Department of Environmental Protection

2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

DEP Form: 62-762.901(9)
Form Title: Storage Tank Equipment Registration Form
Effective Date: July 2019
Incorporated in Rule 62-762.851, F.A.C.

Storage Tank System Equipment Registration Form

Fill out completely

General Information

Company Name: Fuelogic, LLC
Contact Name: Tim Coons
Company Address: 110 Robinson Court
City, State: Fayetteville, Georgia Zip: 30214
E-mail: tim.coons@dbinitiative.com
Contact Number: 404.996.1282
Product Name: UL 142 Certified Double Wall Tank
Model Number(s): N/A- Tanks are custom
Product Type: AST
Rule(s) citation that registration is being requested within Chapter 62-761 (UST), and/or 62-762 (AST), F.A.C.: 62-762

Write a brief description of equipment registration request including product limitations:

Fuelogic is a newly approved UL 142 tank manufacturer located in Fayetteville, GA. At minimum- all manufactured tanks must have level gauge, leak detection, properly sized venting, and properly labeled fill port. Maximum dimensions allowed from UL certification process are are 48"H and 144" W.

Information Checklist (Choose Yes, No, or N/A - Not Applicable):

		Yes	No	N/A
1.	Third-party Certification by a Nationally Recognized Testing Laboratory? (Required)	✓		
2.	Documentation of third-party evaluation that the equipment meets DEP Rules?	✓		
3.	Documents included about the qualifications of the Nationally Recognized Testing Laboratory?		✓	
4.	Technical information and drawings included?	✓		
5.	Installation instructions included?	✓		
6.	Annual Operability Testing Requirements (Rules 62-761.500, 62-762.501, & 62-762.502 F.A.C.)?	✓		
7.	Integrity Testing Requirements (Rules 62-761.700, 62-762.701, & 62-762.702, F.A.C.)?	✓		
8.	Compatible with fuel blends containing >10% ethanol or >20% biodiesel?	✓		
9.	Has the product been approved or registered in other countries or states? (If so provide list)		✓	
10.	Any requirements for company-certified installers or trainers?		✓	
11.	Was this product(s) previously approved or registered by the Department? If yes, EQ-_____		✓	
12.	Any changes or modifications to the equipment since the last submittal to DEP?			✓

Document Information: Provide supporting documents indicated as "Yes" above including this form via email to Tanknotify@floridadep.gov, or documents can be sent to FDEP, Division of Waste Management, 2600 Blair Stone Road, MS 4560, Tallahassee, FL 32399.

Write a brief description of equipment installation and performance in the U.S.:

Fuelogic has been manufacturing tanks as of Q4 2019 and has had no reported issues on installed tanks.

Equipment Registration Certification:

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

Timothy O. Coons - Treasurer
Printed Name and Title

Signature (right click to sign)

03/31/2020
Date

For Department Use Only:

Date Application Received: 3/31/2020 Application complete: Yes: [x] No: [ ]

EQ- 930 Date of complete or incomplete letter sent: 4/2/2020 Date Equipment Requires Renewal: 4/2/2025

Storage tank system equipment requires renewal every 5 years in accordance with subsection 62-762.851(2), F.A.C.

Nicholas Kowal
Design by Initiative L L C
110 Robinson Ct
Fayetteville GA 30214

Date:	2019/09/17
Subscriber:	None
PartySite:	1337552
File No:	MH60877
Project No:	4788753336
PD No:	19M27726
Type:	L
PO Number:	

Subject: **Initial Production Inspection**

PLEASE NOTE: YOU ARE NOT AUTHORIZED TO SHIP ANY PRODUCTS BEARING ANY UL MARKS UNTIL THE INITIAL PRODUCTION INSPECTION HAS BEEN SUCCESSFULLY CONDUCTED BY THE UL FIELD REPRESENTATIVE.

An Initial Production Inspection (IPI) is an inspection that must be conducted prior to the first shipment of products bearing the UL Mark. This is to ensure that products being manufactured are in accordance with UL's requirements including the Follow-Up Service Procedure. After the UL Representative has verified compliance of your product(s), authorization will be granted for shipment of product(s) bearing the appropriate UL Marks as denoted in the Procedure.

Inspections at your plant will be conducted under the supervision of Marcus Fulkerson, Field Engineering Area Manager, UL LLC - Field Engineering Services, 3482 Keith Bridge Road, #326, Cumming, GA 30041, PHONE: 812-205-5246, EMAIL: Marcus.Fulkerson@ul.com

Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

Please review this material and report any inaccuracies to UL's Customer Service Professionals. Contact information for all of UL's global offices can be found at http://ul.com/aboutul/locations.

If you'd like to receive updated materials FASTER, UL offers electronic access and/or delivery of this material. For more details, contact UL's Customer Service Professionals as shown above., referring to the above Project and/or PD Numbers.

This material is provided on behalf of UL LLC(UL) or any authorized licensee of UL.

TRT File

UL INSPECTION CENTER 221

Production Date:	UNKNOWN
Contact:	Nick Kowal
Phone:	4049961285
EMail:	nick.kowal@dbinitiative.com

ADDENDUM TO TRANSMITTAL LETTER

Nicholas Kowal
Design by Initiative L L C
110 Robinson Ct
Fayetteville GA 30214

Date: 2019/09/17
Subscriber: None
PartySite: 1337552
File No: MH60877
Project No: 4788753336
PD No: 19M27726
Type: L
PO Number:

Subject: **Initial Production Inspection**

The following material resulting from the investigation under the above numbers is enclosed.

Issue Date	Vol	Sec	Pages	Revised Date
2019/09/13	1	1	Cert of Compliance	
2019/09/13	1	1	Add New Volume	

Follow-Up Service Procedure

DO NOT DISCARD THIS PAGE

It is important to keep UL Procedures and Test Reports up-to-date as new or revised pages are received.
Correct maintenance will decrease the amount of time the UL Representative spends when visiting your facility.

UL LLC offers MyHome @UL, a dedicated website providing secure access to online tools and databases that can help simplify your compliance activities. You can customize your personal MyHome @UL page to include the content needed most, including timely information about certification updates and links to other Web sites you visit regularly. Visit http://my.home.ul.com/ to sign up today!

PAGES (in content order)	FUNCTION	HOW TO UPDATE
Authorization Page	Displays the Product Category, the type of Follow-Up Service (Type R=Reexamination / Type L=Label), the File Number and the Volume Number associated with each Applicant's, Manufacturer's and Listee's company name and address.	Replace existing page by matching the UL File Number and Volume Number. Discard the older page (refer to "Issued" or "Revised" date).
Addendum to Authorization Page*	Lists the additional names and addresses of manufacturing locations, when multiple locations exist	Replace existing page by matching the UL File Number and Volume Number. Discard the older page (refer to "Issued" or "Revised" date).
Listing Mark Data (LMD), Classification Mark Data (CMD) or Recognized Component Mark Data (RCMD) Pages*#	Used only for products covered under Type R Service. Displays the correct LMD, CMD, or RCMD Mark, the Control Number for Listed and Classified categories and additional information regarding minimum size, application, procurement, and any other optional markings, in addition to the UL Mark.	Replace existing page by matching the UL File Number and Volume Number. Discard the older page (refer to "Issued" or "Revised" date).
Multiple Listing (ML) Correlation Sheet*	Correlates product model numbers between those products made by a Manufacturer for the Basic Applicant and those supplied to another company, the Multiple Listee.	Replace, add or delete page(s) with most current "Issued" or "Revised" date.
Index*	Catalogs the contents of the Procedure by some logical means, i.e. Section Number, Report Reference Number, or Issue Date.	Replace present page by matching the UL File Number, Volume Number, Page Number and most current "Revised" date.
Appendices (App.)*#	Contains instructions for the Manufacturer and UL Representative concerning specific responsibilities and required periodic tests. May also outline tests to be conducted on samples to be forwarded to UL's facilities.	Replace present page by matching the UL File Number, Volume Number, Appendix letter (eg. App. A), Page Number and most current "Revised" date.
	Standardized Appendix Pages are the same for all manufacturers within a particular product category.	Replace present page by matching the Appendix letter (eg. App. A), Page Number and most current "Revised" date.
Follow-Up Inspection Instructions (FUII) Pages*	Contains information similar to that in the Appendices. FUII Pages are issued as part of the Procedure when a UL Standard is used in conjunction with the Procedure, and are the same for all manufacturers within a particular category.	Replace present pages by matching the Page Number and most current "Issued" or "Revised" date.
Section General (Sec. Gen.)*#	Contains description, requirements, identifications and/or specifications that are common to all products covered by the entire volume and supplements the information provided in the Description Section.	Replace present page by matching the UL File Number, Volume Number, Page Number and most current "Revised" date.
Description, or Section (Sec.)*	Contains the specific description of one or more products or systems. This includes written text supplemented by photographs, drawings, etc., as necessary, to define features that affect compliance with the applicable requirements.	Replace present page by matching the UL File Number, Volume Number, Section Number, Page Number and most current "Issued" date.

***** The above page(s) may not appear in all UL Follow-Up Service Procedures; UL's Conformity Assessment Services staff determines their inclusion.
# These pages are combined in the **Generic Inspection Instructions** for International Style Reports, identified, as example by Vol. X1, X2, etc.

PLEASE NOTIFY YOUR LOCAL UL OFFICE OF ANY CHANGES IN CONTACT NAME, COMPANY NAME OR ADDRESS, SO THIS MATERIAL AND IMPORTANT INFORMATION CONTINUES TO BE DELIVERED TO YOUR FACILITY WITHOUT INTERRUPTION.

FOLLOW-UP SERVICE PROCEDURE
(TYPE L)

SPECIAL-PURPOSE TANKS
(EFVT)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

Applicant: 1337552 (Party Site)
Design by Initiative L L C
110 Robinson Ct
Fayetteville GA 30214

Listee: 1337552 (Party Site)
SAME AS APPLICANT

Use of the Mark

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party. The UL Contracting Party for Follow-Up Services is listed in the addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

It is the responsibility of the Applicant, Manufacturer(s), and Listee/Classified Co. to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

Additional Responsibilities

Additional responsibilities, duties and requirements for the Applicant and Manufacturers are defined under Additional Resources at the following web-site: http://www.ul.com/fus . Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the Follow-Up Service Terms referenced below, please contact UL's Customer Service at http://www.ul.com/aboutul/locations/ , select a location and enter your request, or call the number listed for that location.

Acceptance of Follow-Up Services

The Applicant and the specified Manufacturer(s) and any Listee/Classified Co. in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable service agreement is a Global Services Agreement ("GSA"), the Applicant, the specified Manufacturer(s) and any Listee/Classified Co. will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of a) use of the prescribed UL Mark, b) acceptance of the factory inspection, or c) payment of the Follow-Up Service fees. The Service Agreement incorporates such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking the following link: http://services.ul.com/fus-service-terms. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

Use and Ownership of the Follow-Up Service Procedure

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the Applicant, the specified Manufacturer(s), and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Definition of Terms

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

No Third Party Liability

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

Certification Body

UL LLC has signed below solely in its capacity as the certification body to indicate that this Follow-Up Service Procedure fulfills the requirements for certification documentation issued by the certification body.

Bruce A. Mahrenholz
Director
Conformity Assessment Programs (CPO)
UL LLC

LOCATION

1337552 (Party Site)
Design by Initiative L L C
110 Robinson Ct
Fayetteville GA 30214
Factory ID: none
UL Contracting Party for above site is: UL LLC

INDEX

ISSUED: 2017-05-17

STANDARDIZED APPENDIX PAGES
SUBJECT 2067

for

SPECIAL PURPOSE TANKS (EFVT)
and/or
SPECIAL PURPOSE TANKS CERTIFIED for CANADA (EFVT7)

STANDARDIZED APPENDIX PAGES

TABLE OF CONTENT

SPECIAL PURPOSE TANKS (EFVT) and/or
SPECIAL PURPOSE TANKS CERTIFIED for CANADA (EFVT7)

SPECIAL PURPOSE TANKS (EFVT) and/or
SPECIAL PURPOSE TANKS CERTIFIED for CANADA (EFVT7)

APPENDIX A – FIELD ENGINEER'S RESPONSIBILITIES AND INSTRUCTIONS FOR EXAMINATION OF PRODUCTS

I FIELD ENGINEER'S RESPONSIBILITIES

The Field Engineer's general responsibilities, as part of the Follow-Up Services Procedure, are as noted in the published document titled, "UL Mark Surveillance Requirements", and is available through UL's secure customer portal MyHome@UL.com and/or through UL's internet site www.UL.com. Manufacturers that do not have Internet access may obtain the current version of these requirements from their local UL Customer Service Representative or UL Field Engineer.

II PROCEDURE IN THE EVENT OF NONCONFORMANCE

When a product does not comply with the Follow-Up Service Procedure require that the manufacturer implement appropriate action as outlined in the "UL Variation Notice and Corrective Action Requirements" document.

III SPECIAL INSTRUCTIONS FOR STEEL TANKS

A. The Field Engineer shall pay particular attention to the critical items and/or perform special tasks related to inspection of steel tanks as described below:

1. Periodically witness (at least one shipment/year) manufacturer measurement and acceptance procedures of incoming steel plate and pipe stock as described in Appendix D – Steel Stock Verification.

2. Periodically witness (at least one test/year) manufacturer production tests on completely fabricated tanks as described in Appendix D - Tank Production Tests.

3. For cUL, ULC or cULus Marks Only - Periodically review (at least once/year) each manufacturer's procedures and records for compliance with ULC-S601 Sec 4.3 and similar "welding" requirements in other ULC Standards covered under EFVT7.

The written welding procedure shall be 3rd party recognized (see examples below) to ensure that welders are trained and qualified, with records available for review to verify each welder's compliance to it.

- **a)** American Welding Society (AWS) for AWS B2.1 Weld Procedure Specification and D Series Structural Codes,
- **b)** American Society of Mechanical Engineers (ASME) for ASME Sec 8 Pressure Vessels "U" or "H" Stamps,
- **c)** American Society of Mechanical Engineers (ASME) for ASME IX
- **d)** Canadian Welding Bureau (CWB) for CSA W47.1 Div 2 or 3,
- **e)** Alberta Boiler Safety Association (ABSA),
- **f)** Technical Safety Standards Association (TSSA),
- **g)** Mechanical Contractors Association of America,
- **h)** A PE who is Licensed for steel tank design, or
- **i)** Other equivalents as accepted by the Canadian Welding Bureau or Authority Having Jurisdiction

SPECIAL PURPOSE TANKS (EFVT) and/or
SPECIAL PURPOSE TANKS CERTIFIED for CANADA (EFVT7)

B. The Field Engineer shall apply the following general guidelines for accessories and components that are shipped attached to or separately from the tank:

1. Tanks are permitted to have either UL Certified or unlisted accessories and/or components attached directly to, or shipped with the tank assembly as follows:

a) Accessories and components that are covered by a Standard (such as tank supports, lift lugs and heating coils) shall comply with all applicable construction and/or performance requirements, shall be Procedure covered, and shall subject to inspections.

b) Accessories and components that are not covered by a Standard (such as most e-vent devices, pressure/vacuum vent devices, overfill prevention devices, leakage monitor, sensors, etc.), shall not be subject to inspection.

c) If tanks are used as a component in construction of a more complex end product (such as generators) at the same manufacturing location, only the tank shall be subject to inspection.

2. Tanks shall be shipped from the manufacturer as a completely assembled unit with all procedure covered mechanical accessories and components attached, except as permitted below:

a) If the complete assembly is too large and/or too heavy for transportation, major accessories (such as access devices, supports, or dikes) may be shipped disassembled from the base tank.

b) If components (such as pressure/vacuum vents, emergency vents, overfill preventers, etc.) could be damaged during transport if assembled to the base tank, they may be shipped disassembled.

c) Where accessories or components are shipped disassembled, assembly instructions, hardware and any other information supplied by the OEM shall be provided.

SPECIAL PURPOSE TANKS (EFVT) and/or
SPECIAL PURPOSE TANKS CERTIFIED for CANADA (EFVT7)

APPENDIX B – INSTRUCTIONS FOR FIELD ENGINEER'S SAMPLE SELECTION

RESERVED FOR FUTURE USE

SPECIAL PURPOSE TANKS (EFVT) and/or
SPECIAL PURPOSE TANKS CERTIFIED for CANADA (EFVT7)

APPENDIX C – INSTRUCTIONS FOR FOLLOW-UP TESTS AT UL

RESERVED FOR FUTURE USE

SPECIAL PURPOSE TANKS (EFVT) and/or
SPECIAL PURPOSE TANKS CERTIFIED for CANADA (EFVT7)

APPENDIX D - MANUFACTURER'S RESPONSIBILITIES AND REQUIREMENTS FOR CONSTRUCTION CONSIDERATIONS AND PRODUCTION TESTS

The Follow-Up Services Procedure covering these tanks is loaned to the manufacturer and constitutes the basis on which these tanks are judged for continued Certification compliance. Some construction, marking/instruction and other requirements may reference Standards applicable for the specific tank type, as identified in the Section General or each Descriptive Section.

I MANUFACTURER'S GENRAL RESPONSIBILITIES

The Manufacturer's general responsibilities, as part of the Follow-Up Services Procedure, are as noted in the published document titled, "UL Mark Surveillance Requirements", and is available through UL's secure customer portal MyHome@UL.com and/or through UL's internet site www.UL.com. Manufacturers that do not have Internet access may obtain the current version of these requirements from their local UL Customer Service Representative or UL Field Engineer.

II MANUFACTURER'S SPECIAL RESPONSIBILITIES FOR STEEL TANKS

A. Steel Stock Verification – All base stock steel used for the fabrication of certified tanks shall be verified to comply with the material requirements of UL 142 Sec 5.1-5.3 (for UL Marks), ULC-S601 Sec 4.2.1-4.2.2 (for cUL or ULC Marks) and/or other specific steel tank standards referenced in each description for the tank type if applicable. Steel Mill Specifications, Bill of Materials or other proof of compliance shall be kept with records for review by the UL Field Engineer.

B. Steel Thickness Measurement – Acceptance of all steel stocks in a lot for compliance with the minimum thickness requirements for specific tank types and sizes in referenced Standards before welding or coating shall use measurement methods per UL 142 Sec 5.4 (for UL Marks), and/or ULC-S601 Sec 4.2.3-4.2.4, or similar methods in other ULC Standards covered under EFVT7 (for cUL or ULC Marks) with a calibrated micrometer, caliper, or other instrument accurate to at least 0.0005 in or 0.0125 mm.

C. The above steel stock verification and thickness determination method shall also be used for acceptance of flanges, pipes, angles, channels or other pre-fabricated complex shapes or forms, or a calibrated micrometer, caliper, or other instrument accurate to at least 0.0005 in or 0.0125 mm.

D. For cULus Dual Certifications, the most stringent requirement referenced in the applicable UL or ULC Standard shall be applied.

SPECIAL PURPOSE TANKS (EFVT) and/or
SPECIAL PURPOSE TANKS CERTIFIED for CANADA (EFVT7)

III MANUFACTURER'S RESPONSIBILITIES FOR TANK PRODUCTION TESTS

A. Tank Production Tests - Conduct all Tank Production Tests in accordance with the referenced test method and basis of acceptability as identified in Table A before painting and application of the UL Mark or other required markings. General information for the test methods are specified below:

TABLE A

Sec #	Tank Type	Freq	Production Test	Test Method Reference
1	Primary (Single Wall) Tank	100%	Tank Leakage	UL 142 Sec 45 and/or ULC-S601 Sec 9 (*)
2	Secondary (Double Wall or Integrally Contained) Tank	100%	Tank Leakage	UL 142 Sec 45 and/or ULC-S601 Sec 9 (*)
3	Diked (Contained Tank Assembly) Tank	100%	Dike Leakage	UL 142 Sec 46 and/or ULC-S653 Sec 7 (*)
(*) For the cULus Mark – the most stringent requirements shall be applied.				

1. Any pressure or vacuum supply source shall have manual or automatic control at the tank, and a safety relief device. The pressure or vacuum shall be determined on the tank by a calibrated gauge with accuracy of +/- 2.0 % or better.

2. Unless other alternatives are allowed by the specific Test Method Referenced, the Leakage Test shall be conducted with positive air pressure and a soap/water solution applied to all welded tank joints, welded tank accessories, seams and gaskets.

3. Where vacuum testing is allowed as an alternate interstitial space leak detection, but method details are unspecified, no loss of vacuum after 30 min @ 5.0 in Hg (16.9 kPa) or 15 min @ 25.0 in Hg (84.7 kPa) for every 10 cu ft of interstitial volume shall be applied.

4. All pressure tests shall be conducted with a calibrated pressure gauge with scale range from 0 to not more than 30 psi (200 kPa) and scale increments of not more than 1.0 psi (5 kPa).

5. All vacuum tests shall be conducted with a calibrated vacuum gauge with scale range from 0 to not less than 30 in Hg (100 kPa) and scale increments of not more than 1.0 in Hg (2.0 kPa).

6. Where pressure or vacuum testing of dike tanks is not possible, a Hydro Load Test where the dike is filled with water to maximum capacity while inspecting joints for leakage is an equivalent.

APPENDIX A

UL/ULC REPRESENTATIVE'S DUTIES AND INSTRUCTIONS FOR EXAMINATION OF THE PRODUCT

GENERAL INSTRUCTIONS FOR INSPECTION OF MANUFACTURER'S FACILITIES

Audit of Manufacturer's Finished Product Inspections – Observe the inspection routines of personnel conducting the 100 percent visual inspections of finished products for quality of workmanship and materials. If inspections are not being adequately performed, bring it to the attention of the manufacturer's representative for corrective action.

Audit of Manufacturer's Records – Review the manufacturer's records of incoming materials controls, in-process inspections, physical tests, and equipment calibrations to determine if the manufacturer is complying with the requirements of App. D. Bring any discrepancies to the attention of the manufacturer's representative for corrective action.

Audit of Measuring and Testing Equipment Calibrations – Once per year request the manufacturer's representative to spot check several measuring instruments for proper calibration. Request all instruments out of calibration to be repaired or replaced.

Select Samples for Testing at ULC – When appropriate, in accordance with App. B, select the required samples and arrange for shipment as indicated.

Variation Notices – The following shall result in the issuance of a Variation Notice to the manufacturer including the action taken by the manufacturer with regard to the variation:

A. Any non-conformance in construction;

B. Any non-conformance with the requirements of App. D;

C. Failure of the manufacturer to perform immediate corrective and preventative action relative to non-conformance; or

D. Failures of physical tests as witnessed by the UL/ULC Field Representative.

APPENDIX B

INSTRUCTIONS TO UL/ULC FIELD REPRESENTATIVE
FOR SAMPLE PICK-UP

SAMPLES:

No samples are required.

APPENDIX C

INSTRUCTIONS FOR FOLLOW-UP TESTS AT ULC

No follow-up tests required.

APPENDIX D

INSTRUCTIONS FOR MANUFACTURING TESTS AND/OR INSPECTIONS AT FACTORY

CALIBRATION OF INSPECTION, MEASURING AND TEST EQUIPMENT:

The manufacturer shall maintain a program, which includes, but not limited to Calibration Certificates, calibration frequency, corrective action taken to product once an out-of-calibration condition has been discovered. The inspection, measuring and test equipment (IMTE) used in production and/or inspection shall be kept clean, maintained in good working order, and in calibration.

Pressure and vacuum gauges, micrometers, calipers or other equipment used to conduct testing/inspection as required in App. A and D of this Follow-Up Service Procedure shall be calibrated as follows:

a. At least annually;

b. Whenever the measuring equipment has been subjected to physical abuse such as might result from it being dropped or struck with an object; and

c. Any other time when the accuracy of the measuring equipment is questionable.

These requirements also include IMTE supplied by manufacturers and used by the UL/ULC Field Representative during inspection activities at all client's manufacturing locations.

Manufacturers shall maintain records of calibration for at least 1 year. For equipment calibrated less frequently, e.g., every three years, records shall be maintained at least for the current calibration cycle. Calibration records shall be readily available for review by the UL/ULC Field Representative.

Manufacturers are encouraged to go to UL's Follow-Up Service website at http://www.ul.com/fus for additional information under "UL Calibration Requirements".

INCOMING MATERIALS CONTROL:

All incoming shipments of materials to be used in the manufacture of ULC Listed products shall be inspected for compliance with the requirements of the Procedure in accordance with the manufacturer's sampling program.

All materials found to be in non-compliance with the requirements shall be isolated and/or positively identified and not to be used in ULC Listed production.

Records - The manufacturer shall maintain records of inspections and certifications from suppliers of incoming materials for a minimum of 12 months and shall be readily available for review by the UL/ULC Field Representative. These should include at least the following:

a. Identification;

b. Date received;

c. Shipment size;

d. Date inspected;

e. Certificate of Compliance;

f. Certificate of Analysis;

g. Results of inspection with respect to each sample checked (acceptable or unacceptable); and

h. Action taken with respect to entire shipment (acceptable, rejected, culled, etc.).

Lot acceptability - The acceptability of a particular lot of flat rolled steel shall be determined in the following manner:

1. The thickness of each of five pieces of stock shall be determined by five readings spaced equally along an edge of the full piece as rolled. Measurements shall be taken at least 25 mm from the edge of the sheet or plate. The instrument used shall be calibrated to a minimum of $\pm$ 0.013 mm.

2. If all thickness readings of the five pieces of stock are equal to or more than the minimum thickness limit specified from Table 1 of CAN/ULC-S601-14, the particular lot of material shall be considered acceptable.

3. If any of the thickness readings of any of the five pieces of stock are less than the minimum thickness limit specified, fifteen extra pieces shall be selected at random from the lot and their thickness determined.

4. If the thickness readings of all fifteen extra pieces are equal to or more than the minimum thickness specified from Table 1 of CAN/ULC-S601-14, the particular lot of material shall be considered acceptable, except that the individual pieces among the five which had thickness measurements less than the minimum thickness limit specified shall be rejected.

5. If any of the thickness readings of any of the fifteen extra pieces is less than the minimum thickness limit specified, the lot is not acceptable.

6. In lieu of steps 1 – 6, each plate used in the construction of each tank may be measured during the tank manufacturing process by one micrometer reading taken at least 25 mm from the edge of each sheet or plate in the as rolled condition before any additional forming is completed. If the thickness measured is equal or more than the minimum thickness limit specified, that sheet is acceptable. The instrument used shall be calibrated to a minimum of $\pm$ 0.013 mm.

IN-HOUSE MANUFACTURED PARTS INSPECTION:

Records - The manufacturer shall maintain records of their quality control program and in-house inspections for a minimum of 12 months and shall be readily available for review by the UL/ULC Field Representative. These should include at least the following:

A. Part identification;

B. Date inspected;

C. Characteristics checked;

D. Results of inspection with respect to sample checked (acceptable or unacceptable);

E. Action taken with respect to entire lot or batch (acceptable, culled or rejected); and

F. Lot or batch size.

WELDING RECORDS INSPECTION:

The manufacturer shall have third-party approved weld procedures. The UL/ULC Field Representative shall verify that the third-party approval described in the Descriptive section of this Follow-up Service Procedure is current and valid.

The Field Representative shall inspect the manufacturer's list of qualified welders to verify that each welder that has been qualified to fabricate ULC Listed and labelled tanks are approved to the third-party approved weld procedures indicated in the Description section of this Follow-up Service Procedure. The UL/ULC Field Representative shall notify the manufacturer's representative for immediate corrective action if any welder is found fabricating a tank that will be ULC labelled that does not appear in the manufacturer's qualified list.

FINISHED PRODUCT QUALITY CONTROL:

One hundred percent of the finished products shall be visually inspected for quality of workmanship, proper parts, assembly, and required markings prior to packaging/shipping.

All finished products of poor quality and not in compliance with the Laboratories' requirements shall not bear the ULC Listing Mark.

TESTS TO BE CONDUCTED BY THE MANUFACTURER:

One hundred percent of the products bearing the ULC Listing Mark shall be subjected to the Production Leak Test described below. The manufacturer shall maintain records of each test conducted for a minimum of 12 months and shall be readily available for review by the UL/ULC Field Representative.

NOTE: It is not necessary to keep complete test records when 100% production is tested, if the manufacturer has an auditable system in place to confirm production is always subjected to the required tests. Instead, exception reports indicating non-compliance and corrective action should be retained.

A. PRODUCTION LEAK TEST – PRIMARY TANK

Prior to painting/coating and attachment of the secondary containment (if applicable), each primary and each compartment of a multi-compartment tank shall be tested by the manufacturer after all welding slag has been removed and all fittings and appurtenances, which are appropriate to its use, have been fitted.

The primary and each compartment of a multi-compartment tank shall be proved leak-tight at all points including welds, threaded joints, fittings and manways by applying pressure in accordance with Table 1 below:

TABLE 1 - LEAK TEST PRESSURES

	RECTANGULAR TANK	CYLINDRICAL TANK DIAMETER, mm		
		0 to 1750	1751 to 3000	3001 to 4000
MINIMUM TEST PRESSURE, kPa (gauge)	10	30	20	10
MAXIMUM TEST PRESSURE, kPa (gauge)	20	35	30	20

While the pressure is maintained, a liquid soap solution shall be brushed or poured over all seams, threaded connections, flanged connections, bolts, etc. A complete inspection of the entire tank surface for flaws in the welds or parent metal shall then be made.

NOTE: The air supply for use in testing tanks must be controlled and monitored so that there exists no danger of over pressurizing.

If leaks are detected during testing, the pressure shall be removed and the tank shall be made leak-tight and then retested. Defects in welds shall be repaired by chipping or gouging the defective weld from one or both sides of the joint, as required, and re-welded.

If any welding occurs on the primary/multi-compartment tank after its initial production leak test, the tank must be retested as described above.

B. PRODUCTION TEST – DOUBLE-WALL/VACUUM-MONITORED TANK

After attachment of the secondary containment but prior to attachment of the vacuum monitor, the interstitial area shall be pressure tested in accordance with the "PRODUCTION LEAK TEST – PRIMARY TANK" described above.

NOTE: The air supply for use in testing the interstice must be taken from the primary tank/compartment of a multi-compartment tank and regulated to prevent over pressurizing.

VACUUM HOLD TEST – DOUBLE-WALL/VACUUM-MONITORED TANK

After all welding on the secondary containment is complete, it shall be vacuum tested as described below:

1. A minimum vacuum of 63 kPa (gauge) shall be drawn on the interstice. The vacuum reading shall be recorded over a five-day period. If a continuous decrease in gauge reading occurs, remedial action shall be taken as described in step 2 below.

   NOTE: A vacuum decrease less than 9 kPa would not require remedial action.

2. The tank shall be re-tested in accordance with "PRODUCTION LEAK TEST – PRIMARY TANK" described above. All detected leaks shall be repaired and the tank re-tested in accordance with step 1 above.

3. The tank shall be stored and shipped with a vacuum on the interstice applied. The vacuum at time of shipment shall be recorded on the daily vacuum record as described in step 1 and the record shall be kept for a minimum period of 1 year. Where at time of shipment a vacuum reading more positive than 51 kPa (gauge) exists on the interstice, the tank shall not be shipped and immediate remedial action shall be taken.

C. PRODUCTION TEST – INTEGRAL CONTAINED TANK ASSEMBLY

Prior to painting/coating, the secondary containment shall be determined to be leak-tight and shall be tested using a method suitable to the containment design.

The secondary containment may be air pressure tested after attachment to the primary tank/compartment of a multi-compartment tank in accordance with "PRODUCTION LEAK TEST – PRIMARY TANK" described above provided that the primary tank/compartment of a multi-compartment tank is pressurized with an equal internal pressure as shown in Table 1 above.

NOTE: The air supply for use in testing the interstice must be taken from the primary tank/compartment of a multi-compartment tank and regulated to prevent over pressurizing.

If any welding occurs on the primary tank after its initial production leak test, the tank must be retested in accordance with "PRODUCTION LEAK TEST – PRIMARY TANK" described above.

D. PRODUCTION TEST – CONTAINED TANK ASSEMBLY

Each contained tank assembly shall be tested and determined to be leak free. The test procedures used shall be those appropriate to the containment design.

DESCRIPTION

PRODUCT COVERED:

USL – Secondary containment generator base tanks.

COMPLIANCE:

USL - tanks were evaluated for compliance to the requirements of the Standard For Special Purpose Aboveground Tanks For Specific Flammable Or Combustible Liquids UL 142A.

GENERAL:

These generator base steel tanks are designed for storage of diesel fuel at atmospheric pressure. These tanks are designed for the support of diesel generator, motors, and/or pumps.

The tanks are intended for stationary installation in accordance with the Standard for Flammable and Combustible Liquids Code of the National Fire Protection Association, NFPA No. 30; The Standard for Installation and Use of Stationary Combustion Engine and Gas Turbines, NFPA 37; and The Standard for Emergency and Standby Power Systems, NFPA 110.

The tanks are fabricated, inspected, and tested for leakage before shipment from the factory as completely assembled vessels.

TEST TO BE CONDUCTED BY MANUFACTURER:

Each steel tank, before painting, shall be tested by the manufacturer and proved tight against leakage in accordance with the following test procedure. CAUTION: A pressure relief device is to be used in testing tanks with air pressure.

A. After completion of the primary tank, it shall be checked for leakage by applying internal air pressure and using soap suds or an equivalent material for detecting leaks. The test pressure shall be 3 psig. If no leaks are detected, the tank shall be completed.

B. After completion of the secondary containment tank, the primary tank shall be subjected to a pressure of 3 psig for a period of at least 1 hour. A continuous drop in the pressure gauge is indication of leakage. With 3 psig in the primary tank, the interstitial space shall then be subjected to a pressure of 3 psig and checked for leakage by applying soap suds, linseed oil or equivalent material for detection of leaks.

C. If leaks are noted during testing, the tank shall be made tight by welding and retested. Defects in welds shall be repaired as detailed in UL 142, by chipping or melting out from one or both sides of the joint as required and rewelding.

MARKING:

A UL Component Recognized pressure sensitive marking and labeling system label (PGDQ2) suitable for use when exposed outdoors and to occasional exposure to fuel oil when affixed to the appropriate substrate is applied to the outside surface of the tank after finishing. The marking may also be on a corrosion resistant metal nameplate that is fastended to a bracket welded to the tank. All tanks shall be marked with the following:

1. The manufacturer's name

2. “This Tank is Intended for Stationary Installation Only.”

3. The following statements:

A. "CAUTION - Only For Diesel Fuel."

B. "CAUTION – Mount Generator Only On Designated Mounting Points. Maximum Load Capacity 6073 lbf Per Mounting Point.”

C. "This Tank Is Intended For Stationary Installation Only."

D. "This Tank Requires Emergency Relief Venting. Capacity Not Less Than (+) CFH Based on Installation Within 1 Ft. of the Tank Top"

“The Annular Space Requires Emergency Venting. Capacity Not Less Thank (+) CFH"

(+)Emergency venting capacity is determined from Table 8.1 of UL 142. Wetted Surface Area is calculated by 2(HxW) + 2(LxH) + (LxW)

E. "Maximum Lift Lug Load – 9500 lbf Per Lift Fitting”, or equivalent marked near the lift fitting.

F. “CAUTION – Do Not Locate Electric Parts or Terminate Exhaust Near Fill or Vent.”

G. “Pressurize Primary Tank When Pressure Testing Annular Space” or equivalent wording.

H. “Do Not Exceed 3 psi Test Pressure”, or equivalent.

4. Identification of the various tank openings, for example, “Vent”, “Fill”, “Monitor”, etc.

5. The appropriate Listing Mark of UL LLC

LISTING MARK:

THE SYMBOL OF UL LLC
®
LISTED
SECONDARY CONTAINMENT GENERATOR BASE TANK
LABEL SERIAL NUMBER

CONSTRUCTION DETAILS:

Generator-base tanks fabricated in accordance with ILL. 1 shall not exceed the width and height dimensions as indicated below with the exception of the length. All dimensions may be less than those specified below provided the components are constructed using the minimum material thickness of 3/16" for the primary and secondary tank and minimum 9/64" for the baffles or structural steel as specified in the drawings and description and the design remains the same.

Primary Tank -

Length:	no limit
Width:	134 inches max.
Height:	46 inches max.
Maximum baffle span:	40 inches center-to center

Secondary Containment -

Length:	no limit
Width:	136 inches max.
Height:	48 inches. max.

Gaskets - Gaskets shall be of a Listed gasket material (JMST), minimum 1/8 in. thick or UL Recognized gaskets suitable for the intended use.

Lifting lug – minimum 1/2 in. thick, please see ILL 5 for details.

Provision for Venting - Each primary tank shall have provision for normal and emergency venting. The annular space shall have provision for emergency venting. Vent openings shall be sized in accordance with UL 142. The vent openings shall be identified and shall be in addition to filling, withdrawal and monitoring openings. The wetted surface includes 100 percent of the area of the four sides and the bottom (if on supports) of the rectangular tank. The surface area of the top may be omitted. The emergency vent shall communicate with the vapor space above the normal maximum fill level of the primary tank. For emergency vents located in the end of the tank, a baffle shall be installed ensuring the emergency vent communicates with the vapor space. The space between the baffle and the outer tank wall shall be equal or greater than the required emergency vent area.

Additional Openings - Openings in the primary tank, in addition to the vents, shall be provided for connection of fill piping and monitoring. All openings shall employ fittings constructed in accordance with the Standard. Drain fittings may be provided on the primary tank and secondary containment tank. Fitting quantity, size and location may vary. The stub-ups are limited to locations as indicated in ILLS.

Surface Preparation - After the tank has been tested and found to be free from leakage as described under the manufacturing and production tests, it shall be provided with a coating on all exposed surfaces.

PARTS LIST

ITEM	ITEM QTY	PART NUMBER	DESCRIPTION
18	2	2640-346A	PSEUDO BAFFLE
19	1	2640-301P	TOP PLATE
22	1	2640-345	STUB UP PLATE, CORNER
28	2	ASME B16.5 Flange Slip-On Welding - Class 150 3/4	Pipe Flanges - Flange Slip - On Welding - Class 150.Inch
29	1	2640-351P	PIPING
30	1	2640-352P	PIPING
33	1	2640-353P	FUEL LOGIC FLANGE
42	12	2640-321P	ISOLATOR PAD
43	2	2640-322P	RAIN UPSTAND, LONG
44	2	2640-323P	RAIN UPSTAND, SHORT
47	4	2640-312P	INNER TANK SUPPORT BAR
48	4	2640-316A	BAFFLE ASSEMBLY
50	4	2640-341	STUB UP PLATE, MIDDLE
52	2	2640-372P	FILL BUCKET PLATE
53	1	2640-320A	INNER TANK
54	6	2640-380P	2" NPT TANK FITTING
55	3	2640-382P	1/2" NPT TANK FITTING
56	1	2640-383P	1.5" NPT TANK FITTING
58	1	2640-385P	TANK SUPPORT SHEET
61	2	2640-354P	PIPING
62	2	ASME B16.11 Hex Head Bushing 1 1/4 x 1	Hex Head Bushing
63	2	2640-386P	1.25" NPT TANK FITTING
66	1	2640-395A	OUTER TANK

DESCRIPTION

JOB NAME

DRAWN STEPHEN JOHNS 8/13/2019

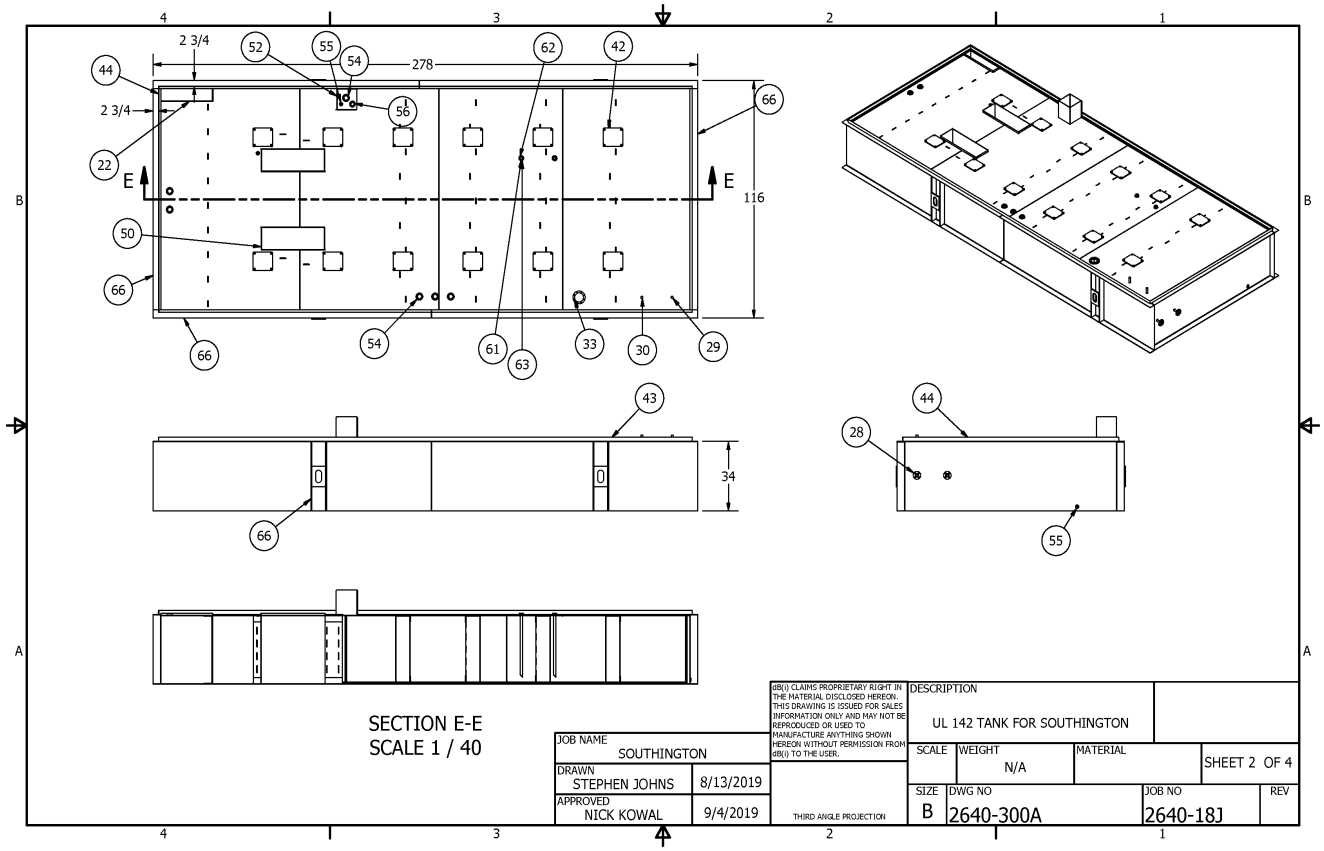
APPROVED NICK KOWAL 9/4/2019

THIRD ANGLE PROJECTION

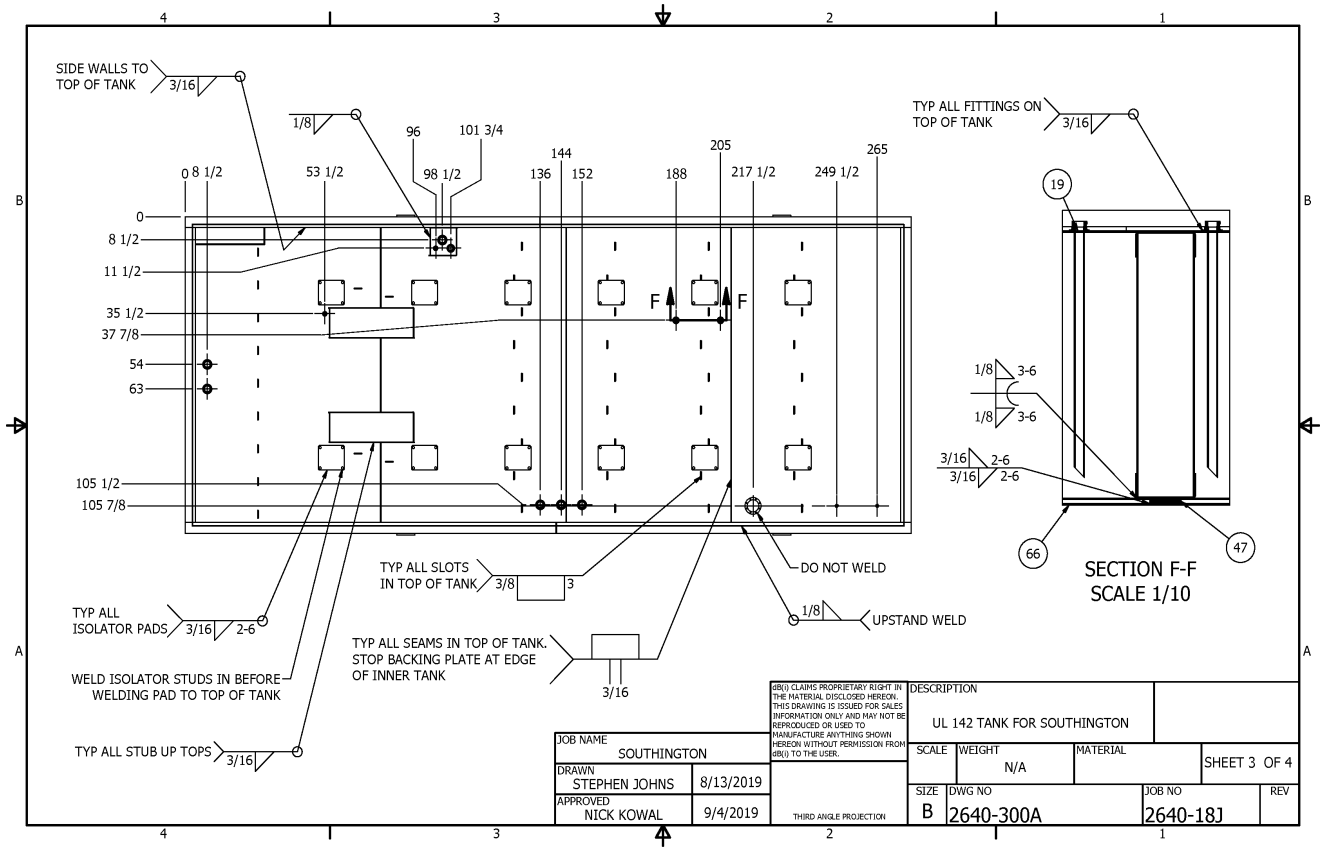
SCALE | WEIGHT | MATERIAL | SHEET 1 OF 4

SIZE B | DWG NO 2640-300A | JOB NO | REV

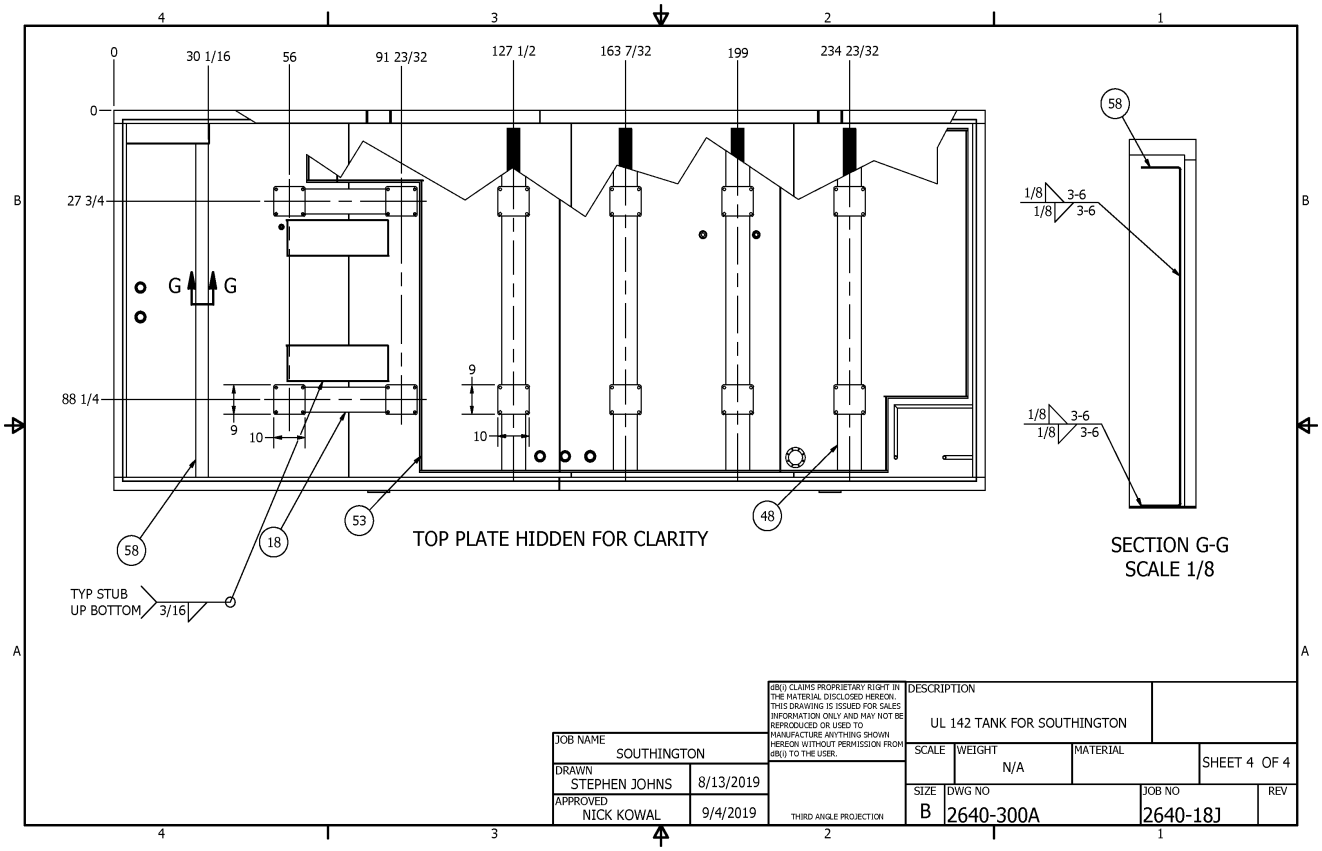
C192168612


2 3/4
278
116
34
SECTION E-E
SCALE 1 / 40
dB(i) CLAIMS PROPRIETARY RIGHT IN THE MATERIAL DISCLOSED HEREON. THIS DRAWING IS ISSUED FOR SALES INFORMATION ONLY AND MAY NOT BE REPRODUCED OR USED TO MANUFACTURE ANYTHING SHOWN HEREON WITHOUT PERMISSION FROM dB(i) TO THE USER.
JOB NAME SOUTHINGTON
DRAWN STEPHEN JOHNS 8/13/2019
APPROVED NICK KOWAL 9/4/2019
THIRD ANGLE PROJECTION
DESCRIPTION UL 142 TANK FOR SOUTHINGTON
SCALE
WEIGHT N/A
MATERIAL
SHEET 2 OF 4
SIZE B
DWG NO 2640-300A
JOB NO 2640-18J
REV

C192168612


SIDE WALLS TO TOP OF TANK 3/16
1/8
96
101 3/4
144
205
265
0
8 1/2
53 1/2
98 1/2
136
152
188
217 1/2
249 1/2
0
8 1/2
11 1/2
35 1/2
37 7/8
54
63
105 1/2
105 7/8
F
F
TYP ALL FITTINGS ON TOP OF TANK 3/16
19
1/8 3-6
1/8 3-6
3/16 2-6
3/16 2-6
66
47
SECTION F-F
SCALE 1/10
TYP ALL SLOTS IN TOP OF TANK 3/8 3
DO NOT WELD
1/8 UPSTAND WELD
TYP ALL ISOLATOR PADS 3/16 2-6
TYP ALL SEAMS IN TOP OF TANK. STOP BACKING PLATE AT EDGE OF INNER TANK
3/16
WELD ISOLATOR STUDS IN BEFORE WELDING PAD TO TOP OF TANK
TYP ALL STUB UP TOPS 3/16
dB(i) CLAIMS PROPRIETARY RIGHT IN THE MATERIAL DISCLOSED HEREON. THIS DRAWING IS ISSUED FOR SALES INFORMATION ONLY AND MAY NOT BE REPRODUCED OR USED TO MANUFACTURE ANYTHING SHOWN HEREON WITHOUT PERMISSION FROM dB(i) TO THE USER.
DESCRIPTION
UL 142 TANK FOR SOUTHINGTON
JOB NAME
SOUTHINGTON
DRAWN
STEPHEN JOHNS
8/13/2019
APPROVED
NICK KOWAL
9/4/2019
THIRD ANGLE PROJECTION
SCALE
WEIGHT
N/A
MATERIAL
SHEET 3 OF 4
SIZE
B
DWG NO
2640-300A
JOB NO
2640-18J
REV

C192168612



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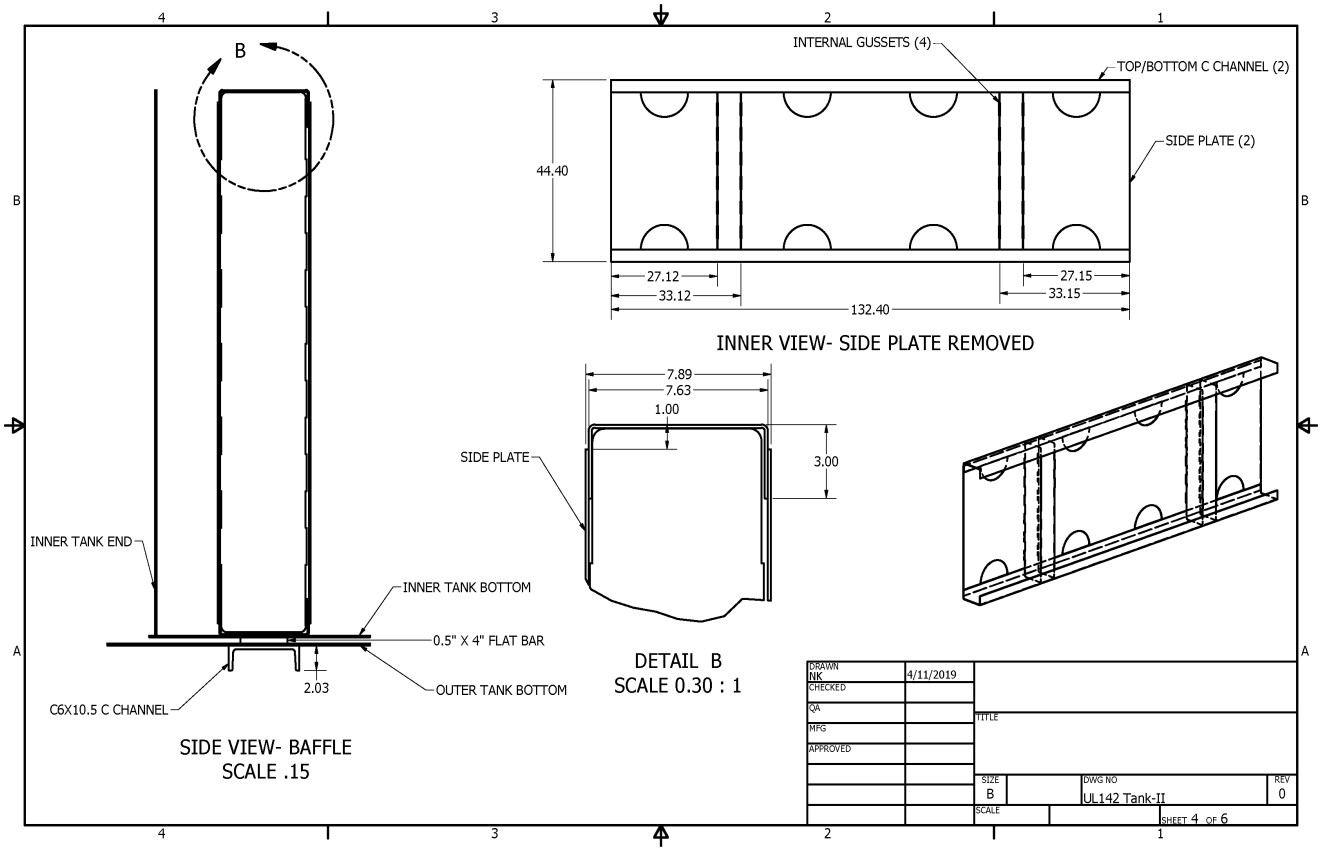
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INTERNAL GUSSETS (4)
TOP/BOTTOM C CHANNEL (2)
SIDE PLATE (2)
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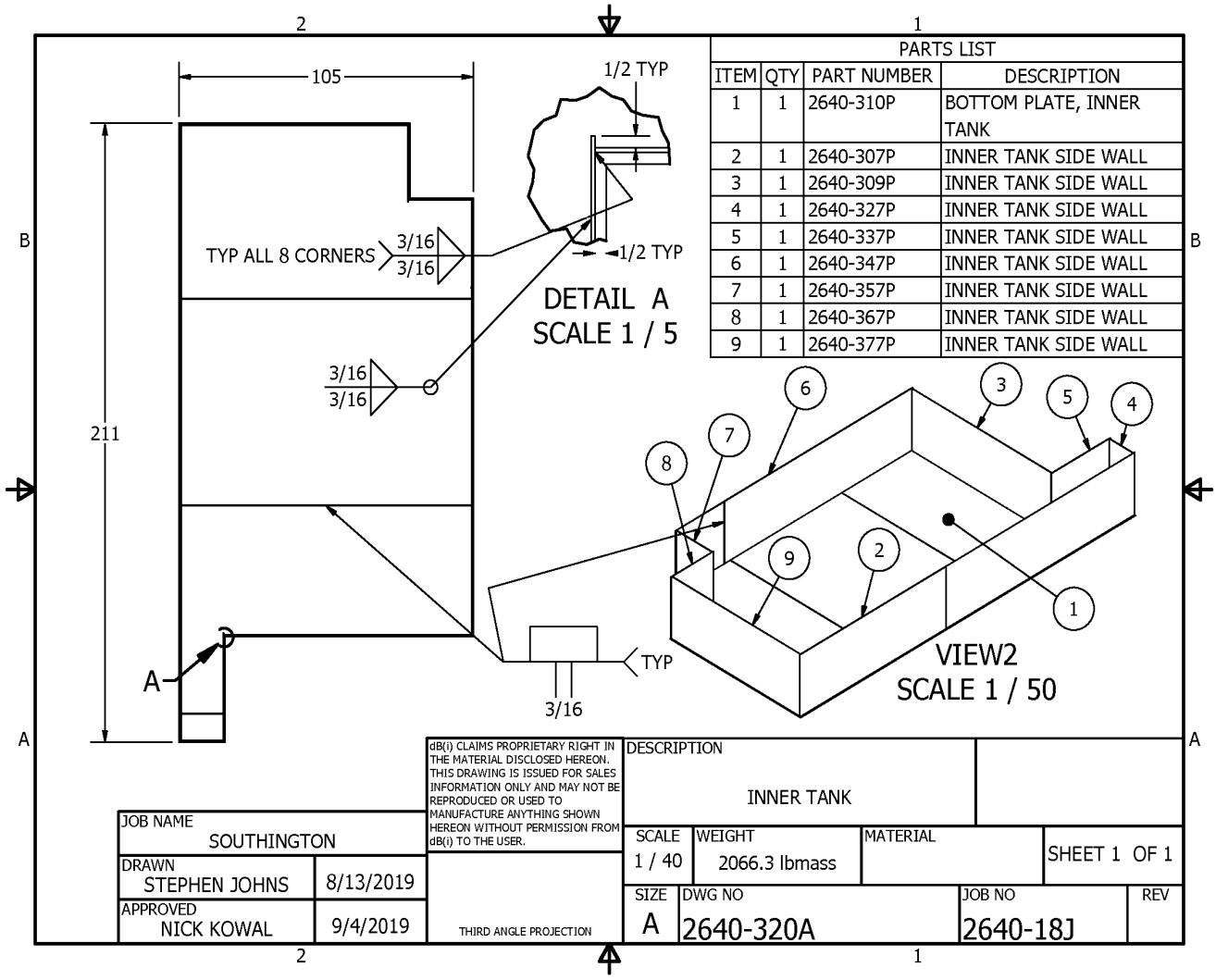
27.12
33.12
27.15
33.15
132.40
INNER VIEW- SIDE PLATE REMOVED
7.89
7.63
1.00
3.00
SIDE PLATE
INNER TANK END
INNER TANK BOTTOM
0.5" X 4" FLAT BAR
2.03
OUTER TANK BOTTOM
C6X10.5 C CHANNEL
SIDE VIEW- BAFFLE
SCALE .15
DETAIL B
SCALE 0.30 : 1
DRAWN NK 4/11/2019
CHECKED
QA
MFG
APPROVED
TITLE
SIZE B
DWG NO UL142 Tank-II
REV 0
SCALE
SHEET 4 OF 6

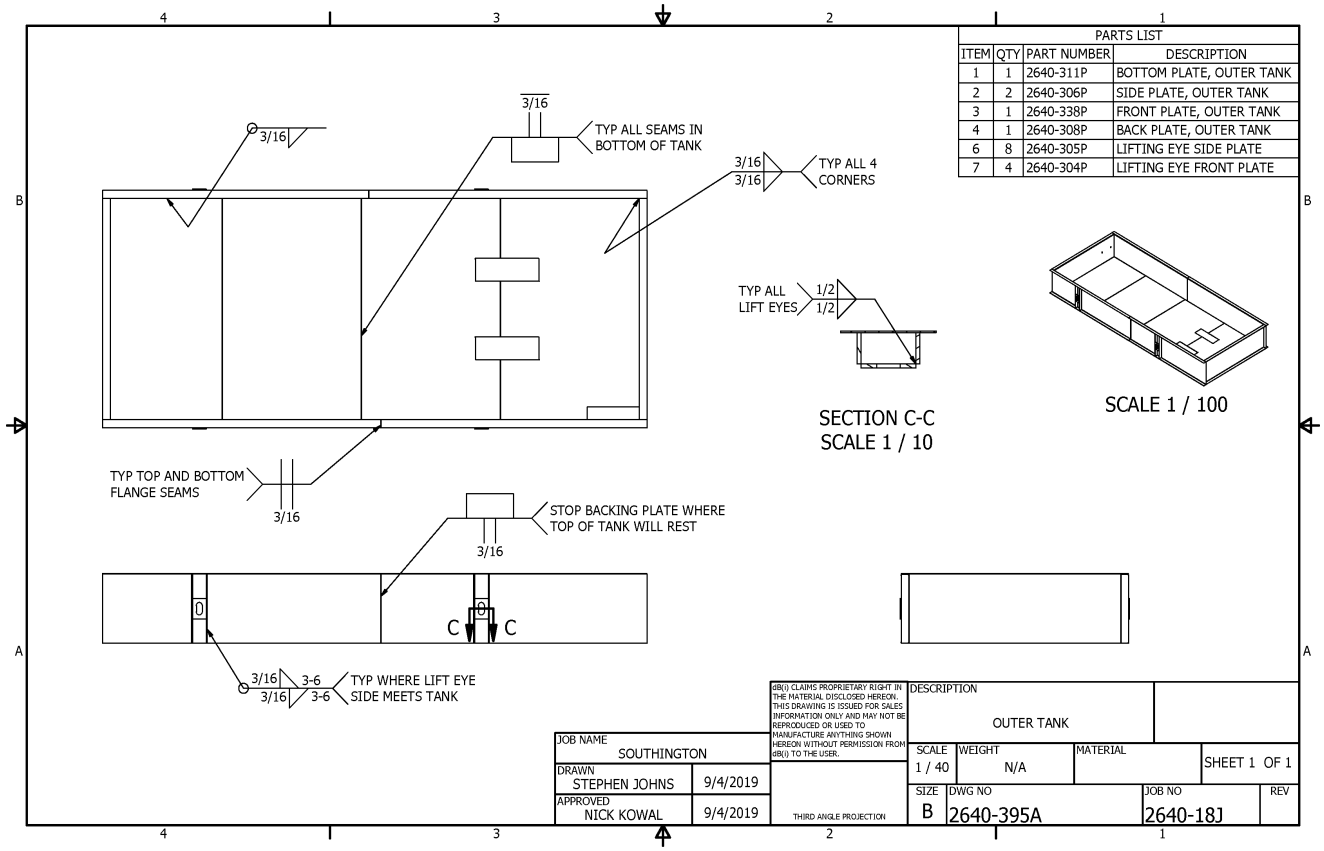


PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2640-310P	BOTTOM PLATE, INNER TANK
2	1	2640-307P	INNER TANK SIDE WALL
3	1	2640-309P	INNER TANK SIDE WALL
4	1	2640-327P	INNER TANK SIDE WALL
5	1	2640-337P	INNER TANK SIDE WALL
6	1	2640-347P	INNER TANK SIDE WALL
7	1	2640-357P	INNER TANK SIDE WALL
8	1	2640-367P	INNER TANK SIDE WALL
9	1	2640-377P	INNER TANK SIDE WALL

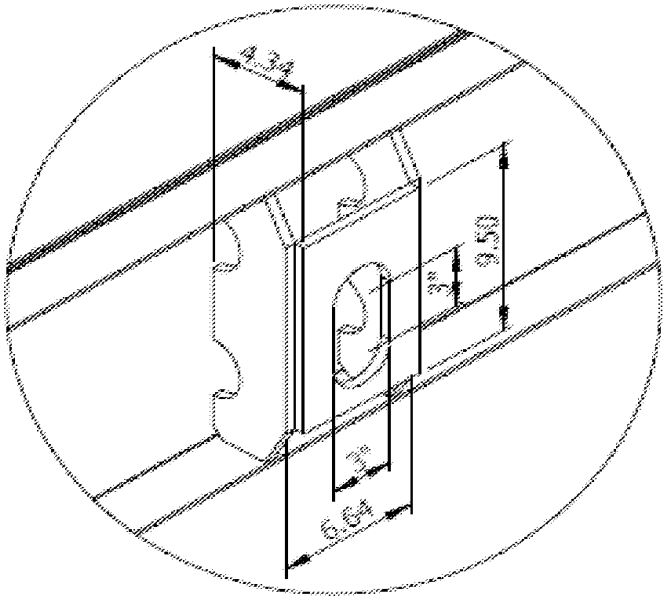
JOB NAME	SOUTHINGTON		
DRAWN	STEPHEN JOHNS	8/13/2019	
APPROVED	NICK KOWAL	9/4/2019	
THIRD ANGLE PROJECTION			

DESCRIPTION	INNER TANK		
SCALE	WEIGHT	MATERIAL	SHEET 1 OF 1
1 / 40	2066.3 lbmass		
SIZE	DWG NO	JOB NO	REV
A	2640-320A	2640-18J	

C192168613


PARTS LIST
ITEM QTY PART NUMBER DESCRIPTION
1 1 2640-311P BOTTOM PLATE, OUTER TANK
2 2 2640-306P SIDE PLATE, OUTER TANK
3 1 2640-338P FRONT PLATE, OUTER TANK
4 1 2640-308P BACK PLATE, OUTER TANK
6 8 2640-305P LIFTING EYE SIDE PLATE
7 4 2640-304P LIFTING EYE FRONT PLATE
3/16
TYP ALL SEAMS IN BOTTOM OF TANK
3/16
3/16
TYP ALL 4 CORNERS
TYP ALL LIFT EYES
1/2
1/2
SECTION C-C
SCALE 1 / 10
SCALE 1 / 100
TYP TOP AND BOTTOM FLANGE SEAMS
3/16
STOP BACKING PLATE WHERE TOP OF TANK WILL REST
3/16
C C
3/16
3/16
3-6
3-6
TYP WHERE LIFT EYE SIDE MEETS TANK
dB(i) CLAIMS PROPRIETARY RIGHT IN THE MATERIAL DISCLOSED HEREON. THIS DRAWING IS ISSUED FOR SALES INFORMATION ONLY AND MAY NOT BE REPRODUCED OR USED TO MANUFACTURE ANYTHING SHOWN HEREON WITHOUT PERMISSION FROM dB(i) TO THE USER.
DESCRIPTION
OUTER TANK
JOB NAME
SOUTHINGTON
DRAWN
STEPHEN JOHNS
9/4/2019
APPROVED
NICK KOWAL
9/4/2019
THIRD ANGLE PROJECTION
SCALE
1 / 40
WEIGHT
N/A
MATERIAL
SHEET 1 OF 1
SIZE
B
DWG NO
2640-395A
JOB NO
2640-18J
REV

C192168614


4.34
9.58
6.64

CERTIFICATE OF COMPLIANCE

Certificate Number	20190917-MH60877
Report Reference	MH60877-20190913
Issue Date	2019-SEPTEMBER-17
Issued to:	Design by Initiative L L C 110 Robinson Ct Fayetteville GA 30214
This certificate confirms that representative samples of	SPECIAL-PURPOSE TANKS Secondary containment generator base tanks
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	UL 142A - Special Purpose Aboveground Tanks for Specific Flammable or Combustible Liquids
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

File MH60877
Project 4788753336

September 13, 2019

REPORT

ON

SPECIAL-PURPOSE TANKS CERTIFIED

Design by Initiative L L C
Fayetteville, GA

DESCRIPTION

PRODUCT COVERED:

USL – Secondary containment generator base tanks.

COMPLIANCE:

USL - tanks were evaluated for compliance to the requirements of the Standard For Special Purpose Aboveground Tanks For Specific Flammable Or Combustible Liquids UL 142A.

GENERAL:

These generator base steel tanks are designed for storage of diesel fuel at atmospheric pressure. These tanks are designed for the support of diesel generator, motors, and/or pumps.

The tanks are intended for stationary installation in accordance with the Standard for Flammable and Combustible Liquids Code of the National Fire Protection Association, NFPA No. 30; The Standard for Installation and Use of Stationary Combustion Engine and Gas Turbines, NFPA 37; and The Standard for Emergency and Standby Power Systems, NFPA 110.

The tanks are fabricated, inspected, and tested for leakage before shipment from the factory as completely assembled vessels.

TEST TO BE CONDUCTED BY MANUFACTURER:

Each steel tank, before painting, shall be tested by the manufacturer and proved tight against leakage in accordance with the following test procedure. CAUTION: A pressure relief device is to be used in testing tanks with air pressure.

A. After completion of the primary tank, it shall be checked for leakage by applying internal air pressure and using soap suds or an equivalent material for detecting leaks. The test pressure shall be 3 psig. If no leaks are detected, the tank shall be completed.

B. After completion of the secondary containment tank, the primary tank shall be subjected to a pressure of 3 psig for a period of at least 1 hour. A continuous drop in the pressure gauge is indication of leakage. With 3 psig in the primary tank, the interstitial space shall then be subjected to a pressure of 3 psig and checked for leakage by applying soap suds, linseed oil or equivalent material for detection of leaks.

C. If leaks are noted during testing, the tank shall be made tight by welding and retested. Defects in welds shall be repaired as detailed in UL 142, by chipping or melting out from one or both sides of the joint as required and rewelding.

MARKING:

A UL Component Recognized pressure sensitive marking and labeling system label (PGDQ2) suitable for use when exposed outdoors and to occasional exposure to fuel oil when affixed to the appropriate substrate is applied to the outside surface of the tank after finishing. The marking may also be on a corrosion resistant metal nameplate that is fastended to a bracket welded to the tank. All tanks shall be marked with the following:

1. The manufacturer's name

2. “This Tank is Intended for Stationary Installation Only.”

3. The following statements:

A. "CAUTION - Only For Diesel Fuel."

B. "CAUTION – Mount Generator Only On Designated Mounting Points. Maximum Load Capacity 6073 lbf Per Mounting Point.”

C. "This Tank Is Intended For Stationary Installation Only."

D. "This Tank Requires Emergency Relief Venting. Capacity Not Less Than (+) CFH Based on Installation Within 1 Ft. of the Tank Top"

“The Annular Space Requires Emergency Venting. Capacity Not Less Thank (+) CFH"

(+)Emergency venting capacity is determined from Table 8.1 of UL 142. Wetted Surface Area is calculated by 2(HxW) + 2(LxH) + (LxW)

E. "Maximum Lift Lug Load – 9500 lbf Per Lift Fitting”, or equivalent marked near the lift fitting.

F. “CAUTION – Do Not Locate Electric Parts or Terminate Exhaust Near Fill or Vent.”

G. “Pressurize Primary Tank When Pressure Testing Annular Space” or equivalent wording.

H. “Do Not Exceed 3 psi Test Pressure”, or equivalent.

4. Identification of the various tank openings, for example, “Vent”, “Fill”, “Monitor”, etc.

5. The appropriate Listing Mark of UL LLC

LISTING MARK:

THE SYMBOL OF UL LLC
®
LISTED
SECONDARY CONTAINMENT GENERATOR BASE TANK
LABEL SERIAL NUMBER

CONSTRUCTION DETAILS:

Generator-base tanks fabricated in accordance with ILL. 1 shall not exceed the width and height dimensions as indicated below with the exception of the length. All dimensions may be less than those specified below provided the components are constructed using the minimum material thickness of 3/16" for the primary and secondary tank and minimum 9/64" for the baffles or structural steel as specified in the drawings and description and the design remains the same.

Primary Tank -

Length:	no limit
Width:	134 inches max.
Height:	46 inches max.
Maximum baffle span:	40 inches center-to center

Secondary Containment -

Length:	no limit
Width:	136 inches max.
Height:	48 inches. max.

Gaskets - Gaskets shall be of a Listed gasket material (JMST), minimum 1/8 in. thick or UL Recognized gaskets suitable for the intended use.

Lifting lug – minimum 1/2 in. thick, please see ILL 5 for details.

Provision for Venting - Each primary tank shall have provision for normal and emergency venting. The annular space shall have provision for emergency venting. Vent openings shall be sized in accordance with UL 142. The vent openings shall be identified and shall be in addition to filling, withdrawal and monitoring openings. The wetted surface includes 100 percent of the area of the four sides and the bottom (if on supports) of the rectangular tank. The surface area of the top may be omitted. The emergency vent shall communicate with the vapor space above the normal maximum fill level of the primary tank. For emergency vents located in the end of the tank, a baffle shall be installed ensuring the emergency vent communicates with the vapor space. The space between the baffle and the outer tank wall shall be equal or greater than the required emergency vent area.

Additional Openings - Openings in the primary tank, in addition to the vents, shall be provided for connection of fill piping and monitoring. All openings shall employ fittings constructed in accordance with the Standard. Drain fittings may be provided on the primary tank and secondary containment tank. Fitting quantity, size and location may vary. The stub-ups are limited to locations as indicated in ILLS.

Surface Preparation - After the tank has been tested and found to be free from leakage as described under the manufacturing and production tests, it shall be provided with a coating on all exposed surfaces.

PARTS LIST

ITEM	ITEM QTY	PART NUMBER	DESCRIPTION
18	2	2640-346A	PSEUDO BAFFLE
19	1	2640-301P	TOP PLATE
22	1	2640-345	STUB UP PLATE, CORNER
28	2	ASME B16.5 Flange Slip-On Welding - Class 150 3/4	Pipe Flanges - Flange Slip - On Welding - Class 150.Inch
29	1	2640-351P	PIPING
30	1	2640-352P	PIPING
33	1	2640-353P	FUEL LOGIC FLANGE
42	12	2640-321P	ISOLATOR PAD
43	2	2640-322P	RAIN UPSTAND, LONG
44	2	2640-323P	RAIN UPSTAND, SHORT
47	4	2640-312P	INNER TANK SUPPORT BAR
48	4	2640-316A	BAFFLE ASSEMBLY
50	4	2640-341	STUB UP PLATE, MIDDLE
52	2	2640-372P	FILL BUCKET PLATE
53	1	2640-320A	INNER TANK
54	6	2640-380P	2" NPT TANK FITTING
55	3	2640-382P	1/2" NPT TANK FITTING
56	1	2640-383P	1.5" NPT TANK FITTING
58	1	2640-385P	TANK SUPPORT SHEET
61	2	2640-354P	PIPING
62	2	ASME B16.11 Hex Head Bushing 1 1/4 x 1	Hex Head Bushing
63	2	2640-386P	1.25" NPT TANK FITTING
66	1	2640-395A	OUTER TANK

DESCRIPTION

JOB NAME

DRAWN STEPHEN JOHNS 8/13/2019

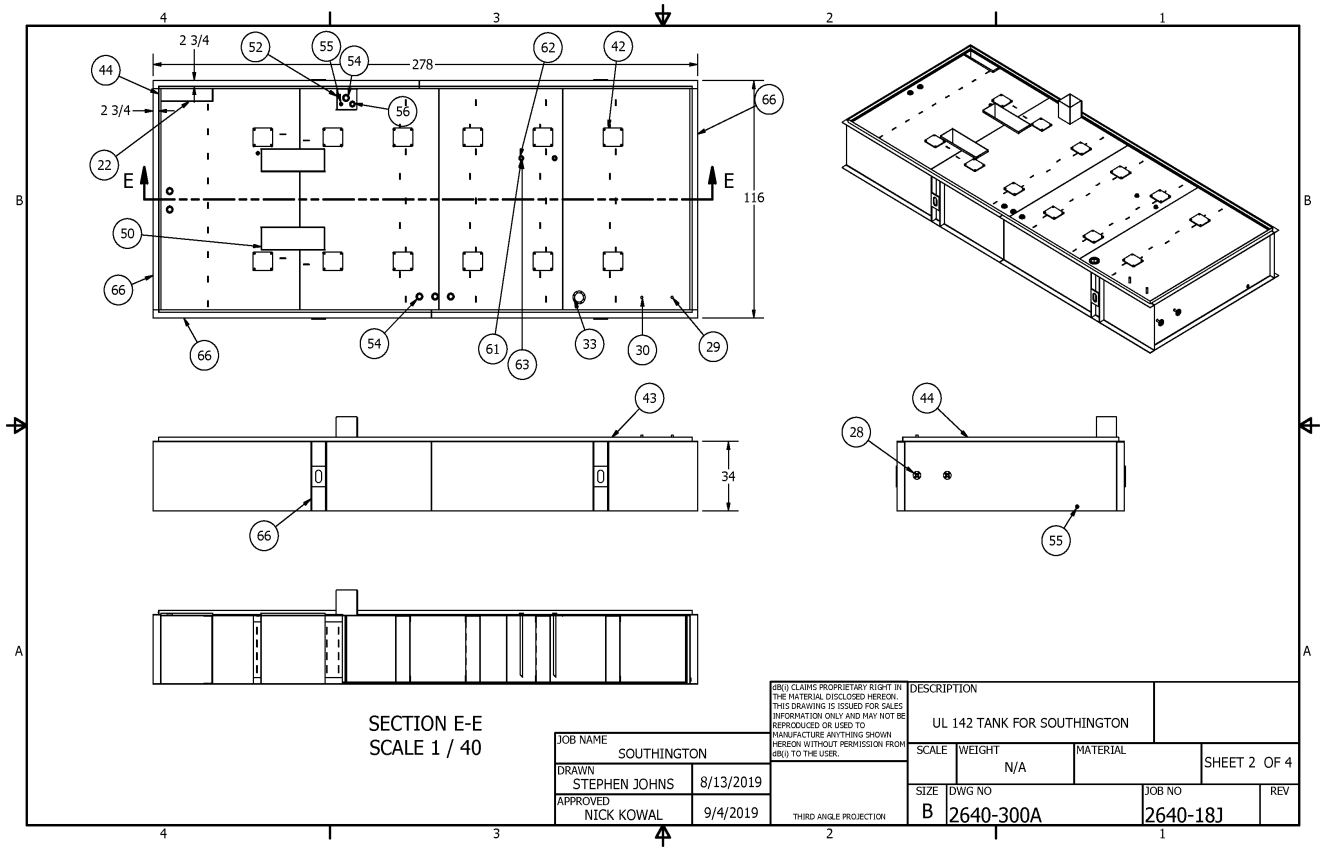
APPROVED NICK KOWAL 9/4/2019

THIRD ANGLE PROJECTION

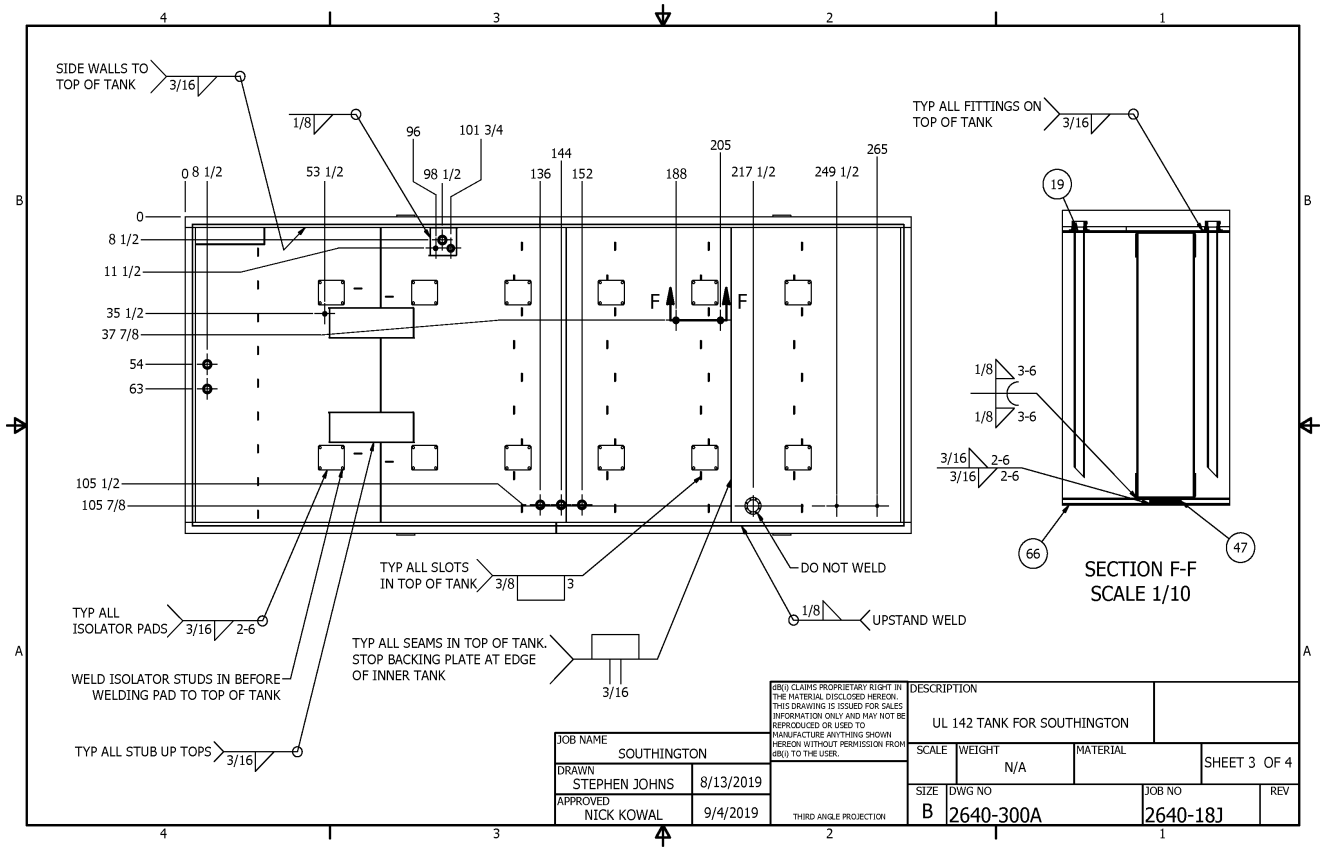
SCALE | WEIGHT | MATERIAL | SHEET 1 OF 4

SIZE B | DWG NO 2640-300A | JOB NO | REV

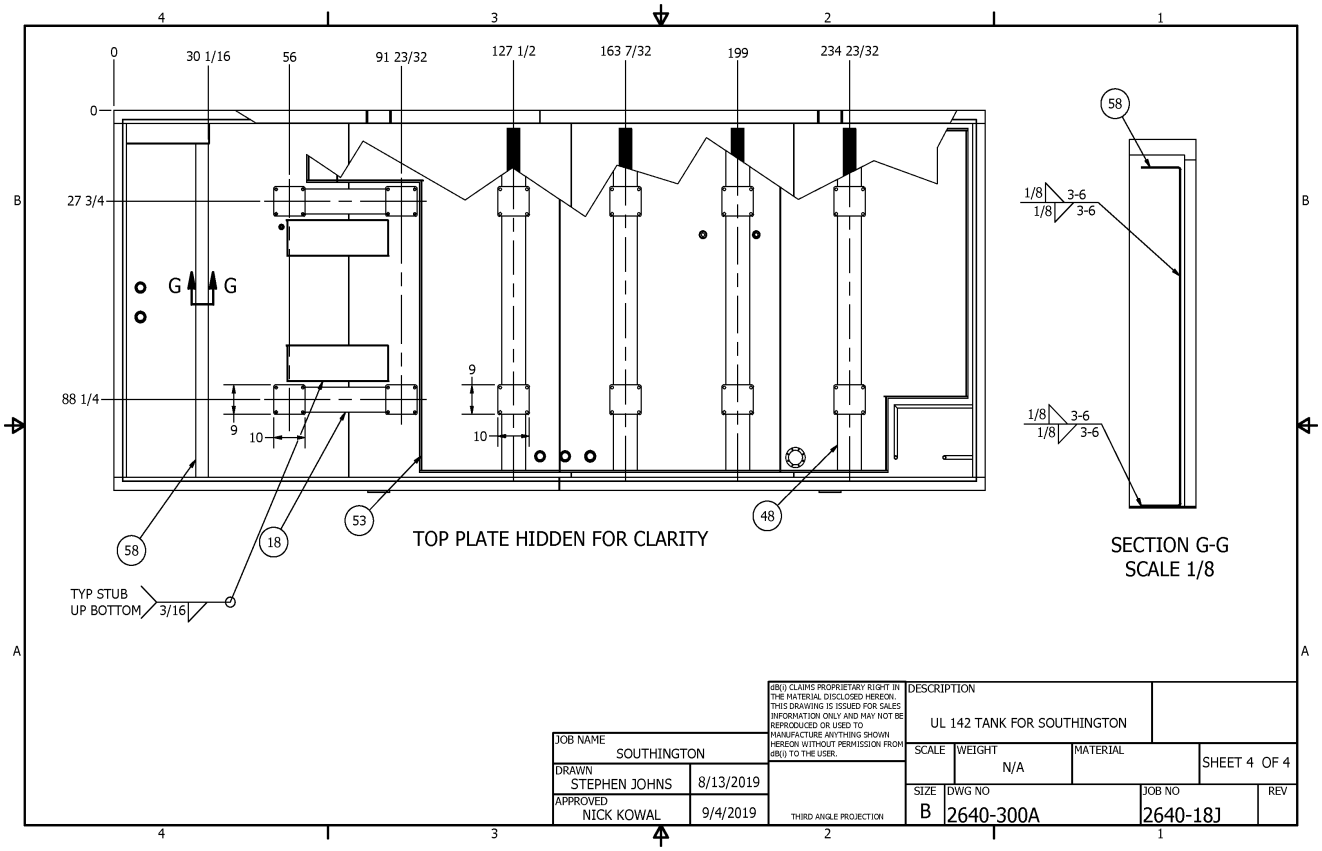
C192168612


2 3/4
278
116
34
SECTION E-E
SCALE 1 / 40
dB(i) CLAIMS PROPRIETARY RIGHT IN THE MATERIAL DISCLOSED HEREON. THIS DRAWING IS ISSUED FOR SALES INFORMATION ONLY AND MAY NOT BE REPRODUCED OR USED TO MANUFACTURE ANYTHING SHOWN HEREON WITHOUT PERMISSION FROM dB(i) TO THE USER.
JOB NAME SOUTHINGTON
DRAWN STEPHEN JOHNS 8/13/2019
APPROVED NICK KOWAL 9/4/2019
THIRD ANGLE PROJECTION
DESCRIPTION UL 142 TANK FOR SOUTHINGTON
SCALE
WEIGHT N/A
MATERIAL
SHEET 2 OF 4
SIZE B
DWG NO 2640-300A
JOB NO 2640-18J
REV

C192168612


SIDE WALLS TO TOP OF TANK 3/16
1/8
96
101 3/4
144
205
265
0
8 1/2
53 1/2
98 1/2
136
152
188
217 1/2
249 1/2
0
8 1/2
11 1/2
35 1/2
37 7/8
54
63
105 1/2
105 7/8
F
F
TYP ALL FITTINGS ON TOP OF TANK 3/16
19
1/8 3-6
1/8 3-6
3/16 2-6
3/16 2-6
66
47
SECTION F-F
SCALE 1/10
TYP ALL SLOTS IN TOP OF TANK 3/8 3
DO NOT WELD
1/8 UPSTAND WELD
TYP ALL ISOLATOR PADS 3/16 2-6
TYP ALL SEAMS IN TOP OF TANK. STOP BACKING PLATE AT EDGE OF INNER TANK
3/16
WELD ISOLATOR STUDS IN BEFORE WELDING PAD TO TOP OF TANK
TYP ALL STUB UP TOPS 3/16
dB(i) CLAIMS PROPRIETARY RIGHT IN THE MATERIAL DISCLOSED HEREON. THIS DRAWING IS ISSUED FOR SALES INFORMATION ONLY AND MAY NOT BE REPRODUCED OR USED TO MANUFACTURE ANYTHING SHOWN HEREON WITHOUT PERMISSION FROM dB(i) TO THE USER.
DESCRIPTION
UL 142 TANK FOR SOUTHINGTON
JOB NAME
SOUTHINGTON
DRAWN
STEPHEN JOHNS
8/13/2019
APPROVED
NICK KOWAL
9/4/2019
THIRD ANGLE PROJECTION
SCALE
WEIGHT
N/A
MATERIAL
SHEET 3 OF 4
SIZE
B
DWG NO
2640-300A
JOB NO
2640-18J
REV

C192168612



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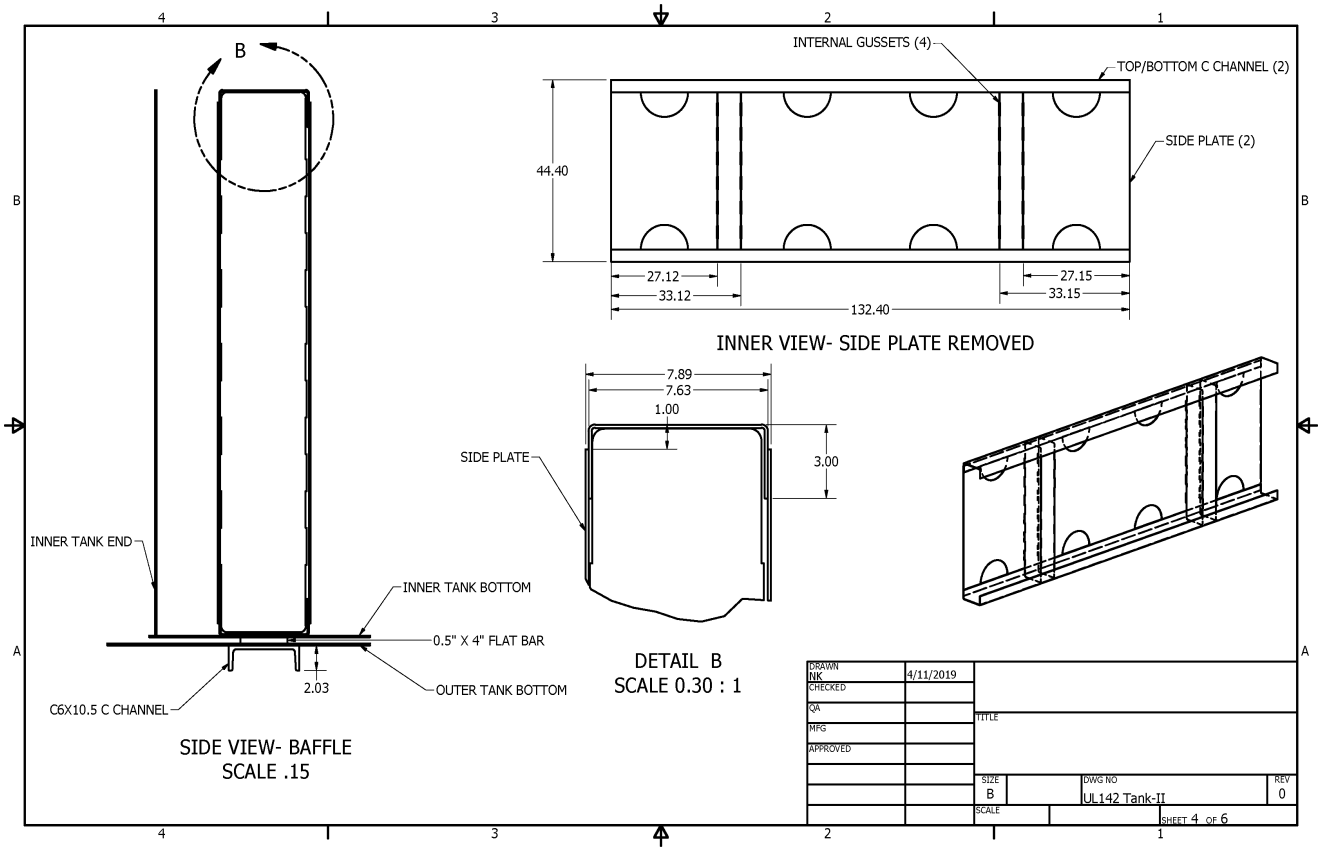
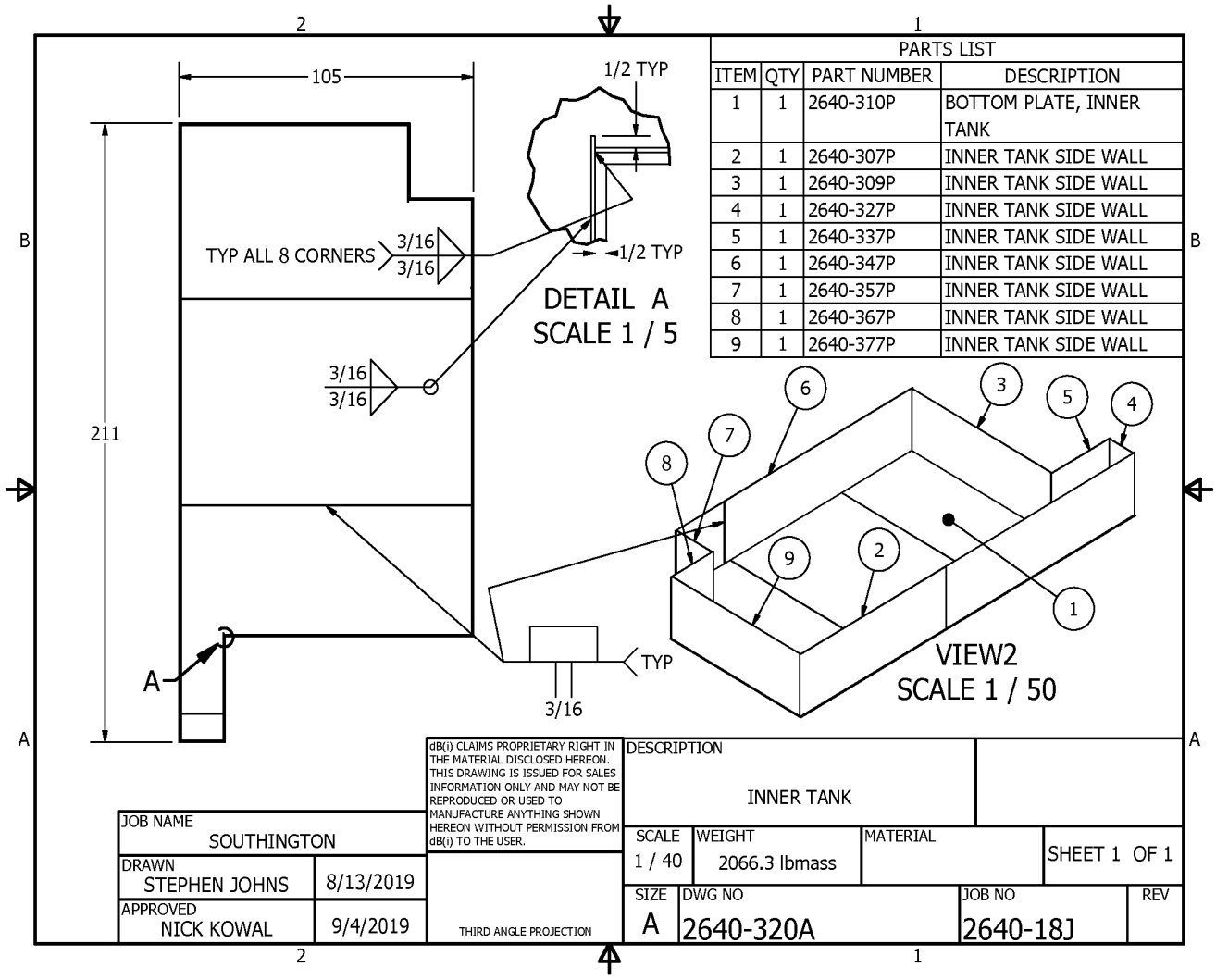

B
INTERNAL GUSSETS (4)
TOP/BOTTOM C CHANNEL (2)
SIDE PLATE (2)
44.40
27.12
33.12
27.15
33.15
132.40
INNER VIEW- SIDE PLATE REMOVED
7.89
7.63
1.00
3.00
SIDE PLATE
INNER TANK END
INNER TANK BOTTOM
0.5" X 4" FLAT BAR
2.03
OUTER TANK BOTTOM
C6X10.5 C CHANNEL
SIDE VIEW- BAFFLE
SCALE .15
DETAIL B
SCALE 0.30 : 1
DRAWN NK 4/11/2019
CHECKED
QA
MFG
APPROVED
TITLE
SIZE B
DWG NO UL142 Tank-II
REV 0
SCALE
SHEET 4 OF 6

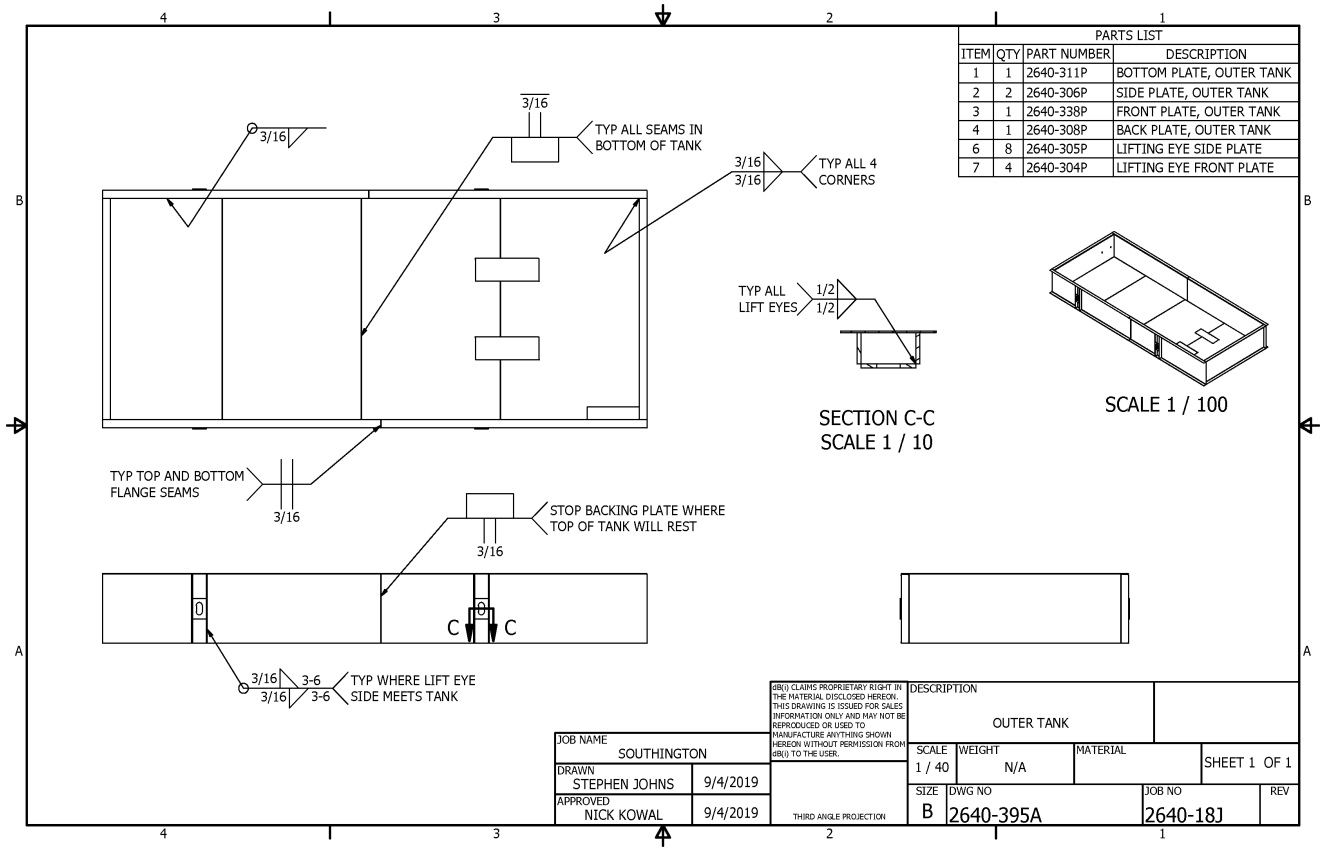


PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2640-310P	BOTTOM PLATE, INNER TANK
2	1	2640-307P	INNER TANK SIDE WALL
3	1	2640-309P	INNER TANK SIDE WALL
4	1	2640-327P	INNER TANK SIDE WALL
5	1	2640-337P	INNER TANK SIDE WALL
6	1	2640-347P	INNER TANK SIDE WALL
7	1	2640-357P	INNER TANK SIDE WALL
8	1	2640-367P	INNER TANK SIDE WALL
9	1	2640-377P	INNER TANK SIDE WALL

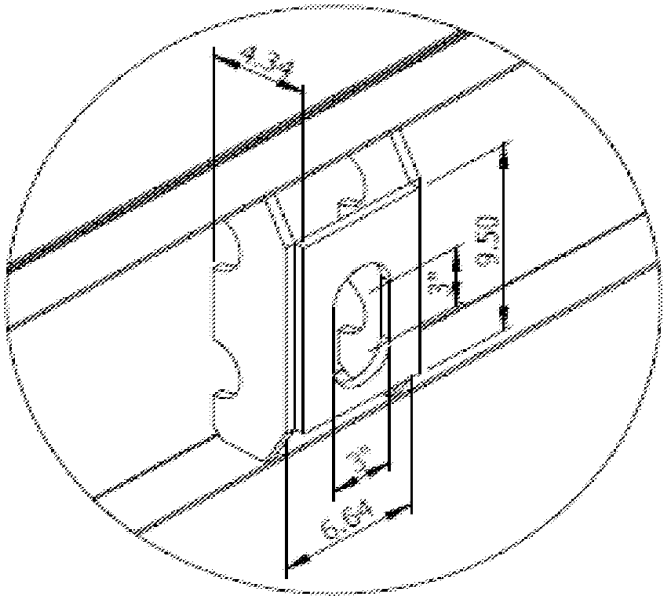
JOB NAME	SOUTHINGTON		
DRAWN	STEPHEN JOHNS	8/13/2019	
APPROVED	NICK KOWAL	9/4/2019	
THIRD ANGLE PROJECTION			

DESCRIPTION	INNER TANK		
SCALE	WEIGHT	MATERIAL	SHEET 1 OF 1
1 / 40	2066.3 lbmass		
SIZE	DWG NO	JOB NO	REV
A	2640-320A	2640-18J	

C192168613


PARTS LIST
ITEM QTY PART NUMBER DESCRIPTION
1 1 2640-311P BOTTOM PLATE, OUTER TANK
2 2 2640-306P SIDE PLATE, OUTER TANK
3 1 2640-338P FRONT PLATE, OUTER TANK
4 1 2640-308P BACK PLATE, OUTER TANK
6 8 2640-305P LIFTING EYE SIDE PLATE
7 4 2640-304P LIFTING EYE FRONT PLATE
3/16
TYP ALL SEAMS IN BOTTOM OF TANK
3/16
3/16
TYP ALL 4 CORNERS
TYP ALL LIFT EYES
1/2
1/2
SECTION C-C
SCALE 1 / 10
SCALE 1 / 100
TYP TOP AND BOTTOM FLANGE SEAMS
3/16
STOP BACKING PLATE WHERE TOP OF TANK WILL REST
3/16
C C
3/16
3/16
3-6
3-6
TYP WHERE LIFT EYE SIDE MEETS TANK
dB(i) CLAIMS PROPRIETARY RIGHT IN THE MATERIAL DISCLOSED HEREON. THIS DRAWING IS ISSUED FOR SALES INFORMATION ONLY AND MAY NOT BE REPRODUCED OR USED TO MANUFACTURE ANYTHING SHOWN HEREON WITHOUT PERMISSION FROM dB(i) TO THE USER.
DESCRIPTION
OUTER TANK
JOB NAME
SOUTHINGTON
DRAWN
STEPHEN JOHNS
9/4/2019
APPROVED
NICK KOWAL
9/4/2019
THIRD ANGLE PROJECTION
SCALE
1 / 40
WEIGHT
N/A
MATERIAL
SHEET 1 OF 1
SIZE
B
DWG NO
2640-395A
JOB NO
2640-18J
REV

C192168614


4.34
9.58
6.64

TEST RECORD NO. 1

SAMPLES:

A sample of the secondary containment generator base tank constructed as described herein, was submitted by the manufacturer for examination and test.

GENERAL:

Test results relate only to the items tested.

The following tests were conducted.

Tank Leakage Test
Hydrostatic Strength Test
Top Load Test
Lift Lug Test (by calculations)
Generator Load Test

The sample tested had the maximum width and height, and the length of the flat side of the sample twice that of the width. Therefore testing of longer tanks of the same height and width or less was not necessary.

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in UL 142A, Standard for Special Purpose Aboveground Tank for Specific Flammable or Combustible Liquids, 1st Edition dated May 25, 2018.

Test Record Summary:

The results of this investigation indicate that the products evaluated comply with the applicable requirements and, therefore, such products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report.

CONCLUSION

A sample of the product covered by this Report has been found to comply with the requirements covering the category and the product is found to comply with UL's applicable requirements. The description and test result in this Report are only applicable to the sample investigated by UL and does not signify UL certification or that the product(s) described are covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the Certification Mark of UL on such products which comply with UL's Follow-Up Service Procedure and any other applicable requirements of UL LLC. The Certification Mark of UL on the product, or the UL symbol on the product and the Certification Mark of UL on the smallest unit container in which the product is packaged, is the only method to identify products investigated by UL to published requirements and manufactured under UL's Listing and Follow-Up Service.

Report by: Reviewed by:

Adrian Liu
Project Engineer

Tim Crews
Staff Engineer