	73	53	72.24	67.74
MW-20B	126.86	77	57	72.28	67.72

Table Notes:

- 1) Elevations are approximate, based upon available well data.
- 2) Groundwater Elevations in this table are continuous-round measurements.

2.2 Groundwater Flow Velocity

The surficial aquifer at the site consists of laterally discontinuous (unconnected), perched areas. The groundwater flow for these perched areas is not calculable due to its non-connectivity.

The groundwater flow velocity for the Floridan aquifer beneath the Facility was calculated using data from a previously performed hydrogeological study (*Hydrogeological Investigation and Groundwater Monitoring Plan* - 2005 Permit Modification, dated January 2006). Horizontal groundwater velocity (v) was calculated using D'Arcy equation for lateral flow:

$$v = (K/n) * (\Delta H/\Delta L)$$

where, v = flow velocity
 K = hydraulic conductivity
 n_e = effective porosity
 ΔH = change in head
 ΔL = distance between measuring points

The following values are products of the 2006 study:

$K = 3.78$ feet/day (average); $n_e = 0.2$ to 0.5

Data from monitoring points MW-10B and P-10 were used to calculate site flow velocity calculations. These monitoring points were chosen because they encompass the steepest hydraulic gradient, based on the groundwater contour maps for the report period

ΔL was calculated by measuring the distance between monitoring points MW-10B and P-10 (3020 ft.). ΔH was determined by calculating the difference in the reported potentiometric values at the described monitoring points. ΔH between monitoring points MW-10B and P-10 ranged from 0.268 to 0.36 feet, with an average of 0.32 feet during the report period. As shown in the following equations, the maximum flow velocity of the surficial aquifer between monitoring points MW-10B and P-10 during the report period was 0.00189 feet/day or 0.69 feet/year.

$$v = (K/n_e) * (\Delta H/\Delta L)$$

$$v_{\max} = (3.78 \text{ feet/day} / 0.2) * (0.32 \text{ feet} / 3020 \text{ feet})$$

$$v_{\max} = (18.9 \text{ feet/day}) * (0.0001) = \mathbf{0.00200 \text{ feet/day or } 0.73 \text{ feet/year}}$$

$$v_{\min} = (3.78 \text{ feet/day} / 0.5) * (0.32 \text{ feet} / 3020 \text{ feet})$$

$$v_{\min} = (7.56 \text{ feet/day}) * (0.0001) = \mathbf{0.000801 \text{ feet/day or } 0.29 \text{ feet/year}}$$

The flow velocity in the 2012-2015 Groundwater Monitoring Technical Report ranged from 0.28 to 0.69 feet/year.

3.0 GROUNDWATER QUALITY

Detailed groundwater quality data have been submitted with the groundwater monitoring reports during the report period.

Groundwater standards include the Primary Drinking Water Standards (PDWS), Secondary Drinking Water Standards (SDWS), and Groundwater Cleanup Target Levels (GCTL). Very few parameters were reported at or outside groundwater standards during the report period. These parameters include the following:

Field Parameters:	pH
Metals	Iron
	Lead
	Nitrate as N

Attachment 4 presents detected parameter exceedances compared to groundwater standards for each sampling event of the report period. Presented in Attachment 5 are graphs of detected field and laboratory parameters. Attachment 6 presents a historical data summary.

Levels of pH in the Floridan background monitoring well, BW-1B, were within the SDWS limits (6.5 to 8.5 S.U.) during the report period. With the exception of well MW-10B (6.13 and 6.21 S.U.) the remaining Floridan wells were within the SDWS. The majority of the surficial aquifer wells were reported below the lower limit of the SDWS, which is common in surficial aquifer monitoring wells. The Facility pH levels are consistent to historical results.

Iron levels were reported below the SDWS of 300 µg/L in the Floridan background monitoring well, BW-1B, during the reporting period. Iron was reported above the SDWS in Floridan MW-8B, ranging from 4270 to 5410 µg/L. Iron was reported below the SDWS in all remaining Floridan aquifer monitoring wells. Surficial aquifer wells MW-5A, MW-7A and MW-19A reported Iron above the SDWS. Iron was reported below the SDWS in all remaining surficial aquifer monitoring wells. The Facility Iron levels are consistent to historical results.

Lead levels were reported below the PSDWS of 15 µg/L in all monitoring wells. Lead was reported above the PDWS in the Supply Well (18.8 µg/L) from the sample collected during the 17S1 event. Lead has never been reported in the Supply Well before or after this event. Continued semiannual sampling will closely scrutinize the lead levels at all sampling points, however, we believe the lead reported in the Supply Well during the 17S1 event to be erratic and not correlative to any trend or contamination.

Nitrate as N levels were reported below the SDWS of 10 mg/L in all wells except MW-19A (16 and 17 mg/L during the 17S1 and 17S2 events, respectively). Continued semiannual sampling is scheduled to analyze the Nitrate as N trend.

With the exception of lead reported in the Supply Well, the data does not appear to be erratic or poorly correlative. With the exception of Nitrate as N in MW-19A, no PDWS exceedances were reported during the report period.

Trendlines (represented as “Plot 1 Regr”) have been added to the time-series plots in each well that consistently detect constituents. Iron in MW-6 and MW-7A, and TDS in MW-3 and MW-4 exhibited increasing trends throughout the report period. The remaining trendlines exhibited neither increasing nor decreasing trends throughout the report period. Trendlines were not included in time-series plots for the new wells (MW-18B, -19A, and -20B) due to the lack of data.

With the exception of Chloride, Sodium and TDS, comparisons of the Floridan and surficial (perched) aquifers time-series plots revealed little to no relationships/similarities. Chloride, Sodium and TDS consistently reported similar results in the Floridan and surficial (perched) wells.

Based on the historically reported parameters it appears that the landfill is effectively designed to prevent groundwater and surface water contamination.

4.0 CORRELATION OF RELATED PARAMETERS

The following values were plotted and compared using R-squared analysis where 0.0 indicates that the model explains none of the variability of the response data around its mean and 1.0 indicates that the model explains all of the variability of the response data around its mean:

- Specific Conductance – Total Dissolved Solids
- pH – Iron
- Oxidation / Reduction Potential – Iron
- Dissolved Oxygen – Iron

The resulting scatter plot charts are provided in Attachment 7. The plots indicate a strong correlation between Specific Conductance and Total Dissolved Solids ($r^2 = 0.93$), and weak correlations between Dissolved Oxygen and Iron ($r^2 = 0.24$), pH and Iron ($r^2 = 0.002$), Total Dissolved Solids and Nitrate as Nitrogen ($r^2 = 0.184$) and pH and Nitrate as Nitrogen ($r^2 = 0.04$).

5.0 ADEQUACY OF MONITORING NETWORK

The site is underlain by a partial surficial aquifer and the Floridan aquifer. The surficial aquifer is not laterally continuous in all areas. The site monitoring network includes wells in both the surficial aquifer and the Floridan aquifer. In all areas where the surficial aquifer monitoring well contained insufficient water for sampling, a Floridan aquifer well is installed in cluster with the surficial aquifer well. Therefore, groundwater samples collected from the Floridan aquifer monitoring well represent the uppermost continuous water bearing unit.

The surficial and Floridan aquifer monitoring wells are positioned around the entire landfill boundary with background wells located on the southern landfill boundary. The groundwater monitoring network appears adequate to detect potential contaminants emanating from the landfill.

Monitoring wells are strategically situated in all downgradient directions. With groundwater flow velocities on the order of less than one foot per year. A semiannual (six month) sampling period is sufficient to detect possible contaminate flows (if any) in the downgradient wells from the Facility operations.

The groundwater flow direction is predominately toward the west and east. Monitoring wells are located downgradient in the described flow directions; enabling detection of contaminate flows (if any) from the site operations.

The current sampling frequency and monitoring well locations appear to be sufficient to adequately monitor the groundwater conditions at the site and no changes are proposed at this time.

6.0 CONCLUSIONS & RECOMMENDATIONS

- Groundwater flow beneath the site is generally towards the west and east. The location of background well (BW-1A and BW-1B) and the downgradient wells are appropriate based on the observed flow directions.
- Groundwater flow velocity beneath the site is on the order of less than one half foot per semiannual event. Therefore, the semiannual monitoring frequency is appropriate.
- Groundwater quality at the Facility is consistent with historical results and/or natural occurring background groundwater quality. Semiannual groundwater monitoring should be continued in accordance with the Facility permit.

ATTACHMENT 1

SITE MAP

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LEGEND

- BW-1B

BACKGROUND MONITORING WELL LOCATION
- MW-7A

DETECTION MONITORING WELL LOCATION
- MW-21A

PROPOSED DETECTION MONITORING WELL LOCATION
- SUPPLY WELL LOCATION
- P-11

SOLID WASTE PIEZOMETER WELL LOCATION
- MW-5AR

SCHEDULED COMPLIANCE MONITORING WELL LOCATION
- MW-12A

WATER LEVEL ONLY WELL LOCATION
- MW-3

PROPOSED TO BE ABANDONED
- MW-5B

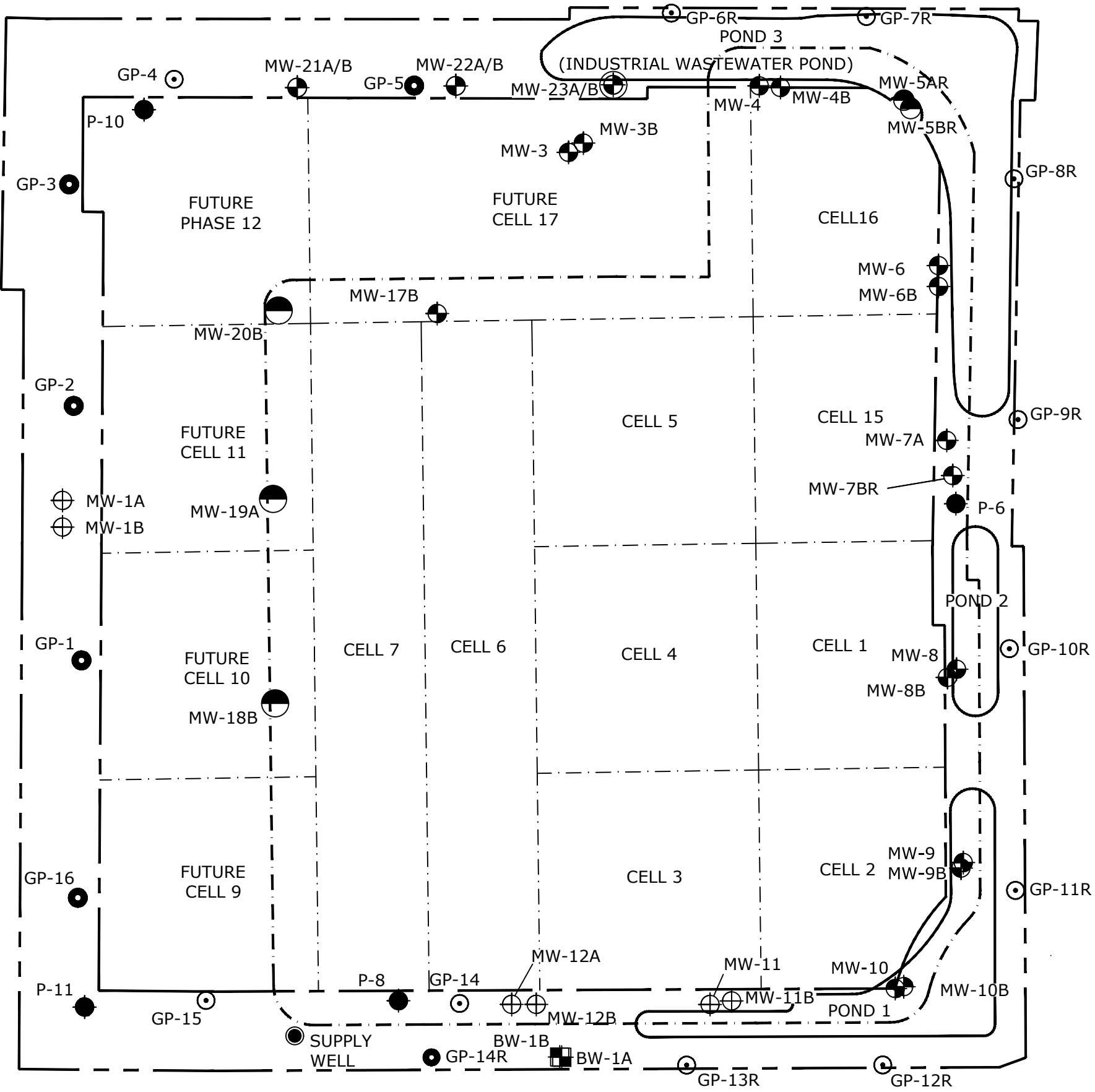
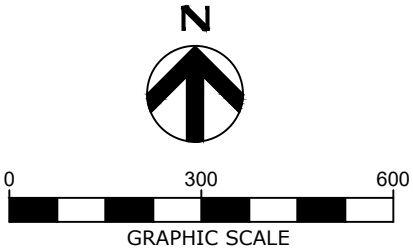
SCHEDULED TO BE ABANDONED
- MW-19B

COMPLIANCE MONITORING WELL LOCATION
- MW-23B

PROPOSED COMPLIANCE MONITORING WELL LOCATION
- GP-1

GAS PROBE LOCATION
- GP-8R

FUTURE GAS PROBE LOCATION
- PROPERTY BOUNDARY
- LANDFILL LIMITS
- CELL BOUNDARY
- ZONE OF DISCHARGE



NO.	DATE	REVISION DESCRIPTION	BY



4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066

PROJECT TITLE:
**ENTERPRISE ROAD CLASS III
RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA**


LISA J. BAKER	DESIGNED BY	LJB
	DRAWN BY	LJB
	CHECKED BY	JDL
FL PE NO. 74652	APPROVED BY	LJB

SHEET TITLE: SITE MONITORING NETWORK	PROJECT NO.: 02000-144-14
	SCALE: AS SHOWN
	DATE: APRIL 2018
	DRAWING: FIGURE 1


ATTACHMENT 2

GROUNDWATER CONTOUR MAPS


LEGEND

 MW-4B


MONITORING WELL LOCATION

 74.17


GROUNDWATER ELEVATION

 GP-1


GAS PROBE LOCATION

 P-11


SUPPLY WELL LOCATION

 P-11


PIEZOMETER WELL LOCATION

 MW-12A


WATER LEVEL ONLY WELL LOCATION

 MW-18B


FUTURE MONITOR WELL LOCATION**

 ---


PROPERTY BOUNDARY

 ---


LANDFILL LIMITS

 ---


CELL BOUNDARY

 74.1

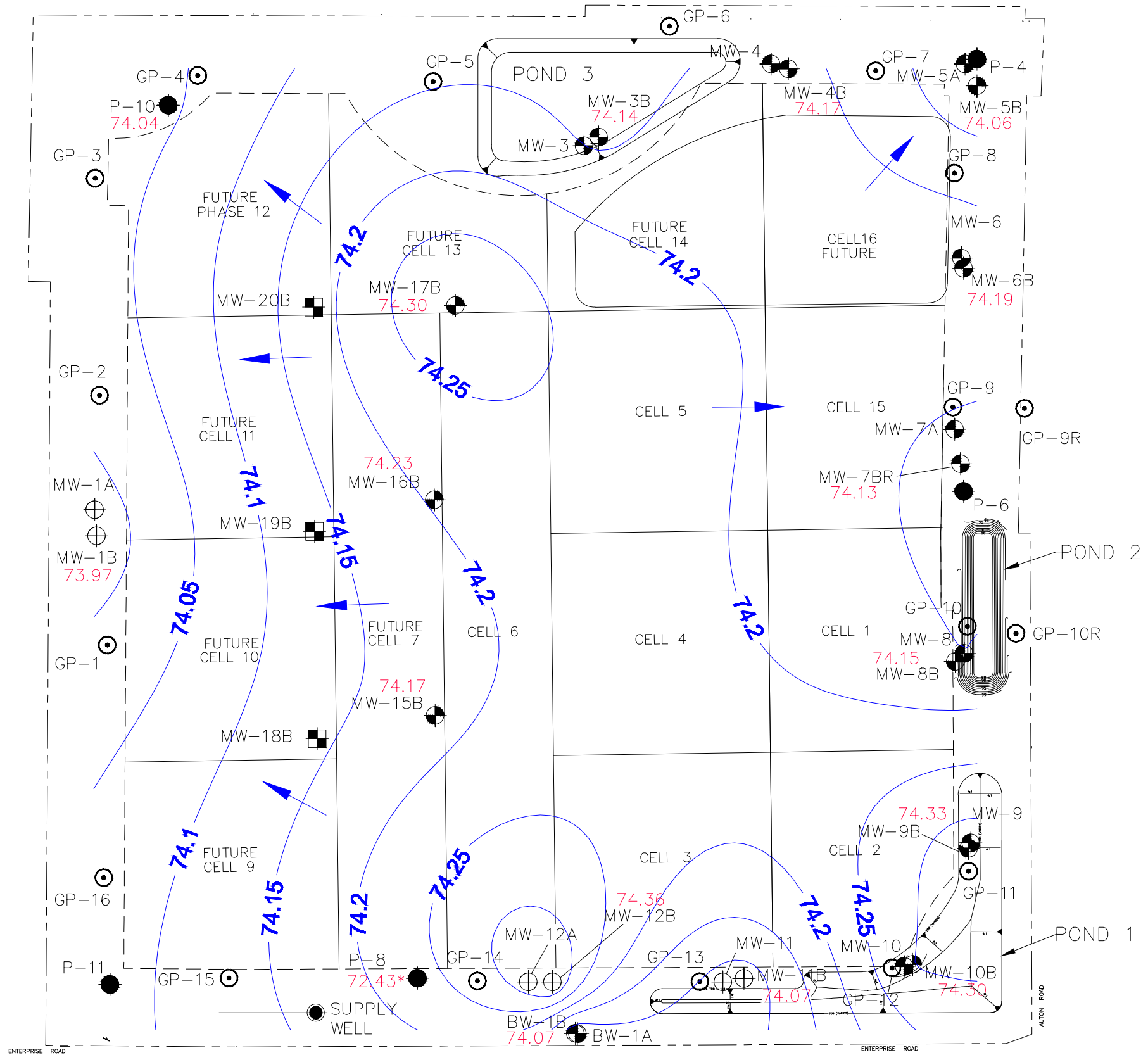
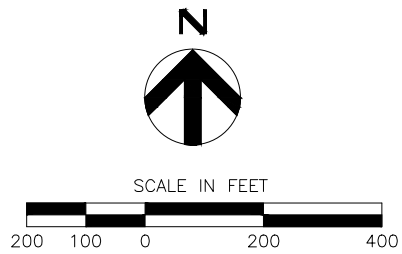
GROUNDWATER CONTOUR LINE (0.05' INTERVALS)

 →


GROUNDWATER FLOW DIRECTION

 *


NOT USED IN CONTOURING




LEGEND

 MW-4B


MONITORING WELL LOCATION

 72.37


GROUNDWATER ELEVATION

 GP-1


GAS PROBE LOCATION

 P-11


SUPPLY WELL LOCATION

 P-11


PIEZOMETER WELL LOCATION

 MW-12A


WATER LEVEL ONLY WELL LOCATION

 MW-18B


FUTURE MONITOR WELL LOCATION**

 ---


PROPERTY BOUNDARY

 ---


LANDFILL LIMITS

 ---


CELL BOUNDARY

 72.4

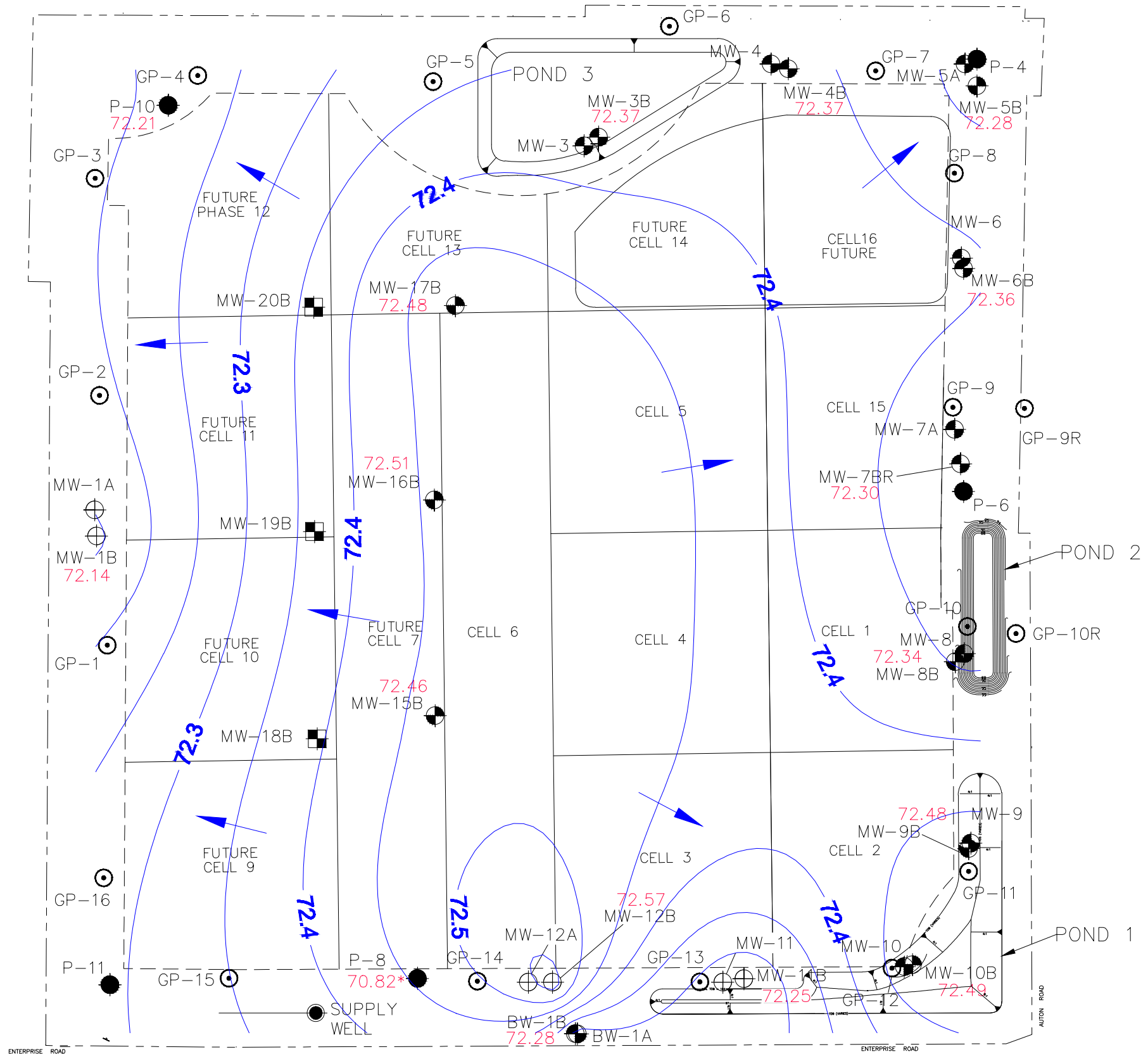
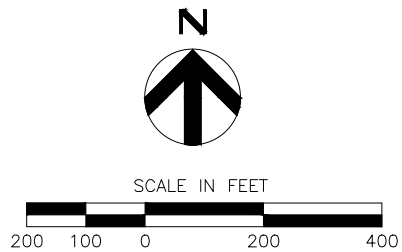
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GROUNDWATER FLOW DIRECTION

 *


NOT USED IN CONTOURING




LEGEND

 MW-4B


MONITORING WELL LOCATION

 70.96


GROUNDWATER ELEVATION

 GP-1


GAS PROBE LOCATION

 P-11


SUPPLY WELL LOCATION

 MW-12A


WATER LEVEL ONLY WELL LOCATION

 MW-18B


FUTURE MONITOR WELL LOCATION**

 ---


PROPERTY BOUNDARY

 ---



LANDFILL LIMITS

 ---


CELL BOUNDARY

 70.92

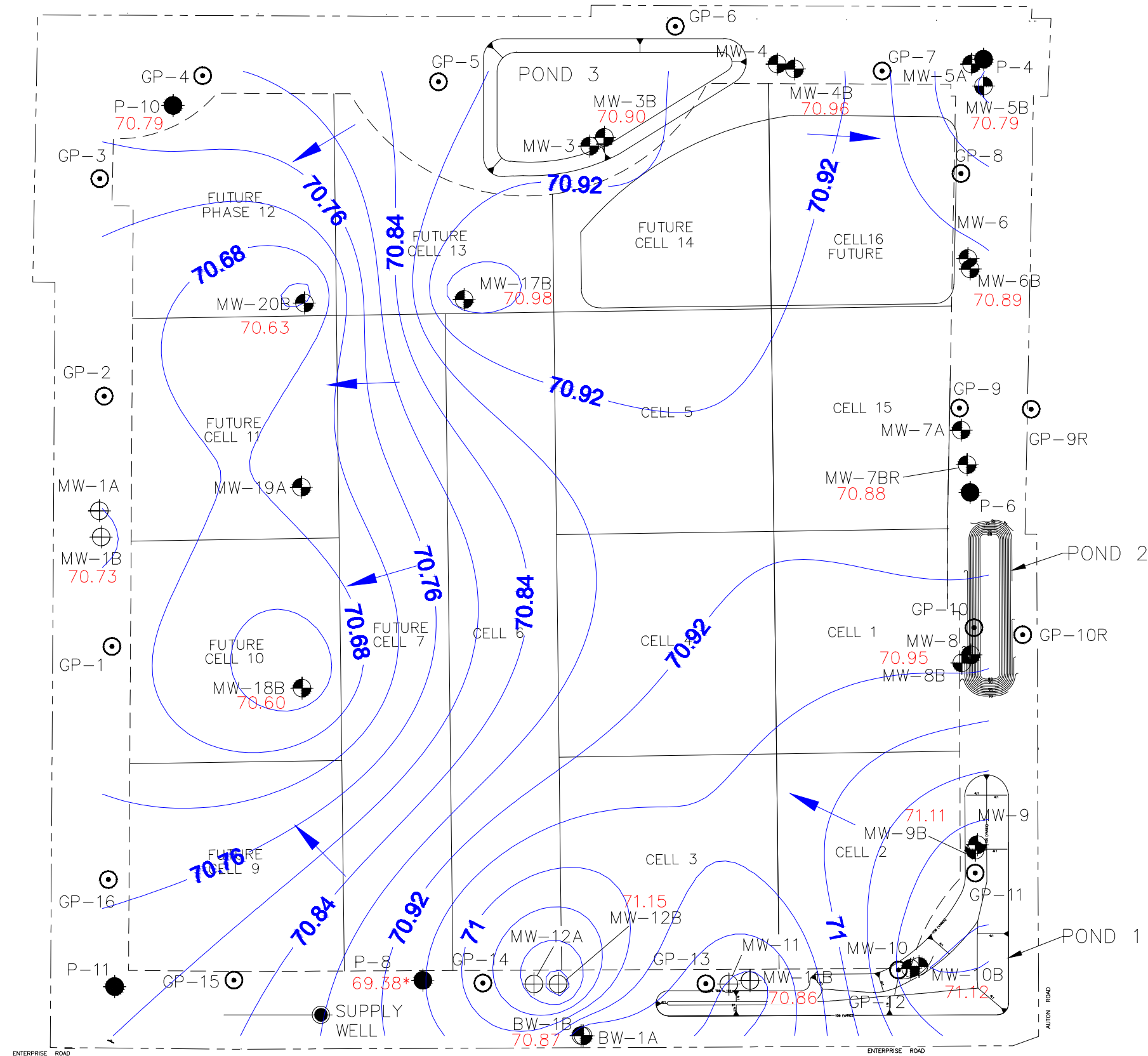
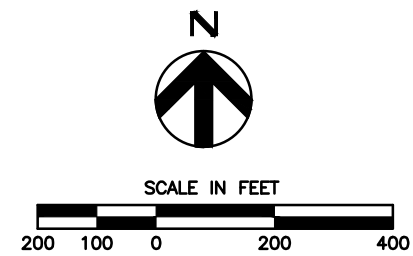
GROUNDWATER CONTOUR LINE (0.04' INTERVALS)


GROUNDWATER FLOW DIRECTION

 *


NOT USED IN CONTOURING




LEGEND

 MW-4B


MONITORING WELL LOCATION

 68.04


GROUNDWATER ELEVATION

 GP-1


GAS PROBE LOCATION

 P-11


SUPPLY WELL LOCATION

 P-11


PIEZOMETER WELL LOCATION

 MW-12A


WATER LEVEL ONLY WELL LOCATION

 MW-18B


FUTURE MONITOR WELL LOCATION**




PROPERTY BOUNDARY




LANDFILL LIMITS




CELL BOUNDARY

 67.9

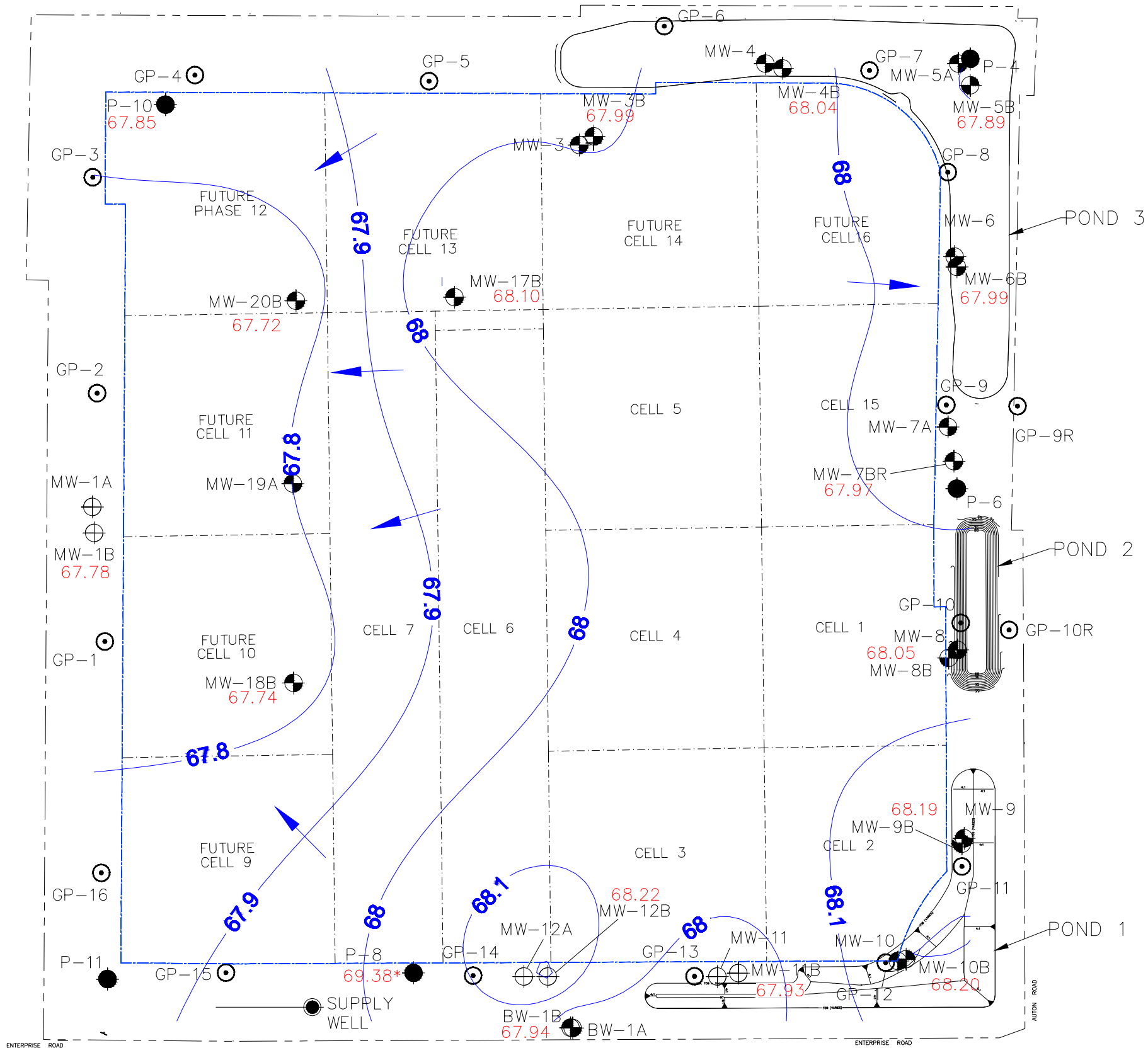
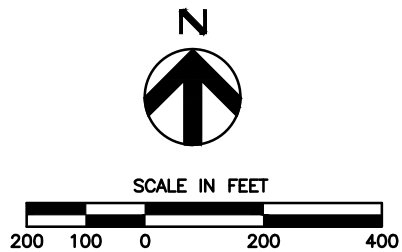
GROUNDWATER CONTOUR LINE (0.1' INTERVALS)




GROUNDWATER FLOW DIRECTION




NOT USED IN CONTOURING




LEGEND

 MW-4B


MONITORING WELL LOCATION

 72.65


GROUNDWATER ELEVATION

 GP-1


GAS PROBE LOCATION

 P-11


SUPPLY WELL LOCATION

 MW-12A


PIEZOMETER WELL LOCATION

 MW-18B


WATER LEVEL ONLY WELL LOCATION

 MW-18B


FUTURE MONITOR WELL LOCATION**




PROPERTY BOUNDARY




LANDFILL LIMITS




CELL BOUNDARY

 72.3

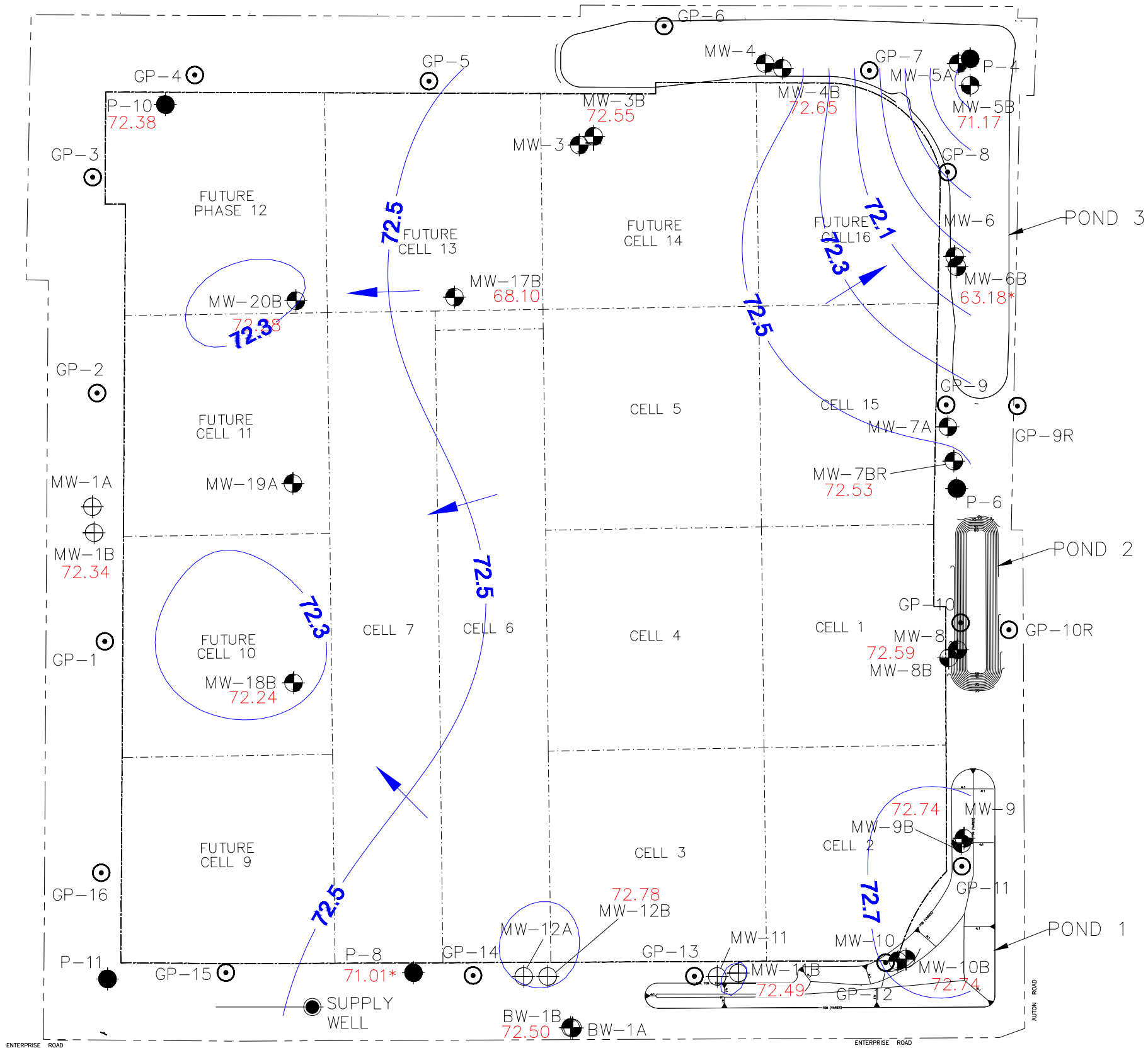
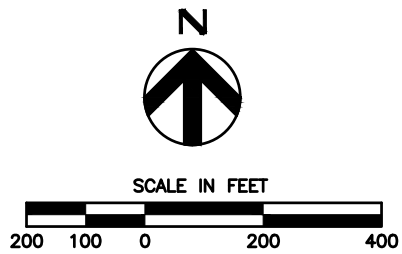
GROUNDWATER CONTOUR LINE (0.2' INTERVALS)



GROUNDWATER FLOW DIRECTION



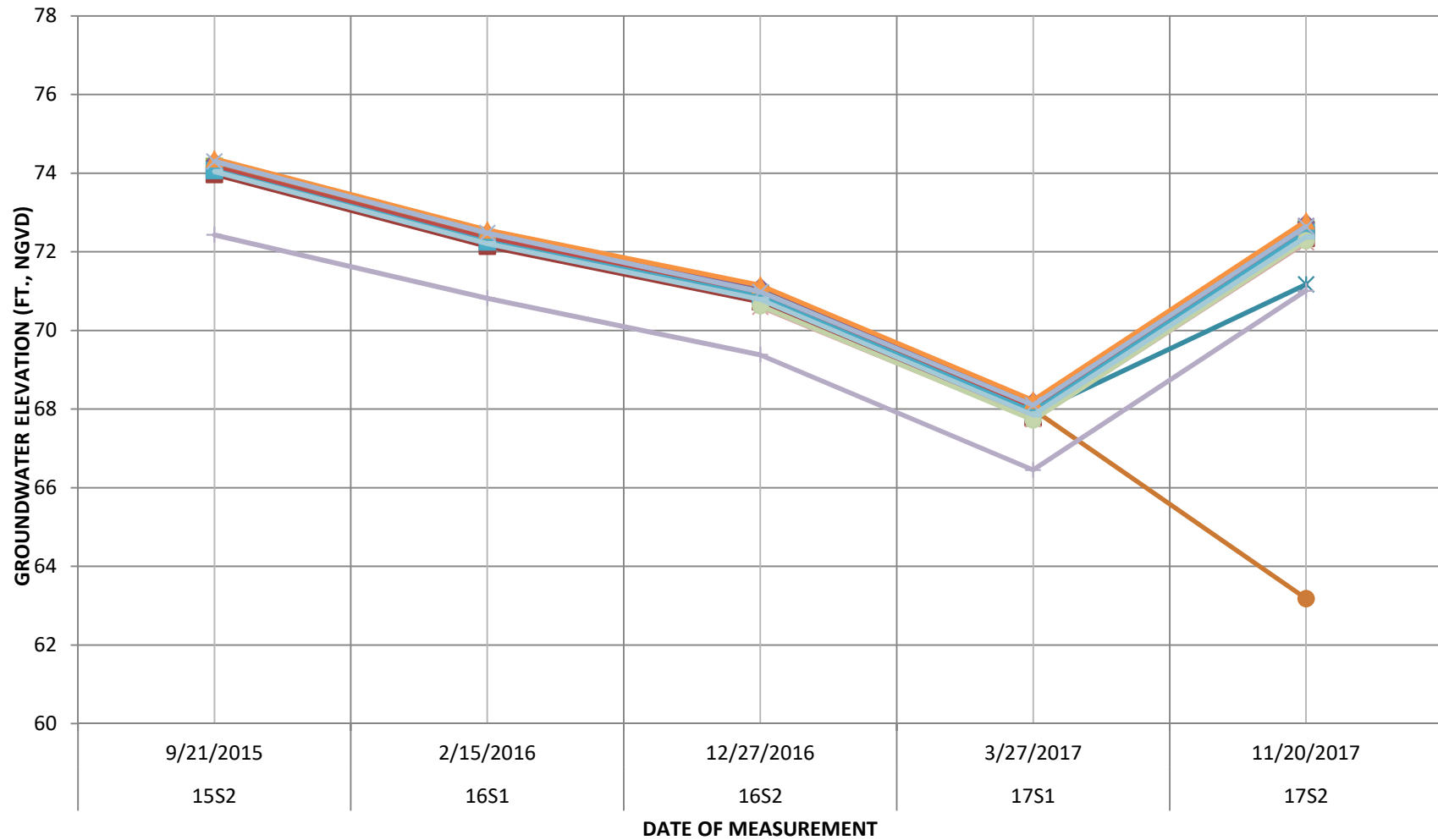
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ATTACHMENT 3

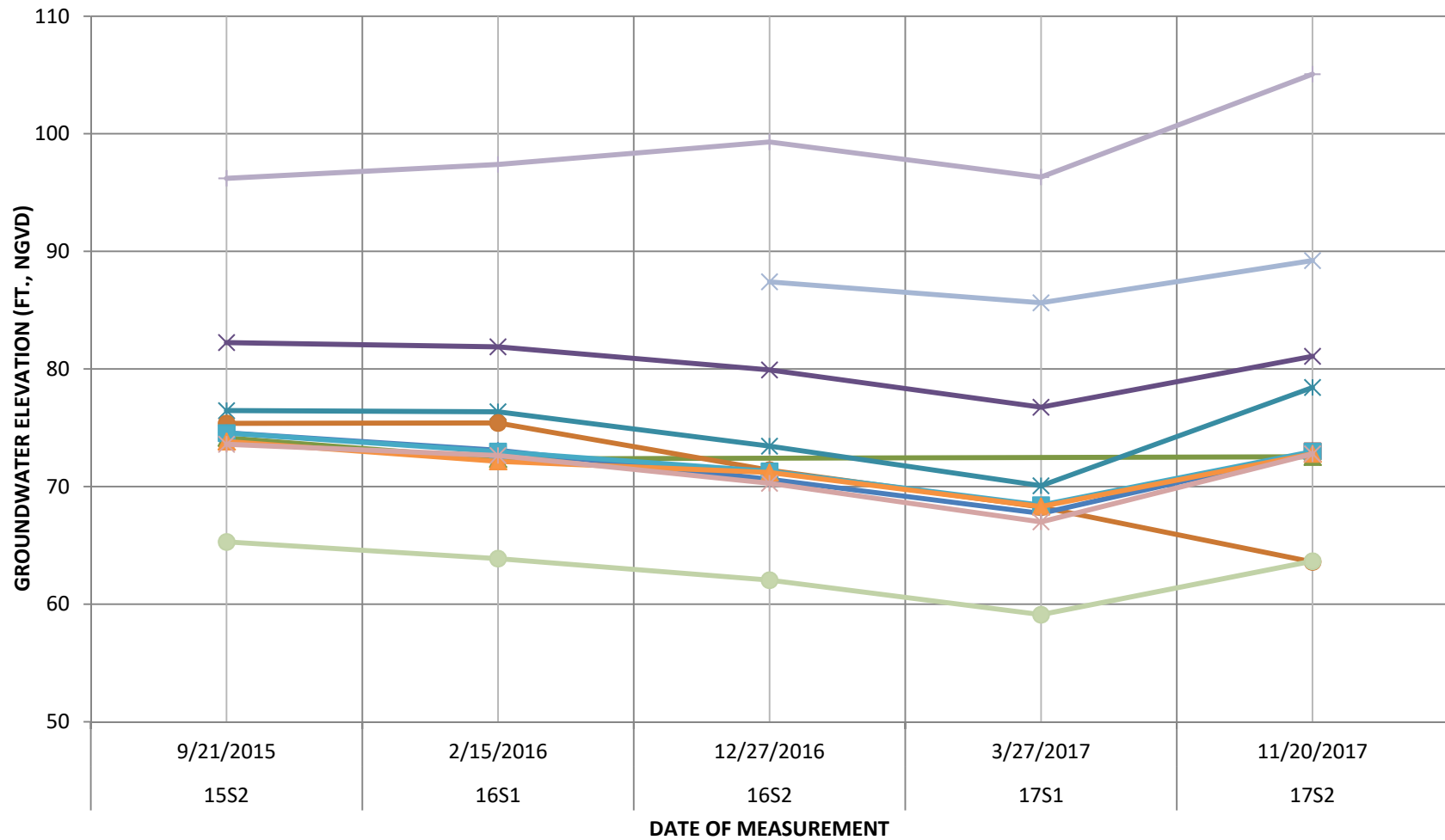
HYDROGRAPH

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY HYDROGRAPH OF FLORIDAN AQUIFER



BW-1B MW-1B MW-3B MW-4B MW-5B MW-6B MW-7BR MW-8B MW-9B
MW-10B MW-11B MW-12B MW-17B MW-18B MW-20B P-8 P-10

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY HYDROGRAPH OF SURFICIAL AQUIFER



- MW-1A
- BW-1A
- MW-3
- MW-4
- MW-5A
- MW-6
- MW-7A
- MW-8
- MW-9
- MW-10
- MW-11
- MW-12A
- MW-19A
- P-4
- P-6
- P-11

ATTACHMENT 4

DETECTED PARAMETER EXCEEDANCES COMPARED TO GROUNDWATER STANDARDS

ANGELO'S AGGREGATE MATERIALS
ENTERPRISE LANDFILL
PARAMETERS EXCEEDING STANDARDS

PARAMETER STANDARD UNIT	Date - MM/DD/YYYY	Iron 300 µg/L** µg/L	Nitrate as N 10 mg/L* mg/L	Lead 15 µg/L* µg/L	pH 6.5-8.5 SU** S.U.
Background					
BW-1B					
15S2	9/23/2015	-	-	-	-
16S1	2/16/2016	-	-	-	-
16S2	12/28/2016	-	-	-	-
17S1	3/27/2017	-	-	-	-
17S2	11/20/2017	-	-	-	-
Detection					
Floridan					
MW-3B					
15S2	9/22/2015	-	-	-	-
16S1	2/16/2016	-	-	-	-
16S2	12/28/2016	-	-	-	-
17S1	3/28/2017	-	-	-	-
17S2	11/21/2017	-	-	-	-
MW-4B					
15S2	9/23/2015	-	-	-	-
16S1	2/16/2016	-	-	-	-
16S2	12/28/2016	-	-	-	-
17S1	3/28/2017	-	-	-	-
17S2	11/21/2017	-	-	-	-
MW-5B					
15S2	9/22/2015	-	-	-	-
16S1	2/16/2016	-	-	-	-
16S2	12/28/2016	-	-	-	-
17S1	3/28/2017	-	-	-	-
17S2	11/21/2017	-	-	-	-
MW-6B					
15S2	9/23/2015	-	-	-	-
16S1	2/16/2016	-	-	-	-
16S2	12/28/2016	-	-	-	-
17S1	3/28/2017	-	-	-	-
17S2	11/21/2017	-	-	-	-
MW-7BR					
15S2	9/21/2015	-	-	-	-
16S1	2/15/2016	-	-	-	-
16S2	12/27/2016	-	-	-	-
17S1	3/27/2017	-	-	-	-
17S2	11/20/2017	-	-	-	-
MW-8B					
15S2	9/21/2015	5030	-	-	-
16S1	2/15/2016	4270	-	-	-
16S2	12/27/2016	4730	-	-	-
17S1	3/27/2017	5300	-	-	-
17S2	11/20/2017	5410	-	-	-

ANGELO'S AGGREGATE MATERIALS
ENTERPRISE LANDFILL
PARAMETERS EXCEEDING STANDARDS

PARAMETER STANDARD UNIT	Date - MM/DD/YYYY	Iron 300 µg/L** µg/L	Nitrate as N 10 mg/L* mg/L	Lead 15 µg/L* µg/L	pH 6.5-8.5 SU** S.U.
MW-9B					
15S2	9/21/2015	-	-	-	-
16S1	2/15/2016	-	-	-	-
16S2	12/27/2016	-	-	-	-
17S1	3/27/2017	-	-	-	-
17S2	11/20/2017	-	-	-	-
MW-10B					
15S2	9/21/2015	-	-	-	6.21
16S1	2/16/2016	-	-	-	6.13
16S2	12/27/2016	-	-	-	-
17S1	3/27/2017	-	-	-	-
17S2	11/20/2017	-	-	-	-
MW-17B					
15S2	9/22/2015	-	-	-	-
16S1	2/15/2016	-	-	-	-
16S2	12/28/2016	-	-	-	-
17S1	3/28/2017	-	-	-	-
17S2	11/21/2017	-	-	-	-
MW-18B					
15S2	NS	NS	NS	NS	NS
16S1	NS	NS	NS	NS	NS
16S2	NS	NS	NS	NS	NS
17S1	3/27/2017	-	-	-	-
17S2	11/21/2017	-	-	-	-
MW-20B					
15S2	NS	NS	NS	NS	NS
16S1	NS	NS	NS	NS	NS
16S2	NS	NS	NS	NS	NS
17S1	3/27/2017	-	-	-	-
Surficial					
MW-3					
15S2	9/22/2015	-	-	-	-
16S1	2/16/2016	-	-	-	-
16S2	NS	NS	NS	NS	NS
17S1	NS	NS	NS	NS	NS
17S2	11/21/2017	-	-	-	-
17S2	11/20/2017	-	-	-	-
MW-4					
15S2	9/23/2015	-	-	-	-
16S1	2/16/2016	-	-	-	-
16S2	12/28/2016	-	-	-	-
17S1	NS	NS	NS	NS	NS
17S2	11/21/2017	-	-	-	-

ANGELO'S AGGREGATE MATERIALS
ENTERPRISE LANDFILL
PARAMETERS EXCEEDING STANDARDS

PARAMETER STANDARD UNIT	Date - MM/DD/YYYY	Iron 300 µg/L** µg/L	Nitrate as N 10 mg/L* mg/L	Lead 15 µg/L* µg/L	pH 6.5-8.5 SU** S.U.
MW-5A					
15S2	9/22/2015	-	-	-	5.38
16S1	2/16/2016	-	-	-	6.17
16S2	12/28/2016	-	-	-	5.64
17S1	3/28/2017	761	-	-	5.59
17S2	11/21/2017	-	-	-	5.78
MW-6					
15S2	9/23/2015	-	-	-	5.56
16S1	2/16/2016	-	-	-	6.27
16S2	12/28/2016	-	-	-	5.42
17S1	NS	NS	NS	NS	NS
17S2	11/21/2017	-	-	-	5.47
MW-7A					
15S2	9/21/2015	1630	-	-	4.83
16S1	2/15/2016	766	-	-	4.94
16S2	12/27/2016	767	-	-	5.04
17S1	3/27/2017	424	-	-	5.3
17S2	11/20/2017	2760	-	-	4.6
MW-19A					
15S2	NS	NS	NS	NS	NS
16S1	NS	NS	NS	NS	NS
16S2	NS	NS	NS	NS	NS
17S1	3/27/2017	366	16	-	6.11
17S2	11/21/2017	-	17	-	5.38
Supply					
SUPPLY WELL					
15S2	9/22/2015	-	-	-	-
16S1	2/15/2016	-	-	-	-
16S2	12/28/2016	-	-	-	-
17S1	3/28/2017	-	-	18.8	-
17S2	11/21/2017	-	-	-	-

Legend

* = primary drinking water standard

** = secondary drinking water standard

*** = Chapter 62-777-Groundwater Cleanup Target Level (GCTL)

1 = No Standard

- = Analysis Result is not at or outside Groundwater Standard (GWS)

NS = Not Sampled

NM = Not Measured

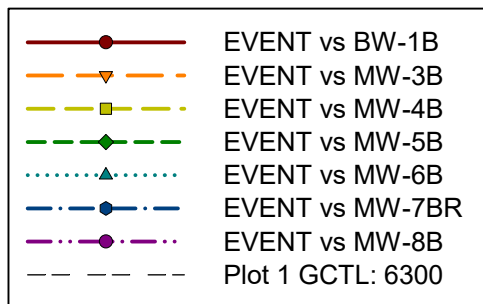
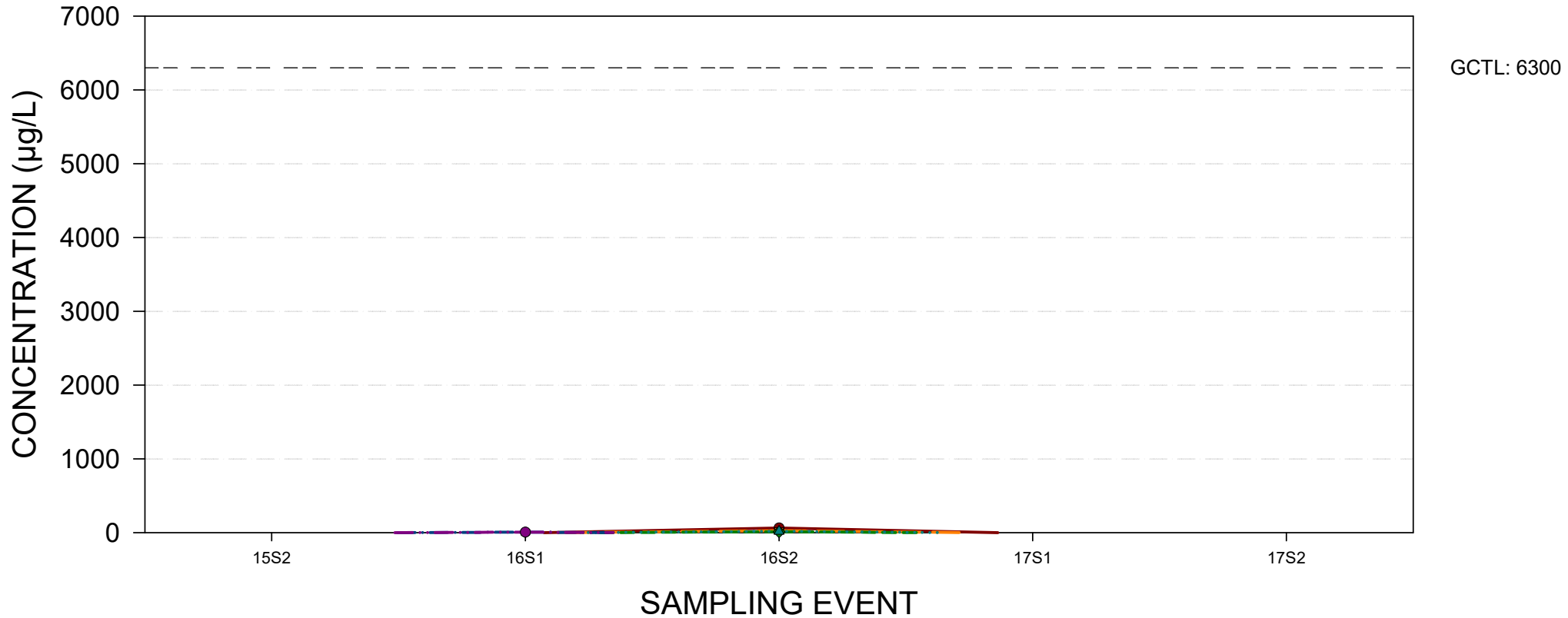
Note: Analysis results which were reported above the laboratory detection limit, but not at or above the GWS are not displayed

ATTACHMENT 5

GROUNDWATER CHEMISTRY GRAPHS

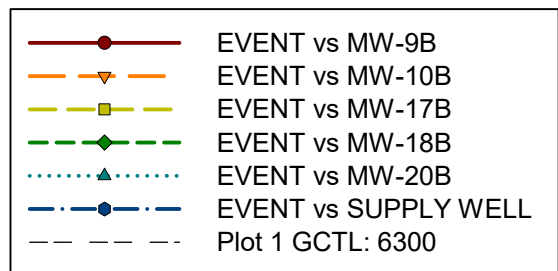
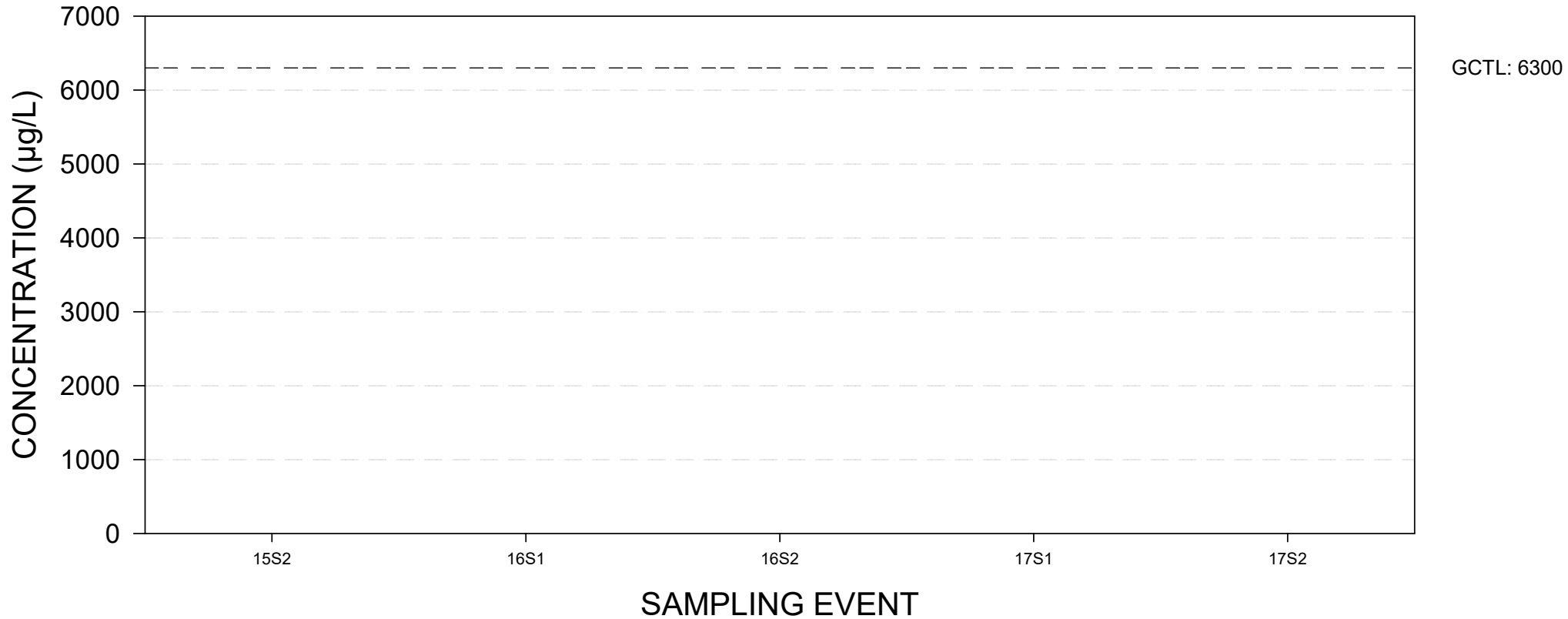
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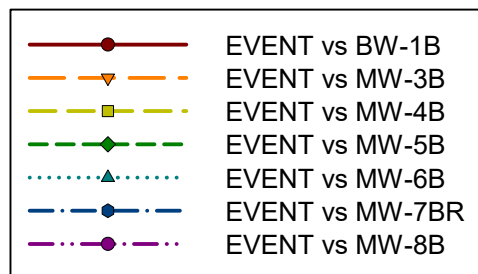
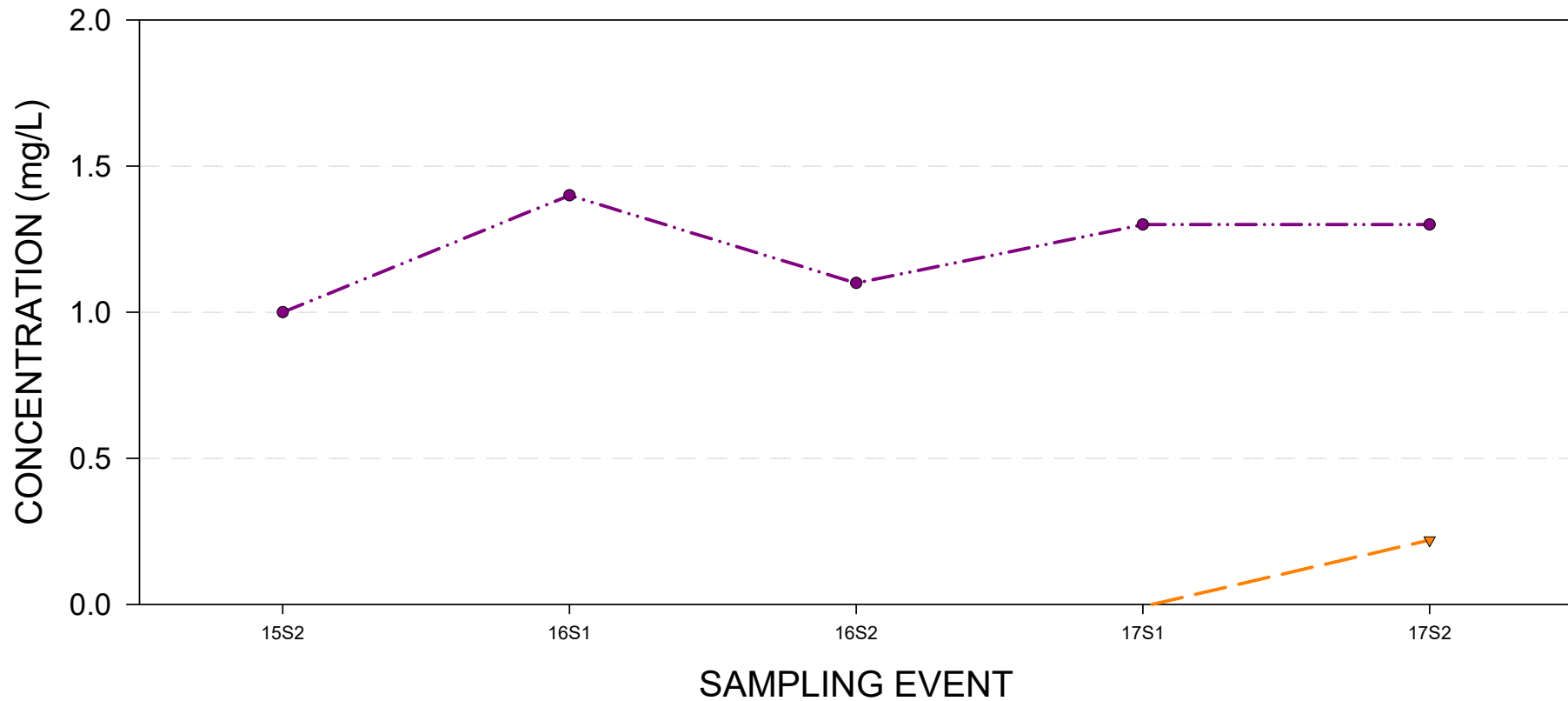
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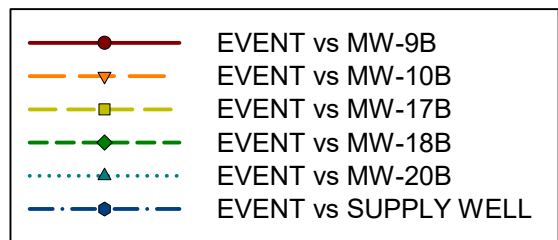
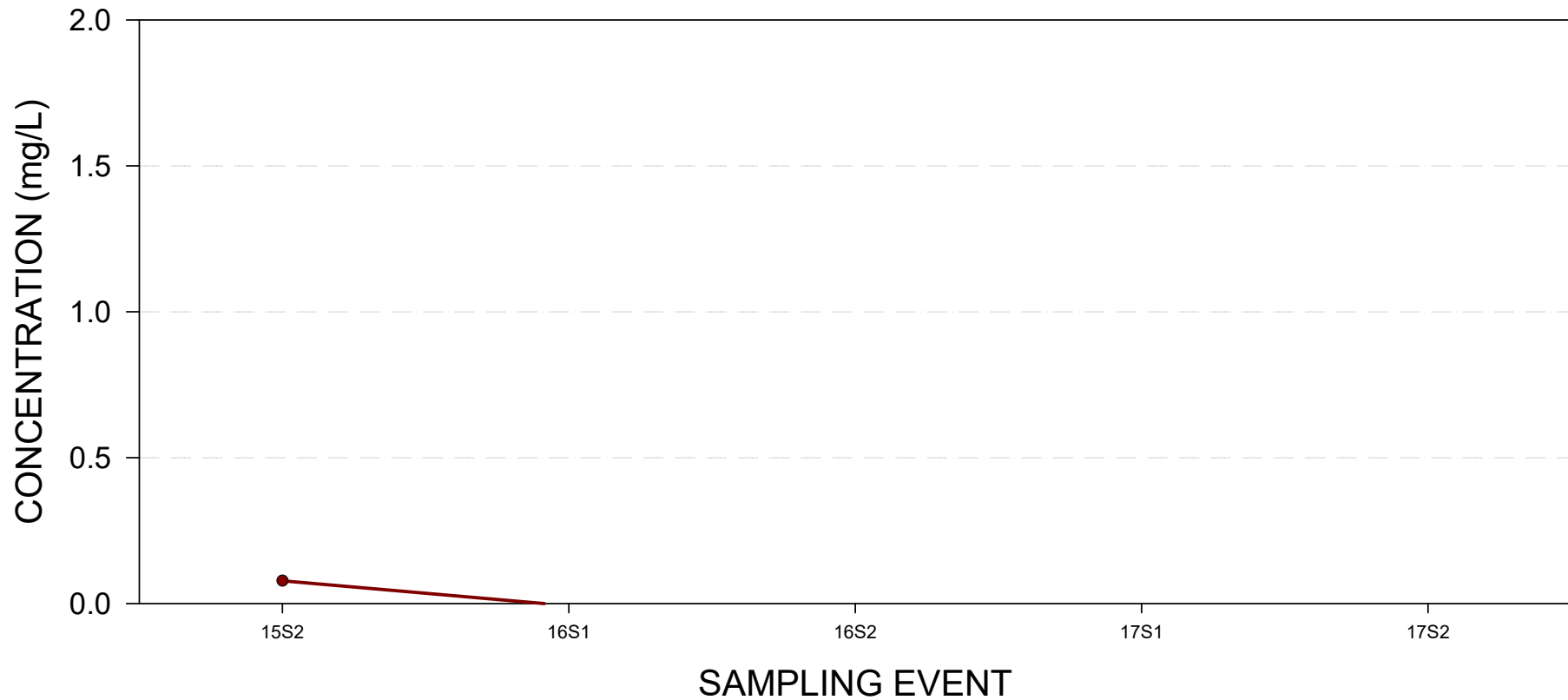
AMMONIA AS NITROGEN

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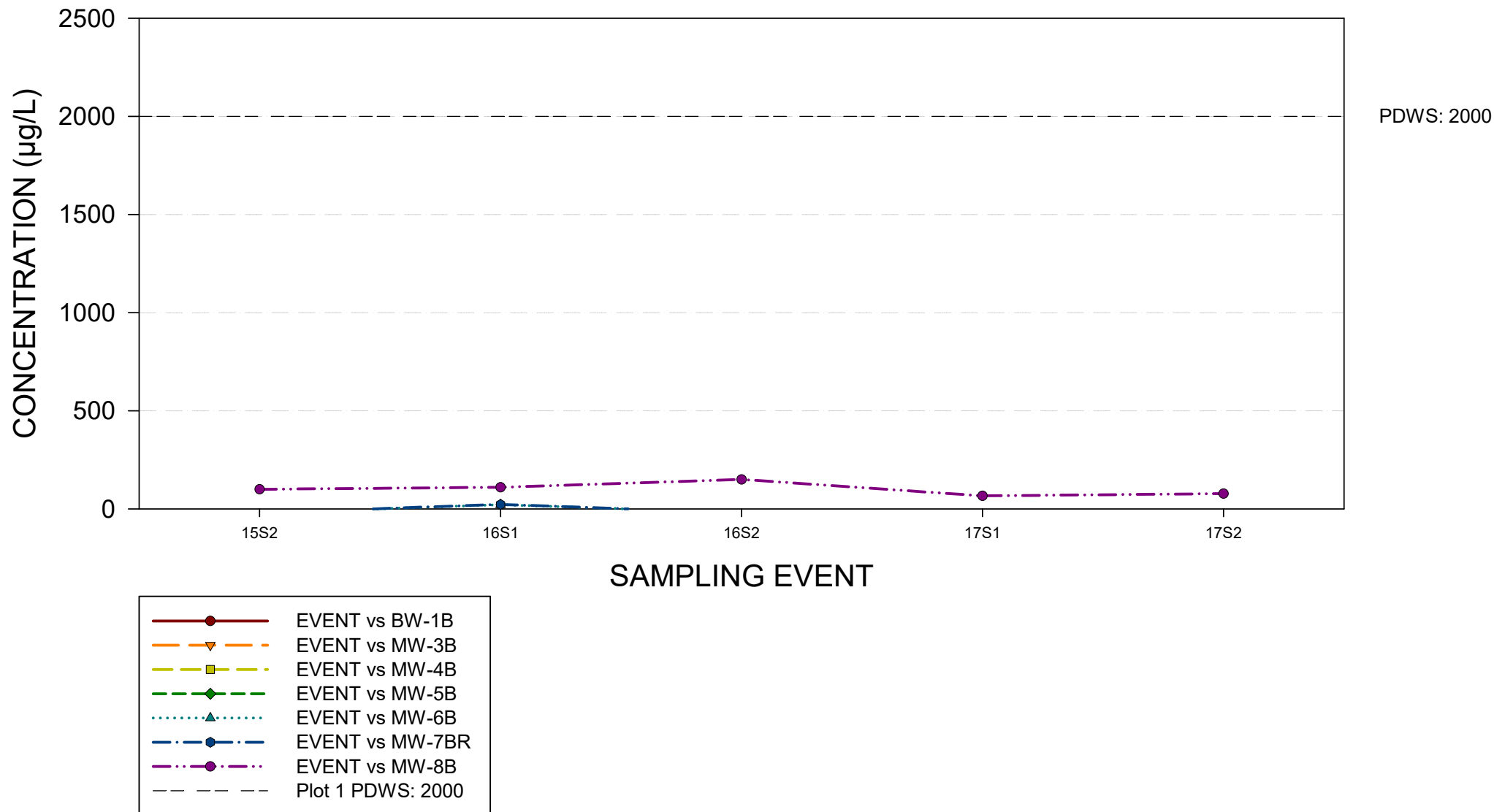
AMMONIA AS NITROGEN

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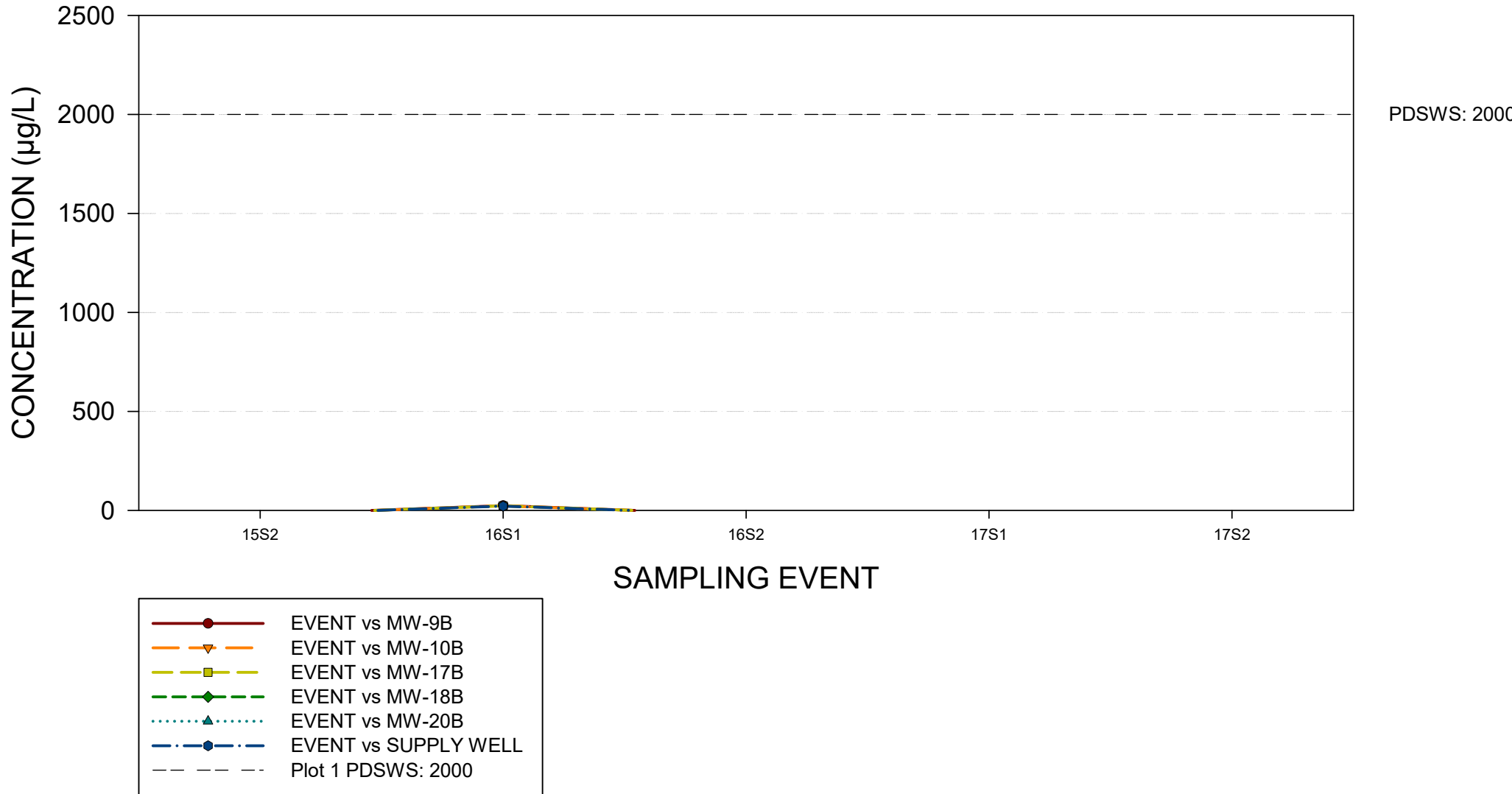
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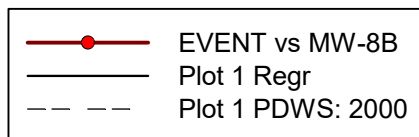
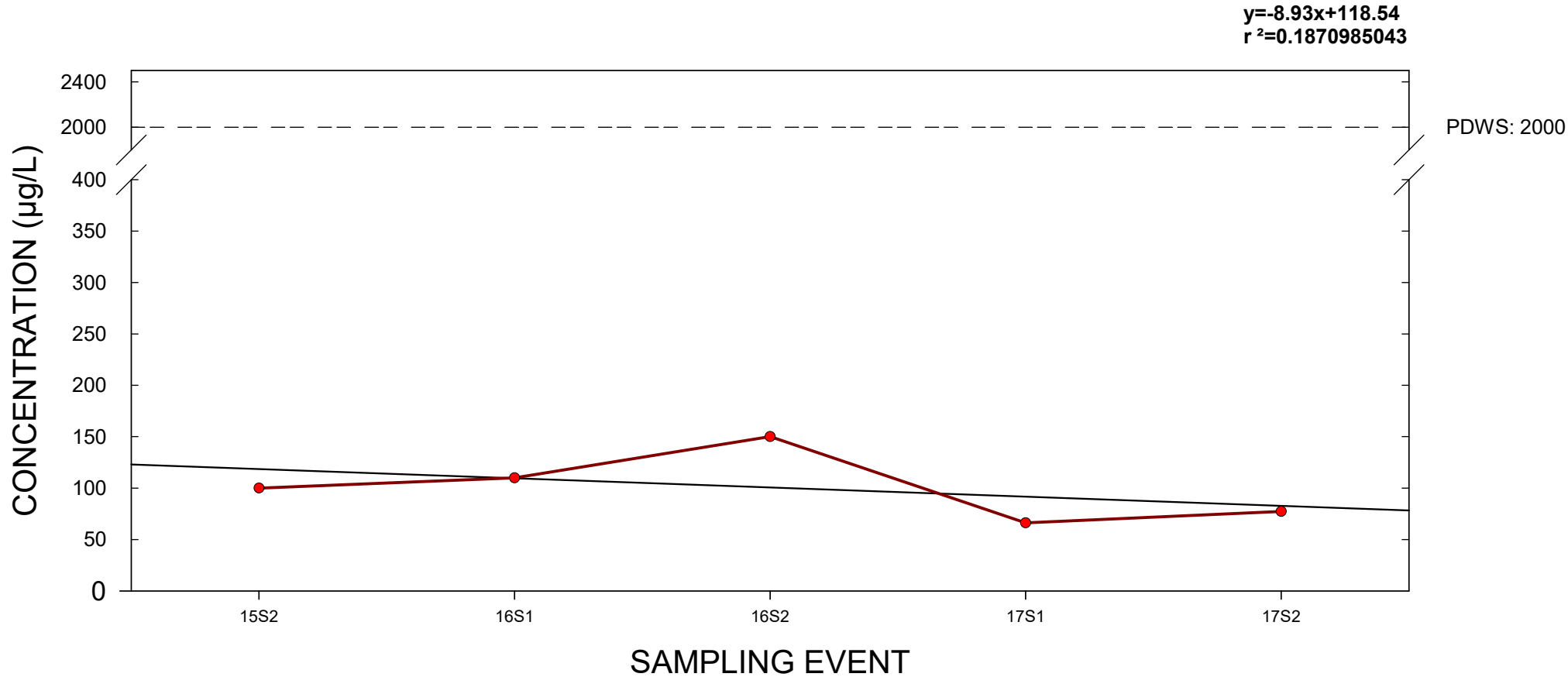
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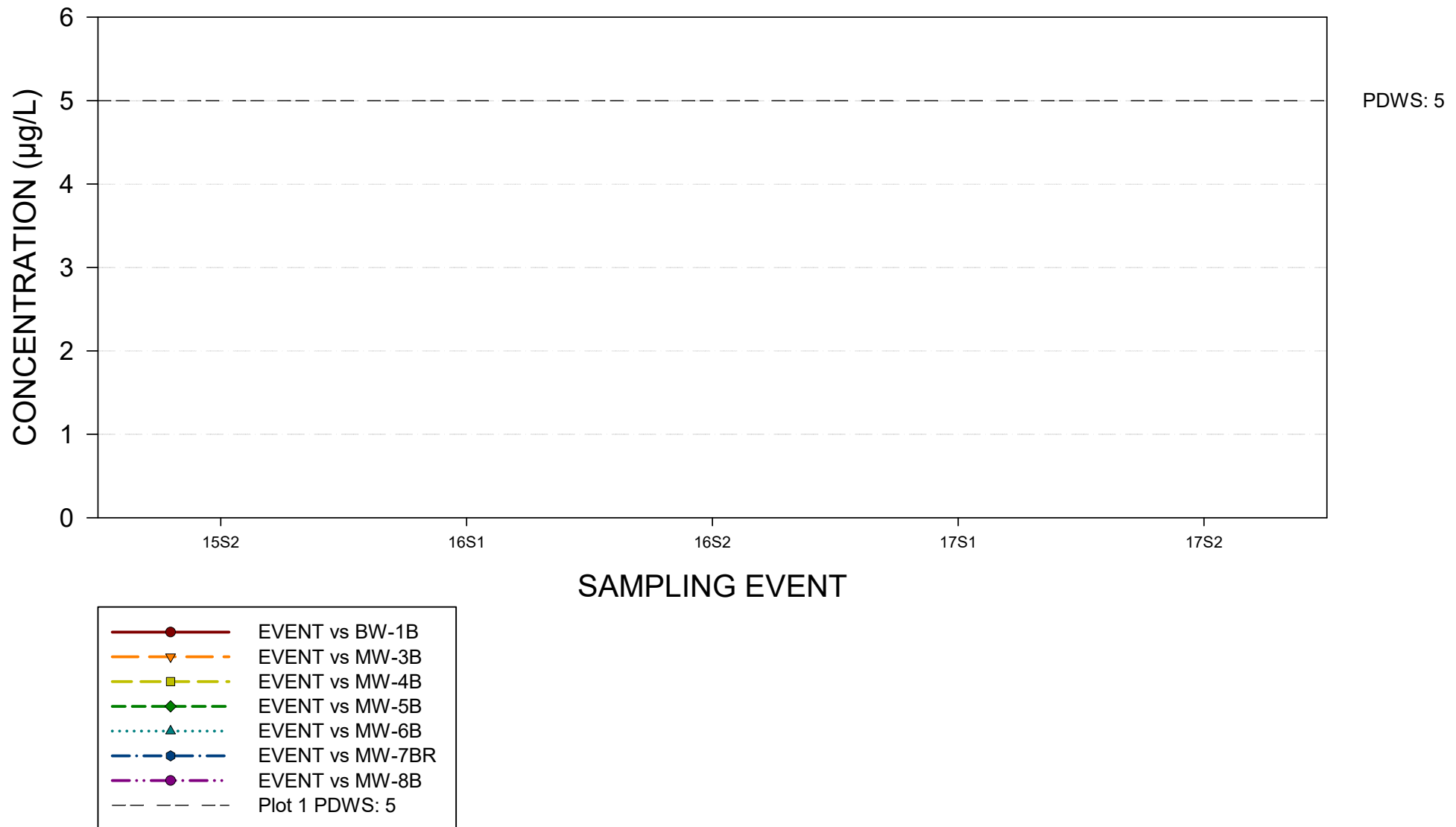
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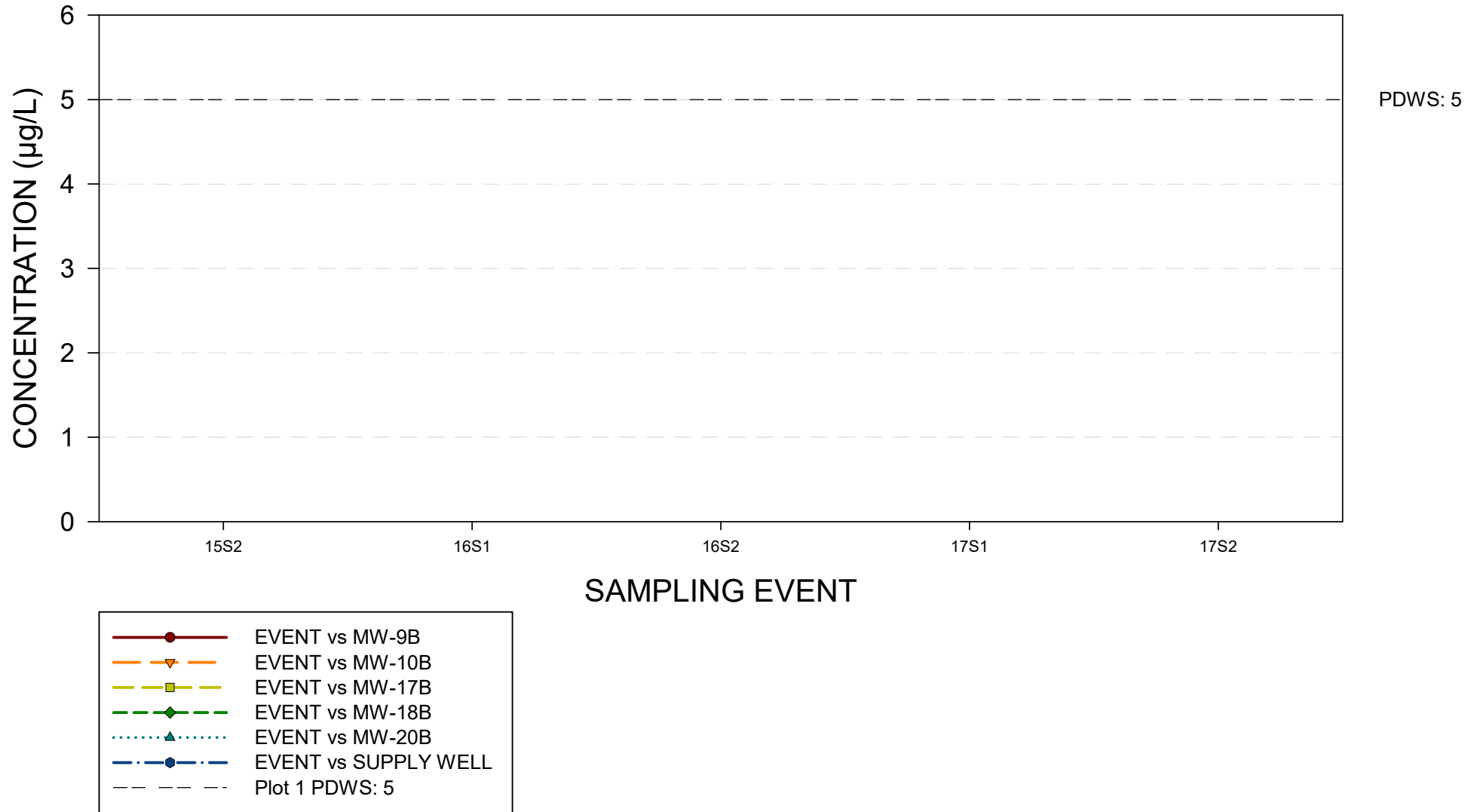
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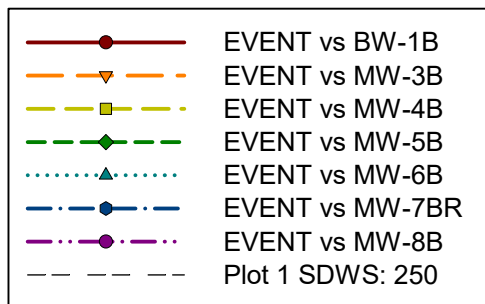
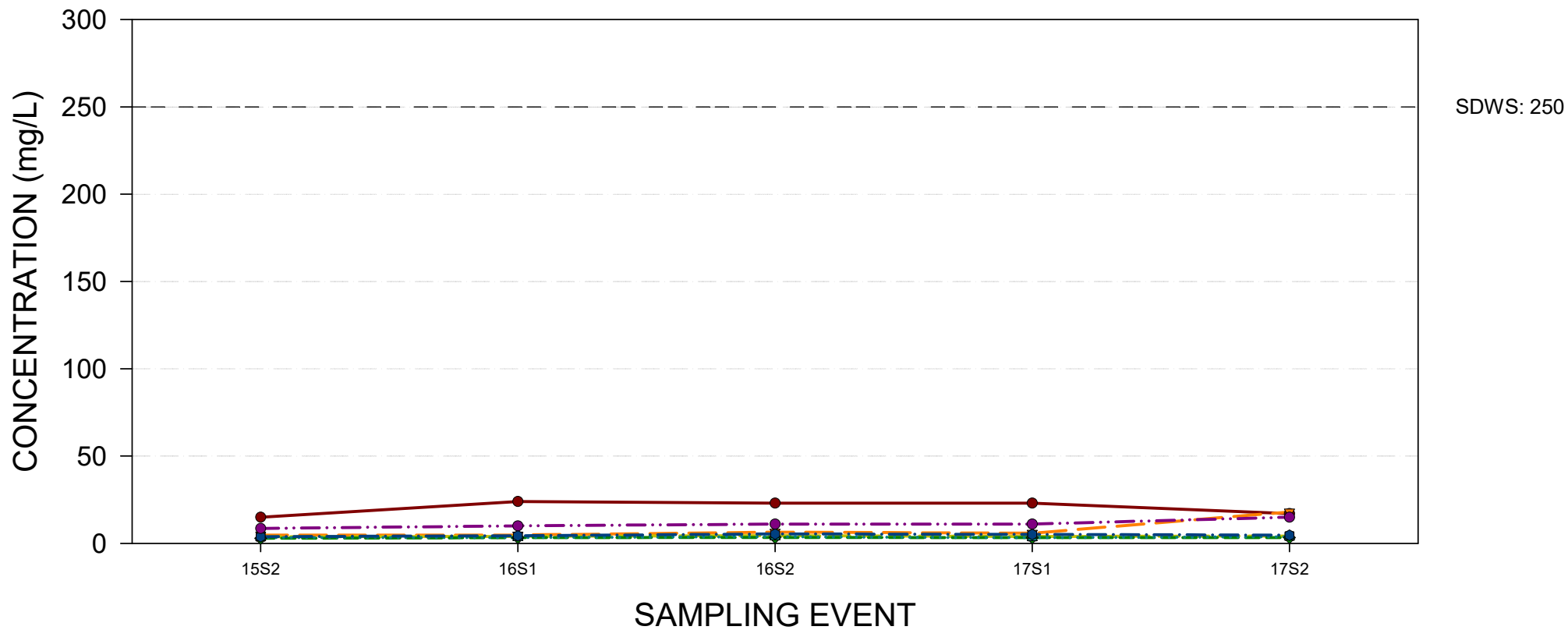
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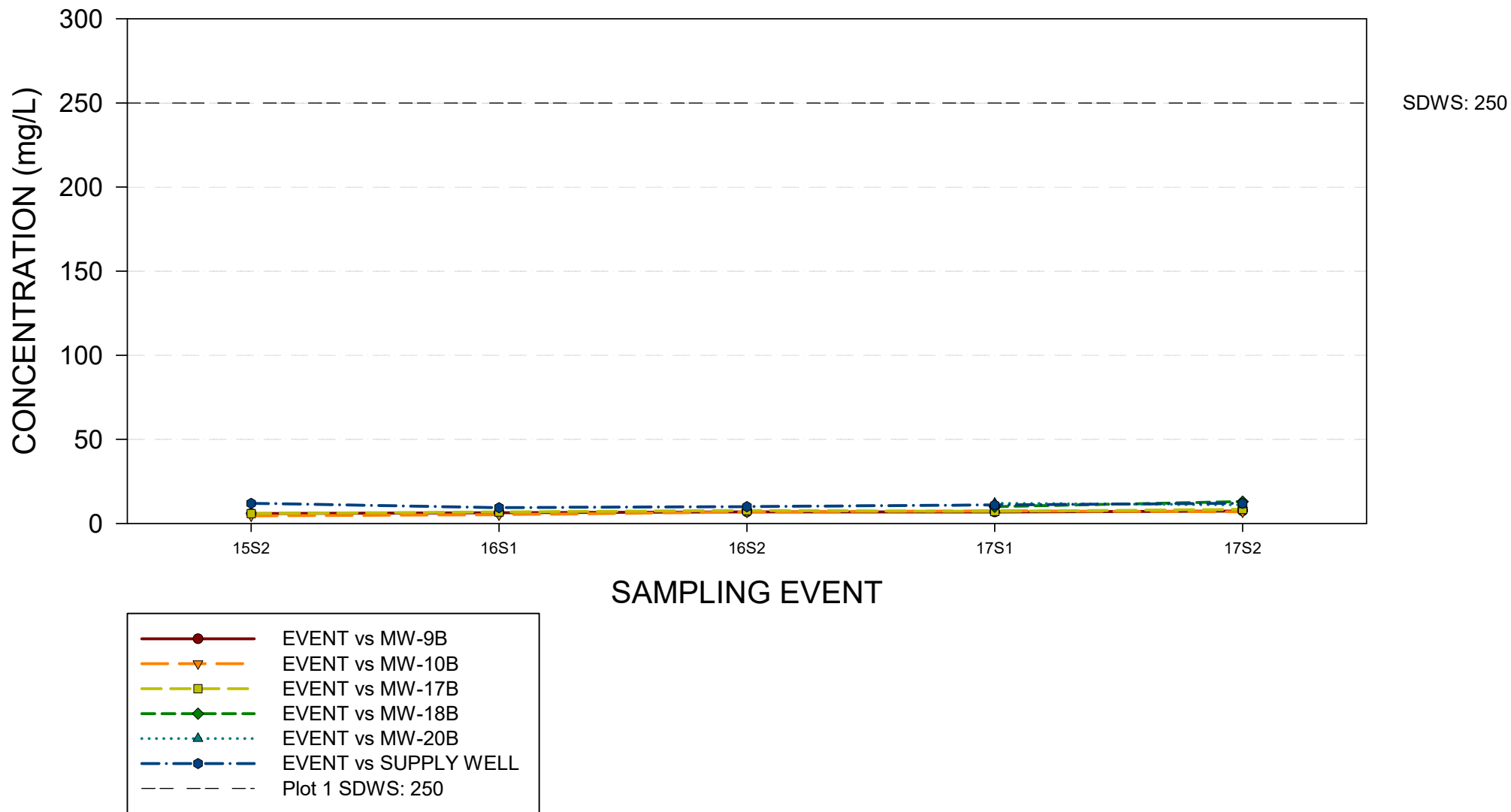
CHLORIDE

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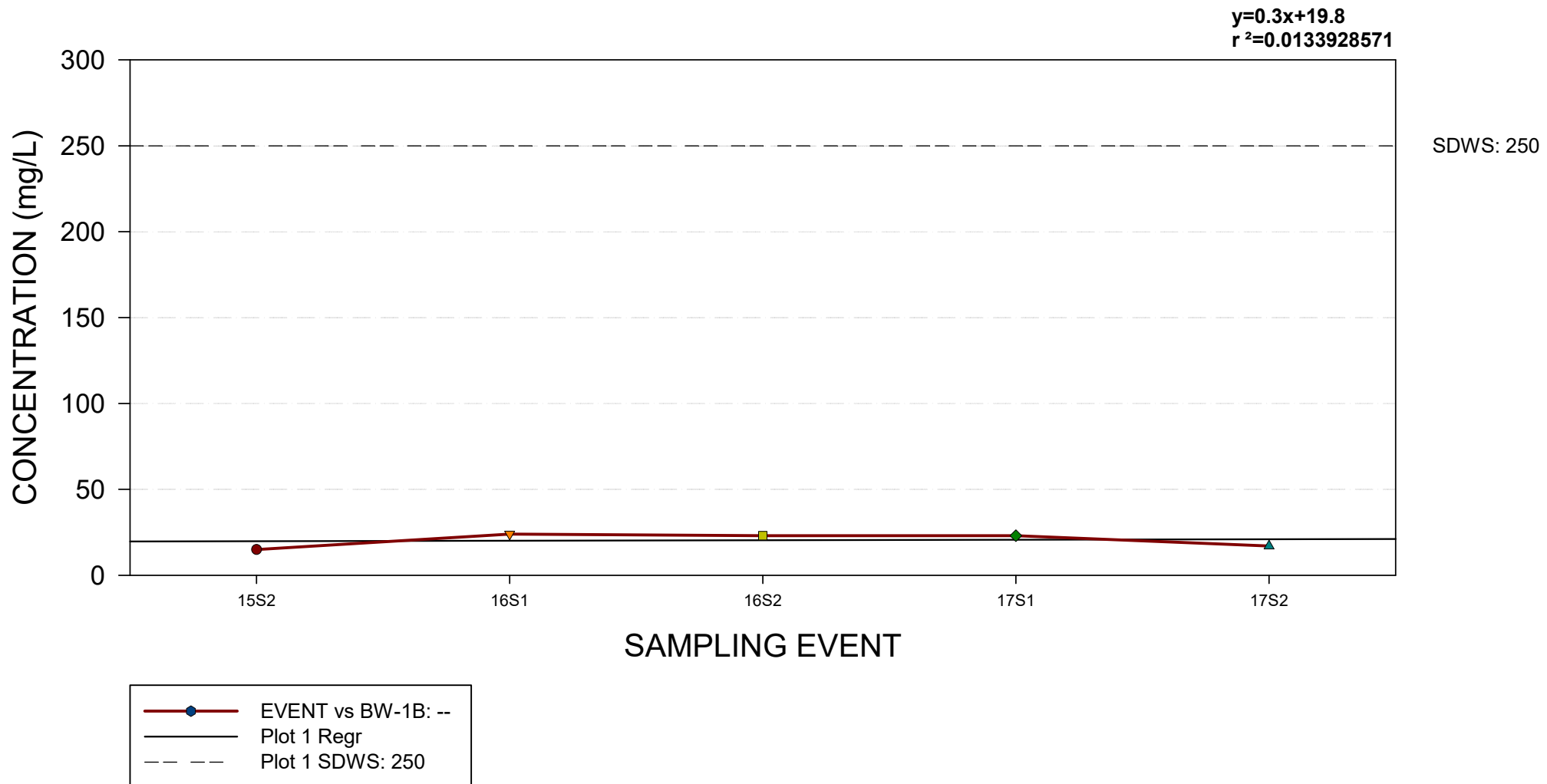
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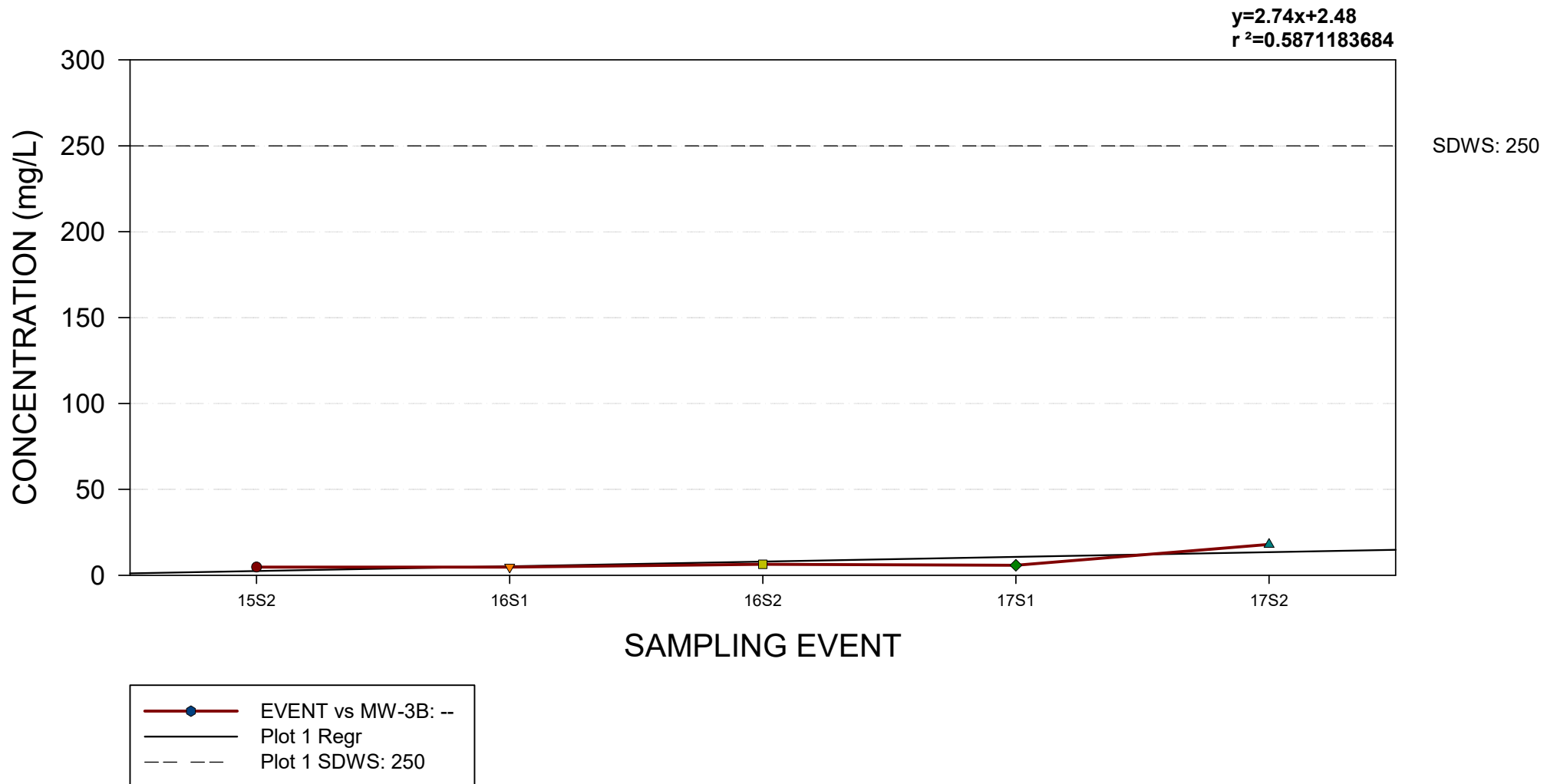
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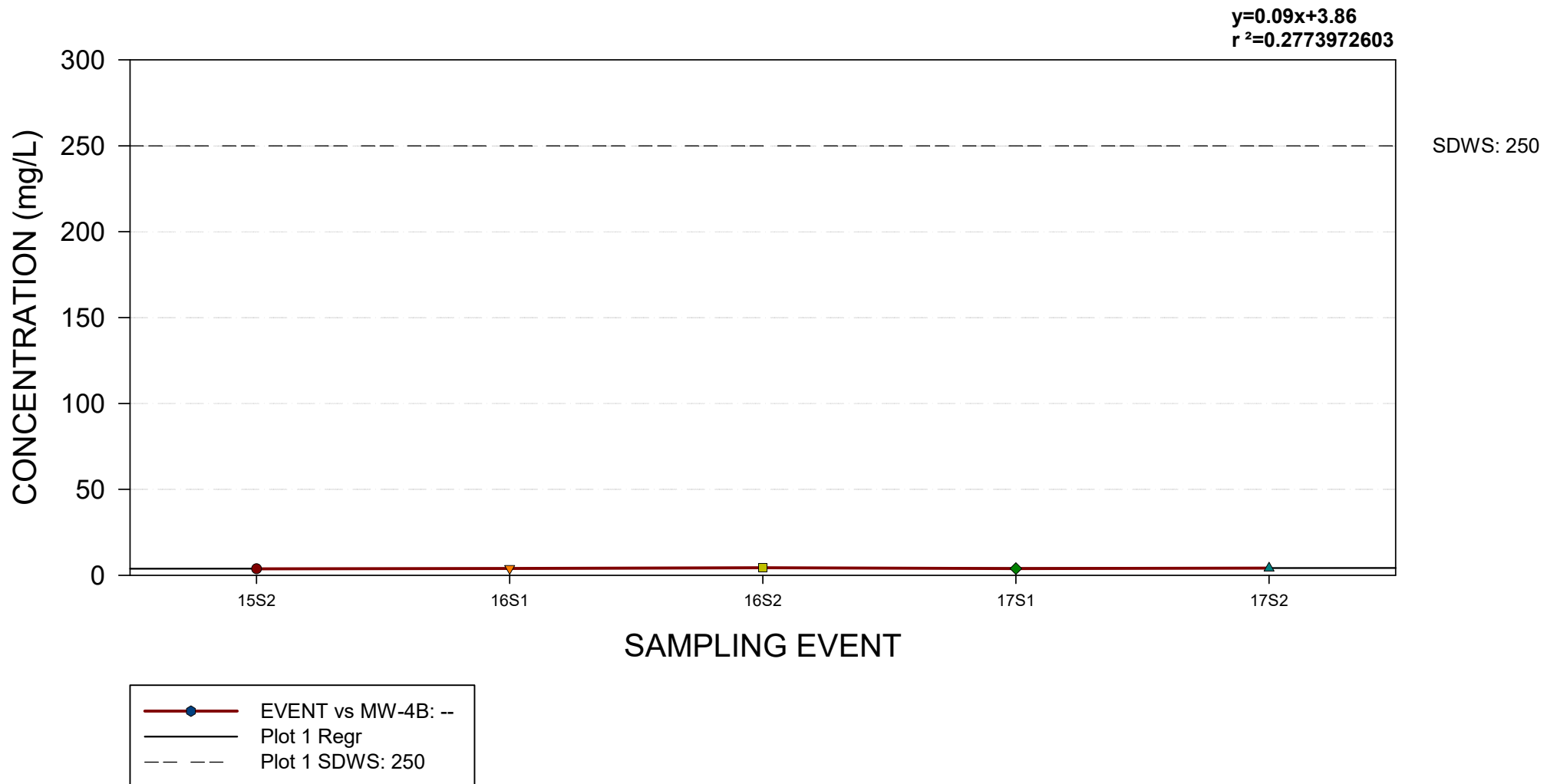
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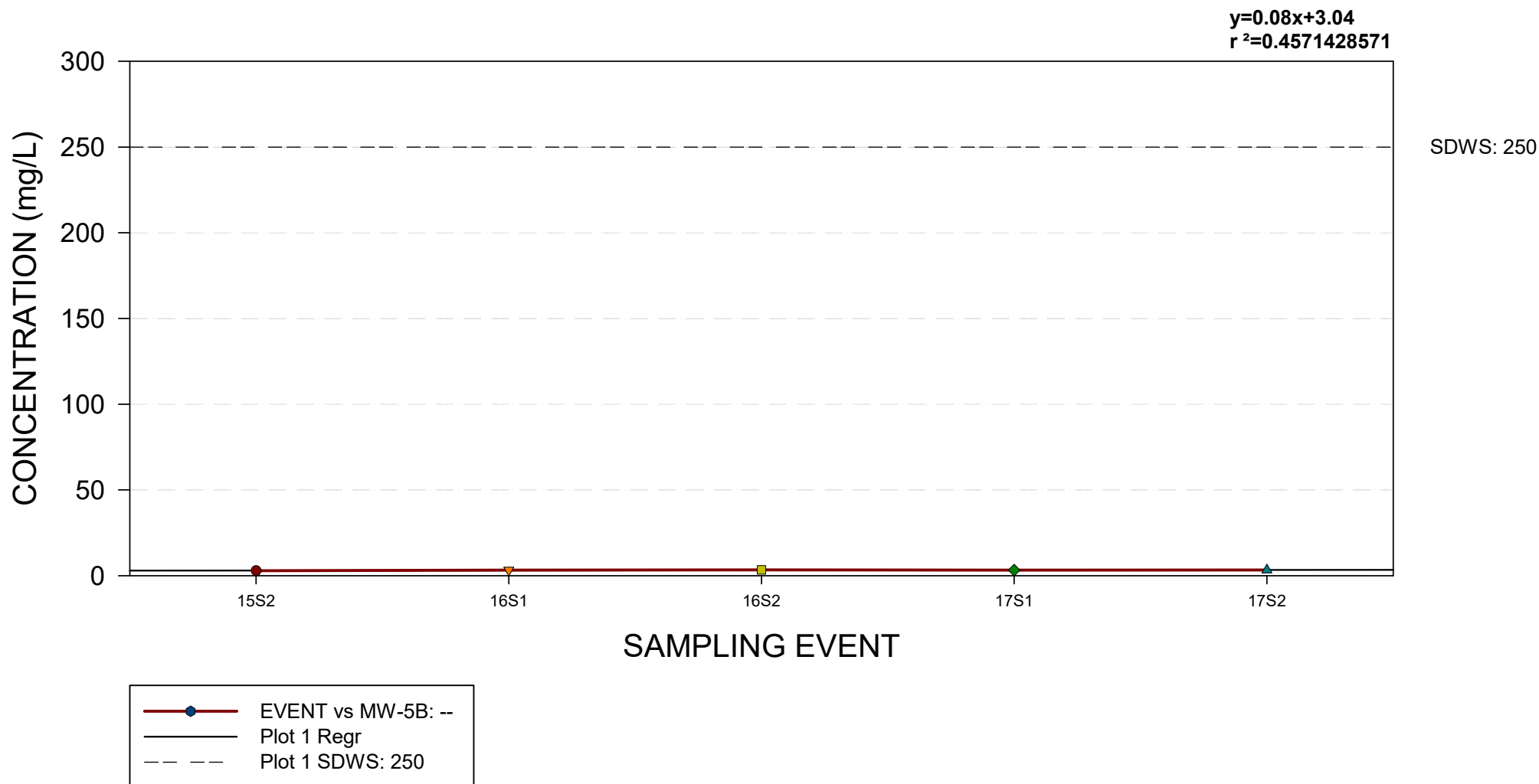
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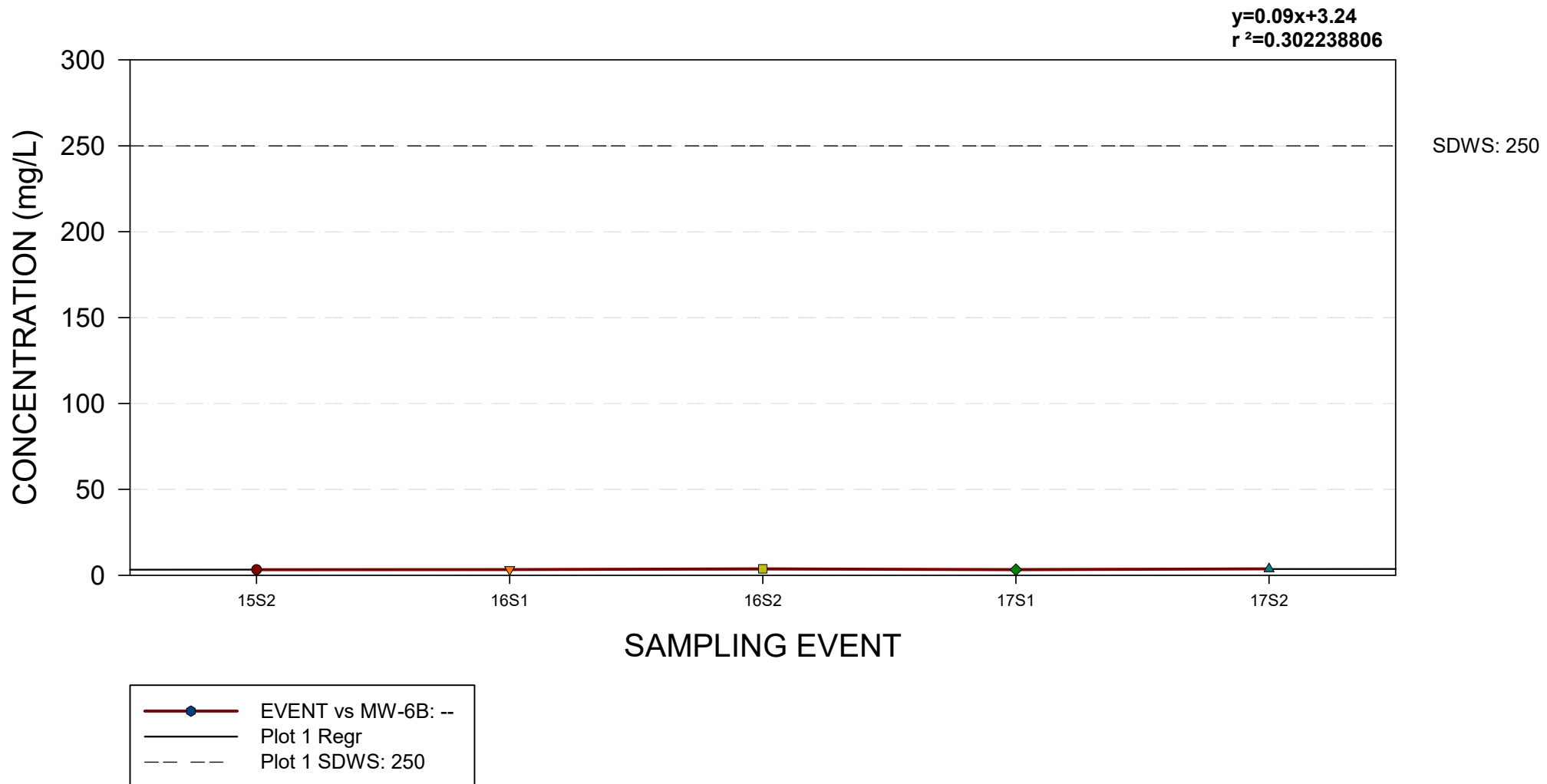
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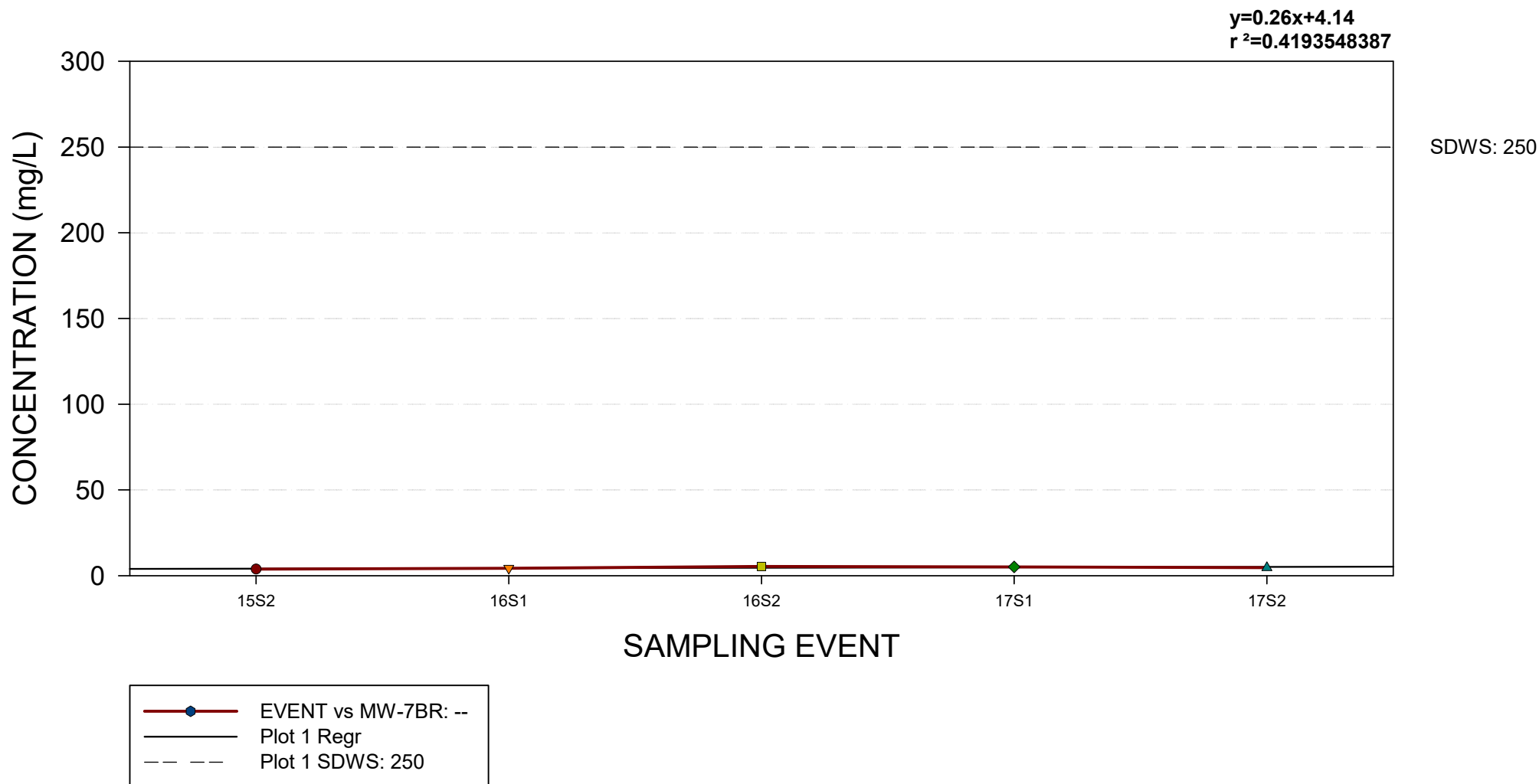
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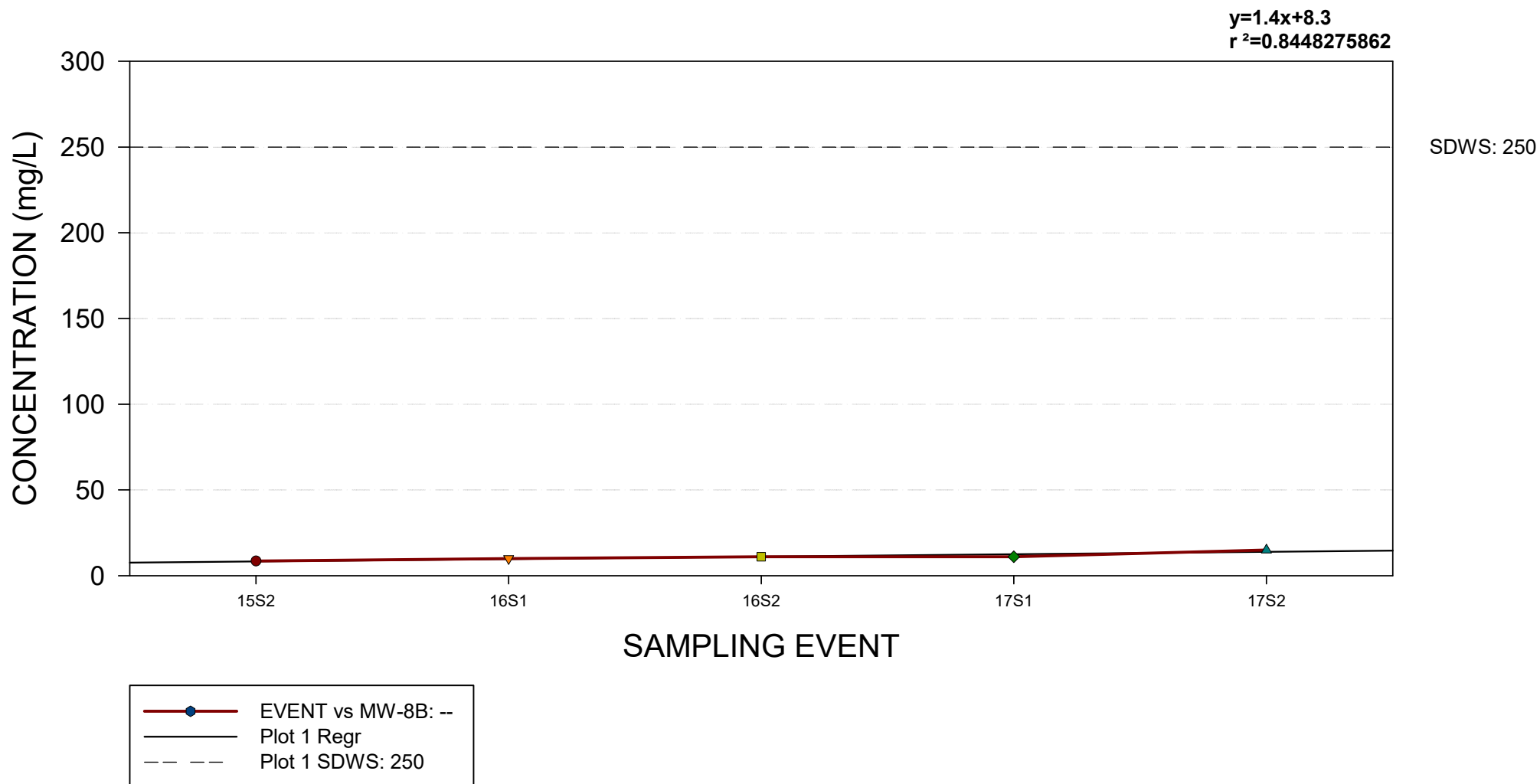
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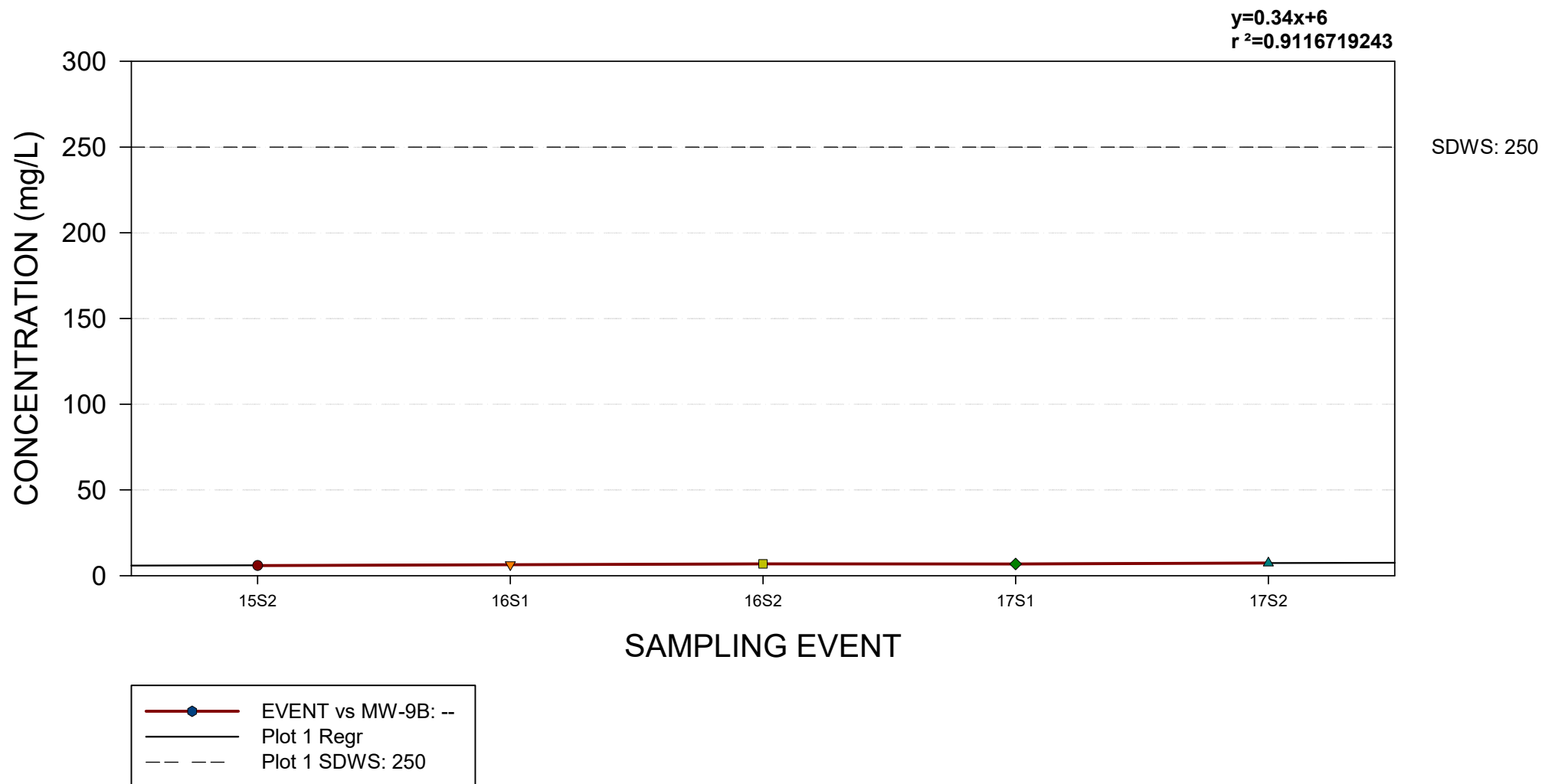
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-8B GROUNDWATER CHEMISTRY TREND GRAPH



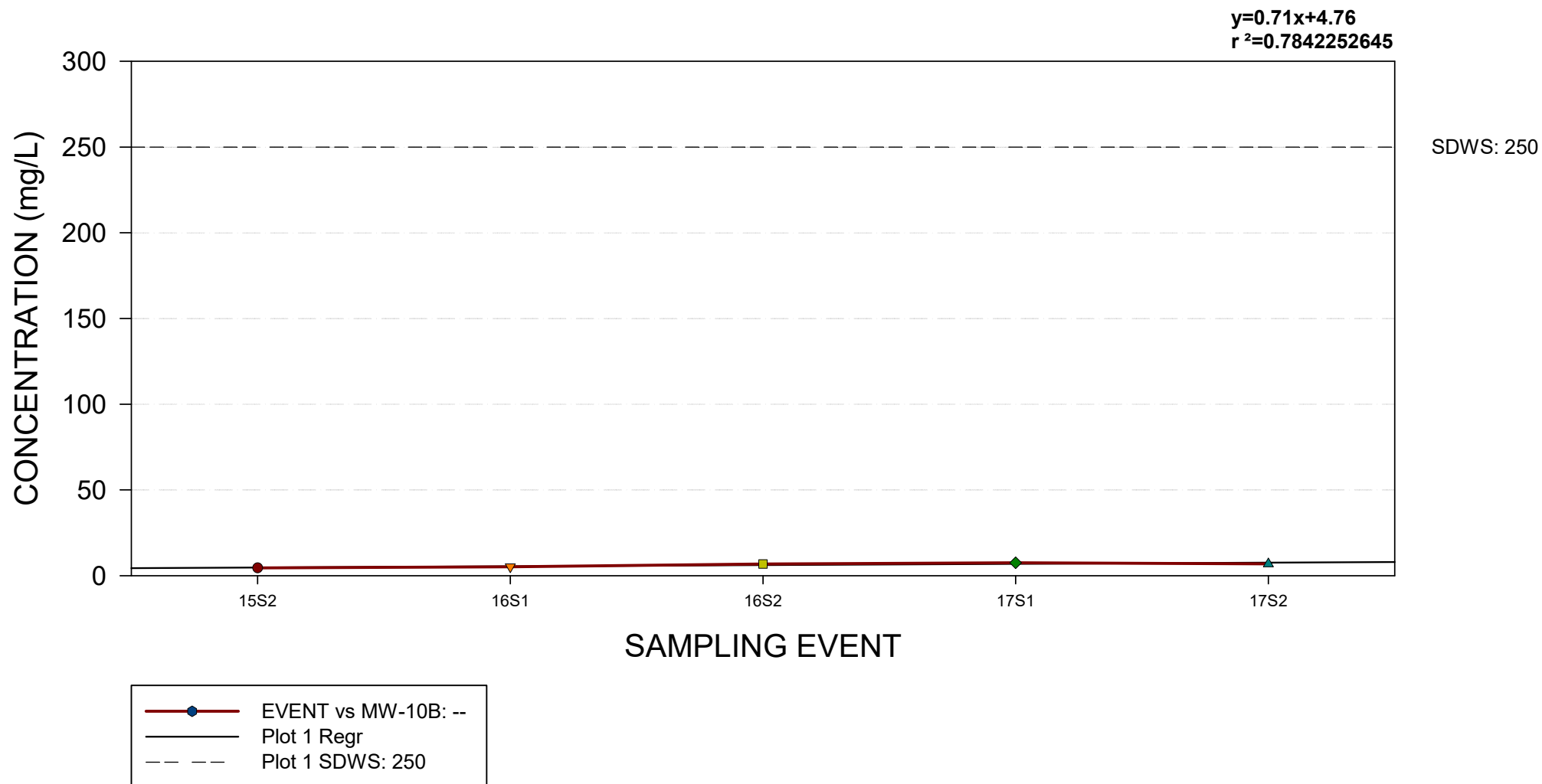
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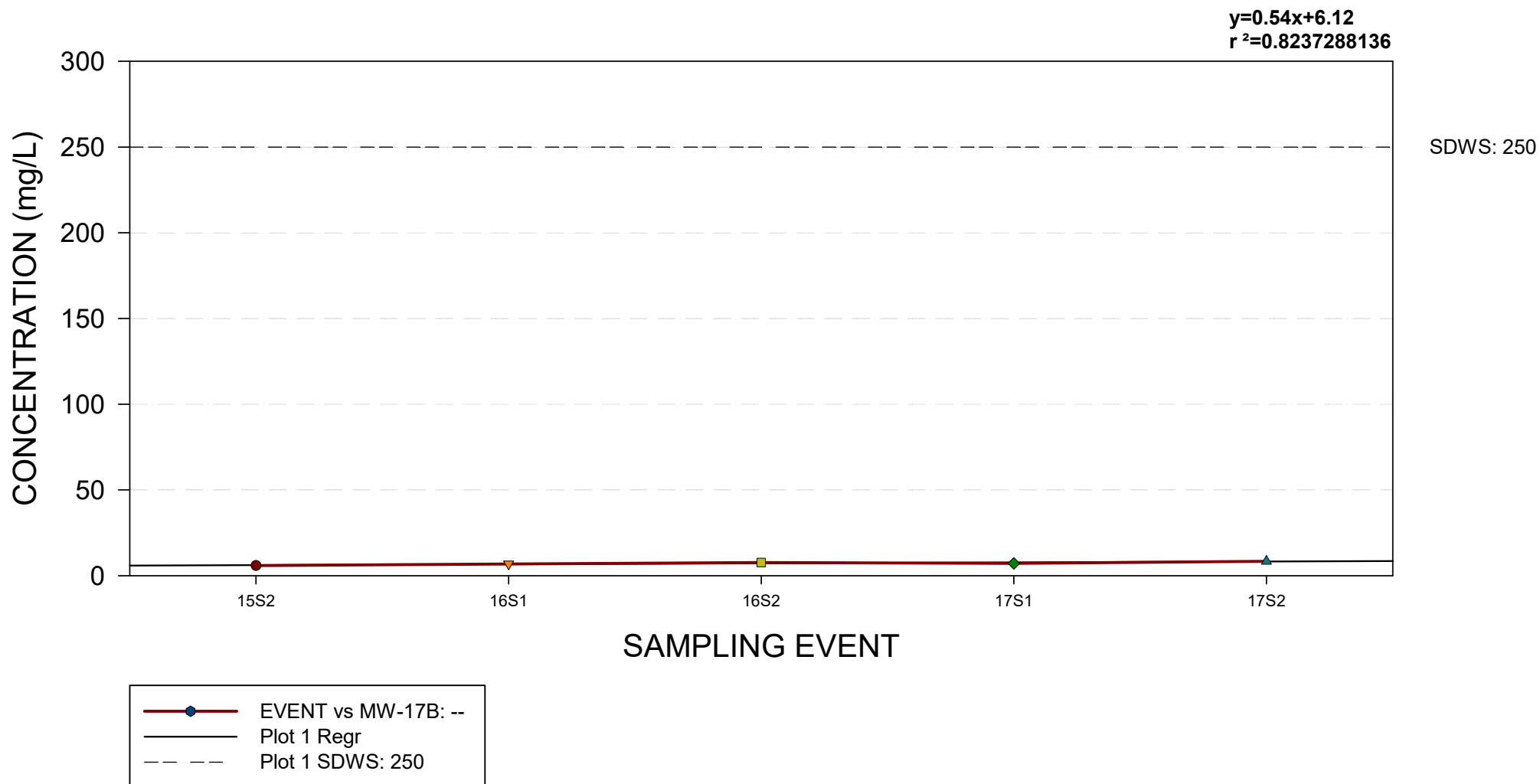
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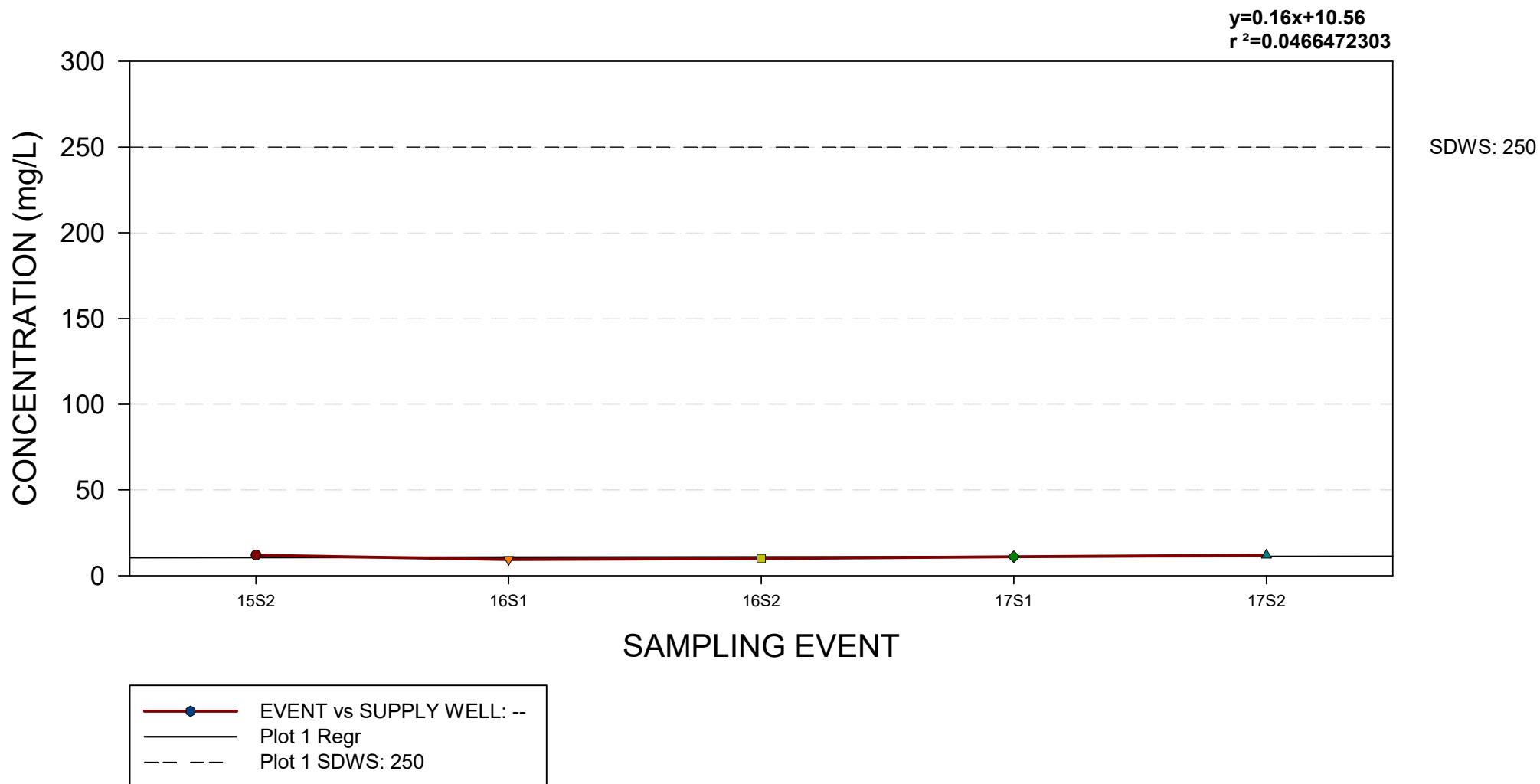
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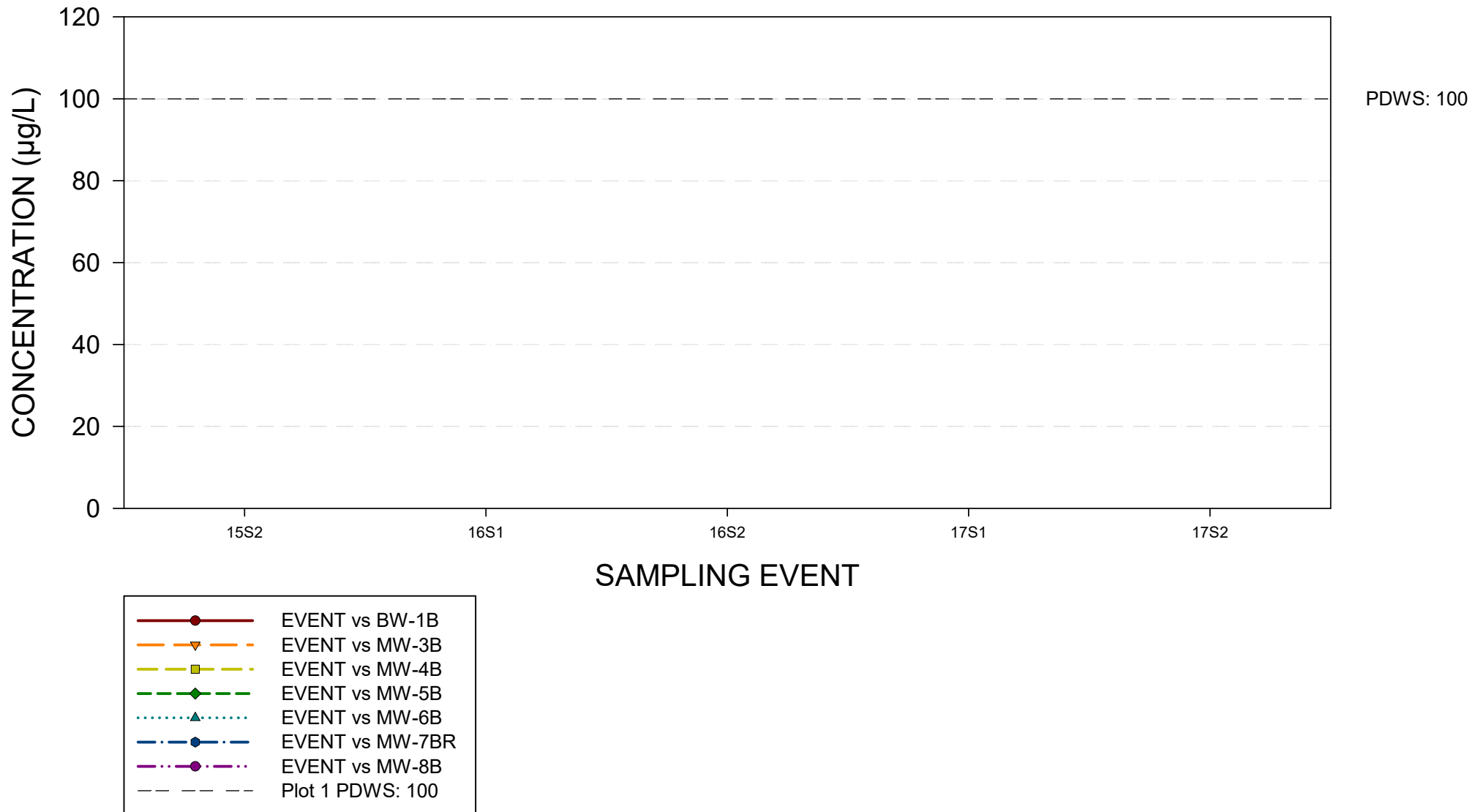


CHLORIDE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY SUPPLY WELL GROUNDWATER CHEMISTRY TREND GRAPH

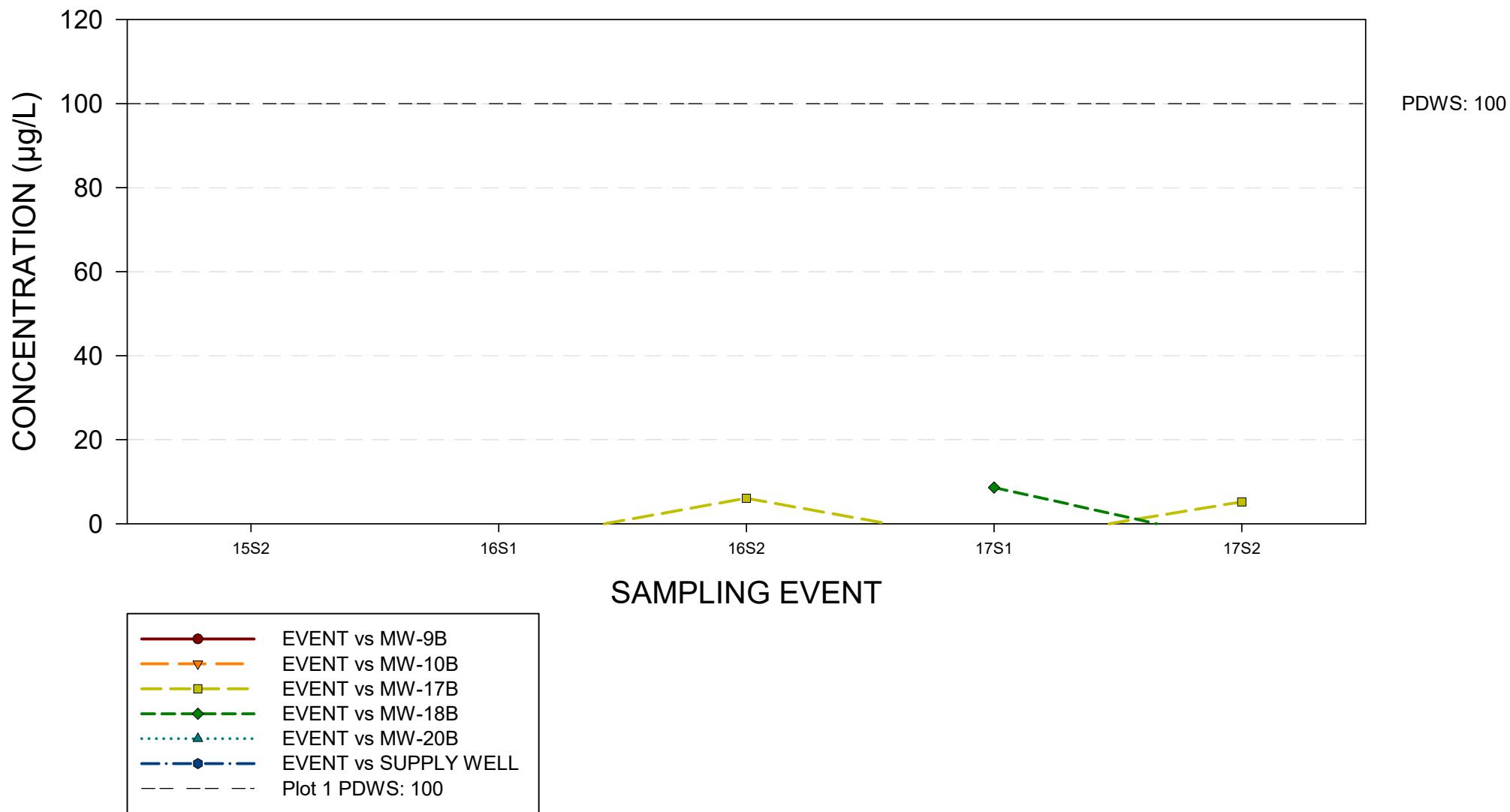


ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



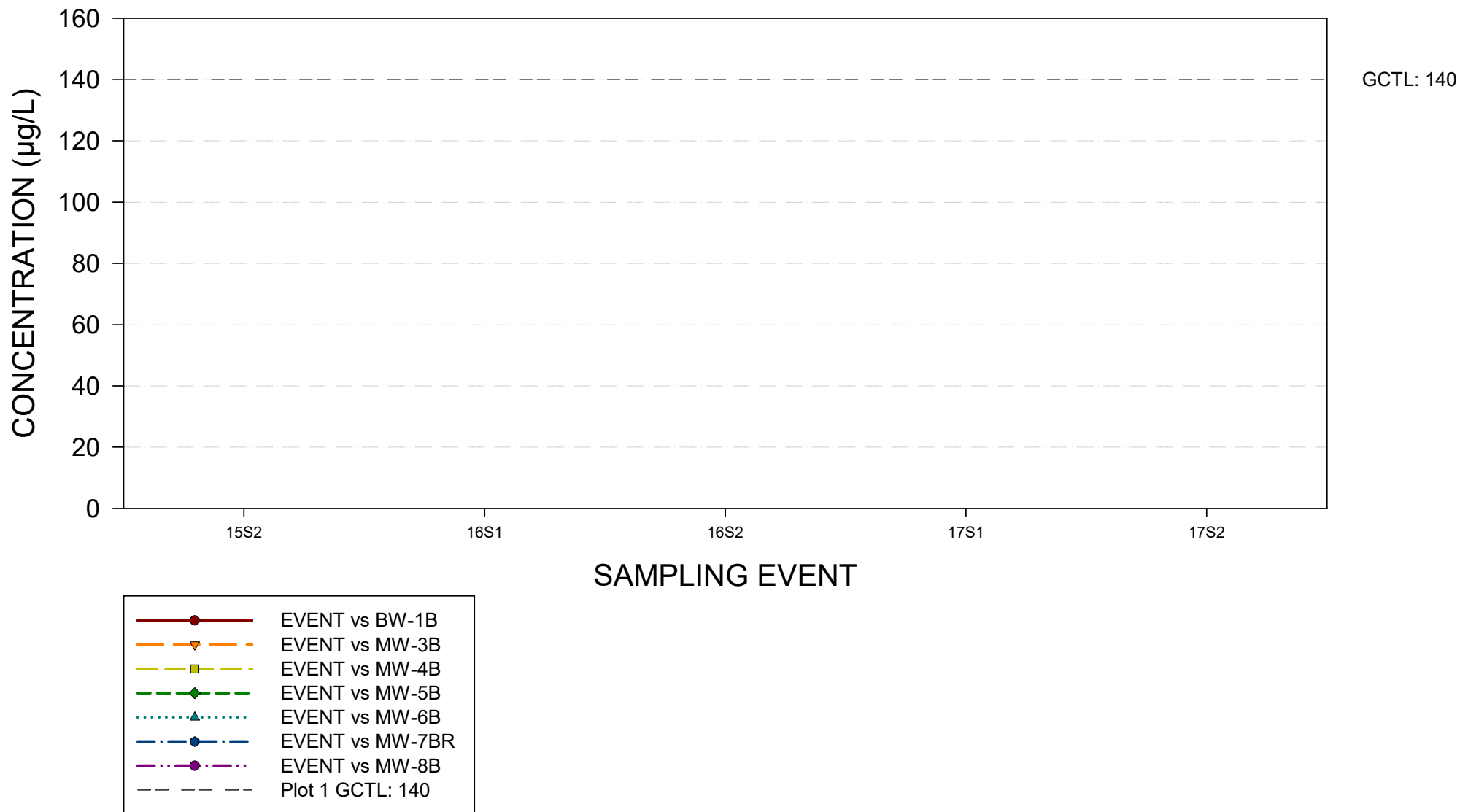
CHROMIUM

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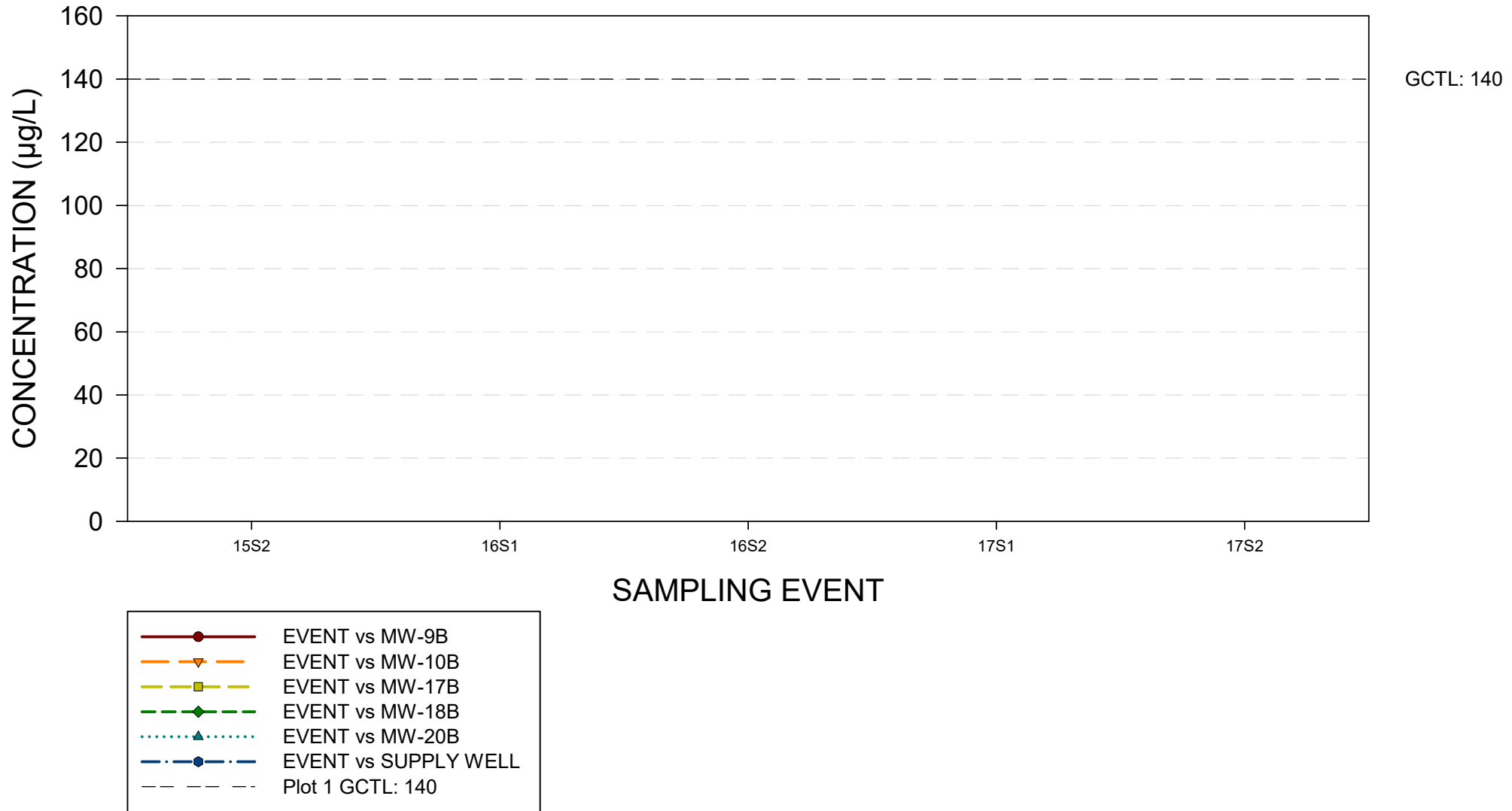
COBALT

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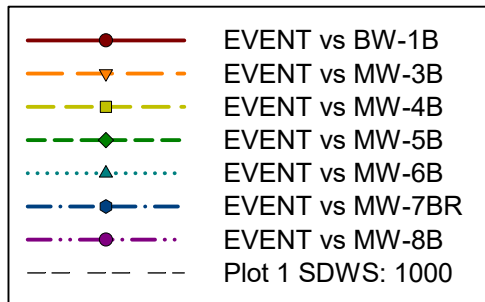
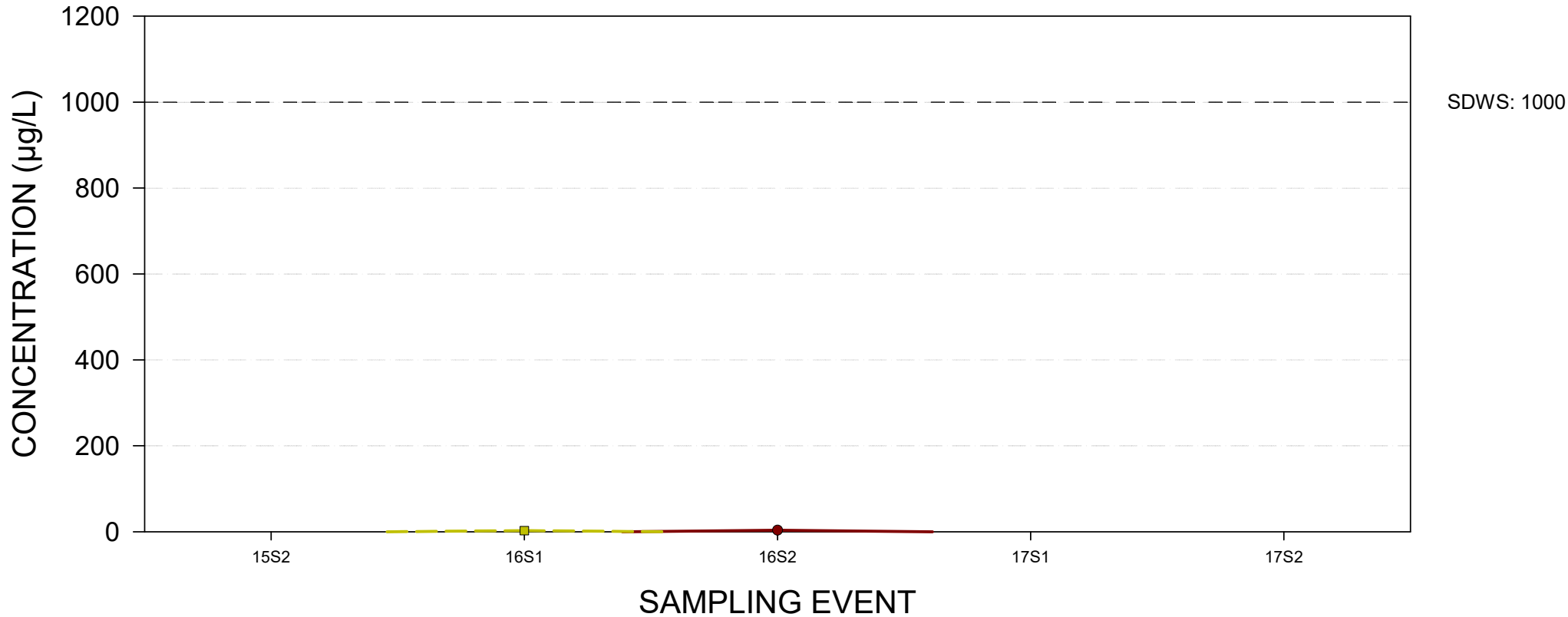
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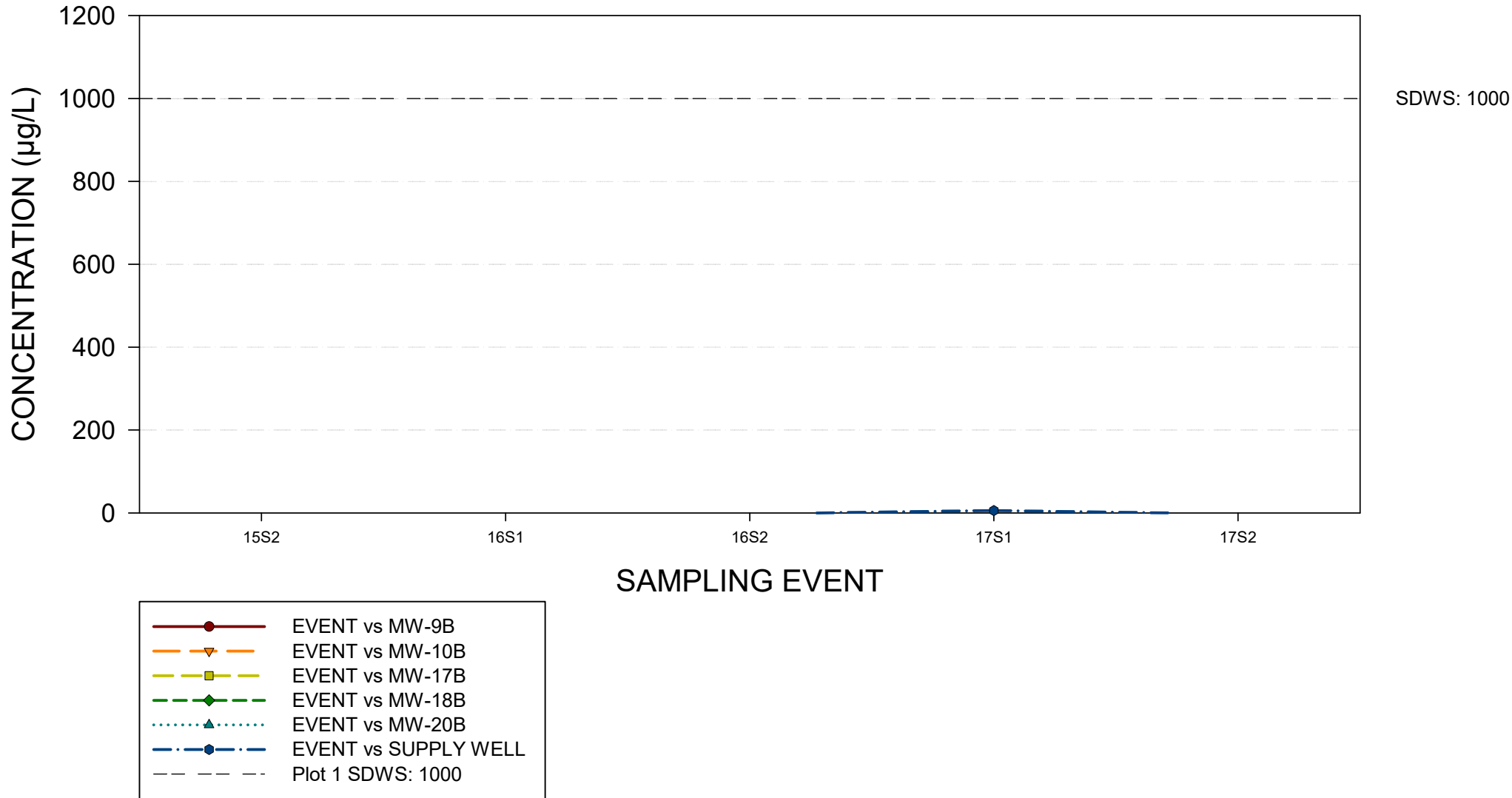
COPPER

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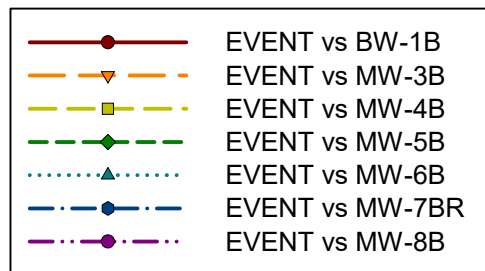
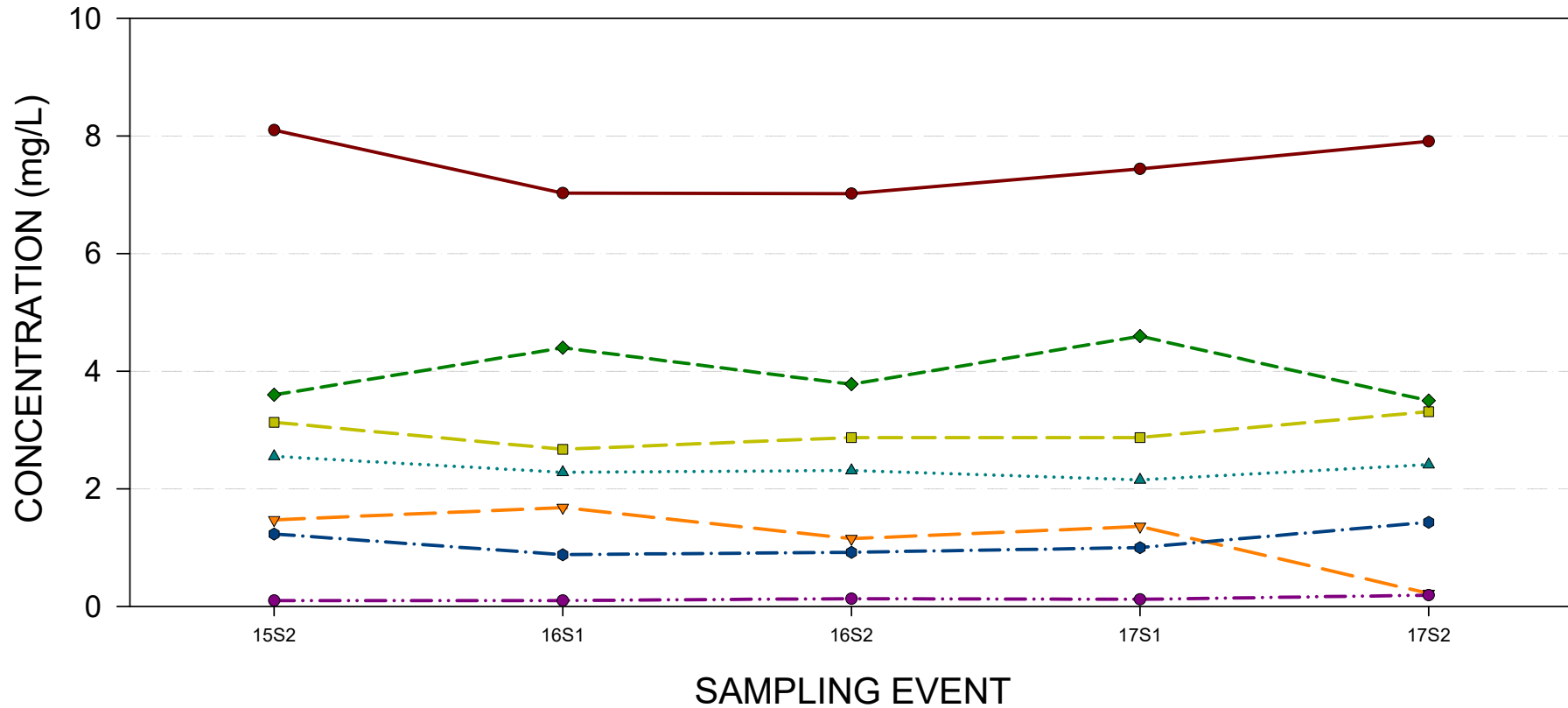
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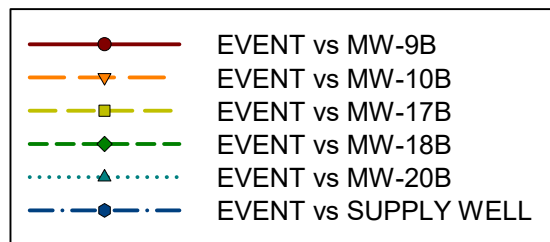
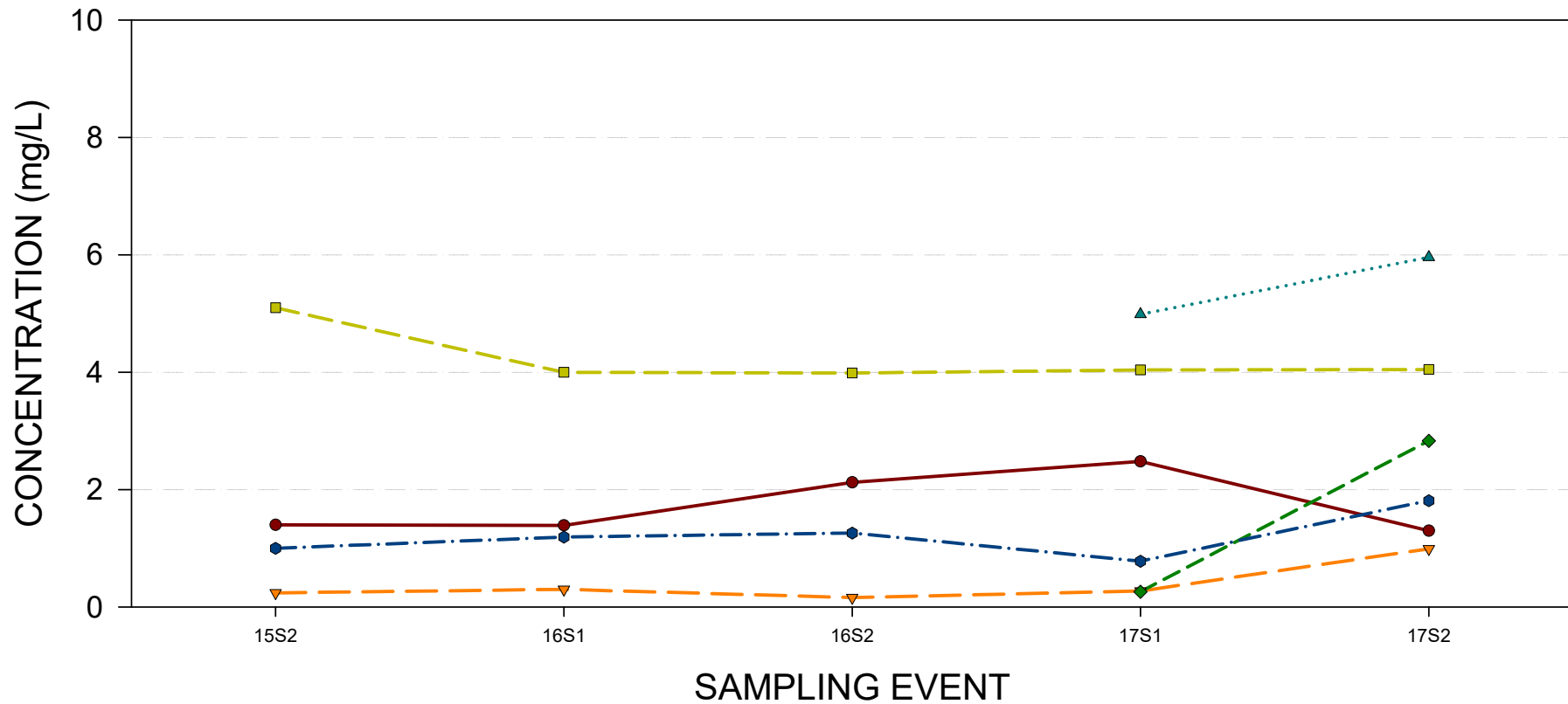
DISSOLVED OXYGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



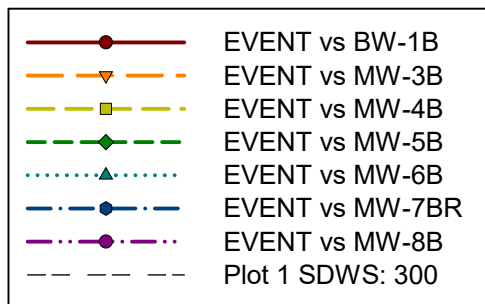
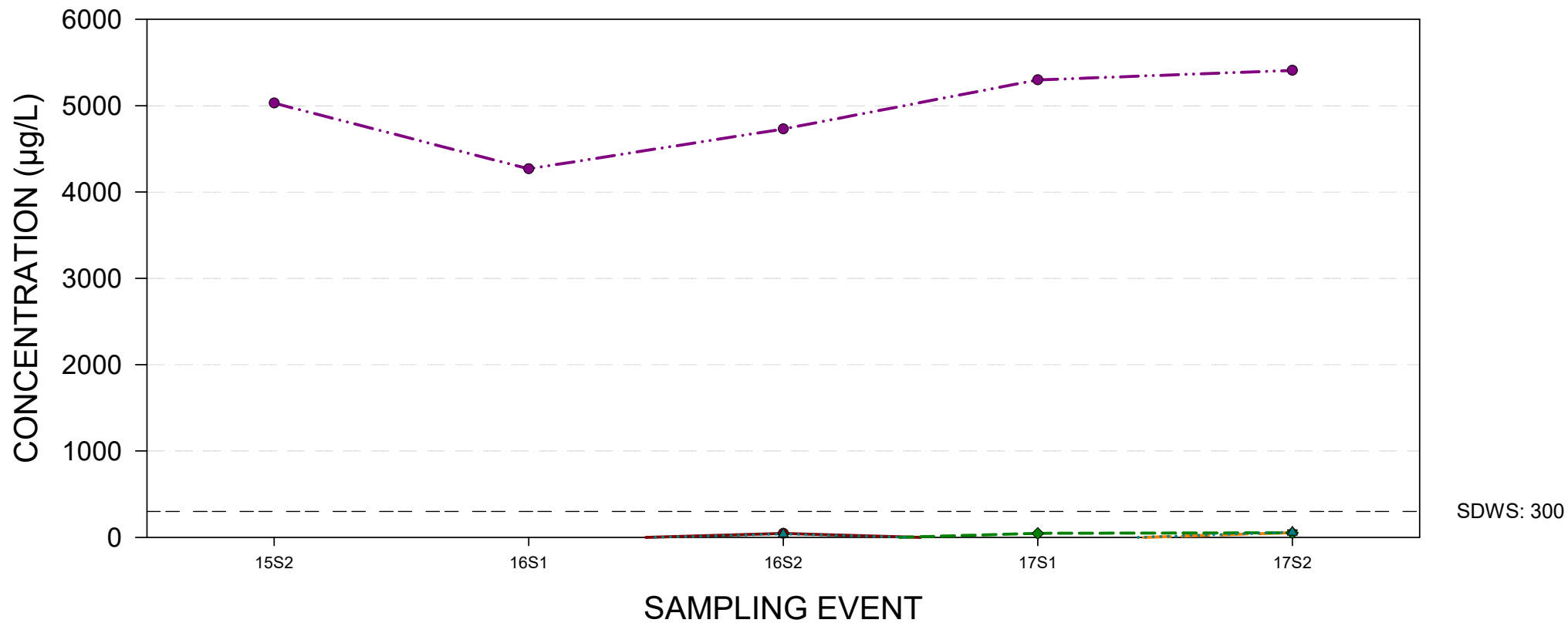
DISSOLVED OXYGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



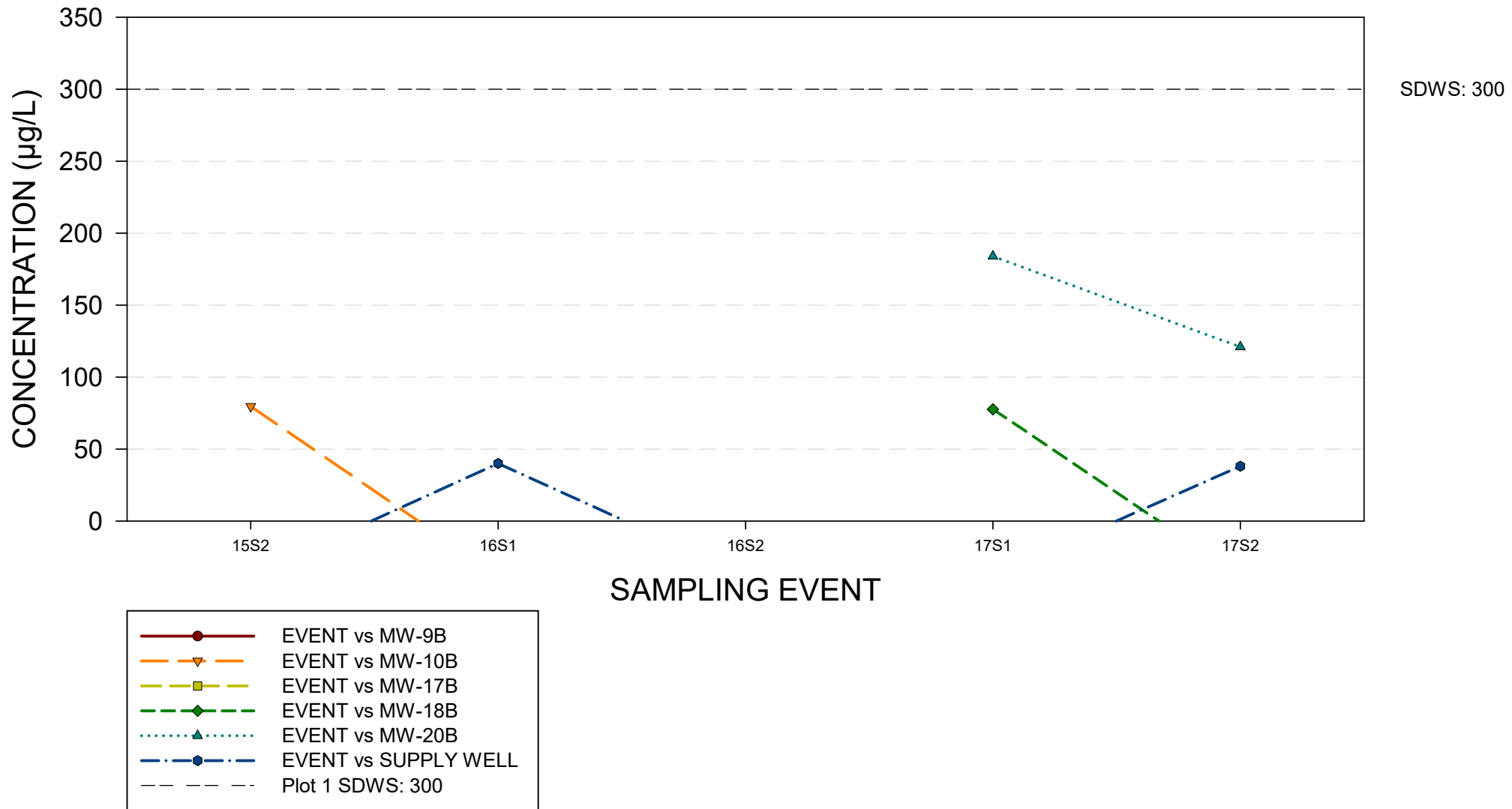
IRON

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



IRON

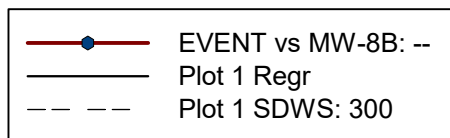
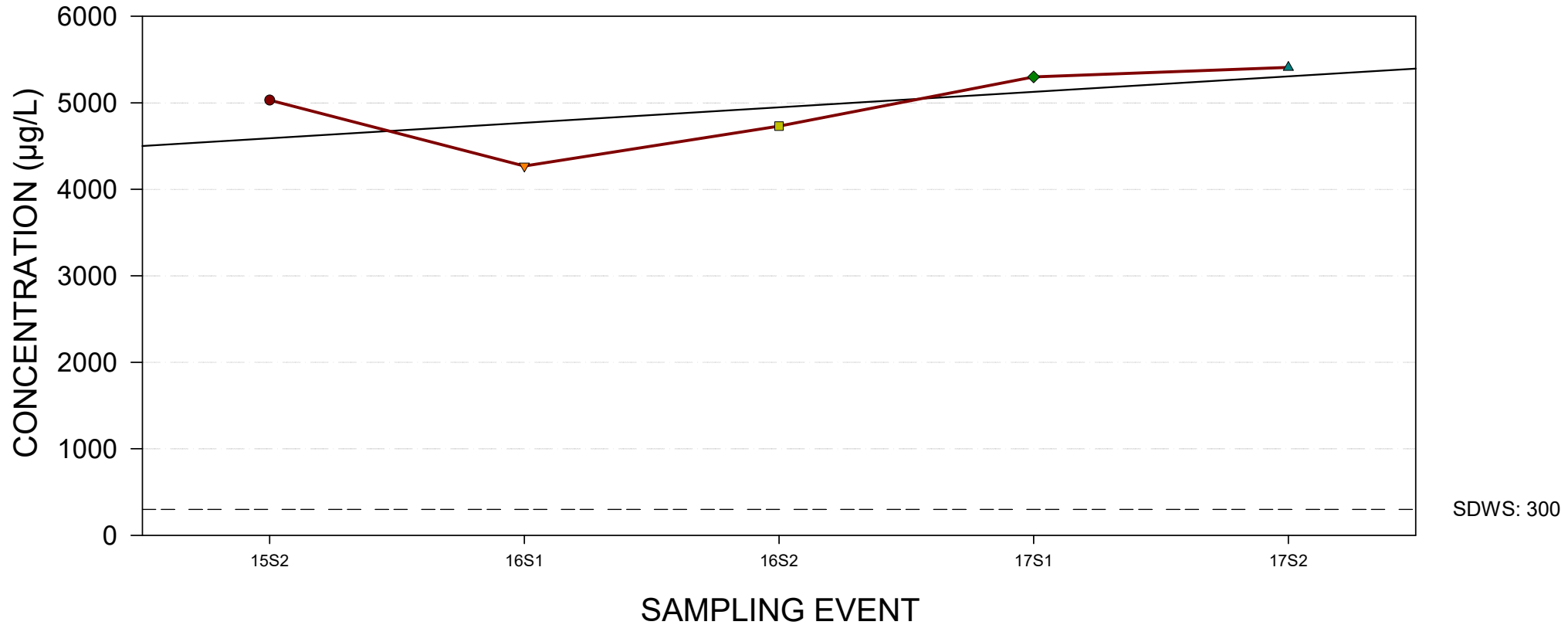
ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



IRON

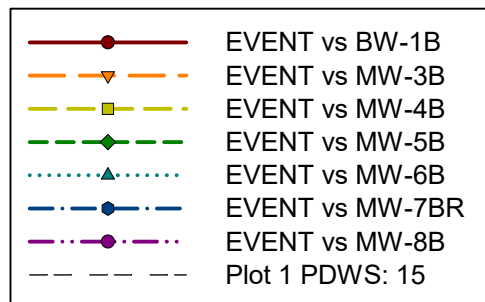
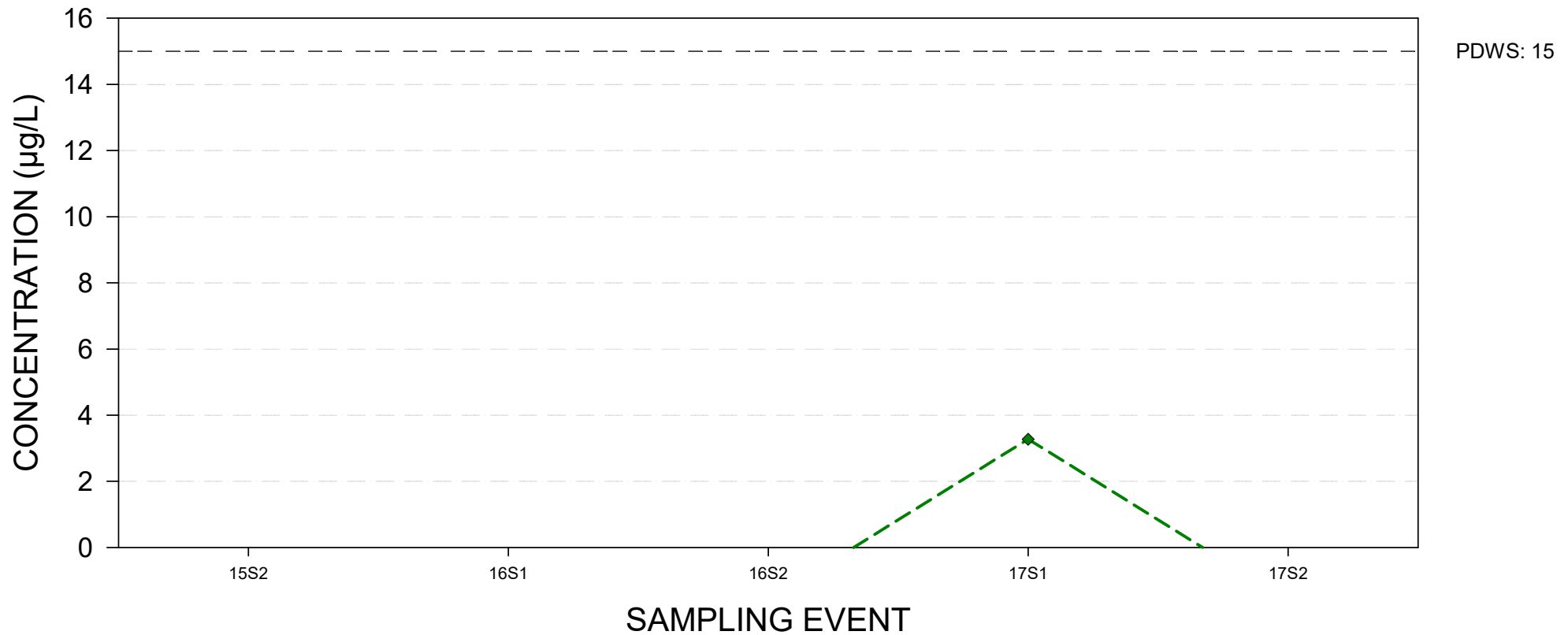
ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-8B GROUNDWATER CHEMISTRY TREND GRAPH

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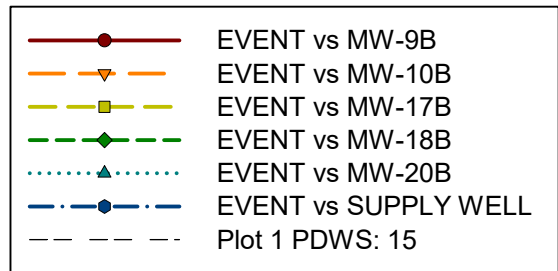
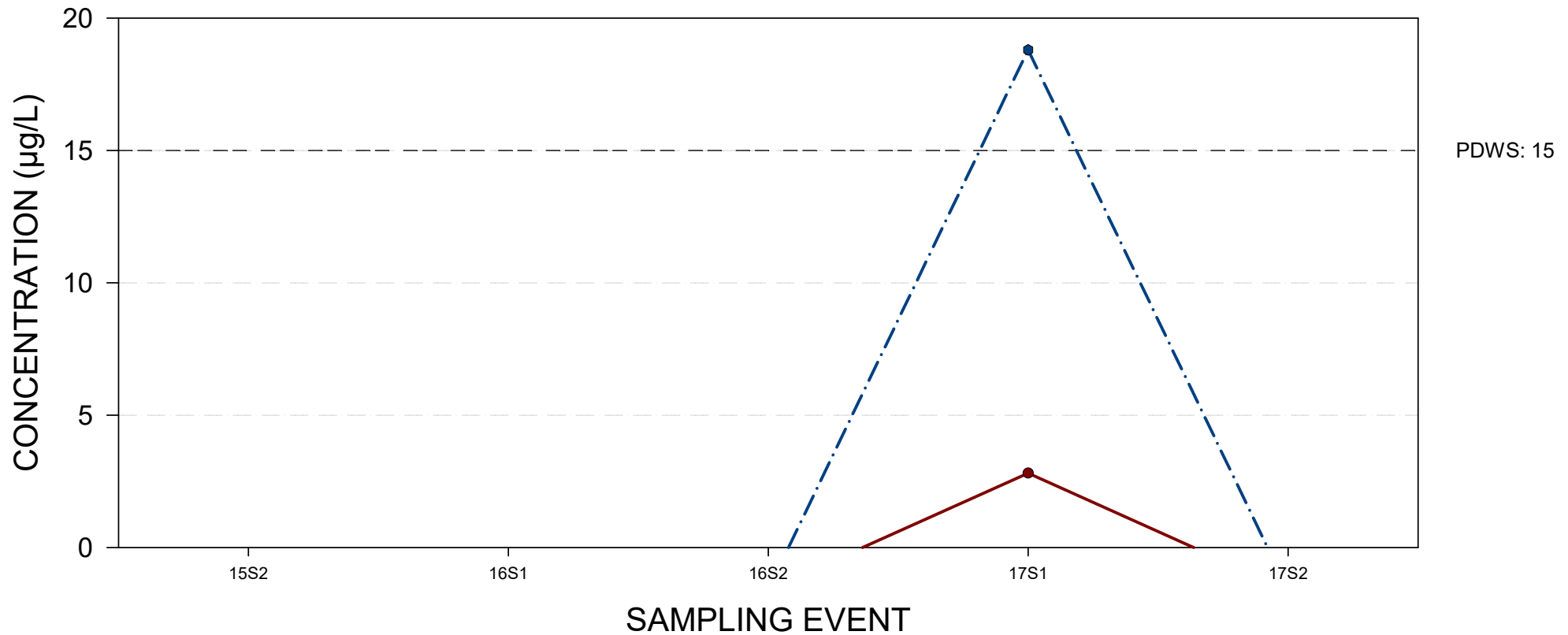
LEAD

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



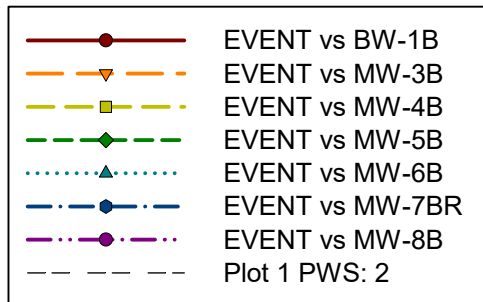
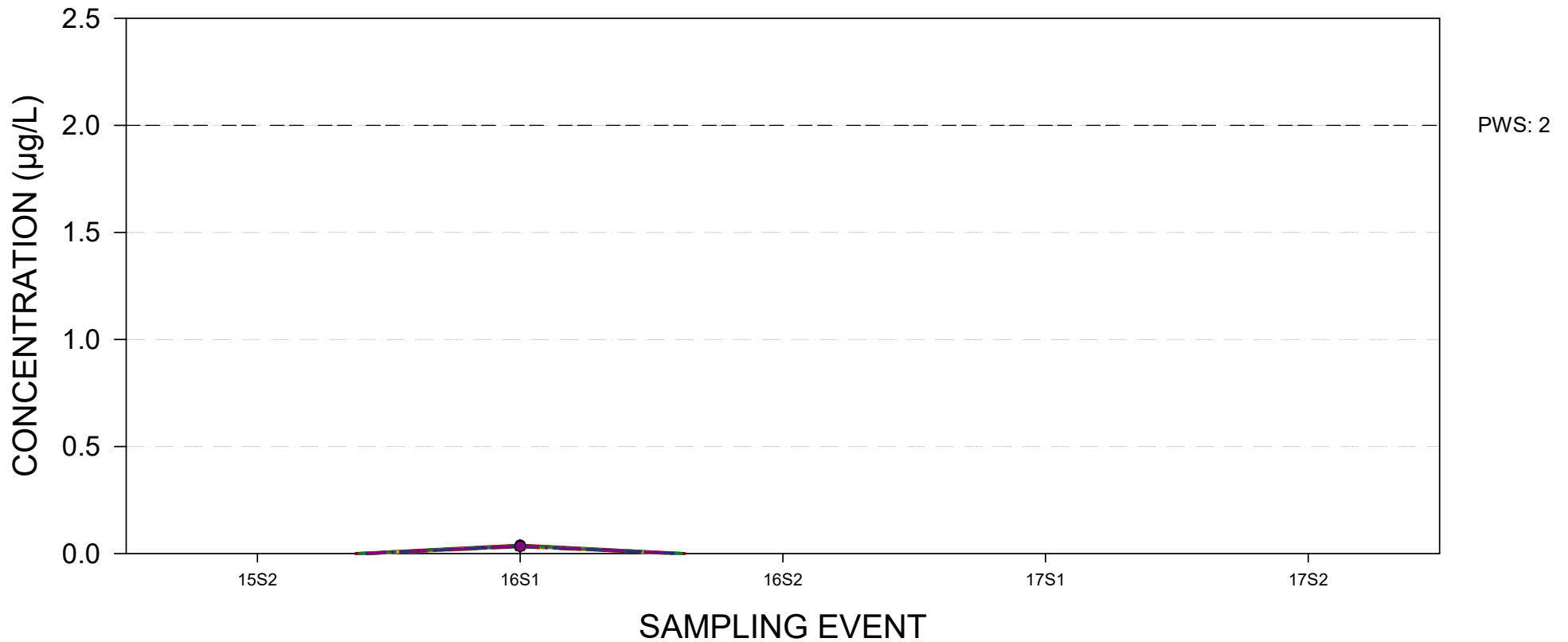
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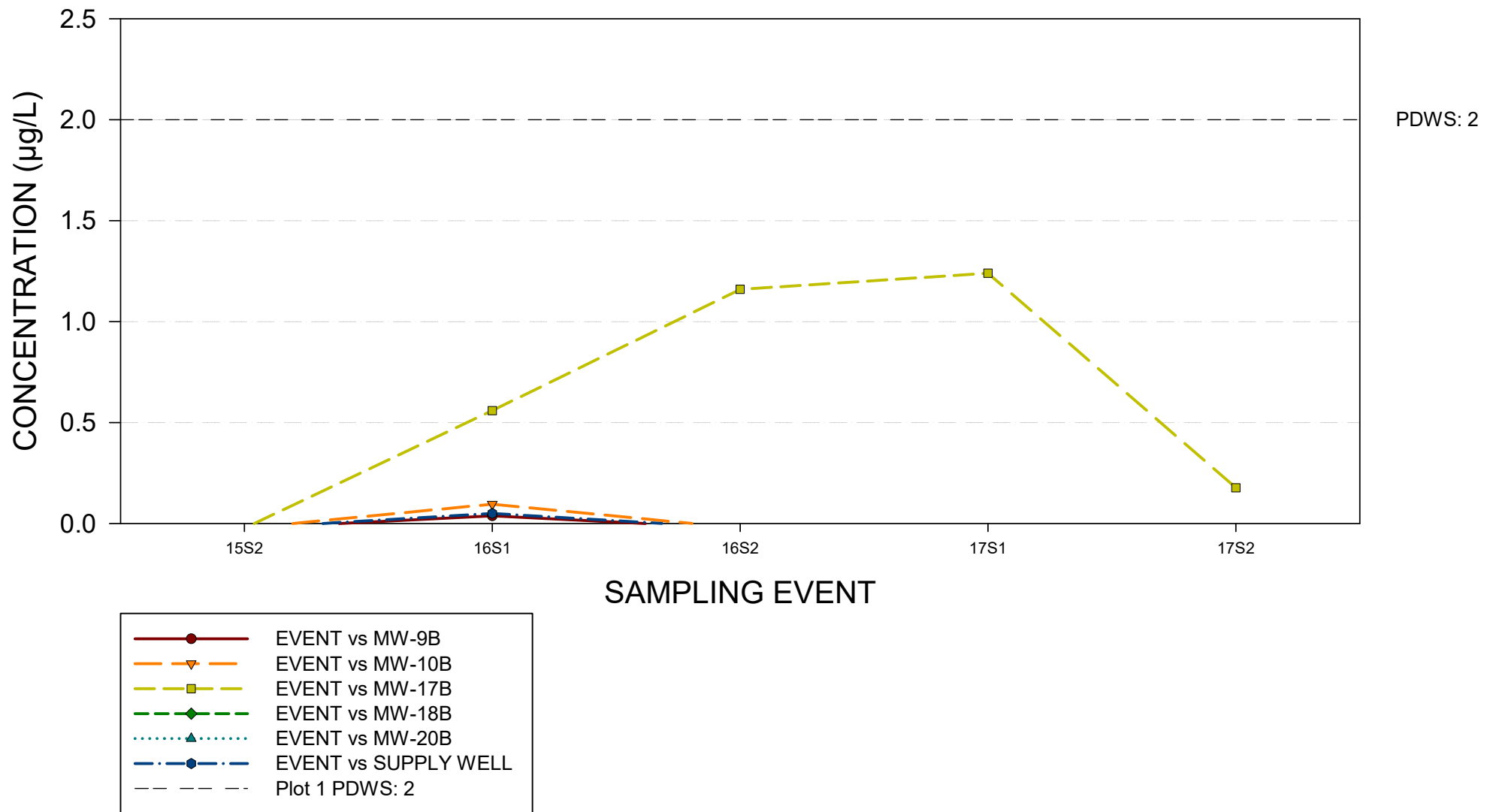
MERCURY

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



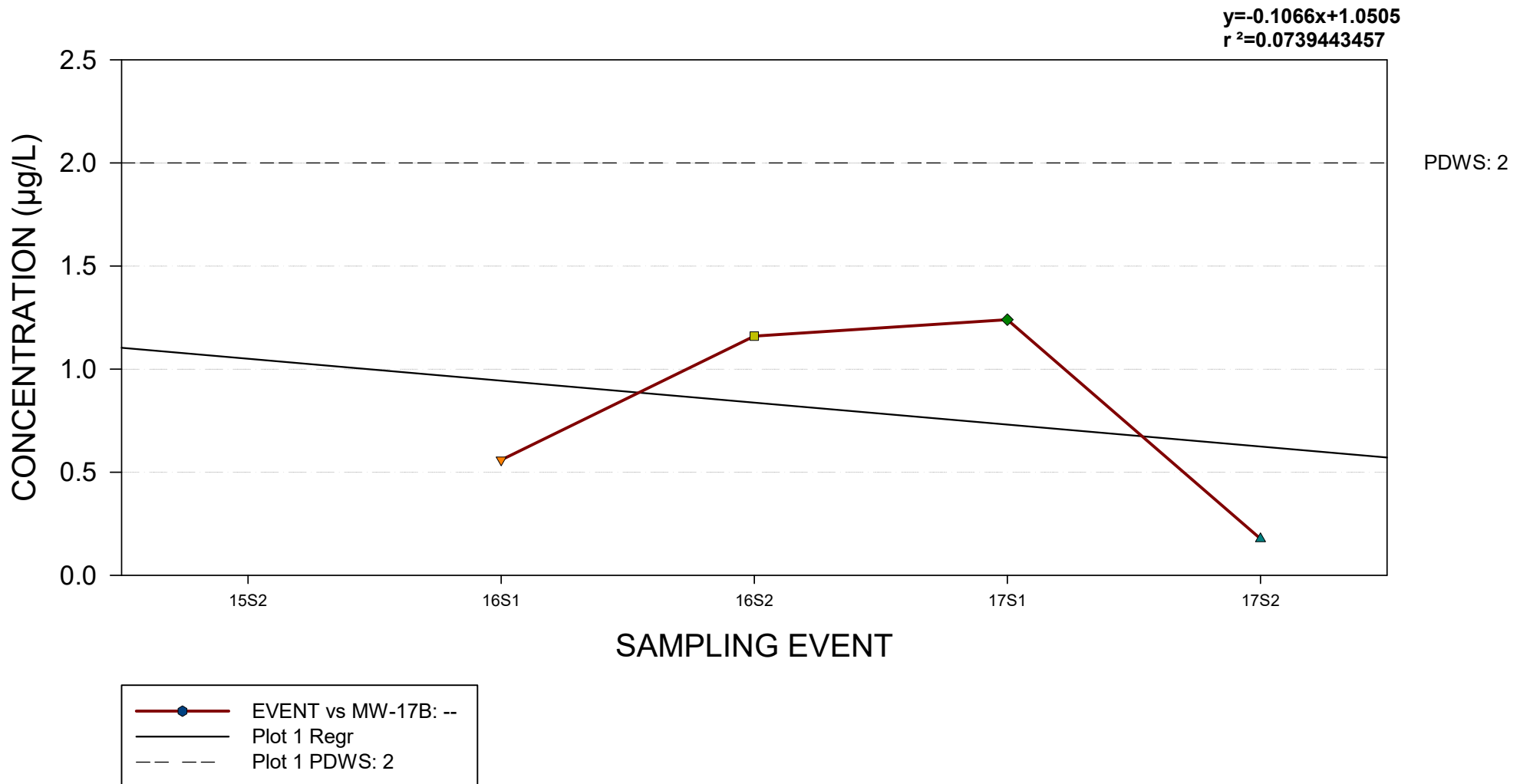
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



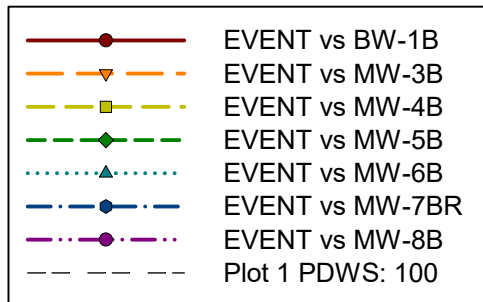
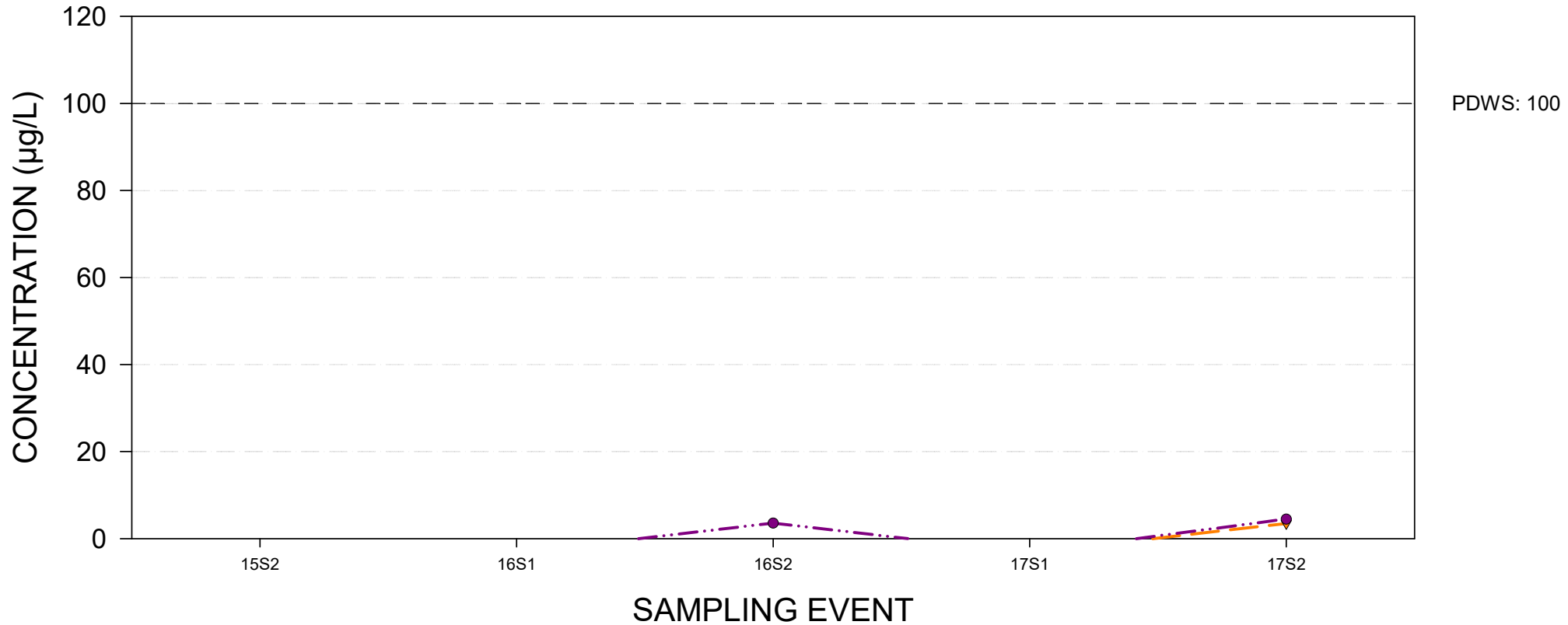
MERCURY

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-17B GROUNDWATER CHEMISTRY TREND GRAPH



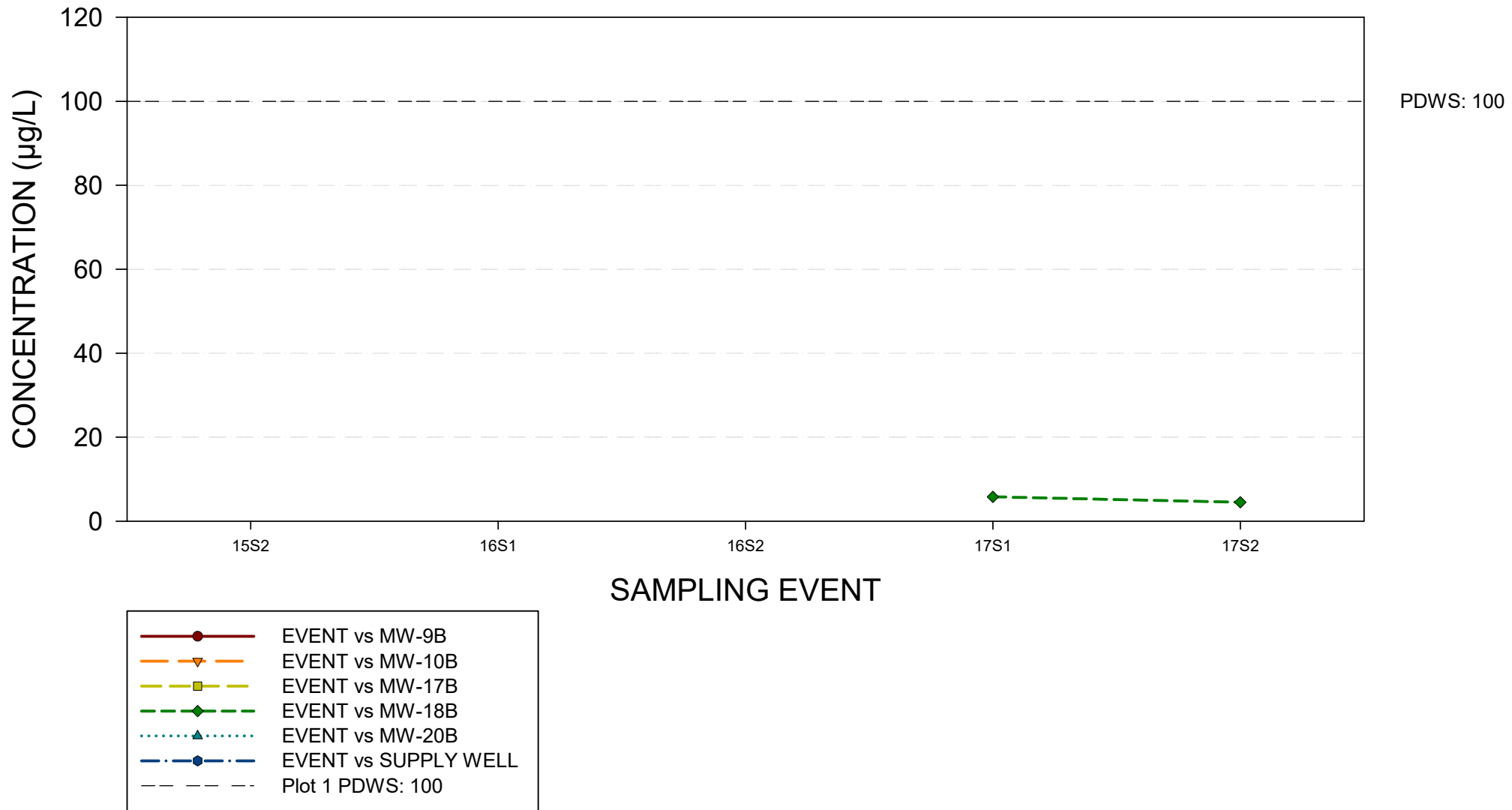
NICKEL

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



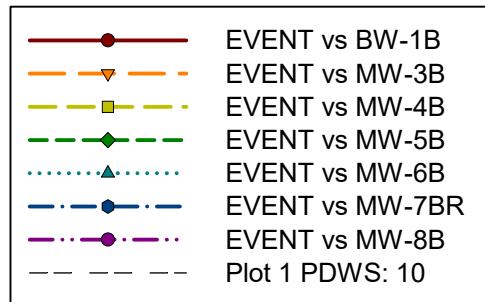
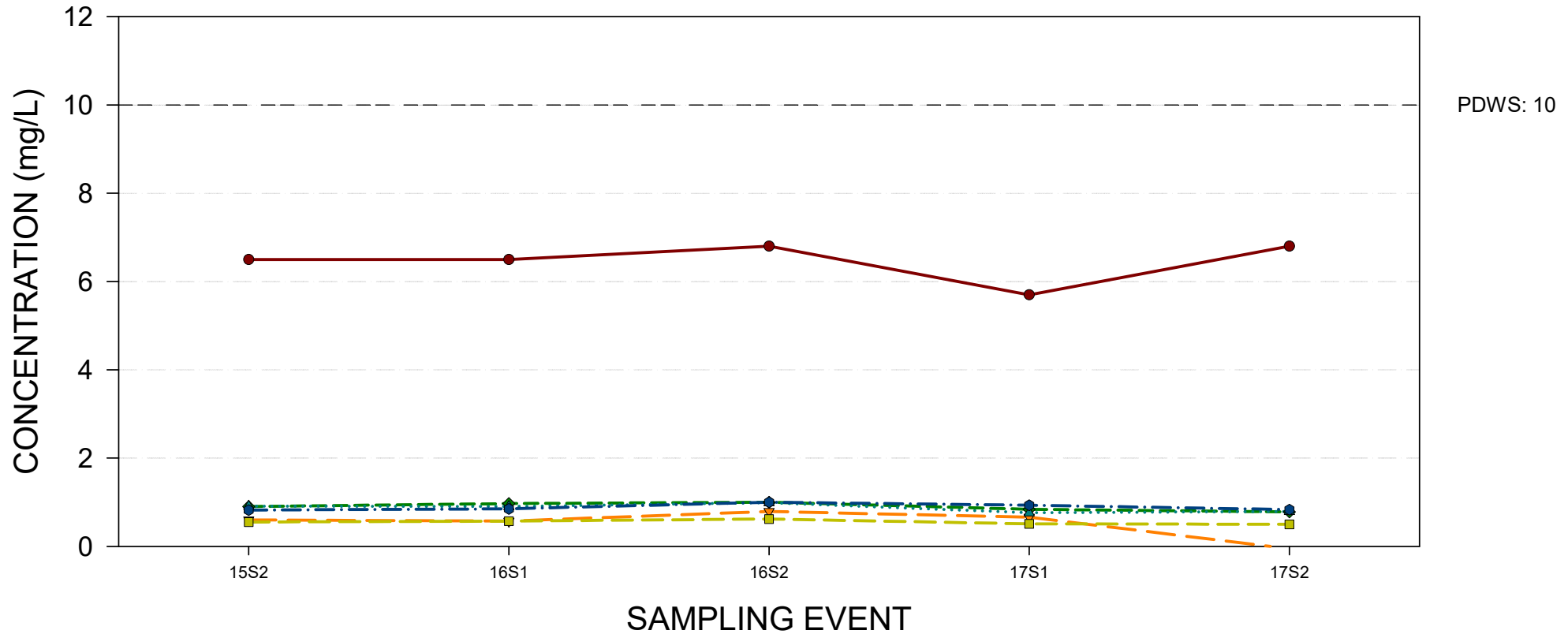
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



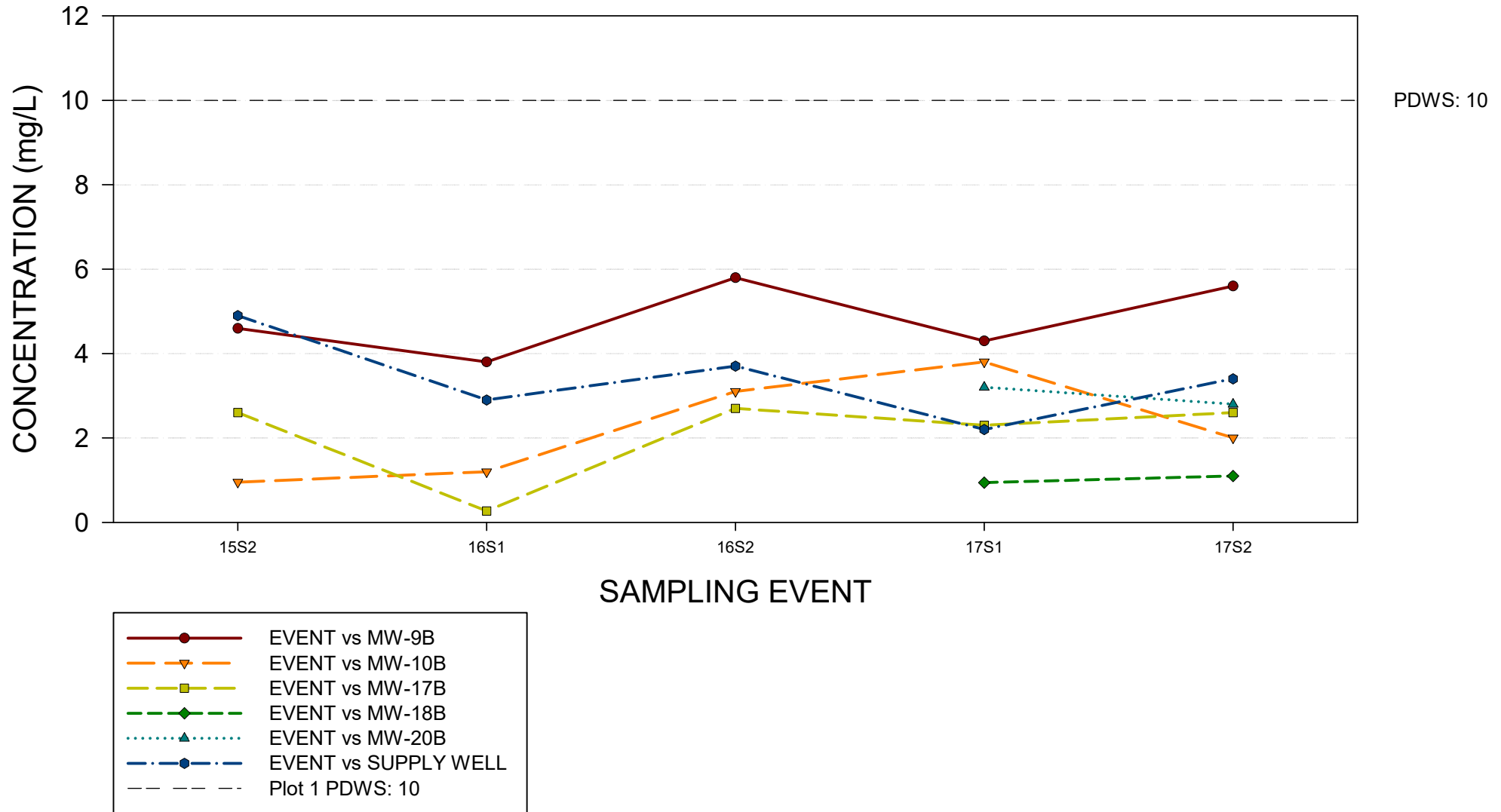
NITRATE AS NITROGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



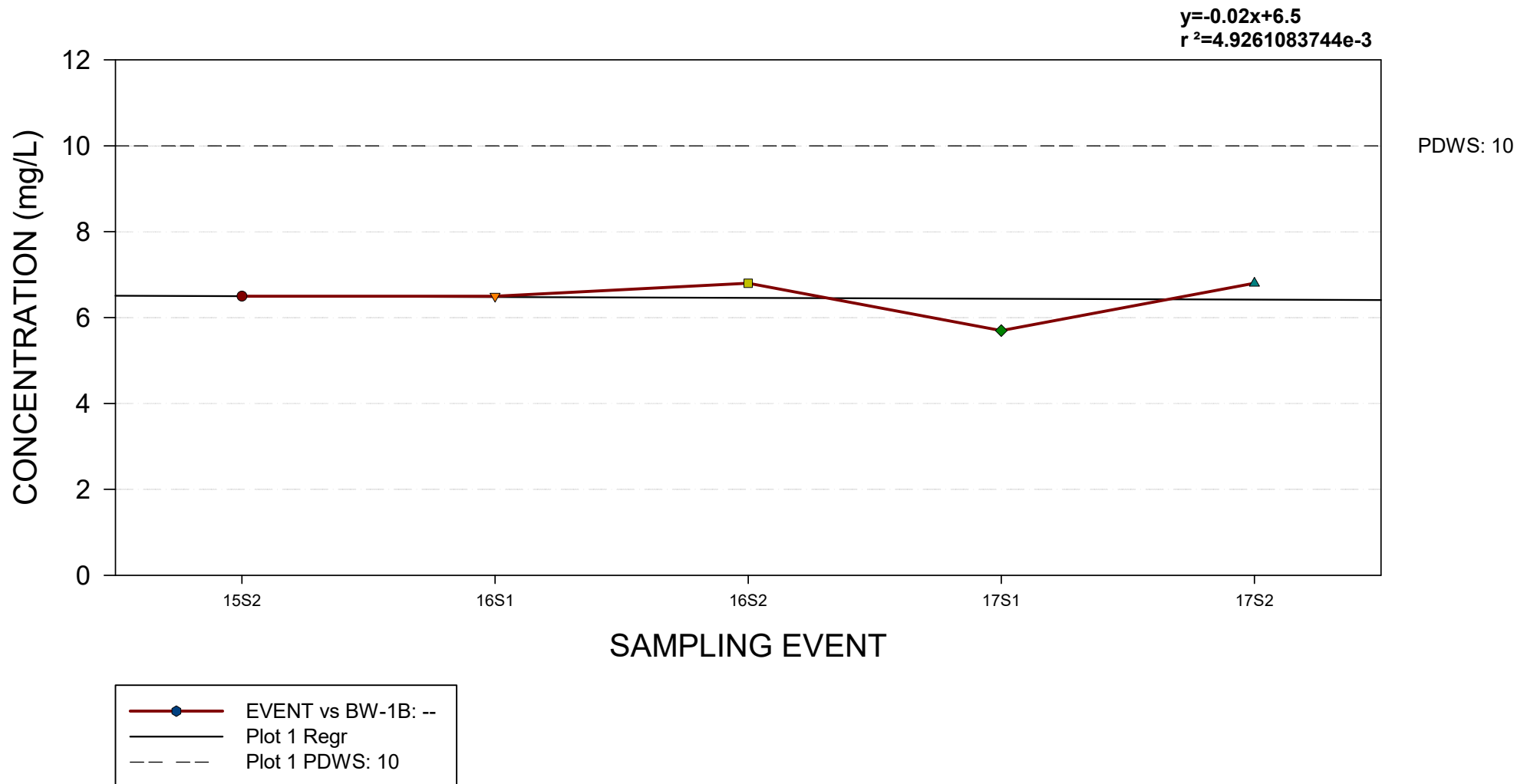
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



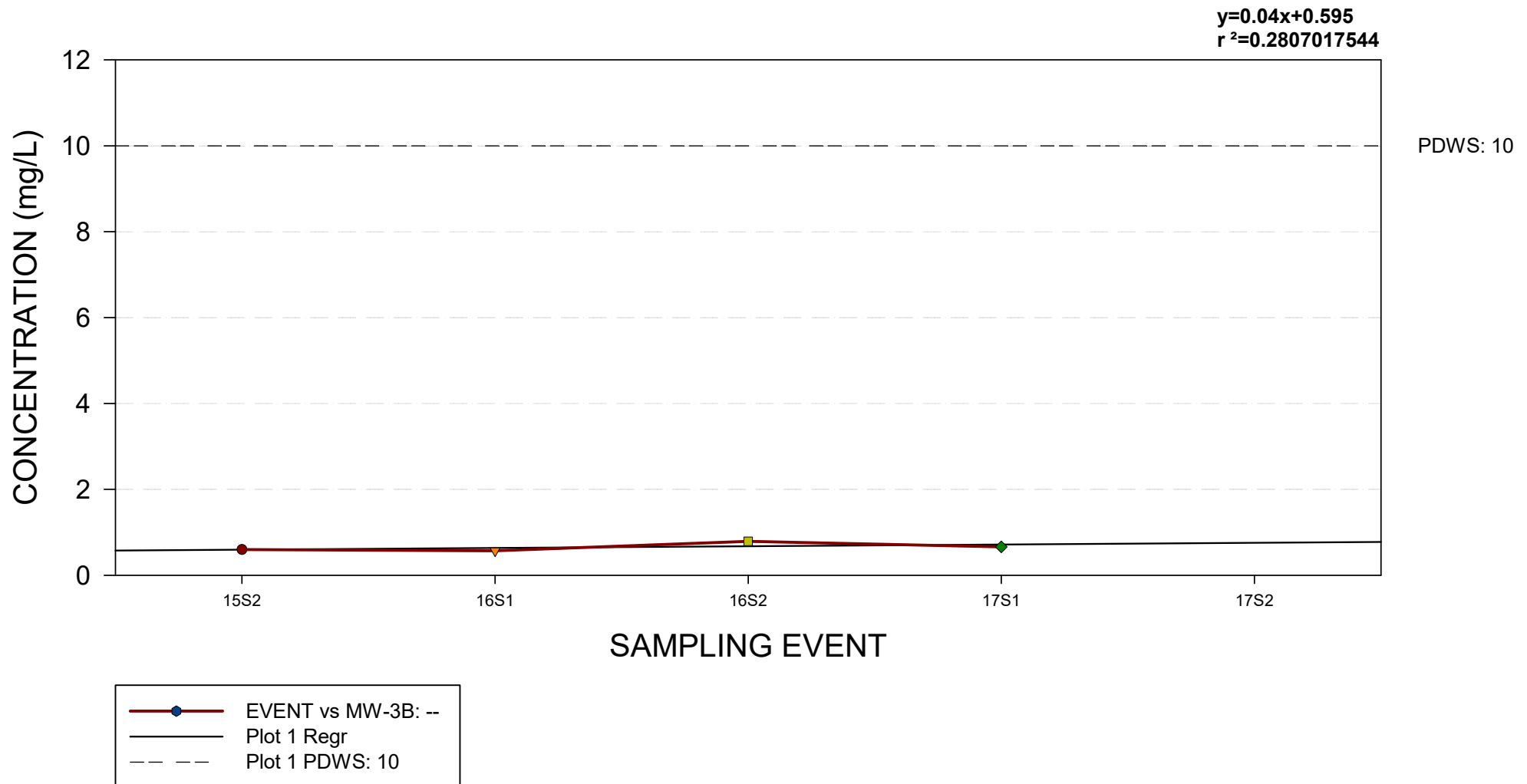
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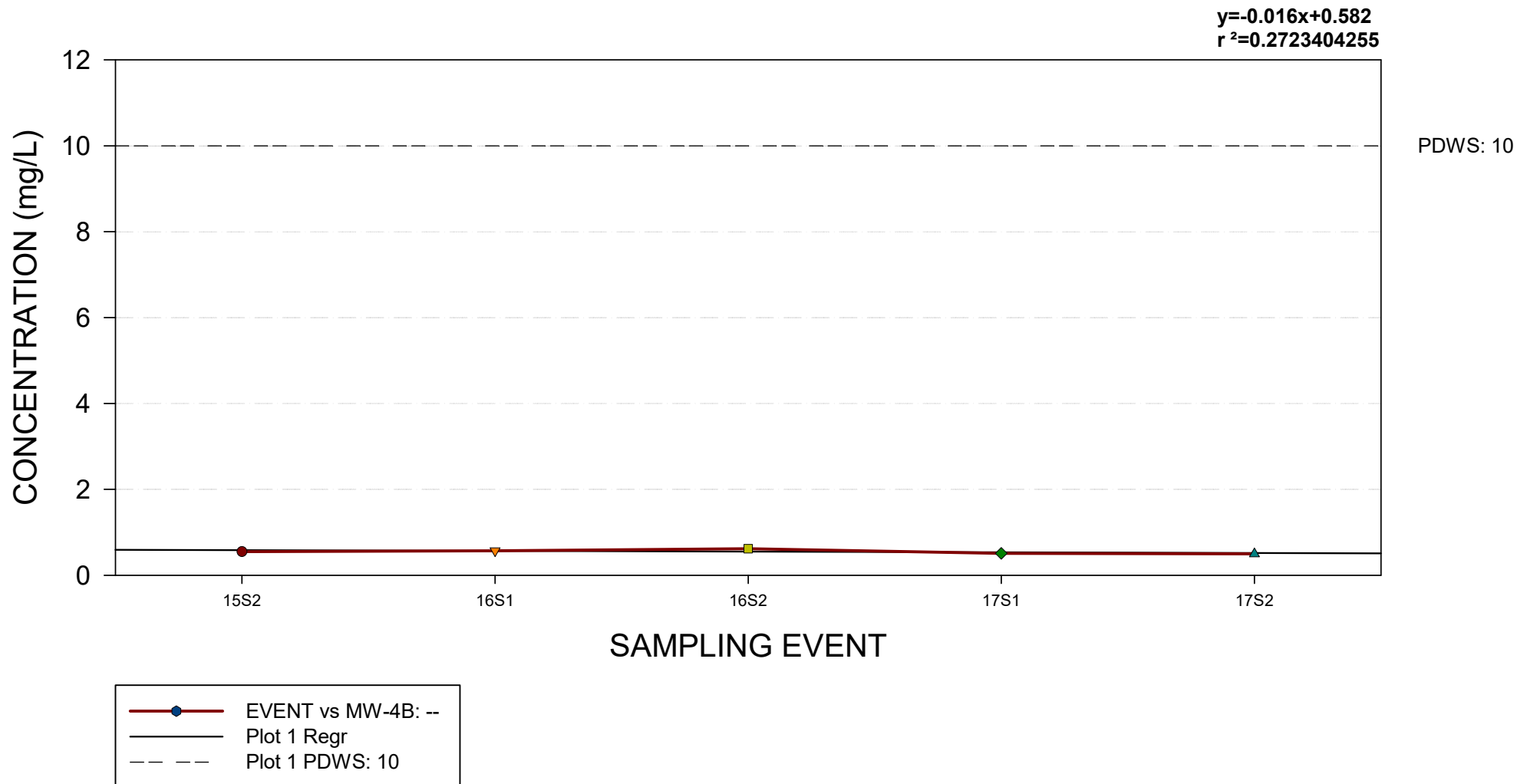
NITRATE AS NITROGEN

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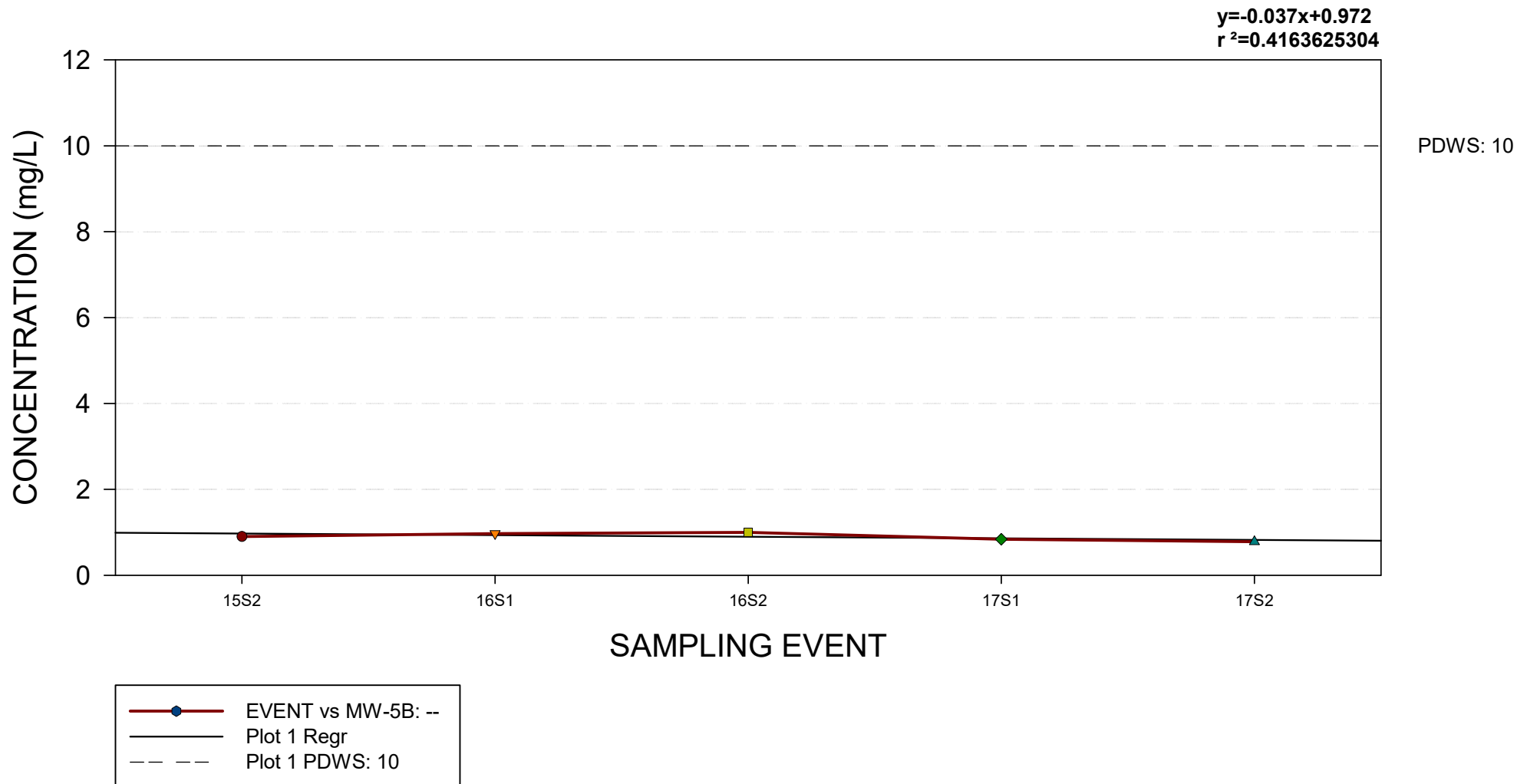
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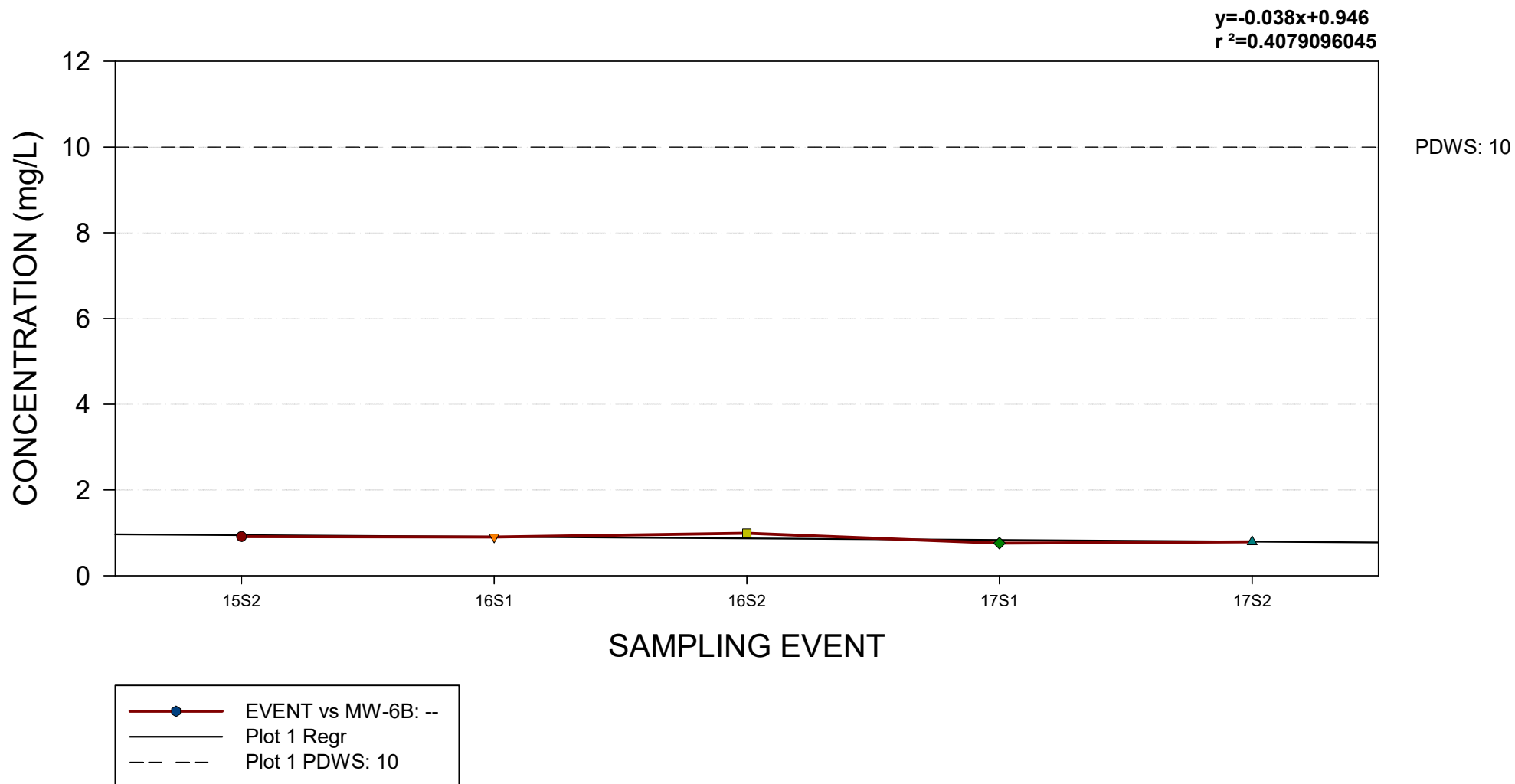
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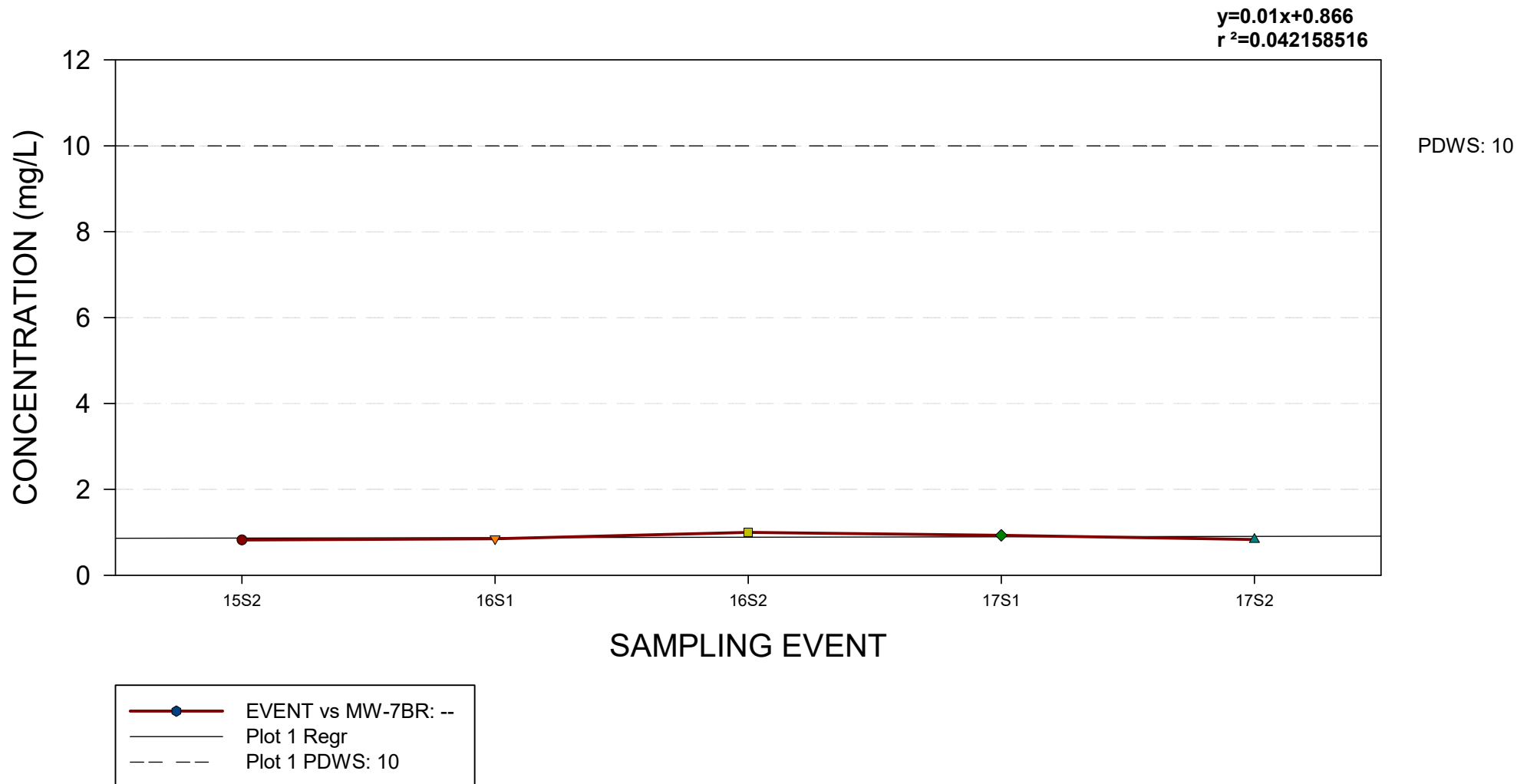
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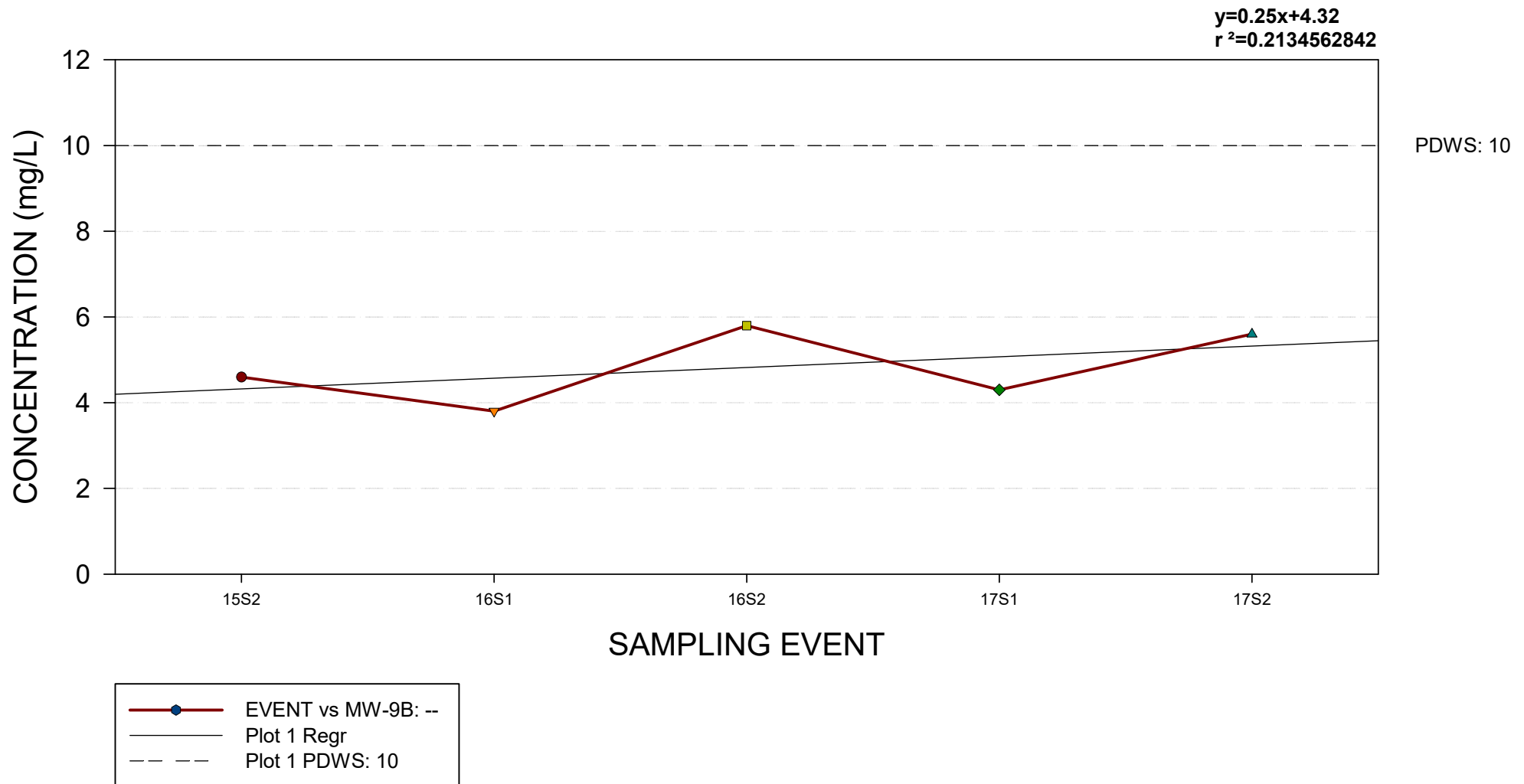
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-7BR GROUNDWATER CHEMISTRY TREND GRAPH



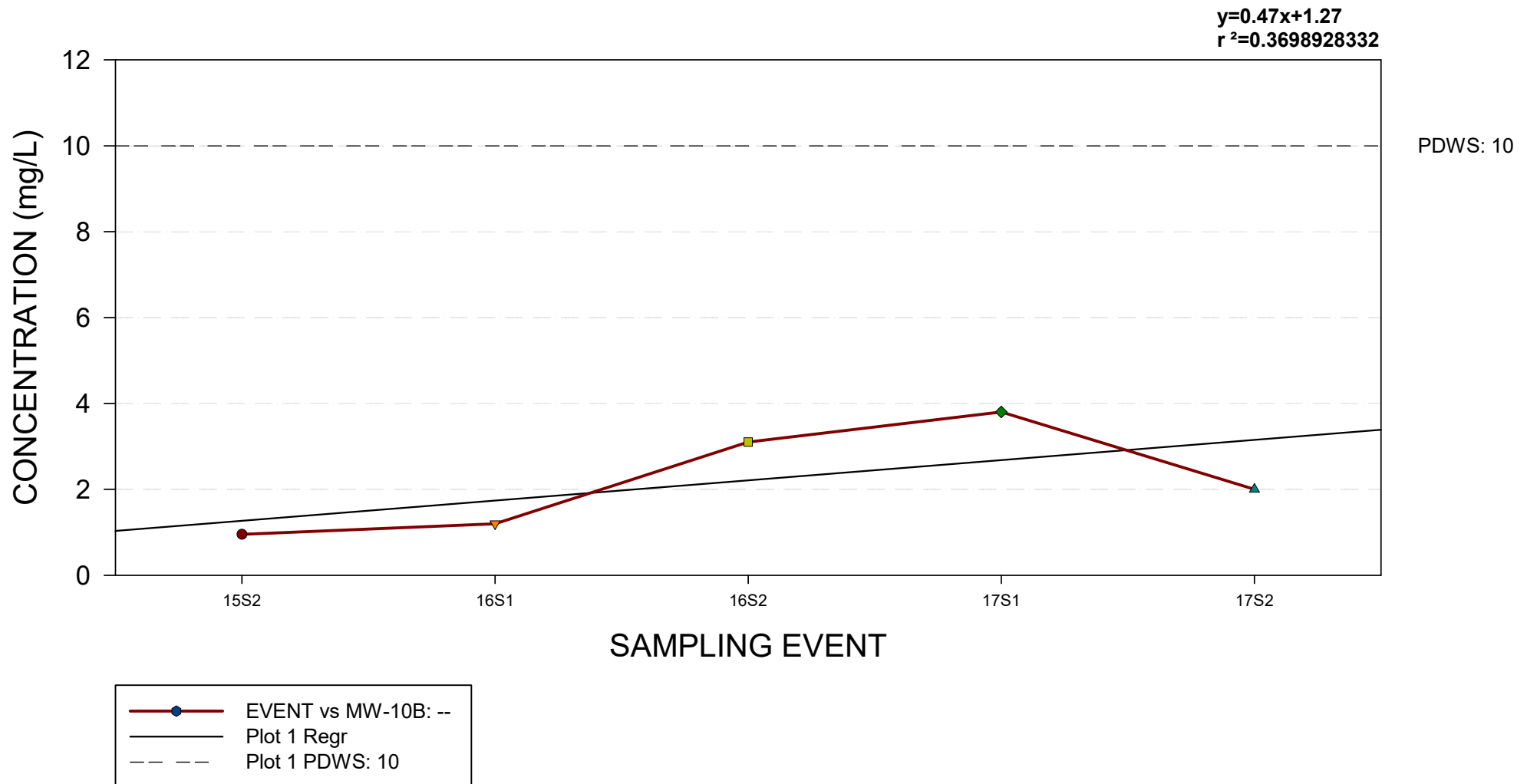
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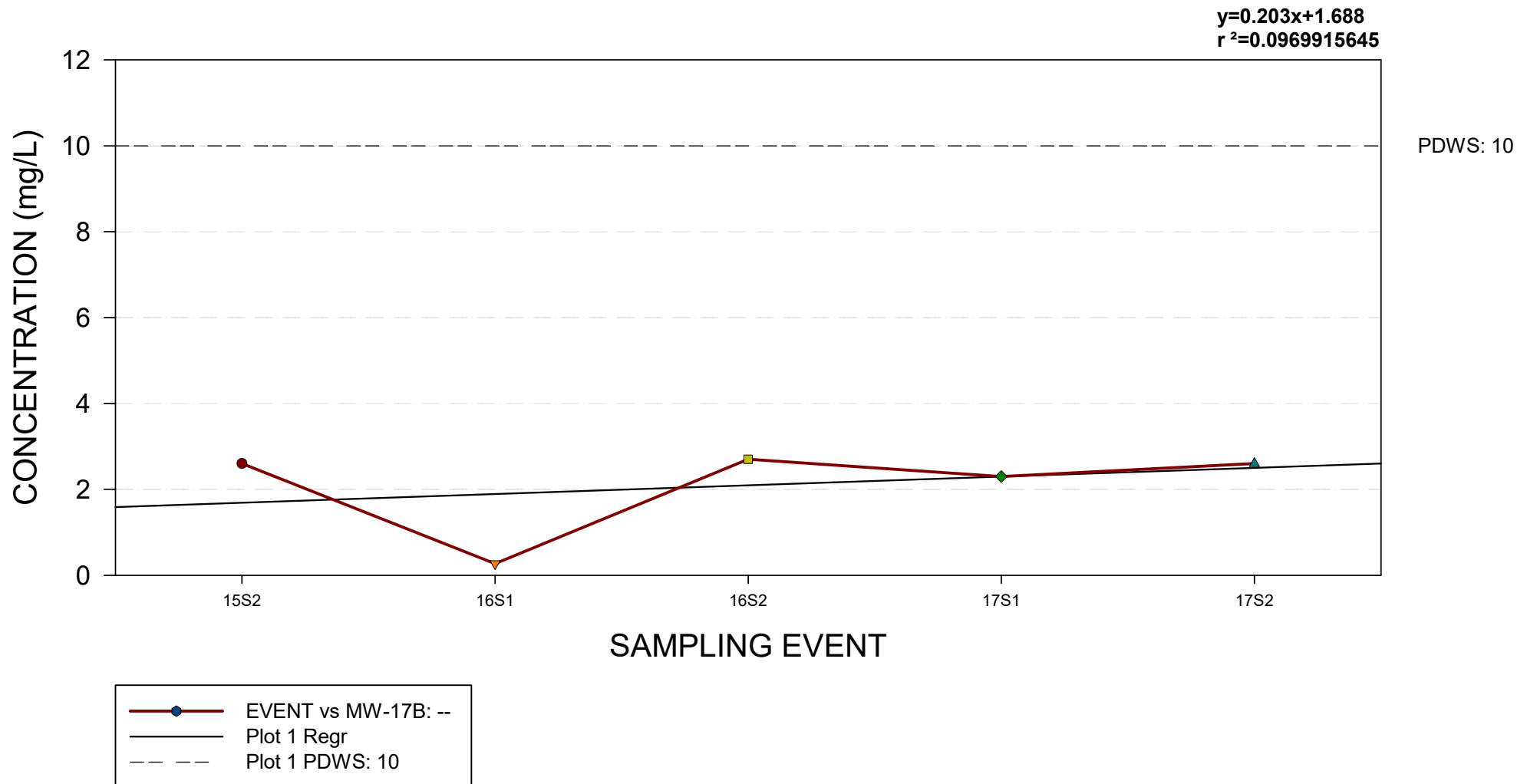
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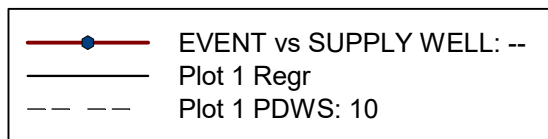
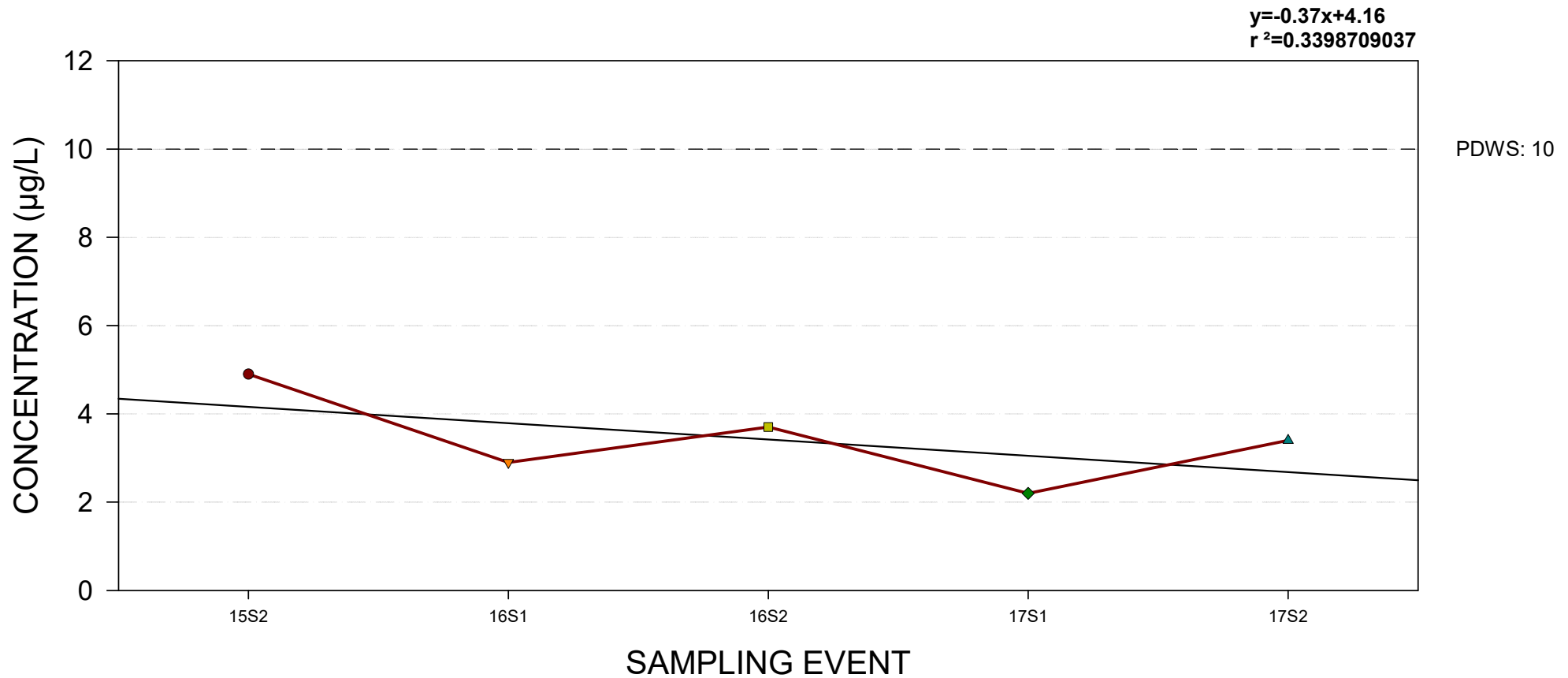
NITRATE AS NITROGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-17B GROUNDWATER CHEMISTRY TREND GRAPH



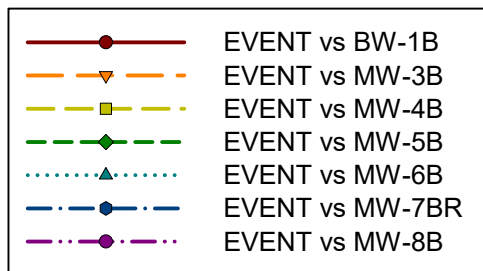
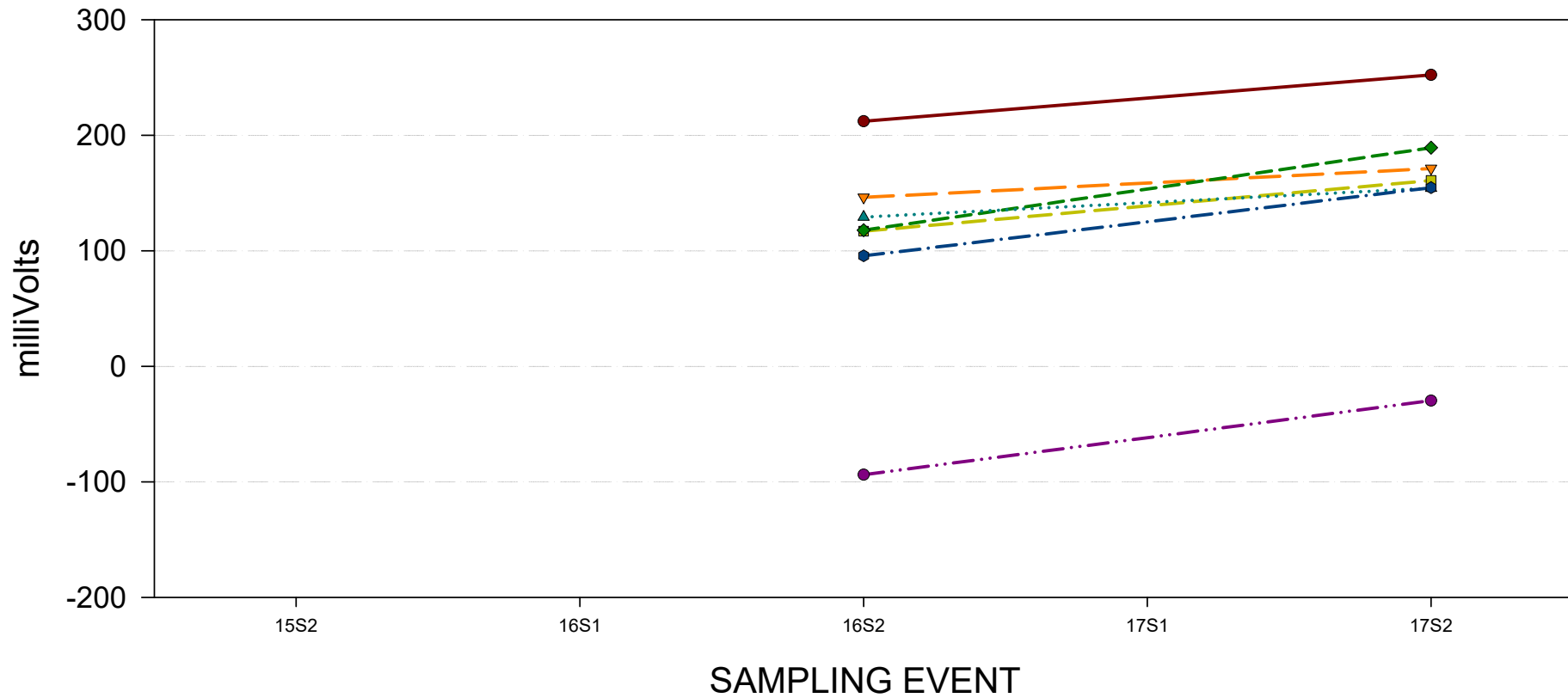
NITRATE AS NITROGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
SUPPLY WELL GROUNDWATER CHEMISTRY TREND GRAPH



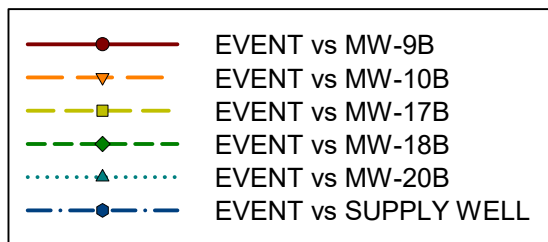
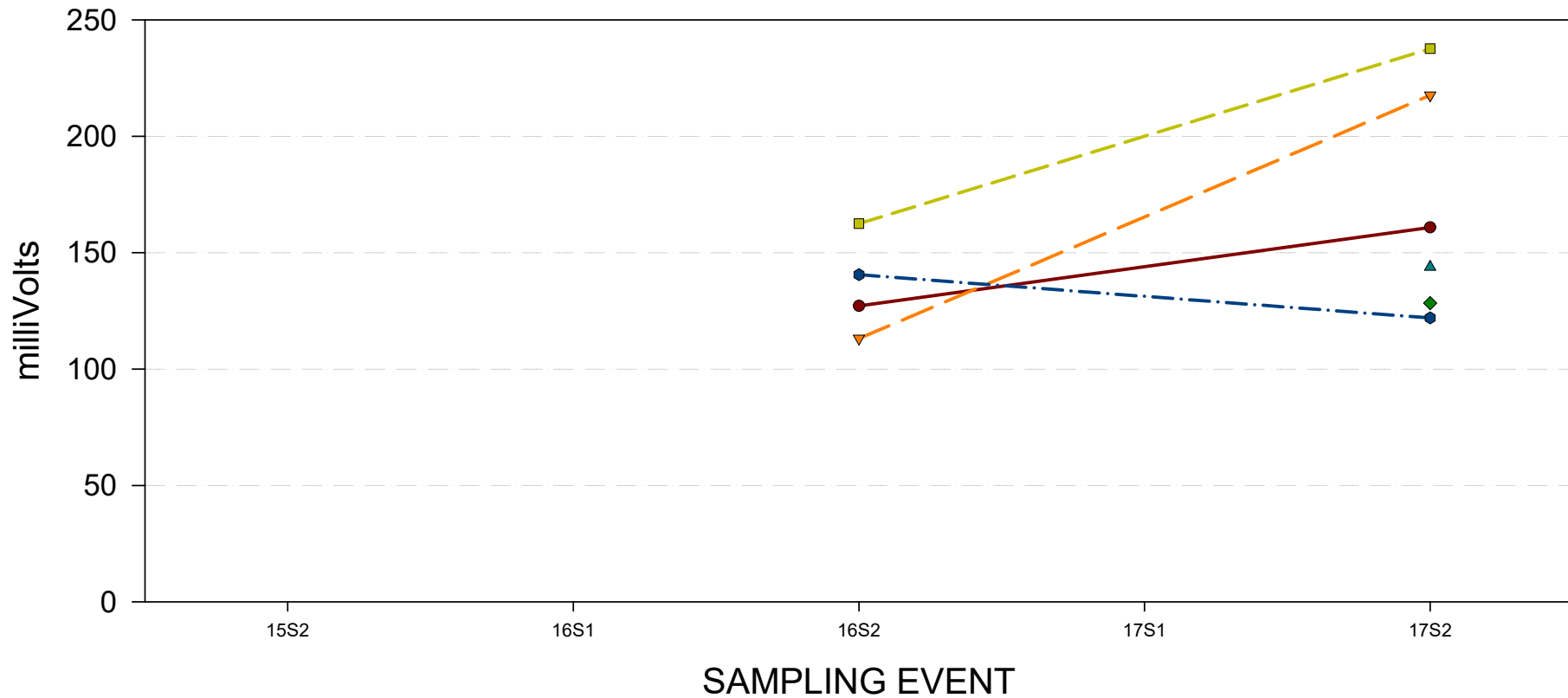
OXIDATION / REDUCTION POTENTIAL

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



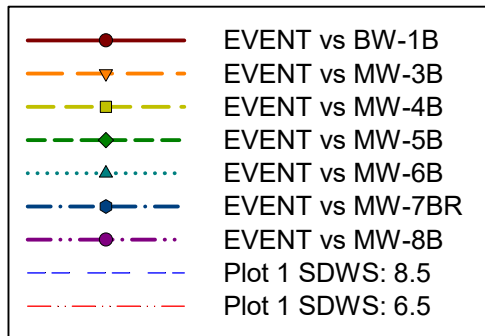
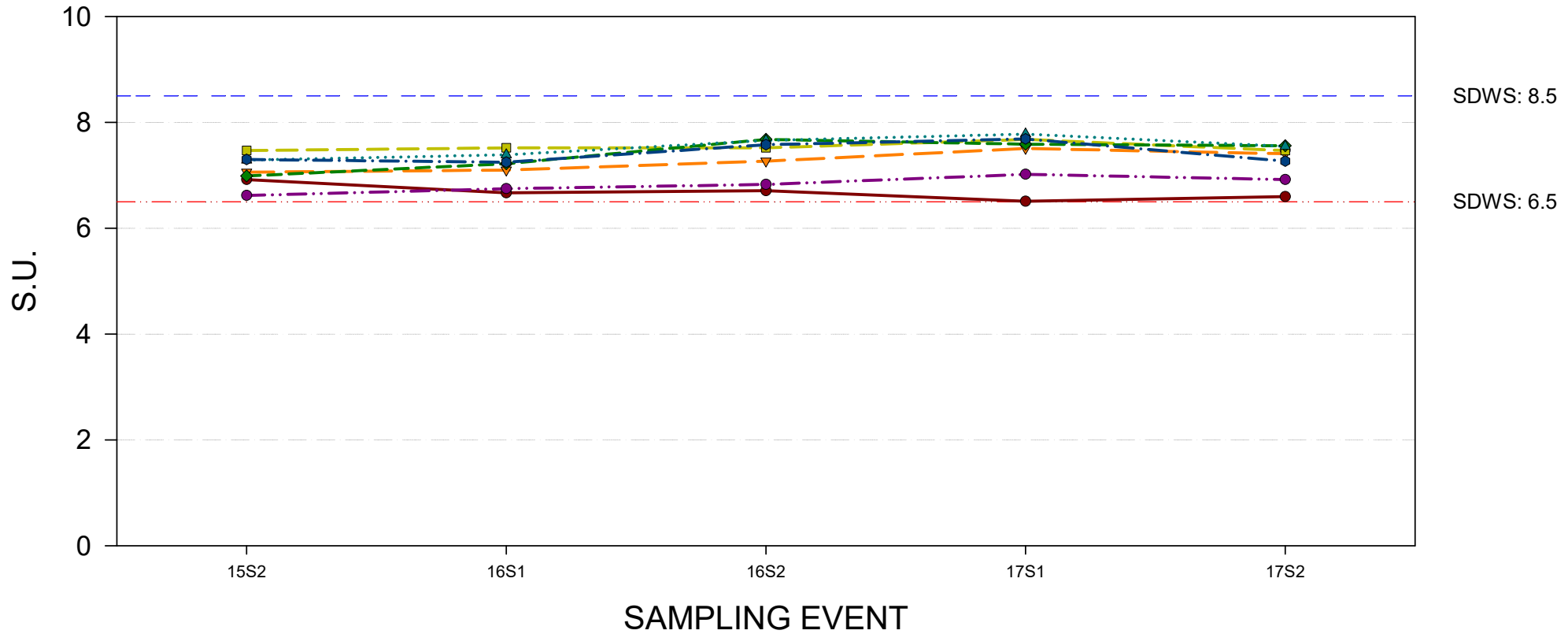
OXIDATION / REDUCTION POTENTIAL

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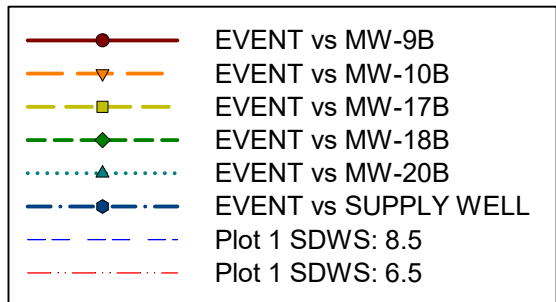
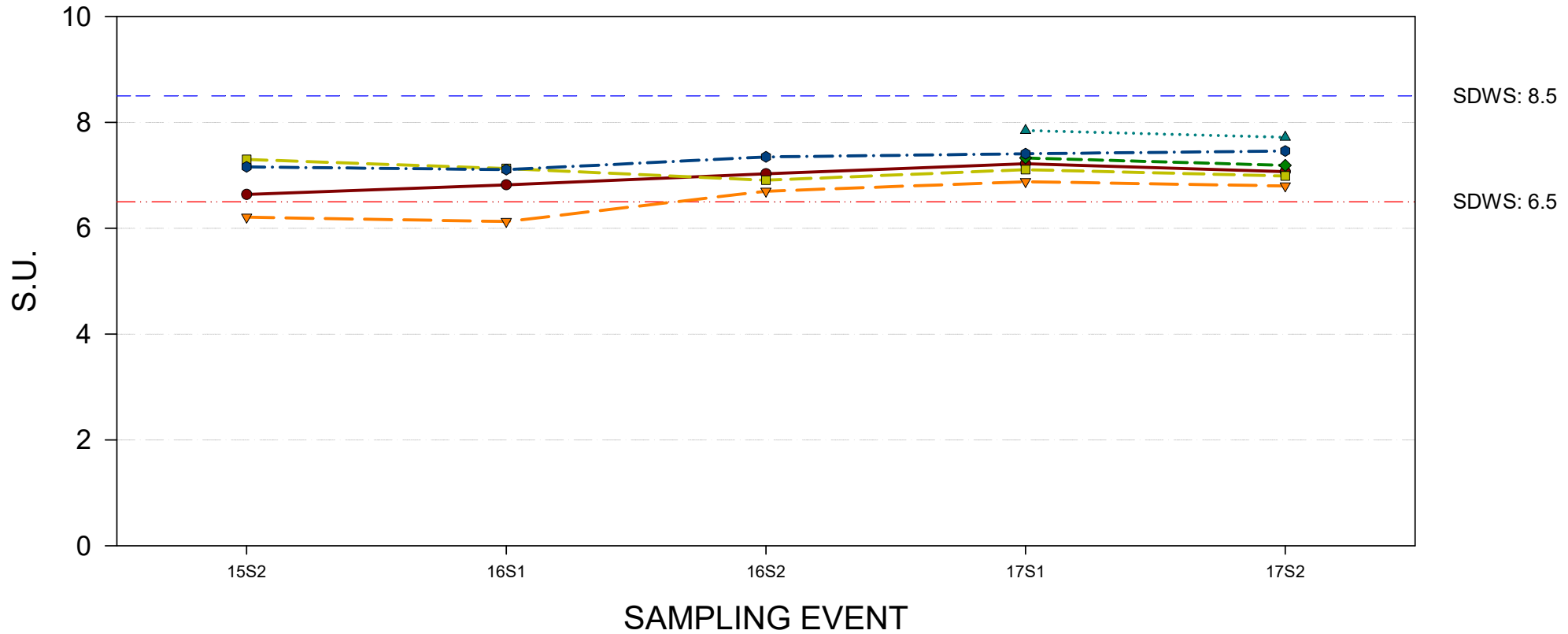
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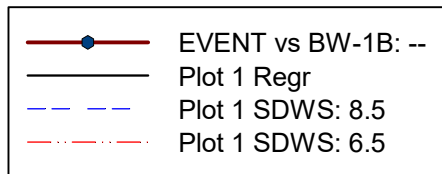
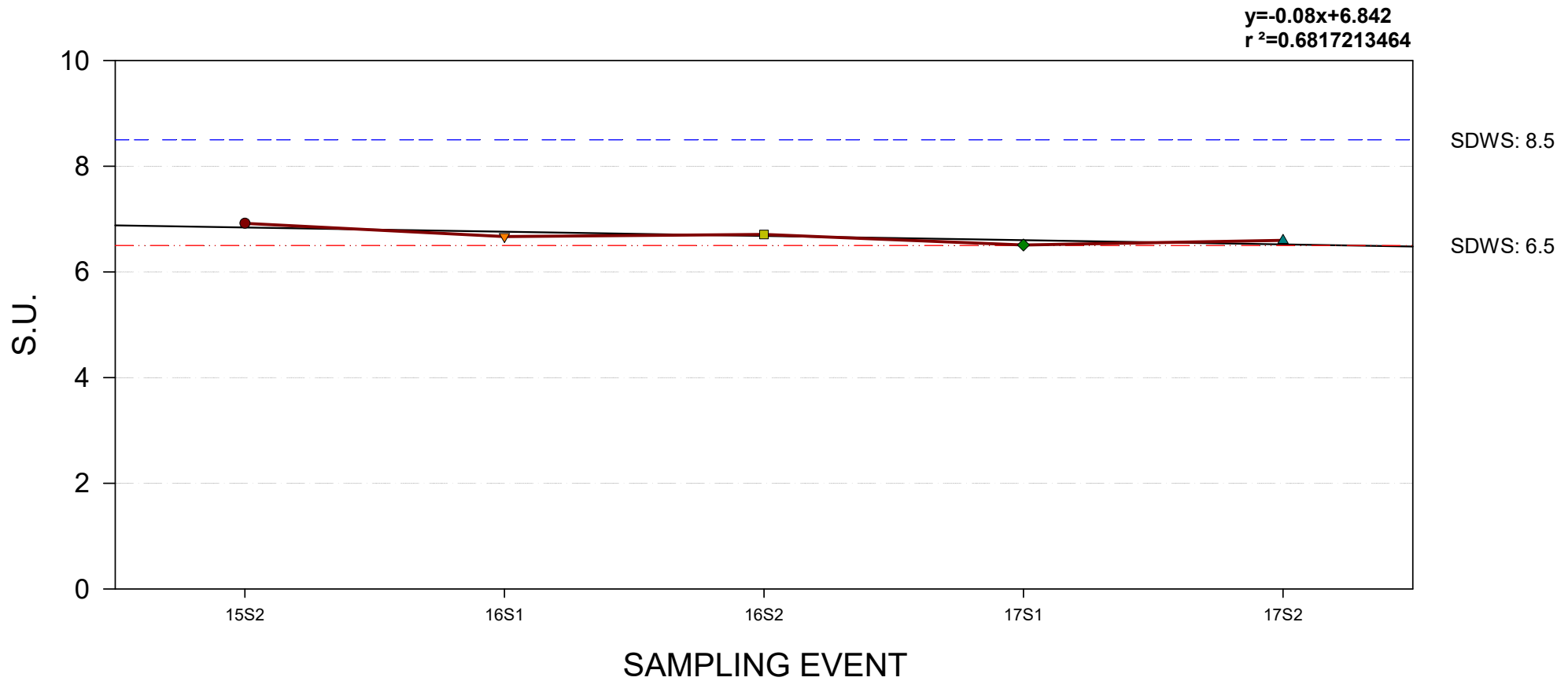
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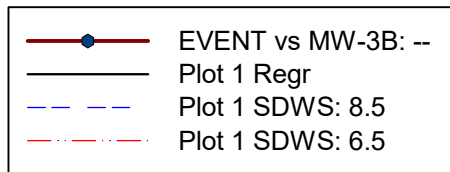
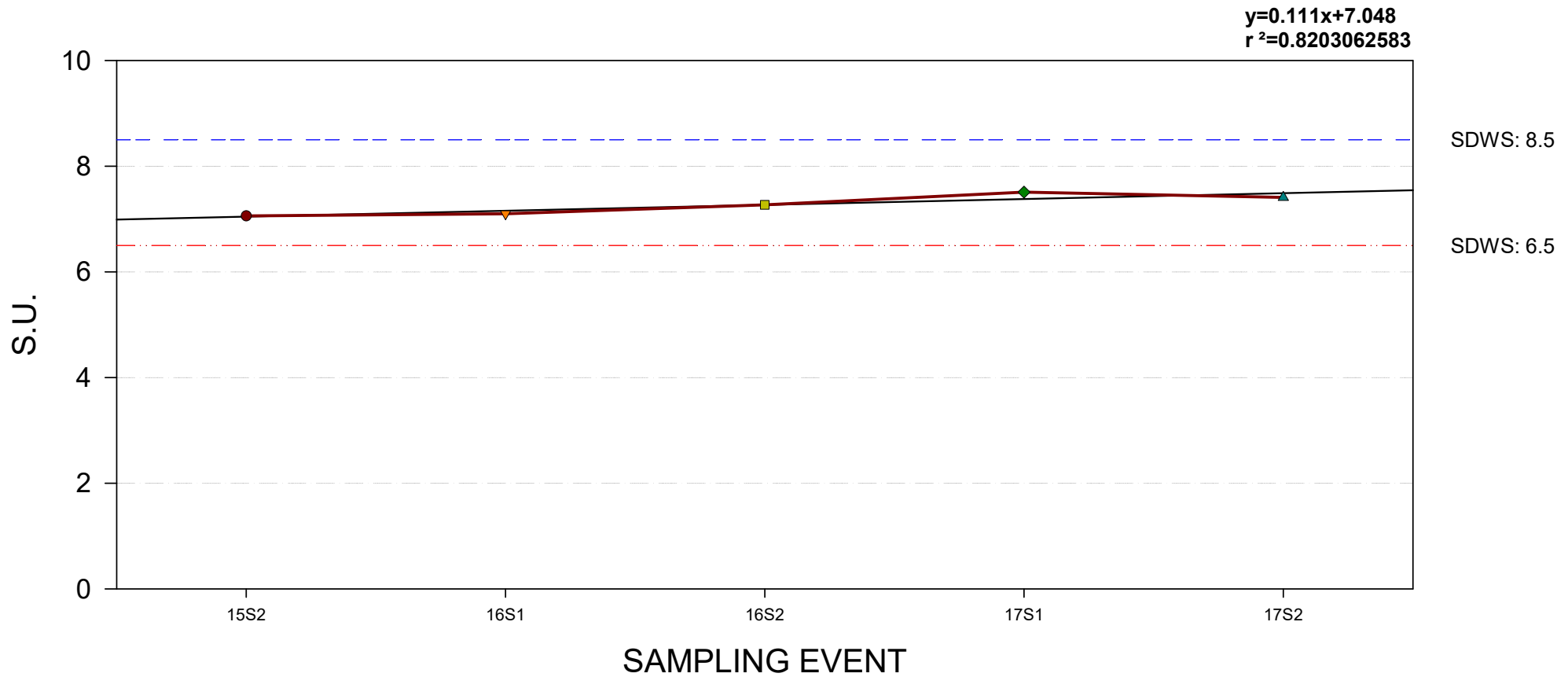
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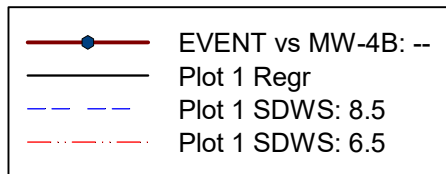
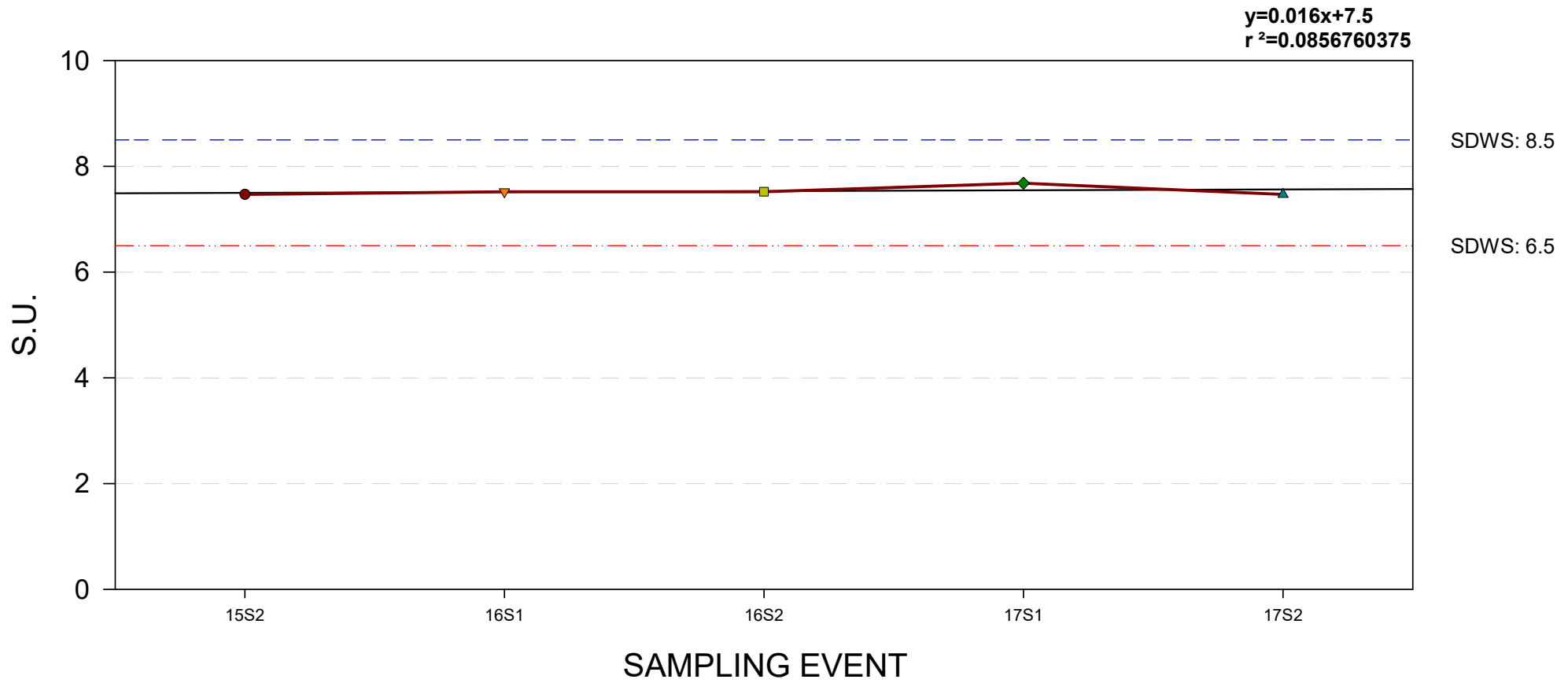
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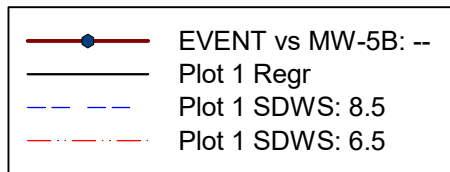
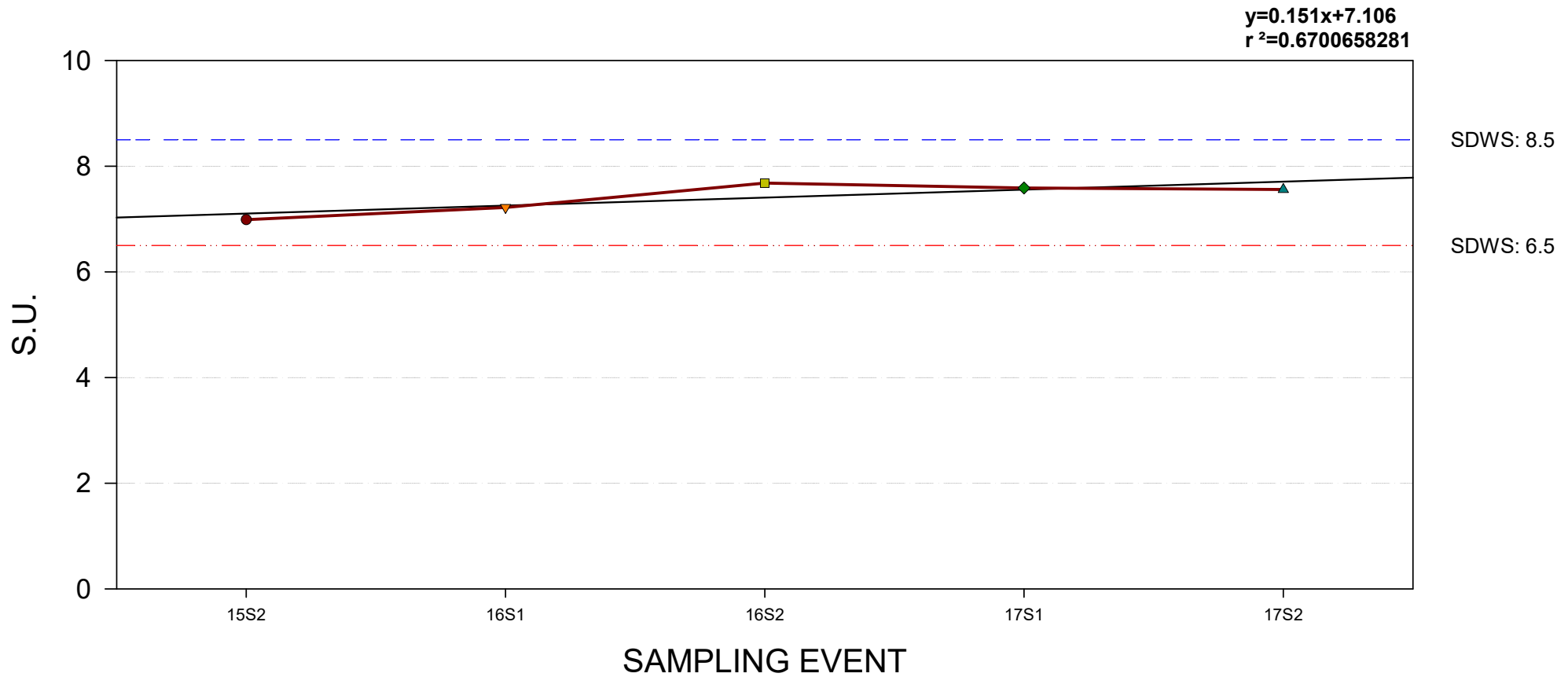
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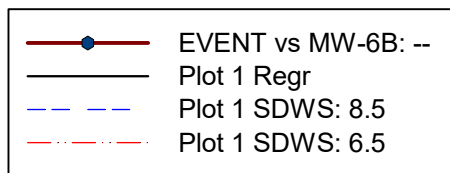
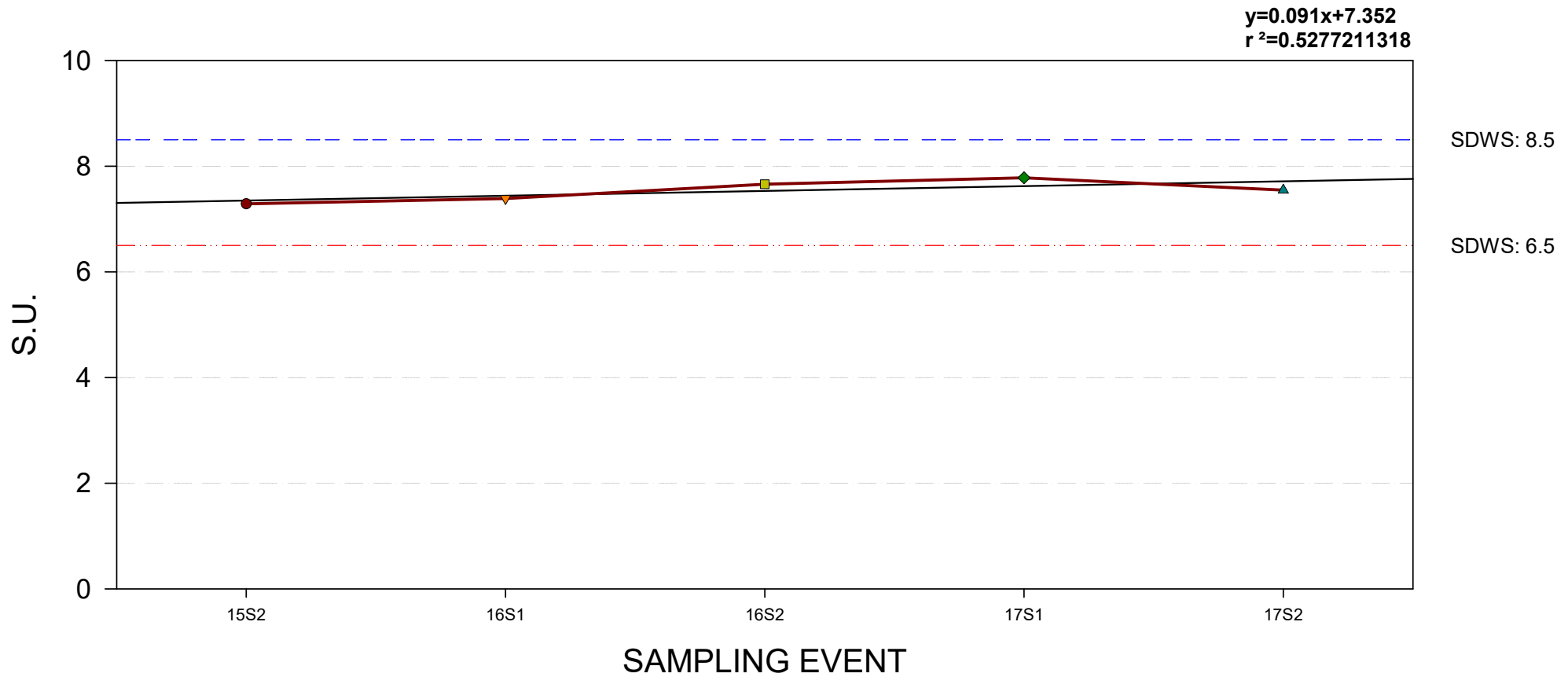
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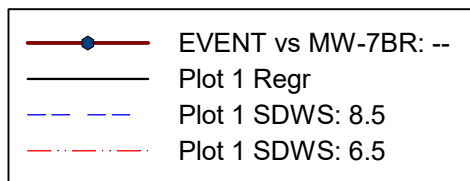
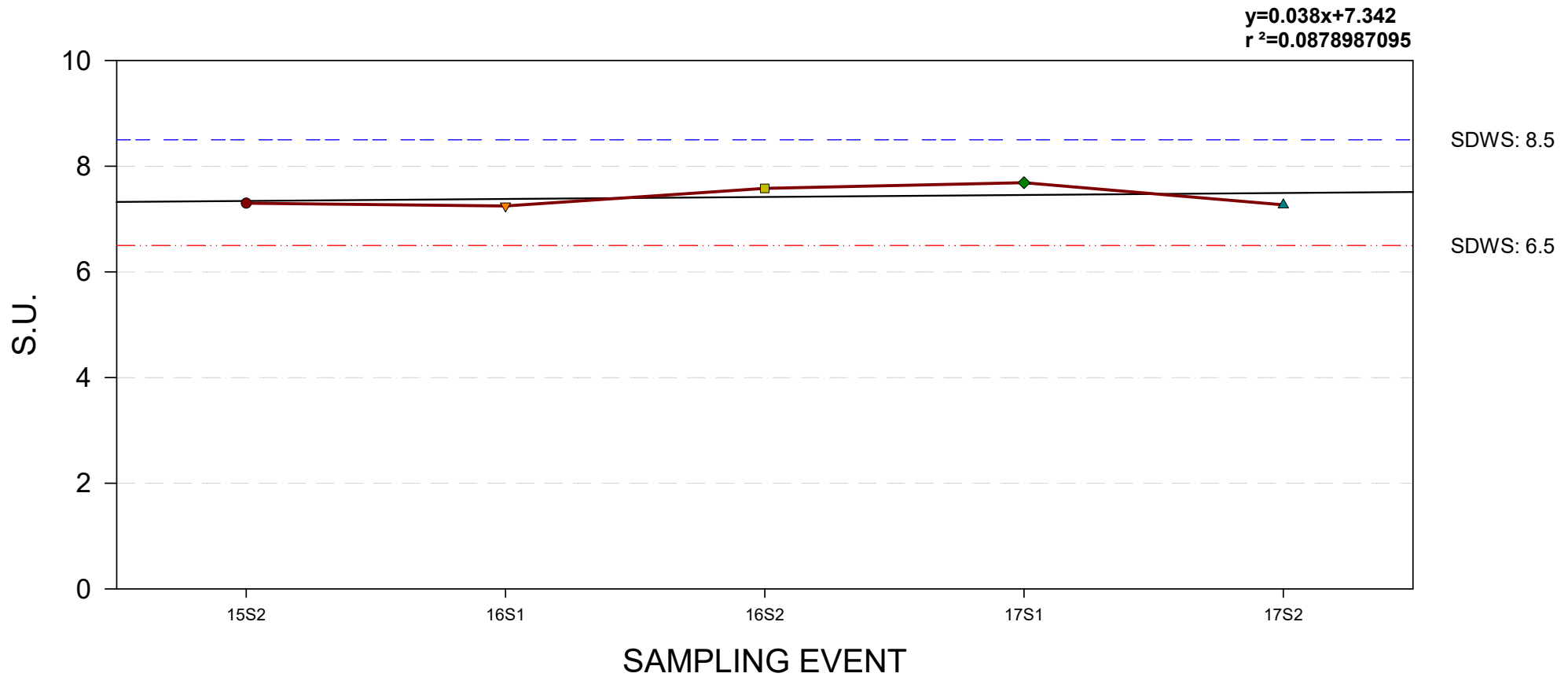
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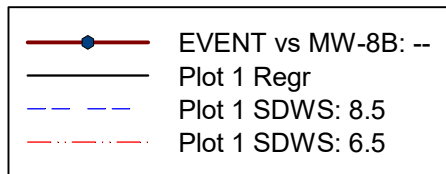
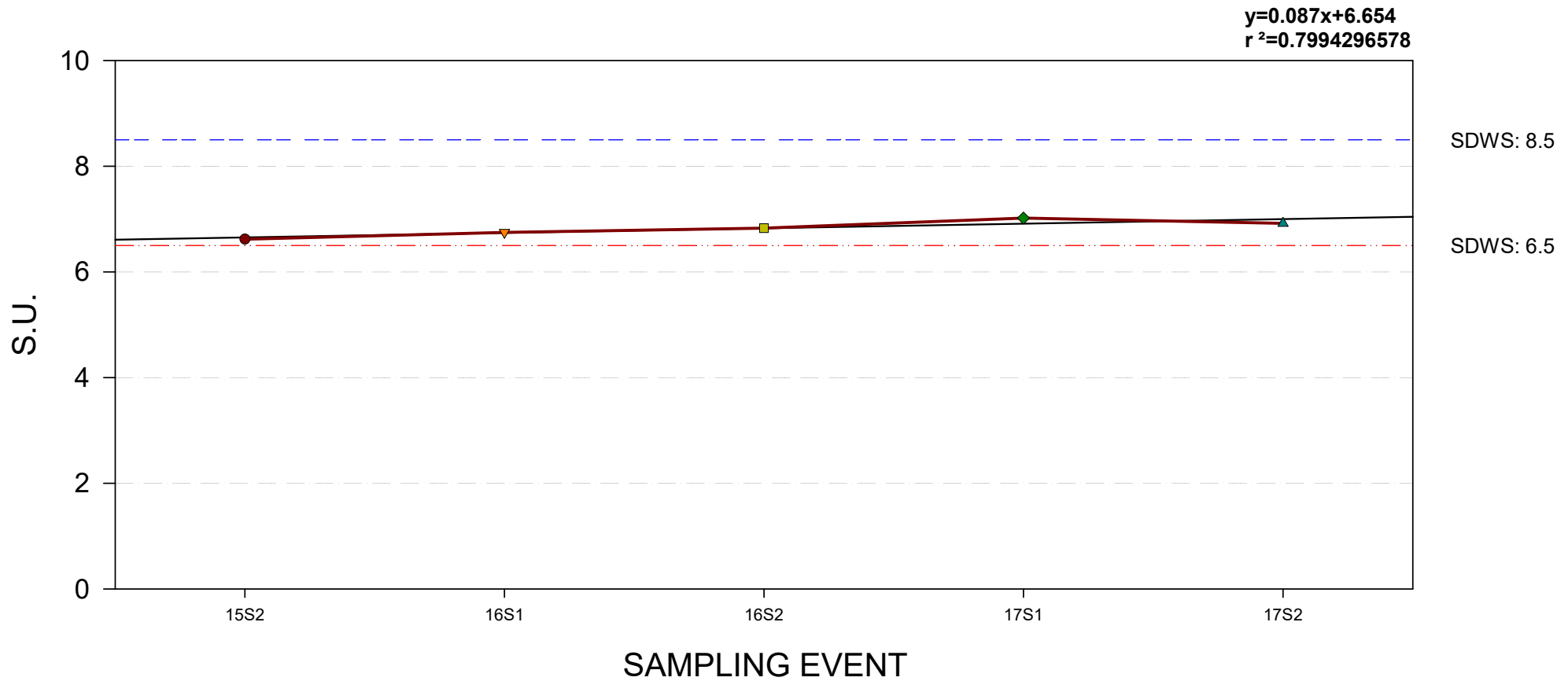
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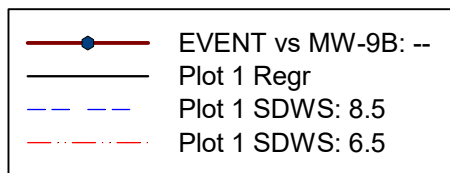
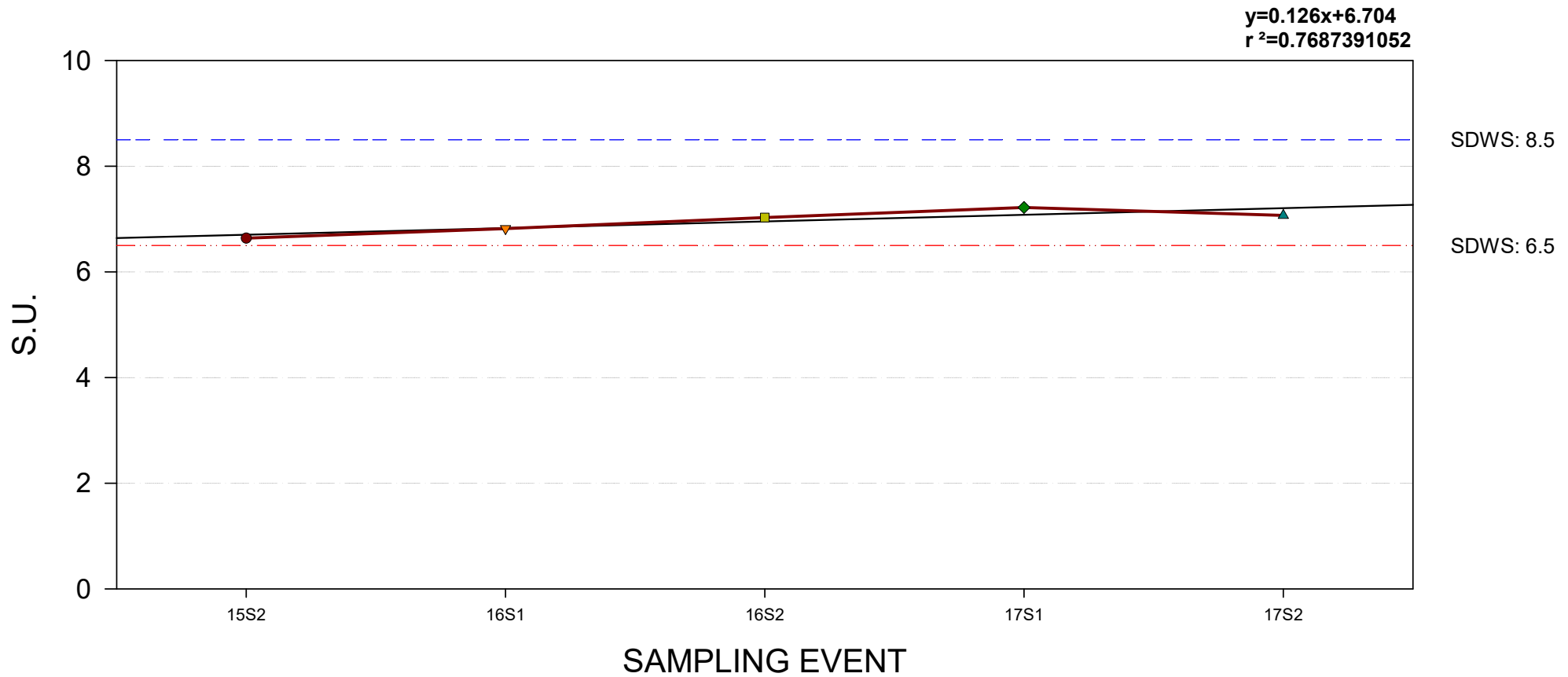
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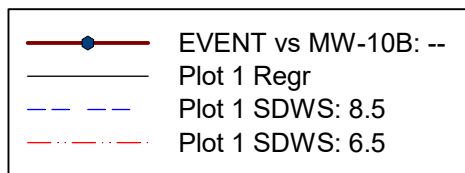
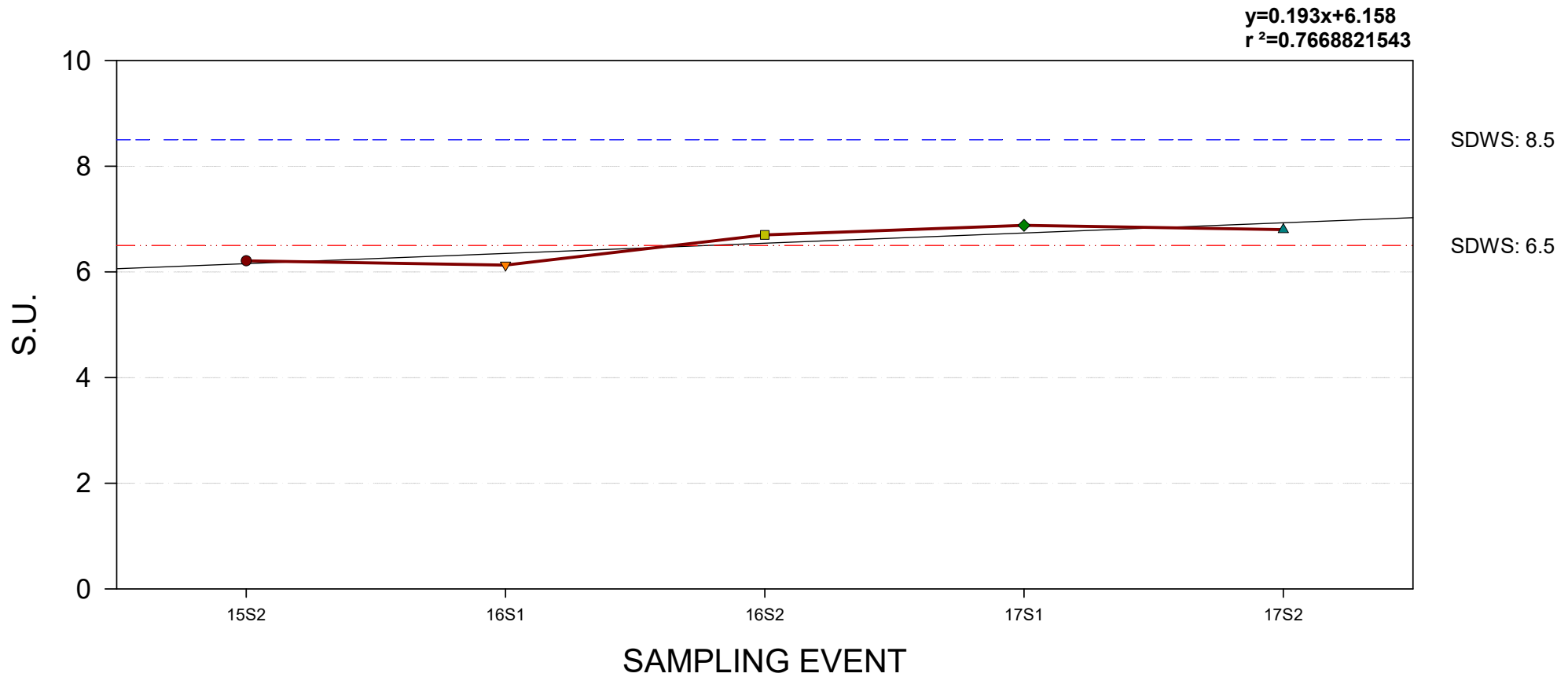
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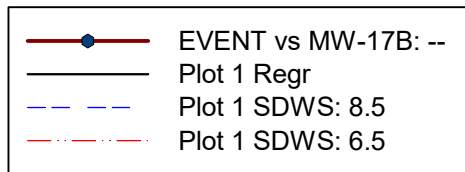
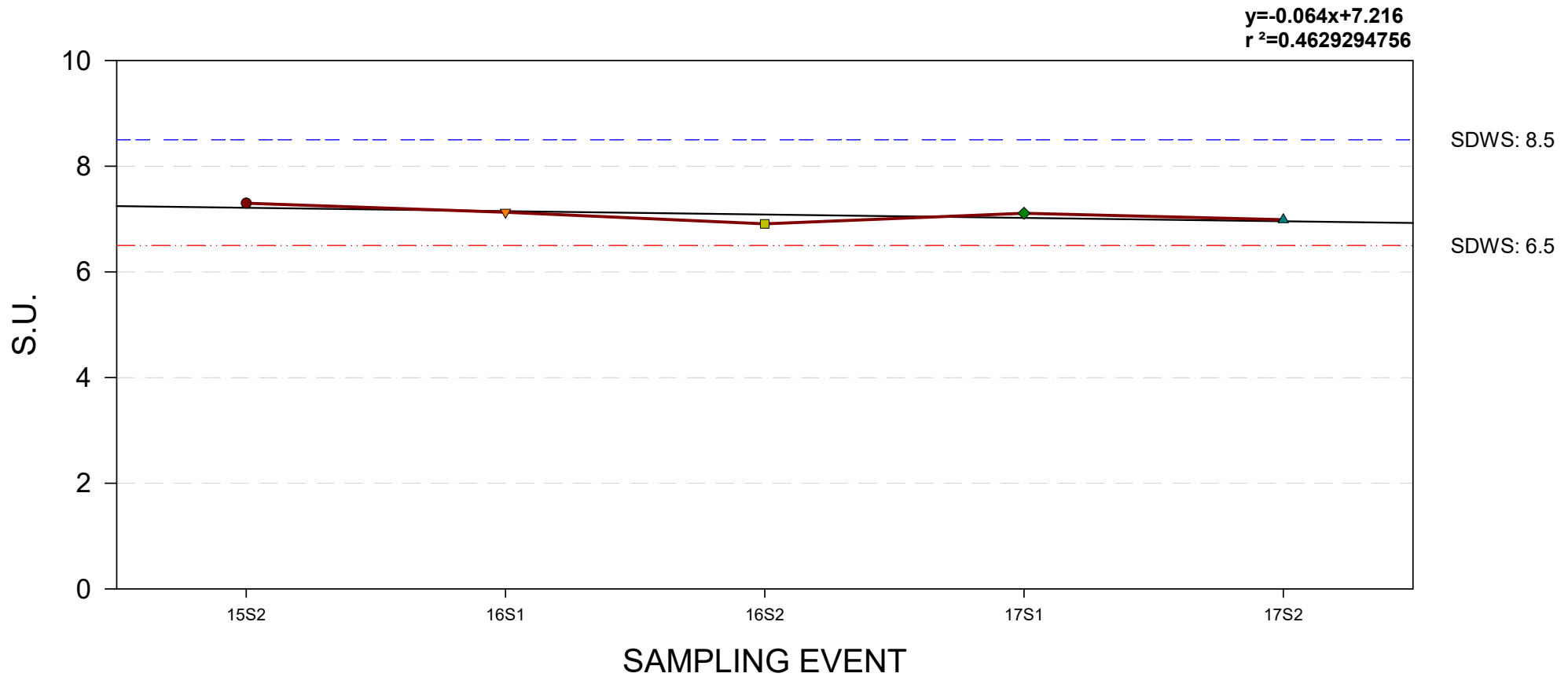
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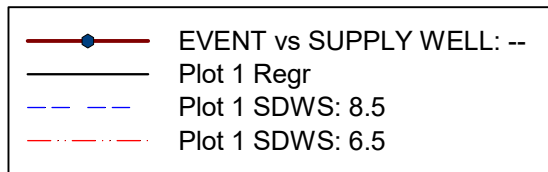
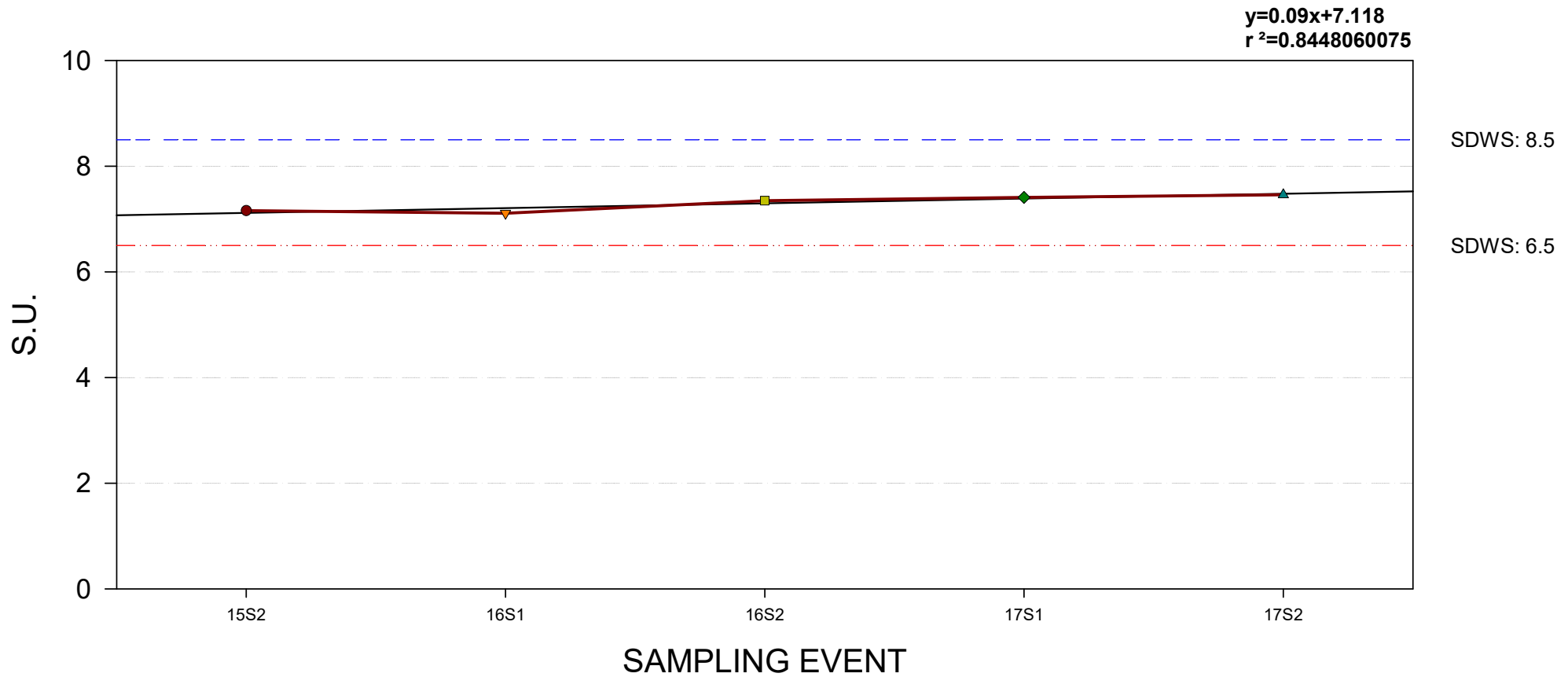
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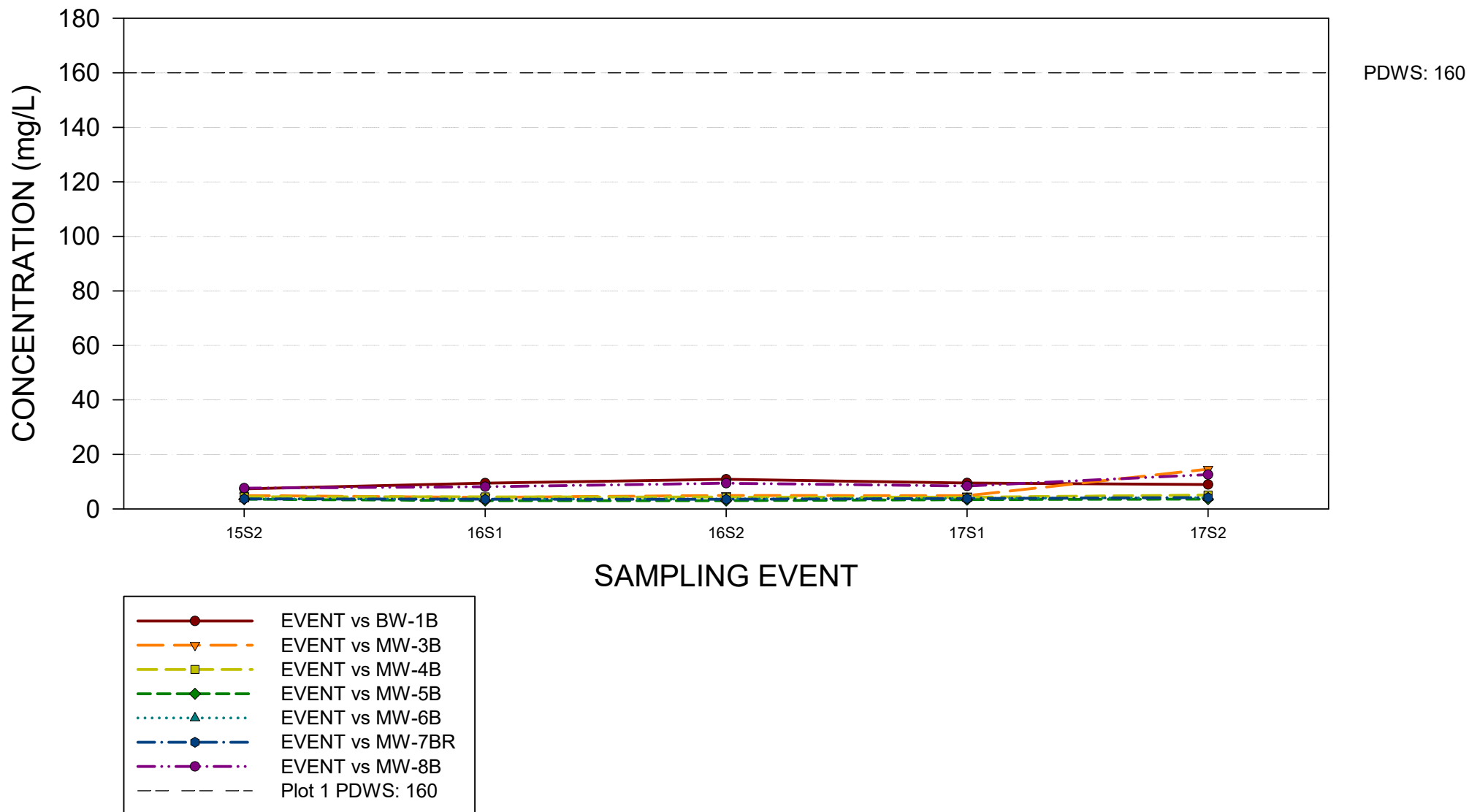
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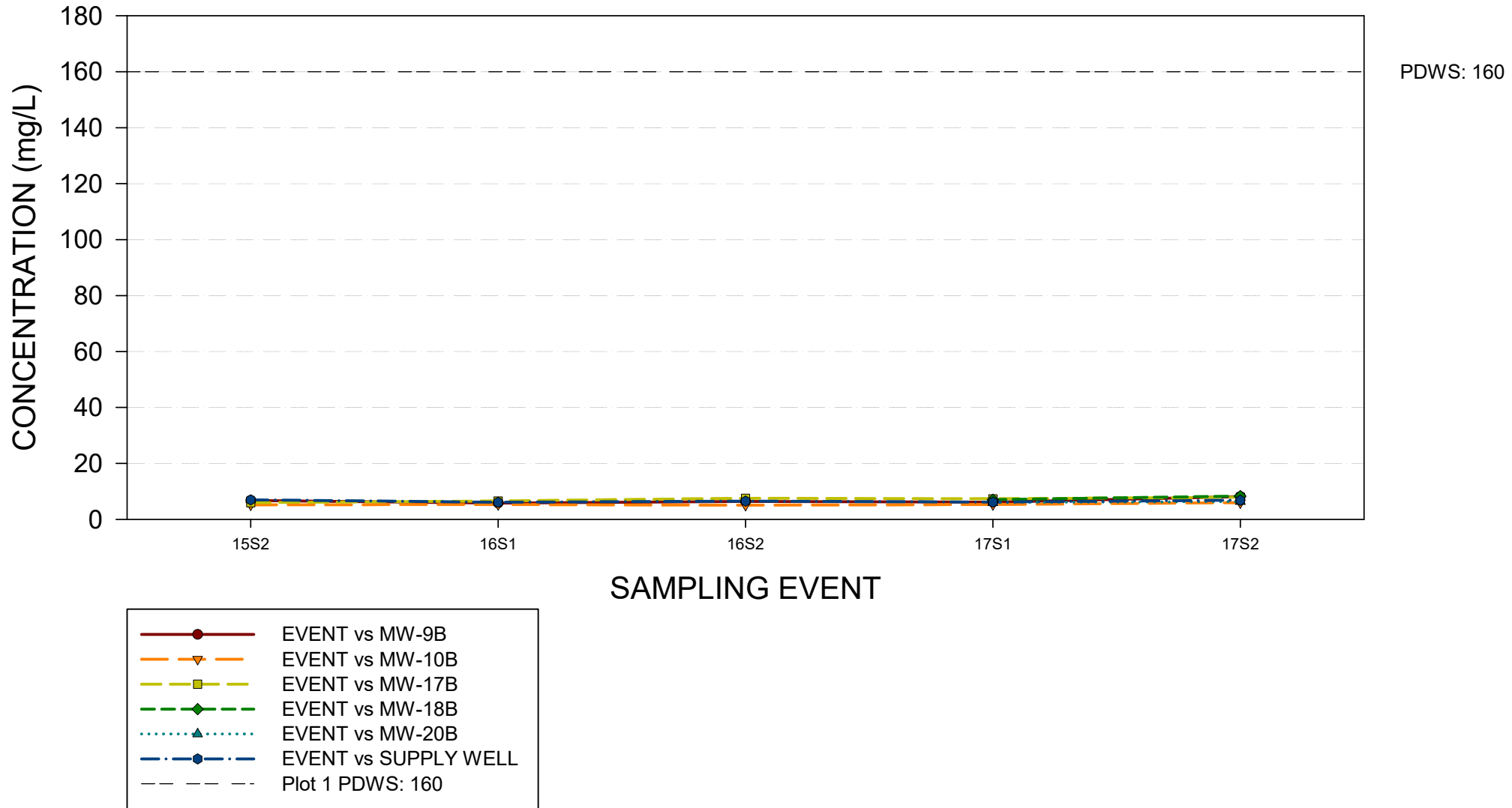
SODIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



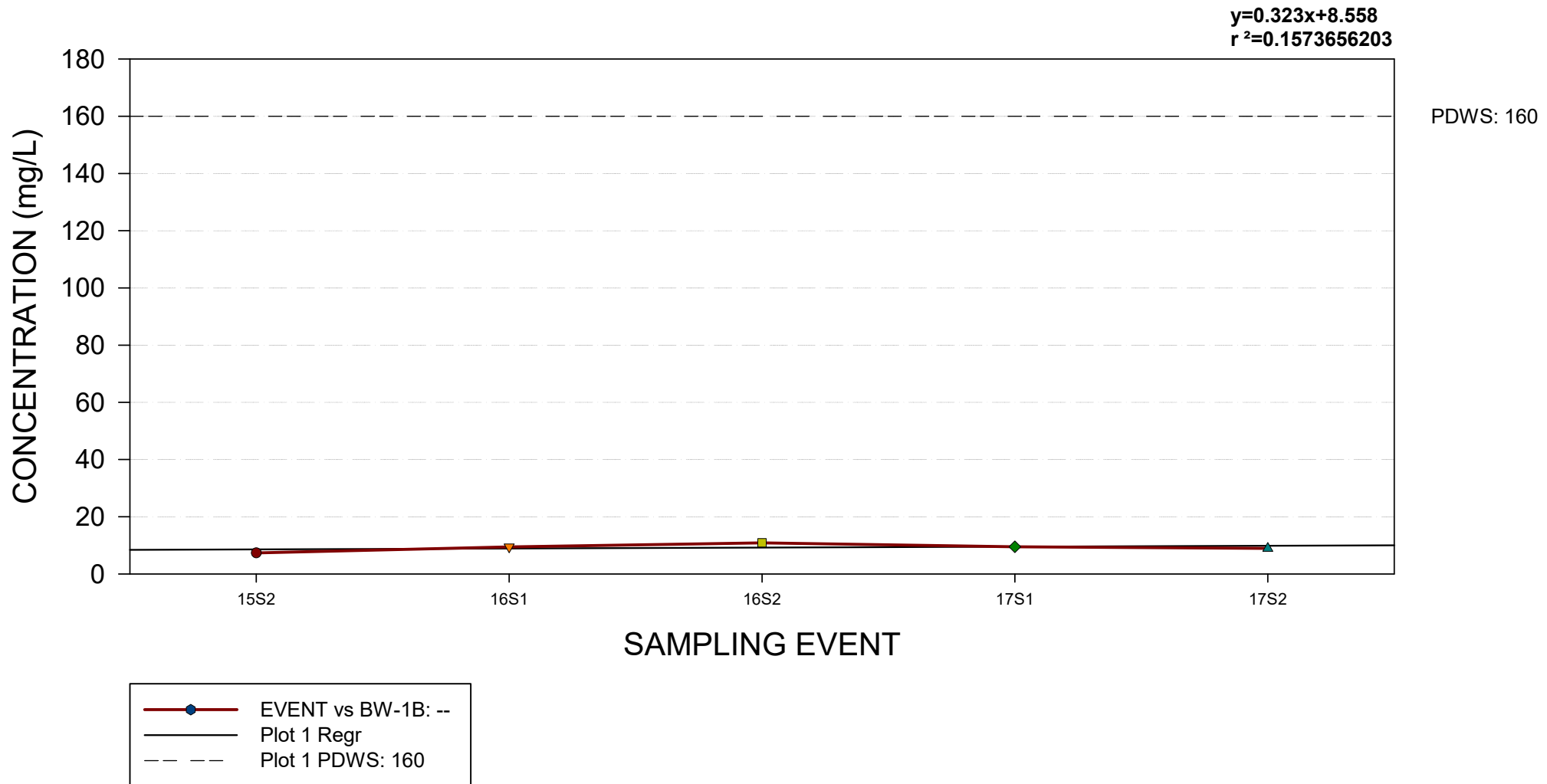
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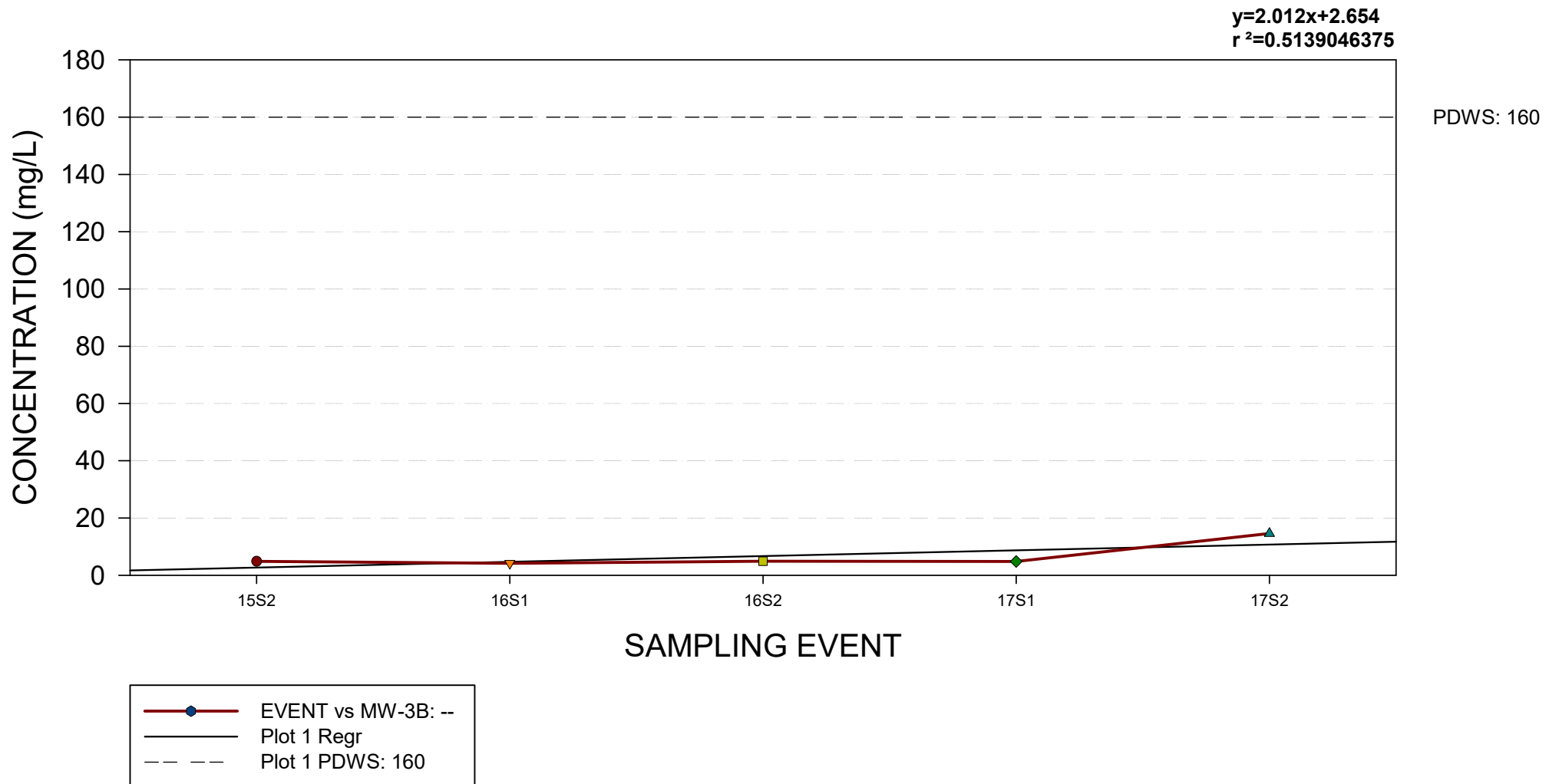
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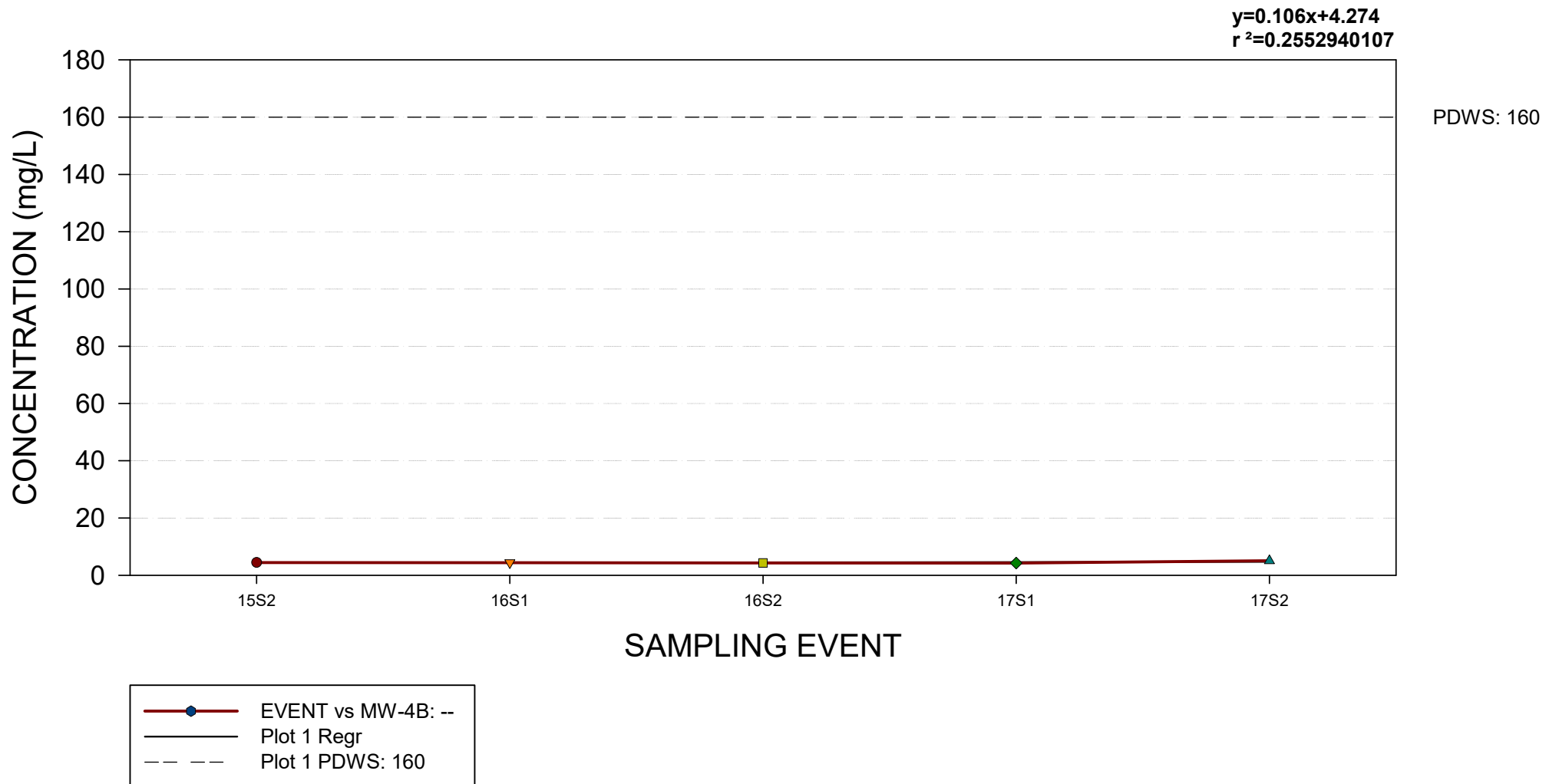
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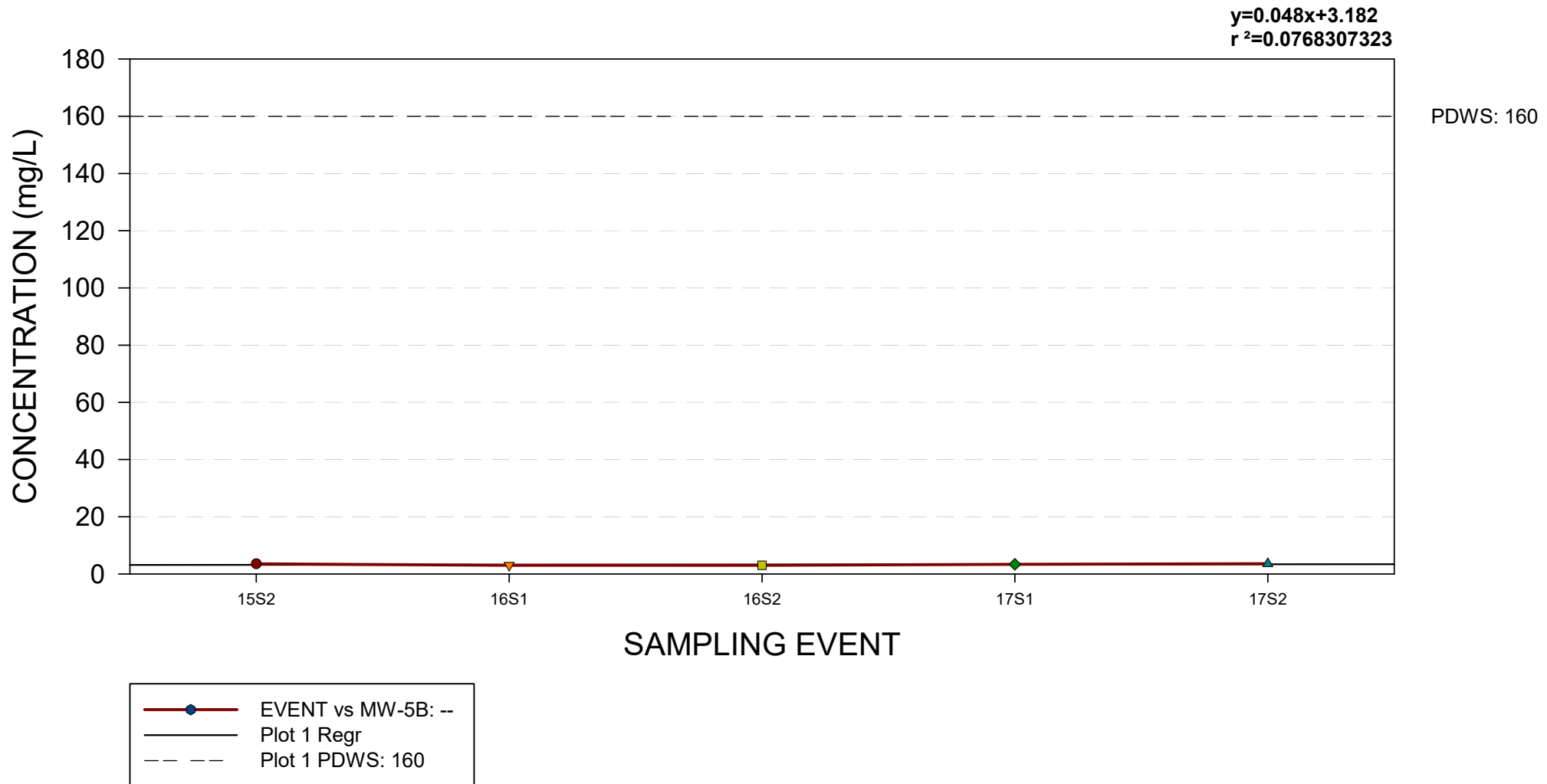
SODIUM

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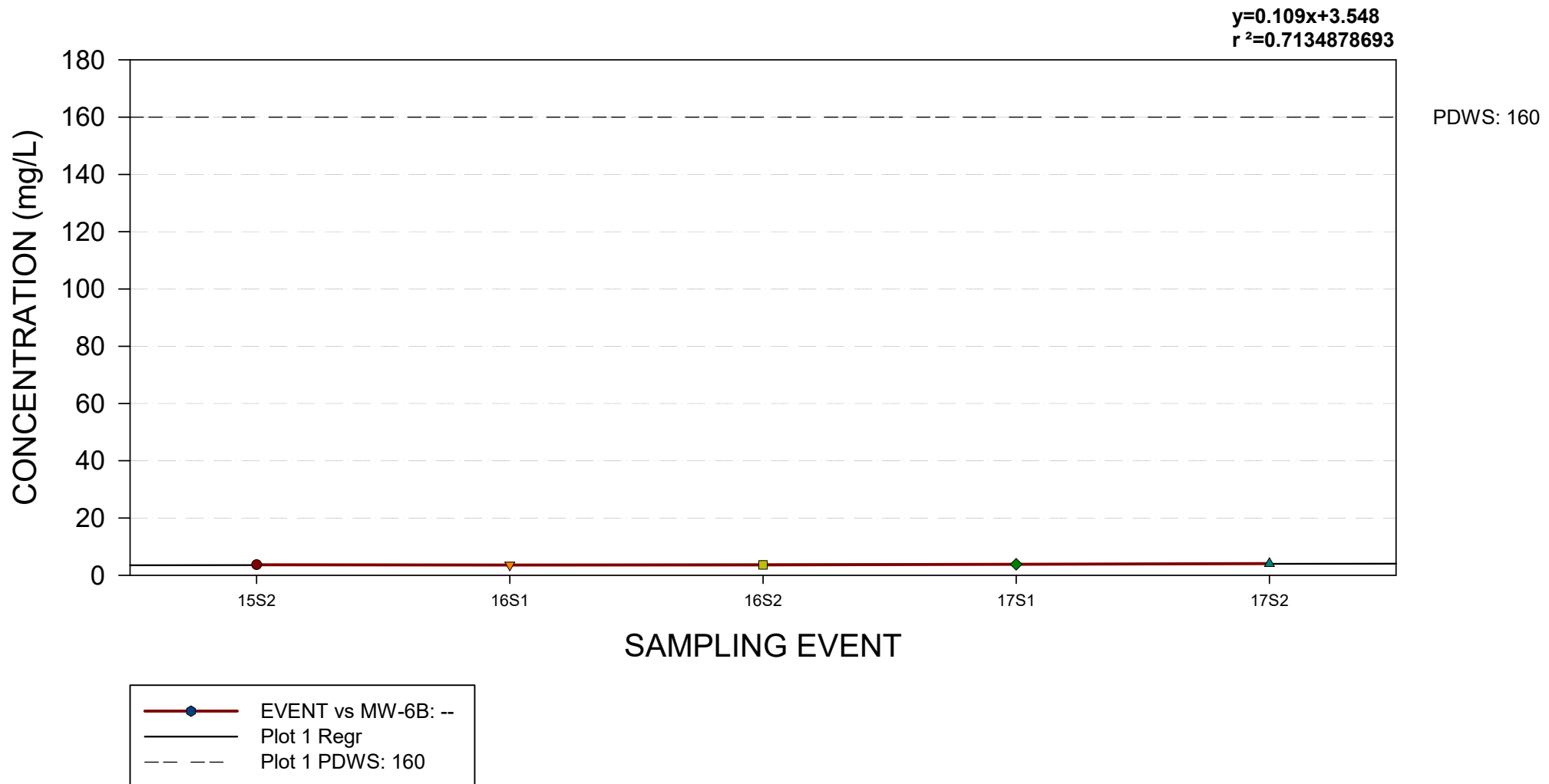
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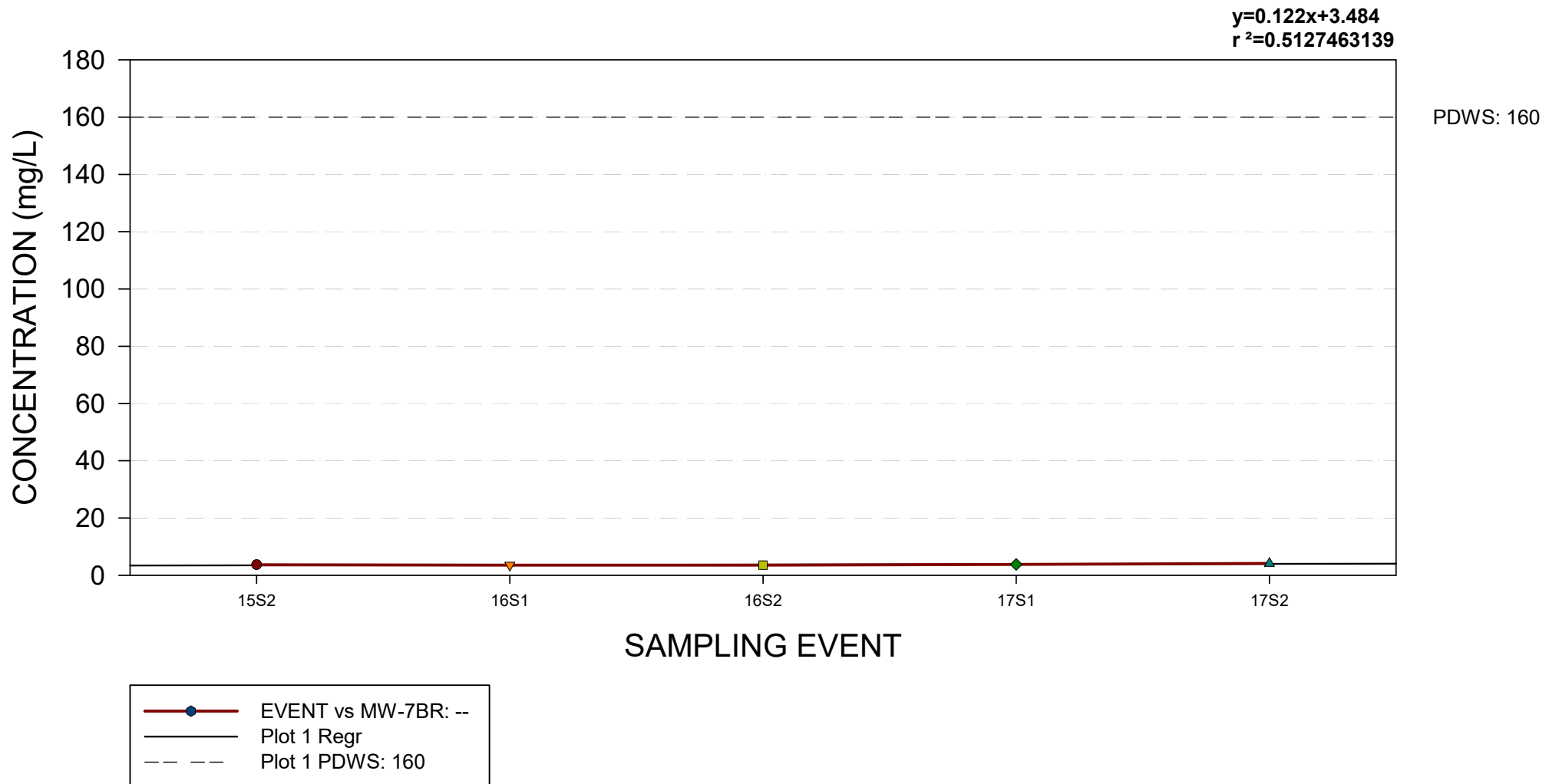
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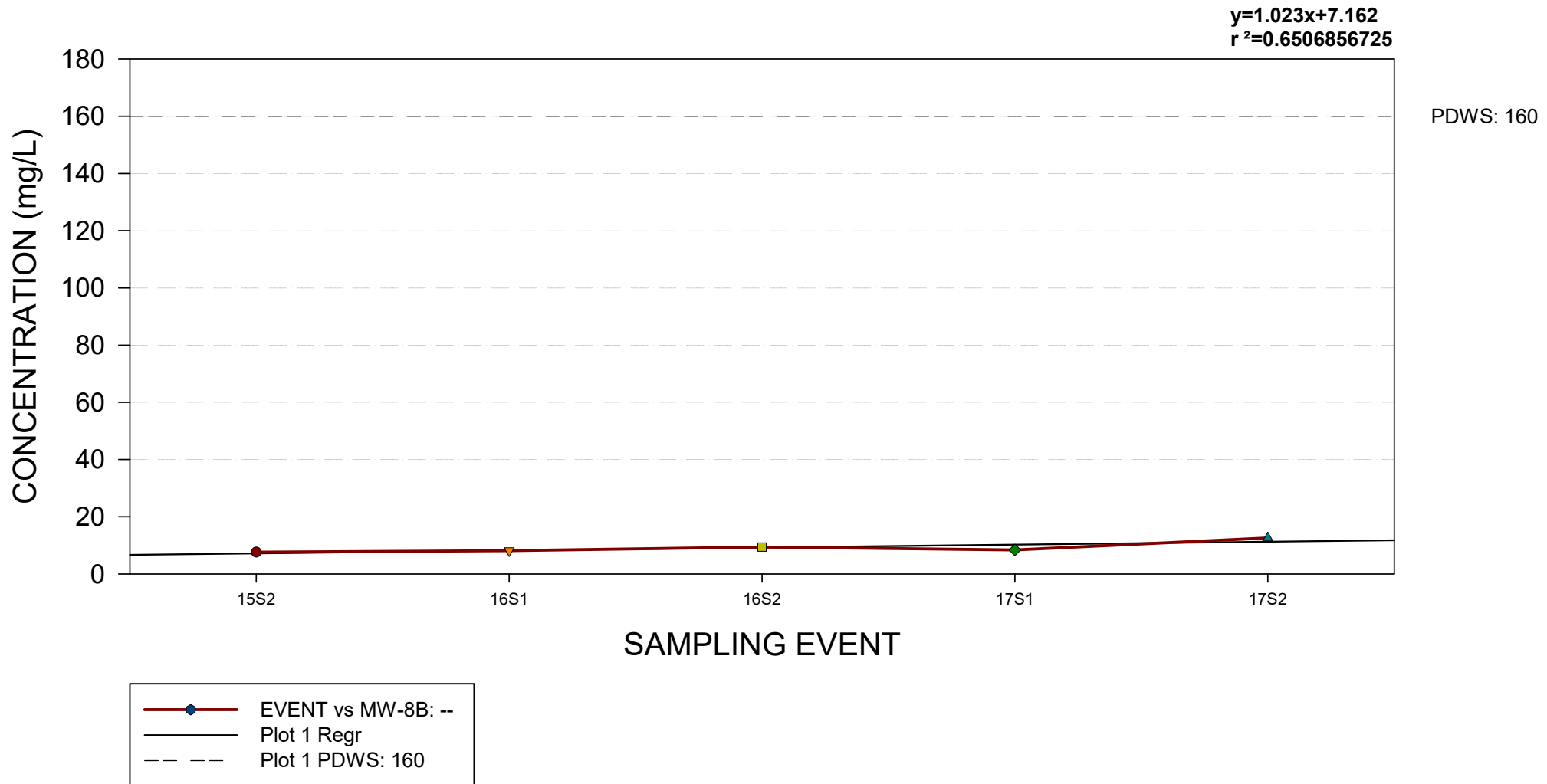
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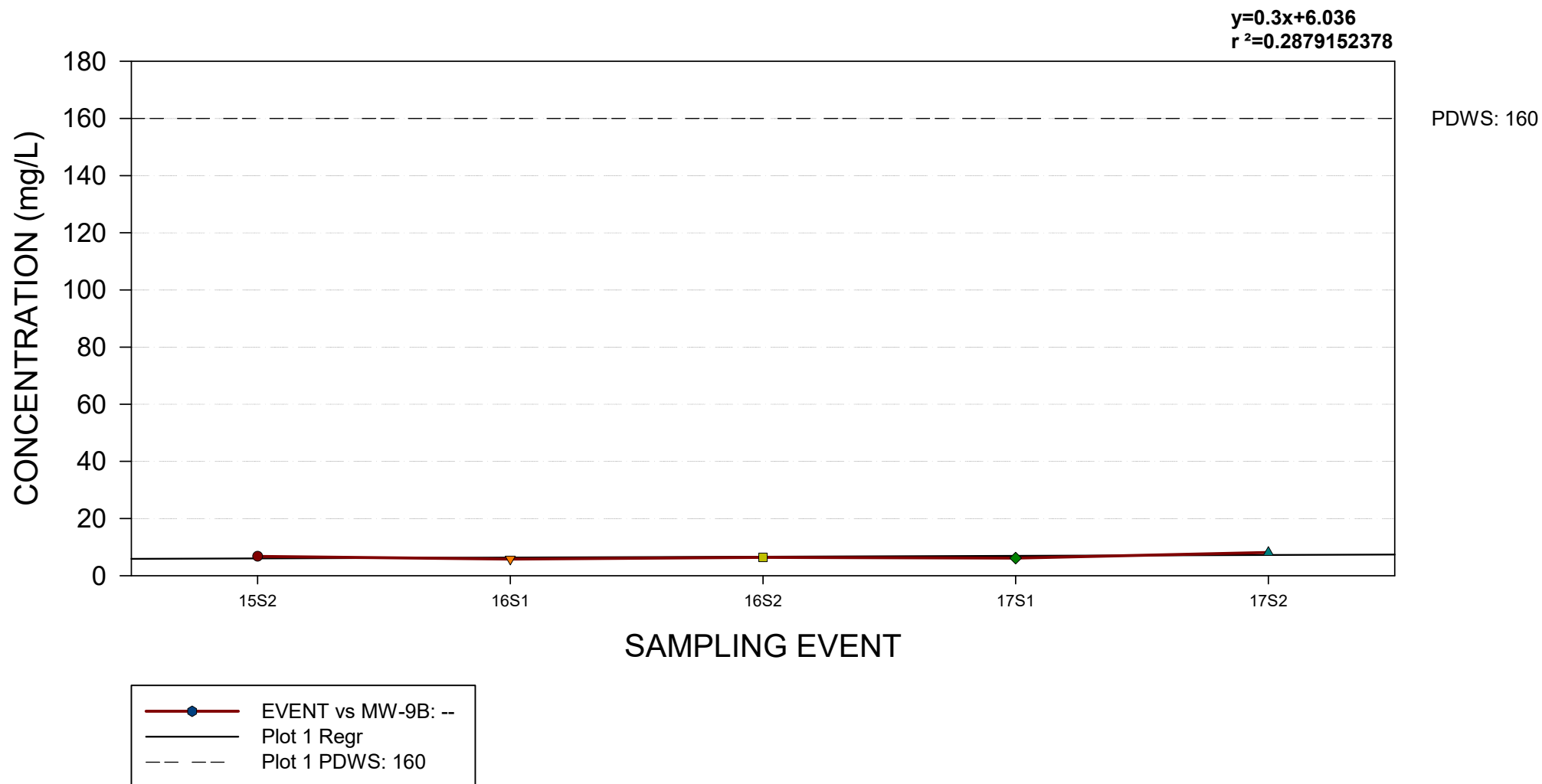
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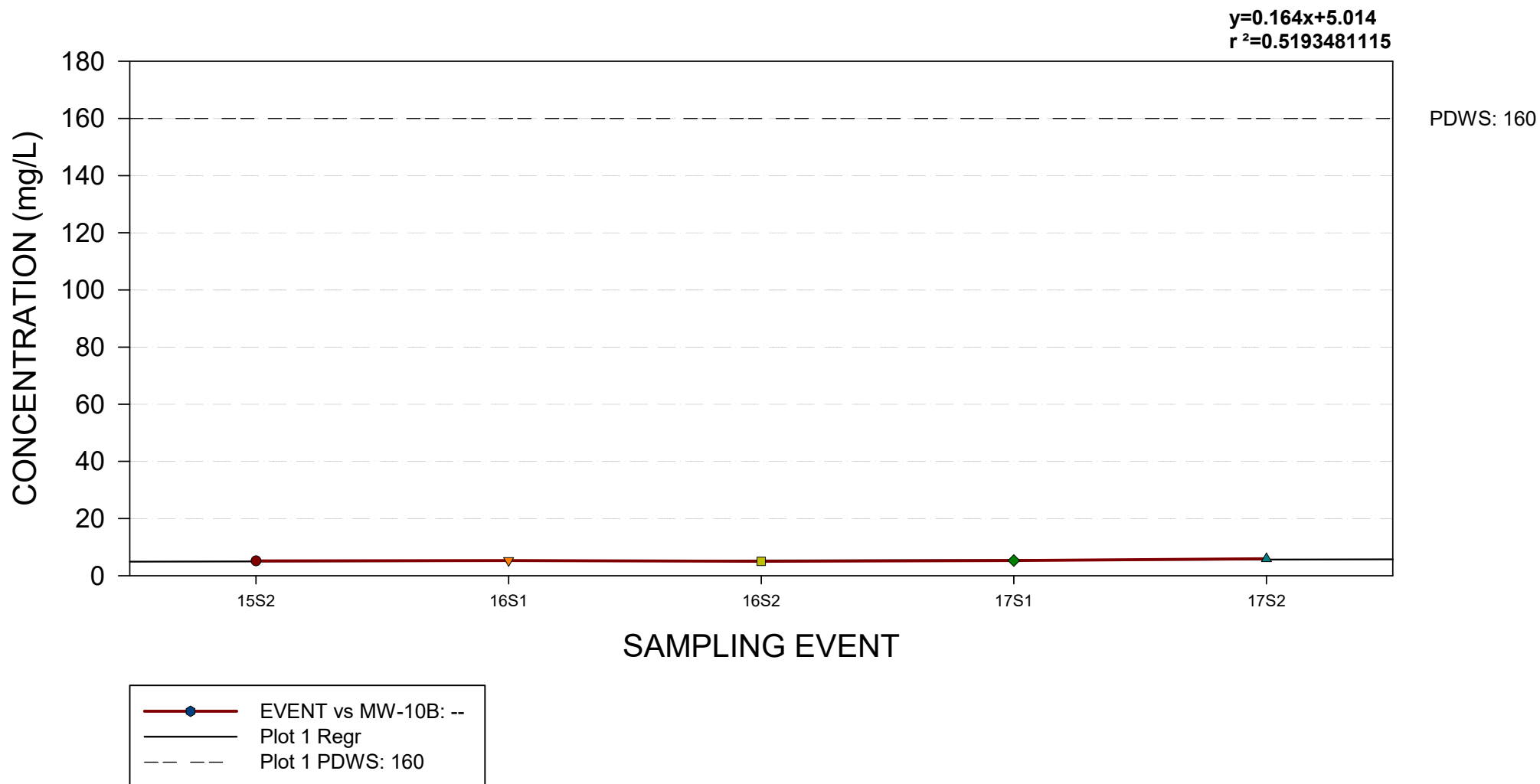
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-9B GROUNDWATER CHEMISTRY TREND GRAPH



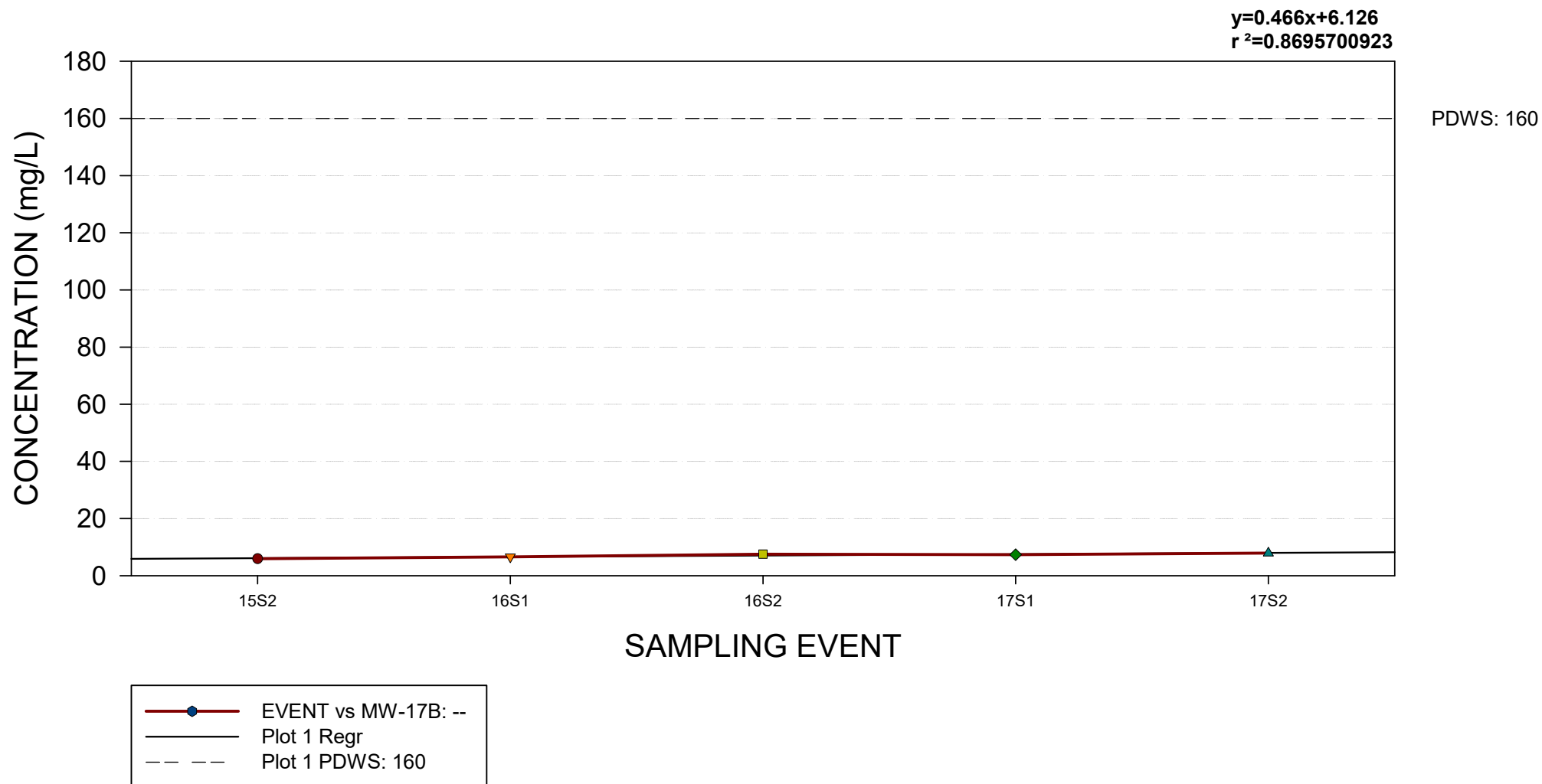
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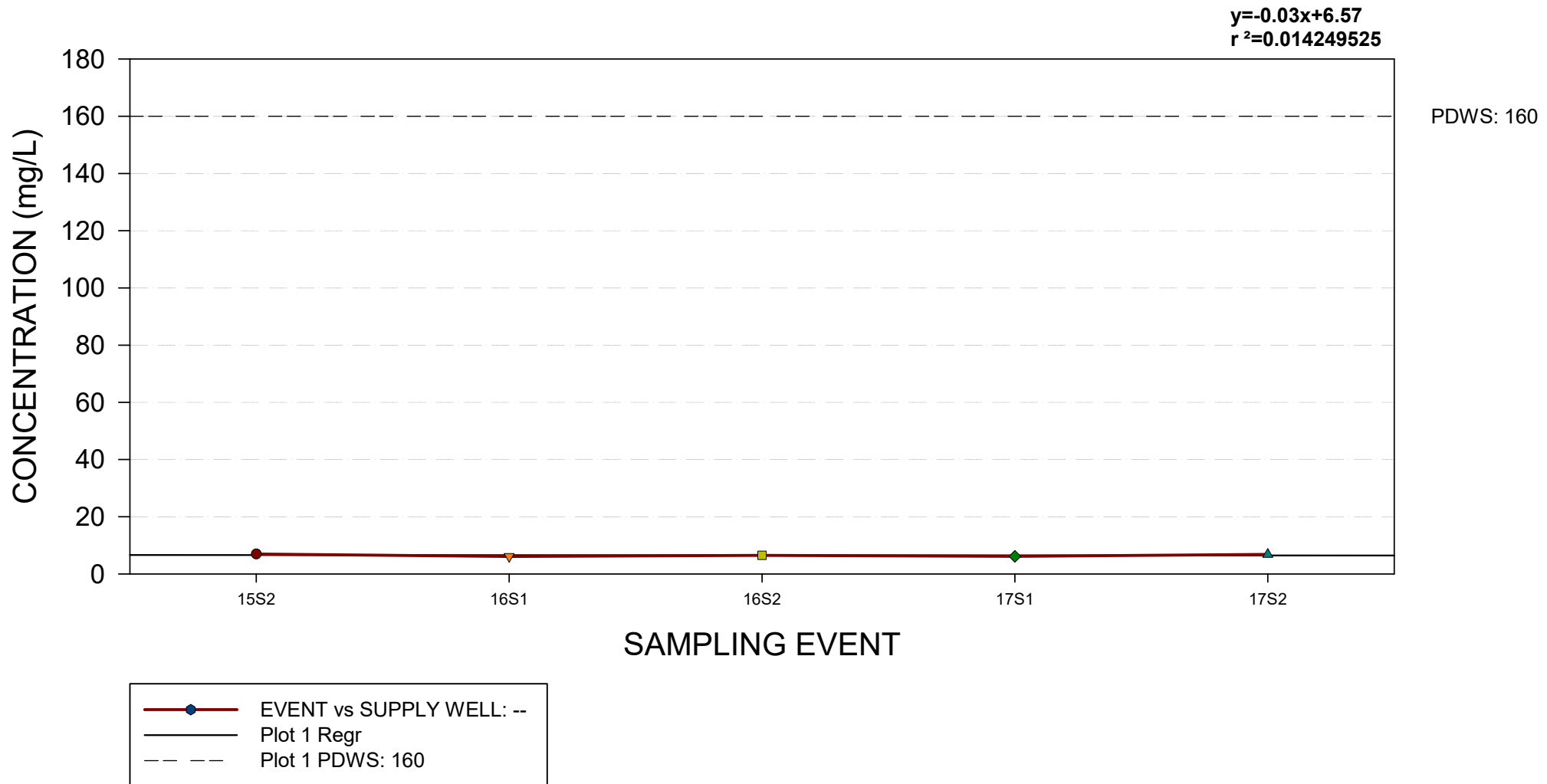
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-17B GROUNDWATER CHEMISTRY TREND GRAPH



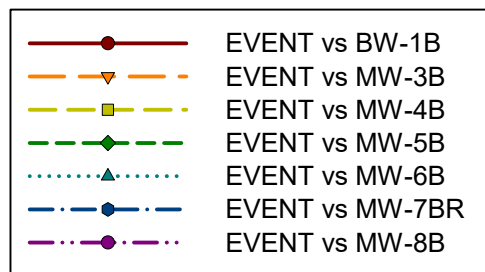
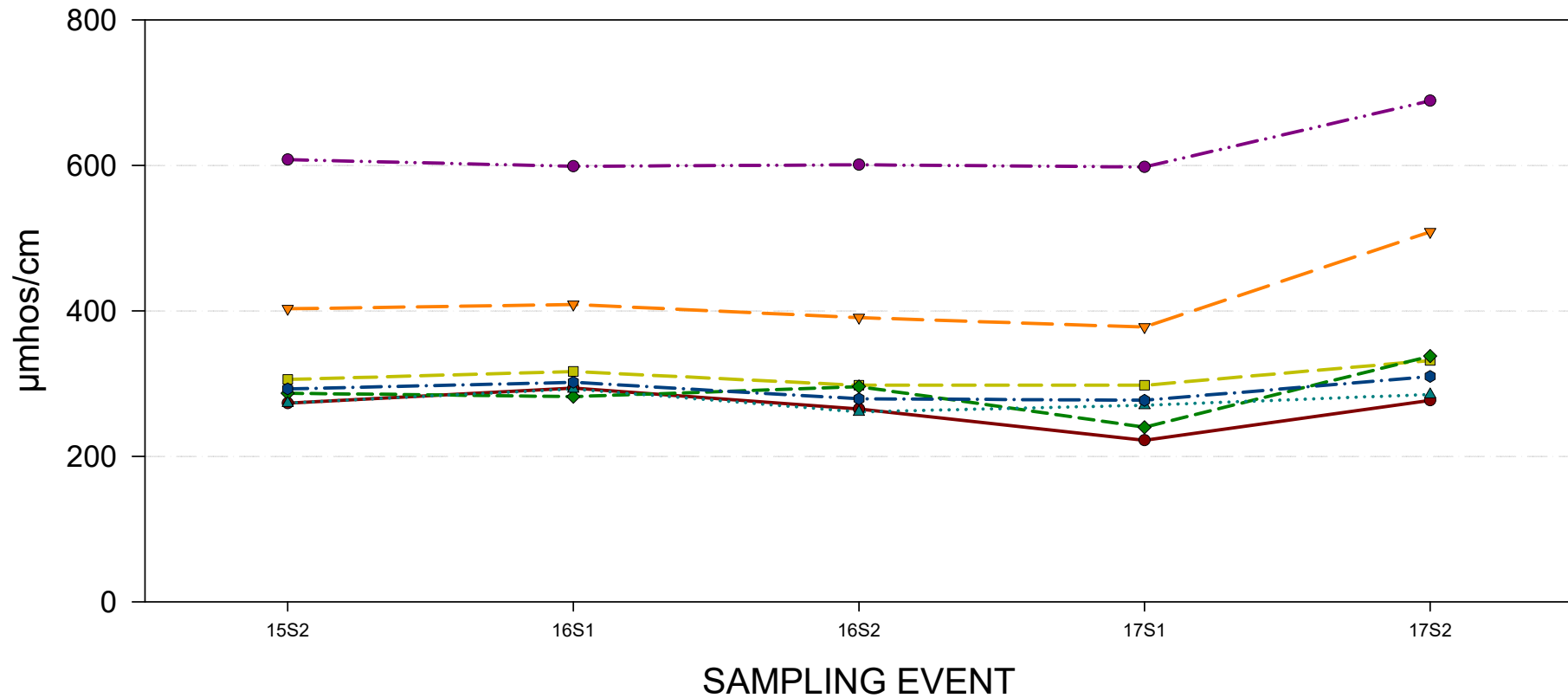
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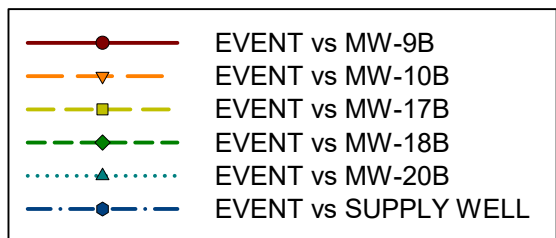
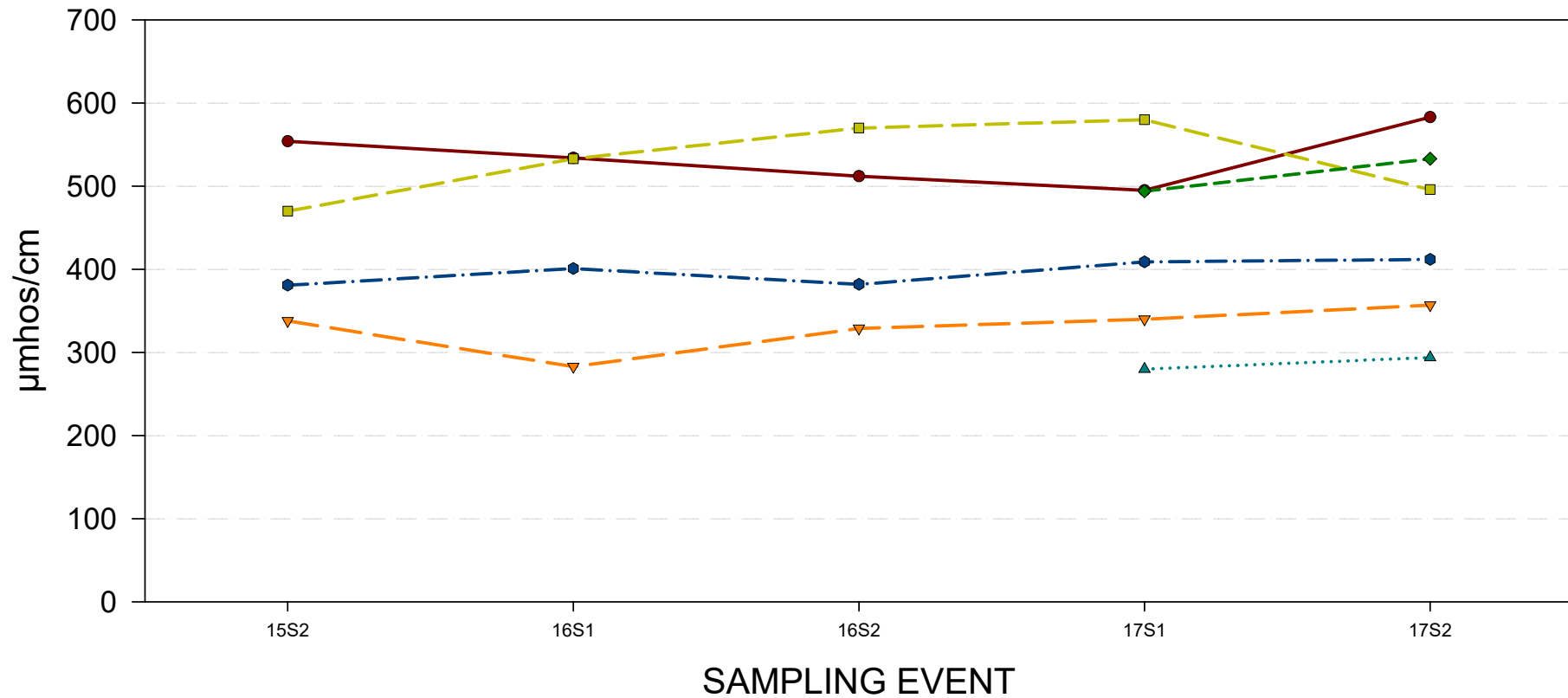
SPECIFIC CONDUCTANCE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



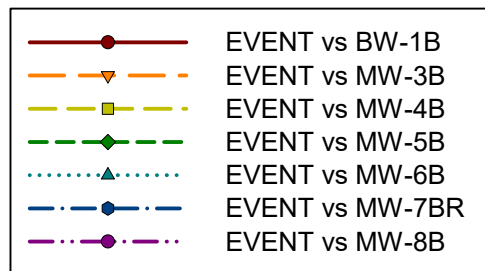
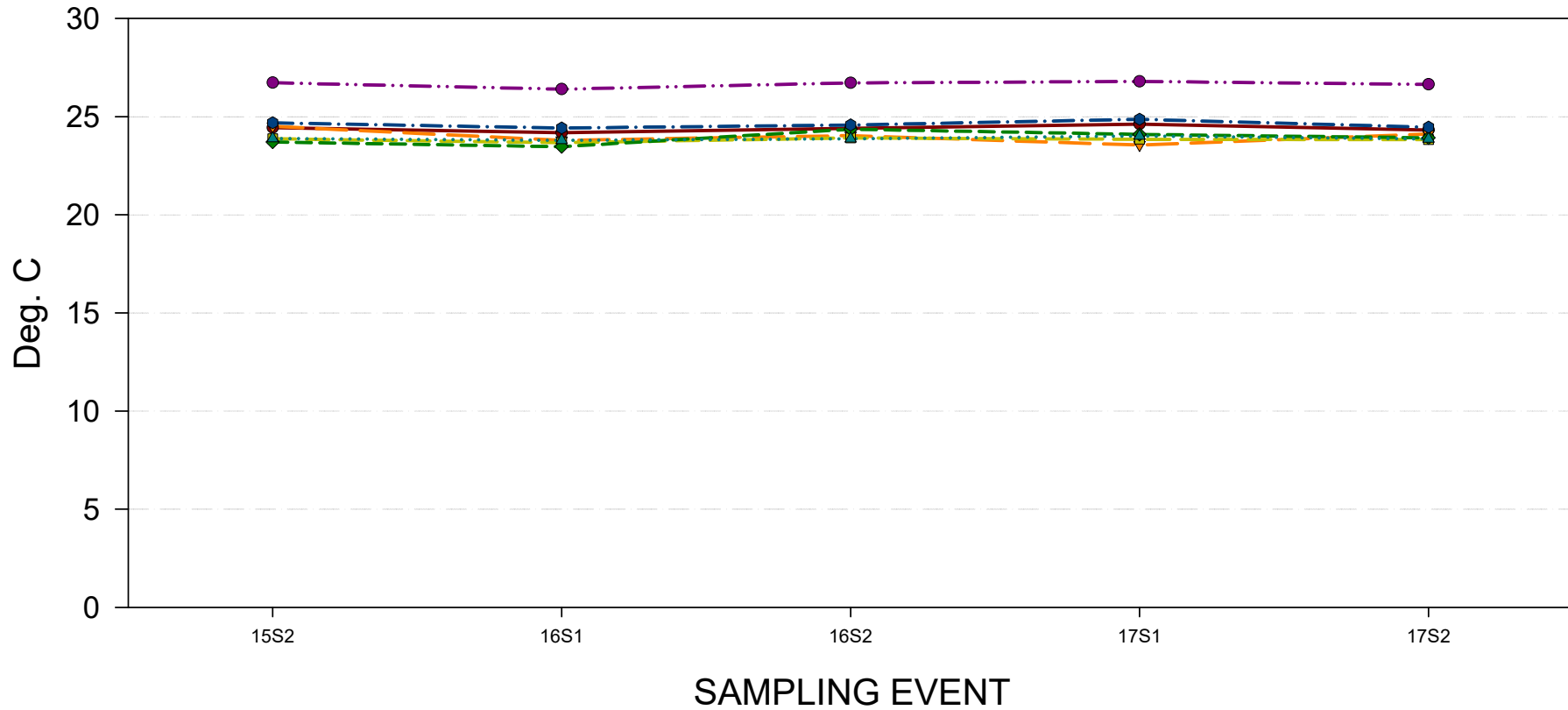
SPECIFIC CONDUCTANCE

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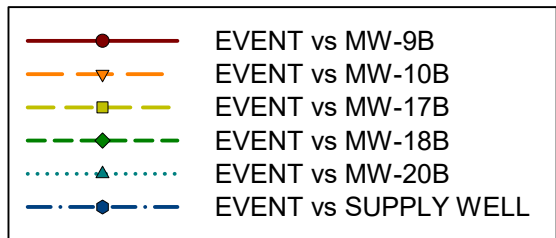
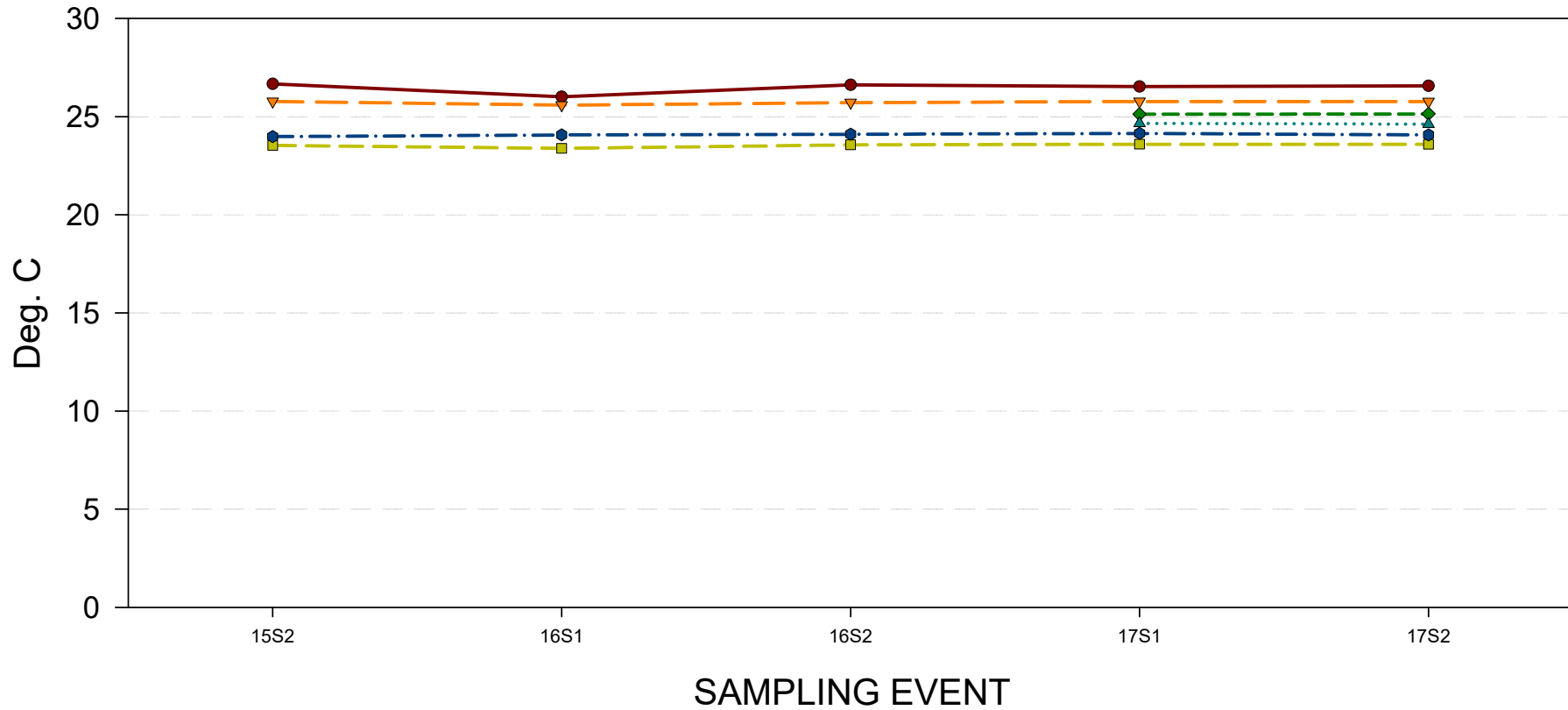
TEMPERATURE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH

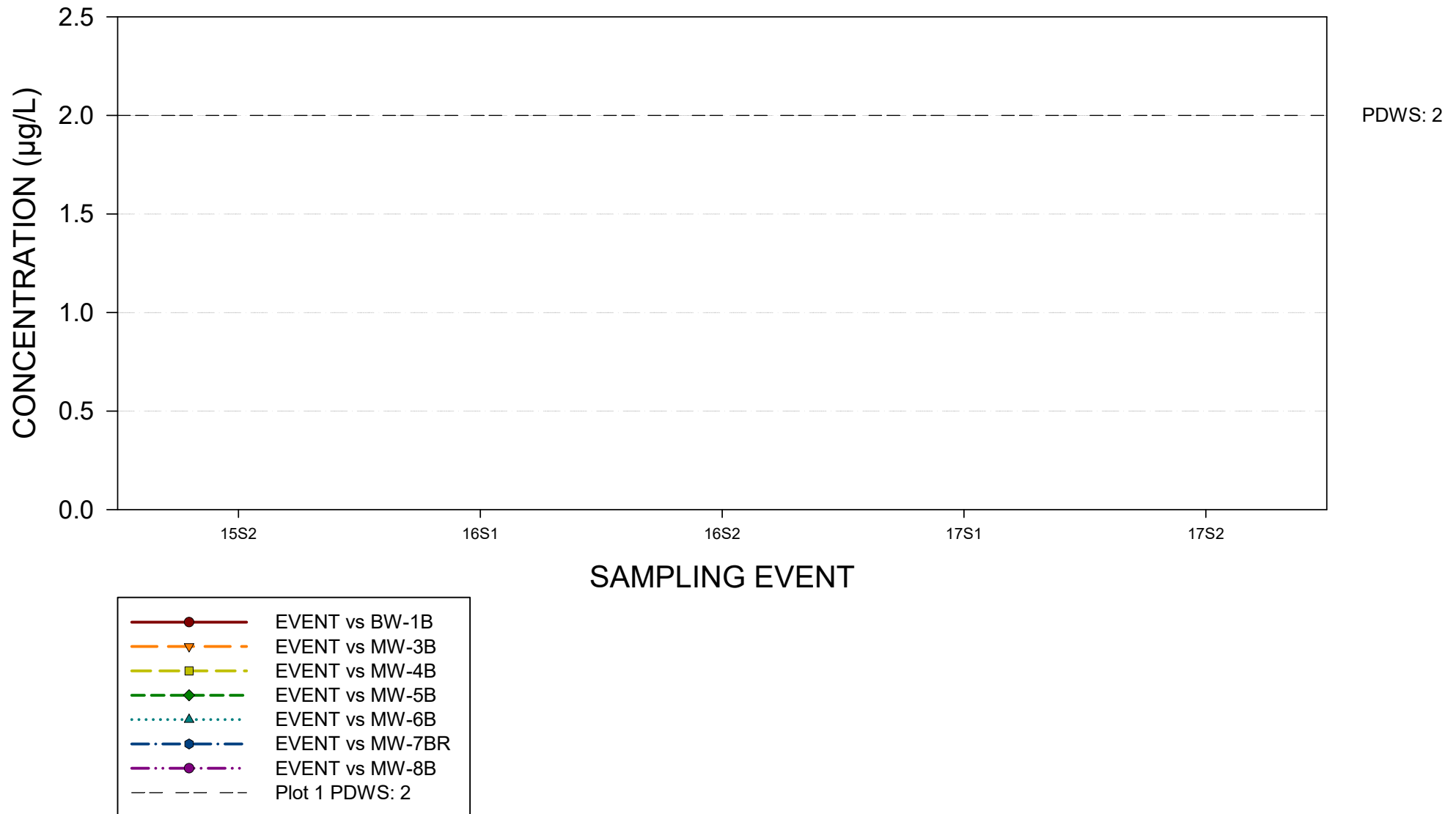


TEMPERATURE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH

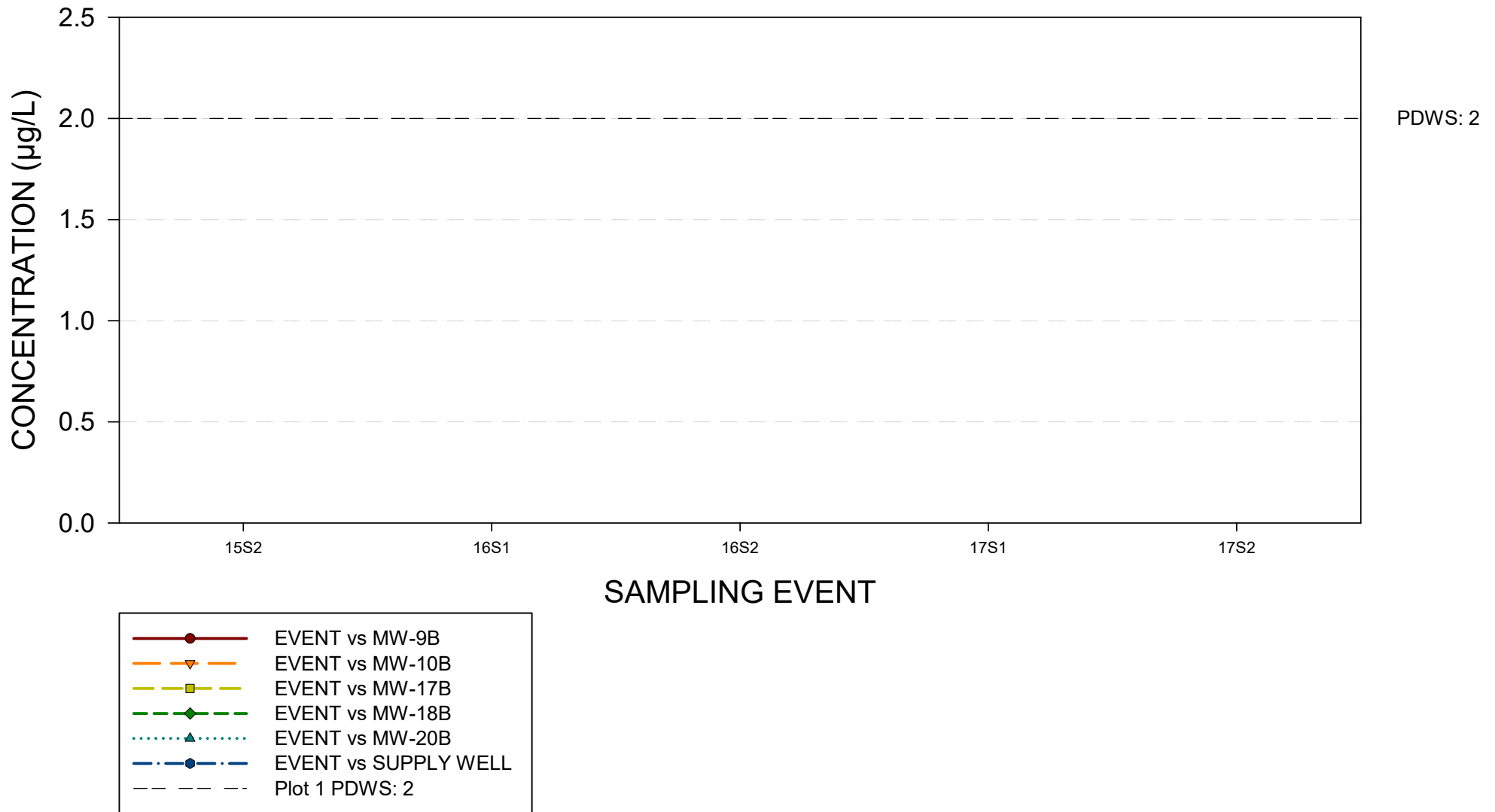


ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



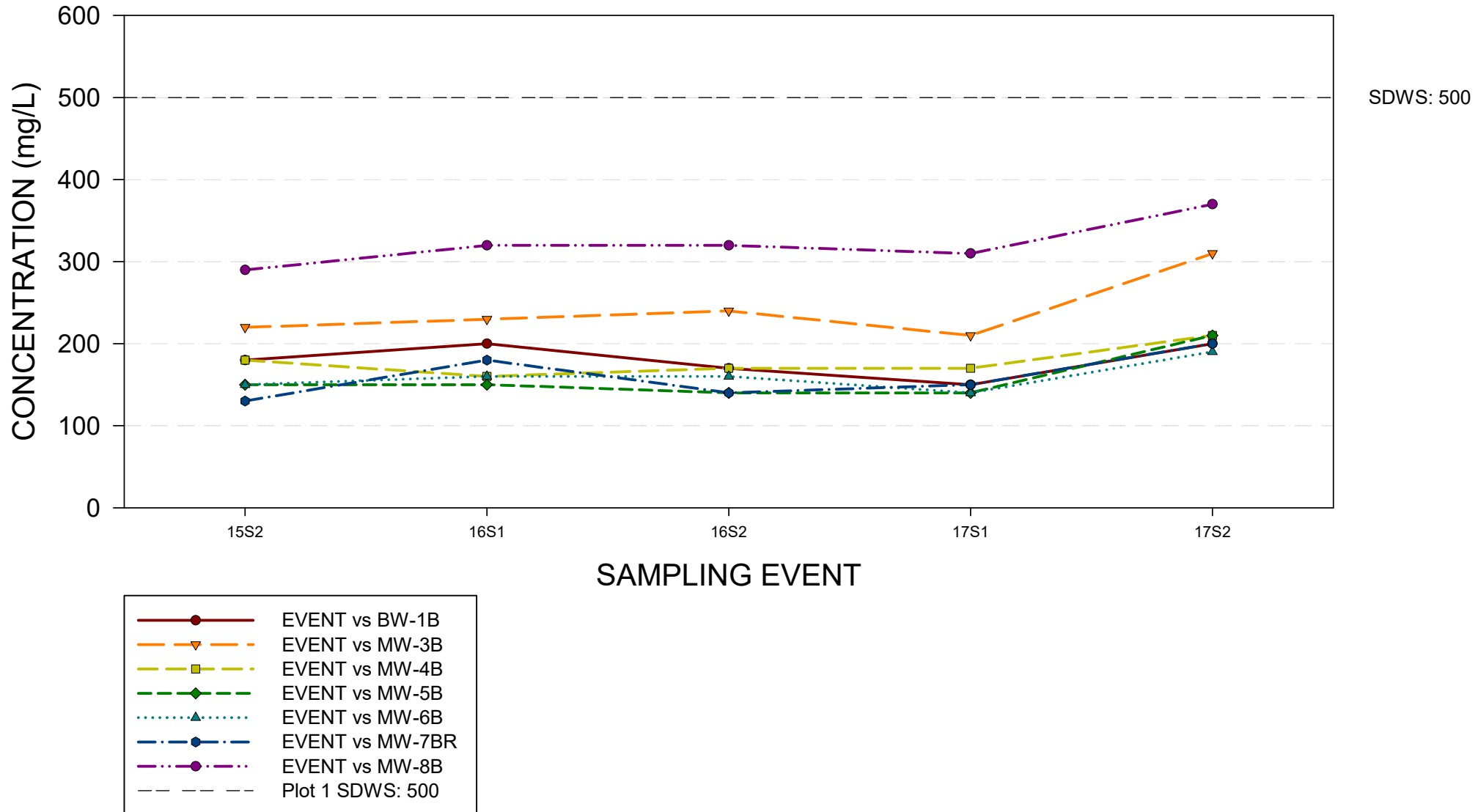
THALLIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



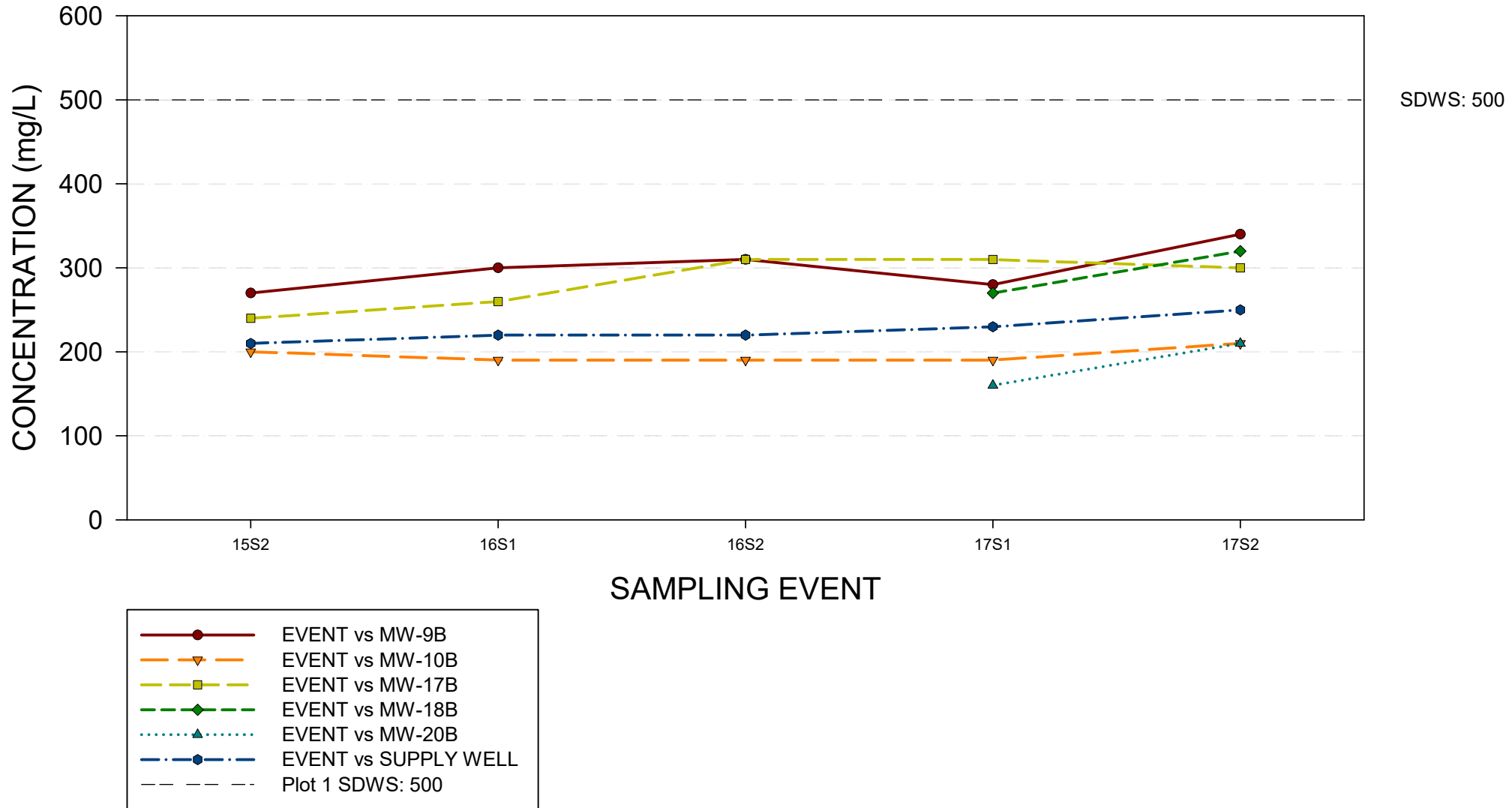
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



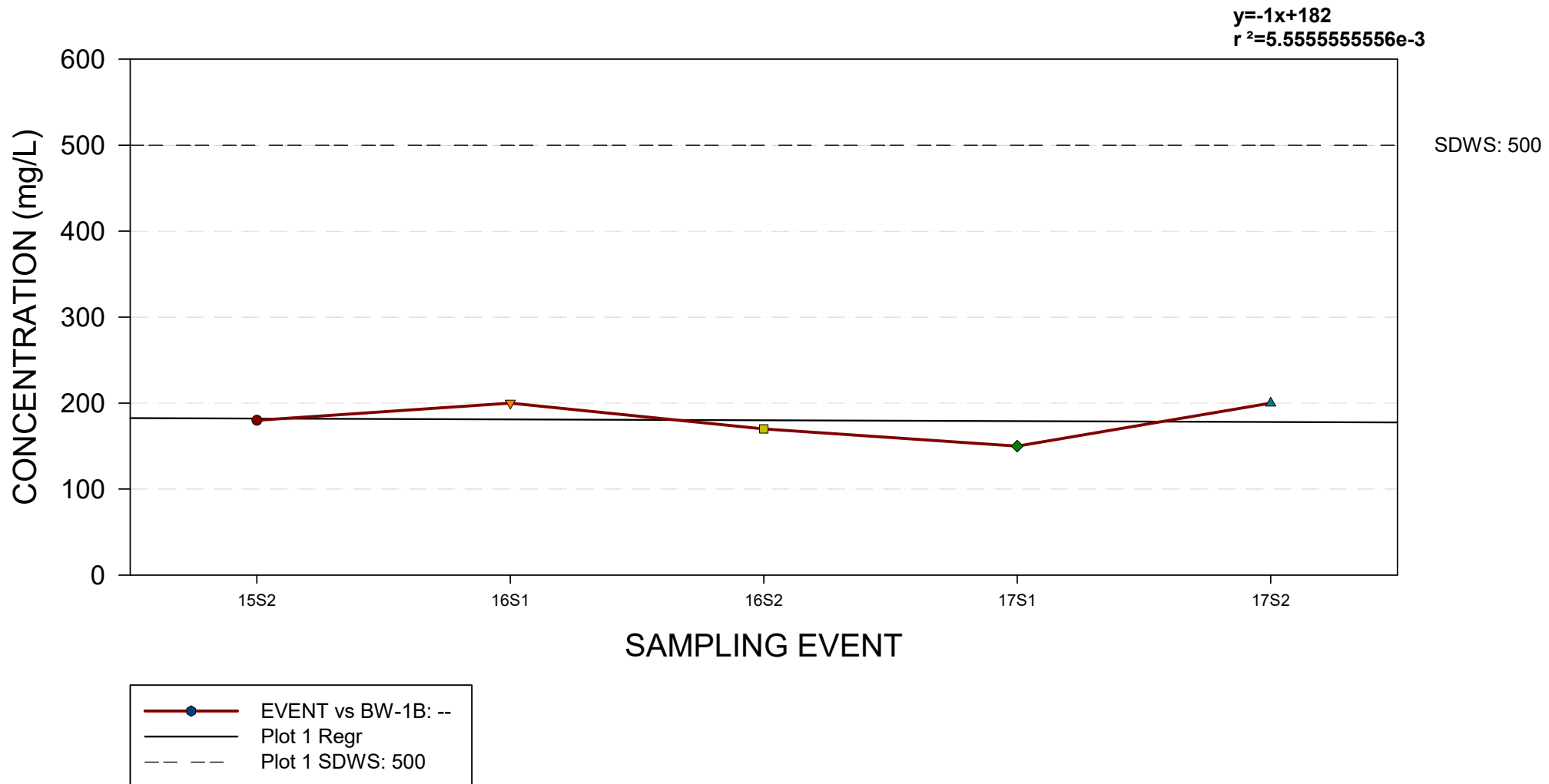
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



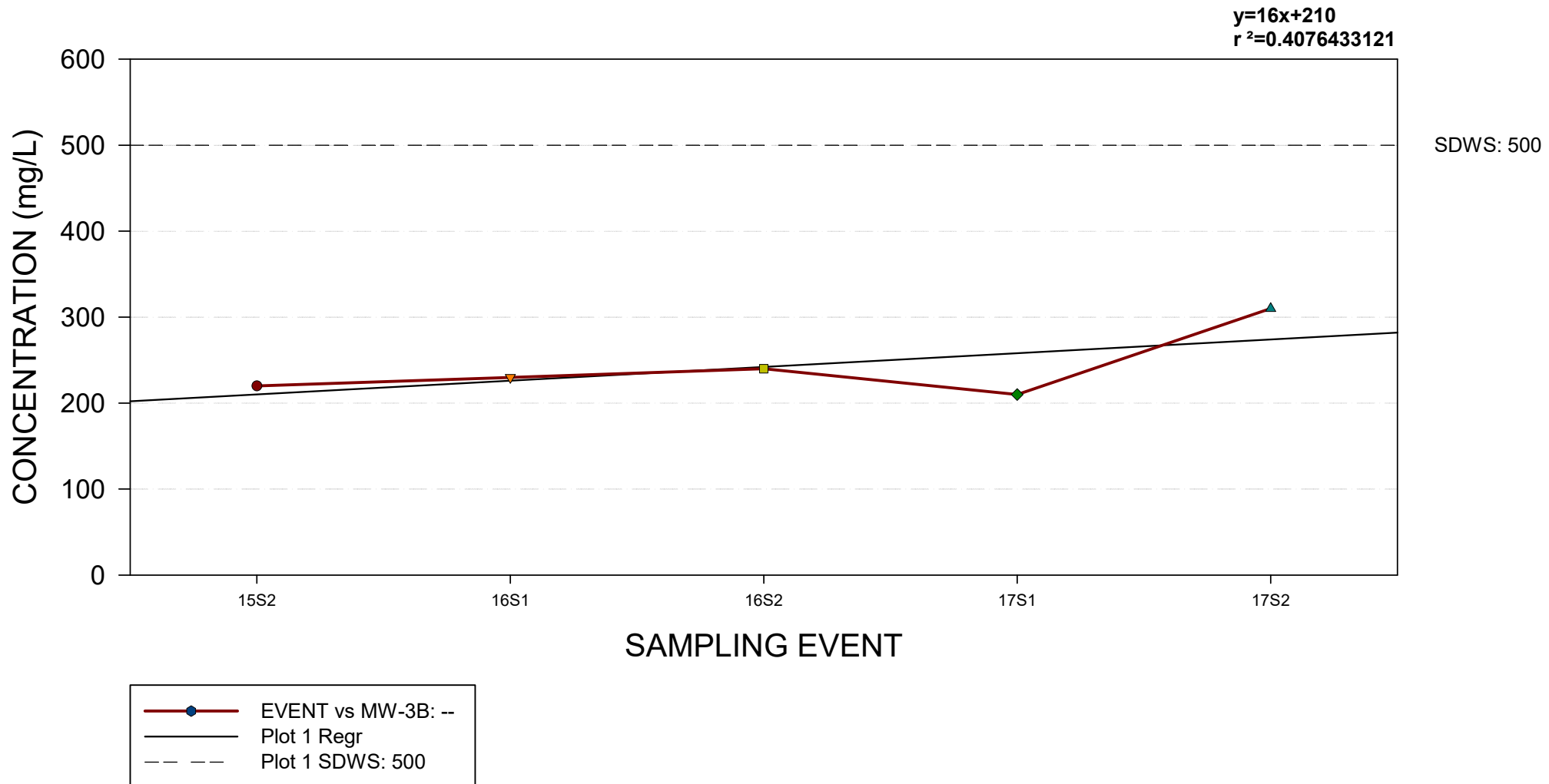
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-1B GROUNDWATER CHEMISTRY TREND GRAPH



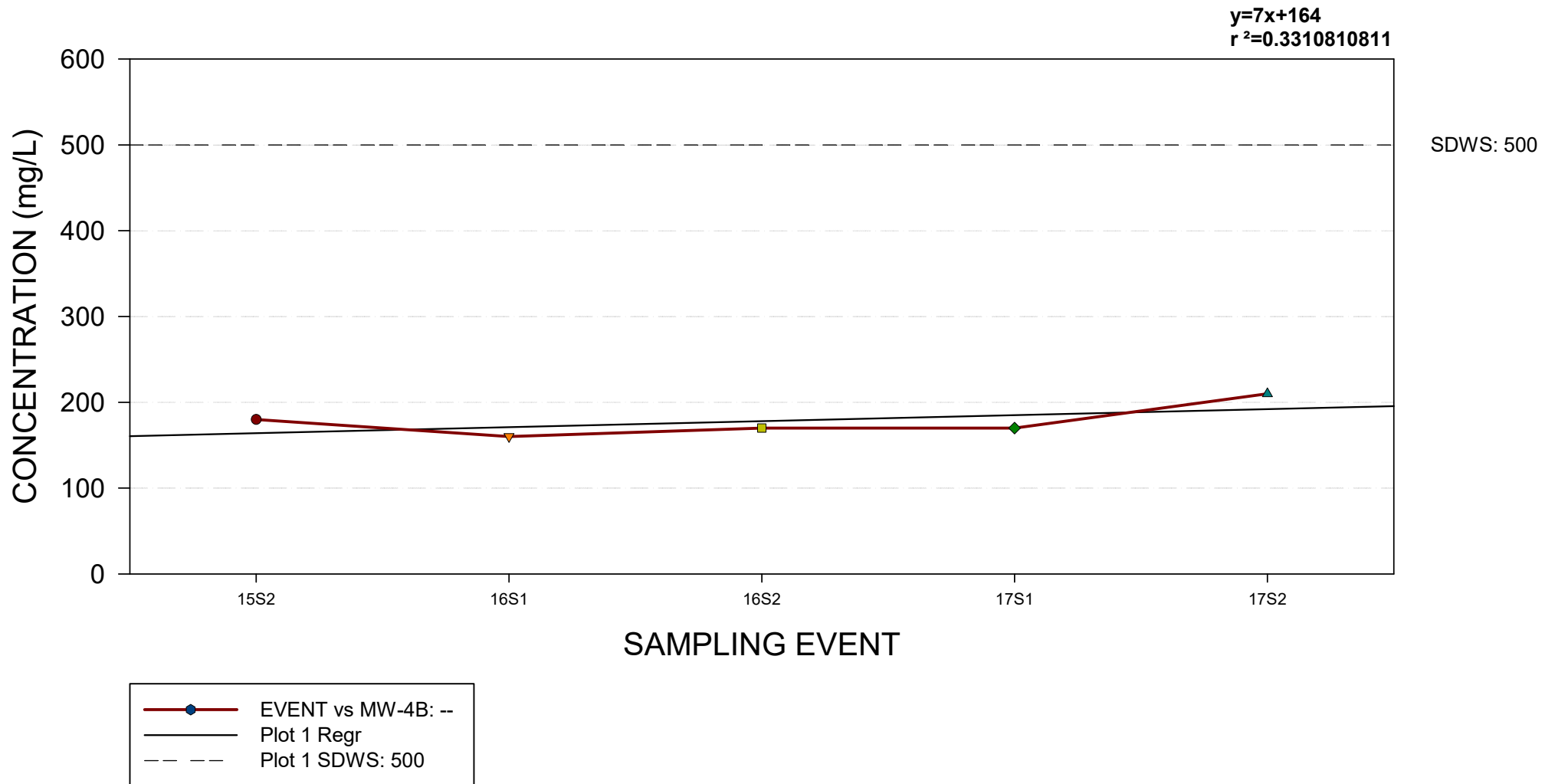
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-3B GROUNDWATER CHEMISTRY TREND GRAPH



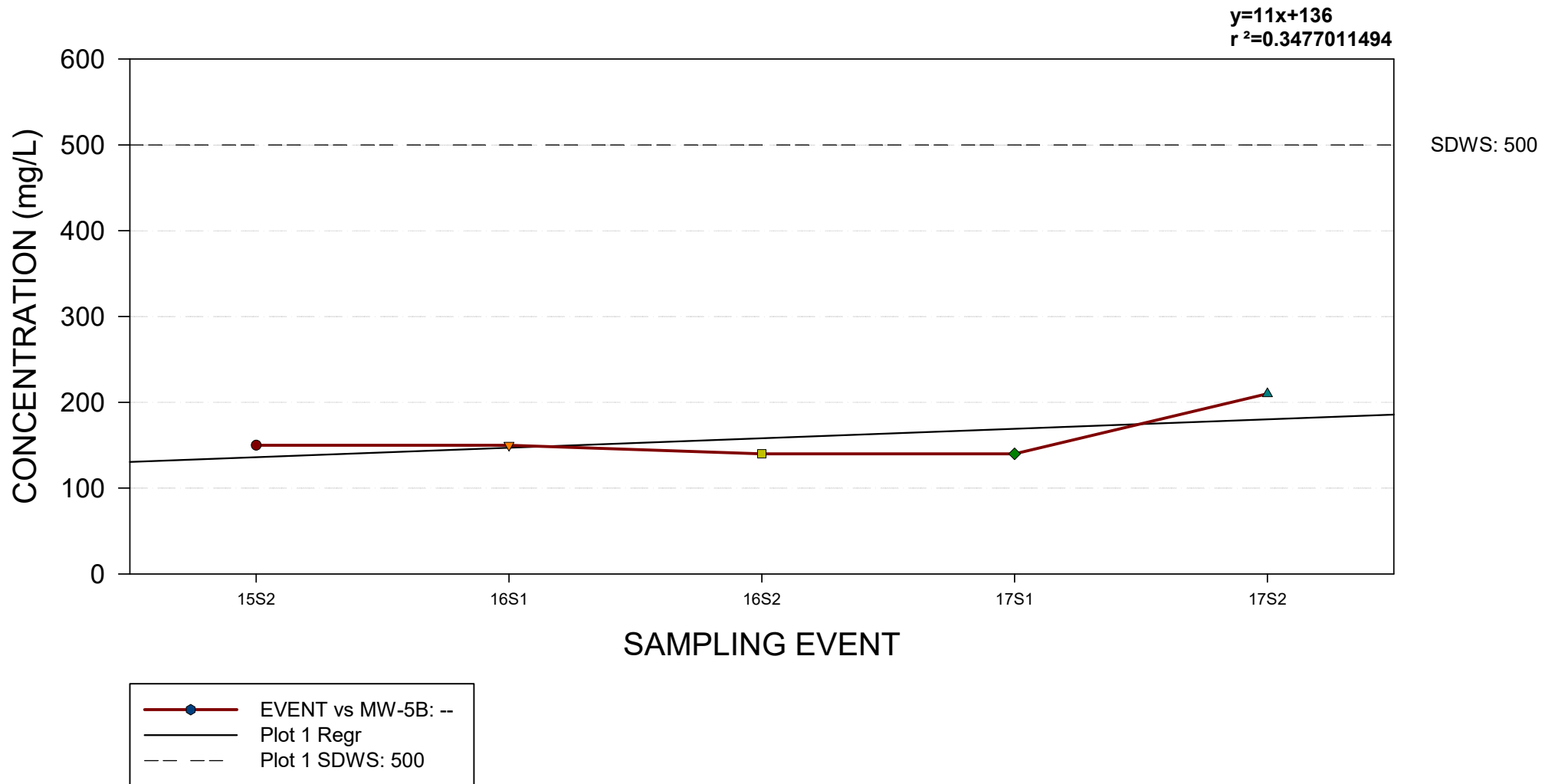
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-4B GROUNDWATER CHEMISTRY TREND GRAPH



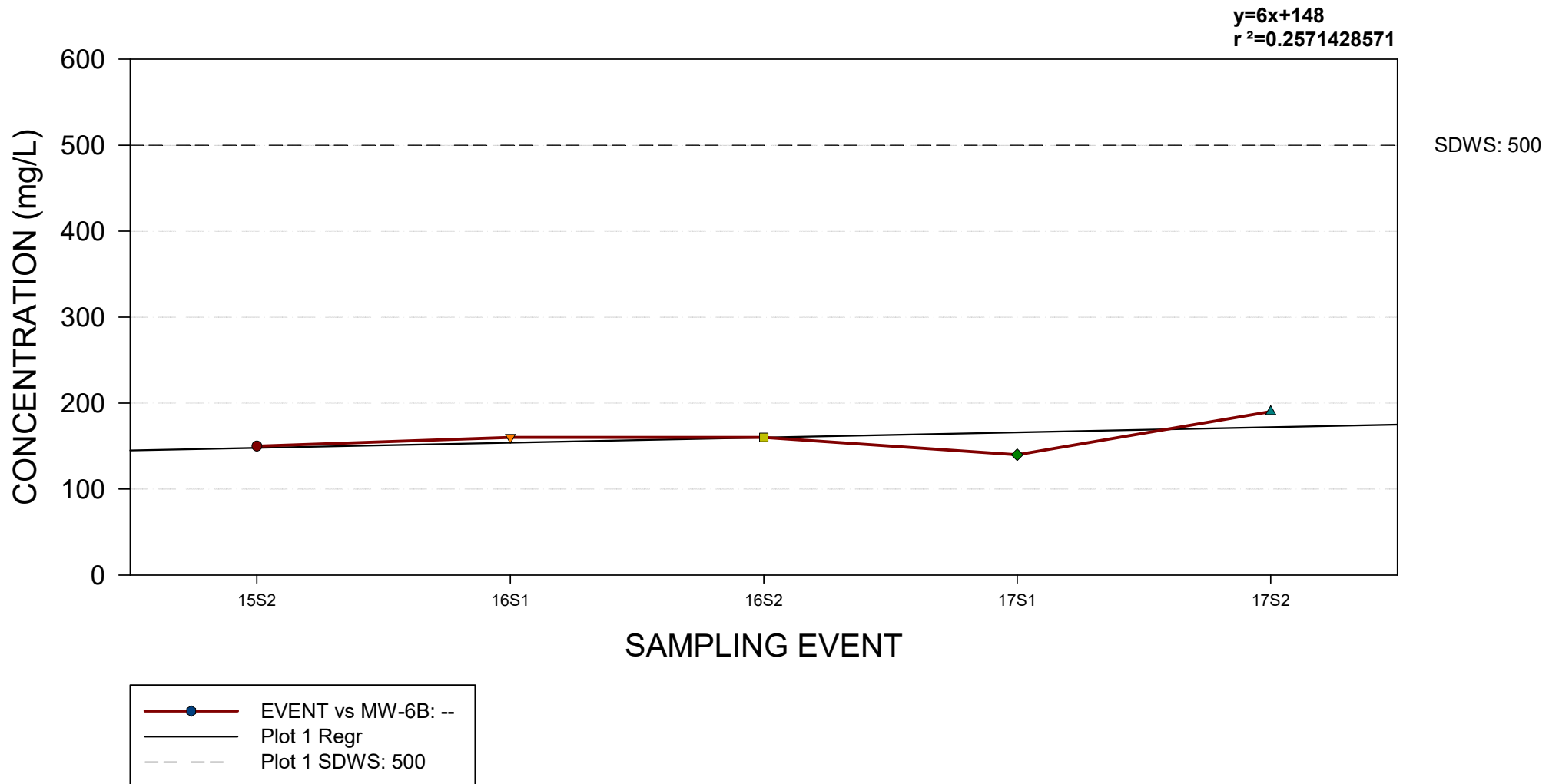
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-5B GROUNDWATER CHEMISTRY TREND GRAPH



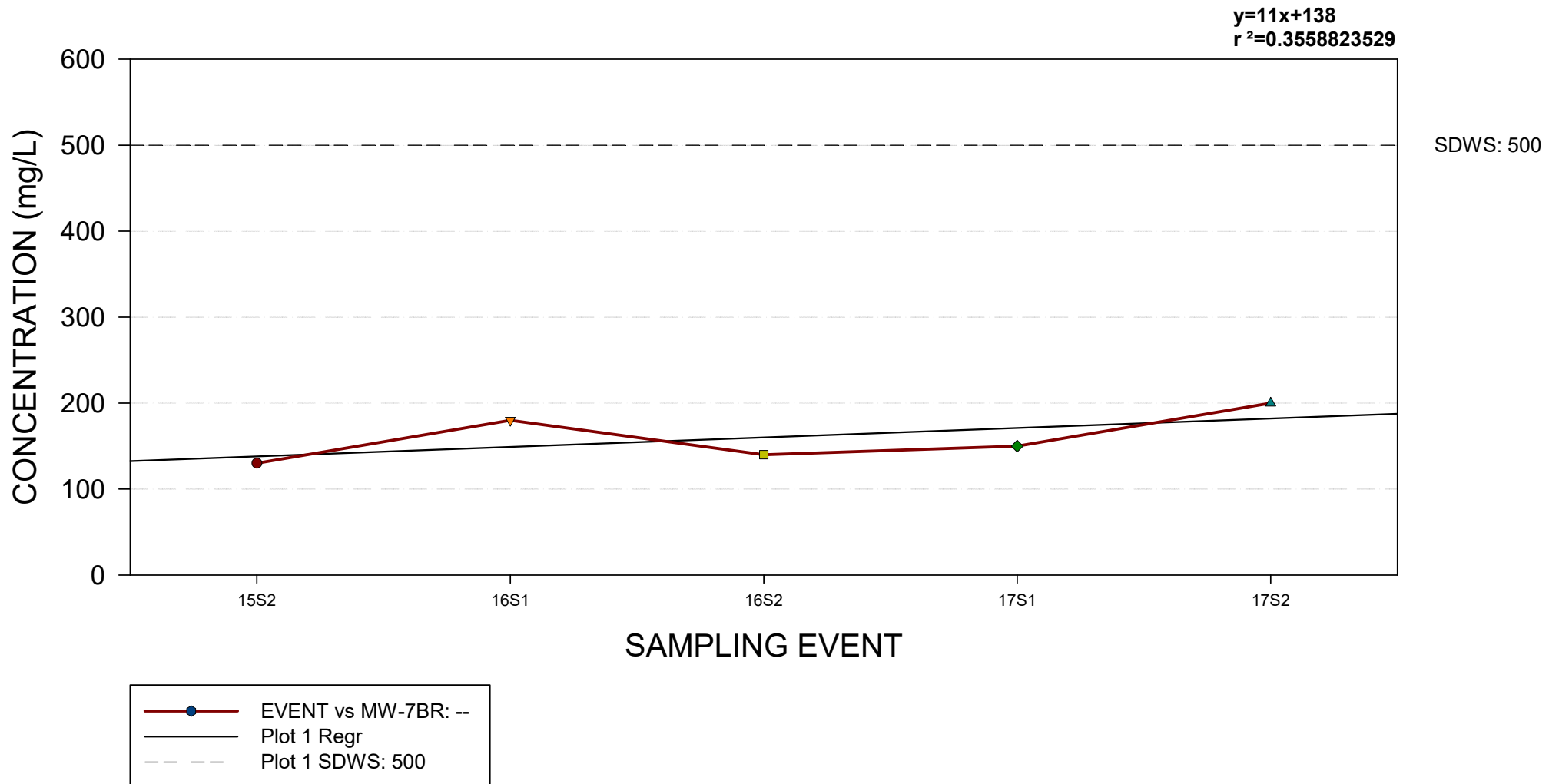
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-6B GROUNDWATER CHEMISTRY TREND GRAPH



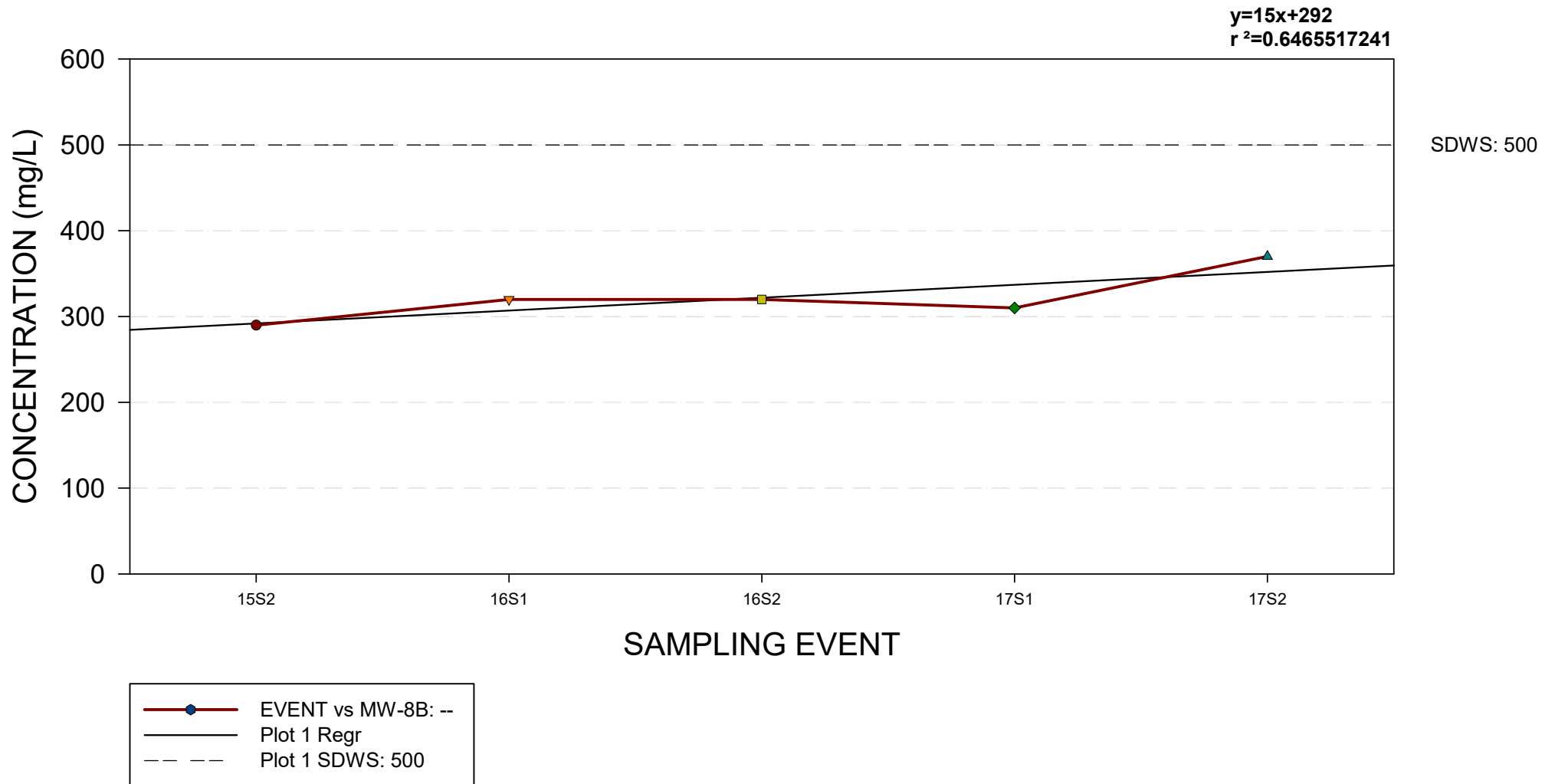
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-7BR GROUNDWATER CHEMISTRY TREND GRAPH



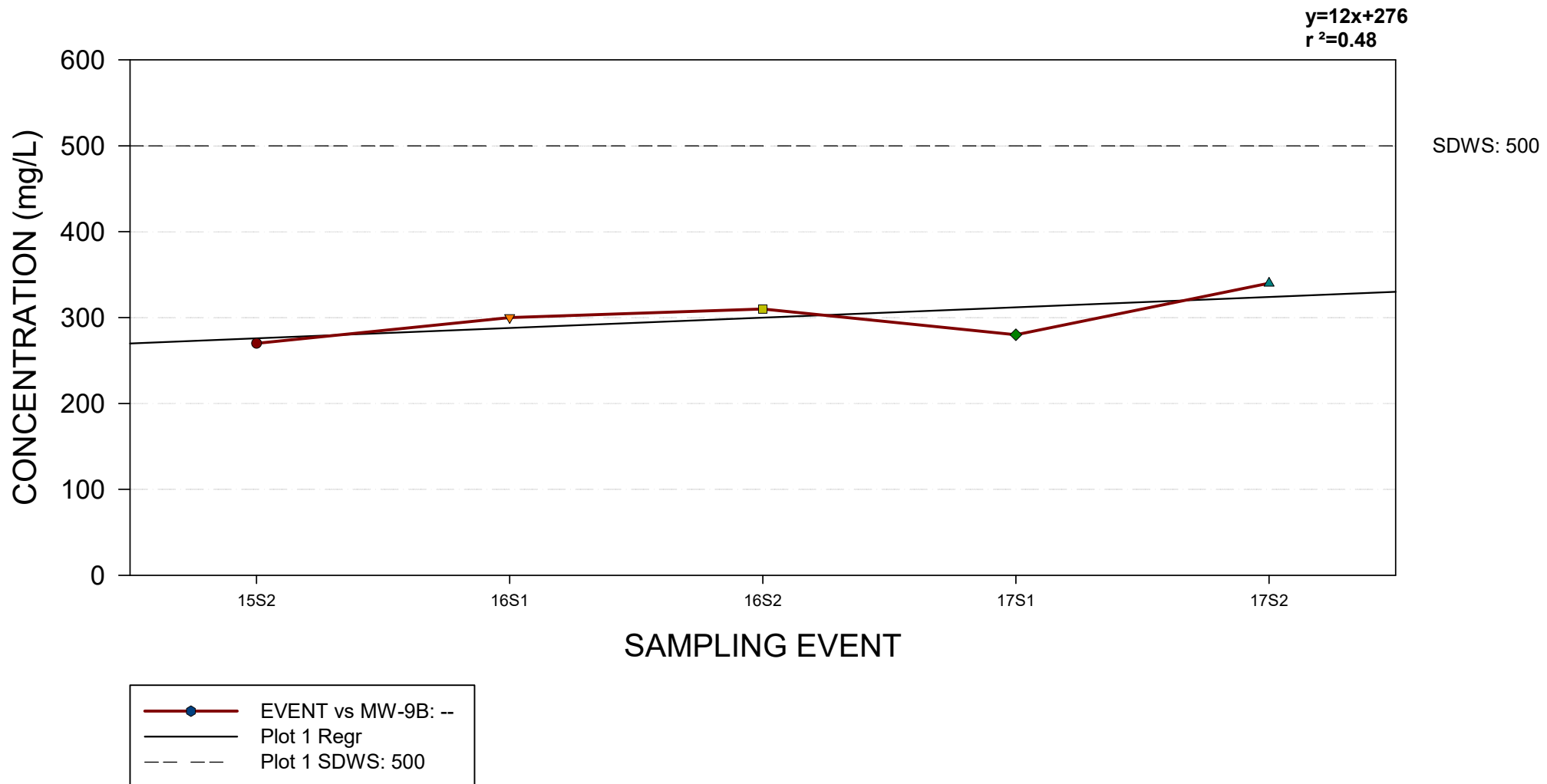
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-8B GROUNDWATER CHEMISTRY TREND GRAPH



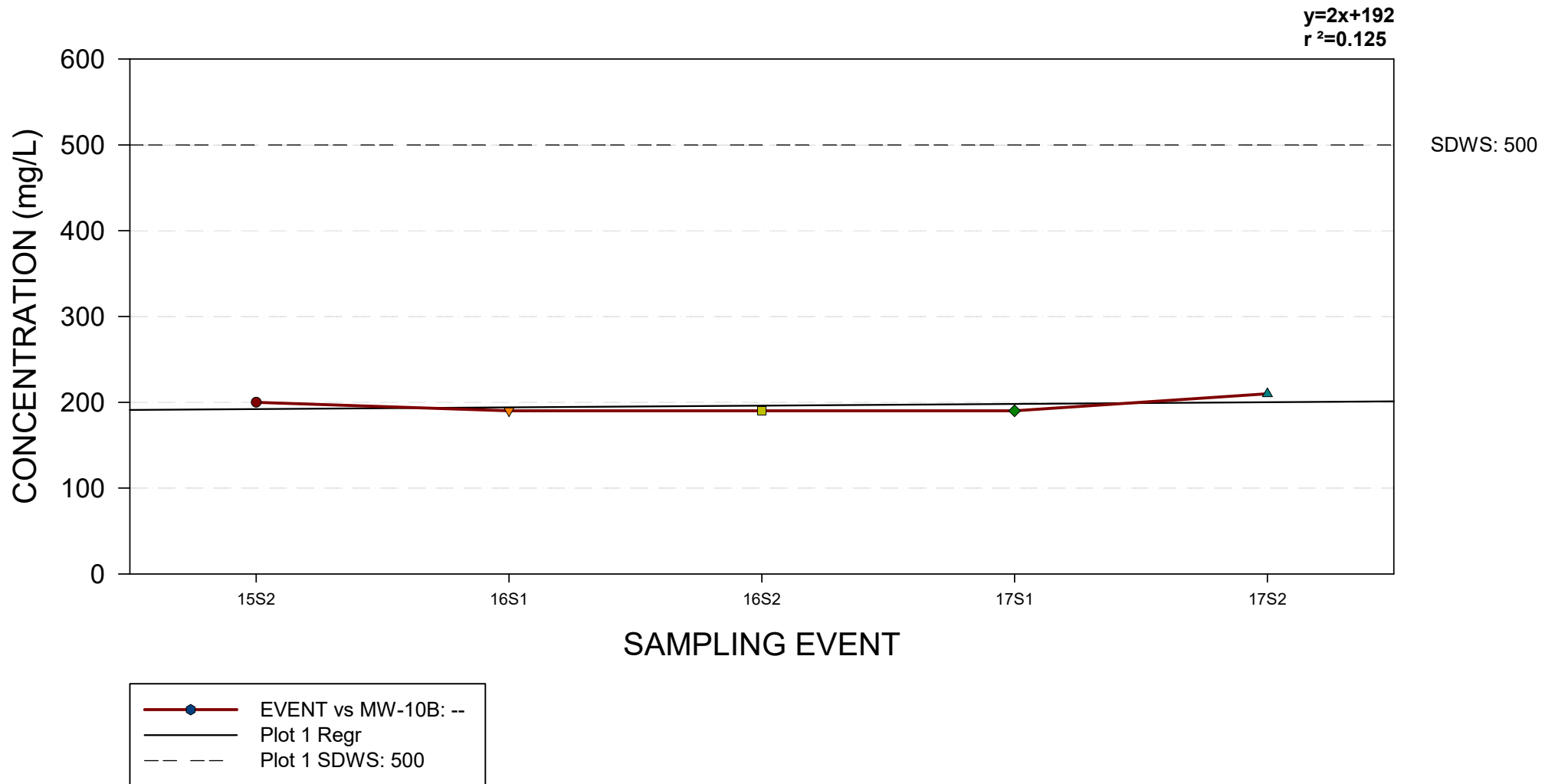
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-9B GROUNDWATER CHEMISTRY TREND GRAPH



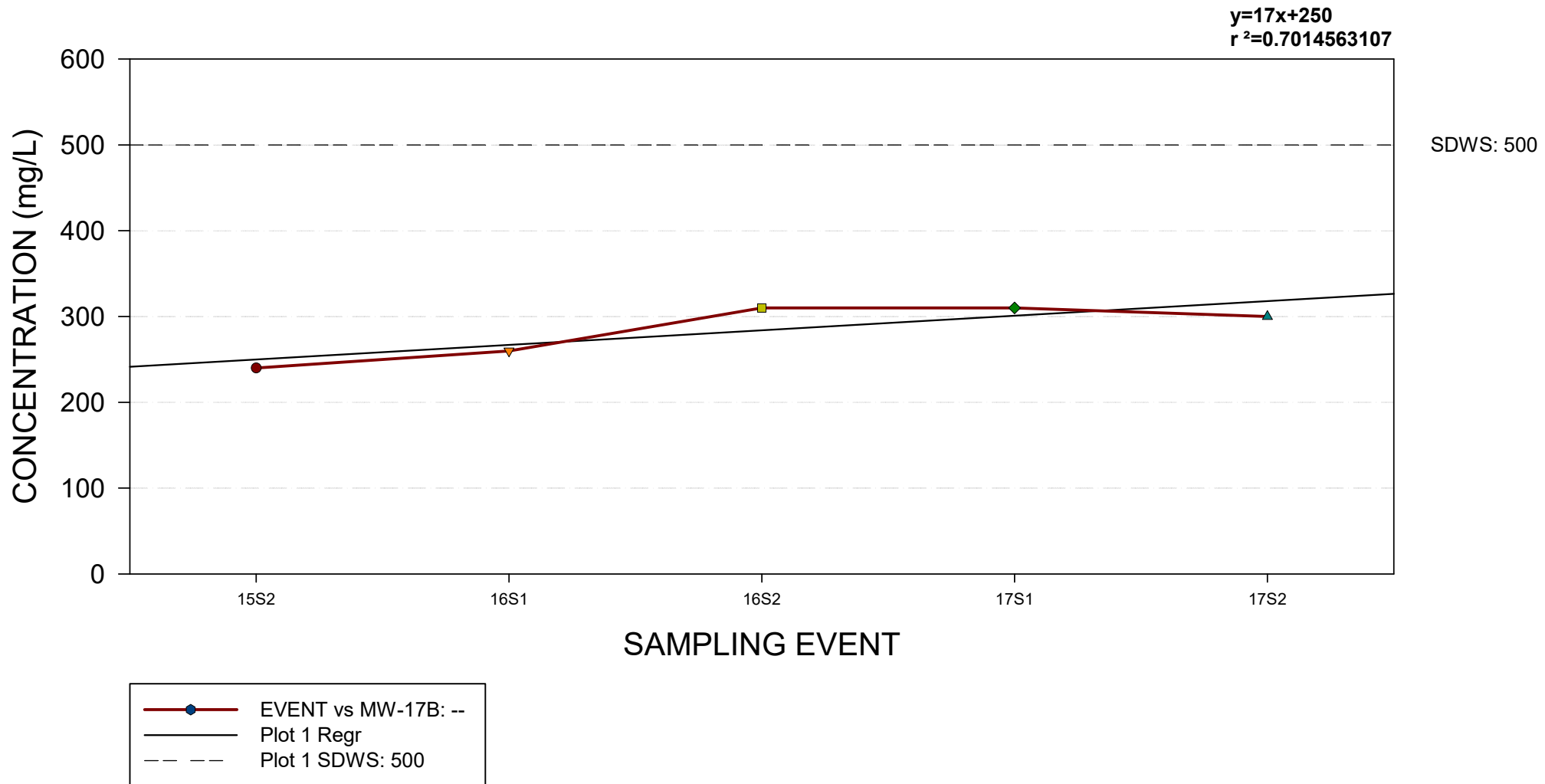
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-10B GROUNDWATER CHEMISTRY TREND GRAPH



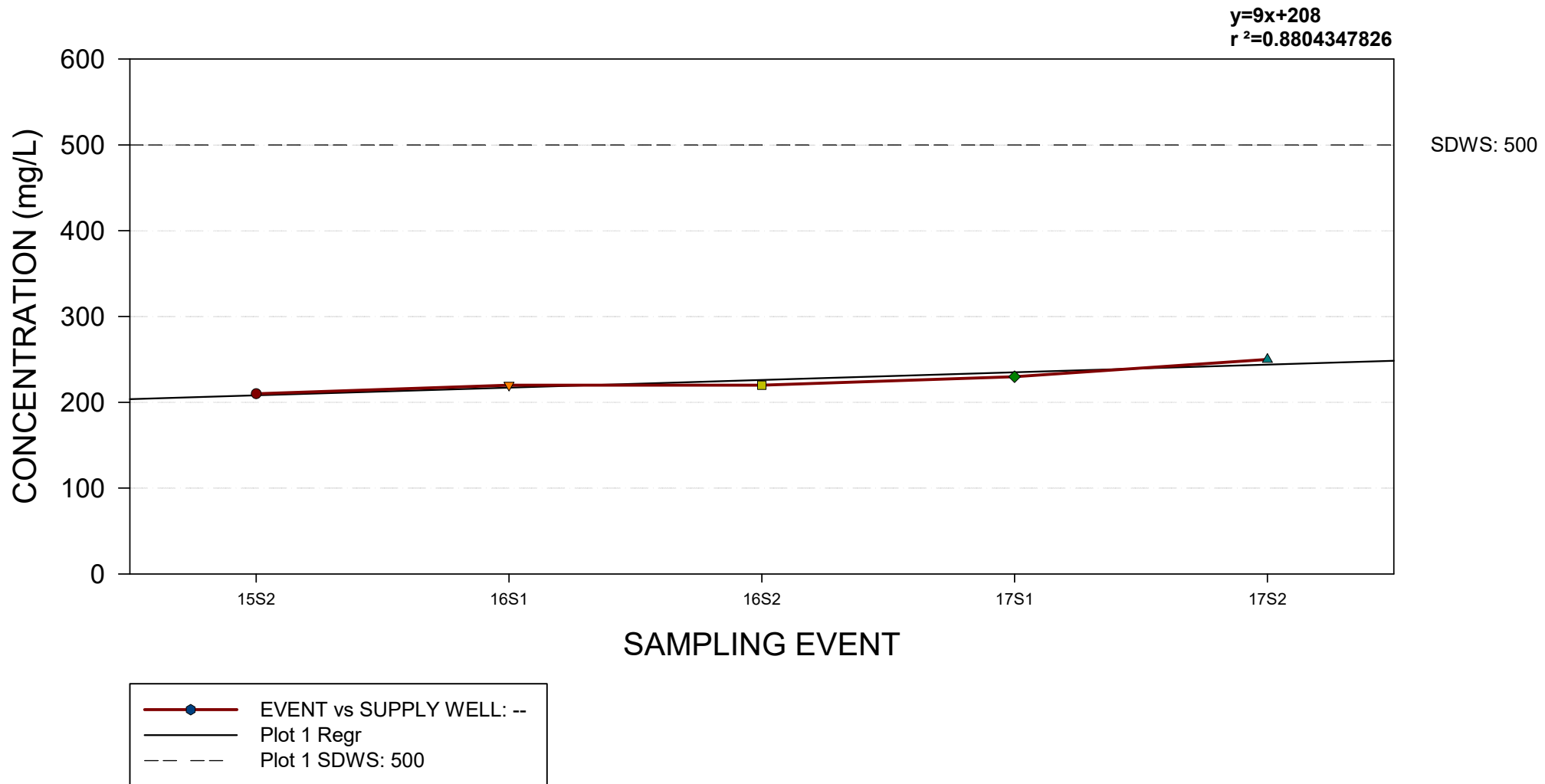
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-17B GROUNDWATER CHEMISTRY TREND GRAPH



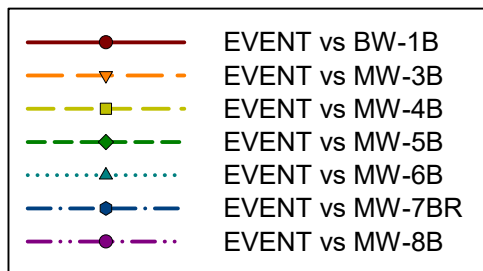
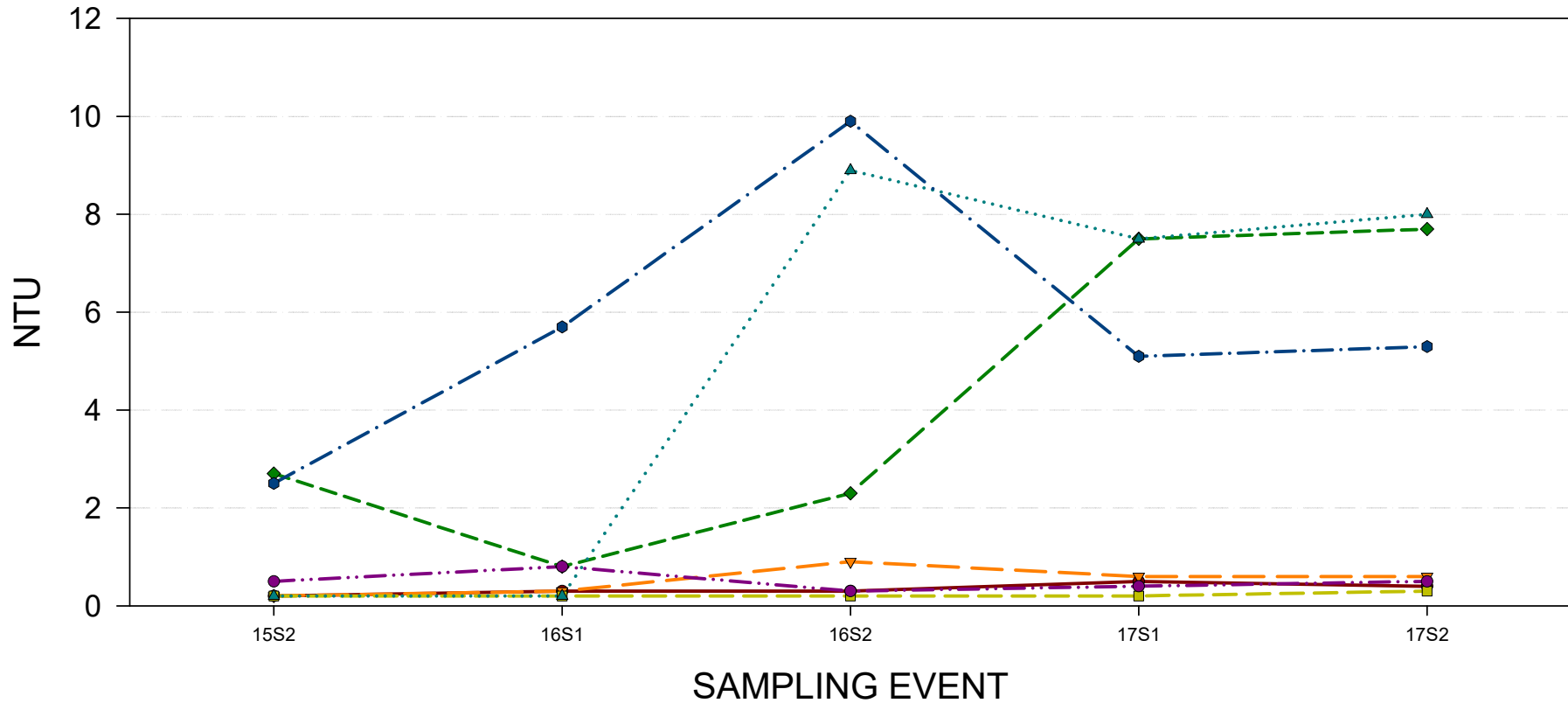
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
SUPPLY WELL GROUNDWATER CHEMISTRY TREND GRAPH



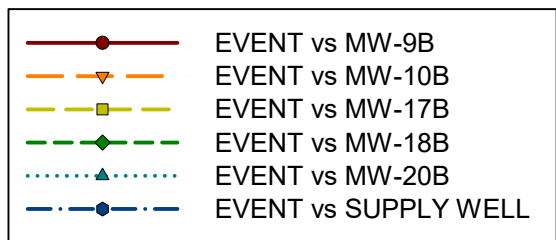
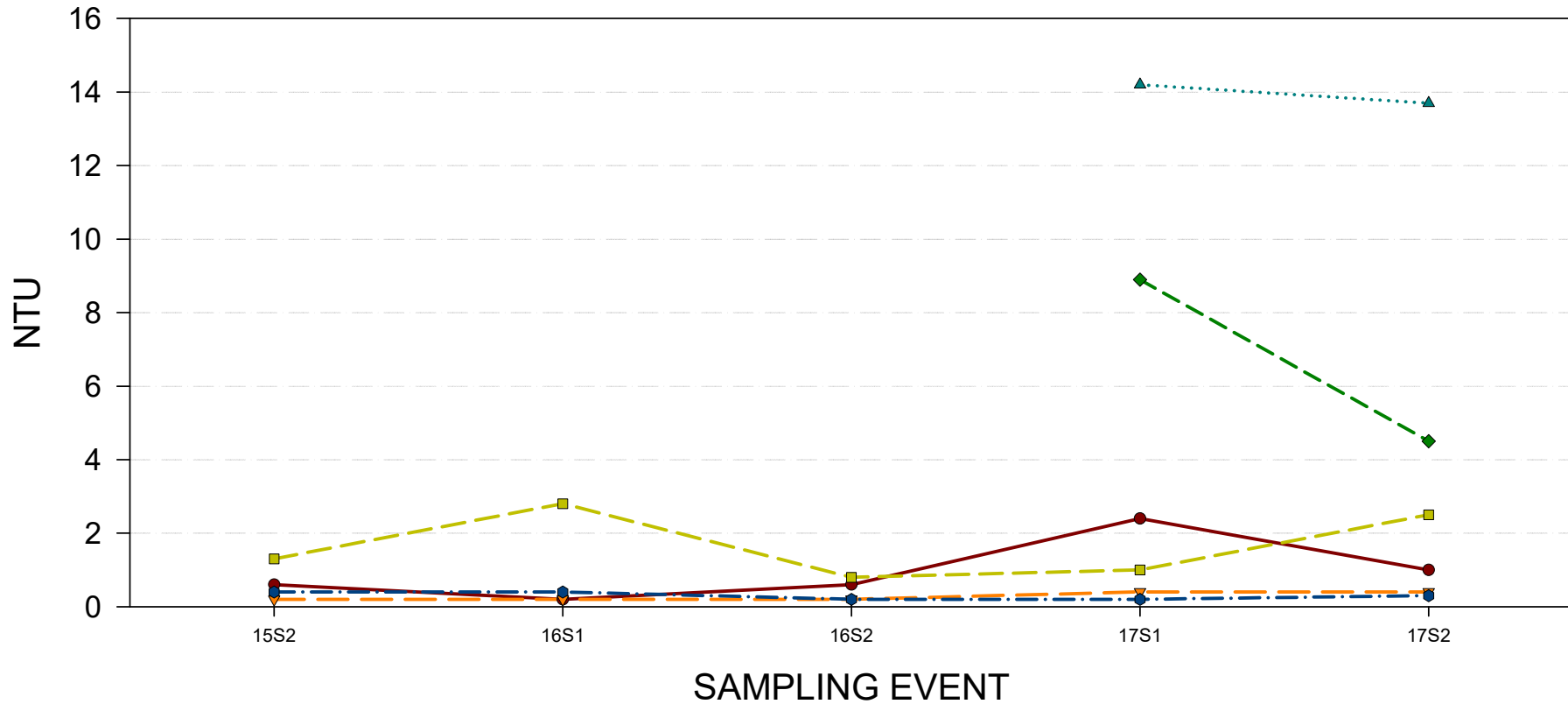
TURBIDITY

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



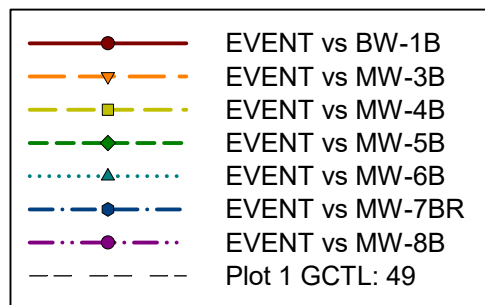
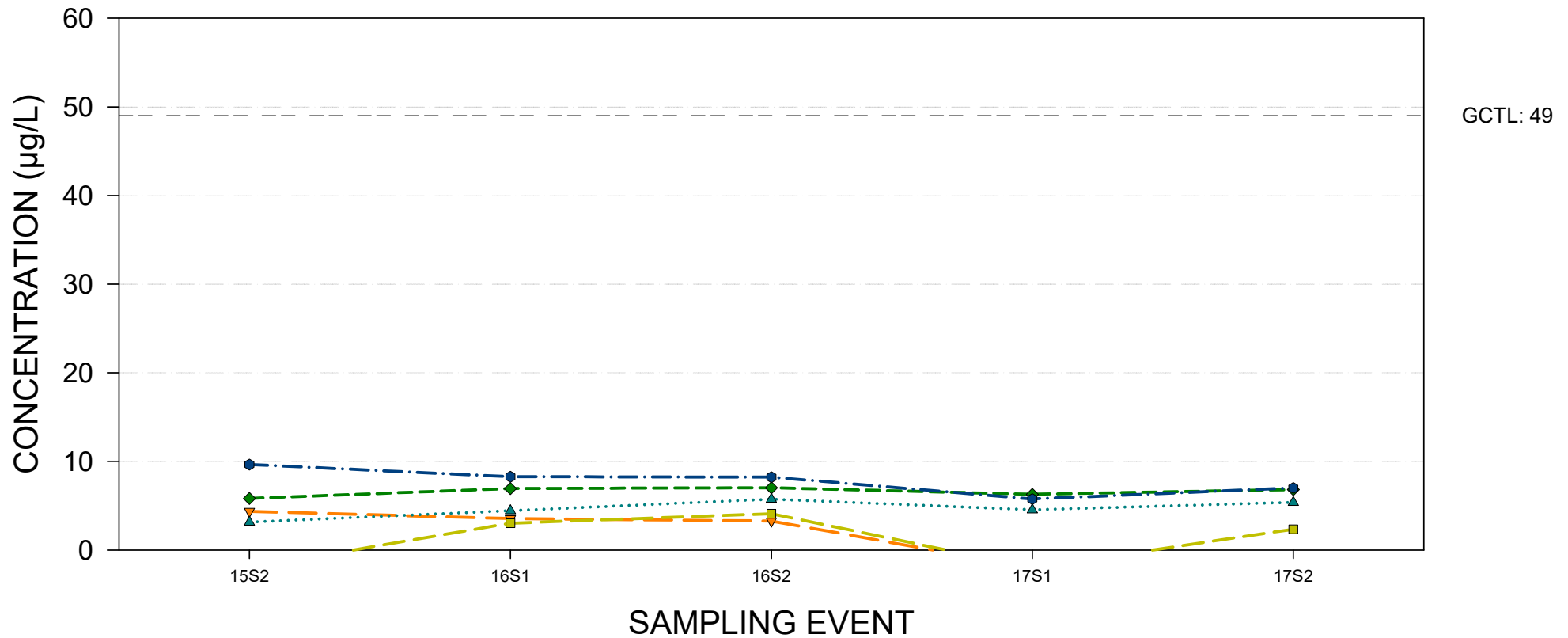
TURBIDITY

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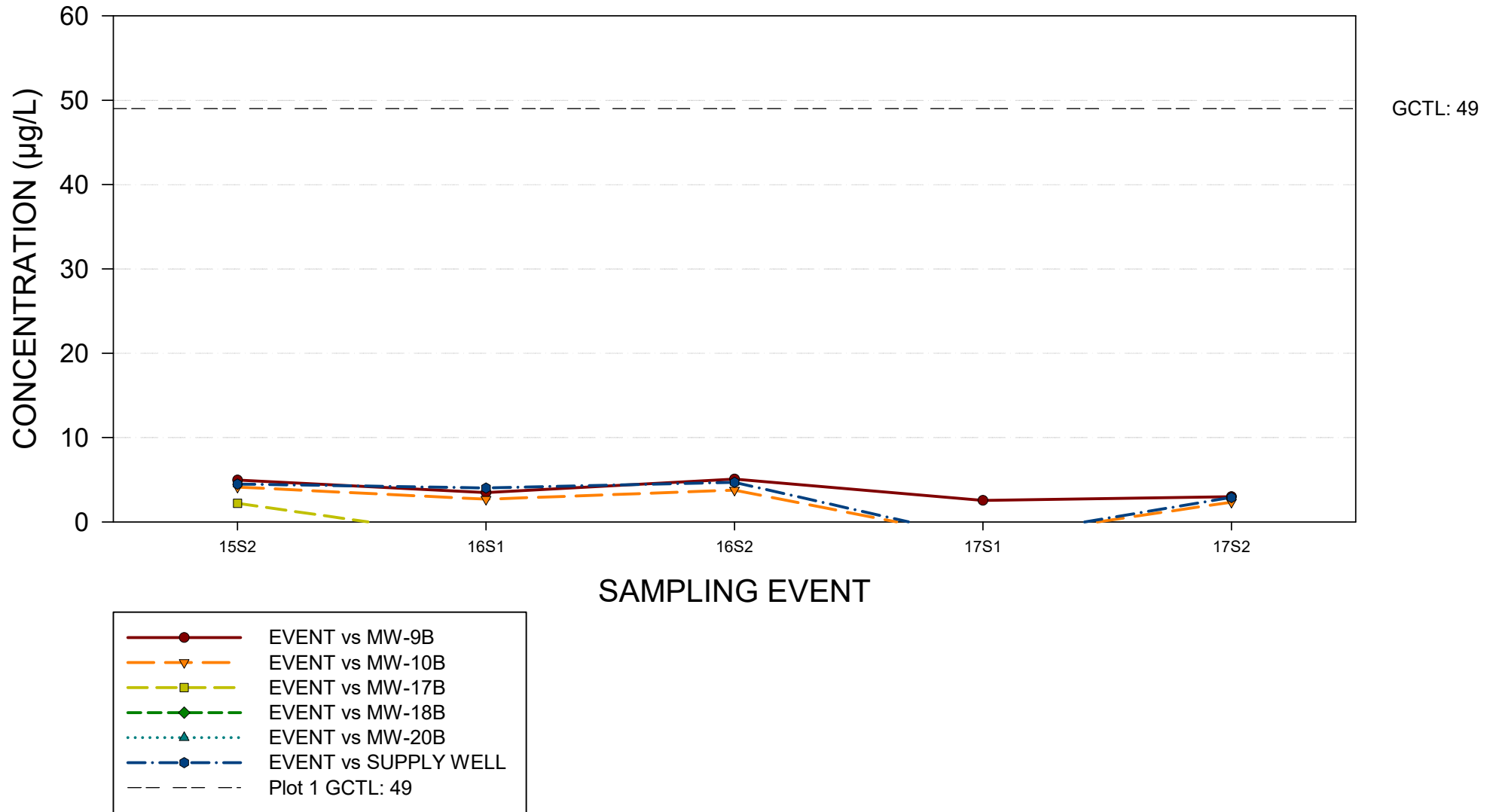
VANADIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



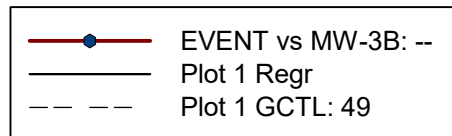
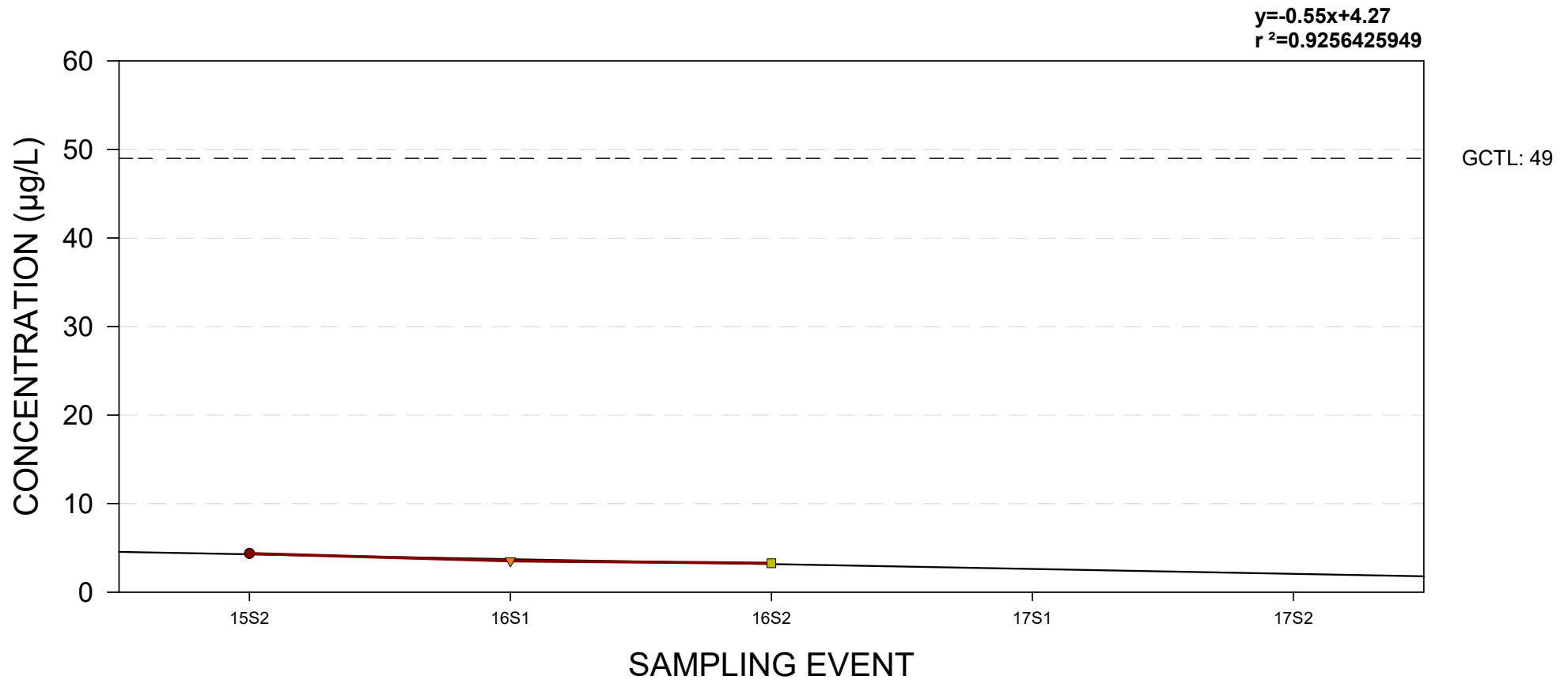
VANADIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



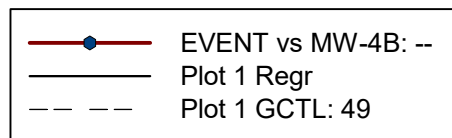
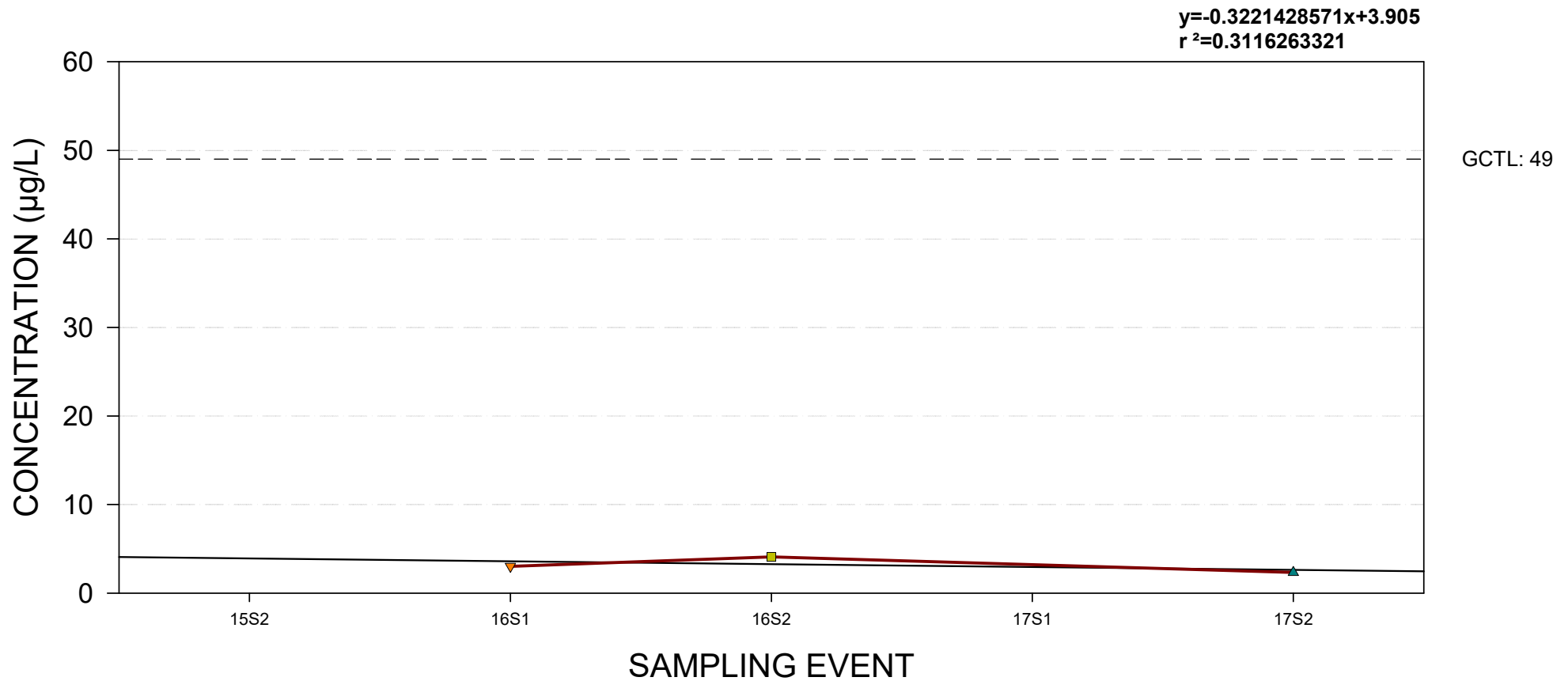
VANADIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-3B GROUNDWATER CHEMISTRY TREND GRAPH



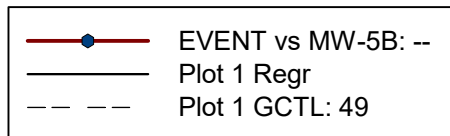
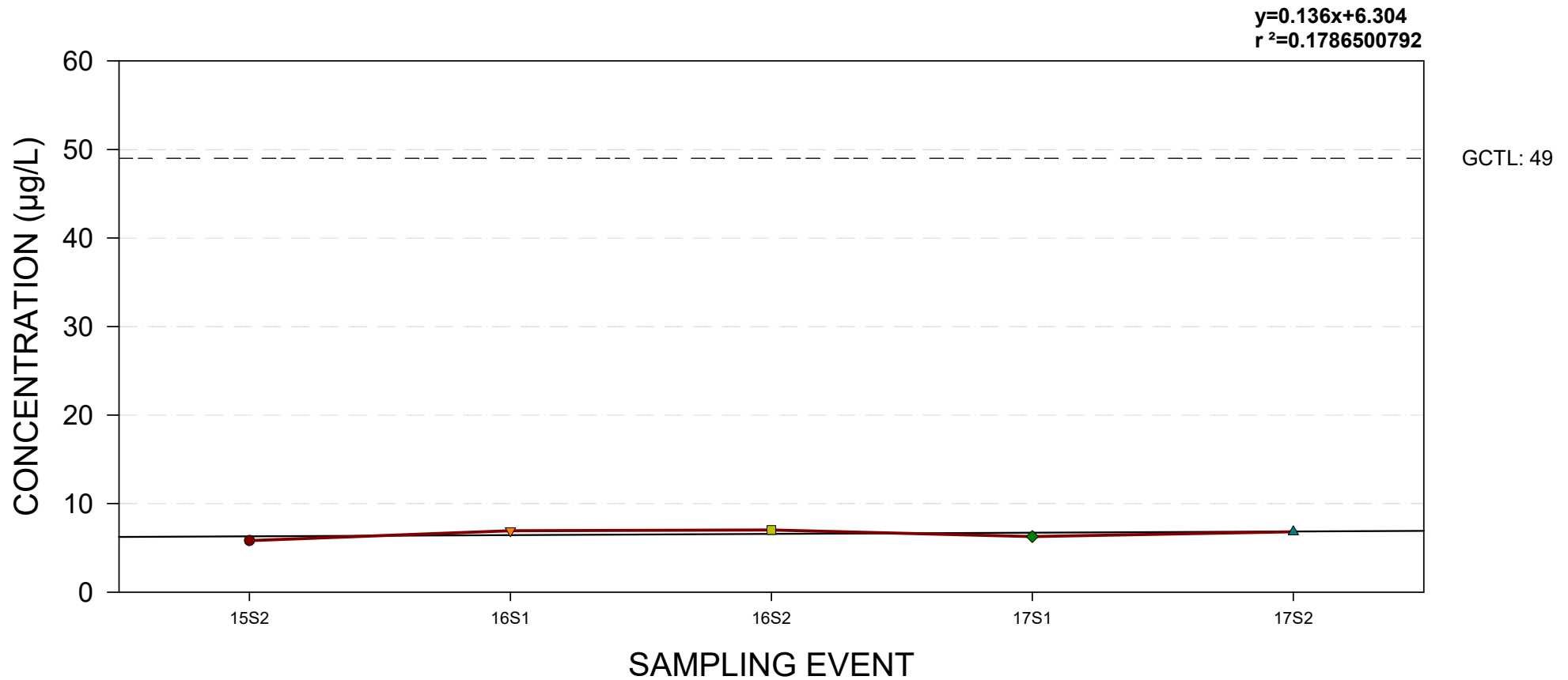
VANADIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-4B GROUNDWATER CHEMISTRY TREND GRAPH



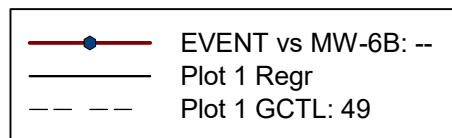
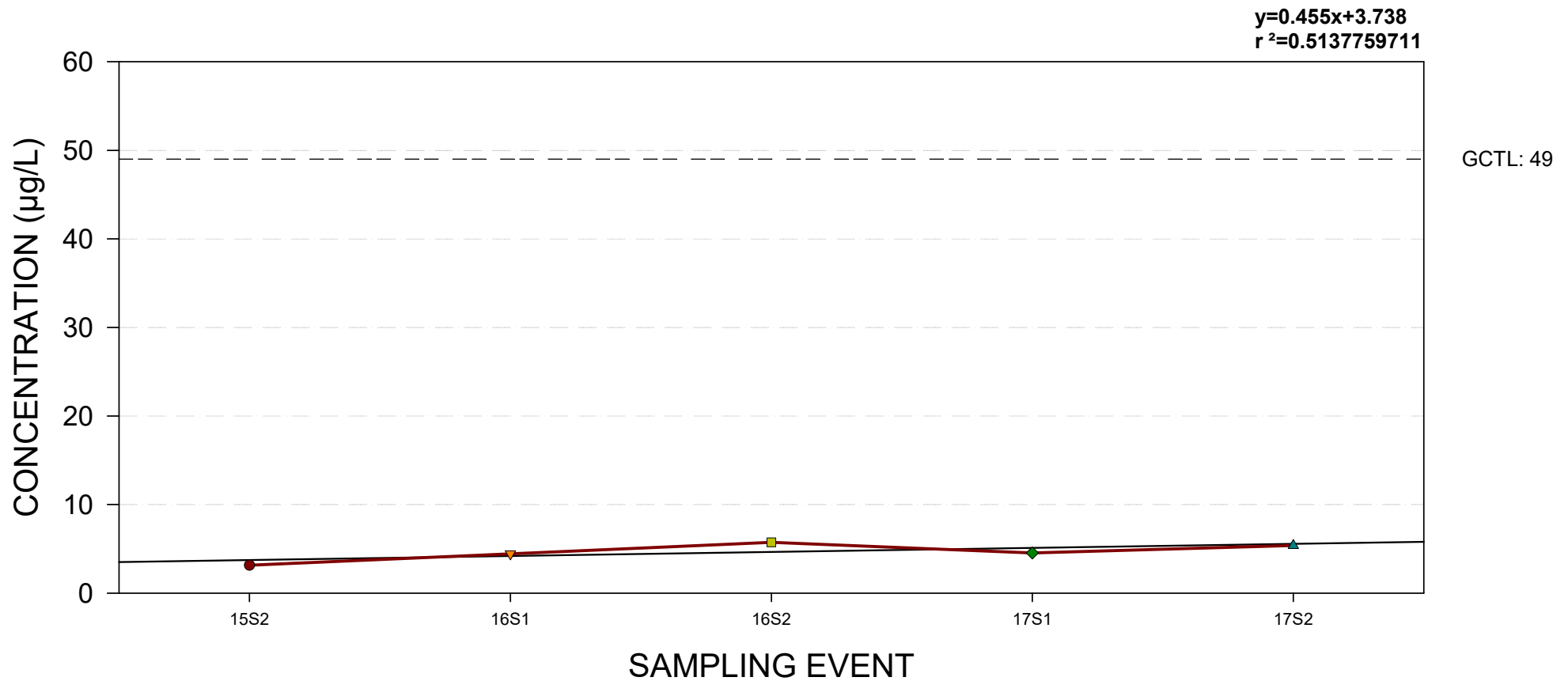
VANADIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-5B GROUNDWATER CHEMISTRY TREND GRAPH



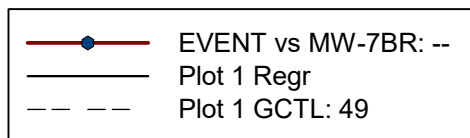
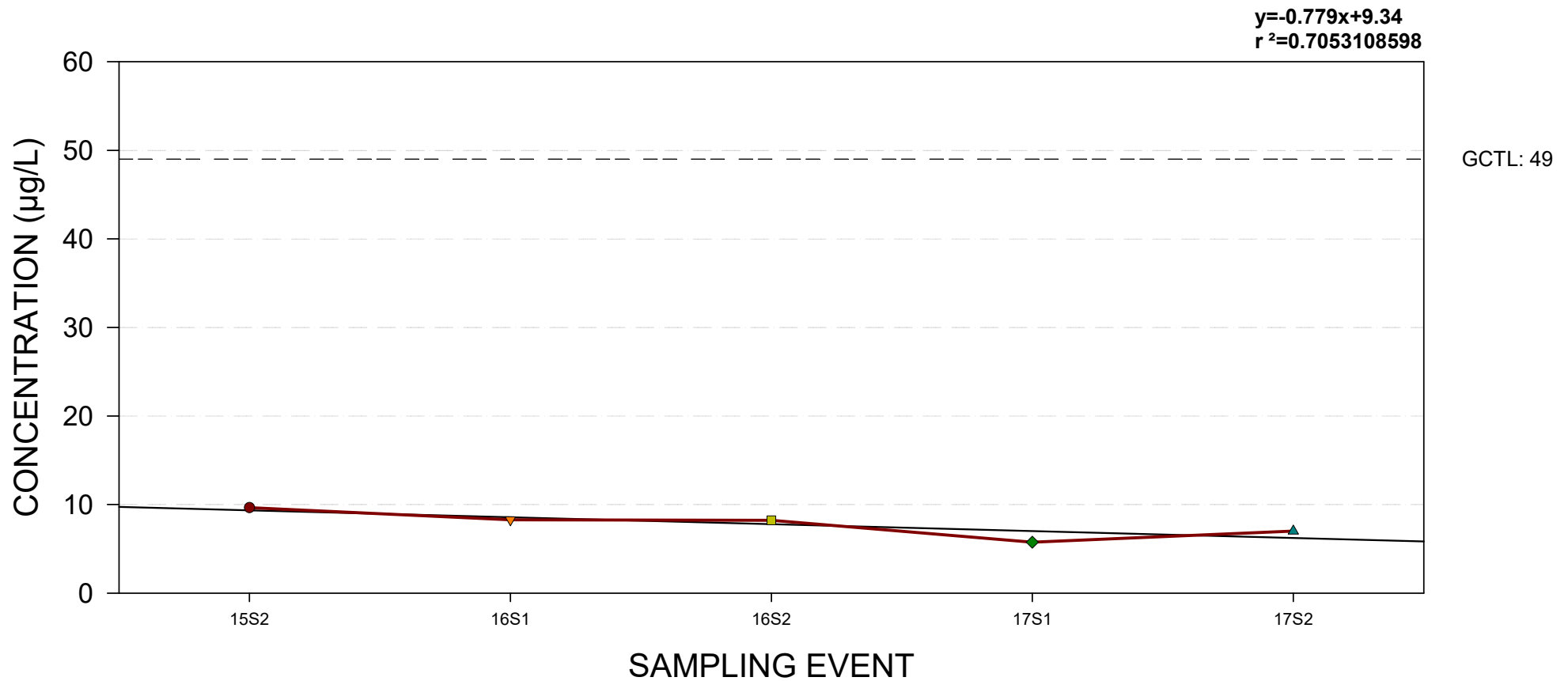
VANADIUM

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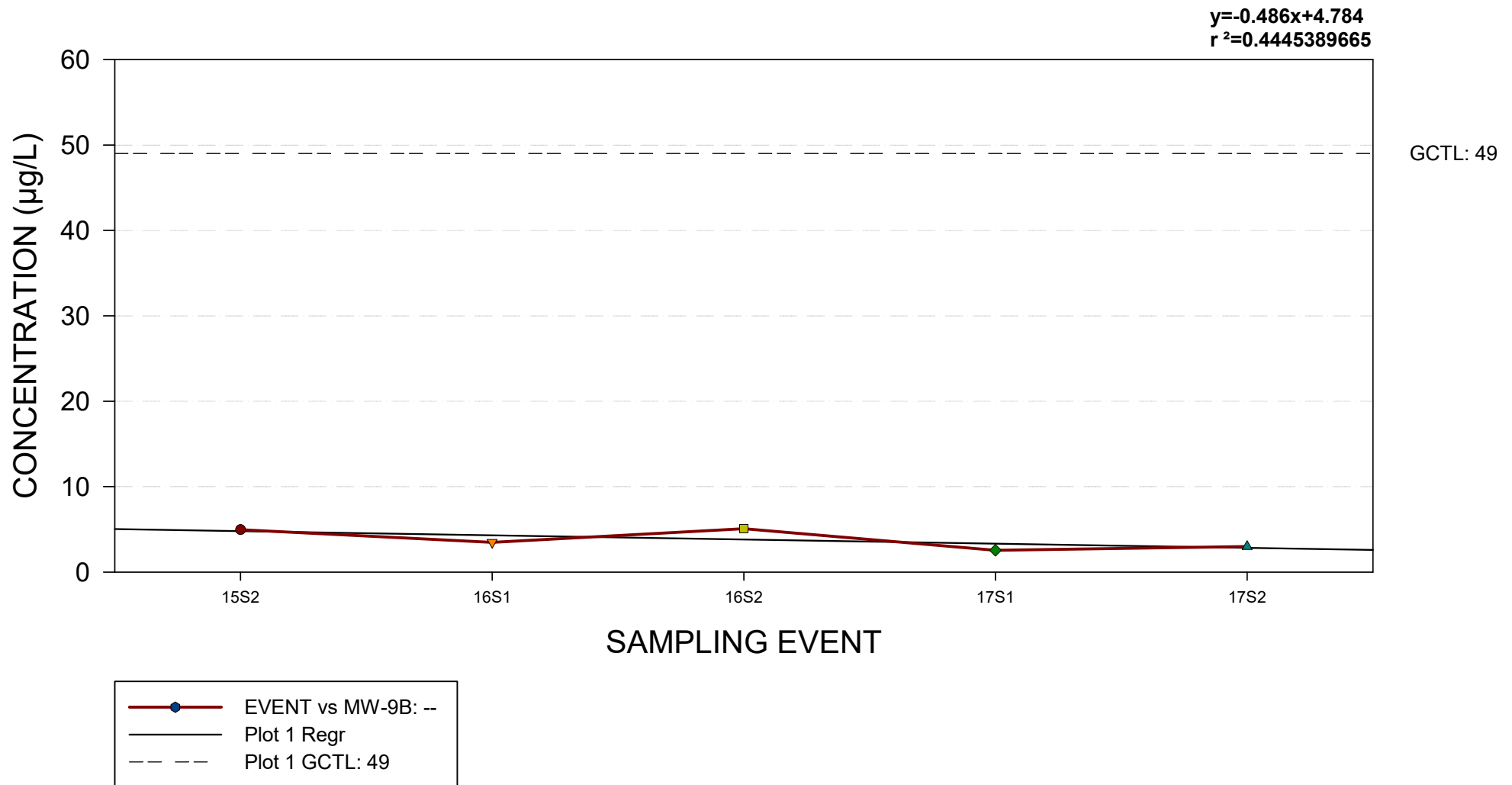
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-7BR GROUNDWATER CHEMISTRY TREND GRAPH



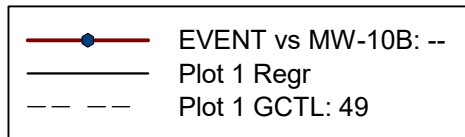
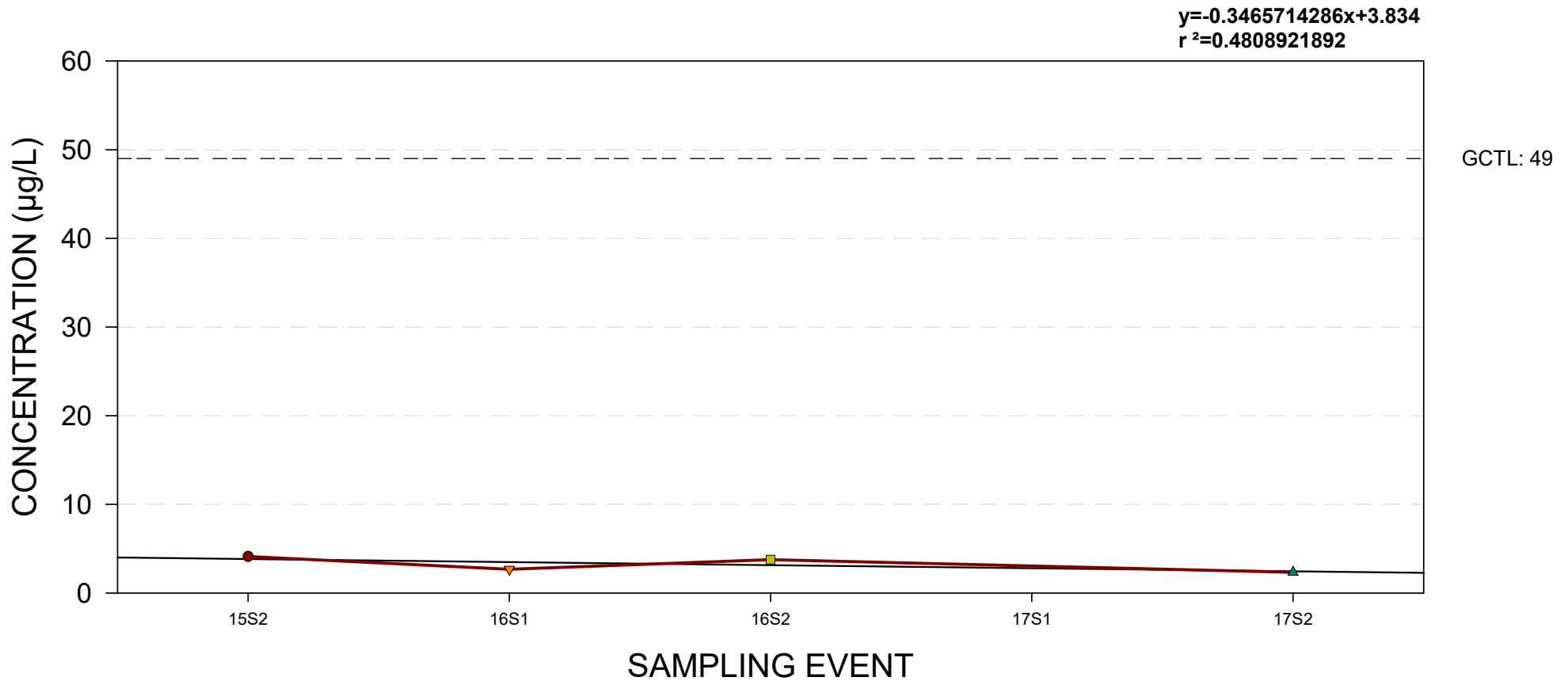
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-9B GROUNDWATER CHEMISTRY TREND GRAPH



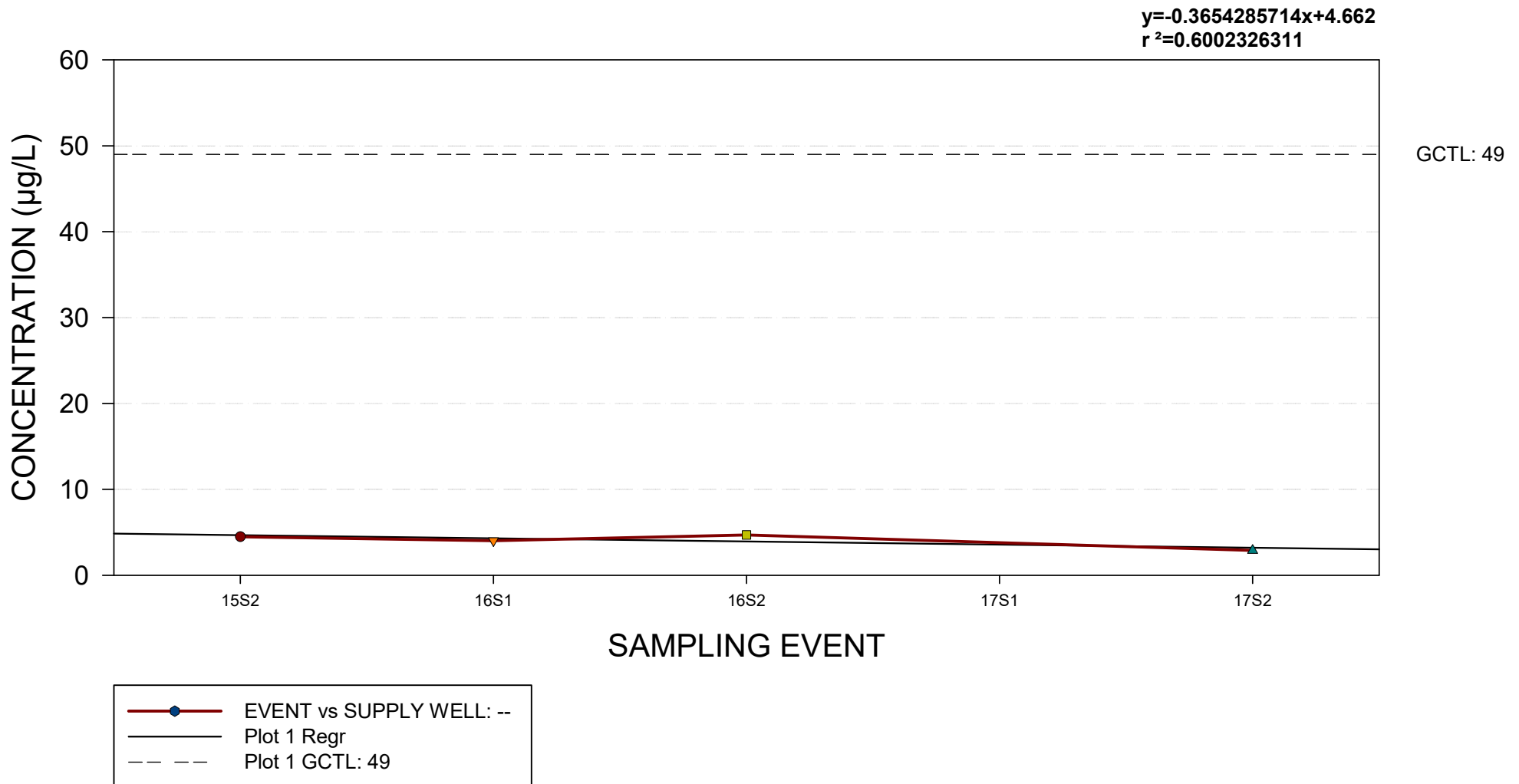
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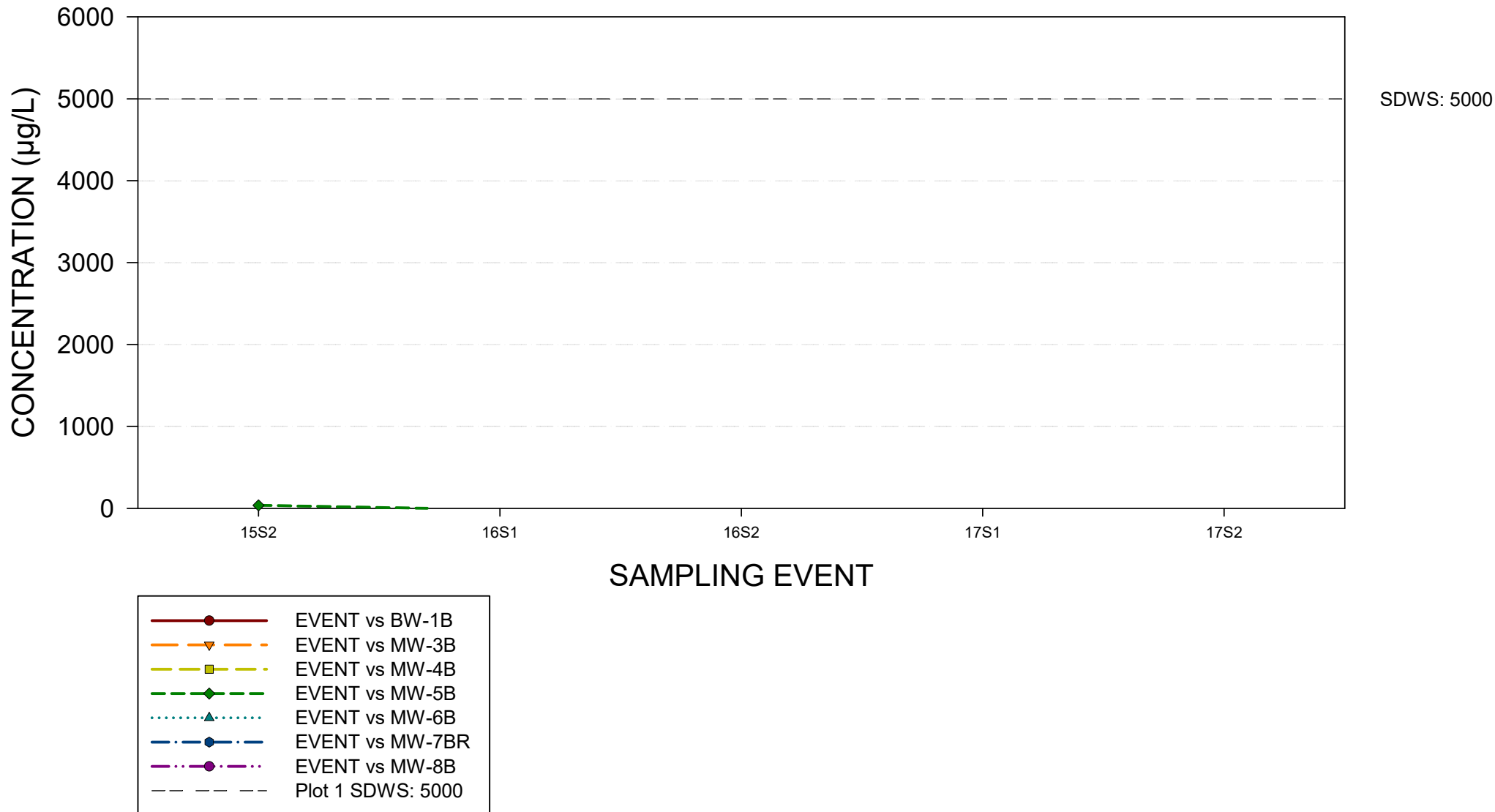


VANADIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY SUPPLY WELL GROUNDWATER CHEMISTRY TREND GRAPH

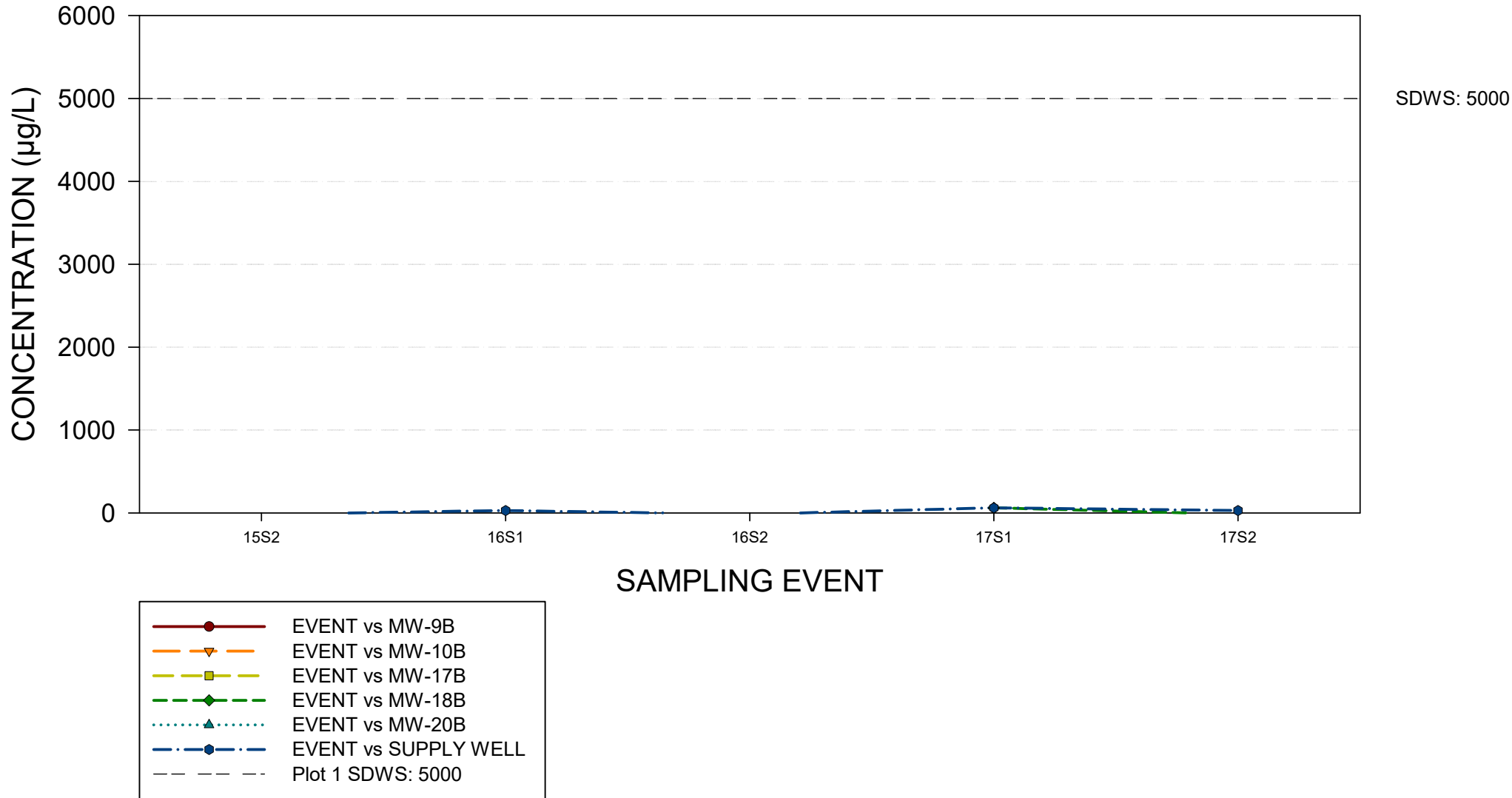


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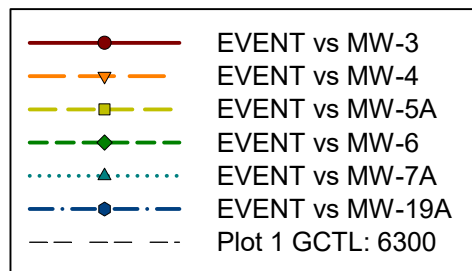
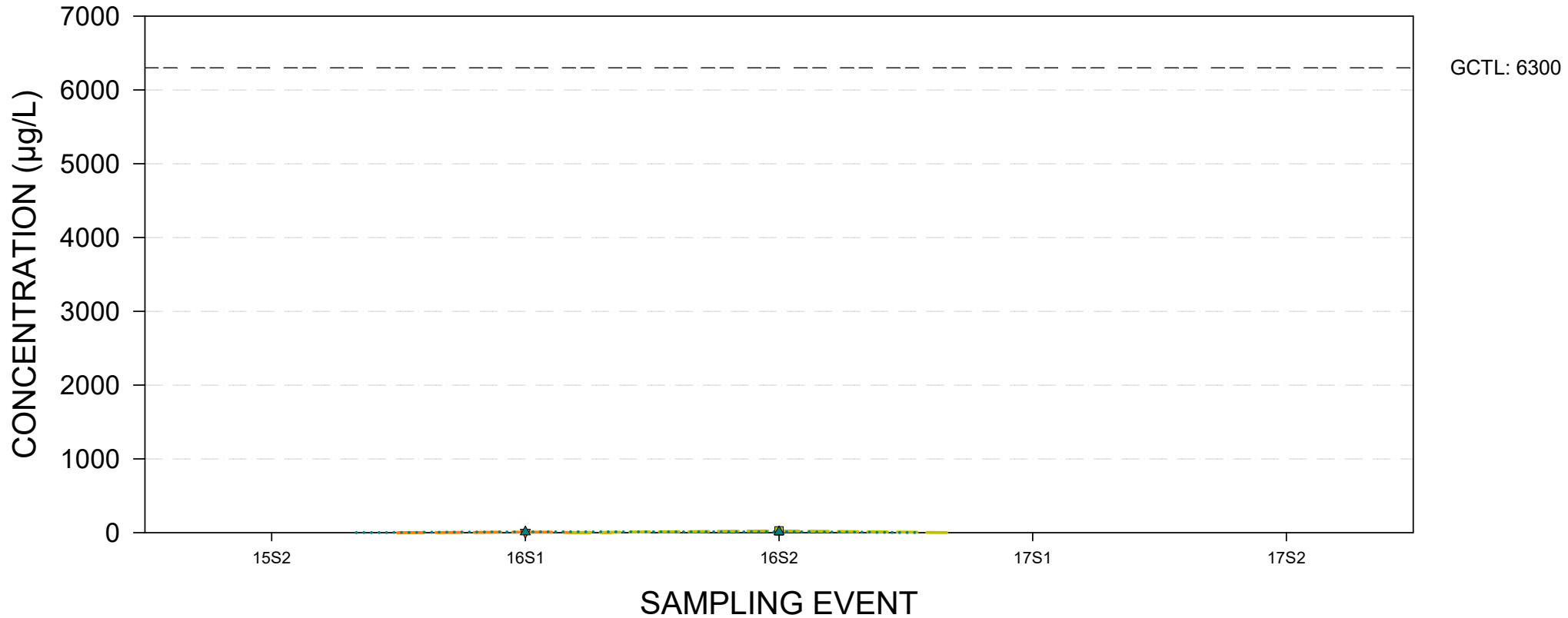
ZINC

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



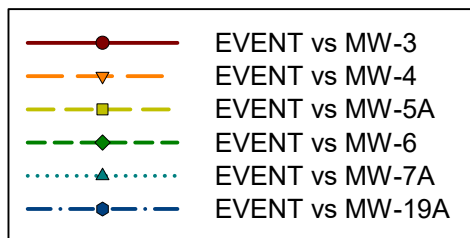
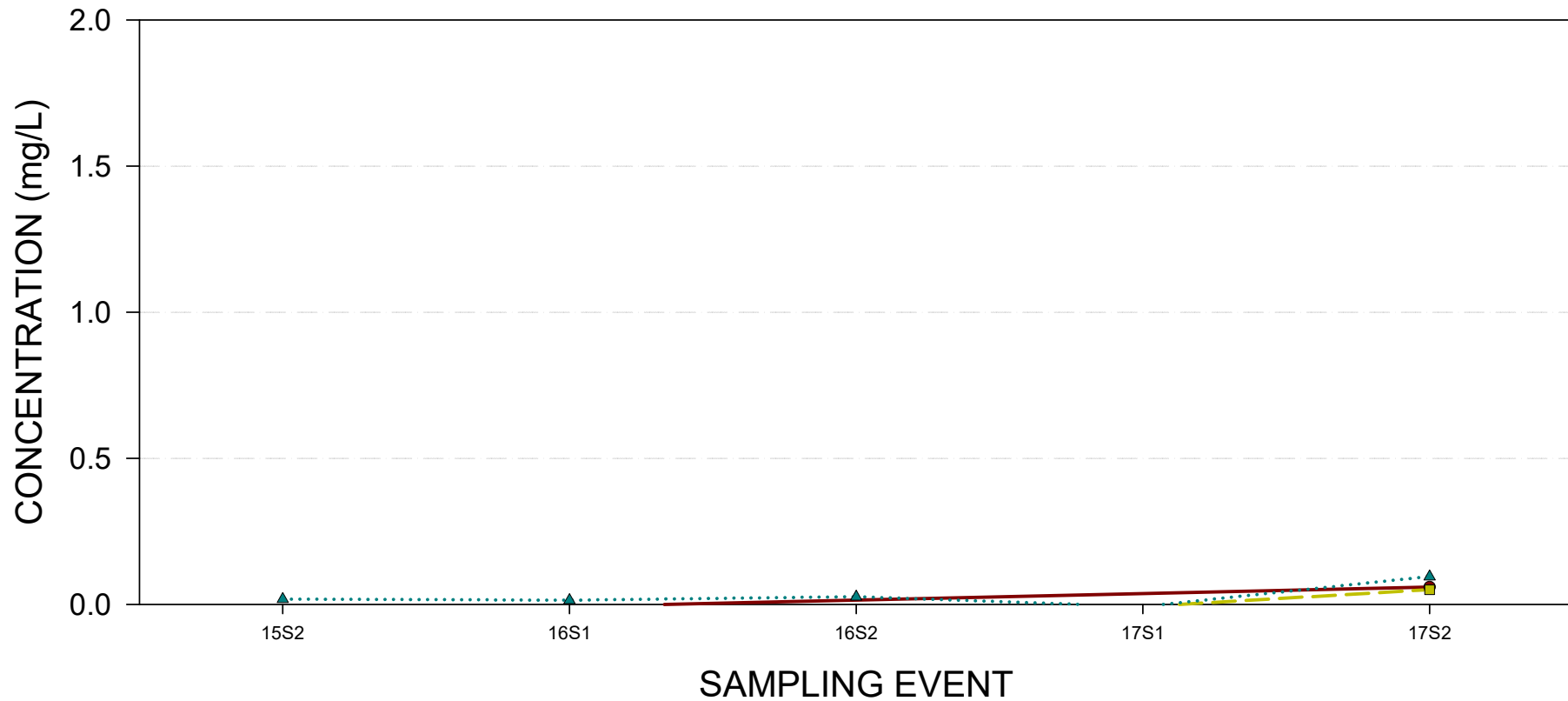
ACETONE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



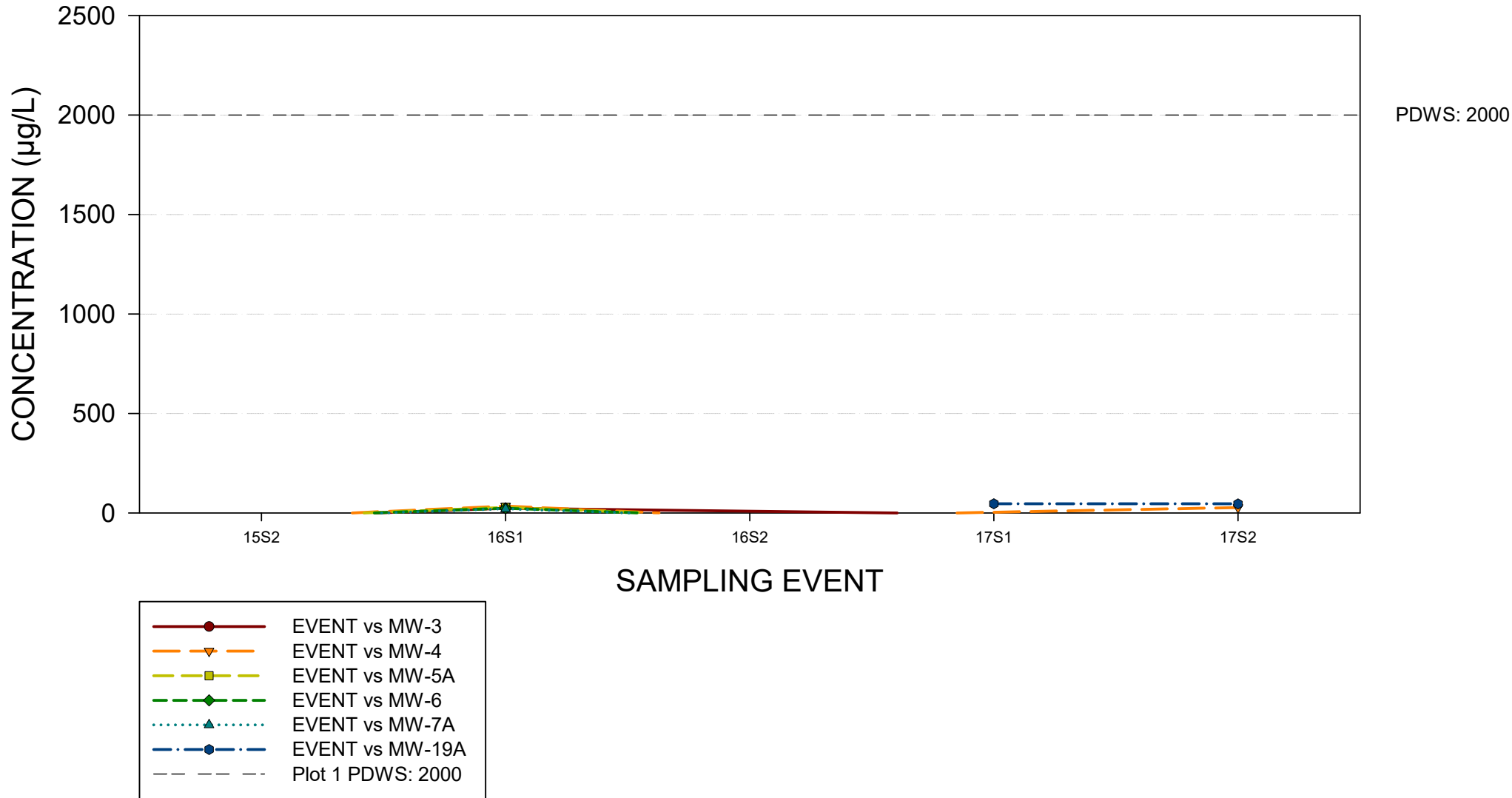
AMMONIA AS NITROGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



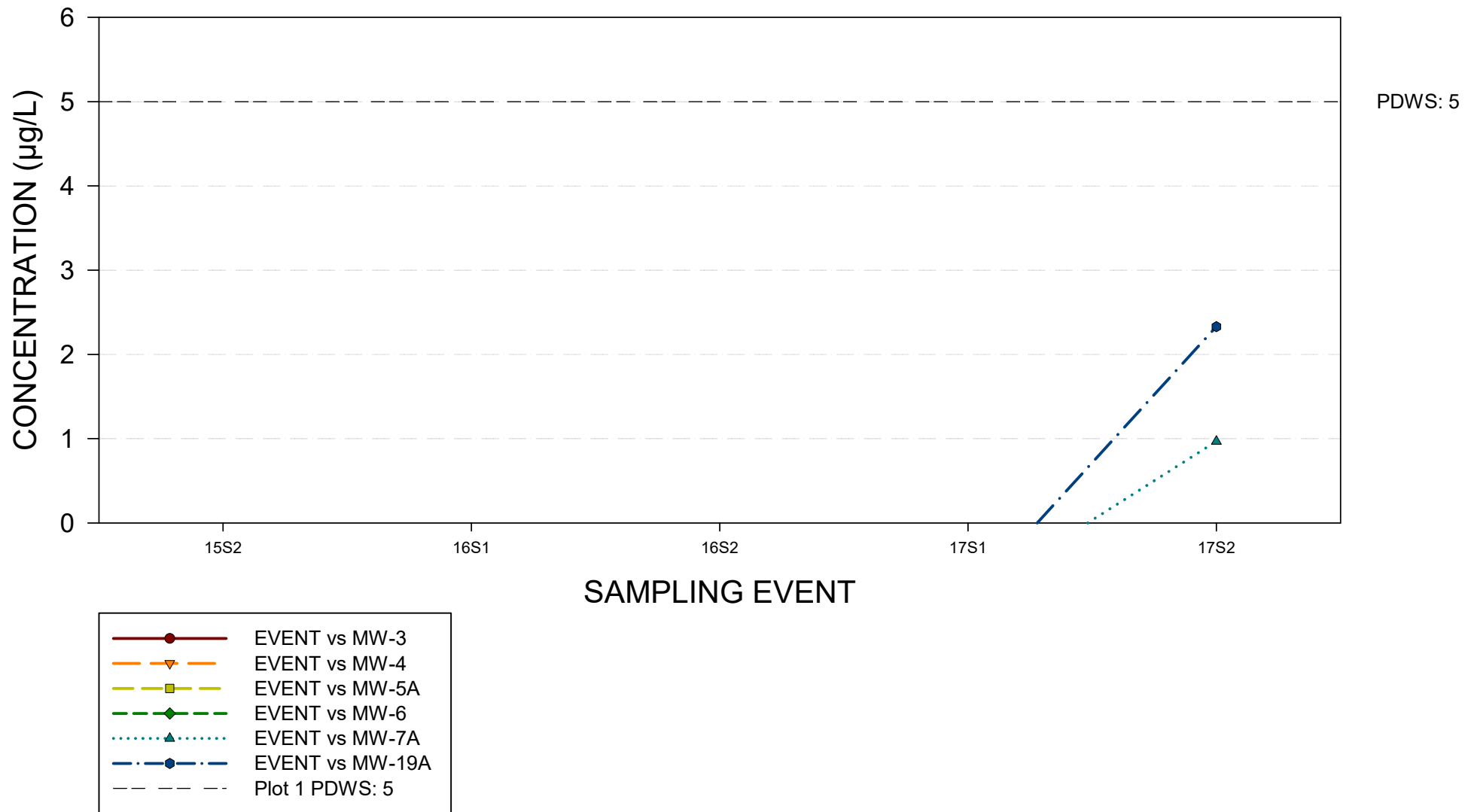
BARIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



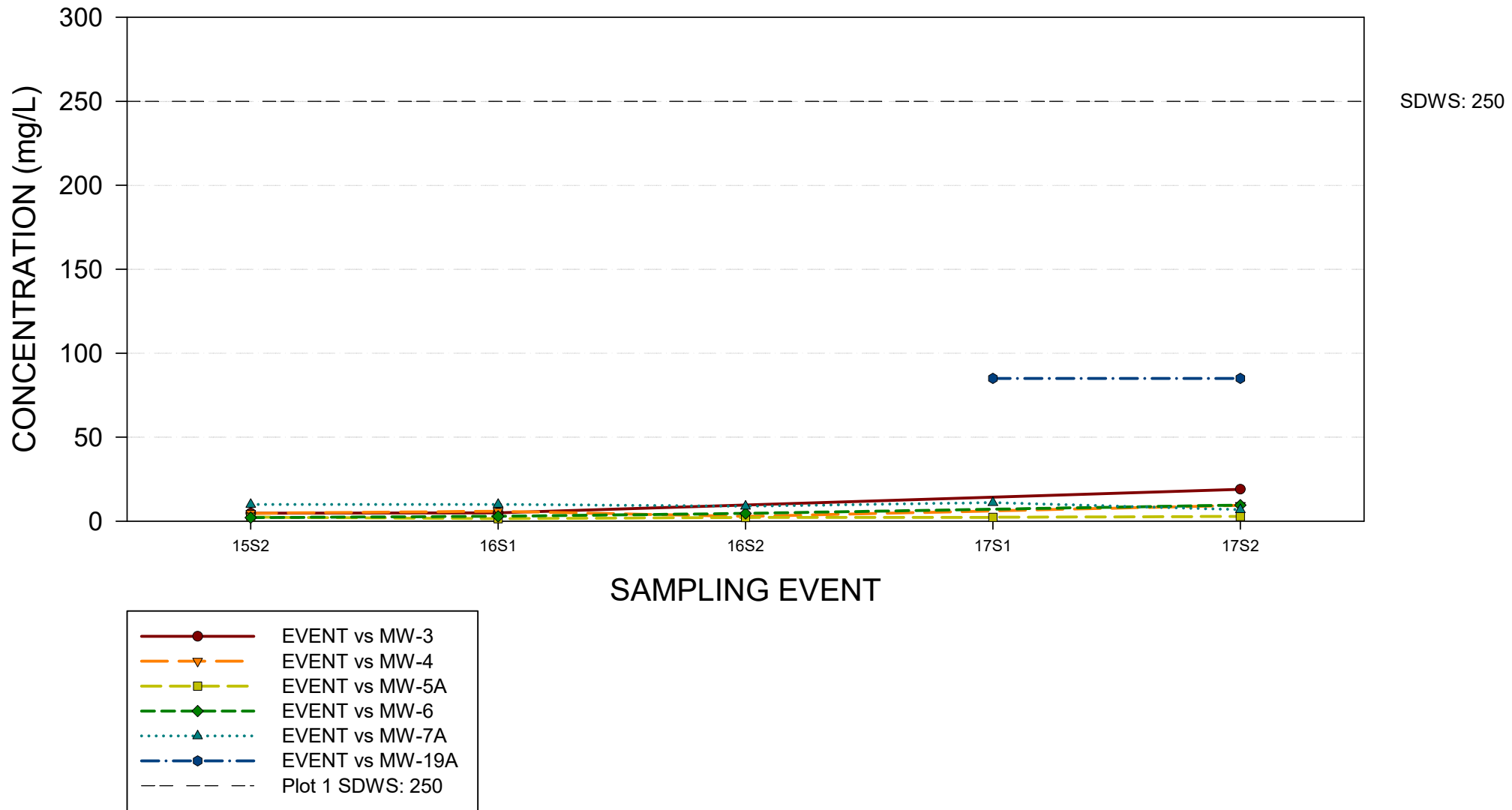
CADMIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



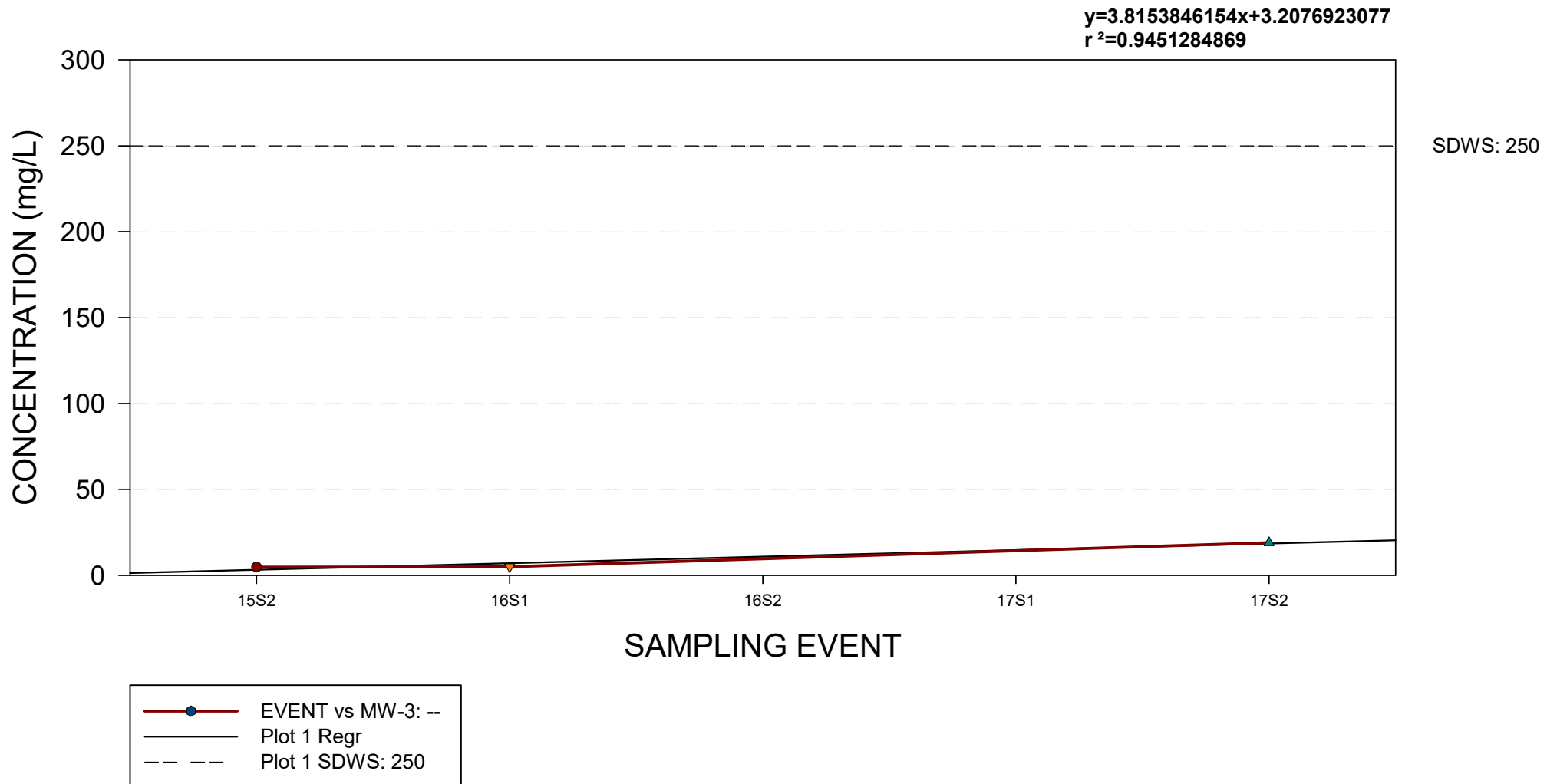
CHLORIDE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



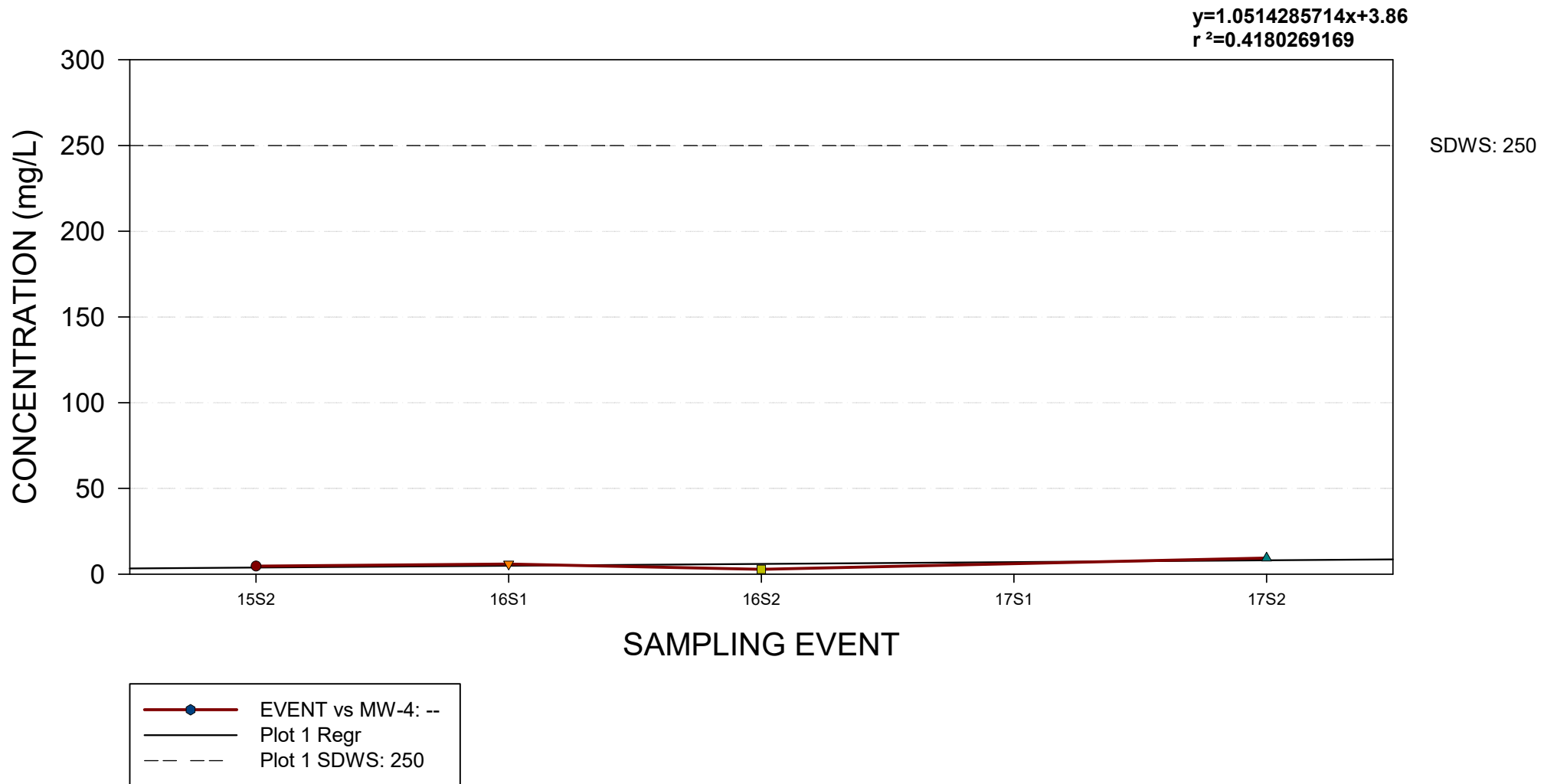
CHLORIDE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-3 GROUNDWATER CHEMISTRY TREND GRAPH



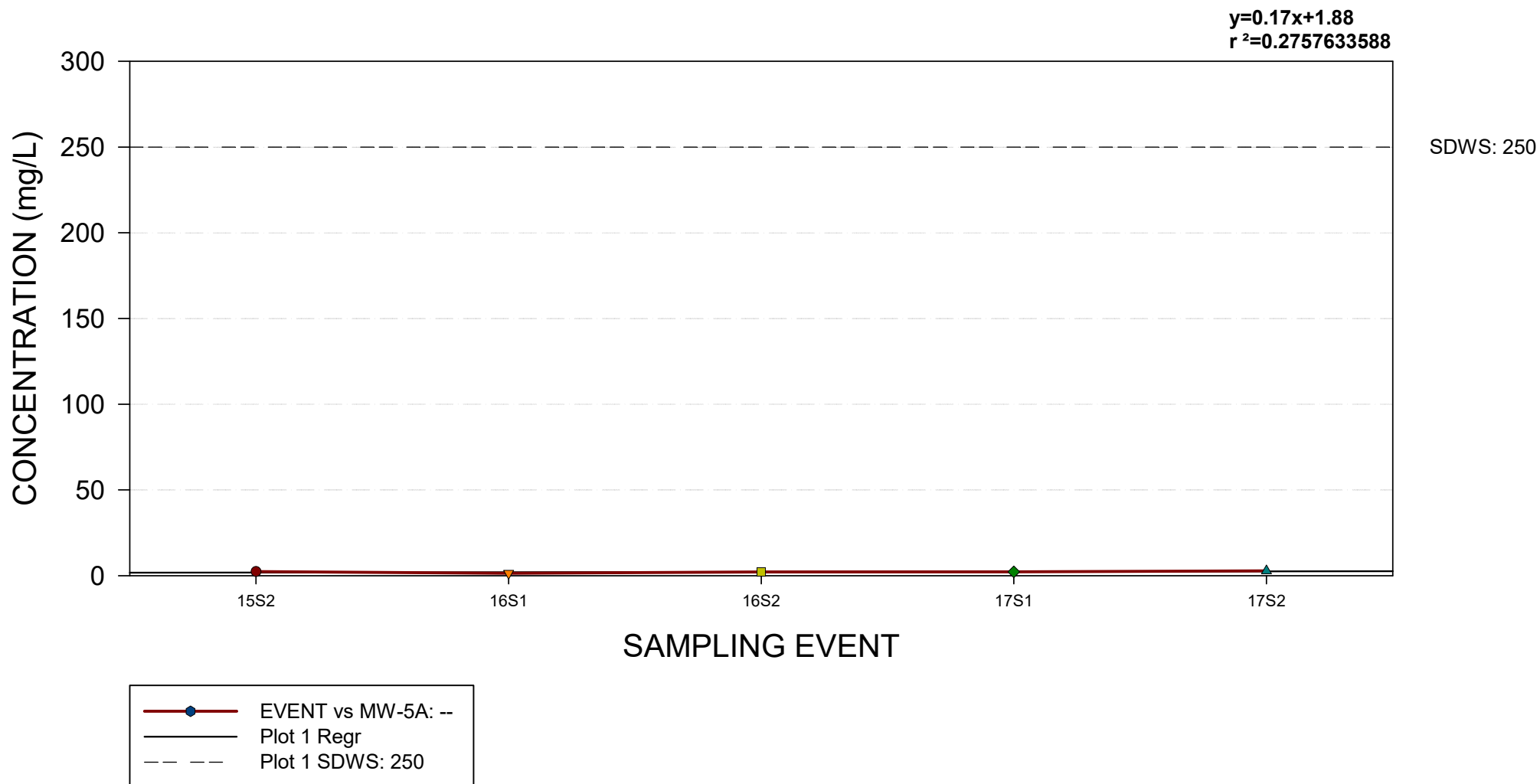
CHLORIDE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-4 GROUNDWATER CHEMISTRY TREND GRAPH



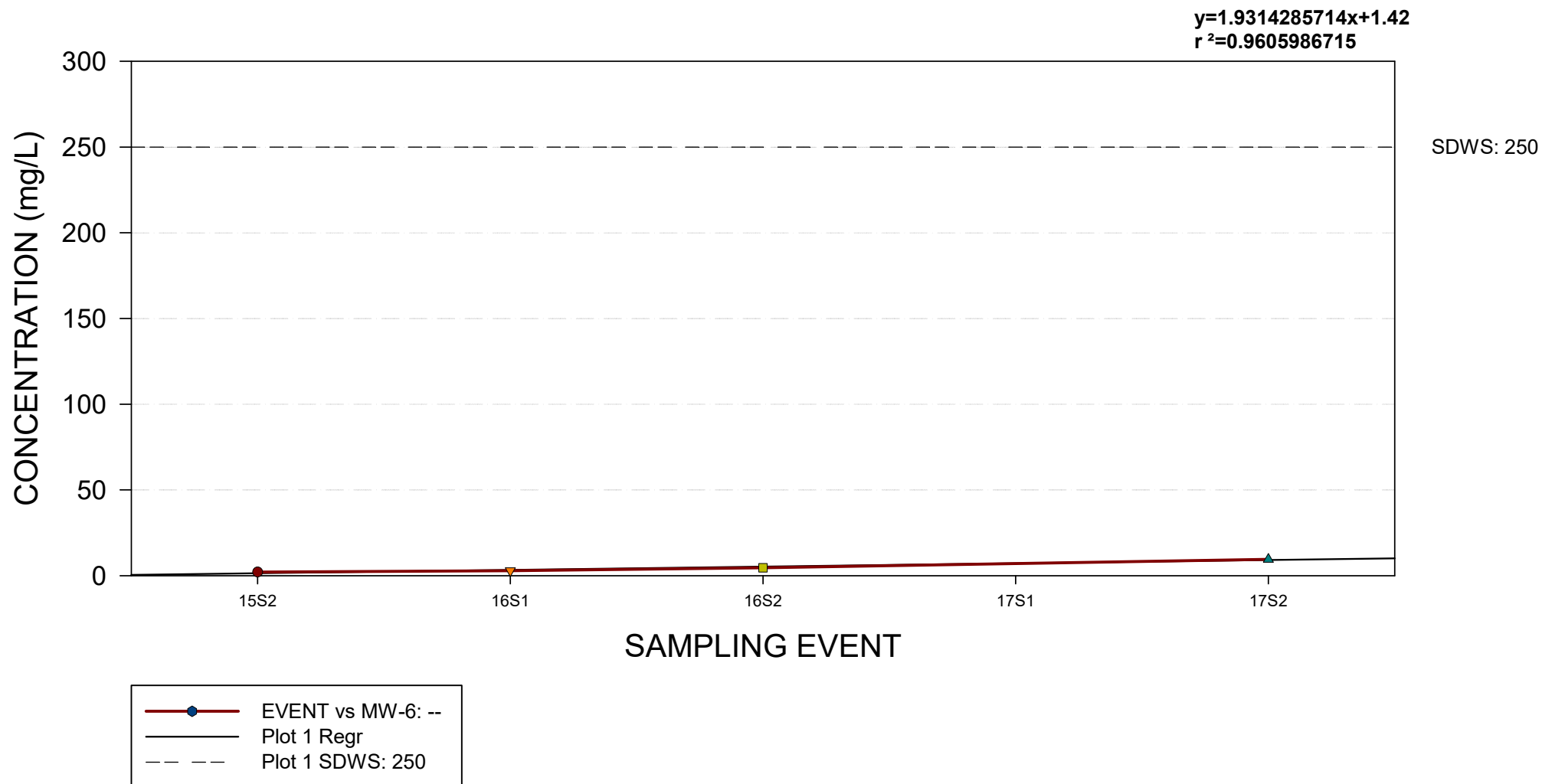
CHLORIDE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-5A GROUNDWATER CHEMISTRY TREND GRAPH



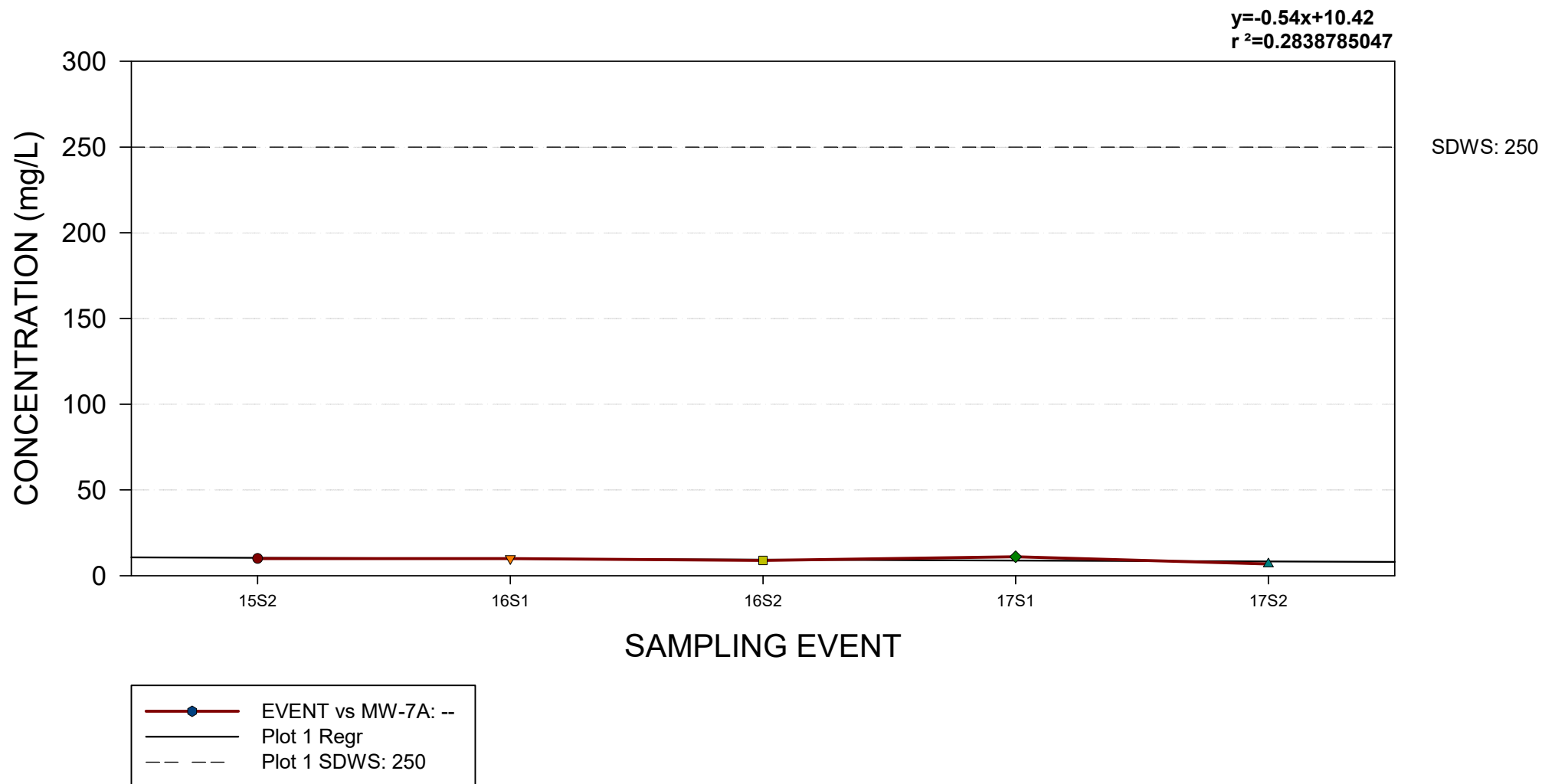
CHLORIDE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-6 GROUNDWATER CHEMISTRY TREND GRAPH



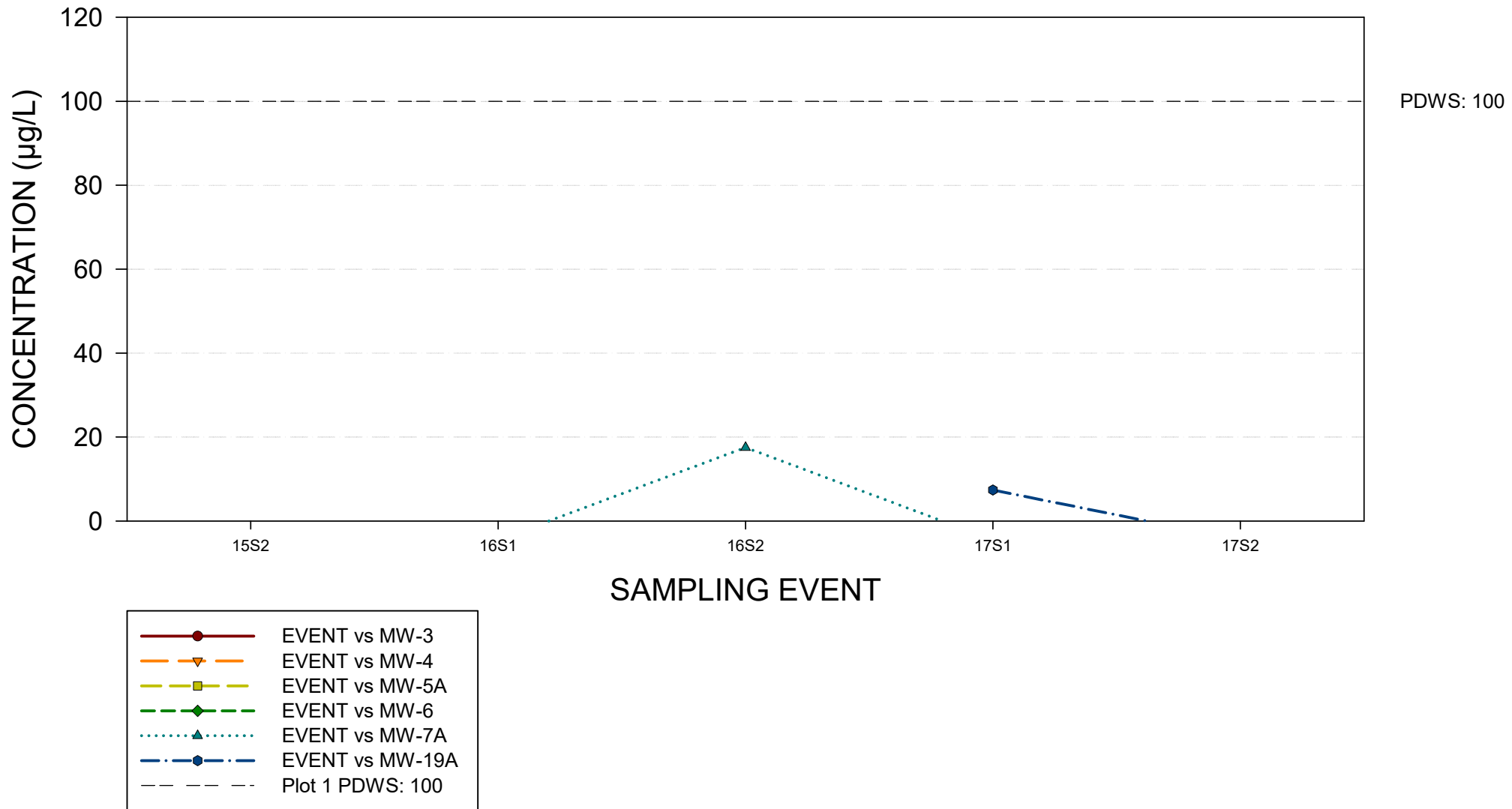
CHLORIDE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-7A GROUNDWATER CHEMISTRY TREND GRAPH



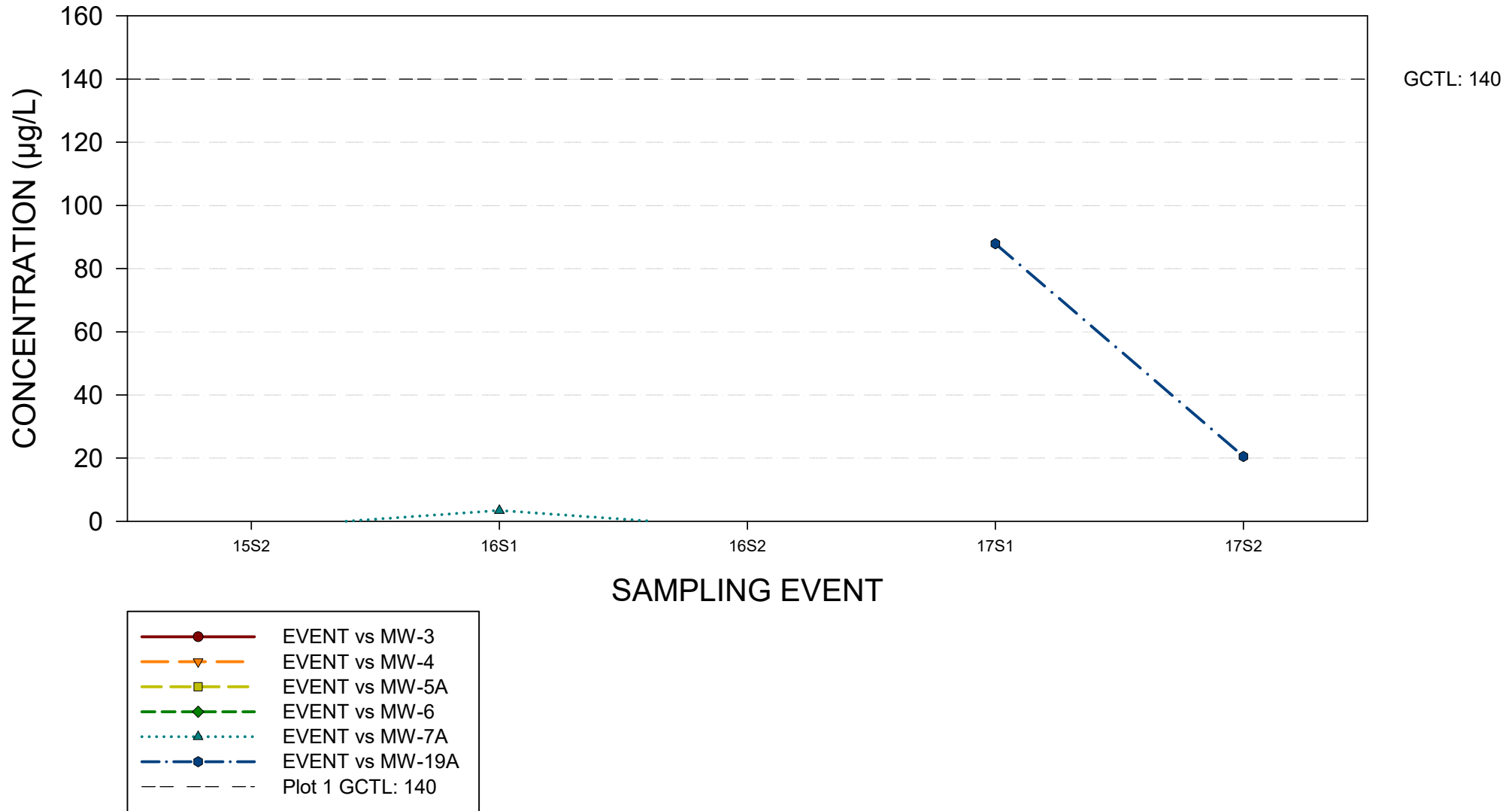
CHROMIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH

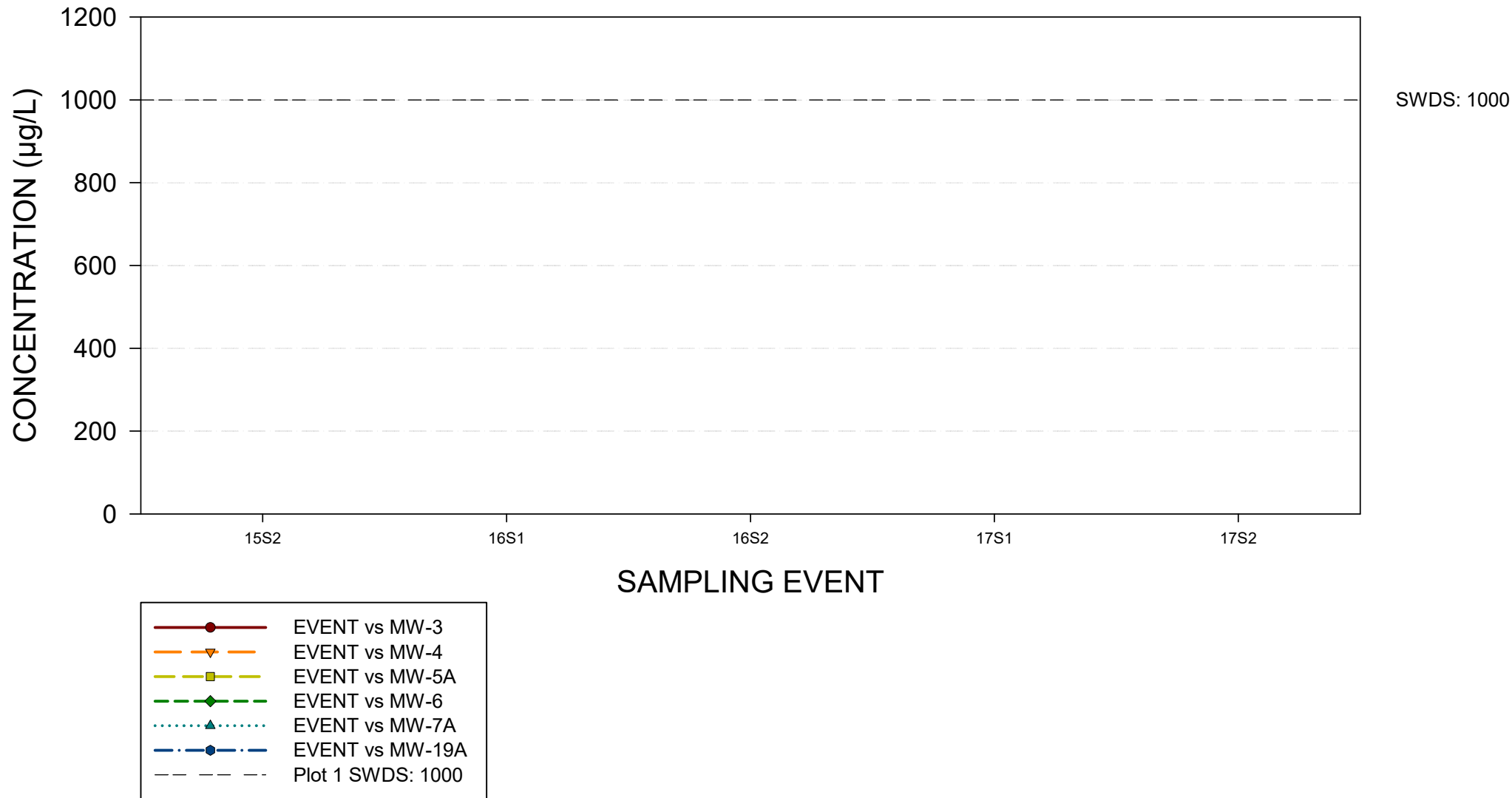


COBALT

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH

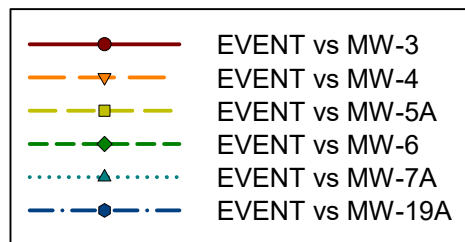
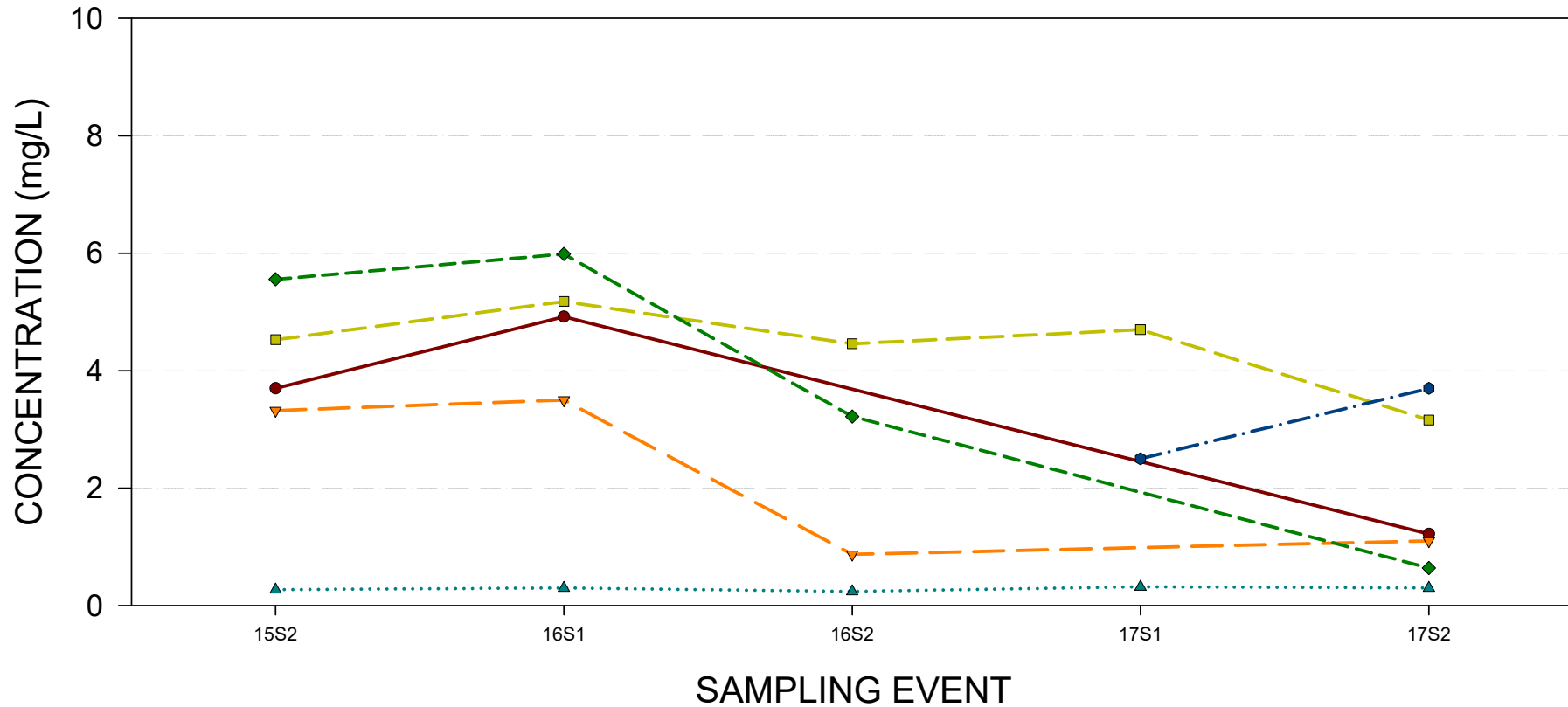


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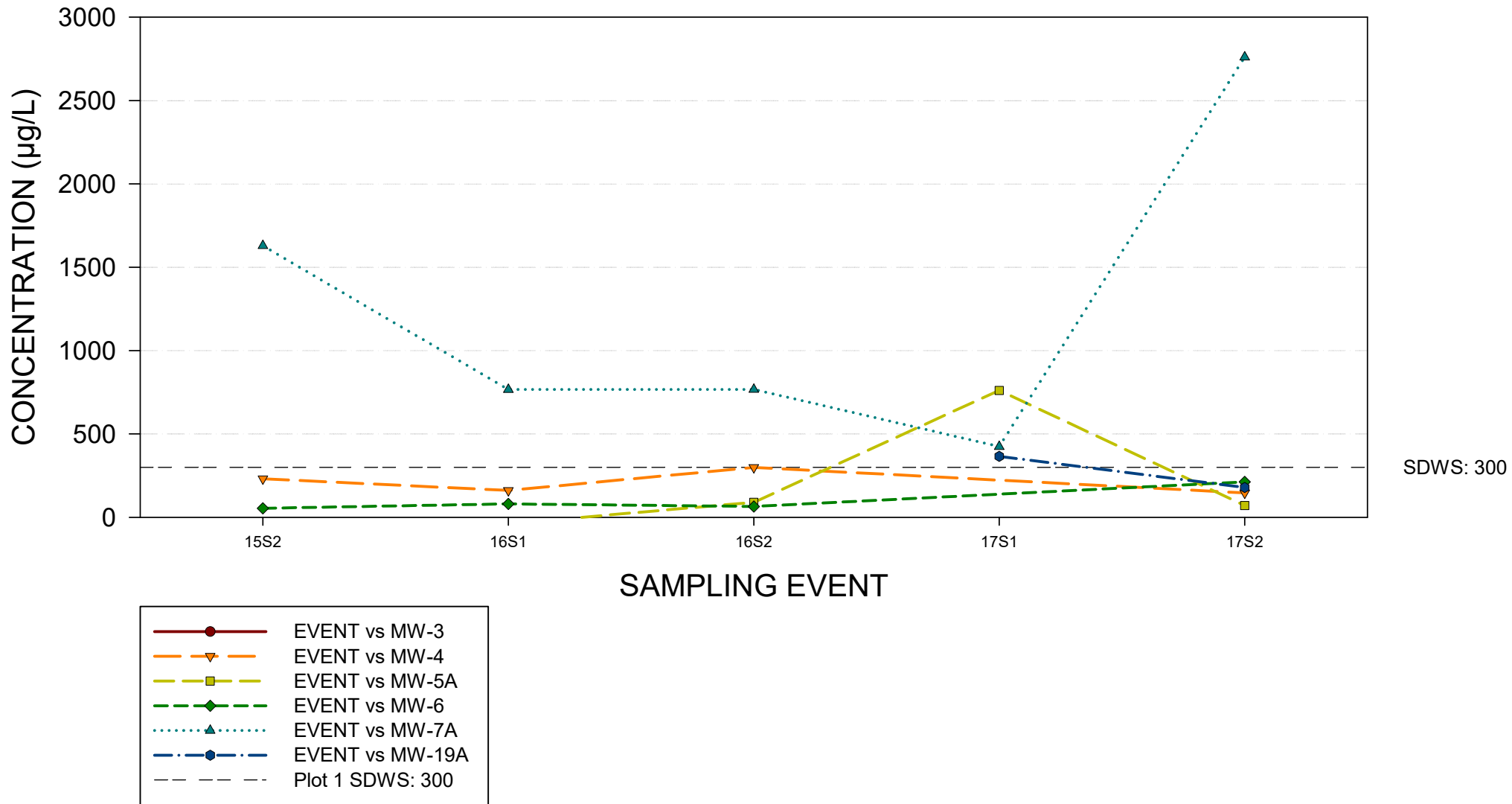
DISSOLVED OXYGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



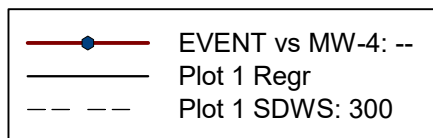
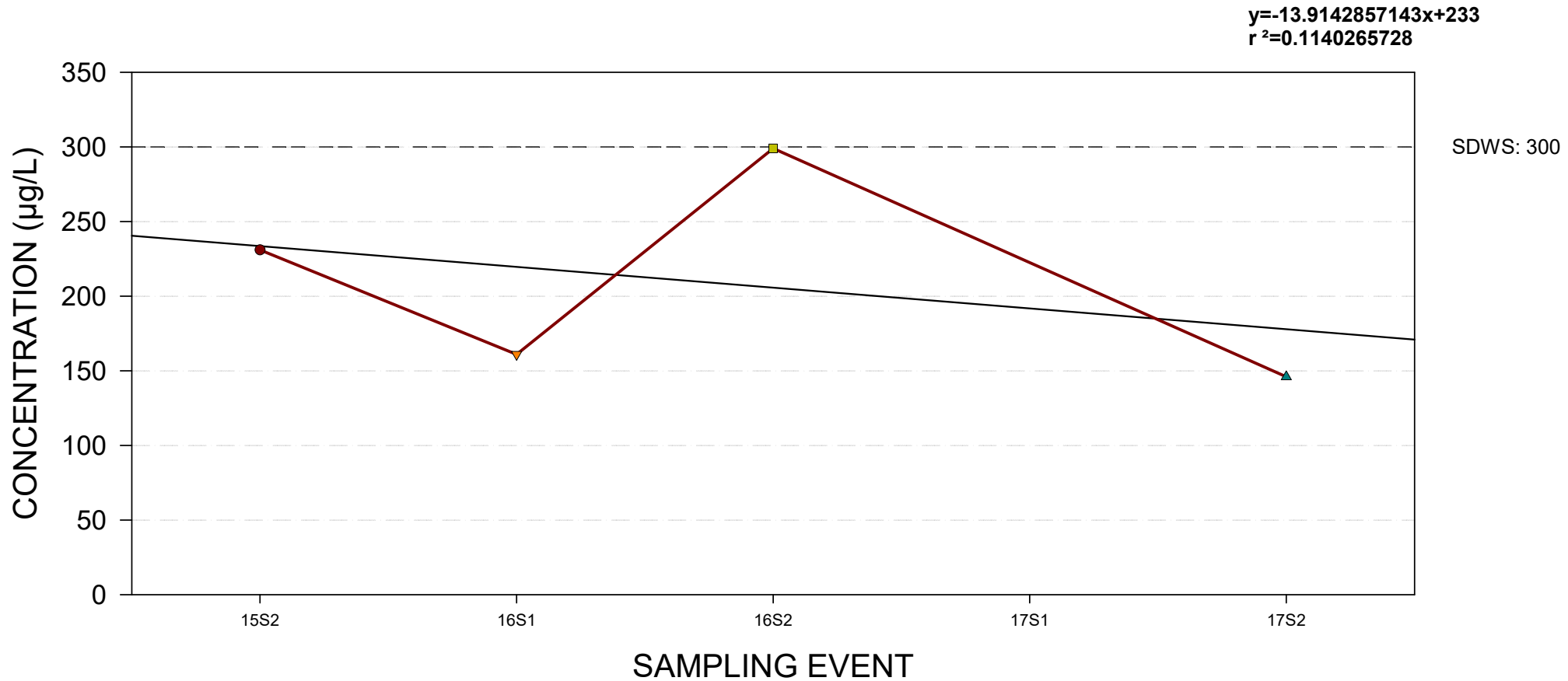
IRON

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



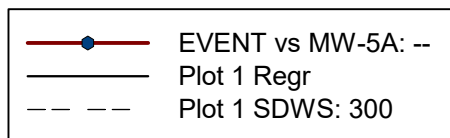
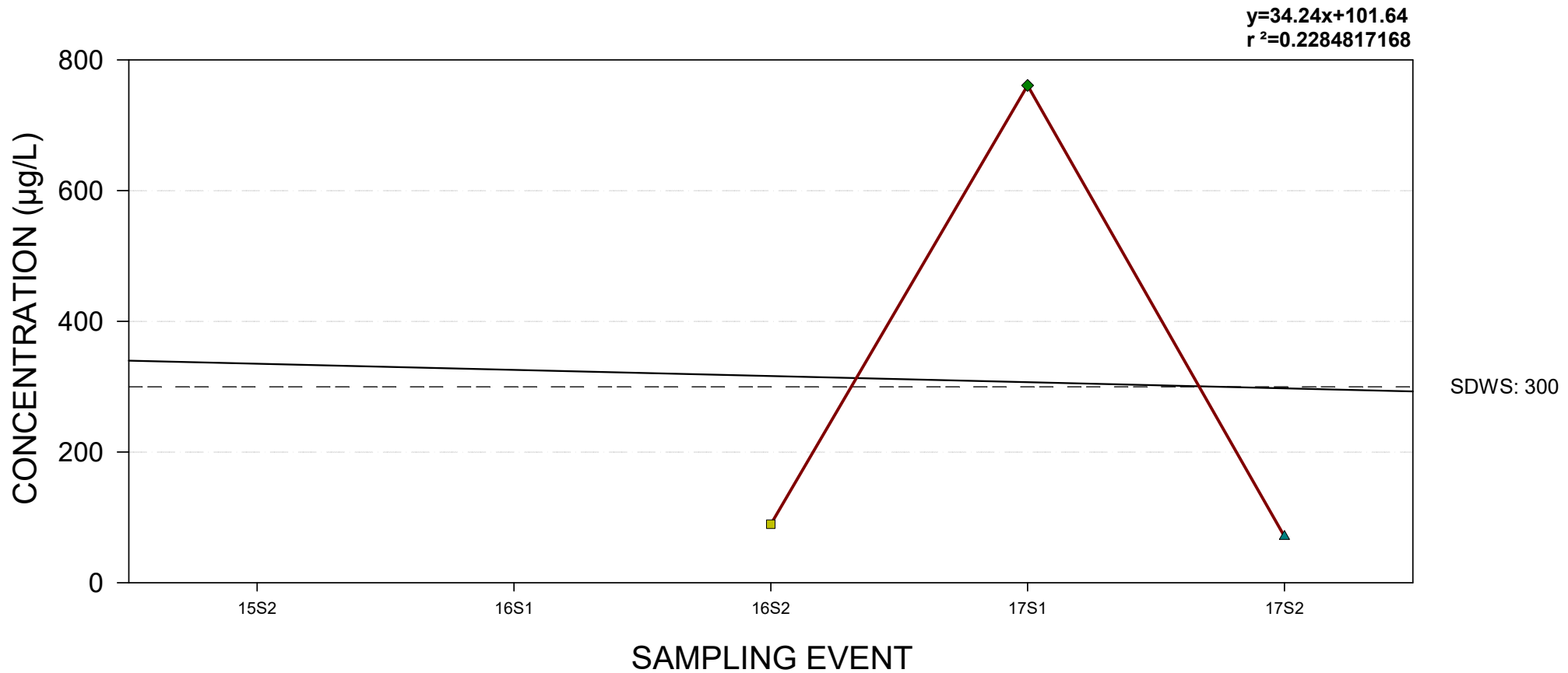
IRON

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-4 GROUNDWATER CHEMISTRY TREND GRAPH



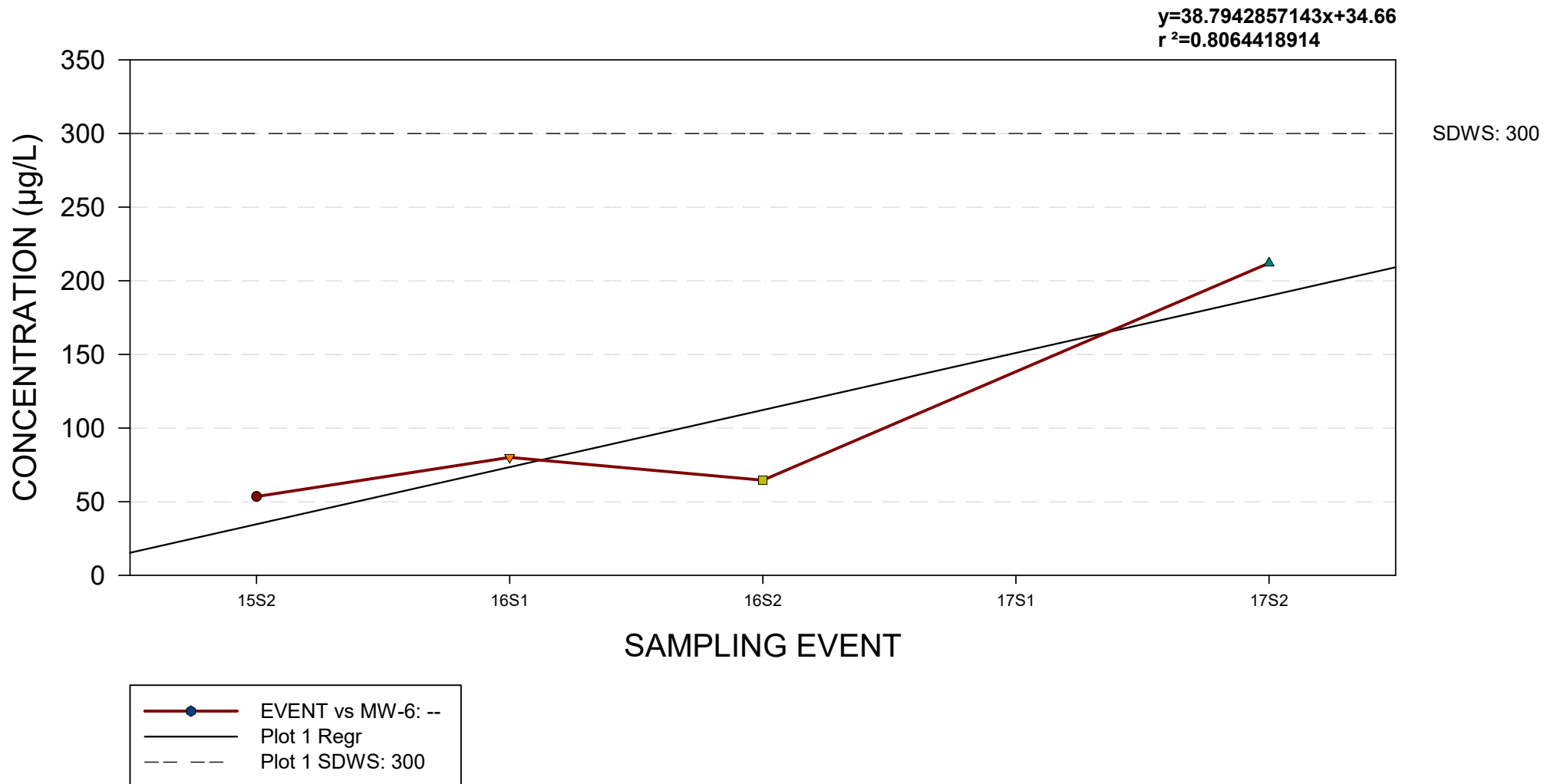
IRON

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-5A GROUNDWATER CHEMISTRY TREND GRAPH



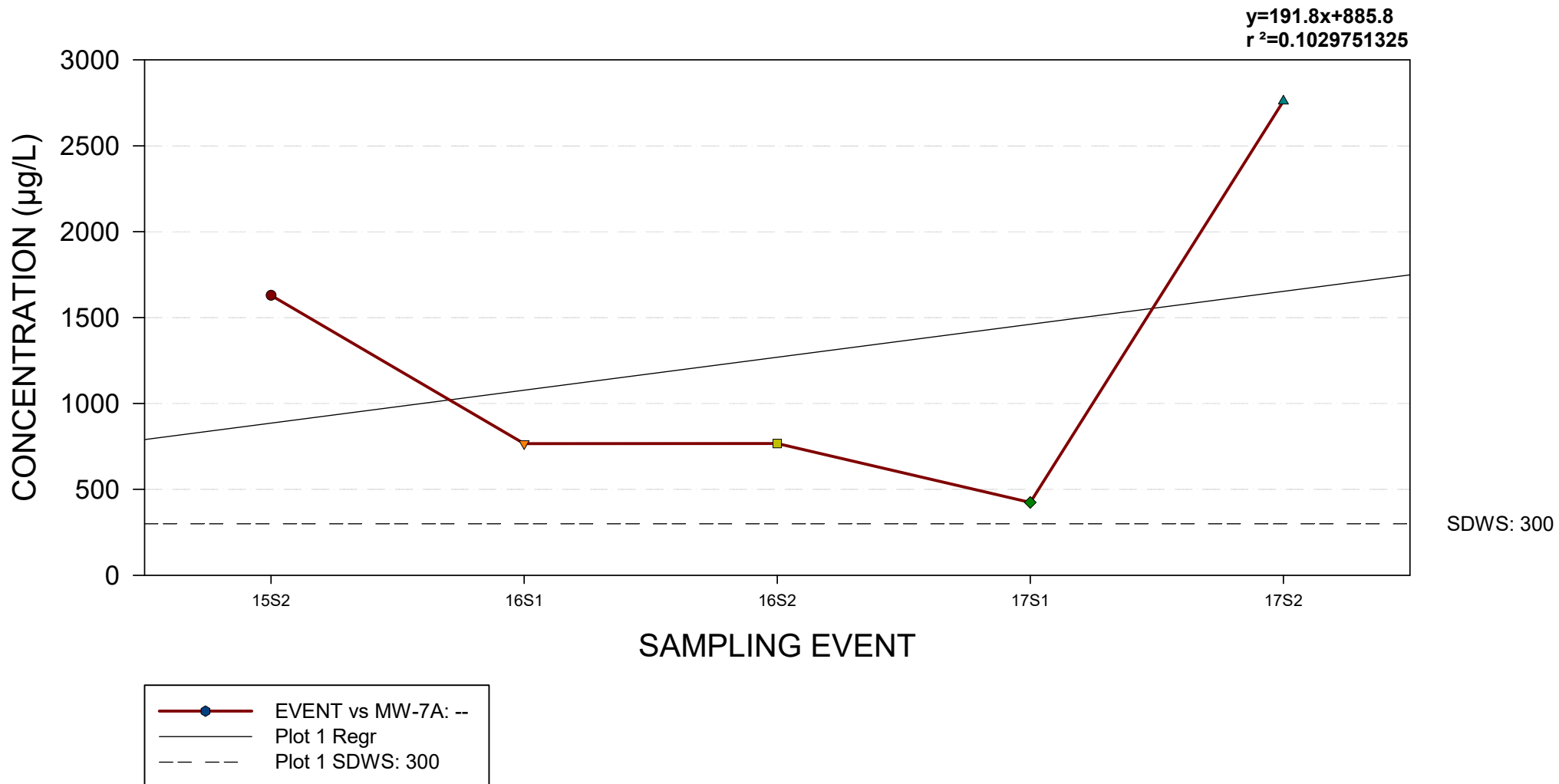
IRON

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-6 GROUNDWATER CHEMISTRY TREND GRAPH



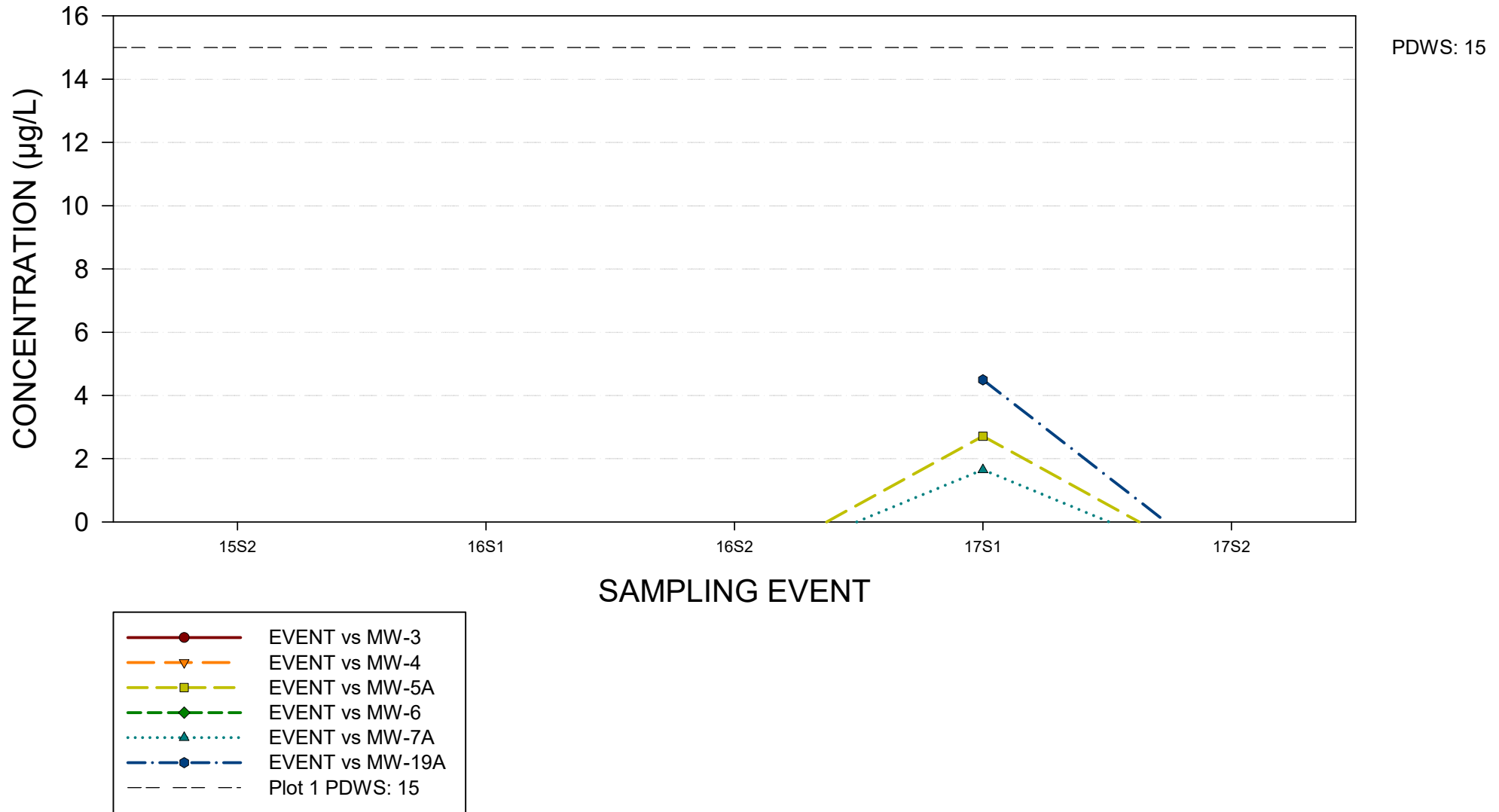
IRON

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-7A GROUNDWATER CHEMISTRY TREND GRAPH



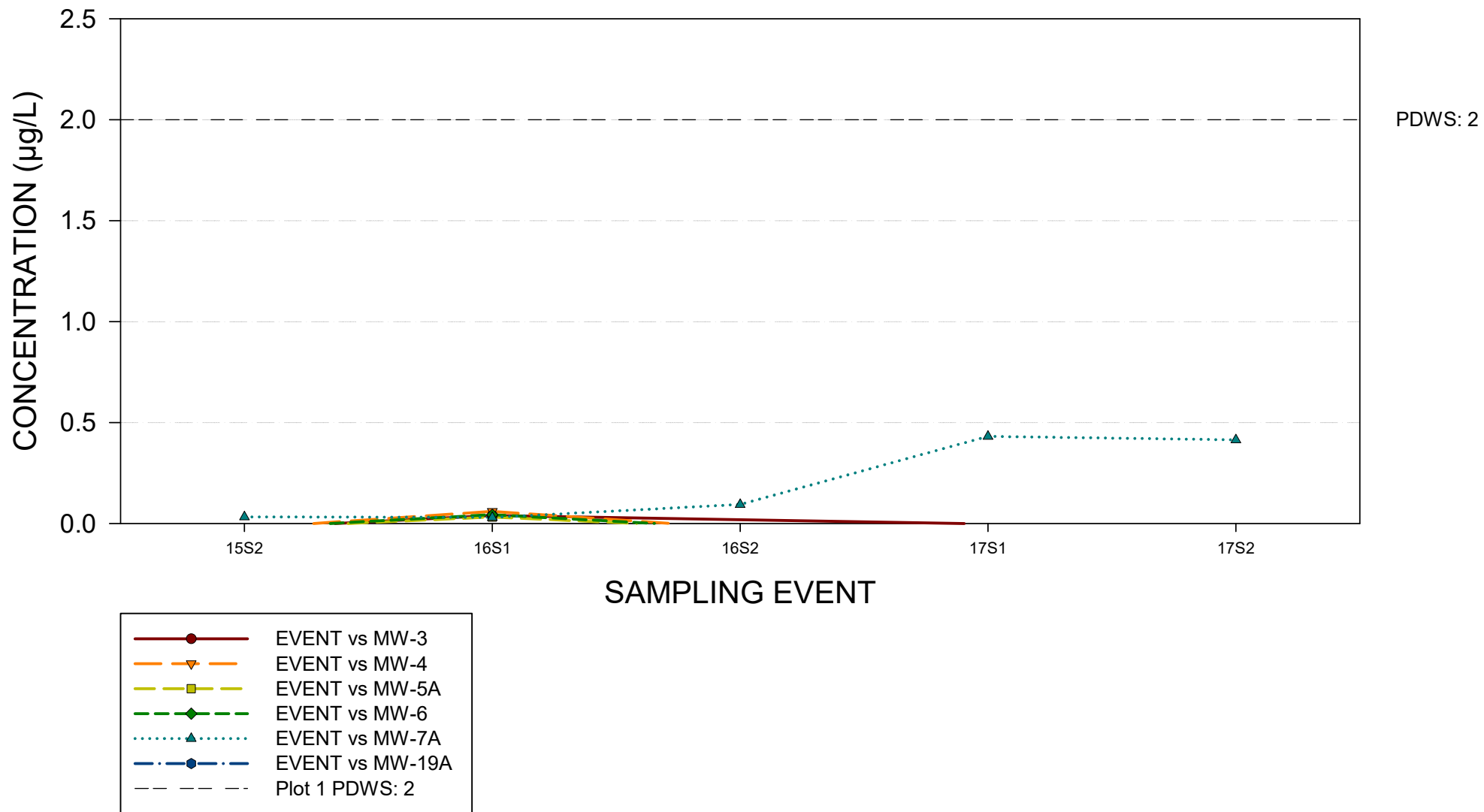
LEAD

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



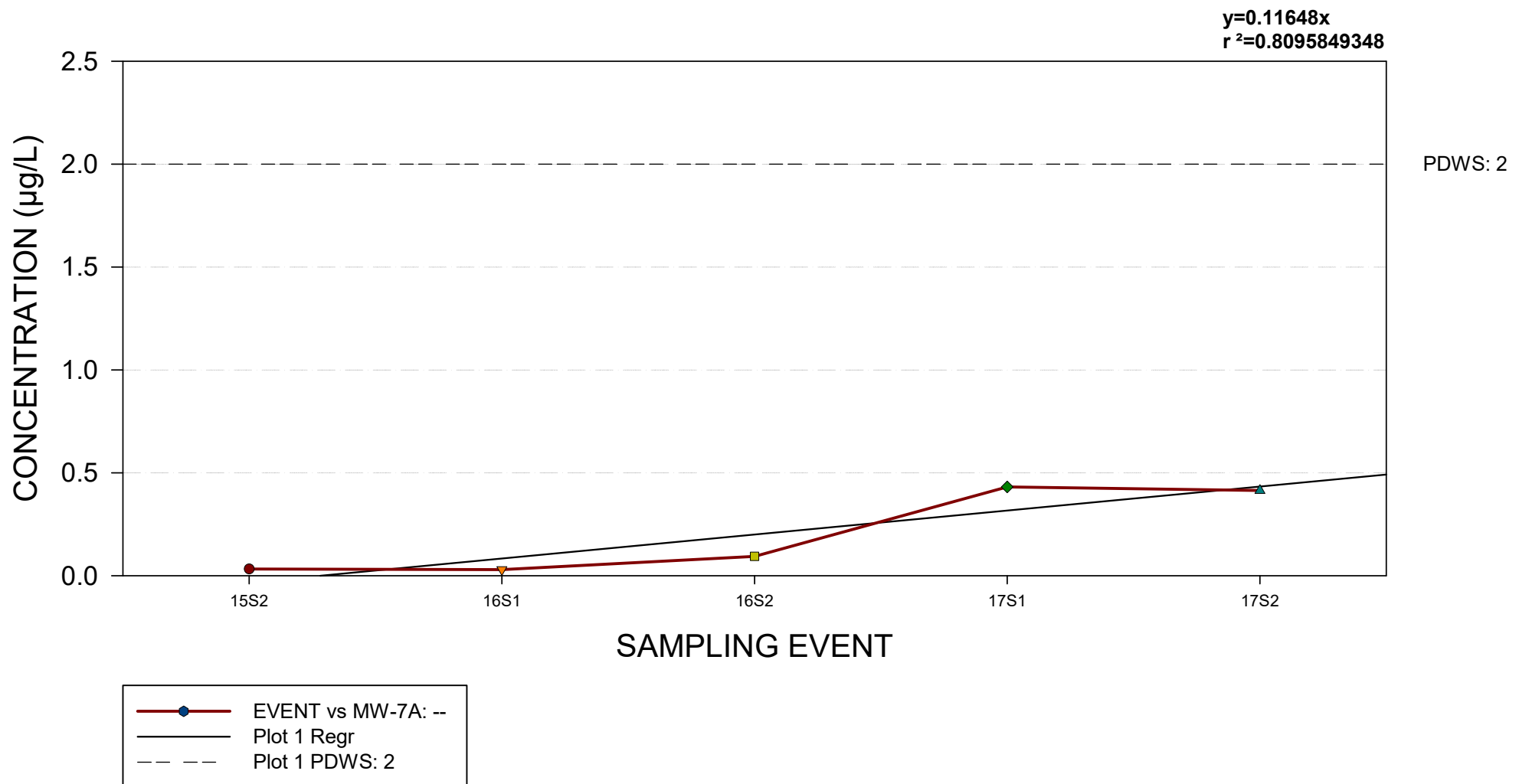
MERCURY

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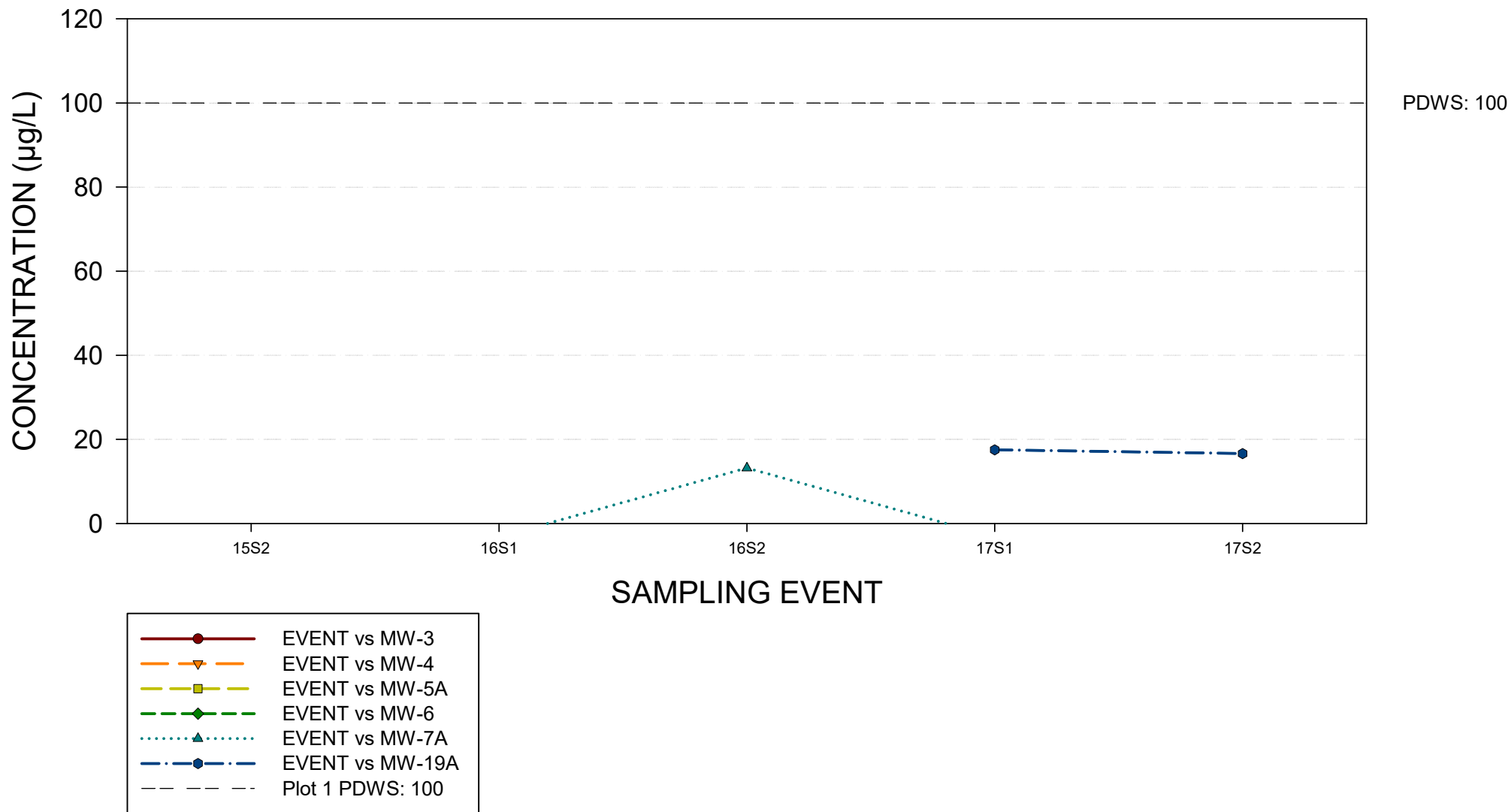
MERCURY

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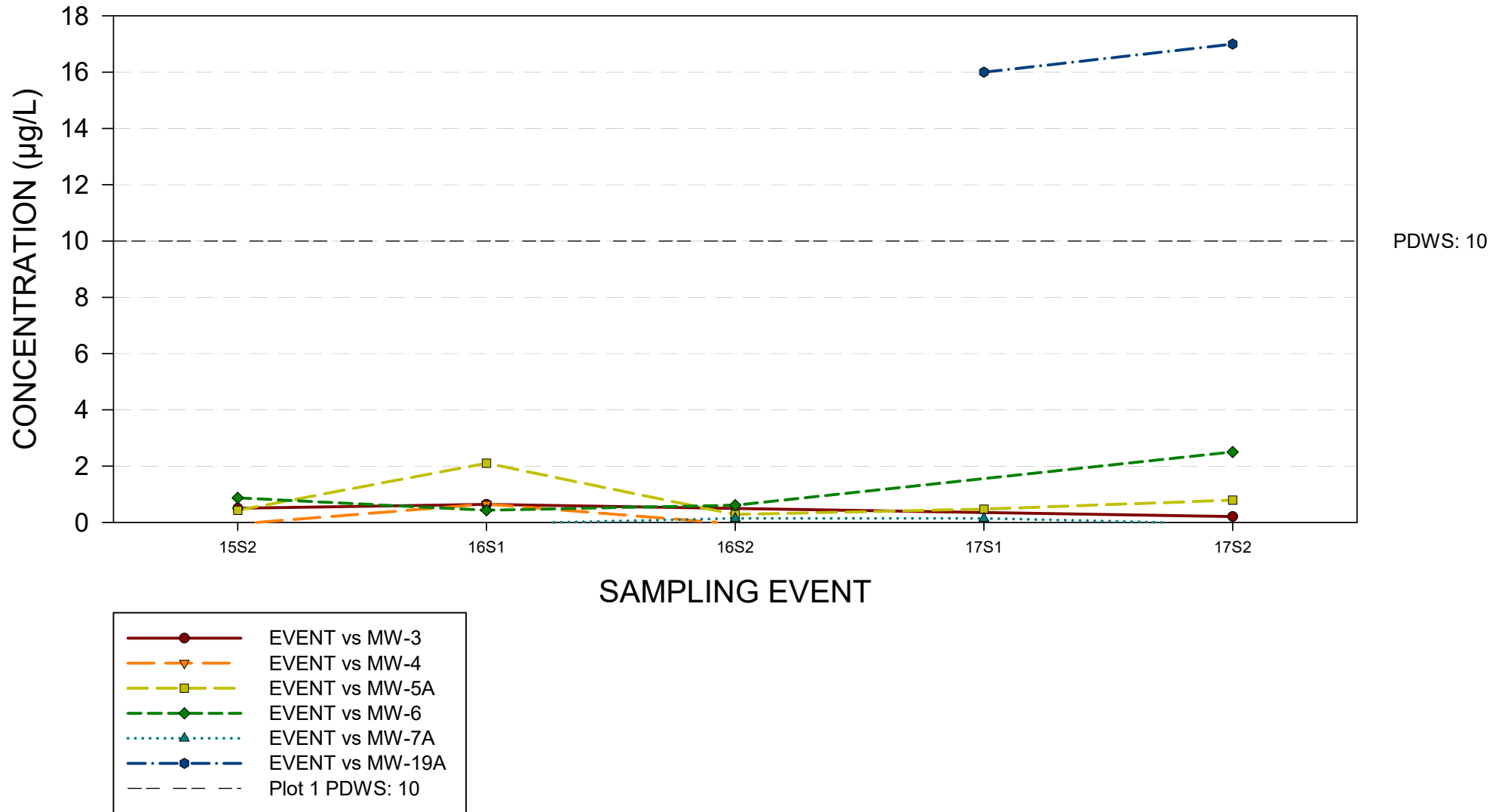
NICKEL

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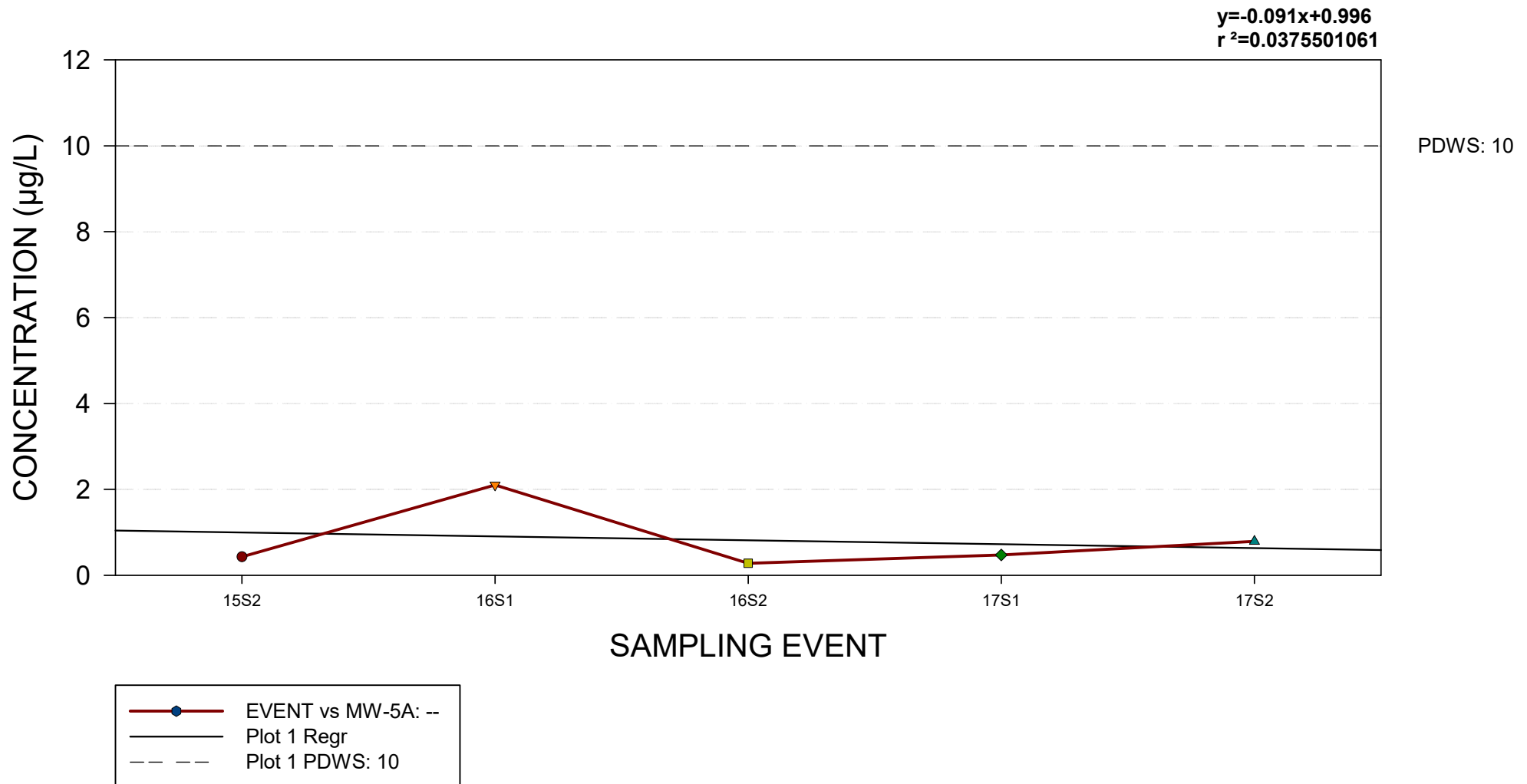
NITRATE AS NITROGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



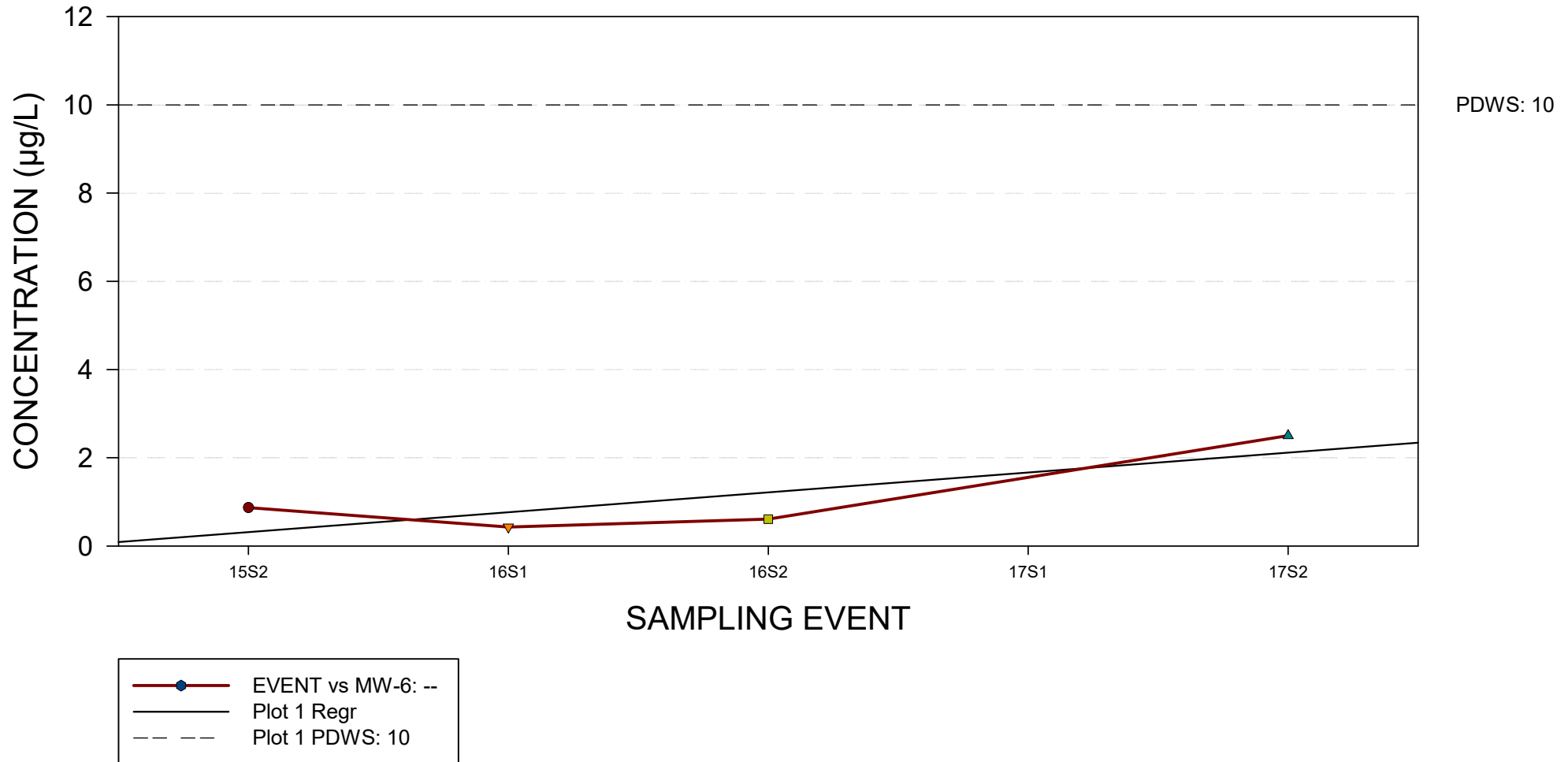
NITRATE AS NITROGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-5A GROUNDWATER CHEMISTRY TREND GRAPH



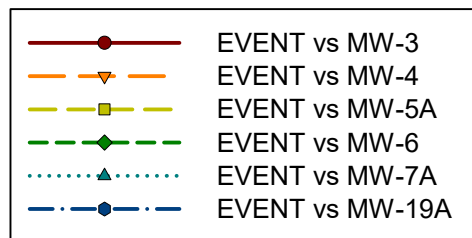
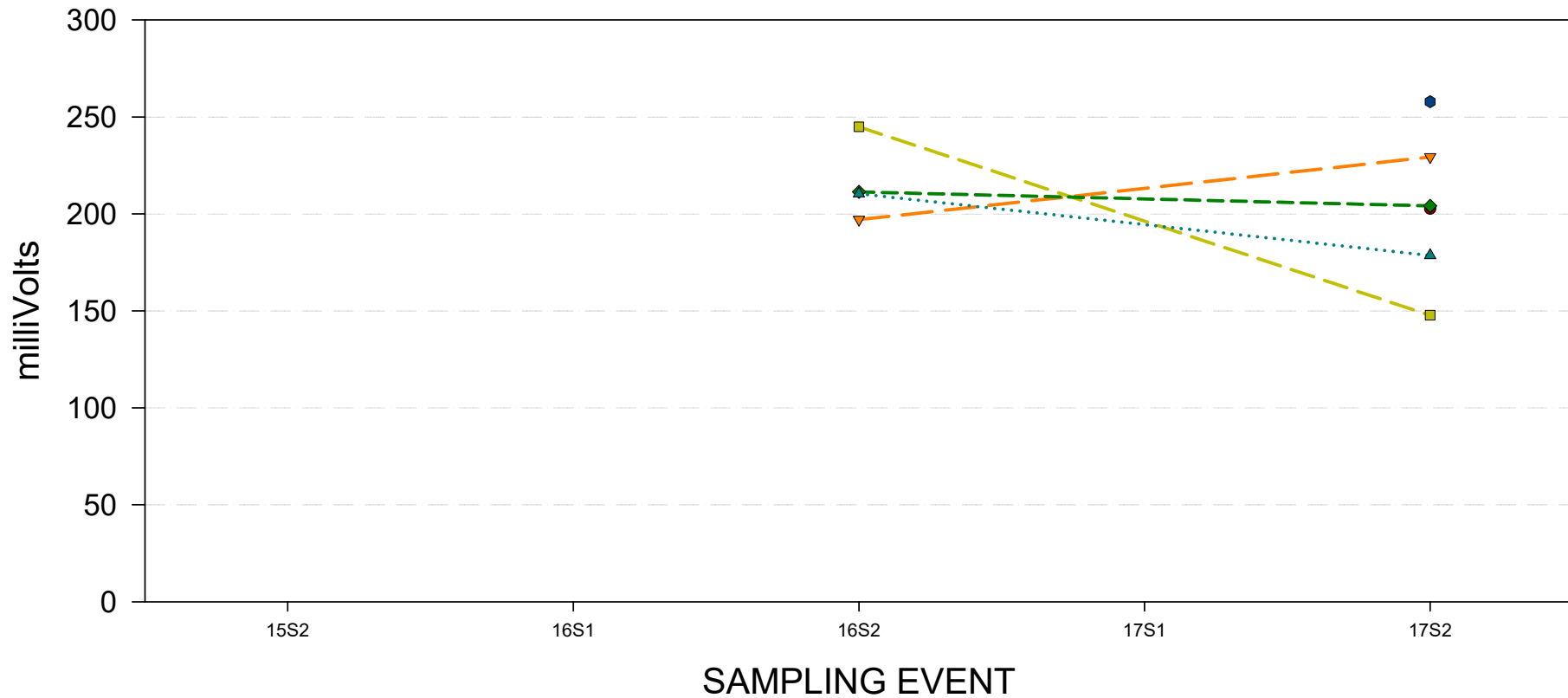
NITRATE AS NITROGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-6 GROUNDWATER CHEMISTRY TREND GRAPH



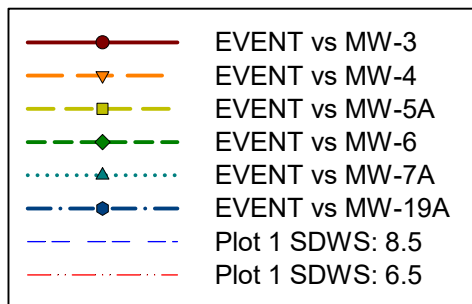
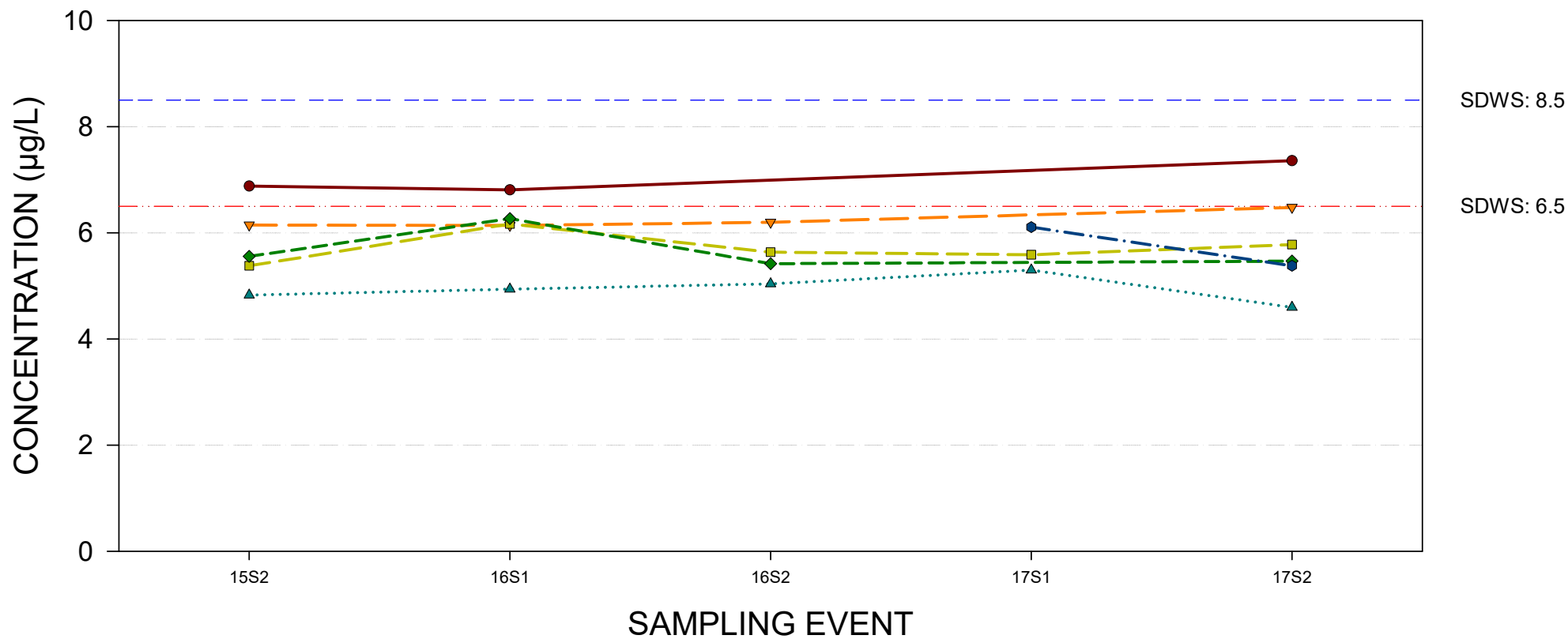
OXIDATION / REDUCTION POTENTIAL

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



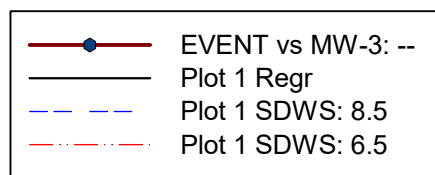
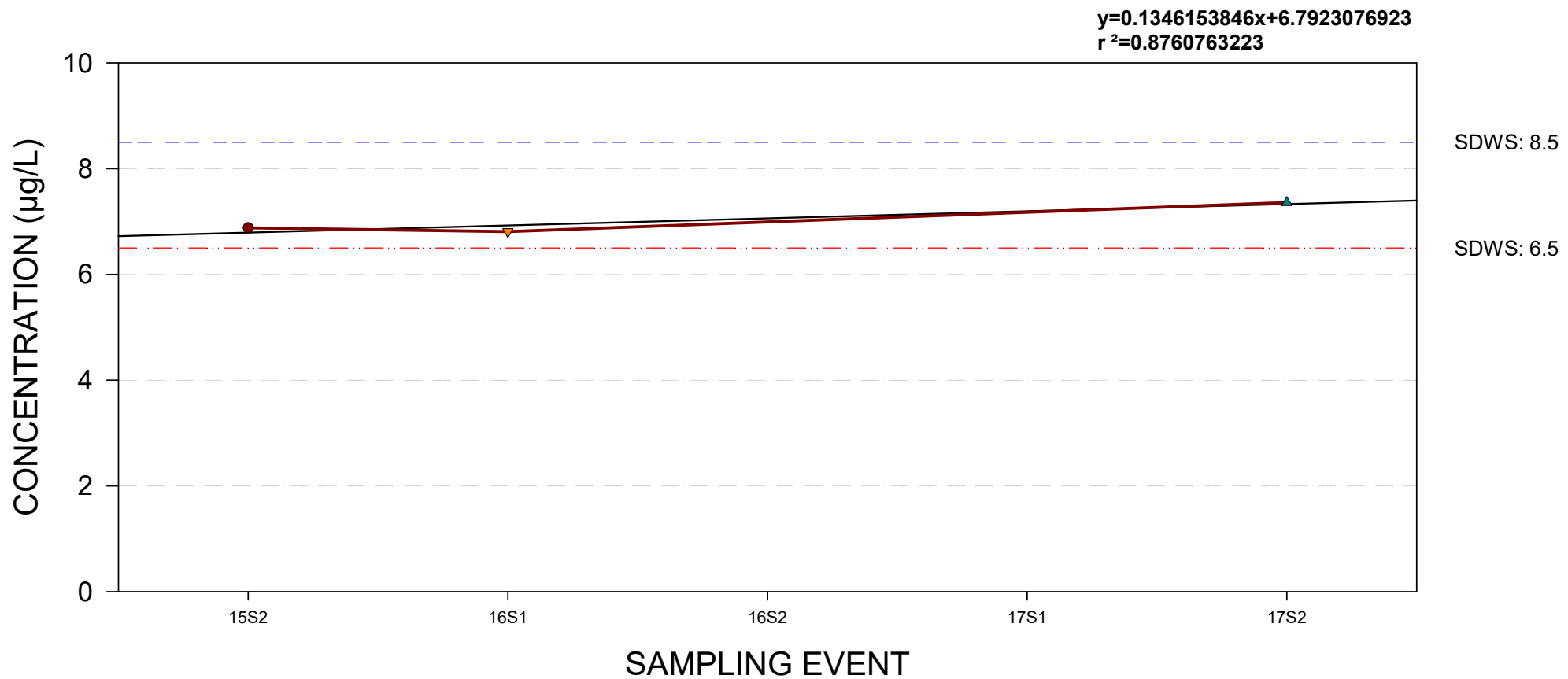
PH

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



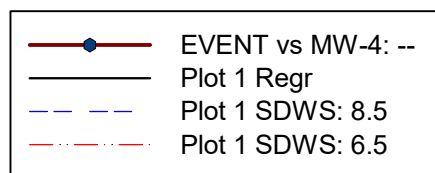
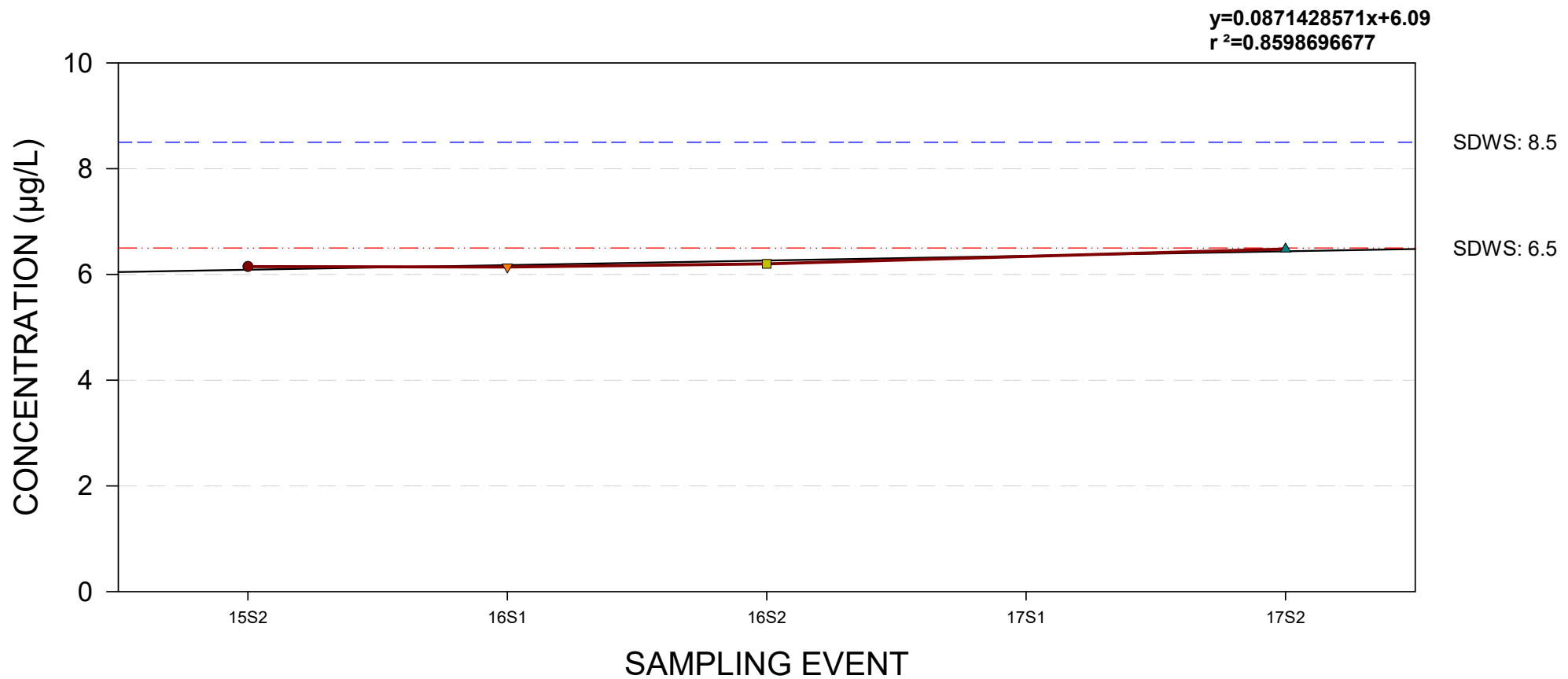
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-3 GROUNDWATER CHEMISTRY TREND GRAPH



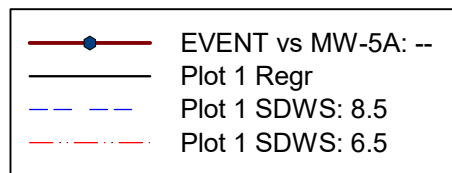
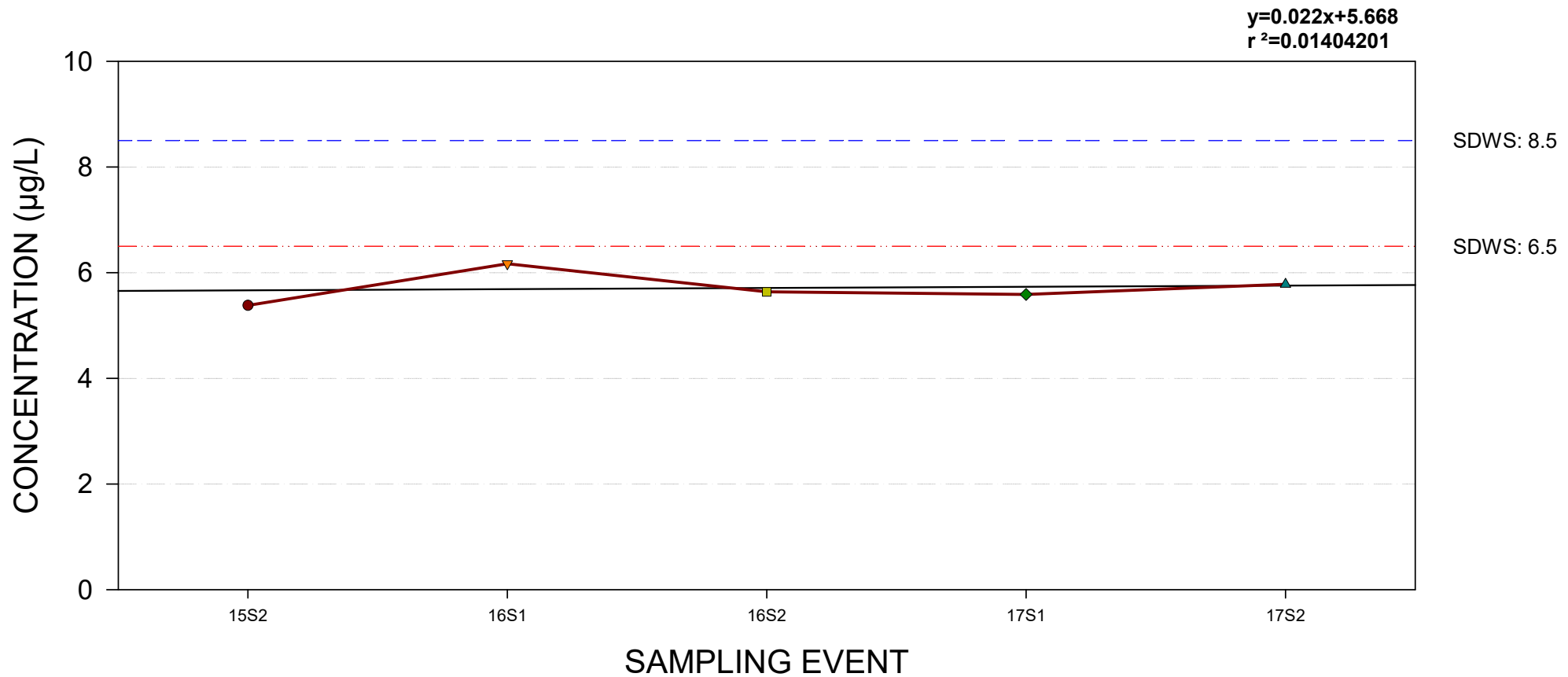
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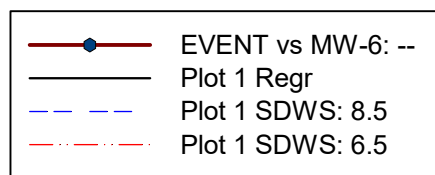
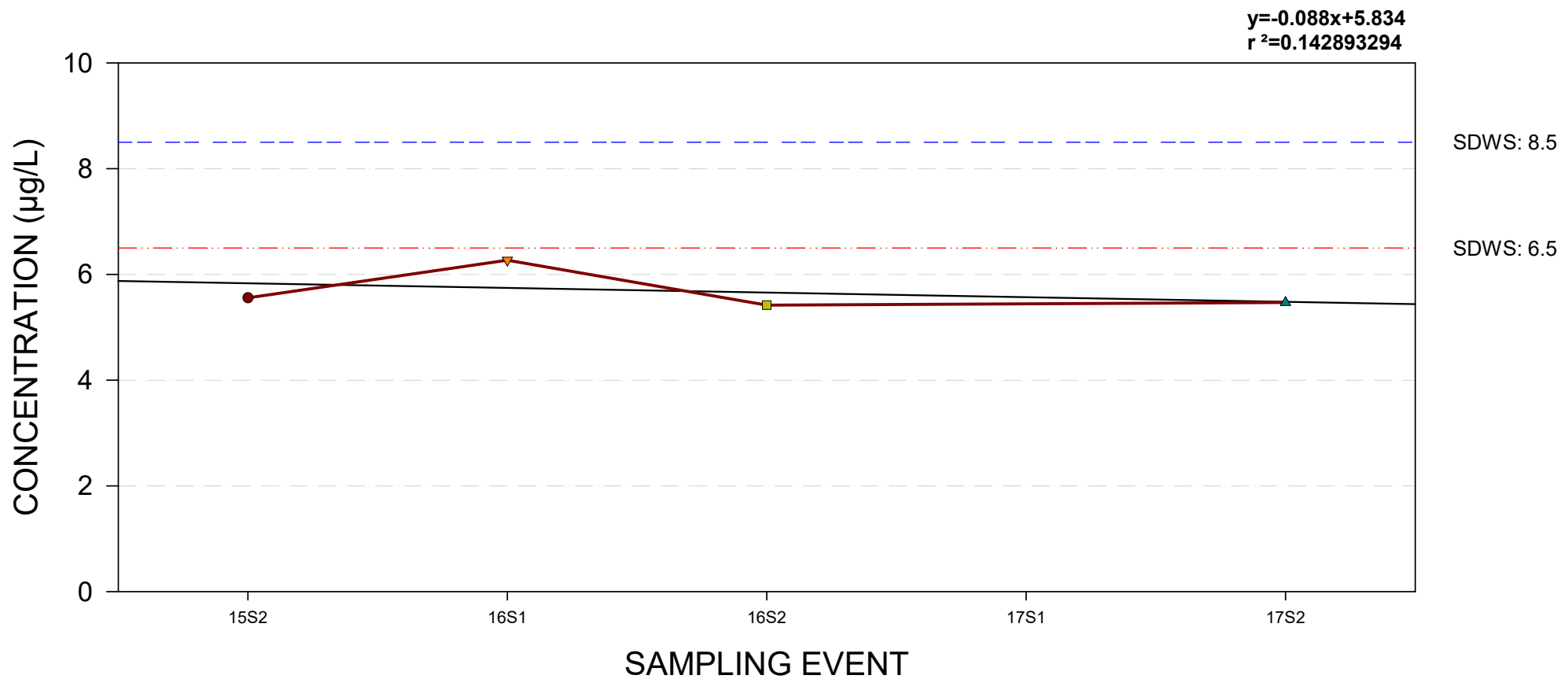
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-5A GROUNDWATER CHEMISTRY TREND GRAPH



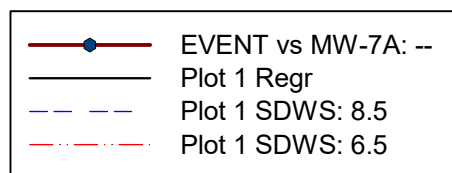
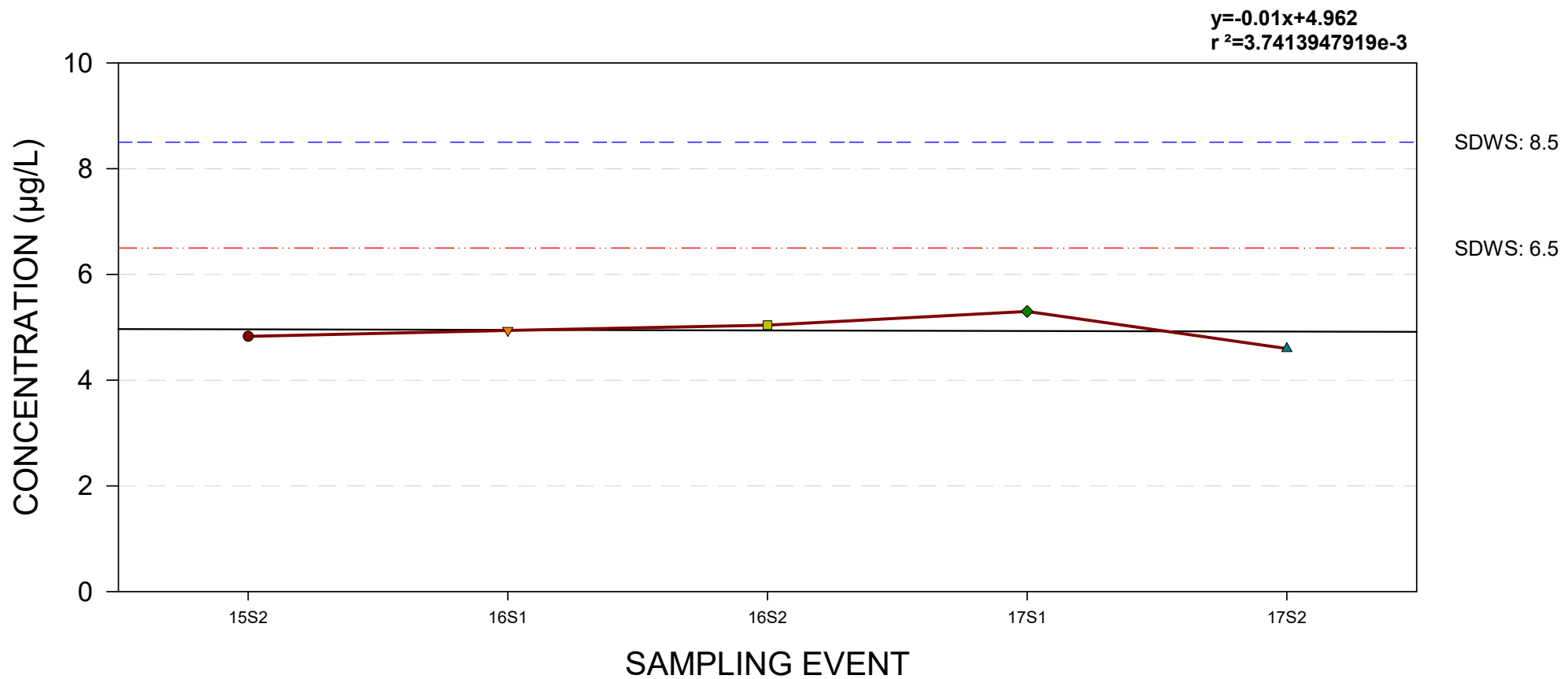
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-6 GROUNDWATER CHEMISTRY TREND GRAPH



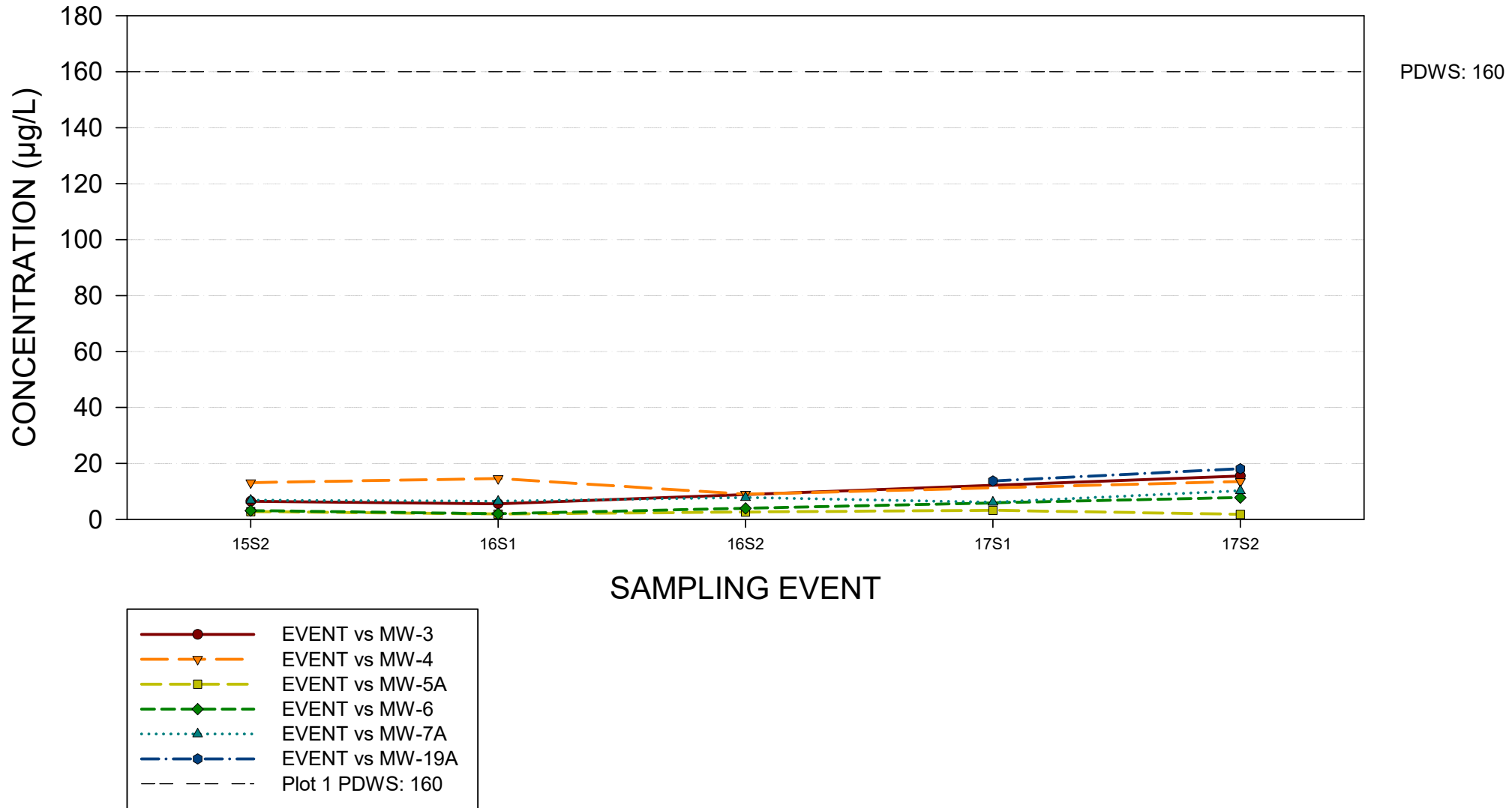
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-7A GROUNDWATER CHEMISTRY TREND GRAPH



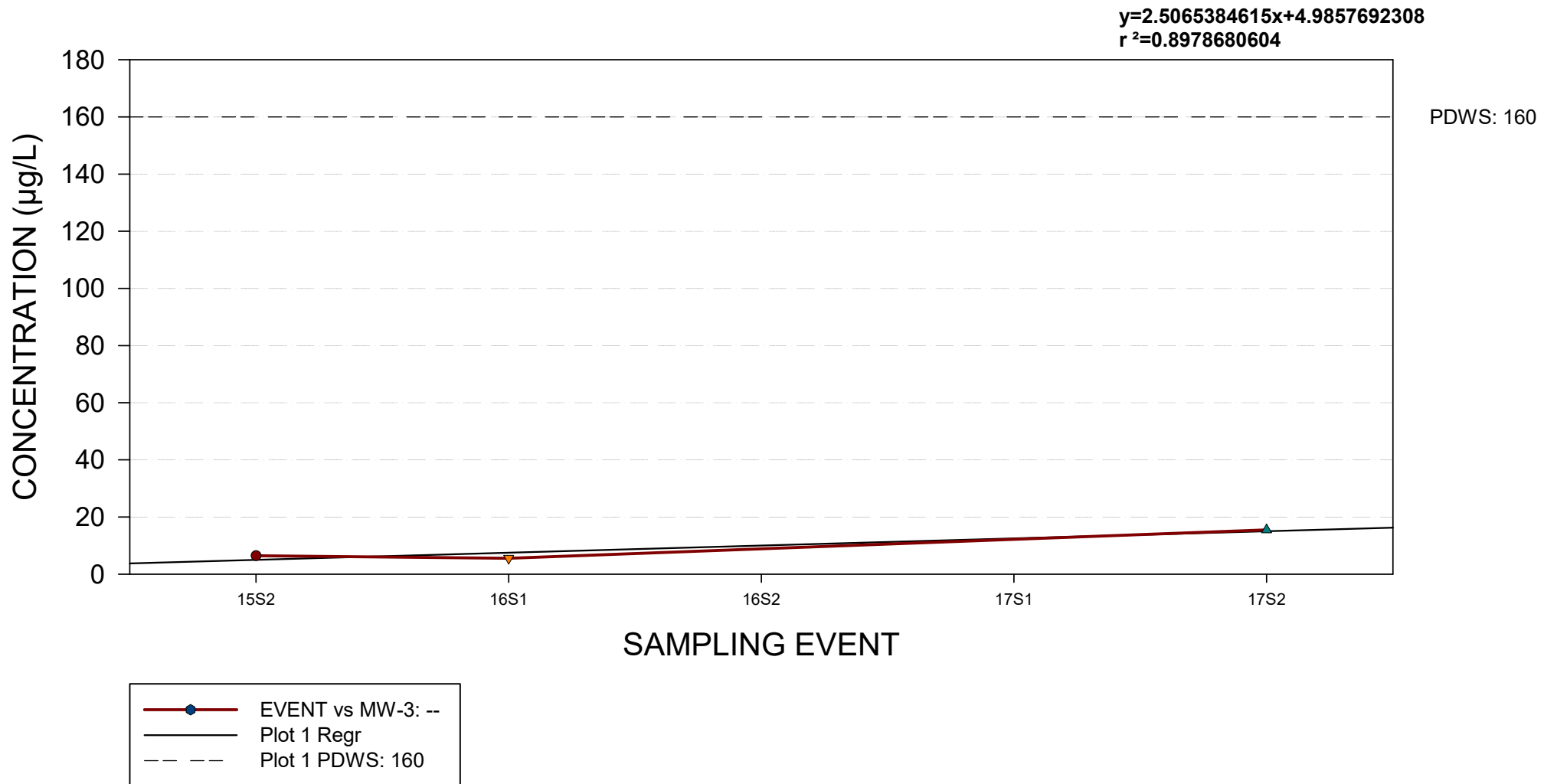
SODIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



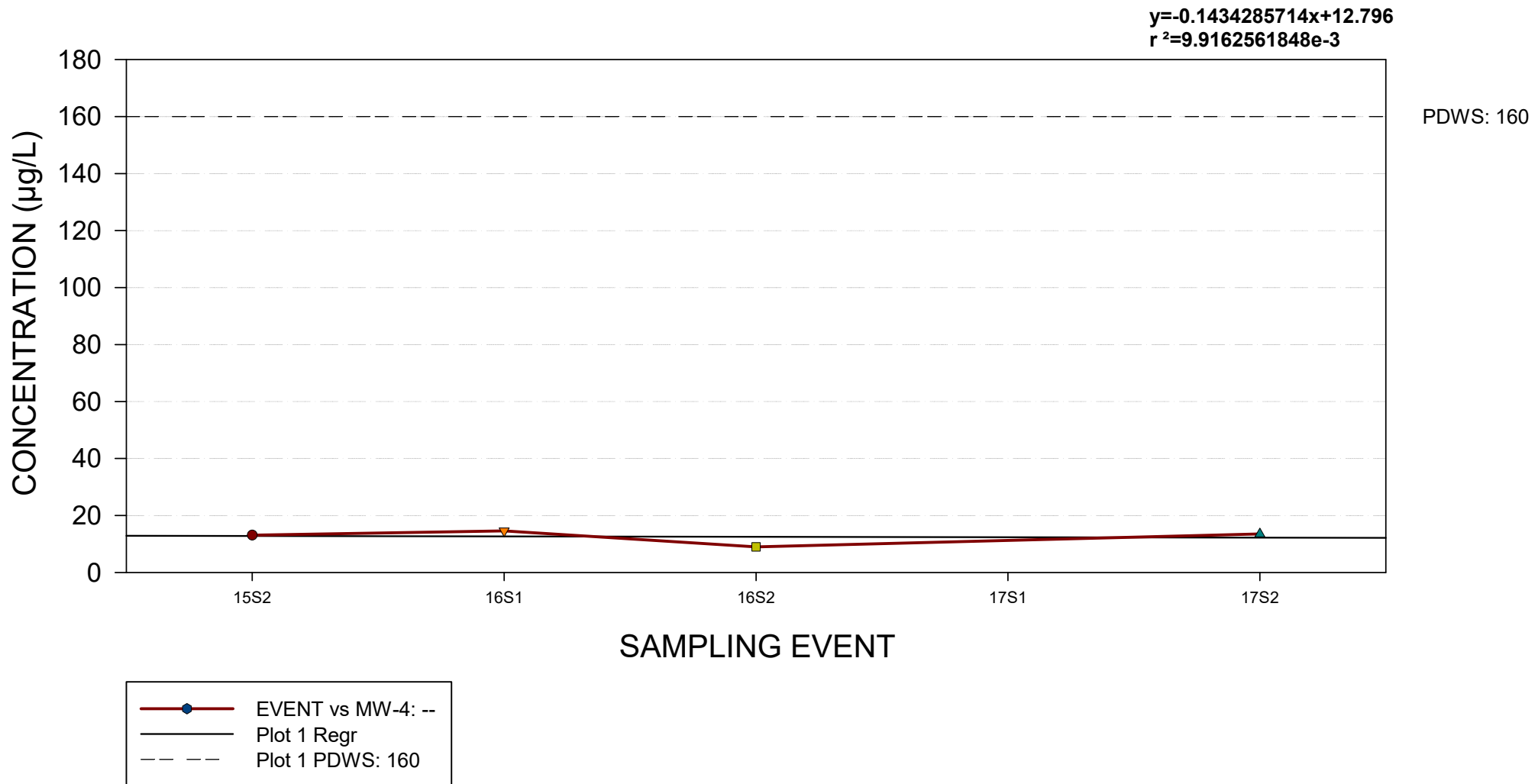
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-3 GROUNDWATER CHEMISTRY TREND GRAPH



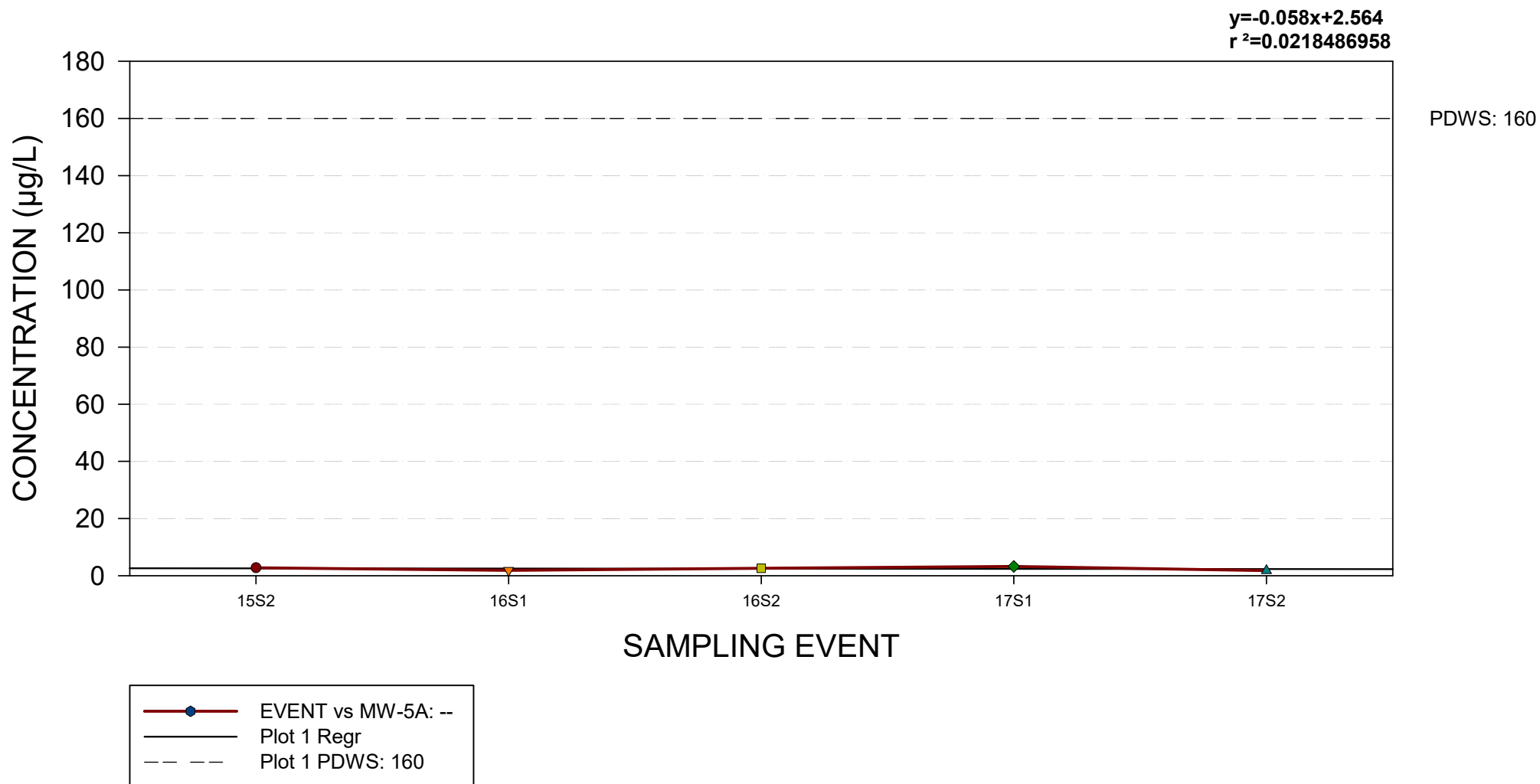
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-4 GROUNDWATER CHEMISTRY TREND GRAPH



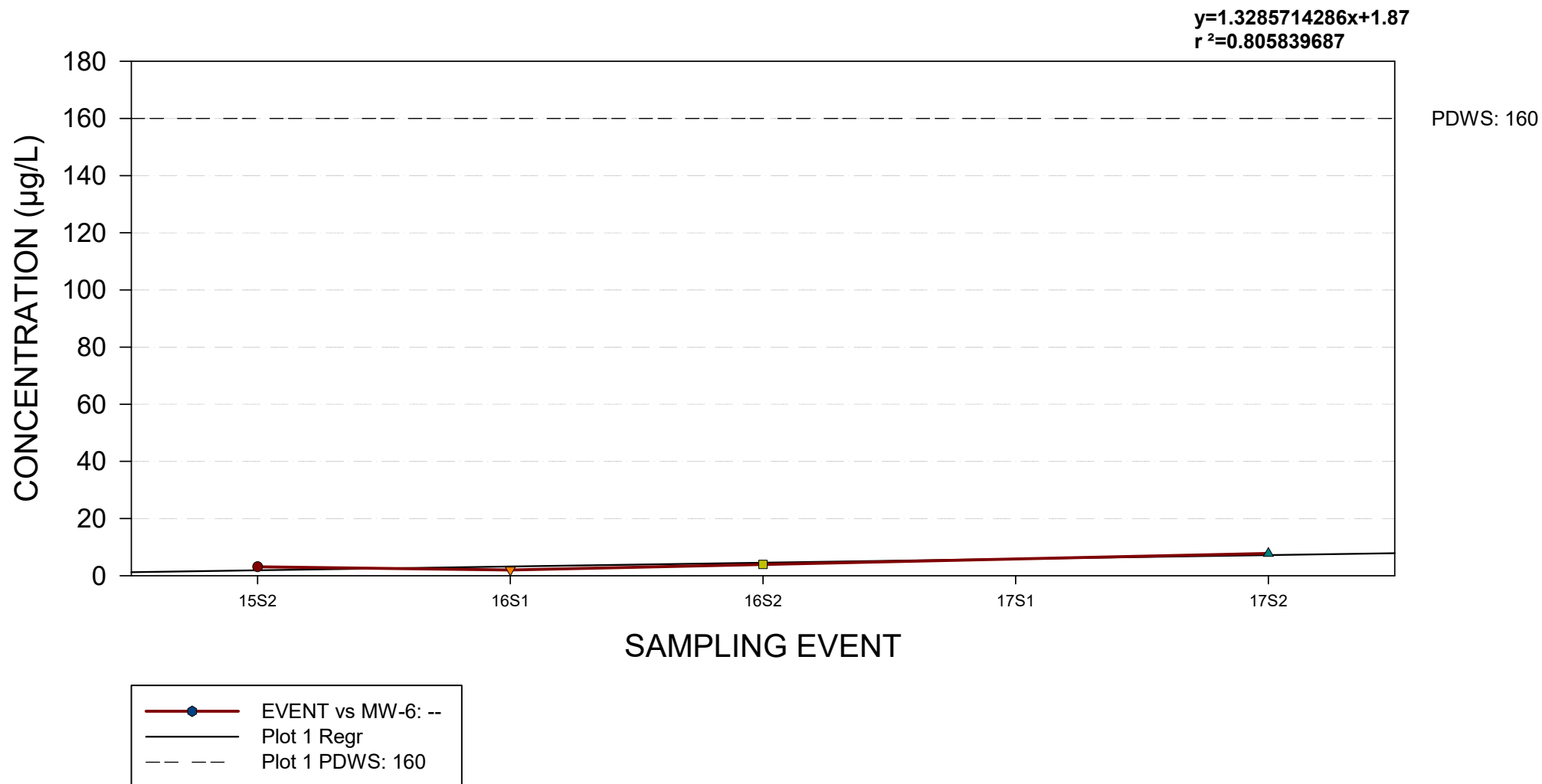
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-5A GROUNDWATER CHEMISTRY TREND GRAPH



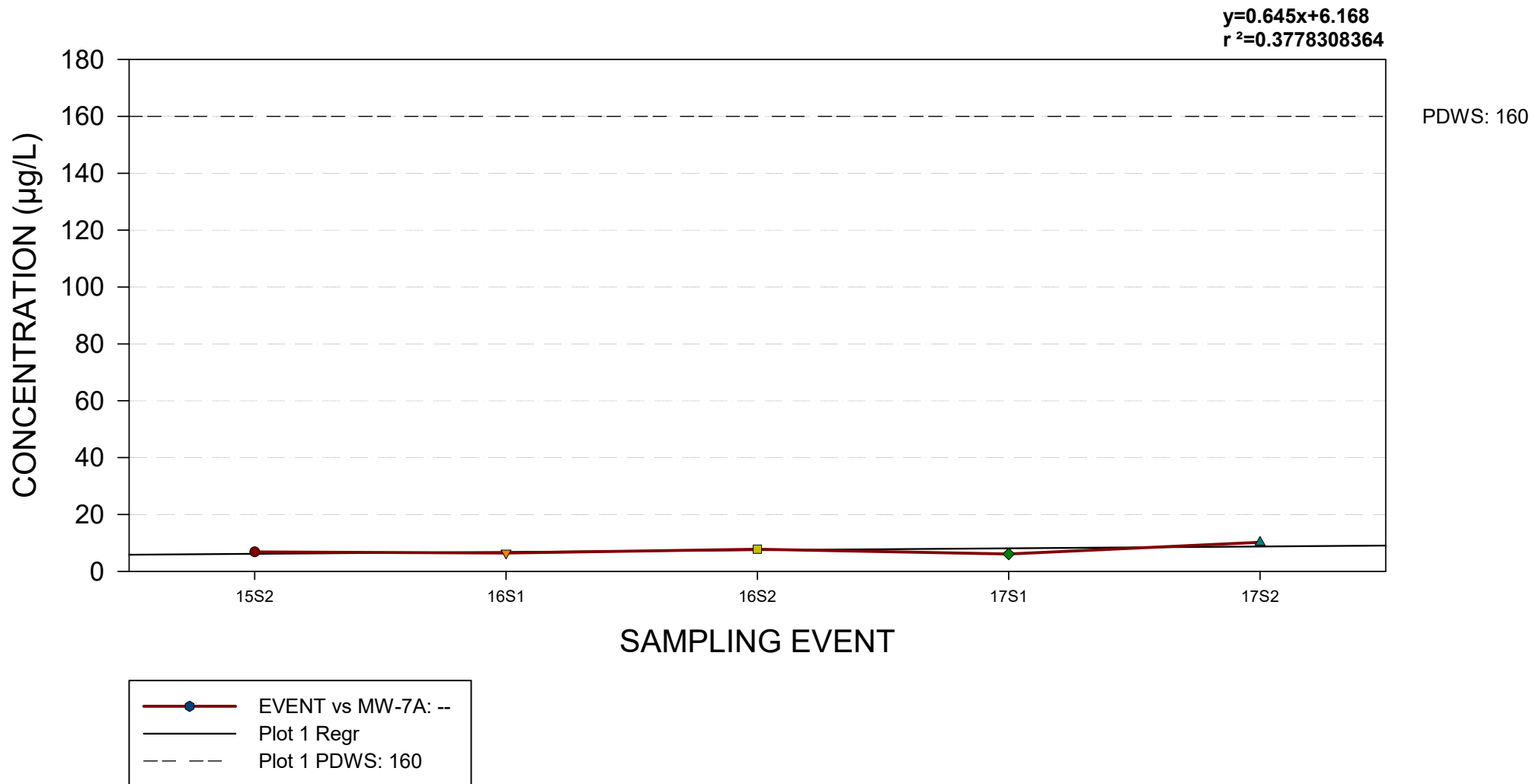
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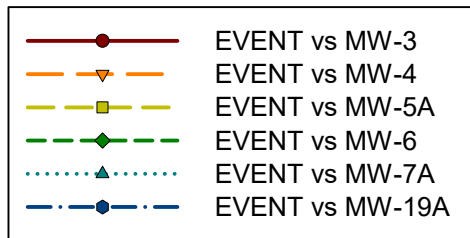
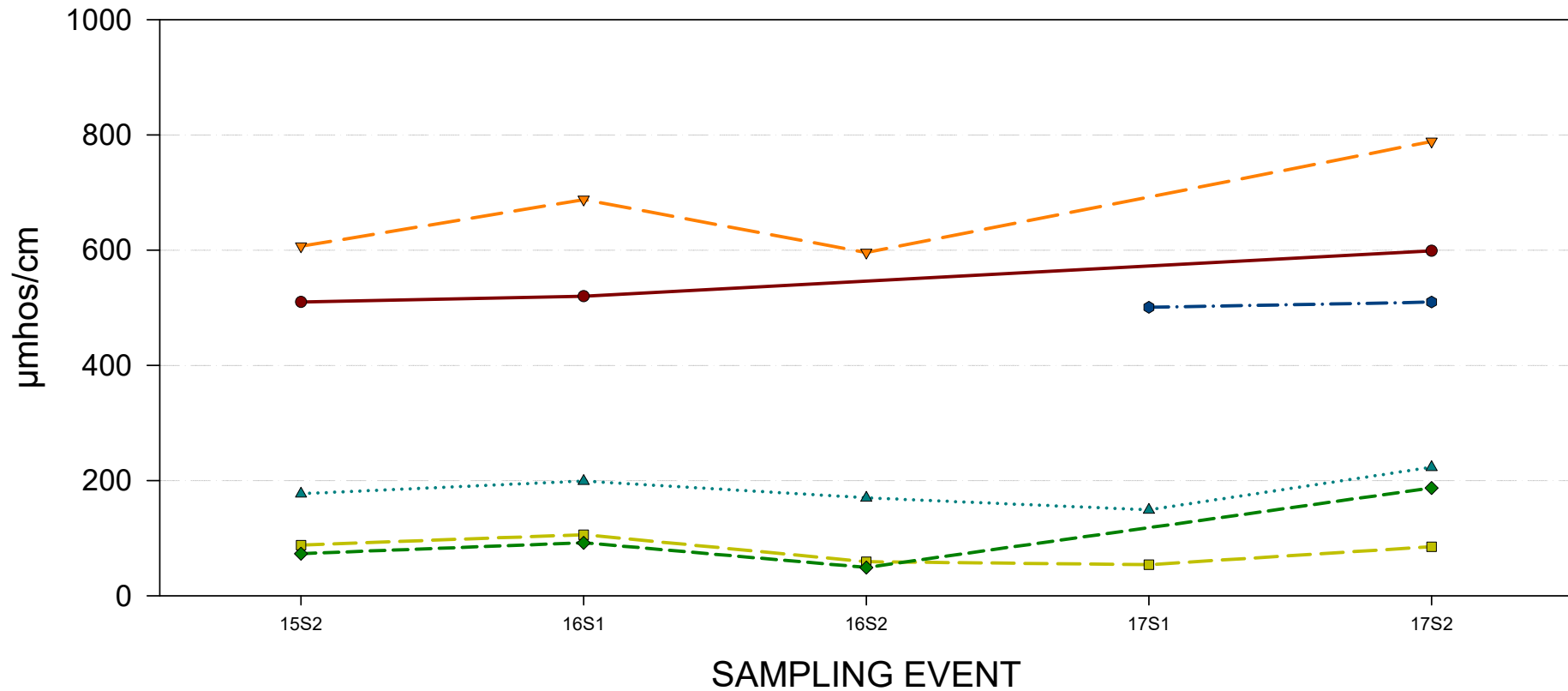
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-7A GROUNDWATER CHEMISTRY TREND GRAPH



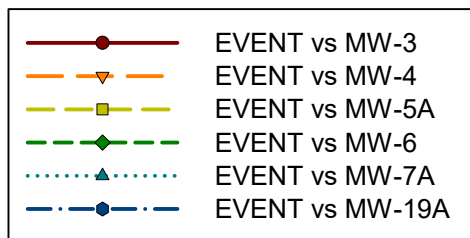
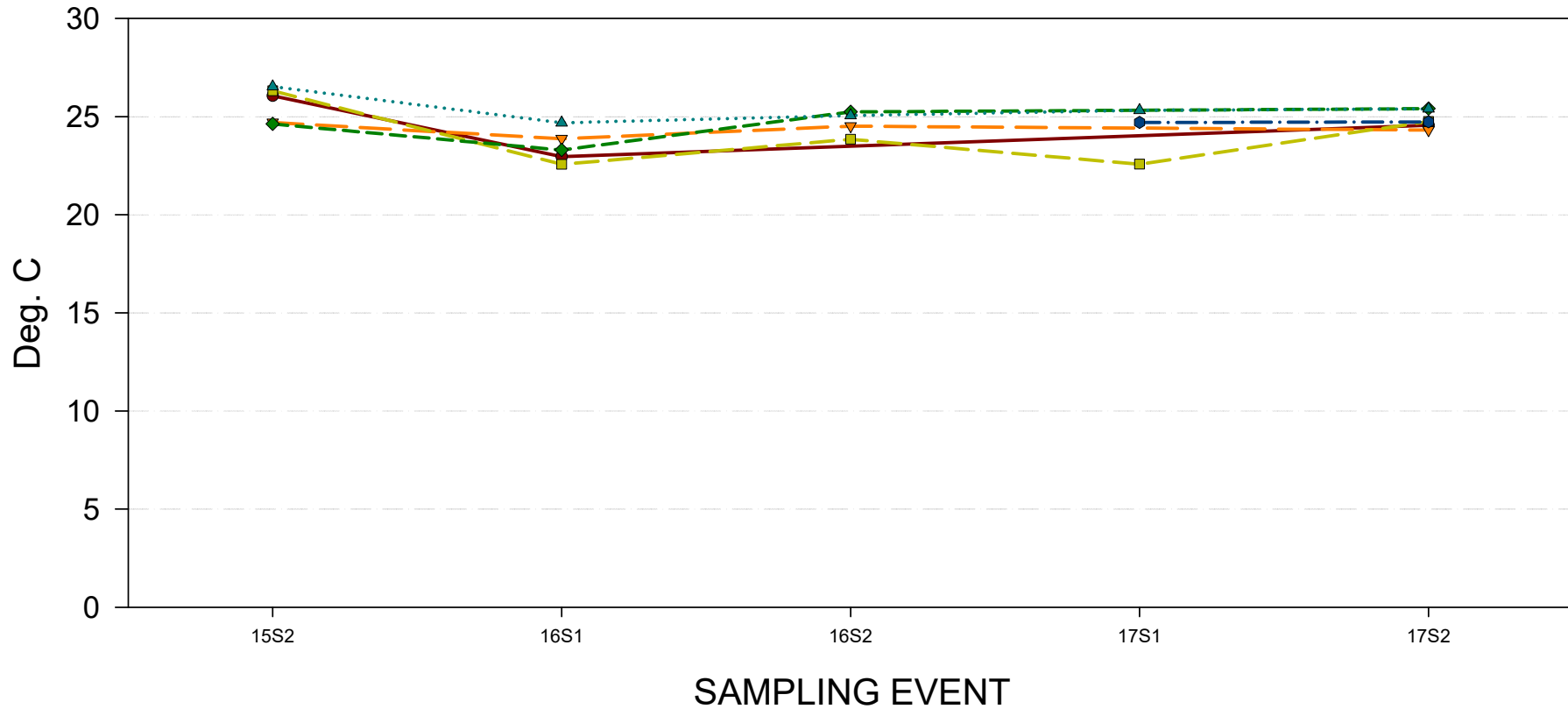
SPECIFIC CONDUCTANCE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
GROUNDWATER CHEMISTRY GRAPH



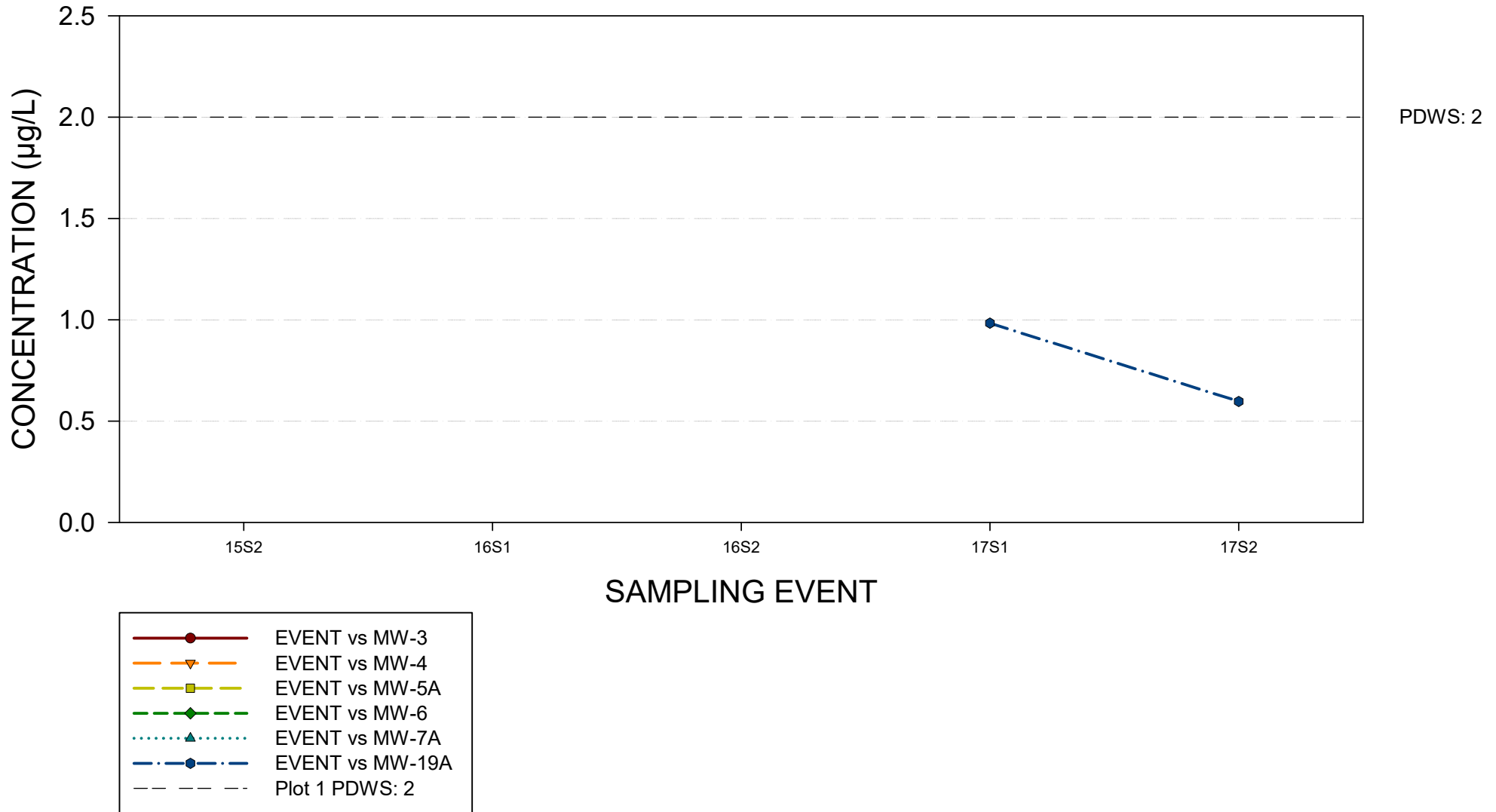
TEMPERATURE

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



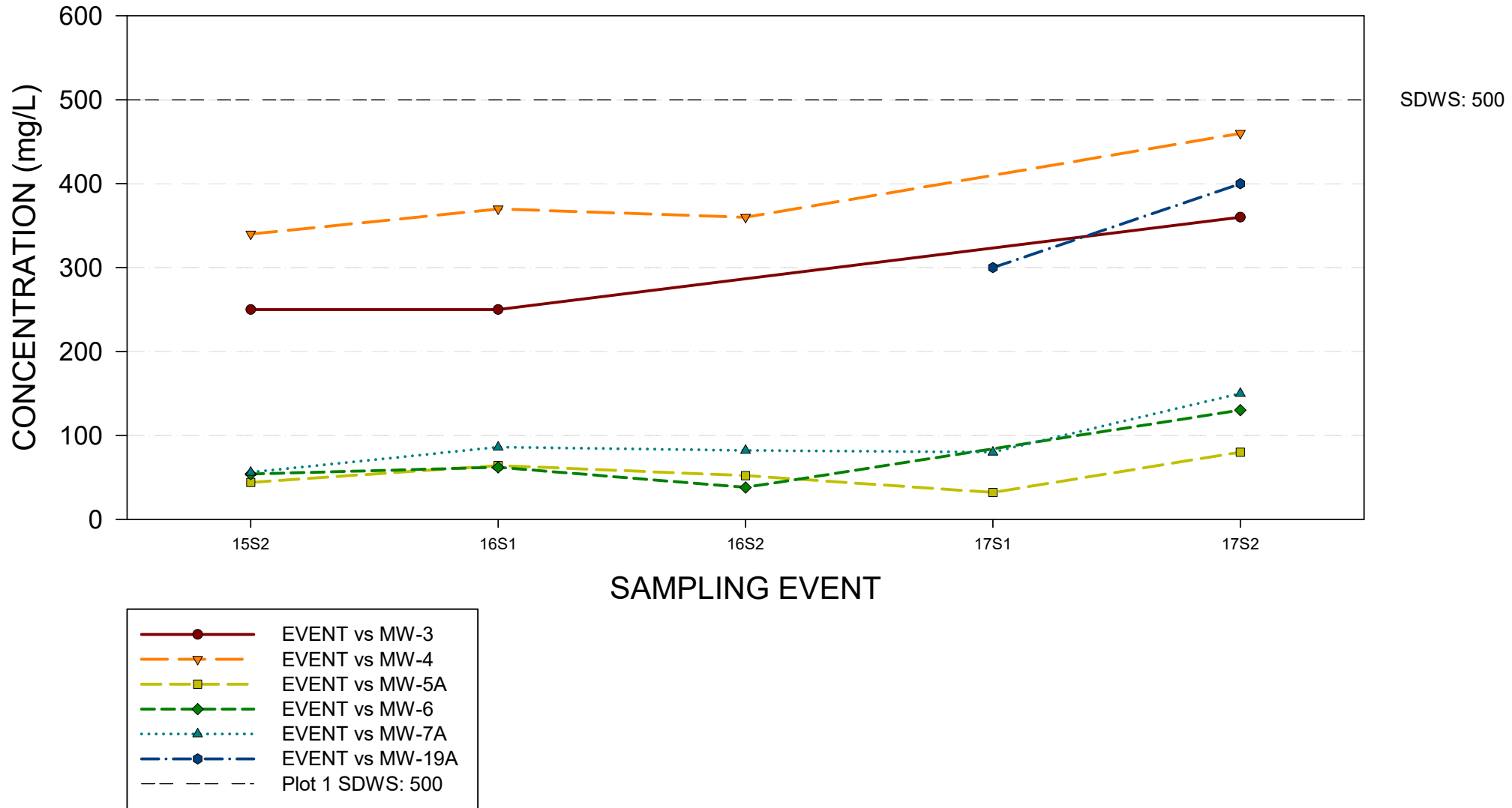
THALLIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



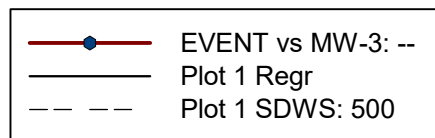
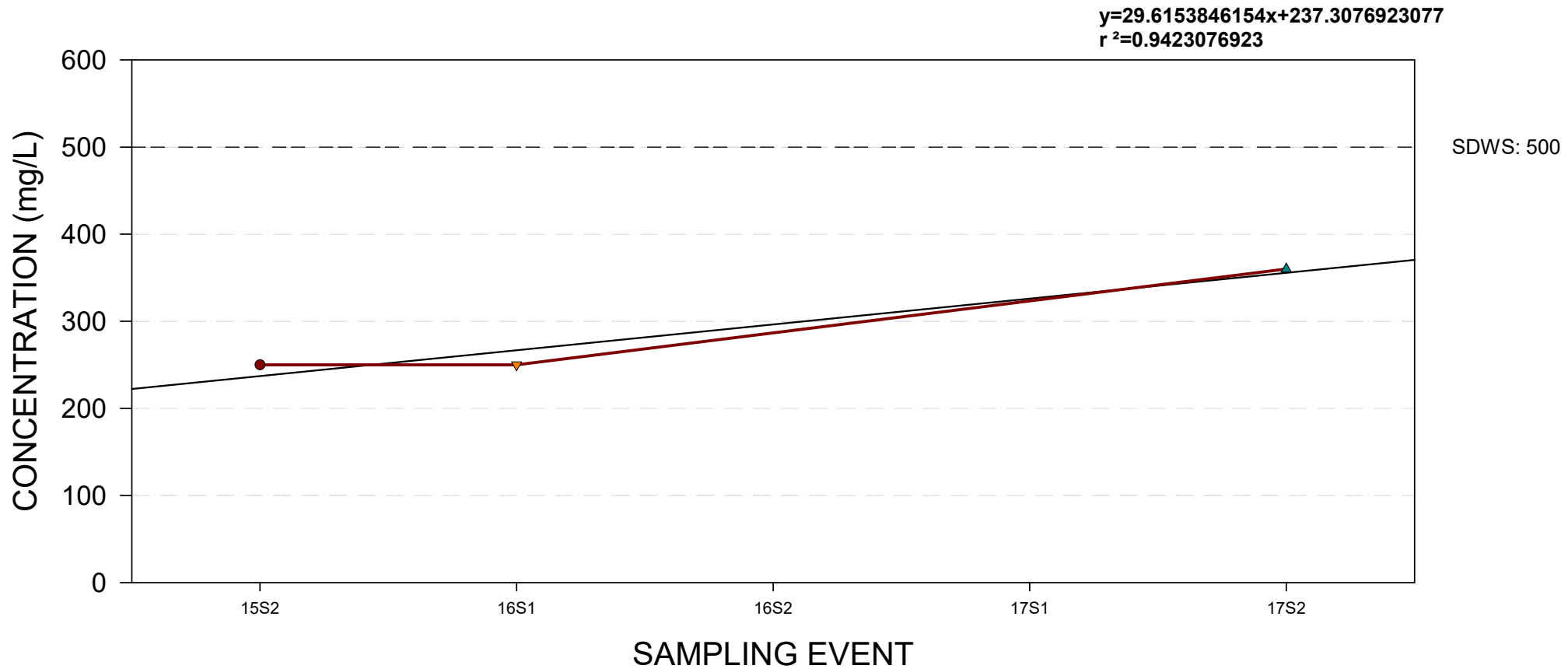
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



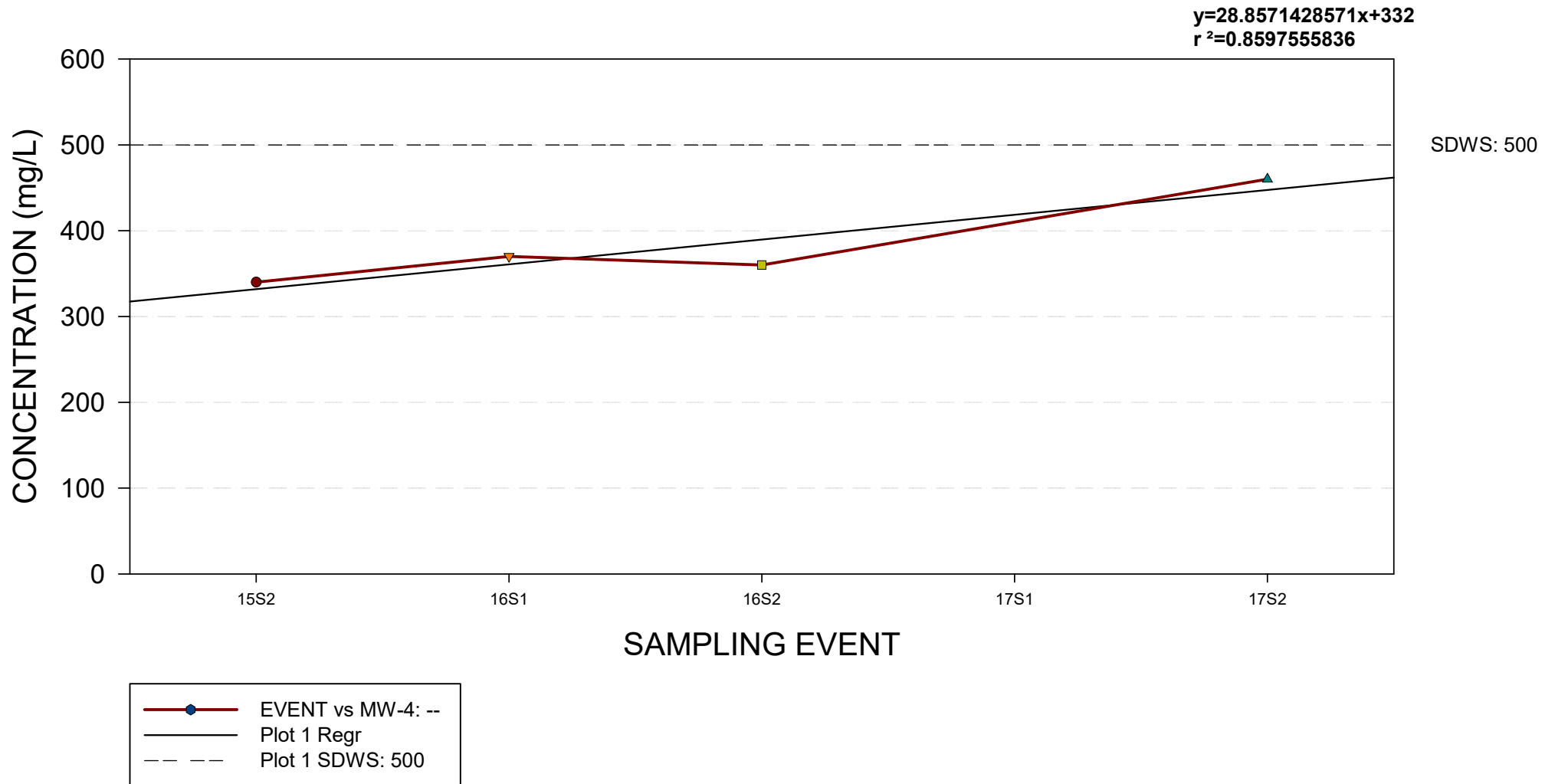
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-3 GROUNDWATER CHEMISTRY TREND GRAPH



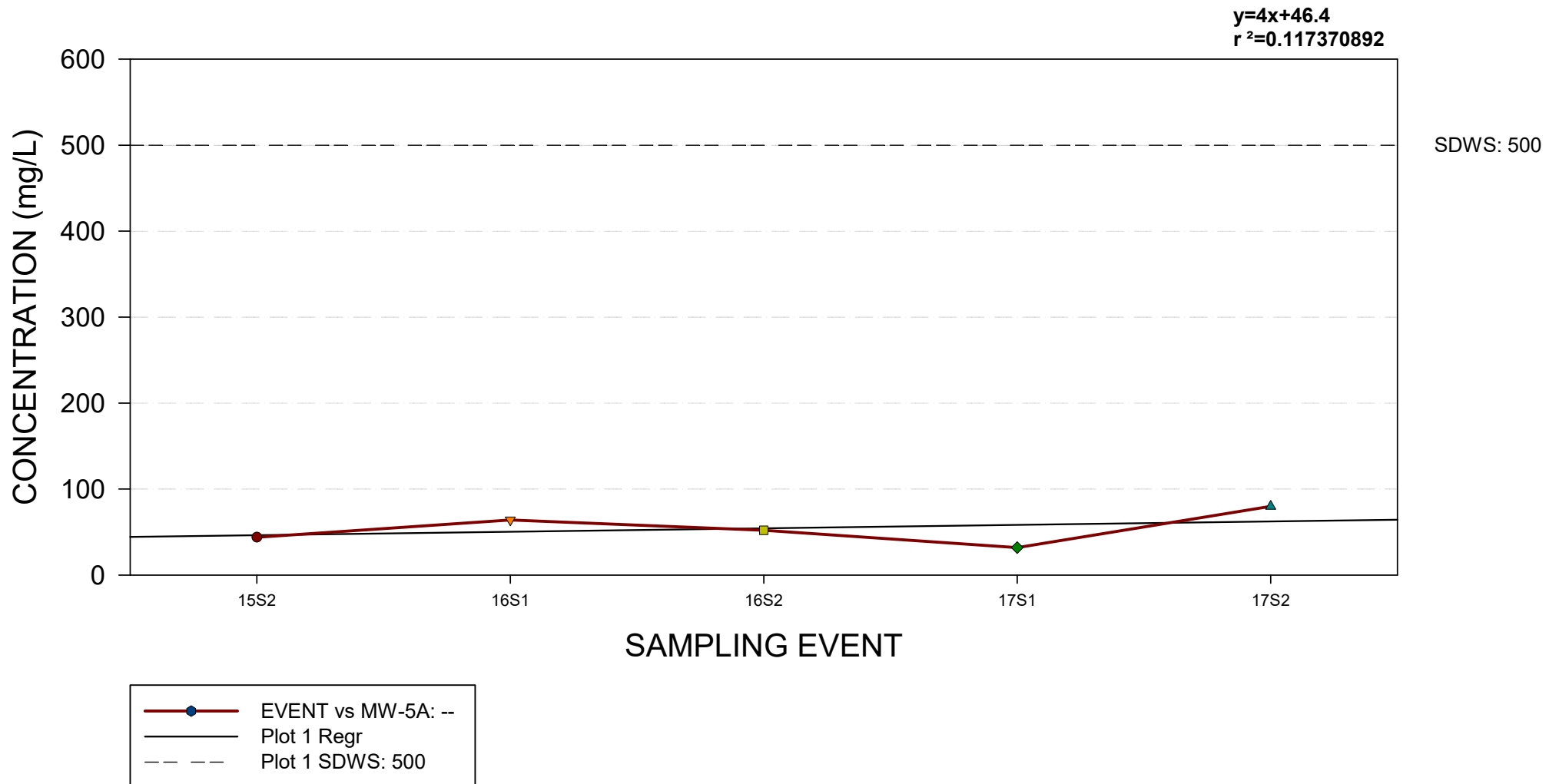
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-4 GROUNDWATER CHEMISTRY TREND GRAPH



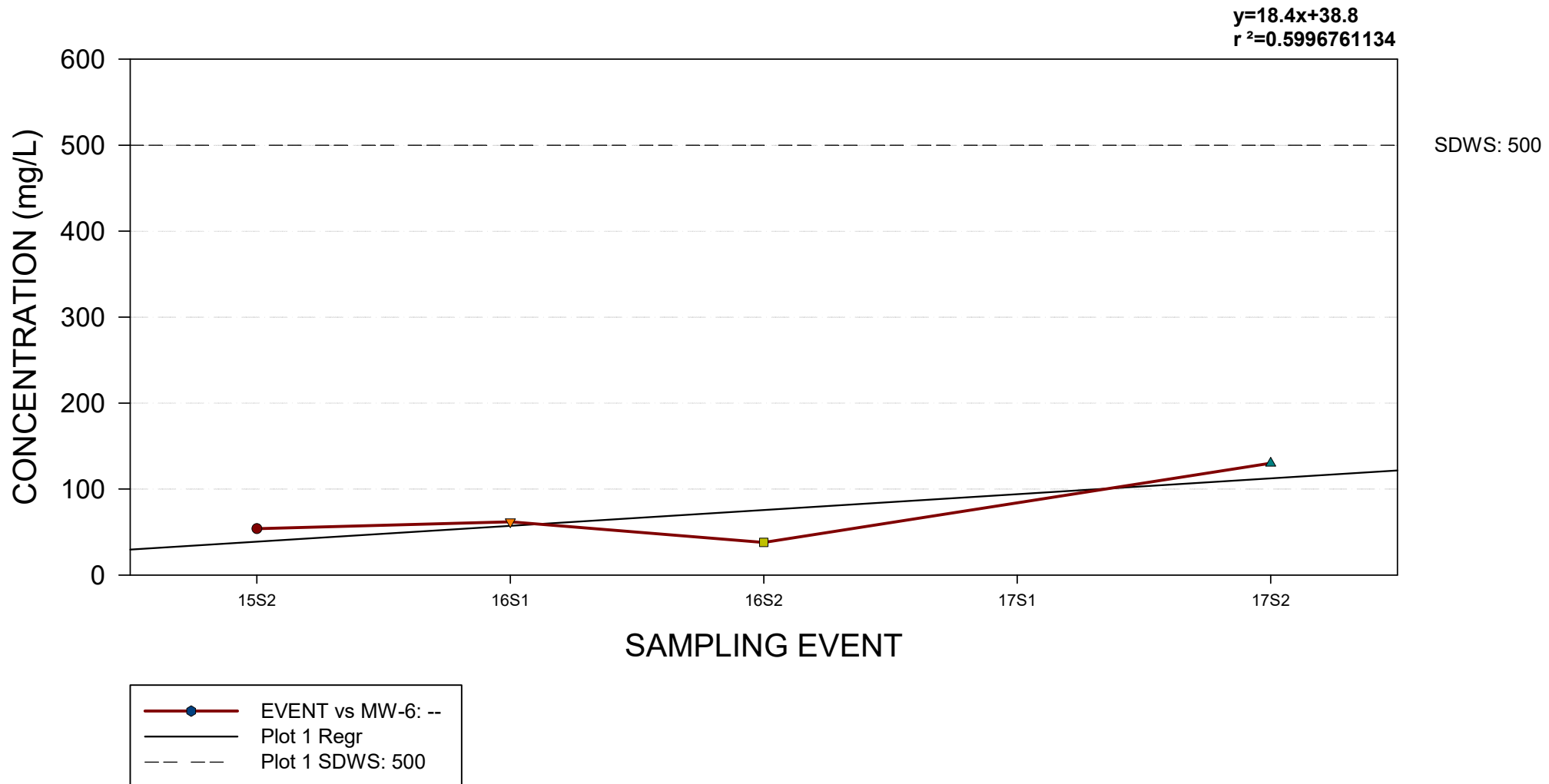
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-5A GROUNDWATER CHEMISTRY TREND GRAPH



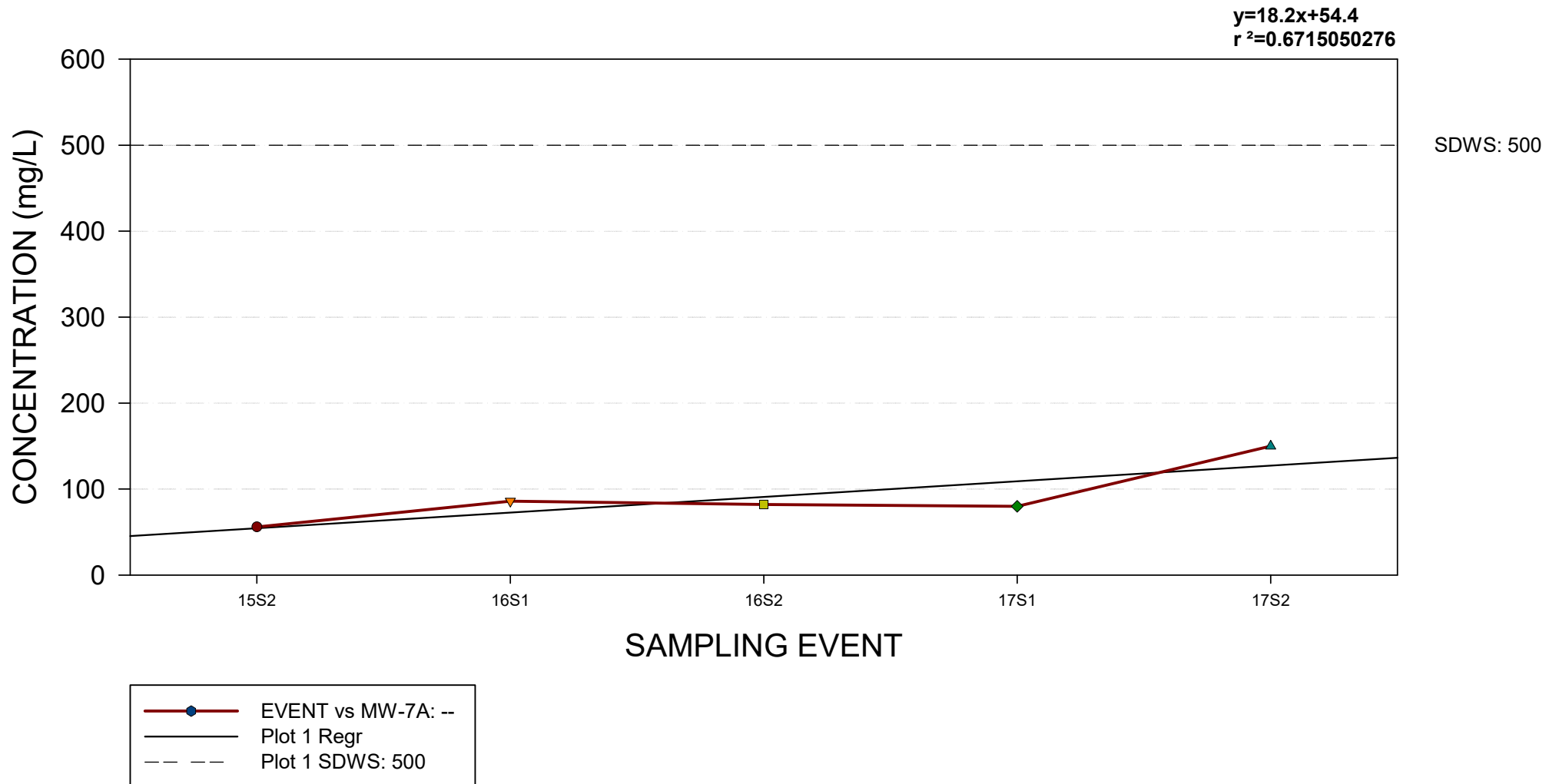
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-6 GROUNDWATER CHEMISTRY TREND GRAPH



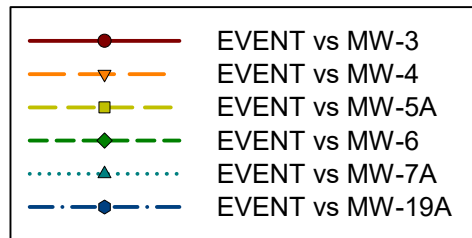
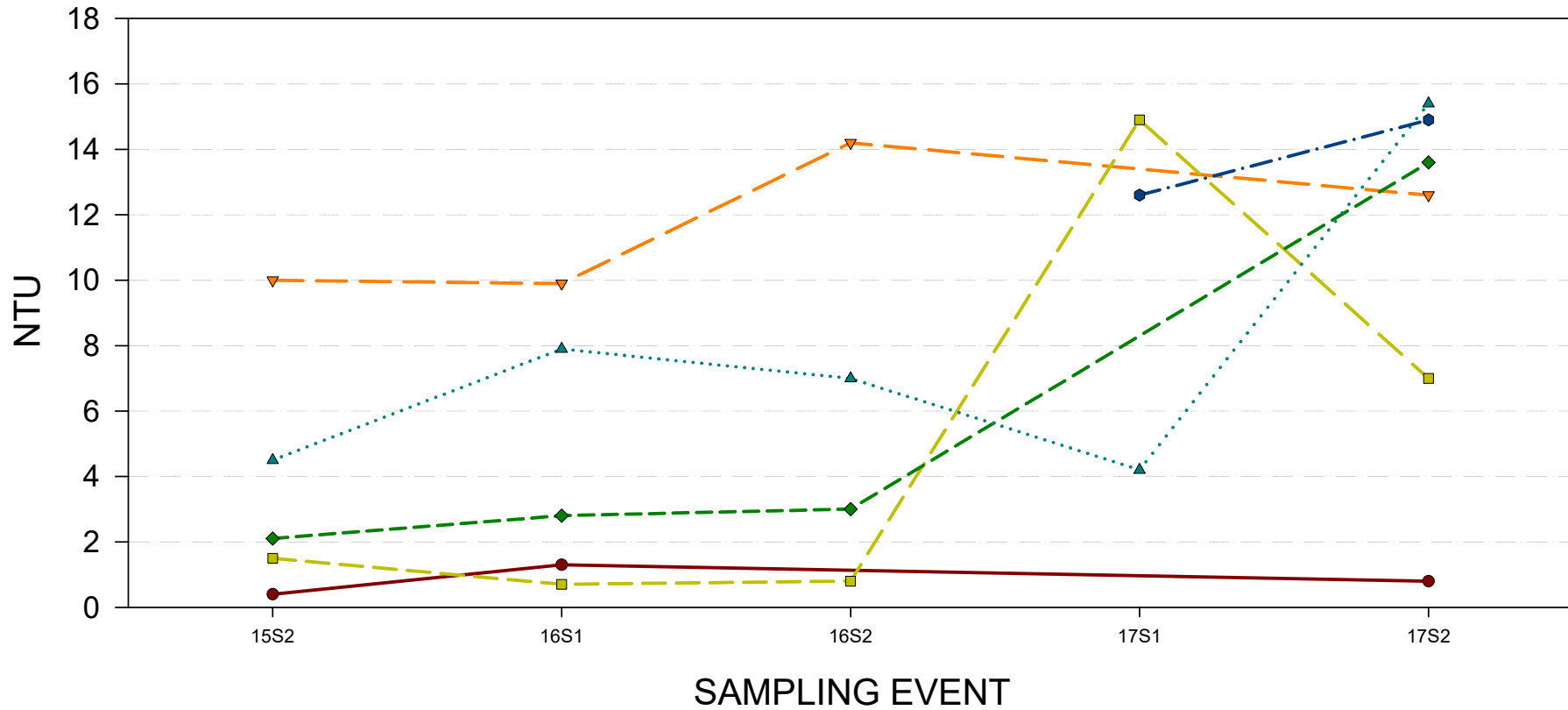
TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
MW-7A GROUNDWATER CHEMISTRY TREND GRAPH



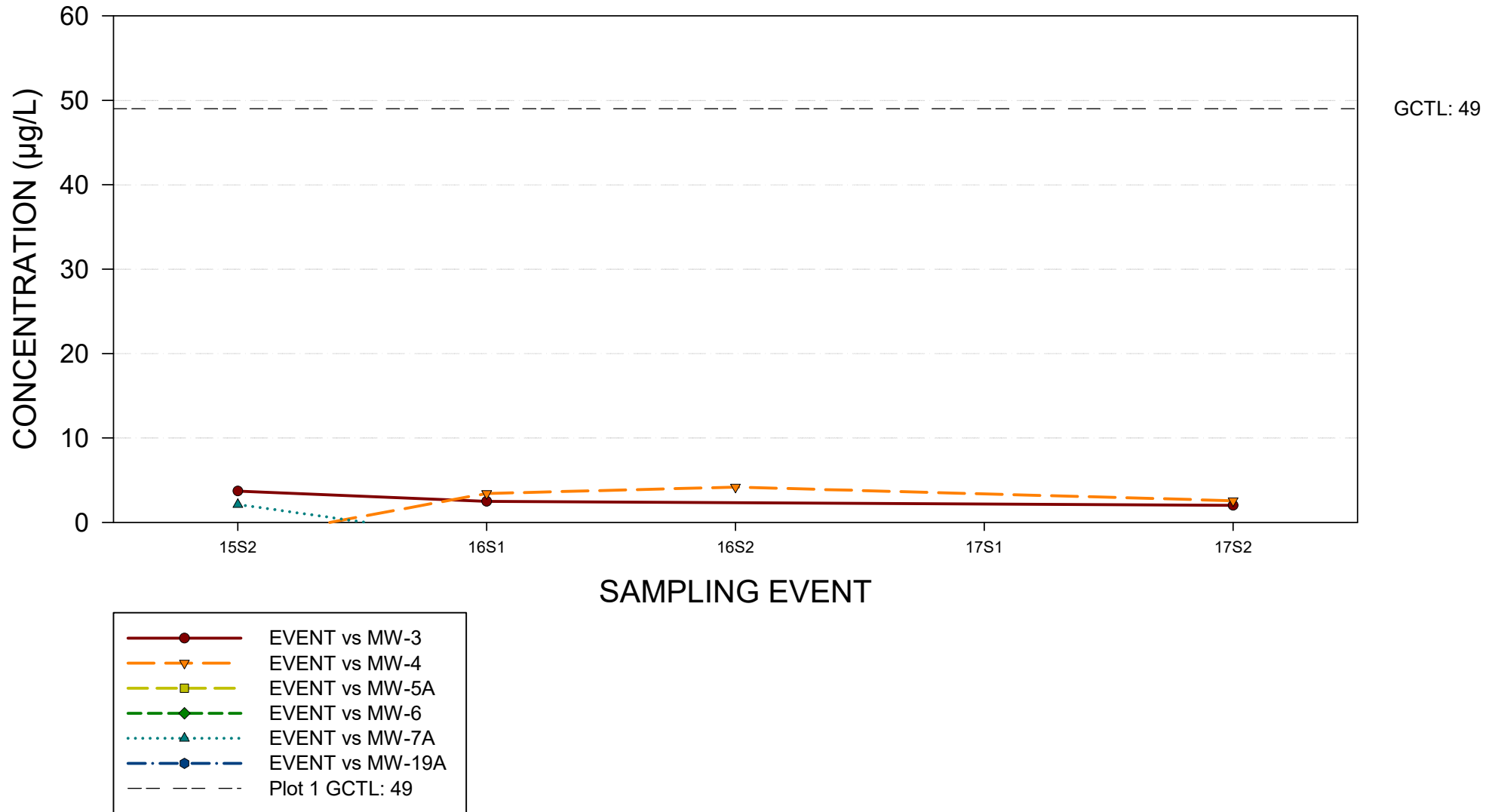
TURBIDITY

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



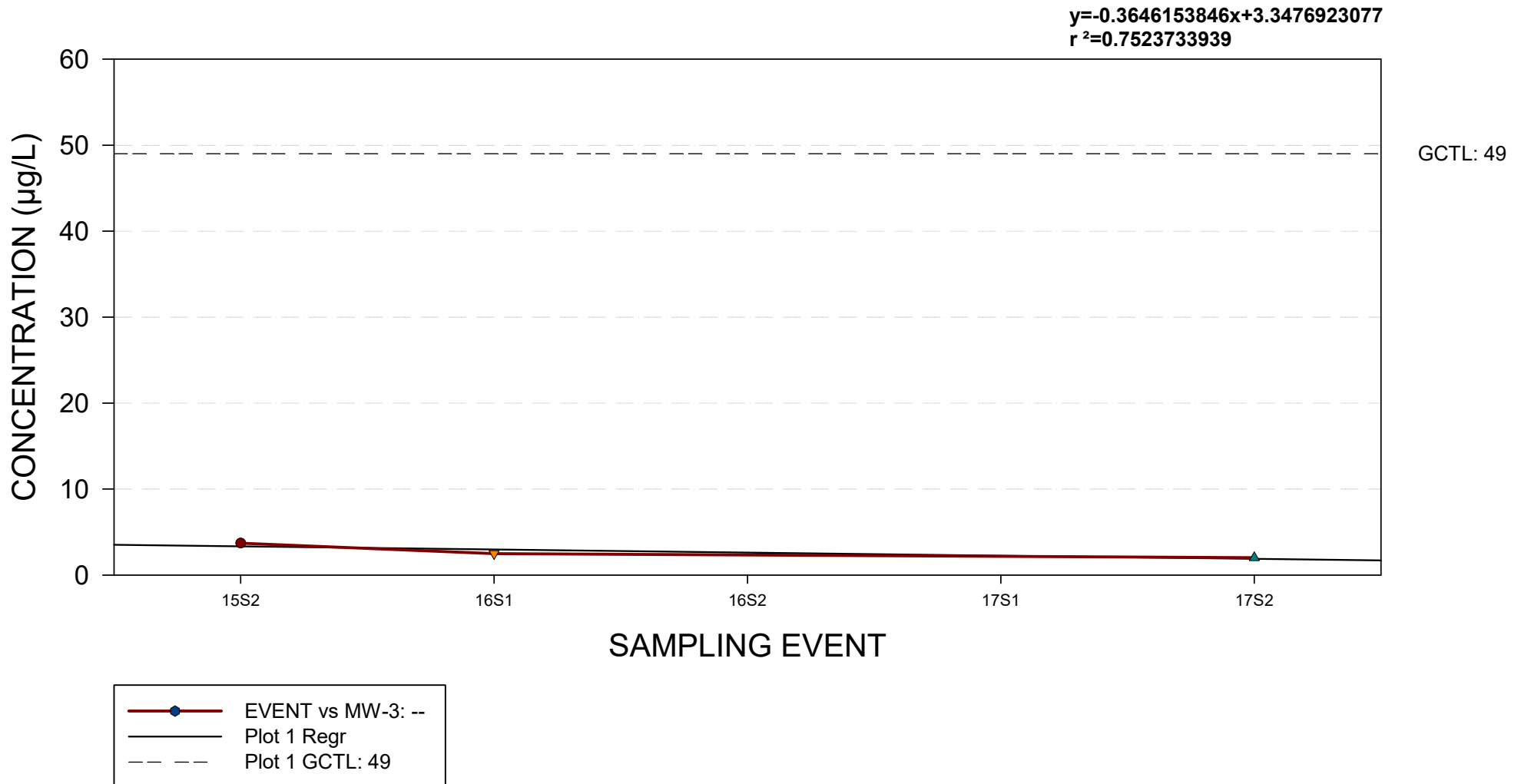
VANADIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



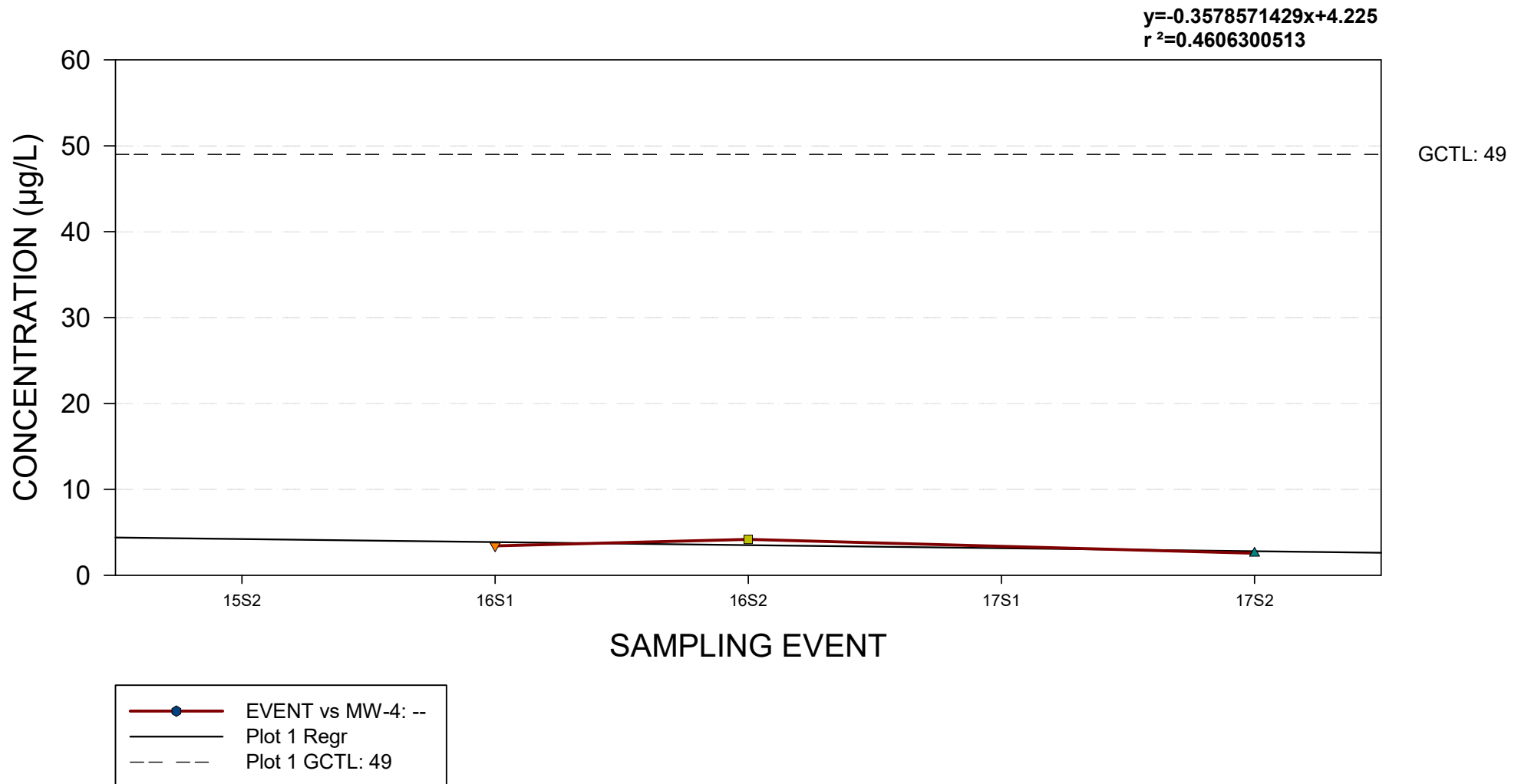
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ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-3 GROUNDWATER CHEMISTRY TREND GRAPH



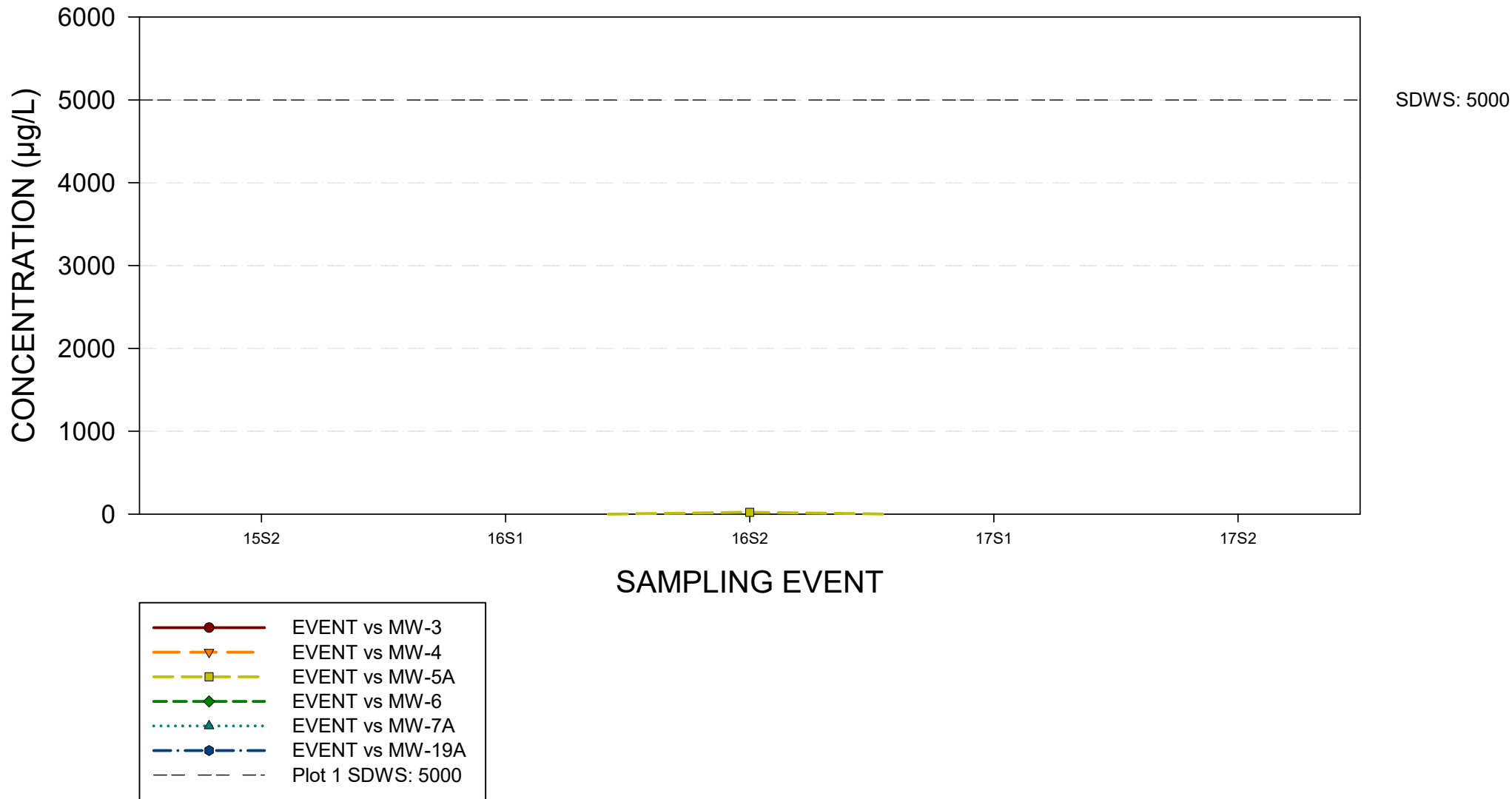
VANADIUM

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY MW-4 GROUNDWATER CHEMISTRY TREND GRAPH



ZINC

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY GROUNDWATER CHEMISTRY GRAPH



ATTACHMENT 6

HISTORICAL DATA SUMMARY

ANGELO'S AGGREGATE MATERIALS
ENTERPRISE LANDFILL
PARAMETERS AT OR ABOVE DETECTION LIMIT

PARAMETER STANDARD UNIT	Date - MM/DD/YYYY	Acetone 6300 µg/L*** µg/L	Ammonia as N - mg/L	Barium 2000 µg/L* µg/L	Cadmium 5 µg/L* µg/L	Chloride 250 mg/L** mg/L	Chromium 100 µg/L* µg/L	Cobalt 140 µg/L**** µg/L	Copper 1000 µg/L** µg/L	Dissolved Oxygen - mg/L	Iron 300 µg/L** µg/L	Lead 15 µg/L* µg/L	Mercury 2 µg/L* µg/L	Nickel 100 µg/L* µg/L	Nitrate as N 10 mg/L* mg/L
Background															
BW-1B															
1552	9/23/2015	<5	<0.0073	<20	<1.1	15	<4.5	<2.1	<2.2	8.1	<38	<1.6	<0.023	<3.2	6.5
1651	2/16/2016	<5	<0.0073	<20	<1.1	24	<4.5	<2.1	<2.2	7.03	<38	<1.6	0.0386	<3.2	6.5
1652	12/28/2016	63	<0.0073	<20	<0.9	23	<4.5	<2.1	3.48	7.02	44.7	<1.6	<0.023	<3.2	6.8
1751	3/27/2017	<10	<0.0073	<20	<0.9	23	<4.5	<2.1	<2.2	7.44	<38	<1.6	<0.023	<3.2	5.7
1752	11/20/2017	<10	<0.0073	<20	<0.9	17	<4.5	<2.1	<2.2	7.91	<38	<1.6	<0.023	<3.2	6.8
Detection															
Floridan															
MW-3B															
1552	9/22/2015	<5	<0.0073	<20	<1.1	4.8	<4.5	<2.1	<2.2	1.47	<38	<1.6	<0.023	<3.2	0.6
1651	2/16/2016	<5	<0.0073	<20	<1.1	4.8	<4.5	<2.1	<2.2	1.68	<38	<1.6	0.0307	<3.2	0.57
1652	12/28/2016	26	<0.0073	<20	<0.9	6.4	<4.5	<2.1	<2.2	1.15	<38	<1.6	<0.023	<3.2	0.79
1751	3/28/2017	<10	<0.0073	<20	<0.9	5.8	<4.5	<2.1	<2.2	1.36	<38	<1.6	<0.023	<3.2	0.66
1752	11/21/2017	<10	0.22	<20	<0.9	18	<4.5	<2.1	<2.2	0.22	53.3	<1.6	<0.023	3.47	<0.052
MW-4B															
1552	9/23/2015	<5	<0.0073	<20	<1.1	3.7	<4.5	<2.1	<2.2	3.13	<38	<1.6	<0.023	<3.2	0.55
1651	2/16/2016	<5	<0.0073	<20	<1.1	4	<4.5	<2.1	2.61	2.67	<38	<1.6	0.0339	<3.2	0.57
1652	12/28/2016	<10	<0.0073	<20	<0.9	4.4	<4.5	<2.1	<2.2	2.87	<38	<1.6	<0.023	<3.2	0.62
1751	3/28/2017	<10	<0.0073	<20	<0.9	3.9	<4.5	<2.1	<2.2	2.87	<38	<1.6	<0.023	<3.2	0.51
1752	11/21/2017	<10	<0.0073	<20	<0.9	4.2	<4.5	<2.1	<2.2	3.31	<38	<1.6	<0.023	<3.2	0.5
MW-5B															
1552	9/22/2015	<5	<0.0073	<20	<1.1	2.9	<4.5	<2.1	<2.2	3.6	<38	<1.6	<0.023	<3.2	0.9
1651	2/16/2016	<5	<0.0073	<20	<1.1	3.2	<4.5	<2.1	<2.2	4.4	<38	<1.6	0.0364	<3.2	0.97
1652	12/28/2016	12	<0.0073	<20	<0.9	3.4	<4.5	<2.1	<2.2	3.78	<38	<1.6	<0.023	<3.2	1
1751	3/28/2017	<10	<0.0073	<20	<0.9	3.2	<4.5	<2.1	<2.2	4.6	45	3.27	<0.023	<3.2	0.84
1752	11/21/2017	<10	<0.0073	<20	<0.9	3.3	<4.5	<2.1	<2.2	3.5	52.8	<1.6	<0.023	<3.2	0.78
MW-6B															
1552	9/23/2015	<5	<0.0073	<20	<1.1	3.2	<4.5	<2.1	<2.2	2.55	<38	<1.6	<0.023	<3.2	0.91
1651	2/16/2016	<5	<0.0073	20.9	<1.1	3.3	<4.5	<2.1	<2.2	2.28	<38	<1.6	0.0338	<3.2	0.9
1652	12/28/2016	18	<0.0073	<20	<0.9	3.7	<4.5	<2.1	<2.2	2.31	38.5	<1.6	<0.023	<3.2	0.99
1751	3/28/2017	<10	<0.0073	<20	<0.9	3.2	<4.5	<2.1	<2.2	2.15	<38	<1.6	<0.023	<3.2	0.76
1752	11/21/2017	<10	<0.0073	<20	<0.9	3.7	<4.5	<2.1	<2.2	2.41	58.3	<1.6	<0.023	<3.2	0.79
MW-7BR															
1552	9/21/2015	<5	<0.0073	<20	<1.1	3.8	<4.5	<2.1	<2.2	1.23	<38	<1.6	<0.023	<3.2	0.82
1651	2/15/2016	5.1	<0.0073	22.5	<1.1	4.3	<4.5	<2.1	<2.2	0.88	<38	<1.6	0.0324	<3.2	0.85
1652	12/27/2016	<10	<0.0073	<20	<0.9	5.4	<4.5	<2.1	<2.2	0.92	<38	<1.6	<0.023	<3.2	1
1751	3/27/2017	<10	<0.0073	<20	<0.9	5.1	<4.5	<2.1	<2.2	1	<38	<1.6	<0.023	<3.2	0.93
1752	11/20/2017	<10	<0.0073	<20	<0.9	4.7	<4.5	<2.1	<2.2	1.43	<38	<1.6	<0.023	<3.2	0.83
MW-8B															
1552	9/21/2015	<5	1	100	<1.1	8.5	<4.5	<2.1	<2.2	0.1	5030	<1.6	<0.023	<3.2	<0.052
1651	2/15/2016	5.3	1.4	110	<1.1	10	<4.5	<2.1	<2.2	0.1	4270	<1.6	0.0323	<3.2	<0.052
1652	12/27/2016	<10	1.1	150	<0.9	11	<4.5	<2.1	<2.2	0.13	4730	<1.6	<0.023	3.54	<0.052
1751	3/27/2017	<10	1.3	66.1	<0.9	11	<4.5	<2.1	<2.2	0.12	5300	<1.6	<0.023	<3.2	<0.052
1752	11/20/2017	<10	1.3	77.3	<0.9	15	<4.5	<2.1	<2.2	0.19	5410	<1.6	<0.023	4.49	<0.052
MW-9B															
1552	9/21/2015	<5	0.078	<20	<1.1	5.9	<4.5	<2.1	<2.2	1.4	<38	<1.6	<0.023	<3.2	4.6
1651	2/15/2016	<5	<0.0073	23.7	<1.1	6.4	<4.5	<2.1	<2.2	1.39	<38	<1.6	0.0372	<3.2	3.8
1652	12/27/2016	<10	<0.0073	<20	<0.9	6.9	<4.5	<2.1	<2.2	2.12	<38	<1.6	<0.023	<3.2	5.8
1751	3/27/2017	<10	<0.0073	<20	<0.9	6.8	<4.5	<2.1	<2.2	2.48	<38	2.81	<0.023	<3.2	4.3
1752	11/20/2017	<10	<0.0073	<20	<0.9	7.4	<4.5	<2.1	<2.2	1.3	<38	<1.6	<0.023	<3.2	5.6
MW-10B															
1552	9/21/2015	<5	<0.0073	<20	<1.1	4.5	<4.5	<2.1	<2.2	0.24	79.7	<1.6	<0.023	<3.2	0.95
1651	2/16/2016	<5	<0.0073	22.4	<1.1	5.2	<4.5	<2.1	<2.2	0.3	<38	<1.6	0.0952	<3.2	1.2
1652	12/27/2016	<10	<0.0073	<20	<0.9	6.8	<4.5	<2.1	<2.2	0.16	<38	<1.6	<0.023	<3.2	3.1
1751	3/27/2017	<10	<0.0073	<20	<0.9	7.5	<4.5	<2.1	<2.2	0.27	<38	<1.6	<0.023	<3.2	3.8
1752	11/20/2017	<10	<0.0073	<20	<0.9	6.9	<4.5	<2.1	<2.2	0.99	<38	<1.6	<0.023	<3.2	2
MW-17B															
1552	9/22/2015	<5	<0.0073	<20	<1.1	5.9	<4.5	<2.1	<2.2	5.1	<38	<1.6	<0.023	<3.2	2.6
1651	2/15/2016	<5	<0.0073	22.5	<1.1	6.8	<4.5	<2.1	<2.2	4	<38	<1.6	0.559	<3.2	0.27
1652	12/28/2016	<10	<0.0073	<20	<0.9	7.7	6.05	<2.1	<2.2	3.99	<38	<1.6	1.16	<3.2	2.7
1751	3/28/2017	<10	<0.0073	<20	<0.9	7.2	<4.5	<2.1	<2.2	4.04	<38	<1.6	1.24	<3.2	2.3
1752	11/21/2017	<10	<0.0073	<20	<0.9	8.4	5.2	<2.1	<2.2	4.05	<38	<1.6	0.177	<3.2	2.6

ANGELO'S AGGREGATE MATERIALS
ENTERPRISE LANDFILL
PARAMETERS AT OR ABOVE DETECTION LIMIT

PARAMETER STANDARD	Date -	Acetone 6300 µg/L***	Ammonia as N -	Barium 2000 µg/L*	Cadmium 5 µg/L*	Chloride 250 mg/L**	Chromium 100 µg/L*	Cobalt 140 µg/L****	Copper 1000 µg/L**	Dissolved Oxygen -	Iron 300 µg/L**	Lead 15 µg/L*	Mercury 2 µg/L*	Nickel 100 µg/L*	Nitrate as N 10 mg/L*
UNIT	MM/DD/YYYY	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L
MW-18B															
15S2															
16S1															
16S2															
17S1	3/27/2017	<10	<0.0073	<20	<0.9	10	8.62	<2.1	<2.2	0.26	77.7	<1.6	<0.023	5.78	0.94
17S2	11/21/2017	<10	<0.0073	<20	<0.9	13	<4.5	<2.1	<2.2	2.83	<38	<1.6	<0.023	4.5	1.1
MW-20B															
15S2															
16S1															
16S2															
17S1	3/27/2017	<10	<0.0073	<20	<0.9	12	<4.5	<2.1	<2.2	4.99	184	<1.6	<0.023	<3.2	3.2
17S2	11/20/2017	<10	<0.0073	<20	<0.9	11	<4.5	<2.1	<2.2	5.96	121	<1.6	<0.023	<3.2	2.8
Surficial															
MW-3															
15S2	9/22/2015	<5	<0.0073	<20	<1.1	4.8	<4.5	<2.1	<2.2	3.7	<38	<1.6	<0.023	<3.2	0.5
16S1	2/16/2016	<5	<0.0073	23	<1.1	4.9	<4.5	<2.1	<2.2	4.92	<38	<1.6	0.04	<3.2	0.64
16S2															
17S1															
17S2	11/21/2017	<10	0.059	<20	<0.9	19	<4.5	<2.1	<2.2	1.22	<38	<1.6	<0.023	<3.2	0.21
MW-4															
15S2	9/23/2015	<5	<0.0073	<20	<1.1	4.7	<4.5	<2.1	<2.2	3.32	231	<1.6	<0.023	<3.2	<0.052
16S1	2/16/2016	5.1	<0.0073	33.8	<1.1	5.9	<4.5	<2.1	<2.2	3.5	161	<1.6	0.0594	<3.2	0.65
16S2	12/28/2016	<10	<0.0073	<20	<0.9	2.8	<4.5	<2.1	<2.2	0.87	299	<1.6	<0.023	<3.2	<0.052
17S1															
17S2	11/21/2017	<10	<0.0073	27.1	<0.9	9.4	<4.5	<2.1	<2.2	1.1	146	<1.6	<0.023	<3.2	<0.052
MW-5A															
15S2	9/22/2015	<5	<0.0073	<20	<1.1	2.4	<4.5	<2.1	<2.2	4.53	<38	<1.6	<0.023	<3.2	0.43
16S1	2/16/2016	<5	<0.0073	27.7	<1.1	1.4	<4.5	<2.1	<2.2	5.18	<38	<1.6	0.0321	<3.2	2.1
16S2	12/28/2016	23	<0.0073	<20	<0.9	2.2	<4.5	<2.1	<2.2	4.46	89.5	<1.6	<0.023	<3.2	0.28
17S1	3/28/2017	<10	<0.0073	<20	<0.9	2.3	<4.5	<2.1	<2.2	4.7	761	2.71	<0.023	<3.2	0.47
17S2	11/21/2017	<10	0.05	<20	<0.9	2.8	<4.5	<2.1	<2.2	3.16	70.7	<1.6	<0.023	<3.2	0.79
MW-6															
15S2	9/23/2015	<5	<0.0073	<20	<1.1	2.1	<4.5	<2.1	<2.2	5.56	53.5	<1.6	<0.023	<3.2	0.87
16S1	2/16/2016	<5	<0.0073	23.3	<1.1	2.9	<4.5	<2.1	<2.2	5.99	80.1	<1.6	0.0435	<3.2	0.43
16S2	12/28/2016	<10	<0.0073	<20	<0.9	4.6	<4.5	<2.1	<2.2	3.22	64.6	<1.6	<0.023	<3.2	0.61
17S1															
17S2	11/21/2017	<10	<0.0073	<20	<0.9	9.6	<4.5	<2.1	<2.2	0.64	212	<1.6	<0.023	<3.2	2.5
MW-7A															
15S2	9/21/2015	<5	0.018	<20	<1.1	10	<4.5	<2.1	<2.2	0.27	1630	<1.6	0.0324	<3.2	<0.052
16S1	2/15/2016	10	0.014	20.7	<1.1	10	<4.5	3.4	<2.2	0.3	766	<1.6	0.0294	<3.2	<0.052
16S2	12/27/2016	12	0.026	<20	<0.9	8.9	17.5	<2.1	<2.2	0.24	767	<1.6	0.094	13.2	0.14
17S1	3/27/2017	<10	<0.0073	<20	<0.9	11	<4.5	<2.1	<2.2	0.32	424	1.65	0.431	<3.2	0.14
17S2	11/20/2017	<10	0.095	<20	0.967	6.8	<4.5	<2.1	<2.2	0.3	2760	<1.6	0.414	<3.2	<0.052
MW-19A															
15S2															
16S1															
16S2															
17S1	3/27/2017	<10	<0.0073	46.3	<0.9	85	7.38	87.9	<2.2	2.5	366	4.49	<0.023	17.5	16
17S2	11/21/2017	<10	<0.0073	45.4	2.33	85	<4.5	20.5	<2.2	3.7	179	<1.6	<0.023	16.6	17
Supply															
SUPPLY WELL															
15S2	9/22/2015	<5	<0.0073	<20	<1.1	12	<4.5	<2.1	<2.2	1	<38	<1.6	<0.023	<3.2	4.9
16S1	2/15/2016	<5	<0.0073	21.3	<1.1	9.4	<4.5	<2.1	<2.2	1.19	40	<1.6	0.0499	<3.2	2.9
16S2	12/28/2016	<10	<0.0073	<20	<0.9	10	<4.5	<2.1	<2.2	1.26	<38	<1.6	<0.023	<3.2	3.7
17S1	3/28/2017	<10	<0.0073	<20	<0.9	11	<4.5	<2.1	5.82	0.78	<38	18.8	<0.023	<3.2	2.2
17S2	11/21/2017	<10	<0.0073	<20	<0.9	12	<4.5	<2.1	<2.2	1.81	38.1	<1.6	<0.023	<3.2	3.4

ANGELO'S AGGREGATE MATERIALS
ENTERPRISE LANDFILL
PARAMETERS AT OR ABOVE DETECTION LIMIT

PARAMETER STANDARD	Date -	Oxidation/Reduction Potential -	pH 6.5-8.5 SU**	Sodium 160 mg/L*	Specific Conductance (EC) -	Temperature -	Thallium 2 µg/L*	Total Dissolved Solids 500 mg/L**	Turbidity -	Vanadium 49 µg/L***	Zinc 5000 µg/L**
UNIT	MM/DD/YYYY	mV	S.U.	mg/L	µmhos/cm	°C	µg/L	mg/L	NTU	µg/L	µg/L
Background											
BW-1B											
15S2	9/23/2015		6.92	7.32	273	24.44	<0.58	180	0.2	<2	<16
16S1	2/16/2016		6.67	9.42	294	24.18	<0.58	200	0.3	<2	<16
16S2	12/28/2016	212.2	6.71	10.9	265	24.41	<0.58	170	0.3	<2	<16
17S1	3/27/2017		6.51	9.47	222	24.62	<0.58	150	0.5	<2	<16
17S2	11/20/2017	252.3	6.6	8.91	277	24.32	<0.58	200	0.4	<2	<16
Detection											
Floridan											
MW-3B											
15S2	9/22/2015		7.06	4.84	403	24.51	<0.58	220	0.2	4.36	<16
16S1	2/16/2016		7.1	4.21	409	23.8	<0.58	230	0.3	3.54	<16
16S2	12/28/2016	146.3	7.27	4.93	391	24.04	<0.58	240	0.9	3.26	<16
17S1	3/28/2017		7.51	4.81	378	23.56	<0.58	210	0.6	<2	<16
17S2	11/21/2017	171.4	7.41	14.6	509	24.12	<0.58	310	0.6	<2	<16
MW-4B											
15S2	9/23/2015		7.47	4.45	306	23.88	<0.58	180	0.2	<2	<16
16S1	2/16/2016		7.52	4.39	317	23.68	<0.58	160	0.2	3.03	<16
16S2	12/28/2016	117	7.52	4.3	298	23.92	<0.58	170	0.2	4.09	<16
17S1	3/28/2017		7.68	4.23	298	23.85	<0.58	170	0.2	<2	<16
17S2	11/21/2017	161.1	7.47	5.06	332	23.83	<0.58	210	0.3	2.34	<16
MW-5B											
15S2	9/22/2015		6.99	3.5	287	23.71	<0.58	150	2.7	5.82	37.1
16S1	2/16/2016		7.22	2.99	282	23.47	<0.58	150	0.8	6.93	<16
16S2	12/28/2016	117.9	7.68	2.99	296	24.36	<0.58	140	2.3	7.02	<16
17S1	3/28/2017		7.59	3.35	240	24.1	<0.58	140	7.5	6.29	<16
17S2	11/21/2017	189.4	7.56	3.56	338	23.93	<0.58	210	7.7	6.82	<16
MW-6B											
15S2	9/23/2015		7.29	3.67	273	23.89	<0.58	150	0.2	3.15	<16
16S1	2/16/2016		7.39	3.59	293	23.8	<0.58	160	0.2	4.44	<16
16S2	12/28/2016	129.4	7.66	3.64	261	23.88	<0.58	160	8.9	5.74	<16
17S1	3/28/2017		7.78	3.84	270	24.02	<0.58	140	7.5	4.53	<16
17S2	11/21/2017	154.4	7.55	4.09	285	23.87	<0.58	190	8	5.38	<16
MW-7BR											
15S2	9/21/2015		7.3	3.69	293	24.69	<0.58	130	2.5	9.65	<16
16S1	2/15/2016		7.25	3.5	302	24.42	<0.58	180	5.7	8.27	<16
16S2	12/27/2016	95.8	7.58	3.51	279	24.58	<0.58	140	9.9	8.22	<16
17S1	3/27/2017		7.69	3.78	277	24.87	<0.58	150	5.1	5.76	<16
17S2	11/20/2017	154.8	7.27	4.16	310	24.47	<0.58	200	5.3	7.01	<16
MW-8B											
15S2	9/21/2015		6.62	7.6	608	26.73	<0.58	290	0.5	<2	<16
16S1	2/15/2016		6.75	8.11	599	26.4	<0.58	320	0.8	<2	<16
16S2	12/27/2016	-93.9	6.83	9.39	601	26.72	<0.58	320	0.3	<2	<16
17S1	3/27/2017		7.02	8.34	598	26.8	<0.58	310	0.4	<2	<16
17S2	11/20/2017	-29.8	6.92	12.6	689	26.64	<0.58	370	0.5	<2	<16
MW-9B											
15S2	9/21/2015		6.64	6.76	554	26.67	<0.58	270	0.6	4.96	<16
16S1	2/15/2016		6.82	5.78	534	26.01	<0.58	300	0.2	3.48	<16
16S2	12/27/2016	127.2	7.03	6.42	512	26.62	<0.58	310	0.6	5.08	<16
17S1	3/27/2017		7.22	6.14	495	26.53	<0.58	280	2.4	2.54	<16
17S2	11/20/2017	160.9	7.07	8.08	583	26.57	<0.58	340	1	3	<16
MW-10B											
15S2	9/21/2015		6.21	5.15	338	25.78	<0.58	200	0.2	4.13	<16
16S1	2/16/2016		6.13	5.27	283	25.59	<0.58	190	0.2	2.68	<16
16S2	12/27/2016	113.2	6.7	5.04	329	25.72	<0.58	190	0.2	3.76	<16
17S1	3/27/2017		6.88	5.29	340	25.78	<0.58	190	0.4	<2	<16
17S2	11/20/2017	217.7	6.8	5.96	357	25.77	<0.58	210	0.4	2.34	<16
MW-17B											
15S2	9/22/2015		7.3	5.95	470	23.54	<0.58	240	1.3	2.21	<16
16S1	2/15/2016		7.13	6.57	533	23.39	<0.58	260	2.8	<2	<16
16S2	12/28/2016	162.5	6.91	7.55	570	23.57	<0.58	310	0.8	<2	<16
17S1	3/28/2017		7.11	7.31	580	23.6	<0.58	310	1	<2	<16
17S2	11/21/2017	237.7	6.99	7.91	496	23.59	<0.58	300	2.5	<2	<16

ANGELO'S AGGREGATE MATERIALS
ENTERPRISE LANDFILL
PARAMETERS AT OR ABOVE DETECTION LIMIT

PARAMETER STANDARD	Date -	Oxidation/Reduction Potential -	pH 6.5-8.5 SU**	Sodium 160 mg/L*	Specific Conductance (EC) -	Temperature -	Thallium 2 µg/L*	Total Dissolved Solids 500 mg/L**	Turbidity -	Vanadium 49 µg/L***	Zinc 5000 µg/L**
UNIT	MM/DD/YYYY	mV	S.U.	mg/L	µmhos/cm	°C	µg/L	mg/L	NTU	µg/L	µg/L
MW-18B											
15S2											
16S1											
16S2											
17S1	3/27/2017		7.33	7.01	494	25.13	<0.58	270	8.9	<2	61.1
17S2	11/21/2017	128.4	7.19	8.29	533	25.14	<0.58	320	4.5	<2	<16
MW-20B											
15S2											
16S1											
16S2											
17S1	3/27/2017		7.85	5.98	280	24.66	<0.58	160	14.2	<2	<16
17S2	11/20/2017	143.9	7.72	6.36	294	24.62	<0.58	210	13.7	<2	<16
Surficial											
MW-3											
15S2	9/22/2015		6.88	6.45	510	26.06	<0.58	250	0.4	3.71	<16
16S1	2/16/2016		6.81	5.54	520	22.96	<0.58	250	1.3	2.5	<16
16S2											
17S1											
17S2	11/21/2017	202.7	7.36	15.5	599	24.56	<0.58	360	0.8	2.01	<16
MW-4											
15S2	9/23/2015		6.15	13.1	607	24.71	<0.58	340	10	<2	<16
16S1	2/16/2016		6.14	14.6	688	23.88	<0.58	370	9.9	3.42	<16
16S2	12/28/2016	197.1	6.2	8.98	596	24.52	<0.58	360	14.2	4.18	<16
17S1											
17S2	11/21/2017	229.4	6.48	13.5	789	24.32	<0.58	460	12.6	2.57	<16
MW-5A											
15S2	9/22/2015		5.38	2.76	88	26.32	<0.58	44	1.5	<2	<16
16S1	2/16/2016		6.17	1.86	106	22.57	<0.58	64	0.7	<2	<16
16S2	12/28/2016	244.9	5.64	2.6	59	23.85	<0.58	52	0.8	<2	22.1
17S1	3/28/2017		5.59	3.24	54	22.58	<0.58	32	14.9	<2	<16
17S2	11/21/2017	147.8	5.78	1.78	85	24.76	<0.58	80	7	<2	<16
MW-6											
15S2	9/23/2015		5.56	3.09	73	24.63	<0.58	54	2.1	<2	<16
16S1	2/16/2016		6.27	1.97	92	23.3	<0.58	62	2.8	<2	<16
16S2	12/28/2016	211.4	5.42	3.93	49	25.25	<0.58	38	3	<2	<16
17S1											
17S2	11/21/2017	204.2	5.47	7.79	187	25.41	<0.58	130	13.6	<2	<16
MW-7A											
15S2	9/21/2015		4.83	6.8	177	26.53	<0.58	56	4.5	2.12	<16
16S1	2/15/2016		4.94	6.43	199	24.69	<0.58	86	7.9	<2	<16
16S2	12/27/2016	210.5	5.04	7.78	170	25.06	<0.58	82	7	<2	<16
17S1	3/27/2017		5.3	6.08	149	25.32	<0.58	80	4.2	<2	<16
17S2	11/20/2017	178.7	4.6	10.2	223	25.4	<0.58	150	15.4	<2	<16
MW-19A											
15S2											
16S1											
16S2											
17S1	3/27/2017		6.11	13.7	501	24.71	0.984	300	12.6	<2	<16
17S2	11/21/2017	257.9	5.38	18.1	510	24.73	0.597	400	14.9	<2	<16
Supply											
SUPPLY WELL											
15S2	9/22/2015		7.16	6.99	381	23.99	<0.58	210	0.4	4.49	<16
16S1	2/15/2016		7.11	6.1	401	24.07	<0.58	220	0.4	4.02	28.9
16S2	12/28/2016	140.6	7.35	6.5	382	24.11	<0.58	220	0.2	4.69	<16
17S1	3/28/2017		7.41	6.14	409	24.15	<0.58	230	0.2	<2	61
17S2	11/21/2017	122	7.46	6.82	412	24.07	<0.58	250	0.3	2.89	28.3

LEGEND

* = primary drinking water standard

** = secondary drinking water standard

*** = Chapter 62-777-Groundwater Cleanup Target Level (GCTL)

1 = No Standard

- = Not analyzed

I = Value is between the Method Detection Level (MDL) and the Reporting Detection Level (RDL)

J = Estimated value

V = Analyte found in associated method blank

Q = Estimated value; analyte analyzed after acceptable holding time

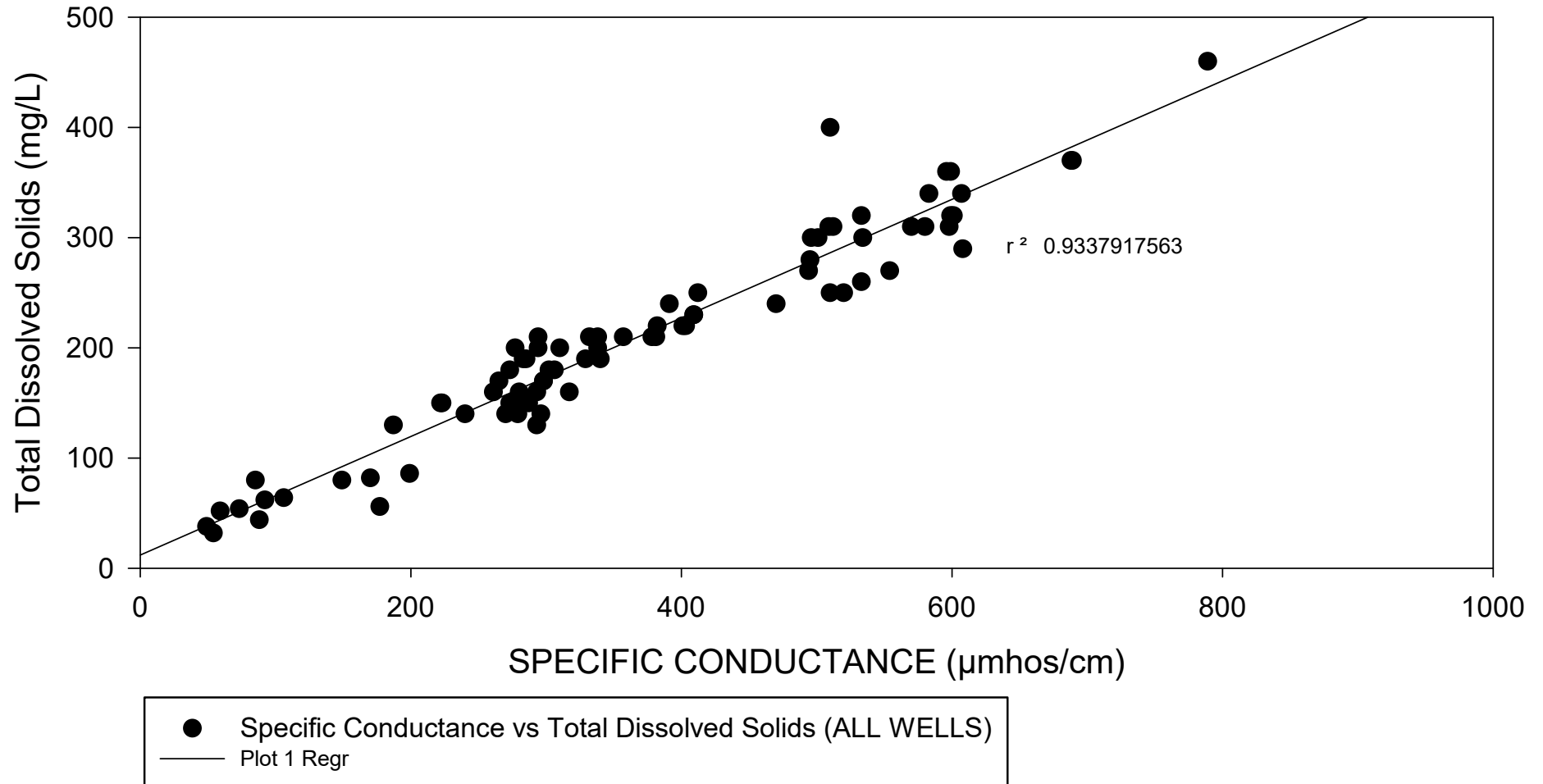
U = Indicates that the compound was analyzed for but not detected

ATTACHMENT 7

CORRELATION PLOT CHARTS

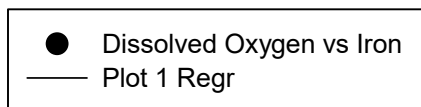
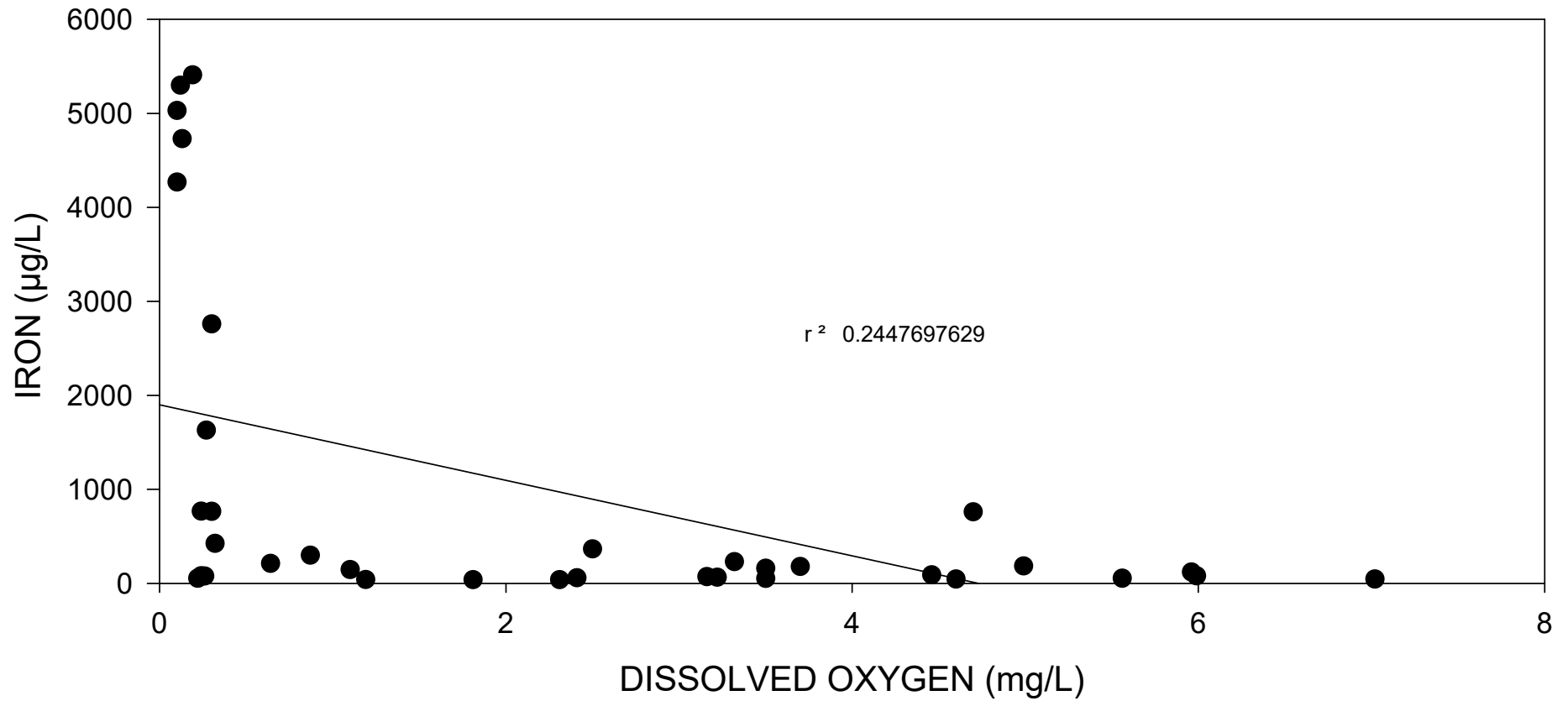
SPECIFIC CONDUCTANCE V TOTAL DISSOLVED SOLIDS

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
GROUNDWATER CORRELATION



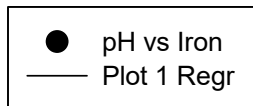
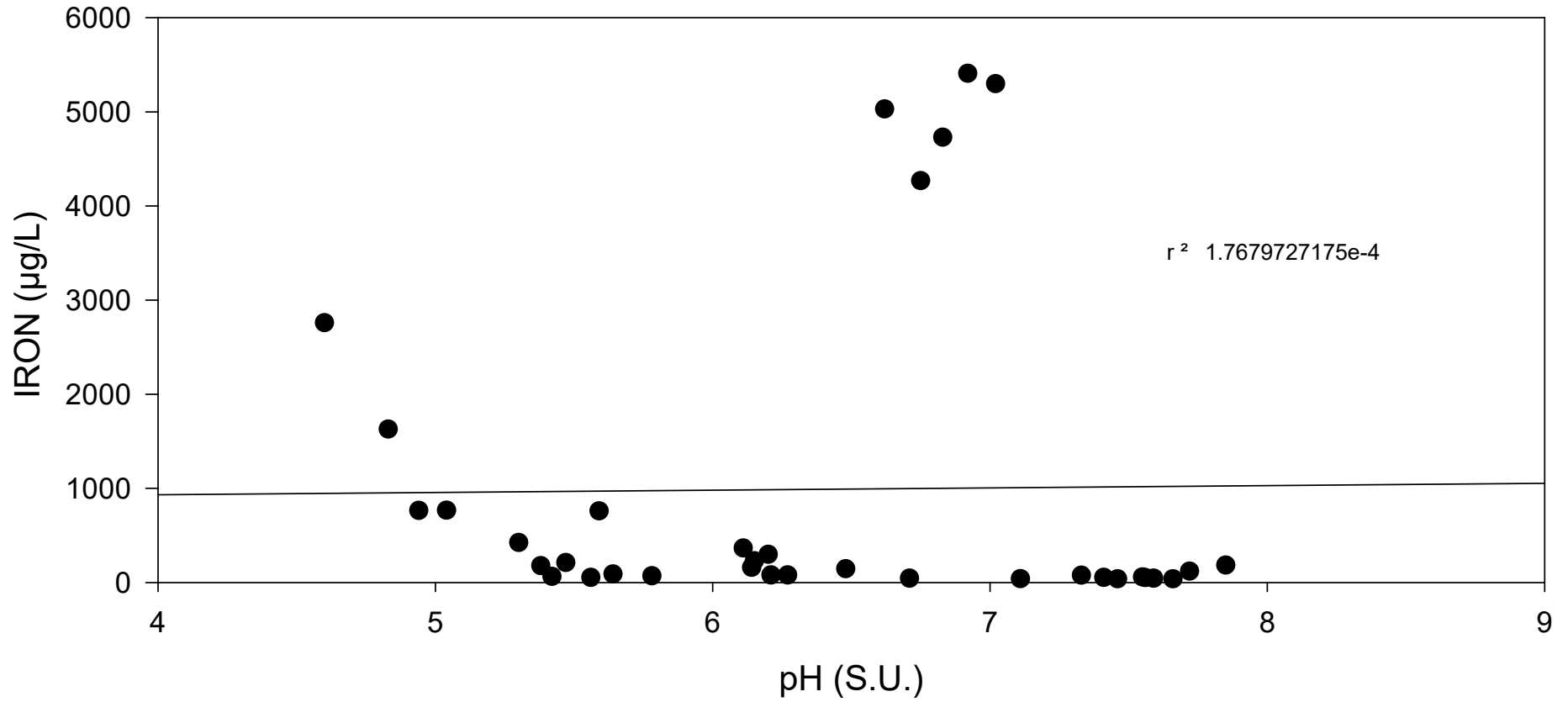
DISSOLVED OXYGEN VS IRON

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
GROUNDWATER CORRELATION



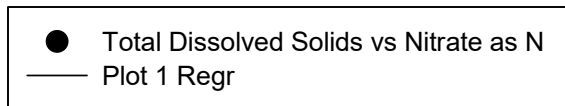
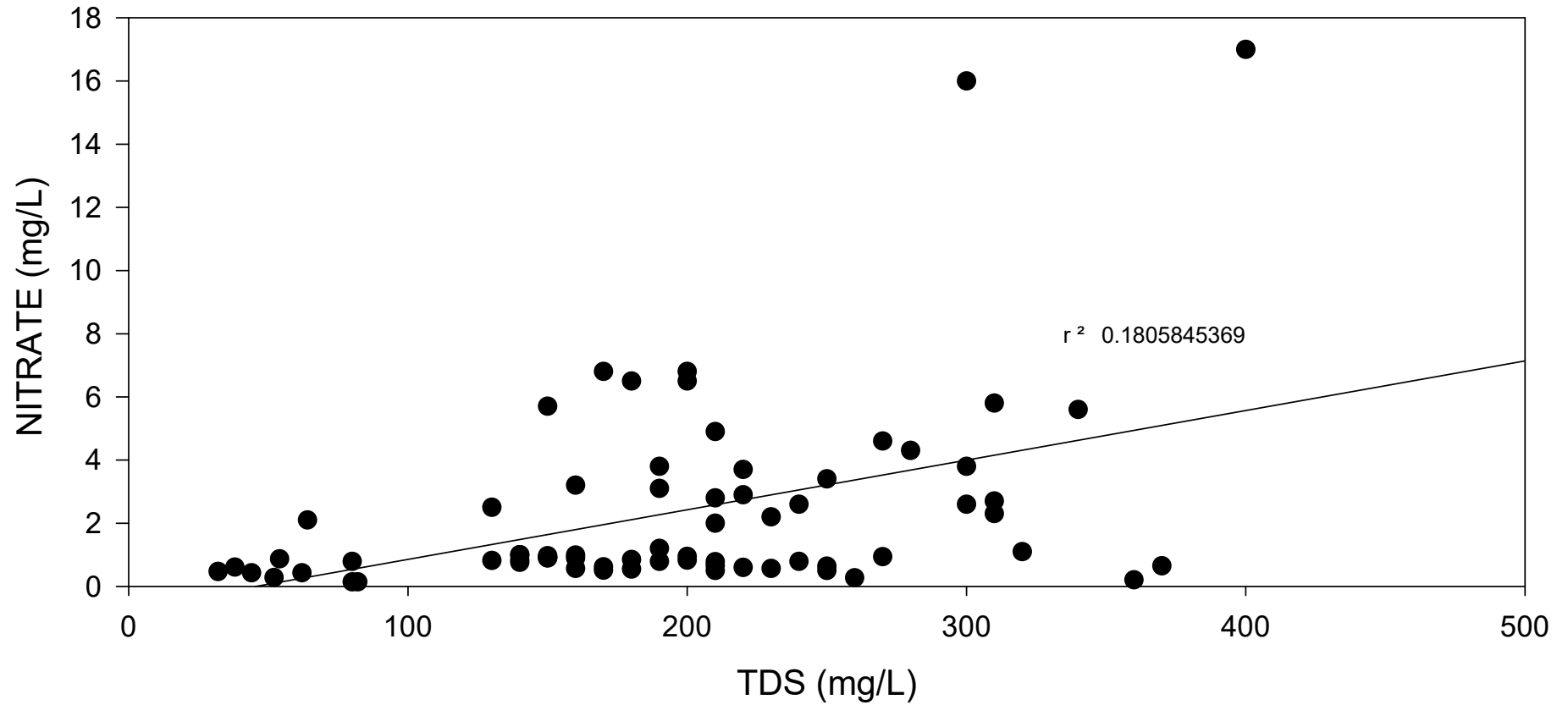
pH VS IRON

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
GROUNDWATER CORRELATION



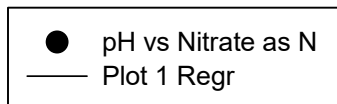
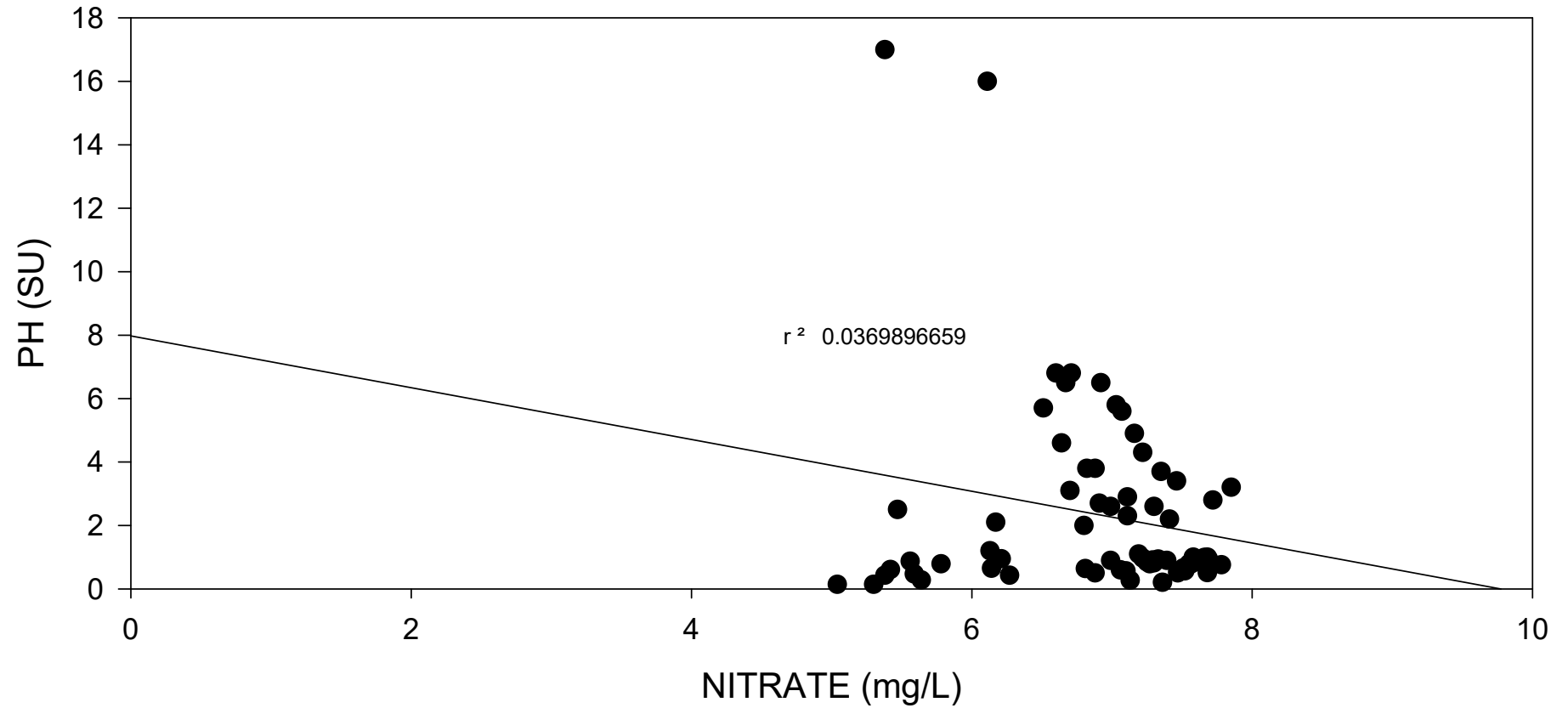
TOTAL DISSOLVED SOLIDS v NITRATE AS NITROGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
GROUNDWATER CORRELATION



PH v NITRATE AS NITROGEN

ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY
GROUNDWATER CORRELATION



SECTION 7

CLOSURE AND RECLAMATION PLAN

**ENTERPRISE ROAD CLASS III RECYCLING AND DISPOSAL FACILITY
PERMIT RENEWAL
CLOSURE AND RECLAMATION PLAN**

Prepared for:

ANGELO'S AGGREGATE MATERIALS, LTD
855 28th Street South
St. Petersburg, Florida 33712

Presented to:

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHWEST DISTRICT – SOLID WASTE DIVISION**
13051 N. Telecom Parkway
Temple Terrace, Florida 33637

Prepared by:

LOCKLEAR & ASSOCIATES, INC.
4140 NW 37 Place, Suite A
Gainesville, Florida 32606
Certificate of Authorization #30066

Project No.: 02000-144-15

APRIL 2018

TABLE OF CONTENTS

1.0	RECLAMATION AND CLOSURE STANDARDS	1
1.1	TIMING	1
1.2	STORMWATER MANAGEMENT	1
1.3	FINAL COVER SPECIFICATIONS	1
1.3.1	Final Cover Design	2
1.3.2	Barrier Layer	2
1.3.3	Vegetative Soil Cover	2
1.3.4	Grading and Compaction	2
1.3.5	Construction Quality Assurance Plan	2
1.3.6	Seeding and Mulching	3
1.3.7	Materials	4
1.4	RECLAMATION APPROVAL	5
1.5	INSPECTIONS	5
1.6	SURVEY MONUMENTS	5
1.7	FINAL SURVEY AND AS BUILT REPORTS	5
1.8	OFFICIAL DATE OF CLOSING	5
1.9	CLOSURE SCHEDULE	6
1.10	NOTICE AND ADVICE TO USERS	6
1.11	NOTICE TO THE PUBLIC	6
1.12	CLOSURE PERMIT APPLICATION SUBMITTAL	6
2.0	FINAL USE AND LONG TERM CARE	6
2.1	REPLACEMENT OF MONITORING DEVICES	7
2.2	LONG TERM MONITORING	7
2.3	FINAL COVER SYSTEM MAINTENANCE	7
2.4	REVEGETATION	8

2.5	LANDFILL GAS MANAGEMENT SYSTEM.....	8
2.6	STORMWATER DRAINAGE SYSTEMS	8
2.7	REDUCED LONG-TERM CARE PERIOD	9
2.8	RIGHT OF ACCESS AND ACCESS CONTROL.....	9
2.9	CONTINGENCY PLAN FOR EMERGENCIES	9
2.10	SUCCESSORS OF INTEREST	10
2.11	COMPLETION OF LONG-TERM CARE	10
3.0	FINANCIAL RESPONSIBILITY	10
3.1	ANNUAL COST ADJUSTMENTS.....	10

1.0 RECLAMATION AND CLOSURE STANDARDS

This Closure Plan is designed to comply with the Florida Department of Environmental Protection (FDEP) requirements of Rule 62-701.600, F.A.C. and the Pasco County Land Development Code (LDC) for Class I Mine reclamation and Class III landfill closure. The landfill will be used to reclaim the borrow pit excavation as phases are completed.

1.1 TIMING

Mine reclamation and landfill closure will commence when all cells have been filled. Reclamation and closure will be completed within four (4) months of commencement. An intermediate soil cover of at least one (1) foot in depth will be applied and maintained within seven (7) days of lift completion. If the landfill operator (Operator) wishes to deposit additional solid waste in the completed cell, all or part of the intermediate cover may be removed to place the waste or to install the final cover. Intermediate cover will be placed on completed landfill cells and sideslopes as filling progresses. Final cover will be installed upon each completed landfill cell within 180 days after attaining final elevation. The remaining Facility life is provided in Section 3.8.3 of the Engineering Report in Section 3.

1.2 STORMWATER MANAGEMENT

The Conceptual Closure Plan (Drawing Sheet C2.00 of the 2016 Plan Set provided in Section 4) includes a site stormwater system comprised of three dry retention ponds. Stormwater runoff will sheetflow down the sideslopes of the landfill into the retention ponds. The Facility's overall stormwater management system is governed by the Mining Operations and ERP Permits. Grades and elevations vary based on the current mining operations and topography. As required by the Florida Department of Environmental Protection (FDEP), a detailed Closure Permit Application with stormwater conveyance systems will be submitted at the time of closure. The stormwater facilities will be constructed in accordance to the approved Closure Permit to prevent the offsite runoff of stormwater.

1.3 FINAL COVER SPECIFICATIONS

The construction of the final cover will consist of three main operations. First, on-site clayey sand and sandy clay soils will be utilized to construct a barrier layer. Secondly, a layer of soil capable of sustaining vegetation will be constructed. Finally, seeding and mulching, or sodding with "Argentine" Bahia grass, or equivalent, will then be performed to establish a permanent ground cover. Detailed specifications for each of these operations are described as follows:

1.3.1 Final Cover Design

All areas filled with waste will have a final cover of soil designed to minimize infiltration of rainfall. Final cover will be initiated with 30 days of reaching final grade and will be placed and completed over each cell within 180 days after final waste deposit. The final cover will consist of a 3-foot thick layer of soil, of which the bottom 18 inches is barrier layer and the top 18 inches will sustain vegetative growth. A detail is provided on Sheet C3.00 of the 2016 Plan Set provided in Section 4.

1.3.2 Barrier Layer

The 18-inch barrier layer will have a permeability of 1×10^{-8} cm/sec or less. On site clayey sands will be used to construct the barrier layer. Once these soils have been placed and compacted in 6-inch lifts to 95% standard proctor, a series of *insitu* thickness tests and permeability tests will be completed prior to placement of the vegetative soil layer.

1.3.3 Vegetative Soil Cover

An 18-inch layer of soil from the onsite borrow operation may be used, as the vegetative soil layer. These soils will sustain vegetative growth (grasses).

1.3.4 Grading and Compaction

Grading work will be performed as shown and specified on the construction plans, (Sheet C1.00 through C2.10 of the 2016 Plan Set provided in Section 4. Final slopes will not exceed a 3:1 slope.

The Applicant will be responsible for grading within the landfill limits. All irregularities and low areas will be fine graded with onsite soil material. The Applicant will maintain grades, profiles and contours as indicated on the approved final grading plan. The Applicant will protect and maintain finish graded areas from traffic and erosion. In the event that the site grading is eroded and/or damaged prior to final acceptance, the Applicant will repair and reestablish the grades in accordance with the construction plans.

1.3.5 Construction Quality Assurance Plan

To assure that the landfill's final cover meets the design parameters, the following Construction Quality Assurance Plan (CQA) plan has been developed. This CQA plan will be under the direction of a Florida registered professional engineer experienced in geotechnical engineering or landfill cover construction. The engineer or his designee will be on-site at all times during

construction of the cover to monitor construction activities. Field and laboratory testing during final cover construction will be by a qualified soil testing laboratory.

Prior to final cover construction, a suitable borrow source meeting the project specifications for the barrier layer will be determined. The Applicant plans to use on-site soils to meet these specifications. A minimum of three (3) representative samples from on-site soils will be submitted to a laboratory for index testing to quantify the variability of the borrow materials. The index tests will consist of percent fines (ASTM D-1140), Atterburg limits (ASTM D-4318), and moisture content (ASTM D-2216).

In addition, a minimum of three (3) laboratory hydraulic conductivity tests will be conducted on the barrier layer borrow source by ASTM D-5084 under a consolidation stress no greater than 10 pounds per square inch. The borrow source will only be considered suitable if the laboratory reports document a hydraulic conductivity of 1×10^{-8} cm/sec or less at the 95 percent confidence level.

The following field tests will be performed during final cover construction:

1. Density tests at a minimum of two tests per acre per 6-inch lift, of the compacted cover material;
2. Thickness measurements at a minimum of three tests per acre;
3. Index testing as previously discussed at a minimum of one sample per acre;
4. Hydraulic conductivity testing of Shelby tube samples (ASTM D-2937) of compacted barrier layer by laboratory test method ASTM D-5084 at a minimum frequency of one test every two acres. The barrier layers' hydraulic conductivity will be considered acceptable if laboratory reports meet the project specifications of 1×10^{-8} cm/sec or less at the 95 percent confidence level.

If laboratory test data for a cover section does not meet these requirements, additional random sample testing may be conducted to determine if the cover is acceptable to the Project Engineer, the cover section must be reworked or reconstructed to meet these requirements.

CQA reporting requirements will include: daily summary reports during cover construction; observation data sheets; problem identification and corrective actions taken; and final documentation, laboratory reports and construction record drawings. A final report with all such documents will be submitted to the Pasco County and the FDEP.

1.3.6 Seeding and Mulching

Seeding and mulching will consist of establishing a dense stand of grass throughout each closed cell. Included with this task are fertilizing, watering, and periodic maintenance mowing as

required to produce a healthy stand of grass. Seeding work will be performed only after planting and other work affecting ground surface has been completed unless the Applicant is specifically requested to do otherwise for purposes of stabilization, etc., prior to project completion. The vegetation species recommended are drought resistant and their roots will not penetrate the final cover to provide a channel for moisture infiltration.

1.3.7 Materials

Seeds and mulch materials will conform to the following:

1. Seed - Fresh, clean new crop mixture composed of the following variety and proportions:

<u>Blend</u>	<u>Parts</u>	<u>Purity</u>	<u>Min. Germination</u>
Argentine Bahia (or equivalent)	100 Percent	80 Percent	90 Percent

Rate will be 120 pounds per acre (Refer to Index No.104, *Roadway and Traffic Design Standards*, Florida Department of Transportation, 1992).

2. Mulch - Dry mulch, free from mature seed bearings stalks or roots of noxious weeds. Dry mulch will be straw or hay consisting of oat, rye or wheat straw. Approximately two (2) inches of the mulch material will be applied uniformly over the seeded area
3. Fertilizer - Granular, non-burning product containing 6 percent nitrogen, 6 percent phosphoric acid, and 6 percent potash by weight, and spread uniformly at a rate of 220 pounds per acre. Fertilizer will be mixed with the soil to a depth of \pm four (4) inches.
4. Watering - The seeded area will be watered so as to provide optimum growth conditions for the establishment of grass. The water used in the grassing operations may be obtained from any approved supply well, like Larkin's well on the adjacent property to the west. The water will be free of excess and harmful chemicals, acids, alkalis, or any substance which might be harmful to plant growth or obnoxious odors to traffic. Salt water will not be used.

The Applicant will provide a uniform dense stand of grass by watering, mowing and maintaining seeded areas for a thirty (30) year period after closure or until final acceptance by FDEP and the County, whichever is less. Sodding may be used as an alternative to seeding and mulching.

1.4 RECLAMATION APPROVAL

Approval of reclaimed areas (final cover) may be requested at any time by submitting such request to the County and the FDEP. The request will include a map specifying reclamation areas (final cover) for which approval is sought and a general description of how reclamation has been accomplished. The Applicant will coordinate and schedule the review of the reclaimed areas with the appropriate departments, divisions or agencies. Reclamation of the site will be deemed completed upon demonstration and agency approval that the site has been reclaimed in accordance with the approved reclamation plan.

1.5 INSPECTIONS

County and FDEP staff will have access to the project to inspect and observe permitted activities in order to determine compliance with the terms of the Closure Permit. The County and FDEP will also have access to the site during the post-closure phase of the project.

1.6 SURVEY MONUMENTS

Permanent concrete monuments will be installed to mark the boundaries of the landfill property. Where the final grade of the landfill is 20 feet or less above grade, permanent markers will be installed to outline the general waste filled area. The location and elevation of all markers will be tied to boundary markers by the professional performing the final survey and will be submitted on a site plan filed with the "Declaration to the Public."

1.7 FINAL SURVEY AND AS BUILT REPORTS

A final topographic survey will be performed by a Florida registered land surveyor to verify the final contours and elevations of the facility are in accordance with the plans as approved in the permit within 180 days after closure. This survey will be submitted to the FDEP along with the Certification of Closure Construction Completion on Form 62-701.900(2), F.A.C..

1.8 OFFICIAL DATE OF CLOSING

Upon receipt and approval of the Certification of Closure Construction Completion and the "Declaration to the Public", FDEP and the County will, within 30 days, acknowledge by letter to the facility operator, that notice of termination of operations and closing of the facility has been completed. The date of the letter will be the official Date of Landfill Closing for purposes of determining the Long Term Care Period.

1.9 CLOSURE SCHEDULE

The schedule for closure activities will be based on the time required to fill each cell to the final grades. Please refer to Sections 1.10 through 1.12 for closure milestones.

1.10 NOTICE AND ADVICE TO USERS

At least 90 days prior to the date when wastes will no longer be accepted at the landfill, the owner or operator will submit an application to advise users of the intent to close the facility by posting signs at the entrance of the facility giving the date of closing, the location of alternative disposal facilities and name of the entity responsible for closing the landfill. These signs will be maintained throughout the closing period. If unforeseen circumstances do not allow the 120 day notice to users, notice will be provided as soon as the need to close the facility becomes apparent.

1.11 NOTICE TO THE PUBLIC

Once closure construction has been completed, a Declaration to the Public will be filed in the deed records in the office of the Pasco County Clerk of Courts. The Declaration to the Public will include a legal description of the Class III Landfill property and a site plan showing the limits of waste. The Declaration to the Public will also include a notice that any future owner or user of the site should consult with the Department prior to planning or initiating any activity involving disturbing the landfill, monitoring system, or control structures. A certified copy of this notice will be filed with the FDEP.

1.12 CLOSURE PERMIT APPLICATION SUBMITTAL

A Closure Permit application will be submitted to Pasco County and the FDEP no less than 90 days prior to the scheduled closing day in accordance with the requirements of Rule 62-701.600, F.A.C..

The Closure Permit application will include the following: Closure Design Plan, Closure Operation Plan, Long-Term Care Plan, and proof of financial responsibility for long-term care period.

2.0 FINAL USE AND LONG TERM CARE

The proposed final use of the closed landfill will be as pastureland. The final use for the landfill site will exclude any buildings or other structures, unless such buildings and structures are specifically designed to address gas venting and settlement considerations associated with construction over a landfill. Long term care for the site will include maintaining the landscaping,

security facilities, erosion control, filling subsidence areas, and maintaining the stormwater system for a period of thirty (30) years and maintaining the groundwater monitoring plan for a period of time established by the County or the FDEP. The Long-Term Care period may be extended if the closure design or operation plan is found to be ineffective, per Rule 62-701.620 F.A.C..

2.1 REPLACEMENT OF MONITORING DEVICES

If the monitoring wells or other devices required by the Groundwater Monitoring Plan are destroyed or fail to operate for any reason, the landfill Owner or Operator will, upon discovery, notify the FDEP and County in writing. All inoperative monitoring devices will be repaired or replaced with functioning devices within 60 days of the discovery of the malfunctioning unit.

2.2 LONG TERM MONITORING

Once the proposed Landfill facility is closed, groundwater and gas monitoring will continue for a period of up to 30 years with reports submitted to the County and the FDEP. Groundwater reports will be submitted semi-annually and gas monitoring reports will be submitted on a quarterly basis.

A Stabilization Report will be submitted to the Department every 5 years after the long-term care permit is issued. The Stabilization Report will include or address the following:

- Water quality technical report
- Waste subsidence
- Barrier layer effectiveness
- Stormwater management
- Gas production and management

2.3 FINAL COVER SYSTEM MAINTENANCE

Regular maintenance of all reclaimed areas will be performed by the Operator or a designated agent in order to assure that the reclamation standards are achieved and the approved reclamation plan is accomplished. The maintenance will include monitoring for a minimum of thirty (30) years after planting, replacement of any planted areas that fail to survive in accordance with the established standards, the removal of non-native species that have not been approved by the County, and the maintenance of all required slopes, final cover, embankments, ponds, fences, gates, signs, monitoring systems and stormwater facilities. The operator will maintain a stockpile on-site of approximately 60,000 cyds of cover material to be used for final cover maintenance.

The Operator will conduct monthly inspections of the facility. The site inspection will include the verification that the final cover system retains its integrity and effectiveness. The final cover will be routinely evaluated and inspected for any evidence of soil erosion, settlement and subsidence, exposed waste, cracks, ponded water, vegetation stress, slope failure, and seeps.

Deficiencies such as cracks, erosion damage, or settlement in the final cover will be evaluated regarding its extent and depth. Repairs and restoration will be consistent with the final cover construction specifications. Location of areas repaired will be identified on a site map for future reference. Areas requiring repeated repairs will be evaluated and considered for special or expanded improvements to retain the integrity and performance of the final cover system. If necessary, temporary berms, ditches, and erosion materials will be used to prevent further erosion damage or ponding on damaged soil cover areas until the site conditions permit the final cover areas and vegetation to be re-established. Preventative maintenance of the final cover should preclude problems arising from potential seeps from infiltration of surface water.

2.4 REVEGETATION

1. Revegetation of all disturbed areas will be conducted in a manner so as to achieve permanent revegetation which will minimize soil erosion and surface water runoff, conceal the effects of surface mining and recognize the requirements for appropriate habitat for fish and wildlife. Should washes, rills, gullies, or the like, develop after revegetation and before a thirty (30) year maintenance period, such eroded areas will be repaired, the slopes stabilized and revegetated, within thirty (30) days.
2. Good quality topsoil will be applied as the soil cover material for all reclaimed areas. Alternate growing media must be approved by the County prior to commencement of revegetation.
3. Revegetation efforts will commence within thirty (30) days after completion of regrading and will be completed within one hundred and twenty (120) days.

2.5 LANDFILL GAS MANAGEMENT SYSTEM

If the gas probes or other devices required by the landfill gas management system are destroyed or fail to operate for any reason, the landfill Operator will, upon discovery, notify the FDEP and County in writing. All inoperative monitoring devices will be repaired or replaced with functioning devices within 60 days of the discovery of the malfunctioning unit.

2.6 STORMWATER DRAINAGE SYSTEMS

Drainage control system problems can result in accelerated erosion of the final cover system and differential settlement of drainage control structures can limit their usefulness and may result in

failure of the drainage structure. It is expected that the drainage facilities at the Facility will require a greater amount of maintenance in the period immediately following construction than in later periods. This is due to greater potential for differential settlement early in the post closure period and the lack of mature vegetation.

The Operator will inspect the drainage facilities for the following:

- Evidence of erosion
- Standing water
- Formation of gullies
- Settlement, blockage, and damage to drainage channels, structures, swales and culverts

Inspection of the drainage facilities will occur prior to and during the rainy season to ensure proper functioning. Surface areas will be inspected during dry periods and necessary repairs made prior to the rainy season. Inspections will include checking for erosional ruts and settlement cracks. In addition, inspections will be made after each major storm to ensure that all swales are functioning properly and that there is no ponding water. All swales, drainage channels, and retention ponds will be inspected on a regular basis for silt or debris build-up. Damage to the drainage system will be addressed immediately after finding a problem. Permanent repairs and restoration will be made consistent with final closure construction specifications. Temporary repairs may be utilized until permanent repairs can be scheduled.

2.7 REDUCED LONG-TERM CARE PERIOD

The owner of the landfill may apply to Pasco County and FDEP for a permit modification to reduce the long-term care schedule after a 10-year history after closure in accordance with Rule 62-701.620 (2), F.A.C..

2.8 RIGHT OF ACCESS AND ACCESS CONTROL

The Owner currently poses a right of access to the subject site. Any future owner or operator will maintain this right of access to the access route and the property for the life of the landfill and throughout the long-term care period. All owners/operators will maintain all security barriers (fencing, signage, gates) for the design life and long-term care period of the landfill.

2.9 CONTINGENCY PLAN FOR EMERGENCIES

If fires or severe weather events occur, the Operator will follow the procedures discussed in the Contingency Plan, Section 3, Appendix 3-B of the Engineering Report.

2.10 SUCCESSORS OF INTEREST

Any person or corporation acquiring rights or ownership, possession or operation of the proposed Class III landfill will be subject to all the requirements of the permit for the proposed facility. Any lease or transfer of property will include the following conditions:

1. The previous owner or operator responsible for closure will maintain proof of financial responsibility with the FDEP and Pasco County.
2. State the party responsible for continuance of monitoring, maintenance, and correction of problems.
3. Mineral rights to any recoverable materials buried at the landfill. Disturbance of a closed landfill will require a Department permit.

2.11 COMPLETION OF LONG-TERM CARE

Upon completion of the landfill's long-term care period, the Operator will notify the FDEP and Pasco County that a Professional Engineer certification has been placed in the landfill's operating record verifying that long-term care has been completed in accordance with the approved Closure and Long-term Care Plans.

3.0 FINANCIAL RESPONSIBILITY

Upon approval of the application, the owner or operator will provide financial assurance documentation for closure and post-closure costs. This financial assurance documents will be submitted prior to permit being issued. See Section 7, Appendix 7-A for the Financial Assurance Cost estimates for the Class III landfill. Third party estimates for selected portions of the proposed work were used for the estimates. A financial assurance mechanism will be fully funded prior to the acceptance of any solid wastes at the proposed landfill.

3.1 ANNUAL COST ADJUSTMENTS

The Operator of the landfill will submit an annual cost adjustment statement of closure and long-term care costs certified by a Professional Engineer to the FDEP and Pasco County. These cost estimates will be revised for inflation and any changes in closure or corrective action plans.

SECTION 7

APPENDIX 7-A

FINANCIAL ASSURANCE COST ESTIMATES



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form # 62-701.900(28), F.A.C.
Form Title: Closure Cost Estimating Form
For Solid Waste Facilities
Effective Date: January 6, 2010
Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: Enterprise Class III Recycling and Disposal Facility WACS ID: 87895
 Permit Application or Consent Order No.: 177982-020-SO/T3 Expiration Date: 7/9/2018
 Facility Address: 41111 Enterprise Road, Dade City, Florida 33525
 Permittee or Owner/Operator: Angelo's Aggregate Materials, LTD.
 Mailing Address: 855 28th Street, South, St. Petersburg, Florida 33712

Latitude: 28 ° 19' 53 " Longitude: 82 ° 08' 06 "
 Coordinate Method: State Plan Datum: NGVD 29
 Collected by: _____ Company/Affiliation Pickett Surveying

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
1-7, 15 and 16	67.0	2004	22	12	N/A	N/A

Total disposal unit acreage included in this estimate: _____ Closure: _____ Long-Term Care: _____

Facility type: ☐ Class I ☒ Class III ☐ C&D Debris Disposal
 (Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☒ Letter of Credit* ☐ Insurance Certificate ☐ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☐ Guarantee Bond* ☐ Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

Northwest District
160 Government Center
Pensacola, FL 32502-5794
850-595-8360

Northeast District
7825 Baymeadows Way, Ste. B200
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pky.
Temple Terrace, FL 33637
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

Southeast District
400 N. Congress Ave., Ste. 200
West Palm Beach, FL 33401
561-681-6600

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate adjustment below.

☒ (a) Inflation Factor Adjustment

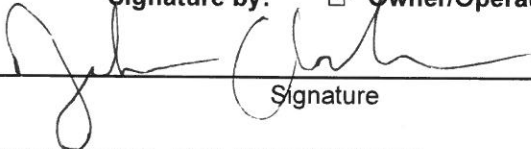
☐ (b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

This adjustment is based on the Department approved closing cost estimate dated:		02/07/2018
Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	Inflation Adjusted Closing Cost Estimate:
\$ 3,414,199.08	× 1.013	= \$ 3,458,583.67

This adjustment is based on the Department approved long-term care cost estimate dated:		02/07/2018
Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$ 94,865.01	× 1.013	= \$ 96,098.26
Number of Years of Long Term Care Remaining:		× 30
Inflation Adjusted Long-Term Care Cost Estimate:		= \$ 2,882,947.80

Signature by: ☒ Owner/Operator



Signature

JOHN ARNOLD, PROJECT MANAGER

Name & Title

05/04/2018

Date

(813) 477-1719

Telephone Number

☐ Engineer (check what applies)

41111 ENTERPRISE ROAD

Address

DADE CITY, FL 33525

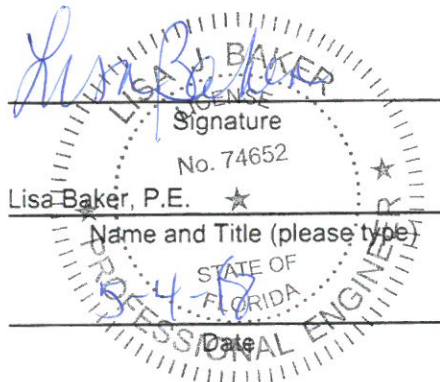
City, State, Zip Code

JOHN.PHILLIP.ARNOLD@GMAIL.COM

E-Mail Address

VI. CERTIFICATION BY ENGINEER

This is to certify that the Cost Estimates pertaining to the engineering features of this solid waste management facility have been examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing and/or long-term care of the facility and comply with the requirements of Rule 62-701.630 F.A.C. and all other Department of Environmental Protection rules, and statutes of the State of Florida. It is understood that the Cost Estimates shall be submitted to the Department annually, revised or adjusted as required by Rule 62-701.630(4), F.A.C.



Signature
No. 74652

Lisa Baker, P.E. ★
Name and Title (please type)

Date

74652
Florida Registration Number
(please affix seal)

4140 NW 37th Place, Suite A
Mailing Address

Gainesville, Florida 32606
City, State, Zip Code

lisa@locklearconsulting.com
E-Mail address (if available)

352-672-6867
Telephone Number

VII. SIGNATURE BY OWNER/OPERATOR



Signature of Applicant

John Arnold, P.E.
Name and Title (please type)

John.Phillip.Arnold@gmail.com
E-Mail address (if available)

855 28th Street South
Mailing Address

St. Petersburg, Florida 33712
City, State, Zip Code

813-477-1719
Telephone Number