

## ADDENDUM NO. 2

### 50184155 – Gretna CDGB-MIT MT140 (Public Safety Building Expansion)

**DATE:** March 24, 2026  
**TO:** Current Plan Holders  
**FROM:** Justin Ford, P.E., Project Manager  
**CC:** Antonio Jefferson, City Manager

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### General

The bid date is being pushed back. The new bid date is Wednesday, April 1, 2026 at 2:00 p.m. EST.

### Questions

1. Have the old storage tanks on the south end been removed? What is the responsibility of the sitework contractor regarding this part of the project?

**Dewberry Response: Per the attached report, dated December 16, 2022 and completed by ERMI, all storage tanks have been removed.**

2. Page 27 of the specs suggest “special damages” in addition to liquidated damages. Please elaborate.

**Dewberry Response: Only liquidated damages are applicable to this project.**

3. Are the contingencies on Page 210 the responsibility of the General Contractor to include in their bid package?

**Dewberry Response: If the reference is page 201, the allowances and contingencies are to be included in the bid.**

4. Is there a more comprehensive geotechnical report than the one shown in Section 023000?

**Dewberry Response: A supplemental Geotech report was completed for the stormwater component and has been attached with this submittal.**

5. Can centipede sod be substituted for the Bermuda that is specified?

**Dewberry Response: Yes, centipede is an acceptable alternative.**

6. The pay item for Limerock Base Course is shown as a cubic yard item. The industry standard is generally a square yard item. Can this be changed?

**Dewberry Response: Yes, pay item has been updated.**

7. There is limited instruction for water and sewer and NO pay item. Please advise if this is part of the scope.

**Dewberry Response: Pay item has been added for the sewer. The water line will be extended internally within the building and shall be included in the Building Addition pay item.**

8. Where should we include the sod and temp irrigation?

**Dewberry Response: It should be included under pay item 2.15 Performance Turf, Sod.**

9. Plans show 15 bumper stops and bid sheet shows six--please clarify.

**Dewberry Response: There are 15 bumper stops proposed. Bid form has been updated.**

10. Please clarify bid sheet unit description on the 8" and 6" concrete SY or SF?

**Dewberry Response: Quantities have been updated to reflect unit.**

11. Are cross drains End walls or MES?

**Dewberry Response: Cross drains are MES.**

12. Is a construction entrance required?

**Dewberry Response: Yes, see updated plans.**

13. Where do we add the cost for the storm system, sewer system, and water system on the bid form?

**Dewberry Response: Pay item has been added for the sewer. The water line will be extended internally within the building and shall be included in the Building Addition pay item. Storm is included in the bid pay items 2.10-2.12.**

14. There is limited instruction for water and sewer and NO pay item- please advise if this is part of the scope.

**Dewberry Response: Pay item has been added for the sewer. The water line will be extended internally within the building and shall be included in the Building Addition pay item. In addition, there are no anticipated utility conflicts, however a contingency line item has been added to the bid form for relocating water and sewer. Contractor shall provide a unit cost for each item.**

15. Are there more details about the 2-hour firewall? Are we adding a new wall? Replacing an existing wall?

**Dewberry Response: This is an existing wall.**

16. I do not see the Specs for the overhead doors on this project. Am I overlooking them?

**Dewberry Response: Rolling service doors spec section 083300.**

17. Do you have the wage rates pdf for this project?

**Dewberry Response: In the CDBG Documents section, see the CDBG Wage Decision.**

18. Just wanted to reach out and confirm that the only fence to be quoted for the Gretna Public Safety Building is the 336 feet of 6ft high black vinyl chain link. Can you please confirm?

**Dewberry Response: Yes.**

19. How tall is the wall from the 8-foot mark to the peak in the new engine bay?

**Dewberry Response: Refer architectural drawings.**

20. Will the ceiling be covered with the 1/2" plywood sheathing?

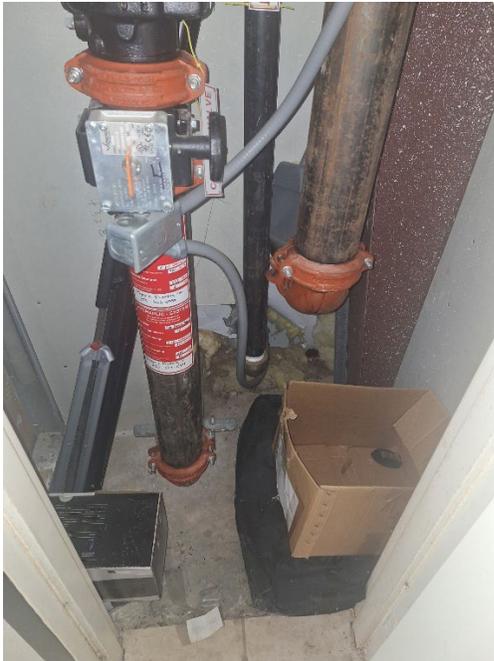
**Dewberry Response: No specific ceiling location specified in question. Interior work has a lay in ceiling.**

21. Do they want the sheathing to be painted as is, or will they want the knot holes filled in to make a smooth finish?

**Dewberry Response: Prep and paint - no knot filling required.**

22. Need information/photos of existing sprinkler riser.

**Dewberry Response: see photos below.**





23. Do not want to make any assumptions --Civil utility dwg. Detects only an existing 2" domestic line feeding the building.

**Dewberry Response: The water line will be extended internally within the building and shall be included in the Building Addition pay item.**

24. Location of a backflow device for existing sprinkler riser?

**Dewberry Response: see photo below.**



25. What is the specific building risk category and exposure (and tornadic info if applicable)?

**Dewberry Response: Risk Category info change. See revised structural sheet.**

26. Sod SF is quite a bit higher than the document shows. Do you want sod installed per plan or per this document?

**Dewberry Response: See updated sod quantity on bid sheet.**

27. Should we price the building based on the code and loads shown on page 19? Most fire stations or public safety buildings typically carry a Risk Category of at least III, and I am not seeing any structural drawings in the set.

**--Included drawing is on next page--**

<b>Design Loads:</b>	
<b>Live Loads:</b>	
Roof:	20 psf
Floor:	40 psf
<b>Dead Loads:</b>	
Roof:	10 psf
<b>Wind Loads:</b>	
Wind Speed:	120 mph, 3 sec. gust/ 110 mph, sustained
Exposure Category:	"B"
Enclosure Classification:	"Enclosed"
Risk Category:	II

The design plans and specifications submitted as part of the permit application are in compliance with the standards established in rule 62B-33.007, Florida Administrative Code.

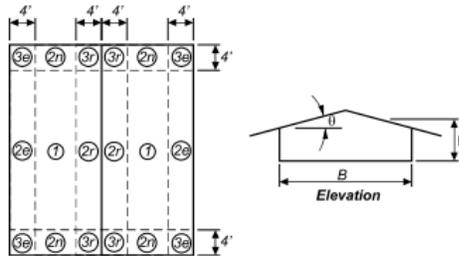
Scope of work has been designed and shall be constructed in accordance with the following applicable building codes:  
 Florida Building Code, Building - 2023 - Rev. 8

### Component and Cladding Design Pressures

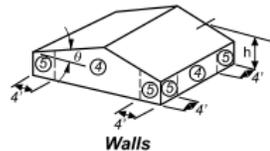
Wall Zones:			
Zone	Design Pressures (psf)		
	10 SF Trib.	100 SF Trib.	500 SF Trib.
4	-13.9	-11.9	-11.9
5	-17.1	-13.3	-13.3
4 and 5	12.7	10.8	10.8

Roof Zones:			
Zone	Design Pressures (psf)		
	10 SF Trib.	100 SF Trib.	500 SF Trib.
Zones 1 and 2e	-18.1	-12.3	-12.3
Zones 2n, 2r and 3e	-28.9	-14.9	-14.9
Zone 3r	-34.4	-17.1	-17.1
All Zones	8.4	5.9	5.9



Gable and Flat Roofs,  $7^\circ < \theta <= 45^\circ$



Dewberry Response: Same answer as question 25.

# RECEIPT OF ADDENDUM

**RE: GREटना CDGB-MIT MT 140 (PUBLIC SAFETY BUILDING EXPANSION)**

**PROJECT NO. 50184155**

## Addendum No. 2

I \_\_\_\_\_ with \_\_\_\_\_  
(Print Name) (Company Name)

Received **Addendum No. 2**

on \_\_\_\_\_.  
(Date)

\_\_\_\_\_  
(Signature)

**City of Gretna - CDBG-MIT Public Safety Building Expansion**

BID FORM					
PAY ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
<b>GENERAL COSTS</b>					
1.01	MOBILIZATION	LS	1	\$ -	\$ -
1.02	MAINTENANCE OF TRAFFIC	LS	1	\$ -	\$ -
1.03	CLEARING & GRUBBING	LS	1	\$ -	\$ -
1.04	BONDS AND INSURANCE	LS	1	\$ -	\$ -
1.05	CERTIFIED AS-BUILTS	LS	1	\$ -	\$ -
1.06	TESTING AND LAYOUT	LS	1	\$ -	\$ -
<i>SUBTOTAL</i>					\$ -
<b>CIVIL</b>					
2.01	SEDIMENT BARRIER (SILT FENCE)	LF	725	\$ -	\$ -
2.02	BUILDING/MISC. DEMO	LS	1	\$ -	\$ -
2.03	TREE REMOVAL	EA	3	\$ -	\$ -
2.04	EARTHWORK	LS	1	\$ -	\$ -
2.05	LIMEROCK BASE COURSE	SY	2095	\$ -	\$ -
2.06	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG 76-22	TN	232	\$ -	\$ -
2.07	8" CONCRETE PAVEMENT	SY	145	\$ -	\$ -
2.08	6" CONCRETE SIDEWALK	SY	60	\$ -	\$ -
2.09	CONCRETE BOLLARDS	EA	9	\$ -	\$ -
2.10	PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELIP/ARCH 15" CD	LF	75	\$ -	\$ -
2.11	PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELIP/ARCH 18" CD	LF	52	\$ -	\$ -
2.12	ELLIPTICAL CONCRETE ENDWALLS	EA	6	\$ -	\$ -
2.13	6.0' CHAIN-LINK FENCE (BLACK VINYL)	LF	336	\$ -	\$ -
2.14	6" RIBBON CURB	LF	50	\$ -	\$ -
2.15	PERFORMANCE TURF, SOD	SY	2734	\$ -	\$ -
2.16	CONCRETE CURB STOPS	EA	15	\$ -	\$ -
2.17	SIGNAGE	EA	4	\$ -	\$ -
2.18	4" SEWER SERVICE	LF	35	\$ -	\$ -
2.19	MISC. UTILITY ADJUSTMENTS (MONITORING WELLS)	EA	8	\$ -	\$ -
2.20	STRIPING/PAVEMENT MARKINGS	LS	1	\$ -	\$ -
<i>SUBTOTAL</i>					\$ -
<b>BUILDING (ARCH AND MEP)</b>					
3.01	BUILDING ADDITION	LS	1		
<i>SUBTOTAL</i>					\$ -
<b>TOTAL</b>					\$ -
<b>CONTINGENCY</b>					
4.01	RELOCATE WATER SERVICE	LF	1	\$ -	\$ -
4.02	RELOCATE SEWER MAIN	LF	1	\$ -	\$ -

**Material Notes:**

- Concrete - Normal weight only, with 28 day compressive strengths of:
  - Slabs on grade.....3000 psi
  - Footings.....3000 psi
- Steel
  - Reinforcing steel bars.....ASTM A615, Grade 60
  - Welded wire fabric.....A602, Fy = 50 ksi
  - Plates, angles, bars.....ASTM A36, Fy = 36 ksi
  - Anchor bolts.....ASTM F1554, grade 36 min. or Grade 55
- Grout - 5000 psi, non-shrink
 

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Scope of work has been designed and shall be constructed in accordance with the following applicable building codes:  
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**Concrete Notes:**

- Concrete work shall conform to all requirements of ACI 301 "Specification for Structural Concrete", unless noted modified as required for these contract documents.
- Concrete mix designs shall be established by the supplier in accordance with ACI specifications. Mix designs and back-up data shall be submitted to the engineer for approval prior to placement of concrete.
- All concrete shall be normal weight (150 pcf) unless noted otherwise on the plans.
- Air entraining agents conforming to ASTM C260 shall be added to all concrete exposed to freezing and thawing to produce 5% entrained air. Air-entraining admixtures shall not be added to concrete used for trowel finished interior slabs-on-grade or elevated slabs.
- Concrete for floor slabs shall have a maximum slump of 5 inches at the point of delivery.
- No calcium chloride shall be used in any concrete.
- "C.J." on slab and foundation plan indicates a key-formed construction joint or saw-cut contraction joint in the concrete slab. Saw-cut joints shall be 1/4 the slab depth (1" min.) and shall be installed within 24 hours of slab placement. "C.J.'s", if not shown on plans, shall be spaced per note 8. "C.J." shall be placed between isolation joints at columns. "C.J." shall not be placed in elevated slabs. No control joints allowed in column center lines.
- Unless noted otherwise, all interior and exterior slabs on grade shown the structural drawings, including steps shall be 4" thick, of the following type:
  - ACI 309 Type B, Slab with shrinkage control reinforcement -
  - Reinforce slab with 6 x 6 - W1.4 x W1.4 WWF supported at 1" from top of slab.
  - WWF shall lap cross wires plus 2" (minimum at splices). "C.J.'s" are to divide the slab such that concrete within "C.J.'s" is not greater than 12'-0" in either direction.
- Temporary excavation for footings, pipes, pits or other purposes shall be sloped and braced in accordance with OSHA requirements.
- Reinforcing steel placement shall be inspected by a qualified structural engineer in accordance with ACI 318 section 1.3.
- Provide bar supports and spacers in accordance with ACI 315 "Details and Detailing of Concrete Reinforcing".
- Splices not shown on the drawings shall be subject to approval. Lap all tension bars a minimum of 24 bar diameters unless noted otherwise.
- Welding of reinforcing steel shall not be permitted except as authorized or directed by the structural engineer.
- Horizontal reinforcement in footings and walls shall be continuous around corners.
- All field bending of reinforcing shall be done cold. Heating of bars is not permitted.
- Principal openings are shown on structural drawings. See architectural, mechanical, and electrical drawings for additional openings, embeds, sleeves, depressions, slopes, etc.

- Unless noted otherwise, all openings shall be reinforced with (2) #5 bars, all sides, extended a minimum of 3'-0" beyond opening.
- Provide a minimum of (2) #4 bars, 4'-0" long at reentrant corners of slabs-on-grade and elevated slabs, centered about corner, unless noted otherwise.
- All debris shall be removed from forms prior to placement of concrete.
- Unless noted otherwise, vertical control joints in step walls and retaining walls shall be placed no more than 25'-0" apart and shall be 3/4" deep "V" chamfered on both sides. Construction joints shall occur at control joints and shall be keyed. 50% of the specified horizontal reinforcement shall stop 3" each side of the control joint.
- Foundation walls shall be laterally braced until concrete has attained the specified design strength and all excavations are properly backfilled.
- Minimum concrete cover for cast-in-place concrete reinforcement:
  - Concrete cast against and permanently exposed to earth.....3 inches
  - Concrete exposed to earth or weather:
    - No. 6 bars and larger.....2 inches
    - No. 5 bars and smaller.....1 1/2 inches
  - Concrete not exposed to weather or in contact with ground:
    - Slabs, walls, joists (No. 11 bars and smaller).....3/4 inches
    - Beams, Columns (All reinforcement).....1 1/2 inches
- Refer to geotechnical engineer's report for subgrade preparation including crushed aggregate base and vapor barrier requirements and recommendations exceeding any shown here.
- Concrete test reports shall be available at job site.
- All foundation and retaining walls shall be backfilled per geotechnical engineer's recommendations.

**General Foundation Notes:**

- General Notes For Foundation
- All construction conform to the 2023 Florida Building Code, Rev 8.
  - In the event of a conflict between plans and the codes, the codes shall govern.
  - Lot shall be landscaped to prevent the detention of surface water.
  - Concrete: 3000 psi Steel: Grade 60
  - All fill shall be compacted to 95% of maximum dry density as determined by the Modified Proctor Test.
    - Definition:
      - a. Compaction test will not be required when the fill is less than 12 inches in depth, the inspector's shall use best judgement.
      - b. When the fill is 12 inches to 18 inches in depth, compaction test will be required only if the inspector's judgement is that the compaction is questionable.
      - c. When the fill is 18 inches in depth or more, compaction test will be required.
    - All splices in footing steel shall be lapped 40 bar diameters in concrete block and 30 bar diameters in monolithic slabs.
    - Steel interior grade beams shall be spliced to steel in exterior grade beams to assure continuity of footing throughout structure.
    - Exterior grade beams shall run continuous around the perimeter of the structure to assure continuity.
    - All concrete slabs shall have control joints to control cracking spaced maximum of 15 feet in each direction.
    - Soil shall be chemically treated for termites.
    - The contractor shall verify all dimensions at the site prior to beginning construction.
    - All reinforcing steel shall be located min. 3" from concrete surface.
    - A clean compacted sand fill at least 18 inches thick shall be placed under all exterior and interior grade beams. Note: This may be omitted in areas that have at least 30 inches of clean compacted natural soil that has minimum bearing capacity of 2000 psi and is free of much organic material and plastic clays and consist of at least 50% sand (opt.)
    - Any organic material under foundation shall be removed prior to construction, unless otherwise specified.
    - For stem walls 5'6" or higher, formwork shall be braced before backfilling.
    - Concrete block shall have minimum compressive strength of 1500 psi (Grade N-1 or better).
    - Additional #5 with filled cells at least bearing points on walls.

**Design Loads:**

**Live Loads:**  
Roof: 20 psf  
Floor: 40 psf

**Dead Loads:**  
Roof: 10 psf

**Wind Loads:**  
Wind Speed: Vult = 140 mph  
Exposure Category: "B"  
Enclosure Classification: "Enclosed"  
Risk Category: IV

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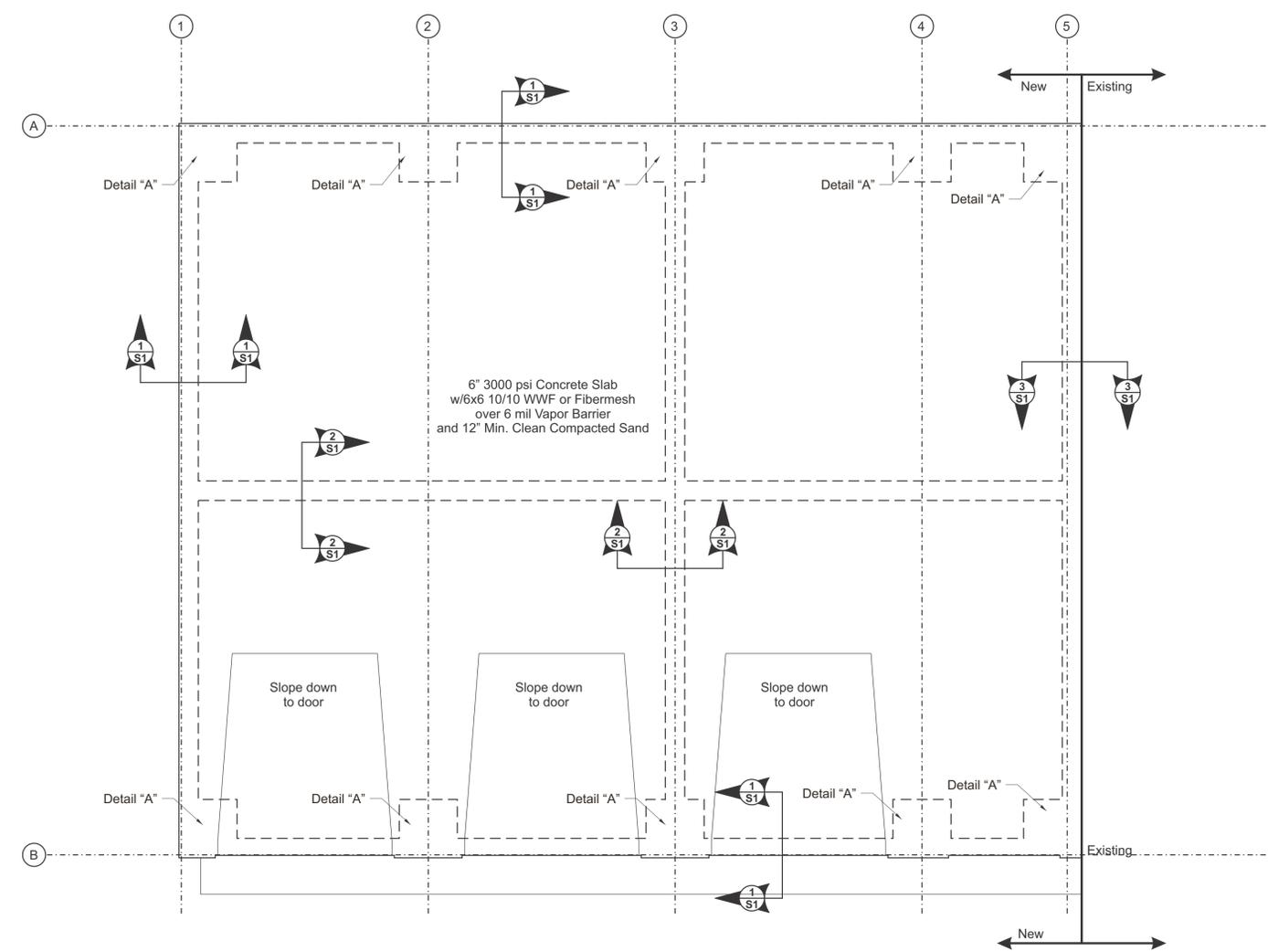
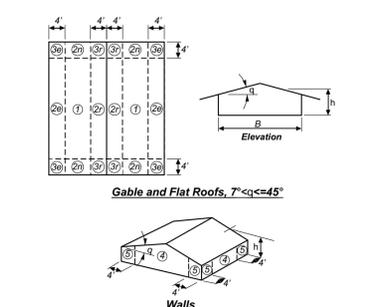
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**Component and Cladding Design Pressures**

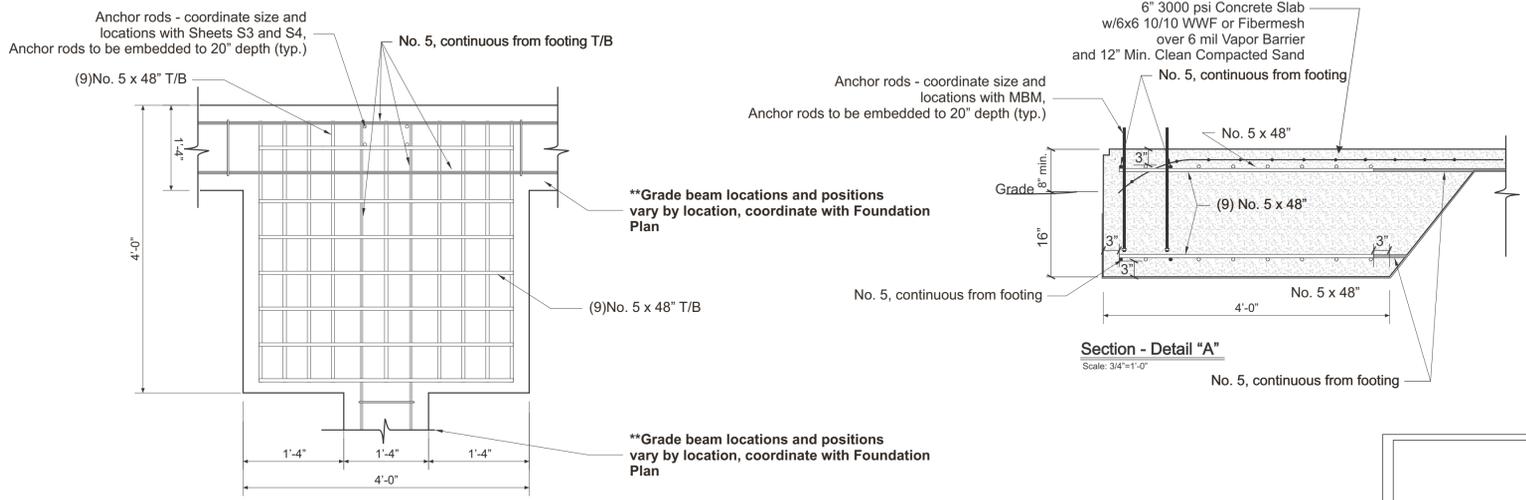
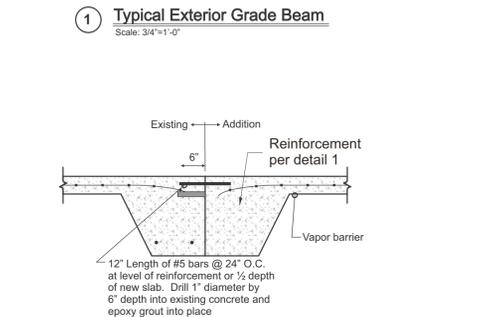
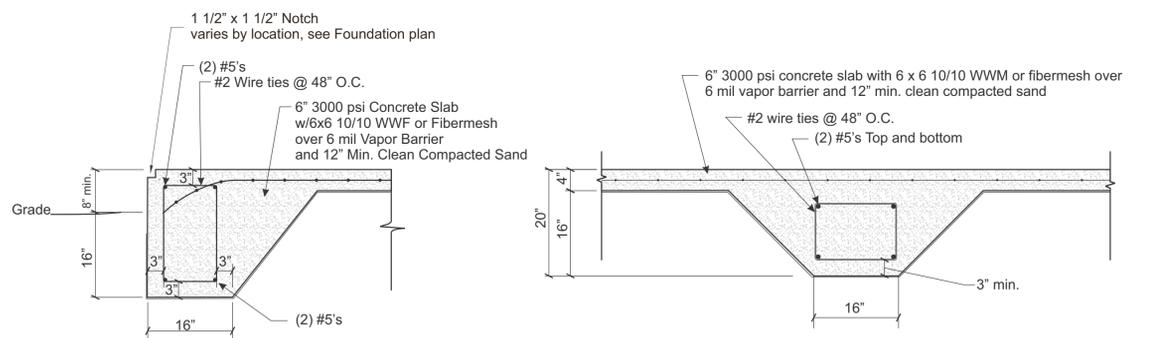
Zone	Wall Zones		
	10 SF Trib.	100 SF Trib.	500 SF Trib.
4	-13.9	-11.9	-11.9
5	-17.1	-13.3	-13.3
4 and 5	12.7	10.8	10.8

Zone	Roof Zones		
	10 SF Trib.	100 SF Trib.	500 SF Trib.
Zones 1 and 2e	-18.1	-12.3	-12.3
Zones 2n, 2r and 3e	-28.9	-14.9	-14.9
Zone 3r	-34.4	-17.1	-17.1
All Zones	8.4	5.9	5.9



**\*\*Refer to Architectural for Dimensions!**  
**\*\*\*Design is based on assumed MBM reactions, submit MBM reactions to EOR prior to construction for review and approval!**



This item has been digitally signed and sealed by Thomas Beitelman on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



1150 E. Tennessee Street  
 Tallahassee, FL, 32308  
 850-222-SOIL (7645)  
[www.segeogroup.com](http://www.segeogroup.com)

CLIENT Dewberry Engineers, Inc. JOB No: 25-768  
 JOB NAME 183 First Street DRILL DATE: September 16, 2025  
 Tax ID: 2-32-3N-4W-0430-00063-0020 COUNTY: Gadsden

Boring Number	Depth (inches)		UNIFIED SYMBOL	SOIL DESCRIPTION AND DRILLING CONDITIONS
	FROM	TO		
B-1	0"	11"	SP-SW	10YR 5/2 Grayish Brown Moist Loamy Sand With Gravel
	11"	16"	SP-SW	10YR 6/4 Light Yellowish Brown Moist Loamy Sand
	16"	28"	SP-SW	10YR 6/6 Brownish Yellow Moist Loamy Sand
	28"	37"	SC-SM	10YR 6/6 Brownish Yellow Moist Weak Sand Clay Loam With Few 7.5YR 7/1 Light Gray Mottles
	37"	45"	SC-SM	10YR 6/6 Brownish Yellow & 7.5YR 5/8 Strong Brown Moist Weak Sand Clay Loam With Common & Distinct 7.5YR 7/1 Light Gray Mottles <b>Seasonal High Groundwater Table At 37"</b>
	45"	54"	SC-SM	10YR 6/6 Brownish Yellow & 7.5YR 5/8 Strong Brown Moist Sand Clay Loam With Common & Distinct 7.5YR 7/1 Light Gray Mottles
	54"	69"	SC-SM	7.5YR 5/8 Strong Brown & 10YR 6/4 Light Yellowish Brown Moist Sand Clay Loam With Common & Distinct 7.5YR 7/1 Light Gray Mottles
	69"	77"	SC-SM	2.5YR 4/8 Red & 7.5YR 5/8 Strong Brown Moist Sand Clay Loam With Common & Distinct 7.5YR 7/1 Light Gray Mottles
	77"	120"	SC-SM	2.5YR 4/8 Red & 2.5YR 6/3 Light Reddish Brown & 10YR 5/8 Yellowish Brown Moist Sand Clay Loam With Common & Distinct 7.5YR 7/1 Light Gray Mottles
<i>Static Groundwater Table Not Encountered</i>				

**GENERAL NOTES**

- 1) Testing was performed at the location(s) indicated/flagged by the Client. Borings conducted using hand augers were performed as per ASTM D-1452. Borings conducted using a Simco model 2400 drill rig were performed as per ASTM D-1586.
- 2) Boring information provided in this report is based on the driller's logs, collected samples, and visual examination of soils in the field. Boring depths indicated are approximate. The Unified Soil Symbols are based on visual descriptions and estimates. Sieve analysis would be necessary to specifically identify the Unified Soil Symbol types. No inference of the approximate soil bearing capacities or soil compaction characteristics is made outside of the test locations and test depths within this report.
- 3) Subsurface conditions are expected to vary from one location to the next. The borings provide a characterization of subsurface conditions at the test location; however, local variations are expected to occur, and significant differences in subsurface conditions may be encountered at other locations not tested. No inference is made regarding the presence or absence of karst or subsidence features.
- 4) Groundwater table elevations are representative of the conditions present at the time of testing. Groundwater tables are subject to fluctuation, depending on the amount of rainfall and other factors. The absence of a groundwater table does not mean it will not occur at the tested depth(s) under other conditions.

**SITE NOTES**

No anomalous features such as fat clay/elastic silt (locally referred to as "pipe clay"), heavy organic material, shallow groundwater (within 5 foot depth), or voids encountered within test borings.

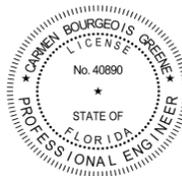
Gadsden County, 183 First Street.  
Seasonal High Groundwater Table Boring  
Project: 25-768

The Seasonal High Groundwater Table determinations were evaluated utilizing the Florida Department of Health Guidelines for on-site wastewater site evaluations. The method is outlined and described on the following website and manual: [http://www.doh.state.fl.us/Environment/ostds/pdfiles/forms/soils\\_manual.pdf](http://www.doh.state.fl.us/Environment/ostds/pdfiles/forms/soils_manual.pdf).

**BORING LOCATION FIGURE (Not to Scale):**



NOTE: Bold numbers located on Figure are approximate boring locations.  
Boring location shown on a site plan from the client.  
Figure source from county property appraiser.  
Boring  $\approx$  75' from the Ash Avenue &  $\approx$  45' from First Street .  
Borings conducted by hand.



This item has been digitally signed and sealed by Carmen Bourgeois Greene, PE on the date adjacent to the seal using a SHA authorization code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

Carmen Bourgeois Greene, P.E.  
FL Reg. No. 40890





Dewberry Engineers Inc. 2700 S. Blair Stone Rd. Ste. 204 D Tallahassee, FL 32301 850.523.0062

CDBG-MIT PUBLIC SAFETY BUILDING EXPANSION CITY OF GRETNA GRETN, FLORIDA

GENERAL NOTES:

- 1. THE EXACT LOCATION AND ELEVATION OF EXISTING STRUCTURES, UTILITIES, AND PIPING SHALL BE PHYSICALLY VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE CONSTRUCTION BEGINS. THESE DRAWINGS DO NOT INTEND TO SHOW IN COMPLETE DETAIL ALL EXISTING STRUCTURES, UTILITIES, OR PIPING. THE CONTRACTOR SHALL EXAMINE ALL AVAILABLE RECORDS AND MAKE ALL EXPLORATIONS AND EXCAVATIONS AS REQUIRED TO DETERMINE THE LOCATION OF EXISTING STRUCTURES, UTILITIES, AND PIPING, WHENEVER NECESSARY. THE OWNER RESERVES THE RIGHT TO CHANGE LOCATION OF LINES TO AVOID CONFLICT WITH EXISTING STRUCTURES, UTILITIES, OR PIPING. THE LOCATIONS OF UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED BY THEIR OWNER OR ENGINEER.
2. THE CONTRACTOR SHALL CHECK PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNER'S ENGINEER OF ANY CONFLICT BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.
3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES ABOVE OR BELOW GROUND THAT MAY OCCUR AS A RESULT OF WORK CALLED FOR IN THESE CONTRACT DOCUMENTS.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LEARN, KNOW, AND COMPLY WITH THE REGULATIONS, ORDINANCES, PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND COMPLY WITH THE CONDITIONS OF THE VARIOUS PERMITS OF THE GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL SCHEDULE THE REQUIRED INSPECTIONS AND APPROVALS IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT CONDITIONS. THE CONTRACTOR SHALL NOTIFY THE NECESSARY AGENCIES OF CONSTRUCTION COMMENCEMENT.
6. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO SHALL BE OF LATEST ISSUE AND SHALL BE CONSIDERED A PART OF THESE DOCUMENTS AS THOUGH INCLUDED.
7. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN ADEQUATE TRAFFIC CONTROL AND TO PROVIDE DETOURS AROUND CONSTRUCTION ACTIVITIES. NO STREET SHALL REMAIN CLOSED TO TRAFFIC OVERNIGHT. IN ADDITION, THE CONTRACTOR SHALL COOPERATE WITH LOCAL RESIDENTS IN GAINING ACCESS TO THEIR HOMES AND BUSINESSES DURING WORKING HOURS AND SHALL ASSIST AT ALL TIMES WHEN VEHICLES EXPERIENCE TROUBLE DUE TO CONSTRUCTION ACTIVITIES.
8. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL INSTALL ANY REQUIRED SILT FENCING OR BAILED HAY BARRIERS (FLORIDA EROSION CONTROL MANUAL) FOR SILT/EROSION CONTROL. THERE WILL BE NO DIRECT PAYMENT FOR THIS WORK. COST SHALL BE INCLUDED IN OTHER ITEMS OF WORK. LOCATION SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED IN THE FIELD.
9. THE CONTRACTOR SHALL INSTALL ALL TRAFFIC CONTROL DEVICES REQUIRED FOR THE PROJECT IN ACCORDANCE WITH THE LATEST EDITION OF THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL.
10. WHERE IT BECOMES NECESSARY TO TEMPORARILY REMOVE, REPOSITION, OR SUPPORT EXISTING FACILITIES, UTILITY POLES, ETC. THIS WORK SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE AND IN ACCORDANCE WITH REQUIREMENTS OF THE OWNER OF THE EXISTING FACILITY, UTILITY POLE, ETC. THE CONTRACTOR SHALL GIVE PROPER NOTICE TO THE UTILITIES. THE CONTRACTOR SHALL PHYSICALLY EXAMINE THE ENTIRE PROJECT SITE AND INFORM HIMSELF FULLY IN REGARD TO ALL CONDITIONS PERTAINING TO THE PLACE WHERE THE WORK IS TO BE PERFORMED FOR PURPOSE OF DETERMINING HIS COST TO PERFORM THE WORK. THE CONTRACTOR SHOULD PAY SPECIAL ATTENTION TO AREAS INVOLVING CLEARING AND GRUBBING, EXISTING FACILITIES REMOVAL AND REPLACEMENT, SUPPORT ON RELOCATION, AND WORK INVOLVED IN WETLAND AREAS.
11. WORK ALONG STREETS MAY REQUIRE THE REMOVAL AND REPLACEMENT OF EXISTING DRAINAGE PIPE, STRUCTURES, HEADWALLS, ETC.. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR RELATED ITEMS OF WORK.
12. COPIES OF TEST REPORTS FOR ASPHALT, SUBGRADE, FILL, AND BACKFILL UNDER ROADWAYS AND STRUCTURES, AND UTILITY TRENCHES SHALL BE PROVIDED DIRECTLY TO THE ENGINEER FOR APPROVAL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE TESTING AND INSURE THAT ALL APPLICABLE TESTS HAVE BEEN PERFORMED. FAILURE TO OBTAIN TEST RESULTS AT ANY POINT OF CONSTRUCTION WILL REQUIRE THE REMOVAL OF THE IMPROVEMENT AND REPLACEMENT BY THE CONTRACTOR. IT SHOULD BE NOTED THAT THE ENGINEER WILL REQUIRE COMPACTION TESTING IN ACCORDANCE WITH THE TESTING SCHEDULE FOR UTILITY TRENCH FILL AND BACKFILL.
13. ANY DISTURBED SIGNS MUST BE REINSTALLED TO EXISTING OR ACCEPTABLE CONDITION BY THE OWNER AT THE CONTRACTOR'S EXPENSE.
14. CONTRACTOR SHALL HAVE COPIES OF ALL PERMITS (CITY, COUNTY, FDOT & FDEP) IN POSSESSION AT ALL TIMES DURING CONSTRUCTION. ANY INDIVIDUAL CREW OR INDIVIDUAL PERSON WORKING ON THE INSTALLATION OF ANY PART OF THIS PROJECT SHALL HAVE A SET OF PLANS AND SPECIFICATIONS WITH THEM AT ALL TIMES.
15. TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TESTING SCHEDULE CONTAINED WITHIN THESE PLANS. SELECTION AND CONTRACTING WITH THE TESTING FIRMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE ALL TESTS.
16. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE THE ACTIVITIES OF THE UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO TV, TELEPHONE, GAS, POWER, ETC., AND PROVIDE IN ACCORDANCE WITH THE UTILITY COMPANY ANY NECESSARY CONDUITS FOR CROSSINGS UNDER PAVEMENT. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS SERVICE. ANY DAMAGE CAUSED BY THE UTILITY COMPANY TO THE IMPROVEMENTS OF THE CONTRACTOR SHALL BE REPAIRED IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT REPAIRS ARE PERFORMED, EITHER BY THE CONTRACTOR OR THE UTILITY COMPANY AT NO COST TO THE OWNER.
17. ALL CONSTRUCTION STAKING SHALL BE DONE AT CONTRACTORS EXPENSE.
18. STATIONING ON THE PLANS RELATES TO THE CENTERLINE OF ALL ROADWAYS/ RIGHT-OF-WAYS AND SHALL BE USED FOR LOCATION PURPOSES ONLY. CONTRACTOR SHALL NOT USE STATIONING WHEN CALCULATING PIPE LENGTHS.
19. THE CONTRACTOR SHALL TAKE WHATEVER PRECAUTIONS NECESSARY TO AVOID TRESPASSING AND DAMAGING PRIVATE PROPERTY.
20. ALL SPOIL MATERIAL FROM EXCAVATION SHALL BE PLACED ON THE UPLAND SIDE OF ANY SLOPED CONSTRUCTION AREA.
21. THE CONTRACTOR SHALL TAKE WHATEVER STEPS NECESSARY TO PREVENT EROSION INTO NEARBY WETLANDS WHICH INCLUDES TURBIDITY CURTAINS, HAY BALES, AND ALL OTHER METHODS TO CONTROL EROSION AT NO ADDITIONAL COST TO OWNER AND MAY BE DIRECTED TO DO SO BY THE ENGINEER.
22. THE CONTRACTOR SHALL MAINTAIN A REASONABLE ACCESS TO ALL RESIDENCES AND BUSINESSES DURING CONSTRUCTION.
23. ALL EXISTING CONCRETE, ASPHALT, TREES, STUMPS, AND OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FLORIDA LAWS.
24. DEWATERING: SHOULD LOWERING OF GROUNDWATER BE NECESSARY FOR THE INSTALLATION OF CONCRETE STRUCTURES, GRAVITY SEWER, FORCEMAINS, WATERMAINS, ETC., OR TO PREVENT LATERAL MOVEMENT OF MATERIAL UNDER CONCRETE ALREADY PLACED, SUCH LOWERING SHALL BE ACCOMPLISHED BY MEANS OF A WELL POINT SYSTEM OR OTHER APPROVED MEANS, AT CONTRACTOR'S EXPENSE. COMPREHENSIVE PLANS FOR DEWATERING OPERATIONS, IF USED, SHALL BE SUBMITTED BY THE CONTRACTOR TO ENGINEER PRIOR TO INSTALLATION.
25. CONTRACTOR SHALL FURNISH "AS BUILT PLANS" INDICATING LOCATIONS OF ALL FEATURES, PIPES, PONDS, PADS, MANHOLES, FITTINGS, VALVES, AND DEAD END RUNS WITH THREE (3) PHYSICAL FEATURES (LOT CORNERS, TREES, ETC.).
26. THE CONTRACTOR SHALL REMOVE AND REPLACE, TO THEIR ORIGINAL NATURE, ALL DISTURBED MATERIALS OR OBJECTS WITHIN THE PATH OF THE NEW UTILITIES AS NECESSARY. ALL REPLACED MATERIALS SHALL BE EQUAL OR BETTER AND SHALL BE APPROVED BY THE ENGINEER. THIS INCLUDES ALL LANDSCAPING WITHIN THE RIGHT OF WAY IN THE PATH OF THE NEW UTILITIES.
27. CONTRACTOR SHALL FOLLOW ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR CONSTRUCTION.
28. A TWO AND ONE HALF FOOT STRIP OF SOD SHALL BE INSTALLED ON THE EDGE OF ALL ASPHALT AND ASPHALT MILLING AREAS AND AROUND ALL ABOVE GROUND CONCRETE STRUCTURES INCLUDING BUT NOT LIMITED TO VALVE PADS, BLOW OFF VAULTS, AND AIR RELEASE VAULTS. ALL OTHER DISTURBED AREAS SHALL BE RESTORED WITH SEED AND MULCH UNLESS OTHERWISE SPECIFIED IN PLANS.
29. PROPOSED SPOT ELEVATIONS REPRESENT PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.

AS BUILT NOTES: AS BUILT/RECORD DRAWINGS

- 1. CONTRACTOR SHALL PROVIDE ENGINEER OF RECORD TWO SIGNED AND SEALED COPIES OF AS-BUILT DRAWINGS OF ALL FINISHED IMPROVEMENTS. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS OF ALL FINISHED IMPROVEMENTS IN PDF AND DWG FORMAT.
2. AS-BUILT DRAWINGS TO BE PERFORMED AND CERTIFIED BY A FLORIDA LICENSED PROFESSIONAL LAND SURVEYOR.
3. AS-BUILT DRAWINGS SHALL BE SUBMITTED AFTER COMPLETION OF ALL IMPROVEMENTS AND PRIOR TO FINAL INSPECTION.
4. AS BUILT DRAWINGS SHALL INCLUDE, BUT NOT BE LIMITED TO:
A. DETAIL OF THE POND CONTROL STRUCTURE INCLUDING STRUCTURE TYPE, STRUCTURE SIZE, INVERT OF ALL PIPES, ORIFICES, WEIRS AND THE INVERT CONNECTIONS AT OFF-SITE CONVEYANCE SYSTEMS, GRATES AND SKIMMERS.
B. POND CONSTRUCTION DETAILS SHOWING THE POND TOPOGRAPHY, TOP OF THE POND BERM/WALL AND POND BOTTOM ELEVATIONS AND THE LOCATION OF SAND FILTERS.
C. SHOW ENTIRE STORM WATER CONVEYANCE SYSTEM INCLUDING THE SIZE TYPE AND INVERT OF ALL PIPES, CHANNELS, ROOF DRAIN SYSTEMS, STRUCTURES, CURBING AND SPOT SHOT ELEVATIONS IN VEHICLE USE AREAS. DRAINAGE STRUCTURES SHALL INCLUDE "X" AND "Y" COORDINATES.
D. SHOW ALL TRAFFIC CONTROL DEVICES INCLUDING SIGNS, SIGNALS, PARKING STRIPPING AND PAVEMENT MARKINGS.
E. DELINEATE CONSERVATION AND DRAINAGE EASEMENT BOUNDARIES AND LABEL WITH THE "OR" BOOK AND PAGE NUMBER.
F. ANY ADDITIONAL ITEMS REQUIRED BY PERMITTING JURISDICTION.

ADA COMPLIANCE NOTES:

- THE CONTRACTOR & OWNER WILL BE HELD ACCOUNTABLE DURING CONSTRUCTION FOR ALL SITE IMPROVEMENTS. COMPLIANCE WITH FLORIDA STATUTES 553.5041 (F.S.), AND THE 2020 FLORIDA BUILDING CODE, ACCESSIBILITY, 7TH EDITION (FBC-A) IS MANDATORY. IF NON-COMPLIANT AT FINAL INSPECTION, CONTRACTOR WILL BE REQUIRED TO MODIFY CONSTRUCTION TO COMPLY WITH F.S. AND FBC-A. THE FOLLOWING ITEMS TAKE PRECEDENCE AND SUPERSEDE OTHER SITE DETAILS ON DRAWINGS: ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON AN ACCESSIBLE ROUTE NO LESS THAN 44" WIDE SO THAT USERS WILL NOT BE COMPELLED TO WALK OR WHEEL BEHIND PARKED VEHICLES EXCEPT BEHIND HIS OR HER OWN VEHICLE. §208.1 AND §502.3, FBC-A AND F.S. 553.5041.
2. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SERVING A PARTICULAR BUILDING SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE FROM THE ACCESSIBLE (H/C) PARKING TO AN ACCESSIBLE ENTRANCE. §208.3.1 FBC-A AND F.S. 553.5041(5)(B).
3. ACCESSIBLE PARKING SPACES SHALL BE 12' WIDE, AND OUTLINED WITH BLUE PAINT. §502.2 AND §502.6, FBC-A
4. ACCESS AISLES REQUIRED ADJACENT TO PARKING SPACES SHALL BE 5' WIDE WITH DIAGONAL STRIPING. §502, FBC-A
5. ACCESSIBLE PARKING AND ACCESS AISLES SHALL BE LEVEL (NOT TO EXCEED 1:48) ON A STABLE FIRM & SLIP RESISTANT SURFACE. RE: §302.1, §502.3, FBC-A
6. ACCESSIBLE PARKING SIGNS SHALL BE FDOT APPROVED AND SHALL READ "PARKING BY DISABLED PERMIT ONLY" AND SHALL INDICATE A \$250 FINE FOR ILLEGAL USE. INSTALL SIGNS A MINIMUM 60"(INCHES) FROM THE GROUND TO THE BOTTOM OF THE SIGN(S). RE: §502.6 AND F.S. 553.5041.
7. CURB RAMPS SHALL NOT EXCEED 1:12 SLOPE, AND CURB RAMP FLARES SHALL NOT EXCEED 1:10 SLOPE. CURB RAMPS AND FLARED SIDES SHALL NOT ENCR OACH UPON PARKING SPACES, ACCESS AISLES, OR VEHICULAR TRAFFIC LANES. THE COUNTER SLOPE OF ADJACENT ROAD SURFACES & GUTTERS SHALL NOT EXCEED 1:20. RE: §405.2, §406, FBC-A
8. CURB RAMPS SHALL HAVE A LANDING WITH A MINIMUM CLEAR LENGTH OF 36" SHALL BE LOCATED AT THE TOP SIDE OF EACH CURB RAMP. A CLEAR WIDTH AT LEAST AS WIDE AS THE CURB RAMP (EXCLUDING FLARED SIDES) LEADING TO IT. EXCEPTION: FOR ALTERATIONS, WHERE THERE IS NO LANDING, CURB RAMP FLARES SHALL BE PROVIDED, AND SHALL NOT BE STEEPER THAN 1:12 SLOPE. RE: §406, FBC-A
9. ALL RAMPS WITH A RISE GREATER THAN 6" SHALL PROVIDE EDGE PROTECTION COMPLYING WITH §405.9 FACBC. RAMPS SHALL HAVE 60" MIN LEVEL LANDINGS AT THE TOP & BOTTOM. RE: §405.7, FBC-A.
10. ALL RAMPS WITH A RISE GREATER THAN 6" SHALL PROVIDE EDGE PROTECTION COMPLYING WITH §405.9 FACBC. RAMPS SHALL HAVE 60" MIN LEVEL LANDINGS AT THE TOP & BOTTOM. RE: §405.7, FBC-A.
11. ACCESSIBLE ROUTES TO "MAIN ENTRY" FROM AN ACCESSIBLE PARKING SPACE, AND FROM THE "PUBLIC WAY", SHALL NOT EXCEED 1:20 SLOPE (UNLESS RAMPS, HANDRAILS WITH PROPER EXTENSIONS ARE PROVIDED) WITH CROSS SLOPE NOT IN EXCESS OF 1:48. RE: §206, §402 AND §403, FBC-A.
12. \*CONNECT BUILDINGS WITHIN THE SAME SITE WITH AN ACCESSIBLE ROUTE WHICH SHALL NOT EXCEED 1:20 SLOPE (UNLESS RAMPS AND HANDRAILS ARE PROVIDED) AND A MAXIMUM CROSS SLOPE OF 1:48. RE: §206 FBC-A.

MAINTENANCE AND INSPECTION SCHEDULE

- 1. EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EVERY 1/2" RAINFALL EVENT. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
2. MAINTENANCE SHALL BE PERFORMED ON ANY ROCK ENTRANCE THE CONTRACTOR PROVIDES WHEN ANY VOID SPACES ARE FULL OF SEDIMENT.
3. HAY BALES SHALL BE USED IN AREAS WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS. INSPECTION OF THE HAY BALES SHALL TAKE PLACE IMMEDIATELY AFTER EACH RAINFALL AND ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
4. INLET(S)/OUTFALLS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAIN EVENT AND ANY REQUIRED REPAIRS TO THE HAY BALES, SILT FENCE, OR FILTER FABRIC SHALL BE PERFORMED IMMEDIATELY.
5. BARE AREAS OF THE SITE THAT WERE PREVIOUSLY SEEDED OR SODDED SHALL BE RESEEDED OR RESODDED PER MANUFACTURERS' INSTRUCTIONS. ALL SOD ON SLOPES 3:1 OR GREATER SHALL BE PINNED.
6. MULCH AND SOD THAT HAS BEEN WASHED OUT SHALL BE REPLACED IMMEDIATELY. IF NEEDED CONTRACTOR SHALL PIN SOD ON SLOPES STEEPER THAN 4:1
7. MAINTAIN ALL OTHER AREAS OF THE SITE WITH PROPER CONTROLS AS NECESSARY.
8. IF PROPOSED EROSION AND SEDIMENTATION CONTROLS ARE FOUND INEFFECTIVE OR IN NEED OF MAINTENANCE INSPECTOR OR ENGINEER MAY DIRECT INSTALLATION OF ADDITIONAL MEASURES TO PROTECT THE ENVIRONMENT. THE ENGINEER SHALL FURNISH THE CONTRACTOR WITH INFORMATION PERTAINING TO THE CONSTRUCTION, OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL PRACTICES PER FLORIDA ADMINISTRATIVE CODE.

STORMWATER POLLUTION PREVENTION PLAN

- 1. SITE DESCRIPTION: CONSTRUCTION OF A NEW ASPHALT PARKING LOT, UTILITIES WITH ONSITE STORMWATER RETENTION AREA.
2. CONSTRUCTION ACTIVITY: CONSTRUCTION OF A NEW ASPHALT PARKING LOT, UTILITIES WITH ONSITE STORMWATER RETENTION AREA.
3. PROJECT LIMITS: SEE SHEET C4.0 (SITE PLAN).
4. PROJECT DESCRIPTION: CONSTRUCTION OF A NEW PUBLIC SAFETY BUILDING, ASPHALT PARKING LOT, UTILITIES WITH ONSITE STORMWATER RETENTION AREA.
5. MAJOR SOIL DISTURBING ACTIVITIES: N/A
6. TOTAL DISTURBED AREA: 54,163 SQUARE FEET OR 1.243 ACRES.
7. DESCRIPTION OF SOIL OR QUALITY OF DISCHARGE: N/A.
8. NAME OF RECEIVING WATERS: N/A.
9. CONTROLS: NARRATIVE: SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS.
A. THE SOIL DISTURBING ACTIVITIES FOR THIS PROJECT ARE AS FOLLOWS - ONLY UPON PROPER PLACEMENT OF ALL EROSION CONTROLS CAN SOIL DISTURBING ACTIVITIES TAKE PLACE. HAY BALES AND SILT FENCE WILL BE USED LATERALLY AT SPECIFIED INTERVALS. HAY BALES SHALL BE USED TO PREVENT SEDIMENTATION FROM ESCAPING PROJECT LIMITS.
B. EROSION AND SEDIMENT CONTROLS:
a. (1) STABILIZATION PRACTICES:
X TEMPORARY SODDING TEMPORARY GRASSING PERMANENT PLANTING, SODDING, OR SEEDING TEMPORARY MULCHING
ARTIFICIAL COVERING BUFFER ZONES PRESERVATION OF NATURAL RESOURCES
b. (2) STRUCTURAL PRACTICES:
SAND BAGGING X SILT FENCES X HAY BALES BERMS DIVERSION, INTERCEPTOR, OR PERIMETER DITCHES
PIPE SLOPE DRAINS FLUMES SEDIMENT TRAPS SEDIMENT BASINS STORM INLET SEDIMENT TRAP (ROCK BAGS)
STONE OUTLET STRUCTURES CURBS AND GUTTERS STORM SEWERS VELOCITY CONTROL DEVICES
TURBIDITY BARRIER RIP RAP
C. OTHER CONTROLS:
a. WASTE DISPOSAL: NO CONSTRUCTION WASTE MATERIAL WILL BE BURIED ON SITE
b. OFF SITE VEHICLE TRACKING:
HAUL ROADS DAMPENED FOR DUST CONTROL
X LOADED HAUL TRUCKS TO BE COVERED WITH TARPULIN
X EXCESS DIRT ON ROAD REMOVED DAILY
c. SANITARY WASTE: N/A
d. FERTILIZERS AND PESTICIDES: FERTILIZERS AND/OR PESTICIDES SHALL BE APPLIED ACCORDING TO MANUFACTURERS' RECOMMENDATIONS BY A LICENSED OR CERTIFIED APPLICATOR AS DIRECTED BY THE PROJECT ENGINEER.
e. NON-STORMWATER DISCHARGE (INCLUDING SPILL REPORTING): NO NON-STORMWATER DISCHARGES ARE ANTICIPATED.
A. APPROVED STATE, LOCAL PLANS, OR STORMWATER PERMITS: APPROVAL SHALL BE OBTAINED BY OWNER.
10. MAINTENANCE:
ALL OF THE CONTROLS SHALL BE MAINTAINED AT ALL TIMES. IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE, BUT NO LATER THAN (7) CALENDAR DAYS AFTER THE SURROUNDING EXPOSED AREA HAS DRIED SUFFICIENTLY TO PREVENT FURTHER DAMAGE FROM HEAVY EQUIPMENT.
11. INSPECTION:
ALL CONTROLS SHALL BE INSPECTED WEEKLY BY THE CONTRACTOR AFTER 0.5" OR MORE OF RAIN. AN INSPECTION AND MAINTENANCE REPORT WILL BE MADE PER EACH INSPECTION. BASED ON INSPECTION RESULTS THE CONTROLS SHALL BE REVISED PER THE INSPECTION REPORTS.
A. THE CONTRACTOR SHALL INITIATE REPAIRS WITHIN 24 HOURS OF INSPECTION THAT INDICATE ITEMS ARE NOT IN GOOD WORKING ORDER. WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH. THE CONTRACTOR SHALL ALSO INSPECT AND CERTIFY THAT CONTROLS INSTALLED IN THE FIELD AGREE WITH THE LATEST STORMWATER POLLUTION PREVENTION PLAN.
B. IF INSPECTIONS INDICATE THAT INSTALLED STABILIZATION AND STRUCTURAL PRACTICES ARE NOT SUFFICIENT TO MINIMIZE EROSION, RETAIN SEDIMENT, AND PREVENT DISCHARGING POLLUTANTS, THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES, AS NEEDED.
C. RECORDS OF THE INSPECTION AND THE CONSTRUCTION PERMIT MUST BE MAINTAINED AT THE CONSTRUCTION SITE AND BE READILY AVAILABLE FOR INSPECTION.

SEAL NOT APPROVED UNLESS ACCOMPANIED WITH A VALID SIGNATURE

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REBEKAH FIELDER, P.E. ENGINEER OF RECORD LICENSE #99533 EB # 8794

PRELIMINARY DOCUMENTS NOT FOR CONSTRUCTION

SCALE

REVISIONS

Table with 3 columns: NO., DESCRIPTION, DATE

DRAWN BY R.FIELDER
APPROVED BY R.FIELDER
CHECKED BY M.FREIDIN
DATE MARCH 2026

TITLE GENERAL NOTES

PROJECT NO. 50184155

C2.0

SHEET NO.

E

D

C

B

A

Vertical text on the left margin: PROJECT NO. 50184155, SHEET NO. C2.0, DATE: MARCH 2026, DRAWN BY: R. FIELDER, CHECKED BY: M. FREIDIN, APPROVED BY: R. FIELDER, TITLE: GENERAL NOTES, PROJECT: CDBG-MIT PUBLIC SAFETY BUILDING EXPANSION, CITY OF GRETN, FLORIDA

**DESCRIPTION:**

OFFICIAL RECORDS BOOK 307, PAGE 125

LOT NUMBERED ONE (1) OF BLOCK NO. 63 IN THE TOWN OF GRETN, FLORIDA, ACCORDING TO A MAP OF PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 18, ON FILE IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF GADSDEN COUNTY, FLORIDA.

ALSO:

OFFICIAL RECORDS BOOK 494, PAGE 959

LOT NUMBERED TWO (2) OF BLOCK NO. 63 IN THE TOWN OF GRETN, FLORIDA, ACCORDING TO A MAP OF PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 18, ON FILE IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF GADSDEN COUNTY, FLORIDA.

**SURVEYOR'S NOTES:**

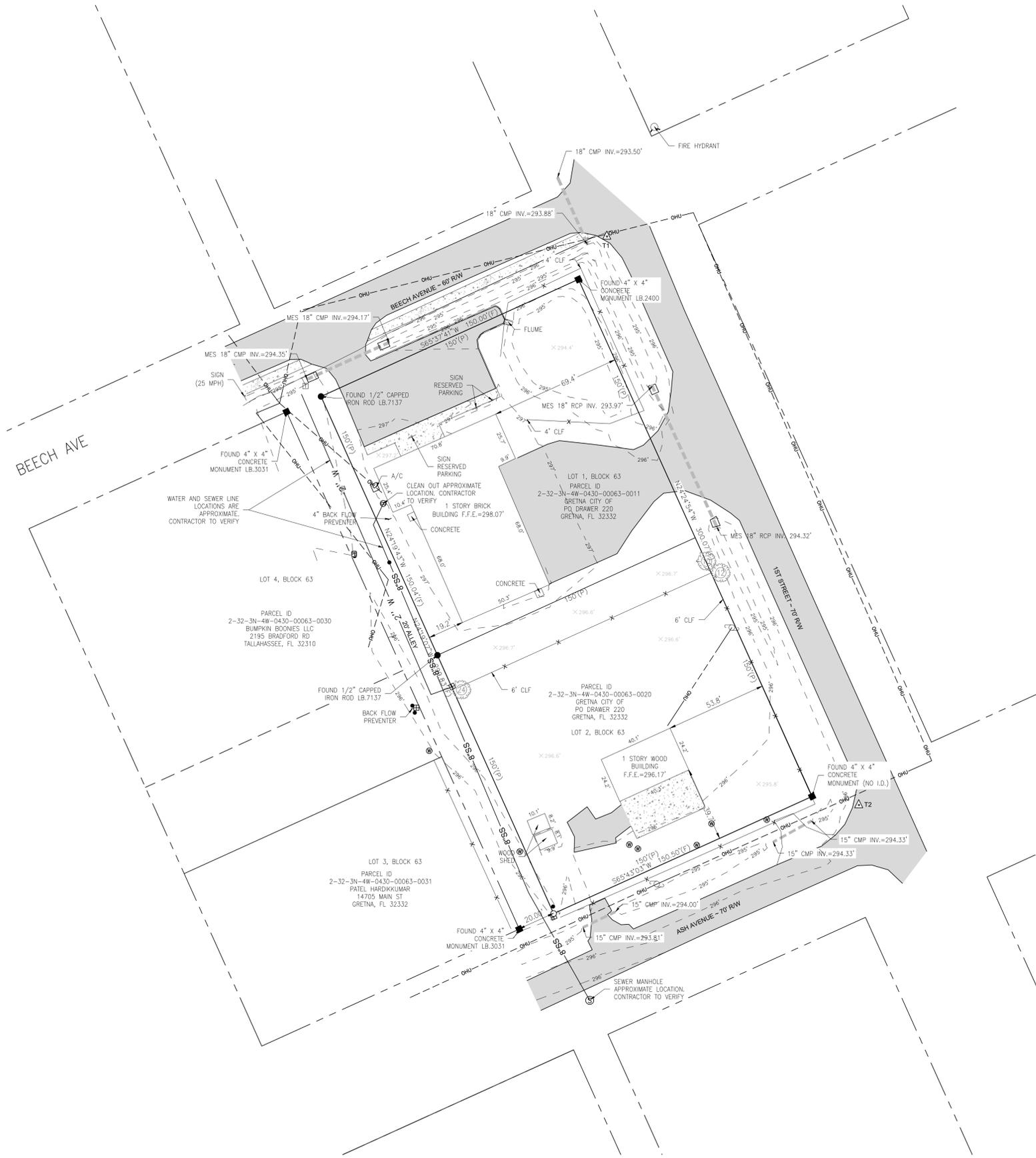
- BEARINGS SHOWN HEREON ARE REFERENCED TO FLORIDA STATE PLANE COORDINATES, NORTH ZONE, NAD 1983/2011, U.S. SURVEY FEET.
- VERTICAL DATUM SHOWN HEREON IS REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- THIS SURVEY, MAP, AND REPORT IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
- FLOOD NOTE: BY GRAPHIC PLOTTING ONLY; THE PROPERTY SHOWN HEREON LIES IN ZONE "X" AS PER THE F.E.M.A FLOOD INSURANCE RATE MAP No.1203902250 FOR THE CITY OF GRETN, GADSDEN COUNTY, FLORIDA; SEE COMMUNITY PANEL No. 120046; WHICH BEARS A EFFECTIVE DATE OF 02/04/2009.
- SOURCE OF INFORMATION: SUBDIVISION PLATS OF THE MAP OF GRETN (P.B.1, PAGE 18), AS RECORDED IN THE PUBLIC RECORDS OF GADSDEN COUNTY, FLORIDA.
- NO TITLE SEARCH, TITLE OPINION OR ABSTRACT WAS PERFORMED BY, NOR PROVIDED TO DEWBERRY ENGINEERS INC. FOR THE SUBJECT PROPERTY. THERE MAY BE DEEDS OF RECORD, UNRECORDED DEEDS, EASEMENTS, ENCROACHMENTS, RIGHT-OF-WAYS, BUILDING SETBACKS, RESTRICTIVE COVENANTS OR OTHER INSTRUMENTS WHICH COULD AFFECT THE BOUNDARIES OR USE OF THE SUBJECT PROPERTY.
- NO ATTEMPT HAS BEEN MADE BY DEWBERRY ENGINEERS INC. TO LOCATE OR DETERMINE UNDERGROUND UTILITIES, UTILITY LINES, FOUNDATIONS, OR OTHER UNDERGROUND STRUCTURES, EXCEPT AS SHOWN.
- NO ATTEMPT HAS BEEN MADE BY DEWBERRY ENGINEERS INC. TO LOCATE OR DETERMINE ENVIRONMENTAL WETLAND LINES, IF ANY EXIST.
- THERE MAY BE ADDITIONAL RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF GADSDEN COUNTY, FLORIDA.
- THE SURVEY DEPICTED HEREON WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OF PRACTICE FOR PROFESSIONAL SURVEYORS AND MAPPERS AS DEFINED IN CHAPTER 5J-17 OF THE FLORIDA ADMINISTRATIVE CODE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS PURSUANT TO SECTION 472.027 OF THE FLORIDA STATUTES.

**SYMBOLS & ABBREVIATIONS:**

- R/W = RIGHT OF WAY
- L.B. = LICENSED BUSINESS
- L.S. = LICENSED SURVEYOR
- P.S.M. = PROFESSIONAL SURVEYOR AND MAPPER
- O.R. = OFFICIAL RECORDS
- (ID) = IDENTIFICATION
- (F) = FIELD MEASUREMENT
- (P) = PLAT DATA
- F.F.E. = FINISHED FLOOR ELEVATION
- BFP = BACKFLOW PREVENTER
- CLF = CHAIN LINK FENCE
- A/C = AIR CONDITIONER
- INV. = INVERT
- ELEV. = ELEVATION
- TBM = TEMPORARY BENCHMARK
- M.E.S. = MITERED END SECTION
- CMP = CORRUGATED METAL PIPE
- T = TRAFFIC SIGN
- PB = PULL BOX
- WV = WATER VALVE
- WM = WATER METER
- FH = FIRE HYDRANT
- MW = MONITORING WELL
- CB = CONCRETE BOLLARD / PILING
- GA = GUY ANCHOR
- UP = UTILITY POLE
- TB = TELEPHONE BOX
- XELEV = SPOT ELEVATION AT "X"
- 10' = CONTOUR ELEVATION AT 1' INTERVALS
- OHU = OVERHEAD UTILITY LINE
- ASPH = EXISTING ASPHALT PAVEMENT
- CONC = EXISTING CONCRETE
- = SET 5/8" CAPPED IRON ROD L.B. #8011
- = FOUND 1/2" CAPPED IRON ROD L.B. #7137
- = FOUND 4" BY 4" CONCRETE MONUMENT

**TEMPORARY SITE CONTROL POINTS:**

DESCRIPTION	NORTHING	EASTING	ELEV. (NAVD 1988)
T1 SET NAIL AND DISK L.B. 8011	588699.07'	1917511.18'	296.56'
T2 SET NAIL AND DISK L.B. 8011	588398.66'	1917644.91'	296.32'



Dewberry Engineers Inc.  
2700 S. Blair Stone Rd., Ste. 204 D  
Tallahassee, FL 32301  
850.523.0062

**CDBG-MIT PUBLIC SAFETY BUILDING  
EXPANSION  
CITY OF GRETN  
GRETN, FLORIDA**

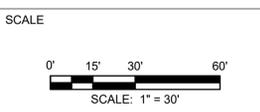
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REBEKAH FIELDER, P.E.  
ENGINEER OF RECORD LICENSE  
#99533  
EB # 8794

PRELIMINARY DOCUMENTS  
NOT FOR CONSTRUCTION



REVISIONS

NO.	DESCRIPTION	DATE

DRAWN BY \_\_\_\_\_ R. FIELDER  
APPROVED BY \_\_\_\_\_ R. FIELDER  
CHECKED BY \_\_\_\_\_ M. FREIDIN  
DATE \_\_\_\_\_ MARCH 2026

TITLE  
**EXISTING  
CONDITIONS**

PROJECT NO. 50184155

**C3.0**

SHEET NO.



**CDBG-MIT PUBLIC SAFETY  
BUILDING EXPANSION**  
**CITY OF GRETNA  
GRETNA, FLORIDA**

C:\GRENA\30184155\_CDBG-MIT (PUBLIC SAFETY BUILDING EXPANSION)\CAD\CIVIL\PRODUCTION\C5.0\_SITE\_PLAN.DWG

SITE DATA TABLE			
PARCEL ID NUMBER	2-32-3N-4W-0430-00063-0011; 2-32-3N-4W-0430-00063-0020		
TOTAL SQUARE FOOTAGE OF ENTIRE PARCEL	45302		
TOTAL ACERAGE OF ENTIRE PARCEL	1.04		
TOTAL SQUARE FOOTAGE OF PROJECT AREA	54163.31		
TOTAL ACERAGE OF PROJECT AREA	1.24		
ZONING DISTRICT	MUNICIPAL		
SITE DENSITY	N/A		
MAXIMUM IMPERVIOUS SURFACE RATIO (ISR)	75%		
<b>PARKING STATISTICS</b>			
	RATIO	REQUIRED	PROVIDED
STANDARD STALLS REQUIRED	1/250 SF GFA	13	14
ADA STALLS REQUIRED (1 PER 25 STANDARD)	1 PER 25	1	1
<b>LAND USE COMPONENT</b>			
<b>EXISTING IMPERVIOUS AREA TO BE REMOVED</b>	<b>SQUARE FOOTAGE</b>	<b>ACRES</b>	<b>% OF PROJECT AREA</b>
BUILDINGS	1,135	0.03	2.10%
ASPHALT, SIDEWALK, MISC IMPERVIOUS	5,939	0.14	10.97%
<b>PROPOSED IMPERVIOUS AREA</b>	<b>SQUARE FOOTAGE</b>	<b>ACRES</b>	<b>% OF PROJECT AREA</b>
BUILDINGS	8,461	0.19	15.63%
ASPHALT, SIDEWALK, MISC IMPERVIOUS	21,096	0.48	38.96%
	<b>SQUARE FOOTAGE</b>	<b>ACRES</b>	<b>% OF PROJECT AREA</b>
<b>TOTAL POST DEVELOPMENT IMPERVIOUS AREA</b>	<b>29,556</b>	<b>0.68</b>	<b>54.59%</b>
<b>TOTAL POST DEVELOPMENT PERVIOUS AREA</b>	<b>13,445</b>	<b>0.31</b>	<b>24.83%</b>
<b>TOTAL POND AREA</b>	<b>11,162</b>	<b>0.26</b>	<b>20.61%</b>
<b>TOTAL PROJECT AREA</b>	<b>54,163</b>	<b>1.243</b>	<b>100.00%</b>



**LEGEND**

EXISTING CONTOUR -----188-----

EXISTING SPOT ELEVATION × 188.04

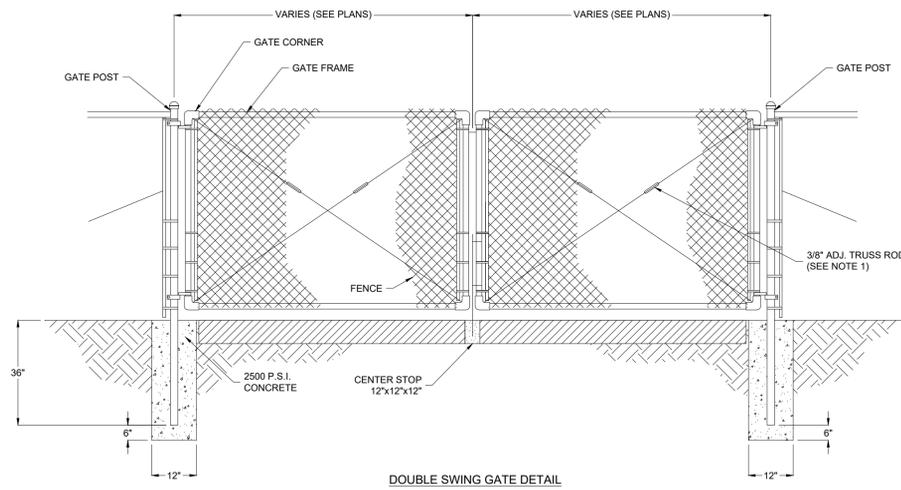
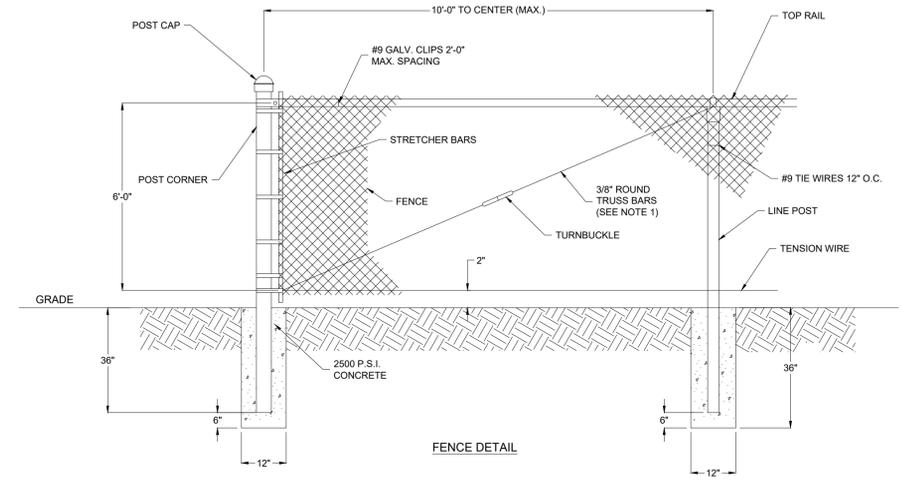
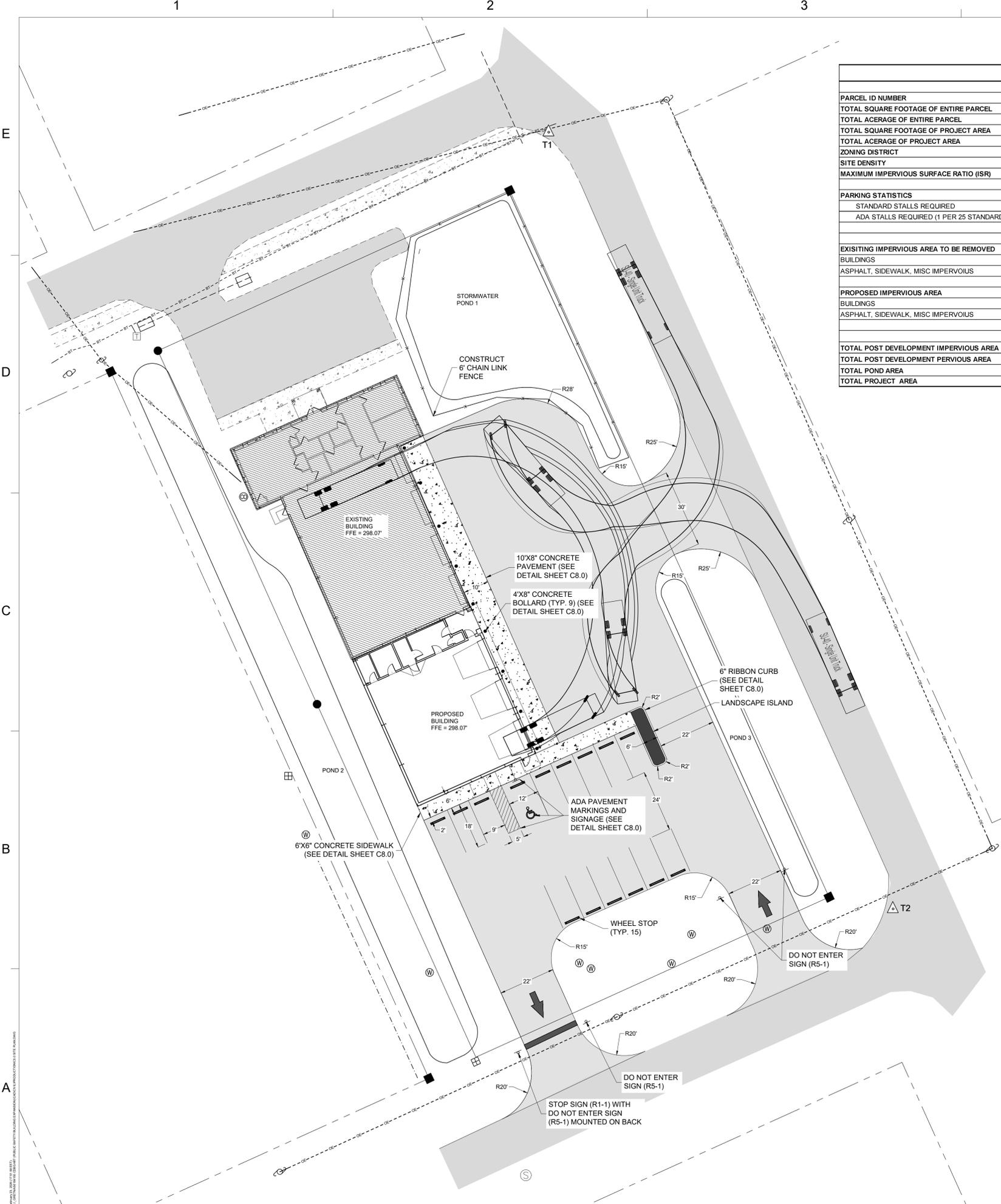
PROPOSED FENCE ————x———

PROPOSED CONCRETE [Pattern]

PROPOSED ASPHALT [Pattern]

LANDSCAPE ISLAND [Pattern]

PAVEMENT MARKINGS [Arrow]



- FENCE/GATE NOTES:**
- 1) TRUSS BARS ARE REQUIRED FOR EACH GATE SECTION AND THE FIRST SPAN ON EACH SIDE OF A CORNER POST ONLY.
  - 2) CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION.
  - 3) FENCING SHALL BE BLACK VINYL COATED.
  - 4) TYPICAL GATE IS 16'. VERIFY WITH COUNTY PRIOR TO CONSTRUCTION.

**CHAIN LINK FENCE DETAILS**  
N.T.S.

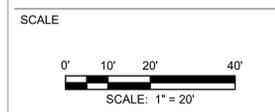
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REBEKAH FIELDER, P.E.  
ENGINEER OF RECORD LICENSE #99533  
EB # 8794

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APPROVED BY \_\_\_\_\_ R. FIELDER  
CHECKED BY \_\_\_\_\_ M. FREIDIN  
DATE \_\_\_\_\_ MARCH 2026

**TITLE**  
**SITE PLAN**

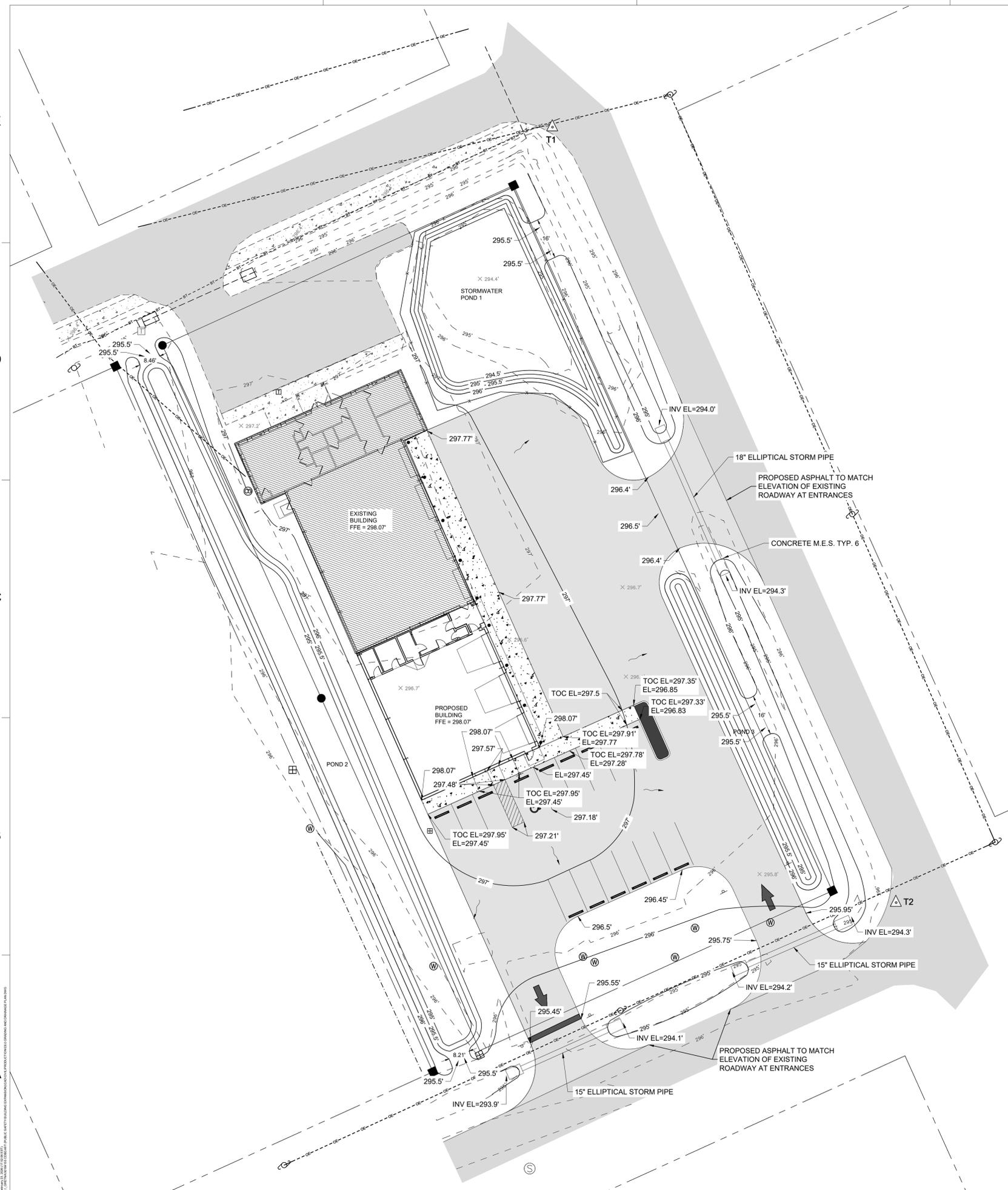
PROJECT NO. 50184155

**C5.0**

SHEET NO.

1 2 3 4 5

E  
D  
C  
B  
A

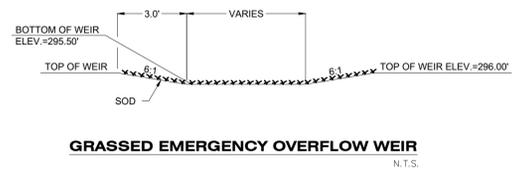


**LEGEND**

- EXISTING CONTOUR  188
- EXISTING SPOT ELEVATION × 188.04
- PROPOSED CONCRETE SIDEWALK
- PROPOSED ASPHALT
- PROPOSED LANDSCAPING
- PROPOSED CHAIN LINK FENCE
- PROPOSED CONTOUR  189
- PROPOSED SPOT ELEVATION × 296.44
- PROPOSED DRAINAGE FLOW ARROW →



**NOTE:**  
ALL DISTURBED AREAS TO BE SODDED WITH ST. AUGUSTINE



Dewberry Engineers Inc.  
101 N. Monroe St., Suite 710  
Tallahassee, FL 32301  
850.523.0062

**CDBG-MIT PUBLIC SAFETY  
BUILDING EXPANSION**  
**CITY OF GRETNA  
GRETNA, FLORIDA**

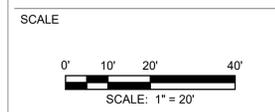
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CHECKED BY \_\_\_\_\_ M. FREIDIN  
DATE \_\_\_\_\_ MARCH 2026

**GRADING AND  
DRAINAGE PLAN**

PROJECT NO. 50184155

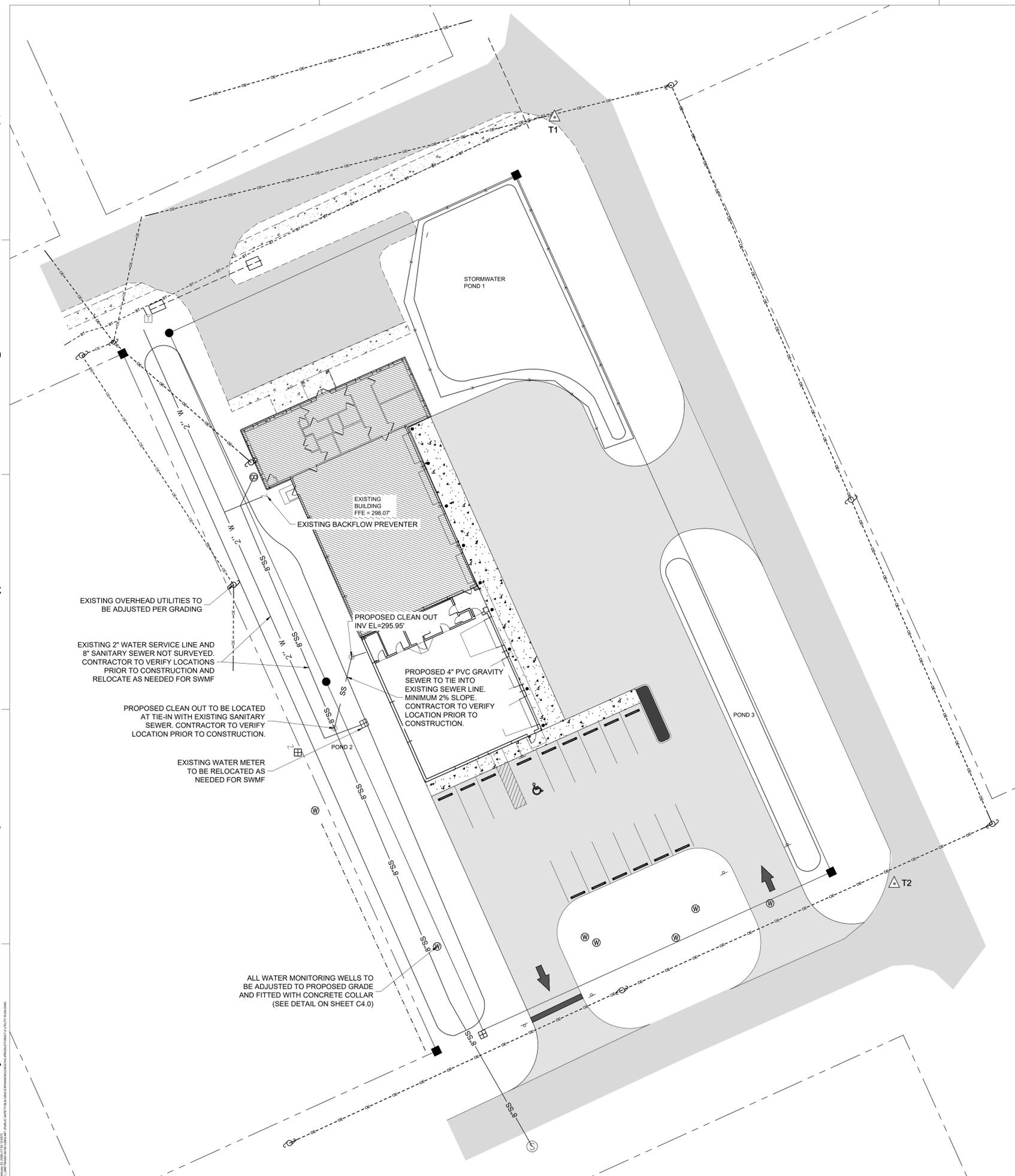
**C6.0**

SHEET NO.

01/20/2026 10:00 AM  
 C:\PROJECTS\50184155\CDBG-MIT PUBLIC SAFETY BUILDING EXPANSION\C6.0 GRADING AND DRAINAGE PLAN.DWG

1 2 3 4 5

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C  
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A



LEGEND	
EXISTING SANITARY SEWER MANHOLE	⊙
EXISTING 2" WATER SERVICE	— 2" W —
EXISTING 8" SANITARY SEWER	— 8" SS —
PROPOSED 4" PVC SANITARY SEWER	— SS —
EXISTING WATER METER	⊠
EXISTING POTABLE BACKFLOW PREVENTER	Z
PROPOSED CLEANOUT	⊙
PROPOSED UTILITY POLE	⊗
PROPOSED OVERHEAD UTILITIES	- - - - -



**UTILITY NOTES:**

**EXISTING UTILITIES DISCLAIMER:**  
 THESE PLANS ARE BASED ON AVAILABLE INFORMATION. CONTRACTOR IS REQUIRED TO VERIFY LOCATION, BURY DEPTH, SIZE AND MATERIAL TYPE PRIOR TO ANY UTILITY IMPROVEMENTS. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES THAT ARE FOUND.

**UTILITY NOTES:**

1. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDERS ON UTILITY RELOCATIONS AND ADJUSTMENTS. REFER TO COVER SHEET FOR UTILITY OWNER INFORMATION.
2. CONTRACTOR SHALL ADJUST ALL UTILITIES INCLUDING BUT NOT LIMITED TO VALVES, MANHOLES, VAULTS, HYDRANTS, COMMUNICATION POST/BOXES, METERS, ETC., TO FINISH GRADE ELEVATION. COORDINATE WITH UTILITY PROVIDERS AS REQUIRED.
3. CONTRACTOR RESPONSIBLE TO REROUTE AND/OR DEFLECT UTILITIES AS NEEDED TO CONSTRUCT PROPOSED IMPROVEMENTS.
4. CONTRACTOR SHALL NOTIFY CIVIL ENGINEER IF ANY UTILITIES CONFLICT WITH PROPOSED IMPROVEMENTS.
5. ALL CLEANOUTS WITH VEHICULAR USE AREAS SHALL BE H-10 TRAFFIC RATED WITH CAST IRON LID INSTALLED FLUSH WITH FINISHED SURFACE.

EXISTING OVERHEAD UTILITIES TO BE ADJUSTED PER GRADING

EXISTING 2" WATER SERVICE LINE AND 8" SANITARY SEWER NOT SURVEYED. CONTRACTOR TO VERIFY LOCATIONS PRIOR TO CONSTRUCTION AND RELOCATE AS NEEDED FOR SWMF

PROPOSED CLEAN OUT TO BE LOCATED AT TIE-IN WITH EXISTING SANITARY SEWER. CONTRACTOR TO VERIFY LOCATION PRIOR TO CONSTRUCTION.

EXISTING WATER METER TO BE RELOCATED AS NEEDED FOR SWMF

ALL WATER MONITORING WELLS TO BE ADJUSTED TO PROPOSED GRADE AND FITTED WITH CONCRETE COLLAR (SEE DETAIL ON SHEET C4.0)



Dewberry Engineers Inc.  
 101 N. Monroe St., Suite 710  
 Tallahassee, FL 32301  
 850.523.0062

**CDBG-MIT PUBLIC SAFETY  
 BUILDING EXPANSION  
 CITY OF GRETNA  
 GRETNA, FLORIDA**

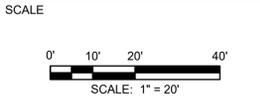
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NO. DESCRIPTION DATE

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APPROVED BY \_\_\_\_\_ R. FIELDER

CHECKED BY \_\_\_\_\_ M. FREIDIN

DATE \_\_\_\_\_ MARCH 2026

TITLE  
**UTILITY PLAN**

PROJECT NO. 50184155

**C7.0**

SHEET NO.

C:\GRETNA\50184155\_CDBG-MIT\_PUBLIC SAFETY BUILDING EXPANSION\CAD\CIVIL\PRODUCTION\C7.0 UTILITY PLAN.DWG











## LIMITED CONTAMINATION ASSESSMENT REPORT

City of Gretna Maintenance Yard Former Gretna Station  
117 Ash Avenue  
Gretna, Gadsden County, Florida 32332  
FDEP Facility ID #20/8519571

**PREPARED FOR:**

Mr. Antonio Jefferson  
City Manager  
City of Gretna  
14615 Main St  
Gretna, Florida 32332

**PREPARED BY:**

ENVIRONMENTAL RISK MANAGEMENT

ERMI File No. E4589A

December 16, 2022



December 16, 2022

Mr. Antonio Jefferson  
City Manager  
City of Gretna  
14615 Main St  
Gretna, Florida 32332

**RE: Limited Contamination Assessment Report  
City of Gretna Maintenance Yard Former Gretna Station  
117 Ash Avenue  
Gretna, Gadsden County, Florida 32332  
FDEP Facility ID #20/8519571  
ERMI File No. E4589A**

Dear Mr. Jefferson:

Environmental Risk Management (ERMI) is pleased to present the following report detailing the recent site assessment activities conducted at the above referenced facility in accordance with Florida Department of Environmental Protection (FDEP) Limited Contamination Assessment Report (LCAR) protocol.

Should you have any questions or concerns, please contact Jon Ascher at (239) 415-6406 or [jascher@ermi.net](mailto:jascher@ermi.net) to discuss the project.

Sincerely,

**ENVIRONMENTAL RISK MANAGEMENT**

A handwritten signature in blue ink, appearing to read "Jon Ascher".

Jonathan Ascher, MS, LEP  
Senior Project Manager

A handwritten signature in blue ink, appearing to read "Barry Murphree".

Barry Murphree, P.G.  
Principal Geologist

**CERTIFICATION****FOR****LIMITED CONTAMINATION ASSESSMENT REPORT**

City of Gretna Maintenance Yard Former Gretna Station  
117 Ash Avenue  
Gretna, Gadsden County, Florida 32332  
FDEP Facility ID #20/8519571  
ERMI File No. E4589A

**PROFESSIONAL GEOLOGIST CERTIFICATION**

Environmental Risk Management (ERMI) hereby certifies the reliability and accuracy of the services performed in this investigation, and the information presented in this report. This report is based on professional services that were conducted using sound geologic principles and “Standard of Industry” practices. Data derived through sampling and subsequent laboratory analysis are extrapolated to render an opinion about overall subsurface conditions. Actual conditions in areas not tested may differ from those inferred to exist.

**Prepared by**

Environmental Risk Management  
6835 International Center Boulevard, Suite 5  
Fort Myers, Florida 33912

Signed,

The item has been electronically signed and sealed by Sam B. Murphree, IV, P.G., on the date adjacent to the seal using a SHA authentication code.

Printed copies of the document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

Sam B. Murphree, IV, P.G.  
Licensed Professional Geologist  
State of Florida, License Number PG-2664

# Table of Contents

1.0	INTRODUCTION .....	1
2.0	SITE DESCRIPTION AND SCOPE OF WORK .....	1
2.1	Site Description .....	1
2.2	Scope of Work.....	2
3.0	SOIL ASSESSMENT .....	3
3.1	Soil Assessment Methodology.....	3
3.2	Soil Field Screening and Results .....	3
3.3	Soil Laboratory Analytical Results.....	4
4.0	GROUNDWATER ASSESSMENT .....	4
4.1	Monitoring Well Installation and Construction.....	4
4.2	Groundwater Sampling Methodology .....	5
4.3	Groundwater Laboratory Analytical Results.....	5
4.4	Groundwater Elevation Summary .....	6
5.0	CONCLUSIONS AND RECOMMENDATIONS .....	6
5.1	Conclusions .....	6
5.2	Recommendations .....	7

# Table of Contents Continued

## List of Figures

<b>Figure 1:</b>	Site Map
<b>Figure 2:</b>	Soil Boring Location Map
<b>Figure 3:</b>	OVA Screening Results Map
<b>Figure 4:</b>	Soil Analytical Concentration Map
<b>Figure 5:</b>	Groundwater Analytical Concentration Map
<b>Figure 6:</b>	Groundwater Elevation Map

## List of Tables

<b>Table 1:</b>	Soil Screening Summary
<b>Table 2:</b>	Soil Analytical Summary – VOAs, TRPH and Metals
<b>Table 3:</b>	Soil Analytical Summary – Non-Carcinogenic PAHs
<b>Table 4:</b>	Soil Analytical Summary – Carcinogenic PAHs
<b>Table 5:</b>	Groundwater Analytical Summary – VOCs and Metals
<b>Table 6:</b>	Groundwater Analytical Summary – PAHs and TRPHs
<b>Table 7:</b>	Groundwater Elevation Summary

## List of Appendices

<b>Appendix A:</b>	Historical Documents
<b>Appendix B:</b>	Field Notes, Sampling Logs, Well Construction and Development Logs, Well Completion Reports, and Instrument Calibration Forms
<b>Appendix C:</b>	Laboratory Analytical Reports and Chain of Custody Records

## 1.0 INTRODUCTION

The Subject Property is located at 117 Ash Avenue, Gretna, Gadsden County, Florida and is identified with Florida Department of Environmental Protection (FDEP) Facility ID #20/8519571. A Site Map is included as **Figure 1** to illustrate the specific site characteristics within the Subject Property boundaries. This report summarizes the site assessment activities performed in accordance with Limited Contamination Assessment Report (LCAR) protocols.

## 2.0 SITE DESCRIPTION AND SCOPE OF WORK

### 2.1 Site Description

The Subject Property consists of approximately 0.5 acres and is developed with a 1,300 square foot vacant commercial building. According to FDEP records, the facility previously maintained one (1) 3,000-gallon leaded gasoline underground storage tank (UST) and one (1) 3,000-gallon unleaded gasoline UST. The USTs were reportedly installed in July 1984 and were removed from the Subject Property by 1990. Additionally, a waste oil UST of an unknown capacity was reportedly installed in 1984 and was removed by 1993. The waste oil UST was not registered with the FDEP. All dispensers associated with the former USTs were removed by 1993.

The FDEP conducted a compliance inspection at this facility on January 26, 1990. During the inspection, soil stained with waste oil and possibly battery acid was observed behind the structure on the Subject Property. An additional inspection was performed on October 3, 1990. An underground waste oil tank was discovered which contained used oil, filters, and possibly battery acid on the northern side of the structure. FDEP recommended the property owner properly abandon/remove the tanks, remove the contaminated soils and properly dispose of them, and perform a tank closure assessment for the three (3) tanks. The FDEP sent a letter to the property owner on October 30, 1990, that explained the violations and necessary actions to bring the facility into compliance. A Discharge Report Form (DRF) was never submitted to the FDEP for these impacts. Additionally, a Tank Closure Assessment Report (TCAR) was never submitted to the FDEP during the tank removal activities, including the removal and disposal of the waste-oil-stained soils, on the Subject Property.

A Forensic Investigation Report was submitted to FDEP by ERMI on August 27, 2009, for the west adjoining property known as Gretna Food Store/Former Gulf Oil Station located at 14681 Main Street, Gretna, Gadsden County, Florida (FDEP Facility ID #20/8519558). The report stated that two (2) monitoring wells were installed in the vicinity of the suspected former UST location of the Subject Property. The report concluded that petroleum contamination detected in samples collected during the investigation is consistent with the release of a leaded gasoline source prior to 1996,

and possibly an unleaded gasoline source located in the approximate vicinity of what is believed to be the former location of UST systems on the Subject Property.

Following the Forensic Investigation Report, the FDEP sent a Storage Tank Facility Registration Form and a DRF to the property owner. According to a FDEP Scoring Review sheet and a submitted DRF, a discharge is on file for this facility with a date of August 31, 2009.

The FDEP sent a letter on July 11, 2011, which stated the property owner of the facility is liable to the FDEP for the reported discharge, and due to the discovery of petroleum contamination, formal site assessment activities are required.

After correspondence between FDEP and the City of Gretna, the facility was deemed eligible for the Petroleum Cleanup Participation Program (PCPP) on January 15, 2019, and was given a score of 31 as of January 23, 2020. The eligibility excludes any vehicular diesel fuel contamination from a 200-gallon diesel aboveground storage tank (AST) that exists on the Subject Property. The PCPP requires a Limited Contamination Assessment Report (LCAR) to be provided prior to any supplemental PCPP assessment is conducted. Please refer to **Appendix A** for historical documents and **Figure 1** for a Site Map.

## 2.2 Scope of Work

The following scope of work was completed:

- On October 12, 13, and 14, 2022, ERMI supervised the installation of eighteen (18) soil borings for OVA field screening purposes.
- On October 13, 2022, ERMI collected three (3) soil samples for laboratory analysis of common petroleum constituents.
- On October 12, 13, and 14, 2022, ERMI supervised the installation of one (1) deep monitoring well (DW-1) and three (3) shallow monitoring wells (MW-32, MW-33, and MW-34) and fifteen (15) soil borings (SB-1 through SB-15).
- On October 20-21, 2022, ERMI collected groundwater samples from the four (4) new monitoring wells (MW-32, MW-33, MW-34, and DW-1) and from two (2) existing monitoring wells (MW-30F and MW-31F) for laboratory analysis of common petroleum constituents.

- All groundwater samples collected during this assessment were submitted to Pace National (Pace) for laboratory analysis. Pace maintains Department of Health (DOH) certification #87487.
- ERMI prepared this Limited Contamination Assessment Report (LCAR) to document the results of the above referenced scope of work.

### 3.0 SOIL ASSESSMENT

#### 3.1 Soil Assessment Methodology

The general methodology for the soil assessment was derived from the FDEP "Guidelines for Assessment and Source Removal of Petroleum Contaminated Soil", dated May 1998. On October 12, 13, and 14, 2022, ERMI collected soil samples for OVA screening from eighteen (18) soil borings (SB-1 through SB-15, DW-1, MW-33, and MW-34). Grab soil samples were collected for screening at 1-foot and 2-foot depth intervals to a varying total depth between 19 and 20 feet below land surface (bls). Groundwater was encountered at approximately 18 feet bls.

Please refer to **Appendix B** for a copy of the soil boring logs.

#### 3.2 Soil Field Screening and Results

On October 12, 13, and 14, 2022, ERMI collected soil samples from eighteen (18) soil borings (SB-1 through SB-15, DW-1, MW-33, and MW-34) for OVA field screening purposes. The screening was completed to investigate whether any petroleum hydrocarbons were present in soil samples at concentrations considered to be "excessively contaminated". The field screening of these samples was conducted using a Photo-Ionization Detector (PID) in survey mode. OVA screening was conducted by collecting soil directly from a stainless-steel hand auger or direct push technology (DPT) sampler tube then transferring the soil samples into 8- and/or 16-ounce mason jars. ERMI uses the soil sample headspace screening procedure, as described in Section 4.1 of the FDEP "Guidelines for Assessment and Source Removal of Petroleum Contaminated Soil" dated May 1998. The PID was shop calibrated and field tested prior to use. Soil borings SB-4, MW-33, and MW-34 were converted to monitoring wells. The remaining soil borings were backfilled upon completion.

OVA field screening results yielded detections of volatile organics (>50 ppm) considered "excessively contaminated" within the vadose, smear, and/or saturated zones in soil borings SB-2, SB-3, SB-6, SB-9, and DW-1.

Field notes, soil boring logs, and instrument calibration forms are included in **Appendix B** and a cumulative summary of soil screening results are included in **Table**

1. **Figure 2** illustrates the soil boring locations and **Figure 3** provides a summary of OVA results.

### 3.3 Soil Laboratory Analytical Results

Copies of the complete laboratory analytical data report and sample chain-of-custody documentation are included in **Appendix C**.

Three (3) soil samples were collected on October 13, 2022, for laboratory analysis of common petroleum constituents. Samples for laboratory analysis were collected based on vadose, smear, and saturated zone OVA responses and previous soil analytical data. Soil samples were collected for laboratory analysis of common petroleum constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tert-butyl ether (MTBE) using EPA Method 8260, Polycyclic Aromatic Hydrocarbons (PAHs) using EPA Method 8270, and Total Recoverable Petroleum Hydrocarbons (TRPHs) using the FL-PRO Method.

Laboratory analysis of soil samples collected from soil borings SB-6 @ 12ft and SB-9 @ 8ft yielded detections of the analyzed contaminants of concern (COCs) greater than the corresponding State of Florida Soil Cleanup Target Levels (SCTLs). Laboratory analysis of soil samples collected from soil boring SB-10 did not yield detections of COCs greater than the corresponding State of Florida SCTLs.

Please refer to **Table 2**, **Table 3**, and **Table 4**, for a Summary of Soil Analytical Results. **Figure 2** through **Figure 4** illustrate the soil sample locations, a summary of soil OVA, and laboratory analytical results.

## 4.0 GROUNDWATER ASSESSMENT

### 4.1 Monitoring Well Installation and Construction

On October 13 and 14, 2022, ERMI supervised the installation of three (3) shallow permanent monitoring wells (MW-32, MW-33, and MW-34) and one (1) deep monitoring well (DW-1). The shallow monitoring wells were installed to a depth of approximately 25 feet bls and are constructed of 1-inch diameter polyvinyl chloride (PVC) with 10 feet of 0.010-inch slotted screen section and 15 feet of solid PVC riser. The deep monitoring well was installed to a depth of approximately 45 feet bls and is constructed of 1-inch diameter PVC with 5 feet of 0.010-inch slotted screen section and 40 feet of solid PVC riser.

All new wells were completed with a pre-packed sand filter consisting of 20/30 grade silica, a 30/65 grade fine sand seal, neat cement grout, traffic-bearing manholes, and locking caps within 2-foot by 2-foot concrete pads.

Following installation, the well was developed by removing groundwater until it appeared clear of suspended sediment to ensure hydraulic communication with the surrounding aquifer. Copies of the Well Construction and Development Logs and Well Completion Reports are included in **Appendix B**.

#### 4.2 Groundwater Sampling Methodology

On October 20 and 21, 2022, ERMI personnel collected groundwater samples from existing monitoring wells MW-30F and MW-31F and new monitoring wells MW-32, MW-33, MW-34, and DW-1, for laboratory analysis of common petroleum constituents BTEX and MTBE using EPA Method 8260, PAHs using EPA Method 8270, and TRPHs using the FL-PRO Method.

All groundwater samples were collected in accordance with the FDEP Standard Operating Procedures (SOP) 01/001 FS 2200 Groundwater Sampling protocol. The wells were purged prior to sampling using a peristaltic pump until the wells met purge completion criteria. Purge water was dispersed onto a nearby impervious concrete surface and allowed to evaporate.

All groundwater samples were submitted to Pace for analysis under sample chain of custody procedure. Field notes, FDEP groundwater sampling logs, well construction and development logs, and instrument calibration sheets are provided in **Appendix B**

#### 4.3 Groundwater Laboratory Analytical Results

Copies of the complete laboratory analytical data report and sample chain of custody documentation are included in **Appendix C**.

Laboratory analysis of groundwater samples collected on October 20 and 21, 2022, from monitoring wells MW-30F, MW-31F, MW-32, MW-33, and DW-1, yielded detections of COCs greater than the State of Florida Groundwater Cleanup Target Levels (GTCLs) and Natural Attenuation Default Concentrations (NADCs).

Laboratory analysis of groundwater samples collected on October 20, 2022, from monitoring well MW-34 did not yield detections of COCs greater than the State of Florida GTCLs and NADCs.

Please refer to **Table 5** and **Table 6** for a summary of groundwater analytical results. **Figure 5** illustrates the groundwater sample locations and provides a summary of laboratory analytical results.

#### 4.4 Groundwater Elevation Summary

On October 20, 2022, ERMI personnel conducted a top-of-casing (TOC) elevation survey of all monitoring wells to determine the site-specific groundwater flow direction. The TOC survey was conducted using a self-leveling transit. An arbitrary benchmark was used for transit placement. Each well was measured for relative elevation by measuring the northern edge of the well's casing.

Depth-to-water (DTW) measurements were recorded on October 20 and 21, 2022, from all sampled monitoring wells. Relative groundwater elevations are summarized in **Table 7**.

According to the October 20 and 21, 2022, data, the groundwater gradient in the shallow well interval suggests that groundwater flows southwest across the site. **Figure 6** depicts the water table contours and inferred groundwater flow direction using DTW measurements.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Conclusions

Based on the supplemental site assessment activities, ERMI concludes the following:

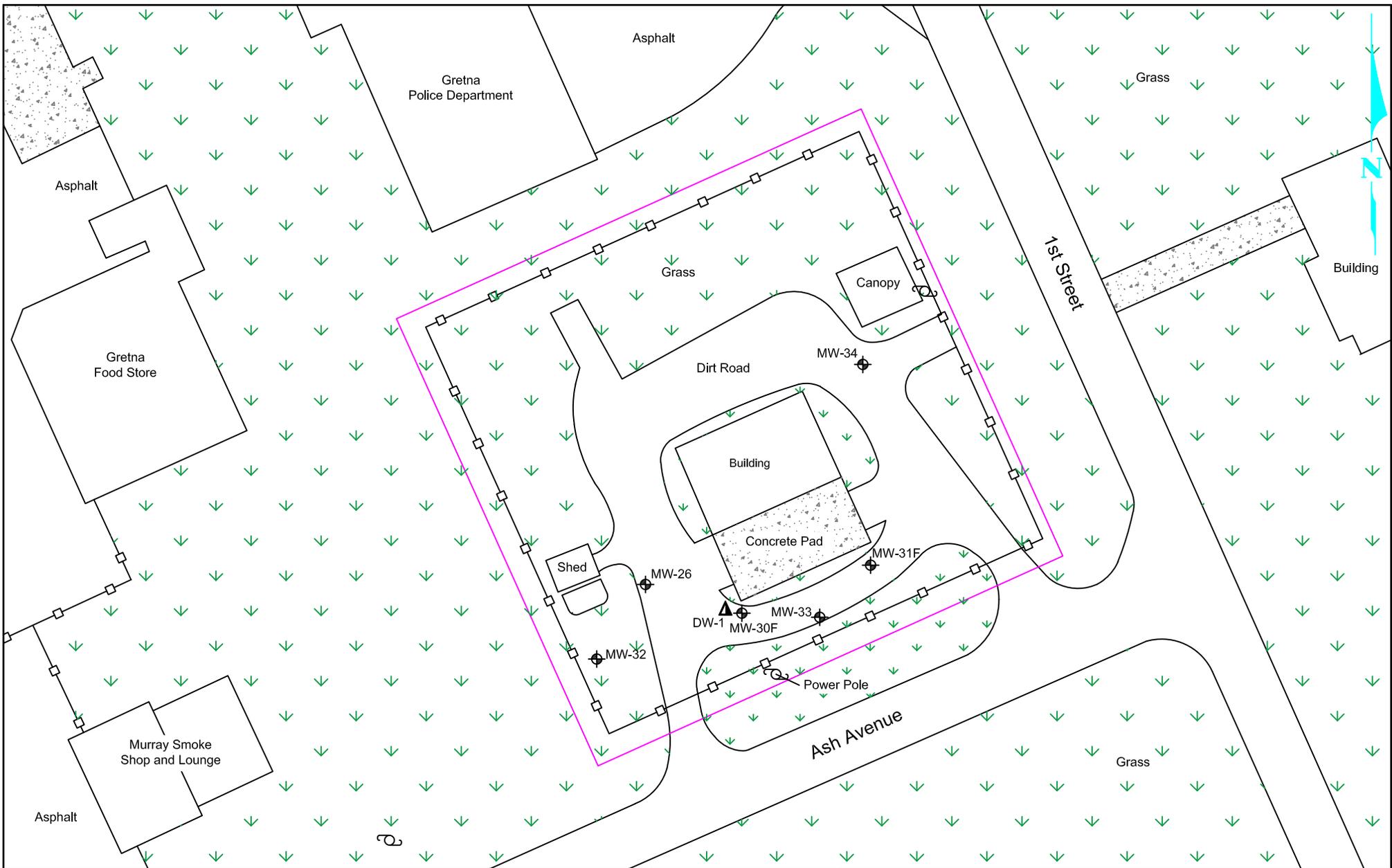
- OVA field screening results yielded detections of volatile organics considered “excessively contaminated” within the vadose, smear, and/or saturated zones of soil borings SB-2, SB-3, SB-6, SB-9, and DW-1.
- Laboratory analysis of soil samples collected from soil borings SB-6 @ 12ft and SB-9 @ 8ft yielded detections of the analyzed COCs greater than the corresponding State of Florida SCTLs. Laboratory analysis of soil samples collected from soil boring SB-10 did not yield detections of COCs greater than the corresponding State of Florida SCTLs.
- Laboratory analysis of groundwater samples collected on October 20 and 21, 2022, from monitoring wells MW-30F, MW-31F, MW-32, MW-33, and DW-1, yielded detections of COCs greater than the State of Florida GTCLs and NADCs. Laboratory analysis of groundwater samples collected on October 20, 2022, from monitoring well MW-34 did not yield detections of COCs greater than the State of Florida GTCLs and NADCs.

- Water table elevations have been recorded at approximately 19.20 feet bls and groundwater gradient in the shallow well interval suggests that groundwater flows southwest across the site.

## 5.2 Recommendations

Based on the results of this investigation, and our professional judgment, ERMI supplemental assessment be conducted prior to the preparation of a Remedial Action Plan (RAP).

## FIGURES



**City of Gretna Maintenance Yard (Former Gretna Station)**  
 117 Ash Avenue  
 Gretna, Gadsden County, Florida 32332  
 FDEP Facility ID# 20/8519571

**FIGURE 1:**  
 Site Map

November 2022      ERM FILE # E4589A

APPROXIMATE SCALE  
 1" = 40'

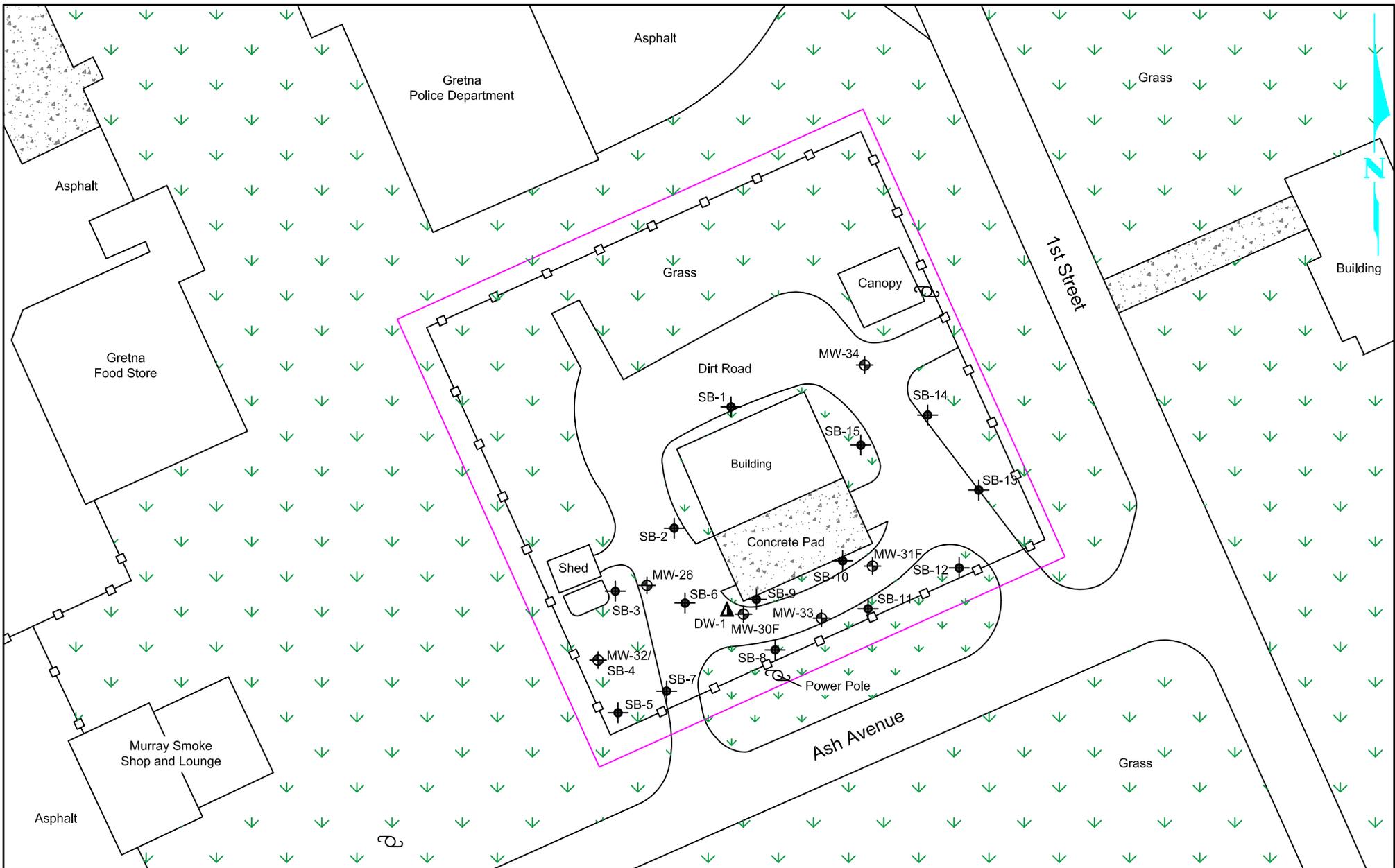
DRAFTED BY: CVD  
 REVIEWED BY: JMA

**LEGEND**

- Monitoring Well Location
- Deep Monitoring Well Location
- Project Boundary



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**City of Gretna Maintenance Yard (Former Gretna Station)**  
 117 Ash Avenue  
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 FDEP Facility ID# 20/8519571

**FIGURE 2:**  
 Soil Boring Location Map

November 2022      ERM FILE # E4589A

APPROXIMATE SCALE  
 1" = 40'

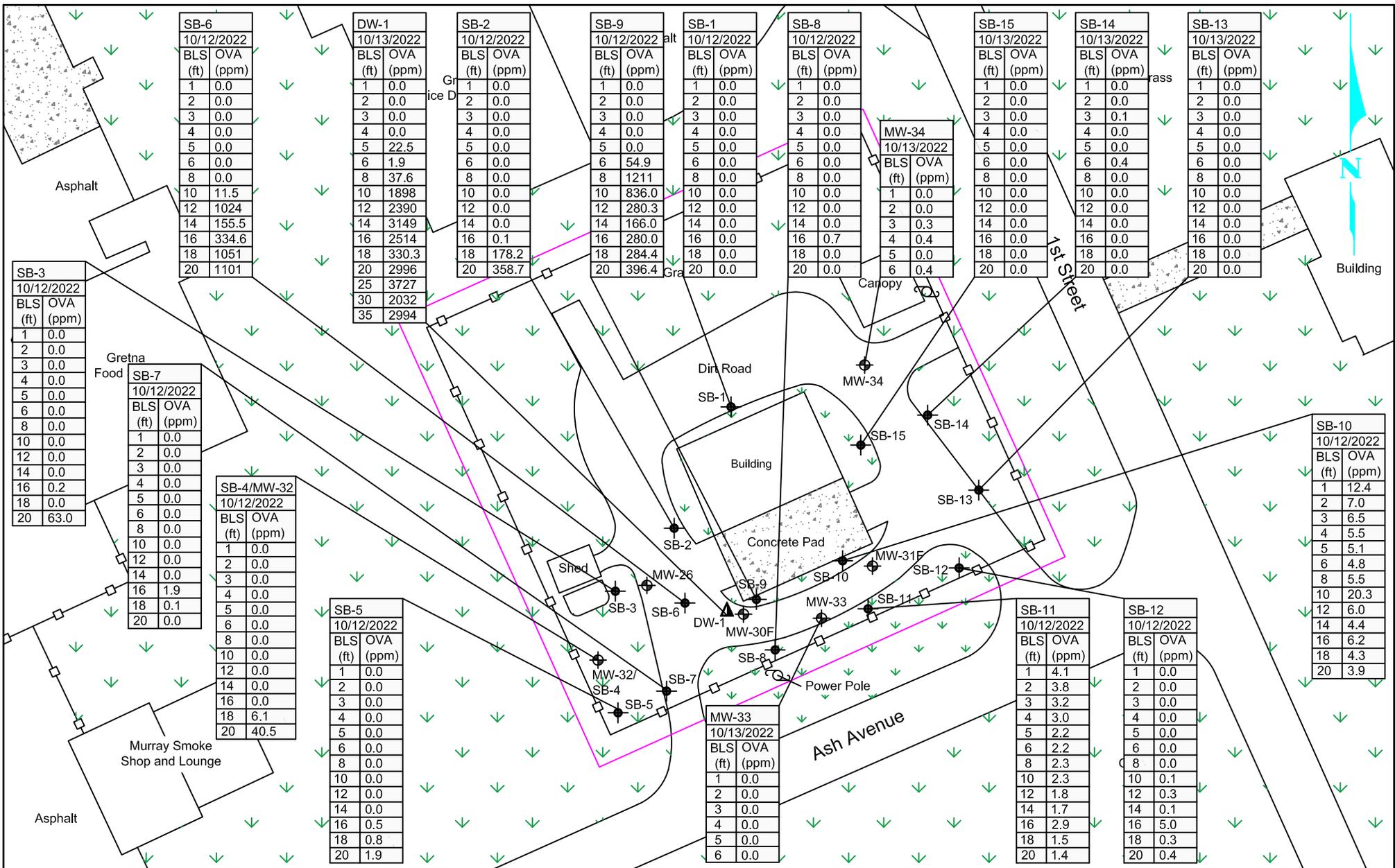
DRAFTED BY: CVD  
 REVIEWED BY: JMA

**LEGEND**

- Monitoring Well Location
- Deep Monitoring Well Location
- Soil Boring Location
- Project Boundary



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**City of Gretna Maintenance Yard (Former Gretna Station)**  
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FDEP Facility ID# 20/8519571

**FIGURE 3:**  
OVA Screening Results Map

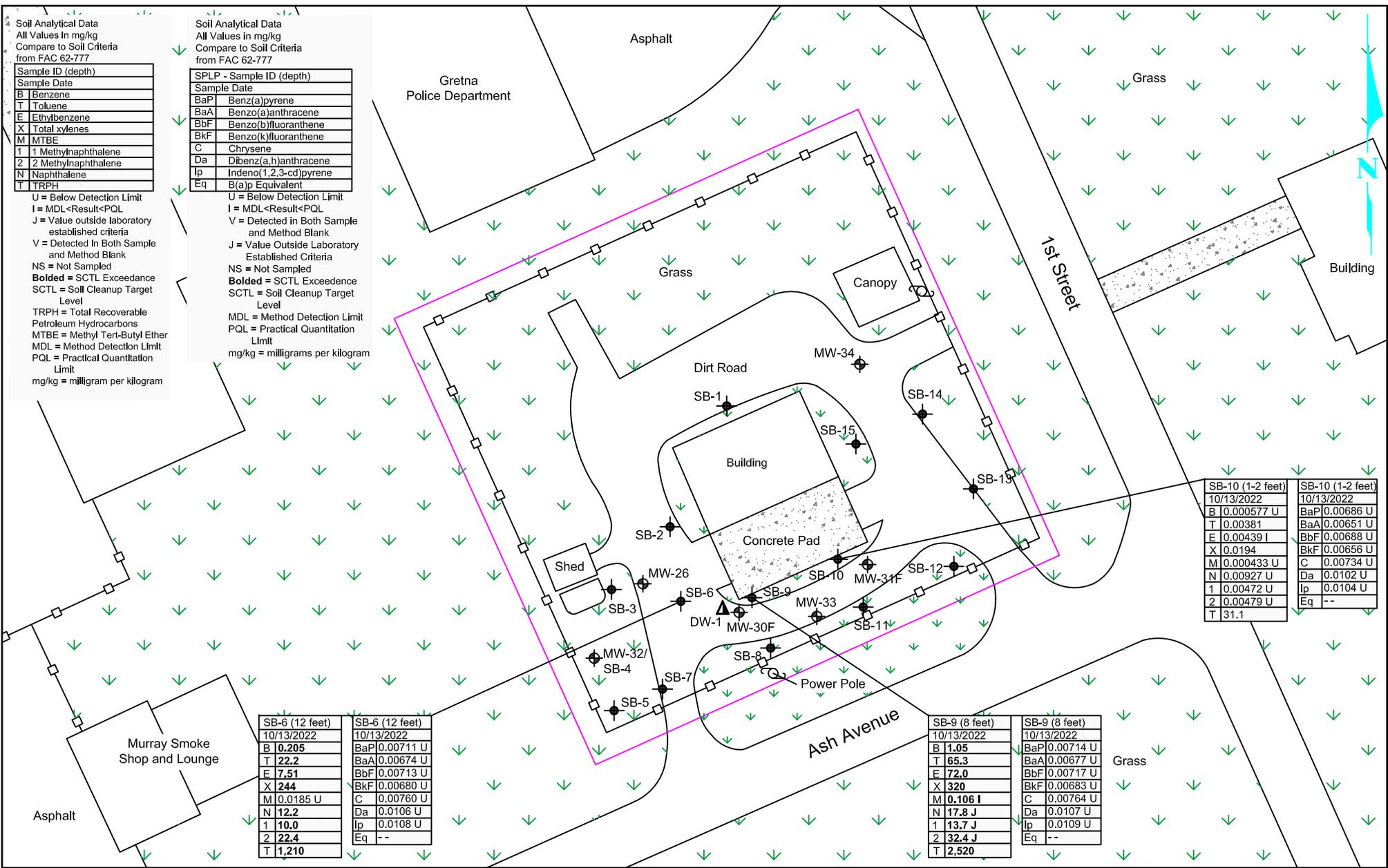
November 2022      ERM FILE # E4589A

APPROXIMATE SCALE  
1" = 40'

DRAFTED BY: CVD  
REVIEWED BY: JMA

**LEGEND**

- Monitoring Well Location
- Deep Monitoring Well Location
- Soil Boring Location
- Project Boundary
- OVA Organic Vapor Analyzer
- BLS Below Land Surface
- ppm parts per million



Soil Analytical Data  
All Values in mg/kg  
Compare to Soil Criteria  
from FAC 62-777

Sample ID (depth)
Sample Date
B Benzene
T Toluene
E Ethylbenzene
X Total xylenes
M MTBE
1 1 Methylnaphthalene
2 2 Methylnaphthalene
N Naphthalene
T TRPH

U = Below Detection Limit  
I = MDL < Result < PQL  
J = Value outside laboratory established criteria  
V = Detected In Both Sample and Method Blank  
NS = Not Sampled  
**Bolded** = SCTL Exceedance  
SCTL = Soil Cleanup Target Level  
TRPH = Total Recoverable Petroleum Hydrocarbons  
MTBE = Methyl Tert-Butyl Ether  
MDL = Method Detection Limit  
PQL = Practical Quantitation Limit  
mg/kg = milligram per kilogram

Soil Analytical Data  
All Values in mg/kg  
Compare to Soil Criteria  
from FAC 62-777

SPLP - Sample ID (depth)
Sample Date
BaP Benz(a)pyrene
BaA Benzo(a)anthracene
BbF Benzo(b)fluoranthene
BkF Benzo(k)fluoranthene
C Chrysene
Da Dibenz(a,h)anthracene
Ip Indeno(1,2,3-cd)pyrene
Eq B(a)p Equivalent

U = Below Detection Limit  
I = MDL < Result < PQL  
V = Detected in Both Sample and Method Blank  
J = Value Outside Laboratory Established Criteria  
NS = Not Sampled  
**Bolded** = SCTL Exceedance  
SCTL = Soil Cleanup Target Level  
MDL = Method Detection Limit  
PQL = Practical Quantitation Limit  
mg/kg = milligrams per kilogram

SB-10 (1-2 feet)		SB-10 (1-2 feet)	
10/13/2022		10/13/2022	
B	0.000577 U	BaP	0.00686 U
T	0.00381	BaA	0.00651 U
E	0.00439 I	BbF	0.00688 U
X	0.0194	BkF	0.00656 U
M	0.000433 U	C	0.00734 U
N	0.00927 U	Da	0.0102 U
1	0.00472 U	Ip	0.0104 U
2	0.00479 U	Eq	--
T	31.1		

SB-6 (12 feet)		SB-6 (12 feet)	
10/13/2022		10/13/2022	
B	<b>10.205</b>	BaP	0.00711 U
T	<b>22.2</b>	BaA	0.00674 U
E	<b>7.51</b>	BbF	0.00713 U
X	<b>244</b>	BkF	0.00680 U
M	0.0185 U	C	0.00760 U
N	<b>12.2</b>	Da	0.0106 U
1	<b>10.0</b>	Ip	0.0108 U
2	<b>22.4</b>	Eq	--
T	<b>1,210</b>		

SB-9 (8 feet)		SB-9 (8 feet)	
10/13/2022		10/13/2022	
B	<b>1.05</b>	BaP	0.00714 U
T	<b>65.3</b>	BaA	0.00677 U
E	<b>72.0</b>	BbF	0.00717 U
X	<b>320</b>	BkF	0.00683 U
M	<b>0.106 I</b>	C	0.00764 U
N	<b>17.8 J</b>	Da	0.0107 U
1	<b>13.7 J</b>	Ip	0.0109 U
2	<b>32.4 J</b>	Eq	--
T	<b>2,520</b>		

**City of Gretna Maintenance Yard (Former Gretna Station)**  
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FDEP Facility ID# 20/8519571

**FIGURE 4:**  
Soil Analytical Concentration Map

APPROXIMATE SCALE  
1" = 40'

DRAFTED BY: CVD

November 2022

ERMI FILE # E4589A

REVIEWED BY: JMA

**LEGEND**

- Monitoring Well Location
- Deep Monitoring Well Location
- Soil Boring Location
- Project Boundary

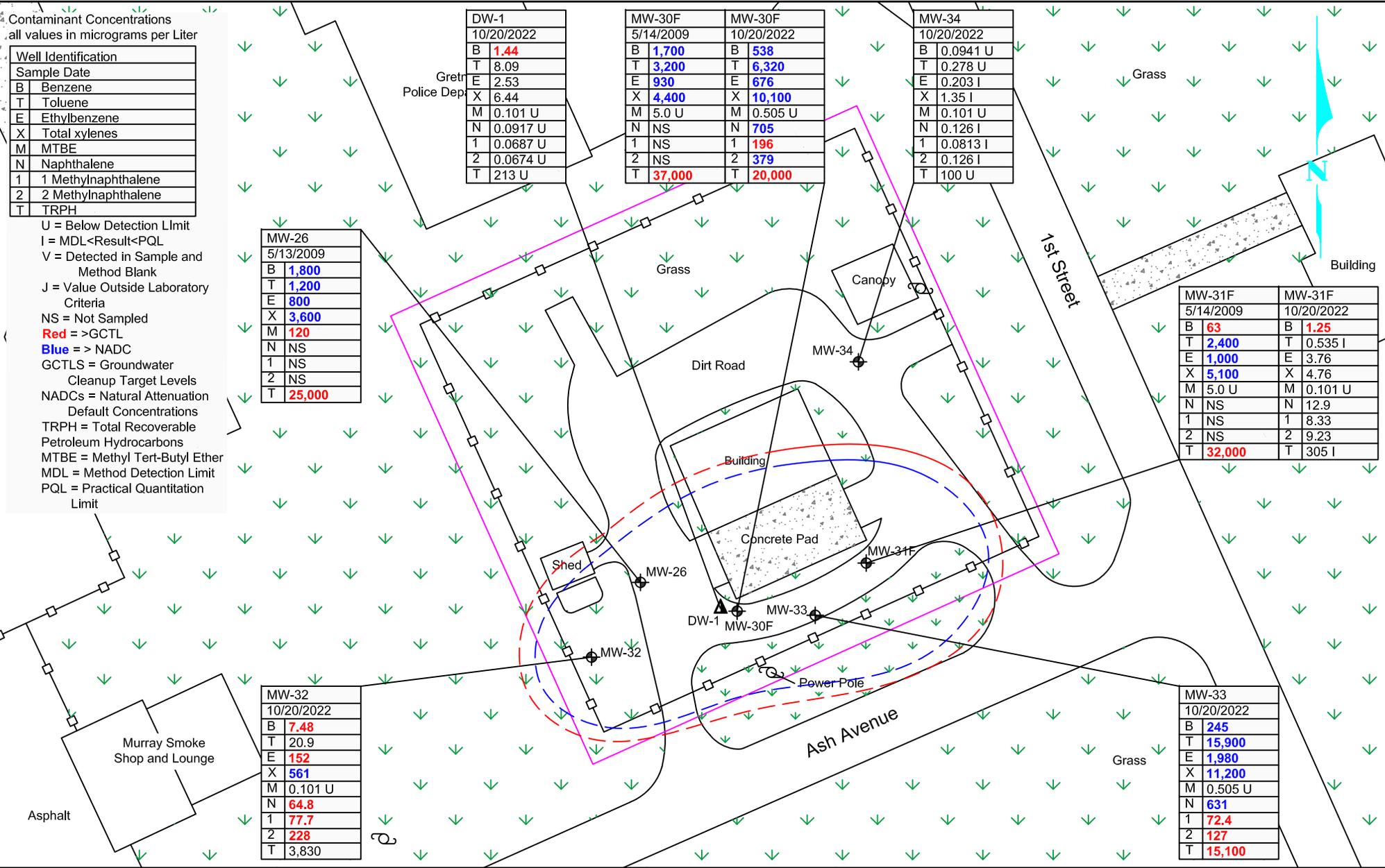


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Contaminant Concentrations  
all values in micrograms per Liter

Well Identification	
Sample Date	
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
M	MTBE
N	Naphthalene
1	1 Methyl naphthalene
2	2 Methyl naphthalene
T	TRPH

U = Below Detection Limit  
 I = MDL < Result < PQL  
 V = Detected in Sample and Method Blank  
 J = Value Outside Laboratory Criteria  
 NS = Not Sampled  
**Red** = > GCTL  
**Blue** = > NADC  
 GCTLs = Groundwater Cleanup Target Levels  
 NADCs = Natural Attenuation Default Concentrations  
 TRPH = Total Recoverable Petroleum Hydrocarbons  
 MTBE = Methyl Tert-Butyl Ether  
 MDL = Method Detection Limit  
 PQL = Practical Quantitation Limit



DW-1	
10/20/2022	
B	1.44
T	8.09
E	2.53
X	6.44
M	0.101 U
N	0.0917 U
1	0.0687 U
2	0.0674 U
T	213 U

MW-30F	
5/14/2009	
B	1,700
T	3,200
E	930
X	4,400
M	5.0 U
N	NS
1	NS
2	NS
T	37,000

MW-30F	
10/20/2022	
B	538
T	6,320
E	676
X	10,100
M	0.505 U
N	705
1	196
2	379
T	20,000

MW-34	
10/20/2022	
B	0.0941 U
T	0.278 U
E	0.203 I
X	1.35 I
M	0.101 U
N	0.126 I
1	0.0813 I
2	0.126 I
T	100 U

MW-26	
5/13/2009	
B	1,800
T	1,200
E	800
X	3,600
M	120
N	NS
1	NS
2	NS
T	25,000

MW-31F	
5/14/2009	
B	63
T	2,400
E	1,000
X	5,100
M	5.0 U
N	NS
1	NS
2	NS
T	32,000

MW-31F	
10/20/2022	
B	1.25
T	0.535 I
E	3.76
X	4.76
M	0.101 U
N	12.9
1	8.33
2	9.23
T	305 I

MW-32	
10/20/2022	
B	7.48
T	20.9
E	152
X	561
M	0.101 U
N	64.8
1	77.7
2	228
T	3,830

MW-33	
10/20/2022	
B	245
T	15,900
E	1,980
X	11,200
M	0.505 U
N	631
1	72.4
2	127
T	15,100

**City of Gretna Maintenance Yard (Former Gretna Station)**  
 117 Ash Avenue  
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 FDEP Facility ID # 20/8519571

**FIGURE 5:**  
 Groundwater Analytical Concentration Map

APPROXIMATE SCALE  
 1" = 40'



DRAFTED BY: CVD

November 2022

ERMI FILE # E4589A

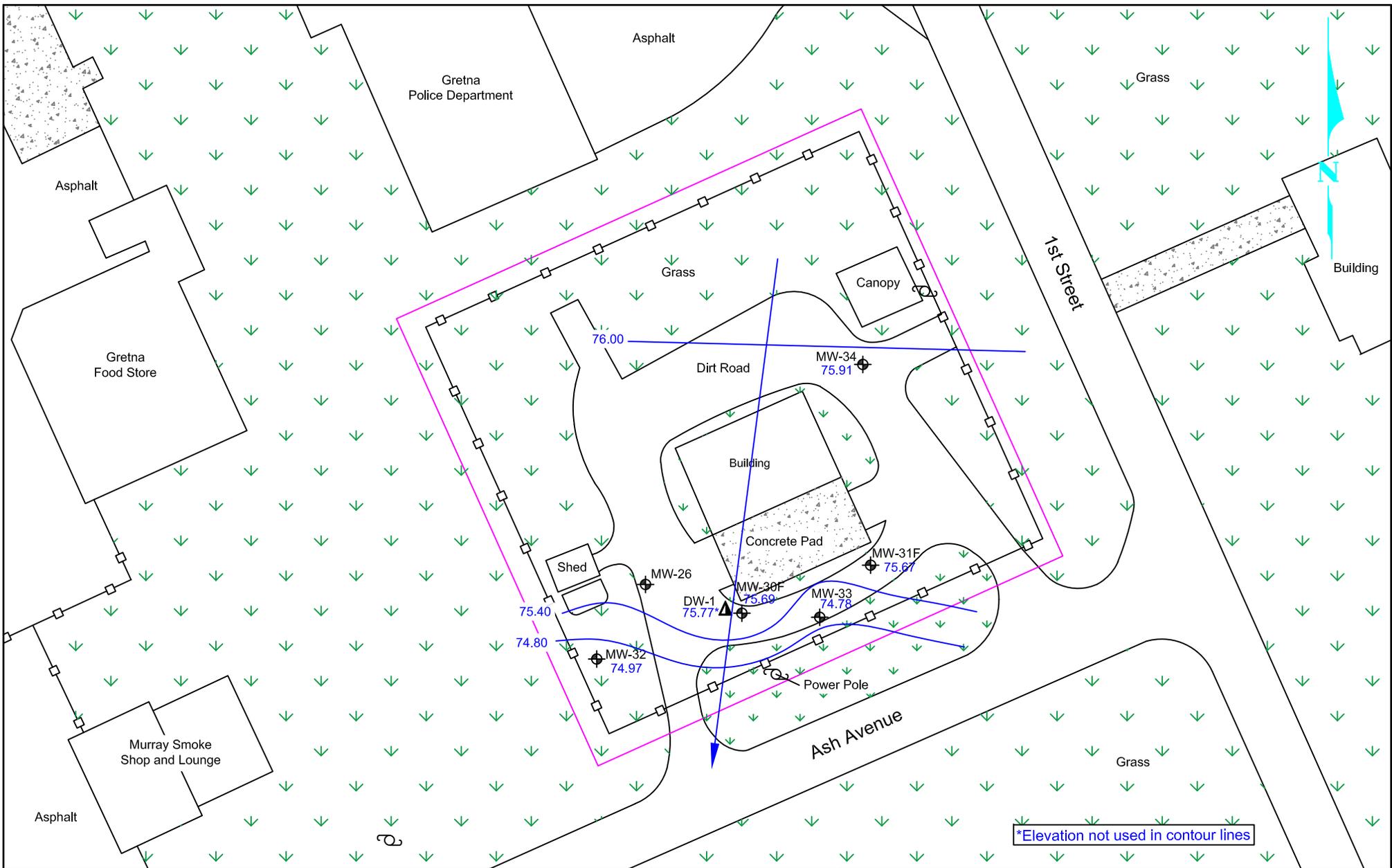
REVIEWED BY: JMA

**LEGEND**

- Monitoring Well Location
- Deep Monitoring Well Location
- Project Boundary
- GCTLs Extent (Dashed where Inferred)
- NADCs Extent



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**City of Gretna Maintenance Yard (Former Gretna Station)**  
 117 Ash Avenue  
 Gretna, Gadsden County, Florida 32332  
 FDEP Facility ID# 20/8519571

**FIGURE 6:**  
**Groundwater Elevation Map**  
**October 20 & 21, 2022**

November 2022      ERM FILE # E4589A

APPROXIMATE SCALE  
 1" = 40'

DRAFTED BY: CVD  
 REVIEWED BY: JMA

**LEGEND**

- Monitoring Well Location
- Deep Monitoring Well Location
- Project Boundary
- Groundwater Flow Direction
- Relative Groundwater Elevation (feet)



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## TABLES

**TABLE 1 : SOIL SCREENING SUMMARY**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLs)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-1	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	0.0	--	0.0	
SB-2	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	0.1	--	0.1	
18	178.2	--	178.2				
20	358.7	--	358.7				
SB-3	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	0.2	--	0.2	
18	0.0	--	0.0				
20	63.0	--	63.0				
SB-4	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	0.0	--	0.0	
18	6.1	--	6.1				
20	40.5	--	40.5				
							Monitoring Well Location: MW-32

**TABLE 1 : SOIL SCREENING SUMMARY**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLs)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-5	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	0.5	--	0.5	
18	0.8	--	0.8				
20	1.9	--	1.9				
SB-6	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	11.5	--	11.5	
			12	1,024	--	1,024	Soil Sample Collected @ 12 ft
			14	155.5	--	155.5	
			16	334.6	--	334.6	
18	1,051	--	1,051				
20	1,101	--	1,101				
SB-7	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	1.9	--	1.9	
18	0.1	--	0.1				
20	0.0	--	0.0				

**TABLE 1 : SOIL SCREENING SUMMARY**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLs)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-8	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	0.7	--	0.7	
18	0.0	--	0.0				
20	0.0	--	0.0				
SB-9	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	54.9	--	54.9	
			8	1,211.0	--	1,211.0	Soil Sample Collected @ 8 ft
			10	836.0	--	836.0	
			12	280.3	--	280.3	
			14	166.0	--	166.0	
			16	280.0	--	280.0	
18	284.4	--	284.4				
20	896.4	--	896.4				
SB-10	10/12/2022	18	1	12.4	--	12.4	Soil Sample Collected @ 1-2 ft
			2	7.0	--	7.0	
			3	6.5	--	6.5	
			4	5.5	--	5.5	
			5	5.1	--	5.1	
			6	4.8	--	4.8	
			8	5.5	--	5.5	
			10	20.3	--	20.3	
			12	6.0	--	6.0	
			14	4.4	--	4.4	
			16	6.2	--	6.2	
18	4.3	--	4.3				
20	3.9	--	3.9				

**TABLE 1 : SOIL SCREENING SUMMARY**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLs)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-11	10/12/2022	18	1	4.1	--	4.1	
			2	3.8	--	3.8	
			3	3.2	--	3.2	
			4	3.0	--	3.0	
			5	2.2	--	2.2	
			6	2.2	--	2.2	
			8	2.3	--	2.3	
			10	2.3	--	2.3	
			12	1.8	--	1.8	
			14	1.7	--	1.7	
			16	2.9	--	2.9	
SB-12	10/12/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.1	--	0.1	
			12	0.3	--	0.3	
			14	0.1	--	0.1	
			16	5.0	--	5.0	
SB-13	10/13/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	0.0	--	0.0	
18	0.0	--	0.0				
20	0.0	--	0.0				

**TABLE 1 : SOIL SCREENING SUMMARY**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLs)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-14	10/13/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.1	--	0.1	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.4	--	0.4	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	0.0	--	0.0	
SB-15	10/13/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
			8	0.0	--	0.0	
			10	0.0	--	0.0	
			12	0.0	--	0.0	
			14	0.0	--	0.0	
			16	0.0	--	0.0	
DW-1	10/14/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	22.5	--	22.5	
			6	1.9	--	1.9	
			8	37.6	--	37.6	
			10	1,898	--	1,898	
			12	2,390	--	2,390	
			14	3,149	--	3,149	
			16	2,514	--	2,514	
			18	330.3	--	330.3	
			20	2,996	--	2,996	
			25	3,727	--	3,727	
30	2,032	--	2,032				
35	2,994	--	2,994				
MW-33	10/14/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	
			4	0.0	--	0.0	
			5	0.0	--	0.0	
			6	0.0	--	0.0	
MW-34	10/14/2022	18	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.3	--	0.3	
			4	0.4	--	0.4	
			5	0.0	--	0.0	
			6	0.4	--	0.4	

Notes: OVA = Organic Vapor Analyzer  
 FBLs = Feet Below Land Surface  
 ppm = parts per million  
 ft = feet

**TABLE 2: SOIL ANALYTICAL SUMMARY - VOAs, TRPHs and Metals**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

Sample				OVA	Laboratory Analyses									
Boring No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene (mg/kg)	Ethyl-benzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TRPHs (mg/kg)	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)
Leachability Based on Groundwater Criteria (mg/kg)					0.007	0.6	0.5	0.2	0.09	340	*	7.5	38	*
Direct Exposure Residential (mg/kg)					1.2	1,500	7,500	130	4,400	460	2.1	82	210	400
SB-6	10/13/2022	18	12	1,024	<b>0.205</b>	<b>22.2</b>	<b>7.51</b>	<b>244</b>	0.0185 U	<b>1210</b>	NS	NS	NS	NS
SB-9	10/13/2022	18	8	1,211	<b>1.05</b>	<b>65.3</b>	<b>72.0</b>	<b>320</b>	<b>0.106 I</b>	<b>2,520</b>	NS	NS	NS	NS
SB-10	10/13/2022	18	1-2	7.0	0.000577 U	0.00381	0.00439 I	0.0194	0.000433 U	31.1	NS	NS	NS	NS

Notes: All values in milligrams per kilogram (mg/kg)  
 SCTLs -- Soil Cleanup Target Levels for Leachability Based on Groundwater Criteria and Direct Exposure Residential per Chapter 62-777, F.A.C.  
 \* = Leachability value may be determined using TCLP.  
 TCLP = Toxicity Characteristic Leaching Procedure  
 VOA = Volatile Organic Aromatics  
 TRPH = Total Recoverable Petroleum Hydrocarbons  
 MTBE = Methyl Tert-Butyl Ether  
 OVA = Organic Vapor Analyzer  
 fbls = Feet Below Land Surface  
 ppm = parts per million  
 ft = feet  
 NS = Not Sampled  
 U = BDL - Below Detection Limit  
 I = Result is between Method Detection Limit (MDL) & Practical Quantitation Limit (PQL)  
 V = Analyte Detected in Sample and Method Blank  
**Bolded** = SCTL Exceedance

**TABLE 3: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

Sample				OVA	Laboratory Analyses										
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph- thalene (mg/kg)	1-Methyl- naph- thalene (mg/kg)	2-Methyl- naph- thalene (mg/kg)	Acen- aph- thene (mg/kg)	Acen- aph- thylene (mg/kg)	Anthra- cene (mg/kg)	Benzo (g,h,i) pery- lene (mg/kg)	Fluoran- thene (mg/kg)	Fluor- ene (mg/kg)	Phenan- threne (mg/kg)	Pyrene (mg/kg)
Leachability Based on Groundwater Criteria (mg/kg)					1.2	3.1	8.5	2.1	27	2,500	32,000	1,200	160	250	880
Direct Exposure Residential (mg/kg)					55	200	210	2,400	1,800	21,000	2,500	3,200	2,600	2,200	2,400
SB-6	10/13/2022	18	12	1,024	<b>12.2</b>	<b>10.0</b>	<b>22.4</b>	0.0474	0.00538 U	0.0126 I	0.00699 U	0.0115 I	0.0491	0.0691	0.0132 I
SB-9	10/13/2022	18	8	1,211	<b>17.8 J</b>	<b>13.7 J</b>	<b>32.4 J</b>	0.0567	0.00541 U	0.0126 I	0.00703 U	0.0152 I	0.0589	0.0906	0.0260 I
SB-10	10/13/2022	18	1-2	7.0	0.00927 U	0.00472 U	0.00479 U	0.00597 U	0.00520 U	0.00657 U	0.00675 U	0.00887 I	0.00601 U	0.00733 U	0.00718 U

Notes: All values in milligrams per kilogram (mg/kg)  
 SCTLs -- Soil Cleanup Target Levels for Leachability Based on Groundwater Criteria and Direct Exposure Residential per Chapter 62-777, F.A.C.  
 PAH = Polycyclic Aromatic Hydrocarbons  
 OVA = Organic Vapor Analyzer  
 fbls = Feet Below Land Surface  
 ppm = parts per million  
 ft = feet  
 U = BDL - Below Detection Limit  
 I = Result is between Method Detection Limit (MDL) & Practical Quantitation Limit (PQL)

**TABLE 4: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

Sample				OVA	Laboratory Analyses							
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra- cene (mg/kg)	Benzo (b) fluoran- thene (mg/kg)	Benzo (k) fluoran- thene (mg/kg)	Chry- sene (mg/kg)	Dibenz (a,h) anthra- cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)
Leachability Based on Groundwater Criteria (mg/kg)					8	0.8	2.4	24	77	0.7	6.6	*
Direct Exposure Residential (mg/kg)					0.1	#	#	#	#	#	#	0.1
SB-6	10/13/2022	18	12	1,024	0.00711 U	0.00674 U	0.00713 U	0.00680 U	0.00760 U	0.0106 U	0.0108 U	--
SB-9	10/13/2022	18	8	1,211	0.00714 U	0.00677 U	0.00717 U	0.00683 U	0.00764 U	0.0107 U	0.0109 U	--
SB-10	10/13/2022	18	1-2	7.0	0.00686 U	0.00651 U	0.00688 U	0.00656 U	0.00734 U	0.0102 U	0.0104 U	--

Notes: All values in milligrams per kilogram (mg/kg)  
 SCTLs -- Soil Cleanup Target Levels for Leachability Based on Groundwater Criteria and Direct Exposure Residential per Chapter 62-777, F.A.C.  
 \* = Leachability value not applicable.  
 # = Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent.  
 PAH = Polycyclic Aromatic Hydrocarbons  
 OVA = Organic Vapor Analyzer  
 fbls = Feet Below Land Surface  
 ppm = parts per million  
 ft = feet  
 U = BDL - Below Detection Limit  
 I = Result is between Method Detection Limit (MDL) & Practical Quantitation Limit (PQL)

**TABLE 5: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - VOCs and Metals**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

Sample		Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	EDB	1,2-Di- chloro- ethane	Total Arsenic	Total Cad- mium	Total Chro- mium	Total Lead
Location	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
<b>GCTLs</b>		1	40	30	20	20	0.02	3	10	5	100	15
<b>NADCs</b>		100	400	300	200	200	2	300	100	50	1,000	150
MW-30F	10/20/2022	<b>538</b>	<b>6,320</b>	<b>676</b>	<b>10,100</b>	0.505 U	NS	NS	NS	NS	NS	NS
MW-31F	10/20/2022	<b>1.25</b>	0.535 I	3.76	4.76	0.101 U	NS	NS	NS	NS	NS	NS
MW-32	10/20/2022	<b>7.48</b>	20.9	<b>152</b>	<b>561</b>	0.101 U	NS	NS	NS	NS	NS	NS
MW-33	10/20/2022	<b>245</b>	<b>15,900</b>	<b>1,980</b>	<b>11,200</b>	0.505 U	NS	NS	NS	NS	NS	NS
MW-34	10/20/2022	0.0941 U	0.278 U	0.203 I	1.35 I	0.101 U	NS	NS	NS	NS	NS	NS
DW-1	10/21/2022	<b>1.44</b>	8.09	2.53	6.44	0.101 U	NS	NS	NS	NS	NS	NS

Notes: all values in micrograms per liter (µg/L)  
 GCTLs -- Groundwater Cleanup Target Levels from Table I of Chapter 62-777, F.A.C.  
 NADCs -- Natural Attenuation Default Concentrations from Table V of Chapter 62-777, F.A.C.  
 VOC = Volatile Organic Compounds  
 MTBE = Methyl Tert-Butyl Ether  
 EDB = Ethylene Dibromide  
 NS = Not Sampled  
 U = BDL - Below Detection Limit  
 I = Result is between Method Detection Limit (MDL) & Practical Quantitation Limit (PQL)

**TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

Sample		TRPHs	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (g,h,i) perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo (a) pyrene	Benzo (a) anthracene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene
Location	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
<b>GCTLs</b>		5,000	14	28	28	20	210	2,100	210	280	280	210	210	0.2	0.05	0.05	0.5	4.8	0.005	0.05
<b>NADCs</b>		50,000	140	280	280	200	2,100	21,000	2,100	2,800	2,800	2,100	2,100	20	5	5	50	480	0.5	5
MW-30F	10/20/2022	<b>20,000</b>	<b>705</b>	<b>196</b>	<b>379</b>	0.351	0.0171 U	0.0490 I	0.0184 U	0.0270 U	0.333	0.278	0.0197 I	0.0184 U	0.0203 U	0.0168 U	0.0202 U	0.0179 U	0.0160 U	0.0158 U
MW-31F	10/20/2022	305 I	12.9	8.33	9.23	0.0510	0.0171 U	0.0190 U	0.0184 U	0.0270 U	0.0350 I	0.0180 U	0.0169 U	0.0184 U	0.0203 U	0.0168 U	0.0202 U	0.0179 U	0.0160 U	0.0158 U
MW-32	10/20/2022	3,830	<b>64.8</b>	<b>77.7</b>	<b>228</b>	0.301	0.0171 U	0.0300 I	0.0184 U	0.0270 U	0.276	0.222	0.0169 U	0.0184 U	0.0203 U	0.0168 U	0.0202 U	0.0179 U	0.0160 U	0.0158 U
MW-33	10/20/2022	<b>15,100</b>	<b>631</b>	<b>72.4</b>	<b>127</b>	0.0190 U	0.0171 U	0.0382 I	0.0184 U	0.0270 U	0.0704	0.0484 I	0.0169 U	0.0184 U	0.0203 U	0.0168 U	0.0202 U	0.0179 U	0.0160 U	0.0158 U
MW-34	10/20/2022	100 U	0.126 I	0.0813 I	0.126 I	0.0190 U	0.0171 U	0.0190 U	0.0184 U	0.0270 U	0.0169 U	0.0180 U	0.0169 U	0.0184 U	0.0203 U	0.0168 U	0.0202 U	0.0179 U	0.0160 U	0.0158 U
DW-1	10/21/2022	213 U	0.0917 U	0.0687 U	0.0674 U	0.0190 U	0.0171 U	0.0190 U	0.0184 U	0.0270 U	0.0169 U	0.0180 U	0.0169 U	0.0184 U	0.0203 U	0.0168 U	0.0202 U	0.0179 U	0.0160 U	0.0158 U

Notes:  
 all values in micrograms per liter (µg/L)  
 GCTLs -- Groundwater Cleanup Target Levels from Table I of Chapter 62-777, F.A.C.  
 NADCs -- Natural Attenuation Default Concentrations from Table V of Chapter 62-777, F.A.C.  
 PAH = Polycyclic Aromatic Hydrocarbons  
 TRPH = Total Recoverable Petroleum Hydrocarbons  
 U = BDL - Below Detection Limit  
 I = Result is between Method Detection Limit (MDL) & Practical Quantitation Limit (PQL)  
 J = The value is outside laboratory established criteria

**TABLE 7: GROUNDWATER ELEVATION SUMMARY**

Facility Name: City of Gretna Maintenance Yard

Facility ID#: 20/8519571

WELL NO.	MW-30F	MW-31F	MW-32
DIAMETER	2"	2"	1"
WELL DEPTH	30'	30'	25'
SCREEN INTERVAL	15'-30'	15'-30'	15'-25'
TOC ELEVATION	94.52	94.48	94.32

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
10/20/2022	5.48	18.83	NS	5.52	18.81	NS	5.68	19.35	NS
								5.32	

WELL NO.	MW-33	MW-34	DW-1
DIAMETER	1"	1"	1.25"
WELL DEPTH	25'	25'	45'
SCREEN INTERVAL	15'-25'	15'-25'	40'-45'
TOC ELEVATION	94.68	95.03	94.56

	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
10/20/2022	5.32	19.90	NS	4.97	19.12	NS	5.44	NS	NS

Notes: Current TOC elevation measured on October 20, 2022  
 TOC elevations are based on an arbitrary benchmark of 100 feet  
 TOC = Top of Casing  
 ELEV = Elevation  
 DTW = Depth of Water  
 FP = Free Product  
 NS = Not Sampled

Appendix A:

Historical Documents



**Florida Department of  
Environmental Protection**

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

Storage Tanks &  
Contamination  
Monitoring  
Information

## Cover Page Report

Report Run Date: 10/13/2022

Last Data Refresh: 10/12/2022

Report Generated from DOPPLER

<b>District</b>	Northwest	<b>Type</b>	Retail Station
<b>County</b>	Gadsden	<b>Status</b>	CLOSED
<b>ID</b>	8519571	<b>Latitude</b>	30° 37' 3.9792
<b>Name</b>	CITY OF GRETNA MAINTENANCE YARD 117 ASH AVE GRETNA, FL 32332	<b>Longitude</b>	84° 39' 43.1064
<b>Contact</b>	ANTONIO JEFFERSON	<b>LL Method</b>	DPHO
<b>Phone</b>	(850) 856-5257	<b>LL Status</b>	REVIEWED
		<b>Status Date</b>	04/04/2012

## Account Owner Information

<b>Name</b>	CITY OF GRETNA PO BOX 220 GRETNA, FL 32332	<b>Effective Date</b>	02/28/2012
<b>Contact</b>	ANTONIO JEFFERSON		
<b>Phone</b>	(850) 856-5257		
<b>Email</b>	AJEFFERSON@MYGRETNA.COM		

**Placard # / Date**

## Property Owner Information

<b>Name</b>	CITY OF GRETNA PO BOX 220 GRETNA, FL 32332	<b>Effective Date</b>	01/11/2019
<b>Contact</b>	ANTONIO JEFFERSON		
<b>Phone</b>	(850) 856-5257		
<b>Email</b>	AJEFFERSON@MYGRETNA.COM		

Tank	Tank Size	Content	Installed	Placement	Status
1	3000	Leaded Gas (A)	07/01/1984	UNDERGROUND	Removed from Site (B)

**Constructions** (C) Steel  
**Pipings** (D) External protective coating  
**Monitorings** (Y) Unknown

Tank	Tank Size	Content	Installed	Placement	Status
2	3000	Unleaded Gas (B)	07/01/1984	UNDERGROUND	Removed from Site (B)

**Constructions** (C) Steel  
**Pipings** (D) External protective coating  
**Monitorings** (Y) Unknown

**No Insurance Documents Found**

**No Legacy Data Found**

## Compliance Activity Information

Activity Code	Date Completed	Results	Inspector	AST/UST Count	Description
Enforcement Tracking	08/18/2021	Closed Without Enforcement	BRISTOL_S		Enforcement
Phone Conversation	09/24/2014	Satisfied	BRISTOL_S		Enforcement
Enforcement Referral	09/22/2014	Accepted	BRISTOL_S		Enforcement
Issue Document	02/22/2012	Satisfied	GILLMAN_M		Non-Compliance
Meeting	02/22/2012	Satisfied	GILLMAN_M		Non-Compliance
Phone Conversation	02/22/2012	Satisfied	GILLMAN_M		Non-Compliance
Phone Conversation	07/06/2011	Satisfied	BRISTOL_S		Discharge

No Open AOCs Found

No Open Violations Found

## Discharge Information

Discharge Date	Clean Up Status	Score	Eligibility Info	Site Manager	Phone
08/31/2009	INACTIVE	31	PETROLEUM CLEANUP PARTICIPATION PROGRAM-PARTIAL		
08/31/2009	INACTIVE	31			

7017 1450 0000 5947 1070

<b>U.S. Postal Service™</b> <b>CERTIFIED MAIL® RECEIPT</b> <i>Domestic Mail Only</i>	
For delivery information, visit our website at <a href="http://www.usps.com">www.usps.com</a> ®.	
<b>OFFICIAL USE</b>	
Certified Mail Fee \$ _____	Postmark Here
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy) \$ _____	
<input type="checkbox"/> Return Receipt (electronic) \$ _____	
<input type="checkbox"/> Certified Mail Restricted Delivery \$ _____	
<input type="checkbox"/> Adult Signature Required \$ _____	
FAC ID# 208519571 Mr. Antonio Jefferson City of Gretna P.O. Box 220 Gretna, Florida 32332	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

**USPS Tracking®** FAQs > (<https://www.usps.com/faqs/uspstracking-faqs.htm>)

**Track Another Package +**

**Tracking Number:** 70171450000059471070

Remove X

Your item was picked up at the post office at 10:54 am on January 17, 2019 in GRETNA, FL 32332.

 **Delivered**

January 17, 2019 at 10:54 am  
 Delivered, Individual Picked Up at Post Office  
 GRETNA, FL 32332

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Feedback



# FLORIDA DEPARTMENT OF Environmental Protection

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

Ron DeSantis  
Governor

Jeanette Nuñez  
Lt. Governor

Noah Valenstein  
Secretary

January 15, 2019

**CERTIFIED MAIL-RETURN RECEIPT REQUESTED  
NUMBER 7017 1450 0000 5947 1070**

Mr. Antonio Jefferson  
City of Gretna  
Post Office Box 220  
Gretna, Florida 32332

**RE: City of Gretna Maintenance Yard  
117 Ash Avenue, Gretna, Florida  
Incident Reporting Date: August 31, 2009 - DEP Facility #208519571**

Dear Mr. Jefferson:

In accordance with Section 376.3071(13), Florida Statutes (F.S.), the Department has reviewed the affidavit submitted for the Petroleum Cleanup Participation Program (PCPP) for the above referenced discharge. This discharge is **eligible** to participate in the PCPP and is subject to the requirements set forth in Section 376.3071(13), F.S. **This site's eligibility excludes any vehicular diesel fuel contamination from the 200-gallon diesel aboveground storage tank.**

This eligibility is contingent upon the owner, operator, or responsible party signing a PCPP agreement with the Department and paying 25% of the cost of the cleanup. This agreement along with additional eligibility requirements, including a Limited Contamination Assessment Report (LCAR) and co-payment costs will be required at a later date. Future state assisted rehabilitation will be dictated by the site's priority ranking score.

Pursuant to Subsection 376.3071, F.S., the Department will **not pay** for costs incurred for rehabilitation work performed before the execution of a PCPP agreement. If you choose to pay for cleanup and not participate in the PCPP, you must inform the Department and rehabilitate the site in accordance with Chapter 62-780, Florida Administrative Code (F.A.C.).

This Order only applies to PCPP eligibility and does not apply in any way to any storage tank regulation or compliance matters, including any discharges not addressed herein. You continue to be responsible for compliance with all environmental regulations and will be subject to enforcement should you fail to comply with any environmental regulations.

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under sections 120.569 and 120.57, F.S., within **21** days of receipt of this Order. Persons who have filed such a petition may seek to mediate the dispute and choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing and pursuing mediation are set forth below.

Persons affected by this Order have the following options.

If you choose to accept the Department's decision regarding this eligibility determination you do not have to do anything. This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order.

If you choose to challenge the decision, you may do the following.

- 1.) File a request for an extension of time to file a petition for hearing with the Department's Agency Clerk in the Office of General Counsel within **21** days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to resolve any disputes without first filing a petition for hearing or negotiate an agreement to mediate; or
- 2.) File a petition for administrative hearing with the Department's Agency Clerk in the Office of General Counsel within **21** days of receipt of this Order.
- 3.) In addition to requesting an administrative hearing, any petitioner may elect to pursue mediation under section 120.573, F.S., and must negotiate an agreement to mediate within **10** days after the deadline for filing a petition.

#### How to Request an Extension of Time to File a Petition for Hearing

For good cause shown, pursuant to Rule 62-110.106(4), Florida Administrative Code (F.A.C.), the Department may grant a request for an extension of time to file a petition for hearing. Such a request must be filed (received) by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within **21** days of receipt of this Order. Petitioner, if different from the applicant, shall mail a copy of the request to the applicant at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for administrative hearing must be made.

### How to file a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000, within **21** days of receipt of this Order. Petitioner, if different from the applicant, shall mail a copy of the petition to the applicant, at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under sections 120.569 and 120.57, F.S.

Pursuant to subsections 120.54 (5)(b) 4 and 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for administrative hearing shall contain the following information.

- a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative; if any, the site owner's name and address, if different from the petitioner; the DEP facility number, and the name and address of the facility;
- b) A statement of when and how the petitioner received notice of the Department's action or proposed action;
- c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;
- e) A concise statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- f) A statement of the specific rules or statutes that the petitioner contends requires reversal or modification of the Department's action or proposed action; and
- g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the Department to take with respect to the Department's action or proposed action.

### How to Pursue Mediation

In addition to requesting an administrative hearing, any petitioner may elect to pursue mediation. The election may be accomplished by filing with the Department a mediation agreement with all parties to the proceeding (i.e., the applicant, the Department, and any person who has filed a timely and sufficient petition for hearing). The agreement must contain all the information required by Rule 28-106.404, F.A.C. The agreement, signed by all parties, must be received by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000 within **10** days after the deadline for filing a petition, as set forth above. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement.

Pursuant to Rule 28-106.404, F.A.C., an agreement to mediate must include the following:

- (i) The name, address, and telephone number of the persons who may attend the mediation (also the DEP facility number, and the name and address of the facility if applicable);
- (ii) The name, address, and telephone number of the mediator agreed to by the parties;

- (iii) How the costs and fees associated with the mediation will be allocated (the Petroleum Restoration Program will not pay any of the costs of mediation);
- (iv) The agreement of the parties regarding the confidentiality of discussions and documents introduced during mediation to the extent authorized by law;
- (v) The date, time, and place of the first mediation session;
- (vi) The name of the party's representative who shall have authority to settle or recommend settlement; and
- (vii) The signature of the parties.

As provided in section 120.573, F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57, F.S., for holding an administrative hearing and issuing a final order. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons seeking to protect their substantial interests that would be affected by such a modified final decision must file their petitions within **21** days of receipt of this notice, or they shall be deemed to have waived their right to a proceeding under sections 120.569 and 120.57, F.S. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120.569 and 120.57, F.S. are resumed.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or mediation settlement.

#### Judicial Review

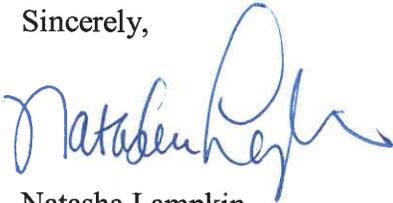
Any party to this Order has the right to seek judicial review of it under section 120.68, F.S., by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Agency Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this order is filed with the clerk of the Department (see below).

Mr. Antonio Jefferson  
Page 5  
January 15, 2019

Questions

Any questions regarding the Department's review of your eligibility determination should be directed to Lewis J. Cornman Jr. at (850) 245-8839. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for administrative hearing, or a request for a time extension to file a petition for hearing or an agreement to mediate.

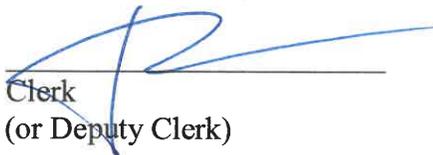
Sincerely,



Natasha Lampkin  
Acting Program Administrator  
Petroleum Restoration Program

NL/ljc

FILING AND ACKNOWLEDGMENT  
FILED, on this date, pursuant to §120.52  
Florida Statutes, with the designated  
Department Clerk, receipt of which is  
hereby acknowledged.



Clerk  
(or Deputy Clerk)

1-15-19  
Date

EC: Mark Gillman – FDEP - Northwest Florida District Office – [mark.gillman@dep.state.fl.us](mailto:mark.gillman@dep.state.fl.us)  
Susan Bristol – FDEP - Northwest Florida District Office – [susan.bristol@dep.state.fl.us](mailto:susan.bristol@dep.state.fl.us)  
Edwin C. French – Leon County Growth & Environment Department –  
[frenche@leoncountyfl.gov](mailto:frenche@leoncountyfl.gov)



# Department of Environmental Protection

2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

## DISCHARGE REPORT FORM

DEP Form: 62-761.900(1)  
Form Title: Discharge Report Form  
Effective Date: January 2017  
Incorporated in Rule 62-761.405, F.A.C.

Complete all applicable blanks, and submit copies of any analytical or field test results confirming contamination to soils, surface water, or groundwater to the County via email or mail.

Facility ID Number (If Registered): 8519571 Date of Form Completion: 1/9/2019 Date of Discovery: 8/31/2009

Facility Name: City of Gretna Maintenance Yard County: Gadsden

Facility (Property) Owner: City of Gretna Telephone Number: 850-856-5257

Owner Mailing Address: Post Office Box 220 Gretna, Florida 32332

Location of Discharge (Facility Street Address): First Street and Ash Avenue Lat/Long: \_\_\_\_\_

Date of receipt of any test or analytical results confirming a discharge: 8/31/2009 Estimated number of gallons discharged: Unknown

**Discharge affected:** (Check all that apply)

- Soil
- Drinking water well(s)
- Groundwater
- Shoreline
- Soil water (water body name) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

**Evidence of discharge:** (Check all that apply)

- Visual observation of sheen
- Visual observation of free product
- Results or receipt of results of analytical tests
- Spill or vehicle overfill > 25 gallons to a pervious surface
- Stained soils
- Other (explain in comments)

**Method of discovery and confirmation of discharge:** (Check all that apply, see rule language explanation on instructions for this form)

- Visual observation
- Groundwater analytical results
- Closure/Closure sampling assessment
- Soil analytical results
- Surface water analytical results
- Other (specify) DEP Forensic Investigation Report

**Type of regulated substance discharged:** (Check all that apply)

- Gasoline
- Diesel
- Heating oil
- Kerosene
- Aviation gas
- Hazardous substance (USTs) – write name or Chemical Abstract Service (CAS) #: \_\_\_\_\_
- Jet fuel
- Used/waste oil
- New motor/lube oil
- Pesticide
- Grade 5 & 6 residual oils
- Mineral acids (ASTs)
- Ammonia compound
- Chlorine compound
- Biofuel blends
- Unknown
- Other (specify) \_\_\_\_\_

**Discharge originated from a:** (Check all that apply)

- Tank
- Piping
- Spill bucket
- Dispenser
- Piping sump
- Dispenser sump
- Other secondary containment
- Fitting or pipe connection
- Valve
- Tank truck
- Vehicle or customer vehicle
- Aircraft
- Railroad tankcar
- Barge, tanker ship or other vessel
- Pipeline
- Drum
- Unknown
- Other (specify) \_\_\_\_\_

**Cause of the discharge:** (Check all that apply)

- Spill
- Overfill
- Corrosion
- Puncture
- Material failure (crack, split, etc.)
- Material incompatibility
- Improper installation
- Loose connection
- Collision
- Vehicle accident
- Fire/explosion
- Vandalism
- Weather
- Human error
- Unknown
- Other (specify) \_\_\_\_\_

**Actions taken in response to the discharge:**

No action taken by the City as discharged occurred prior to the City of Gretna owning the facility.

**Comments:**

This Discharge Report is based on information received by the City from the Florida Department of Environmental Protection which is based on a forensic investigation performed for the department and results provided to the Department in a report dated August 31, 2009. The limited information contained herein is based on information provided by the Department.

**Agencies notified (as applicable):**

- Fire Department
- County Program \_\_\_\_\_
- District Office \_\_\_\_\_
- State Watch Office 800-320-0519
- National Response Center 800-424-8802

To the best of my knowledge and belief, all information submitted on this form is true, accurate and complete.

Antonio Jefferson for the City of Gretna  
Printed Name of Owner, Operator or Authorized Representative

*Antonio Jefferson*  
Signature of Owner, Operator or Authorized Representative



# Florida Department of Environmental Regulation

Northwest District • 160 Governmental Center • Pensacola, Florida 32501-5794 • 904/436-8300

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary  
Robert Kriegel, Deputy Assistant Secretary

October 30, 1990

WARNING NOTICE  
NWST 20 - 1092

CERTIFIED, RETURN  
RECEIPT REQUESTED

Gus Richardson, Owner  
Gretna Station  
Route 5 Box 528  
Guincy, Florida 32351

Dear Mr. Richardson:

On January 26, 1990, a Department representative inspected your facility Gretna Station, Id. No. 208519571 on Ash Street, Gretna, Florida. During the inspection we found your facility to be out of compliance with a number of the stationary tank requirements referenced in Florida Administrative Code Chapter 17-61. On February 13, 1990, we mailed you a copy of the inspection report attached to a cover letter requesting that you inform us within fourteen (14) days of the actions you have taken to correct the deficiencies noted during our inspection. To date, we have not received a response from you. The facility was inspected again on October 3, 1990 and found that no corrective actions have been made.

It is therefore requested that you respond to us in writing within fourteen (14) days after receiving this Warning Notice. Your response must include a brief explanation of the actions you have taken or will take (with a schedule) to bring your facility into compliance within 30 days with each of the requirements now cited as being violated. Please cite the DER number listed above in your response.

Your cooperation in this matter may eliminate the need for further enforcement and the possible imposition of fines and penalties pursuant to Section 403.411, Florida Statutes, of up to \$10,000 per day per violation.

Should you have any questions, please do not hesitate to contact Bruce French in the Tallahassee Branch Office at (904) 488-3704.

Sincerely



Robert V. Kriegel  
Deputy Assistant Secretary

RVK/bfd

cc: Tallahassee Branch Office  
Ms. Eva Richardson  
P. O. Box 296  
Gretna, FL 32332



State of Florida  
Department of Environmental Regulation

Pollutant Storage Tank System  
Inspection Report Form

SPN

TK00292

Facility ID No.: 208519571 County: Gadsden-20  
 Facility Name: Gretna Station  
 Facility Location: Ash Street Gretna, Florida  
 Operator: D. L. & C Auto, Inc. Phone: (904) 856-5455  
 Owner: Gus Richardson Phone: \_\_\_\_\_  
 Latitude 30° 37' 06" Longitude 84° 39' 46" Section 32 Township 3N Range 4W

Tank #	Size	Contents	Installation Date	U/A or In-Contact	Tank Construction	Integral Piping	Monitoring System	Tank Status
1	3000	A	84	U	C	D	Y	F
2	3000	B	84	U	C	D	Y	F
3	?	L	?	U	?	?	I	F

Comments: Inspected site 1-26-90; Non-compliance letter issued 2-13-90; no response received from owner as of 10-3-90. Status of facility remains unchanged. Discovered underground waste oil tank on north side of building - contains used oil, filters, and possibly battery acid. Owner must pay fees for tank registration for 1990; properly abandon fuel tanks; remove waste oil tank; perform E.P. Toxicity Test on waste oil in tank and on waste oil contaminated soils; remove all contaminated soils and dispose of them properly; and, perform a tank closure assessment on all three tanks.

Inspection Type: <input type="checkbox"/> Complaint Response <input type="checkbox"/> Initial <input type="checkbox"/> EDI <input type="checkbox"/> Public Well Field <input checked="" type="checkbox"/> Reinspection <input type="checkbox"/> Installation <input type="checkbox"/> Tank Removal <input type="checkbox"/> Unregistered	Facility Information: <input checked="" type="checkbox"/> Abandoned <input type="checkbox"/> Aboveground <input type="checkbox"/> Govt.-Federal <input type="checkbox"/> Govt.-Other <input type="checkbox"/> Non-retail <input checked="" type="checkbox"/> Retail Closed <input type="checkbox"/> Retrofit (M. or O.) <input type="checkbox"/> Retrofit (L. or R.)
--	--

DER District: 10-NWD/TBO  
Bruce French 10-3-90  
 Inspector's Signature & Date

Local Program: NA  
 \_\_\_\_\_  
 Facility Contact's Signature & Date

Violations must be corrected by: next routine inspection  or by:  mo /  day /  yr



Department of Environmental Regulation  
**Inspection Form — UST Compliance Section**

Facility # 208519571  
 Date 10-3-90

GPH

**I. REGISTRATION/NOTIFICATION:**

	Yes	No	Unk	N/A
1. Facility has properly registered all applicable tanks on site? 17-61.050(1)(a). <i>Tanks not paid for in 1990</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
2. Current Registration placard is properly displayed? 376.303(1)(b), F.S.		<input checked="" type="checkbox"/>		
3. Proper notification has been made for the following: 17-61.050(1)(b)		<input checked="" type="checkbox"/>		
4. abandonment		<input checked="" type="checkbox"/>		
5. facility sale		<input checked="" type="checkbox"/>		
6. retrofitting				<input checked="" type="checkbox"/>
7. tank test failure				<input checked="" type="checkbox"/>
8. discharges		<input checked="" type="checkbox"/>		
9. monitoring response				<input checked="" type="checkbox"/>

**II. TANK STATUS:**

10. Tank Designated Out of Service: 17-61.050(3)(b)1.:		<input checked="" type="checkbox"/>		
11. inventory + monitoring records kept or		<input checked="" type="checkbox"/>		
12. secured against tampering		<input checked="" type="checkbox"/>		
13. Tanks properly abandoned? 17-61.050(3)(c)		<input checked="" type="checkbox"/>		
14. in place or		<input checked="" type="checkbox"/>		
15. removed				<input checked="" type="checkbox"/>

**III. OPERATION AND MAINTENANCE:**

16. The schedule for retrofitting has been met? 17-61.060(2)(c) & (3)(b)2.		<input checked="" type="checkbox"/>		
17. overfill protection		<input checked="" type="checkbox"/>		
18. piping and/or		<input checked="" type="checkbox"/>		
19. tanks		<input checked="" type="checkbox"/>		
20. Structure-to-soil potential test schedules for sacrificial anode protected systems are being met?				<input checked="" type="checkbox"/>
21. tanks 17-61.060(2)(d)1.a.				<input checked="" type="checkbox"/>
22. piping 17-61.060(3)(b)1.b.				<input checked="" type="checkbox"/>
23. Impressed current protected systems are continuously energized and metered?				<input checked="" type="checkbox"/>
24. tanks 17-61.060(2)(d)1.b.				<input checked="" type="checkbox"/>
25. piping 17-61.060(3)(b)1.c.				<input checked="" type="checkbox"/>

**IV. INVENTORY REQUIREMENTS:**

26. Daily inventory records maintained? 17-61.050(4)(c)2.a.				<input checked="" type="checkbox"/>
27. water				<input checked="" type="checkbox"/>
28. product				<input checked="" type="checkbox"/>
29. meter readings				<input checked="" type="checkbox"/>
30. Inventory reconciliation is performed? 17-61.050(4)(c)2.b.				<input checked="" type="checkbox"/>
31. each 5 consecutive readings				<input checked="" type="checkbox"/>
32. once a week				<input checked="" type="checkbox"/>
33. alternate procedure				<input checked="" type="checkbox"/>
34. Significant loss/gain investigation 17-61.050(4)(c)3.				<input checked="" type="checkbox"/>
35. performed				<input checked="" type="checkbox"/>
36. found source of discrepancy, and/or				<input checked="" type="checkbox"/>
37. followed up with precision testing? 17-61.050(4)(c)				<input checked="" type="checkbox"/>



Department of Environmental Regulation  
**Inspection Form — UST Compliance Section**

694  
 Facility # 208519571  
 Date 10-3-90

**V. RECORD KEEPING, DISCHARGE REPORTING & CONTAMINATION CLEAN UP:**

- 38. Records being kept as specified by 17-61.050(4)(a)?
- 39. 2 years
- 40. monitoring system exams
- 41. retrofitting records
- 42. maintenance exams
- 43. NFPA 329 tests
- 44. repairs
- 45. available within 2 working days
- 46. Tank and pipe tests:
- 47. meet NFPA 329 standards 17-61.060(2)(d)4.
- 48. administered by manufacturer certified personnel?
- 49. The discharge of pollutants has resulted in immediate action undertaken for:
- 50. containing *waste oil & battery acid soils must be*
- 51. removing, and *tested for EP Toxicity, removed and disposed*
- 52. abating? 17-61.050(4)(b)1 *of properly.*

	Yes	No	Unk	N/A
38		✓		
39		✓		
40		✓		
41				✓
42				✓
43				✓
44				✓
45		✓		
46				✓
47				✓
48				✓
49		✓		
50				✓
51		✓		
52				✓

**VI. LEAK DETECTION/MONITORING WELLS:**

- 53. Facility has an approved leak detection system in compliance with the retrofit schedule? 17-61.060(2)(b)3.
- 54. Monitoring wells have been properly constructed? 17-61.050(5)(a)
- 55. 2" diameter casing
- 56. properly grouted
- 57. equipped with water tight cap
- 58. properly located 17-61.060(2)(b)3.
- 59. Monitoring wells are being properly sampled? 17-61.050(5)(b).
- 60. containing less than 1 foot water
- 61. automatically tested wells
- 62. manually sampled wells
- 63. Continuously operating leak detection systems installed and operated in accordance with manufacturer's specs? 17-61.050(4)(c)1.
- 64. Positive response of a detection device treated as a discharge? 17-61.050(5)(c).
- 65. Monitoring system requirements are being complied with? 17-61.060(2)(b)3.
- 66. groundwater plan
- 67. SPCC plan
- 68. approved alternate procedure

53		✓		
54				✓
55				✓
56				✓
57				✓
58				✓
59				✓
60				✓
61				✓
62				✓
63				✓
64				✓
65				✓
66				✓
67				✓
68				✓

**PROGRAM ELIGIBILITY REVIEW CHECKLIST/ROUTING SLIP**

Reviewed By: Lewis Cornman  
 Addressee: Mr. Antonio Jefferson  
 Company Name: CITY OF GRETNA  
 Address: P.O. Box 220  
GRETNA, FL 32332

Facility ID#: 208519571  
 Fac. Name: CITY OF GRETNA MAINTENANCE YARD  
 Address: 117 ASH AVENUE  
GRETNA, FL

ATRP      EDI      FPLRIP      PCPP      DRF PCPP      IVPSSRP

Amended                      Rescind                      Re-Evaluation                      Partial

Latitude 30 / 37 / 39<sup>1</sup> Longitude 84 / 39 / 43<sup>10</sup> AMENDED \_\_\_\_\_ Date of Original \_\_\_\_/\_\_\_\_/\_\_\_\_

INITIALS    DATE

MC    1/15/2017    LOI 1 / 14 / 2019 Discovery Date 8 / 31 / 09 Inspection Date 1 / 7 / 19

MC    1/15/09    Review Documentation / STCM Application Tracking  
MC    1/15/17    Prepare Letter or Final Order (Check Appropriate Line)

- 1. Eligible for State Assisted Cleanup per s. 376, F.S.
- 2. Ineligible

MC    1/15/19    Review Letter (Check each line after verification of Information)

- 1. Proper Addressee
- 2. Facility Name
- 3. Facility Address
- 4. DEP Facility Number
- 5. CC: All Other Applicants \_\_\_\_\_
- 6. EC: All Other Applicants \_\_\_\_\_
- 7. EC: NW District Tanks Supervisor NW
- 8. EC: Cleanup LP \_\_\_\_\_
- 9. EC: Compliance LP Leon - Brian French
- 10. EC: DEP OGC \_\_\_\_\_
- 11. EC: Site Manager Sue Bristol

N.L.    1/15/19    PRP Administer Signature  
K.W.    1/16/19    Mail Registered/Certified  
S.B.    1/15/19    Department Clerk Stamp, Signature and Mail/Email Copies  
 File Copy of Letter or Final Order to Log Out

N/A    N/A    INELIGIBLE Data Entry  
N/A    N/A    Send to Scoring

**EXCLUDES ANY VEHICLES DIESEL FUEL CONTAMINATION FROM THE 200-GALLON DIESEL AST.**

MC    1/15/19    ELIGIBLE Data Entry  
NO                      Send to Scoring - Score 10

DEDUCTIBLE    X    EXISTING FILE - Historical References:    N/A    NEW FILE

(Supplemental) - I    8/31/09    A/P I    6/9/17    OP

TOTAL    II    \_\_\_\_\_

\$400,000 CAP    III a b    \_\_\_\_\_

25% COPAY    \_\_\_\_\_



# Florida Department of Environmental Regulation

Northwest District • 160 Governmental Center • Pensacola, Florida 32501-5794 • 904-436-8300

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary  
Robert Kriegel, Deputy Assistant Secretary

February 13, 1990

Mr. Gus Richardson  
Route 5, Box 528  
Quincy, Florida 32351

Dear Mr. Richardson:

Attached is a copy of the compliance inspection recently completed for the Gretna Station (DER #208519571) located on Ash Street, Gretna. We have found that your facility is not in compliance with a number of the Stationary Tank requirements referenced in Chapter 17-61, F.A.C. Please note the items listed in the comments section, if any, and identified in the "no" column of the Inspection Report forms, and provide us with a written response within 14 days informing us of the measures taken to correct the noted deficiencies. Failure to respond in writing within 14 days could result in further enforcement action and the possible imposition of fines and penalties. Please cite the DER number listed above in your written response and send to the letterhead address.

Furthermore, in 1987, the Florida legislature authorized the Department to impose upon the tank owner an initial registration fee in the amount of \$50 per tank and an annual renewal fee of \$25 per tank. Our records for your facility reflect an uncleared balance in the amount of \$100.00. You should make the check payable to the Department of Environmental Regulation (DER) and include the DER facility ID# on the check and send it to:

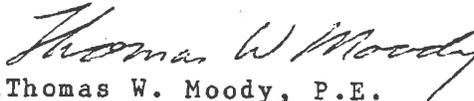
FDER  
Tanks Registration  
Twin Towers  
2600 Blairstone Road  
Tallahassee, Florida 32399-2405

# EXHIBIT 1

Mr. Gus Richardson  
Page two

If you have any further questions, please contact Bob Barr,  
Storage Tank Section Supervisor, at (904) 436-8360.

Sincerely,

  
Thomas W. Moody, P.E.  
Waste Management Program  
Administrator

TWM:bb1  
Attachment

cc: Ms. Eva Richardson  
P. O. Box 296  
Gretna, Florida 32332

**EXHIBIT 1**



State of Florida  
Department of Environmental Regulation

# Pollutant Storage Tank System Inspection Report Form

RECEIVED

FEB 1 1990

Northwest Florida  
DER

WPN

Facility ID No.: 208519571 County: Gadsden-20  
 Facility Name: Gretna Station  
 Facility Location: Ash Street, Gretna, FL  
 Operator: Gus Richardson Rt 5 Box 328 Phone: (904) 856-5455  
 Owner: Same Quincy, FL 32351 Phone: \_\_\_\_\_  
 Latitude \_\_\_° \_\_\_' \_\_\_" Longitude \_\_\_° \_\_\_' \_\_\_" Section 3R Township 3N Range 4W

Tank #	Size	Contents	Installation Date	U/A or In-Contact	Tank Construction	Integral Piping	Monitoring System	Tank Status
1	3000	A	84	U	C	D	Y	U
2	3000	B	84	U	C	D	Y	U

Comments: *Tanks have not been paid for. Unable to contact owner who may be deceased. Wife is Eva Richardson, P.O. Box 296, Gretna, FL (no phone listed). Inspected site (now leased to D.L. & C Auto, Inc. - Batteries) & found the gas station closed. No monitoring wells or systems; no overflow protection. Tanks still in ground, contents & volume unknown. Noticed a 15-20' dia area of soil behind the building heavily stained with waste oil & possibly battery acid. No one was on-site during the inspection.*

<b>Inspection Type:</b> <input type="checkbox"/> Complaint Response <input checked="" type="checkbox"/> Initial <input type="checkbox"/> EDI <input type="checkbox"/> Public Well Field <input type="checkbox"/> Reinspection <input type="checkbox"/> Installation <input type="checkbox"/> Tank Removal <input type="checkbox"/> Unregistered	<b>Facility Information:</b> <input checked="" type="checkbox"/> Abandoned <input type="checkbox"/> Aboveground <input type="checkbox"/> Govt.-Federal <input type="checkbox"/> Govt.-Other <input type="checkbox"/> Non-retail <input checked="" type="checkbox"/> Retail <input type="checkbox"/> Retrofit (M. or O.) <input type="checkbox"/> Retrofit (L. or R.)
---	--

DER District: *Dance French*

Local Program: \_\_\_\_\_

1-26-90

Inspector's Signature & Date: \_\_\_\_\_ Facility Contact's Signature & Date: \_\_\_\_\_

Violations must be corrected by next routine inspection by:  \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 mo day yr

# EXHIBIT 1



Department of Environmental Regulation  
**Inspection Form — UST Compliance Section**

I. REGISTRATION/NOTIFICATION:		Yes	No	Unk	N/A
1.	Facility has properly registered all applicable tanks on site? 17-61.050(1)(a).		✓		
2.	Current Registration placard is properly displayed? 376.303(1)(b), F.S.		✓		
3.	Proper notification has been made for the following: 17-61.050(1)(b)		✓		
4.	abandonment		✓		
5.	facility sale		✓		
6.	retrofitting				✓
7.	tank test failure				✓
8.	discharges		✓		
9.	monitoring response				✓

II. TANK STATUS:		Yes	No	Unk	N/A
10.	Tank Designated Out of Service: 17-61.050(3)(b)1.	✓			
11.	inventory + monitoring records kept or		✓		
12.	secured against tampering		✓		
13.	Tanks properly abandoned? 17-61.050(3)(c)		✓		
14.	in place or		✓		
15.	removed				✓

*Tanks should be properly abandoned by either removing the tanks from the premises or completely filling them with sand and/or concrete within 90 days of discovery.*

III. OPERATION AND MAINTENANCE:		Yes	No	Unk	N/A
16.	The schedule for retrofitting has been met? 17-61.060(2)(c) & (3)(b)2.		✓		
17.	overflow protection		✓		
18.	pipng and/or		✓		
19.	tanks		✓		
20.	Structure-to-soil potential test schedules for sacrificial anode protected systems are being met?				✓
21.	tanks 17-61.060(2)(d)1.a.				✓
22.	pipng 17-61.060(3)(b)1.b.				✓
23.	Impressed current protected systems are continuously energized and metered?				✓
24.	tanks 17-61.060(2)(d)1.b.				✓
25.	pipng 17-61.060(3)(b)1.c.				✓

IV. INVENTORY REQUIREMENTS:		Yes	No	Unk	N/A
26.	Daily inventory records maintained? 17-61.050(4)(c)2.a.		✓		
27.	water		✓		
28.	product		✓		
29.	meter readings		✓		
30.	Inventory reconciliation is performed? 17-61.050(4)(c)2.b.		✓		
31.	each 5 consecutive readings				✓
32.	once a week				✓
33.	alternate procedure				✓
34.	Significant loss/gain investigation 17-61.050(4)(c)3.		✓		
35.	performed		✓		
36.	found source of discrepancy, and/or				✓
37.	followed up with precision testing? 17-61.050(4)(c)				✓

**EXHIBIT 1**



Gretna Station

Department of Environmental Regulation  
**Inspection Form — UST Compliance Section**

Facility # 208519571  
 Date 1-26-90  
*BJF*

V. RECORD KEEPING, DISCHARGE REPORTING & CONTAMINATION CLEAN UP:		Yes	No	Unk	N/A
38. Records being kept as specified by 17-61.050(4)(a)?	38		✓		
39. 2 years	39		✓		
40. monitoring system exams	40		✓		
41. retrofitting records	41				✓
42. maintenance exams	42				✓
43. NFPA 329 tests	43				✓
44. repairs	44				✓
45. available within 2 working days	45		✓		
46. Tank and pipe tests:	46				✓
47. meet NFPA 329 standards 17-61.060(2)(d)4.	47				✓
48. administered by manufacturer certified personnel?	48				✓
49. The discharge of pollutants has resulted in immediate action undertaken for:	49		✓		
50. containing	50				✓
51. removing, and <i>Waste oil site active; discharge to</i>	51		✓		
52. abating? 17-61.050(4)(b)1 <i>surface soils.</i>	52		✓		

VI. LEAK DETECTION/MONITORING WELLS:		Yes	No	Unk	N/A
53. Facility has an approved leak detection system in compliance with the retrofit schedule? 17-61.060(2)(b)3.	53		✓		
54. Monitoring wells have been properly constructed? 17-61.050(5)(a) <i>NONE</i>	54		✓		
55. 2" diameter casing	55				✓
56. properly grouted	56				✓
57. equipped with water tight cap	57				✓
58. properly located 17-61.060(2)(b)3.	58				✓
59. Monitoring wells are being properly sampled? 17-61.050(5)(b).	59				✓
60. containing less than 1 foot water	60				✓
61. automatically tested wells	61				✓
62. manually sampled wells	62				✓
63. Continuously operating leak detection systems installed and operated in accordance with manufacturer's specs? 17-61.050(4)(c)1.	63				✓
64. Positive response of a detection device treated as a discharge? 17-61.050(5)(c).	64				✓
65. Monitoring system requirements are being complied with? 17-61.060(2)(b)3.	65		✓		
66. groundwater plan <i>NONE</i>	66		✓		
67. SPCC plan	67		✓		
68. approved alternate procedure	68		✓		

# EXHIBIT 1



STATE OF FLORIDA  
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

April 11, 1994

L. C. Chance  
Route 5, Box 55-F  
Quincy, Florida 32351

**Re:Gretna Station**  
#208519571

Dear Mr. Chance:

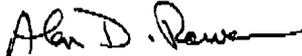
An inspection of the above referenced facility located at Ash Street, in Quincy, Florida, was conducted by the Gadsden County Storage Tank Program on January 17, 1994. This inspection was conducted under the authority of Chapter 376, Section 03, Florida Statutes, and is designed to determine the compliance status of the facility with regard to Chapter 17-761 Florida Administrative Code (F.A.C.), which regulates underground stationary storage tank systems. During this inspection, possible non-compliance items were noted and recorded on the enclosed compliance inspection form.

Therefore, this facility may currently not be operating in compliance with Chapter 17-761, F.A.C. standards. Any non-compliance items should be corrected. Please review the comments on the cover page of the inspection as well as items checked "no" or "unknown" on the inspection sheets.

Please notify this office, in writing within 14 calendar days of the receipt of this letter, as to the proposed corrective actions. Please include a proposed timeframe for corrective actions to be completed.

Should you have questions, please contact me at (904) 875-4975.

Sincerely,

  
Alan D. Rowan  
Environmental Specialist

ADR/sm  
Enclosure

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
POLLUTANT STORAGE TANK SYSTEM  
INSPECTION REPORT FORM - COVER PAGE

PAGE: 1 OF 2  
PRINTED: 01/18/94

FACILITY ID #: 208519571  
FACILITY NAME: GRETNA STATION  
FACILITY LOCATION: ASH ST, QUINCY  
FACILITY CONTACT: GUS RICHARDSON  
OWNER: RICHARDSON, GUS  
OWNER ADDRESS: RR 5 BOX 328, QUINCY, FL, 32351-9341  
OWNER CONTACT: GUS RICHARDSON *LC Chance*  
LATITUDE: 30-37-02 LONGITUDE: 84-39-41  
LAST UST COMPLIANCE DATE: 10/03/90  
CONTAMINATION DATA AVAILABLE: NONE  
COUNTY: GADSDEN  
PHONE: ( ) -  
PHONE: (904) 856-5455  
OWNER CHANGE DATE: 07/30/85  
FAC TYPE: RETAIL STATION  
LAST AST COMPLIANCE DATE: 00/00/00

TANK #	SIZE	CONTENT	INSTALL DATE	UNDER OR ABOVE	TANK TYPE	INTEGRAL PIPING	MONITORING SYSTEM	TANK STAT
1	3000	A	XX/84	U	C	D	Y	U
2	3000	B	XX/84	U	C	D	Y	U

*Need a Closure Assessment on tank site.*

*Non compl*

*Cap letter*

INSPECTION TYPE (CHOOSE ONE)	SITE INFORMATION (ALL THAT APPLY)
<input type="checkbox"/> ROUTINE	<input type="checkbox"/> NEAR PUB WELL
<input type="checkbox"/> INSTALL	<input type="checkbox"/> CONTAMINATED
<input type="checkbox"/> ABANDONED	<input type="checkbox"/> COMPLAINT
<input type="checkbox"/> DISCHARGE	<input type="checkbox"/> ACID TANKS
<input checked="" type="checkbox"/> CLOSURE	<input type="checkbox"/> REPAIRED
<input type="checkbox"/> REINSPECT	<input type="checkbox"/> UPGRADED
	<input type="checkbox"/> UST & AST
	<input type="checkbox"/> HAZARD MAT

DER DISTRICT OR LOCAL PROGRAM: Gadsden CPHU

INSPECTOR NAME (PRINT) Alan D. Rowan CONTACT NAME (PRINT) \_\_\_\_\_

Alan D. Rowan 1-18-94

Name: Althea Station  
 Facility I.D.#: 208519571  
 Date: 1-19-94



**UNDERGROUND STORAGE TANK  
 CLOSURE INSPECTION FORM**

Yes	No	Unk	N/A
-----	----	-----	-----

**I. REGISTRATION AND NOTIFICATION** 17-761.400 & 450 FAC: Comments: \_\_\_\_\_

1. All of the facility's tanks properly registered; .400	1.	<input checked="" type="checkbox"/>			
2. Proper notification made 30 days prior to tank(s) closure; .450 (1) (a)	2.				<input checked="" type="checkbox"/>
3. Proper notice given 24 hours prior to storage tank(s) closure; .450 (4)	3.				<input checked="" type="checkbox"/>

**II. CLOSURE PROCEDURES/STATUS:** 17.761.800 Comments: \_\_\_\_\_

4. Certified contractor performed the tank removal(s); .740 (2)	4.				<input checked="" type="checkbox"/>
5. Storage tank(s) properly closed and removed from the site; (2) (d)	5.				<input checked="" type="checkbox"/>
6. Storage tank(s) properly closed and filled in place; (2) (d)	6.				<input checked="" type="checkbox"/>
7. Storage tank(s) properly closed within 90 days of discovery; (2) (a)	7.				
8. All liquid & sludge removed from the tank(s); (2) (d)	8.				<input checked="" type="checkbox"/>
9. Storage tanks properly purged or inerted prior to transport; (2) (d)	9.				<input checked="" type="checkbox"/>
10. All piping capped and/or removed;	10.	<input checked="" type="checkbox"/>			
11. All monitoring wells left in place for contamination assessment purposes; (2) (f)	11.				<input checked="" type="checkbox"/>
12. All monitoring wells have been properly abandoned; .800 (2) (f)	12.				<input checked="" type="checkbox"/>
13. A closure assessment was properly performed; .800 (3),	13.		<input checked="" type="checkbox"/>		

**III. DISCHARGE REPORTING** 17-761.460, F.A.C.: Comments: \_\_\_\_\_

14. Evidence of contamination or a discharge reported (Explain in comments) 460 (1), (2) and (3)	14.		<input checked="" type="checkbox"/>		
15. Discharge Reporting Form (DRF) submitted; 460 (2)	15.			<input checked="" type="checkbox"/>	

**IV. DISCHARGE RESPONSE:** Comments: \_\_\_\_\_

16. Free product present; (Explain in comments)	16.		<input checked="" type="checkbox"/>		
17. Free product being removed; 17-761.800 (3) (d) & 17-761.820 (2)	17.			<input checked="" type="checkbox"/>	

Comments: Need a closure assessment.

STATE OF FLORIDA  
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

February 15, 1993

Gretna Station  
RR 5 Box 328 55 F  
Quincy, Florida 32351-9341Re: Gretna Station  
#208519571Dear Mr. ~~Richardson~~ <sup>Chance</sup>

An inspection of the above referenced facility located at Ash Street in Quincy, Florida, was conducted by the Gadsden County Storage Tank Program on February 5, 1993. This inspection was conducted under the authority of Chapter 376, Section 03, Florida Statutes, and is designed to determine the compliance status of the facility with regard to Chapter 17-761 Florida Administrative Code (F.A.C.), which regulates underground stationary storage tanks.

Per the inspection, we have determined that this facility has had its underground storage tanks removed. Please see the attached inspection report.

Should you have questions, please do not hesitate to contact me at 875-4975.

SUGGESTED CORRECTIVE ACTION  
GADSDEN COUNTY - GREтна STATION  
FACILITY ID# 208519571

17-761.740(1)-(9), FAC

Failure to have all storage tank repairs, installations or removals performed by a Pollutant Storage System Specialty Contractor (PSSSC)

17-761.800(3), FAC

Failure to have a closure assessment properly performed

Sincerely,

A handwritten signature in cursive script that reads "Alan D. Rowan".  
Alan Rowan

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
POLLUTANT STORAGE TANK SYSTEM  
INSPECTION REPORT FORM - COVER PAGE

PAGE: 1 OF 2  
PRINTED: 02/02/93

FACILITY ID #: 208519571 COUNTY: GADSDEN  
 FACILITY NAME: GRETNA STATION  
 FACILITY LOCATION: ASH ST, QUINCY  
 FACILITY CONTACT: ~~GUS RICHARDSON~~ *L.C. Chance* *Box 55-F* *Quincy, FL 32351* *In station*  
 OWNER: RICHARDSON, GUS PHONE: ( ) -  
 OWNER ADDRESS: RR 5 BOX 328, QUINCY, FL, 32351-9341 PHONE: (904) 856-5455  
 OWNER CONTACT: GUS RICHARDSON OWNER CHANGE DATE: 07/30/85  
 LATITUDE: 30-37-02 LONGITUDE: 84-39-41 FAC TYPE: RETAIL STATION  
 LAST UST COMPLIANCE DATE: 10/03/90 LAST AST COMPLIANCE DATE: 00/00/00  
 CONTAMINATION DATA AVAILABLE: NONE

TANK #	SIZE	CONTENT	INSTALL DATE	UNDER OR ABOVE	TANK TYPE	INTEGRAL PIPING	MONITORING SYSTEM	TANK STAT
1	3000	A	XX/84	U	C	D	Y	U
2	3000	B	XX/84	U	C	D	Y	U

*You need to have a closure assessment properly done. List enclosed*

INSPECTION TYPE (CHOOSE ONE)

- ROUTINE
- INSTALL
- ABANDONED
- DISCHARGE
- CLOSURE
- REINSPECT

SITE INFORMATION (ALL THAT APPLY)

- NEAR PUB WELL
- CONTAMINATED
- COMPLAINT
- ACID TANKS
- REPAIRED
- UPGRADED
- UST & AST
- HAZARD MAT

DER DISTRICT OR LOCAL PROGRAM: Gadsden CEH

INSPECTOR NAME (PRINT) Alex D. Rowan CONTACT NAME (PRINT) Mr. Chance.

Alex D. Rowan 2-5-93

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
POLLUTANT STORAGE TANK SYSTEM  
INSPECTION REPORT FORM - COVER PAGE

PAGE: 2 OF 2  
PRINTED: 02/02/93

FACILITY ID #: 208519571  
FACILITY NAME: GRETNA STATION  
FACILITY LOCATION: ASH ST, QUINCY  
FACILITY CONTACT: GUS RICHARDSON

COUNTY: GADSDEN

PHONE: ( ) -

COMMENTS:

1) when were tanks removed? 11/89-90

2) who removed the tanks? workers of H.C. Chance - taken to city yard.

3) Has a closure assessment been done?

Piping removed 2-4-93



Name: Gretna Station  
 Facility I.D.#: 208519571  
 Date: 2-5-97

**UNDERGROUND STORAGE TANK  
 CLOSURE INSPECTION FORM**

Yes	No	Unk	N/A
-----	----	-----	-----

**I. REGISTRATION AND NOTIFICATION** 17-761.400 & 450 FAC: Comments: \_\_\_\_\_

1. All of the facility's tanks properly registered; .400	1.	<input checked="" type="checkbox"/>			
2. Proper notification made 30 days prior to tank(s) closure; .450 (1) (a)	2.			<input checked="" type="checkbox"/>	
3. Proper notice given 24 hours prior to storage tank(s) closure; 450 (4)	3.			<input checked="" type="checkbox"/>	

**II. CLOSURE PROCEDURES/STATUS:** 17.761.800 Comments: \_\_\_\_\_

4. Certified contractor performed the tank removal(s); .740 (2)	4.		<input checked="" type="checkbox"/>		
5. Storage tank(s) properly closed and removed from the site; (2) (d)	5.			<input checked="" type="checkbox"/>	
6. Storage tank(s) properly closed and filled in place; (2) (d)	6.				<input checked="" type="checkbox"/>
7. Storage tank(s) properly closed within 90 days of discovery; (2) (a)	7.				<input checked="" type="checkbox"/>
8. All liquid & sludge removed from the tank(s); (2) (d)	8.		<input checked="" type="checkbox"/>		
9. Storage tanks properly purged or inerted prior to transport; (2) (d)	9.		<input checked="" type="checkbox"/>		
10. All piping capped and/or removed;	10.	<input checked="" type="checkbox"/>			
11. All monitoring wells left in place for contamination assessment purposes; (2) (f)	11.				<input checked="" type="checkbox"/>
12. All monitoring wells have been properly abandoned; .800 (2) (f)	12.				<input checked="" type="checkbox"/>
13. A closure assessment was properly performed; .800 (3),	13.	<input checked="" type="checkbox"/>			

**III. DISCHARGE REPORTING** 17-761.460, F.A.C.: Comments: \_\_\_\_\_

14. Evidence of contamination or a discharge reported (Explain in comments) 460 (1); (2) and (3)	14.				<input checked="" type="checkbox"/>
15. Discharge Reporting Form (DRF) submitted; 460 (2)	15.				<input checked="" type="checkbox"/>

**IV. DISCHARGE RESPONSE:** Comments: \_\_\_\_\_

16. Free product present; (Explain in comments)	16.				<input checked="" type="checkbox"/>
17. Free product being removed; 17-761.800 (3) (d) & 17-761.820 (2)	17.				<input checked="" type="checkbox"/>

Comments: Tanks were removed in 1989-1990

Tanks were removed by Mr. Chance, and a employee.

Tanks were taken to the city (Gretna) Sewer plant

Closure assessment needs to be done & submitted to this office.

**Appendix B:**

Field Notes, Sampling Logs, Well Construction and Development Logs, Well Completion Reports, and Instrument Calibration Forms

Coral Springs, FL Date 10/7/22  
/ Client Heron Bay Golf Course  
E4590

- : Calibrate equipment  
- load truck T-007
- : Leave FM office
- : ARRive on site
- : Calibrate equipment
- : Begin Soil Samples

: 0845  
0905  
0925  
0945  
1005  
1025  
1045  
1105  
1125  
11:45  
1245

end of Soil samples/TMW  
calibrate equipment/  
clean up  
Take Samples to HP Fedex/  
go back to office  
ARRive out ERMI / end  
OF Day

Location Gretna, FL Date 10/12/22<sup>11</sup>  
Project / Client City of Gretna Maintenance  
yard former Gretna Station E4581A

- 0645: Drove to Site from Hotel  
- truck T-001
- 0700: Calibrated equipment  
- mark out Soil Borings  
and well installs

1030: Started Screening Soil

- SB-1: 1030-1104  
SB-2: 1108-1126  
SB-3: 1130-1155  
SB-4: 1200-1208  
SB-5: 1220-1310  
SB-6: 1315-1340  
SB-7: 1345-1410  
SB-8: 1415-1455  
SB-9: 1500-1525  
SB-10: 1535-1545  
SB-11: 1550-1610  
SB-12: 1615-1645

- 1645: End of Soil Borings  
1700: Calibrated equipment  
1715: Left Site to hotel  
1730: End of day

S. 2nd 10-12-22

Location Gretna, FLDate 10/13/22Project / Client City of Gretna maintenance yard E4589A

- 0645: Calibrated equipment
- 0700: Left Hotel to site
- 0715: Arrived on site
- 0730: Calibrated equipment
- 0800: Began Soil Borings

SB-13: 0800-0840

SB-14: 0845-0900

SB-15: 0905-0925

0935: Began Well install

DW-1: 0935-1140

MW-32: 1200-1208 (SB-4)

MW-33: 1455-1540

MW-34: 1545-1615

1620: Calibrated equipment

1730: SB and mws location for maps

1815: Left Site to hotel

1845: Arrived to hotel

- end of day

---

S. Lind 10/13/22

Gretna, FL Date 10/13/22

Client City of Gretna maintenance  
and E4589A

Calibrated equipment  
Left Hotel to site  
Arrived on site  
Calibrated equipment  
Began Soil Borings

3: 0800-1040  
1: 0845-0900  
5: 0905-0925

Began Well install

0935-1140  
2: 1200-1208 (SB-4)  
3: 1455-1540  
1: 1545-1615

Calibrated equipment  
SB and MWS location for  
maps  
Left Site to hotel  
Arrived to hotel  
- end of day

S. Gmel 10/13/22

Location Gretna, FL Date 10/14/22

Project / Client City of Gretna maintenance  
yard E4589A

0645: Left Hotel to site  
0700: Stopped for fuel and ice  
0730: Arrived on site  
- PDS Setup to drill  
0800: Drilling began

1000: Drilling finish and developing  
done, concrete pads being  
built

1030: Clean up and leave site

1245: left site

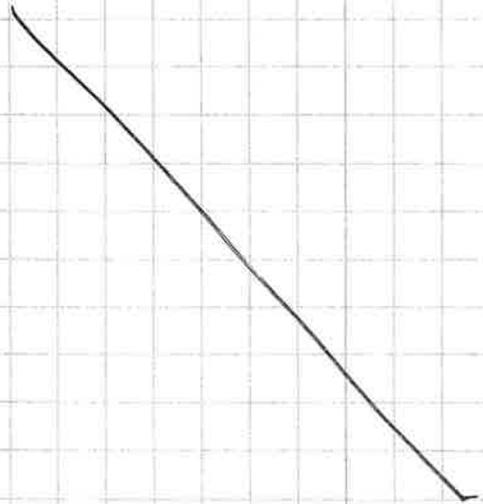
1945: Arrived at ERMI  
- end of Day

S. Gmel 10-14-22

Location Gretua, FL Date 10-11-22 <sup>29</sup>

Project / Client E4589A - Gretua Maintenance Yard.

FACI: 20/8519571  
ERMI Vehicle: T-002  
ERMI: Jorge Cabrera  
          : Shannon Gaul  
Weather: 81°F, Sunny.  
0800: Arrived at F.M.  
          office. Started to load  
0     truck.  
0900: Left the office.  
1700: Arrived at hotel.  
          in Quincy, FL.



*[Signature]*

30 Location Gretna, FL Date 10-12-22

Project / Client E4589A - Gretna Maintenance Yard.

FAC: 20/8519571

Vehicle: T-002

ERMI: Jorge Cabrera  
Shaynon Gaul

0700: Calibration.

0730: Left Hotel.

0800: Started to locate wells and mark SB locations.

MW<sub>s</sub> DTW

MW-30 F 18.42

1000: PDS Arrived on site.

Equipment: 1 box truck

1 Geoprobe 8640PT

1 Flat bed towtruck

1 F-150 Support truck

SB-1 @ 1030 - 1104

SB-2 @ 1108 - 1126

DTW = 18.56

SB-3 @ 1130 - 1155

SB-4 @ 1200 - 1218

SB-5 @ 1220 - 1310

SB-6 @ 1315 - 1340

SB-7 @ 1345 - 1410

*[Signature]*

Location Gretna, FL Date 10-12-22 31

Project / Client E4589A - Gretna Maintenance

FAC: 20/8519571

SB-8 @ 1415 - 1455

SB-9 @ 1500 - 1525

SB-10 @ 1535 - 1545

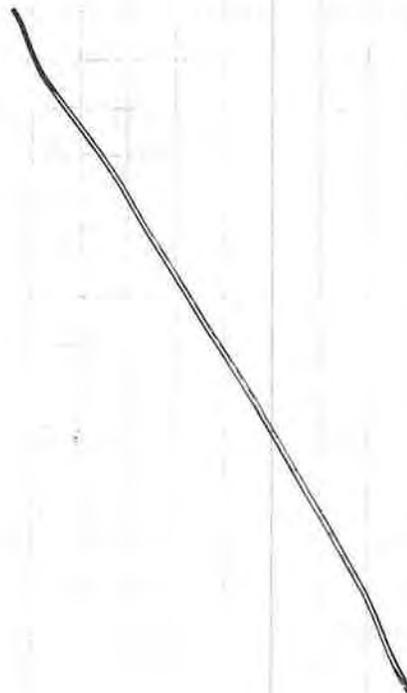
SB-11 @ 1550 - 1610

SB-12 @ 1615 - 1645

1700: Final Cal. Check

1715: Left the site.

1745: Arrived at hotel.



*[Signature]*

*[Faint text]*

Location Gretna, FL Date 10-13-22Project / Client E 4589A -  
Gretna Maintenance YardFAC: 20/8519571ERMI: Shannon GowlJorge CabreraVehicle: T-002Weather: 21°C, sunny, OK with0645: Calibration0700: Left the hotel0730: Arrived at the site.• Cal Check.SB-13 @ 0800 - 0840SB-14 @ 0845 - 0900SB-15 @ 0905 - 0925DW-1 @ 09351140 Set 4" casing to 35'1145 Grouting.

(10-14-22)

0820 Drilling inside of 4" casing.

DTW B.D.

1025 18.69

PTW A.D.

25.65 1125

J. GowlLocation Gretna, FL Date 10-13-22Project / Client E 4589A -  
Gretna Maintenance YardFAC: 20/8519571

SB-6 @ 12' 1330

SB-9 @ 8' 1400

SB-10 @ 2' 1415

MW-32 / SB-4 @ 1430-

(10-14-22) DTW B.D.

0810 19.05

PTW A.D. 1450

22.35 0910

60 mins @ 0.2 GPM

= 12.8 Gallons

MW-33 @ 1455 - 1540

(10-14-22)

DTW B.D.

PTW A.D.

1130 21.61

23.55 1230

MW-34 @ 1545 - 1615

(10-14-22)

0920 DTW B.D.

18.67

PTW A.D. 1020

22.51

J. Gowl

Retired 2/20/2022

Location Gretna, FL Date 10-13-22

Project / Client E4589A-  
Gretna Maintenance Yard

FAC: 20/8519571

1620 Final Cal. check.

1630 PDS started to  
move equipment  
around.

1730 Started to take  
SBs and NWs locations

1815: Left the site.

1845: Arrived at hotel

*[Signature]*

Location Gretna, FL Date ~~10-13-22~~<sup>35</sup> 10-14-22

Project / Client E4589A-  
at Gretna Maintenance Yard

FAC: 20/8519571

0645: Left the hotel

0700: Bought fuel and  
Ice.

0730: Arrived at the site.

• PDS started to set up  
for drilling.

0800: PDS started to drill  
DW-1

1000: PDS started to build  
the concrete pads

• A Total of 4 drums  
were used. Drums placed  
at the North West corner  
of the property.

1245: Left the site.

1945: Arrived at F.M. office.

*[Signature]*

# BORING LOG

Boring/Well Number: SB- <u>1</u>		Permit Number: <u>20/8519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u>	Borehole Start Time: <u>1030</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
		End Date: <u>10/12/22</u>	End Time: <u>1104</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon Gavl</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>PDS</u>		Pavement Thickness (inches): <u>✓</u>	Borehole Diameter (inches): 4.25		Borehole <del>Depth</del> (feet): <u>20</u>
Drilling Method(s): <u>HA/DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~18.0</u>	Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)	
HA	0-1	12		0.0		0.0	1	Tan, poorly graded sands with rocks, NO odor	SP	D		
	1-2			0.0		0.0	2		"	SP		D
	2-3			0.0		0.0	3		"	SP		D
	3-4			0.0		0.0	4		"	SP		D
	4-5			0.0		0.0	5		"	SP		D
	5-6			0.0		0.0	6		"	SP		D
	DP			7-8			0.0		0.0	8		Redish orange, poorly graded sand, NO odor clay
9-10			0.0	0.0	10	"	ML	D				
					11							
					12	"	ML	D				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB- <u>1</u>		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/22</u> End Date: <u>10/12/22</u>					
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)	
DP	13-14	12		0.0		0.0	14	orange poorly graded fine Sand, NO odor <sup>clay</sup>	ML	D		
	15-16			0.0		0.0	16		"	ML	M	
	17-18			0.0		0.0	18		"	ML	M	
	19-20			0.0		0.0	20		"	ML	W	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>2</u>		Permit Number: <u>2018519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u>		Borehole Start Time: <u>1108</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <u>10/12/22</u>		End Time: <u>1126</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <u>PDS</u>		Env. Sci.'s Name: <u>Shannen Gault</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: ERMI		Pavement Thickness (inches): <u>/</u>		Borehole Diameter (inches): 4.25	
				Borehole Depth (feet): <u>20</u>	
Drilling Method(s): HA <u>DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~18.0</u>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0		0.0	1	Brown, poorly graded fine sands, NO odor	SP	D	
	1-2			0.0		0.0	2	Tan, poorly graded fine sands, NO odor	SP	D	
	2-3			0.0		0.0	3	" " " "	SP	D	
	3-4			0.0		0.0	4	" " " "	SP	D	
	4-5			0.0		0.0	5	" " " "	SP	D	
	5-6			0.0		0.0	6	" " " "	SP	D	
DP							7				
	7-8		0.0	0.0	8	Orange poorly graded clay fine sand NO odor	ML	M			
	9-10		0.0	0.0	10	" " " "	ML	M			
	11-12		0.0	0.0	12	" " " "	ML	M			

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB- <u>2</u>		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/22</u> End Date: <u>10/12/22</u>				
Sample Type	Sample Depth Interval (feet)	Sample Recovery (Inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12		0.0		0.0	-14	orange poorly graded, clay fine sand, NO odor	ML	M	
	15-16			0.1		0.1	-16	" " odor "	ML	M	
	17-18			178.2		178.2	-18	orange poorly graded, clay fine sand, petroleum	ML	M	
	19-20			358.7		358.7	-20	odor	ML	W	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>3</u>		Permit Number: <u>20/8519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u>	Borehole Start Time: <u>1130</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
		End Date: <u>10/12/22</u>	End Time: <u>1155</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
Environmental Contractor: ERMI		Env. Sci's Name: <u>Shannon Gault</u>		Environmental Technician's Name: <u>Jorge Lebruna</u>	
Drilling Company: <u>PDS</u>		Pavement Thickness (inches): <u>/</u>	Borehole Diameter (inches): 4.25	Borehole Depth (feet): <u>20</u>	
Drilling Method(s): HA <u>IDP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~18.0</u>	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
HA	0-1	12		0.0		0.0	1	orange, fine poorly graded sand, no odor	SP	D	
	1-2			0.0		0.0	2	"	SP	D	
	2-3			0.0		0.0	3	"	SP	D	
	3-4			0.0		0.0	4	"	SP	D	
	4-5			0.0		0.0	5	"	SP	D	
	5-6			0.0		0.0	6	"	SP	D	
DP				0.0		0.0	7				
	7-8			0.0		0.0	8	orange clay and poorly graded fine sands no odor	ML	M	
							9				
	9-10			0.0		0.0	10	"	ML	M	
							11				
	11-12			0.0		0.0	12	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB-3		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borehole Start Date: 10/12/22 End Date: 10/12/22				
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12		0.0	0.0	0.0	14	orange clay with poorly graded fine sands nodules	ML	M	
	15-16			0.2	0.2	0.2	16	orange clay with poorly graded fine sands, odor	ML	M	
	17-18			0.0	0.0	0.0	18	" "	ML	M	
	19-20			63.0	63.0	63.0	20	" "	ML	W	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>4/mw-32</u>		Permit Number: <u>20/8519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u> End Date: <u>10/12/22</u>		Borehole Start Time: <u>1200</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM End Time: <u>1218</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon Gault</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>PDS</u>		Pavement Thickness (inches): <u>/</u>		Borehole Diameter (inches): 4.25	
Drilling Method(s): HA <u>IDP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~18.0</u>		Measured Well DTW (in feet after water recharges in well):	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>		OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID			
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0	0.0	0.0	1	Tan poorly graded fine Sands, NO odor	SP	D	
	1-2			0.0	0.0	0.0	2	" "	SP	D	
	2-3			0.0	0.0	0.0	3	" "	SP	D	
	3-4			0.0	0.0	0.0	4	" "	SP	D	
	4-5			0.0	0.0	0.0	5	Orange poorly graded fine Sands, NO odor	SP	D	
	5-6			0.0	0.0	0.0	6	" "	SP	D	
DP				0.0	0.0	0.0	7				
	7-8			0.0	0.0	0.0	8	Orange poorly graded fine Sands with clay, NO odor	ML	D	
	9-10			0.0	0.0	0.0	10	" "	ML	D	
	11-12			0.0	0.0	0.0	12	" "	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB-4/MW-32		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borchole Start Date: 10/12/22 End Date: 10/12/22				
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12		0.0	0.0	0.0	14	Orange poorly graded fine Sands with clay NO odor	ML	M	
	15-16			0.0	0.0	0.0	16	" "	ML	M	
	17-18			6.1	6.1	6.1	18	Orange poorly graded fine Sands with clay, petroleum	ML	M	
	19-20			40.5	40.5	40.5	20	" odor,"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>5</u>		Permit Number: <u>20/8519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u>		Borehole Start Time: <u>1220</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <u>10/12/22</u>		End Time: <u>1310</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon baul</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>RPS</u>		Pavement Thickness (inches): <u>/</u>		Borehole Diameter (inches): 4.25	
				Borehole Depth (feet): <u>20</u>	
Drilling Method(s): HA <u>DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~19.0</u>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12	[Hand-drawn SPT blow curve]	0.0	0.0	0.0	1	Tan poorly graded fine Sand, No odor	SP	D	
	1-2			0.0	0.0	0.0	2	"	SP	D	
	2-3			0.0	0.0	0.0	3	"	SP	D	
	3-4			0.0	0.0	0.0	4	orange poorly graded fine Sand, no odor	SP	D	
	4-5			0.0	0.0	0.0	5	"	SP	D	
	5-6			0.0	0.0	0.0	6	"	SP	D	
DP	7-8	12	[Hand-drawn SPT blow curve]	0.0	0.0	0.0	8	orange/red clay and poorly graded fine Sand NO odor	ML	D	
	9-10			0.0	0.0	0.0	10	"	ML	D	
	11-12			0.0	0.0	0.0	12	"	ML	D	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB-5		FDEP Facility Identification Number: 20/8519571		Site Name: City of Gretna Maintenance Yard		Borehole Start Date: 10/12/22		End Date: 10/12/22			
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12	12	0.0	0.0	0.0	14	orange poorly graded fine sand and clay no odor	ML	M	
	15-16			0.5	0.5	0.5	16	orange poorly graded fine sand with clay, petroleum odor	ML	M	
	17-18			0.8	0.8	0.8	18	"	ML	M	
	19-20			1.9	1.9	1.9	20	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>6</u>		Permit Number: <u>20/8519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u>		Borehole Start Time: <u>1315</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <u>10/12/22</u>		End Time: <u>1340</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon Gavi</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>PDS</u>		Pavement Thickness (inches): <u>/</u>		Borehole Diameter (inches): 4.25	
				Borehole Depth (feet): <u>20</u>	
Drilling Method(s): HA <u>DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>218.0</u>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
<i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0		0.0	1	Tan poorly graded fine sand no odor	SP	D	
	1-2			0.0		0.0	2	" "	SP	D	
	2-3			0.0		0.0	3	" "	SP	D	
	3-4			0.0		0.0	4	" "	SP	D	
	4-5			0.0		0.0	5	Orange poorly graded fine sand no odor	SP	D	
	5-6			0.0		0.0	6	" "	SP	D	
DP							7				
	7-8			0.0		0.0	8	orange clay with poorly graded fine sand no odor	ML	M	
							9				
	9-10			11.5		11.5	10	Tan clay with poorly graded fine sand petroleum odor	ML	M	
							11				
	11-12			1024		1024	12	" "	ML	M	SB-6@12'

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 2 of 2

Boring/Well Number: SB- <u>6</u>		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/22</u> End Date: <u>10/12/22</u>				
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12		155.5		155.5	14	Orange clay with poorly graded fine sand, petroleum odor	ML	M	
	15-16			334.6		334.6	16	"	ML	M	
	17-18			1051		1051	18	"	ML	W	
	19-20			1101		1101	20	"	ML	W	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; BP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>7</u>		Permit Number: <u>20/8519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u>		Borehole Start Time: <u>1345</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <u>10/12/22</u>		End Time: <u>1410</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon Gault</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>PDS</u>		Pavement Thickness (inches): <u>✓</u>		Borehole Diameter (inches): 4.25	
				Borehole Depth (feet): <u>20.0</u>	
Drilling Method(s): <u>HA/DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~18.0</u>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0		0.0	1	Tan poorly graded fine sand No odor	SP	D	
	1-2			0.0		0.0	2	" "	SP	D	
	2-3			0.0		0.0	3	" "	SP	D	
	3-4			0.0		0.0	4	" "	SP	D	
	4-5			0.0		0.0	5	Orange poorly graded fine sand, No odor	SP	D	
	5-6			0.0		0.0	6	" "	SP	D	
DP	7-8			0.0		0.0	8	Tan clay with poorly graded fine sand, No odor	ML	M	
	9-10			0.0		0.0	10	" "	ML	M	
	11-12			0.0		0.0	12	" "	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB-7		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borehole Start Date: 10/12/22 End Date: 10/12/22				
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12		0.0		0.0	14	orange poorly graded fine sand with clay No odor	ML	M	
	15-16			1.9		1.9	16	orange clay with poorly graded fine sand with slight petroleum odor	ML	M	
	17-18			0.1		0.1	18	"	ML	M	
	19-20			0.0		0.0	20	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>B</u>		Permit Number: <u>20/0519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u>		Borehole Start Time: <u>1415</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <u>10/12/22</u>		End Time: <u>1455</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon Gault</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>PDS</u>		Pavement Thickness (inches): <u>/</u>		Borehole Diameter (inches): 4.25	
				Borehole Depth (feet): <u>20</u>	
Drilling Method(s): HA <u>DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>218.0</u>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0		0.0	1	Tan poorly graded fine sand	SP	D	
	1-2		0.0		0.0	2	" "	SP	D		
	2-3		0.0		0.0	3	" "	SP	D		
	3-4		0.0		0.0	4	" "	SP	D		
	4-5		0.0		0.0	5	Orange poorly graded fine sand, No odor	SP	D		
	5-6		0.0		0.0	6	" "	SP	M		
DP	7-8			0.0		0.0	8	Tan <sup>clay</sup> poorly graded fine sand, No odor	ML	M	
	9-10			0.0		0.0	10	Orange clay with poorly graded fine sand, No odor	ML	M	
	11-12			0.0		0.0	12	" "	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB- <u>8</u>		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borhole Start Date: <u>10/12/22</u> End Date: <u>10/12/22</u>				
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12		0.0		0.0	14	"	SP	M	
	15-16			0.7		0.7	16	Orange clay with poorly graded fine sand, slight odor	SP	M	
	17-18			0.0		0.0	18	Orange clay with poorly graded fine sand, No odor	SP	M	
	19-20			0.0		0.0	20	"	SP	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>9</u>		Permit Number: <u>20/8519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u>		Borehole Start Time: <u>1500</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <u>10/12/22</u>		End Time: <u>1525</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon Gault</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>RDS</u>		Pavement Thickness (inches): <u>/</u>		Borehole Diameter (inches): 4.25	
				Borehole Depth (feet): <u>20</u>	
Drilling Method(s): <u>HA/DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~18.0</u>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0		0.0	1	Tan poorly graded fine sand	SP	D	
	1-2			0.0		0.0	2	"	SP	D	
	2-3			0.0		0.0	3	"	SP	D	
	3-4			0.0		0.0	4	"	SP	D	
	4-5			0.0		0.0	5	"	SP	D	
	5-6				54.9		54.9	6	Orange poorly graded fine sand, Petroleum odor	SP	D
DP	7-8			1211.0		1211.0	8	Brownish orange clay with poorly graded fine sand, petroleum odor	ML	M	SB-90 8 feet
	9-10			836.0		836.0	10	"	ML	M	
	11-12			280.3		280.3	12	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 2 of 2

Boring/Well Number: SB- <u>9</u>		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borohole Start Date: 10/12/22		End Date: 10/12/22		
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12		166.0		166.0	14	"	ML	M	
	15-16			280.0		280.0	16	orange clay with poorly graded fine sands, petroleum odor	ML	M	
	17-18			284.4		284.4	18	"	ML	M	
	19-20			296.4		296.4	20	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>10</u>		Permit Number: <u>20/8519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u>		Borehole Start Time: <u>1535</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <u>10/12/22</u>		End Time: <u>1545</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon baul</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>PDS</u>		Pavement Thickness (inches): <u>/</u>		Borehole Diameter (inches): 4.25	
				Borehole Depth (feet): <u>20</u>	
Drilling Method(s): HA <u>DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~18.0</u>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		12.4		12.4	1	Tan poorly graded fine sands Slight petroleum smell	SP	D	SB-10 1-2 Feet
	1-2			7.0		7.0	2	" "	SP	D	
	2-3			6.5		6.5	3	" "	SP	D	
	3-4			5.5		5.5	4	" "	SP	D	
	4-5			5.1		5.1	5	" "	SP	D	
	5-6			4.8		4.8	6	orange poorly graded fine sands Slight petroleum smell	SP	D	
DP	7-8			5.5		5.5	8	orange clay with poorly graded fine sands petroleum smell	ML	M	
	9-10			20.3		20.3	10	" "	ML	M	
	11-12			6.0		6.0	12	" "	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB- 10		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borhole Start Date: 10/12/22 End Date: 10/12/22				
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PP	13-14	12		4.4		4.4	14	Orange clay with fine graded sands slight petroleum smell	ML	M	
	15-16			6.2		6.2	16	"	ML	M	
	17-18			4.3		4.3	18	"	ML	M	
	19-20			3.9		3.9	20	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- 11		Permit Number: 20/8519571		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: 10/12/2022 End Date: 10/12/22		Borehole Start Time: 1550 End Time: 1610	
Environmental Contractor: ERMI		Env Sci's Name: Shannon Gault		Environmental Technician's Name: Jorge Cabrera	
Drilling Company: PDS		Pavement Thickness (inches): /		Borehole Diameter (inches): 4.25	
Drilling Method(s): HA/DP		Apparent Borehole DTW (in feet from soil moisture content): ~18.0		Measured Well DTW (in feet after water recharges in well):	
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):		<input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill		<input type="checkbox"/> Stockpile <input type="checkbox"/> Other	
Borehole Completion (check one):		Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill		<input type="checkbox"/> Other (describe)	

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		4.1		4.1	1	Tan poorly graded fine sand Slight petroleum odor	SP	D	
	1-2			3.8		3.8	2	"	SP	D	
	2-3			3.2		3.2	3	"	SP	D	
	3-4			3.0		3.0	4	"	SP	D	
	4-5			2.2		2.2	5	Orange poorly graded fine sand, slight petroleum odor	SP	D	
	5-6			2.2		2.2	6	"	SP	D	
DP							7				
	7-8			2.3		2.3	8	Orange clay with poorly graded fine sand, slight petroleum odor	ML	M	
	9-10			2.3		2.3	10	"	ML	M	
							11				
	11-12			1.8		1.8	12	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated



# BORING LOG

Boring/Well Number: SB- <u>12</u>		Permit Number: <u>20/8519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/2022</u> End Date: <u>10/12/22</u>		Borehole Start Time: <u>1615</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM End Time: <u>1645</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon Gault</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>PDS</u>		Pavement Thickness (inches): <u>/</u>		Borehole Diameter (inches): 4.25	
Drilling Method(s): HA <u>DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~18.0</u>		Measured Well DTW (in feet after water recharges in well):	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>		Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)			

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0		0.0	1	Tan poorly graded fine sand no odor	SP	D	
	1-2		0.0		0.0	2	"		SP	D	
	2-3		0.0		0.0	3	"		SP	D	
	3-4		0.0		0.0	4	"		SP	D	
	4-5		0.0		0.0	5	"		SP	D	
	5-6		0.0		0.0	6	"		SP	D	
DP	7-8			0.0		0.0	8	Orange clay with poorly graded fine sand no odor	ML	M	
	9-10			0.1		0.1	10		"	ML	M
	11						11		"		
	11-12			0.3		0.3	12		"	ML	M

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB- <u>12</u>		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/12/22</u> End Date: <u>10/12/22</u>				
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12		0.1		0.1	14	Orange clay with poorly graded fine sand No odor	ML	M	
	15-16			5.0		5.0	16	" "	ML	M	
	17-18			0.3		0.3	18	Tan clay with poorly graded fine sand No odor	ML	M	
	19-20			0.4		0.4	20	" "	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB-13		Permit Number: 20/8519571		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: 10/13/2022		Borehole Start Time: 0800 AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: 10/13/22		End Time: 0846 AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: ERMI		Env. Sci's Name: Shannon Gavl		Environmental Technician's Name: Jorge Cabrera	
Drilling Company: PDS		Pavement Thickness (inches):		Borehole Diameter (inches): 4.25	
				Borehole Depth (feet): 20	
Drilling Method(s): HA/DP		Apparent Borehole DTW (in feet from soil moisture content): ~18.0		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0		0.0	1	Tan poorly graded fine sands, no odor	SP	D	
	1-2			0.0		0.0	2	"	SP	D	
	2-3			0.0		0.0	3	"	SP	D	
	3-4			0.0		0.0	4	"	SP	D	
	4-5			0.0		0.0	5	"	SP	D	
	5-6			0.0		0.0	6	"	SP	D	
DP							7				
	7-8			0.0		0.0	8	Orange clay with poorly graded fine sands, no odor	ML	M	
							9				
	9-10			0.0		0.0	10	"	ML	M	
							11				
	11-12			0.0		0.0	12	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB- 13		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borehole Start Date: 10/13/22		End Date: 10/13/22		
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	3-4	12		0.0		0.0	14"	"	ML	M	
	15-16			0.0		0.0	16"	"	ML	M	
	17-18			0.0		0.0	18"	"	ML	M	
	19-20			0.0		0.0	20"	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- 14		Permit Number: 20/051971		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: 10/13/2022		Borehole Start Time: 0845 AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: 10/13/22		End Time: 0900 AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: ERM1		Env Sci's Name: Shannon Gault		Environmental Technician's Name: Jorge Cabrera	
Drilling Company: PDS		Pavement Thickness (inches): /		Borehole Diameter (inches): 4.25	
				Borehole Depth (feet): 20	
Drilling Method(s): HA DP		Apparent Borehole DTW (in feet from soil moisture content): ~18.0		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0		0.0	1	Tan poorly graded fine Sands, No odor	SP	D	
	1-2			0.0		0.0	2	"	SP	D	
	2-3			0.0		0.0	3	"	SP	D	
	3-4			0.1		0.1	4	"	SP	D	
	4-5			0.0		0.0	5	"	SP	D	
	5-6			0.0		0.0	6	"	SP	D	
DP				0.4		0.4	6	"	SP	D	
							7				
	7-8			0.0		0.0	8	orange clay with poorly graded fine Sands no odor	ML	M	
							9				
	9-10			0.0		0.0	10	"	ML	M	
							11				
	11-12			0.0		0.0	12	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB-14		FDEP Facility Identification Number: 20/8519571			Site Name: City of Gretna Maintenance Yard		Borehole Start Date: 10/13/22 End Date: 10/13/22				
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12	0.0	0.0	0.0	0.0	14	"	ML	M	
	15-16		0.0	0.0	0.0	0.0	16	"	ML	M	
	17-18		0.0	0.0	0.0	0.0	18	"	ML	M	
	19-20		0.0	0.0	0.0	0.0	20	"	ML	M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: SB- <u>15</u>		Permit Number: <u>2018519571</u>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/13/2022</u>		Borehole Start Time: <u>0905</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <u>10/13/22</u>		End Time: <u>0925</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <u>Shannon Gowl</u>		Environmental Technician's Name: <u>Jorge Cabrera</u>	
Drilling Company: <u>PDS</u>		Pavement Thickness (inches): <u>/</u>		Borehole Diameter (inches): <u>2.25</u>	
				Borehole Depth (feet): <u>20.0</u>	
Drilling Method(s): HA <u>DP</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>~18.0</u>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)	
HA	0-1	12		0.0		0.0	1	Tan poorly graded fine Sands, No odor	SP	D		
	1-2						2					"
	2-3						3					"
	3-4						4					"
	4-5						5					"
	5-6						6					"
DP	7-8			0.0		0.0	8	Orange clay with poorly graded fine sand No odor	ML	M		
	8-9			0.0		0.0	9					
	9-10			0.0		0.0	10					"
	10-11			0.0		0.0	11					"
	11-12			0.0		0.0	12					"
					0.0		0.0					

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## BORING LOG

Page 2 of 2

Boring/Well Number: SB- <u>15</u>		FDEP Facility Identification Number: 20/8519571		Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <u>10/13/22</u> End Date: <u>10/13/22</u>					
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	13-14	12	0.0	0.0	0.0	0.0	14	11	11	ML	M
	15-16		0.0	0.0	0.0	0.0	16	11	11	ML	M
	17-18		0.0	0.0	0.0	0.0	18	11	11	ML	M
	19-20		0.0	0.0	0.0	0.0	20	11	11	ML	M

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <b>DW-1</b>		Permit Number: <b>2018519571</b>		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <b>10/13/2022</b>	Borehole Start Time: <b>0935</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	End Date: <b>10/14/22</b>	
Environmental Contractor: ERMI		Env Sci's Name: <b>Shannon Gaul</b>		Environmental Technician's Name: <b>Jorge Cabrera</b>	
Drilling Company: <b>PDS</b>		Pavement Thickness (inches): <b>/</b>	Borehole Diameter (inches): <del>4.25</del> <b>10.25</b>	Borehole Depth (feet): <b>35.0</b>	
Drilling Method(s): <del>HA</del> <b>PH/HSA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>~18.0</b>	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input checked="" type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	0-1	12		0.0	0.0	0.0	1	Tan poorly graded fine sands	SP	D	
	1-2						2	"	"	SP	D
	2-3						3	"	"	SP	D
	3-4						4	"	"	SP	D
	4-5						5	"	"	SP	D
	5-6						6	22.5	22.5	Orange poorly graded fine sands petroleum odor	SP
DL				1.9	1.9		6	"	"	SP	D
							7				
	7-8			37.6	37.6		8	Orange poorly graded fine sands with some clay petroleum odor	ML	M	
							9				
	9-10			1898	1898		10	"	"	ML	M
							11				
	11-12			2390	2390		12	"	"	M	M

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 2 of 2

Boring/Well Number: <b>DW-1</b>		FDEP Facility Identification Number: 20/8519571		Site Name: City of Gretna Maintenance Yard		Borehole Start Date: <b>10/13/22</b> End Date: <b>10/14/22</b>					
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DC	13-14	12		3149		3149	14	"	11	ML	M
	15-16			2514		2514	16	"	11	ML	M
	17-18			330.3		330.3	18	"	11	ML	M
	19-20			2996		2996	20	"	11	ML	M
	24-25			3727		3727	25	"	11	ML	M
	29-30			2032		2032	30	"	11	ML	W
	31-35			2994		2994	35	"	11	ML	W

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: ● MW-33		Permit Number: 20/85/9571		FDEP Facility Identification Number: 20/8519571	
Site Name: City of Gretna Maintenance Yard		Borehole Start Date: 10/13/2022		Borehole Start Time: 1455 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: 10/14/22		End Time: 1540 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: Shannon Gawl		Environmental Technician's Name: Jorge Cabrera	
Drilling Company: ERMI		Pavement Thickness (inches): 1		Borehole Diameter (inches): 3.25	
				Borehole Depth (feet): 6.0	
Drilling Method(s): HA		Apparent Borehole DTW (in feet from soil moisture content): ~18.0		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input checked="" type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0		0.0	1	Tan poorly graded fine sand with no odor	SP	D	
	1-2			0.0		0.0	2	" "	SP	D	
	2-3			0.0		0.0	3	" "	SP	D	
	3-4			0.0		0.0	4	Orange poorly graded fine sand with no odor	SP	D	
	4-5			0.0		0.0	5	" "	SP	D	
	5-6			0.0		0.0	6	" "	SP	D	
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <b>MW-34</b>		Permit Number: <b>2018519571</b>		FDEP Facility Identification Number: <b>2018519571</b>	
Site Name: <b>City of GICMA maint. yard</b>		Borehole Start Date: <b>10/13/22</b>		Borehole Start Time: <b>1545</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>10/14/22</b>		End Time: <b>1615</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: ERMI		Env Sci's Name: <b>Shannon Gaul</b>		Environmental Technician's Name: <b>Jorge Cabrera</b>	
Drilling Company: <b>ERMI</b>		Pavement Thickness (inches): <b>1</b>		Borehole Diameter (inches): <b>3.25</b>	
				Borehole Depth (feet): <b>6.0</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>~18.0</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): MiniRAE 3000 <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input checked="" type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
<i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	12		0.0	0.0	0.0	1	Tan poorly graded fine sands with no odor	SP	D	
	1-2			0.0	0.0	0.0	2	"	SP	D	
	2-3			0.3	0.3	0.3	3	"	SP	D	
	3-4			0.4	0.4	0.4	4	"	SP	D	
	4-5			0.0	0.0	0.0	5	"	SP	D	
	5-6			0.4	0.4	0.4	6	"	SP	D	
						7					
						8					
						9					
						10					
						11					
						12					

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

FIELD INSTRUMENT CALIBRATION RECORDS - CALIBRATION LOG - PRP

Project Site/FacID:

City of Gretna Maintenance Yard E4589A

Calibrated by (Print)/Affiliation:

Shannon Gaul

Boldly "X" this box if there is qualified data on this page.

ORGANIC VAPOR ANALYZER (OVA)

Acceptance Criteria +/-5% the standard

REFERENCE: Portable Instruments User's Manual For Monitoring VOC Sources, EPA-340/1-86-015, June 1986

Meter/Instrument Name and Unique ID:

CAL	ICV	CCV	Initials	Date	Time	Standard (ppm)	Exp. Date	Lot #	Response (ppm)	Deviation (%)	Pass or Fail
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SB	10/12/22	0700	100.0	3/11/2025	21-7803	100.2		<input checked="" type="checkbox"/> P <input type="checkbox"/> F
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SB		0900	100.0	3/11/2025	21-7803	100.1		<input checked="" type="checkbox"/> P <input type="checkbox"/> F
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SB		1700	100.0	3/11/2025	21-7803	100.0		<input checked="" type="checkbox"/> P <input type="checkbox"/> F
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SB	10/13/22	0645	100.0	3/11/2025	21-7803	100.2		<input checked="" type="checkbox"/> P <input type="checkbox"/> F
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SB		0730	100.0			100.1		<input checked="" type="checkbox"/> P <input type="checkbox"/> F
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SB		1620	100.0			100.2		<input checked="" type="checkbox"/> P <input type="checkbox"/> F
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## WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA			
Well Number: <b>DW-1</b>	Site Name: <b>City of Gretna Maint. Yard</b>	FDEP Facility I.D. Number: <b>2018519571</b>	Well Install Date(s): <b>10/13/22 10/14/22</b>
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input checked="" type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input type="checkbox"/> Shallow (Water-Table) Monitoring <input checked="" type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)	Well Install Method: <b>PH/DPT</b>  Surface Casing Install Method: <b>PH/HSR</b>
If AG, list feet of riser above land surface:			
Borehole Depth (feet): <b>45.0</b>	Well Depth (feet): <b>45.0</b>	Borehole Diameter (inches): <b>10.25</b>	Manhole Diameter (inches): <b>8.0</b>
Well Pad Size: <b>2</b> feet by <b>2</b> feet		Riser Length: <b>40</b> feet from <b>0</b> feet to <b>40</b> feet	
Riser Diameter and Material: <b>1 in Schedule 400 PVC</b>	Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Screen Length: <b>5</b> feet from <b>40</b> feet to <b>45</b> feet	
Screen Diameter and Material: <b>1 in Schedule 40.0 PVC</b>	Screen Slot Size: <b>0.010</b>	1 <sup>st</sup> Surface Casing Length: <b>35</b> feet from <b>0</b> feet to <b>35</b> feet	
1 <sup>st</sup> Surface Casing Material: also check: <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary	1 <sup>st</sup> Surface Casing I.D. (inches): <b>4.0 in</b>	2 <sup>nd</sup> Surface Casing Length: _____ feet from <b>0</b> feet to _____ feet	
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	2 <sup>nd</sup> Surface Casing I.D. (inches):	3 <sup>rd</sup> Surface Casing Length: _____ feet from <b>0</b> feet to _____ feet	
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	3 <sup>rd</sup> Surface Casing I.D. (inches):	Filter Pack Length: <b>7</b> feet from <b>45</b> feet to <b>38</b> feet	
Filter Pack Material and Size: <b>20/30 Silica</b>	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Filter Pack Seal Length: <b>2</b> feet from <b>38</b> feet to <b>36</b> feet	
Filter Pack Seal Material and Size: <b>30/65 Silica</b>		Surface Seal Length: <b>36</b> feet from <b>36</b> feet to <b>0</b> feet	
Surface Seal Material: <b>Neat Grout</b>			

WELL DEVELOPMENT DATA			
Well Development Date: <b>10/14/22</b>	Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)		
Development Pump Type (check): <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)	Depth to Groundwater (before developing in feet): <b>18.69</b>		
Pumping Rate (gallons per minute): <b>0.2</b>	Maximum Drawdown of Groundwater During Development (feet): <b>.696</b>	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <b>12.8</b>	Development Duration (minutes): <b>60</b>	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <b>Brown, dark, slight odor</b>		Water Appearance (color and odor) At End of Development: <b>Clear, no odor</b>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS	
Start: <b>1025</b> End: <b>1125</b>	End DTW: <b>25.65</b>

## WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA					
Well Number: <b>MW-32</b>	Site Name: <b>City of Brema Maint. Yard</b>	FDEP Facility I.D. Number: <b>2018519571</b>	Well Install Date(s): <b>10/13/22 10/14/22</b>		
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input checked="" type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: <b>HA/DP</b>	
IF AG, list feet of riser above land surface:					
Borehole Depth (feet): <b>25.0</b>	Well Depth (feet): <b>25.0</b>	Borehole Diameter (inches): <b>3.25</b>	Manhole Diameter (inches): <b>8.0</b>	Well Pad Size: <b>2</b> feet by <b>2</b> feet	
Riser Diameter and Material: <b>1 in Schedule 40 PVC</b>		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: <b>15</b> feet from <b>0</b> feet to <b>15</b> feet		
Screen Diameter and Material: <b>1 in Schedule 40 PVC</b>		Screen Slot Size: <b>0.010</b>	Screen Length: <b>10</b> feet from <b>15</b> feet to <b>25</b> feet		
1 <sup>st</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches):	1 <sup>st</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches):	2 <sup>nd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches):	3 <sup>rd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
Filter Pack Material and Size: <b>20/30 Silica</b>	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: <b>12</b> feet from <b>25</b> feet to <b>13</b> feet		
Filter Pack Seal Material and Size: <b>30/65 Silica</b>		Filter Pack Seal Length: <b>2</b> feet from <b>13</b> feet to <b>11</b> feet			
Surface Seal Material: <b>Neat Grout</b>		Surface Seal Length: <b>11</b> feet from <b>11</b> feet to <b>0</b> feet			

WELL DEVELOPMENT DATA			
Well Development Date: <b>10/14/22</b>		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): <b>19.05</b>	
Pumping Rate (gallons per minute): <b>0.2</b>	Maximum Drawdown of Groundwater During Development (feet): <b>3.3</b>	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <b>12.8</b>	Development Duration (minutes): <b>60 min</b>	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <b>Brown, No odor</b>		Water Appearance (color and odor) At End of Development: <b>Clear, No odor</b>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS	
Start: <b>0810</b> End: <b>0910</b>	End DTW: <b>22.35</b>

## WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA			
Well Number: <b>MW-33</b>		Site Name: <b>City of bretha maint. yard</b>	FDEP Facility I.D. Number: <b>2018519571</b>
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input checked="" type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)	Well Install Date(s): <b>10/13/22</b> <b>10/14/22</b>
IF AG, list feet of riser above land surface:		Well Install Method: <b>HAND DP</b>	Surface Casing Install Method:
Borehole Depth (feet): <b>25.0</b>	Well Depth (feet): <b>25.0</b>	Borehole Diameter (inches): <b>3.25</b>	Manhole Diameter (inches): <b>8.0</b>
Riser Diameter and Material: <b>1 in Schedule 40 PVC</b>		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Well Pad Size: <b>2</b> feet by <b>2</b> feet
Screen Diameter and Material: <b>1 in Schedule 40 PVC</b>		Screen Slot Size: <b>0.010</b>	Riser Length: <b>15</b> feet from <b>0</b> feet to <b>15</b> feet
1 <sup>st</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches):	1 <sup>st</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches):	2 <sup>nd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches):	3 <sup>rd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet
Filter Pack Material and Size: <b>20/30 Silica</b>	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: <b>12</b> feet from <b>25</b> feet to <b>13</b> feet
Filter Pack Seal Material and Size: <b>30/65 Silica</b>		Filter Pack Seal Length: <b>2</b> feet from <b>13</b> feet to <b>11</b> feet	
Surface Seal Material: <b>Neat Grout</b>		Surface Seal Length: <b>11</b> feet from <b>11</b> feet to <b>0</b> feet	

WELL DEVELOPMENT DATA			
Well Development Date: <b>10/14/22</b>		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): <b>21.61</b>	
Pumping Rate (gallons per minute): <b>0.2</b>	Maximum Drawdown of Groundwater During Development (feet): <b>1.94</b>	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <b>12.8</b>	Development Duration (minutes): <b>60 min</b>	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <b>Brown, no odor</b>		Water Appearance (color and odor) At End of Development: <b>clear, no odor</b>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS	
Start: <b>1130</b> End: <b>1230</b>	End DTW: <b>23.55</b>

## WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA					
Well Number: <b>MW-34</b>	Site Name: <b>City of Grema Maint. Yard</b>	FDEP Facility I.D. Number: <b>2018519571</b>	Well Install Date(s): <b>10/13/22 10/14/22</b>		
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input checked="" type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: <b>HA/DP</b>	
If AG, list feet of riser above land surface:					
Borehole Depth (feet): <b>25.0</b>	Well Depth (feet): <b>25.0</b>	Borehole Diameter (inches): <b>3.25</b>	Manhole Diameter (inches): <b>8.0</b>	Well Pad Size: <b>2</b> feet by <b>2</b> feet	
Riser Diameter and Material: <b>1 in Schedule 40 PVC</b>		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: <b>15</b> feet from <b>0</b> feet to <b>15</b> feet		
Screen Diameter and Material: <b>1 in Schedule 40 PVC</b>		Screen Slot Size: <b>0.010</b>	Screen Length: <b>10</b> feet from <b>15</b> feet to <b>25</b> feet		
1 <sup>st</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches):	1 <sup>st</sup> Surface Casing Length: _____ feet from <b>0</b> feet to _____ feet		
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches):	2 <sup>nd</sup> Surface Casing Length: _____ feet from <b>0</b> feet to _____ feet		
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches):	3 <sup>rd</sup> Surface Casing Length: _____ feet from <b>0</b> feet to _____ feet		
Filter Pack Material and Size: <b>20/30 Silica</b>	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: <b>12</b> feet from <b>25</b> feet to <b>13</b> feet		
Filter Pack Seal Material and Size: <b>30/65 Silica</b>		Filter Pack Seal Length: <b>2</b> feet from <b>13</b> feet to <b>11</b> feet			
Surface Seal Material: <b>Neat Grout</b>		Surface Seal Length: <b>4</b> feet from <b>11</b> feet to <b>0</b> feet			

WELL DEVELOPMENT DATA			
Well Development Date: <b>10/14/22</b>		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): <b>18.67</b>	
Pumping Rate (gallons per minute): <b>0.2</b>	Maximum Drawdown of Groundwater During Development (feet): <b>3.84</b>		Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <b>12.8</b>	Development Duration (minutes): <b>60 min</b>	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <b>Brown, no odor</b>		Water Appearance (color and odor) At End of Development: <b>clear, no odor</b>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS	
Start <b>0920</b> End: <b>1020</b>	End DTW: <b>22.51</b>



Google Earth

Ash Ave

Cabela's Food Store

Murray Smoke Shop and Lounge

**Legend**

- ◆ Ash Ave
- ◻ Cabela's Food Store
- ◻ Murray Smoke Shop and Lounge

100 ft



SB-6 @ 12'      SB-10 @ 1-2'

SB-9 @ 8'



STATE OF FLORIDA WELL COMPLETION REPORT

- Southwest
Northwest
St. Johns River
South Florida
Suwannee River
DEP
Delegated Authority (If Applicable)

Date Stamp
Confirmation# 611839
Date: 11/15/2022
Official Use Only

1. \*Permit Number MO-C-307941-1 \*CUP/WUP Number \*DID Number 317210 62-524 Delineation No.
2. \*Number of permitted wells constructed, repaired, or abandoned 4 \*Number of permitted wells not constructed, repaired, or abandoned 6
3. \*Owner's Name City Of Gretna 4.\*Completion Date 10/14/2022 5. Florida Unique ID
6. 183 First St, Gretna, FL 32332
\*Well Location - Address, Road Name or Number, City, ZIP
7. \*County Gadsden \*Section 32 Land Grant \*Township 3N \*Range 4W
8. Latitude 303703.9824 Longitude 843943.094
9. Data Obtained From: GPS X Map Survey Datum: NAD 27 X NAD 83 WGS 84

10. \*Type of Work: X Construction Repair Modification Abandonment Reason:
11. \*Specify Intended Use(s) of Well(s):
Domestic Landscape Irrigation Agricultural Irrigation Site Investigation
Bottled Water Supply Recreation Area Irrigation Livestock X 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)

12. \*Drill Method: X Auger Cable Tool Rotary Combination (Two or More Methods) Jetted Sonic
Horizontal Drilling Hydraulic Point (Direct Push) Other
13. \*Measured Static Water Level 19 ft. Measured Pumping Water Level ft. After Hours at GPM
14. \*Measuring Point (Describe) Ground Surface Which is ft. Above Below Land Surface \*Flowing: Yes X No
15. \*Casing Material: Black Steel Galvanized X PVC Stainless Steel Not Cased Other
16. \*Total Well Depth 45 ft. Cased Depth 40 ft. \*Open Hole: From To ft. \*Screen: From 40 To 45 ft. Slot Size .01

17. \*Abandonment: Other(Explain)
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
From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other

18. \*Surface Casing Diameter and Depth:
Dia 4 in. From 0 ft. To 35 ft. No. of Bags 7 Seal Material (Check One): X 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 1 in. From 0 ft. To 38 ft. No. of Bags 1.5 Seal Material (Check One): X 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
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.
23. Chemical Analysis (When Required): Iron ppm Sulfate ppm Chloride ppm
Laboratory Test Field Test Kit

24. Water Well Contractor:
\*Contractor Name Gregory W Campbell \*License Number 2613 E-mail Address shannon@pdsflorida.com
\*Contractor's Signature Gregory W Campbell \*Driller's Name (Print or Type) Paul Otto



Detailed Site Map of Well Location





STATE OF FLORIDA WELL COMPLETION REPORT

PLEASE, FILL OUT ALL APPLICABLE FIELDS
(\*Denotes Required Fields Where Applicable)
Southwest
X Northwest
St. Johns River
South Florida
Suwannee River
DEP
Delegated Authority (If Applicable)

Date Stamp
Confirmation# 611841
Date: 11/15/2022
Official Use Only

1. \*Permit Number MO-C-307941-1 \*CUP/WUP Number \*DID Number 319288 62-524 Delineation No.
2. \*Number of permitted wells constructed, repaired, or abandoned 4 \*Number of permitted wells not constructed, repaired, or abandoned 6
3. \*Owner's Name City Of Gretna 4. \*Completion Date 10/12/2022 5. Florida Unique ID
6. 183 First St, Gretna, FL 32332
\*Well Location - Address, Road Name or Number, City, ZIP
7. \*County Gadsden \*Section 32 Land Grant \*Township 3N \*Range 4W
8. Latitude 303704.186 Longitude 843942.8381
9. Data Obtained From: GPS X Map Survey Datum: NAD 27 X NAD 83 WGS 84

10. \*Type of Work: X Construction Repair Modification Abandonment Reason:
11. \*Specify Intended Use(s) of Well(s):
Domestic Landscape Irrigation Agricultural Irrigation Site Investigation
Bottled Water Supply Recreation Area Irrigation Livestock X 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)

12. \*Drill Method: X Auger Cable Tool Rotary Combination (Two or More Methods) Jetted Sonic
Horizontal Drilling Hydraulic Point (Direct Push) Other
13. \*Measured Static Water Level 19 ft. Measured Pumping Water Level ft. After Hours at GPM
14. \*Measuring Point (Describe) Ground Surface Which is ft. Above Below Land Surface \*Flowing: Yes X No
15. \*Casing Material: Black Steel Galvanized X PVC Stainless Steel Not Cased Other
16. \*Total Well Depth 25 ft. Cased Depth 15 ft. \*Open Hole: From To ft. \*Screen: From 15 To 25 ft. Slot Size .01

17. \*Abandonment: Other(Explain)
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
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 1 in. From 0 ft. To 11 ft. No. of Bags .42 Seal Material (Check One): X 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
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.
23. Chemical Analysis (When Required):
Iron ppm Sulfate ppm Chloride ppm
Laboratory Test Field Test Kit
24. Water Well Contractor:
\*Contractor Name Gregory W Campbell \*License Number 2613 E-mail Address shannon@pdsflorida.com
\*Contractor's Signature Gregory W Campbell \*Driller's Name (Print or Type) Paul Otto
(I certify that the information provided in this report is accurate and true.)



\*Detailed Site Map of Well Location





STATE OF FLORIDA WELL COMPLETION REPORT

PLEASE, FILL OUT ALL APPLICABLE FIELDS
(\*Denotes Required Fields Where Applicable)
Southwest
X Northwest
St. Johns River
South Florida
Suwannee River
DEP
Delegated Authority (If Applicable)

Date Stamp
Confirmation# 611843
Date: 11/15/2022
Official Use Only

1. \*Permit Number MO-C-307941-1 \*CUP/WUP Number \*DID Number 319290 62-524 Delineation No.
2. \*Number of permitted wells constructed, repaired, or abandoned 4 \*Number of permitted wells not constructed, repaired, or abandoned 6
3. \*Owner's Name City Of Gretna 4.\*Completion Date 10/12/2022 5. Florida Unique ID
6. 183 First St, Gretna, FL 32332
\*Well Location - Address, Road Name or Number, City, ZIP
7. \*County Gadsden \*Section 32 Land Grant \*Township 3N \*Range 4W
8. Latitude 303704.4145 Longitude 843942.9057
9. Data Obtained From: GPS X Map Survey Datum: NAD 27 NAD 83 X WGS 84

10. \*Type of Work: X Construction Repair Modification Abandonment Reason:
11. \*Specify Intended Use(s) of Well(s):
Domestic Landscape Irrigation Agricultural Irrigation Site Investigation
Bottled Water Supply Recreation Area Irrigation Livestock X 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)

12. \*Drill Method: X Auger Cable Tool Rotary Combination (Two or More Methods) Jetted Sonic
Horizontal Drilling Hydraulic Point (Direct Push) Other
13. \*Measured Static Water Level 19 ft. Measured Pumping Water Level ft. After Hours at GPM
14. \*Measuring Point (Describe) Ground Surface Which is ft. Above Below Land Surface \*Flowing: Yes X No
15. \*Casing Material: Black Steel Galvanized X PVC Stainless Steel Not Cased Other
16. \*Total Well Depth 25 ft. Cased Depth 15 ft. \*Open Hole: From To ft. \*Screen: From 15 To 25 ft. Slot Size .01

17. \*Abandonment:
Other(Explain )
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
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 1 in. From 0 ft. To 11 ft. No. of Bags 42 Seal Material (Check One): X 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
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.
23. Chemical Analysis (When Required): Iron ppm Sulfate ppm Chloride ppm
Laboratory Test Field Test Kit

24. Water Well Contractor:
\*Contractor Name Gregory W Campbell \*License Number 2613 E-mail shannon@pdsflorida.com
Address
\*Contractor's Signature Gregory W Campbell \*Driller's Name (Print or Type) Paul Otto
(I certify that the information provided in this report is accurate and true.)



\*Detailed Site Map of Well Location





STATE OF FLORIDA WELL COMPLETION REPORT

PLEASE, FILL OUT ALL APPLICABLE FIELDS
(\*Denotes Required Fields Where Applicable)
Southwest
X Northwest
St. Johns River
South Florida
Suwannee River
DEP
Delegated Authority (If Applicable)

Date Stamp
Confirmation# 611844
Date: 11/15/2022
Official Use Only

1. \*Permit Number MO-C-307941-1 \*CUP/WUP Number \*DID Number 319291 62-524 Delineation No.
2. \*Number of permitted wells constructed, repaired, or abandoned 4 \*Number of permitted wells not constructed, repaired, or abandoned 6
3. \*Owner's Name City Of Gretna 4.\*Completion Date 10/13/2022 5. Florida Unique ID
6. 183 First St, Gretna, FL 32332
\*Well Location - Address, Road Name or Number, City, ZIP
7. \*County Gadsden \*Section 32 Land Grant \*Township 3N \*Range 4W
8. Latitude 303704.5516 Longitude 843943.3595
9. Data Obtained From: GPS X Map Survey Datum: NAD 27 X NAD 83 WGS 84

10. \*Type of Work: X Construction Repair Modification Abandonment Reason:
11. \*Specify Intended Use(s) of Well(s):
Domestic Landscape Irrigation Agricultural Irrigation Site Investigation
Bottled Water Supply Recreation Area Irrigation Livestock X 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 II Injection HVAC Return
Class V Injection: Recharge Commercial/Industrial Disposal Aquifer Storage and Recovery Drainage
Remediation: Recovery Air Sparge Other (Describe)
Other (Describe)

12. \*Drill Method: X Auger Cable Tool Rotary Combination (Two or More Methods) Jetted Sonic
Horizontal Drilling Hydraulic Point (Direct Push) Other
13. \*Measured Static Water Level 19 ft. Measured Pumping Water Level ft. After Hours at GPM
14. \*Measuring Point (Describe) Ground Surface Which is ft. Above Below Land Surface \*Flowing: Yes X No
15. \*Casing Material: Black Steel Galvanized X PVC Stainless Steel Not Cased Other
16. \*Total Well Depth 25 ft. Cased Depth 15 ft. \*Open Hole: From To ft. \*Screen: From 15 To 25 ft. Slot Size .01

17. \*Abandonment: Other(Explain)
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
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 1 in. From 0 ft. To 11 ft. No. of Bags 42 Seal Material (Check One): X 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
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

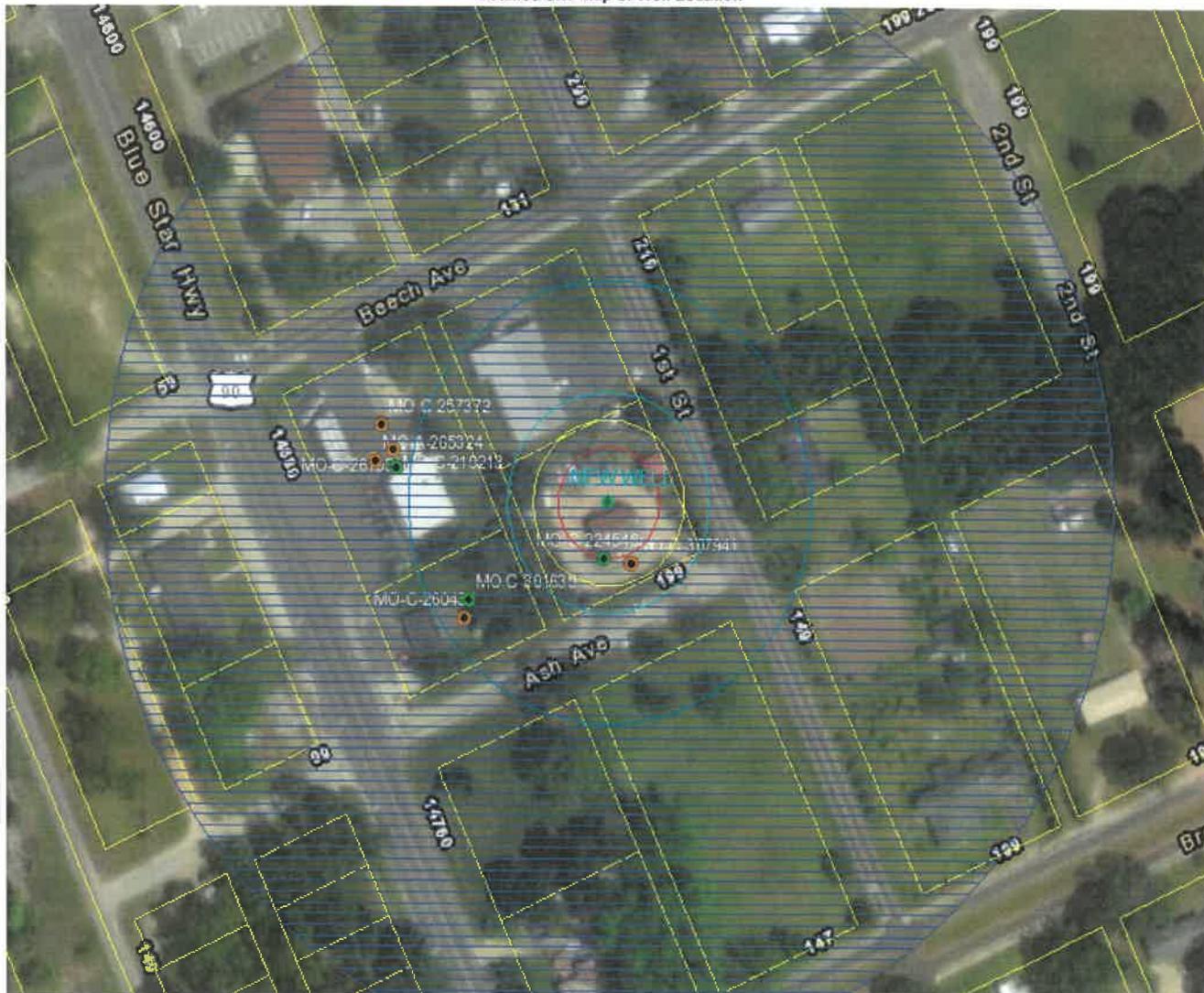
22. Pump Type (If known): Centrifugal Jet Submersible Turbine
Horsepower Pump Capacity (GPM)
Pump Depth ft. Intake Depth ft.
23. Chemical Analysis (When Required): Iron ppm Sulfate ppm Chloride ppm
Laboratory Test Field Test Kit

24. Water Well Contractor:
\*Contractor Name Gregory W Campbell \*License Number 2613 E-mail Address shannon@pdsflorida.com
\*Contractor's Signature Gregory W Campbell \*Driller's Name (Print or Type) Paul Otto

(I certify that the information provided in this report is accurate and true.)



Detailed Site Map of Well Location



Location Gretna, FL Date 10/20/22

Project / Client City of Gretna Maintenance  
yard E4589A

- 0: Calibrated equipment
- 0: Left ERMI to site  
- in truck T-009
- 0: Arrive on site
- 5: Calibrate equipment
- 0: Begin GWS

W;	Depth	Time
J-33:	19.90	1415
J-31F:	18.81	1447
J-30F:	18.83	1520
J-32:	19.35	1545
J-34:	19.12	1635

able to locate mw-26

- 0: Finish GWS
- 5: Calibrate equipment
- 0: Begin TOC reading

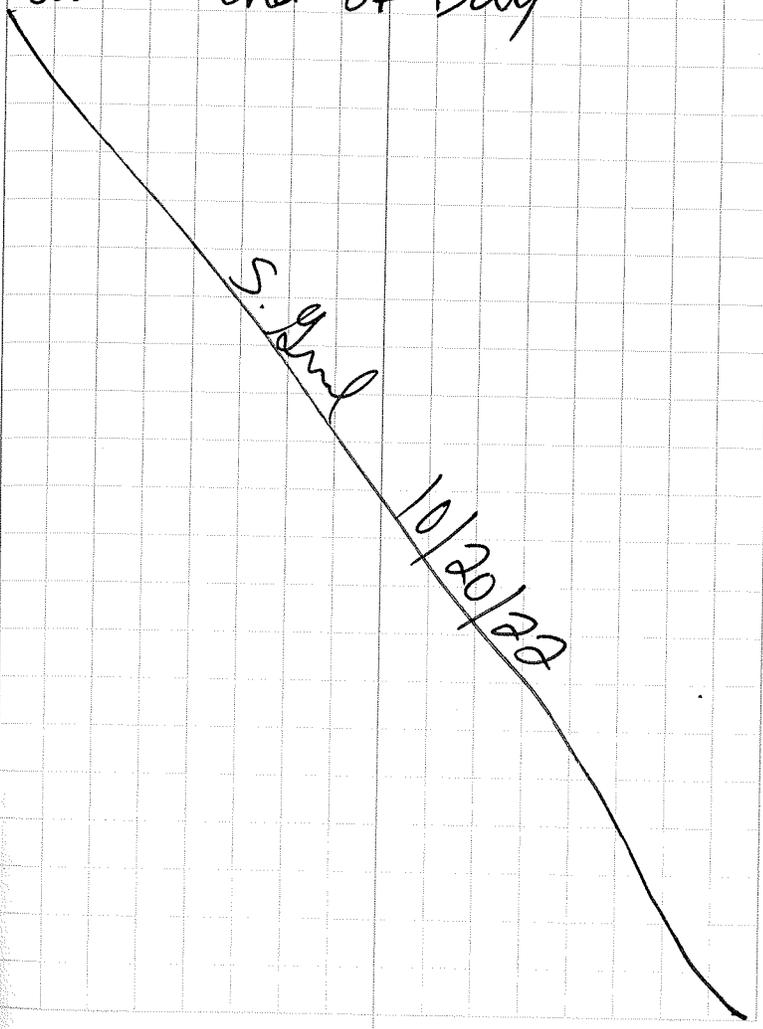
W	DTW	elevation:
-33	19.90	5.32
-31F	18.81	5.52
-30F:	18.83	5.48
-32:	19.35	5.68
J-34:	19.12	4.97
-1:		5.44

30: End of TOC

Location Gretna, FL Date 10/20/22<sup>15</sup>

Project / Client City Gretna Maintenance  
yard E4589A

- 1745: Left site to hotel
- ~~1745~~: Arrived at hotel
- 1800 - end of Day



*Plot in the Rain*

Location Gretna, FL Date 10/21/22  
 Project / Client City of Gretna maintenance  
Jewel E4589A

- 06:00: Calibrated equipment
- 07:00: Left hotel to Site  
- in truck T-009
- 08:30: Arrived on site
- 09:15: Calibrated equipment
- 10:00: begin GWS for DW-1

<u>W:</u>	<u>Depth:</u>	<u>Time:</u>
-1	18.79	0845

- 10:00: Finish GWS
- 10:05: Calibrate equipment
- 10:05: Leave E4589A to FedEx  
in Tallahassee
- 10:15: Arrive at FedEx
- 10:20: Leave FedEx to site  
E3383D
- 10:30: Arrive at site for  
Site visit
- 10:45: Leave site to FM office
- 10:45: Arrive at FM office  
← End of day

S. Gul 10/21/22

Location Tallahassee, FL Date 10/21/22<sup>17</sup>  
 Project / Client Swifty serve E3383D

10:30: Began Site notes

<u>Well:</u>	<u>Condition:</u>
TF-2	destroyed
TF-3	destroyed
TF-4	destroyed
MW-5	Sampleable
MW-6	Sampleable
MW-7	Sampleable
MW-8	Sampleable
MW-9	Sampleable
MW-10	<del>Destroyed</del> Sampleable
MW-12	Sampleable
MW-15	Sampleable
MW-16	Sampleable
MW-19	Sampleable
MW-20	Sampleable
MW-22	Sampleable
MW-23	Sampleable
MW-24	Could not find
MW-25	Destroyed
MW-26	Destroyed
MW-21	Sampleable
11:45	: Finished assesment, left site

*Return to Rain*

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: City of Gretna Maintenance Yard	SITE LOCATION: Gretna, FL
WELL NO: DW-1	SAMPLE ID: DW-1
DATE: 10/21/22	

**PURGING DATA**

WELL DIAMETER (inches): 1.25"	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 40 feet to 45 feet	STATIC DEPTH TO WATER (feet): 18.79	PURGE PUMP TYPE OR BAILER: PP
<b>WELL VOLUME PURGE: 1</b> WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (                      feet -                      feet ) X                      gallons/foot =                      gallons				
<b>EQUIPMENT VOLUME PURGE: 1</b> EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= 0 gallons + (0.0026 gallons/foot X 45 feet) + 0.132 gallons = 0.249 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 42.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 42.5	PURGING INITIATED AT: 0810	PURGING ENDED AT: 0819	TOTAL VOLUME PURGED (gallons): 0.9

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm <input type="checkbox"/> or μS/cm <input checked="" type="checkbox"/>	DISSOLVED OXYGEN (circle units) mg/L or % saturation <input type="checkbox"/>	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0815	0.5	0.5	0.10	18.83	8.88	21.8	656	1.49	12.20	Brown	gas
0817	0.2	0.7	0.10	18.83	8.88	21.7	656	1.48	10.68	Brown	gas
0819	0.2	0.9	0.10	18.83	8.88	21.8	655	1.43	9.69	Brown	gas
			ORP: -94.6								

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: S. Gavl ERM1		SAMPLER(S) SIGNATURE(S): S. Gavl		SAMPLING INITIATED AT: 0820	SAMPLING ENDED AT: 0845
PUMP OR TUBING DEPTH IN WELL (feet): 42.5		TUBING MATERIAL CODE: HDPE/S		FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>		DUPLICATE: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
DW-1	2	AG	40 mL	-	-	-	PAH's	APP	200
	2	AG	40 mL	HCl	-	-	BTEX & MTBE	APP	200
	2	AG	100 mL	HCl	-	-	TRPH's	APP	200

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: City of Gretna Maintenance Yard	SITE LOCATION: Gretna, FL
WELL NO: MW- 30F	SAMPLE ID: MW- 30F
DATE: 10/20/22	

**PURGING DATA**

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 15 feet to 25 feet	STATIC DEPTH TO WATER (feet): 18.83	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 25 feet - 18.83 feet ) X 0.16 gallons/foot = 0.9872 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + ( gallons/foot X feet ) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 20.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 20.5	PURGING INITIATED AT: 1457	PURGING ENDED AT: 1513	TOTAL VOLUME PURGED (gallons): 1.6							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm <input type="checkbox"/> or μS/cm <input checked="" type="checkbox"/>	DISSOLVED OXYGEN (circle units) mg/L or <input type="checkbox"/> % saturation <input checked="" type="checkbox"/>	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1507	1.0	1.0	0.10	18.86	5.25	25.0	73.0	0.53	3.39	None	gas
1510	0.3	1.3	0.10	18.86	5.24	25.1	72.4	0.52	1.44	None	gas
1513	0.3	1.6	0.10	18.86	5.24	25.1	72.3	0.53	1.43	None	gas
			ORP: -23.8								
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88											
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: S. Gavi ERM			SAMPLER(S) SIGNATURE(S): S. Gavi			SAMPLING INITIATED AT: 1514		SAMPLING ENDED AT: 1520	
PUMP OR TUBING DEPTH IN WELL (feet): 20.5			TUBING MATERIAL CODE: HDPE/S			FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y <input type="checkbox"/> N <input checked="" type="checkbox"/>			TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>			DUPLICATE: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-30F	2	AG	40 mL	-	-	-	PAH's	APP	200
	2	AG	40 mL	HCl	-	-	BTEX & MTBE	APP	200
	2	AG	100 mL	HCl	-	-	TRPH's	APP	200
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)





DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: City of Gretna Maintenance Yard	SITE LOCATION: Gretna, FL
WELL NO: MW-33	SAMPLE ID: MW-33
DATE: 10/20/22	

**PURGING DATA**

WELL DIAMETER (inches): 1"	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 15 feet to 25 feet	STATIC DEPTH TO WATER (feet): 19.90	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 25 feet - 19.90 feet ) X 0.04 gallons/foot = 0.204 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + ( gallons/foot X feet ) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 21.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21.5	PURGING INITIATED AT: 1400	PURGING ENDED AT: 1409	TOTAL VOLUME PURGED (gallons): 0.9							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm <input type="checkbox"/> or μS/cm <input checked="" type="checkbox"/>	DISSOLVED OXYGEN (circle units) mg/L or <input checked="" type="checkbox"/> % saturation <input type="checkbox"/>	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1405	0.5	0.5	0.10	20.0	6.11	25.6	316.6	0.55	8.67	NONE	gas
1407	0.2	0.7	0.10	20.0	6.11	25.7	310.1	0.54	8.28	NONE	gas
1409	0.2	0.9	0.10	20.0	6.11	25.7	309.2	0.49	8.06	NONE	gas
			ORP: -495.5								
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer, BP = Bladder Pump, ESP = Electric Submersible Pump, PP = Peristaltic Pump, O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: S. Gant ERM			SAMPLER(S) SIGNATURE(S): S. Gant			SAMPLING INITIATED AT: 1410		SAMPLING ENDED AT: 1415	
PUMP OR TUBING DEPTH IN WELL (feet): 21.5			TUBING MATERIAL CODE: HDPE/S			FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		FILTRATION EQUIPMENT TYPE: _____ μm	
FIELD DECONTAMINATION: PUMP Y <input type="checkbox"/> N <input checked="" type="checkbox"/>			TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>			DUPLICATE: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-33	2	AG	40 mL	-	-	-	PAH's	APP	200
	2	AG	40 mL	HCl	-	-	BTEX & MTBE	APP	200
	2	AG	100 mL	HCl	-	-	TRPH's	APP	200
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: City of Gretna Maintenance Yard	SITE LOCATION: Gretna, FL
WELL NO: MW- 34	SAMPLE ID: MW- 34
DATE: 10/20/22	

**PURGING DATA**

WELL DIAMETER (inches): 1"	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 15 feet to 25 feet	STATIC DEPTH TO WATER (feet): 19.12	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 25 feet - 19.12 feet ) X 0.04 gallons/foot = 0.2352 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + ( gallons/foot X feet ) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 20.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 20.5	PURGING INITIATED AT: 1620	PURGING ENDED AT: 1629	TOTAL VOLUME PURGED (gallons): 0.9

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm <input type="checkbox"/> or μS/cm <input checked="" type="checkbox"/>	DISSOLVED OXYGEN (circle units) mg/L or % saturation <input checked="" type="checkbox"/>	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1625	0.5	0.5	0.10	19.17	5.56	23.9	100.9	1.48	4.52	NONE	gas
1627	0.2	0.7	0.10	19.17	5.55	23.8	106.5	1.46	4.22	NONE	gas
1629	0.2	0.9	0.10	19.17	5.55	23.8	98.7	1.43	4.10	NONE	gas
			ORP: -94.5								

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: S. Gaur ERM1		SAMPLER(S) SIGNATURE(S): S. Gaur		SAMPLING INITIATED AT: 1630	SAMPLING ENDED AT: 1635
PUMP OR TUBING DEPTH IN WELL (feet): 20.5		TUBING MATERIAL CODE: HDPE/S		FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>		DUPLICATE: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-34	2	AG	40 mL	-	-	-	PAH's	APP	200
	2	AG	40 mL	HCl	-	-	BTEX & MTBE	APP	200
	2	AG	100 mL	HCl	-	-	TRPH's	APP	200

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

FIELD INSTRUMENT CALIBRATION RECORDS - EXAMPLE CALIBRATION LOG - PRP

Project Site/FacID: City of Gretna Maintenance Yard E4589A Boldly "X" this box if there is qualified data on this page.  
 Calibrated by (Print)/Affiliation: Sherron Gawl

Temperature (Quarterly) \_\_\_\_\_ Date of Last Temp Verification: \_\_\_\_\_ See log book: \_\_\_\_\_

**DISSOLVED OXYGEN (DO) (REFERENCE: DEP SOP FT 1500)** **Acceptance Criteria +/-0.3 mg DO/L**

Meter/Instrument Name and Unique ID: YSI Pro - Serial Number - 20F162280

Initials	Date	Time	Standard (DO %)	Temp °C	Saturation mg/L (100%)	Response DO (%)	Deviation mg DO/L	Deviation mg DO/L	Pass or Fail
CAL ICV CCV SG	10/20/22	0530	100%	24	8.418	99.8			(P) F
CAL ICV CCV SG	I	0530	100%	24	8.418	99.9			(P) F
CAL ICV CCV SG	I	1345	100%	24	8.418	99.8			(P) F
CAL ICV CCV SG	I	1645	100%	30	7.559	99.9			(P) F
CAL ICV CCV			100%						P F
CAL ICV CCV			100%						P F

See Table FT 1500-1 and/or Table FS 2200-2 for Dissolved Oxygen Saturation corresponding to Temperature.

**SPECIFIC CONDUCTANCE (REFERENCE: DEP SOP FT 1200)** **Acceptance Criteria +/-5% the standard**

Meter/Instrument Name and Unique ID: YSI Pro - Serial Number - 20F162280

Initials	Date	Time	Standard (µmho/cm)	Exp. Date	Lot #	Response	Deviation (%)	Pass or Fail
CAL ICV CCV SG	10/20/22	0530	100	12/22	1GJ611	100.1		(P) F
CAL ICV CCV SG	I	0530	1413	I	1GF067	1412		(P) F
CAL ICV CCV SG	I	0530	1413	I	1GF067	1413		(P) F
CAL ICV CCV SG	I	1345	1413	I	1GF067	1412		(P) F
CAL ICV CCV SG	I	1645	1413	I	1GF067	1413		(P) F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

**OXIDATION-REDUCTION POTENTIAL (ORP)** **Acceptance Criteria +/-10 mV**

REFERENCE: EPA Region 4, Operating Procedure, Field Measurement of Oxidation-Reduction Potential (ORP)

Meter/Instrument Name and Unique ID: YSI Pro - Serial Number - 20F162280

Initials	Date	Time	Standard (mV)	Exp. Date	Lot #	Response (mV)	Response (mV)	Pass or Fail
CAL ICV CCV SG	10/20/22	0530	220	12/22	1GJ449	220.1		(P) F
CAL ICV CCV SG	I	0530	220	I	1GJ449	220.0		(P) F
CAL ICV CCV SG	I	1345	220	I	1GJ449	219.8		(P) F
CAL ICV CCV SG	I	1645	220	I	1GJ449	220.0		(P) F
CAL ICV CCV								P F
CAL ICV CCV								P F

Perform ICVs and CCVs only in "READ/RUN" mode.  
 CAL - Calibration; ICV - Initial Calibration Verification; and, CCV - Continuing Calibration Verification.

FIELD INSTRUMENT CALIBRATION RECORDS - EXAMPLE CALIBRATION LOG - PRP

Project Site/FacID:

City of Gretna Maintenance yard E4589A

Calibrated by (Print)/Affiliation:

Shannon Gawl

Boldly "X" this box if there is qualified data on this page.

**TURBIDITY (REFERENCE: DEP SOP FT 1600)**

Meter/Instrument Name and Unique ID:

micro TPW-200701235

Std=0.1-10 NTU +/-10%

Std=11-40 NTU +/-8%

Std=41-100 NTU +/-6.5%

Std>100 NTU +/-5%

Initials	Date	Time	Standard (NTU)	Exp. Date	Lot #	Response (NTU)	Deviation (%)	Pass or Fail
CAL	10/20/22	0530	0.02	5/23	210502	0.02		P F
CAL		0530	10.00	4/23	210407	9.99		P F
CAL		0530	1000	5/23	210503	1001		P F
CAL		1345	0.02	5/23	210502	0.02		P F
CAL		1345	10.00	4/23	210407	9.99		P F
CAL		1345	1000	5/23	210503	1001		P F
CAL		1645	0.02	5/23	210502	0.02		P F
CAL		1645	10.00	4/23	210407	10.01		P F
CAL		1645	1000	5/23	210503	1000		P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F

**pH (REFERENCE: DEP SOP FT 1100)**

Acceptance Criteria +/-0.2 SU

Meter/Instrument Name and Unique ID: YSI Pro - Serial Number - 20F162280

Initials	Date	Time	Standard (SU)	Exp. Date	Lot #	Response (SU)	Deviation (SU)	Pass or Fail
CAL	10/20/22	0530	4.00	8/23	1GH562	3.99		P F
CAL		0530	10.00	12/22	9GF372	10.02		P F
CAL		0530	7.00	12/22	0GF592	6.99		P F
CAL		1345	7.00	12/22	0GF592	7.00		P F
CAL		1645	7.00	12/22	0GF592	7.00		P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F

Perform ICVs and CCVs only in "READ/RUN" mode.

CAL - Calibration; ICV - Initial Calibration Verification; and, CCV - Continuing Calibration Verification.

FIELD INSTRUMENT CALIBRATION RECORDS - EXAMPLE CALIBRATION LOG - PRP

Project Site/FacID: City of Gretna Maintenance yard E4581A  
 Calibrated by (Print)/Affiliation: Shannon Gowl

*boldly "X" this box if there is qualified data on this page.*

Temperature (Quarterly) \_\_\_\_\_ Date of Last Temp Verification: \_\_\_\_\_ See log book: \_\_\_\_\_

**DISSOLVED OXYGEN (DO) (REFERENCE: DEP SOP FT 1500)** **Acceptance Criteria +/-0.3 mg DO/L**

Meter/Instrument Name and Unique ID: YSI Pro - Serial Number - 20F162280

Initials	Date	Time	Standard (DO %)	Temp °C	Saturation mg/L (100%)	Response DO (%)	Deviation mg DO/L	Deviation mg DO/L	Pass or Fail
CAL ICV CCV SG	10/21/22	0630	100%	24	8.418	99.8			(P) F
CAL ICV CCV SG		0630	100%	24	8.418	99.9			(P) F
CAL ICV CCV SG		0745	100%	24	8.418	99.8			(P) F
CAL ICV CCV SG		0905	100%	30	7.559	99.9			(P) F
CAL ICV CCV			100%						P F
CAL ICV CCV			100%						P F

See Table FT 1500-1 and/or Table FS 2200-2 for Dissolved Oxygen Saturation corresponding to Temperature.

**SPECIFIC CONDUCTANCE (REFERENCE: DEP SOP FT 1200)** **Acceptance Criteria +/-5% the standard**

Meter/Instrument Name and Unique ID: YSI Pro - Serial Number - 20F162280

Initials	Date	Time	Standard (µmho/cm)	Exp. Date	Lot #	Response	Deviation (%)	Pass or Fail
CAL ICV CCV SG	10/21/22	0630	100	12/22	1G6611	99.9		(P) F
CAL ICV CCV SG		0630	1413		1GF067	1414		(P) F
CAL ICV CCV SG		0630	1413		1GF067	1412		(P) F
CAL ICV CCV SG		0745	1413		1GF067	1413		(P) F
CAL ICV CCV SG		0905	1413		1GF067	1413		(P) F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

**OXIDATION-REDUCTION POTENTIAL (ORP)** **Acceptance Criteria +/-10 mV**

REFERENCE: *EPA Region 4, Operating Procedure, Field Measurement of Oxidation-Reduction Potential (ORP)*

Meter/Instrument Name and Unique ID: YSI Pro - Serial Number - 20F162280

Initials	Date	Time	Standard (mV)	Exp. Date	Lot #	Response (mV)	Response (mV)	Pass or Fail
CAL ICV CCV SG	10/21/22	0630	220	12/22	1GJ449	220		(P) F
CAL ICV CCV SG		0630	220		1GJ449	220.1		(P) F
CAL ICV CCV SG		0745	220		1GJ449	220.1		(P) F
CAL ICV CCV SG		0905	220		1GJ449	220		(P) F
CAL ICV CCV								P F
CAL ICV CCV								P F

Perform ICVs and CCVs only in "READ/RUN" mode.

CAL - Calibration; ICV - Initial Calibration Verification; and, CCV - Continuing Calibration Verification.

FIELD INSTRUMENT CALIBRATION RECORDS - EXAMPLE CALIBRATION LOG - PRP

Project Site/FacID:

City of Gretna Maintenance Yard E4584

Calibrated by (Print)/Affiliation:

Shannon Gault

Boldly "X" this box if there is qualified data on this page.

**TURBIDITY (REFERENCE: DEP SOP FT 1600)**

Meter/Instrument Name and Unique ID: Micro TPW-200701235

Std=0.1-10 NTU +/-10%

Std=11-40 NTU +/-8%

Std=41-100 NTU +/-6.5%

Std>100 NTU +/-5%

Initials	Date	Time	Standard (NTU)	Exp. Date	Lot #	Response (NTU)	Deviation (%)	Pass or Fail
CAL	10/21/22	0630	0.02	5/23	210502	0.02		P F
CAL		0630	10.00	4/23	210407	9.99		P F
CAL		0630	1000	5/23	210503	1000		P F
CAL		0745	0.02	5/23	210502	0.02		P F
CAL		0745	10.00	4/23	210407	10.01		P F
CAL		0745	1000	5/23	210503	1000		P F
CAL		0905	0.02	5/23	210502	0.02		P F
CAL		0905	10.00	4/23	210407	10.01		P F
CAL		0905	1000	5/23	210503	1000		P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F

**pH (REFERENCE: DEP SOP FT 1100)**

Acceptance Criteria +/-0.2 SU

Meter/Instrument Name and Unique ID: YSI Pro - Serial Number - 20F162280

Initials	Date	Time	Standard (SU)	Exp. Date	Lot #	Response (SU)	Deviation (SU)	Pass or Fail
CAL	10/21/22	0630	4.00	8/23	1GH562	3.99		P F
CAL		0630	10.00	12/22	9GF372	10.00		P F
CAL		0630	7.00	12/22	0GF592	7.01		P F
CAL		0745	7.00	12/22	0GF592	7.00		P F
CAL		0905	7.00	12/22	0GF592	6.99		P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F
CAL								P F

Perform ICVs and CCVs only in "READ/RUN" mode.

CAL - Calibration; ICV - Initial Calibration Verification; and, CCV - Continuing Calibration Verification.

**Appendix C:**

Laboratory Analytical Reports and Chain of Custody Records

**ERMI - FL**

Sample Delivery Group: L1546497  
Samples Received: 10/14/2022  
Project Number: E4589A  
Description: Gretna Maintenance Yard  
Site: 2018519571  
Report To: Jon Ascher  
6835 International Center Blvd  
Suite 5  
Fort Myers, FL 33912

Entire Report Reviewed By:



Jeff Carr  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

# TABLE OF CONTENTS

<b>Cp: Cover Page</b>	<b>1</b>
<b>Tc: Table of Contents</b>	<b>2</b>
<b>Ss: Sample Summary</b>	<b>3</b>
<b>Cn: Case Narrative</b>	<b>4</b>
<b>Sr: Sample Results</b>	<b>5</b>
<b>SB-6 12' L1546497-01</b>	<b>5</b>
<b>SB-9 8' L1546497-02</b>	<b>6</b>
<b>SB-10 2' L1546497-03</b>	<b>7</b>
<b>Qc: Quality Control Summary</b>	<b>8</b>
<b>Total Solids by Method 2540 G-2011</b>	<b>8</b>
<b>Volatile Organic Compounds (GC/MS) by Method 8260B</b>	<b>10</b>
<b>Semi-Volatile Organic Compounds (GC) by Method FLPRO</b>	<b>11</b>
<b>Semi Volatile Organic Compounds (GC/MS) by Method 8270C</b>	<b>13</b>
<b>Gl: Glossary of Terms</b>	<b>19</b>
<b>Al: Accreditations &amp; Locations</b>	<b>20</b>
<b>Sc: Sample Chain of Custody</b>	<b>21</b>



# SAMPLE SUMMARY

## SB-6 12' L1546497-01 Solid

Collected by Shannon Gaul  
 Collected date/time 10/13/22 13:30  
 Received date/time 10/14/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1944127	1	10/19/22 11:27	10/19/22 11:39	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1945374	40	10/13/22 13:30	10/19/22 17:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method FLPRO	WG1941360	5	10/17/22 06:20	10/18/22 11:22	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1945313	1	10/19/22 23:02	10/20/22 14:12	AGW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1945313	20	10/19/22 23:02	10/21/22 19:02	JMB	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

## SB-9 8' L1546497-02 Solid

Collected by Shannon Gaul  
 Collected date/time 10/13/22 14:00  
 Received date/time 10/14/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1944127	1	10/19/22 11:27	10/19/22 11:39	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1945374	80	10/13/22 14:00	10/19/22 17:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method FLPRO	WG1941360	10	10/17/22 06:20	10/18/22 11:52	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1948370	1	10/25/22 08:10	10/28/22 17:11	AMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1948370	20	10/25/22 08:10	10/31/22 14:40	AMG	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

## SB-10 2' L1546497-03 Solid

Collected by Shannon Gaul  
 Collected date/time 10/13/22 14:15  
 Received date/time 10/14/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1944163	1	10/19/22 09:44	10/19/22 09:50	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1945374	1	10/13/22 14:15	10/19/22 14:23	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method FLPRO	WG1946827	1	10/21/22 13:52	10/22/22 19:55	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1945313	1	10/19/22 23:02	10/20/22 15:13	AGW	Mt. Juliet, TN

9 Sc

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.1		1	10/19/2022 11:39	<a href="#">WG1944127</a>

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.205		0.0247	0.0528	40	10/19/2022 17:33	<a href="#">WG1945374</a>
Toluene	7.51		0.0686	0.264	40	10/19/2022 17:33	<a href="#">WG1945374</a>
Ethylbenzene	22.2		0.0389	0.132	40	10/19/2022 17:33	<a href="#">WG1945374</a>
Total Xylenes	244		0.0464	0.343	40	10/19/2022 17:33	<a href="#">WG1945374</a>
Methyl tert-butyl ether	0.0185	U	0.0185	0.0528	40	10/19/2022 17:33	<a href="#">WG1945374</a>
(S) Toluene-d8	106			75.0-131		10/19/2022 17:33	<a href="#">WG1945374</a>
(S) 4-Bromofluorobenzene	108			67.0-138		10/19/2022 17:33	<a href="#">WG1945374</a>
(S) 1,2-Dichloroethane-d4	94.3			70.0-130		10/19/2022 17:33	<a href="#">WG1945374</a>

Semi-Volatile Organic Compounds (GC) by Method FLPRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Petroleum Range Organics	1210		15.5	57.4	5	10/18/2022 11:22	<a href="#">WG1941360</a>
(S) o-Terphenyl	66.5			66.0-136		10/18/2022 11:22	<a href="#">WG1941360</a>
(S) C35	73.7			36.0-132		10/18/2022 11:22	<a href="#">WG1941360</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acenaphthene	0.0474		0.00619	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Acenaphthylene	0.00538	U	0.00538	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Anthracene	0.0126		0.00681	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Benzo(a)anthracene	0.00674	U	0.00674	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Benzo(a)pyrene	0.00711	U	0.00711	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Benzo(b)fluoranthene	0.00713	U	0.00713	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Benzo(g,h,i)perylene	0.00699	U	0.00699	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Benzo(k)fluoranthene	0.00680	U	0.00680	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Chrysene	0.00760	U	0.00760	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Dibenz(a,h)anthracene	0.0106	U	0.0106	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Fluoranthene	0.0115	U	0.00690	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Fluorene	0.0491	U	0.00622	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Indeno(1,2,3-cd)pyrene	0.0108	U	0.0108	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
1-Methylnaphthalene	10.0		0.0978	0.765	20	10/21/2022 19:02	<a href="#">WG1945313</a>
2-Methylnaphthalene	22.4		0.0992	0.765	20	10/21/2022 19:02	<a href="#">WG1945313</a>
Naphthalene	12.2		0.192	0.765	20	10/21/2022 19:02	<a href="#">WG1945313</a>
Phenanthrene	0.0691		0.00759	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
Pyrene	0.0132	U	0.00744	0.0382	1	10/20/2022 14:12	<a href="#">WG1945313</a>
(S) Nitrobenzene-d5	110			31.0-146		10/20/2022 14:12	<a href="#">WG1945313</a>
(S) Nitrobenzene-d5	0.000	U		31.0-146		10/21/2022 19:02	<a href="#">WG1945313</a>
(S) 2-Fluorobiphenyl	66.9			31.0-130		10/20/2022 14:12	<a href="#">WG1945313</a>
(S) 2-Fluorobiphenyl	64.0	U		31.0-130		10/21/2022 19:02	<a href="#">WG1945313</a>
(S) p-Terphenyl-d14	73.5			20.0-127		10/20/2022 14:12	<a href="#">WG1945313</a>
(S) p-Terphenyl-d14	57.8	U		20.0-127		10/21/2022 19:02	<a href="#">WG1945313</a>



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.7		1	10/19/2022 11:39	<a href="#">WG1944127</a>

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	1.05		0.0502	0.107	80	10/19/2022 17:52	<a href="#">WG1945374</a>
Toluene	72.0		0.140	0.537	80	10/19/2022 17:52	<a href="#">WG1945374</a>
Ethylbenzene	65.3		0.0792	0.269	80	10/19/2022 17:52	<a href="#">WG1945374</a>
Total Xylenes	320		0.0945	0.698	80	10/19/2022 17:52	<a href="#">WG1945374</a>
Methyl tert-butyl ether	0.106	!	0.0376	0.107	80	10/19/2022 17:52	<a href="#">WG1945374</a>
(S) Toluene-d8	104			75.0-131		10/19/2022 17:52	<a href="#">WG1945374</a>
(S) 4-Bromofluorobenzene	110			67.0-138		10/19/2022 17:52	<a href="#">WG1945374</a>
(S) 1,2-Dichloroethane-d4	94.3			70.0-130		10/19/2022 17:52	<a href="#">WG1945374</a>

Semi-Volatile Organic Compounds (GC) by Method FLPRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Petroleum Range Organics	2520		31.0	115	10	10/18/2022 11:52	<a href="#">WG1941360</a>
(S) o-Terphenyl	67.1			66.0-136		10/18/2022 11:52	<a href="#">WG1941360</a>
(S) C35	77.3			36.0-132		10/18/2022 11:52	<a href="#">WG1941360</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acenaphthene	0.0567		0.00622	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Acenaphthylene	0.00541		0.00541	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Anthracene	0.0126		0.00684	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Benzo(a)anthracene	0.00677		0.00677	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Benzo(a)pyrene	0.00714		0.00714	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Benzo(b)fluoranthene	0.00717		0.00717	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Benzo(g,h,i)perylene	0.00703		0.00703	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Benzo(k)fluoranthene	0.00683		0.00683	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Chrysene	0.00764		0.00764	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Dibenz(a,h)anthracene	0.0107		0.0107	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Fluoranthene	0.0152		0.00694	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Fluorene	0.0589		0.00625	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Indeno(1,2,3-cd)pyrene	0.0109		0.0109	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
1-Methylnaphthalene	13.7		0.0983	0.769	20	10/31/2022 14:40	<a href="#">WG1948370</a>
2-Methylnaphthalene	32.4		0.0997	0.769	20	10/31/2022 14:40	<a href="#">WG1948370</a>
Naphthalene	17.8		0.193	0.769	20	10/31/2022 14:40	<a href="#">WG1948370</a>
Phenanthrene	0.0906		0.00763	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
Pyrene	0.0260		0.00748	0.0384	1	10/28/2022 17:11	<a href="#">WG1948370</a>
(S) Nitrobenzene-d5	128			31.0-146		10/28/2022 17:11	<a href="#">WG1948370</a>
(S) Nitrobenzene-d5	73.5			31.0-146		10/31/2022 14:40	<a href="#">WG1948370</a>
(S) 2-Fluorobiphenyl	85.3			31.0-130		10/28/2022 17:11	<a href="#">WG1948370</a>
(S) 2-Fluorobiphenyl	96.9			31.0-130		10/31/2022 14:40	<a href="#">WG1948370</a>
(S) p-Terphenyl-d14	79.6			20.0-127		10/28/2022 17:11	<a href="#">WG1948370</a>
(S) p-Terphenyl-d14	77.2			20.0-127		10/31/2022 14:40	<a href="#">WG1948370</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.2		1	10/19/2022 09:50	<a href="#">WG1944163</a>

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000577	U	0.000577	0.00124	1	10/19/2022 14:23	<a href="#">WG1945374</a>
Toluene	0.00439	I	0.00161	0.00618	1	10/19/2022 14:23	<a href="#">WG1945374</a>
Ethylbenzene	0.00381		0.000911	0.00309	1	10/19/2022 14:23	<a href="#">WG1945374</a>
Total Xylenes	0.0194		0.00109	0.00804	1	10/19/2022 14:23	<a href="#">WG1945374</a>
Methyl tert-butyl ether	0.000433	U	0.000433	0.00124	1	10/19/2022 14:23	<a href="#">WG1945374</a>
(S) Toluene-d8	103			75.0-131		10/19/2022 14:23	<a href="#">WG1945374</a>
(S) 4-Bromofluorobenzene	110			67.0-138		10/19/2022 14:23	<a href="#">WG1945374</a>
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		10/19/2022 14:23	<a href="#">WG1945374</a>

Semi-Volatile Organic Compounds (GC) by Method FLPRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Petroleum Range Organics	31.1		2.98	11.1	1	10/22/2022 19:55	<a href="#">WG1946827</a>
(S) o-Terphenyl	54.5	J		66.0-136		10/22/2022 19:55	<a href="#">WG1946827</a>
(S) C35	68.3			36.0-132		10/22/2022 19:55	<a href="#">WG1946827</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acenaphthene	0.00597	U	0.00597	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Acenaphthylene	0.00520	U	0.00520	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Anthracene	0.00657	U	0.00657	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Benzo(a)anthracene	0.00651	U	0.00651	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Benzo(a)pyrene	0.00686	U	0.00686	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Benzo(b)fluoranthene	0.00688	U	0.00688	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Benzo(g,h,i)perylene	0.00675	U	0.00675	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Benzo(k)fluoranthene	0.00656	U	0.00656	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Chrysene	0.00734	U	0.00734	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Dibenz(a,h)anthracene	0.0102	U	0.0102	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Fluoranthene	0.00887	U	0.00666	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Fluorene	0.00601	U	0.00601	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Indeno(1,2,3-cd)pyrene	0.0104	U	0.0104	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
1-Methylnaphthalene	0.00472	U	0.00472	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
2-Methylnaphthalene	0.00479	U	0.00479	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Naphthalene	0.00927	U	0.00927	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Phenanthrene	0.00733	U	0.00733	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
Pyrene	0.00718	U	0.00718	0.0369	1	10/20/2022 15:13	<a href="#">WG1945313</a>
(S) Nitrobenzene-d5	80.1			31.0-146		10/20/2022 15:13	<a href="#">WG1945313</a>
(S) 2-Fluorobiphenyl	92.3			31.0-130		10/20/2022 15:13	<a href="#">WG1945313</a>
(S) p-Terphenyl-d14	83.0			20.0-127		10/20/2022 15:13	<a href="#">WG1945313</a>

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Method Blank (MB)

(MB) R3850728-1 10/19/22 11:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00200			

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

L1546483-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1546483-02 10/19/22 11:39 • (DUP) R3850728-3 10/19/22 11:39

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	90.1	90.2	1	0.0750		10

<sup>4</sup>Cn

<sup>5</sup>Sr

Laboratory Control Sample (LCS)

(LCS) R3850728-2 10/19/22 11:39

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3850685-1 10/19/22 09:50

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

L1546594-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1546594-02 10/19/22 09:50 • (DUP) R3850685-3 10/19/22 09:50

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	86.7	88.7	1	2.34		10

<sup>4</sup>Cn

<sup>5</sup>Sr

Laboratory Control Sample (LCS)

(LCS) R3850685-2 10/19/22 09:50

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3851887-3 10/19/22 11:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000467	NI	0.000467	0.00100
Toluene	0.00130	NI	0.00130	0.00500
Ethylbenzene	0.000737	NI	0.000737	0.00250
Xylenes, Total	0.000880	NI	0.000880	0.00650
Methyl tert-butyl ether	0.000350	NI	0.000350	0.00100
(S) Toluene-d8	106			75.0-131
(S) 4-Bromofluorobenzene	105			67.0-138
(S) 1,2-Dichloroethane-d4	92.6			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3851887-1 10/19/22 09:54 • (LCSD) R3851887-2 10/19/22 10:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.131	0.136	105	109	70.0-123			3.75	20
Toluene	0.125	0.146	0.140	117	112	75.0-121			4.20	20
Ethylbenzene	0.125	0.143	0.149	114	119	74.0-126			4.11	20
Xylenes, Total	0.375	0.429	0.439	114	117	72.0-127			2.30	20
Methyl tert-butyl ether	0.125	0.120	0.128	96.0	102	66.0-132			6.45	20
(S) Toluene-d8				108	103	75.0-131				
(S) 4-Bromofluorobenzene				99.3	108	67.0-138				
(S) 1,2-Dichloroethane-d4				88.0	97.5	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3849693-1 10/17/22 15:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Petroleum Range Organics	2.69	<u>U</u>	2.69	10.0
(S) o-Terphenyl	74.9			66.0-136
(S) C35	97.2			36.0-132

Laboratory Control Sample (LCS)

(LCS) R3849693-2 10/17/22 15:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Petroleum Range Organics	113	80.8	71.5	65.0-119	
(S) o-Terphenyl			68.0	66.0-136	
(S) C35			41.4	36.0-132	

L1544301-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1544301-02 10/17/22 19:13 • (MS) R3849693-3 10/17/22 19:28 • (MSD) R3849693-4 10/17/22 19:43

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Petroleum Range Organics	123	371	401	510	23.9	112	1	39.0-181	<u>J</u>		24.0	25
(S) o-Terphenyl					61.7	68.3		66.0-136	<u>J</u>			
(S) C35					71.0	72.8		36.0-132				

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Method Blank (MB)

(MB) R3852159-1 10/22/22 15:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Petroleum Range Organics	2.69	<u>U</u>	2.69	10.0
(S) o-Terphenyl	82.6			66.0-136
(S) C35	108			36.0-132

Laboratory Control Sample (LCS)

(LCS) R3852159-2 10/22/22 15:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Petroleum Range Organics	113	100	88.5	65.0-119	
(S) o-Terphenyl			82.9	66.0-136	
(S) C35			45.2	36.0-132	

L1546696-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1546696-02 10/22/22 18:38 • (MS) R3852159-3 10/22/22 18:54 • (MSD) R3852159-4 10/22/22 19:09

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry)	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Petroleum Range Organics	117	23.2	130	136	90.8	96.1	1	39.0-181			4.69	25
(S) o-Terphenyl					81.1	81.7		66.0-136				
(S) C35					58.2	69.4		36.0-132				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3851462-2 10/20/22 12:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	0.00539	IC	0.00539	0.0333
Acenaphthylene	0.00469	IC	0.00469	0.0333
Anthracene	0.00593	IC	0.00593	0.0333
Benzo(a)anthracene	0.00587	IC	0.00587	0.0333
Benzo(a)pyrene	0.00619	IC	0.00619	0.0333
Benzo(b)fluoranthene	0.00621	IC	0.00621	0.0333
Benzo(g,h,i)perylene	0.00609	IC	0.00609	0.0333
Benzo(k)fluoranthene	0.00592	IC	0.00592	0.0333
Chrysene	0.00662	IC	0.00662	0.0333
Dibenz(a,h)anthracene	0.00923	IC	0.00923	0.0333
Fluoranthene	0.00601	IC	0.00601	0.0333
Fluorene	0.00542	IC	0.00542	0.0333
Indeno(1,2,3-cd)pyrene	0.00941	IC	0.00941	0.0333
1-Methylnaphthalene	0.00426	IC	0.00426	0.0333
2-Methylnaphthalene	0.00432	IC	0.00432	0.0333
Naphthalene	0.00836	IC	0.00836	0.0333
Phenanthrene	0.00661	IC	0.00661	0.0333
Pyrene	0.00648	IC	0.00648	0.0333
(S) Nitrobenzene-d5	82.7			31.0-146
(S) 2-Fluorobiphenyl	129			31.0-130
(S) p-Terphenyl-d14	99.4			20.0-127

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3851462-1 10/20/22 11:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.400	0.336	84.0	51.0-122	
Acenaphthylene	0.400	0.322	80.5	49.0-127	
Anthracene	0.400	0.337	84.3	48.0-123	
Benzo(a)anthracene	0.400	0.343	85.8	47.0-123	
Benzo(a)pyrene	0.400	0.386	96.5	48.0-123	
Benzo(b)fluoranthene	0.400	0.372	93.0	45.0-124	
Benzo(g,h,i)perylene	0.400	0.382	95.5	47.0-132	
Benzo(k)fluoranthene	0.400	0.328	82.0	47.0-123	
Chrysene	0.400	0.341	85.3	51.0-125	
Dibenz(a,h)anthracene	0.400	0.397	99.3	46.0-131	
Fluoranthene	0.400	0.389	97.3	53.0-132	
Fluorene	0.400	0.361	90.3	53.0-120	

Laboratory Control Sample (LCS)

(LCS) R3851462-1 10/20/22 11:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Indeno(1,2,3-cd)pyrene	0.400	0.418	105	48.0-131	
1-Methylnaphthalene	0.400	0.362	90.5	56.0-122	
2-Methylnaphthalene	0.400	0.363	90.8	53.0-120	
Naphthalene	0.400	0.350	87.5	51.0-120	
Phenanthrene	0.400	0.348	87.0	49.0-120	
Pyrene	0.400	0.314	78.5	46.0-127	
(S) Nitrobenzene-d5			92.2	31.0-146	
(S) 2-Fluorobiphenyl			101	31.0-130	
(S) p-Terphenyl-d14			98.7	20.0-127	

L1546497-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1546497-03 10/20/22 15:13 • (MS) R3851462-3 10/20/22 15:34 • (MSD) R3851462-4 10/20/22 15:54

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acenaphthene	0.435	0.00597	0.274	0.238	63.0	56.0	1	21.0-127			13.9	25
Acenaphthylene	0.435	0.00520	0.259	0.229	59.7	53.9	1	21.0-135			12.2	25
Anthracene	0.435	0.00657	0.257	0.227	59.2	53.4	1	10.0-133			12.4	30
Benzo(a)anthracene	0.435	0.00651	0.282	0.239	64.8	56.3	1	10.0-140			16.2	35
Benzo(a)pyrene	0.435	0.00686	0.282	0.255	64.8	59.9	1	10.0-137			9.92	35
Benzo(b)fluoranthene	0.435	0.00688	0.270	0.235	62.2	55.2	1	10.0-137			14.0	40
Benzo(g,h,i)perylene	0.435	0.00675	0.288	0.257	66.3	60.4	1	10.0-140			11.4	37
Benzo(k)fluoranthene	0.435	0.00656	0.249	0.221	57.4	51.8	1	10.0-130			12.3	34
Chrysene	0.435	0.00734	0.284	0.241	65.3	56.5	1	10.0-144			16.5	33
Dibenz(a,h)anthracene	0.435	0.0102	0.296	0.273	68.1	64.1	1	10.0-133			8.19	31
Fluoranthene	0.435	0.00887	0.278	0.244	62.0	55.2	1	10.0-150			13.2	33
Fluorene	0.435	0.00601	0.296	0.253	68.1	59.4	1	20.0-128			15.8	29
Indeno(1,2,3-cd)pyrene	0.435	0.0104	0.306	0.268	70.4	63.0	1	10.0-136			13.1	35
1-Methylnaphthalene	0.435	0.00472	0.289	0.270	66.6	63.5	1	10.0-150			6.73	25
2-Methylnaphthalene	0.435	0.00479	0.295	0.300	67.9	70.6	1	10.0-142			1.86	25
Naphthalene	0.435	0.00927	0.290	0.265	66.8	62.2	1	10.0-146			9.18	27
Phenanthrene	0.435	0.00733	0.270	0.229	62.2	53.9	1	10.0-139			16.4	32
Pyrene	0.435	0.00718	0.259	0.229	59.7	53.9	1	10.0-143			12.2	35
(S) Nitrobenzene-d5					66.0	63.5		31.0-146				
(S) 2-Fluorobiphenyl					73.8	67.3		31.0-130				
(S) p-Terphenyl-d14					68.5	57.6		20.0-127				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3854820-2 10/28/22 16:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	0.00539	IC	0.00539	0.0333
Acenaphthylene	0.00469	IC	0.00469	0.0333
Anthracene	0.00593	IC	0.00593	0.0333
Benzo(a)anthracene	0.00587	IC	0.00587	0.0333
Benzo(a)pyrene	0.00619	IC	0.00619	0.0333
Benzo(b)fluoranthene	0.00621	IC	0.00621	0.0333
Benzo(g,h,i)perylene	0.00609	IC	0.00609	0.0333
Benzo(k)fluoranthene	0.00592	IC	0.00592	0.0333
Chrysene	0.00662	IC	0.00662	0.0333
Dibenz(a,h)anthracene	0.00923	IC	0.00923	0.0333
Fluoranthene	0.00601	IC	0.00601	0.0333
Fluorene	0.00542	IC	0.00542	0.0333
Indeno(1,2,3-cd)pyrene	0.00941	IC	0.00941	0.0333
1-Methylnaphthalene	0.00426	IC	0.00426	0.0333
2-Methylnaphthalene	0.00432	IC	0.00432	0.0333
Naphthalene	0.00836	IC	0.00836	0.0333
Phenanthrene	0.00661	IC	0.00661	0.0333
Pyrene	0.00648	IC	0.00648	0.0333
<i>(S) Nitrobenzene-d5</i>	97.6			31.0-146
<i>(S) 2-Fluorobiphenyl</i>	115			31.0-130
<i>(S) p-Terphenyl-d14</i>	126			20.0-127

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3855114-2 10/31/22 13:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	0.00539	IC	0.00539	0.0333
Acenaphthylene	0.00469	IC	0.00469	0.0333
Anthracene	0.00593	IC	0.00593	0.0333
Benzo(a)anthracene	0.00587	IC	0.00587	0.0333
Benzo(a)pyrene	0.00619	IC	0.00619	0.0333
Benzo(b)fluoranthene	0.00621	IC	0.00621	0.0333
Benzo(g,h,i)perylene	0.00609	IC	0.00609	0.0333
Benzo(k)fluoranthene	0.00592	IC	0.00592	0.0333
Chrysene	0.00662	IC	0.00662	0.0333
Dibenz(a,h)anthracene	0.00923	IC	0.00923	0.0333
Fluoranthene	0.00601	IC	0.00601	0.0333
Fluorene	0.00542	IC	0.00542	0.0333

Method Blank (MB)

(MB) R3855114-2 10/31/22 13:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Indeno(1,2,3-cd)pyrene	0.00941	NI	0.00941	0.0333
1-Methylnaphthalene	0.00426	NI	0.00426	0.0333
2-Methylnaphthalene	0.00432	NI	0.00432	0.0333
Naphthalene	0.00836	NI	0.00836	0.0333
Phenanthrene	0.00661	NI	0.00661	0.0333
Pyrene	0.00648	NI	0.00648	0.0333
(S) Nitrobenzene-d5	103			31.0-146
(S) 2-Fluorobiphenyl	114			31.0-130
(S) p-Terphenyl-d14	122			20.0-127

Laboratory Control Sample (LCS)

(LCS) R3854820-1 10/28/22 16:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.400	0.340	85.0	51.0-122	
Acenaphthylene	0.400	0.320	80.0	49.0-127	
Anthracene	0.400	0.335	83.8	48.0-123	
Benzo(a)anthracene	0.400	0.308	77.0	47.0-123	
Benzo(a)pyrene	0.400	0.353	88.2	48.0-123	
Benzo(b)fluoranthene	0.400	0.397	99.3	45.0-124	
Benzo(g,h,i)perylene	0.400	0.387	96.8	47.0-132	
Benzo(k)fluoranthene	0.400	0.358	89.5	47.0-123	
Chrysene	0.400	0.362	90.5	51.0-125	
Dibenz(a,h)anthracene	0.400	0.426	107	46.0-131	
Fluoranthene	0.400	0.358	89.5	53.0-132	
Fluorene	0.400	0.353	88.2	53.0-120	
Indeno(1,2,3-cd)pyrene	0.400	0.379	94.8	48.0-131	
1-Methylnaphthalene	0.400	0.339	84.7	56.0-122	
2-Methylnaphthalene	0.400	0.347	86.8	53.0-120	
Naphthalene	0.400	0.349	87.3	51.0-120	
Phenanthrene	0.400	0.350	87.5	49.0-120	
Pyrene	0.400	0.363	90.8	46.0-127	
(S) Nitrobenzene-d5			106	31.0-146	
(S) 2-Fluorobiphenyl			121	31.0-130	
(S) p-Terphenyl-d14			122	20.0-127	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3855114-1 10/31/22 12:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Acenaphthene	0.400	0.350	87.5	51.0-122	
Acenaphthylene	0.400	0.303	75.8	49.0-127	
Anthracene	0.400	0.312	78.0	48.0-123	
Benzo(a)anthracene	0.400	0.321	80.3	47.0-123	
Benzo(a)pyrene	0.400	0.381	95.3	48.0-123	
Benzo(b)fluoranthene	0.400	0.382	95.5	45.0-124	
Benzo(g,h,i)perylene	0.400	0.376	94.0	47.0-132	
Benzo(k)fluoranthene	0.400	0.340	85.0	47.0-123	
Chrysene	0.400	0.369	92.2	51.0-125	
Dibenz(a,h)anthracene	0.400	0.390	97.5	46.0-131	
Fluoranthene	0.400	0.353	88.2	53.0-132	
Fluorene	0.400	0.348	87.0	53.0-120	
Indeno(1,2,3-cd)pyrene	0.400	0.388	97.0	48.0-131	
1-Methylnaphthalene	0.400	0.358	89.5	56.0-122	
2-Methylnaphthalene	0.400	0.357	89.3	53.0-120	
Naphthalene	0.400	0.358	89.5	51.0-120	
Phenanthrene	0.400	0.336	84.0	49.0-120	
Pyrene	0.400	0.350	87.5	46.0-127	
<i>(S) Nitrobenzene-d5</i>			109	31.0-146	
<i>(S) 2-Fluorobiphenyl</i>			121	31.0-130	
<i>(S) p-Terphenyl-d14</i>			122	20.0-127	

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

L1546497-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1546497-02 10/28/22 17:11 • (MS) R3854820-3 10/28/22 17:31 • (MSD) R3854820-4 10/28/22 17:52

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acenaphthene	0.459	0.0567	0.406	0.408	76.1	76.6	1	21.0-127			0.567	25
Acenaphthylene	0.459	0.00541	0.353	0.347	76.9	75.6	1	21.0-135			1.65	25
Anthracene	0.459	0.0126	0.381	0.333	80.2	69.9	1	10.0-133			13.2	30
Benzo(a)anthracene	0.459	0.00677	0.320	0.318	69.6	69.3	1	10.0-140			0.362	35
Benzo(a)pyrene	0.459	0.00714	0.352	0.331	76.6	72.1	1	10.0-137			6.08	35
Benzo(b)fluoranthene	0.459	0.00717	0.355	0.324	77.4	70.6	1	10.0-137			9.17	40
Benzo(g,h,i)perylene	0.459	0.00703	0.337	0.302	73.4	65.8	1	10.0-140			10.8	37
Benzo(k)fluoranthene	0.459	0.00683	0.312	0.272	67.8	59.3	1	10.0-130			13.4	34
Chrysene	0.459	0.00764	0.325	0.298	70.9	64.8	1	10.0-144			8.89	33
Dibenz(a,h)anthracene	0.459	0.0107	0.363	0.324	79.1	70.6	1	10.0-133			11.4	31
Fluoranthene	0.459	0.0152	0.331	0.324	68.8	67.3	1	10.0-150			2.11	33
Fluorene	0.459	0.0589	0.396	0.368	73.4	67.3	1	20.0-128			7.25	29

L1546497-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1546497-02 10/28/22 17:11 • (MS) R3854820-3 10/28/22 17:31 • (MSD) R3854820-4 10/28/22 17:52

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Indeno(1,2,3-cd)pyrene	0.459	0.0109	0.335	0.300	72.9	65.3	1	10.0-136			10.9	35
1-Methylnaphthalene	0.459	11.9	15.6	13.8	804	427	1	10.0-150	JL	JL	11.8	25
2-Methylnaphthalene	0.459	26.7	32.4	29.9	1260	704	1	10.0-142	JL	JL	8.15	25
Naphthalene	0.459	14.1	19.6	18.6	1210	980	1	10.0-146	JL	JL	5.44	27
Phenanthrene	0.459	0.0906	0.449	0.415	78.0	70.7	1	10.0-139			7.74	32
Pyrene	0.459	0.0260	0.389	0.374	79.0	75.8	1	10.0-143			3.93	35
(S) Nitrobenzene-d5					171	152		31.0-146	J	J		
(S) 2-Fluorobiphenyl					92.9	96.7		31.0-130				
(S) p-Terphenyl-d14					97.8	92.4		20.0-127				

L1546497-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1546497-02 10/31/22 13:39 • (MS) R3855114-3 10/31/22 13:59 • (MSD) R3855114-4 10/31/22 14:20

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.459	0.0679	0.413	0.400	75.2	72.4	1	21.0-127			3.12	25
Acenaphthylene	0.459	0.00541	0.353	0.351	76.9	76.4	1	21.0-135			0.656	25
Anthracene	0.459	0.00684	0.336	0.330	73.1	71.9	1	10.0-133			1.73	30
Benzo(a)anthracene	0.459	0.00677	0.343	0.312	74.6	67.8	1	10.0-140			9.52	35
Benzo(a)pyrene	0.459	0.00714	0.350	0.321	76.1	69.8	1	10.0-137			8.61	35
Benzo(b)fluoranthene	0.459	0.00717	0.348	0.314	75.9	68.3	1	10.0-137			10.5	40
Benzo(g,h,i)perylene	0.459	0.00703	0.335	0.302	72.9	65.8	1	10.0-140			10.1	37
Benzo(k)fluoranthene	0.459	0.00683	0.302	0.283	65.8	61.6	1	10.0-130			6.71	34
Chrysene	0.459	0.00764	0.331	0.300	72.1	65.3	1	10.0-144			9.87	33
Dibenz(a,h)anthracene	0.459	0.0107	0.332	0.324	72.4	70.6	1	10.0-133			2.46	31
Fluoranthene	0.459	0.0119	0.336	0.317	70.5	66.5	1	10.0-150			5.65	33
Fluorene	0.459	0.0576	0.412	0.384	77.2	71.1	1	20.0-128			6.96	29
Indeno(1,2,3-cd)pyrene	0.459	0.0109	0.362	0.331	78.9	72.1	1	10.0-136			8.99	35
1-Methylnaphthalene	0.459	12.2	16.2	15.8	854	779	1	10.0-150	JL	JL	2.17	25
2-Methylnaphthalene	0.459	28.5	31.7	31.4	704	628	1	10.0-142	JL	JL	1.10	25
Naphthalene	0.459	15.0	20.1	19.8	1110	1060	1	10.0-146	JL	JL	1.16	27
Phenanthrene	0.459	0.0767	0.481	0.414	88.1	73.5	1	10.0-139			14.9	32
Pyrene	0.459	0.0172	0.370	0.350	76.9	72.4	1	10.0-143			5.77	35
(S) Nitrobenzene-d5					171	186		31.0-146	J	J		
(S) 2-Fluorobiphenyl					96.9	93.6		31.0-130				
(S) p-Terphenyl-d14					97.2	91.9		20.0-127				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

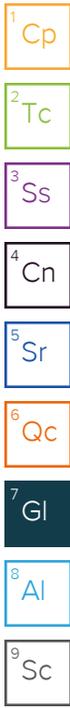
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	The value is outside laboratory established criteria.
L	Off-scale high. Actual value is known to be greater than value given.
U	Indicates the compound was analyzed for but not detected above the method detection limit.



# ACCREDITATIONS & LOCATIONS

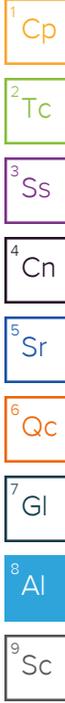
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address: **ERMI - FL**  
 6835 International Center Blvd  
 Suite 5  
 Fort Myers, FL 33912

Billing Information:  
 Accounts Payable  
 6835 International Center Blvd.  
 Suite 5  
 Fort Myers, FL 33912

Report to:  
 Jon Ascher

Email To: jascher@ermi.net

City/State Collected: **Gretna, FL**

Please Circle:  
 PT MT CT

Project Description: **Gretna Maintenance Yard**

Client Project # **E4589A**

Lab Project # **ERMIFL-E4589**

Collected by (print): **Shannon baul**

Site/Facility ID # **2018519571**

Collected by (signature): *Shannon Baul*

**Rush?** (Lab MUST Be Notified)  
 Same Day  Five Day  
 Next Day  5 Day (Rad Only)  
 Two Day  10 Day (Rad Only)  
 Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N  Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	** HOLD ** 4ozAmb-NoPres	** HOLD ** EnCore-25g	SVOCs 4ozAmb-NoPres	TS 2ozClr-NoPres	V8260BTEXM 40m/Amb/MeOH10ml/Syr	VOC Screen 2ozClr-NoPres
SB-6	12'	G	SS	12'	10/13/22	1330	X	X	X	X	X	X
SB-9	8'		SS	8'		1400	X	X	X	X	X	X
SB-10	2'		SS	2'		1415	X	X	X	X	X	X

Chain of Custody Page \_\_\_ of \_\_\_

**Pace**  
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**

12065 Lebanon Rd Mount Juliet, TN 37122  
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at:  
<https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

SDG # **L1546497**  
**E095**

Acctnum: **ERMIFL**  
 Template: **T216613**  
 Prelogin: **P951752**  
 PM: 206 - Jeff Carr  
 PB: *[Signature]*

Shipped Via: **FedEX Ground**

Remarks Sample # (lab only)

- \* Matrix:  
 SS - Soil AIR - Air F - Filter  
 GW - Groundwater B - Bioassay  
 WW - WasteWater  
 DW - Drinking Water  
 OT - Other \_\_\_\_\_

Remarks: \* HOLD for contingent SPLP or TPH speciation. FDEP Rates.

pH \_\_\_\_\_ Temp \_\_\_\_\_  
 Flow \_\_\_\_\_ Other \_\_\_\_\_

Sample Receipt Checklist

COC Seal Present/Intact:	<input checked="" type="checkbox"/>	Y	N
COC Signed/Accurate:	<input checked="" type="checkbox"/>	Y	N
Bottles arrive intact:	<input checked="" type="checkbox"/>	Y	N
Correct bottles used:	<input checked="" type="checkbox"/>	Y	N
Sufficient volume sent:	<input checked="" type="checkbox"/>	Y	N
If Applicable			
VOA Zero Headspace:	<input checked="" type="checkbox"/>	Y	N
Preservation Correct/Checked:	<input checked="" type="checkbox"/>	Y	N
RAD Screen <0.5 mR/hr:	<input checked="" type="checkbox"/>	Y	N

Samples returned via:  UPS  FedEx  Courier \_\_\_\_\_

Tracking # **5882 7561 3984**

Relinquished by: (Signature) <i>[Signature]</i>	Date: <b>9/12/22</b>	Time: <b>1000</b>	Received by: (Signature) <i>Shannon Baul</i>	Trip Blank Received: Yes (No) <input checked="" type="checkbox"/>	HCL/MeoH TBR
Relinquished by: (Signature) <i>S. Baul</i>	Date: <b>10/13/22</b>	Time:	Received by: (Signature)	Temp: <b>68°F</b>	Bottles Received: <b>1-6 + 0 = 1-6 18</b>
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>[Signature]</i>	Date: <b>10-14-22</b>	Time: <b>0900</b>

If preservation required by Login: Date/Time

Hold: Condition **NCF / DR**

## ERMI - FL

Sample Delivery Group: L1549416  
Samples Received: 10/22/2022  
Project Number: E4589A  
Description: Gretna Maintenance Yard  
Site: 8519571  
Report To: Jon Ascher  
6835 International Center Blvd  
Suite 5  
Fort Myers, FL 33912

Entire Report Reviewed By:



Jeff Carr  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

# TABLE OF CONTENTS

<b>Cp: Cover Page</b>	1	
<b>Tc: Table of Contents</b>	2	
<b>Ss: Sample Summary</b>	3	
<b>Cn: Case Narrative</b>	4	
<b>Sr: Sample Results</b>	5	
MW-30F L1549416-01	5	
MW-31F L1549416-02	6	
MW-32 L1549416-03	7	
MW-33 L1549416-04	8	
MW-34 L1549416-05	9	
DW-1 L1549416-06	10	
<b>Qc: Quality Control Summary</b>	11	
Volatile Organic Compounds (GC/MS) by Method 8260B	11	
Semi-Volatile Organic Compounds (GC) by Method FLPRO	13	
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	14	
<b>Gl: Glossary of Terms</b>	16	
<b>Al: Accreditations &amp; Locations</b>	17	
<b>Sc: Sample Chain of Custody</b>	18	

# SAMPLE SUMMARY

## MW-30F L1549416-01 GW

Collected by  
Shannon Gaul

Collected date/time  
10/20/22 15:20

Received date/time  
10/22/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1947335	5	10/23/22 07:15	10/23/22 07:15	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1948210	200	10/24/22 23:35	10/24/22 23:35	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method FLPRO	WG1947479	5	10/24/22 04:48	10/25/22 09:15	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1947480	1	10/23/22 16:34	10/24/22 00:21	AMM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1947480	20	10/23/22 16:34	10/25/22 09:58	JMB	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

## MW-31F L1549416-02 GW

Collected by  
Shannon Gaul

Collected date/time  
10/20/22 14:47

Received date/time  
10/22/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1947335	1	10/23/22 03:14	10/23/22 03:14	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method FLPRO	WG1947479	1	10/24/22 04:48	10/25/22 07:46	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1947480	1	10/23/22 16:34	10/24/22 00:39	AMM	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

## MW-32 L1549416-03 GW

Collected by  
Shannon Gaul

Collected date/time  
10/20/22 15:45

Received date/time  
10/22/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1947335	1	10/23/22 03:36	10/23/22 03:36	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1948210	10	10/24/22 23:56	10/24/22 23:56	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method FLPRO	WG1947479	5	10/24/22 04:48	10/25/22 08:30	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1947480	1	10/23/22 16:34	10/24/22 00:57	AMM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1947480	10	10/23/22 16:34	10/25/22 09:40	JMB	Mt. Juliet, TN

9 Sc

## MW-33 L1549416-04 GW

Collected by  
Shannon Gaul

Collected date/time  
10/20/22 14:15

Received date/time  
10/22/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1947335	5	10/23/22 07:37	10/23/22 07:37	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1948210	200	10/25/22 00:16	10/25/22 00:16	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method FLPRO	WG1947479	5	10/24/22 04:48	10/25/22 08:53	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1947480	1	10/23/22 16:34	10/24/22 05:42	AMM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1947480	10	10/23/22 16:34	10/25/22 09:22	JMB	Mt. Juliet, TN

## MW-34 L1549416-05 GW

Collected by  
Shannon Gaul

Collected date/time  
10/20/22 16:35

Received date/time  
10/22/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1947335	1	10/23/22 03:58	10/23/22 03:58	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1948210	1	10/24/22 23:15	10/24/22 23:15	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method FLPRO	WG1947479	1	10/24/22 04:48	10/24/22 20:15	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1947480	1	10/23/22 16:34	10/24/22 01:14	AMM	Mt. Juliet, TN

## DW-1 L1549416-06 GW

Collected by  
Shannon Gaul

Collected date/time  
10/21/22 08:45

Received date/time  
10/22/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1947335	1	10/23/22 04:20	10/23/22 04:20	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method FLPRO	WG1947479	2.13	10/24/22 04:48	10/24/22 20:37	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1947480	1	10/23/22 16:34	10/24/22 06:00	AMM	Mt. Juliet, TN

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr  
Project Manager

## Sample Delivery Group (SDG) Narrative

---

An aliquot for analysis was taken from the original container received due to the level of sediment present in the sample. Rinsing of the original sample container for inclusion in the sample extraction was not performed.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
<a href="#">L1549416-06</a>	<a href="#">DW-1</a>	FLPRO

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Temperature (on-site)	25.1	Deg. C
Dissolved Oxygen (on-site)	.53	mg/l
pH (On Site)	5.24	su
Specific Conductance	72.3	umhos/cm

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	538		0.471	5.00	5	10/23/2022 07:15	<a href="#">WG1947335</a>
Toluene	6320		55.6	200	200	10/24/2022 23:35	<a href="#">WG1948210</a>
Ethylbenzene	676		0.685	5.00	5	10/23/2022 07:15	<a href="#">WG1947335</a>
Total Xylenes	10100		34.8	600	200	10/24/2022 23:35	<a href="#">WG1948210</a>
Methyl tert-butyl ether	0.505	U	0.505	5.00	5	10/23/2022 07:15	<a href="#">WG1947335</a>
(S) Toluene-d8	100			80.0-120		10/23/2022 07:15	<a href="#">WG1947335</a>
(S) Toluene-d8	106			80.0-120		10/24/2022 23:35	<a href="#">WG1948210</a>
(S) 4-Bromofluorobenzene	124			77.0-126		10/23/2022 07:15	<a href="#">WG1947335</a>
(S) 4-Bromofluorobenzene	109			77.0-126		10/24/2022 23:35	<a href="#">WG1948210</a>
(S) 1,2-Dichloroethane-d4	111			70.0-130		10/23/2022 07:15	<a href="#">WG1947335</a>
(S) 1,2-Dichloroethane-d4	105			70.0-130		10/24/2022 23:35	<a href="#">WG1948210</a>

Semi-Volatile Organic Compounds (GC) by Method FLPRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Petroleum Range Organics	20000		500	2000	5	10/25/2022 09:15	<a href="#">WG1947479</a>
(S) o-Terphenyl	62.8	J		66.0-139		10/25/2022 09:15	<a href="#">WG1947479</a>
(S) C35	51.5			40.0-129		10/25/2022 09:15	<a href="#">WG1947479</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Anthracene	0.0490	I	0.0190	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Acenaphthene	0.351		0.0190	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Acenaphthylene	0.0171	U	0.0171	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Benzo(a)anthracene	0.0203	U	0.0203	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Benzo(a)pyrene	0.0184	U	0.0184	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Benzo(b)fluoranthene	0.0168	U	0.0168	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Benzo(g,h,i)perylene	0.0184	U	0.0184	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Benzo(k)fluoranthene	0.0202	U	0.0202	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Chrysene	0.0179	U	0.0179	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Dibenz(a,h)anthracene	0.0160	U	0.0160	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Fluoranthene	0.0270	U	0.0270	0.100	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Fluorene	0.333		0.0169	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Indeno(1,2,3-cd)pyrene	0.0158	U	0.0158	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Naphthalene	705		1.83	5.00	20	10/25/2022 09:58	<a href="#">WG1947480</a>
Phenanthrene	0.278		0.0180	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
Pyrene	0.0197	I	0.0169	0.0500	1	10/24/2022 00:21	<a href="#">WG1947480</a>
1-Methylnaphthalene	196		1.37	5.00	20	10/25/2022 09:58	<a href="#">WG1947480</a>
2-Methylnaphthalene	379		1.35	5.00	20	10/25/2022 09:58	<a href="#">WG1947480</a>
(S) Nitrobenzene-d5	0.000	J		31.0-160		10/25/2022 09:58	<a href="#">WG1947480</a>
(S) Nitrobenzene-d5	97.0			31.0-160		10/24/2022 00:21	<a href="#">WG1947480</a>
(S) 2-Fluorobiphenyl	74.5			48.0-148		10/24/2022 00:21	<a href="#">WG1947480</a>
(S) 2-Fluorobiphenyl	99.5	U		48.0-148		10/25/2022 09:58	<a href="#">WG1947480</a>
(S) p-Terphenyl-d14	117	U		37.0-146		10/25/2022 09:58	<a href="#">WG1947480</a>
(S) p-Terphenyl-d14	105			37.0-146		10/24/2022 00:21	<a href="#">WG1947480</a>

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Temperature (on-site)	25.5	Deg. C
Dissolved Oxygen (on-site)	.17	mg/l
pH (On Site)	5.7	su
Specific Conductance	129.1	umhos/cm

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatle Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	1.25		0.0941	1.00	1	10/23/2022 03:14	<a href="#">WG1947335</a>
Toluene	0.535	!	0.278	1.00	1	10/23/2022 03:14	<a href="#">WG1947335</a>
Ethylbenzene	3.76		0.137	1.00	1	10/23/2022 03:14	<a href="#">WG1947335</a>
Total Xylenes	4.76		0.174	3.00	1	10/23/2022 03:14	<a href="#">WG1947335</a>
Methyl tert-butyl ether	0.101	U	0.101	1.00	1	10/23/2022 03:14	<a href="#">WG1947335</a>
(S) Toluene-d8	98.1			80.0-120		10/23/2022 03:14	<a href="#">WG1947335</a>
(S) 4-Bromofluorobenzene	113			77.0-126		10/23/2022 03:14	<a href="#">WG1947335</a>
(S) 1,2-Dichloroethane-d4	125			70.0-130		10/23/2022 03:14	<a href="#">WG1947335</a>

Semi-Volatile Organic Compounds (GC) by Method FLPRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Petroleum Range Organics	305	!	100	400	1	10/25/2022 07:46	<a href="#">WG1947479</a>
(S) o-Terphenyl	94.9			66.0-139		10/25/2022 07:46	<a href="#">WG1947479</a>
(S) C35	53.3			40.0-129		10/25/2022 07:46	<a href="#">WG1947479</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Anthracene	0.0190	U	0.0190	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Acenaphthene	0.0510		0.0190	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Acenaphthylene	0.0171	U	0.0171	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Benzo(a)anthracene	0.0203	U	0.0203	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Benzo(a)pyrene	0.0184	U	0.0184	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Benzo(b)fluoranthene	0.0168	U	0.0168	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Benzo(g,h,i)perylene	0.0184	U	0.0184	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Benzo(k)fluoranthene	0.0202	U	0.0202	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Chrysene	0.0179	U	0.0179	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Dibenz(a,h)anthracene	0.0160	U	0.0160	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Fluoranthene	0.0270	U	0.0270	0.100	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Fluorene	0.0350	U	0.0169	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Indeno(1,2,3-cd)pyrene	0.0158	U	0.0158	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Naphthalene	12.9		0.0917	0.250	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Phenanthrene	0.0180	U	0.0180	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
Pyrene	0.0169	U	0.0169	0.0500	1	10/24/2022 00:39	<a href="#">WG1947480</a>
1-Methylnaphthalene	8.33		0.0687	0.250	1	10/24/2022 00:39	<a href="#">WG1947480</a>
2-Methylnaphthalene	9.23		0.0674	0.250	1	10/24/2022 00:39	<a href="#">WG1947480</a>
(S) Nitrobenzene-d5	116			31.0-160		10/24/2022 00:39	<a href="#">WG1947480</a>
(S) 2-Fluorobiphenyl	85.0			48.0-148		10/24/2022 00:39	<a href="#">WG1947480</a>
(S) p-Terphenyl-d14	105			37.0-146		10/24/2022 00:39	<a href="#">WG1947480</a>

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Temperature (on-site)	22.7	Deg. C
Dissolved Oxygen (on-site)	1.19	mg/l
pH (On Site)	6.01	su
Specific Conductance	86.2	umhos/cm

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	7.48		0.0941	1.00	1	10/23/2022 03:36	<a href="#">WG1947335</a>
Toluene	20.9		0.278	1.00	1	10/23/2022 03:36	<a href="#">WG1947335</a>
Ethylbenzene	152		0.137	1.00	1	10/23/2022 03:36	<a href="#">WG1947335</a>
Total Xylenes	561		1.74	30.0	10	10/24/2022 23:56	<a href="#">WG1948210</a>
Methyl tert-butyl ether	0.101	U	0.101	1.00	1	10/23/2022 03:36	<a href="#">WG1947335</a>
(S) Toluene-d8	102			80.0-120		10/23/2022 03:36	<a href="#">WG1947335</a>
(S) Toluene-d8	106			80.0-120		10/24/2022 23:56	<a href="#">WG1948210</a>
(S) 4-Bromofluorobenzene	125			77.0-126		10/23/2022 03:36	<a href="#">WG1947335</a>
(S) 4-Bromofluorobenzene	107			77.0-126		10/24/2022 23:56	<a href="#">WG1948210</a>
(S) 1,2-Dichloroethane-d4	127			70.0-130		10/23/2022 03:36	<a href="#">WG1947335</a>
(S) 1,2-Dichloroethane-d4	107			70.0-130		10/24/2022 23:56	<a href="#">WG1948210</a>

Semi-Volatile Organic Compounds (GC) by Method FLPRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Petroleum Range Organics	3830		500	2000	5	10/25/2022 08:30	<a href="#">WG1947479</a>
(S) o-Terphenyl	73.8			66.0-139		10/25/2022 08:30	<a href="#">WG1947479</a>
(S) C35	68.0			40.0-129		10/25/2022 08:30	<a href="#">WG1947479</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Anthracene	0.0300	I	0.0190	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Acenaphthene	0.301		0.0190	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Acenaphthylene	0.0171	U	0.0171	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Benzo(a)anthracene	0.0203	U	0.0203	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Benzo(a)pyrene	0.0184	U	0.0184	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Benzo(b)fluoranthene	0.0168	U	0.0168	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Benzo(g,h,i)perylene	0.0184	U	0.0184	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Benzo(k)fluoranthene	0.0202	U	0.0202	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Chrysene	0.0179	U	0.0179	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Dibenz(a,h)anthracene	0.0160	U	0.0160	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Fluoranthene	0.0270	U	0.0270	0.100	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Fluorene	0.276		0.0169	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Indeno(1,2,3-cd)pyrene	0.0158	U	0.0158	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Naphthalene	64.8		0.0917	0.250	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Phenanthrene	0.222		0.0180	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
Pyrene	0.0169	U	0.0169	0.0500	1	10/24/2022 00:57	<a href="#">WG1947480</a>
1-Methylnaphthalene	77.7		0.0687	0.250	1	10/24/2022 00:57	<a href="#">WG1947480</a>
2-Methylnaphthalene	228		0.674	2.50	10	10/25/2022 09:40	<a href="#">WG1947480</a>
(S) Nitrobenzene-d5	95.0			31.0-160		10/24/2022 00:57	<a href="#">WG1947480</a>
(S) Nitrobenzene-d5	98.5			31.0-160		10/25/2022 09:40	<a href="#">WG1947480</a>
(S) 2-Fluorobiphenyl	85.5			48.0-148		10/24/2022 00:57	<a href="#">WG1947480</a>
(S) 2-Fluorobiphenyl	107			48.0-148		10/25/2022 09:40	<a href="#">WG1947480</a>
(S) p-Terphenyl-d14	103			37.0-146		10/24/2022 00:57	<a href="#">WG1947480</a>
(S) p-Terphenyl-d14	132			37.0-146		10/25/2022 09:40	<a href="#">WG1947480</a>

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Temperature (on-site)	25.7	Deg. C
Dissolved Oxygen (on-site)	.49	mg/l
pH (On Site)	6.11	su
Specific Conductance	309.2	umhos/cm

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	245		0.471	5.00	5	10/23/2022 07:37	<a href="#">WG1947335</a>
Toluene	15900		55.6	200	200	10/25/2022 00:16	<a href="#">WG1948210</a>
Ethylbenzene	1980		27.4	200	200	10/25/2022 00:16	<a href="#">WG1948210</a>
Total Xylenes	11200		34.8	600	200	10/25/2022 00:16	<a href="#">WG1948210</a>
Methyl tert-butyl ether	0.505	U	0.505	5.00	5	10/23/2022 07:37	<a href="#">WG1947335</a>
(S) Toluene-d8	109			80.0-120		10/23/2022 07:37	<a href="#">WG1947335</a>
(S) Toluene-d8	106			80.0-120		10/25/2022 00:16	<a href="#">WG1948210</a>
(S) 4-Bromofluorobenzene	131	J		77.0-126		10/23/2022 07:37	<a href="#">WG1947335</a>
(S) 4-Bromofluorobenzene	108			77.0-126		10/25/2022 00:16	<a href="#">WG1948210</a>
(S) 1,2-Dichloroethane-d4	107			70.0-130		10/23/2022 07:37	<a href="#">WG1947335</a>
(S) 1,2-Dichloroethane-d4	108			70.0-130		10/25/2022 00:16	<a href="#">WG1948210</a>

Semi-Volatile Organic Compounds (GC) by Method FLPRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Petroleum Range Organics	15100		500	2000	5	10/25/2022 08:53	<a href="#">WG1947479</a>
(S) o-Terphenyl	59.2	J		66.0-139		10/25/2022 08:53	<a href="#">WG1947479</a>
(S) C35	49.4			40.0-129		10/25/2022 08:53	<a href="#">WG1947479</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Anthracene	0.0382	I	0.0190	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Acenaphthene	0.0190	U	0.0190	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Acenaphthylene	0.0171	U	0.0171	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Benzo(a)anthracene	0.0203	U	0.0203	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Benzo(a)pyrene	0.0184	U	0.0184	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Benzo(b)fluoranthene	0.0168	U	0.0168	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Benzo(g,h,i)perylene	0.0184	U	0.0184	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Benzo(k)fluoranthene	0.0202	U	0.0202	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Chrysene	0.0179	U	0.0179	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Dibenz(a,h)anthracene	0.0160	U	0.0160	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Fluoranthene	0.0270	U	0.0270	0.100	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Fluorene	0.0704		0.0169	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Indeno(1,2,3-cd)pyrene	0.0158	U	0.0158	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Naphthalene	631		0.917	2.50	10	10/25/2022 09:22	<a href="#">WG1947480</a>
Phenanthrene	0.0484	I	0.0180	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
Pyrene	0.0169	U	0.0169	0.0500	1	10/24/2022 05:42	<a href="#">WG1947480</a>
1-Methylnaphthalene	72.4		0.687	2.50	10	10/25/2022 09:22	<a href="#">WG1947480</a>
2-Methylnaphthalene	127		0.674	2.50	10	10/25/2022 09:22	<a href="#">WG1947480</a>
(S) Nitrobenzene-d5	29.5	J		31.0-160		10/24/2022 05:42	<a href="#">WG1947480</a>
(S) Nitrobenzene-d5	145			31.0-160		10/25/2022 09:22	<a href="#">WG1947480</a>
(S) 2-Fluorobiphenyl	51.0			48.0-148		10/24/2022 05:42	<a href="#">WG1947480</a>
(S) 2-Fluorobiphenyl	101			48.0-148		10/25/2022 09:22	<a href="#">WG1947480</a>
(S) p-Terphenyl-d14	116			37.0-146		10/25/2022 09:22	<a href="#">WG1947480</a>
(S) p-Terphenyl-d14	102			37.0-146		10/24/2022 05:42	<a href="#">WG1947480</a>

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Temperature (on-site)	23.8	Deg. C
Dissolved Oxygen (on-site)	1.43	mg/l
pH (On Site)	5.55	su
Specific Conductance	98.7	umhos/cm

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatle Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	0.0941	U	0.0941	1.00	1	10/23/2022 03:58	<a href="#">WG1947335</a>
Toluene	0.278	U	0.278	1.00	1	10/23/2022 03:58	<a href="#">WG1947335</a>
Ethylbenzene	0.203	I	0.137	1.00	1	10/24/2022 23:15	<a href="#">WG1948210</a>
Total Xylenes	1.35	I	0.174	3.00	1	10/24/2022 23:15	<a href="#">WG1948210</a>
Methyl tert-butyl ether	0.101	U	0.101	1.00	1	10/23/2022 03:58	<a href="#">WG1947335</a>
(S) Toluene-d8	97.7			80.0-120		10/23/2022 03:58	<a href="#">WG1947335</a>
(S) Toluene-d8	106			80.0-120		10/24/2022 23:15	<a href="#">WG1948210</a>
(S) 4-Bromofluorobenzene	111			77.0-126		10/23/2022 03:58	<a href="#">WG1947335</a>
(S) 4-Bromofluorobenzene	109			77.0-126		10/24/2022 23:15	<a href="#">WG1948210</a>
(S) 1,2-Dichloroethane-d4	118			70.0-130		10/23/2022 03:58	<a href="#">WG1947335</a>
(S) 1,2-Dichloroethane-d4	109			70.0-130		10/24/2022 23:15	<a href="#">WG1948210</a>

Semi-Volatile Organic Compounds (GC) by Method FLPRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Petroleum Range Organics	100	U	100	400	1	10/24/2022 20:15	<a href="#">WG1947479</a>
(S) o-Terphenyl	93.0			66.0-139		10/24/2022 20:15	<a href="#">WG1947479</a>
(S) C35	56.3			40.0-129		10/24/2022 20:15	<a href="#">WG1947479</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Anthracene	0.0190	U	0.0190	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Acenaphthene	0.0190	U	0.0190	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Acenaphthylene	0.0171	U	0.0171	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Benzo(a)anthracene	0.0203	U	0.0203	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Benzo(a)pyrene	0.0184	U	0.0184	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Benzo(b)fluoranthene	0.0168	U	0.0168	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Benzo(g,h,i)perylene	0.0184	U	0.0184	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Benzo(k)fluoranthene	0.0202	U	0.0202	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Chrysene	0.0179	U	0.0179	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Dibenz(a,h)anthracene	0.0160	U	0.0160	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Fluoranthene	0.0270	U	0.0270	0.100	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Fluorene	0.0169	U	0.0169	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Indeno(1,2,3-cd)pyrene	0.0158	U	0.0158	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Naphthalene	0.126	I	0.0917	0.250	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Phenanthrene	0.0180	U	0.0180	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
Pyrene	0.0169	U	0.0169	0.0500	1	10/24/2022 01:14	<a href="#">WG1947480</a>
1-Methylnaphthalene	0.0813	I	0.0687	0.250	1	10/24/2022 01:14	<a href="#">WG1947480</a>
2-Methylnaphthalene	0.126	I	0.0674	0.250	1	10/24/2022 01:14	<a href="#">WG1947480</a>
(S) Nitrobenzene-d5	116			31.0-160		10/24/2022 01:14	<a href="#">WG1947480</a>
(S) 2-Fluorobiphenyl	91.5			48.0-148		10/24/2022 01:14	<a href="#">WG1947480</a>
(S) p-Terphenyl-d14	104			37.0-146		10/24/2022 01:14	<a href="#">WG1947480</a>

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Temperature (on-site)	21.8	Deg. C
Dissolved Oxygen (on-site)	1.43	mg/l
pH (On Site)	8.88	su
Specific Conductance	655	umhos/cm

1 Cp  
2 Tc  
3 Ss  
4 Cn  
5 Sr  
6 Qc  
7 Gl  
8 Al  
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	1.44		0.0941	1.00	1	10/23/2022 04:20	<a href="#">WG1947335</a>
Toluene	8.09		0.278	1.00	1	10/23/2022 04:20	<a href="#">WG1947335</a>
Ethylbenzene	2.53		0.137	1.00	1	10/23/2022 04:20	<a href="#">WG1947335</a>
Total Xylenes	6.44		0.174	3.00	1	10/23/2022 04:20	<a href="#">WG1947335</a>
Methyl tert-butyl ether	0.101	U	0.101	1.00	1	10/23/2022 04:20	<a href="#">WG1947335</a>
(S) Toluene-d8	94.6			80.0-120		10/23/2022 04:20	<a href="#">WG1947335</a>
(S) 4-Bromofluorobenzene	111			77.0-126		10/23/2022 04:20	<a href="#">WG1947335</a>
(S) 1,2-Dichloroethane-d4	117			70.0-130		10/23/2022 04:20	<a href="#">WG1947335</a>

Semi-Volatile Organic Compounds (GC) by Method FLPRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Petroleum Range Organics	213	U	213	852	2.13	10/24/2022 20:37	<a href="#">WG1947479</a>
(S) o-Terphenyl	90.1			66.0-139		10/24/2022 20:37	<a href="#">WG1947479</a>
(S) C35	56.9			40.0-129		10/24/2022 20:37	<a href="#">WG1947479</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Anthracene	0.0190	U	0.0190	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Acenaphthene	0.0190	U	0.0190	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Acenaphthylene	0.0171	U	0.0171	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Benzo(a)anthracene	0.0203	U	0.0203	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Benzo(a)pyrene	0.0184	U	0.0184	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Benzo(b)fluoranthene	0.0168	U	0.0168	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Benzo(g,h,i)perylene	0.0184	U	0.0184	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Benzo(k)fluoranthene	0.0202	U	0.0202	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Chrysene	0.0179	U	0.0179	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Dibenz(a,h)anthracene	0.0160	U	0.0160	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Fluoranthene	0.0270	U	0.0270	0.100	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Fluorene	0.0169	U	0.0169	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Indeno(1,2,3-cd)pyrene	0.0158	U	0.0158	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Naphthalene	0.0917	U	0.0917	0.250	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Phenanthrene	0.0180	U	0.0180	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
Pyrene	0.0169	U	0.0169	0.0500	1	10/24/2022 06:00	<a href="#">WG1947480</a>
1-Methylnaphthalene	0.0687	U	0.0687	0.250	1	10/24/2022 06:00	<a href="#">WG1947480</a>
2-Methylnaphthalene	0.0674	U	0.0674	0.250	1	10/24/2022 06:00	<a href="#">WG1947480</a>
(S) Nitrobenzene-d5	73.0			31.0-160		10/24/2022 06:00	<a href="#">WG1947480</a>
(S) 2-Fluorobiphenyl	34.9	U		48.0-148		10/24/2022 06:00	<a href="#">WG1947480</a>
(S) p-Terphenyl-d14	55.5			37.0-146		10/24/2022 06:00	<a href="#">WG1947480</a>

Method Blank (MB)

(MB) R3852213-3 10/23/22 00:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	0.0941	NI	0.0941	1.00
Toluene	0.278	NI	0.278	1.00
Ethylbenzene	0.137	NI	0.137	1.00
Xylenes, Total	0.174	NI	0.174	3.00
Methyl tert-butyl ether	0.101	NI	0.101	1.00
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	112			77.0-126
(S) 1,2-Dichloroethane-d4	119			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3852213-1 10/22/22 23:13 • (LCSD) R3852213-2 10/22/22 23:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	5.61	5.62	112	112	70.0-123			0.178	20
Toluene	5.00	4.66	4.87	93.2	97.4	79.0-120			4.41	20
Ethylbenzene	5.00	4.87	4.92	97.4	98.4	79.0-123			1.02	20
Xylenes, Total	15.0	14.1	14.6	94.0	97.3	79.0-123			3.48	20
Methyl tert-butyl ether	5.00	5.79	5.49	116	110	68.0-125			5.32	20
(S) Toluene-d8				94.7	95.3	80.0-120				
(S) 4-Bromofluorobenzene				113	111	77.0-126				
(S) 1,2-Dichloroethane-d4				129	122	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3852519-3 10/24/22 21:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Toluene	0.278	NI	0.278	1.00
Ethylbenzene	0.137	NI	0.137	1.00
Xylenes, Total	0.174	NI	0.174	3.00
(S) Toluene-d8	108			80.0-120
(S) 4-Bromofluorobenzene	109			77.0-126
(S) 1,2-Dichloroethane-d4	109			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3852519-1 10/24/22 20:15 • (LCSD) R3852519-2 10/24/22 20:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Toluene	5.00	4.96	5.00	99.2	100	79.0-120			0.803	20
Ethylbenzene	5.00	4.67	4.54	93.4	90.8	79.0-123			2.82	20
Xylenes, Total	15.0	14.2	14.3	94.7	95.3	79.0-123			0.702	20
(S) Toluene-d8				105	104	80.0-120				
(S) 4-Bromofluorobenzene				110	105	77.0-126				
(S) 1,2-Dichloroethane-d4				109	109	70.0-130				

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3852599-1 10/24/22 09:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Petroleum Range Organics	100	<u>U</u>	100	400
(S) o-Terphenyl	70.0			66.0-139
(S) C35	57.6			40.0-129

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3852599-2 10/24/22 09:59 • (LCSD) R3852599-3 10/24/22 10:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Petroleum Range Organics	1700	1230	1440	72.4	84.7	66.0-119			15.7	20
(S) o-Terphenyl				71.0	70.8	66.0-139				
(S) C35				62.0	56.6	40.0-129				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3852456-3 10/24/22 00:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Anthracene	0.0190	IC	0.0190	0.0500
Acenaphthene	0.0190	IC	0.0190	0.0500
Acenaphthylene	0.0171	IC	0.0171	0.0500
Benzo(a)anthracene	0.0203	IC	0.0203	0.0500
Benzo(a)pyrene	0.0184	IC	0.0184	0.0500
Benzo(b)fluoranthene	0.0168	IC	0.0168	0.0500
Benzo(g,h,i)perylene	0.0184	IC	0.0184	0.0500
Benzo(k)fluoranthene	0.0202	IC	0.0202	0.0500
Chrysene	0.0179	IC	0.0179	0.0500
Dibenz(a,h)anthracene	0.0160	IC	0.0160	0.0500
Fluoranthene	0.0270	IC	0.0270	0.100
Fluorene	0.0169	IC	0.0169	0.0500
Indeno(1,2,3-cd)pyrene	0.0158	IC	0.0158	0.0500
Naphthalene	0.0917	IC	0.0917	0.250
Phenanthrene	0.0180	IC	0.0180	0.0500
Pyrene	0.0169	IC	0.0169	0.0500
1-Methylnaphthalene	0.0687	IC	0.0687	0.250
2-Methylnaphthalene	0.0674	IC	0.0674	0.250
(S) Nitrobenzene-d5	91.0			31.0-160
(S) 2-Fluorobiphenyl	69.0			48.0-148
(S) p-Terphenyl-d14	86.5			37.0-146

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3852456-1 10/23/22 23:28 • (LCSD) R3852456-2 10/23/22 23:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	2.00	1.64	1.69	82.0	84.5	67.0-150			3.00	20
Acenaphthene	2.00	1.60	1.69	80.0	84.5	65.0-138			5.47	20
Acenaphthylene	2.00	1.62	1.72	81.0	86.0	66.0-140			5.99	20
Benzo(a)anthracene	2.00	1.82	1.81	91.0	90.5	61.0-140			0.551	20
Benzo(a)pyrene	2.00	1.82	1.88	91.0	94.0	60.0-143			3.24	20
Benzo(b)fluoranthene	2.00	1.75	1.78	87.5	89.0	58.0-141			1.70	20
Benzo(g,h,i)perylene	2.00	1.84	1.95	92.0	97.5	52.0-153			5.80	20
Benzo(k)fluoranthene	2.00	1.70	1.78	85.0	89.0	58.0-148			4.60	20
Chrysene	2.00	1.82	1.86	91.0	93.0	64.0-144			2.17	20
Dibenz(a,h)anthracene	2.00	1.80	1.88	90.0	94.0	52.0-155			4.35	20
Fluoranthene	2.00	1.84	1.90	92.0	95.0	69.0-153			3.21	20
Fluorene	2.00	1.72	1.81	86.0	90.5	64.0-136			5.10	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3852456-1 10/23/22 23:28 • (LCSD) R3852456-2 10/23/22 23:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Indeno(1,2,3-cd)pyrene	2.00	1.93	2.00	96.5	100	54.0-153			3.56	20
Naphthalene	2.00	1.48	1.54	74.0	77.0	61.0-137			3.97	20
Phenanthrene	2.00	1.68	1.78	84.0	89.0	62.0-137			5.78	20
Pyrene	2.00	1.68	1.76	84.0	88.0	60.0-142			4.65	20
1-Methylnaphthalene	2.00	1.51	1.57	75.5	78.5	66.0-142			3.90	20
2-Methylnaphthalene	2.00	1.55	1.61	77.5	80.5	62.0-136			3.80	20
<i>(S) Nitrobenzene-d5</i>				101	106	31.0-160				
<i>(S) 2-Fluorobiphenyl</i>				73.5	77.5	48.0-148				
<i>(S) p-Terphenyl-d14</i>				89.5	88.5	37.0-146				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# GLOSSARY OF TERMS

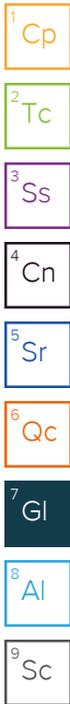
## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.



### Qualifier Description

I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	The value is outside laboratory established criteria.
U	Indicates the compound was analyzed for but not detected above the method detection limit.

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Company Name/Address: **ERMI - FL**  
 6835 International Center Blvd  
 Suite 5  
 Fort Myers, FL 33912

Billing Information:  
 Accounts Payable  
 6835 International Center Blvd.  
 Suite 5  
 Fort Myers, FL 33912

Report to:  
 Jon Ascher

Email To: jascher@ermi.net

Analysis / Container / Preservative

Chain of Custody Page \_\_\_ of \_\_\_

**Pace**  
 PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**

12065 Lebanon Rd Mount Juliet, TN 37122  
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

Project Description: **Gretna Maintenance Yard** City/State Collected: **Gretna, FL** Please Circle: PT MT CT **ET**

Client Project # **E4589A** Lab Project # **ERMIFL-E4589**

Collected by (print): **Shannon bawl** Site/Facility ID # P.O. #

Collected by (signature): *Shannon bawl* **Rush?** (Lab MUST Be Notified)  
 Same Day  Five Day  
 Next Day  5 Day (Rad Only)  
 Two Day  10 Day (Rad Only)  
 Three Day

Quote # \_\_\_\_\_ Date Results Needed \_\_\_\_\_

Immediately Packed on Ice N  Y

Phone: **239-415-6406**

FLPRO 100ml Amb HCl  
 PAHs 82700-SIM LVI 40mIAmb-NoPres-WT  
 V8260BTEXM 40mIAmb-HCl

SDG # **L1549416**  
**A230**

Acctnum: **ERMIFL**  
 Template: **T216615**  
 Prelogin: **P951753**  
 PM: **206 - Jeff Carr**  
 PB: **9/20/22 mm**

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Remarks	Sample # (lab only)
MW-30F	G	GW	N/A	10/20/22	1520	7	X X X	-01
MW-31F		GW			1447	7	X X X	-02
MW-32		GW			1545	7	X X X	-03
MW-33		GW			1415	7	X X X	-04
MW-34		GW			1635	7	X X X	-05
DW-1		GW		10/21/22	0845	7	X X X	-06
		GW				7	X X X	

\* Matrix: SS - Soil AIR - Air F - Filter  
 GW - Groundwater B - Bioassay  
 WW - WasteWater  
 DW - Drinking Water  
 OT - Other \_\_\_\_\_

Remarks: **PRP Rates**

Samples returned via:  UPS  FedEx  Courier \_\_\_\_\_ Tracking # \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_  
 Flow \_\_\_\_\_ Other \_\_\_\_\_

Relinquished by: (Signature) *W. Burt* Date: **9/20/22** Time: **2pm**  
 Received by: (Signature) *S. Gule* Trip Blank Received:  Yes / No  HCl / MeOH TBR

Relinquished by: (Signature) *S. Gule* Date: **10/21/22** Time: \_\_\_\_\_  
 Received by: (Signature) \_\_\_\_\_ Temp: **68.1°C** Bottles Received: **42**  
**2.800:2.8**

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received for lab by: (Signature) *ASB* Date: **10/27/22** Time: **900**  
 Hold: \_\_\_\_\_ Condition: **NCF / OK**

**Sample Receipt Checklist**  
 COC Seal Present/Intact:  NP  Y  N  
 COC Signed/Accurate:   N  
 Bottles arrive intact:   N  
 Correct bottles used:   N  
 Sufficient volume sent:   N  
 If Applicable  
 VOA Zero Headspace:   N  
 Preservation Correct/Checked:   N  
 RAD Screen <0.5 mR/hr:   N

