

TANK 13

API 653 OUT-OF-SERVICE INSPECTION AND SUITABILITY FOR SERVICE EVALUATION FINAL PRE-REPAIR REPORT (FOUO)

Joint Base Pearl Harbor-Hickam, HI (JBPHH)

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Prepared For:



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SUITABILITY FOR SERVICE TESTAMENT TANK 13

Enterprise Engineering, Inc. (EEI) completed a comprehensive, out-of-service internal integrity inspection and suitability for service evaluation of Tank 13 at the Red Hill Fuel Storage Facility, NAVSUP FLC, Pearl Harbor, HI. The inspection was performed October 2017 – March 2018. The inspection was performed in accordance with the applicable criteria of API Standard 653, UFC 3-460-01, UFC 3-460-03, and the Statement of Work following the project's approved Inspection and Testing Plan.

The EEI inspection and evaluation found conditions that affect the hydraulic integrity of the tank. These conditions must be addressed prior to returning the tank to service.

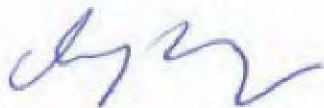
This report provides inspection findings, tank suitability for service evaluation, conclusions, and recommendations for repair. Recommendations for continued long-term service are also provided.

EEI recommends the next internal out-of-service inspection be scheduled no later than March 2038 (20 years from 2018 inspection), or sooner if a change in condition has occurred.

In accordance with API Standard 653, this report satisfies the requirement for an out-of-service, integrity inspection and as such, should remain available as a historical record for future reference.

I hereby acknowledge that being familiar with the provisions of API Standard 653, the inspection and evaluation was performed in accordance with the provisions of API Standard 653 and good engineering practices, and with the exercise of usual and customary care.

This tank inspection has determined that mandatory repairs are required prior to return to service. Tank 13 may not be returned to service at this time. Recommended repairs have been identified, and if possible, should also be completed before returning the tank to service.



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5/21/2020

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TANK 13
API 653 TANK INSPECTION
SUITABILITY FOR SERVICE EVALUATION
RED HILL FUEL STORAGE FACILITY, NAVSUP FLC,
JOINT BASE PEARL HARBOR-HICKAM, HI (JBPHH)

1.0 SUMMARY

Enterprise Engineering, Inc. (EEI) has completed a comprehensive, out-of-service internal integrity inspection and suitability for service evaluation of Tank 13 at Red Hill Fuel Storage Facility, Naval Supply (NAVSUP) Fleet Logistics Center (FLC) Pearl Harbor, Hawaii under contract to APTIM. The inspection was performed between October 2017 and March 2018. The inspection was performed in accordance with the applicable criteria of API Standard 653, UFC 3-460-01, UFC 3-460-03, and the Statement of Work following the project approved Inspection and Testing Plan.

Tank 13 is a mined underground storage tank consisting of an upper dome, expansion joint, barrel, and lower dome. The tank was constructed between 1940-1943. The tank is built with reinforced concrete and has a welded steel liner. As the reinforced concrete shell provides tank structural integrity and the steel plates serve as a shell liner, the entire tank (upper dome, barrel, lower dome) follows the requirements of API 653 for tank floors. Tank 13 is 100 feet in diameter, has an overall height of 250 feet, and has a nominal capacity of 300,000 bbl.

The accessible surfaces of the tank steel liner and plate butt welds were inspected by TesTex, Inc. (TesTex) using Low Frequency Electromagnetic (LFET) (liner plates), ultrasonic testing (UT) and Balanced Field Electromagnetic (BFET) (welds) testing methods. The findings from the initial TesTex scanning were further evaluated (flaw characterization) by EEI through visual (VT), magnetic particle (MT), and phased array ultrasonic (PAUT) inspection techniques. In addition, EEI performed 100% visual inspection on all accessible tank shell liner plates and welds to confirm findings and identify additional discontinuities.

Common weld discontinuities that were identified included: porosity, undercut, lack of fusion, and incomplete fill. The majority of weld defects are located in the upper dome and extension ring plates and are components of the original construction. The upper dome inspection also identified several dent and gouge defects that require repair. These dent/gouge types of defects are presumed to be from contact of the boom end or other machinery within the tank shell.

Backside corrosion appears to be present within Tank 13. Defects were found in the upper dome, extension ring, and barrel courses. Several large repair patch plates are required to remediate the affected areas in the Upper Dome Course A, extension ring, and barrel of the tank. Repairs for each defect were determined during inspection of the tank. The repairs fall under two categories: Weld Repair or Patch Plate. Weld repairs will include grinding of the existing weld until the defect is no longer present and then rewelding of the area to meet weld profile and penetration criteria. Patch plates are generally designed per API 653 requirements (with some clearance exceptions) and will be fillet welded to the existing tank liner.

Predicted repairs were construction estimates that were established before inspection so some repair scope could be quantified in the contract. Six-inch patch plates and weld repair by linear feet were estimated and budgeted. Predictive repair quantity was originally two hundred (200) 6-inch patch plates for general

repair (backside corrosion, dent, gouges). After inspection, the 200 general repair 6-inch patch plate locations were reduced to 101. In addition to the predictive repairs, tank inspection identified areas requiring patch plate repair that varied in size depending on the repair. Patch plates are categorized by size; 6-inch diameter, less than 2 square feet, and greater than 2 square feet. Welded pipe caps are utilized when protruding features attached to the tank make it impossible to install a patch plate. Repairs to existing welds were also identified. Weld repairs are quantified by location and linear feet of required repair.

The following table provides an overall repair summary. See Attachment F for a full breakdown of repair quantities and locations.

Table 1-1 Shell Repair Requirements Summary						
Repair Type	Number of 6-inch Diameter Plate	Number of Patch Plates <= 2 sq. ft.	Number of Patch Plates > 2 sq. ft.	Weld Repair Linear Feet	Weld Repair Quantity	Pipe Cap
Weld Repair				1498	2412	0
Patch Plate Repairs	101	190	75	0	0	0
Pipe Cap Repairs						1

Three nozzles (32-inch and 18-inch product lines and 8-inch drain line) on Tank 13 were strength and leak-tested to 160-170 psig with water. All lines passed the strength and leak testing. A full visual inspection was performed on the 32-inch nozzle (man entry). The visual examinations performed on the 32-inch issue/receipt line revealed that the line will require some weld repairs to the internal welds but that pipe wall thickness was measured and found acceptable for the entire length of the pipe (indicates no backside corrosion). A pipe visual inspection camera was used to exam the 18-inch issue/receipt line. The camera examination of the 18-inch piping did not reveal any visible weld issues; however, camera evaluation does not provide the same visual inspection capability that man entry into pipe provides. For both the 18-inch and 8-inch pipes, pipe wall thickness can only be verified at the accessible ends of the pipes which limits the information on possible backside corrosion. Based on limited camera examination capabilities and the inability to obtain pipe wall thickness reading for the entire lengths of the 18-inch and 8-inch drain lines, EEI recommends utilizing the 18-inch pipe as a carrier for new sample and drain lines. This recommendation will add secondary containment capability for the sample and drain lines which will improve overall tank integrity.

Additional mandatory repairs are described later in this report. Based on the findings during the inspection, repairs are required before returning Tank 13 to service.

2.0 INSPECTION ASSESSMENT

A comprehensive table identifying tank features with findings and conclusions as appropriate is included as Attachment F. The Attachments also contain several tables with full reporting of data obtained. The following discussion only addresses key integrity issues.

The tank inspection revealed that mandatory repairs are required to return the tank to service. Mandatory repairs are considered actions necessary to preserve or restore the structural and hydraulic integrity of the tank. This includes any condition which has or may breach the hydraulic or structural integrity of the tank prior to the next integrity inspection.

Hydraulic Integrity

Hydraulic integrity is the ability of the tank to hold product (until the next inspection) without compromise to the boundaries of the floor, shell, dome, and piping to the first valve outside of the tank. Primarily, the identified areas within the tank that affect the hydraulic integrity of the tank include the following:

- Backside corrosion over localized areas of the tank shell and upper dome
- Multiple rounded or linear weld defects which could be less than recommended repair thickness
- The condition of the circumferential welds on the 32-inch product line

Structural Integrity

Structural integrity is the capability of the tank to remain freestanding, with or without product, under the conditions of its design basis. Structural attributes include the floor, shell, upper dome, and their attachments.

Inspection of the tank shell, bottom dome and floor, and the upper dome found no indications of damaged or deteriorated base structure of the tank. There were no other relevant indications in the shell areas which may have indicated that there was an underlying structural issue with the tank.

A full tower inspection was performed by APTIM and Hawaii Engineering Group (HEG). The inspection determined that the tower structure was suitable for continued service under the intended operating conditions once minor repairs were completed. Minor repairs included replacing missing damaged nuts and bolts, tightening loose nuts, and repairing gusset plates at Elevation 225. See Tower Structural Report Attachment J.

Next Inspection

Based upon API-653 criteria, upon successful completion of mandatory repairs, Tank 13 must receive its next internal out of service inspection in March 2038. The current tank liner corrosion assessment identified repairs that will result in a remaining metal thickness equal to or greater than 100 mil (one mil is one-thousandth of an inch) at the next inspection. The 20-year interval is based on the date of the most recent corrosion scan, and not return to service date.

3.0 INSPECTION METHODOLOGY

API 653 inspection criteria was followed in terms of procedure and evaluation to the greatest extent possible. Tank inspection included assessment of the upper dome, extension ring, under catwalk, entire course shells (barrel section), lower dome, floor appurtenances, access ways, and vents. All accessible interior surfaces of the upper and lower domes, floor, shell, and all welds were examined by one or more nondestructive testing (NDT) methods. NDT methods included:

- Electromagnetic Testing methods:
 - Low Frequency Electromagnetic Testing (LFET) (utilized on liner plate surfaces)
 - Balanced Field Electromagnetic Testing (BFET) (utilized on liner plate welds)
- Ultrasonic Testing methods:
 - Straight-beam, Longitudinal Wave, Pulse Echo Method (UT)
 - Phased Array Ultrasonic Testing (PAUT)
- Visual Testing (VT)
- Magnetic Particle Testing (MT)

TesTex Scanning

Initial inspection of Tank 13 was performed by TesTex. The inspection can be broken down into three parts:

- Scanning 100% of accessible shell plates utilizing LFET technology
- Scanning 100% of accessible welds using BFET technology
- Visual inspection of accessible shell plates and welds

LFET was used to detect discontinuities caused by backside corrosion. While scanning the shell plates, technicians marked locations of discontinuities found using LFET. They then used UT to determine remaining wall thickness in the area. The threshold for remaining wall thickness was set as 200 mil and less.

BFET was used to detect surface and near surface discontinuities in the liner plate welds.

VT was performed to detect discontinuities in liner plate surfaces and welds. Discontinuities detected by VT were evaluated as: porosity, undercut, lack-of-fusion, incomplete fill, dents, gouges, and bulges.

All relevant indications observed by TesTex were documented and provided to EEI for further investigation. Relevant indications were assigned unique identifiers for tracking purposes.

TesTex Personnel Qualifications

TesTex technicians performed a “blind” test consistent with API 653 Annex G requirements using the LFET equipment. Each technician scanned coated and uncoated test plates containing known defects. Discontinuity location was recorded and flaw characterization using UT was performed. All technicians passed the tests given to them. Test results are provided in Attachment H of this report.

EEI Prove-up (Flaw Characterization)

EEI provided an API inspector during the Tank 13 inspection phase. During this time, the inspector reviewed all data provided by TesTex and performed a full visual inspection of 100% of the accessible tank shell plates and welds. Flaw characterization was performed to verify size, shape, location, and to verify interpretation (relevant, nonrelevant, or false) of each reported relevant indication. Repair recommendations were made when discontinuities were evaluated as defects.

For relevant indications associated with backside corrosion, flaw characterization was performed with PAUT. The PAUT transducers utilized were specifically designed to examine backside surfaces for corrosion damage. The areas of concern were scanned to determine the remaining wall thickness. Repairs were recommended for any area thinner than the repair threshold of 160 mil.

In areas where repairs were recommended due to backside corrosion, the surrounding areas of liner plate were also scanned to verify the area identified was correct and to determine the size of patch plate. Patch plates were designed to cover the entire defect as well as meet API 653 criteria for weld clearances and intersection requirements.

Discontinuities in welds identified by BFET were reported by TesTex and were inspected by EEI with MT to verify the extent of the discontinuity. During follow up investigations it was found that many of the discontinuities reported could be detected using VT. If the discontinuity was found visually and could be evaluated, no further inspection was performed. Weld repairs were designed and recorded for discontinuities evaluated as defects.

For all instances of backside corrosion, repairs were determined based on the repair threshold for remaining wall thickness. Many other repair recommendations were based on this same criterion, however, in some cases, exceptions occurred as described below.

Porosity and Undercut: Repairs were recommended for discontinuities where the bottom of the discontinuity was visually obscured or otherwise unable to be characterized. Areas lacking coating or where coating was present but damaged (peeling, blistering, or not tightly adhered) were also recommended for repair. Further discussion of discontinuities caused by rounded indications and acceptance criteria are provided in Attachment C.

Dents and Bulges: Repairs were recommended for discontinuities caused by sharp profile changes or creases that create a point of stress concentration. Repairs were not recommended for shallow, smooth profile discontinuities. The bulges reported by TesTex were found to have smooth transitions across the shell liner plate welds, were distributed uniformly around the tank, and presented with similar appearance (size and shape) in each shell course. It is thought that these features are artifacts of the original construction process.

Weld Defects: Both full penetration butt welds and fillet welds were evaluated. Common weld discontinuities that were identified in both types of welds included: porosity, undercut, lack of fusion, and incomplete fill. Discontinuity depth was evaluated where possible, that is, where the configuration of the defect or presence of coating did not significantly obscure the measurement. The criteria used to evaluate liner thickness was based on remaining thickness of the liner plate, as outlined in Attachment C. Locations called out for repair having porosity, incomplete fill, undercut, and other damage related to plate thickness did not meet the remaining thickness requirements for the required service interval.

In addition to the discontinuities reported by TesTex, EEI found defects based on the criteria and methods mentioned above. All relevant indication data (by both TesTex and EEI) were recorded for each plate and

given a unique identifier locating the area relative to the lower left corner of the plate. A table of relevant indications and resulting defects is provided in Attachment F.

API 653 Inspection

EEI performed an API 653 out-of-service inspection of Tank 13 in terms of procedure and evaluation to the greatest extent possible. Since this tank is unusual and not an API designed tank, the API 653 checklist was used to the extent of relevant content. The checklist is provided in Attachment A.

The nozzles at the bottom of the tank and top of the tank were visually inspected. One of the critical items inspected was the 24-inch vent line. This line connects the top of the tank with the vent system in the upper tunnel. Visual inspection of the inside of the pipe at the top and bottom were performed. Access to the majority of the vent line was limited because the line is encased in concrete which limits visual inspection. To alleviate this, an inspection of the vent line utilizing a motorized crawling camera was performed. Multiple holes and corrosion areas were identified on the vent line. Repair or replacement of the line is recommended. A Vent Inspection Report is provided in Attachment I.

Visual inspection of the large bore 32-inch line was performed by physically crawling into the pipe to ensure all internal pitting and weld quality was inspected. The 18-inch and 8-inch lines were remotely inspected using a camera inspection unit to determine the condition of the lines. Where possible, video and photo records of this inspection were made.

APTIM performed a hydrostatic strength test of the three tank nozzles. A subcontractor, Vista, provided precision leak testing using a third-party certified procedure to test each of the lines from the tank. A Test Report is included as Attachment K. All three lines passed the strength and leak tests at 160-170 psig. EEI provided quality assurance (QA) of the process.

4.0 INSPECTION FINDINGS

All instances of discontinuities resulting in relevant indications and recommended repairs that were reported during the inspection phase are provided in Attachment F.

Tank Nozzles

EEI has adopted the following numbering scheme for the purposes of locating pipe welds: girth weld numbering referenced in the following discussion starts at first flange outside the tank and increases toward the tank. Clock positions place 12 o'clock at the top of the pipe and 3 o'clock 90 degrees to the right when facing toward the tank.

32-inch Line

The 32-inch line was inspected by accessing the pipe from the lower tunnel side and performing a full visual inspection. Distances to welds were measured from the first flange outside the tank in the lower tunnel. Some welds were performed from the inside of the pipe and some from the outside during original construction. The line is currently buried in concrete and can only be inspected from the inside. Visual inspection showed that Welds C1, C2, C3, C5, and C7 are in acceptable condition, whereas Welds C4 and C6 require repairs:

- Weld C4 (419 inches from entrance) was welded from the outside. From the inside, there are two locations exhibiting lack of penetration at the weld root, one at 7:00 165 mil deep requiring a minimum of 5 inches of circumferential weld repair, and one at 11:00 150 mil deep requiring a minimum of 8 inches of circumferential weld repair.
- Weld C6 (540 inches from entrance) was welded from the outside, and there is one instance of lack of penetration of the weld root at 7:00 130 mil deep requiring a minimum of 4 inches of circumferential weld repair.

Lack of penetration of the weld root is problematic because the remaining thickness of the weld cannot be accurately determined. In addition, the resulting gap in the weld joint is an area where debris is likely to collect and water can be trapped. This may result in accelerated product-side corrosion in the pipe. Repairs may be performed from inside the pipe. Nominal ultrasonic thickness measurements of the pipe wall were 410 mil for the entire length of the pipe indicating no or limited backside corrosion.

Overall, the interior surface of the pipe was in good condition; however, coating the pipe to protect the metal from product side corrosion is recommended. The entire interior of the 32-inch line should be coated at the same time and using the same material as the lower dome.

18-inch Line

The 18-inch piping was inspected using remote video pipe inspection camera to examine the pipe condition. Distances to welds were measured from the first flange outside the tank in the lower tunnel. Minor misalignment of the pipe was observed at the C1 weld (18 inches in from the flange). A vertical dent was detected near the C5 weld (711 inches from the flange). This dent appeared to be smooth and rounded and, given the constrained condition, does not affect the integrity of the pipe. General corrosion with no scaling is also present on the inside of this line. Access limitations prevent thickness measurement along the entire length, and man entry for visual weld inspection is not possible. UT readings for pipe could only be taken from the nozzle inside of the tank and from the 12-inch flange from the tunnel. Nominal pipe wall thickness in the areas measured was 375 mil. EEI recommends taking this

line out of service because there is limited remaining pipe wall thickness data to determine the remaining life of the piping or determine if backside corrosion is present.

8-inch Drain Line

The 8-inch piping inspection was limited because access is only available from the tunnel. There is a welded plate with two 1-inch thread-o-let penetrations from the tank interior. Access limitations prevent thickness measurement along the entire length, and man entry for visual weld inspection is not possible. UT readings for pipe could only be taken from the 8-inch flange from the tunnel. Nominal pipe thickness is 280 mil. EEI recommends taking this line out of service because there is limited remaining pipe wall thickness data to determine the remaining life of the piping or determine if backside corrosion is present.

Tank Interior

Evaluating the hydraulic barrier of a Red Hill tank requires understanding of how the tank shell was constructed. All plates were butt welded with either a flat backing bar or a reinforcing angle behind the weld. There are three distinct areas of the tank shell: Upper Dome, Barrel (includes extension ring), and the Lower Dome. In the Upper Dome, a full penetration butt weld was performed from outside the tank with backing bars inside the tank. The backing bars were subsequently fillet welded to the liner plates. While the full penetration butt weld would normally represent the hydraulic boundary of the liner, this weld can't be evaluated from inside the tank. For this reason, the fillet weld joining the backing bars to the liner plates was evaluated as if it were a hydraulic boundary. This approach is conservative in that a breach in the fillet weld does not necessarily confirm a path through the liner of the tank.

In the barrel and lower dome, full penetration butt welds were performed from inside the tank and a reinforcing angle was used as a backer bar. As these welds can be inspected from inside the tank, evaluating these butt welds as a hydraulic boundary is standard practice.

Table 4-1 Tank Repairs by Area Summary

Category	Basis for Percentage (Tank or Region)		Lower Dome	Barrel	Extension Ring	Upper Dome
	Tank	Region				
Percent of total relevant indications reported for assessment in Tank 13	X		2%	46%	13%	39%
Percent of relevant indications that required repair (defects)		X	31%	39%	53%	68%
Percent of the total repairs recommended in Tank 13	X		1%	35%	13%	51%
Percent of repairs due to backside corrosion in given area (lower dome, extension ring, upper dome or barrel)		X	0%	10%	54%	6%

Lower Dome

Tank 13 lower dome was inspected using LFET, BFET, and visual techniques. Inspection of the lower dome identified 2% of the relevant indications in the tank. Flaw characterization resulted in 31% of the relevant indications meeting repair criteria (defects), accounting for 1% of the total repair recommendations in the tank. No defects due to backside corrosion were found in the lower dome. See Attachment F for repair quantities in lower dome.

Barrel

Tank 13 barrel was inspected using LFET, BFET, and visual techniques. Inspection of the barrel plates identified 46% of the relevant indications in the tank. Flaw characterization resulted in 39% of the relevant indications meeting repair criteria (defects), accounting for 35% of all repair recommendations in the tank. Approximately 10% of repair recommendations are defects caused by backside corrosion. See Attachment F for repair quantities in barrel.

Extension Ring

Tank 13 extension ring was inspected using LFET, BFET, and visual techniques. Inspection of the extension ring identified 13% of the relevant indications in the tank. Flaw characterization resulted in 53% of the relevant indications requiring repair (defects), accounting for 13% of all repair recommendations in the tank. Approximately 54% of repair recommendations are defects caused by backside corrosion. See Attachment F for repair quantities in extension ring.

Upper Dome

Tank 13 upper dome was inspected using LFET, BFET, and visual techniques. Inspection of the upper dome identified 39% of the relevant indications in the tank. Flaw characterization resulted in 68% of these relevant indications requiring repair (defects), accounting for 51% of the repair recommendations in the tank. Approximately 6% of repair recommendations are defects caused by backside corrosion. See Attachment F for repair quantities in upper dome.

Vent Line

Preliminary inspection of the exposed portion of the 24-inch spiral welded vent line found it to be in acceptable condition. However, complete inspection utilizing a motorized camera found the line to be in poor condition. Results from the internal inspection of Tank 13's vent line can be found in Attachment I.

5.0 REPAIR ITEMS

Based upon the API field inspection, engineering judgment, and knowledge of funding practices, recommendations developed are listed below in the following tables as required (mandatory), recommended (non-mandatory), and recommended for long term serviceability. Refer to Attachment B, “Assessment of Compliance with Military Criteria” for comprehensive comments and recommendations of the tanks’ compliance with military criteria.

Standard of Care

All repairs must meet the requirements of API 650 and API 653 regarding material, welding procedures, and qualification of welders, non-destructive examination (NDE) of welding and testing requirements. Obtaining hot work permits and developing the appropriate hot work procedure for the tank floor is the responsibility of the repair contractor and must consider the tank has been in petroleum fuel service.

Mandatory Repairs

Table 5-1 Required Repairs (Mandatory)		
Findings	Repair	Photo
Mandatory repairs are repairs that are critical to the hydraulic and structural integrity of the tank and require repair prior to returning the tank to service.		
1. Defects found requiring patch plate repairs are: - Backside Corrosion - Dents - Other shell topside defects that were too large to repair with a weld repair	1. Provide patch plate repairs. Plate size, location in tank, and overall quantities can be found in Attachment F. 2. Provide pipe caps to cover protruding features that cannot be covered with a flat patch plate. Cap size, location in tank, and overall quantities can be found in Attachment F.	
2. Defects found requiring weld repairs are: - BFET (Weld) Indications - Porosity/Rounded defects - Lack of Fusion - Insufficient Fill - Gouges - Undercut - Other shell topside defects	Provide weld to repair defects. Weld length, location in tank, and overall quantities can be found in Attachment F.	

Table 5-1 Required Repairs (Mandatory)

Findings	Repair	Photo
		
3. The existing 2-inch condensate line is sealed with a threaded cap.	Cut off existing pipe flush with tank floor and seal weld plate over the opening with an 8-inch patch plate. Thickness of the patch plate will be determined in the engineering design.	
4. The 32-inch tank product lines (nozzle) contain weld defects.	32-inch line: Provide a minimum of 17 inches of circumferential weld to repair the existing weld root-side defects.	

Table 5-1 Required Repairs (Mandatory)

Findings	Repair	Photo
		
5. Unused stilling well/gauge tube is welded to the floor.	Remove unused gauge tube at the floor and install a 6-inch patch plate. The remainder of the gauge tube is well supported on the center tower.	

Non-Mandatory Repairs

Table 5-2 Non-Mandatory Repairs		
Findings	Repair	Photo
The repairs listed below are not mandatory per API 653 or for structural and hydraulic integrity of the tank but should be performed if approved by the Government for the long-term preservation and integrity of the tank.		
1. The inside of the 32-inch line is not currently coated.	Once the 32-inch line is repaired, coat the inside of the line with a Polysulfide modified Epoxy Novolac coating system. By doing so the line will be subject to less corrosion potential.	
2. The 18-inch tank product line passed strength and leak tightness tests, but the pipe wall thickness could not be evaluated for the entire pipe length. Welds could only be examined using a camera.	Take 18-inch line out of service and use as carrier pipe for drain line and sample lines. Modify piping in lower tunnel to reconnect tank to tunnel 18-inch line. This recommendation to remove 18-inch from active service was not made due to inadequate hydraulic or structural integrity but based on an abundance of caution to elevate the standard of care.	
3. The 8-inch tank drain line passed strength and leak tightness tests, but pipe wall thickness could not be evaluated for the entire pipe length. Welds could only be examined using a camera.	Provide cover plate in tank and replace drain line. This recommendation to remove 8-inch from active service was not made due to inadequate hydraulic or structural integrity but based on an abundance of caution to elevate the standard of care.	
4. The existing Vent line contains multiple defects such as large dents, multiple holes in gunite encased steel liner, corroded welds on the spiral welds.	The vent line should be replaced in its entirety. See Attachment I.	

Predictive Repairs

The SOW lists predictive repairs for Tank 13. The following table includes the predictive repairs listed in the government's SOW and identifies whether the repairs are valid or are not needed in our opinion. In addition to the list below, the Basis of Design will be updated during design and include notations or exceptions to the published specifications.

Table 5-3 Tank 13 SOW Repairs		
Item	SOW Description	EEL Finding/Comment
1.	Reference: Part 3 ¶B201009 Exterior Piping: Remove corrosion and coating on all exterior carbon steel issue, receipt, and drain piping within the tunnel, between the tank and skin valves, and recoat per Section 09 97 13.27. Coat isolation valves and repair coating damaged during installation per Section 09 97 13.27. Touch Up: Repair localized areas of failed and damaged coatings on the exterior of the manway in the upper tunnel. Markings: Identify all piping by marking in accordance with MIL-STD-161H (Identification of Piping Systems) per RFI-TO 004-002 and RFI TO 005-004.	EEL concurs with the repair. However, EEL recommends use of Sherwin Williams Macropoxy 646 fast cure epoxy system, a recognized industrial coating repair product.
2.	Reference: ¶C3040 Shell and Floor Coating: After completion of inspection, repairs, and re-inspection of repairs, remove the existing coating and any corrosion within the lower dome, and the barrel extending up 40 inches from the spring line, and recoat per Section 09 97 13.15. Include prep and coating of piping and structural steel within the same elevation.	EEL concurs with the repair.
3.	Reference: ¶G306001 first paragraph. Inspect all fuel piping systems between the tank and the outside face of the flange of tank skin valves. Provide inspection and pressure test design for all pipe/nozzles between the tanks' skin valves and the tank. Include a hydrostatic test in accordance with ASME B31.3 and API RP 1110.	Inspection and Pressure Testing was completed.
4.	Reference: ¶G306001 second paragraph. Clean, refurbish, and recoat (per Section 4.1 Exterior Coating) the double-block-and-bleed valves (6-inch, 12-inch, and 20-inch) and/or ball valves (12-inch) in the pipelines connecting to each tank. Clean, refurbish, and recoat drain valves (4-inch). If any valves are gate valves, replace with double-block-and-bleed valves. Commission new or rebuilt valves into service.	1. EEL concurs with the coating repair. See comments on item 1 above. 2. Valve refurbishment/repair: EEL concurs, details will be in design. 3. Valve Replacements: EEL recommends installing new ball valves closest to the tank on all sample line.
5.	Reference: ¶ G306003 (Tank Repairs) Item a. Provide angle iron to add an upper handrail, about 6-inch above the existing handrail.	EEL concurs with the repair. This repair was completed prior to the start of the inspection.

Table 5-3 Tank 13 SOW Repairs

Item	SOW Description	EEL Finding/Comment
6.	Reference: ¶ G306003 (Tank Repairs) Item b. Provide 24 each missing fastener sets on center tower.	EEL concurs with the repair. Any HEG recommended repair items have been completed. See Tower Structural Report Attachment J
7.	Reference: ¶ G306003 (Tank Repairs) Item c.1. Provide 6-inch diameter patch plates (200 each).	EEL concurs with the repair. It should be noted that there are only 101 recommended 6-inch diameter patch plates in Tank 13. The remainder of the recommended patch plates are larger in size.
8.	Reference: ¶ G306003 (Tank Repairs) Item d. Provide datum plates at the bottom of each tank.	EEL recommends not providing datum plates. In similar tanks at Red Hill (Tank 5) the datum plate was removed for water detection at the tank bottom. With the tank floor being half-inch thick at this location an additional datum was not necessary. New strapping tables will so note no datum plate.
9.	Reference: ¶ G306003 (Tank Repairs) Item e. Replace all interior and exterior sample lines.	1. EEL recommends providing 100% replacement on the sample lines within the tank. These lines should be pressure tested to confirm the integrity of the fittings. 2. EEL recommends changing the current configuration of the sample line connections to the lower tunnel since the existing nozzles are not recommended for continued use. See discussion below. 3. Further discussion needed to determine amount of re-piping, if any, of sample piping manifold.
10.	Reference: ¶ G306003 (Tank Repairs) Item f. Remove non-standard flange on 32-inch interior nozzle and provide raised face, weld neck flange.	EEL Concur, repair completed to support pressure testing.
11.	Provide Calibration Tables	EEL concurs new strapping tables are required.

Shell Repairs - General

Generally, welding repairs require surface preparation followed by welding of a tank seam or placement of a patch plate depending on the nature of the defect being repaired. Repairs by welding that involve the placement of a patch plate are further divided into two categories based on the patch size. Patches of a surface area of 2 square feet or less can be manipulated by hand utilizing the existing means of tank shell access. It is important to note that patch plates larger than 2 square feet will require additional consideration to both the means of moving and positioning the patch in place prior to welding and may also require further considerations regarding attachment to the underlying tank structure.

Instances of multiple defects in close proximity to each other that were reported and verified individually in the inspection process are combined into a single repair at some locations. This grouping of multiple individual defects into single repairs is necessary to facilitate weld spacing requirements. The grouping of multiple defects into a single repair may also provide considerable time and material savings over addressing each defect separately. The approach for repair types is discussed below.

The overall repair methodology utilized in the determinations of repairs are outlined in API 653 and were utilized to the greatest extent possible.

Defects Caused by Rounded Relevant Indications

The recommended repair for these areas is to grind the affected area and apply a weld bead (or beads) to replace the deficient weld. Individual instances of porosity may be addressed by as little as 2 to 4 inches of weld repair while longer areas with numerous defects require several inches or more of repair weld bead.

Defects Caused by Dents, Gouges, Tear-outs and Dent/Gouge Combinations

Repairs associated with these defects will be addressed with one of two methods depending on the severity and size of the defect. Tear-outs from the removal of temporary welds in the manufacture of the tank (or later) are typically repaired by filling the affected area with weld and then grinding the welded area to a flush condition with the surrounding plate surface. It is anticipated that these areas will require relatively short lengths of weld to correct the underlying discontinuity. The recommended repair for dents, gouges, and dent/gouge combinations is to apply a patch plate over the affected area and seal weld the patch to the surrounding plate with a multiple-pass fillet weld.

BFET Indications

When the lateral extent of the defect could be seen, relevant indications identified by BFET methods were characterized by visual methods. BFET indications of discontinuities that were not easily characterized by visual methods were added to the repair list without further inspection. It was determined that further inspecting the weld requires a greater effort to definitively examine and characterize than would be required to provide a repair. These efforts include destructive examination including coating removal and grinding prior to evaluation. A typical repair involves preparation of the affected area by grinding followed by re-welding.

Local Backside Corrosion

Localized backside corrosion limited to an area that can be repaired with a smaller sized patch plate and is discussed within this section.

The recommended repair is the placement of a lap patch sized sufficiently to overlap affected area by at least 2 inches in all directions. In some instances, this overlap spacing requirement is not attainable within a single shell plate while maintaining weld-to-weld spacing requirements per the requirements outlined in API 653 for floor plate patch repairs. There are varied approaches that are recommended based on the situation.

In the presence of significant thickness loss in close proximity to a butt-welded seam, the patch is forced to extend onto the adjacent plate. In this case, the weld spacing requirements API 653 for lap patches on floors have been adopted.

When the patch plate is near, or abuts a backing bar (a flat steel bar installed on the tank exterior, or the backside of the weld), the recommendation is to provide a tombstone shaped patch plate with sides of the plate intersecting the backing bar fillet weld at approximately 90 degrees. The size of the patch plate will influence the method by which it is positioned for welding.

General Backside Corrosion

General backside corrosion is such that the area affected is much larger than a localized corrosion area and requires a repair that is larger in size. Within Tank 13, there are repairs that fall under this category, and it is recommended to repair an area greater than 2 square feet in area for each location. Several of these repairs are full-size liner plate replacement repairs.

These repairs will be unlike any previous repairs done at the Red Hill Facility and will require extensive design and construction considerations. Repairs could include the removal of existing shell plates and inserting new plate or welding patch plates to cover the affected areas.

Drain and Sample Lines Between Tank and Lower Tunnel

EEI recommends repurposing the 18-inch product line to serve as a carrier pipe for passage of the Drain and Sample Lines between the tank boundary (tank floor) and lower tunnel. The overall recommended concept will be fully developed during design but is summarized as follows:

1. The 18-inch line will be modified in the tank and in the lower tunnel.
2. A companion flange will be provided in the tank, close to the floor.
3. An 18-inch blind flange will be modified to contain four flanged 3/4-inch bulkhead connections and one 4-inch or 6-inch flanged bulkhead fitting, for the in-tank connections. We also will be considering a 100% welded method of penetrating the tank envelope, rather than an 18-inch flanged condition.
4. The method of closing off, or not closing off, the tunnel end of the system will be further evaluated.
5. The sample lines will be a flanged flexible stainless steel braided hose.
6. The drain line material will be developed during design.

6.0 COATING SYSTEM

Coating Requirements

APTIM is responsible for obtaining the services of an SSPC QP-5 certified firm, to provide a NACE Level 3 Coating Inspector to perform a coating condition survey. Results of this survey will be utilized to determine coating repair requirements.

7.0 SUITABILITY FOR SERVICE EVALUATION

Historical Inspection Information

Previous inspection on Tank 13 was completed in 1994 – 1996 by contractor AMAN Environmental Construction Inc. The tanks were inspected to API Std 653 by Leif Woodman of Conam MMP Inspections, Inc.

Corrosion Rates

Corrosion rates were calculated by region (upper dome, lower dome, barrel, or extension ring) utilizing the maximum wall loss for the entire area. Maximum wall loss is for a single location on the plate and not indicative for the entire plate or the entire region. Full results are in Attachment G. Each rate is based off UT data collected in the field. The max corrosion rates for a single plate found in tank sections are as follows:

Upper Dome:	2.267 mils per year
Extension Ring:	3.333 mils per year
Barrel:	2.027 mils per year
Lower Dome:	0.973 mils per year
Floor:	Negligible – Plate thickness is within mill tolerance

The corrosion rates were calculated using an assumed original metal thickness of 0.250 mil and the year of construction being 1942. The numbers listed above are the largest corrosion rate in each area.

8.0 CLOSURE

Conclusions

Mandatory repairs were identified prior to return-to-service. Pending completion of the mandatory repair items noted, Tank 13 will be suitable to return-to-service.

The repairs to Tank 13 primarily include weld and patch plate repairs.

Project Organization

Prime Contractor	APTIM
Tank Inspection	Enterprise Engineering Inc.
Tank Inspection	TesTex
Pressure Testing	Vista Precision Solutions
Mechanical Services	Oceanic Companies Inc.

EEI Project Team

Site Team

Doug J. Kieley, P.E.	Project Manager, Inspector of Record API 653 AST Inspector Certificate No. 40281 API 570 Piping Inspector Certificate No. 23161
Karl R. Schlenker	Senior Mechanical Integrity Engineer, API 653 AST Inspector Certificate No. 40225 API 570 Piping Inspector Certificate No. 41177
Curtiss M. Hallock	Mechanical Integrity Engineer, API 653 AST Inspector Certificate No. 72319
Jacob M. Sylvain	Mechanical Integrity Engineer, API 570 Piping Inspector Certificate No. 77282
Adam Simpson	Mechanical Integrity Engineer
Timothy J. Newman, P.E.	Mechanical Integrity Engineer API 653 Piping Inspector Certificate No. 65093

Support Team

Stephen S. Brooks, P.E.	Principal-in-Charge/ QA Review API 653 AST Inspector Certificate No. 17 API 570 Piping Inspector No. 23663
Steve J. DiGregorio, P.E.	Chief Structural Engineer, API 653 AST Inspector Certificate No. 1113

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ATTACHMENT A
TANK INSPECTION DATA SHEET AND
EVALUATION ITEMS

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DLA ENERGY TANK CMP CONDITION FORM

TANK INSPECTION SUMMARY SHEET

Tank Location (Site Code): Red Hill Fuel Storage Facility, NAVSUP FLC, Joint Base Pearl Harbor-Hickam, Hawaii (JBPHH)
Tank No.: 13
Facility No.: N/A
Inspection Date(s): December 2017 to March 2018
Tank Type: Mined Underground Storage Tank
Type of Inspection: Internal w/ Suitability for Service Evaluation
Contract Number, Task Order: N39430-15-D-1632, Task Order 0004
Prime Contractor Name: APTIM
12005 Ford Road, Suite 600
Dallas, TX 75234
(833) 862-7846
Inspector, Certificate #: Douglas J. Kieley, P.E.
API-653 AST Inspector
Certificate No. 40281
Inspection Company: Enterprise Engineering, Inc.
400 US Route 1, North Suite B
Falmouth, ME 04105
(207) 869-8006
Manufacturer, Date, Design Standard: Morrison Knudsen, 1942, Not Specified
Diameter: 100'-0"
Shell Height: 250'-6"
Product, Specific Gravity: JP-5, 0.82
Design Pressure / Temperature: 96.9 psi / 50 degrees F
Gross Capacity / Nominal Capacity: 300,000 Bbls
Safe Fill Height: Top of Shell Course A in the Upper Dome
GPS Latitude & Longitude: N/A
Foundation Configuration: Concrete / Gunite encasement with embedded rebar & I-beams
Shell Configuration: Upper Dome: 5 courses, Butt Welded w/ Backing Bars
Extension Ring: 4 courses, Butt Welded w/ Backing Bars
Barrel: 28 courses, Butt Welded
Lower Dome: 4 Courses, Butt Welded
Roof: Dome with Structural Steel
Floating Pan: Not Applicable
Cathodic Protection: None – Not Applicable
Stilling Wells: Aluminum, 6-inch ATG
Last Inspection (Type, Date): Out-of-Service, 1995
Last Coated Internally (Product): 1983 (Floor and first course of lower dome recoated in 1996)
Last Coated Externally (Product): Not coated Externally

INSPECTION RESULTS

Can tank return to service?: No.
Deficiencies identified as mandatory repairs: Yes, see paragraph titled "Mandatory Repairs" in body of report
Deficiencies identified as recommended repairs: Yes, see paragraph titled "Non-Mandatory Repairs" in body of report.
Deficiencies identified as long term repairs: No.
Next Scheduled API Inspections (Type, Date): API 653 Out-of-Service: 2038 (20 Years)
Next Scheduled Tank Cleaning (UFC 3-460-03, 2016): Army, Navy, Marine Corps Tank (During OOS Inspection Unless Required More Frequently due to Potential Fuel Quality Issues):
March 2038 Date

ADDITIONAL ITEMS

Change in Service: None
As-Built Drawings, Specifications: Yes

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ATTACHMENT B
ASSESSMENT OF COMPLIANCE WITH
MILITARY CRITERIA

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ASSESSMENT OF COMPLIANCE WITH MILITARY CRITERIA				
UFC 3-460-01, Table 8-1				
(Complete UFC available at www.wbdg.org)				
Requirements for Vertical Underground Storage Tank (V-U) Only				
ITEM	APPURTENANCE (UFC REQUIREMENT)	COMPLIANT		COMMENTS/RECOMMENDATION (A blank in comments column indicates UFC compliance)
		YES	NO	
MANHOLE				
a	A 30-inch diameter manhole, a minimum of one manhole for tanks between 1,000 gallons and 5,000 gallons capacity, and a minimum of two manholes (both are to be at least 36 inches), for tanks larger than 5,000 gallons capacity.		X	Tank is equipped with one 24-inch manhole at the Upper Tunnel level and one 30-inch manhole on top of the tank. It is not compelling to provide 36-inch manholes.
LADDER/STAIRS				
i	Internal ladders (in accordance with OSHA criteria) for tanks of 5,000 gallons or larger with floating pans.	X		Internal ladder in good condition and compliant from bottom of tank to the top inside center tower.
LEVEL ALARMS				
l	An individual automatic level alarm system, independent of the gauging device or system for each tank. Include high, high-high, low and low-low level alarms.	X		Tank contains high level and high-high level alarms which alarm separate from ATG system. The remainder of the Alarms are compliant with NAVSUP requirements for the Red Hill Facility.
VENTS				
m	Open atmospheric vents with weather hoods and bird screens or pressure/vacuum vents in lieu of open vents. Comply with NFPA 30, host nation requirements, Chapter 2 of this UFC, API Std 650, API Std 2000, 29 CFR Part 1910.106, and DoD Standard Design AW 78-24-27, where applicable.	X		Tank contains a single 24-inch spiral welded vent line from the top of the tank to the Upper Tunnel Vent spool. The remaining portions of the requirements are not applicable to Red Hill Tanks.
n	Emergency relief venting with capacity in accordance with NFPA 30 and UL 142, as applicable or a weak roof-to-shell seam, as specified in API Std 650.	X		No emergency relief venting required for Red Hill Tanks.
GAUGE/GAUGE HATCH/STILLING WELLS				
o	A liquid level gauge calibrated in 1/16-inch graduations mounted at 60 inches above the walking surface.	X		Tank is outfitted with an ATG system on the top of the tank.
p	Automatic Tank Gauging (ATG) for all tanks with fuel managed through the Defense Logistics Agency's Business Modernization {BSM Enterprise Resource Programs (ERP) - Fuels section}, that complies with API MPMS Chapter 3.	X		Tank is outfitted with an ATG system on the top of the tank.
q	A 4-inch gauge hatch with drop tube to within 3 inches of the bottom of the tank (lowest point in the tank, not the sump). A second 4-inch opening without a drop tube or gauge hatch.	X		Tank does contain a gauge hatch, but does not have a drop tube. Tank is compliant with NAVSUP requirements.

ASSESSMENT OF COMPLIANCE WITH MILITARY CRITERIA				
UFC 3-460-01, Table 8-1				
(Complete UFC available at www.wbdg.org)				
Requirements for Vertical Underground Storage Tank (V-U) Only				
ITEM	APPURTENANCE (UFC REQUIREMENT)	COMPLIANT		COMMENTS/RECOMMENDATION (A blank in comments column indicates UFC compliance)
		YES	NO	
r	One 10-inch roof flanged nozzle with an 8-inch aluminum, fully slotted, stilling well for ATG near the edge of the roof near the top of the stairway platform.	X		A 6-inch Aluminum ATG system stilling well is mounted on a 10-inch nozzle. Tank is compliant with NAVSUP requirements.
s	One 8-inch roof flanged nozzle with a 6-inch aluminum, fully slotted, stilling well for temperature and water bottom sensor, as close to or in the tank sump as possible. See DoD Standard Design AW 78-24-27.	X		There is no separate stilling well for temperature and water bottom sensor. Tank is compliant with NAVSUP requirements.
t	One 10-inch roof nozzle and an aluminum, slotted stilling well extended to within 3 inches of the bottom of the tank* for gauging and sampling. A datum plate to establish a gauging zero point.	X		There is no stilling well for manual tank gauging. Tank is compliant with NAVSUP requirements.
PIPE CONNECTION				
w	Inlet fill pipe with horizontal exit perpendicular to a tank radial. Discharge is approximately 4 inches above tank floor and enlarged to reduce fuel velocity. An inverted trap is placed in the line to serve as a liquid lock to prevent entry of fire or an explosion from outside the fill pipe.		X	32-inch pipe exits perpendicular to tank floor. 18-inch pipe exits perpendicular to tank radial at 2-feet above tank floor. No trap is placed in line. Design is Standard for Red Hill Tanks.
OVERFILL PROTECTION				
x	Overfill protection with a hydraulically operated diaphragm control valve.		X	Not applicable to Red Hill Tanks.
WATER DRAW-OFF				
dd	A central sump pump.	X		Tank is equipped with a 4-inch drain in center of tank. Drain line rises 10-feet to new 20-inch tank penetration pipe.
STRIKER PLATES				
gg	Striker plates under all openings used for manual gauging in steel tanks and all openings in fiberglass tanks.	X		Not applicable to Red Hill Tanks.
Additional Military Criteria Items, Comments or Notes: None.				

END OF DATA

ATTACHMENT C
NON-DESTRUCTIVE EXAMINATION (NDE)
AND EVALUATION CRITERIA

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CODES AND STANDARDS

API Standard 653, 5th Edition, November 2014

API Standard 650, 12th Edition, March 2013, Addendum 2, January 2016

UFC 3-301-01 Structural Engineering, September 2016

NON DESTRUCTIVE EXAMINATION (NDE)

Tank Inspection (General)

API Standard 653 as applicable.

Visual Inspection

1. Inspection Items

- In accordance with API Standard 653.
- Floor, shell and upper dome welded joints (where accessible).
- Floor, shell and upper dome surfaces.
- Items affecting structural and hydraulic integrity.

2. Method

- In accordance with API Standard 653.
- Special considerations for rounded indications:

Rounded indications are defined as surface-penetrating discontinuities whose length is less than three times the width. Rounded indications in existing work are subject to further examination when they are obscured by coating and/or debris or if, for any reason, the full extent of the included surface is obscured. Cleaning the area of interest to bare metal is performed prior to re-evaluation of the indication. Removal of coating, serves multiple purposes, such as:

- Length and width can be accurately measured without the inclusion of an unknown coating thickness;
 - False positive indications caused solely by coating defect can be easily evaluated;
 - Other forms of indication or defect (slag inclusions, for example) can often be hidden by coating and cause the appearance of rounded indications in the coating.
- Remaining thickness-based criteria for evaluation of indications.

It is common practice to only bring historically constructed and service-tested equipment into compliance with current code when repair, upgrade or other new construction is performed. For this reason, criteria presented here for surface penetrating (but non-crack forming) indications that have a length component in the through-thickness direction are based on the calculated minimum remaining wall thickness. It is the goal of this criteria to identify and reject any discontinuity that penetrates the steel to a depth such that the remaining wall thickness is thinner than the calculated minimum based on the calculations presented in Attachment G.

3. Acceptance Criteria

Acceptance criteria are from the applicable clause in AWS D1.1 and section in API 650:

Indication Type	Acceptance Criteria
Crack	Unacceptable, regardless of size or location.
Weld/Base Metal Fusion	Complete fusion shall exist between adjacent layers of weld metal and between weld metal and base metal.
Crater Cross Section	All crater cracks shall be removed and filled.
Weld Profiles	Must confirm to AWS D1.1 Subclause 5.23.
Undersize Welds	The size of a fillet weld in any continuous weld may be less than the ¼-inch nominal size without correction by 3/32-inch or by an amount that ensures a minimum through-thickness of the remaining wall thickness criteria, as calculated in Attachment G.
Undercut	For existing welds (welds that have previously been in-service) the acceptance criteria for depth of undercut will be based on remaining wall thickness criteria, as calculated in Attachment G.
Porosity, Rounded Indications	Piping shall have no visible porosity. For all other welds porosity shall not exceed 1 indication in 4 inches and the maximum diameter shall not exceed 3/32-inch. In addition, acceptance criteria for depth of the discontinuity will be based on remaining wall thickness criteria, as calculated in Attachment G.

Ultrasonic Testing (UT)

Ultrasonic thickness measurements were taken to establish end of nozzle and floor plate thicknesses.

1. Inspection Items

- In accordance with EEI NDE Procedure, EEI-UT-002, Ultrasonic Thickness Examination.
- Floor plates
- End of nozzles

2. Equipment

- Olympus 38DL Plus / Olympus 45 MG

3. Method

- Perform on a spot basis to determine thickness.
- Perform as follow-up to LFET indications to determine the remaining wall thickness.

4. Acceptance Criteria

Planar indications such as laminations shall be reported to the inspector of record for further review.

Dual Linear Phased Array UT

Quantitative assessment of the tank shell and floor.

1. Inspection Items

- In accordance with EEI NDE Procedure, EEI-PAUT-001, Ultrasonic Thickness Examination.

- Shell plates
 - Upper dome plates
 - Floor plates (to prove up any findings from the LFET)
2. Equipment
 - Olympus OmniScan SX with 7.5 MHz Dual Linear Array Probe for corrosion inspection.
 3. Method
 - Perform at follow-up to LFET indications found by TesTex to determine the nature of the indication.
 - Echo/Echo (E/E) or Thru Coat mode for determining metal thickness and backside corrosion on coated surfaces without including thickness of coating in reading.
 4. Acceptance Criteria

Planar indications such as laminations shall be reported to the inspector of record for further review.

Phased Array UT

Quantitative assessment of welds.

1. Inspection Items
 - In accordance with EEI NDE Procedure, EEI-PAUT-002.
 - Circumferential welds of the 32-inch piping.
2. Equipment
 - Olympus OmniScan SX with 5MHz angle beam probe.
3. Method
 - Perform double-sided angle beam inspections of circumferential welds according to established scan plans developed for addressing the piping thickness and weld orientation.
4. Acceptance Criteria
 - ASME B31.3
 - A linear-type discontinuity is unacceptable if the amplitude of the indication exceeds the reference level and its length exceeds $\frac{1}{4}$ in. for pipe thickness less than or equal to $\frac{3}{4}$ in.

Low Frequency Electromagnetic Technique (LFET)

1. Inspection Items
 - In accordance with TesTex Inspection Procedure.
2. Equipment
 - FALCON S (8-Channel), 18.10 KHz

The equipment utilizes magnetizing core that acts as a DC electromagnet to generate a strong magnetic field. The saturation lowers the permeability of the ferromagnetic material which allows the Eddy Current field to penetrate deeper into the material being tested. Any wall loss will result in a

concentration of the magnetic field in the remaining wall, resulting in an increased magnetic flux density around and under the defect. The distortion of the magnetic field is measured as a change of phase and amplitude in the secondary voltage generated by the material. The signal amplitude of the defect indication is in direct proportion to the volume of the defect. The signal phase of the defect indication is used to differentiate top side or bottom side defects

3. Detection Capability

The equipment is calibrated on a 1/4-inch thick function test plate with three machined metal loss defects:

- 1/8-inch diameter hole in 1/4-inch thick plate
- A tapered hole drilled 40% backside metal loss of plate thickness on surface opposite the detection equipment
- A machined notch across the width of the function test plate

Any signal that can be clearly distinguished from background noise during floor scanning is marked for follow-up testing by ultrasonic A-Scan.

4. Acceptance Criteria

- Indication - Full screen LED display in “red” zone requires follow-up ultrasonic testing to determine nature of the indication.

5. Areas Not Accessible to Scanning

- Within 1-inch of tank shell
- Within 1-inch of welded joints
- Floor areas below interior piping and appurtenances where the equipment cannot fit
- Sumps
- Below column bases and pipe supports
- Patch plates

Balanced Field Electromagnetic Technique (LFET)

1. Inspection Items

- In accordance with TesTex Inspection Procedure.

2. Equipment

- FALCON S (8-Channel), 18.10 KHz
- Hawkeye probe

The Hawkeye probe creates a balanced field in which small changes in the electromagnetic field can be detected by reducing the noise through phase rotation of the horizontal and vertical component of the signal. This allows the Hawkeye probe to detect surface and subsurface cracking.

3. Detection Capability

- The equipment is calibrated to TesTex standards.

4. Acceptance Criteria

- Indication - The flaw will appear as a differential signal

Pit Survey

1. Inspection Items

- Tank floor
- Tank shell
- Tank Upper Dome

2. Equipment

- Mechanical pit gauges

Magnetic Particle Testing (MT)

1. Inspection items

- In accordance with EEI NDE Procedure, EEI-NDE-001
- Mitered welds in the 32-inch
- 8-inch drain cap
- TesTex weld BFET indications
- Plug welds in the adjustment plate and expansion joint
- Strain gauges

2. Equipment

- Magnaflux Y-1

The Magnaflux Y-1 is AC electromagnetic yoke.

3. Method

- The application of wet visible or fluorescent particles shall be by spraying or flowing the medium under the continuous magnetization technique; i.e., the magnetizing current remains on while the examination medium is being applied and while excess of the examination medium is being removed.
- At least two separate examinations shall be carried out at each location. During the second examination, the lines of magnetic flux shall be approximately perpendicular to those used during the first examination.

4. Acceptance Criteria

All surfaces to be examined shall be free of:

- Relevant linear indications;
- Relevant rounded indications greater than 3/16-inch;
- Four or more relevant rounded indications in a line separated by 3/16-inch or less, edge to edge.

Vacuum Box Testing (VBT)

1. Inspection Items

- 8-inch drain cap
- Strain gauges
- Adjustment plate welds
- Expansion joint welds
- Tower leg welds

2. Equipment

- Custom vacuum boxes built in situ for different welds.

3. Method

- The application of a soap film solution is applied in accordance with API 650.
- Initial pressure of between 21 and 35 kPa in which the vacuum is formed.
- Increase and test under 56 to 70 kPa.

4. Acceptance Criteria

- Indications - The continuous formation or growth of bubbles produced by air passing through the thickness is a through thickness leak indication. A large opening leak is indicated by the quick bursting bubbles or spitting response at initial pressure of vacuum.

Coating Thickness Measurements

1. Equipment

- PosiTector 6000 Thickness Gauge.

ATTACHMENT D

TANK DRAWINGS

S003775

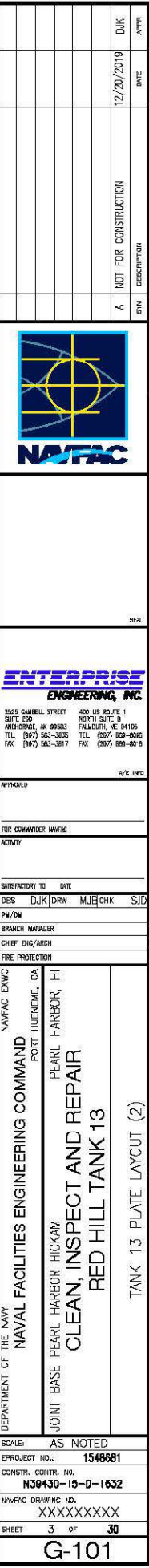
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ATTACHMENT E
TANK PHOTOGRAPHS

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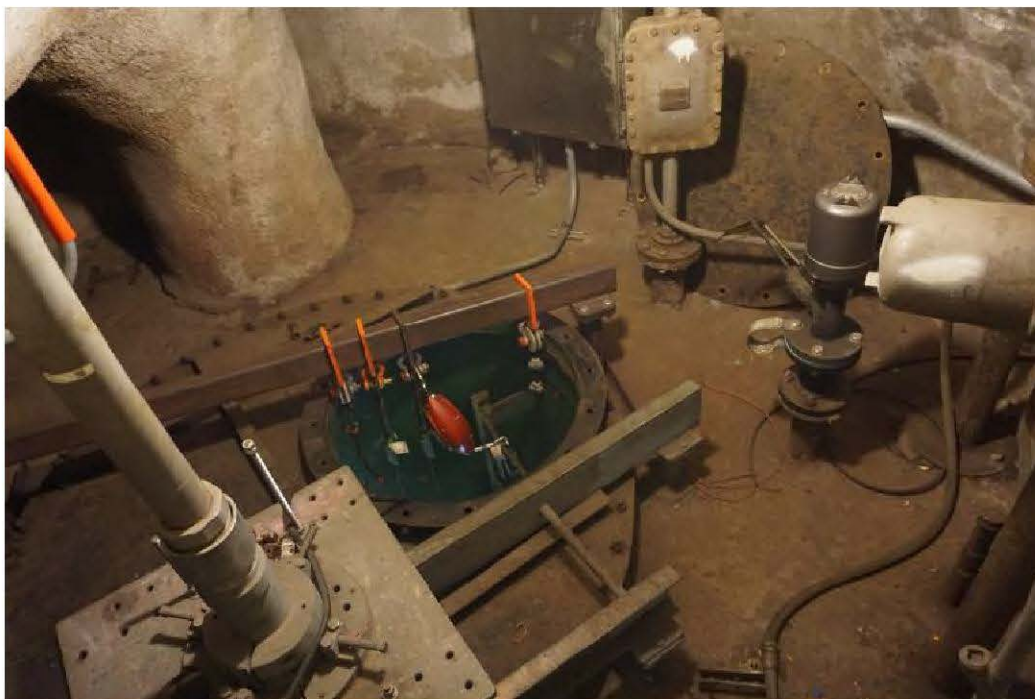


Photo 1: Upper Access Manway and tank gauges.



Photo 2: Cribbing supporting ATG.



Photo 3: Vent piping from upper dome near upper access manway.



Photo 4: Vent piping with spool removed in upper access tunnel.



Photo 5: Flange of vent piping.



Photo 6: Internal condition of vent piping as seen from upper access tunnel.

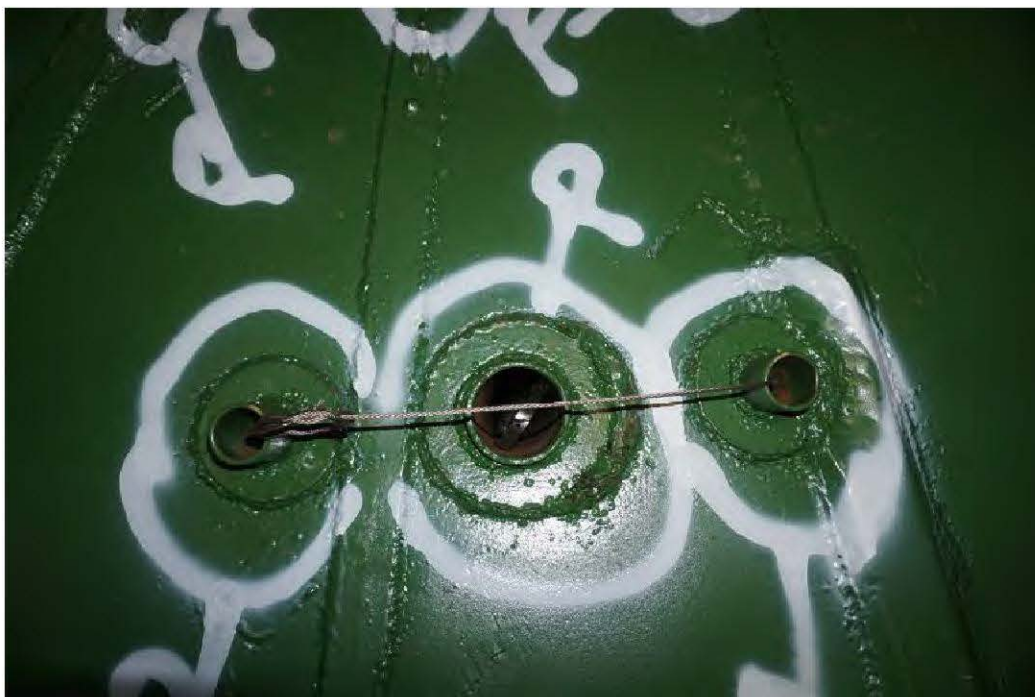


Photo 7: Floating tank gauge and guide wires tied off and out of service.

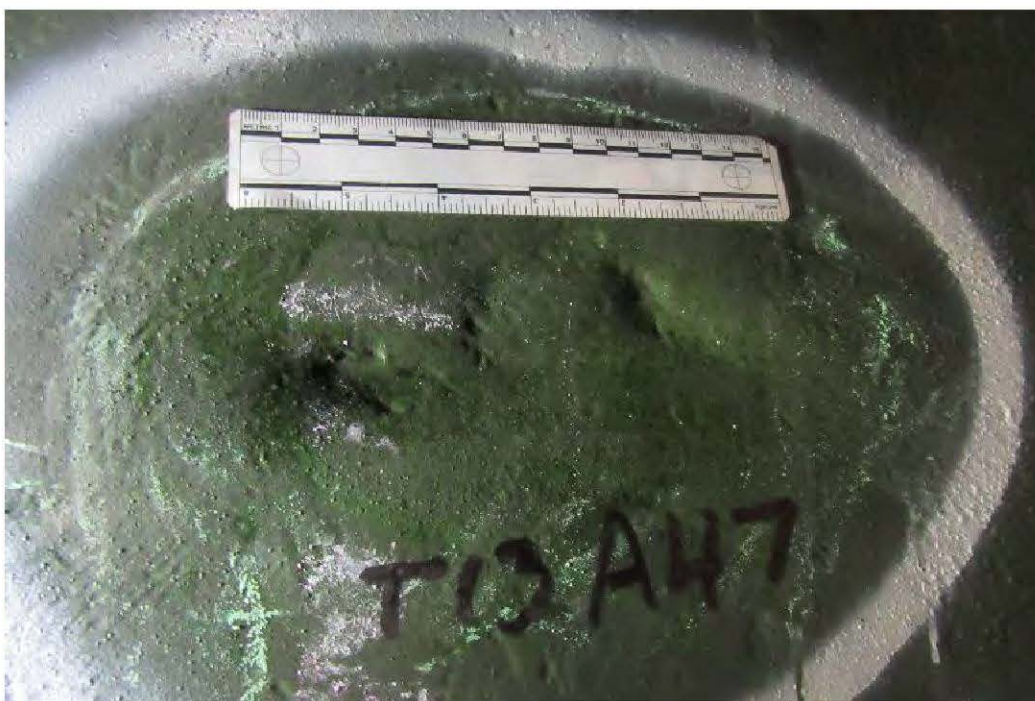


Photo 8: Example of dents in upper dome plate in course A.

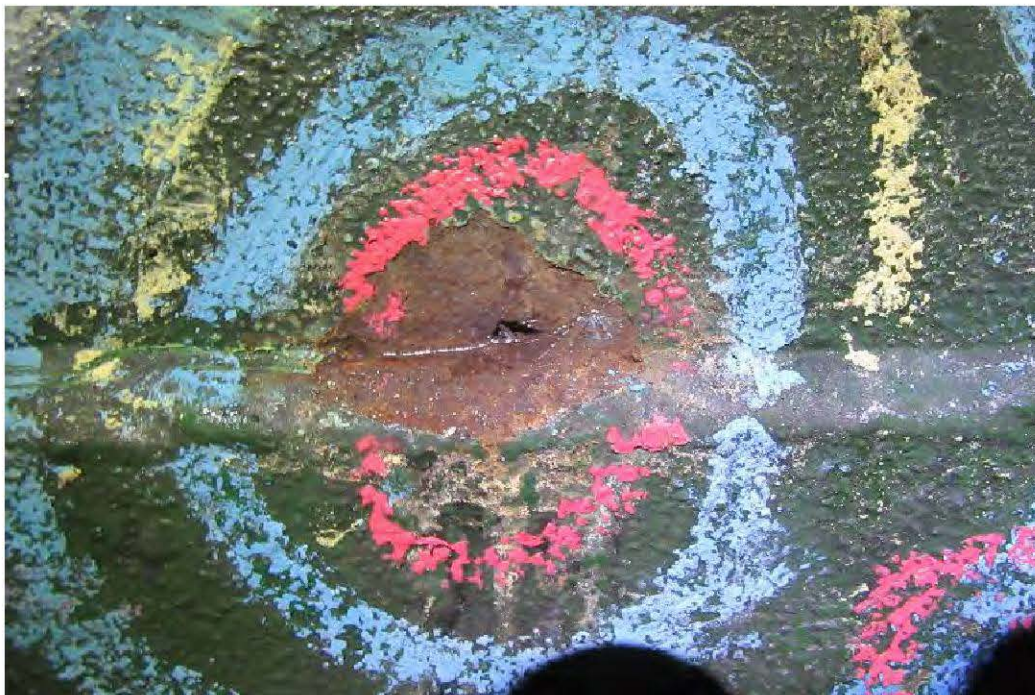


Photo 9: Liner damage in extension ring plate in course 2. The area was corroded and included coating failure at the margins. No evidence of cut marks or gouges was observed.



Photo 10: Inspection marks (chalk, white and yellow paint) on liner plates in the barrel. Area circled in red shows example of relevant indications of weld discontinuities.



Photo 11: Layout of the extents of a patch plate (yellow dashed lines) to completely cover defects in the shell due to backside corrosion.



Photo 12: Example of a relevant indication in previous patch plate welds on barrel plate in row 1.



Photo 13: Large coating failures along lower dome. Re-coating to be addressed as part of the SOW.



Photo 14: Tank floor and center tower.



Photo 15: 18-inch piping at tank floor with diffuser removed.



Photo 16: 18-inch piping's diffuser removed to inspect pipe supports.



Photo 17: 32-inch piping at tank floor with vortex preventer removed with new flange installed.



Photo 18: 32-inch piping's vortex preventer removed.



Photo 19: Weld defects of circumferential weld in 32-inch piping.



Photo 20: Sampling lines at tank floor.



Photo 21: Sampling lines' tank floor penetration.



Photo 22: ATG at tank floor.

ATTACHMENT F
EEI MASTER SPREADSHEET OF FINDINGS
AND REPAIRS

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NAVY0014610

			Recommended Repairs				
			Number of Repairs	Linear Feet of Weld	Area of Patch Plate (sq. ft.)	Number of Patch Plates ≤ 2 sq. ft.	Number of Patch Plates > 2 sq. ft.
Location in Tank	Upper Dome Course F	Weld Repairs	55	65			
		Patch Plate Repairs	1		0	1	0
	Upper Dome Course E	Weld Repairs	161	94			
		Patch Plate Repairs	4		11	3	1
	Upper Dome Course D	Weld Repairs	175	105			
		Patch Plate Repairs	18		11	18	0
	Upper Dome Course C	Weld Repairs	274	163			
		Patch Plate Repairs	22		10	22	0
	Upper Dome Course B	Weld Repairs	352	191			
		Patch Plate Repairs	32		23	30	2
	Upper Dome Course A	Weld Repairs	201	118			
		Patch Plate Repairs	74		150	54	20
	Extension on Ring	Weld Repairs	251	164			
		Patch Plate Repairs	90		725	45	45
	Barrell	Weld Repairs	911	572			
		Patch Plate Repairs	24		42	17	7
		Misc Repairs	1		1	1	0
	Lower Dome	Weld Repairs	32	25			
		Patch Plate Repairs	0		0	0	0
Floor		Weld Repairs	0	0			
		Patch Plate Repairs	0		0	0	0

Summary of Discovered Repairs					
	Number of Repairs	Linear Feet of Weld	Area of Patch Plate (sq. ft.)	Number of Patch Plates ≤ 2 sq. ft.	Number of Patch Plates > 2 sq. ft.
Weld Repairs	2412	1498			
Patch Plate Repairs	265		973	190	75
Misc Repairs	1		1.4	1	0
Totals	2678	1498	974	191	75

TOTAL RECOMMENDED REPAIRS	
Patch Plates	366
Weld Repairs	2412
Pipe Cap	1
TOTAL	2779

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NAVY0014611

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Indication Topside	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-UD-F-1-1-40	UD	F	1	1	1	40	VT	POR			1	40	VT	POR	R			1	40	0	6	6			13-UD-F-1-1-40-1	WR
13	13-UD-F-2-1-14	UD	F	2	1	1	14	VT	POR			1	14	VT	POR	R			1	14	0	6	6			13-UD-F-2-1-14-1	WR
13	13-UD-F-2-1-58	UD	F	2	2	1	58	VT	POR			1	58	VT	POR	R			1	58	0	6	6			13-UD-F-2-1-58-2	WR
13	13-UD-F-3-1-34	UD	F	3	1	1	34	VT	POR			1	34	VT	POR	R			1	34	0	6	6			13-UD-F-3-1-34-1	WR
13	13-UD-F-3-1-38	UD	F	3	2	1	38	VT	POR			1	38	VT	POR	R			1	38	0	6	6			13-UD-F-3-1-38-2	WR
13	13-UD-F-3-1-47	UD	F	3	3	1	47	VT	POR			1	47	VT	POR	R			1	47	0	8	8			13-UD-F-3-1-47-3	WR
13	13-UD-F-4-20-75	UD	F	4	1	20	75	VT	POR			20	75	VT	POR	R			20	75	0	6	6			13-UD-F-4-20-75-1	WR
13	13-UD-F-4-1-119	UD	F	4	3	1	119	VT	POR			1	119	VT	POR	R			1	119	0	6	6			13-UD-F-4-1-119-2	WR
13	13-UD-F-5-7-87	UD	F	5	1	7	87	VT	DENT			7	87	VT	DENT	R			7	87	8	8	32	64		13-UD-F-5-7-87-1	PP
13	13-UD-F-6-1-28	UD	F	6	1	1	28	VT	POR			1	28	VT	POR	R			1	28	0	6	6			13-UD-F-6-1-28-1	WR
13	13-UD-F-6-31-24	UD	F	6	2	31	24	VT	POR			31	24	VT	POR	R			31	24	0	6	6			13-UD-F-6-31-24-2	WR
13	13-UD-F-7-8-89	UD	F	7	1	1-15	89	VT	POR			8	89	VT	POR	R			8	89	18	0	18			13-UD-F-7-8-89-1	WR
13	13-UD-F-8-1-35	UD	F	8	1	1	35	VT	POR			1	35	VT	POR	R			1	35	0	6	6			13-UD-F-8-1-35-1	WR
13	13-UD-F-8-14-97	UD	F	8	2	14	97	VT	POR			14	97	VT	POR	R			14	97	0	8	8			13-UD-F-8-14-97-2	WR
13	13-UD-F-10-34-14	UD	F	10	1	34	14	VT	POR			34	14	VT	POR	R			34	14	0	6	6			13-UD-F-10-34-14-1	WR
13	13-UD-F-11-1-1	UD	F	11	1	1	1	VT	POR			1	1	VT	POR	R			1	1	6	6	12			13-UD-F-11-1-1-1	WR
13	13-UD-F-12-17-74	UD	F	12	1	17	74	VT	POR			17	74	VT	POR	R			17	74	18	0	18			13-UD-F-12-17-74-1	WR
13	13-UD-F-12-1-75	UD	F	12	2	1	73-77	VT	LF			1	75	VT	IF	R			1	75	0	48	48			13-UD-F-12-1-75-2	WR
13	13-UD-F-13-7-75	UD	F	13	1	1-14	75	VT	POR/LF			7	75	VT	IF	R			7	75	8	0	8			13-UD-F-13-7-75-1	WR
13	13-UD-F-14-14-34	UD	F	14	1	14	34	VT	POR			14	34	VT	POR	R			14	34	0	6	6			13-UD-F-14-14-34-1	WR
13	13-UD-F-15-1-55	UD	F	15	1	1	55	VT	POR			1	55	VT	POR	R			1	55	0	6	6			13-UD-F-15-1-55-1	WR
13	13-UD-F-15-1-90	UD	F	15	2	1	90	VT	POR			1	90	VT	POR	R			1	90	0	6	6			13-UD-F-15-1-90-2	WR
13	13-UD-F-15-1-115	UD	F	15	3	1	115	VT	POR			1	115	VT	POR	R			1	115	32	0	32			13-UD-F-15-1-115-3	WR
13	13-UD-F-15-5-110	UD	F	15	4	5	110	VT	POR			5	110	VT	POR	R			5	110	30	0	30			13-UD-F-15-5-110-4	WR
13	13-UD-F-16-1-9	UD	F	16	1	1	9	VT	POR			1	9	VT	POR	R			1	9	0	6	6			13-UD-F-16-1-9-1	WR
13	13-UD-F-16-1-15	UD	F	16	2	1	15	VT	POR			1	15	VT	POR	R			1	15	0	8	8			13-UD-F-16-1-15-2	WR
13	13-UD-F-16-37-2	UD	F	16	3	37	2	VT	POR			37	2	VT	POR	R			37	2	6	6	12			13-UD-F-16-37-2-3	WR
13	13-UD-F-16-10-109	UD	F	16	4	10	109	VT	POR			10	109	VT	POR	R			10	109	0	6	6			13-UD-F-16-10-109-4	WR
13	13-UD-F-17-1-39	UD	F	17	1	1	39	VT	POR			1	39	VT	POR	R			1	39	0	6	6			13-UD-F-17-1-39-1	WR
13	13-UD-F-17-1-99	UD	F	17	2	1	99	VT	POR			1	99	VT	POR	R			1	99	18	0	18			13-UD-F-17-1-99-2	WR
13	13-UD-F-18-8-102	UD	F	18	1	1-16	102	VT	POR/LF			8	102	VT	IF	R			8	102	18	0	18			13-UD-F-18-8-102-1	WR
13	13-UD-F-18-12-104	UD	F	18	2	12	104	VT	POR			12	104	VT	POR	R			12	104	0	24	24			13-UD-F-18-12-104-2	WR
13	13-UD-F-18-11-107	UD	F	18	3	11	107	VT	POR			11	107	VT	POR	R			11	107	0	48	48			13-UD-F-18-11-107-3	WR
13	13-UD-F-19-10-87	UD	F	19	1	6-14	84-91	VT	LOF			10	87	VT	LOF	R			10	87	30	0	30			13-UD-F-19-10-87-1	WR
13	13-UD-F-19-1-91	UD	F	19	2	1	91	VT	POR			1	91	VT	POR	R			1	91	0	8	8			13-UD-F-19-1-91-2	WR
13	13-UD-F-19-3-108	UD	F	19	4	1-4	108	VT	LOF			3	108	VT	LOF	R			3	108	12	0	12			13-UD-F-19-3-108-3	WR
13	13-UD-F-20-1-32	UD	F	20	1	1	32	VT	POR			1	32	VT	POR	R			1	32	0	8	8			13-UD-F-20-1-32-1	WR
13	13-UD-F-20-1-41	UD	F	20	2	1	41	VT	POR			1	41	VT	POR	R			1	41	0	6	6			13-UD-F-20-1-41-2	WR
13	13-UD-F-20-1-59	UD	F	20	3	1	59	VT	POR			1	59	VT	POR	R			1	59	0	4	4			13-UD-F-20-1-59-3	WR
13	13-UD-F-20-1-66	UD	F	20	4	1	66	VT	POR			1	66	VT	POR	R			1	66	0	4	4			13-UD-F-20-1-66-4	WR
13	13-UD-F-20-11-93	UD	F	20	6	9-14	91-95	VT	POR			11	93	VT	POR	R			11	93	20	0	20			13-UD-F-20-11-93-5	WR
13	13-UD-F-20-9-113	UD	F	20	8	9	109-116	VT	POR			9	113	VT	POR	R			9	113	60	0	60			13-UD-F-20-9-113-6	WR
13	13-UD-F-21-1-68	UD	F	21	1	1	64-72	VT	POR			1	68	VT	POR	R			1	68	0	16	16			13-UD-F-21-1-68-1	WR
13	13-UD-F-21-1-94	UD	F	21	2	1	91-97	VT	POR			1	94	VT	POR	R			1	94	20	0	20			13-UD-F-21-1-94-2	WR
13	13-UD-F-21-12-94	UD	F	21	3	11-14	92-96	VT	POR			12	94	VT	POR	R			12	94	35	0	35			13-UD-F-21-12-94-3	WR
13	13-UD-F-21-1-112	UD	F	21	4	1	112	VT	POR			1	112	VT	POR	R			1	112	12	0	12			13-UD-F-21-1-112-4	WR
13	13-UD-F-22-1-33	UD	F	22	1	1	33	VT	POR			1	33	VT	POR	R			1	33	0	6	6			13-UD-F-22-1-33-1	WR
13	13-UD-F-22-15-93	UD	F	22	2	15	93	VT	POR			15	93	VT	POR	R			15	93	0	6	6			13-UD-F-22-15-93-2	WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-UD-F-22-1-122	UD	F	22	3	1	122	VT	POR			1	122	VT	POR	R			1	122	0	6	6			13-UD-F-22-1-122-3	WR
13	13-UD-F-23-3-1	UD	F	23	1	3	1	VT	POR			3	1	VT	POR	R			3	1	6	0	6			13-UD-F-23-3-1-1	WR
13	13-UD-F-23-7-107	UD	F	23	2	7	107	VT	POR			7	107	VT	POR	R			7	107	6	0	6			13-UD-F-23-7-107-2	WR
13	13-UD-F-23-1-115	UD	F	23	3	1	110-120	VT	POR			1	115	VT	POR	R			1	115	0	60	60			13-UD-F-23-1-115-3	WR
13	13-UD-F-24-1-26	UD	F	24	1	1	26	VT	POR			1	26	VT	POR	R			1	26	0	6	6			13-UD-F-24-1-26-1	WR
13	13-UD-F-24-1-90	UD	F	24	2	1	90	VT	POR			1	90	VT	POR	R			1	90	0	6	6			13-UD-F-24-1-90-2	WR
13	13-UD-F-24-12-102	UD	F	24	3	12	102	VT	POR			12	102	VT	POR	R			12	102	4	4	8			13-UD-F-24-12-102-3	WR
13	13-UD-F-24-9-111	UD	F	24	4	3-16	111	VT	POR			9	111	VT	POR	R			9	111	18	0	18			13-UD-F-24-9-111-4	WR
13	13-UD-E-1-33-1	UD	E	1	1	20-51	1	VT	UC			33	1	VT	UC	R			33	1	26	0	26			13-UD-E-1-33-1-1	WR
13	13-UD-E-1-1-33	UD	E	1	2	1	29-36	BFET	WI			1	33	VT	WI	R			1	33	0	8	8			13-UD-E-1-1-33-4	WR
13	13-UD-E-1-1-84	UD	E	1	4	1	100	BFET	WI			1	84	VT	RI	R			1	84	0	6	6			13-UD-E-1-1-84-2	WR
13	13-UD-E-1-39-153	UD	E	1	5	39	153	VT	POR			39	153	VT	RI	R			39	153	6	6	12			13-UD-E-1-39-153-3	WR
13	13-UD-E-2-41-1	UD	E	2	2	30-52	1	BFET	WI			41	1	VT	WI	R			41	1	22	0	22			13-UD-E-2-41-1-2	WR
13	13-UD-E-2-1-97	UD	E	2	3	1	97	VT	POR			1	97	VT	POR	R			1	103	0	24	24			13-UD-E-2-1-103-1	WR
13	13-UD-E-2-1-106	UD	E	2	4	1	106	VT	UC			1	106	VT	UC	R			1	103	0	24	24			13-UD-E-2-1-103-1	WR
13	13-UD-E-2-1-110	UD	E	2	5	1	110	BFET	WI			1	110	VT	WI	R			1	103	0	24	24			13-UD-E-2-1-103-1	WR
13	13-UD-E-2-48-115	UD	E	2	7	48	115	BFET	WI			48	115	VT	WI	R			48	115	0	6	6			13-UD-E-2-48-115-3	WR
13	13-UD-E-2-58-17	UD	E	2								58	17	VT	RI	R			59	17	0	15	15			13-UD-E-2-59-17-2	WR
13	13-UD-E-3-2-1	UD	E	3	1	2	1	VT	POR			2	1	VT	POR	R			2	1	4	0	4			13-UD-E-3-2-1-1	WR
13	13-UD-E-3-1-30	UD	E	3	3	1	30	VT	POR			1	30	VT	POR	R			1	30	0	6	6			13-UD-E-3-1-30-2	WR
13	13-UD-E-3-76-13	UD	E	3	7	76	13	VT	TS			76	13	VT	TS	R			76	13	8	8	16			13-UD-E-3-76-13-3	WR
13	13-UD-E-3-78-28	UD	E	3	8	78	28	VT	POR			78	28	VT	POR	R			78	28	0	2	2			13-UD-E-3-78-28-4	WR
13	13-UD-E-3-55-62	UD	E	3	9	55	62	VT	DENT			55	62	VT	DENT	R			51	62	6	0	18.84956	28.27433		13-UD-E-3-51-62-5	PP
13	13-UD-E-3-0-99	UD	E	3								0	99	VT	RI	R			0	99	0	4	4			13-UD-E-3-0-99-6	WR
13	13-UD-E-4-59-13	UD	E	4	1	59	13	VT	POR			59	13	VT	POR	R			59	13	0	4	4			13-UD-E-4-59-13-1	WR
13	13-UD-E-4-52-1	UD	E	4	2	52	1	VT	POR			52	1	VT	POR	R			52	1	4	0	4			13-UD-E-4-52-1-2	WR
13	13-UD-E-4-29-49	UD	E	4	3	29	49	VT	TS		0.094	29	49	VT	TS	R			29	49	6	6	24	36		13-UD-E-4-29-49-3	TSPP
13	13-UD-E-4-26-132	UD	E	4	5	26	132	VT	DENT			26	132	VT	DENT	R			26	132	6	6	24	36		13-UD-E-4-26-132-4	TSPP
13	13-UD-E-4-21-1	UD	E	4								21	1	VT	RI	R			21	1	1	0	1			13-UD-E-4-21-1-5	WR
13	13-UD-E-4-55-6	UD	E	4								55	6	VT	RI	R			55	6	1	0	1			13-UD-E-4-55-6-6	WR
13	13-UD-E-4-60-7	UD	E	4								60	7	VT	RI	R			60	7	1	0	1			13-UD-E-4-60-7-7	WR
13	13-UD-E-4-74-4	UD	E	4								74	4	VT	RI	R			74	7	0	9	9			13-UD-E-4-74-7-8	WR
13	13-UD-E-5-3-4	UD	E	5	1	3	4	VT	TS			3	4	VT	TS	R			3	4	2	0	2			13-UD-E-5-3-4-1	WR
13	13-UD-E-5-16-2	UD	E	5	2	16	2	VT	TS			16	2	VT	TS	R			16	2	2	0	2			13-UD-E-5-16-2-2	WR
13	13-UD-E-5-43-1	UD	E	5	3	43	1	VT	POR			43	1	VT	POR	R			43	1	4	0	4			13-UD-E-5-43-1-3	WR
13	13-UD-E-5-64-50	UD	E	5	4	64	50	VT	POR			64	50	VT	POR	R			64	50	0	4	4			13-UD-E-5-64-50-4	WR
13	13-UD-E-5-6-103	UD	E	5	5	6	100-107	VT	TS			6	103	VT	TS	R			6	104	20	0	20			13-UD-E-5-6-104-5	WR
13	13-UD-E-5-2-156	UD	E	5	6	2	156	VT	POR			2	156	VT	POR	R			2	156	0	6	6			13-UD-E-5-2-156-6	WR
13	13-UD-E-5-75-34	UD	E	5	7	75	34	VT	TS			75	34	VT	TS	R			75	34	0	2	2			13-UD-E-5-75-34-7	WR
13	13-UD-E-5-76-12	UD	E	5	8	76	12	VT	TS			76	12	VT	TS	R			76	12	0	2	2			13-UD-E-5-76-12-8	WR
13	13-UD-E-5-78-6	UD	E	5	9	78	6	VT	TS			78	6	VT	TS	R			78	5	0	10	10			13-UD-E-5-78-5-9	WR
13	13-UD-E-5-0-70	UD	E	5								0	70	VT	RI	R			0	70	0	4	4			13-UD-E-5-0-70-10	WR
13	13-UD-E-5-1-23	UD	E	5								1	23	VT	RI	R			1	23	2	0	2			13-UD-E-5-1-23-11	WR
13	13-UD-E-5-53-0	UD	E	5								53	0	VT	RI	R			53	0	4	0	4			13-UD-E-5-53-0-12	WR
13	13-UD-E-5-60-45	UD	E	5								60	45	VT	RI	R			60	45	0	6	6			13-UD-E-5-60-45-13	WR
13	13-UD-E-6-1-115	UD	E	6	1	1	115	VT	POR			1	115	VT	POR	R			1	115	0	4	4			13-UD-E-6-1-115-1	WR
13	13-UD-E-6-1-98	UD	E	6	2	1	96-101	VT	POR			1	98	VT	POR	R			1	95	0	18	18			13-UD-E-6-1-95-2	WR
13	13-UD-E-6-52-108	UD	E	6	3	52	108	BFET	WI			52	108	VT	WI	R			52	108	0	6	6			13-UD-E-6-52-108-8	WR

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs							Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)
13	13-UD-E-6-1-14	UD	E	6	4	1	14	VT	TS			1	14	VT	TS	R			1	14	0	5	5		13-UD-E-6-1-14-3	WR
13	13-UD-E-6-6-5	UD	E	6	5	6	5	VT	TS			6	5	VT	TS	R			6	5	2	0	2		13-UD-E-6-6-5-4	WR
13	13-UD-E-6-39-1	UD	E	6	6	39	1	VT	TS			39	1	VT	TS	R			39	1	4	0	4		13-UD-E-6-39-1-5	WR
13	13-UD-E-6-62-3	UD	E	6	7	62	3	VT	TS			62	3	VT	TS	R			60	1	16	16	32		13-UD-E-6-60-1-6	WR
13	13-UD-E-6-60-1	UD	E	6	8	60	1	VT	POR			60	1	VT	POR	R			60	1	16	16	32		13-UD-E-6-60-1-6	WR
13	13-UD-E-6-0-39	UD	E	6								0	39	VT	RI	R			0	39	0	4	4		13-UD-E-6-0-39-7	WR
13	13-UD-E-7-4-8	UD	E	7	1	4	8	VT	TS			4	8	VT	TS	R			4	8	2	0	2		13-UD-E-7-4-8-1	WR
13	13-UD-E-7-12-3	UD	E	7	2	12	3	VT	TS			12	3	VT	TS	R			12	3	2	0	2		13-UD-E-7-12-3-2	WR
13	13-UD-E-7-37-72	UD	E	7	3	37	72	VT	TS		0.094	37	72	VT	TS	R	0.094		37	72	4	0	4		13-UD-E-7-37-72-3	WR
13	13-UD-E-7-0-56	UD	E	7								0	56	VT	IF	R			0	56	0	30	30		13-UD-E-7-0-56-4	WR
13	13-UD-E-7-0-103	UD	E	7								0	103	VT	IF	R			0	103	0	24	24		13-UD-E-7-0-103-5	WR
13	13-UD-E-8-60-10	UD	E	8	1	60	10	VT	POR			60	10	VT	POR	R			60	10	0	6	6		13-UD-E-8-60-10-1	WR
13	13-UD-E-8-78-10	UD	E	8	2	78	10	VT	UC		0.094	78	10	VT	UC	R	0.094		78	15	0	12	12		13-UD-E-8-78-15-2	WR
13	13-UD-E-8-61-21	UD	E	8	3	61	17-25	VT	LOF			61	21	VT	LOF	R			61	17	0	22	22		13-UD-E-8-61-17-3	WR
13	13-UD-E-8-5-28	UD	E	8	4	5	28	VT	TS		0.09	5	28	VT	TS	R		0.094	5	28	2	0	2		13-UD-E-8-5-28-4	WR
13	13-UD-E-8-22-87	UD	E	8	5	22	87	VT	TS		0.09	22	87	VT	TS	R		0.094	22	87	2	0	2		13-UD-E-8-22-87-5	WR
13	13-UD-E-8-55-108	UD	E	8	6	55	108	VT	POR			55	108	VT	POR	R			55	104	0	17	17		13-UD-E-8-55-104-6	WR
13	13-UD-E-9-59-1	UD	E	9	1	59	1	VT	TS			59	1	VT	TS	R			59	1	2	0	2		13-UD-E-9-59-1-1	WR
13	13-UD-E-9-61-1	UD	E	9	2	61	1	VT	POR			61	1	VT	POR	R			60	1	14	10	24		13-UD-E-9-60-1-2	WR
13	13-UD-E-9-78-6	UD	E	9	3	78	6	VT	TS			78	6	VT	TS	R			78	6	0	2	2		13-UD-E-9-78-6-3	WR
13	13-UD-E-9-59-87	UD	E	9	5	59	87	VT	TS			59	87	VT	TS	R			59	87	0	2	2		13-UD-E-9-59-87-4	WR
13	13-UD-E-9-0-17	UD	E	9								0	17	VT	RI	R			0	17	0	21	21		13-UD-E-9-0-17-5	WR
13	13-UD-E-9-0-109	UD	E	9								0	109	VT	RI	R			0	109	0	6	6		13-UD-E-9-0-109-6	WR
13	13-UD-E-10-20-14	UD	E	10	1	20	14	VT	POR			20	14	VT	POR	R			20	14	4	0	4		13-UD-E-10-20-14-1	WR
13	13-UD-E-10-56-10	UD	E	10	2	56	10	VT	TS		0.09	56	10	VT	TS	R			56	10	6	0	6		13-UD-E-10-56-10-2	WR
13	13-UD-E-10-62-3	UD	E	10	3	62	3	VT	POR			62	3	VT	POR	R			62	3	4	4	8		13-UD-E-10-62-3-3	WR
13	13-UD-E-10-18-105	UD	E	10	6	18	105	VT	TS		0.09	18	105	VT	TS	R			18	105	2	0	2		13-UD-E-10-18-105-4	WR
13	13-UD-E-11-1-136	UD	E	11	1	1	136	VT	POR			1	136	VT	POR	R			1	136	0	6	6		13-UD-E-11-1-136-1	WR
13	13-UD-E-11-38-156	UD	E	11	3	38	156	VT	POR			38	156	VT	POR	R			38	156	8	8	16		13-UD-E-11-38-156-2	WR
13	13-UD-E-11-59-72	UD	E	11	5	59	72	VT	POR			59	72	VT	POR	R			59	72	0	4	4		13-UD-E-11-59-72-3	WR
13	13-UD-E-11-61-20	UD	E	11	7	61	20	VT	POR			61	20	VT	POR	R			61	20	0	4	4		13-UD-E-11-61-20-4	WR
13	13-UD-E-11-78-38	UD	E	11	8	78	38	VT	POR			78	38	VT	POR	R			78	38	0	4	4		13-UD-E-11-78-38-5	WR
13	13-UD-E-11-34-1	UD	E	11	10	34	1	VT	POR			34	1	VT	POR	R			34	1	4	0	4		13-UD-E-11-34-1-6	WR
13	13-UD-E-11-46-1	UD	E	11	11	46	1	VT	POR			46	1	VT	POR	R			46	1	4	0	4		13-UD-E-11-46-1-7	WR
13	13-UD-E-11-63-1	UD	E	11								63	1	VT	RI	R			63	1	4	0	4		13-UD-E-11-63-1-8	WR
13	13-UD-E-11-60-61	UD	E	11								60	61	VT	RI	R			60	61	0	8	8		13-UD-E-11-60-61-9	WR
13	13-UD-E-12-1-14	UD	E	12	1	1	14	VT	POR			1	14	VT	POR	R			1	14	0	4	4		13-UD-E-12-1-14-1	WR
13	13-UD-E-12-1-60	UD	E	12	2	1	60	VT	POR			1	60	VT	POR	R			1	60	0	4	4		13-UD-E-12-1-60-2	WR
13	13-UD-E-12-78-74	UD	E	12	7	78	74	VT	POR			78	74	VT	POR	R			78	74	0	4	4		13-UD-E-12-78-74-3	WR
13	13-UD-E-13-59-8	UD	E	13	1	59	8	VT	POR			59	8	VT	POR	R			59	8	0	4	4		13-UD-E-13-59-8-1	WR
13	13-UD-E-13-61-12	UD	E	13	2	61	12	VT	LOF			61	12	VT	LOF	R			61	11	0	10	10		13-UD-E-13-61-11-2	WR
13	13-UD-E-13-62-45	UD	E	13	4	62	45	VT	LOF			62	45	VT	LOF	R			62	45	0	6	6		13-UD-E-13-62-45-3	WR
13	13-UD-E-13-59-88	UD	E	13	5	59	88	VT	POR			59	88	VT	POR	R			59	88	0	4	4		13-UD-E-13-59-88-4	WR
13	13-UD-E-13-0-18	UD	E	13								0	18	VT	RI	R			0	18	0	4	4		13-UD-E-13-0-18-5	WR
13	13-UD-E-13-72-12	UD	E	13								72	12	VT	RI	R			72	12	0	4	4		13-UD-E-13-72-12-6	WR
13	13-UD-E-14-78-1	UD	E	14	1	78	1	VT	POR			78	1	VT	POR	R			78	1	4	0	4		13-UD-E-14-78-1-1	WR
13	13-UD-E-14-77-3	UD	E	14	2	77	3	VT	TS			77	3	VT	TS	R			77	3	0	2	2		13-UD-E-14-77-3-2	WR
13	13-UD-E-14-60-52	UD	E	14	3	60	52	VT	POR			60	52	VT	POR	R			60	50	0	8	8		13-UD-E-14-60-50-3	WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-UD-E-14-59-73	UD	E	14	4	59	73	VT	TS			59	73	VT	TS	R			59	73	0	6	6			13-UD-E-14-59-73-4	WR
13	13-UD-E-14-58-80	UD	E	14	5	58	80	VT	TS		0.094	58	80	VT	TS	R			58	80	0	4	4			13-UD-E-14-58-80-5	WR
13	13-UD-E-14-59-88	UD	E	14	6	59	88	VT	LOF			59	88	VT	LOF	R			59	90	0	10	10			13-UD-E-14-59-90-6	WR
13	13-UD-E-14-2-108	UD	E	14	7	2	108	VT	TS		0.09	2	108	VT	TS	R			2	108	2	0	2			13-UD-E-14-2-108-7	WR
13	13-UD-E-14-12-108	UD	E	14	8	12	108	VT	TS		0.09	12	108	VT	TS	R			12	108	2	0	2			13-UD-E-14-12-108-8	WR
13	13-UD-E-14-40-156	UD	E	14	9	40	156	VT	POR			40	156	VT	POR	R			40	156	4	0	4			13-UD-E-14-40-156-9	WR
13	13-UD-E-14-0-64	UD	E	14								0	64	VT	RI	R			0	64	0	6	6			13-UD-E-14-0-64-10	WR
13	13-UD-E-14-0-10	UD	E	14								0	10	VT	RI	R			0	10	0	4	4			13-UD-E-14-0-10-11	WR
13	13-UD-E-15-78-1	UD	E	15	1	78	1	VT	TS			78	1	VT	TS	R			78	1	0	4	4			13-UD-E-15-78-1-1	WR
13	13-UD-E-15-59-60	UD	E	15	3	59	60	VT	TS		0.09	59	60	VT	TS	R			59	60	4	0	4			13-UD-E-15-59-60-2	WR
13	13-UD-E-15-60-68	UD	E	15	4	60	68	VT	POR			60	68	VT	POR	R			60	68	0	6	6			13-UD-E-15-60-68-3	WR
13	13-UD-E-15-24-84	UD	E	15	5	24	84	VT	DENT			24	84	VT	DENT	R			24	84	8	8	32	64		13-UD-E-15-24-84-4	PP
13	13-UD-E-15-1-120	UD	E	15	6	1	120	VT	LOF			1	120	VT	RI	R			1	120	0	12	12			13-UD-E-15-1-120-5	WR
13	13-UD-E-15-1-134	UD	E	15	7	1	134	VT	LOF			1	134	VT	RI	R			1	134	0	4	4			13-UD-E-15-1-134-6	WR
13	13-UD-E-15-43-125	UD	E	15	8	43	125	VT	TS		0.09	43	125	VT	TS	R			43	125	4	0	4			13-UD-E-15-43-125-7	WR
13	13-UD-E-15-0-29	UD	E	15								0	29	VT	RI	R			0	29	0	4	4			13-UD-E-15-0-29-8	WR
13	13-UD-E-15-0-56	UD	E	15								0	56	VT	RI	R			0	56	0	4	4			13-UD-E-15-0-56-9	WR
13	13-UD-E-15-62-49	UD	E	15								62	49	VT	RI	R			62	49	0	4	4			13-UD-E-15-62-49-10	WR
13	13-UD-E-16-1-115	UD	E	16	1	1	110-120	VT	LOF			1	115	VT	IF	R			1	114	0	12	12			13-UD-E-16-1-114-1	WR
13	13-UD-E-16-47-1	UD	E	16	2	47	1	VT	POR			47	1	VT	POR	R			47	1	4	0	4			13-UD-E-16-47-1-2	WR
13	13-UD-E-16-60-5	UD	E	16	3	60	5	VT	LOF			60	5	VT	RI	R			60	5	0	4	4			13-UD-E-16-60-5-3	WR
13	13-UD-E-16-60-17	UD	E	16	4	60	17	VT	POR			60	17	VT	POR	R			61	21	0	16	16			13-UD-E-16-61-21-4	WR
13	13-UD-E-16-62-17	UD	E	16	5	62	17	VT	LOF			62	17	VT	RI	R			61	21	0	16	16			13-UD-E-16-61-21-4	WR
13	13-UD-E-16-60-26	UD	E	16	6	60	26	VT	POR			60	26	VT	POR	R			61	21	0	16	16			13-UD-E-16-61-21-4	WR
13	13-UD-E-16-0-55	UD	E	16								0	55	VT	RI	R			0	55	0	4	4			13-UD-E-16-0-55-5	WR
13	13-UD-E-17-1-133	UD	E	17	1	1	133	VT	POR			1	133	VT	POR	R			1	133	0	6	6			13-UD-E-17-1-133-1	WR
13	13-UD-E-17-23-84	UD	E	17	2	23	84	VT	TS		0.09	23	84	VT	TS	R			23	84	4	0	4			13-UD-E-17-23-84-2	WR
13	13-UD-E-17-59-1	UD	E	17	3	59	1	VT	POR			59	1	VT	POR	R			59	1	4	0	4			13-UD-E-17-59-1-3	WR
13	13-UD-E-17-60-16	UD	E	17	4	60	16	VT	POR			60	16	VT	POR	R			60	16	0	4	4			13-UD-E-17-60-16-4	WR
13	13-UD-E-17-73-26	UD	E	17	5	73	26	VT	POR			73	26	VT	POR	R			73	23	0	10	10			13-UD-E-17-73-23-5	WR
13	13-UD-E-17-60-31	UD	E	17	6	60	31	VT	POR			60	31	VT	POR	R			60	33	0	4	4			13-UD-E-17-60-33-6	WR
13	13-UD-E-17-16-0	UD	E	17								16	0	VT	RI	R			16	0	4	0	4			13-UD-E-17-16-0-7	WR
13	13-UD-E-17-60-25	UD	E	17								60	25	VT	RI	R			60	25	0	4	4			13-UD-E-17-60-25-8	WR
13	13-UD-E-17-78-4	UD	E	17								78	4	VT	RI	R			78	4	0	4	4			13-UD-E-17-78-4-9	WR
13	13-UD-E-18-1-68	UD	E	18	1	1	68	VT	POR			1	68	VT	POR	R			1	68	0	10	10			13-UD-E-18-1-68-1	WR
13	13-UD-E-18-42-60	UD	E	18	2	42	60	LFET	BC	0.15		42	60	VT	BC	R	0.154		47	33	22	66	176	1452		13-UD-E-18-47-33-2	PP
13	13-UD-E-18-8-1	UD	E	18	3	8	1	VT	POR			8	1	VT	POR	R			8	1	4	0	4			13-UD-E-18-8-1-3	WR
13	13-UD-E-18-44-25	UD	E	18	4	44	25	LFET	BC	0.15		44	25	VT	BC	R	0.147		47	33	22	66	176	1452		13-UD-E-18-47-33-2	PP
13	13-UD-E-18-58-1	UD	E	18	5	18	1	VT	POR			58	1	VT	POR	R			58	1	4	0	4			13-UD-E-18-58-1-4	WR
13	13-UD-E-18-30-0	UD	E	18								30	0	VT	RI	R			30	0	4	0	4			13-UD-E-18-30-0-5	WR
13	13-UD-E-19-74-33	UD	E	19	1	74	33	VT	TS		0.09	74	33	VT	TS	R			74	33	0	2	2			13-UD-E-19-74-33-1	WR
13	13-UD-E-19-27-1	UD	E	19	2	27	1	VT	POR			27	1	VT	POR	R			27	1	2	0	2			13-UD-E-19-27-1-2	WR
13	13-UD-E-19-52-96	UD	E	19	3	52	96	VT	UC		0.09	52	96	VT	UC	R			52	107	0	30	30			13-UD-E-19-52-107-3	WR
13	13-UD-E-19-52-104	UD	E	19	4	52	104	VT	UC		0.09	52	104	VT	UC	R			52	107	0	30	30			13-UD-E-19-52-107-3	WR
13	13-UD-E-19-52-120	UD	E	19	5	52	120	VT	UC		0.09	52	120	VT	UC	R			52	107	0	30	30			13-UD-E-19-52-107-3	WR
13	13-UD-E-19-40-144	UD	E	19	6	40	144	VT	POR			40	144	VT	POR	R			40	144	8	8	16			13-UD-E-19-40-144-4	WR
13	13-UD-E-19-27-156	UD	E	19	8	27	156	VT	POR			27	156	VT	POR	R			27	156	4	0	4			13-UD-E-19-27-156-5	WR
13	13-UD-E-19-56-72	UD	E	19								56	72	VT	RI	R			56	72	0	4	4			13-UD-E-19-56-72-6	WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-UD-E-20-36-156	UD	E	20	3	36	156	VT	POR			36	156	VT	POR	R			28	156	22	0	22			13-UD-E-20-28-156-1	WR
13	13-UD-E-20-0-76	UD	E	20								0	76	VT	RI	R			0	76	0	6	6			13-UD-E-20-0-76-2	WR
13	13-UD-E-20-0-2	UD	E	20								0	2	VT	RI	R			0	2	0	4	4			13-UD-E-20-0-2-3	WR
13	13-UD-E-20-0-14	UD	E	20								0	14	VT	RI	R			0	14	0	4	4			13-UD-E-20-0-14-4	WR
13	13-UD-E-20-58-19	UD	E	20								58	19	VT	RI	R			58	19	0	4	4			13-UD-E-20-58-19-5	WR
13	13-UD-E-20-58-34	UD	E	20								58	34	VT	RI	R			58	34	0	4	4			13-UD-E-20-58-34-6	WR
13	13-UD-E-21-61-1	UD	E	21	1	61	1	VT	POR			61	1	VT	POR	R			61	1	0	4	4			13-UD-E-21-61-1-1	WR
13	13-UD-E-21-14-4	UD	E	21	2	14	4	VT	TS			14	4	VT	TS	R			14	4	0	8	8			13-UD-E-21-14-4-2	WR
13	13-UD-E-21-8-1	UD	E	21	3	8	1	VT	POR			8	1	VT	POR	R			7	1	0	4	4			13-UD-E-21-7-1-3	WR
13	13-UD-E-21-3-14	UD	E	21	4	3	14	VT	TS			3	14	VT	TS	R			3	14	6	0	6			13-UD-E-21-3-14-4	WR
13	13-UD-E-21-16-1	UD	E	21	5	16	1	VT	POR			16	1	VT	POR	R			0	10	0	10	10			13-UD-E-21-0-10-5	WR
13	13-UD-E-21-78-72	UD	E	21	6	78	72	VT	POR			78	72	VT	POR	R			78	72	0	6	6			13-UD-E-21-78-72-6	WR
13	13-UD-E-21-47-0	UD	E	21								47	0	VT	RI	R			47	0	4	0	4			13-UD-E-21-47-0-7	WR
13	13-UD-E-21-51-102	UD	E	21								51	102	VT	RI	R			51	102	0	4	4			13-UD-E-21-51-102-8	WR
13	13-UD-E-22-61-4	UD	E	22	1	61	4	VT	LOF			61	4	VT	RI	R			61	4	0	4	4			13-UD-E-22-61-4-1	WR
13	13-UD-E-22-29-1	UD	E	22	3	29	1	VT	TS		0.09	29	1	VT	TS	R			29	1	0	2	2			13-UD-E-22-29-1-2	WR
13	13-UD-E-22-15-1	UD	E	22	4	15	1	VT	POR			15	1	VT	POR	R			15	1	6	0	6			13-UD-E-22-15-1-3	WR
13	13-UD-E-22-20-156	UD	E	22	6	16-24	156	VT	LOF			20	156	VT	LOF	R			24	156	18	0	18			13-UD-E-22-24-156-4	WR
13	13-UD-E-22-30-156	UD	E	22	7	30	156	VT	POR			30	156	VT	POR	R			24	156	18	0	18			13-UD-E-22-24-156-4	WR
13	13-UD-E-22-40-151	UD	E	22	9	40	151	VT	POR			40	151	VT	POR	R			40	151	0	4	4			13-UD-E-22-40-151-5	WR
13	13-UD-E-22-50-40	UD	E	22	10	50	40	VT	DENT			50	40	VT	DENT	R			48	38	6	0	18.84956	28.27433		13-UD-E-22-48-38-6	PP
13	13-UD-E-22-7-4	UD	E	22								7	4	VT	RI	R			7	4	4	0	4			13-UD-E-22-7-4-7	WR
13	13-UD-E-22-0-142	UD	E	22								0	142	VT	RI	R			0	142	0	4	4			13-UD-E-22-0-142-8	WR
13	13-UD-E-22-62-65	UD	E	22								62	65	VT	RI	R			62	65	0	12	12			13-UD-E-22-62-65-9	WR
13	13-UD-E-23-55-156	UD	E	23	1	55	156	VT	LOF			55	156	VT	LOF	R			55	156	2	0	2			13-UD-E-23-55-156-1	WR
13	13-UD-E-23-35-136	UD	E	23	2	35	136	VT	TS			35	136	VT	TS	R			35	136	0	2	2			13-UD-E-23-35-136-2	WR
13	13-UD-E-23-0-108	UD	E	23	3	0	108	VT	POR			0	108	VT	POR	R			0	108	0	4	4			13-UD-E-23-0-108-3	WR
13	13-UD-E-23-0-6	UD	E	23	4	0	6	VT	LOF			0	6	VT	RI	R			0	6	0	4	4			13-UD-E-23-0-6-4	WR
13	13-UD-E-23-20-0	UD	E	23	5	16-23	0	VT	POR			20	0	VT	POR	R			19	0	10	0	10			13-UD-E-23-19-0-5	WR
13	13-UD-E-23-0-16	UD	E	23	6	0	16	VT	POR			0	16	VT	POR	R			0	16	0	4	4			13-UD-E-23-0-16-6	WR
13	13-UD-E-23-0-150	UD	E	23								0	150	VT	RI	R			0	150	0	4	4			13-UD-E-23-0-150-7	WR
13	13-UD-E-23-0-95	UD	E	23								0	95	VT	RI	R			0	95	8	16	24			13-UD-E-23-0-95-8	WR
13	13-UD-E-23-6-0	UD	E	23								6	0	VT	RI	R			6	0	4	0	4			13-UD-E-23-6-0-9	WR
13	13-UD-E-24-60-36	UD	E	24	2	60	36	BFET	WI			60	36	VT	WI	R			60	36	0	6	6			13-UD-E-24-60-36-1	WR
13	13-UD-E-24-55-93	UD	E	24	3	55	93	BFET	WI			55	93	VT	WI	R			55	93	0	6	6			13-UD-E-24-55-93-2	WR
13	13-UD-E-24-52-105	UD	E	24	4	52	105	VT	POR			52	105	VT	POR	R			52	105	0	4	4			13-UD-E-24-52-105-3	WR
13	13-UD-E-24-39-145	UD	E	24	5	39	145	BFET	WI			39	145	VT	RI	R			39	145	0	17	17			13-UD-E-24-39-145-4	WR
13	13-UD-E-24-39-150	UD	E	24	6	39	150	VT	POR			39	150	VT	POR	R			39	145	0	17	17			13-UD-E-24-39-145-4	WR
13	13-UD-E-24-0-118	UD	E	24	7	0	118	VT	LOF			0	118	VT	LOF	R			0	118	0	4	4			13-UD-E-24-0-118-5	WR
13	13-UD-E-24-12-156	UD	E	24	8	9-15	156	VT	LOF			12	156	VT	RI	R			12	156	8	0	8			13-UD-E-24-12-156-6	WR
13	13-UD-E-24-59-71	UD	E	24								59	71	VT	RI	R			59	71	0	4	4			13-UD-E-24-59-71-7	WR
13	13-UD-D-1-0-147	UD	D	1	2	0	147	VT	POR			0	147	VT	POR	R			0	147	0	4	4			13-UD-D-1-0-147-1	WR
13	13-UD-D-1-26-110	UD	D	1	4	26	110	VT	POR			26	110	VT	POR	R			26	110	0	4	4			13-UD-D-1-26-110-2	WR
13	13-UD-D-2-0-156	UD	D	2	2	0	156	VT	POR			0	156	VT	POR	R			0	156	4	0	4			13-UD-D-2-0-156-1	WR
13	13-UD-D-2-0-89	UD	D	2								0	89	VT	POR	R			0	89	0	4	4			13-UD-D-2-0-89-2	WR
13	13-UD-D-3-0-0	UD	D	3	2	0	0	VT	POR			0	0	VT	POR	R			0	0	4	4	8			13-UD-D-3-0-0-1	WR
13	13-UD-D-4-45-74	UD	D	4								45	74	VT	RI	R			45	74	6	0	6			13-UD-D-4-45-74-1	WR
13	13-UD-D-5-4-156	UD	D	5	1	4	156	VT	POR			4	156	VT	POR	R			8	156	10	0	10			13-UD-D-5-8-156-1	WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-UD-D-5-9-156	UD	D	5	2	9	156	VT	POR			9	156	VT	POR	R			8	156	10	0	10			13-UD-D-5-8-156-1	WR
13	13-UD-D-5-15-104	UD	D	5	4	15	104	VT	TC		0.094	15	104	VT	TC	R			15	104	0	4	4			13-UD-D-5-15-104-2	WR
13	13-UD-D-5-47-0	UD	D	5	10	47	0	VT	POR			47	0	VT	POR	R			47	0	4	0	4			13-UD-D-5-47-0-3	WR
13	13-UD-D-6-0-124	UD	D	6	5	0	124	VT	POR			0	124	VT	POR	R			0	124	0	4	4			13-UD-D-6-0-124-1	WR
13	13-UD-D-7-18-147	UD	D	7	1	18	145-150	VT	UC			18	147	VT	GOUGE	R			18	147	0	4	4			13-UD-D-7-18-147-1	WR
13	13-UD-D-8-1-155	UD	D	8	6	0-2	154-156	VT	UC			1	155	VT	LOF	R			1	155	5	0	5			13-UD-D-8-1-155-1	WR
13	13-UD-D-8-21-89	UD	D	8								21	89	VT	LOF	R			21	89	12	0	12			13-UD-D-8-21-89-2	WR
13	13-UD-D-9-17-149	UD	D	9	1	17	149	VT	POR			17	149	VT	POR	R			17	149	10	0	10			13-UD-D-9-17-149-1	WR
13	13-UD-D-9-0-156	UD	D	9	11	0	156	VT	UC			0	156	VT	UC	R			0	156	5	0	5			13-UD-D-9-0-156-2	WR
13	13-UD-D-10-55-156	UD	D	10	4	57	156	VT	POR			55	156	VT	POR	R			55	156	8	0	8			13-UD-D-10-55-156-1	WR
13	13-UD-D-10-26-104	UD	D	10	7	26	104	VT	TC		0.15	26	104	VT	DENT	R			26	104	8	8	32	64		13-UD-D-10-26-104-2	PP
13	13-UD-D-10-22-53	UD	D	10	9	22	53	VT	TC		0.1	22	53	VT	DENT	R			22	53	6	0	18.84956	28.27433		13-UD-D-10-22-53-3	PP
13	13-UD-D-10-0-0	UD	D	10	12	0	0	VT	POR			0	0	VT	POR	R			0	0	0	10	10			13-UD-D-10-0-0-4	WR
13	13-UD-D-11-27-62	UD	D	11	1	27	62	VT	POR			27	62	VT	POR	R			27	62	0	4	4			13-UD-D-11-27-62-1	WR
13	13-UD-D-11-5-156	UD	D	11	2	5	156	VT	POR			5	156	VT	POR	R			5	156	30	0	30			13-UD-D-11-5-156-2	WR
13	13-UD-D-11-0-21	UD	D	11	6	0	21	VT	POR			0	21	VT	POR	R			0	21	0	4	4			13-UD-D-11-0-21-3	WR
13	13-UD-D-11-0-156	UD	D	11								0	156	VT	POR	R			0	156	0	4	4			13-UD-D-11-0-156-4	WR
13	13-UD-D-11-42-30	UD	D	11								42	30	VT	POR	R			42	30	0	4	4			13-UD-D-11-42-30-5	WR
13	13-UD-D-11-0-0	UD	D	11								0	0	VT	LOF	R			0	0	24	0	24			13-UD-D-11-0-0-6	WR
13	13-UD-D-12-50-52	UD	D	12	3	51	52	VT	UC/POR			50	52	VT	POR	R			50	52	12	0	12			13-UD-D-12-50-52-1	WR
13	13-UD-D-12-7-156	UD	D	12	4	7	156	VT	POR			7	156	VT	POR	R			7	156	4	0	4			13-UD-D-12-7-156-2	WR
13	13-UD-D-12-19-156	UD	D	12	5	19	156	VT	POR			19	156	VT	POR	R			19	156	6	0	6			13-UD-D-12-19-156-3	WR
13	13-UD-D-12-31-156	UD	D	12	6	31	156	VT	POR			31	156	VT	POR	R			31	156	4	0	4			13-UD-D-12-31-156-4	WR
13	13-UD-D-12-0-126	UD	D	12	8	0	126	VT	POR			0	126	VT	POR	R			0	126	0	4	4			13-UD-D-12-0-126-5	WR
13	13-UD-D-13-20-141	UD	D	13	1	20	141	VT	TC		0.094	20	141	VT	GOUGE	R			20	141	2	0	2			13-UD-D-13-20-141-1	WR
13	13-UD-D-13-8-156	UD	D	13	2	0-17	136	VT	UC/POR			8	156	VT	RI	R			8	156	4	0	4			13-UD-D-13-8-156-2	WR
13	13-UD-D-13-0-154	UD	D	13	3	0	152	VT	POR			0	154	VT	LOF	R			0	154	0	8	8			13-UD-D-13-0-154-3	WR
13	13-UD-D-14-0-156	UD	D	14	2	0	156	VT	POR			0	156	VT	POR	R			0	156	8	0	8			13-UD-D-14-0-156-1	WR
13	13-UD-D-14-0-54	UD	D	14	4	0	54	VT	POR			0	54	VT	POR	R			0	54	0	4	4			13-UD-D-14-0-54-2	WR
13	13-UD-D-14-0-25	UD	D	14	5	0	25	VT	POR			0	25	VT	POR	R			0	25	8	0	8			13-UD-D-14-0-25-3	WR
13	13-UD-D-14-34-0	UD	D	14	7	34	0	VT	POR			34	0	VT	POR	R			34	0	8	0	8			13-UD-D-14-34-0-4	WR
13	13-UD-D-15-0-47	UD	D	15	5	0	47	BFET	WI			0	47	VT	WI	R			0	47	0	8	8			13-UD-D-15-0-47-1	WR
13	13-UD-D-15-0-30	UD	D	15	6	0	30	VT	POR			0	30	VT	POR	R			0	30	0	4	4			13-UD-D-15-0-30-2	WR
13	13-UD-D-16-0-0	UD	D	16	1	0	0	VT	LW			0	0	VT	IF	R			0	0	30	0	30			13-UD-D-16-0-0-1	WR
13	13-UD-D-16-39-0	UD	D	16	2	26-59	0	VT	UC			39	0	VT	UC	R			39	0	6	0	6			13-UD-D-16-39-0-2	WR
13	13-UD-D-16-53-0	UD	D	16	3	55	0	VT	POR			53	0	VT	POR	R			53	0	4	0	4			13-UD-D-16-53-0-3	WR
13	13-UD-D-16-52-68	UD	D	16	4	55	69	VT	UC/POR			52	68	VT	POR	R			52	68	4	0	4			13-UD-D-16-52-68-4	WR
13	13-UD-D-16-29-110	UD	D	16	5	29	110	VT	TC		0.1	29	110	VT	DENT	R			29	110	8	8	32	64		13-UD-D-16-29-110-5	PP
13	13-UD-D-16-18-156	UD	D	16								18	156	VT	POR	R			18	156	4	0	4			13-UD-D-16-18-156-6	WR
13	13-UD-D-17-0-17	UD	D	17	2	0	17	VT	POR			0	17	VT	POR	R			0	17	0	4	4			13-UD-D-17-0-17-1	WR
13	13-UD-D-17-33-18	UD	D	17	4	15-19	32-35	VT	TC		0.1	33	18	VT	TC	R			33	18	10	10	40	100		13-UD-D-17-33-18-2	PP
13	13-UD-D-17-0-140	UD	D	17	6	0	140	VT	POR			0	140	VT	POR	R			0	140	0	4	4			13-UD-D-17-0-140-3	WR
13	13-UD-D-17-0-156	UD	D	17								0	156	VT	RI	R			0	156	12	0	12			13-UD-D-17-0-156-4	WR
13	13-UD-D-18-38-66	UD	D	18	1	38	66	VT	TC		0.094	38	66	VT	GOUGE	R			38	66	2	0	2			13-UD-D-18-38-66-1	WR
13	13-UD-D-18-57-132	UD	D	18								57	132	VT	RI	R			57	132	0	4	4			13-UD-D-18-57-132-2	WR
13	13-UD-D-19-17-153	UD	D	19	1	19	149-151	VT	UC			17	153	VT	LOF	R			17	153	5	0	5			13-UD-D-19-17-153-1	WR
13	13-UD-D-19-6-84	UD	D	19	3	6	84	VT	DENT			6	84	VT	DENT	R			6	84	6	0	18.84956	28.27433		13-UD-D-19-6-84-2	PP
13	13-UD-D-19-43-42	UD	D	19	9	43	42	VT	POR			43	42	VT	RI	R			43	42	0	4	4			13-UD-D-19-43-42-3	WR

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-UD-D-19-26-57	UD	D	19	11	26	57	VT	TC			26	57	VT	GOUGE	R			26	57	4	0	4		13-UD-D-19-26-57-4		WR
13	13-UD-D-19-4-65	UD	D	19								4	65	VT	GOUGE	R			4	65	0	4	4		13-UD-D-19-4-65-5		WR
13	13-UD-D-19-0-0	UD	D	19								0	0	VT	LOF	R			0	0	6	0	6		13-UD-D-19-0-0-6		WR
13	13-UD-D-20-40-45	UD	D	20	2	40	45	LFET	BC	0.18		40	45	VT	BC	R	< 0.160		40	45	10	10	40	100	13-UD-D-20-40-45-1		TSPP
13	13-UD-D-20-58-49	UD	D	20	3	58	49	VT	TC		0.125	58	49	VT	TC	R			58	49	0	3	3		13-UD-D-20-58-49-2		WR
13	13-UD-D-20-37-89	UD	D	20	4	37	89	VT	DENT			37	89	VT	DENT	R			37	89	8	8	32	64	13-UD-D-20-37-89-3		PP
13	13-UD-D-20-4-23	UD	D	20	12	4	23	VT	TC		0.094	4	23	VT	GOUGE	R			4	23	6	0	6		13-UD-D-20-4-23-4		WR
13	13-UD-D-20-17-12	UD	D	20	13	17	12	VT	TC		0.094	17	12	VT	DENT	R			17	12	6	0	18.84956	28.27433	13-UD-D-20-17-12-5		PP
13	13-UD-D-20-5-156	UD	D	20								5	156	VT	RI	R			5	156	12	0	12		13-UD-D-20-5-156-6		WR
13	13-UD-D-20-29-156	UD	D	20								29	156	VT	RI	R			29	156	4	0	4		13-UD-D-20-29-156-7		WR
13	13-UD-D-21-44-22	UD	D	21	2	0-37	0-37	VT	UC			44	22	VT	IF	R			44	22	0	6	6		13-UD-D-21-44-22-1		WR
13	13-UD-D-21-5-39	UD	D	21	3	39	39	VT	TC		0.1	5	39	VT	GOUGE	R			5	39	2	0	2		13-UD-D-21-5-39-2		WR
13	13-UD-D-22-24-156	UD	D	22	1	0-58	156	VT	UC/POR			24	156	VT	LOF	R			24	156	48	0	48		13-UD-D-22-24-156-1		WR
13	13-UD-D-22-58-60	UD	D	22	2	58	60	VT	POR			58	60	VT	RI	R			58	60	0	4	4		13-UD-D-22-58-60-2		WR
13	13-UD-D-22-40-48	UD	D	22	3	40	48	VT	TC			40	48	VT	GOUGE	R			40	48	4	0	4		13-UD-D-22-40-48-3		WR
13	13-UD-D-22-0-0	UD	D	22	4	0	0	VT	UC			0	0	VT	UC	R			0	0	0	4	4		13-UD-D-22-0-0-4		WR
13	13-UD-D-22-0-10	UD	D	22								0	10	VT	RI	R			0	10	0	4	4		13-UD-D-22-0-10-5		WR
13	13-UD-D-23-15-156	UD	D	23	2	19	156	VT	IW			15	156	VT	RI	R			15	156	0	4	4		13-UD-D-23-15-156-1		WR
13	13-UD-D-23-37-41	UD	D	23	7	37	41	VT	TC		0.094	37	41	VT	GOUGE	R			37	41	3	3	6		13-UD-D-23-37-41-2		WR
13	13-UD-D-23-8-11	UD	D	23								8	11	VT	DENT	R			8	11	8	8	32	64	13-UD-D-23-8-11-3		PP
13	13-UD-D-24-48-80	UD	D	24	3	48	80	VT	TC		0.125	48	80	VT	GOUGE	R			48	80	2	0	2		13-UD-D-24-48-80-1		WR
13	13-UD-D-24-1-124	UD	D	24	4	1	124	VT	TC		0.1	1	124	VT	DENT	R			1	124	6	6	24	36	13-UD-D-24-1-124-2		TSPP
13	13-UD-D-24-4-156	UD	D	24	5	3-58	156	VT	UC			4	156	VT	LOF	R			4	156	4	0	4		13-UD-D-24-4-156-3		WR
13	13-UD-D-24-32-156	UD	D	24	6	32	156	VT	POR			32	156	VT	POR	R			32	156	5	0	5		13-UD-D-24-32-156-4		WR
13	13-UD-D-24-58-14	UD	D	24								58	14	VT	RI	R			58	14	0	4	4		13-UD-D-24-58-14-5		WR
13	13-UD-D-25-25-15	UD	D	25	1	25	15	VT	TC		0.14	25	15	VT	DENT	R			25	17	12	12	48	144	13-UD-D-25-25-17-1		PP
13	13-UD-D-25-27-20	UD	D	25	2	27	20	VT	TC		0.15	27	20	VT	DENT	R			25	17	12	12	48	144	13-UD-D-25-25-17-1		PP
13	13-UD-D-25-13-36	UD	D	25	3	13	36	VT	DENT			13	36	VT	DENT	R			13	36	8	8	32	64	13-UD-D-25-13-36-2		PP
13	13-UD-D-25-17-70	UD	D	25	4	17	70	VT	TC		0.11	17	70	VT	DENT	R			17	70	6	0	18.84956	28.27433	13-UD-D-25-17-70-3		PP
13	13-UD-D-25-13-156	UD	D	25	7	17	156	VT	POR			13	156	VT	RI	R			13	156	4	0	4		13-UD-D-25-13-156-4		WR
13	13-UD-D-25-39-48	UD	D	25								39	48	VT	POR	R			39	48	0	4	4		13-UD-D-25-39-48-5		WR
13	13-UD-D-25-19-57	UD	D	25								19	57	VT	DENT	R			19	57	6	0	18.84956	28.27433	13-UD-D-25-19-57-6		PP
13	13-UD-D-26-0-18	UD	D	26	1	0	18	VT	POR			0	18	VT	POR	R			0	18	0	4	4		13-UD-D-26-0-18-1		WR
13	13-UD-D-26-0-156	UD	D	26								0	156	VT	LOF	R			0	156	24	0	24		13-UD-D-26-0-156-2		WR
13	13-UD-D-26-42-156	UD	D	26								42	156	VT	POR	R			42	156	4	0	4		13-UD-D-26-42-156-3		WR
13	13-UD-D-27-44-28	UD	D	27	1	44	28	VT	TC			44	28	VT	TC	R			44	28	6	6	24	36	13-UD-D-27-44-28-1		TSPP
13	13-UD-D-27-0-0	UD	D	27	2	0	2	BFET	WI			0	0	VT	WI	R			0	0	4	4	8		13-UD-D-27-0-0-2		WR
13	13-UD-D-28-54-69	UD	D	28	1	54	69	BFET	WI			54	69	VT	WI	R			54	69	12	0	12		13-UD-D-28-54-69-1		WR
13	13-UD-D-28-0-0	UD	D	28								0	0	VT	POR	R			0	0	0	4	4		13-UD-D-28-0-0-2		WR
13	13-UD-D-29-24-122	UD	D	29	1	24	122	VT	POR			24	122	VT	POR	R			24	122	0	4	4		13-UD-D-29-24-122-1		WR
13	13-UD-D-29-23-66	UD	D	29	2	23	66	VT	TC		0.094	23	66	VT	GOUGE	R			23	66	0	6	6		13-UD-D-29-23-66-2		WR
13	13-UD-D-29-33-85	UD	D	29								33	85	VT	POR	R			33	85	0	4	4		13-UD-D-29-33-85-3		WR
13	13-UD-D-29-39-47	UD	D	29								39	47	VT	POR	R			39	47	0	4	4		13-UD-D-29-39-47-4		WR
13	13-UD-D-30-2-4	UD	D	30	1	2	4	VT	TC		0.094	2	4	VT	GOUGE	R			2	4	0	8	8		13-UD-D-30-2-4-1		WR
13	13-UD-D-30-48-111	UD	D	30	3	48	111	VT	DENT			48	111	VT	DENT	R			48	111	8	8	32	64	13-UD-D-30-48-111-2		PP
13	13-UD-D-30-14-120	UD	D	30	4	14	120	VT	DENT			14	120	VT	DENT	R			14	120	8	8	32	64	13-UD-D-30-14-120-3		PP
13	13-UD-D-30-0-156	UD	D	30								0	156	VT	LOF	R			0	156	3	6	9		13-UD-D-30-0-156-4		WR
13	13-UD-D-30-48-156	UD	D	30								48	156	VT	POR	R			48	156	4	0	4		13-UD-D-30-48-156-5		WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-D-31-0-156	UD	D	31								0	156	VT	LOF	R			0	156	15	0	15		13-UD-D-31-0-156-1	WR	
13	13-UD-D-31-3-156	UD	D	31								3	156	VT	POR	R			3	156	4	0	4		13-UD-D-31-3-156-2	WR	
13	13-UD-D-32-60-99	UD	D	32	2	60	99	VT	POR			60	99	VT	POR	R			60	99	0	4	4		13-UD-D-32-60-99-1	WR	
13	13-UD-D-32-58-22	UD	D	32								58	22	VT	POR	R			58	22	0	4	4		13-UD-D-32-58-22-2	WR	
13	13-UD-D-32-56-73	UD	D	32								56	73	VT	LOF	R			56	73	12	0	12		13-UD-D-32-56-73-3	WR	
13	13-UD-D-32-17-156	UD	D	32								17	156	VT	RI	R			17	156	4	0	4		13-UD-D-32-17-156-4	WR	
13	13-UD-D-33-36-64	UD	D	33	3	36	64	VT	POR			36	64	VT	POR	R			36	64	0	4	4		13-UD-D-33-36-64-1	WR	
13	13-UD-D-34-3-156	UD	D	34	1	3	156	BFET	WI			3	156	VT	WI	R			3	156	6	4	10		13-UD-D-34-3-156-1	WR	
13	13-UD-D-34-55-156	UD	D	34	2	55	156	BFET	WI			55	156	VT	WI	R			55	156	10	0	10		13-UD-D-34-55-156-2	WR	
13	13-UD-D-34-0-124	UD	D	34	3	0	124	VT	POR			0	124	VT	POR	R			0	124	0	11	11		13-UD-D-34-0-124-3	WR	
13	13-UD-D-34-0-83	UD	D	34	5	0	83	VT	POR			0	83	VT	POR	R			0	83	0	5	5		13-UD-D-34-0-83-4	WR	
13	13-UD-D-34-0-26	UD	D	34	8	0	26	VT	POR			0	26	VT	POR	R			0	26	0	4	4		13-UD-D-34-0-26-5	WR	
13	13-UD-D-35-0-0	UD	D	35	1	0-51	0	VT	UC			0	0	VT	LOF	R			0	0	14	0	14		13-UD-D-35-0-0-1	WR	
13	13-UD-D-35-26-0	UD	D	35	2	26	0	VT	POR			26	0	VT	POR	R			26	0	4	0	4		13-UD-D-35-26-0-2	WR	
13	13-UD-D-35-36-39	UD	D	35	3	36	39	VT	DENT			36	39	VT	DENT	R			36	39	14	14	56	196	13-UD-D-35-36-39-3	TSPP	
13	13-UD-D-35-16-70	UD	D	35	4	16	70	VT	TC		0.094	16	70	VT	TC	R			16	70	6	0	18.84956	28.27433	13-UD-D-35-16-70-4	PP	
13	13-UD-D-35-19-156	UD	D	35	6	19	156	VT	POR			19	156	VT	POR	R			19	156	2	2	4		13-UD-D-35-19-156-5	WR	
13	13-UD-D-35-21-134	UD	D	35	7	21	134	VT	POR			21	134	VT	RI	R			21	134	0	4	4		13-UD-D-35-21-134-6	WR	
13	13-UD-D-35-0-100	UD	D	35								0	100	VT	POR	R			0	100	0	4	4		13-UD-D-35-0-100-7	WR	
13	13-UD-D-35-0-114	UD	D	35								0	114	VT	POR	R			0	114	0	4	4		13-UD-D-35-0-114-8	WR	
13	13-UD-D-35-14-113	UD	D	35								14	113	VT	DENT	R			14	113	8	8	32	64	13-UD-D-35-14-113-9	PP	
13	13-UD-D-35-0-67	UD	D	35								0	67	VT	RI	R			0	67	0	4	4		13-UD-D-35-0-67-10	WR	
13	13-UD-D-36-14-115	UD	D	36	1	14	115	VT	DENT			14	115	VT	DENT	R			14	115	14	14	56	196	13-UD-D-36-14-115-1	PP	
13	13-UD-D-37-37-66	UD	D	37	3	37	66	VT	POR			37	66	VT	POR	R			37	66	0	4	4		13-UD-D-37-37-66-1	WR	
13	13-UD-D-37-46-0	UD	D	37								46	0	VT	RI	R			46	0	4	0	4		13-UD-D-37-46-0-2	WR	
13	13-UD-D-38-41-125	UD	D	38	1	41	125	VT	TC		0.094	41	125	VT	TC	R			41	125	0	4	4		13-UD-D-38-41-125-1	WR	
13	13-UD-D-38-0-91	UD	D	38	2	0	91	VT	POR			0	91	VT	POR	R			0	91	0	4	4		13-UD-D-38-0-91-2	WR	
13	13-UD-D-38-23-68	UD	D	38	3	23	68	VT	DENT			23	68	VT	DENT	R			23	68	10	10	40	100	13-UD-D-38-23-68-3	PP	
13	13-UD-D-38-5-5	UD	D	38	8	5	5	VT	TC		0.094	5	5	VT	GOUGE	R			5	5	3	0	3		13-UD-D-38-5-5-4	WR	
13	13-UD-D-39-7-0	UD	D	39	1	3-10	0	VT	UC			7	0	VT	UC	R			7	0	0	9	9		13-UD-D-39-7-0-1	WR	
13	13-UD-D-39-0-19	UD	D	39	2	0	19	VT	POR			0	19	VT	POR	R			0	19	0	4	4		13-UD-D-39-0-19-2	WR	
13	13-UD-D-39-0-37	UD	D	39	4	0	37	VT	POR			0	37	VT	POR	R			0	37	0	6	6		13-UD-D-39-0-37-3	WR	
13	13-UD-D-39-41-43	UD	D	39	5	41	43	VT	POR			41	43	VT	POR	R			41	43	0	4	4		13-UD-D-39-41-43-4	WR	
13	13-UD-D-39-41-35	UD	D	39	6	41	35	VT	POR			41	35	VT	POR	R			41	35	0	4	4		13-UD-D-39-41-35-5	WR	
13	13-UD-D-39-0-62	UD	D	39	7	0	62	BFET	WI			0	62	VT	WI	R			0	62	0	9	9		13-UD-D-39-0-62-6	WR	
13	13-UD-D-39-0-71	UD	D	39	8	0	71	VT	POR			0	71	VT	POR	R			0	71	0	4	4		13-UD-D-39-0-71-7	WR	
13	13-UD-D-39-0-88	UD	D	39	9	0	88	VT	POR			0	88	VT	POR	R			0	88	0	4	4		13-UD-D-39-0-88-8	WR	
13	13-UD-D-39-34-72	UD	D	39	10	34	72	VT	POR			34	72	VT	POR	R			34	72	0	4	4		13-UD-D-39-34-72-9	WR	
13	13-UD-D-39-31-83	UD	D	39	11	31	83	VT	POR			31	83	VT	POR	R			31	83	0	4	4		13-UD-D-39-31-83-10	WR	
13	13-UD-D-39-28-101	UD	D	39	12	28	101	VT	POR			28	101	VT	POR	R			28	101	0	4	4		13-UD-D-39-28-101-11	WR	
13	13-UD-D-39-19-156	UD	D	39	13	19	156	VT	POR			19	156	VT	POR	R			19	156	4	4	8		13-UD-D-39-19-156-12	WR	
13	13-UD-D-39-36-63	UD	D	39								36	63	VT	POR	R			36	63	0	4	4		13-UD-D-39-36-63-13	WR	
13	13-UD-D-40-60-22	UD	D	40	2	60	22	VT	POR			60	22	VT	POR	R			60	22	0	4	4		13-UD-D-40-60-22-1	WR	
13	13-UD-D-40-0-53	UD	D	40	3	0	53	BFET	WI			0	53	VT	WI	R			0	53	0	10	10		13-UD-D-40-0-53-2	WR	
13	13-UD-D-40-0-78	UD	D	40	5	0	78	VT	POR			0	78	VT	POR	R			0	78	0	4	4		13-UD-D-40-0-78-3	WR	
13	13-UD-D-40-14-83	UD	D	40	6	14	83	VT	TC		0.125	14	83	VT	GOUGE	R			14	83	0	5	5		13-UD-D-40-14-83-4	WR	
13	13-UD-D-40-0-89	UD	D	40	7	0	89	BFET	WI			0	89	VT	WI	R			0	89	0	12	12		13-UD-D-40-0-89-5	WR	
13	13-UD-D-40-0-93	UD	D	40	8	0	93	VT	POR			0	93	VT	POR	R			0	89	0	12	12		13-UD-D-40-0-89-5	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-UD-D-40-32-100	UD	D	40	9	32	100	VT	TC		0.094	32	100	VT	GOUGE	R			32	100	4	0	4		13-UD-D-40-32-100-6		WR
13	13-UD-D-40-4-156	UD	D	40	11	4	156	BFET	WI			4	156	VT	WI	R			4	156	7	5	12		13-UD-D-40-4-156-7		WR
13	13-UD-D-40-26-156	UD	D	40	12	26	156	BFET	WI			26	156	VT	WI	R			26	156	11	0	11		13-UD-D-40-26-156-8		WR
13	13-UD-D-40-51-92	UD	D	40								51	92	VT	POR	R			51	92	6	0	6		13-UD-D-40-51-92-9		WR
13	13-UD-D-41-0-125	UD	D	41	1	0	125	VT	POR			0	125	VT	POR	R			0	125	0	4	4		13-UD-D-41-0-125-1		WR
13	13-UD-D-41-26-115	UD	D	41	2	26	115	VT	POR			26	115	VT	POR	R			26	103	0	35	35		13-UD-D-41-26-103-2		WR
13	13-UD-D-41-26-105	UD	D	41	3	26	91-119	BFET	WI			26	105	VT	WI	R			26	103	0	35	35		13-UD-D-41-26-103-2		WR
13	13-UD-D-41-49-3	UD	D	41	5	49	3	VT	POR			49	3	VT	POR	R			49	3	4	4	8		13-UD-D-41-49-3-3		WR
13	13-UD-D-41-0-81	UD	D	41								0	81	VT	RI	R			0	81	0	6	6		13-UD-D-41-0-81-4		WR
13	13-UD-D-42-31-54	UD	D	42	2	31	54	VT	TC		0.094	31	54	VT	GOUGE	R			31	54	0	4	4		13-UD-D-42-31-54-1		WR
13	13-UD-D-42-50-85	UD	D	42	3	50	85	VT	DENT			50	85	VT	DENT	R			50	85	6	0	18.84956	28.27433	13-UD-D-42-50-85-2		PP
13	13-UD-D-42-30-90	UD	D	42	5	30	90	VT	TC		0.125	30	90	VT	GOUGE	R			30	90	0	4	4		13-UD-D-42-30-90-3		WR
13	13-UD-D-42-37-95	UD	D	42	6	37	95	VT	TC		0.094	37	95	VT	GOUGE	R			37	95	0	3	3		13-UD-D-42-37-95-4		WR
13	13-UD-D-42-12-125	UD	D	42	7	12	125	VT	TC		0.094	12	125	VT	GOUGE	R			12	125	0	2	2		13-UD-D-42-12-125-5		WR
13	13-UD-D-42-0-128	UD	D	42	8	0	128	VT	POR			0	128	VT	POR	R			0	128	0	4	4		13-UD-D-42-0-128-6		WR
13	13-UD-D-42-2-137	UD	D	42	9	2	137	VT	TC		0.094	2	137	VT	GOUGE	R			2	137	2	0	2		13-UD-D-42-2-137-7		WR
13	13-UD-D-42-0-112	UD	D	42								0	112	VT	LOF	R			0	112	0	4	4		13-UD-D-42-0-112-8		WR
13	13-UD-D-42-0-0	UD	D	42								0	0	VT	RI	R			0	0	4	0	4		13-UD-D-42-0-0-9		WR
13	13-UD-D-43-20-118	UD	D	43	1	20	118	VT	TC		0.094	20	118	VT	DENT	R			20	118	6	0	18.84956	28.27433	13-UD-D-43-20-118-1		PP
13	13-UD-D-43-0-135	UD	D	43	2	0	135	BFET	WI			0	135	VT	WI	R			0	135	0	10	10		13-UD-D-43-0-135-2		WR
13	13-UD-D-43-0-101	UD	D	43	3	0	101	VT	POR			0	101	VT	LOF	R			0	101	0	6	6		13-UD-D-43-0-101-3		WR
13	13-UD-D-43-33-83	UD	D	43	4	33	83	VT	POR			33	83	VT	RI	R			33	83	0	7	7		13-UD-D-43-33-83-4		WR
13	13-UD-D-43-0-66	UD	D	43	6	0	66	VT	POR			0	66	VT	POR	R			0	66	0	4	4		13-UD-D-43-0-66-5		WR
13	13-UD-D-43-51-0	UD	D	43	8	51	0	VT	POR			51	0	VT	RI	R			51	0	8	0	8		13-UD-D-43-51-0-6		WR
13	13-UD-D-43-9-0	UD	D	43	9	9	0	VT	POR			9	0	VT	POR	R			9	0	4	0	4		13-UD-D-43-9-0-7		WR
13	13-UD-D-43-0-0	UD	D	43								0	0	VT	POR	R			0	0	15	0	15		13-UD-D-43-0-0-8		WR
13	13-UD-D-44-0-6	UD	D	44	1	0	3-10	BFET	WI			0	6	VT	WI	R			0	6	0	12	12		13-UD-D-44-0-6-1		WR
13	13-UD-D-44-0-11	UD	D	44	2	0	11	VT	POR			0	11	VT	POR	R			0	6	0	12	12		13-UD-D-44-0-6-1		WR
13	13-UD-D-44-32-64	UD	D	44	3	32	64	VT	POR			32	64	VT	POR	R			32	64	12	0	12		13-UD-D-44-32-64-2		WR
13	13-UD-D-44-25-88	UD	D	44	4	25	88	VT	POR			25	88	VT	POR	R			25	88	6	0	6		13-UD-D-44-25-88-3		WR
13	13-UD-D-44-0-81	UD	D	44	5	0	81	VT	POR			0	81	VT	POR	R			0	81	0	4	4		13-UD-D-44-0-81-4		WR
13	13-UD-D-44-11-156	UD	D	44	7	11	156	VT	POR			11	156	VT	POR	R			11	156	6	0	6		13-UD-D-44-11-156-5		WR
13	13-UD-D-44-40-156	UD	D	44	8	40	156	BFET	WI			40	156	VT	WI	R			40	156	18	0	18		13-UD-D-44-40-156-6		WR
13	13-UD-D-44-0-0	UD	D	44								0	0	VT	POR	R			0	0	12	0	12		13-UD-D-44-0-0-7		WR
13	13-UD-D-45-16-156	UD	D	45	1	16	156	BFET	WI			16	156	VT	WI	R			16	156	7	0	7		13-UD-D-45-16-156-1		WR
13	13-UD-D-45-0-141	UD	D	45	2	0	141	VT	POR			0	141	VT	LOF	R			0	141	0	7	7		13-UD-D-45-0-141-2		WR
13	13-UD-D-45-0-60	UD	D	45	3	0	60	VT	POR			0	60	VT	RI	R			0	60	0	4	4		13-UD-D-45-0-60-3		WR
13	13-UD-D-45-0-0	UD	D	45								0	0	VT	RI	R			0	0	24	0	24		13-UD-D-45-0-0-4		WR
13	13-UD-D-46-24-59	UD	D	46	1	24	59	VT	DENT			24	59	VT	DENT	R			24	59	12	12	48	144	13-UD-D-46-24-59-1		PP
13	13-UD-D-46-16-157	UD	D	46	2	16	157	BFET	WI			16	157	VT	WI	R			15	156	11	0	11		13-UD-D-46-15-156-2		WR
13	13-UD-D-46-20-157	UD	D	46	3	20	157	VT	POR			20	157	VT	POR	R			15	156	11	0	11		13-UD-D-46-15-156-2		WR
13	13-UD-D-46-55-156	UD	D	46								55	156	VT	LOF	R			55	156	4	0	4		13-UD-D-46-55-156-3		WR
13	13-UD-D-47-0-156	UD	D	47	1	0	152	VT	POR			0	156	VT	POR	R			0	156	4	6	10		13-UD-D-47-0-156-1		WR
13	13-UD-D-47-37-65	UD	D	47	2	37	65	BFET	WI			37	65	VT	WI	R			37	65	0	10	10		13-UD-D-47-37-65-2		WR
13	13-UD-D-47-0-24	UD	D	47								0	24	VT	LOF	R			0	24	0	5	5		13-UD-D-47-0-24-3		WR
13	13-UD-D-47-47-8	UD	D	47								47	8	VT	LOF	R			47	8	0	4	4		13-UD-D-47-47-8-4		WR
13	13-UD-D-48-0-8	UD	D	48	1	0	8	BFET	WI			0	8	VT	WI	R			0	8	0	9	9		13-UD-D-48-0-8-1		WR
13	13-UD-D-48-0-75	UD	D	48	3	0	68-85	BFET	WI			0	75	VT	WI	R			0	75	0	22	22		13-UD-D-48-0-75-2		WR

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-UD-D-48-0-108	UD	D	48	4	0	108	BFET	WI			0	108	VT	WI	R			0	108	0	8	8			13-UD-D-48-0-108-3	WR
13	13-UD-D-48-0-122	UD	D	48	5	0	122	BFET	WI			0	122	VT	WI	R			0	122	0	10	10			13-UD-D-48-0-122-4	WR
13	13-UD-D-48-14-120	UD	D	48	6	14	120	VT	DENT			14	120	VT	DENT	R			14	120	8	8	32	64		13-UD-D-48-14-120-5	PP
13	13-UD-D-48-5-157	UD	D	48	7	5	157	BFET	WI			5	157	VT	WI	R			6	156	22	0	22			13-UD-D-48-6-156-6	WR
13	13-UD-D-48-15-157	UD	D	48	8	15	157	BFET	WI			15	157	VT	WI	R			6	156	22	0	22			13-UD-D-48-6-156-6	WR
13	13-UD-D-48-39-157	UD	D	48	9	39	157	BFET	WI			39	157	VT	WI	R			39	157	10	0	10			13-UD-D-48-39-157-7	WR
13	13-UD-D-48-0-143	UD	D	48								0	143	VT	RI	R			0	143	10	0	10			13-UD-D-48-0-143-8	WR
13	13-UD-D-48-0-0	UD	D	48								0	0	VT	LOF	R			0	0	12	0	12			13-UD-D-48-0-0-9	WR
13	13-UD-D-48-0-11	UD	D	48								0	11	VT	LOF	R			0	11	0	6	6			13-UD-D-48-0-11-10	WR
13	13-UD-C-1-5-0	UD	C	1	2	3-7	0	VT	UC			5	0	VT	UC	R			5	0	4	0	4			13-UD-C-1-5-0-1	WR
13	13-UD-C-1-36-156	UD	C	1								36	156	VT	POR	R			26	156	4	0	4			13-UD-C-1-26-156-2	WR
13	13-UD-C-1-0-125	UD	C	1								0	125	VT	RI	R			0	125	0	4	4			13-UD-C-1-0-125-3	WR
13	13-UD-C-1-53-135	UD	C	1								53	135	VT	RI	R			53	135	0	4	4			13-UD-C-1-53-135-4	WR
13	13-UD-C-1-0-43	UD	C	1								0	43	VT	POR	R			0	43	0	4	4			13-UD-C-1-0-43-5	WR
13	13-UD-C-1-71-19	UD	C	1								71	19	VT	POR	R			71	19	0	4	4			13-UD-C-1-71-19-6	WR
13	13-UD-C-1-25-0	UD	C	1								25	0	VT	RI	R			25	0	4	0	4			13-UD-C-1-25-0-7	WR
13	13-UD-C-1-0-0	UD	C	1								0	0	VT	UC	R			0	0	4	3	7			13-UD-C-1-0-0-8	WR
13	13-UD-C-2-44-156	UD	C	2	4	42-45	156	VT	POR			44	156	VT	POR	R			44	156	4	0	4			13-UD-C-2-44-156-1	WR
13	13-UD-C-2-0-0	UD	C	2								0	0	VT	LOF	R			0	0	6	3	9			13-UD-C-2-0-0-2	WR
13	13-UD-C-3-0-132	UD	C	3								0	132	VT	LOF	R			0	132	4	0	4			13-UD-C-3-0-132-1	WR
13	13-UD-C-3-8-84	UD	C	3								8	84	VT	LOF	R			8	84	6	0	6			13-UD-C-3-8-84-2	WR
13	13-UD-C-3-60-66	UD	C	3								60	66	VT	DENT	R			60	66	8	8	32	64		13-UD-C-3-60-66-3	TSPP
13	13-UD-C-3-61-36	UD	C	3								61	36	VT	DENT	R			61	36	8	8	32	64		13-UD-C-3-61-36-4	PP
13	13-UD-C-4-1-10	UD	C	4	6	1	10	VT	TC		0.1	1	10	VT	GOUGE	R			1	10	4	0	4			13-UD-C-4-1-10-1	WR
13	13-UD-C-4-51-0	UD	C	4	7	44-58	0	VT	UC			51	0	VT	UC	R			51	0	5	3	8			13-UD-C-4-51-0-2	WR
13	13-UD-C-5-26-156	UD	C	5	1	24-28	156	VT	UC			26	156	VT	UC	R			26	156	4	0	4			13-UD-C-5-26-156-1	WR
13	13-UD-C-5-0-94	UD	C	5	2	0	94	VT	POR			0	94	VT	RI	R			0	94	12	0	12			13-UD-C-5-0-94-2	WR
13	13-UD-C-5-18-1	UD	C	5	7	17-19	2	VT	POR			18	1	VT	POR	R			18	1	5	4	9			13-UD-C-5-18-1-3	WR
13	13-UD-C-5-60-100	UD	C	5	9	60	99-101	VT	UC			60	100	VT	UC	R			60	100	0	5	5			13-UD-C-5-60-100-4	WR
13	13-UD-C-5-42-156	UD	C	5								42	156	VT	POR	R			42	156	5	0	5			13-UD-C-5-42-156-5	WR
13	13-UD-C-5-0-87	UD	C	5								0	87	VT	POR	R			0	87	0	3	3			13-UD-C-5-0-87-6	WR
13	13-UD-C-5-68-39	UD	C	5								68	39	VT	POR	R			68	39	0	4	4			13-UD-C-5-68-39-7	WR
13	13-UD-C-6-49-156	UD	C	6	1	32-58	156	VT	UC			49	156	VT	LOF	R			49	156	16	0	16			13-UD-C-6-49-156-1	WR
13	13-UD-C-6-17-0	UD	C	6	2	17	0	VT	POR			17	0	VT	RI	R			17	0	2	0	2			13-UD-C-6-17-0-2	WR
13	13-UD-C-6-2-29	UD	C	6	3	2	29	VT	TC		0.1	2	29	VT	TC	R			2	29	2	0	2			13-UD-C-6-2-29-3	WR
13	13-UD-C-7-33-156	UD	C	7	1	33	156	VT	POR			33	156	VT	POR	R			33	156	4	0	4			13-UD-C-7-33-156-1	WR
13	13-UD-C-7-42-156	UD	C	7	2	42	156	VT	POR			42	156	VT	POR	R			42	156	4	0	4			13-UD-C-7-42-156-2	WR
13	13-UD-C-7-2-0	UD	C	7								2	0	VT	POR	R			2	0	7	3	10			13-UD-C-7-2-0-3	WR
13	13-UD-C-7-24-27	UD	C	7								24	27	VT	LOF	R			24	27	4	0	4			13-UD-C-7-24-27-4	WR
13	13-UD-C-7-1-84	UD	C	7								1	84	VT	POR	R			1	84	3	0	3			13-UD-C-7-1-84-5	WR
13	13-UD-C-7-10-127	UD	C	7								10	127	VT	LOF	R			10	127	4	0	4			13-UD-C-7-10-127-6	WR
13	13-UD-C-8-48-156	UD	C	8	2	48	156	VT	UC			48	156	VT	LOF	R			48	156	6	0	6			13-UD-C-8-48-156-1	WR
13	13-UD-C-8-57-156	UD	C	8								57	156	VT	POR	R			57	156	5	0	5			13-UD-C-8-57-156-2	WR
13	13-UD-C-8-0-13	UD	C	8								0	13	VT	RI	R			0	13	0	4	4			13-UD-C-8-0-13-3	WR
13	13-UD-C-9-68-60	UD	C	9	1	68	60	BFET	WI			68	60	VT	WI	R			68	60	0	8	8			13-UD-C-9-68-60-1	WR
13	13-UD-C-9-11-113	UD	C	9	2	11	113	VT	DENT			11	113	VT	DENT	R			11	113	8	8	32	64		13-UD-C-9-11-113-2	PP
13	13-UD-C-9-59-98	UD	C	9								59	98	VT	LOF	R			59	98	0	4	4			13-UD-C-9-59-98-3	WR
13	13-UD-C-10-0-88	UD	C	10	1	0	88	VT	TC		0.094	0	88	VT	TC	R			0	88	0	4	4			13-UD-C-10-0-88-1	WR

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-C-10-48-34	UD	C	10								48	34	VT	DENT	R			48	34	8	8	32	64	13-UD-C-10-48-34-2	PP	
13	13-UD-C-10-0-0	UD	C	10								0	0	VT	LOF	R			0	0	0	8	8		13-UD-C-10-0-0-3	WR	
13	13-UD-C-11-30-130	UD	C	11	1	30	130	VT	TC		0.094	30	130	VT	DENT	R			30	130	6	0	18.84956	28.27433	13-UD-C-11-30-130-1	PP	
13	13-UD-C-11-75-0	UD	C	11								75	0	VT	POR	R			75	0	2	2	4		13-UD-C-11-75-0-2	WR	
13	13-UD-C-11-0-96	UD	C	11								0	96	VT	POR	R			0	96	0	4	4		13-UD-C-11-0-96-3	WR	
13	13-UD-C-12-55-104	UD	C	12	1	55	104	VT	TC		0.1	55	104	VT	TC	R			55	104	6	0	6		13-UD-C-12-55-104-1	WR	
13	13-UD-C-12-12-118	UD	C	12	5	12	118	VT	TC		0.1	12	118	VT	TC	R			12	118	0	4	4		13-UD-C-12-12-118-2	WR	
13	13-UD-C-12-23-74	UD	C	12								23	74	VT	LOF	R			23	74	6	0	6		13-UD-C-12-23-74-3	WR	
13	13-UD-C-13-0-156	UD	C	13	1	0	156	VT	POR			0	156	VT	LOF	R			0	156	7	0	7		13-UD-C-13-0-156-1	WR	
13	13-UD-C-13-17-139	UD	C	13	2	17	139	VT	TC		0.1	17	139	VT	GOUGE	R			17	139	0	2	2		13-UD-C-13-17-139-2	WR	
13	13-UD-C-13-39-0	UD	C	13	6	39	0	VT	POR			39	0	VT	POR	R			39	0	5	0	5		13-UD-C-13-39-0-3	WR	
13	13-UD-C-13-10-0	UD	C	13								10	0	VT	RI	R			10	0	7	0	7		13-UD-C-13-10-0-4	WR	
13	13-UD-C-13-69-0	UD	C	13								69	0	VT	RI	R			69	0	0	2	2		13-UD-C-13-69-0-5	WR	
13	13-UD-C-13-1-86	UD	C	13								1	86	VT	POR	R			1	86	0	4	4		13-UD-C-13-1-86-6	WR	
13	13-UD-C-13-25-156	UD	C	13								25	156	VT	RI	R			25	156	4	0	4		13-UD-C-13-25-156-7	WR	
13	13-UD-C-14-58-41	UD	C	14	2	58	41	BFET	WI			58	41	VT	WI	R			58	41	0	8	8		13-UD-C-14-58-41-1	WR	
13	13-UD-C-14-9-129	UD	C	14	4	9	129	VT	TC		0.1	9	129	VT	TC	R			9	129	0	1	1		13-UD-C-14-9-129-2	WR	
13	13-UD-C-14-10-113	UD	C	14	5	10	113	VT	TC		0.1	10	113	VT	TC	R			10	113	0	2	2		13-UD-C-14-10-113-3	WR	
13	13-UD-C-14-10-156	UD	C	14	6	0-19	156	VT	UC			10	156	VT	UC	R			10	156	7	0	7		13-UD-C-14-10-156-4	WR	
13	13-UD-C-14-38-156	UD	C	14	7	34-48	156	VT	UC			38	156	VT	UC	R			38	156	9	0	9		13-UD-C-14-38-156-5	WR	
13	13-UD-C-14-53-125	UD	C	14								53	125	VT	POR	R			53	125	0	4	4		13-UD-C-14-53-125-6	WR	
13	13-UD-C-14-7-0	UD	C	14								7	0	VT	RI	R			7	0	4	0	4		13-UD-C-14-7-0-7	WR	
13	13-UD-C-15-58-130	UD	C	15	1	58	130	VT	TC		0.094	58	130	VT	TC	R			58	130	2	0	2		13-UD-C-15-58-130-1	WR	
13	13-UD-C-15-58-126	UD	C	15	2	58	126	VT	TC		0.094	58	126	VT	TC	R			58	126	2	0	2		13-UD-C-15-58-126-2	WR	
13	13-UD-C-15-58-116	UD	C	15	3	58	116	VT	POR			58	116	VT	POR	R			58	116	0	7	7		13-UD-C-15-58-116-3	WR	
13	13-UD-C-15-20-2	UD	C	15	5	20	2	VT	TC		0.094	20	2	VT	TC	R			20	2	2	0	2		13-UD-C-15-20-2-4	WR	
13	13-UD-C-15-57-104	UD	C	15								57	104	VT	RI	R			57	104	0	5	5		13-UD-C-15-57-104-5	WR	
13	13-UD-C-15-55-48	UD	C	15								55	48	VT	GOUGE	R			55	48	2	0	2		13-UD-C-15-55-48-6	WR	
13	13-UD-C-15-44-31	UD	C	15								44	31	VT	DENT	R			44	31	6	0	18.84956	28.27433	13-UD-C-15-44-31-7	PP	
13	13-UD-C-15-57-0	UD	C	15								57	0	VT	RI	R			57	0	4	0	4		13-UD-C-15-57-0-8	WR	
13	13-UD-C-16-0-32	UD	C	16								0	32	VT	RI	R			0	32	0	4	4		13-UD-C-16-0-32-1	WR	
13	13-UD-C-16-0-94	UD	C	16								0	94	VT	RI	R			0	94	0	4	4		13-UD-C-16-0-94-2	WR	
13	13-UD-C-16-56-125	UD	C	16								56	125	VT	RI	R			56	125	0	4	4		13-UD-C-16-56-125-3	WR	
13	13-UD-C-16-0-103	UD	C	16								0	103	VT	RI	R			0	103	0	4	4		13-UD-C-16-0-103-4	WR	
13	13-UD-C-16-56-147	UD	C	16								56	147	VT	POR	R			56	147	0	4	4		13-UD-C-16-56-147-5	WR	
13	13-UD-C-16-44-156	UD	C	16								44	156	VT	RI	R			44	156	4	0	4		13-UD-C-16-44-156-6	WR	
13	13-UD-C-17-72-6	UD	C	17	3	72	6	VT	POR			72	6	VT	RI	R			72	6	0	4	4		13-UD-C-17-72-6-1	WR	
13	13-UD-C-17-2-52	UD	C	17	6	2	52	VT	TC		0.125	2	52	VT	TC	R			2	52	8	8	32	64	13-UD-C-17-2-52-2	TSPP	
13	13-UD-C-17-4-86	UD	C	17	7	4	86	VT	DENT			4	86	VT	DENT	R			4	86	8	8	32	64	13-UD-C-17-4-86-3	TSPP	
13	13-UD-C-17-19-130	UD	C	17	9	19	130	VT	TC		0.094	19	130	VT	TC	R			19	130	0	6	6		13-UD-C-17-19-130-4	WR	
13	13-UD-C-17-11-135	UD	C	17	10	11	135	VT	TC		0.094	11	135	VT	TC	R			11	135	2	0	2		13-UD-C-17-11-135-5	WR	
13	13-UD-C-17-19-135	UD	C	17	11	19	135	VT	TC		0.094	19	135	VT	TC	R			19	135	0	4	4		13-UD-C-17-19-135-6	WR	
13	13-UD-C-17-19-144	UD	C	17	12	19	144	VT	TC		0.094	19	144	VT	TC	R			19	144	2	0	2		13-UD-C-17-19-144-7	WR	
13	13-UD-C-17-45-147	UD	C	17	13	45	147	VT	TC		0.094	45	147	VT	TC	R			45	147	2	0	2		13-UD-C-17-45-147-8	WR	
13	13-UD-C-17-0-154	UD	C	17								0	154	VT	RI	R			0	154	0	4	4		13-UD-C-17-0-154-9	WR	
13	13-UD-C-17-17-0	UD	C	17								17	0	VT	LOF	R			17	0	3	3	6		13-UD-C-17-17-0-10	WR	
13	13-UD-C-17-17-0	UD	C	17								17	0	VT	POR	R			17	0	0	4	4		13-UD-C-17-17-0-11	WR	
13	13-UD-C-18-37-97	UD	C	18	1	37	97	VT	TC		0.1	37	97	VT	TC	R			37	97	3	0	3		13-UD-C-18-37-97-1	WR	

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-UD-C-18-43-70	UD	C	18	3	43	70	VT	TC		0.094	43	70	VT	TC	R			43	70	2	0	2		13-UD-C-18-43-70-2		WR
13	13-UD-C-18-0-63	UD	C	18	5	0	63	VT	TC		0.094	0	63	VT	TC	R			0	63	0	4	4		13-UD-C-18-0-63-3		WR
13	13-UD-C-18-15-93	UD	C	18	6	15	93	VT	TC		0.094	15	93	VT	TC	R			15	93	3	0	3		13-UD-C-18-15-93-4		WR
13	13-UD-C-18-5-156	UD	C	18	7	5	156	VT	POR			5	156	VT	POR	R			5	156	4	0	4		13-UD-C-18-5-156-5		WR
13	13-UD-C-18-0-108	UD	C	18	8	0	108	VT	TC		0.11	0	108	VT	TC	R			0	108	0	4	4		13-UD-C-18-0-108-6		WR
13	13-UD-C-18-54-79	UD	C	18								54	79	VT	LOF	R			54	79	6	0	6		13-UD-C-18-54-79-7		WR
13	13-UD-C-18-54-156	UD	C	18								54	156	VT	LOF	R			54	156	4	0	4		13-UD-C-18-54-156-8		WR
13	13-UD-C-18-0-142	UD	C	18								0	142	VT	LOF	R			0	142	10	0	10		13-UD-C-18-0-142-9		WR
13	13-UD-C-18-0-0	UD	C	18								0	0	VT	LOF	R			0	0	5	5	10		13-UD-C-18-0-0-10		WR
13	13-UD-C-19-9-144	UD	C	19	1	9	144	VT	TC		0.094	9	144	VT	TC	R			9	144	0	3	3		13-UD-C-19-9-144-1		WR
13	13-UD-C-19-9-140	UD	C	19	2	9	140	VT	TC		0.094	9	140	VT	TC	R			9	140	0	5	5		13-UD-C-19-9-140-2		WR
13	13-UD-C-19-45-0	UD	C	19	3	0-58	0	VT	UC			45	0	VT	UC	R			45	0	57	0	57		13-UD-C-19-45-0-3		WR
13	13-UD-C-19-72-8	UD	C	19								72	8	VT	RI	R			72	8	0	4	4		13-UD-C-19-72-8-4		WR
13	13-UD-C-19-43-23	UD	C	19								43	23	VT	DENT	R			43	23	8	8	32	64	13-UD-C-19-43-23-5		PP
13	13-UD-C-19-52-50	UD	C	19								52	50	VT	DENT	R			52	50	6	0	18.84956	28.27433	13-UD-C-19-52-50-6		PP
13	13-UD-C-19-28-133	UD	C	19								28	133	VT	RI	R			28	133	4	0	4		13-UD-C-19-28-133-7		WR
13	13-UD-C-19-0-156	UD	C	19								0	156	VT	LOF	R			0	156	5	0	5		13-UD-C-19-0-156-8		WR
13	13-UD-C-19-28-151	UD	C	19								28	151	VT	DENT	R			28	151	6	0	18.84956	28.27433	13-UD-C-19-28-151-9		PP
13	13-UD-C-20-0-0	UD	C	20	1	0	0	VT	POR			0	0	VT	RI	R			0	0	0	4	4		13-UD-C-20-0-0-1		WR
13	13-UD-C-20-28-0	UD	C	20	2	5-55	0	VT	UC			28	0	VT	UC	R			28	0	56	0	56		13-UD-C-20-28-0-2		WR
13	13-UD-C-20-0-5	UD	C	20								0	5	VT	POR	R			0	5	0	4	4		13-UD-C-20-0-5-3		WR
13	13-UD-C-21-15-0	UD	C	21								15	0	VT	POR	R			15	0	4	0	4		13-UD-C-21-15-0-1		WR
13	13-UD-C-21-0-156	UD	C	21								0	156	VT	LOF	R			0	156	5	0	5		13-UD-C-21-0-156-2		WR
13	13-UD-C-22-60-122	UD	C	22	1	60	122	VT	POR			60	122	VT	RI	R			60	122	0	4	4		13-UD-C-22-60-122-1		WR
13	13-UD-C-22-1-78	UD	C	22	2	1	78	VT	DENT			1	78	VT	DENT	R			1	78	8	8	32	64	13-UD-C-22-1-78-2		TSPP
13	13-UD-C-22-39-112	UD	C	22								39	112	VT	DENT	R			39	112	8	8	32	64	13-UD-C-22-39-112-3		PP
13	13-UD-C-22-52-83	UD	C	22								52	83	VT	RI	R			52	83	3	0	3		13-UD-C-22-52-83-4		WR
13	13-UD-C-22-46-83	UD	C	22								46	83	VT	GOUGE	R			46	83	2	0	2		13-UD-C-22-46-83-5		WR
13	13-UD-C-22-0-39	UD	C	22								0	39	VT	GOUGE	R			0	39	3	0	3		13-UD-C-22-0-39-6		WR
13	13-UD-C-23-3-86	UD	C	23	2	3	86	VT	TC		0.094	3	86	VT	TC	R			3	86	0	4	4		13-UD-C-23-3-86-1		WR
13	13-UD-C-23-0-85	UD	C	23								0	85	VT	POR	R			0	85	0	2	2		13-UD-C-23-0-85-2		WR
13	13-UD-C-23-39-89	UD	C	23								39	89	VT	DENT	R			39	89	8	8	32	64	13-UD-C-23-39-89-3		PP
13	13-UD-C-23-0-0	UD	C	23								0	0	VT	LOF	R			0	0	3	0	3		13-UD-C-23-0-0-4		WR
13	13-UD-C-23-60-0	UD	C	23								60	0	VT	POR	R			60	0	4	0	4		13-UD-C-23-60-0-5		WR
13	13-UD-C-23-74-8	UD	C	23								74	8	VT	RI	R			74	8	10	0	10		13-UD-C-23-74-8-6		WR
13	13-UD-C-24-0-104	UD	C	24	2	0	95-113	VT	UC			0	104	VT	LOF	R			0	104	0	6	6		13-UD-C-24-0-104-1		WR
13	13-UD-C-24-16-132	UD	C	24	3	16	132	VT	TC		0.094	16	132	VT	TC	R			16	132	2	0	2		13-UD-C-24-16-132-2		WR
13	13-UD-C-24-0-8	UD	C	24								0	8	VT	LOF	R			0	8	6	0	6		13-UD-C-24-0-8-3		WR
13	13-UD-C-24-5-70	UD	C	24								5	70	VT	DENT	R			5	70	10	10	40	100	13-UD-C-24-5-70-4		TSPP
13	13-UD-C-24-11-118	UD	C	24								11	118	VT	DENT	R			11	118	10	10	40	100	13-UD-C-24-11-118-5		PP
13	13-UD-C-24-0-156	UD	C	24								0	156	VT	LOF	R			0	156	8	0	8		13-UD-C-24-0-156-6		WR
13	13-UD-C-26-17-5	UD	C	26	1	17	5	VT	DENT			17	5	VT	DENT	R			17	5	8	8	32	64	13-UD-C-26-17-5-1		TSPP
13	13-UD-C-26-57-42	UD	C	26	2	57	42	VT	TC		0.094	57	42	VT	GOUGE	R			57	42	6	6	24	36	13-UD-C-26-57-42-2		TSPP
13	13-UD-C-26-57-78	UD	C	26	3	57	78	VT	TC		0.094	57	78	VT	GOUGE	R			57	78	3	0	3		13-UD-C-26-57-78-3		WR
13	13-UD-C-26-37-140	UD	C	26	5	37	140	VT	TC		0.125	37	140	VT	GOUGE	R			37	140	8	8	32	64	13-UD-C-26-37-140-4		PP
13	13-UD-C-26-34-150	UD	C	26	6	34	150	VT	TC		0.094	34	150	VT	GOUGE	R			34	150	8	8	32	64	13-UD-C-26-34-150-5		TSPP
13	13-UD-C-26-25-156	UD	C	26	7	25	156	BFET	WI			25	156	VT	WI	R			25	156	9	0	9		13-UD-C-26-25-156-6		WR
13	13-UD-C-26-0-156	UD	C	26								0	156	VT	POR	R			0	156	4	3	7		13-UD-C-26-0-156-7		WR

S003807

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-C-26-59-96	UD	C	26								59	96	VT	LOF	R			59	96	18	0	18		13-UD-C-26-59-96-8	WR	
13	13-UD-C-26-20-10	UD	C	26								20	10	VT	GOUGE	R			20	10	0	6	6		13-UD-C-26-20-10-9	WR	
13	13-UD-C-26-56-24	UD	C	26								56	24	VT	GOUGE	R			56	24	2	0	2		13-UD-C-26-56-24-10	WR	
13	13-UD-C-27-0-153	UD	C	27	1	0	153	VT	POR			0	153	VT	POR	R			0	153	4	5	9		13-UD-C-27-0-153-1	WR	
13	13-UD-C-27-25-156	UD	C	27	2	25	156	BFET	WI			25	156	VT	WI	R			25	156	9	0	9		13-UD-C-27-25-156-2	WR	
13	13-UD-C-27-34-77	UD	C	27	3	34	77	VT	TC		0.094	34	77	VT	TC	R			34	77	2	0	2		13-UD-C-27-34-77-3	WR	
13	13-UD-C-27-18-62	UD	C	27	4	18	62	BFET	WI			18	62	VT	WI	R			18	62	12	0	12		13-UD-C-27-18-62-4	WR	
13	13-UD-C-27-53-13	UD	C	27	5	53	13	VT	TC		0.094	53	13	VT	TC	R			53	13	4	0	4		13-UD-C-27-53-13-5	WR	
13	13-UD-C-27-56-16	UD	C	27	6	56	16	VT	TC		0.094	56	16	VT	TC	R			56	16	6	0	6		13-UD-C-27-56-16-6	WR	
13	13-UD-C-27-59-10	UD	C	27								59	10	VT	GOUGE	R			59	10	2	0	2		13-UD-C-27-59-10-7	WR	
13	13-UD-C-27-14-1	UD	C	27								14	1	VT	POR	R			14	1	4	3	7		13-UD-C-27-14-1-8	WR	
13	13-UD-C-28-42-0	UD	C	28	2	42	0	VT	POR			42	0	VT	POR	R			42	0	6	0	6		13-UD-C-28-42-0-1	WR	
13	13-UD-C-28-32-156	UD	C	28	5	35	156	VT	POR			32	156	VT	POR	R			32	156	9	0	9		13-UD-C-28-32-156-2	WR	
13	13-UD-C-28-9-156	UD	C	28								9	156	VT	POR	R			9	156	4	0	4		13-UD-C-28-9-156-3	WR	
13	13-UD-C-29-45-115	UD	C	29	6	45	115	VT	TC		0.125	45	115	VT	TC	R			45	115	6	0	18.84956	28.27433	13-UD-C-29-45-115-1	PP	
13	13-UD-C-29-20-110	UD	C	29	7	20	110	VT	TC		0.125	20	110	VT	TC	R			20	110	6	0	18.84956	28.27433	13-UD-C-29-20-110-2	PP	
13	13-UD-C-29-0-96	UD	C	29	9	0	96	VT	TC		0.094	0	96	VT	TC	R			0	96	2	0	2		13-UD-C-29-0-96-3	WR	
13	13-UD-C-29-54-47	UD	C	29	10	54	47	VT	TC		0.094	54	47	VT	TC	R			54	47	1	0	1		13-UD-C-29-54-47-4	WR	
13	13-UD-C-29-56-17	UD	C	29	11	56	17	VT	TC		0.094	56	17	VT	TC	R			56	17	0	6	6		13-UD-C-29-56-17-5	WR	
13	13-UD-C-29-54-10	UD	C	29	12	54	10	VT	TC		0.094	54	10	VT	TC	R			54	10	4	0	4		13-UD-C-29-54-10-6	WR	
13	13-UD-C-29-1-0	UD	C	29	13	1	0	VT	UC			1	0	VT	UC	R			1	0	5	3	8		13-UD-C-29-1-0-7	WR	
13	13-UD-C-29-17-0	UD	C	29	14	17	0	VT	POR			17	0	VT	POR	R			17	0	6	0	6		13-UD-C-29-17-0-8	WR	
13	13-UD-C-29-17-15	UD	C	29	15	17	15	VT	POR			17	15	VT	POR	R			12	19	0	13	13		13-UD-C-29-12-19-9	WR	
13	13-UD-C-29-17-22	UD	C	29	16	17	22	BFET	WI			17	22	VT	WI	R			12	19	0	13	13		13-UD-C-29-12-19-9	WR	
13	13-UD-C-30-32-156	UD	C	30	3	32	156	VT	POR			32	156	VT	POR	R			32	156	4	0	4		13-UD-C-30-32-156-1	WR	
13	13-UD-C-30-55-156	UD	C	30								55	156	VT	POR	R			55	156	3	0	3		13-UD-C-30-55-156-2	WR	
13	13-UD-C-31-0-156	UD	C	31	1	0	156	BFET	WI			0	156	VT	WI	R			0	148	5	16	21		13-UD-C-31-0-148-1	WR	
13	13-UD-C-31-0-144	UD	C	31	2	0	144	BFET	WI			0	144	VT	WI	R			0	148	5	16	21		13-UD-C-31-0-148-1	WR	
13	13-UD-C-31-30-156	UD	C	31	3	30	156	BFET	WI			30	156	VT	WI	R			28	156	9	0	9		13-UD-C-31-28-156-2	WR	
13	13-UD-C-31-46-79	UD	C	31	4	46	79	VT	DENT			46	79	VT	DENT	R			46	79	6	0	18.84956	28.27433	13-UD-C-31-46-79-3	PP	
13	13-UD-C-31-31-15	UD	C	31	6	31	15	VT	TC		0.094	31	15	VT	GOUGE	R			29	11	8	12	20		13-UD-C-31-29-11-4	WR	
13	13-UD-C-31-30-10	UD	C	31	7	30	10	VT	TC		0.094	30	10	VT	GOUGE	R			29	11	8	12	20		13-UD-C-31-29-11-4	WR	
13	13-UD-C-31-49-142	UD	C	31								49	142	VT	GOUGE	R			49	142	0	2	2		13-UD-C-31-49-142-5	WR	
13	13-UD-C-31-38-156	UD	C	31								38	156	VT	POR	R			38	156	5	0	5		13-UD-C-31-38-156-6	WR	
13	13-UD-C-31-52-141	UD	C	31								52	141	VT	RI	R			52	141	0	1	1		13-UD-C-31-52-141-7	WR	
13	13-UD-C-31-9-0	UD	C	31								9	0	VT	POR	R			9	0	4	0	4		13-UD-C-31-9-0-8	WR	
13	13-UD-C-31-26-33	UD	C	31								26	33	VT	LOF	R			26	33	4	0	4		13-UD-C-31-26-33-9	WR	
13	13-UD-C-31-25-30	UD	C	31								25	30	VT	GOUGE	R			25	30	0	6	6		13-UD-C-31-25-30-10	WR	
13	13-UD-C-32-53-135	UD	C	32								53	135	VT	POR	R			53	135	0	6	6		13-UD-C-32-53-135-1	WR	
13	13-UD-C-32-14-110	UD	C	32								14	110	VT	POR	R			14	110	4	0	4		13-UD-C-32-14-110-2	WR	
13	13-UD-C-32-0-68	UD	C	32								0	68	VT	POR	R			0	68	0	4	4		13-UD-C-32-0-68-3	WR	
13	13-UD-C-32-0-0	UD	C	32								0	0	VT	POR	R			0	0	2	2	4		13-UD-C-32-0-0-4	WR	
13	13-UD-C-32-28-0	UD	C	32								28	0	VT	POR	R			28	0	4	0	4		13-UD-C-32-28-0-5	WR	
13	13-UD-C-32-48-0	UD	C	32								48	0	VT	POR	R			48	0	9	0	9		13-UD-C-32-48-0-6	WR	
13	13-UD-C-32-74-0	UD	C	32								74	0	VT	POR	R			74	0	2	0	2		13-UD-C-32-74-0-7	WR	
13	13-UD-C-32-73-8	UD	C	32								73	8	VT	POR	R			73	8	0	5	5		13-UD-C-32-73-8-8	WR	
13	13-UD-C-33-58-64	UD	C	33	1	58	64	VT	TC		0.094	58	64	VT	TC	R			58	64	2	0	2		13-UD-C-33-58-64-1	WR	
13	13-UD-C-33-2-0	UD	C	33								2	0	VT	POR	R			2	0	4	0	4		13-UD-C-33-2-0-2	WR	

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-C-33-0-5	UD	C	33								0	5	VT	POR	R			0	5	0	4	4		13-UD-C-33-0-5-3	WR	
13	13-UD-C-33-57-35	UD	C	33								57	35	VT	POR	R			57	35	0	4	4		13-UD-C-33-57-35-4	WR	
13	13-UD-C-33-56-128	UD	C	33								56	128	VT	POR	R			56	128	6	0	6		13-UD-C-33-56-128-5	WR	
13	13-UD-C-33-53-156	UD	C	33								53	156	VT	RI	R			53	156	4	0	4		13-UD-C-33-53-156-6	WR	
13	13-UD-C-34-26-0	UD	C	34	1	6-38	0	VT	UC			26	0	VT	UC	R			26	0	40	0	40		13-UD-C-34-26-0-1	WR	
13	13-UD-C-34-26-26	UD	C	34	3	26	26	VT	DENT			26	26	VT	DENT	R			26	26	8	8	32	64	13-UD-C-34-26-26-2	PP	
13	13-UD-C-34-60-154	UD	C	34	6	60	154	VT	POR			60	154	VT	POR	R			60	154	5	3	8		13-UD-C-34-60-154-3	WR	
13	13-UD-C-34-6-156	UD	C	34	7	6	156	BFET	WI			6	156	VT	WI	R			14	156	26	0	26		13-UD-C-34-14-156-4	WR	
13	13-UD-C-34-17-156	UD	C	34	8	17	156	BFET	WI			17	156	VT	WI	R			14	156	26	0	26		13-UD-C-34-14-156-4	WR	
13	13-UD-C-34-24-156	UD	C	34	9	24	156	BFET	WI			24	156	VT	WI	R			14	156	26	0	26		13-UD-C-34-14-156-4	WR	
13	13-UD-C-34-0-128	UD	C	34								0	128	VT	POR	R			0	128	8	0	8		13-UD-C-34-0-128-5	WR	
13	13-UD-C-34-0-0	UD	C	34								0	0	VT	POR	R			0	0	36	0	36		13-UD-C-34-0-0-6	WR	
13	13-UD-C-34-58-1	UD	C	34								58	1	VT	RI	R			58	1	58	1	59		13-UD-C-34-58-1-7	WR	
13	13-UD-C-35-25-156	UD	C	35	1	0-52	156	BFET	WI			25	156	VT	LOF	R			25	156	52	0	52		13-UD-C-35-25-156-1	WR	
13	13-UD-C-35-52-143	UD	C	35	2	52	143	VT	POR			52	143	VT	POR	R			52	143	18	0	18		13-UD-C-35-52-143-2	WR	
13	13-UD-C-35-46-51	UD	C	35	4	46	51	VT	TC		0.125	46	51	VT	DENT	R			46	51	6	0	18.84956	28.27433	13-UD-C-35-46-51-3	PP	
13	13-UD-C-35-76-0	UD	C	35	5	76	0	VT	UC			76	0	VT	POR	R			76	0	6	0	6		13-UD-C-35-76-0-4	WR	
13	13-UD-C-35-10-0	UD	C	35								10	0	VT	POR	R			10	0	6	0	6		13-UD-C-35-10-0-5	WR	
13	13-UD-C-35-16-0	UD	C	35								16	0	VT	POR	R			16	0	4	4	8		13-UD-C-35-16-0-6	WR	
13	13-UD-C-35-49-0	UD	C	35								49	0	VT	POR	R			49	0	1	0	1		13-UD-C-35-49-0-7	WR	
13	13-UD-C-35-13-9	UD	C	35								13	9	VT	RI	R			13	9	0	4	4		13-UD-C-35-13-9-8	WR	
13	13-UD-C-35-69-43	UD	C	35								69	43	VT	POR	R			69	43	0	2	2		13-UD-C-35-69-43-9	WR	
13	13-UD-C-35-13-23	UD	C	35								13	23	VT	RI	R			13	23	0	4	4		13-UD-C-35-13-23-10	WR	
13	13-UD-C-35-11-56	UD	C	35								11	56	VT	POR	R			11	56	8	0	8		13-UD-C-35-11-56-11	WR	
13	13-UD-C-35-0-75	UD	C	35								0	75	VT	POR	R			0	75	2	0	2		13-UD-C-35-0-75-12	WR	
13	13-UD-C-35-57-105	UD	C	35								57	105	VT	GOUGE	R			57	105	2	0	2		13-UD-C-35-57-105-13	WR	
13	13-UD-C-36-13-104	UD	C	36	1	13	104	VT	TC		0.094	13	104	VT	TC	R			13	104	2	0	2		13-UD-C-36-13-104-1	WR	
13	13-UD-C-36-0-142	UD	C	36								0	142	VT	POR	R			0	142	6	0	6		13-UD-C-36-0-142-2	WR	
13	13-UD-C-36-41-156	UD	C	36								41	156	VT	LOF	R			41	156	4	0	4		13-UD-C-36-41-156-3	WR	
13	13-UD-C-36-55-156	UD	C	36								55	156	VT	LOF	R			55	156	7	0	7		13-UD-C-36-55-156-4	WR	
13	13-UD-C-36-0-130	UD	C	36								0	130	VT	POR	R			0	130	0	7	7		13-UD-C-36-0-130-5	WR	
13	13-UD-C-36-57-131	UD	C	36								57	131	VT	POR	R			57	131	0	4	4		13-UD-C-36-57-131-6	WR	
13	13-UD-C-36-5-0	UD	C	36								5	0	VT	RI	R			5	0	10	4	14		13-UD-C-36-5-0-7	WR	
13	13-UD-C-36-16-0	UD	C	36								16	0	VT	POR	R			16	0	4	0	4		13-UD-C-36-16-0-8	WR	
13	13-UD-C-36-53-0	UD	C	36								53	0	VT	POR	R			53	0	4	4	8		13-UD-C-36-53-0-9	WR	
13	13-UD-C-37-3-156	UD	C	37	2	3	156	VT	POR			3	156	VT	POR	R			3	156	4	0	4		13-UD-C-37-3-156-1	WR	
13	13-UD-C-37-3-91	UD	C	37	3	3	91	VT	TC		0.125	3	91	VT	TC	R			3	91	0	6	6		13-UD-C-37-3-91-2	WR	
13	13-UD-C-37-32-0	UD	C	37	4	21-44	0	VT	UC		0.094	32	0	VT	UC	R			32	0	24	0	24		13-UD-C-37-32-0-3	WR	
13	13-UD-C-37-5-90	UD	C	37								5	90	VT	POR	R			5	90	0	4	4		13-UD-C-37-5-90-4	WR	
13	13-UD-C-37-59-99	UD	C	37								59	99	VT	POR	R			59	99	0	4	4		13-UD-C-37-59-99-5	WR	
13	13-UD-C-37-44-151	UD	C	37								44	151	VT	RI	R		0.25	44	151	10	10	40	100	13-UD-C-37-44-151-6	TSPP	
13	13-UD-C-38-13-114	UD	C	38	2	13	114	VT	TC		0.094	13	114	VT	TC	R			13	114	3	0	3		13-UD-C-38-13-114-1	WR	
13	13-UD-C-38-0-136	UD	C	38	3	0	136	BFET	WI			0	136	VT	WI	R			0	136	6	0	6		13-UD-C-38-0-136-2	WR	
13	13-UD-C-38-46-156	UD	C	38	5	46	156	VT	POR			46	156	VT	RI	R			46	156	4	0	4		13-UD-C-38-46-156-3	WR	
13	13-UD-C-38-57-121	UD	C	38								57	121	VT	POR	R			57	121	0	4	4		13-UD-C-38-57-121-4	WR	
13	13-UD-C-38-38-99	UD	C	38								38	99	VT	GOUGE	R			38	99	0	4	4		13-UD-C-38-38-99-5	WR	
13	13-UD-C-38-36-82	UD	C	38								36	82	VT	POR	R			36	82	6	0	6		13-UD-C-38-36-82-6	WR	
13	13-UD-C-38-19-0	UD	C	38								19	0	VT	RI	R			19	0	2	0	2		13-UD-C-38-19-0-7	WR	

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Indication Topside	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-UD-C-39-56-156	UD	C	39	1	56	156	BFET	WI			56	156	VT	WI	R			56	156	12	0	12		13-UD-C-39-56-156-1		WR
13	13-UD-C-39-2-70	UD	C	39	3	2	70	VT	TC		0.094	2	70	VT	TC	R			2	70	4	0	4		13-UD-C-39-2-70-2		WR
13	13-UD-C-39-19-0	UD	C	39	4	19	0	BFET	WI			19	0	VT	WI	R			19	0	5	5	10		13-UD-C-39-19-0-3		WR
13	13-UD-C-39-73-1	UD	C	39	5	4	76	VT	POR			73	1	VT	POR	R			73	1	0	6	6		13-UD-C-39-73-1-4		WR
13	13-UD-C-39-44-88	UD	C	39								44	88	VT	DENT	R			44	88	6	0	18.84956	28.27433	13-UD-C-39-44-88-5		PP
13	13-UD-C-39-60-88	UD	C	39								60	88	VT	POR	R			60	88	0	4	4		13-UD-C-39-60-88-6		WR
13	13-UD-C-39-13-5	UD	C	39								13	5	VT	POR	R			13	5	0	12	12		13-UD-C-39-13-5-7		WR
13	13-UD-C-39-71-11	UD	C	39								71	11	VT	POR	R			71	11	0	4	4		13-UD-C-39-71-11-8		WR
13	13-UD-C-39-35-0	UD	C	39								35	0	VT	POR	R			35	0	4	0	4		13-UD-C-39-35-0-9		WR
13	13-UD-C-40-54-108	UD	C	40	1	54	108	VT	DENT			54	108	VT	DENT	R			54	108	8	8	32	64	13-UD-C-40-54-108-1		TSPP
13	13-UD-C-40-0-130	UD	C	40	2	0	130	VT	POR			0	130	VT	RI	R			0	130	0	4	4		13-UD-C-40-0-130-2		WR
13	13-UD-C-40-60-145	UD	C	40	3	60	145	VT	POR			60	145	VT	POR	R			60	145	4	6	10		13-UD-C-40-60-145-3		WR
13	13-UD-C-40-11-156	UD	C	40	4	11	156	BFET	WI			11	156	VT	RI	R			11	156	10	0	10		13-UD-C-40-11-156-4		WR
13	13-UD-C-40-0-10	UD	C	40								0	10	VT	POR	R			0	10	0	4	4		13-UD-C-40-0-10-5		WR
13	13-UD-C-40-0-115	UD	C	40								0	115	VT	POR	R			0	115	4	4	8		13-UD-C-40-0-115-6		WR
13	13-UD-C-40-20-156	UD	C	40								20	156	VT	POR	R			20	156	4	0	4		13-UD-C-40-20-156-7		WR
13	13-UD-C-40-56-151	UD	C	40								56	151	VT	POR	R			56	151	0	4	4		13-UD-C-40-56-151-8		WR
13	13-UD-C-41-0-145	UD	C	41	1	0	145	VT	POR			0	145	VT	POR	R			0	145	18	0	18		13-UD-C-41-0-145-1		WR
13	13-UD-C-41-62-0	UD	C	41	3	70	0	VT	POR			62	0	VT	LOF	R			62	0	20	0	20		13-UD-C-41-62-0-2		WR
13	13-UD-C-41-73-8	UD	C	41								73	8	VT	POR	R			73	8	0	4	4		13-UD-C-41-73-8-3		WR
13	13-UD-C-41-61-87	UD	C	41								61	87	VT	POR	R			61	87	0	4	4		13-UD-C-41-61-87-4		WR
13	13-UD-C-41-0-93	UD	C	41								0	93	VT	POR	R			0	93	4	0	4		13-UD-C-41-0-93-5		WR
13	13-UD-C-41-49-156	UD	C	41								49	156	VT	RI	R			49	156	4	0	4		13-UD-C-41-49-156-6		WR
13	13-UD-C-42-58-148	UD	C	42	2	58	148	VT	TC		0.094	58	148	VT	TC	R			58	148	2	0	2		13-UD-C-42-58-148-1		WR
13	13-UD-C-42-26-156	UD	C	42	3	26	156	BFET	WI			26	156	VT	WI	R			26	156	10	0	10		13-UD-C-42-26-156-2		WR
13	13-UD-C-42-45-156	UD	C	42	4	45	156	VT	POR			45	156	VT	POR	R			45	156	4	0	4		13-UD-C-42-45-156-3		WR
13	13-UD-C-42-56-156	UD	C	42	5	56	156	VT	POR			56	156	VT	POR	R			56	156	4	0	4		13-UD-C-42-56-156-4		WR
13	13-UD-C-42-0-0	UD	C	42								0	0	VT	LOF	R			0	0	5	0	5		13-UD-C-42-0-0-5		WR
13	13-UD-C-42-26-0	UD	C	42								26	0	VT	RI	R			26	0	4	0	4		13-UD-C-42-26-0-6		WR
13	13-UD-C-42-56-6	UD	C	42								56	6	VT	POR	R			56	6	0	4	4		13-UD-C-42-56-6-7		WR
13	13-UD-C-42-57-135	UD	C	42								57	135	VT	RI	R			57	135	0	7	7		13-UD-C-42-57-135-8		WR
13	13-UD-C-42-0-153	UD	C	42								0	153	VT	RI	R			0	153	0	4	4		13-UD-C-42-0-153-9		WR
13	13-UD-C-42-0-156	UD	C	42								0	156	VT	RI	R			0	156	0	4	4		13-UD-C-42-0-156-10		WR
13	13-UD-C-43-58-33	UD	C	43	1	58	33	VT	TC		0.094	58	33	VT	TC	R			58	33	0	4	4		13-UD-C-43-58-33-1		WR
13	13-UD-C-43-0-0	UD	C	43	3	0	0	VT	POR			0	0	VT	POR	R			0	0	4	4	8		13-UD-C-43-0-0-2		WR
13	13-UD-C-43-0-102	UD	C	43								0	102	VT	POR	R			0	102	0	8	8		13-UD-C-43-0-102-3		WR
13	13-UD-C-43-0-97	UD	C	43								0	97	VT	POR	R			0	97	0	2	2		13-UD-C-43-0-97-4		WR
13	13-UD-C-43-0-93	UD	C	43								0	93	VT	POR	R			0	93	0	4	4		13-UD-C-43-0-93-5		WR
13	13-UD-C-43-38-28	UD	C	43								38	28	VT	IF	R			38	28	8	0	8		13-UD-C-43-38-28-6		WR
13	13-UD-C-44-44-41	UD	C	44	1	44	41	VT	TC		0.094	44	41	VT	TC	R			44	41	2	0	2		13-UD-C-44-44-41-1		WR
13	13-UD-C-44-0-91	UD	C	44	5	0	91	VT	POR			0	91	VT	POR	R			0	91	0	4	4		13-UD-C-44-0-91-2		WR
13	13-UD-C-44-0-117	UD	C	44	6	0	110-123	BFET	WI			0	117	VT	WI	R			0	117	0	20	20		13-UD-C-44-0-117-3		WR
13	13-UD-C-44-60-120	UD	C	44	7	60	120	BFET	WI			60	120	VT	WI	R			60	120	0	12	12		13-UD-C-44-60-120-4		WR
13	13-UD-C-44-0-135	UD	C	44	8	0	135	VT	POR			0	135	VT	POR	R			0	135	0	4	4		13-UD-C-44-0-135-5		WR
13	13-UD-C-44-29-156	UD	C	44	9	0-60	156	BFET	WI			29	156	VT	WI	R			29	156	58	0	58		13-UD-C-44-29-156-6		WR
13	13-UD-C-45-5-155	UD	C	45	1	5	155	VT	POR			5	155	VT	POR	R			5	155	10	0	10		13-UD-C-45-5-155-1		WR
13	13-UD-C-45-54-156	UD	C	45	2	54	156	VT	POR			54	156	VT	POR	R			46	156	9	0	9		13-UD-C-45-46-156-2		WR
13	13-UD-C-45-58-156	UD	C	45	3	58	156	VT	POR			58	156	VT	POR	R			46	156	9	0	9		13-UD-C-45-46-156-2		WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-C-45-57-117	UD	C	45	4	57	117	VT	TC		0.094	57	117	VT	TC	R			57	117	0	3	3		13-UD-C-45-57-117-3	WR	
13	13-UD-C-45-60-105	UD	C	45	5	60	105	VT	POR			60	105	VT	POR	R			60	105	0	8	8		13-UD-C-45-60-105-4	WR	
13	13-UD-C-45-60-86	UD	C	45	6	60	86	BFET	WI			60	86	VT	WI	R			60	86	0	12	12		13-UD-C-45-60-86-5	WR	
13	13-UD-C-45-60-26	UD	C	45	9	60	26	VT	UC			60	26	VT	UC	R			60	26	0	4	4		13-UD-C-45-60-26-6	WR	
13	13-UD-C-45-8-0	UD	C	45	10	2-14	0	VT	UC			8	0	VT	UC	R			8	0	17	0	17		13-UD-C-45-8-0-7	WR	
13	13-UD-C-45-45-0	UD	C	45	12	45	0	BFET	WI			45	0	VT	WI	R			45	0	10	0	10		13-UD-C-45-45-0-8	WR	
13	13-UD-C-45-5-3	UD	C	45	13	5	3	VT	TC		0.094	5	3	VT	TC	R			5	3	6	6	24	36	13-UD-C-45-5-3-9	TSPP	
13	13-UD-C-45-57-55	UD	C	45								57	55	VT	POR	R			57	55	0	5	5		13-UD-C-45-57-55-10	WR	
13	13-UD-C-46-4-0	UD	C	46	1	4	0	VT	POR			4	0	VT	POR	R			0	5	4	10	14		13-UD-C-46-0-5-1	WR	
13	13-UD-C-46-0-5	UD	C	46	2	0	5	BFET	WI			0	5	VT	WI	R			0	5	4	10	14		13-UD-C-46-0-5-1	WR	
13	13-UD-C-46-0-8	UD	C	46	3	0	8	VT	POR			0	8	VT	POR	R			0	5	4	10	14		13-UD-C-46-0-5-1	WR	
13	13-UD-C-46-0-82	UD	C	46	5	0	82	VT	POR			0	82	VT	RI	R			0	82	0	4	4		13-UD-C-46-0-82-2	WR	
13	13-UD-C-46-60-125	UD	C	46	7	60	125	BFET	WI			60	125	VT	WI	R			60	125	0	8	8		13-UD-C-46-60-125-3	WR	
13	13-UD-C-46-2-156	UD	C	46	8	2	156	VT	POR			2	156	VT	POR	R			14	156	29	0	29		13-UD-C-46-14-156-4	WR	
13	13-UD-C-46-15-156	UD	C	46	9	15	156	VT	POR			15	156	VT	POR	R			14	156	29	0	29		13-UD-C-46-14-156-4	WR	
13	13-UD-C-46-24-156	UD	C	46	10	24	156	BFET	WI			24	156	VT	WI	R			14	156	29	0	29		13-UD-C-46-14-156-4	WR	
13	13-UD-C-46-0-54	UD	C	46								0	54	VT	POR	R			0	54	0	4	4		13-UD-C-46-0-54-5	WR	
13	13-UD-C-46-58-139	UD	C	46								58	139	VT	RI	R			58	139	0	4	4		13-UD-C-46-58-139-6	WR	
13	13-UD-C-47-5-157	UD	C	47	1	5	157	BFET	WI			5	157	VT	WI	R			5	157	8	0	8		13-UD-C-47-5-157-1	WR	
13	13-UD-C-47-44-145	UD	C	47	2	44	145	VT	TC		0.094	44	145	VT	GOUGE	R			44	145	2	0	2		13-UD-C-47-44-145-2	WR	
13	13-UD-C-47-4-114	UD	C	47	3	4	114	VT	TC		0.094	4	114	VT	GOUGE	R			4	114	2	0	2		13-UD-C-47-4-114-3	WR	
13	13-UD-C-47-0-4	UD	C	47	6	0	6	VT	POR			0	4	VT	POR	R			0	4	0	10	10		13-UD-C-47-0-4-4	WR	
13	13-UD-C-47-41-12	UD	C	47								41	12	VT	DENT	R			41	12	10	10	40	100	13-UD-C-47-41-12-5	PP	
13	13-UD-C-47-0-88	UD	C	47								0	88	VT	POR	R			0	88	4	0	4		13-UD-C-47-0-88-6	WR	
13	13-UD-C-47-1-93	UD	C	47								1	93	VT	POR	R			1	93	4	0	4		13-UD-C-47-1-93-7	WR	
13	13-UD-C-47-0-120	UD	C	47								0	120	VT	IF	R			0	120	0	10	10		13-UD-C-47-0-120-8	WR	
13	13-UD-C-48-6-0	UD	C	48	1	5-29	0	VT	UC			6	0	VT	UC	R			6	0	5	0	5		13-UD-C-48-6-0-1	WR	
13	13-UD-C-48-4-89	UD	C	48	3	4	89	VT	TC		0.094	4	89	VT	GOUGE	R			4	89	4	0	4		13-UD-C-48-4-89-2	WR	
13	13-UD-C-48-11-133	UD	C	48	4	11	133	VT	TC		0.125	11	133	VT	GOUGE	R			11	133	0	4	4		13-UD-C-48-11-133-3	WR	
13	13-UD-C-48-58-121	UD	C	48	5	58	118-124	VT	UC			58	121	VT	UC	R			58	120	0	18	18		13-UD-C-48-58-120-4	WR	
13	13-UD-C-48-58-126	UD	C	48	6	58	126	VT	POR			58	126	VT	POR	R			58	120	0	18	18		13-UD-C-48-58-120-4	WR	
13	13-UD-C-48-5-157	UD	C	48	7	5	157	VT	POR			5	157	VT	POR	R			5	157	4	0	4		13-UD-C-48-5-157-5	WR	
13	13-UD-C-48-34-157	UD	C	48	8	26-44	157	BFET	WI			34	157	VT	WI	R			34	156	22	0	22		13-UD-C-48-34-156-6	WR	
13	13-UD-C-48-58-97	UD	C	48								58	97	VT	LOF	R			58	97	0	6	6		13-UD-C-48-58-97-7	WR	
13	13-UD-C-48-2-72	UD	C	48								2	72	VT	GOUGE	R			2	72	6	6	24	36	13-UD-C-48-2-72-8	TSPP	
13	13-UD-C-48-0-35	UD	C	48								0	35	VT	RI	R			0	35	0	4	4		13-UD-C-48-0-35-9	WR	
13	13-UD-C-48-0-0	UD	C	48								0	0	VT	LOF	R			0	0	32	0	32		13-UD-C-48-0-0-10	WR	
13	13-UD-B-1-59-149	UD	B	1	1	59	149	BFET	WI			59	149	VT	WI	R			58	145	0	19	19		13-UD-B-1-58-145-8	WR	
13	13-UD-B-1-59-138	UD	B	1	2	59	138	BFET	WI			59	138	VT	WI	R			58	145	0	19	19		13-UD-B-1-58-145-8	WR	
13	13-UD-B-1-1-155	UD	B	1	3	1	155	VT	POR			1	155	VT	POR	R			0	156	2	2	4		13-UD-B-1-0-156-1	WR	
13	13-UD-B-1-31-99	UD	B	1	4	31	99	VT	TS			31	99	VT	TS	R			31	99	10	14	48	140	13-UD-B-1-31-99-2	PP	
13	13-UD-B-1-1-19	UD	B	1	5	1	19	VT	POR			1	19	VT	POR	R			1	19	0	5	5		13-UD-B-1-1-19-3	WR	
13	13-UD-B-1-30-14	UD	B	1								30	14	VT	GOUGE	R			30	14	2	0	2		13-UD-B-1-30-14-4	WR	
13	13-UD-B-1-39-66	UD	B	1								39	66	VT	DENT	R			39	66	6	0	18.84956	28.27433	13-UD-B-1-39-66-5	PP	
13	13-UD-B-1-56-156	UD	B	1								56	156	VT	POR	R			56	156	3	0	3		13-UD-B-1-56-156-6	WR	
13	13-UD-B-1-8-0	UD	B	1								8	0	VT	RI	R			8	0	4	0	4		13-UD-B-1-8-0-7	WR	
13	13-UD-B-2-9-24	UD	B	2	1	9	24	VT	GOUGE		0.1	9	24	VT	GOUGE	R			9	24	6	0	18.84956	28.27433	13-UD-B-2-9-24-1	PP	
13	13-UD-B-2-11-156	UD	B	2								11	156	VT	POR	R			11	156	7	0	7		13-UD-B-2-11-156-2	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-B-2-0-156	UD	B	2								0	156	VT	RI	R			0	156	0	1	1		13-UD-B-2-0-156-3	WR	
13	13-UD-B-2-0-23	UD	B	2								0	23	VT	POR	R			0	23	0	6	6		13-UD-B-2-0-23-4	WR	
13	13-UD-B-3-9-1	UD	B	3	1	5-14	1	BFET	WI			9	1	VT	WI	R			7	0	12	0	12		13-UD-B-3-7-0-4	WR	
13	13-UD-B-3-25-115	UD	B	3	2	25	115	VT	WI			25	115	VT	WI	R			25	115	0	8	8		13-UD-B-3-25-115-5	WR	
13	13-UD-B-3-15-155	UD	B	3	3	15	155	VT	POR			15	155	VT	POR	R			15	156	3	0	3		13-UD-B-3-15-156-1	WR	
13	13-UD-B-3-2-156	UD	B	3								2	156	VT	LOF	R			2	156	2	0	2		13-UD-B-3-2-156-2	WR	
13	13-UD-B-3-29-0	UD	B	3								29	0	VT	IF	R			29	0	3	0	3		13-UD-B-3-29-0-3	WR	
13	13-UD-B-4-1-24	UD	B	4	1	1	20-28	BFET	WI			1	24	VT	WI	R			0	23	0	12	12		13-UD-B-4-0-23-6	WR	
13	13-UD-B-4-1-62	UD	B	4	3	1	15	VT	UC			1	62	VT	UC	R			1	62	0	5	5		13-UD-B-4-1-62-1	WR	
13	13-UD-B-4-1-70	UD	B	4	4	1	24	VT	UC			1	70	VT	UC	R			1	70	0	6	6		13-UD-B-4-1-70-2	WR	
13	13-UD-B-4-8-0	UD	B	4								8	0	VT	LOF	R			8	0	5	0	5		13-UD-B-4-8-0-3	WR	
13	13-UD-B-4-14-0	UD	B	4								14	0	VT	RI	R			14	0	2	0	2		13-UD-B-4-14-0-4	WR	
13	13-UD-B-4-36-115	UD	B	4								36	115	VT	POR	R			36	115	0	3	3		13-UD-B-4-36-115-5	WR	
13	13-UD-B-5-37-156	UD	B	5	1	36-38	156	VT	POR			37	156	VT	POR	R			36	156	5	0	5		13-UD-B-5-36-156-1	WR	
13	13-UD-B-5-16-39	UD	B	5	4	16	39	VT	TC		0.1	16	39	VT	DENT	R			16	39	6	0	18.84956	28.27433	13-UD-B-5-16-39-2	PP	
13	13-UD-B-5-54-35	UD	B	5	5	54	35	VT	TC		0.093	54	35	VT	TC	R			54	35	2	0	2		13-UD-B-5-54-35-3	WR	
13	13-UD-B-5-44-1	UD	B	5	6	41-47	1	VT	UC			44	1	VT	UC	R			42	0	5	0	5		13-UD-B-5-42-0-4	WR	
13	13-UD-B-5-16-1	UD	B	5	7	2-34	1	VT	UC			16	1	VT	UC	R			11	0	16	0	16		13-UD-B-5-11-0-5	WR	
13	13-UD-B-5-10-156	UD	B	5								10	156	VT	LOF	R			10	156	4	0	4		13-UD-B-5-10-156-6	WR	
13	13-UD-B-5-50-140	UD	B	5								50	140	VT	POR	R			50	140	2	2	4		13-UD-B-5-50-140-7	WR	
13	13-UD-B-5-56-0	UD	B	5								56	0	VT	LOF	R			56	0	0	2	2		13-UD-B-5-56-0-8	WR	
13	13-UD-B-6-1-77	UD	B	6	3	1	77	BFET	WI			1	77	VT	WI	R			0	78	0	9	9		13-UD-B-6-0-78-3	WR	
13	13-UD-B-6-17-1	UD	B	6	4	17	1	VT	POR			17	1	VT	POR	R			15	0	16	0	16		13-UD-B-6-15-0-1	WR	
13	13-UD-B-6-1-33	UD	B	6								1	33	VT	GOUGE	R			1	33	2	0	2		13-UD-B-6-1-33-2	WR	
13	13-UD-B-7-0-77	UD	B	7	1	1	81	VT	POR			0	77	VT	POR	R			0	77	0	10	10		13-UD-B-7-0-77-1	WR	
13	13-UD-B-7-23-109	UD	B	7								23	109	VT	RI	R			23	109	2	2	4		13-UD-B-7-23-109-2	WR	
13	13-UD-B-7-58-118	UD	B	7								58	118	VT	POR	R			58	118	0	3	3		13-UD-B-7-58-118-3	WR	
13	13-UD-B-8-39-22	UD	B	8	1	39	22	VT	GOUGE		0.101	39	22	VT	DENT	R			39	22	8	8	32	64	13-UD-B-8-39-22-1	PP	
13	13-UD-B-8-9-155	UD	B	8	3	9	155	VT	POR			9	155	VT	POR	R			8	156	15	0	15		13-UD-B-8-8-156-2	WR	
13	13-UD-B-8-48-155	UD	B	8	4	48	155	VT	POR			48	155	VT	POR	R			46	156	6	0	6		13-UD-B-8-46-156-3	WR	
13	13-UD-B-9-1-27	UD	B	9	1	1	27	BFET	WI			1	27	VT	POR	R			0	27	0	7	7		13-UD-B-9-0-27-1	WR	
13	13-UD-B-9-1-92	UD	B	9	4	1	92	BFET	WI			1	92	VT	WI	R			0	92	0	8	8		13-UD-B-9-0-92-2	WR	
13	13-UD-B-9-6-156	UD	B	9								6	156	VT	LOF	R			6	156	3	0	3		13-UD-B-9-6-156-3	WR	
13	13-UD-B-10-59-75	UD	B	10	1	59	75	VT	POR			59	75	VT	RI	R			59	75	0	3	3		13-UD-B-10-59-75-1	WR	
13	13-UD-B-10-46-30	UD	B	10								46	30	VT	DENT	R			46	30	6	0	18.84956	28.27433	13-UD-B-10-46-30-2	PP	
13	13-UD-B-11-55-86	UD	B	11	1	55	86	VT	POR			55	86	VT	POR	R			55	86	0	4	4		13-UD-B-11-55-86-1	WR	
13	13-UD-B-11-1-144	UD	B	11	2	1	136-152	BFET	WI			1	144	VT	WI	R			1	144	0	19	19		13-UD-B-11-1-144-2	WR	
13	13-UD-B-11-14-156	UD	B	11								14	156	VT	LOF	R			14	156	5	0	5		13-UD-B-11-14-156-3	WR	
13	13-UD-B-11-30-156	UD	B	11								30	156	VT	LOF	R			30	156	5	0	5		13-UD-B-11-30-156-4	WR	
13	13-UD-B-11-41-130	UD	B	11								41	130	VT	DENT	R			41	130	6	0	18.84956	28.27433	13-UD-B-11-41-130-5	PP	
13	13-UD-B-11-0-77	UD	B	11								0	77	VT	POR	R			0	77	0	4	4		13-UD-B-11-0-77-6	WR	
13	13-UD-B-11-8-0	UD	B	11								8	0	VT	POR	R			8	0	4	0	4		13-UD-B-11-8-0-7	WR	
13	13-UD-B-12-0-5	UD	B	12	1	0	5-18	VT	TC		0.11	0	5	VT	TC	R			0	5	4	0	4		13-UD-B-12-0-5-1	WR	
13	13-UD-B-12-7-156	UD	B	12	2	7	155	VT	POR			7	156	VT	POR	R			7	156	0	4	4		13-UD-B-12-7-156-2	WR	
13	13-UD-B-12-24-0	UD	B	12								24	0	VT	RI	R			24	0	3	0	3		13-UD-B-12-24-0-3	WR	
13	13-UD-B-12-3-21	UD	B	12								3	21	VT	DENT	R			3	21	8	8	32	64	13-UD-B-12-3-21-4	TSPP	
13	13-UD-B-13-59-104	UD	B	13	1	59	101	VT	POR			59	104	VT	RI	R			59	104	0	7	7		13-UD-B-13-59-104-1	WR	
13	13-UD-B-13-25-109	UD	B	13								25	109	VT	LOF	R			25	109	6	8	14		13-UD-B-13-25-109-2	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-B-13-0-119	UD	B	13								0	119	VT	POR	R			0	119	0	6	6		13-UD-B-13-0-119-3	WR	
13	13-UD-B-13-32-84	UD	B	13								32	84	VT	RI	R			32	84	10	0	10		13-UD-B-13-32-84-4	WR	
13	13-UD-B-13-59-0	UD	B	13								59	0	VT	IF	R			59	0	2	0	2		13-UD-B-13-59-0-5	WR	
13	13-UD-B-14-50-154	UD	B	14	2	50	154	VT	TC		0.1	50	154	VT	TC	R			50	154	2	0	2		13-UD-B-14-50-154-1	WR	
13	13-UD-B-14-50-154	UD	B	14								50	154	VT	LOF	R			50	154	3	1	4		13-UD-B-14-50-154-2	WR	
13	13-UD-B-15-24-102	UD	B	15	2	24	100-104	BFET	WI			24	102	VT	WI	R			24	102	8	0	8		13-UD-B-15-24-102-1	WR	
13	13-UD-B-15-9-156	UD	B	15								9	156	VT	POR	R			9	156	4	0	4		13-UD-B-15-9-156-2	WR	
13	13-UD-B-15-27-42	UD	B	15								27	42	VT	POR	R			27	42	0	4	4		13-UD-B-15-27-42-3	WR	
13	13-UD-B-16-40-1	UD	B	16	1	2-59	1	VT	UC			40	1	VT	UC	R			40	1	18	0	18		13-UD-B-16-40-1-1	WR	
13	13-UD-B-16-16-1	UD	B	16	2	15	1	VT	POR			16	1	VT	UC	R			16	1	11	0	11		13-UD-B-16-16-1-2	WR	
13	13-UD-B-16-1-155	UD	B	16	4	1	155	VT	POR			1	155	VT	POR	R			1	155	3	3	6		13-UD-B-16-1-155-3	WR	
13	13-UD-B-16-6-152	UD	B	16	5	6	152	VT	TC			6	152	VT	TC	R			6	152	3	2	5		13-UD-B-16-6-152-4	WR	
13	13-UD-B-16-53-156	UD	B	16								53	156	VT	RI	R			53	156	4	0	4		13-UD-B-16-53-156-5	WR	
13	13-UD-B-16-28-110	UD	B	16								28	110	VT	LOF	R			28	110	8	6	14		13-UD-B-16-28-110-6	WR	
13	13-UD-B-17-6-65	UD	B	17	1	6	65	VT	GOUGE		0.094	6	65	VT	GOUGE	R			0	71	10	22	64	220	13-UD-B-17-0-71-1	TSPP	
13	13-UD-B-17-8-23	UD	B	17	2	8	23	VT	DENT			8	23	VT	DENT	R			0	71	10	22	64	220	13-UD-B-17-0-71-1	TSPP	
13	13-UD-B-17-3-28	UD	B	17	3	3	28	VT	DENT			3	28	VT	DENT	R			0	71	10	22	64	220	13-UD-B-17-0-71-1	TSPP	
13	13-UD-B-17-1-77	UD	B	17	4	1	70-85	VT	LW			1	77	VT	IF	R			0	71	10	22	64	220	13-UD-B-17-0-71-1	TSPP	
13	13-UD-B-17-12-156	UD	B	17	5	4-22	155	VT	POR			12	156	VT	LOF	R			12	156	22	0	22		13-UD-B-17-12-156-2	WR	
13	13-UD-B-17-42-156	UD	B	17								42	156	VT	LOF	R			42	156	14	0	14		13-UD-B-17-42-156-3	WR	
13	13-UD-B-17-50-152	UD	B	17								50	152	VT	POR	R			50	152	0	4	4		13-UD-B-17-50-152-4	WR	
13	13-UD-B-17-0-120	UD	B	17								0	120	VT	POR	R			0	120	0	4	4		13-UD-B-17-0-120-5	WR	
13	13-UD-B-17-0-60	UD	B	17								0	60	VT	POR	R			0	60	0	4	4		13-UD-B-17-0-60-6	WR	
13	13-UD-B-17-12-0	UD	B	17								12	0	VT	LOF	R			12	0	4	0	4		13-UD-B-17-12-0-7	WR	
13	13-UD-B-17-29-0	UD	B	17								29	0	VT	POR	R			29	0	4	0	4		13-UD-B-17-29-0-8	WR	
13	13-UD-B-17-24-16	UD	B	17								24	16	VT	TC	R			24	16	1	0	1		13-UD-B-17-24-16-9	WR	
13	13-UD-B-17-50-156	UD	B	17								50	156	VT	POR	R			50	156	0	3	3		13-UD-B-17-50-156-10	WR	
13	13-UD-B-18-19-30	UD	B	18	1	19	30	VT	TC		0.094	19	30	VT	TC	R			19	30	0	1	1		13-UD-B-18-19-30-1	WR	
13	13-UD-B-18-19-29	UD	B	18	2	19	29	VT	UC			19	29	VT	POR	R			19	29	4	0	4		13-UD-B-18-19-29-2	WR	
13	13-UD-B-18-23-0	UD	B	18	3	23	1	VT	UC			23	0	VT	LOF	R			23	0	4	0	4		13-UD-B-18-23-0-3	WR	
13	13-UD-B-18-27-76	UD	B	18	4	27	76	VT	POR			27	76	VT	POR	R			27	76	0	4	4		13-UD-B-18-27-76-4	WR	
13	13-UD-B-18-24-100	UD	B	18	5	26	86-106	VT	LW			24	100	VT	RI	R			24	100	0	4	4		13-UD-B-18-24-100-5	WR	
13	13-UD-B-18-0-108	UD	B	18	6	1	105-119	VT	LW			0	108	VT	POR	R			0	108	0	7	7		13-UD-B-18-0-108-6	WR	
13	13-UD-B-18-9-114	UD	B	18	7	9	114	VT	TC		0.094	9	114	VT	DENT	R			9	114	6	0	18.84956	28.27433	13-UD-B-18-9-114-7	PP	
13	13-UD-B-18-0-93	UD	B	18								0	93	VT	POR	R			0	93	0	7	7		13-UD-B-18-0-93-8	WR	
13	13-UD-B-19-22-124	UD	B	19	2	22	24	VT	TC			22	124	VT	DENT	R			22	124	8	8	32	64	13-UD-B-19-22-124-1	PP	
13	13-UD-B-19-34-135	UD	B	19	3	34	35	VT	DENT			34	135	VT	DENT	R			34	135	8	8	32	64	13-UD-B-19-34-135-2	PP	
13	13-UD-B-19-58-127	UD	B	19	4	58	123-127	BFET	WI			58	127	VT	WI	R			58	127	0	9	9		13-UD-B-19-58-127-3	WR	
13	13-UD-B-19-59-35	UD	B	19	5	59	35	VT	POR			59	35	VT	RI	R			59	35	0	4	4		13-UD-B-19-59-35-4	WR	
13	13-UD-B-19-5-156	UD	B	19								5	156	VT	LOF	R			5	156	10	0	10		13-UD-B-19-5-156-5	WR	
13	13-UD-B-19-29-156	UD	B	19								29	156	VT	LOF	R			29	156	4	0	4		13-UD-B-19-29-156-6	WR	
13	13-UD-B-19-51-156	UD	B	19								51	156	VT	LOF	R			51	156	7	0	7		13-UD-B-19-51-156-7	WR	
13	13-UD-B-19-58-156	UD	B	19								58	156	VT	POR	R			58	156	2	2	4		13-UD-B-19-58-156-8	WR	
13	13-UD-B-19-0-127	UD	B	19								0	127	VT	POR	R			0	127	0	4	4		13-UD-B-19-0-127-9	WR	
13	13-UD-B-19-41-122	UD	B	19								41	122	VT	DENT	R			41	122	6	0	18.84956	28.27433	13-UD-B-19-41-122-10	PP	
13	13-UD-B-19-28-107	UD	B	19								28	107	VT	LOF	R			28	107	7	0	7		13-UD-B-19-28-107-11	WR	
13	13-UD-B-19-29-81	UD	B	19								29	81	VT	LOF	R			29	81	12	0	12		13-UD-B-19-29-81-12	WR	
13	13-UD-B-19-0-16	UD	B	19								0	16	VT	POR	R			0	16	0	4	4		13-UD-B-19-0-16-13	WR	

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-B-19-27-11	UD	B	19								27	11	VT	DENT	R			27	11	6	0	18.84956	28.27433	13-UD-B-19-27-11-14	PP	
13	13-UD-B-19-27-20	UD	B	19								27	20	VT	DENT	R			27	20	6	0	18.84956	28.27433	13-UD-B-19-27-20-15	PP	
13	13-UD-B-19-33-0	UD	B	19								33	0	VT	RI	R			33	0	4	0	4		13-UD-B-19-33-0-16	WR	
13	13-UD-B-19-42-0	UD	B	19								42	0	VT	POR	R			42	0	5	0	5		13-UD-B-19-42-0-17	WR	
13	13-UD-B-19-53-0	UD	B	19								53	0	VT	UC	R			53	0	7	0	7		13-UD-B-19-53-0-18	WR	
13	13-UD-B-20-1-140	UD	B	20	2	1	140	VT	POR			1	140	VT	POR	R			1	140	0	4	4		13-UD-B-20-1-140-1	WR	
13	13-UD-B-20-21-74	UD	B	20	4	21	74	VT	DENT			21	74	VT	DENT	R			21	74	12	12	48	144	13-UD-B-20-21-74-2	PP	
13	13-UD-B-20-8-0	UD	B	20	5	3-5	1	VT	UC			8	0	VT	UC	R			8	0	14	0	14		13-UD-B-20-8-0-3	WR	
13	13-UD-B-20-31-1	UD	B	20	6	24-51	1	VT	UC			31	1	VT	UC	R			31	1	17	0	17		13-UD-B-20-31-1-4	WR	
13	13-UD-B-20-1-37	UD	B	20	7	1	37	BFET	WI			1	37	VT	WI	R			1	37	0	9	9		13-UD-B-20-1-37-5	WR	
13	13-UD-B-20-49-38	UD	B	20	9	49	38	LFET	BC	0.128		49	38	PAUT	BC	R	0.143		48	36	16	16	64	256	13-UD-B-20-48-36-6	TSPP	
13	13-UD-B-20-56-65	UD	B	20	10	56	65	BFET	WI			56	65	VT	WI	R			56	65	4	7	11		13-UD-B-20-56-65-7	WR	
13	13-UD-B-20-52-124	UD	B	20	12	52	124	BFET	WI			52	124	VT	WI	R			52	124	0	9	9		13-UD-B-20-52-124-8	WR	
13	13-UD-B-20-52-146	UD	B	20	13	52	146	BFET	WI			52	146	VT	WI	R			52	146	0	7	7		13-UD-B-20-52-146-9	WR	
13	13-UD-B-20-52-155	UD	B	20	14	52	155	VT	POR			52	155	VT	POR	R			52	155	4	4	8		13-UD-B-20-52-155-10	WR	
13	13-UD-B-20-44-156	UD	B	20								44	156	VT	POR	R			44	156	0	3	3		13-UD-B-20-44-156-11	WR	
13	13-UD-B-20-0-0	UD	B	20								0	0	VT	IF	R			0	0	4	0	4		13-UD-B-20-0-0-12	WR	
13	13-UD-B-20-50-0	UD	B	20								50	0	VT	UC	R			50	0	15	0	15		13-UD-B-20-50-0-13	WR	
13	13-UD-B-20-35-0	UD	B	20								35	0	VT	IF	R			35	0	3	0	3		13-UD-B-20-35-0-14	WR	
13	13-UD-B-21-13-1	UD	B	21	1	9-18	1	VT	UC			13	1	VT	UC	R			13	0	24	0	24		13-UD-B-21-13-0-1	WR	
13	13-UD-B-21-25-1	UD	B	21	2	20-30	1	VT	UC			25	1	VT	UC	R			13	0	24	0	24		13-UD-B-21-13-0-1	WR	
13	13-UD-B-21-29-17	UD	B	21	3	29	17	VT	POR			29	17	VT	POR	R			29	17	0	4	4		13-UD-B-21-29-17-2	WR	
13	13-UD-B-21-23-68	UD	B	21	4	23	68	VT	DENT			23	68	VT	DENT	R			23	68	10	20	60	200	13-UD-B-21-23-68-3	TSPP	
13	13-UD-B-21-24-139	UD	B	21	8	24	134-139	BFET	WI			24	139	VT	WI	R			24	139	0	10	10		13-UD-B-21-24-139-4	WR	
13	13-UD-B-22-1-13	UD	B	22	1	1	15	BFET	WI			1	13	VT	WI	R			1	13	0	10	10		13-UD-B-22-1-13-1	WR	
13	13-UD-B-22-59-155	UD	B	22	3	59	155	VT	POR			59	155	VT	RI	R			59	155	2	2	4		13-UD-B-22-59-155-2	WR	
13	13-UD-B-22-56-122	UD	B	22								56	122	VT	DENT	R			56	122	6	6	24	36	13-UD-B-22-56-122-3	TSPP	
13	13-UD-B-22-12-99	UD	B	22								12	99	VT	DENT	R			12	99	12	12	48	144	13-UD-B-22-12-99-4	PP	
13	13-UD-B-22-46-0	UD	B	22								46	0	VT	LOF	R			46	0	4	0	4		13-UD-B-22-46-0-5	WR	
13	13-UD-B-22-37-18	UD	B	22								37	18	VT	GOUGE	R			37	18	4	0	4		13-UD-B-22-37-18-6	WR	
13	13-UD-B-23-1-136	UD	B	23	1	1	136	BFET	WI			1	136	VT	WI	R			1	136	0	9	9		13-UD-B-23-1-136-1	WR	
13	13-UD-B-23-30-142	UD	B	23	2	30	142	VT	TC			30	142	VT	DENT	R			30	142	6	0	18.84956	28.27433	13-UD-B-23-30-142-2	PP	
13	13-UD-B-23-49-85	UD	B	23	4	49	85	VT	GOUGE			49	85	VT	DENT	R			49	85	6	0	18.84956	28.27433	13-UD-B-23-49-85-3	PP	
13	13-UD-B-23-56-58	UD	B	23	5	56	58	VT	UC			56	58	VT	GOUGE	R			56	58	2	0	2		13-UD-B-23-56-58-4	WR	
13	13-UD-B-23-1-14	UD	B	23	7	1	14	VT	POR			1	14	VT	RI	R			1	14	0	4	4		13-UD-B-23-1-14-5	WR	
13	13-UD-B-23-2-0	UD	B	23								2	0	VT	RI	R			2	0	20	12	32		13-UD-B-23-2-0-6	WR	
13	13-UD-B-23-38-0	UD	B	23								38	0	VT	LOF	R			38	0	9	0	9		13-UD-B-23-38-0-7	WR	
13	13-UD-B-23-57-0	UD	B	23								57	0	VT	POR	R			57	0	4	3	7		13-UD-B-23-57-0-8	WR	
13	13-UD-B-23-53-99	UD	B	23								53	99	VT	POR	R			53	99	0	4	4		13-UD-B-23-53-99-9	WR	
13	13-UD-B-23-51-127	UD	B	23								51	127	VT	POR	R			51	127	0	4	4		13-UD-B-23-51-127-10	WR	
13	13-UD-B-24-11-155	UD	B	24	1	11	155	VT	POR			11	155	VT	LOF	R			11	155	5	0	5		13-UD-B-24-11-155-1	WR	
13	13-UD-B-24-2-80	UD	B	24								2	80	VT	DENT	R			2	80	6	6	24	36	13-UD-B-24-2-80-2	TSPP	
13	13-UD-B-24-25-86	UD	B	24								25	86	VT	RI	R			25	86	0	4	4		13-UD-B-24-25-86-3	WR	
13	13-UD-B-24-1-0	UD	B	24								1	0	VT	RI	R			1	0	4	1	5		13-UD-B-24-1-0-4	WR	
13	13-UD-B-25-23-0	UD	B	25	1	23	0	VT	PIT		0.09	23	0	VT	TS	R			23	0	2	0	2		13-UD-B-25-23-0-1	WR	
13	13-UD-B-25-49-5	UD	B	25	2	49	5	VT	TC		0.094	49	5	VT	GOUGE	R			49	5	2	0	2		13-UD-B-25-49-5-2	WR	
13	13-UD-B-25-6-90	UD	B	25	7	6	90	VT	DENT			6	90	VT	DENT	R			6	90	8	8	32	64	13-UD-B-25-6-90-3	TSPP	
13	13-UD-B-25-19-155	UD	B	25	8	19	155	VT	POR			19	155	VT	RI	R			19	155	4	0	4		13-UD-B-25-19-155-4	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-B-25-45-156	UD	B	25								45	156	VT	POR	R			45	156	4	0	4		13-UD-B-25-45-156-5	WR	
13	13-UD-B-25-57-150	UD	B	25								57	150	VT	POR	R			57	150	3	3	6		13-UD-B-25-57-150-6	WR	
13	13-UD-B-25-25-108	UD	B	25								25	108	VT	POR	R			25	108	2	2	4		13-UD-B-25-25-108-7	WR	
13	13-UD-B-25-35-61	UD	B	25								35	61	VT	POR	R			35	61	5	0	5		13-UD-B-25-35-61-8	WR	
13	13-UD-B-25-0-27	UD	B	25								0	27	VT	POR	R			0	27	0	4	4		13-UD-B-25-0-27-9	WR	
13	13-UD-B-25-58-19	UD	B	25								58	19	VT	POR	R			58	19	0	6	6		13-UD-B-25-58-19-10	WR	
13	13-UD-B-25-1-0	UD	B	25								1	0	VT	GOUGE	R			1	0	8	0	8		13-UD-B-25-1-0-11	WR	
13	13-UD-B-25-29-0	UD	B	25								29	0	VT	GOUGE	R			29	0	4	0	4		13-UD-B-25-29-0-12	WR	
13	13-UD-B-25-57-0	UD	B	25								57	0	VT	POR	R			57	0	3	3	6		13-UD-B-25-57-0-13	WR	
13	13-UD-B-26-56-73	UD	B	26	1	56	73	BFET	WI			56	73	VT	WI	R			56	73	0	9	9		13-UD-B-26-56-73-1	WR	
13	13-UD-B-26-1-64	UD	B	26	2	1	64	VT	UC			1	64	VT	UC	R			1	64	0	6	6		13-UD-B-26-1-64-2	WR	
13	13-UD-B-26-57-48	UD	B	26	3	57	48	VT	POR			57	48	VT	POR	R			57	48	0	4	4		13-UD-B-26-57-48-3	WR	
13	13-UD-B-26-57-38	UD	B	26	4	57	38	BFET	WI			57	38	VT	WI	R			57	38	0	10	10		13-UD-B-26-57-38-4	WR	
13	13-UD-B-26-3-0	UD	B	26								3	0	VT	POR	R			3	0	7	4	11		13-UD-B-26-3-0-5	WR	
13	13-UD-B-26-0-0	UD	B	26								0	0	VT	GOUGE	R			0	0	3	0	3		13-UD-B-26-0-0-6	WR	
13	13-UD-B-26-0-3	UD	B	26								0	3	VT	RI	R			0	3	3	0	3		13-UD-B-26-0-3-7	WR	
13	13-UD-B-26-56-50	UD	B	26								56	50	VT	POR	R			56	50	0	4	4		13-UD-B-26-56-50-8	WR	
13	13-UD-B-26-56-65	UD	B	26								56	65	VT	POR	R			56	65	3	0	3		13-UD-B-26-56-65-9	WR	
13	13-UD-B-27-23-146	UD	B	27	2	23	146	BFET	WI			23	146	VT	WI	R			23	146	0	10	10		13-UD-B-27-23-146-1	WR	
13	13-UD-B-27-11-34	UD	B	27	6	11	34	VT	TC		0.094	11	34	VT	DENT	R			11	34	6	0	18.84956	28.27433	13-UD-B-27-11-34-2	PP	
13	13-UD-B-27-1-33	UD	B	27	7	1	32-37	VT	POR			1	33	VT	POR	R			1	33	0	10	10		13-UD-B-27-1-33-3	WR	
13	13-UD-B-27-1-10	UD	B	27	8	1	10	VT	POR			1	10	VT	POR	R			1	10	0	4	4		13-UD-B-27-1-10-4	WR	
13	13-UD-B-27-27-29	UD	B	27	15	27	29	VT	TC		0.094	27	29	VT	DENT	R			27	29	8	8	32	64	13-UD-B-27-27-29-5	PP	
13	13-UD-B-27-25-53	UD	B	27								25	53	VT	POR	R			25	53	0	2	2		13-UD-B-27-25-53-6	WR	
13	13-UD-B-27-25-50	UD	B	27								25	50	VT	POR	R			25	50	0	2	2		13-UD-B-27-25-50-7	WR	
13	13-UD-B-27-0-24	UD	B	27								0	24	VT	POR	R			0	24	0	4	4		13-UD-B-27-0-24-8	WR	
13	13-UD-B-27-0-0	UD	B	27								0	0	VT	RI	R			0	0	2	0	2		13-UD-B-27-0-0-9	WR	
13	13-UD-B-28-1-114	UD	B	28	1	1	114	BFET	WI			1	114	VT	WI	R			1	114	0	9	9		13-UD-B-28-1-114-1	WR	
13	13-UD-B-28-1-82	UD	B	28	3	1	79-83	VT	POR			1	82	VT	POR	R			1	82	0	6	6		13-UD-B-28-1-82-2	WR	
13	13-UD-B-28-1-64	UD	B	28	5	1	63	VT	PIT			1	64	VT	LOF	R			1	64	0	7	7		13-UD-B-28-1-64-3	WR	
13	13-UD-B-28-51-73	UD	B	28	7	51	73	VT	GOUGE			51	73	VT	DENT	R	0.13		51	73	8	8	32	64	13-UD-B-28-51-73-4	PP	
13	13-UD-B-28-59-67	UD	B	28	8	59	64-70	VT	MISALIGNED			59	67	VT	IF	R			59	67	20	12	32		13-UD-B-28-59-67-5	WR	
13	13-UD-B-28-1-36	UD	B	28	9	1	36	VT	POR			1	36	VT	POR	R			0	33	0	10	10		13-UD-B-28-0-33-6	WR	
13	13-UD-B-28-1-29	UD	B	28	10	1	29	VT	POR			1	29	VT	POR	R			0	33	0	10	10		13-UD-B-28-0-33-6	WR	
13	13-UD-B-28-60-45	UD	B	28	11	60	45	VT	GOUGE			60	45	VT	GOUGE	R			60	45	2	3	5		13-UD-B-28-60-45-7	WR	
13	13-UD-B-28-58-0	UD	B	28								58	0	VT	POR	R			58	0	2	0	2		13-UD-B-28-58-0-8	WR	
13	13-UD-B-28-0-37	UD	B	28								0	37	VT	POR	R			0	37	0	4	4		13-UD-B-28-0-37-9	WR	
13	13-UD-B-28-0-49	UD	B	28								0	49	VT	RI	R			0	49	0	5	5		13-UD-B-28-0-49-10	WR	
13	13-UD-B-28-41-65	UD	B	28								41	65	VT	GOUGE	R			41	65	8	8	32	64	13-UD-B-28-41-65-11	PP	
13	13-UD-B-28-0-127	UD	B	28								0	127	VT	POR	R			0	127	0	5	5		13-UD-B-28-0-127-12	WR	
13	13-UD-B-29-39-126	UD	B	29	1	39	126	VT	TC		0.1	39	126	VT	GOUGE	R			39	126	3	0	3		13-UD-B-29-39-126-1	WR	
13	13-UD-B-29-17-12	UD	B	29	3	17	12	VT	TC		0.1	17	12	VT	GOUGE	R			17	12	0	2	2		13-UD-B-29-17-12-2	WR	
13	13-UD-B-29-1-0	UD	B	29								1	0	VT	GOUGE	R			1	0	1	0	1		13-UD-B-29-1-0-3	WR	
13	13-UD-B-29-33-0	UD	B	29								33	0	VT	GOUGE	R			33	0	4	0	4		13-UD-B-29-33-0-4	WR	
13	13-UD-B-30-29-22	UD	B	30	6	29	22	VT	TC		0.15	29	22	VT	DENT	R			29	22	6	6	24	36	13-UD-B-30-29-22-1	TSPP	
13	13-UD-B-30-28-0	UD	B	30								28	0	VT	LOF	R			28	0	2	0	2		13-UD-B-30-28-0-2	WR	
13	13-UD-B-30-0-40	UD	B	30								0	40	VT	POR	R			0	40	0	4	4		13-UD-B-30-0-40-3	WR	
13	13-UD-B-30-28-27	UD	B	30								28	27	VT	POR	R			28	27	0	4	4		13-UD-B-30-28-27-4	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs									Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)		
13	13-UD-B-30-1-55	UD	B	30								1	55	VT	GOUGE	R			1	55	2	0	2		13-UD-B-30-1-55-5	WR		
13	13-UD-B-30-25-103	UD	B	30								25	103	VT	IF	R			25	103	0	6	6		13-UD-B-30-25-103-6	WR		
13	13-UD-B-31-31-14	UD	B	31	1	31	14	VT	TC		0.1	31	14	VT	TC	R			31	14	6	0	18.84956	28.27433	13-UD-B-31-31-14-1	PP		
13	13-UD-B-31-25-39	UD	B	31	2	25	39	VT	TC		0.1	25	39	VT	DENT	R			25	39	6	0	18.84956	28.27433	13-UD-B-31-25-39-2	PP		
13	13-UD-B-31-0-2	UD	B	31	3	0	2	VT	LF			0	2	VT	IF	R			0	2	5	5	10		13-UD-B-31-0-2-3	WR		
13	13-UD-B-31-34-88	UD	B	31	4	34	88	VT	DENT			34	88	VT	DENT	R			34	88	8	8	32	64	13-UD-B-31-34-88-4	PP		
13	13-UD-B-31-27-156	UD	B	31								27	156	VT	POR	R			27	156	4	0	4		13-UD-B-31-27-156-5	WR		
13	13-UD-B-31-25-108	UD	B	31								25	108	VT	POR	R			25	108	4	4	8		13-UD-B-31-25-108-6	WR		
13	13-UD-B-31-23-0	UD	B	31								23	0	VT	GOUGE	R			23	0	3	0	3		13-UD-B-31-23-0-7	WR		
13	13-UD-B-32-52-72	UD	B	32	3	52	72	VT	TC		0.1	52	72	VT	GOUGE	R			52	72	2	0	2		13-UD-B-32-52-72-1	WR		
13	13-UD-B-32-56-14	UD	B	32	4	56	14	VT	TC		0.1	56	14	VT	GOUGE	R			56	14	2	0	2		13-UD-B-32-56-14-2	WR		
13	13-UD-B-32-44-26	UD	B	32	5	44	26	VT	TC		0.1	44	26	VT	DENT	R			44	26	6	0	18.84956	28.27433	13-UD-B-32-44-26-3	PP		
13	13-UD-B-32-0-0	UD	B	32								0	0	VT	POR	R			0	0	4	0	4		13-UD-B-32-0-0-4	WR		
13	13-UD-B-32-0-58	UD	B	32								0	58	VT	POR	R			0	58	6	0	6		13-UD-B-32-0-58-5	WR		
13	13-UD-B-32-7-48	UD	B	32								7	48	VT	DENT	R			7	48	6	0	18.84956	28.27433	13-UD-B-32-7-48-6	PP		
13	13-UD-B-32-5-156	UD	B	32								5	156	VT	POR	R			5	156	5	0	5		13-UD-B-32-5-156-7	WR		
13	13-UD-B-32-17-156	UD	B	32								17	156	VT	POR	R			17	156	5	0	5		13-UD-B-32-17-156-8	WR		
13	13-UD-B-32-50-156	UD	B	32								50	156	VT	POR	R			50	156	4	4	8		13-UD-B-32-50-156-9	WR		
13	13-UD-B-33-6-156	UD	B	33	1	6	156	VT	POR			6	156	VT	RI	R			6	156	4	0	4		13-UD-B-33-6-156-1	WR		
13	13-UD-B-33-30-14	UD	B	33	2	30	14	VT	UC			30	14	VT	LOF	R			30	14	0	4	4		13-UD-B-33-30-14-2	WR		
13	13-UD-B-33-3-0	UD	B	33								3	0	VT	RI	R			3	0	4	0	4		13-UD-B-33-3-0-3	WR		
13	13-UD-B-34-31-108	UD	B	34	1	26-31	110-115	VT	UC			31	108	VT	POR	R			31	108	2	3	5		13-UD-B-34-31-108-1	WR		
13	13-UD-B-34-11-76	UD	B	34	3	11	76	VT	DENT			11	76	VT	DENT	R			11	76	8	8	32	64	13-UD-B-34-11-76-2	PP		
13	13-UD-B-34-45-0	UD	B	34	4	10-58	0	VT	UC			45	0	VT	UC	R			45	0	5	0	5		13-UD-B-34-45-0-3	WR		
13	13-UD-B-34-31-0	UD	B	34	5	31	0	VT	TC		0.094	31	0	VT	GOUGE	R			31	0	4	0	4		13-UD-B-34-31-0-4	WR		
13	13-UD-B-34-23-28	UD	B	34	6	23	28	VT	TC		0.094	23	28	VT	DENT	R			23	28	6	0	18.84956	28.27433	13-UD-B-34-23-28-5	PP		
13	13-UD-B-34-55-0	UD	B	34								55	0	VT	POR	R			55	0	4	0	4		13-UD-B-34-55-0-6	WR		
13	13-UD-B-34-14-88	UD	B	34								14	88	VT	DENT	R			14	88	6	0	18.84956	28.27433	13-UD-B-34-14-88-7	PP		
13	13-UD-B-34-31-108	UD	B	34								31	108	VT	POR	R			31	108	2	3	5		13-UD-B-34-31-108-1	WR		
13	13-UD-B-35-58-9	UD	B	35	3	58	9	VT	UC			58	9	VT	UC	R			58	9	5	0	5		13-UD-B-35-58-9-1	WR		
13	13-UD-B-35-0-68	UD	B	35	4	0	68	VT	POR			0	68	VT	RI	R			0	68	0	4	4		13-UD-B-35-0-68-2	WR		
13	13-UD-B-35-0-93	UD	B	35	5	0	93	VT	POR			0	93	VT	POR	R			0	93	0	4	4		13-UD-B-35-0-93-3	WR		
13	13-UD-B-35-2-156	UD	B	35								2	156	VT	POR	R			2	156	4	0	4		13-UD-B-35-2-156-4	WR		
13	13-UD-B-35-0-103	UD	B	35								0	103	VT	POR	R			0	103	0	5	5		13-UD-B-35-0-103-5	WR		
13	13-UD-B-35-0-30	UD	B	35								0	30	VT	POR	R			0	30	0	4	4		13-UD-B-35-0-30-6	WR		
13	13-UD-B-35-0-0	UD	B	35								0	0	VT	POR	R			0	0	3	4	7		13-UD-B-35-0-0-7	WR		
13	13-UD-B-35-29-0	UD	B	35								29	0	VT	GOUGE	R			29	0	3	0	3		13-UD-B-35-29-0-8	WR		
13	13-UD-B-36-0-25	UD	B	36	4	0	28	VT	POR			0	25	VT	POR	R			0	25	0	10	10		13-UD-B-36-0-25-1	WR		
13	13-UD-B-36-0-0	UD	B	36								0	0	VT	POR	R			0	0	3	3	6		13-UD-B-36-0-0-2	WR		
13	13-UD-B-36-28-0	UD	B	36								28	0	VT	GOUGE	R			28	0	5	0	5		13-UD-B-36-28-0-3	WR		
13	13-UD-B-36-3-156	UD	B	36								3	156	VT	RI	R			3	156	5	4	9		13-UD-B-36-3-156-4	WR		
13	13-UD-B-36-12-156	UD	B	36								12	156	VT	POR	R			12	156	4	0	4		13-UD-B-36-12-156-5	WR		
13	13-UD-B-37-25-108	UD	B	37	2	24-30	109-114	VT	UC			25	108	VT	POR	R			25	108	4	2	6		13-UD-B-37-25-108-1	WR		
13	13-UD-B-37-34-6	UD	B	37	3	37	74	VT	UC			34	6	VT	POR	R			34	6	12	0	12		13-UD-B-37-34-6-2	WR		
13	13-UD-B-37-59-24	UD	B	37	5	59	24	VT	UC			59	24	VT	UC	R			59	10	0	18	18		13-UD-B-37-59-10-3	WR		
13	13-UD-B-37-59-10	UD	B	37	6	59	10	VT	UC			59	10	VT	UC	R			59	10	0	18	18		13-UD-B-37-59-10-3	WR		
13	13-UD-B-37-29-0	UD	B	37	7	29	0	VT	TC		0.1	29	0	VT	TC	R			29	0	3	0	3		13-UD-B-37-29-0-4	WR		
13	13-UD-B-37-59-36	UD	B	37	8	59	38	VT	POR			59	36	VT	POR	R			59	36	0	9	9		13-UD-B-37-59-36-5	WR		

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-B-37-0-54	UD	B	37								0	54	VT	POR	R			0	54	0	4	4		13-UD-B-37-0-54-6	WR	
13	13-UD-B-37-54-0	UD	B	37								54	0	VT	POR	R			54	0	2	0	2		13-UD-B-37-54-0-7	WR	
13	13-UD-B-38-29-0	UD	B	38	1	25-33	0	VT	TC		0.1	29	0	VT	TC	R			29	0	8	0	8		13-UD-B-38-29-0-1	WR	
13	13-UD-B-38-6-27	UD	B	38	2	6	27	VT	TC		0.1	6	27	VT	TC	R			6	27	6	0	18.84956	28.27433	13-UD-B-38-6-27-2	PP	
13	13-UD-B-38-0-30	UD	B	38	4	0	30	VT	UC			0	30	VT	UC	R			0	30	0	5	5		13-UD-B-38-0-30-3	WR	
13	13-UD-B-38-24-122	UD	B	38	6	24	122	VT	TC		0.1	24	122	VT	DENT	R			24	122	6	0	18.84956	28.27433	13-UD-B-38-24-122-4	PP	
13	13-UD-B-38-0-0	UD	B	38								0	0	VT	GOUGE	R			0	0	4	0	4		13-UD-B-38-0-0-5	WR	
13	13-UD-B-38-0-15	UD	B	38								0	15	VT	POR	R			0	15	0	4	4		13-UD-B-38-0-15-6	WR	
13	13-UD-B-38-0-156	UD	B	38								0	156	VT	POR	R			0	156	0	2	2		13-UD-B-38-0-156-7	WR	
13	13-UD-B-39-0-0	UD	B	39	1	0	0	VT	UC			0	0	VT	UC	R			0	0	2	3	5		13-UD-B-39-0-0-1	WR	
13	13-UD-B-39-0-31	UD	B	39	2	0	31	VT	POR			0	31	VT	POR	R			0	31	0	3	3		13-UD-B-39-0-31-2	WR	
13	13-UD-B-39-0-8	UD	B	39	3	0	8	VT	UC			0	8	VT	UC	R			0	8	0	7	7		13-UD-B-39-0-8-3	WR	
13	13-UD-B-39-0-11	UD	B	39	4	0	11	VT	POR			0	11	VT	POR	R			0	11	0	7	7		13-UD-B-39-0-11-3	WR	
13	13-UD-B-39-3-19	UD	B	39	6	3	19	VT	TS		0.09	3	19	VT	TS	R			3	19	2	0	2		13-UD-B-39-3-19-4	WR	
13	13-UD-B-39-0-75	UD	B	39	7	0	75	VT	TS		0.09	0	75	VT	TS	R			0	75	2	0	2		13-UD-B-39-0-75-5	WR	
13	13-UD-B-39-0-90	UD	B	39	8	0	90	VT	TS		0.09	0	90	VT	TS	R			0	90	2	0	2		13-UD-B-39-0-90-6	WR	
13	13-UD-B-39-28-65	UD	B	39	9	28	65	VT	GOUGE			28	65	VT	GOUGE	R			28	65	9	0	9		13-UD-B-39-28-65-7	WR	
13	13-UD-B-39-0-148	UD	B	39	10	0	148	VT	TS		0.09	0	148	VT	TS	R			0	148	2	0	2		13-UD-B-39-0-148-8	WR	
13	13-UD-B-40-49-19	UD	B	40	3	49	19	BFET	WI			49	19	VT	WI	R			49	19	3	0	3		13-UD-B-40-49-19-1	WR	
13	13-UD-B-40-40-36	UD	B	40	4	40	36	LFET	BC	0.167		40	36	PAUT	BC	R	0.159		40	36	12	12	48	144	13-UD-B-40-40-36-2	PP	
13	13-UD-B-40-6-75	UD	B	40	7	6	75	VT	DENT			6	75	VT	DENT	R			6	75	8	8	32	64	13-UD-B-40-6-75-3	TSPP	
13	13-UD-B-40-32-110	UD	B	40	9	32	110	VT	POR			32	110	VT	POR	R			30	110	6	0	6		13-UD-B-40-30-110-4	WR	
13	13-UD-B-40-5-156	UD	B	40	10	5	156	BFET	WI			5	156	VT	WI	R			3	156	12	0	12		13-UD-B-40-3-156-5	WR	
13	13-UD-B-41-5-39	UD	B	41	2	5	39	LFET	BC	0.192		5	39	PAUT	BC	R	0.147		3	38	6	6	24	36	13-UD-B-41-3-38-1	TSPP	
13	13-UD-B-41-0-26	UD	B	41	4	0	26	VT	POR			0	26	VT	RI	R			0	20	0	15	15		13-UD-B-41-0-20-2	WR	
13	13-UD-B-41-0-15	UD	B	41	5	0	15	VT	POR			0	15	VT	POR	R			0	20	0	15	15		13-UD-B-41-0-20-2	WR	
13	13-UD-B-41-0-3	UD	B	41	6	0	3	VT	POR			0	3	VT	POR	R			0	3	0	4	4		13-UD-B-41-0-3-3	WR	
13	13-UD-B-41-47-0	UD	B	41	7	47	0	VT	POR			47	0	VT	RI	R			47	0	4	0	4		13-UD-B-41-47-0-4	WR	
13	13-UD-B-41-52-123	UD	B	41								52	123	VT	POR	R			52	123	0	4	4		13-UD-B-41-52-123-5	WR	
13	13-UD-B-41-52-138	UD	B	41								52	138	VT	POR	R			52	138	2	2	4		13-UD-B-41-52-138-6	WR	
13	13-UD-B-41-8-156	UD	B	41								8	156	VT	POR	R			8	156	4	0	4		13-UD-B-41-8-156-7	WR	
13	13-UD-B-42-22-128	UD	B	42	3	22	128	LFET	BC	0.137		22	128	PAUT	BC	R	0.137		20	132	6	8	28	48	13-UD-B-42-20-132-1	TSPP	
13	13-UD-B-42-0-125	UD	B	42	4	0	125	VT	POR			0	125	VT	POR	R			0	125	0	4	4		13-UD-B-42-0-125-2	WR	
13	13-UD-B-42-23-147	UD	B	42	5	23	147	VT	POR			23	147	VT	POR	R			23	147	0	4	4		13-UD-B-42-23-147-3	WR	
13	13-UD-B-42-27-0	UD	B	42								27	0	VT	GOUGE	R			27	0	4	0	4		13-UD-B-42-27-0-4	WR	
13	13-UD-B-43-36-134	UD	B	43	1	36	134	LFET	BC	0.192		36	134	PAUT	BC	R	0.150		35	135	10	10	40	100	13-UD-B-43-35-135-1	PP	
13	13-UD-B-43-51-87	UD	B	43	2	51	87	VT	TC		0.093	51	87	VT	GOUGE	R			51	87	2	0	2		13-UD-B-43-51-87-2	WR	
13	13-UD-B-43-9-131	UD	B	43	3	21	66-142	LFET	BC	0.142		9	131	PAUT	BC	R	0.139		9	131	19	17	72	323	13-UD-B-43-9-131-3	TSPP	
13	13-UD-B-43-23-102	UD	B	43	3	21	66-142	LFET	BC	0.142		23	102	PAUT	BC	R	0.138		23	102	21	23	88	483	13-UD-B-43-23-102-4	PP	
13	13-UD-B-43-54-64	UD	B	43	4	54	64	VT	UC			54	64	VT	UC	R			52	62	12	0	12		13-UD-B-43-52-62-5	WR	
13	13-UD-B-43-51-62	UD	B	43	5	51	62	BFET	WI			51	62	VT	WI	R			52	62	12	0	12		13-UD-B-43-52-62-5	WR	
13	13-UD-B-44-6-0	UD	B	44	1	6	0	VT	POR			6	0	VT	RI	R			6	0	4	0	4		13-UD-B-44-6-0-1	WR	
13	13-UD-B-44-38-0	UD	B	44	2	38	0	VT	POR			38	0	VT	RI	R			38	0	4	0	4		13-UD-B-44-38-0-2	WR	
13	13-UD-B-44-23-118	UD	B	44	3	0-60	82-130	LFET	BC	0.1		23	118	PAUT	BC	R	0.080		23	118	8	8	32	64	13-UD-B-44-23-118-3	PP	
13	13-UD-B-44-42-115	UD	B	44	4	42	115	VT	TC		0.093	42	115	VT	GOUGE	R			42	115	0	4	4		13-UD-B-44-42-115-4	WR	
13	13-UD-B-44-2-153	UD	B	44	5	2	153	BFET	WI			2	153	VT	WI	R			2	156	6	4	10		13-UD-B-44-2-156-5	WR	
13	13-UD-B-44-53-98	UD	B	44								53	98	VT	POR	R			53	98	0	4	4		13-UD-B-44-53-98-6	WR	
13	13-UD-B-44-44-0	UD	B	44								44	0	VT	POR	R			44	0	5	0	5		13-UD-B-44-44-0-7	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-B-44-56-0	UD	B	44								56	0	VT	POR	R			56	0	6	0	6		13-UD-B-44-56-0-8	WR	
13	13-UD-B-45-28-2	UD	B	45	3	30	0	BFET	WI			28	2	VT	WI	R			28	2	4	4	8		13-UD-B-45-28-2-1	WR	
13	13-UD-B-45-0-0	UD	B	45								0	0	VT	POR	R			0	0	4	0	4		13-UD-B-45-0-0-2	WR	
13	13-UD-B-45-6-0	UD	B	45								6	0	VT	POR	R			6	0	6	0	6		13-UD-B-45-6-0-3	WR	
13	13-UD-B-45-28-27	UD	B	45								28	27	VT	POR	R			28	27	4	0	4		13-UD-B-45-28-27-4	WR	
13	13-UD-B-45-0-62	UD	B	45								0	62	VT	POR	R			0	62	2	2	4		13-UD-B-45-0-62-5	WR	
13	13-UD-B-46-52-156	UD	B	46	2	52	156	VT	POR			52	156	VT	POR	R			52	156	4	0	4		13-UD-B-46-52-156-1	WR	
13	13-UD-B-46-57-156	UD	B	46	3	57	156	VT	POR			57	156	VT	POR	R			57	156	4	0	4		13-UD-B-46-57-156-2	WR	
13	13-UD-B-46-26-109	UD	B	46								26	109	VT	POR	R			26	109	4	1	5		13-UD-B-46-26-109-3	WR	
13	13-UD-B-46-55-0	UD	B	46								55	0	VT	RI	R			55	0	10	0	10		13-UD-B-46-55-0-4	WR	
13	13-UD-B-47-26-0	UD	B	47								26	0	VT	POR	R			26	0	4	0	4		13-UD-B-47-26-0-1	WR	
13	13-UD-B-47-58-6	UD	B	47								58	6	VT	POR	R			58	6	1	2	3		13-UD-B-47-58-6-2	WR	
13	13-UD-B-47-0-9	UD	B	47								0	9	VT	POR	R			0	9	0	4	4		13-UD-B-47-0-9-3	WR	
13	13-UD-B-47-23-100	UD	B	47								23	100	VT	POR	R			23	100	4	0	4		13-UD-B-47-23-100-4	WR	
13	13-UD-B-47-0-105	UD	B	47								0	105	VT	POR	R			0	105	0	4	4		13-UD-B-47-0-105-5	WR	
13	13-UD-B-49-27-108	UD	B	49	1	27	108	VT	POR			27	108	VT	RI	R			27	108	3	3	6		13-UD-B-49-27-108-1	WR	
13	13-UD-B-49-56-88	UD	B	49	2	56	88	VT	UC			56	88	VT	LOF	R			56	88	6	0	6		13-UD-B-49-56-88-2	WR	
13	13-UD-B-49-0-48	UD	B	49	3	0	48	VT	POR			0	48	VT	POR	R			0	51	0	14	14		13-UD-B-49-0-51-3	WR	
13	13-UD-B-49-0-56	UD	B	49	4	0	56	VT	POR			0	56	VT	POR	R			0	51	0	14	14		13-UD-B-49-0-51-3	WR	
13	13-UD-B-49-59-72	UD	B	49								59	72	VT	DENT	R			59	72	0	4	4		13-UD-B-49-59-72-4	WR	
13	13-UD-B-49-58-30	UD	B	49								58	30	VT	POR	R			58	30	0	4	4		13-UD-B-49-58-30-5	WR	
13	13-UD-B-49-56-0	UD	B	49								56	0	VT	RI	R			56	0	5	0	5		13-UD-B-49-56-0-6	WR	
13	13-UD-B-49-58-114	UD	B	49								58	114	VT	POR	R			58	114	2	2	4		13-UD-B-49-58-114-7	WR	
13	13-UD-B-49-4-156	UD	B	49								4	156	VT	POR	R			4	156	8	0	8		13-UD-B-49-4-156-8	WR	
13	13-UD-B-50-2-0	UD	B	50	1	2	0	BFET	WI			2	0	VT	UC	R			30	0	61	0	61		13-UD-B-50-30-0-1	WR	
13	13-UD-B-50-19-0	UD	B	50	2	19	0	VT	UC			19	0	VT	LOF	R			30	0	61	0	61		13-UD-B-50-30-0-1	WR	
13	13-UD-B-50-43-0	UD	B	50	3	43	0	VT	UC			43	0	VT	IF	R			30	0	61	0	61		13-UD-B-50-30-0-1	WR	
13	13-UD-B-50-4-156	UD	B	50								4	156	VT	POR	R			4	156	8	0	8		13-UD-B-50-4-156-2	WR	
13	13-UD-B-50-29-156	UD	B	50								29	156	VT	RI	R			29	156	7	0	7		13-UD-B-50-29-156-3	WR	
13	13-UD-B-50-48-156	UD	B	50								48	156	VT	LOF	R			48	156	5	0	5		13-UD-B-50-48-156-4	WR	
13	13-UD-B-50-53-90	UD	B	50								53	90	VT	POR	R			53	90	3	2	5		13-UD-B-50-53-90-5	WR	
13	13-UD-B-50-56-90	UD	B	50								56	90	VT	RI	R			56	90	0	1	1		13-UD-B-50-56-90-6	WR	
13	13-UD-B-50-55-46	UD	B	50								55	46	VT	POR	R			55	46	3	6	9		13-UD-B-50-55-46-7	WR	
13	13-UD-B-50-0-8	UD	B	50								0	8	VT	RI	R			0	8	0	4	4		13-UD-B-50-0-8-8	WR	
13	13-UD-B-51-0-148	UD	B	51	1	0	148	VT	POR			0	148	VT	POR	R			0	148	0	4	4		13-UD-B-51-0-148-1	WR	
13	13-UD-B-52-0-150	UD	B	52	2	0	150	BFET	WI			0	150	VT	WI	R			0	150	0	4	4		13-UD-B-52-0-150-1	WR	
13	13-UD-B-52-34-37	UD	B	52	6	34	37	VT	DENT			34	37	VT	DENT	R			34	37	6	0	18.84956	28.27433	13-UD-B-52-34-37-2	PP	
13	13-UD-B-52-28-23	UD	B	52	7	28	23	VT	TC			28	23	VT	TC	R			28	23	2	0	2		13-UD-B-52-28-23-3	WR	
13	13-UD-B-52-60-40	UD	B	52	8	60	40	VT	POR			60	40	VT	POR	R			60	40	2	0	2		13-UD-B-52-60-40-4	WR	
13	13-UD-B-52-60-0	UD	B	52								60	0	VT	LOF	R			60	0	2	0	2		13-UD-B-52-60-0-5	WR	
13	13-UD-B-53-0-39	UD	B	53	1	0	39	VT	POR			0	39	VT	POR	R			0	39	0	3	3		13-UD-B-53-0-39-1	WR	
13	13-UD-B-53-53-156	UD	B	53	3	53	156	VT	POR			53	156	VT	POR	R			53	156	3	0	3		13-UD-B-53-53-156-2	WR	
13	13-UD-B-53-0-0	UD	B	53								0	0	VT	LOF	R			0	0	3	0	3		13-UD-B-53-0-0-3	WR	
13	13-UD-B-55-52-96	UD	B	55	2	52	96	VT	DENT			52	96	VT	DENT	R			52	96	6	0	18.84956	28.27433	13-UD-B-55-52-96-1	PP	
13	13-UD-B-55-10-75	UD	B	55								10	75	VT	DENT	R			10	75	6	0	18.84956	28.27433	13-UD-B-55-10-75-2	PP	
13	13-UD-B-55-31-72	UD	B	55								31	72	VT	LOF	R			31	72	8	0	8		13-UD-B-55-31-72-3	WR	
13	13-UD-B-56-42-7	UD	B	56	4	42	7	VT	TC		0.093	42	7	VT	TC	R			42	7	6	0	18.84956	28.27433	13-UD-B-56-42-7-1	PP	
13	13-UD-B-58-42-156	UD	B	58	1	42	156	VT	POR			42	156	VT	POR	R			44	156	9	0	9		13-UD-B-58-44-156-1	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-UD-B-58-47-156	UD	B	58	2	47	156	VT	POR			47	156	VT	POR	R			44	156	9	0	9		13-UD-B-58-44-156-1		WR
13	13-UD-B-58-52-105	UD	B	58	4	52	105	VT	TC		0.093	52	105	VT	TC	R			54	105	2	0	2		13-UD-B-58-54-105-2		WR
13	13-UD-B-58-55-54	UD	B	58	5	55	54	LFET	BC	0.189		55	54	PAUT	BC	R	0.150		55	54	8	8	32	64	13-UD-B-58-55-54-3		TSPP
13	13-UD-B-59-10-34	UD	B	59	2	10	34	VT	TC		0.125	10	34	VT	TC	R			10	34	6	0	18.84956	28.27433	13-UD-B-59-10-34-1		PP
13	13-UD-B-59-58-10	UD	B	59	4	58	10	VT	TC		0.093	58	10	VT	TC	R			58	10	1	0	1		13-UD-B-59-58-10-2		WR
13	13-UD-B-61-14-156	UD	B	61	1	14	156	BFET	WI			14	156	VT	WI	R			19	156	18	0	18		13-UD-B-61-19-156-1		WR
13	13-UD-B-61-20-156	UD	B	61	2	20	156	VT	POR			20	156	VT	POR	R			19	156	18	0	18		13-UD-B-61-19-156-1		WR
13	13-UD-B-61-24-156	UD	B	61	3	24	156	VT	POR			24	156	VT	POR	R			19	156	18	0	18		13-UD-B-61-19-156-1		WR
13	13-UD-B-61-44-144	UD	B	61	4	44	144	VT	DENT			44	144	VT	DENT	R			44	144	6	0	18.84956	28.27433	13-UD-B-61-44-144-2		PP
13	13-UD-B-61-40-111	UD	B	61	5	40	111	VT	TC		0.093	40	111	VT	TC	R			40	111	2	0	2		13-UD-B-61-40-111-3		WR
13	13-UD-B-61-11-74	UD	B	61	7	11	74	VT	DENT			11	74	VT	DENT	R			11	74	6	0	18.84956	28.27433	13-UD-B-61-11-74-4		PP
13	13-UD-B-61-55-22	UD	B	61	9	55	22	VT	DENT			55	22	VT	DENT	R			55	22	6	6	24	36	13-UD-B-61-55-22-5		TSPP
13	13-UD-B-61-27-40	UD	B	61								27	40	VT	GOUGE	R			27	40	6	6	24	36	13-UD-B-61-27-40-7		TSPP
13	13-UD-B-62-0-103	UD	B	62	5	0	103	VT	POR			0	103	VT	POR	R			0	103	0	4	4		13-UD-B-62-0-103-1		WR
13	13-UD-B-62-21-156	UD	B	62	8	21	156	BFET	WI			21	156	VT	WI	R			21	156	6	0	6		13-UD-B-62-21-156-2		WR
13	13-UD-B-63-3-156	UD	B	63	1	3	156	BFET	WI			3	156	VT	WI	R			9	156	18	0	18		13-UD-B-63-9-156-1		WR
13	13-UD-B-63-13-156	UD	B	63	2	13	156	VT	POR			13	156	VT	POR	R			9	156	18	0	18		13-UD-B-63-9-156-1		WR
13	13-UD-B-63-23-146	UD	B	63	3	23	146	VT	POR			23	146	VT	POR	R			23	146	0	3	3		13-UD-B-63-23-146-2		WR
13	13-UD-B-63-25-44	UD	B	63	5	25	44	VT	DENT			25	44	VT	DENT	R			25	44	6	0	18.84956	28.27433	13-UD-B-63-25-44-3		PP
13	13-UD-B-63-0-106	UD	B	63								0	106	VT	POR	R			0	106	3	0	3		13-UD-B-63-0-106-4		WR
13	13-UD-B-64-12-156	UD	B	64	1	12	156	VT	POR			12	156	VT	RI	R			12	156	8	0	8		13-UD-B-64-12-156-1		WR
13	13-UD-B-64-24-156	UD	B	64	2	24	156	VT	POR			24	156	VT	RI	R			24	156	7	0	7		13-UD-B-64-24-156-2		WR
13	13-UD-B-64-35-156	UD	B	64	3	35	156	VT	POR			35	156	VT	RI	R			35	156	5	0	5		13-UD-B-64-35-156-3		WR
13	13-UD-B-64-6-110	UD	B	64	4	6	110	VT	TC		0.094	6	110	VT	DENT	R			6	110	6	0	18.84956	28.27433	13-UD-B-64-6-110-4		PP
13	13-UD-B-64-5-0	UD	B	64	5	2-8	0	VT	UC			5	0	VT	UC	R			30	0	60	0	60		13-UD-B-64-30-0-5		WR
13	13-UD-B-64-43-0	UD	B	64	6	30-57	0	VT	UC			43	0	VT	UC	R			30	0	60	0	60		13-UD-B-64-30-0-5		WR
13	13-UD-B-64-0-156	UD	B	64								0	156	VT	POR	R			0	156	2	0	2		13-UD-B-64-0-156-6		WR
13	13-UD-B-64-57-156	UD	B	64								57	156	VT	LOF	R			57	156	9	0	9		13-UD-B-64-57-156-7		WR
13	13-UD-B-64-58-138	UD	B	64								58	138	VT	POR	R			58	138	0	4	4		13-UD-B-64-58-138-8		WR
13	13-UD-B-64-0-55	UD	B	64								0	55	VT	POR	R			0	55	0	6	6		13-UD-B-64-0-55-9		WR
13	13-UD-B-64-58-55	UD	B	64								58	55	VT	RI	R			58	55	0	48	48		13-UD-B-64-58-55-10		WR
13	13-UD-B-64-58-22	UD	B	64								58	22	VT	POR	R			58	22	0	4	4		13-UD-B-64-58-22-11		WR
13	13-UD-B-65-11-0	UD	B	65	1	6-30	0	VT	UC			11	0	VT	UC	R			11	0	16	0	16		13-UD-B-65-11-0-1		WR
13	13-UD-B-65-19-96	UD	B	65	2	19	96	VT	POR			19	96	VT	POR	R			19	96	6	0	6		13-UD-B-65-19-96-2		WR
13	13-UD-B-65-33-113	UD	B	65	3	33	113	VT	DENT			33	113	VT	DENT	R			33	113	6	0	18.84956	28.27433	13-UD-B-65-33-113-3		PP
13	13-UD-B-65-31-0	UD	B	65								31	0	VT	POR	R			31	0	4	0	4		13-UD-B-65-31-0-4		WR
13	13-UD-B-65-44-0	UD	B	65								44	0	VT	LOF	R			44	0	5	0	5		13-UD-B-65-44-0-5		WR
13	13-UD-B-65-11-98	UD	B	65								11	98	VT	POR	R			11	98	8	0	8		13-UD-B-65-11-98-6		WR
13	13-UD-B-65-53-110	UD	B	65								53	110	VT	POR	R			53	110	0	4	4		13-UD-B-65-53-110-7		WR
13	13-UD-B-65-0-156	UD	B	65								0	156	VT	POR	R			0	156	8	6	14		13-UD-B-65-0-156-8		WR
13	13-UD-B-66-17-156	UD	B	66	1	17	156	BFET	WI			17	156	VT	LOF	R			15	156	15	4	19		13-UD-B-66-15-156-1		WR
13	13-UD-B-66-22-156	UD	B	66	2	22	156	BFET	WI			22	156	VT	RI	R			15	156	15	4	19		13-UD-B-66-15-156-1		WR
13	13-UD-B-66-25-75	UD	B	66	3	27	75	BFET	WI			25	75	VT	WI	R			25	75	0	10	10		13-UD-B-66-25-75-2		WR
13	13-UD-B-66-0-126	UD	B	66								0	126	VT	POR	R			0	126	0	7	7		13-UD-B-66-0-126-3		WR
13	13-UD-B-66-0-109	UD	B	66								0	109	VT	POR	R			0	109	0	7	7		13-UD-B-66-0-109-4		WR
13	13-UD-B-66-25-89	UD	B	66								25	89	VT	POR	R			25	89	0	4	4		13-UD-B-66-25-89-5		WR
13	13-UD-B-66-9-57	UD	B	66								9	57	VT	DENT	R			9	57	6	0	18.84956	28.27433	13-UD-B-66-9-57-6		PP
13	13-UD-B-66-0-0	UD	B	66								0	0	VT	POR	R			0	0	6	4	10		13-UD-B-66-0-0-7		WR

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-B-66-0-3	UD	B	66								0	3	VT	POR	R			0	3	0	4	4		13-UD-B-66-0-3-8	WR	
13	13-UD-B-66-6-0	UD	B	66								6	0	VT	POR	R			6	0	4	0	4		13-UD-B-66-6-0-9	WR	
13	13-UD-B-66-26-0	UD	B	66								26	0	VT	POR	R			26	0	9	1	10		13-UD-B-66-26-0-10	WR	
13	13-UD-B-67-55-28	UD	B	67	1	55	28	VT	TC		0.094	55	28	VT	TC	R			55	28	8	8	32	64	13-UD-B-67-55-28-1	TSPP	
13	13-UD-B-67-47-67	UD	B	67	2	47	67	VT	TC		0.094	47	67	VT	TC	R			47	67	6	0	18.84956	28.27433	13-UD-B-67-47-67-2	PP	
13	13-UD-B-67-27-79	UD	B	67	3	27	79	VT	POR			27	79	VT	RI	R			27	79	5	0	5		13-UD-B-67-27-79-3	WR	
13	13-UD-B-67-28-109	UD	B	67	4	28	109	BFET	WI			28	109	VT	WI	R			28	109	6	0	6		13-UD-B-67-28-109-4	WR	
13	13-UD-B-67-1-156	UD	B	67	5	1	156	VT	POR			1	156	VT	POR	R			1	156	3	3	6		13-UD-B-67-1-156-5	WR	
13	13-UD-B-67-3-0	UD	B	67								3	0	VT	RI	R			3	0	7	0	7		13-UD-B-67-3-0-6	WR	
13	13-UD-B-67-19-0	UD	B	67								19	0	VT	UC	R			19	0	11	0	11		13-UD-B-67-19-0-7	WR	
13	13-UD-B-67-36-0	UD	B	67								36	0	VT	UC	R			36	0	5	0	5		13-UD-B-67-36-0-8	WR	
13	13-UD-B-67-0-56	UD	B	67								0	56	VT	POR	R			0	56	0	8	8		13-UD-B-67-0-56-9	WR	
13	13-UD-B-67-58-137	UD	B	67								58	137	VT	POR	R			58	137	0	4	4		13-UD-B-67-58-137-10	WR	
13	13-UD-B-68-34-156	UD	B	68	1	34	156	VT	POR			34	156	VT	POR	R			34	156	6	3	9		13-UD-B-68-34-156-1	WR	
13	13-UD-B-68-54-104	UD	B	68								54	104	VT	POR	R			54	104	5	0	5		13-UD-B-68-54-104-2	WR	
13	13-UD-B-69-21-0	UD	B	69	1	21	0	BFET	WI			21	0	VT	WI	R			21	0	8	0	8		13-UD-B-69-21-0-1	WR	
13	13-UD-B-69-3-53	UD	B	69	2	3	53	VT	TC		0.094	3	53	VT	TC	R			3	53	2	0	2		13-UD-B-69-3-53-2	WR	
13	13-UD-B-69-0-0	UD	B	69								0	0	VT	POR	R			0	0	3	3	6		13-UD-B-69-0-0-3	WR	
13	13-UD-B-69-0-96	UD	B	69								0	96	VT	RI	R			0	96	4	0	4		13-UD-B-69-0-96-4	WR	
13	13-UD-B-69-25-95	UD	B	69								25	95	VT	POR	R			25	95	0	4	4		13-UD-B-69-25-95-5	WR	
13	13-UD-B-69-26-80	UD	B	69								26	80	VT	POR	R			26	80	0	4	4		13-UD-B-69-26-80-6	WR	
13	13-UD-B-69-0-156	UD	B	69								0	156	VT	POR	R			0	156	4	0	4		13-UD-B-69-0-156-7	WR	
13	13-UD-B-69-22-156	UD	B	69								22	156	VT	POR	R			22	156	8	0	8		13-UD-B-69-22-156-8	WR	
13	13-UD-B-70-10-156	UD	B	70								10	156	VT	POR	R			10	156	4	0	4		13-UD-B-70-10-156-1	WR	
13	13-UD-B-70-26-108	UD	B	70								26	108	VT	POR	R			26	108	10	0	10		13-UD-B-70-26-108-2	WR	
13	13-UD-B-70-0-0	UD	B	70								0	0	VT	POR	R			0	0	12	0	12		13-UD-B-70-0-0-3	WR	
13	13-UD-B-70-11-0	UD	B	70								11	0	VT	POR	R			11	0	4	0	4		13-UD-B-70-11-0-4	WR	
13	13-UD-B-70-47-0	UD	B	70								47	0	VT	POR	R			47	0	5	0	5		13-UD-B-70-47-0-5	WR	
13	13-UD-B-71-35-58	UD	B	71	1	35	58	VT	DENT			35	58	VT	DENT	R			35	58	6	0	18.84956	28.27433	13-UD-B-71-35-58-1	PP	
13	13-UD-B-71-12-72	UD	B	71	2	12	72	VT	DENT			12	72	VT	DENT	R			12	72	8	8	32	64	13-UD-B-71-12-72-2	PP	
13	13-UD-B-71-31-91	UD	B	71	3	31	91	VT	DENT			31	91	VT	DENT	R			31	91	6	0	18.84956	28.27433	13-UD-B-71-31-91-3	PP	
13	13-UD-B-71-43-0	UD	B	71								43	0	VT	IF	R			43	0	30	0	30		13-UD-B-71-43-0-4	WR	
13	13-UD-B-71-56-34	UD	B	71								56	34	VT	POR	R			56	34	0	4	4		13-UD-B-71-56-34-5	WR	
13	13-UD-B-71-25-67	UD	B	71								25	67	VT	DENT	R			25	67	6	0	18.84956	28.27433	13-UD-B-71-25-67-6	PP	
13	13-UD-B-71-54-82	UD	B	71								54	82	VT	POR	R			54	82	0	5	5		13-UD-B-71-54-82-7	WR	
13	13-UD-B-71-0-101	UD	B	71								0	101	VT	POR	R			0	101	0	4	4		13-UD-B-71-0-101-8	WR	
13	13-UD-B-72-0-156	UD	B	72								0	156	VT	IF	R			0	156	8	0	8		13-UD-B-72-0-156-1	WR	
13	13-UD-B-72-26-76	UD	B	72								26	76	VT	RI	R			26	76	0	4	4		13-UD-B-72-26-76-2	WR	
13	13-UD-B-72-0-67	UD	B	72								0	67	VT	IF	R			0	67	0	6	6		13-UD-B-72-0-67-3	WR	
13	13-UD-B-72-27-60	UD	B	72								27	60	VT	POR	R			27	60	0	4	4		13-UD-B-72-27-60-4	WR	
13	13-UD-B-72-0-12	UD	B	72								0	12	VT	POR	R			0	12	0	4	4		13-UD-B-72-0-12-5	WR	
13	13-UD-B-72-0-0	UD	B	72								0	0	VT	IF	R			0	0	4	0	4		13-UD-B-72-0-0-6	WR	
13	13-UD-B-72-30-0	UD	B	72								30	0	VT	POR	R			30	0	0	4	4		13-UD-B-72-30-0-7	WR	
13	13-UD-A-1-59-120	UD	A	1	1	59	116-123	BFET	WI			59	120	VT	WI	R			59	108	0	35	35		13-UD-A-1-59-108-1	WR	
13	13-UD-A-1-59-102	UD	A	1	2	59	92-111	BFET	WI			59	102	VT	WI	R			59	108	0	35	35		13-UD-A-1-59-108-1	WR	
13	13-UD-A-1-42-51	UD	A	1	3	41	50	BFET	WI			42	51	VT	WI	R			42	51	4	4	8		13-UD-A-1-42-51-2	WR	
13	13-UD-A-2-18-156	UD	A	2								18	156	VT	POR	R			18	156	36	0	36		13-UD-A-2-18-156-1	WR	
13	13-UD-A-2-0-67	UD	A	2								0	67	VT	UC	R			0	67	0	4	4		13-UD-A-2-0-67-2	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-UD-A-2-56-124	UD	A	2	6	57	124	BFET	WI			56	124	VT	WI	R			56	124	0	7	7		13-UD-A-2-56-124-3		WR
13	13-UD-A-3-17-134	UD	A	3	1	17	134	VT	DENT			17	134	VT	DENT	R			17	134	10	6	32	60	13-UD-A-3-17-134-1		PP
13	13-UD-A-3-9-85	UD	A	3	2	9	85	VT	GOUGE			9	85	VT	GOUGE	R		0.11	9	85	2	0	2		13-UD-A-3-9-85-2		WR
13	13-UD-A-4-38-132	UD	A	4	2	38	132	VT	GOUGE		0.11	38	132	VT	GOUGE	R	0.110		38	132	2	0	2		13-UD-A-4-38-132-1		WR
13	13-UD-A-4-4-97	UD	A	4	3	4	97	VT	DENT			4	97	VT	DENT	R			4	97	6	6	24	36	13-UD-A-4-4-97-2		TSPP
13	13-UD-A-4-45-63	UD	A	4								45	63	VT	POR	R			45	63	4	0	4		13-UD-A-4-45-63-3		WR
13	13-UD-A-5-17-155	UD	A	5	1	17	155	VT	POR			17	155	VT	POR	R			27	156	54	0	54		13-UD-A-5-27-156-1		WR
13	13-UD-A-5-4-0	UD	A	5								4	0	VT	UC	R			4	0	0	8	8		13-UD-A-5-4-0-2		WR
13	13-UD-A-6-0-100	UD	A	6								0	100	VT	RI	R			0	100	0	4	4		13-UD-A-6-0-100-1		WR
13	13-UD-A-7-37-115	UD	A	7	2	37-38	115-116	VT	DENT			37	115	VT	DENT	R			37	115	6	0	18.84956	28.27433	13-UD-A-7-37-115-1		PP
13	13-UD-A-7-43-141	UD	A	7	3	43-44	141-142	VT	DENT			43	141	VT	DENT	R			43	141	6	0	18.84956	28.27433	13-UD-A-7-43-141-2		PP
13	13-UD-A-7-51-156	UD	A	7								51	156	VT	UC	R			51	156	9	0	9		13-UD-A-7-51-156-3		WR
13	13-UD-A-8-52-116	UD	A	8	1	52-53	116-118	VT	DENT			52	116	VT	DENT	R			52	116	8	10	36	80	13-UD-A-8-52-116-1		TSPP
13	13-UD-A-8-26-155	UD	A	8	2	26	155	VT	POR			26	155	VT	POR	R			26	155	4	0	4		13-UD-A-8-26-155-2		WR
13	13-UD-A-8-36-155	UD	A	8	3	35-37	155	VT	POR			36	155	VT	POR	R			36	155	4	0	4		13-UD-A-8-36-155-3		WR
13	13-UD-A-9-9-106	UD	A	9	2	9	106-107	VT	DENT			9	106	VT	DENT	R			9	106	6	0	18.84956	28.27433	13-UD-A-9-9-106-1		PP
13	13-UD-A-9-1-117	UD	A	9	3	1	115-120	VT	POR			1	117	VT	POR	R			1	117	0	5	5		13-UD-A-9-1-117-2		WR
13	13-UD-A-9-25-155	UD	A	9	4	25	155	VT	POR			25	155	VT	POR	R			17	156	33	0	33		13-UD-A-9-17-156-3		WR
13	13-UD-A-9-34-155	UD	A	9	5	34	155	VT	POR			34	155	VT	POR	R			17	156	33	0	33		13-UD-A-9-17-156-3		WR
13	13-UD-A-9-21-105	UD	A	9								21	105	VT	GOUGE	R			21	105	6	0	18.84956	28.27433	13-UD-A-9-21-105-4		PP
13	13-UD-A-9-0-99	UD	A	9								0	99	VT	GOUGE	R			0	99	1	0	1		13-UD-A-9-0-99-5		WR
13	13-UD-A-9-0-19	UD	A	9								0	19	VT	POR	R			0	19	4	0	4		13-UD-A-9-0-19-6		WR
13	13-UD-A-12-34-146	UD	A	12	1	34	46	VT	POR			34	146	VT	POR	R			34	146	0	4	4		13-UD-A-12-34-146-1		WR
13	13-UD-A-13-18-155	UD	A	13	1	18	155	VT	LF			18	155	VT	IF	R			18	155	5	0	5		13-UD-A-13-18-155-1		WR
13	13-UD-A-13-27-155	UD	A	13	2	27	155	VT	LF			27	155	VT	IF	R			27	155	9	0	9		13-UD-A-13-27-155-2		WR
13	13-UD-A-13-1-155	UD	A	13	3	1	155	VT	POR			1	155	VT	POR	R			1	155	2	2	4		13-UD-A-13-1-155-3		WR
13	13-UD-A-13-0-0	UD	A	13								0	0	VT	UC	R			0	0	2	2	4		13-UD-A-13-0-0-4		WR
13	13-UD-A-13-58-51	UD	A	13								58	51	VT	POR	R			58	51	0	4	4		13-UD-A-13-58-51-5		WR
13	13-UD-A-14-20-92	UD	A	14								20	92	VT	GOUGE	R			20	92	0	3	3		13-UD-A-14-20-92-1		WR
13	13-UD-A-15-34-154	UD	A	15	2	34	154	VT	POR			34	154	VT	POR	R			32	156	4	0	4		13-UD-A-15-32-156-1		WR
13	13-UD-A-16-47-154	UD	A	16	4	44-50	154	VT	POR			47	154	VT	POR	R			45	156	9	0	9		13-UD-A-16-45-156-1		WR
13	13-UD-A-16-59-156	UD	A	16								59	156	VT	RI	R			59	156	2	2	4		13-UD-A-16-59-156-2		WR
13	13-UD-A-17-22-10	UD	A	17								22	10	VT	GOUGE	R			22	10	2	0	2		13-UD-A-17-22-10-1		WR
13	13-UD-A-18-34-143	UD	A	18	1	34	142-145	BFET	WI			34	143	VT	WI	R			32	147	0	9	9		13-UD-A-18-32-147-1		WR
13	13-UD-A-19-35-121	UD	A	19	1	35	121-122	VT	DENT		0.07	35	121	VT	DENT	R			35	121	6	0	18.84956	28.27433	13-UD-A-19-35-121-1		PP
13	13-UD-A-19-58-121	UD	A	19	2	58	121-122	LFET	BC	0.161		58	121	PAUT	BC	R	< 0.160		58	121	6	6	24	36	13-UD-A-19-58-121-2		TSPP
13	13-UD-A-20-57-87	UD	A	20	1	57	83-94	BFET	WI			57	87	VT	WI	R			55	92	0	17	17		13-UD-A-20-55-92-1		WR
13	13-UD-A-20-124-3	UD	A	20	2	123-126	3-4	VT	TC		0.135	124	3	VT	TC	R			124	3	3	0	3		13-UD-A-20-124-3-2		WR
13	13-UD-A-20-0-156	UD	A	20								0	156	VT	RI	R			0	156	2	2	4		13-UD-A-20-0-156-3		WR
13	13-UD-A-21-31-36	UD	A	21	1	31	36	VT	DENT		0.12	31	36	VT	DENT	R			31	36	6	0	18.84956	28.27433	13-UD-A-21-31-36-1		PP
13	13-UD-A-21-33-70	UD	A	21								33	70	VT	RI	R			33	70	0	4	4		13-UD-A-21-33-70-2		WR
13	13-UD-A-22-9-153	UD	A	22	1	8-13	153	BFET	WI			9	153	VT	WI	R			9	153	12	0	12		13-UD-A-22-9-153-1		WR
13	13-UD-A-22-58-146	UD	A	22	2	58	146	BFET	WI			58	146	VT	WI	R			58	146	0	12	12		13-UD-A-22-58-146-2		WR
13	13-UD-A-22-58-122	UD	A	22	3	58	122	BFET	WI			58	122	VT	WI	R			58	122	0	12	12		13-UD-A-22-58-122-3		WR
13	13-UD-A-22-58-105	UD	A	22	4	58	105	BFET	WI			58	105	VT	WI	R			58	105	0	12	12		13-UD-A-22-58-105-4		WR
13	13-UD-A-22-37-112	UD	A	22	5	36-38	111-113	VT	DENT		0.13	37	112	VT	DENT	R			37	112	6	0	18.84956	28.27433	13-UD-A-22-37-112-5		PP
13	13-UD-A-22-26-77	UD	A	22	6	25-27	77	VT	TC		0.093	26	77	VT	DENT	R			24	73	8	8	32	64	13-UD-A-22-24-73-6		PP
13	13-UD-A-22-1-32	UD	A	22	7	1	31-34	BFET	WI			1	32	VT	WI	R			0	31	0	12	12		13-UD-A-22-0-31-7		WR

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-UD-A-22-1-13	UD	A	22	8	1	12-14	BFET	WI			1	13	VT	WI	R			0	13	0	12	12		13-UD-A-22-0-13-8		WR
13	13-UD-A-22-33-156	UD	A	22								33	156	VT	POR	R			33	156	4	0	4		13-UD-A-22-33-156-9		WR
13	13-UD-A-22-57-156	UD	A	22								57	156	VT	LOF	R			57	156	9	0	9		13-UD-A-22-57-156-10		WR
13	13-UD-A-22-57-70	UD	A	22								57	70	VT	UC	R			57	70	4	4	8		13-UD-A-22-57-70-11		WR
13	13-UD-A-22-57-34	UD	A	22								57	34	VT	POR	R			57	34	0	18	18		13-UD-A-22-57-34-12		WR
13	13-UD-A-22-10-11	UD	A	22								10	11	VT	DENT	R			10	11	6	0	18.84956	28.27433	13-UD-A-22-10-11-13		PP
13	13-UD-A-22-24-0	UD	A	22								24	0	VT	LOF	R			24	0	24	0	24		13-UD-A-22-24-0-14		WR
13	13-UD-A-23-60-3	UD	A	23								60	3	VT	LOF	R			60	3	4	3	7		13-UD-A-23-60-3-1		WR
13	13-UD-A-23-0-26	UD	A	23								0	26	VT	POR	R			0	26	0	4	4		13-UD-A-23-0-26-2		WR
13	13-UD-A-23-0-40	UD	A	23								0	40	VT	POR	R			0	40	0	4	4		13-UD-A-23-0-40-3		WR
13	13-UD-A-23-0-51	UD	A	23								0	51	VT	POR	R			0	51	0	4	4		13-UD-A-23-0-51-4		WR
13	13-UD-A-23-8-147	UD	A	23								8	147	VT	POR	R			8	147	4	0	4		13-UD-A-23-8-147-5		WR
13	13-UD-A-23-46-154	UD	A	23								46	154	VT	POR	R			46	154	4	0	4		13-UD-A-23-46-154-6		WR
13	13-UD-A-23-0-145	UD	A	23								0	145	VT	LOF	R			0	145	4	0	4		13-UD-A-23-0-145-7		WR
13	13-UD-A-24-35-22	UD	A	24	1	35	22	VT	TC		0.09	35	22	VT	RI	R			35	22	0	4	4		13-UD-A-24-35-22-1		WR
13	13-UD-A-24-35-28	UD	A	24	2	35	28	BFET	WI			35	28	VT	WI	R			33	114	0	77	77		13-UD-A-24-33-114-2		WR
13	13-UD-A-24-35-33	UD	A	24	3	35	33	BFET	WI			35	33	VT	WI	R			33	114	0	77	77		13-UD-A-24-33-114-2		WR
13	13-UD-A-24-35-39	UD	A	24	4	35	39	BFET	WI			35	39	VT	WI	R			33	114	0	77	77		13-UD-A-24-33-114-2		WR
13	13-UD-A-24-35-45	UD	A	24	5	35	45	BFET	WI			35	45	VT	WI	R			33	114	0	77	77		13-UD-A-24-33-114-2		WR
13	13-UD-A-24-34-120	UD	A	24	6	34	106-133	BFET	WI			34	120	VT	WI	R			33	114	0	77	77		13-UD-A-24-33-114-2		WR
13	13-UD-A-24-34-137	UD	A	24	7	34	137	BFET	WI			34	137	VT	WI	R			33	114	0	77	77		13-UD-A-24-33-114-2		WR
13	13-UD-A-24-34-145	UD	A	24	8	34	142-148	BFET	WI			34	145	VT	WI	R			33	114	0	77	77		13-UD-A-24-33-114-2		WR
13	13-UD-A-24-25-153	UD	A	24	9	25	153	BFET	WI			25	153	VT	WI	R			24	156	9	0	9		13-UD-A-24-24-156-3		WR
13	13-UD-A-24-0-132	UD	A	24								0	132	VT	POR	R			0	132	0	4	4		13-UD-A-24-0-132-4		WR
13	13-UD-A-24-9-102	UD	A	24								9	102	VT	DENT	R			9	102	8	8	32	64	13-UD-A-24-9-102-5		PP
13	13-UD-A-25-2-156	UD	A	25	1	4	153	VT	POR			2	156	VT	LOF	R			2	156	5	0	5		13-UD-A-25-2-156-1		WR
13	13-UD-A-25-5-34	UD	A	25	3	5-6	34-35	VT	GOUGE		0.15	5	34	VT	DENT	R			5	34	8	8	32	64	13-UD-A-25-5-34-2		TSPP
13	13-UD-A-25-0-25	UD	A	25	4	0	25	VT	POR			0	25	VT	RI	R			0	25	0	2	2		13-UD-A-25-0-25-3		WR
13	13-UD-A-25-6-4	UD	A	25								6	4	VT	DENT	R			6	4	8	8	32	64	13-UD-A-25-6-4-4		TSPP
13	13-UD-A-25-0-6	UD	A	25								0	6	VT	RI	R			0	6	0	2	2		13-UD-A-25-0-6-5		WR
13	13-UD-A-25-58-20	UD	A	25								58	20	VT	RI	R			58	20	0	4	4		13-UD-A-25-58-20-6		WR
13	13-UD-A-25-57-65	UD	A	25								57	65	VT	POR	R			57	65	0	4	4		13-UD-A-25-57-65-7		WR
13	13-UD-A-25-21-156	UD	A	25								21	156	VT	RI	R			21	156	10	0	10		13-UD-A-25-21-156-8		WR
13	13-UD-A-25-47-156	UD	A	25								47	156	VT	POR	R			47	156	7	0	7		13-UD-A-25-47-156-9		WR
13	13-UD-A-25-56-156	UD	A	25								56	156	VT	RI	R			56	156	3	0	3		13-UD-A-25-56-156-10		WR
13	13-UD-A-26-0-156	UD	A	26								0	156	VT	RI	R			0	156	5	0	5		13-UD-A-26-0-156-1		WR
13	13-UD-A-26-55-100	UD	A	26								55	100	VT	LOF	R			55	100	3	4	7		13-UD-A-26-55-100-2		WR
13	13-UD-A-26-56-64	UD	A	26								56	64	VT	RI	R			56	64	0	4	4		13-UD-A-26-56-64-3		WR
13	13-UD-A-26-0-2	UD	A	26								0	2	VT	RI	R			0	2	3	6	9		13-UD-A-26-0-2-4		WR
13	13-UD-A-26-0-17	UD	A	26								0	17	VT	RI	R			0	17	0	4	4		13-UD-A-26-0-17-5		WR
13	13-UD-A-27-26-7	UD	A	27								26	7	VT	POR	R			26	7	2	0	2		13-UD-A-27-26-7-1		WR
13	13-UD-A-27-35-19	UD	A	27								35	19	VT	LOF	R			35	19	0	4	4		13-UD-A-27-35-19-2		WR
13	13-UD-A-27-0-56	UD	A	27								0	56	VT	LOF	R			0	56	5	0	5		13-UD-A-27-0-56-3		WR
13	13-UD-A-27-0-100	UD	A	27								0	100	VT	RI	R			0	100	0	4	4		13-UD-A-27-0-100-4		WR
13	13-UD-A-27-0-105	UD	A	27								0	105	VT	POR	R			0	105	0	4	4		13-UD-A-27-0-105-5		WR
13	13-UD-A-27-0-119	UD	A	27								0	119	VT	RI	R			0	119	0	5	5		13-UD-A-27-0-119-6		WR
13	13-UD-A-27-33-126	UD	A	27								33	126	VT	POR	R			33	126	0	4	4		13-UD-A-27-33-126-7		WR
13	13-UD-A-27-33-148	UD	A	27								33	148	VT	POR	R			33	148	0	4	4		13-UD-A-27-33-148-8		WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-A-28-39-145	UD	A	28	1	39-41	143-144	VT	DENT		0.065	39	145	VT	DENT	R			39	145	8	8	32	64	13-UD-A-28-39-145-1	PP	
13	13-UD-A-28-57-156	UD	A	28								57	156	VT	RI	R			57	156	3	2	5		13-UD-A-28-57-156-2	WR	
13	13-UD-A-29-17-22	UD	A	29	2	17-18	22-23	LFET	BC	0.186		17	22	PAUT	BC	R	< 0.160		28	24	57	48	210	2736	13-UD-A-29-28-24-1	PP	
13	13-UD-A-29-21-21	UD	A	29	3	21-22	21-23	LFET	BC	0.188		21	21	PAUT	BC	R	0.111		28	24	57	48	210	2736	13-UD-A-29-28-24-1	PP	
13	13-UD-A-29-47-156	UD	A	29								47	156	VT	POR	R			47	156	11	0	11		13-UD-A-29-47-156-2	WR	
13	13-UD-A-29-0-43	UD	A	29								0	43	VT	RI	R			0	156	0	4	4		13-UD-A-29-0-156-3	WR	
13	13-UD-A-29-57-39	UD	A	29								57	39	VT	LOF	R			57	156	0	4	4		13-UD-A-29-57-156-4	WR	
13	13-UD-A-30-12-135	UD	A	30	1	12-13	135	VT	DENT		0.045	12	135	VT	DENT	R			12	134	9	9	36	81	13-UD-A-30-12-134-1	PP	
13	13-UD-A-30-13-131	UD	A	30	2	12-14	131-132	VT	DENT		0.12	13	131	VT	DENT	R			12	134	9	9	36	81	13-UD-A-30-12-134-1	PP	
13	13-UD-A-30-15-116	UD	A	30	3	15-16	116-117	VT	DENT		0.1	15	116	VT	DENT	R			15	116	6	0	18.84956	28.27433	13-UD-A-30-15-116-2	PP	
13	13-UD-A-30-30-85	UD	A	30	4	30-31	80-90	VT	DENT		0.13	30	85	VT	DENT	R			30	85	7	7	28	49	13-UD-A-30-30-85-3	TSPP	
13	13-UD-A-30-25-77	UD	A	30	5	25-26	77-78	VT	DENT		0.09	25	77	VT	DENT	R			25	77	6	0	18.84956	28.27433	13-UD-A-30-25-77-4	PP	
13	13-UD-A-32-33-135	UD	A	32	1	33-34	135-136	VT	TC		0.1	33	135	VT	TC	R			33	135	6	0	18.84956	28.27433	13-UD-A-32-33-135-1	PP	
13	13-UD-A-32-57-31	UD	A	32	2	56-58	31	VT	TC		0.115	57	31	VT	TC	R			57	31	8	8	32	64	13-UD-A-32-57-31-2	TSPP	
13	13-UD-A-32-44-0	UD	A	32	3	44	0	VT	POR			44	0	VT	POR	R			44	0	7	0	7		13-UD-A-32-44-0-3	WR	
13	13-UD-A-32-0-156	UD	A	32								0	156	VT	POR	R			0	156	2	2	4		13-UD-A-32-0-156-4	WR	
13	13-UD-A-32-54-128	UD	A	32								54	128	VT	GOUGE	R			54	156	2	0	2		13-UD-A-32-54-156-5	WR	
13	13-UD-A-32-60-4	UD	A	32								60	4	VT	POR	R			60	4	0	7	7		13-UD-A-32-60-4-6	WR	
13	13-UD-A-33-5-44	UD	A	33	1	5-6	44-45	LFET	BC	0.183		5	44	PAUT	BC	R	0.116		10	44	20	20	80	400	13-UD-A-33-10-44-1	TSPP	
13	13-UD-A-33-17-41	UD	A	33	2	17-18	41-42	VT	DENT		0.16	17	41	VT	DENT	R			10	44	20	20	80	400	13-UD-A-33-10-44-1	TSPP	
13	13-UD-A-34-18-156	UD	A	34								18	156	VT	RI	R			18	156	4	0	4		13-UD-A-34-18-156-1	WR	
13	13-UD-A-34-44-110	UD	A	34								44	110	VT	POR	R			44	110	4	0	4		13-UD-A-34-44-110-2	WR	
13	13-UD-A-35-42-84	UD	A	35	1	41-43	84-85	LFET	BC	0.145		42	84	PAUT	BC	R	< 0.160		44	84	16	16	64	256	13-UD-A-35-44-84-1	PP	
13	13-UD-A-35-52-115	UD	A	35	2	52-53	114-116	LFET	BC	0.165		52	115	PAUT	BC	R	< 0.160		47	121	12	43	110	516	13-UD-A-35-47-121-2	TSPP	
13	13-UD-A-35-55-114	UD	A	35	3	54-56	113-115	LFET	BC	0.18		55	114	PAUT	BC	R	0.097		47	121	12	43	110	516	13-UD-A-35-47-121-2	TSPP	
13	13-UD-A-35-20-122	UD	A	35	4	20-21	120-123	LFET	BC	0.195		20	122	PAUT	BC	R	< 0.160		22	134	16	12	56	192	13-UD-A-35-22-134-3	PP	
13	13-UD-A-35-25-123	UD	A	35	5	25-26	123	LFET	BC	0.177		25	123	PAUT	BC	R	0.140		22	134	16	12	56	192	13-UD-A-35-22-134-3	PP	
13	13-UD-A-35-12-132	UD	A	35	6	12-13	131-133	LFET	BC	0.185		12	132	PAUT	BC	R	0.144		10	133	10	10	40	100	13-UD-A-35-10-133-4	PP	
13	13-UD-A-35-0-0	UD	A	35								0	0	VT	RI	R			0	0	4	4	8		13-UD-A-35-0-0-5	WR	
13	13-UD-A-35-0-156	UD	A	35								0	156	VT	LOF	R			0	156	4	4	8		13-UD-A-35-0-156-6	WR	
13	13-UD-A-35-0-146	UD	A	35								0	146	VT	POR	R			0	146	0	4	4		13-UD-A-35-0-146-7	WR	
13	13-UD-A-35-56-73	UD	A	35								56	73	VT	POR	R			56	73	0	8	8		13-UD-A-35-56-73-8	WR	
13	13-UD-A-35-56-48	UD	A	35								56	48	VT	LOF	R			56	48	0	5	5		13-UD-A-35-56-48-9	WR	
13	13-UD-A-36-0-61	UD	A	36	1	1	61	VT	POR			0	61	VT	POR	R			0	61	0	4	4		13-UD-A-36-0-61-1	WR	
13	13-UD-A-36-1-92	UD	A	36	2	1	92	BFET	WI			1	92	VT	WI	R			5	95	10	40	100	400	13-UD-A-36-5-95-8	TSPP	
13	13-UD-A-36-5-95	UD	A	36	3	5	95	VT	TC		0.17	5	95	VT	TC	R			5	95	10	40	100	400	13-UD-A-36-5-95-8	TSPP	
13	13-UD-A-36-1-97	UD	A	36	4	1	97	VT	POR			1	97	VT	POR	R			5	95	10	40	100	400	13-UD-A-36-5-95-8	TSPP	
13	13-UD-A-36-20-99	UD	A	36	5	20	99	VT	DENT		0.09	20	99	VT	DENT	R			20	99	8	8	32	64	13-UD-A-36-20-99-2	PP	
13	13-UD-A-36-34-153	UD	A	36	7	34	153	VT	POR			34	153	VT	POR	R			33	155	3	6	9		13-UD-A-36-33-155-4	WR	
13	13-UD-A-36-26-156	UD	A	36								26	156	VT	POR	R			26	156	4	0	4		13-UD-A-36-26-156-3	WR	
13	13-UD-A-36-33-155	UD	A	36								33	155	VT	RI	R			33	155	3	6	9		13-UD-A-36-33-155-4	WR	
13	13-UD-A-36-33-143	UD	A	36								33	143	VT	POR	R			33	143	0	4	4		13-UD-A-36-33-143-5	WR	
13	13-UD-A-36-34-113	UD	A	36								34	113	VT	RI	R			34	113	0	4	4		13-UD-A-36-34-113-6	WR	
13	13-UD-A-36-0-0	UD	A	36								0	0	VT	POR	R			0	0	4	3	7		13-UD-A-36-0-0-7	WR	
13	13-UD-A-36-5-95	UD	A	36								5	95	VT	LOF	R			5	95	10	40	100	400	13-UD-A-36-5-95-8	TSPP	
13	13-UD-A-36-35-62	UD	A	36								35	62	VT	POR	R			35	62	4	0	4		13-UD-A-36-35-62-9	WR	
13	13-UD-A-37-41-71	UD	A	37	1	41-42	70-72	VT	GOUGE		0.12	41	71	VT	DENT	R			41	71	8	8	32	64	13-UD-A-37-41-71-1	PP	
13	13-UD-A-37-1-88	UD	A	37	2	1	88	VT	POR			1	88	VT	POR	R			1	88	0	4	4		13-UD-A-37-1-88-2	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-UD-A-37-34-62	UD	A	37								34	62	VT	DENT	R			34	62	6	0	18.84956	28.27433	13-UD-A-37-34-62-3	PP	
13	13-UD-A-37-57-94	UD	A	37								57	94	VT	POR	R			57	94	0	4	4		13-UD-A-37-57-94-4	WR	
13	13-UD-A-37-7-103	UD	A	37								7	103	VT	POR	R			7	103	7	0	7		13-UD-A-37-7-103-5	WR	
13	13-UD-A-37-0-106	UD	A	37								0	106	VT	POR	R			0	106	0	4	4		13-UD-A-37-0-106-6	WR	
13	13-UD-A-37-58-115	UD	A	37								58	115	VT	POR	R			58	115	0	8	8		13-UD-A-37-58-115-7	WR	
13	13-UD-A-37-13-156	UD	A	37								13	156	VT	LOF	R			13	156	4	0	4		13-UD-A-37-13-156-8	WR	
13	13-UD-A-37-53-156	UD	A	37								53	156	VT	RI	R			53	156	11	0	11		13-UD-A-37-53-156-9	WR	
13	13-UD-A-38-45-72	UD	A	38	1	43-47	71-73	LFET	BC	0.17		45	72	PAUT	BC	R	0.160		49	74	8	8	32	64	13-UD-A-38-49-74-1	PP	
13	13-UD-A-38-46-144	UD	A	38	2	46	144	VT	TC		0.11	46	144	VT	TC	R			46	144	1	0	1		13-UD-A-38-46-144-2	WR	
13	13-UD-A-37-0-156	UD	A	37								0	156	VT	LOF	R			0	156	4	4	8		13-UD-A-37-0-156-3	WR	
13	13-UD-A-37-55-156	UD	A	37								55	156	VT	RI	R			55	156	4	4	8		13-UD-A-37-55-156-4	WR	
13	13-UD-A-37-57-147	UD	A	37								57	147	VT	LOF	R			57	147	5	0	5		13-UD-A-37-57-147-5	WR	
13	13-UD-A-37-0-49	UD	A	37								0	49	VT	RI	R			0	49	0	7	7		13-UD-A-37-0-49-6	WR	
13	13-UD-A-37-57-69	UD	A	37								57	69	VT	POR	R			57	69	0	4	4		13-UD-A-37-57-69-7	WR	
13	13-UD-A-37-57-77	UD	A	37								57	77	VT	POR	R			57	77	0	4	4		13-UD-A-37-57-77-8	WR	
13	13-UD-A-37-0-3	UD	A	37								0	3	VT	LOF	R			0	3	4	8	12		13-UD-A-37-0-3-9	WR	
13	13-UD-A-40-30-17	UD	A	40	1	0-60	17	LFET	BC	0.134		30	17	PAUT	BC	R	< 0.160		28	17	28	15	86	420	13-UD-A-40-28-17-1	PP	
13	13-UD-A-40-28-46	UD	A	40	2	28	46	LFET	BC	0.136		28	46	PAUT	BC	R	< 0.160		24	46	22	16	76	352	13-UD-A-40-24-46-2	PP	
13	13-UD-A-40-44-125	UD	A	40	4	44	125	VT	DENT			44	125	VT	DENT	R			44	125	6	0	18.84956	28.27433	13-UD-A-40-44-125-3	PP	
13	13-UD-A-40-14-156	UD	A	40	5	14	156	VT	POR			14	156	VT	POR	R			14	156	2	0	2		13-UD-A-40-14-156-4	WR	
13	13-UD-A-41-46-66	UD	A	41	2	46	36-96	LFET	BC	0.114		46	66	PAUT	BC	R	< 0.160		46	62	24	18	84	432	13-UD-A-41-46-62-1	PP	
13	13-UD-A-41-48-117	UD	A	41	4	48	96-138	LFET	BC	0.16		48	117	PAUT	BC	R	< 0.160		43	112	22	14	72	308	13-UD-A-41-43-112-2	PP	
13	13-UD-A-41-53-141	UD	A	41	5	53	141	LFET	BC	0.18		53	141	PAUT	BC	R	< 0.160		43	135	22	22	88	484	13-UD-A-41-43-135-3	PP	
13	13-UD-A-41-46-156	UD	A	41	7	46	156	VT	POR			46	156	VT	POR	R			46	156	4	0	4		13-UD-A-41-46-156-4	WR	
13	13-UD-A-42-19-31	UD	A	42	1	0-38	0-62	LFET	BC	0.115		19	31	PAUT	BC	R	< 0.160		17	6	34	12	92	408	13-UD-A-42-17-6-1	PP	
13	13-UD-A-42-26-82	UD	A	42	2	26	82	VT	DENT			26	82	VT	DENT	R			26	82	6	0	18.84956	28.27433	13-UD-A-42-26-82-2	PP	
13	13-UD-A-42-15-156	UD	A	42	3	15	156	BFET	WI			15	156	VT	WI	R			15	156	4	0	4		13-UD-A-42-15-156-3	WR	
13	13-UD-A-43-30-38	UD	A	43	1	0-60	38	LFET	BC	0.1		30	38	PAUT	BC	R	< 0.160		30	28	60	56	232	3360	13-UD-A-43-30-28-1	PP	
13	13-UD-A-43-50-45	UD	A	43	2	50	45	LFET	BC	0.11		50	45	PAUT	BC	R	< 0.160		30	28	60	56	232	3360	13-UD-A-43-30-28-1	PP	
13	13-UD-A-43-29-156	UD	A	43	5	29	156	VT	POR			29	156	VT	POR	R			29	156	4	0	4		13-UD-A-43-29-156-2	WR	
13	13-UD-A-43-39-148	UD	A	43	6	39	148	LFET	BC	0.187		39	148	PAUT	BC	R	< 0.160		40	148	12	12	48	144	13-UD-A-43-40-148-3	PP	
13	13-UD-A-44-5-2	UD	A	44	1	5	2	LFET	BC	0.175		5	2	PAUT	BC	R	< 0.160		6	3	12	6	36	72	13-UD-A-44-6-3-1	PP	
13	13-UD-A-44-53-5	UD	A	44	2	45-60	0-11	LFET	BC	0.163		53	5	PAUT	BC	R	< 0.160		48	8	18	16	68	288	13-UD-A-44-48-8-2	PP	
13	13-UD-A-44-9-44	UD	A	44	3	9	44	LFET	BC	0.159		9	44	PAUT	BC	R	< 0.160		8	45	16	18	68	288	13-UD-A-44-8-45-3	PP	
13	13-UD-A-44-0-132	UD	A	44	4	0	132	VT	POR			0	132	VT	POR	R			0	132	0	4	4		13-UD-A-44-0-132-4	WR	
13	13-UD-A-44-23-156	UD	A	44	5	23	156	BFET	WI			23	156	VT	WI	R			23	156	4	0	4		13-UD-A-44-23-156-5	WR	
13	13-UD-A-44-27-156	UD	A	44	6	27	156	VT	POR			27	156	VT	POR	R			27	156	4	0	4		13-UD-A-44-27-156-6	WR	
13	13-UD-A-44-39-156	UD	A	44	7	49	156	VT	POR			39	156	VT	POR	R			39	156	4	0	4		13-UD-A-44-39-156-7	WR	
13	13-UD-A-44-53-156	UD	A	44								53	156	VT	POR	R			53	156	6	0	6		13-UD-A-44-53-156-8	WR	
13	13-UD-A-45-19-3	UD	A	45	1	0-38	3	LFET	BC	0.153		19	3	PAUT	BC	R	< 0.160		19	6	38	12	100	456	13-UD-A-45-19-6-1	PP	
13	13-UD-A-45-33-60	UD	A	45	2	33	60	LFET	BC	0.152		33	60	PAUT	BC	R	< 0.160		30	60	10	20	60	200	13-UD-A-45-30-60-2	PP	
13	13-UD-A-45-26-95	UD	A	45	3	26	95	VT	DENT			26	95	VT	DENT	R			26	95	6	0	18.84956	28.27433	13-UD-A-45-26-95-3	PP	
13	13-UD-A-45-0-120	UD	A	45	4	0	120	VT	POR			0	120	VT	POR	R			0	120	0	12	12		13-UD-A-45-0-120-4	WR	
13	13-UD-A-45-0-137	UD	A	45	5	0	137	VT	POR			0	137	VT	POR	R			0	137	0	4	4		13-UD-A-45-0-137-5	WR	
13	13-UD-A-45-21-156	UD	A	45	6	21	156	VT	POR			21	156	VT	POR	R			21	156	0	4	4		13-UD-A-45-21-156-6	WR	
13	13-UD-A-45-0-156	UD	A	45								0	156	VT	POR	R			53	156	0	2	2		13-UD-A-45-53-156-7	WR	
13	13-UD-A-46-30-24	UD	A	46	1	0-60	0-48	LFET	BC	0.143		30	24	PAUT	BC	R	0.140		44	6	28	12	80	336	13-UD-A-46-44-6-1	PP	
13	13-UD-A-46-8-93	UD	A	46	2	8	48-137	LFET	BC	0.156		8	93	PAUT	BC	R	0.139		11	36	22	72	188	1584	13-UD-A-46-11-36-2	PP	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-UD-A-46-6-116	UD	A	46	4	6	116	LFET	BC	0.169		6	116	PAUT	BC	R	0.139		6	116	16	10	52	160		13-UD-A-46-6-116-3	PP
13	13-UD-A-47-47-16	UD	A	47	1	33-60	0-33	LFET	BC	0.135		47	16	PAUT	BC	R	0.146		49	6	16	12	56	192		13-UD-A-47-49-6-1	PP
13	13-UD-A-47-16-36	UD	A	47	2	16	36	VT	DENT			16	36	VT	DENT	R			16	36	14	14	56	196		13-UD-A-47-16-36-2	PP
13	13-UD-A-47-3-156	UD	A	47	3	4	156	VT	POR			3	156	VT	RI	R			3	156	7	0	7			13-UD-A-47-3-156-3	WR
13	13-UD-A-47-46-156	UD	A	47	4	46	156	VT	POR			46	156	VT	RI	R			50	156	12	0	12			13-UD-A-47-50-156-4	WR
13	13-UD-A-47-54-156	UD	A	47	5	54	156	BFET	WI			54	156	VT	WI	R			50	156	12	0	12			13-UD-A-47-50-156-4	WR
13	13-UD-A-47-25-149	UD	A	47	6	25	149	VT	DENT			25	149	VT	DENT	R			25	149	8	8	32	64		13-UD-A-47-25-149-5	PP
13	13-UD-A-47-55-151	UD	A	47								55	151	VT	RI	R			55	151	0	4	4			13-UD-A-47-55-151-6	WR
13	13-UD-A-47-55-144	UD	A	47								55	144	VT	LOF	R			55	144	2	3	5			13-UD-A-47-55-144-7	WR
13	13-UD-A-48-30-10	UD	A	48	1	0-60	0-20	LFET	BC	0.135		30	10	PAUT	BC	R	0.101		17	9	34	18	104	612		13-UD-A-48-17-9-1	PP
13	13-UD-A-48-0-0	UD	A	48	2	0	0	VT	UC			0	0	VT	UC	R			0	0	4	5	9			13-UD-A-48-0-0-2	WR
13	13-UD-A-48-10-132	UD	A	48	3	10	108-156	LFET	BC	0.135		10	132	PAUT	BC	R	0.138		9	132	18	48	132	864		13-UD-A-48-9-132-3	PP
13	13-UD-A-50-1-0	UD	A	50								1	0	VT	UC	R			1	0	7	0	7			13-UD-A-50-1-0-1	WR
13	13-UD-A-51-10-0	UD	A	51	1	10	0	BFET	WI			10	0	VT	WI	R			10	0	5	0	5			13-UD-A-51-10-0-1	WR
13	13-UD-A-51-27-56	UD	A	51								27	56	VT	RI	R			27	56	3	0	3			13-UD-A-51-27-56-2	WR
13	13-UD-A-51-0-54	UD	A	51								0	54	VT	POR	R			0	54	0	4	4			13-UD-A-51-0-54-3	WR
13	13-UD-A-52-0-0	UD	A	52								0	0	VT	UC	R			0	0	44	3	47			13-UD-A-52-0-0-1	WR
13	13-UD-A-52-29-80	UD	A	52								29	80	VT	UC	R			29	80	9	0	9			13-UD-A-52-29-80-2	WR
13	13-UD-A-52-45-126	UD	A	52								45	126	VT	RI	R			45	126	0	1	1			13-UD-A-52-45-126-3	WR
13	13-UD-A-52-59-101	UD	A	52								59	101	VT	RI	R			59	101	0	4	4			13-UD-A-52-59-101-4	WR
13	13-UD-A-52-31-156	UD	A	52								31	156	VT	UC	R			31	156	20	0	20			13-UD-A-52-31-156-5	WR
13	13-UD-A-53-54-156	UD	A	53	1	54	156	VT	POR			54	156	VT	POR	R			54	156	4	0	4			13-UD-A-53-54-156-1	WR
13	13-UD-A-53-12-123	UD	A	53	2	12	123	VT	DENT			12	123	VT	DENT	R			12	123	8	0	25.13274	50.26548		13-UD-A-53-12-123-2	PP
13	13-UD-A-53-59-0	UD	A	53								59	0	VT	UC	R			59	0	7	0	7			13-UD-A-53-59-0-3	WR
13	13-UD-A-53-44-52	UD	A	53								44	52	VT	RI	R			44	52	1	0	1			13-UD-A-53-44-52-4	WR
13	13-UD-A-54-36-12	UD	A	54	1	36	12	BFET	WI			36	12	VT	UC	R			35	8	0	16	16			13-UD-A-54-35-8-1	WR
13	13-UD-A-54-2-156	UD	A	54	2	2	156	BFET	WI			2	156	VT	RI	R			2	156	3	0	3			13-UD-A-54-2-156-2	WR
13	13-UD-A-54-25-156	UD	A	54	3	25	156	BFET	WI			25	156	VT	RI	R			25	156	5	0	5			13-UD-A-54-25-156-3	WR
13	13-UD-A-55-2-0	UD	A	55	1	2	0	BFET	WI			2	0	VT	UC	R			2	0	13	0	13			13-UD-A-55-2-0-1	WR
13	13-UD-A-55-0-84	UD	A	55	2	0	84	VT	POR			0	84	VT	POR	R			0	84	0	9	9			13-UD-A-55-0-84-2	WR
13	13-UD-A-55-54-106	UD	A	55	4	54	106	VT	POR			54	106	VT	POR	R			54	106	1	0	1			13-UD-A-55-54-106-3	WR
13	13-UD-A-55-1-156	UD	A	55	5	1	156	BFET	WI			1	156	VT	WI	R			1	156	2	2	4			13-UD-A-55-1-156-4	WR
13	13-UD-A-55-16-156	UD	A	55	6	16	156	BFET	WI			16	156	VT	POR	R			16	156	5	0	5			13-UD-A-55-16-156-5	WR
13	13-UD-A-55-25-156	UD	A	55	7	25	156	BFET	WI			25	156	VT	RI	R			25	156	4	0	4			13-UD-A-55-25-156-6	WR
13	13-UD-A-56-51-42	UD	A	56	3	51	42	VT	TC		0.094	51	42	VT	GOUGE	R			51	42	2	0	2			13-UD-A-56-51-42-1	WR
13	13-UD-A-56-55-100	UD	A	56	4	55	100	VT	TC		0.094	55	100	VT	TC	R			55	100	1	0	1			13-UD-A-56-55-100-2	WR
13	13-UD-A-56-7-156	UD	A	56	5	7	156	BFET	WI			7	156	VT	UC	R			12	156	15	0	15			13-UD-A-56-12-156-3	WR
13	13-UD-A-56-16-156	UD	A	56	6	16	156	BFET	WI			16	156	VT	UC	R			12	156	15	0	15			13-UD-A-56-12-156-3	WR
13	13-UD-A-56-40-156	UD	A	56	7	40	156	BFET	WI			40	156	VT	WI	R			40	156	10	0	10			13-UD-A-56-40-156-4	WR
13	13-UD-A-56-13-6	UD	A	56								13	6	VT	POR	R			13	6	2	0	2			13-UD-A-56-13-6-5	WR
13	13-UD-A-56-0-97	UD	A	56								0	97	VT	RI	R			0	97	0	4	4			13-UD-A-56-0-97-6	WR
13	13-UD-A-56-0-156	UD	A	56								0	156	VT	UC	R			0	156	3	3	6			13-UD-A-56-0-156-7	WR
13	13-UD-A-57-32-38	UD	A	57	2	32	4-72	LFET	BC	0.174		32	38	PAUT	BC	R	< 0.160		30	46	12	6	36	72		13-UD-A-57-30-46-1	TSPP
13	13-UD-A-57-11-156	UD	A	57	3	11	156	BFET	WI			11	156	VT	RI	R			12	156	12	0	12			13-UD-A-57-12-156-2	WR
13	13-UD-A-57-15-156	UD	A	57	4	15	156	VT	POR			15	156	VT	POR	R			12	156	12	0	12			13-UD-A-57-12-156-2	WR
13	13-UD-A-57-32-38	UD	A	57								32	38	PAUT	BC	R	< 0.160		29	17	8	8	32	64		13-UD-A-57-29-17-3	PP
13	13-UD-A-58-30-20	UD	A	58	1	0-60	0-20	LFET	BC	0.135		30	20	PAUT	BC	R	< 0.160		20	8	40	16	112	640		13-UD-A-58-20-8-1	PP
13	13-UD-A-58-36-36	UD	A	58	2	20-52	20-52	LFET	BC	0.146		36	36	PAUT	BC	R	< 0.160		46	6	12	12	48	144		13-UD-A-58-46-6-2	PP

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-UD-A-58-23-74	UD	A	58	3	23	74	VT	DENT			23	74	VT	DENT	R			23	74	8	0	25.13274	50.26548	13-UD-A-58-23-74-3		PP
13	13-UD-A-58-6-138	UD	A	58	4	6	120-156	LFET	BC	0.156		6	138	PAUT	BC	R	< 0.160		55	138	10	36	92	360	13-UD-A-58-55-138-4		PP
13	13-UD-A-58-2-156	UD	A	58	5	2	156	BFET	WI			2	156	VT	UC	R			2	156	6	0	6		13-UD-A-58-2-156-5		WR
13	13-UD-A-58-30-20	UD	A	58								30	20	PAUT	BC	R	< 0.160		54	10	10	9	38	90	13-UD-A-58-54-10-6		TSPP
13	13-UD-A-59-30-3	UD	A	59	1	0-60	3	LFET	BC	0.107		30	3	PAUT	BC	R	0.107		44	3	14	6	40	84	13-UD-A-59-44-3-1		PP
13	13-UD-A-59-43-17	UD	A	59	2	43	17	VT	TC		0.094	43	17	VT	TC	R			43	17	2	0	2		13-UD-A-59-43-17-2		WR
13	13-UD-A-59-0-33	UD	A	59	3	0	33	BFET	WI			0	33	VT	POR	R			0	33	0	4	4		13-UD-A-59-0-33-3		WR
13	13-UD-A-59-39-54	UD	A	59	4	39	54	LFET	BC	0.172		39	54	PAUT	BC	R	< 0.160		36	57	6	0	18.84956	28.27433	13-UD-A-59-36-57-4		PP
13	13-UD-A-59-30-3	UD	A	59								30	3	PAUT	BC	R	0.131		11	3	23	6	58	138	13-UD-A-59-11-3-5		PP
13	13-UD-A-60-19-4	UD	A	60	1	0-38	4	LFET	BC	0.18		19	4	PAUT	BC	R	0.109		35	3	6	0	18.84956	28.27433	13-UD-A-60-35-3-1		PP
13	13-UD-A-60-35-83	UD	A	60	2	35	44-112	LFET	BC	0.122		35	83	PAUT	BC	R	0.140		32	66	8	6	28	48	13-UD-A-60-32-66-2		TSPP
13	13-UD-A-60-0-60	UD	A	60	3	0	60	VT	POR			0	60	VT	POR	R			0	60	0	4	4		13-UD-A-60-0-60-3		WR
13	13-UD-A-60-0-91	UD	A	60	4	0	91	VT	POR			0	91	VT	POR	R			0	91	0	4	4		13-UD-A-60-0-91-4		WR
13	13-UD-A-60-0-26	UD	A	60	5	0	26	BFET	WI			0	26	VT	WI	R			0	26	0	8	8		13-UD-A-60-0-26-5		WR
13	13-UD-A-60-0-155	UD	A	60	6	0	155	VT	POR			0	155	VT	IF	R			0	155	4	0	4		13-UD-A-60-0-155-6		WR
13	13-UD-A-60-29-156	UD	A	60								29	156	VT	POR	R			29	156	8	0	8		13-UD-A-60-29-156-7		WR
13	13-UD-A-60-35-83	UD	A	60								35	83	PAUT	BC	R	0.130		31	79	8	14	44	112	13-UD-A-60-31-79-8		PP
13	13-UD-A-60-35-83	UD	A	60								35	83	PAUT	BC	R	0.113		32	47	8	8	32	64	13-UD-A-60-32-47-9		TSPP
13	13-UD-A-60-35-83	UD	A	60								35	83	PAUT	BC	R	0.120		30	95	8	8	32	64	13-UD-A-60-30-95-10		TSPP
13	13-UD-A-61-48-3	UD	A	61	1	36-60	3	LFET	BC	0.17		48	3	PAUT	BC	R	0.134		48	3	10	6	32	60	13-UD-A-61-48-3-1		PP
13	13-UD-A-61-10-16	UD	A	61	2	10	0-32	LFET	BC	0.147		10	16	PAUT	BC	R	0.099		10	16	16	12	56	192	13-UD-A-61-10-16-2		PP
13	13-UD-A-61-7-94	UD	A	61	3	7	44-144	LFET	BC	0.123		7	94	PAUT	BC	R	< 0.160		5	117	10	33	86	330	13-UD-A-61-5-117-3		TSPP
13	13-UD-A-61-43-156	UD	A	61								43	156	VT	POR	R			43	156	9	0	9		13-UD-A-61-43-156-4		WR
13	13-UD-A-61-7-94	UD	A	61								7	94	PAUT	BC	R	0.108		5	52	9	13	44	117	13-UD-A-61-5-52-5		TSPP
13	13-UD-A-61-10-16	UD	A	61								10	16	PAUT	BC	R	0.136		3	20	6	6	24	36	13-UD-A-61-3-20-6		TSPP
13	13-UD-A-61-45-6	UD	A	61								45	6	VT	UC	R			45	6	2	0	2		13-UD-A-61-45-6-7		WR
13	13-UD-A-62-30-36	UD	A	62	1	0-60	0-72	LFET	BC	0.05		30	36	PAUT	BC	R	0.123		30	4	16	9	50	144	13-UD-A-62-30-4-1		TSPP
13	13-UD-A-62-60-31	UD	A	62	3	60	31	VT	POR			60	31	VT	POR	R			60	31	0	4	4		13-UD-A-62-60-31-2		WR
13	13-UD-A-62-47-71	UD	A	62	4	47	71	VT	TC		0.094	47	71	VT	GOUGE	R			47	71	1	0	1		13-UD-A-62-47-71-3		WR
13	13-UD-A-62-5-115	UD	A	62	6	5	109-120	LFET	BC	0.084		5	115	PAUT	BC	R	0.115		3	112	6	32	76	192	13-UD-A-62-3-112-4		TSPP
13	13-UD-A-62-2-134	UD	A	62	9	0-5	120-149	LFET	BC	0.14		2	134	PAUT	BC	R	0.158		3	143	6	7	26	42	13-UD-A-62-3-143-5		TSPP
13	13-UD-A-62-31-137	UD	A	62	11	31	120-154	LFET	BC	0.05		31	137	PAUT	BC	R	0.102		30	133	24	39	126	936	13-UD-A-62-30-133-6		PP
13	13-UD-A-62-0-156	UD	A	62	12	0	156	BFET	WI			0	156	VT	UC	R			4	156	10	0	10		13-UD-A-62-4-156-7		WR
13	13-UD-A-62-5-156	UD	A	62	13	5	156	BFET	WI			5	156	VT	UC	R			4	156	10	0	10		13-UD-A-62-4-156-7		WR
13	13-UD-A-62-18-38	UD	A	62								18	38	PAUT	BC	R	0.108		18	38	6	0	18.84956	28.27433	13-UD-A-62-18-38-8		PP
13	13-UD-A-62-19-50	UD	A	62								19	50	PAUT	BC	R	0.145		19	50	6	0	18.84956	28.27433	13-UD-A-62-19-50-9		PP
13	13-UD-A-62-11-56	UD	A	62								11	56	PAUT	BC	R	0.108		11	56	6	0	18.84956	28.27433	13-UD-A-62-11-56-10		PP
13	13-UD-A-62-55-10	UD	A	62								55	10	PAUT	BC	R	0.160		55	10	7	7	28	49	13-UD-A-62-55-10-11		TSPP
13	13-UD-A-62-49-0	UD	A	62								49	0	VT	UC	R			49	0	4	0	4		13-UD-A-62-49-0-12		WR
13	13-UD-A-63-19-4	UD	A	63	1	0-38	0-7	LFET	BC	0.13		19	4	PAUT	BC	R	0.120		3	7	14	6	40	84	13-UD-A-63-3-7-1		PP
13	13-UD-A-63-28-156	UD	A	63	2	28	156	BFET	WI			28	156	VT	WI	R			28	156	10	0	10		13-UD-A-63-28-156-2		WR
13	13-UD-A-63-19-4	UD	A	63								19	4	PAUT	BC	R	0.155		30	3	14	6	40	84	13-UD-A-63-30-3-3		PP
13	13-UD-A-64-27-2	UD	A	64	1	0-55	0-4	LFET	BC	0.148		27	2	PAUT	BC	R	0.131		11	3	23	6	58	138	13-UD-A-64-11-3-1		PP
13	13-UD-A-64-2-0	UD	A	64	2	2	0	BFET	WI			2	0	VT	WI	R			11	3	23	6	58	138	13-UD-A-64-11-3-1		PP
13	13-UD-A-64-50-0	UD	A	64	3	50	0	VT	POR			50	0	VT	RI	R			50	0	4	0	4		13-UD-A-64-50-0-2		WR
13	13-UD-A-64-42-30	UD	A	64	4	42	30	LFET	BC	0.188		42	30	PAUT	BC	R	0.141		39	26	12	12	48	144	13-UD-A-64-39-26-3		PP
13	13-UD-A-64-54-33	UD	A	64	6	54	33	VT	DENT			54	33	VT	DENT	R			54	33	6	0	18.84956	28.27433	13-UD-A-64-54-33-4		PP
13	13-UD-A-64-46-156	UD	A	64	7	46	156	BFET	WI			46	156	VT	WI	R			48	156	15	0	15		13-UD-A-64-48-156-5		WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-UD-A-64-53-156	UD	A	64	8	53	156	BFET	WI			53	156	VT	WI	R			48	156	15	0	15		13-UD-A-64-48-156-5		WR
13	13-UD-A-64-35-156	UD	A	64								35	156	VT	POR	R			35	156	4	0	4		13-UD-A-64-35-156-6		WR
13	13-UD-A-64-27-2	UD	A	64								27	2	PAUT	BC	R	0.131		37	3	6	6	24	36	13-UD-A-64-37-3-7		TSPP
13	13-UD-A-65-30-3	UD	A	65	1	2-58	3	LFET	BC	0.15		30	3	PAUT	BC	R	0.146		6	3	12	6	36	72	13-UD-A-65-6-3-1		PP
13	13-UD-A-65-3-155	UD	A	65	2	3	155	VT	POR			3	155	VT	POR	R			3	155	6	0	6		13-UD-A-65-3-155-2		WR
13	13-UD-A-65-24-153	UD	A	65	3	24	153	VT	POR			24	153	VT	POR	R			26	156	6	0	6		13-UD-A-65-26-156-3		WR
13	13-UD-A-65-28-155	UD	A	65	4	28	155	VT	POR			28	155	VT	POR	R			26	156	6	0	6		13-UD-A-65-26-156-3		WR
13	13-UD-A-65-51-155	UD	A	65	5	51	155	VT	POR			51	155	VT	POR	R			51	155	4	0	4		13-UD-A-65-51-155-4		WR
13	13-UD-A-66-11-97	UD	A	66	2	11	97	VT	TC		0.094	11	97	VT	TC	R			11	97	1	0	1		13-UD-A-66-11-97-1		WR
13	13-UD-A-66-29-156	UD	A	66								29	156	VT	POR	R			29	156	4	0	4		13-UD-A-66-29-156-2		WR
13	13-UD-A-67-13-155	UD	A	67	3	13	155	BFET	WI			13	155	VT	LOF	R			13	155	8	0	8		13-UD-A-67-13-155-1		WR
13	13-UD-A-67-27-155	UD	A	67	4	25-30	155	VT	POR			27	155	VT	POR	R			30	156	14	0	14		13-UD-A-67-30-156-2		WR
13	13-UD-A-67-47-156	UD	A	67	5	47	156	VT	POR			47	156	VT	POR	R			47	156	6	0	6		13-UD-A-67-47-156-3		WR
13	13-UD-A-68-0-154	UD	A	68	3	0	154	VT	POR			0	154	VT	POR	R			0	154	0	4	4		13-UD-A-68-0-154-1		WR
13	13-UD-A-68-39-156	UD	A	68	4	39	156	VT	POR			39	156	VT	POR	R			51	156	4	0	4		13-UD-A-68-51-156-2		WR
13	13-UD-A-69-17-7	UD	A	69	1	17	7	VT	TC		0.094	17	7	VT	TC	R			17	7	1	0	1		13-UD-A-69-17-7-1		WR
13	13-UD-A-69-0-3	UD	A	69	2	0	3	VT	POR			0	3	VT	POR	R			0	3	0	6	6		13-UD-A-69-0-3-2		WR
13	13-UD-A-69-0-6	UD	A	69	3	0	6	BFET	WI			0	6	VT	WI	R			0	6	2	0	2		13-UD-A-69-0-6-3		WR
13	13-UD-A-70-8-3	UD	A	70	1	8	3	LFET	BC	0.188		8	3	PAUT	BC	R	< 0.160		3	3	6	0	18.84956	28.27433	13-UD-A-70-3-3-1		PP
13	13-UD-A-70-57-1	UD	A	70	2	57	1	VT	TC		0.094	57	1	VT	TC	R			38	3	42	6	96	252	13-UD-A-70-38-3-2		PP
13	13-UD-A-70-35-2	UD	A	70	3	19-51	2	LFET	BC	0.137		35	2	PAUT	BC	R	0.155		38	3	42	6	96	252	13-UD-A-70-38-3-2		PP
13	13-UD-A-70-8-153	UD	A	70	4	8	153	VT	POR			8	153	VT	POR	R			8	153	5	0	5		13-UD-A-70-8-153-3		WR
13	13-UD-A-71-11-156	UD	A	71	1	11	156	VT	POR			11	156	VT	POR	R			11	156	4	0	4		13-UD-A-71-11-156-1		WR
13	13-UD-A-71-20-134	UD	A	71	2	20	134	VT	TC		0.094	20	134	VT	TC	R			20	134	1	0	1		13-UD-A-71-20-134-2		WR
13	13-UD-A-71-57-111	UD	A	71	3	57	111	VT	POR			57	111	VT	POR	R			57	111	0	6	6		13-UD-A-71-57-111-3		WR
13	13-UD-A-71-0-89	UD	A	71								0	89	VT	RI	R			0	89	0	4	4		13-UD-A-71-0-89-4		WR
13	13-UD-A-71-56-138	UD	A	71								56	138	VT	GOUGE	R			56	138	1	0	1		13-UD-A-71-56-138-5		WR
13	13-UD-A-71-58-26	UD	A	71	7	58	26	BFET	WI			58	26	VT	WI	R			58	26	0	7	7		13-UD-A-71-58-26-6		WR
13	13-UD-A-72-0-150	UD	A	72								0	150	VT	IF	R			0	150	0	6	6		13-UD-A-72-0-150-1		WR
13	13-UD-A-72-35-26	UD	A	72	2	35	26	BFET	WI			35	26	VT	WI	R			35	26	0	16	16		13-UD-A-72-35-26-2		WR
13	13-ER-4-1-142-0	ER	4	1								142	0	VT	LOF	R			142	0	4	0	4		13-ER-4-1-142-0-1		WR
13	13-ER-4-2-111-23	ER	4	2	3	110-112	23	VT	UC			111	23	VT	UC	R			113	20	8	6	28	48	13-ER-4-2-113-20-1		TSPP
13	13-ER-4-2-115-21	ER	4	2	4	115	21	VT	TC		0.125	115	21	VT	TC	R			113	20	8	6	28	48	13-ER-4-2-113-20-1		TSPP
13	13-ER-4-2-149-14	ER	4	2	10	149	?	VT	DENT			149	14	VT	DENT	R			153	14	14	8	44	112	13-ER-4-2-153-14-2		PP
13	13-ER-4-2-157-14	ER	4	2	11	157	?	VT	DENT			157	14	VT	DENT	R			153	14	14	8	44	112	13-ER-4-2-153-14-2		PP
13	13-ER-4-2-151-0	ER	4	2	14	151	0	VT	TC		0.11	151	0	VT	TC	R			151	0	0	2	2		13-ER-4-2-151-0-3		WR
13	13-ER-4-2-103-23	ER	4	2								103	23	VT	LOF	R			103	23	4	0	4		13-ER-4-2-103-23-4		WR
13	13-ER-4-3-12-21	ER	4	3	1	12	21	VT	DENT			12	21	VT	DENT	R			12	21	6	6	24	36	13-ER-4-3-12-21-1		TSPP
13	13-ER-4-3-20-23	ER	4	3	2	20	23	VT	UC			20	23	VT	LOF	R			20	23	5	0	5		13-ER-4-3-20-23-2		WR
13	13-ER-4-5-126-23	ER	4	5	4	118-134	23	VT	UC			126	23	VT	UC	R			125	23	12	0	12		13-ER-4-5-125-23-1		WR
13	13-ER-4-5-212-23	ER	4	5	6	212	23	VT	POR			212	23	VT	POR	R			212	23	4	0	4		13-ER-4-5-212-23-2		WR
13	13-ER-4-5-169-23	ER	4	5								169	23	VT	RI	R			169	23	4	0	4		13-ER-4-5-169-23-3		WR
13	13-ER-4-6-93-2	ER	4	6	5	93	2	VT	TC/POR		0.18	93	2	VT	POR	R			93	2	0	2	2		13-ER-4-6-93-2-1		WR
13	13-ER-4-6-126-20	ER	4	6	6	126	20	VT	UC			126	20	VT	UC	R	0.099		156	17	58	10	136	580	13-ER-4-6-156-17-2		PP
13	13-ER-4-6-129-21	ER	4	6	7	129	21	VT	TC		0.15	129	21	VT	TC	R	0.099		156	17	58	10	136	580	13-ER-4-6-156-17-2		PP
13	13-ER-4-6-136-23	ER	4	6	8	136	23	VT	UC			136	23	VT	UC	R	0.099		156	17	58	10	136	580	13-ER-4-6-156-17-2		PP
13	13-ER-4-6-156-18	ER	4	6	9	140-171	13-23	LFET	BC	0.17		156	18	PAUT	BC	R	0.099		156	17	58	10	136	580	13-ER-4-6-156-17-2		PP
13	13-ER-4-6-166-20	ER	4	6	10	166	20	VT	TC		0.187	166	20	VT	TC	R	0.099		156	17	58	10	136	580	13-ER-4-6-156-17-2		PP

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs							Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)
13	13-ER-4-6-178-21	ER	4	6	12	170-186	19-23	LFET	BC	0.199		178	21	PAUT	BC	R	0.099		156	17	58	10	136	580	13-ER-4-6-156-17-2	PP
13	13-ER-4-6-233-9	ER	4	6	13	226-240	0-18	LFET	BC	0.1		233	9	PAUT	BC	R	0.067		233	10	14	20	68	280	13-ER-4-6-233-10-3	PP
13	13-ER-4-6-116-23	ER	4	6								116	23	VT	LOF	R			116	23	5	0	5		13-ER-4-6-116-23-4	WR
13	13-ER-4-7-31-14	ER	4	7	1	27-36	6-23	LFET	BC	0.165		31	14	PAUT	BC	R	0.055		96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-7-72-14	ER	4	7	3	48-96	6-23	LFET	BC	0.133		72	14	PAUT	BC	R	0.055		96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-7-63-23	ER	4	7	4	61-65	23	VT	UC			63	23	VT	UC	R			96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-7-87-0	ER	4	7	5	82-93	0	VT	UC			87	0	VT	UC	R			96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-7-120-23	ER	4	7	6	118-122	23	VT	UC			120	23	VT	UC	R			96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-7-120-0	ER	4	7	7	116-124	0	VT	UC			120	0	VT	UC	R			96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-7-152-0	ER	4	7	8	138-167	0	VT	UC			152	0	VT	UC	R			96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-7-153-23	ER	4	7	9	153	23	VT	UC			153	23	VT	UC	R			96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-7-89-7	ER	4	7	10	82-96	0-13	LFET	BC	0.19		89	7	PAUT	BC	R	0.055		96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-7-131-11	ER	4	7	11	96-166	0-23	LFET	BC	0.064		131	11	PAUT	BC	R	0.055		96	11	142	22	328	3124	13-ER-4-7-96-11-1	PP
13	13-ER-4-8-51-20	ER	4	8	1	36-66	18-23	LFET	BC	0.146		51	20	PAUT	BC	R	0.156		55	19	6	6	24	36	13-ER-4-8-55-19-1	TSPP
13	13-ER-4-8-101-16	ER	4	8	4	80-123	9-23	LFET	BC	0.07		101	16	PAUT	BC	R	0.136		107	14	55	17	144	935	13-ER-4-8-107-14-2	TSPP
13	13-ER-4-8-91-0	ER	4	8								91	0	VT	GOUGE	R			91	0	0	2	2		13-ER-4-8-91-0-3	WR
13	13-ER-4-8-172-7	ER	4	8								172	7	VT	DENT	R			172	7	6	0	18.84956	28.27433	13-ER-4-8-172-7-4	PP
13	13-ER-4-9-206-15	ER	4	9	2	12 RL	8-23	LFET	BC	0.16		206	15	PAUT	BC	R	0.137		206	15	42	16	116	672	13-ER-4-9-206-15-1	PP
13	13-ER-4-9-134-17	ER	4	9	3	96 RL	14-20	LFET	BC	0.18		134	17	PAUT	BC	R	0.155		134	16	23	10	66	230	13-ER-4-9-134-16-2	PP
13	13-ER-4-9-109-22	ER	4	9								109	22	VT	LOF	R			109	22	5	0	5		13-ER-4-9-109-22-3	WR
13	13-ER-4-9-118-22	ER	4	9								118	22	VT	RI	R			118	22	4	0	4		13-ER-4-9-118-22-4	WR
13	13-ER-4-9-150-22	ER	4	9								150	22	VT	RI	R			150	22	7	0	7		13-ER-4-9-150-22-5	WR
13	13-ER-4-9-234-22	ER	4	9								234	22	VT	RI	R			234	22	8	0	8		13-ER-4-9-234-22-6	WR
13	13-ER-4-10-48-17	ER	4	10	2	48	17	LFET	BC	0.18		48	17	PAUT	BC	R	< 0.160		68	14	58	18	152	1044	13-ER-4-10-68-14-1	TSPP
13	13-ER-4-10-90-17	ER	4	10	3	90	17	LFET	BC	0.16		90	17	PAUT	BC	R	< 0.160		68	14	58	18	152	1044	13-ER-4-10-68-14-1	TSPP
13	13-ER-4-10-103-12	ER	4	10	4	103	12	VT	DENT			103	12	VT	DENT	R			160	12	125	20	290	2500	13-ER-4-10-160-12-2	TSPP
13	13-ER-4-10-114-17	ER	4	10	5	106-222	17	LFET	BC	0.125		114	17	PAUT	BC	R	< 0.160		160	12	125	20	290	2500	13-ER-4-10-160-12-2	TSPP
13	13-ER-4-10-188-8	ER	4	10	6	188	8	VT	DENT			188	8	VT	DENT	R			160	12	125	20	290	2500	13-ER-4-10-160-12-2	TSPP
13	13-ER-4-10-12-22	ER	4	10								12	22	VT	RI	R			12	22	5	0	5		13-ER-4-10-12-22-3	WR
13	13-ER-4-11-72-19	ER	4	11	2	72	19	LFET	BC	0.18		72	19	PAUT	BC	R	0.153		69	15	36	16	104	576	13-ER-4-11-69-15-1	TSPP
13	13-ER-4-11-102-20	ER	4	11	3	20	174	LFET	BC	0.167		102	20	PAUT	BC	R	0.148		147	19	12	10	44	120	13-ER-4-11-147-19-2	TSPP
13	13-ER-4-11-174-12	ER	4	11	4	102	12	LFET	BC	0.1		174	12	PAUT	BC	R	0.110		170	11	16	13	58	208	13-ER-4-11-170-11-3	PP
13	13-ER-4-11-214-17	ER	4	11	5	244	17	LFET	BC	0.167		214	17	PAUT	BC	R	0.137		214	13	31	19	100	589	13-ER-4-11-214-13-4	TSPP
13	13-ER-4-11-7-22	ER	4	11								7	22	VT	RI	R			7	22	4	0	4		13-ER-4-11-7-22-5	WR
13	13-ER-4-11-170-22	ER	4	11								170	22	VT	LOF	R			170	22	24	0	24		13-ER-4-11-170-22-6	WR
13	13-ER-4-12-190-24	ER	4	12	3	190	24	VT	POR			190	24	VT	POR	R			190	24	4	0	4		13-ER-4-12-190-24-1	WR
13	13-ER-4-12-103-22	ER	4	12								103	22	VT	LOF	R			103	22	19	0	19		13-ER-4-12-103-22-2	WR
13	13-ER-4-12-173-22	ER	4	12								173	22	VT	LOF	R			173	22	5	0	5		13-ER-4-12-173-22-3	WR
13	13-ER-4-12-229-22	ER	4	12								229	22	VT	LOF	R			229	22	12	0	12		13-ER-4-12-229-22-4	WR
13	13-ER-4-13-37-6	ER	4	13	1	37	6	VT	DENT			37	6	VT	DENT	R			37	6	6	0	18.84956	28.27433	13-ER-4-13-37-6-1	PP
13	13-ER-4-13-189-16	ER	4	13	2	138-240	16	LFET	BC	0.14		189	16	PAUT	BC	R	0.138		189	11	102	22	248	2244	13-ER-4-13-189-11-2	PP
13	13-ER-4-13-44-22	ER	4	13								44	22	VT	RI	R			44	22	6	0	6		13-ER-4-13-44-22-3	WR
13	13-ER-4-13-57-22	ER	4	13								57	22	VT	RI	R			57	22	6	0	6		13-ER-4-13-57-22-4	WR
13	13-ER-4-14-89-16	ER	4	14	1	0-178	16	LFET	BC	0.09		89	16	PAUT	BC	R	0.142		26	11	51	22	146	1122	13-ER-4-14-26-11-1	PP
13	13-ER-4-14-213-20	ER	4	14	2	202-224	20	LFET	BC	0.1		213	20	PAUT	BC	R	0.099		212	17	10	24	68	240	13-ER-4-14-212-17-2	TSPP
13	13-ER-4-14-236-20	ER	4	14	3	236	20	LFET	BC	0.178		236	20	PAUT	BC	R	0.130		235	19	7	7	28	49	13-ER-4-14-235-19-3	PP
13	13-ER-4-14-89-16	ER	4	14								89	16	PAUT	BC	R	0.155		62	18	9	9	36	81	13-ER-4-14-62-18-4	TSPP
13	13-ER-4-14-89-16	ER	4	14								89	16	PAUT	BC	R	0.125		117	11	77	22	198	1694	13-ER-4-14-117-11-5	PP

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-ER-4-15-112-17	ER	4	15	1	0-224	17	LFET	BC	0.11		112	17	PAUT	BC	R	0.097		70	11	139	22	322	3058	13-ER-4-15-70-11-1	PP	
13	13-ER-4-15-39-18	ER	4	15	2	39	18	VT	DENT			39	18	VT	DENT	R			70	11	139	22	322	3058	13-ER-4-15-70-11-1	PP	
13	13-ER-4-15-112-17	ER	4	15								112	17	PAUT	BC	R	0.097		183	14	60	19	158	1140	13-ER-4-15-183-14-2	TSPP	
13	13-ER-4-15-204-22	ER	4	15								204	22	VT	LOF	R			204	22	8	0	8		13-ER-4-15-204-22-3	WR	
13	13-ER-4-15-232-22	ER	4	15								232	22	VT	RI	R			232	22	5	0	5		13-ER-4-15-232-22-4	WR	
13	13-ER-4-16-20-17	ER	4	16	1	0-40	17	LFET	BC	0.176		20	17	PAUT	BC	R	0.111		20	16	41	15	112	615	13-ER-4-16-20-16-1	PP	
13	13-ER-4-16-138-4	ER	4	16	5	134	4	VT	DENT			138	4	VT	DENT	R			138	4	16	8	48	128	13-ER-4-16-138-4-2	TSPP	
13	13-ER-4-16-178-22	ER	4	16								178	22	VT	RI	R			178	22	5	0	5		13-ER-4-16-178-22-3	WR	
13	13-ER-3-2-28-0	ER	3	2	1	23-33	1	BFET	WI			28	0	VT	WI	R			28	0	14	0	14		13-ER-3-2-28-0-1	WR	
13	13-ER-3-3-50-61	ER	3	3								50	61	VT	LOF	R			50	61	9	0	9		13-ER-3-3-50-61-1	WR	
13	13-ER-3-4-137-54	ER	3	4								137	54	VT	GOUGE	R			137	54	4	0	4		13-ER-3-4-137-54-1	WR	
13	13-ER-3-5-24-5	ER	3	5	1	24	0-10	VT	TC		0.126	24	5	VT	TC	R			24	5	0	6	6		13-ER-3-5-24-5-1	WR	
13	13-ER-3-5-84-36	ER	3	5	2	84	36	VT	DENT			84	36	VT	DENT	R			84	36	10	10	40	100	13-ER-3-5-84-36-2	PP	
13	13-ER-3-5-108-60	ER	3	5								108	60	VT	POR	R			108	60	4	0	4		13-ER-3-5-108-60-3	WR	
13	13-ER-3-6-56-15	ER	3	6	1	56	15	VT	DENT			56	15	VT	DENT	R			56	15	6	0	18.84956	28.27433	13-ER-3-6-56-15-1	PP	
13	13-ER-3-6-70-15	ER	3	6	2	70	15	VT	DENT			70	15	VT	DENT	R			70	15	6	0	18.84956	28.27433	13-ER-3-6-70-15-2	PP	
13	13-ER-3-6-234-3	ER	3	6	3	230-239	1-6	LFET	BC	0.18		234	3	PAUT	BC	R	0.120		234	4	9	9	36	81	13-ER-3-6-234-4-3	TSPP	
13	13-ER-3-6-57-12	ER	3	6								57	12	VT	DENT	R			57	12	8	8	32	64	13-ER-3-6-57-12-4	PP	
13	13-ER-3-7-30-9	ER	3	7	1	20-40	9	LFET	BC	0.15		30	9	PAUT	BC	R	0.139		40	29	81	57	276	4617	13-ER-3-7-40-29-1	PP	
13	13-ER-3-7-42-42	ER	3	7	2	0-84	42	LFET	BC	0.151		42	42	PAUT	BC	R	0.139		40	29	81	57	276	4617	13-ER-3-7-40-29-1	PP	
13	13-ER-3-7-196-9	ER	3	7	3	196	9	VT	TC		0.094	196	9	VT	TC	R			152	33	102	52	308	5304	13-ER-3-7-152-33-2	PP	
13	13-ER-3-7-168-47	ER	3	7	4	168	47	LFET	BC	0.134		168	47	PAUT	BC	R	0.088		152	33	102	52	308	5304	13-ER-3-7-152-33-2	PP	
13	13-ER-3-8-28-24	ER	3	8	1	28	24	VT	TC/GOUGE		0.094	28	24	VT	DENT	R			28	24	8	8	32	64	13-ER-3-8-28-24-1	PP	
13	13-ER-3-8-135-9	ER	3	8	2	135	9	VT	DENT			135	9	VT	DENT	R			135	9	12	12	48	144	13-ER-3-8-135-9-2	TSPP	
13	13-ER-3-8-188-59	ER	3	8	4	188	59	VT	POR			188	59	VT	POR	R			188	59	4	0	4		13-ER-3-8-188-59-3	WR	
13	13-ER-3-8-211-0	ER	3	8								211	0	VT	LOF	R			211	0	5	0	5		13-ER-3-8-211-0-4	WR	
13	13-ER-3-8-126-60	ER	3	8								126	60	VT	POR	R			126	60	4	0	4		13-ER-3-8-126-60-5	WR	
13	13-ER-3-8-110-60	ER	3	8								110	60	VT	POR	R			110	60	4	0	4		13-ER-3-8-110-60-6	WR	
13	13-ER-3-8-36-60	ER	3	8								36	60	VT	LOF	R			36	60	14	0	14		13-ER-3-8-36-60-7	WR	
13	13-ER-3-9-108-49	ER	3	9	1	108	49	VT	TC		0.094	108	49	VT	DENT	R			108	49	6	0	18.84956	28.27433	13-ER-3-9-108-49-1	PP	
13	13-ER-3-9-204-41	ER	3	9	2	204	41	LFET	BC	0.13		204	41	PAUT	BC	R	0.150		180	44	54	29	166	1566	13-ER-3-9-180-44-2	PP	
13	13-ER-3-9-101-47	ER	3	9	4	101	47	VT	DENT			101	47	VT	DENT	R			180	44	54	29	166	1566	13-ER-3-9-180-44-2	PP	
13	13-ER-3-9-204-41	ER	3	9								204	41	PAUT	BC	R	0.123		227	35	25	51	152	1275	13-ER-3-9-227-35-3	PP	
13	13-ER-3-9-62-45	ER	3	9								62	45	VT	DENT	R			62	45	6	0	18.84956	28.27433	13-ER-3-9-62-45-4	PP	
13	13-ER-3-10-36-30	ER	3	10	1	36	30	LFET	BC	0.134		36	30	PAUT	BC	R	< 0.160		120	30	240	60	600	14400	13-ER-3-10-120-30-1	PP	
13	13-ER-3-10-110-30	ER	3	10	2	110	30	LFET	BC	0.1		110	30	PAUT	BC	R	< 0.160		120	30	240	60	600	14400	13-ER-3-10-120-30-1	PP	
13	13-ER-3-10-120-25	ER	3	10	3	120	25	VT	DENT			120	25	VT	DENT	R			120	30	240	60	600	14400	13-ER-3-10-120-30-1	PP	
13	13-ER-3-10-100-59	ER	3	10	4	90-110	59	BFET	WI			100	59	VT	WI	R			120	30	240	60	600	14400	13-ER-3-10-120-30-1	PP	
13	13-ER-3-10-212-35	ER	3	10	5	212	35	LFET	BC	0.1		212	35	PAUT	BC	R	< 0.160		120	30	240	60	600	14400	13-ER-3-10-120-30-1	PP	
13	13-ER-3-10-188-59	ER	3	10	6	188	59	BFET	WI			188	59	VT	WI	R			120	30	240	60	600	14400	13-ER-3-10-120-30-1	PP	
13	13-ER-3-10-198-59	ER	3	10	7	198	59	BFET	WI			198	59	VT	WI	R			120	30	240	60	600	14400	13-ER-3-10-120-30-1	PP	
13	13-ER-3-10-232-59	ER	3	10	8	232	59	BFET	WI			232	59	VT	WI	R			120	30	240	60	600	14400	13-ER-3-10-120-30-1	PP	
13	13-ER-3-10-192-4	ER	3	10	9	192	4	LFET	BC	0.16		192	4	PAUT	BC	R	< 0.160		120	30	240	60	600	14400	13-ER-3-10-120-30-1	PP	
13	13-ER-3-11-17-50	ER	3	11	1	17	50	LFET	BC	0.178		17	50	PAUT	BC	R	0.157		17	54	12	22	68	264	13-ER-3-11-17-54-1	TSPP	
13	13-ER-3-11-41-59	ER	3	11	2	41	59	BFET	WI			41	59	VT	WI	R			74	60	78	0	78		13-ER-3-11-74-60-2	WR	
13	13-ER-3-11-78-59	ER	3	11	3	47-110	59	BFET	WI			78	59	VT	WI	R			74	60	78	0	78		13-ER-3-11-74-60-2	WR	
13	13-ER-3-11-75-50	ER	3	11	4	75	50	LFET	BC	0.179		75	50	PAUT	BC	R	0.153		80	54	17	11	56	187	13-ER-3-11-80-54-3	TSPP	
13	13-ER-3-11-120-45	ER	3	11	5	120	45	LFET	BC	0.145		120	45	PAUT	BC	R	0.130										

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-ER-3-12-22-38	ER	3	12	1	22	38	LFET	BC	0.1		22	38	PAUT	BC	R	0.125		22	34	35	46	162	1610	13-ER-3-12-22-34-1	TSPP	
13	13-ER-3-12-51-59	ER	3	12	2	51	59	BFET	WI			51	59	VT	WI	R			51	59	9	0	9		13-ER-3-12-51-59-2	WR	
13	13-ER-3-12-48-17	ER	3	12	3	48	17	VT	TC		0.094	48	17	VT	TC	R			48	17	2	0	2		13-ER-3-12-48-17-3	WR	
13	13-ER-3-12-46-7	ER	3	12	4	46	7	VT	TC		0.094	46	7	VT	TC	R			46	7	2	0	2		13-ER-3-12-46-7-4	WR	
13	13-ER-3-12-132-59	ER	3	12	5	132	59	BFET	WI			132	59	VT	WI	R			132	59	12	0	12		13-ER-3-12-132-59-5	WR	
13	13-ER-3-12-168-38	ER	3	12	6	168	38	LFET	BC	?		168	38	PAUT	BC	R	0.080		168	38	54	45	198	2430	13-ER-3-12-168-38-6	TSPP	
13	13-ER-3-12-168-26	ER	3	12	7	168	26	VT	DENT			168	26	VT	DENT	R			168	26	54	45	198	2430	13-ER-3-12-168-26-6	TSPP	
13	13-ER-3-12-221-60	ER	3	12								221	60	VT	RI	R			221	60	4	0	4		13-ER-3-12-221-60-7	WR	
13	13-ER-3-13-8-59	ER	3	13	1	0-16	59	BFET	WI			8	59	VT	WI	R			8	59	18	0	18		13-ER-3-13-8-59-1	WR	
13	13-ER-3-13-26-57	ER	3	13	2	26	57	VT	DENT			26	57	VT	DENT	R			26	57	12	8	40	96	13-ER-3-13-26-57-2	PP	
13	13-ER-3-13-108-59	ER	3	13	3	96-120	59	BFET	WI			108	59	VT	WI	R			108	59	23	0	23		13-ER-3-13-108-59-3	WR	
13	13-ER-3-14-0-33	ER	3	14	1	0	33	BFET	WI			0	33	VT	WI	R			0	33	0	7	7		13-ER-3-14-0-33-1	WR	
13	13-ER-3-14-72-40	ER	3	14	2	0-144	40	LFET	BC	0.147		72	40	PAUT	BC	R	0.116		76	38	130	43	346	5590	13-ER-3-14-76-38-2	TSPP	
13	13-ER-3-14-32-42	ER	3	14	3	32	42	VT	TC		0.094	32	42	VT	TC	R			76	38	130	43	346	5590	13-ER-3-14-76-38-2	TSPP	
13	13-ER-3-14-20-22	ER	3	14	4	20	22	VT	TC		0.125	20	22	VT	TC	R			76	38	130	43	346	5590	13-ER-3-14-76-38-2	TSPP	
13	13-ER-3-14-192-48	ER	3	14	5	144-240	48	LFET	BC	0.12		192	48	PAUT	BC	R	0.132		228	47	24	24	96	576	13-ER-3-14-228-47-3	PP	
13	13-ER-3-14-192-48	ER	3	14								192	48	PAUT	BC	R	0.125		206	52	12	12	48	144	13-ER-3-14-206-52-4	TSPP	
13	13-ER-3-14-192-48	ER	3	14								192	48	PAUT	BC	R	0.144		154	46	16	24	80	384	13-ER-3-14-154-46-5	TSPP	
13	13-ER-3-15-6-53	ER	3	15	1	6	53	LFET	BC	0.177		6	53	PAUT	BC	R	0.151		6	53	6	6	24	36	13-ER-3-15-6-53-1	TSPP	
13	13-ER-3-15-55-28	ER	3	15	2	55	28	VT	DENT			55	28	VT	DENT	R			78	29	64	58	244	3712	13-ER-3-15-78-29-2	PP	
13	13-ER-3-15-76-30	ER	3	15	3	76	0-60	LFET	BC	0.12		76	30	PAUT	BC	R	0.106		78	29	64	58	244	3712	13-ER-3-15-78-29-2	PP	
13	13-ER-3-15-154-40	ER	3	15	4	154	40	LFET	BC	0.16		154	40	PAUT	BC	R	0.151		144	30	12	12	48	144	13-ER-3-15-144-30-3	PP	
13	13-ER-3-15-154-40	ER	3	15								154	40	PAUT	BC	R	0.132		166	29	12	12	48	144	13-ER-3-15-166-29-4	PP	
13	13-ER-3-16-10-27	ER	3	16	1	10	27	LFET	BC	0.164		10	27	PAUT	BC	R	0.159		9	22	18	20	76	360	13-ER-3-16-9-22-1	TSPP	
13	13-ER-3-16-6-20	ER	3	16	2	6	20	VT	DENT			6	20	VT	DENT	R			9	22	18	20	76	360	13-ER-3-16-9-22-1	TSPP	
13	13-ER-3-16-57-27	ER	3	16	3	57	27	LFET	BC	0.17		57	27	PAUT	BC	R	0.160		55	25	16	12	56	192	13-ER-3-16-55-25-2	PP	
13	13-ER-3-16-144-45	ER	3	16	4	144	45	LFET	BC	0.18		144	45	PAUT	BC	R	0.148		144	45	10	10	40	100	13-ER-3-16-144-45-3	PP	
13	13-ER-3-16-175-11	ER	3	16	6	175	11	VT	DENT			175	11	VT	DENT	R			175	11	6	0	18.84956	28.27433	13-ER-3-16-175-11-4	PP	
13	13-ER-3-16-206-4	ER	3	16	8	206	4	LFET	BC	0.153		206	4	PAUT	BC	R	0.134		209	4	14	8	44	112	13-ER-3-16-209-4-5	TSPP	
13	13-ER-3-16-198-59	ER	3	16	9	198	59	BFET	WI			198	59	VT	WI	R			198	59	10	0	10		13-ER-3-16-198-59-6	WR	
13	13-ER-3-16-25-59	ER	3	16								25	59	VT	LOF	R			25	59	4	0	4		13-ER-3-16-25-59-7	WR	
13	13-ER-2-1-123-60	ER	2	1								123	60	VT	RI	R			123	60	4	0	4		13-ER-2-1-123-60-1	WR	
13	13-ER-2-2-66-61	ER	2	2								66	61	VT	LOF	R			66	61	32	0	32		13-ER-2-2-66-61-1	WR	
13	13-ER-2-2-112-61	ER	2	2								112	61	VT	LOF	R			112	61	5	0	5		13-ER-2-2-112-61-2	WR	
13	13-ER-2-2-182-61	ER	2	2								182	61	VT	LOF	R			182	61	5	0	5		13-ER-2-2-182-61-3	WR	
13	13-ER-2-2-50-5	ER	2	2								50	5	VT	RI	R			50	5	5	0	5		13-ER-2-2-50-5-4	WR	
13	13-ER-2-2-48-1	ER	2	2								48	1	VT	RI	R			48	1	3	3	6		13-ER-2-2-48-1-5	WR	
13	13-ER-2-2-0-60	ER	2	2								0	60	VT	RI	R			0	60	3	3	6		13-ER-2-2-0-60-6	WR	
13	13-ER-2-3-72-57	ER	2	3	2	72	57	VT	POR			72	57	VT	POR	R			72	57	6	0	6		13-ER-2-3-72-57-1	WR	
13	13-ER-2-3-86-45	ER	2	3	4	86	45	VT	POR			86	45	VT	POR	R			86	45	6	0	6		13-ER-2-3-86-45-2	WR	
13	13-ER-2-3-145-1	ER	2	3	6	145	1	BFET	WI			145	1	VT	WI	R			145	1	10	0	10		13-ER-2-3-145-1-3	WR	
13	13-ER-2-3-186-57	ER	2	3	8	186	57	VT	UC			186	57	VT	UC	R			186	57	4	0	4		13-ER-2-3-186-57-4	WR	
13	13-ER-2-3-3-61	ER	2	3								3	61	VT	LOF	R			3	61	5	0	5		13-ER-2-3-3-61-5	WR	
13	13-ER-2-3-25-61	ER	2	3								25	61	VT	LOF	R			25	61	12	0	12		13-ER-2-3-25-61-6	WR	
13	13-ER-2-3-0-50	ER	2	3								0	50	VT	POR	R			0	50	0	4	4		13-ER-2-3-0-50-7	WR	
13	13-ER-2-3-0-53	ER	2	3								0	53	VT	RI	R			0	53	0	5	5		13-ER-2-3-0-53-8	WR	
13	13-ER-2-3-49-61	ER	2	3								49	61	VT	LOF	R			49	61	5	0	5		13-ER-2-3-49-61-9	WR	
13	13-ER-2-4-1-55	ER	2	4	2	1	55	VT	POR			1	55	VT	POR	R			1	55	3	3	6		13-ER-2-4-1-55-1	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-ER-2-4-68-34	ER	2	4	4	68	34	VT	POR			68	34	VT	LOF	R			68	34	6	0	6		13-ER-2-4-68-34-2	WR	
13	13-ER-2-4-125-38	ER	2	4	6	125	38	VT	POR			125	38	VT	LOF	R			125	38	4	0	4		13-ER-2-4-125-38-3	WR	
13	13-ER-2-4-120-55	ER	2	4	7	120	55	BFET	WI			120	55	VT	WI	R			120	55	16	0	16		13-ER-2-4-120-55-4	WR	
13	13-ER-2-4-144-55	ER	2	4	8	144	55	BFET	WI			144	55	VT	WI	R			144	55	8	0	8		13-ER-2-4-144-55-5	WR	
13	13-ER-2-4-238-37	ER	2	4	11	238	37	VT	TC		0.094	238	37	VT	TC	R			238	37	7	0	7		13-ER-2-4-238-37-6	WR	
13	13-ER-2-5-72-44	ER	2	5	4	72	44	VT	DENT			72	44	VT	DENT	R			72	44	10	10	40	100	13-ER-2-5-72-44-1	PP	
13	13-ER-2-5-24-12	ER	2	5	6	24	12	VT	TC		0.094	24	12	VT	TC	R			24	12	6	0	18.84956	28.27433	13-ER-2-5-24-12-2	PP	
13	13-ER-2-5-183-49	ER	2	5	8	183	49	VT	TC/GOUGE		0.13	183	49	VT	GOUGE	R			178	55	12	10	44	120	13-ER-2-5-178-55-3	PP	
13	13-ER-2-6-1-53	ER	2	6	1	1	53	VT	POR			1	53	VT	POR	R			1	53	0	4	4		13-ER-2-6-1-53-1	WR	
13	13-ER-2-6-1-27	ER	2	6	2	1	27	VT	POR			1	27	VT	POR	R			1	27	0	6	6		13-ER-2-6-1-27-2	WR	
13	13-ER-2-6-114-56	ER	2	6	6	108-120	56	BFET	WI			114	56	VT	WI	R			114	56	14	0	14		13-ER-2-6-114-56-3	WR	
13	13-ER-2-6-126-32	ER	2	6	7	126	32	VT	DENT			126	32	VT	DENT	R			126	32	6	0	18.84956	28.27433	13-ER-2-6-126-32-4	PP	
13	13-ER-2-6-239-49	ER	2	6	15	239	49	VT	TC		0.094	239	49	VT	TC	R			239	49	0	2	2		13-ER-2-6-239-49-5	WR	
13	13-ER-2-7-96-41	ER	2	7	1	96	41	LFET	BC	0.16		96	41	PAUT	BC	R	0.145		10	53	20	16	72	320	13-ER-2-7-10-53-1	TSPP	
13	13-ER-2-7-48-54	ER	2	7	4	48	54	VT	TC		0.094	48	54	VT	TC	R			48	54	0	2	2		13-ER-2-7-48-54-2	WR	
13	13-ER-2-7-84-2	ER	2	7	6	48-120	2	LFET	BC	0.12		84	2	PAUT	BC	R	0.128		87	6	74	12	172	888	13-ER-2-7-87-6-3	TSPP	
13	13-ER-2-7-196-35	ER	2	7	12	196	35	VT	TC		0.094	196	35	VT	TC	R			196	35	6	0	18.84956	28.27433	13-ER-2-7-196-35-4	PP	
13	13-ER-2-7-240-40	ER	2	7	15	240	40	VT	POR			240	40	VT	POR	R			240	40	0	6	6		13-ER-2-7-240-40-5	WR	
13	13-ER-2-7-96-41	ER	2	7								96	41	PAUT	BC	R	< 0.160		89	44	57	33	180	1881	13-ER-2-7-89-44-6	PP	
13	13-ER-2-8-1-54	ER	2	8	1	1	54	VT	TC		>0.094	1	54	VT	TC	R			1	54	0	2	2		13-ER-2-8-1-54-1	WR	
13	13-ER-2-8-12-48	ER	2	8	2	12	48	VT	TC		>0.094	12	48	VT	TC	R			12	48	8	8	32	64	13-ER-2-8-12-48-2	PP	
13	13-ER-2-8-50-56	ER	2	8	8	50	56	BFET	WI			50	56	VT	WI	R			50	56	0	4	4		13-ER-2-8-50-56-3	WR	
13	13-ER-2-8-115-51	ER	2	8	9	115	51	VT	TC		>0.094	115	51	VT	TC	R			115	51	8	8	32	64	13-ER-2-8-115-51-4	TSPP	
13	13-ER-2-8-146-41	ER	2	8	12	146	41	VT	DENT			146	41	VT	DENT	R			146	41	6	0	18.84956	28.27433	13-ER-2-8-146-41-5	PP	
13	13-ER-2-8-161-46	ER	2	8	15	161	46	VT	DENT			161	46	VT	DENT	R			161	46	6	0	18.84956	28.27433	13-ER-2-8-161-46-6	PP	
13	13-ER-2-8-163-56	ER	2	8	16	163	56	VT	POR			163	56	VT	POR	R			163	56	4	0	4		13-ER-2-8-163-56-7	WR	
13	13-ER-2-8-177-44	ER	2	8	17	177	44	VT	TC		0.13	177	44	VT	TC	R			177	44	8	8	32	64	13-ER-2-8-177-44-8	PP	
13	13-ER-2-8-71-61	ER	2	8								71	61	VT	LOF	R			71	61	5	0	5		13-ER-2-8-71-61-9	WR	
13	13-ER-2-8-65-29	ER	2	8								65	29	VT	GOUGE	R			65	29	14	6	40	84	13-ER-2-8-65-29-10	PP	
13	13-ER-2-8-26-14	ER	2	8								26	14	VT	GOUGE	R			26	14	22	28	100	616	13-ER-2-8-26-14-11	TSPP	
13	13-ER-2-9-85-60	ER	2	9	5	?	?	BFET	WI			85	60	VT	WI	R			85	60	20	0	20		13-ER-2-9-85-60-1	WR	
13	13-ER-2-9-210-56	ER	2	9	14	210	56	VT	POR			210	56	VT	POR	R			208	60	6	0	6		13-ER-2-9-208-60-2	WR	
13	13-ER-2-9-214-9	ER	2	9	15	214	9	VT	DENT			214	9	VT	DENT	R			212	14	8	8	32	64	13-ER-2-9-212-14-3	PP	
13	13-ER-2-10-12-30	ER	2	10	1	12	30	LFET	BC	0.152		12	30	PAUT	BC	R	0.080		102	33	204	56	520	11424	13-ER-2-10-102-33-1	PP	
13	13-ER-2-10-72-30	ER	2	10	2	72	30	LFET	BC	0.14		72	30	PAUT	BC	R	0.080		102	33	204	56	520	11424	13-ER-2-10-102-33-1	PP	
13	13-ER-2-10-90-12	ER	2	10	3	90	12	VT	DENT			90	12	VT	DENT	R			102	33	204	56	520	11424	13-ER-2-10-102-33-1	PP	
13	13-ER-2-10-154-40	ER	2	10	4	154	40	LFET	BC	0.147		154	40	PAUT	BC	R	0.080		102	33	204	56	520	11424	13-ER-2-10-102-33-1	PP	
13	13-ER-2-10-144-43	ER	2	10	5	144	43	VT	DENT			144	43	VT	DENT	R			102	33	204	56	520	11424	13-ER-2-10-102-33-1	PP	
13	13-ER-2-10-190-8	ER	2	10								190	8	VT	RI	R			190	8	4	4	8		13-ER-2-10-190-8-2	WR	
13	13-ER-2-11-45-28	ER	2	11	1	45	28	LFET	BC	0.137		45	28	PAUT	BC	R	0.120		43	28	85	56	282	4760	13-ER-2-11-43-28-1	PP	
13	13-ER-2-11-55-0	ER	2	11	2	55	0	LFET	BC	0		55	0	PAUT	BC	R	0.000		56	5	6	0	18.84956	28.27433	13-ER-2-11-56-5-2	PP	
13	13-ER-2-11-71-44	ER	2	11	3	71	44	VT	DENT			71	44	VT	DENT	R			43	28	85	56	282	4760	13-ER-2-11-43-28-1	PP	
13	13-ER-2-11-76-6	ER	2	11	4	76	6	LFET	BC	0.181		76	6	PAUT	BC	R	0.120		43	28	85	56	282	4760	13-ER-2-11-43-28-1	PP	
13	13-ER-2-11-120-13	ER	2	11	5	120	13	LFET	BC	0.151		120	13	PAUT	BC	R	0.159		114	8	18	16	68	288	13-ER-2-11-114-8-3	TSPP	
13	13-ER-2-11-220-53	ER	2	11	7	220	53	VT	TC		0.094	220	53	VT	TC	R			220	53	2	0	2		13-ER-2-11-220-53-4	WR	
13	13-ER-2-11-161-45	ER	2	11	8	161	45	BFET	WI			161	45	VT	WI	R			161	45	8	0	8		13-ER-2-11-161-45-5	WR	
13	13-ER-2-11-240-0	ER	2	11								240	0	VT	RI	R			240	0	4	4	8		13-ER-2-11-240-0-6	WR	
13	13-ER-2-12-149																										

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-ER-2-12-195-56	ER	2	12	3	195	56	BFET	WI			195	56	VT	WI	R			136	28	79	56	270	4424	13-ER-2-12-136-28-1	PP	
13	13-ER-2-12-225-10	ER	2	12	5	225	10	VT	TC		0.094	225	10	VT	TC	R			225	10	10	8	36	80	13-ER-2-12-225-10-2	PP	
13	13-ER-2-12-134-30	ER	2	12	6	134	30	LFET	BC	0.115		134	30	PAUT	BC	R	0.104		136	28	79	56	270	4424	13-ER-2-12-136-28-1	PP	
13	13-ER-2-12-130-29	ER	2	12	7	130	29	VT	DENT			130	29	VT	DENT	R			136	28	79	56	270	4424	13-ER-2-12-136-28-1	PP	
13	13-ER-2-12-128-21	ER	2	12	8	128	21	VT	DENT			128	21	VT	DENT	R			136	28	79	56	270	4424	13-ER-2-12-136-28-1	PP	
13	13-ER-2-12-94-8	ER	2	12								94	8	VT	RI	R			94	8	0	4	4		13-ER-2-12-94-8-3	WR	
13	13-ER-2-13-164-48	ER	2	13	2	164	48	LFET	BC	0.155		164	48	PAUT	BC	R	0.147		166	49	22	14	72	308	13-ER-2-13-166-49-1	PP	
13	13-ER-2-13-120-56	ER	2	13	3	120	56	BFET	WI			120	56	VT	WI	R			120	56	9	0	9		13-ER-2-13-120-56-2	WR	
13	13-ER-2-13-216-51	ER	2	13	4	216	51	LFET	BC	0.179		216	51	PAUT	BC	R	0.148		213	51	8	8	32	64	13-ER-2-13-213-51-3	PP	
13	13-ER-2-13-236-7	ER	2	13	5	236	7	VT	DENT			236	7	VT	DENT	R			236	7	10	14	48	140	13-ER-2-13-236-7-4	TSPP	
13	13-ER-2-14-6-51	ER	2	14	1	6	51	LFET	BC	0.17		6	51	PAUT	BC	R	0.152		5	49	10	13	46	130	13-ER-2-14-5-49-1	TSPP	
13	13-ER-2-14-33-56	ER	2	14	2	33	56	BFET	WI			33	56	VT	WI	R			33	56	12	0	12		13-ER-2-14-33-56-2	WR	
13	13-ER-2-14-32-0	ER	2	14	3	32	0	BFET	WI			32	0	VT	WI	R			32	0	9	0	9		13-ER-2-14-32-0-3	WR	
13	13-ER-2-14-94-56	ER	2	14	5	94	56	BFET	WI			94	56	VT	WI	R			99	56	18	0	18		13-ER-2-14-99-56-4	WR	
13	13-ER-2-14-104-56	ER	2	14	6	104	56	BFET	WI			104	56	VT	WI	R			99	56	18	0	18		13-ER-2-14-99-56-4	WR	
13	13-ER-2-14-183-50	ER	2	14	7	183	50	LFET	BC	0.1		183	50	PAUT	BC	R	0.063		200	38	80	40	240	3200	13-ER-2-14-200-38-5	PP	
13	13-ER-2-14-208-55	ER	2	14	8	208	55	LFET	BC	0		208	55	PAUT	BC	R	0.063		200	38	80	40	240	3200	13-ER-2-14-200-38-5	PP	
13	13-ER-2-14-219-43	ER	2	14	9	219	43	LFET	BC	0.137		219	43	PAUT	BC	R	0.063		200	38	80	40	240	3200	13-ER-2-14-200-38-5	PP	
13	13-ER-2-15-0-56	ER	2	15	1	0	56	BFET	WI			0	56	VT	WI	R			0	56	5	3	8		13-ER-2-15-0-56-1	WR	
13	13-ER-2-15-32-56	ER	2	15	3	32	56	BFET	WI			32	56	VT	WI	R			32	56	6	0	6		13-ER-2-15-32-56-2	WR	
13	13-ER-2-15-43-56	ER	2	15	4	43	56	BFET	WI			43	56	VT	WI	R			46	56	13	0	13		13-ER-2-15-46-56-3	WR	
13	13-ER-2-15-50-56	ER	2	15	5	50	56	BFET	WI			50	56	VT	WI	R			46	56	13	0	13		13-ER-2-15-46-56-3	WR	
13	13-ER-2-15-60-35	ER	2	15	6	60	35	LFET	BC	0.167		60	35	PAUT	BC	R	0.157		99	37	6	0	18.84956	28.27433	13-ER-2-15-99-37-4	PP	
13	13-ER-2-15-132-56	ER	2	15	8	132	56	BFET	WI			132	56	VT	WI	R			132	56	10	0	10		13-ER-2-15-132-56-5	WR	
13	13-ER-2-15-14-14	ER	2	15	9	14	14	LFET	BC	0.145		14	14	PAUT	BC	R	< 0.160		22	16	44	32	152	1408	13-ER-2-15-22-16-6	PP	
13	13-ER-2-15-240-5	ER	2	15								240	5	VT	RI	R			240	5	4	4	8		13-ER-2-15-240-5-7	WR	
13	13-ER-2-16-24-29	ER	2	16	1	24	29	LFET	BC	0.16		24	29	PAUT	BC	R	0.158		24	29	8	8	32	64	13-ER-2-16-24-29-1	TSPP	
13	13-ER-2-16-24-29	ER	2	16								24	29	PAUT	BC	R	0.141		19	14	30	27	114	810	13-ER-2-16-19-14-2	TSPP	
13	13-ER-2-16-215-60	ER	2	16								215	60	VT	LOF	R			215	60	4	0	4		13-ER-2-16-215-60-3	WR	
13	13-ER-2-16-224-60	ER	2	16								224	60	VT	LOF	R			224	60	4	0	4		13-ER-2-16-224-60-4	WR	
13	13-ER-1-1-168-12	ER	1	1	1	168	9	VT	TC		0.094	168	12	VT	TC	R			168	12	4	0	4		13-ER-1-1-168-12-1	WR	
13	13-ER-1-1-206-13	ER	1	1	3	206	13	VT	POR			206	13	VT	POR	R			201	16	18	0	18		13-ER-1-1-201-16-2	WR	
13	13-ER-1-1-46-1	ER	1	1	6	46	1	VT	POR			46	1	VT	POR	R			46	1	5	0	5		13-ER-1-1-46-1-3	WR	
13	13-ER-1-1-126-0	ER	1	1								126	0	VT	POR	R			126	0	8	0	8		13-ER-1-1-126-0-4	WR	
13	13-ER-1-1-174-0	ER	1	1								174	0	VT	POR	R			174	0	8	0	8		13-ER-1-1-174-0-5	WR	
13	13-ER-1-1-138-13	ER	1	1								138	13	VT	LOF	R			138	13	5	0	5		13-ER-1-1-138-13-6	WR	
13	13-ER-1-1-143-16	ER	1	1								143	16	VT	RI	R			143	16	4	0	4		13-ER-1-1-143-16-7	WR	
13	13-ER-1-1-178-16	ER	1	1								178	16	VT	POR	R			178	16	4	0	4		13-ER-1-1-178-16-8	WR	
13	13-ER-1-1-214-16	ER	1	1								214	16	VT	RI	R			214	16	8	0	8		13-ER-1-1-214-16-9	WR	
13	13-ER-1-1-155-16	ER	1	1								155	16	VT	RI	R			155	16	8	0	8		13-ER-1-1-155-16-10	WR	
13	13-ER-1-1-184-16	ER	1	1								184	16	VT	RI	R			184	16	8	0	8		13-ER-1-1-184-16-11	WR	
13	13-ER-1-1-228-16	ER	1	1								228	16	VT	RI	R			228	16	5	0	5		13-ER-1-1-228-16-12	WR	
13	13-ER-1-1-232-16	ER	1	1								232	16	VT	RI	R			232	16	4	0	4		13-ER-1-1-232-16-13	WR	
13	13-ER-1-1-168-0	ER	1	1								168	0	VT	POR	R			168	0	11	0	11		13-ER-1-1-168-0-14	WR	
13	13-ER-1-1-187-0	ER	1	1								187	0	VT	POR	R			187	0	9	0	9		13-ER-1-1-187-0-15	WR	
13	13-ER-1-1-5-12	ER	1	1								5	12	VT	LOF	R			5	12	6	0	6		13-ER-1-1-5-12-16	WR	
13	13-ER-1-1-59-0	ER	1	1								59	0	VT	RI	R			59	0	2	0	2		13-ER-1-1-59-0-17	WR	
13	13-ER-1-1-0-16	ER	1	1								0	16	VT	LOF	R			0	16	6	0	6		13-ER-1-1-0-16-18	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-ER-1-1-200-0	ER	1	1								200	0	VT	RI	R			200	0	4	0	4		13-ER-1-1-200-0-19	WR	
13	13-ER-1-2-164-9	ER	1	2	5	160-168	6-11	VT	TC X2		0.094	164	9	VT	TC	R			164	9	8	8	32	64	13-ER-1-2-164-9-1	PP	
13	13-ER-1-2-1-16	ER	1	2								1	16	VT	POR	R			1	16	2	0	2		13-ER-1-2-1-16-2	WR	
13	13-ER-1-2-35-16	ER	1	2								35	16	VT	LOF	R			35	16	6	0	6		13-ER-1-2-35-16-3	WR	
13	13-ER-1-2-66-16	ER	1	2								66	16	VT	CL	R			66	16	6	0	6		13-ER-1-2-66-16-4	WR	
13	13-ER-1-2-78-0	ER	1	2								78	0	VT	RI	R			78	0	8	0	8		13-ER-1-2-78-0-5	WR	
13	13-ER-1-2-124-0	ER	1	2								124	0	VT	RI	R			124	0	8	0	8		13-ER-1-2-124-0-6	WR	
13	13-ER-1-2-132-0	ER	1	2								132	0	VT	LOF	R			132	0	10	0	10		13-ER-1-2-132-0-7	WR	
13	13-ER-1-2-174-0	ER	1	2								174	0	VT	RI	R			174	0	4	0	4		13-ER-1-2-174-0-8	WR	
13	13-ER-1-2-198-0	ER	1	2								198	0	VT	RI	R			198	0	4	0	4		13-ER-1-2-198-0-9	WR	
13	13-ER-1-2-218-0	ER	1	2								218	0	VT	RI	R			218	0	4	0	4		13-ER-1-2-218-0-10	WR	
13	13-ER-1-2-228-0	ER	1	2								228	0	VT	RI	R			228	0	4	0	4		13-ER-1-2-228-0-11	WR	
13	13-ER-1-2-222-16	ER	1	2								222	16	VT	RI	R			222	16	2	0	2		13-ER-1-2-222-16-12	WR	
13	13-ER-1-2-226-16	ER	1	2								226	16	VT	RI	R			226	16	2	0	2		13-ER-1-2-226-16-13	WR	
13	13-ER-1-3-6-0	ER	1	3								6	0	VT	RI	R			6	0	8	0	8		13-ER-1-3-6-0-1	WR	
13	13-ER-1-3-30-16	ER	1	3								30	16	VT	RI	R			30	16	8	0	8		13-ER-1-3-30-16-2	WR	
13	13-ER-1-3-35-0	ER	1	3								35	0	VT	RI	R			35	0	5	0	5		13-ER-1-3-35-0-3	WR	
13	13-ER-1-3-60-0	ER	1	3								60	0	VT	LOF	R			60	0	4	0	4		13-ER-1-3-60-0-4	WR	
13	13-ER-1-3-70-0	ER	1	3								70	0	VT	UC	R			70	0	6	0	6		13-ER-1-3-70-0-5	WR	
13	13-ER-1-3-80-0	ER	1	3								80	0	VT	RI	R			80	0	8	0	8		13-ER-1-3-80-0-6	WR	
13	13-ER-1-3-86-0	ER	1	3								86	0	VT	POR	R			86	0	10	0	10		13-ER-1-3-86-0-7	WR	
13	13-ER-1-3-124-0	ER	1	3								124	0	VT	RI	R			124	0	8	0	8		13-ER-1-3-124-0-8	WR	
13	13-ER-1-3-44-16	ER	1	3								44	16	VT	RI	R			44	16	4	0	4		13-ER-1-3-44-16-9	WR	
13	13-ER-1-3-149-16	ER	1	3								149	16	VT	RI	R			149	16	8	0	8		13-ER-1-3-149-16-10	WR	
13	13-ER-1-3-210-16	ER	1	3								210	16	VT	RI	R			210	16	8	0	8		13-ER-1-3-210-16-11	WR	
13	13-ER-1-3-172-0	ER	1	3								172	0	VT	RI	R			172	0	8	0	8		13-ER-1-3-172-0-12	WR	
13	13-ER-1-3-237-0	ER	1	3								237	0	VT	LOF	R			237	0	5	0	5		13-ER-1-3-237-0-13	WR	
13	13-ER-1-4-53-16	ER	1	4	3	50-60	13	VT	UC			53	16	VT	RI	R			53	16	15	0	15		13-ER-1-4-53-16-1	WR	
13	13-ER-1-4-30-0	ER	1	4								30	0	VT	RI	R			30	0	8	0	8		13-ER-1-4-30-0-2	WR	
13	13-ER-1-4-80-0	ER	1	4								80	0	VT	RI	R			80	0	8	0	8		13-ER-1-4-80-0-3	WR	
13	13-ER-1-4-98-0	ER	1	4								98	0	VT	RI	R			98	0	8	0	8		13-ER-1-4-98-0-4	WR	
13	13-ER-1-4-84-0	ER	1	4								84	0	VT	LOF	R			84	0	6	0	6		13-ER-1-4-84-0-5	WR	
13	13-ER-1-4-70-16	ER	1	4								70	16	VT	LOF	R			70	16	4	0	4		13-ER-1-4-70-16-6	WR	
13	13-ER-1-4-86-16	ER	1	4								86	16	VT	LOF	R			86	16	6	0	6		13-ER-1-4-86-16-7	WR	
13	13-ER-1-4-90-16	ER	1	4								90	16	VT	RI	R			90	16	8	0	8		13-ER-1-4-90-16-8	WR	
13	13-ER-1-4-198-0	ER	1	4								198	0	VT	RI	R			198	0	8	0	8		13-ER-1-4-198-0-9	WR	
13	13-ER-1-4-200-16	ER	1	4								200	16	VT	RI	R			200	16	8	0	8		13-ER-1-4-200-16-10	WR	
13	13-ER-1-5-0-0	ER	1	5								0	0	VT	POR	R			0	0	8	0	8		13-ER-1-5-0-0-1	WR	
13	13-ER-1-5-6-0	ER	1	5								6	0	VT	LOF	R			6	0	4	0	4		13-ER-1-5-6-0-2	WR	
13	13-ER-1-5-16-0	ER	1	5								16	0	VT	LOF	R			16	0	8	0	8		13-ER-1-5-16-0-3	WR	
13	13-ER-1-5-30-0	ER	1	5								30	0	VT	LOF	R			30	0	4	0	4		13-ER-1-5-30-0-4	WR	
13	13-ER-1-5-40-0	ER	1	5								40	0	VT	LOF	R			40	0	4	0	4		13-ER-1-5-40-0-5	WR	
13	13-ER-1-5-49-0	ER	1	5								49	0	VT	RI	R			49	0	6	0	6		13-ER-1-5-49-0-6	WR	
13	13-ER-1-5-88-0	ER	1	5								88	0	VT	POR	R			88	0	3	0	3		13-ER-1-5-88-0-7	WR	
13	13-ER-1-5-86-0	ER	1	5								86	0	VT	RI	R			86	0	6	0	6		13-ER-1-5-86-0-8	WR	
13	13-ER-1-5-41-0	ER	1	5								41	0	VT	LOF	R			41	0	8	0	8		13-ER-1-5-41-0-9	WR	
13	13-ER-1-5-18-16	ER	1	5								18	16	VT	LOF	R			18	16	8	0	8		13-ER-1-5-18-16-10	WR	
13	13-ER-1-5-49-16	ER	1	5								49	16	VT	LOF	R			49	16	8	0	8		13-ER-1-5-49-16-11	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs									Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)		
13	13-ER-1-5-152-12	ER	1	5								152	12	VT	LOF	R			152	12	6	0	6		13-ER-1-5-152-12-12	WR		
13	13-ER-1-5-172-0	ER	1	5								172	0	VT	LOF	R			172	0	8	0	8		13-ER-1-5-172-0-13	WR		
13	13-ER-1-5-95-16	ER	1	5								95	16	VT	POR	R			95	16	4	0	4		13-ER-1-5-95-16-14	WR		
13	13-ER-1-5-120-16	ER	1	5								120	16	VT	LOF	R			120	16	8	0	8		13-ER-1-5-120-16-15	WR		
13	13-ER-1-5-230-16	ER	1	5								230	16	VT	LOF	R			230	16	8	0	8		13-ER-1-5-230-16-16	WR		
13	13-ER-1-6-150-10	ER	1	6	5	151	8	LFET	BC	0.193		150	10	PAUT	BC	R	0.153		150	10	6	0	18.84956	28.27433	13-ER-1-6-150-10-1	PP		
13	13-ER-1-6-180-10	ER	1	6	6	158-201	4-13	LFET	BC	0.09		180	10	PAUT	BC	R	0.120		180	10	39	14	106	546	13-ER-1-6-180-10-2	PP		
13	13-ER-1-6-12-0	ER	1	6								12	0	VT	LOF	R			12	0	6	0	6		13-ER-1-6-12-0-3	WR		
13	13-ER-1-6-30-0	ER	1	6								30	0	VT	LOF	R			30	0	8	0	8		13-ER-1-6-30-0-4	WR		
13	13-ER-1-6-3-16	ER	1	6								3	16	VT	LOF	R			3	16	8	0	8		13-ER-1-6-3-16-5	WR		
13	13-ER-1-6-82-16	ER	1	6								82	16	VT	LOF	R			82	16	8	0	8		13-ER-1-6-82-16-6	WR		
13	13-ER-1-6-162-0	ER	1	6								162	0	VT	RI	R			162	0	4	0	4		13-ER-1-6-162-0-7	WR		
13	13-ER-1-6-171-16	ER	1	6								171	16	VT	LOF	R			171	16	4	0	4		13-ER-1-6-171-16-8	WR		
13	13-ER-1-6-112-16	ER	1	6								112	16	VT	LOF	R			112	16	8	0	8		13-ER-1-6-112-16-9	WR		
13	13-ER-1-6-190-0	ER	1	6								190	0	VT	RI	R			190	0	4	0	4		13-ER-1-6-190-0-10	WR		
13	13-ER-1-7-72-0	ER	1	7								72	0	VT	LOF	R			72	0	6	0	6		13-ER-1-7-72-0-1	WR		
13	13-ER-1-7-90-0	ER	1	7								90	0	VT	LOF	R			90	0	3	0	3		13-ER-1-7-90-0-2	WR		
13	13-ER-1-7-124-0	ER	1	7								124	0	VT	UC	R			124	0	8	0	8		13-ER-1-7-124-0-3	WR		
13	13-ER-1-7-128-0	ER	1	7								128	0	VT	RI	R			128	0	7	0	7		13-ER-1-7-128-0-4	WR		
13	13-ER-1-7-204-0	ER	1	7								204	0	VT	RI	R			204	0	34	0	34		13-ER-1-7-204-0-5	WR		
13	13-ER-1-8-202-9	ER	1	8	5	201-204	8-11	LFET	BC	0.18		202	9	PAUT	BC	R	0.150		206	11	6	0	18.84956	28.27433	13-ER-1-8-206-11-1	PP		
13	13-ER-1-8-208-9	ER	1	8	6	206-210	8-11	LFET	BC	0.171		208	9	PAUT	BC	R	0.150		206	11	6	0	18.84956	28.27433	13-ER-1-8-206-11-1	PP		
13	13-ER-1-8-0-0	ER	1	8								0	0	VT	RI	R			0	0	4	4	8		13-ER-1-8-0-0-2	WR		
13	13-ER-1-8-23-16	ER	1	8								23	16	VT	RI	R			23	16	8	0	8		13-ER-1-8-23-16-3	WR		
13	13-ER-1-8-53-16	ER	1	8								53	16	VT	RI	R			53	16	8	0	8		13-ER-1-8-53-16-4	WR		
13	13-ER-1-8-88-0	ER	1	8								88	0	VT	RI	R			88	0	30	0	30		13-ER-1-8-88-0-5	WR		
13	13-ER-1-8-123-0	ER	1	8								123	0	VT	RI	R			123	0	8	0	8		13-ER-1-8-123-0-6	WR		
13	13-ER-1-8-157-16	ER	1	8								157	16	VT	POR	R			157	16	8	0	8		13-ER-1-8-157-16-7	WR		
13	13-ER-1-8-226-16	ER	1	8								226	16	VT	RI	R			226	16	4	0	4		13-ER-1-8-226-16-8	WR		
13	13-ER-1-9-20-10	ER	1	9	1	0-30	0-13	LFET	BC	0.16		20	10	PAUT	BC	R	0.157		20	10	39	14	106	546	13-ER-1-9-20-10-1	PP		
13	13-ER-1-9-30-0	ER	1	9								30	0	VT	RI	R			30	0	8	0	8		13-ER-1-9-30-0-2	WR		
13	13-ER-1-9-23-16	ER	1	9								23	16	VT	LOF	R			23	16	8	0	8		13-ER-1-9-23-16-3	WR		
13	13-ER-1-9-88-0	ER	1	9								88	0	VT	LOF	R			88	0	3	0	3		13-ER-1-9-88-0-4	WR		
13	13-ER-1-9-53-16	ER	1	9								53	16	VT	POR	R			53	16	8	0	8		13-ER-1-9-53-16-5	WR		
13	13-ER-1-9-122-0	ER	1	9								122	0	VT	LOF	R			122	0	8	0	8		13-ER-1-9-122-0-6	WR		
13	13-ER-1-9-88-17	ER	1	9								88	17	VT	RI	R			88	17	5	0	5		13-ER-1-9-88-17-7	WR		
13	13-ER-1-9-168-0	ER	1	9								168	0	VT	LOF	R			168	0	8	0	8		13-ER-1-9-168-0-8	WR		
13	13-ER-1-9-170-0	ER	1	9								170	0	VT	LOF	R			170	0	8	0	8		13-ER-1-9-170-0-9	WR		
13	13-ER-1-9-170-0	ER	1	9								170	0	VT	LOF	R			170	0	8	0	8		13-ER-1-9-170-0-10	WR		
13	13-ER-1-9-196-0	ER	1	9								196	0	VT	POR	R			196	0	8	0	8		13-ER-1-9-196-0-11	WR		
13	13-ER-1-9-232-17	ER	1	9								232	17	VT	RI	R			232	17	4	0	4		13-ER-1-9-232-17-12	WR		
13	13-ER-1-9-235-17	ER	1	9								235	17	VT	RI	R			235	17	4	0	4		13-ER-1-9-235-17-13	WR		
13	13-ER-1-10-97-11	ER	1	10	7	97	10-11	LFET	BC	0.137		97	11	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP		
13	13-ER-1-10-100-11	ER	1	10	8	100	10-11	LFET	BC	0.16		100	11	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP		
13	13-ER-1-10-99-4	ER	1	10	9	99	4	LFET	BC	0.157		99	4	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP		
13	13-ER-1-10-104-3	ER	1	10	10	104	2-4	LFET	BC	0.116		104	3	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP		
13	13-ER-1-10-111-6	ER	1	10	11	111	6	LFET	BC	0.12		111	6	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP		
13	13-ER-1-10-115-2	ER	1	10	12	115	2	LFET	BC	0.157		115	2	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP		

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs							Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)
13	13-ER-1-10-117-6	ER	1	10	13	117	6	LFET	BC	0.14		117	6	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP
13	13-ER-1-10-120-11	ER	1	10	14	120	10-12	LFET	BC	0.16		120	11	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP
13	13-ER-1-10-121-5	ER	1	10	15	121	5	LFET	BC	0.16		121	5	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP
13	13-ER-1-10-125-9	ER	1	10	16	125	9	LFET	BC	0.174		125	9	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP
13	13-ER-1-10-129-1	ER	1	10	17	128-130	1-2	LFET	BC	0.170-.181		129	1	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP
13	13-ER-1-10-146-7	ER	1	10	18	146	1-13	LFET	BC	0.090-.125		146	7	PAUT	BC	R	0.123		121	9	58	14	144	812	13-ER-1-10-121-9-1	PP
13	13-ER-1-10-199-12	ER	1	10	19	199	11-13	LFET	BC	0.164		199	12	PAUT	BC	R	0.121		216	9	44	14	116	616	13-ER-1-10-216-9-2	PP
13	13-ER-1-10-211-5	ER	1	10	20	211	5	LFET	BC	0.17		211	5	PAUT	BC	R	0.121		216	9	44	14	116	616	13-ER-1-10-216-9-2	PP
13	13-ER-1-10-215-11	ER	1	10	21	215	11-12	LFET	BC	0.155		215	11	PAUT	BC	R	0.121		216	9	44	14	116	616	13-ER-1-10-216-9-2	PP
13	13-ER-1-10-233-6	ER	1	10	22	233	6	LFET	BC	0.155		233	6	PAUT	BC	R	0.121		216	9	44	14	116	616	13-ER-1-10-216-9-2	PP
13	13-ER-1-10-16-0	ER	1	10								16	0	VT	RI	R			16	0	4	0	4		13-ER-1-10-16-0-3	WR
13	13-ER-1-10-11-17	ER	1	10								11	17	VT	LOF	R			11	17	6	0	6		13-ER-1-10-11-17-4	WR
13	13-ER-1-10-53-17	ER	1	10								53	17	VT	LOF	R			53	17	8	0	8		13-ER-1-10-53-17-5	WR
13	13-ER-1-10-144-17	ER	1	10								144	17	VT	LOF	R			144	17	8	0	8		13-ER-1-10-144-17-6	WR
13	13-ER-1-10-157-17	ER	1	10								157	17	VT	RI	R			157	17	8	0	8		13-ER-1-10-157-17-7	WR
13	13-ER-1-10-150-0	ER	1	10								150	0	VT	LOF	R			150	0	4	0	4		13-ER-1-10-150-0-8	WR
13	13-ER-1-10-192-17	ER	1	10								192	17	VT	LOF	R			192	17	6	0	6		13-ER-1-10-192-17-9	WR
13	13-ER-1-10-240-0	ER	1	10								240	0	VT	LOF	R			240	0	6	0	6		13-ER-1-10-240-0-10	WR
13	13-ER-1-11-57-0	ER	1	11								57	0	VT	RI	R			57	0	11	0	11		13-ER-1-11-57-0-1	WR
13	13-ER-1-11-171-0	ER	1	11								171	0	VT	POR	R			171	0	8	0	8		13-ER-1-11-171-0-2	WR
13	13-ER-1-11-154-16	ER	1	11								154	16	VT	LOF	R			154	16	6	0	6		13-ER-1-11-154-16-3	WR
13	13-ER-1-12-79-0	ER	1	12								79	0	VT	POR	R			79	0	8	0	8		13-ER-1-12-79-0-1	WR
13	13-ER-1-12-87-0	ER	1	12								87	0	VT	RI	R			87	0	5	0	5		13-ER-1-12-87-0-2	WR
13	13-ER-1-12-92-17	ER	1	12								92	17	VT	RI	R			92	17	5	0	5		13-ER-1-12-92-17-3	WR
13	13-ER-1-13-66-12	ER	1	13	1	66	12	LFET	BC	0.189		66	12	PAUT	BC	R	0.159		67	9	6	0	18.84956	28.27433	13-ER-1-13-67-9-1	PP
13	13-ER-1-13-144-10	ER	1	13	2	144	10	LFET	BC	0.135		144	10	PAUT	BC	R	0.148		144	7	47	14	122	658	13-ER-1-13-144-7-2	PP
13	13-ER-1-13-67-0	ER	1	13								67	0	VT	RI	R			67	0	5	0	5		13-ER-1-13-67-0-3	WR
13	13-ER-1-13-67-0	ER	1	13								67	0	VT	RI	R			67	0	7	0	7		13-ER-1-13-67-0-4	WR
13	13-ER-1-13-79-0	ER	1	13								79	0	VT	POR	R			79	0	8	0	8		13-ER-1-13-79-0-5	WR
13	13-ER-1-13-124-0	ER	1	13								124	0	VT	RI	R			124	0	8	0	8		13-ER-1-13-124-0-6	WR
13	13-ER-1-13-114-0	ER	1	13								114	0	VT	RI	R			114	0	6	0	6		13-ER-1-13-114-0-7	WR
13	13-ER-1-13-116-17	ER	1	13								116	17	VT	POR	R			116	17	6	0	6		13-ER-1-13-116-17-8	WR
13	13-ER-1-13-172-0	ER	1	13								172	0	VT	RI	R			172	0	8	0	8		13-ER-1-13-172-0-9	WR
13	13-ER-1-13-209-17	ER	1	13								209	17	VT	RI	R			209	17	6	0	6		13-ER-1-13-209-17-10	WR
13	13-ER-1-13-176-0	ER	1	13								176	0	VT	LOF	R			176	0	6	0	6		13-ER-1-13-176-0-11	WR
13	13-ER-1-14-236-1	ER	1	14	2	236	1	LFET	BC	0.141		236	1	PAUT	BC	R	0.129		236	10	8	14	44	112	13-ER-1-14-236-10-1	PP
13	13-ER-1-14-31-0	ER	1	14								31	0	VT	POR	R			31	0	8	0	8		13-ER-1-14-31-0-2	WR
13	13-ER-1-14-188-0	ER	1	14								188	0	VT	RI	R			188	0	8	0	8		13-ER-1-14-188-0-3	WR
13	13-ER-1-14-163-5	ER	1	14								163	5	VT	LOF	R			163	5	8	0	8		13-ER-1-14-163-5-4	WR
13	13-ER-1-14-108-17	ER	1	14								108	17	VT	LOF	R			108	17	8	0	8		13-ER-1-14-108-17-5	WR
13	13-ER-1-14-139-17	ER	1	14								139	17	VT	RI	R			139	17	8	0	8		13-ER-1-14-139-17-6	WR
13	13-ER-1-14-249-0	ER	1	14								249	0	VT	LOF	R			249	0	18	0	18		13-ER-1-14-249-0-7	WR
13	13-ER-1-14-263-0	ER	1	14								263	0	VT	LOF	R			263	0	18	0	18		13-ER-1-14-263-0-8	WR
13	13-ER-1-14-267-0	ER	1	14								267	0	VT	RI	R			267	0	6	0	6		13-ER-1-14-267-0-9	WR
13	13-ER-1-14-231-0	ER	1	14								231	0	VT	RI	R			231	0	6	0	6		13-ER-1-14-231-0-10	WR
13	13-ER-1-14-198-17	ER	1	14								198	17	VT	LOF	R			198	17	8	0	8		13-ER-1-14-198-17-11	WR
13	13-ER-1-14-258-17	ER	1	14								258	17	VT	RI	R			258	17	8	0	8		13-ER-1-14-258-17-12	WR
13	13-ER-1-15-82-14	ER	1	15	1	82	14	LFET	BC	0.163		82	14	PAUT	BC	R	< 0.160		90	11	8	8	32	64	13-ER-1-15-90-11-1	TSPP

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-ER-1-15-120-13	ER	1	15	2	120	13	LFET	BC	0.17		120	13	PAUT	BC	R	< 0.160		122	9	39	12	102	468	13-ER-1-15-122-9-2		TSPP
13	13-ER-1-15-28-0	ER	1	15								28	0	VT	RI	R			28	0	4	0	4		13-ER-1-15-28-0-3		WR
13	13-ER-1-15-67-0	ER	1	15								67	0	VT	LOF	R			67	0	12	0	12		13-ER-1-15-67-0-4		WR
13	13-ER-1-15-78-0	ER	1	15								78	0	VT	RI	R			78	0	8	0	8		13-ER-1-15-78-0-5		WR
13	13-ER-1-15-90-17	ER	1	15								90	17	VT	POR	R			90	17	4	0	4		13-ER-1-15-90-17-6		WR
13	13-ER-1-15-101-17	ER	1	15								101	17	VT	POR	R			101	17	5	0	5		13-ER-1-15-101-17-7		WR
13	13-ER-1-15-134-17	ER	1	15								134	17	VT	RI	R			134	17	6	0	6		13-ER-1-15-134-17-8		WR
13	13-ER-1-16-8-13	ER	1	16	1	8	13	LFET	BC	0.18		8	13	PAUT	BC	R	0.148		10	9	20	12	64	240	13-ER-1-16-10-9-1		TSPP
13	13-ER-1-16-23-17	ER	1	16								23	17	VT	RI	R			23	17	5	0	5		13-ER-1-16-23-17-2		WR
13	13-ER-1-16-30-17	ER	1	16								30	17	VT	LOF	R			30	17	8	0	8		13-ER-1-16-30-17-3		WR
13	13-ER-MW-HW-0-50	ER	MW	HW	4			BFET	WI			0	50	VT	WI	R			0	50	16	0	16		13-ER-MW-HW-0-50-1		WR
13	13-ER-MW-HW-0-90	ER	MW	HW	7			BFET	WI			0	90	VT	WI	R			0	90	10	5	15		13-ER-MW-HW-0-90-2		WR
13	13-ER-MW-HW-288-95	ER	MW	HW	8			BFET	WI			288	95	VT	WI	R			288	95	7	0	7		13-ER-MW-HW-288-95-3		WR
13	13-ER-MW-HW-227-90	ER	MW	HW	9			VT	TS			227	90	VT	TS	R			227	90	10	10	40	100	13-ER-MW-HW-227-90-4		TSPP
13	13-ER-MW-HW-213-95	ER	MW	HW	10			BFET	WI			213	95	VT	WI	R			213	95	7	0	7		13-ER-MW-HW-213-95-5		WR
13	13-ER-MW-HW-192-95	ER	MW	HW	11			BFET	WI			192	95	VT	WI	R			192	95	7	0	7		13-ER-MW-HW-192-95-6		WR
13	13-ER-MW-HW-167-94	ER	MW	HW	12			VT	TS			167	94	VT	TS	R			167	94	4	0	4		13-ER-MW-HW-167-94-7		WR
13	13-ER-MW-HW-130-95	ER	MW	HW	13			BFET	WI			130	95	VT	WI	R			130	95	7	0	7		13-ER-MW-HW-130-95-8		WR
13	13-ER-MW-HW-228-5	ER	MW	HW								228	5	VT	GOUGE	R			228	5	9	0	9		13-ER-MW-HW-228-5-9		WR
13	13-ER-MW-IC-12-12	ER	MW	IC								12	12	VT	POR	R			12	12	76	0	76		13-ER-MW-IC-12-12-1		WR
13	13-ER-MW-IC-11 O'CLOCK-56	ER	MW	IC								11 O'CLOCK	56	VT	RI	R			11 O'CLOCK	56	13	0	13		13-ER-MW-IC-11 O'CLOCK-56-		WR
13	13-BA-28-3-88-0	BA	28	3	1	88	0	VT	POR			88	0	VT	POR	R			88	0	2	0	2		13-BA-28-3-88-0-1		WR
13	13-BA-28-4-80-0	BA	28	4	4	80	60	BFET	WI			80	0	VT	WI	R			83	0	7	0	7		13-BA-28-4-83-0-1		WR
13	13-BA-28-4-85-0	BA	28	4	5	85	0	VT	POR			85	0	VT	POR	R			83	0	7	0	7		13-BA-28-4-83-0-1		WR
13	13-BA-28-5-0-3	BA	28	5	2	0	?	VT	UC			0	3	VT	UC	R			0	3	2	0	2		13-BA-28-5-0-3-1		WR
13	13-BA-28-8-67-30	BA	28	8	1	67	30	VT	POR			67	30	VT	POR	R			67	30	2	0	2		13-BA-28-8-67-30-1		WR
13	13-BA-28-8-84-30	BA	28	8	2	84	30	VT	POR			84	30	VT	POR	R			84	30	2	0	2		13-BA-28-8-84-30-2		WR
13	13-BA-28-8-96-30	BA	28	8	3	96	30	VT	POR			96	30	VT	POR	R			96	30	2	0	2		13-BA-28-8-96-30-3		WR
13	13-BA-28-8-208-0	BA	28	8								208	0	VT	RI	R			208	0	8	0	8		13-BA-28-8-208-0-4		WR
13	13-BA-28-10-30-24	BA	28	10	1	30	24	LFET	BC	0.175		30	24	PAUT	BC	R	< 0.160		6	23	6	0	18.84956	28.27433	13-BA-28-10-6-23-1		PP
13	13-BA-28-10-8-30	BA	28	10								8	30	VT	LOF	R			8	30	4	0	4		13-BA-28-10-8-30-2		WR
13	13-BA-28-11-41-30	BA	28	11	1	0-82	30 (0-60)	LFET	BC	0.103		41	30	PAUT	BC	R	0.130		16	24	12	12	48	144	13-BA-28-11-16-24-1		PP
13	13-BA-28-11-41-30	BA	28	11								41	30	PAUT	BC	R	0.150		48	8	6	0	18.84956	28.27433	13-BA-28-11-48-8-2		PP
13	13-BA-28-11-41-30	BA	28	11								41	30	PAUT	BC	R	0.099		55	25	14	10	48	140	13-BA-28-11-55-25-3		PP
13	13-BA-28-11-6-30	BA	28	11								6	30	VT	LOF	R			6	30	4	0	4		13-BA-28-11-6-30-4		WR
13	13-BA-28-11-66-30	BA	28	11								66	30	VT	LOF	R			66	30	4	0	4		13-BA-28-11-66-30-5		WR
13	13-BA-28-12-156-16	BA	28	12	1	156	16	LFET	BC	0.143		156	16	PAUT	BC	R	0.140		158	18	8	8	32	64	13-BA-28-12-158-18-1		PP
13	13-BA-28-12-174-22	BA	28	12	2	174	22	LFET	BC	0.178		174	22	PAUT	BC	R	0.155		174	24	6	0	18.84956	28.27433	13-BA-28-12-174-24-2		PP
13	13-BA-28-12-220-8	BA	28	12	3	220	8	LFET	BC	0.138		220	8	PAUT	BC	R	0.113		216	7	18	14	64	252	13-BA-28-12-216-7-3		PP
13	13-BA-28-12-212-0	BA	28	12	4	212	0	VT	POR			212	0	VT	POR	R			212	0	4	0	4		13-BA-28-12-212-0-4		WR
13	13-BA-28-12-78-30	BA	28	12								78	30	VT	POR	R			78	30	4	0	4		13-BA-28-12-78-30-5		WR
13	13-BA-28-12-27-0	BA	28	12								27	0	VT	LOF	R			27	0	4	0	4		13-BA-28-12-27-0-6		WR
13	13-BA-28-12-87-0	BA	28	12								87	0	VT	RI	R			87	0	9	0	9		13-BA-28-12-87-0-7		WR
13	13-BA-28-12-100-0	BA	28	12								100	0	VT	LOF	R			100	0	6	0	6		13-BA-28-12-100-0-8		WR
13	13-BA-28-12-12-0	BA	28	12								12	0	VT	LOF	R			12	0	10	0	10		13-BA-28-12-12-0-9		WR
13	13-BA-28-13-24-50	BA	28	13	2	24	50	LFET	BC	0.11		24	50	PAUT	BC	R	0.100		26	26	42	8	100	336	13-BA-28-13-26-26-1		PP
13	13-BA-28-13-40-0	BA	28	13	4	40	0	VT	POR			40	0	VT	POR	R			40	0	4	0	4		13-BA-28-13-40-0-2		WR
13	13-BA-28-13-61-0	BA	28	13	5	61	0	VT	POR			61	0	VT	LOF	R			61	0	5	0	5		13-BA-28-13-61-0-3		WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-BA-28-13-121-31	BA	28	13	9	121	31	BFET	WI			121	31	VT	WI	R			121	31	7	0	7			13-BA-28-13-121-31-4	WR
13	13-BA-28-13-33-0	BA	28	13								33	0	VT	RI	R			33	0	4	0	4			13-BA-28-13-33-0-5	WR
13	13-BA-28-13-189-30	BA	28	13								189	30	VT	LOF	R			189	30	5	0	5			13-BA-28-13-189-30-6	WR
13	13-BA-28-14-96-30	BA	28	14	2	96	30	VT	POR			96	30	VT	RI	R			96	30	4	0	4			13-BA-28-14-96-30-1	WR
13	13-BA-28-14-84-0	BA	28	14	3	84	0	VT	POR			84	0	VT	POR	R			84	0	5	0	5			13-BA-28-14-84-0-2	WR
13	13-BA-28-14-24-0	BA	28	14	4	24	0	VT	POR			24	0	VT	POR	R			24	0	6	0	6			13-BA-28-14-24-0-3	WR
13	13-BA-28-14-0-10	BA	28	14	5	0	10	VT	POR			0	10	VT	LOF	R			0	10	0	4	4			13-BA-28-14-0-10-4	WR
13	13-BA-28-14-222-31	BA	28	14	7	222	31	VT	POR			222	31	VT	POR	R			230	30	20	0	20			13-BA-28-14-230-30-5	WR
13	13-BA-28-14-236-31	BA	28	14	8	236	31	BFET	WI			236	31	VT	WI	R			230	30	20	0	20			13-BA-28-14-230-30-5	WR
13	13-BA-28-14-227-0	BA	28	14	9	227	0	BFET	WI			227	0	VT	WI	R			227	0	9	0	9			13-BA-28-14-227-0-6	WR
13	13-BA-28-14-184-0	BA	28	14	10	184	0	BFET	WI			184	0	VT	WI	R			184	0	10	0	10			13-BA-28-14-184-0-7	WR
13	13-BA-28-14-84-30	BA	28	14								84	30	VT	POR	R			84	30	4	0	4			13-BA-28-14-84-30-8	WR
13	13-BA-28-14-203-30	BA	28	14								203	30	VT	LOF	R			203	30	16	0	16			13-BA-28-14-203-30-9	WR
13	13-BA-28-15-34-0	BA	28	15	1	34	30	BFET	WI			34	0	VT	LOF	R			34	0	8	0	8			13-BA-28-15-34-0-1	WR
13	13-BA-28-15-60-0	BA	28	15	2	60	30	BFET	WI			60	0	VT	WI	R			60	0	8	0	8			13-BA-28-15-60-0-2	WR
13	13-BA-28-15-90-30	BA	28	15	3	90	0	BFET	WI			90	30	VT	WI	R			90	30	8	0	8			13-BA-28-15-90-30-3	WR
13	13-BA-28-15-24-0	BA	28	15								24	0	VT	LOF	R			24	0	3	3	6			13-BA-28-15-24-0-4	WR
13	13-BA-28-15-78-0	BA	28	15								78	0	VT	LOF	R			78	0	4	0	4			13-BA-28-15-78-0-5	WR
13	13-BA-28-15-148-30	BA	28	15								148	30	VT	LOF	R			148	30	4	0	4			13-BA-28-15-148-30-6	WR
13	13-BA-28-15-223-0	BA	28	15								223	0	VT	LOF	R			223	0	5	0	5			13-BA-28-15-223-0-7	WR
13	13-BA-28-15-210-0	BA	28	15								210	0	VT	POR	R			210	0	8	0	8			13-BA-28-15-210-0-8	WR
13	13-BA-28-16-36-26	BA	28	16	3	204 RL	26	LFET	BC	0.171		36	26	PAUT	BC	R	0.158		34	23	24	14	76	336		13-BA-28-16-34-23-1	TSPP
13	13-BA-28-16-90-0	BA	28	16								90	0	VT	LOF	R			90	0	8	0	8			13-BA-28-16-90-0-2	WR
13	13-BA-28-17-94-0	BA	28	17								94	0	VT	LOF	R			94	0	5	0	5			13-BA-28-17-94-0-1	WR
13	13-BA-28-17-84-0	BA	28	17								84	0	VT	LOF	R			84	0	4	0	4			13-BA-28-17-84-0-2	WR
13	13-BA-28-17-135-0	BA	28	17								135	0	VT	RI	R			135	0	20	0	20			13-BA-28-17-135-0-3	WR
13	13-BA-28-18-120-30	BA	28	18								120	30	VT	RI	R			120	30	4	0	4			13-BA-28-18-120-30-4	WR
13	13-BA-27-2-30-0	BA	27	2								30	0	VT	RI	R			30	0	2	0	2			13-BA-27-2-30-0-1	WR
13	13-BA-27-3-150-0	BA	27	3								150	0	VT	POR	R			150	0	2	0	2			13-BA-27-3-150-0-1	WR
13	13-BA-27-4-0-13	BA	27	4	2	0	13	VT	POR			0	13	VT	POR	R			0	13	3	0	3			13-BA-27-4-0-13-1	WR
13	13-BA-27-4-0-1	BA	27	4	3	0	0-3	VT	POR/UC			0	1	VT	POR	R			0	1	3	0	3			13-BA-27-4-0-1-2	WR
13	13-BA-27-4-210-60	BA	27	4	8	?	60	VT	POR			210	60	VT	POR	R			210	60	4	0	4			13-BA-27-4-210-60-3	WR
13	13-BA-27-6-240-47	BA	27	6	5	240	47	VT	POR			240	47	VT	POR	R			240	47	0	4	4			13-BA-27-6-240-47-1	WR
13	13-BA-27-7-1-58	BA	27	7	1	1	58	VT	POR			1	58	VT	POR	R			1	58	0	2	2			13-BA-27-7-1-58-1	WR
13	13-BA-27-7-30-60	BA	27	7	2	30	60	VT	LF			30	60	VT	LOF	R			30	60	2	0	2			13-BA-27-7-30-60-2	WR
13	13-BA-27-8-150-0	BA	27	8								150	0	VT	LOF	R			150	0	8	0	8			13-BA-27-8-150-0-1	WR
13	13-BA-27-9-20-8	BA	27	9	1	20	8	LFET	BC	0.158		20	8	PAUT	BC	R	0.148		20	8	8	8	32	64		13-BA-27-9-20-8-1	PP
13	13-BA-27-9-38-51	BA	27	9	4	38	51	LFET	BC	0.151		38	51	PAUT	BC	R	0.150		38	51	20	10	60	200		13-BA-27-9-38-51-2	PP
13	13-BA-27-9-144-54	BA	27	9	6	144	54	LFET	BC	0.189		144	54	PAUT	BC	R	0.155		144	54	24	10	68	240		13-BA-27-9-144-54-3	PP
13	13-BA-27-9-216-47	BA	27	9	7	216	47	LFET	BC	0.152		216	47	PAUT	BC	R	0.149		216	47	24	17	82	408		13-BA-27-9-216-47-4	PP
13	13-BA-27-9-38-51	BA	27	9								38	51	PAUT	BC	R	0.150		32	34	12	12	48	144		13-BA-27-9-32-34-5	PP
13	13-BA-27-9-216-47	BA	27	9								216	47	PAUT	BC	R	0.155		151	35	6	0	18.84956	28.27433		13-BA-27-9-151-35-6	PP
13	13-BA-27-9-149-0	BA	27	9								149	0	VT	RI	R			149	0	0	3	3			13-BA-27-9-149-0-7	WR
13	13-BA-27-10-16-54	BA	27	10	1	0-32	7-50	LFET	BC	0.149		16	54	PAUT	BC	R	0.149		6	54	12	12	48	144		13-BA-27-10-6-54-1	PP
13	13-BA-27-10-24-13	BA	27	10	2	24	13	LFET	BC	0.165		24	13	PAUT	BC	R	0.150		25	12	18	28	92	504		13-BA-27-10-25-12-2	PP
13	13-BA-27-10-74-52	BA	27	10	3	33-127	52	LFET	BC	0.144		74	52	PAUT	BC	R	0.130		74	50	56	20	152	1120		13-BA-27-10-74-50-3	PP
13	13-BA-27-10-78-32	BA	27	10	4	78	32	LFET	BC	0.138		78	32	PAUT	BC	R	0.141		76	31	8	8	32	64		13-BA-27-10-76-31-4	PP
13	13-BA-27-10-0-55	BA	27	10	5	0	55	VT	POR			0	55	VT	POR	R			0	55	2	3	5			13-BA-27-10-0-55-5	WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-BA-27-10-30-2	BA	27	10	6	30	2	BFET	WI			30	2	VT	WI	R			25	12	18	28	92	504	13-BA-27-10-25-12-2		PP
13	13-BA-27-10-144-37	BA	27	10	7	144	37	LFET	BC	0.137		144	37	PAUT	BC	R	0.141		150	51	14	17	62	238	13-BA-27-10-150-51-6		PP
13	13-BA-27-10-139-0	BA	27	10	9	139	0	VT	POR			139	0	VT	POR	R			139	0	8	0	8		13-BA-27-10-139-0-7		WR
13	13-BA-27-10-203-0	BA	27	10	11	203	0	VT	POR			203	0	VT	POR	R			203	0	4	0	4		13-BA-27-10-203-0-8		WR
13	13-BA-27-10-240-0	BA	27	10	12	240	0	VT	POR			240	0	VT	POR	R			240	15	0	30	30		13-BA-27-10-240-15-9		WR
13	13-BA-27-10-240-20	BA	27	10	13	240	20	VT	POR			240	20	VT	POR	R			240	15	0	30	30		13-BA-27-10-240-15-9		WR
13	13-BA-27-10-216-55	BA	27	10	16	216	55	LFET	BC	0.05		216	55	PAUT	BC	R	0.098		209	48	27	24	102	648	13-BA-27-10-209-48-10		PP
13	13-BA-27-10-49-59	BA	27	10								49	59	VT	POR	R			49	59	6	0	6		13-BA-27-10-49-59-11		WR
13	13-BA-27-10-16-54	BA	27	10								16	54	PAUT	BC	R	0.144		23	54	10	12	44	120	13-BA-27-10-23-54-12		PP
13	13-BA-27-10-16-54	BA	27	10								16	54	PAUT	BC	R	0.155		3	40	6	0	18.84956	28.27433	13-BA-27-10-3-40-13		PP
13	13-BA-27-10-144-37	BA	27	10								144	37	PAUT	BC	R	0.141		154	36	7	7	28	49	13-BA-27-10-154-36-14		PP
13	13-BA-27-10-120-0	BA	27	10								120	0	VT	LOF	R			120	0	10	0	10		13-BA-27-10-120-0-15		WR
13	13-BA-27-10-2-0	BA	27	10								2	0	VT	RI	R			2	0	4	0	4		13-BA-27-10-2-0-16		WR
13	13-BA-27-10-75-0	BA	27	10								75	0	VT	RI	R			75	0	4	0	4		13-BA-27-10-75-0-17		WR
13	13-BA-27-10-84-0	BA	27	10								84	0	VT	POR	R			84	0	4	0	4		13-BA-27-10-84-0-18		WR
13	13-BA-27-10-100-0	BA	27	10								100	0	VT	LOF	R			100	0	6	0	6		13-BA-27-10-100-0-19		WR
13	13-BA-27-11-34-0	BA	27	11	1	34	0	BFET	WI			34	0	VT	WI	R			41	0	23	0	23		13-BA-27-11-41-0-1		WR
13	13-BA-27-11-41-0	BA	27	11	2	41	0	VT	POR			41	0	VT	POR	R			41	0	23	0	23		13-BA-27-11-41-0-1		WR
13	13-BA-27-11-49-0	BA	27	11	3	49	0	BFET	WI			49	0	VT	WI	R			41	0	23	0	23		13-BA-27-11-41-0-1		WR
13	13-BA-27-11-76-0	BA	27	11	4	76	0	VT	POR			76	0	VT	POR	R			76	0	4	0	4		13-BA-27-11-76-0-2		WR
13	13-BA-27-11-90-0	BA	27	11								90	0	VT	POR	R			90	0	4	0	4		13-BA-27-11-90-0-3		WR
13	13-BA-27-12-121-0	BA	27	12	1	96-146	60	VT	UC			121	0	VT	UC	R			125	0	66	0	66		13-BA-27-12-125-0-1		WR
13	13-BA-27-12-107-0	BA	27	12	2	107	60	BFET	WI			107	0	VT	WI	R			125	0	66	0	66		13-BA-27-12-125-0-1		WR
13	13-BA-27-12-113-0	BA	27	12	3	113	60	BFET	WI			113	0	VT	WI	R			125	0	66	0	66		13-BA-27-12-125-0-1		WR
13	13-BA-27-12-146-0	BA	27	12	4	146	60	BFET	WI			146	0	VT	WI	R			125	0	66	0	66		13-BA-27-12-125-0-1		WR
13	13-BA-27-12-154-0	BA	27	12	5	154	60	BFET	WI			154	0	VT	WI	R			125	0	66	0	66		13-BA-27-12-125-0-1		WR
13	13-BA-27-12-0-0	BA	27	12	7	0	0	BFET	WI			0	0	VT	WI	R			0	0	8	10	18		13-BA-27-12-0-0-2		WR
13	13-BA-27-12-0-4	BA	27	12	8	0	4	BFET	WI			0	4	VT	WI	R			0	0	8	10	18		13-BA-27-12-0-0-2		WR
13	13-BA-27-12-0-46	BA	27	12	9	0	46	BFET	WI			0	46	VT	WI	R			0	46	0	12	12		13-BA-27-12-0-46-3		WR
13	13-BA-27-12-56-0	BA	27	12	10	56	0	BFET	WI			56	0	VT	WI	R			56	0	7	0	7		13-BA-27-12-56-0-4		WR
13	13-BA-27-12-30-0	BA	27	12								30	0	VT	POR	R			30	0	8	0	8		13-BA-27-12-30-0-5		WR
13	13-BA-27-13-36-0	BA	27	13	1	84	0	VT	POR			36	0	VT	POR	R			36	0	4	0	4		13-BA-27-13-36-0-1		WR
13	13-BA-27-13-181-60	BA	27	13	3	181	60	VT	LOF			181	60	VT	LOF	R			181	60	4	0	4		13-BA-27-13-181-60-2		WR
13	13-BA-27-13-232-60	BA	27	13	4	232	60	VT	POR			232	60	VT	POR	R			232	60	4	0	4		13-BA-27-13-232-60-3		WR
13	13-BA-27-13-30-0	BA	27	13								30	0	VT	LOF	R			30	0	8	0	8		13-BA-27-13-30-0-4		WR
13	13-BA-27-14-95-54	BA	27	14	1	95	54	LFET	BC	0.169		95	54	PAUT	BC	R	0.153		94	58	16	0	50.26548	201.0619	13-BA-27-14-94-58-1		PC
13	13-BA-27-14-1-27	BA	27	14	3	1	27	VT	POR			1	27	VT	POR	R			1	27	0	7	7		13-BA-27-14-1-27-2		WR
13	13-BA-27-14-90-0	BA	27	14								90	0	VT	LOF	R			90	0	8	0	8		13-BA-27-14-90-0-3		WR
13	13-BA-27-14-121-0	BA	27	14								121	0	VT	POR	R			121	0	0	4	4		13-BA-27-14-121-0-4		WR
13	13-BA-27-15-88-54	BA	27	15	2	88	54	LFET	BC	0.133		88	54	PAUT	BC	R	0.122		88	56	8	8	32	64	13-BA-27-15-88-56-1		TSPP
13	13-BA-27-15-167-60	BA	27	15	3	160-173	60	VT	UC			167	60	VT	LOF	R			168	60	4	0	4		13-BA-27-15-168-60-2		WR
13	13-BA-27-15-138-60	BA	27	15	4	138	60	VT	POR			138	60	VT	RI	R			138	60	0	4	4		13-BA-27-15-138-60-3		WR
13	13-BA-27-15-43-0	BA	27	15								43	0	VT	LOF	R			43	0	4	0	4		13-BA-27-15-43-0-4		WR
13	13-BA-27-16-36-60	BA	27	16	1	36	60	VT	POR			36	60	VT	RI	R			36	60	8	0	8		13-BA-27-16-36-60-1		WR
13	13-BA-26-2-18-0	BA	26	2	1	18	0	VT	POR			18	0	VT	POR	R			18	0	2	0	2		13-BA-26-2-18-0-1		WR
13	13-BA-26-3-85-0	BA	26	3	2	205	0	VT	POR			85	0	VT	POR	R			85	0	2	0	2		13-BA-26-3-85-0-1		WR
13	13-BA-26-4-50-0	BA	26	4	3	50	0	BFET	WI			50	0	VT	WI	R			50	0	3	0	3		13-BA-26-4-50-0-1		WR
13	13-BA-26-7-30-58	BA	26	7	1	30	58	VT	POR			30	58	VT	POR	R			30	58	4	0	4		13-BA-26-7-30-58-1		WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-BA-26-8-24-60	BA	26	8	1	24	60	VT	POR			24	60	VT	POR	R			24	60	2	0	2		13-BA-26-8-24-60-1		WR
13	13-BA-26-9-220-54	BA	26	9	1	220	54	LFET	BC	0.157		220	54	PAUT	BC	R	0.150		220	53	6	0	18.84956	28.27433	13-BA-26-9-220-53-1		PP
13	13-BA-26-9-213-0	BA	26	9	2	213	0	BFET	WI			213	0	VT	WI	R			213	0	6	0	6		13-BA-26-9-213-0-2		WR
13	13-BA-26-9-205-0	BA	26	9	3	205	0	BFET	WI			205	0	VT	WI	R			205	0	8	0	8		13-BA-26-9-205-0-3		WR
13	13-BA-26-9-24-60	BA	26	9	4	24	60	VT	POR			24	60	VT	POR	R			24	60	4	0	4		13-BA-26-9-24-60-4		WR
13	13-BA-26-10-152-59	BA	26	10	1	152	59	VT	POR			152	59	VT	POR	R			152	59					13-BA-27-10-25-12-2		pp
13	13-BA-26-10-20-54	BA	26	10	9	20	54	LFET	BC	0.157		20	54	PAUT	BC	R	0.155		20	54	9	8	34	72	13-BA-26-10-20-54-1		PP
13	13-BA-26-10-86-0	BA	26	10								86	0	VT	RI	R			86	0	4	0	4		13-BA-26-10-86-0-2		WR
13	13-BA-26-11-0-60	BA	26	11	1	0	60	VT	POR			0	60	VT	POR	R			0	60					13-BA-27-10-120-0-15		WR
13	13-BA-26-11-146-57	BA	26	11	3	146	57	VT	POR			146	57	VT	POR	R			146	57	6	0	6		13-BA-26-11-146-57-1		WR
13	13-BA-26-11-30-0	BA	26	11								30	0	VT	LOF	R			30	0	3	0	3		13-BA-26-11-30-0-2		WR
13	13-BA-26-12-0-12	BA	26	12	1	0	12	VT	POR			0	12	VT	POR	R			0	12	0	4	4		13-BA-26-12-0-12-1		WR
13	13-BA-26-12-92-59	BA	26	12	2	92	59	VT	LF			92	59	VT	LOF	R			92	59	7	0	7		13-BA-26-12-92-59-2		WR
13	13-BA-26-12-94-1	BA	26	12	3	94	1	VT	POR			94	1	VT	IF	R			94	1	0	4	4		13-BA-26-12-94-1-3		WR
13	13-BA-26-12-150-0	BA	26	12	4	150	0	BFET	WI			150	0	VT	WI	R			150	0	12	0	12		13-BA-26-12-150-0-4		WR
13	13-BA-26-13-206-60	BA	26	13	1	34 RL	60	VT	UC			206	60	VT	UC	R			206	60					13-BA-27-12-125-0-1		WR
13	13-BA-26-13-160-60	BA	26	13	2	80 RL	60	VT	POR			160	60	VT	POR	R			160	60					13-BA-27-13-36-0-1		WR
13	13-BA-26-13-240-20	BA	26	13	3	1 RL	20	VT	POR			240	20	VT	POR	R			240	20	0	5	5		13-BA-26-13-240-20-1		WR
13	13-BA-26-13-96-58	BA	26	13	5	96	58	BFET	WI			96	58	VT	WI	R			96	58	4	0	4		13-BA-26-13-96-58-2		WR
13	13-BA-26-13-175-0	BA	26	13								175	0	VT	LOF	R			175	0	4	0	4		13-BA-26-13-175-0-3		WR
13	13-BA-26-14-84-60	BA	26	14	1	122 RL	60	VT	POR			84	60	VT	LOF	R			84	60	11	0	11		13-BA-26-14-84-60-1		WR
13	13-BA-26-14-118-60	BA	26	14	2	158 RL	60	VT	POR			118	60	VT	LOF	R			118	60	8	6	14		13-BA-26-14-118-60-2		WR
13	13-BA-26-14-0-11	BA	26	14								0	11	VT	LOF	R			0	11	0	5	5		13-BA-26-14-0-11-3		WR
13	13-BA-26-14-214-0	BA	26	14								214	0	VT	RI	R			214	0	18	0	18		13-BA-26-14-214-0-4		WR
13	13-BA-26-15-115-60	BA	26	15	1	115	60	VT	POR			115	60	VT	POR	R			115	60	4	0	4		13-BA-26-15-115-60-1		WR
13	13-BA-26-16-38-60	BA	26	16	1	38	60	VT	POR			38	60	VT	LOF	R			38	60	6	0	6		13-BA-26-16-38-60-1		WR
13	13-BA-26-16-145-60	BA	26	16	2	145	60	VT	POR			145	60	VT	RI	R			145	60	4	0	4		13-BA-26-16-145-60-2		WR
13	13-BA-26-16-57-60	BA	26	16	4	57	60	VT	POR			57	60	VT	LOF	R			57	60	5	0	5		13-BA-26-16-57-60-3		WR
13	13-BA-26-16-0-56	BA	26	16								0	56	VT	LOF	R			0	56	4	0	4		13-BA-26-16-0-56-4		WR
13	13-BA-26-16-21-0	BA	26	16								21	0	VT	LOF	R			21	0	4	0	4		13-BA-26-16-21-0-5		WR
13	13-BA-26-16-30-0	BA	26	16								30	0	VT	RI	R			30	0	16	0	16		13-BA-26-16-30-0-6		WR
13	13-BA-25-1-1-60	BA	25	1	1	1	60	VT	POR			1	60	VT	POR	R			1	60	2	0	2		13-BA-25-1-1-60-1		WR
13	13-BA-25-1-1-45	BA	25	1	2	1	45	VT	POR			1	45	VT	UC	R			1	45	0	2	2		13-BA-25-1-1-45-2		WR
13	13-BA-25-1-144-60	BA	25	1	3	144	60	VT	POR			144	60	VT	POR	R			144	60	2	0	2		13-BA-25-1-144-60-3		WR
13	13-BA-25-1-156-60	BA	25	1	4	156	60	BFET	WI			156	60	VT	WI	R			156	60	4	0	4		13-BA-25-1-156-60-4		WR
13	13-BA-25-1-168-60	BA	25	1	5	168	60	VT	POR			168	60	VT	POR	R			168	60	2	0	2		13-BA-25-1-168-60-5		WR
13	13-BA-25-3-208-0	BA	25	3	3	88	0	VT	POR			208	0	VT	POR	R			208	0	3	0	3		13-BA-25-3-208-0-1		WR
13	13-BA-25-4-155-58	BA	25	4	13	155	58	VT	POR			155	58	VT	POR	R			155	58	2	0	2		13-BA-25-4-155-58-1		WR
13	13-BA-25-4-213-58	BA	25	4	15	213	58	VT	POR			213	58	VT	POR	R			213	58	2	0	2		13-BA-25-4-213-58-2		WR
13	13-BA-25-5-226-60	BA	25	5	3	226	60	VT	POR			226	60	VT	POR	R			226	60	2	0	2		13-BA-25-5-226-60-1		WR
13	13-BA-25-8-92-59	BA	25	8								92	59	VT	LOF	R			92	59	6	0	6		13-BA-25-8-92-59-1		WR
13	13-BA-25-9-30-1	BA	25	9	1	30	1	BFET	WI			30	1	VT	WI	R			30	1	8	0	8		13-BA-25-9-30-1-1		WR
13	13-BA-25-9-87-0	BA	25	9	2	87	0	BFET	WI			87	0	VT	WI	R			87	0	6	0	6		13-BA-25-9-87-0-2		WR
13	13-BA-25-9-96-0	BA	25	9	3	96	0	BFET	WI			96	0	VT	WI	R			96	0	8	0	8		13-BA-25-9-96-0-3		WR
13	13-BA-25-9-120-0	BA	25	9	4	120	0	BFET	WI			120	0	VT	WI	R			120	0	6	3	9		13-BA-25-9-120-0-4		WR
13	13-BA-25-9-176-0	BA	25	9	5	176	0	VT	POR			176	0	VT	POR	R			176	0	4	0	4		13-BA-25-9-176-0-5		WR
13	13-BA-25-9-43-0	BA	25	9								43	0	VT	RI	R			43	0	4	0	4		13-BA-25-9-43-0-6		WR
13	13-BA-25-9-148-0	BA	25	9								148	0	VT	RI	R			148	0	0	4	4		13-BA-25-9-148-0-7		WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Indication Topside	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.		Repair Type (Patch, Weld)
13	13-BA-25-10-20-53	BA	25	10	1	20	53	LFET	BC	0.17		20	53	PAUT	BC	R	0.148		17	50	6	0	18.84956	28.27433	13-BA-25-10-17-50-1		PP
13	13-BA-25-10-0-4	BA	25	10	2	0	4	VT	POR			0	4	VT	LOF	R			0	4	0	4	4		13-BA-25-10-0-4-2		WR
13	13-BA-25-10-30-59	BA	25	10	3	30	59	VT	POR			30	59	VT	POR	R			30	59	8	0	8		13-BA-25-10-30-59-3		WR
13	13-BA-25-10-24-0	BA	25	10	4	24	0	VT	POR			24	0	VT	LOF	R			24	0	6	0	6		13-BA-25-10-24-0-4		WR
13	13-BA-25-10-32-0	BA	25	10	5	32	0	VT	POR			32	0	VT	RI	R			32	0	5	0	5		13-BA-25-10-32-0-5		WR
13	13-BA-25-10-216-0	BA	25	10	7	216	0	VT	POR			216	0	VT	POR	R			216	0	7	0	7		13-BA-25-10-216-0-6		WR
13	13-BA-25-10-210-0	BA	25	10								210	0	VT	LOF	R			210	0	8	0	8		13-BA-25-10-210-0-7		WR
13	13-BA-25-10-206-0	BA	25	10								206	0	VT	LOF	R			206	0	7	0	7		13-BA-25-10-206-0-8		WR
13	13-BA-25-10-150-0	BA	25	10								150	0	VT	RI	R			150	0	0	3	3		13-BA-25-10-150-0-9		WR
13	13-BA-25-11-0-31	BA	25	11	1	0	31	BFET	WI			0	31	VT	WI	R			0	31	0	10	10		13-BA-25-11-0-31-1		WR
13	13-BA-25-11-120-0	BA	25	11	2	120	0	BFET	WI			120	0	VT	WI	R			120	0	8	0	8		13-BA-25-11-120-0-2		WR
13	13-BA-25-11-153-0	BA	25	11	3	144-153	0	VT	POR			153	0	VT	POR	R			153	0	5	0	5		13-BA-25-11-153-0-3		WR
13	13-BA-25-12-0-24	BA	25	12	1	0	24	BFET	WI			0	24	VT	WI	R			0	24	0	9	9		13-BA-25-12-0-24-1		WR
13	13-BA-25-12-26-0	BA	25	12	2	26	0	BFET	WI			26	0	VT	WI	R			26	0	7	0	7		13-BA-25-12-26-0-2		WR
13	13-BA-25-12-56-0	BA	25	12	3	56	0	VT	POR			56	0	VT	POR	R			56	0	4	0	4		13-BA-25-12-56-0-3		WR
13	13-BA-25-12-90-0	BA	25	12	4	90	0	VT	POR			90	0	VT	POR	R			97	0	34	0	34		13-BA-25-12-97-0-4		WR
13	13-BA-25-12-97-0	BA	25	12	5	97	0	BFET	WI			97	0	VT	WI	R			97	0	34	0	34		13-BA-25-12-97-0-4		WR
13	13-BA-25-12-106-0	BA	25	12	6	106	0	BFET	WI			106	0	VT	WI	R			97	0	34	0	34		13-BA-25-12-97-0-4		WR
13	13-BA-25-13-90-60	BA	25	13	1	90	60	VT	POR			90	60	VT	POR	R			90	60	0	4	4		13-BA-25-13-90-60-1		WR
13	13-BA-25-13-128-0	BA	25	13								128	0	VT	LOF	R			128	0	4	0	4		13-BA-25-13-128-0-2		WR
13	13-BA-25-13-209-0	BA	25	13								209	0	VT	LOF	R			209	0	0	4	4		13-BA-25-13-209-0-3		WR
13	13-BA-25-13-213-0	BA	25	13								213	0	VT	POR	R			213	0	4	0	4		13-BA-25-13-213-0-4		WR
13	13-BA-25-15-53-0	BA	25	15								53	0	VT	LOF	R			53	0	5	0	5		13-BA-25-15-53-0-1		WR
13	13-BA-24-1-209-60	BA	24	1	5	209	60	VT	POR			209	60	VT	POR	R			209	60	3	0	3		13-BA-24-1-209-60-1		WR
13	13-BA-24-3-38-0	BA	24	3	2	38	0	BFET	WI			38	0	VT	WI	R			38	0	4	0	4		13-BA-24-3-38-0-1		WR
13	13-BA-24-3-69-0	BA	24	3	3	69	0	BFET	WI			69	0	VT	WI	R			69	0	6	0	6		13-BA-24-3-69-0-2		WR
13	13-BA-24-3-0-2	BA	24	3								0	2	VT	RI	R			0	2	0	2	2		13-BA-24-3-0-2-3		WR
13	13-BA-24-4-30-0	BA	24	4	3	30	0	VT	POR			30	0	VT	POR	R			30	0	2	0	2		13-BA-24-4-30-0-1		WR
13	13-BA-24-6-26-60	BA	24	6	3	26	60	VT	POR			26	60	VT	POR	R			26	60	2	0	2		13-BA-24-6-26-60-1		WR
13	13-BA-24-7-29-59	BA	24	7	1	29	59	VT	POR			29	59	VT	POR	R			29	59	2	0	2		13-BA-24-7-29-59-1		WR
13	13-BA-24-8-202-0	BA	24	8								202	0	VT	LOF	R			202	0	6	0	6		13-BA-24-8-202-0-1		WR
13	13-BA-24-8-230-0	BA	24	8								230	0	VT	LOF	R			230	0	13	0	13		13-BA-24-8-230-0-2		WR
13	13-BA-24-9-168-0	BA	24	9	2	168	0	BFET	WI			168	0	VT	WI	R			168	0	11	0	11		13-BA-24-9-168-0-1		WR
13	13-BA-24-9-192-0	BA	24	9	3	192	0	BFET	WI			192	0	VT	WI	R			192	0	12	0	12		13-BA-24-9-192-0-2		WR
13	13-BA-24-9-202-0	BA	24	9	4	202	0	BFET	WI			202	0	VT	WI	R			202	0	9	0	9		13-BA-24-9-202-0-3		WR
13	13-BA-24-9-236-0	BA	24	9	5	236	0	BFET	WI			236	0	VT	WI	R			236	0	9	0	9		13-BA-24-9-236-0-4		WR
13	13-BA-24-9-24-60	BA	24	9	6	24	60	VT	POR			24	60	VT	POR	R			24	60	4	0	4		13-BA-24-9-24-60-5		WR
13	13-BA-24-9-84-60	BA	24	9	7	84	60	VT	POR			84	60	VT	POR	R			84	60	4	0	4		13-BA-24-9-84-60-6		WR
13	13-BA-24-9-212-0	BA	24	9								212	0	VT	LOF	R			212	0	4	0	4		13-BA-24-9-212-0-7		WR
13	13-BA-24-9-20-0	BA	24	9								20	0	VT	LOF	R			20	0	6	4	10		13-BA-24-9-20-0-8		WR
13	13-BA-24-10-44-60	BA	24	10	2	44	60	VT	POR			44	60	VT	POR	R			44	60					13-BA-25-9-176-0-5		WR
13	13-BA-24-10-144-60	BA	24	10	3	144	60	VT	POR			144	60	VT	POR	R			144	60					13-BA-25-10-24-0-4		WR
13	13-BA-24-10-152-60	BA	24	10	4	152	60	VT	POR			152	60	VT	POR	R			152	60					13-BA-25-10-32-0-5		WR
13	13-BA-24-10-240-54	BA	24	10	5	240	54	VT	LF			240	54	VT	IF	R			240	54	0	4	4		13-BA-24-10-240-54-1		WR
13	13-BA-24-10-150-0	BA	24	10								150	0	VT	RI	R			150	0	24	0	24		13-BA-24-10-150-0-2		WR
13	13-BA-24-11-165-58	BA	24	11	1	165	58	BFET	WI			165	58	VT	WI	R			165	58	6	0	6		13-BA-24-11-165-58-1		WR
13	13-BA-24-11-135-0	BA	24	11	2	130-140	0	BFET	WI			135	0	VT	WI	R			135	0	17	0	17		13-BA-24-11-135-0-2		WR
13	13-BA-24-11-157-0	BA	24	11	3	157	0	BFET	WI			157	0	VT	WI	R			157	0	9	0	9		13-BA-24-11-157-0-3		WR

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-BA-24-11-207-0	BA	24	11	4	207	0	BFET	WI			207	0	VT	WI	R			225	0	32	0	32			13-BA-24-11-225-0-4	WR
13	13-BA-24-11-223-0	BA	24	11	5	223	0	BFET	WI			223	0	VT	WI	R			225	0	32	0	32			13-BA-24-11-225-0-4	WR
13	13-BA-24-11-236-0	BA	24	11	6	236	0	BFET	WI			236	0	VT	WI	R			225	0	32	0	32			13-BA-24-11-225-0-4	WR
13	13-BA-24-11-30-0	BA	24	11								30	0	VT	LOF	R			30	0	8	0	8			13-BA-24-11-30-0-5	WR
13	13-BA-24-12-7-0	BA	24	12	1	7	0	BFET	WI			7	0	VT	WI	R			4	0	8	0	8			13-BA-24-12-4-0-1	WR
13	13-BA-24-12-17-0	BA	24	12	2	17	0	VT	LF			17	0	VT	IF	R			17	0	4	0	4			13-BA-24-12-17-0-2	WR
13	13-BA-24-12-32-0	BA	24	12	3	32	0	VT	POR			32	0	VT	POR	R			36	0	12	0	12			13-BA-24-12-36-0-3	WR
13	13-BA-24-12-40-0	BA	24	12	4	40	0	VT	POR			40	0	VT	POR	R			36	0	12	0	12			13-BA-24-12-36-0-3	WR
13	13-BA-24-12-96-55	BA	24	12	5	96	55	VT	POR			96	55	VT	LOF	R			96	55	3	0	3			13-BA-24-12-96-55-4	WR
13	13-BA-24-12-115-0	BA	24	12	6	115	0	VT	POR			115	0	VT	LOF	R			115	0	4	0	4			13-BA-24-12-115-0-5	WR
13	13-BA-24-12-134-0	BA	24	12	7	134	0	BFET	WI			134	0	VT	WI	R			134	0	8	0	8			13-BA-24-12-134-0-6	WR
13	13-BA-24-12-168-0	BA	24	12	8	168	0	BFET	WI			168	0	VT	WI	R			168	0	19	0	19			13-BA-24-12-168-0-7	WR
13	13-BA-24-12-192-0	BA	24	12	9	192	0	BFET	WI			192	0	VT	WI	R			192	0	9	0	9			13-BA-24-12-192-0-8	WR
13	13-BA-24-12-240-0	BA	24	12	10	240	0	VT	POR			240	0	VT	POR	R			240	0	4	0	4			13-BA-24-12-240-0-9	WR
13	13-BA-24-12-151-0	BA	24	12								151	0	VT	RI	R			151	0	0	8	8			13-BA-24-12-151-0-10	WR
13	13-BA-24-13-0-54	BA	24	13	1	0	54	BFET	WI			0	54	VT	WI	R			0	54	0	5	5			13-BA-24-13-0-54-1	WR
13	13-BA-24-13-30-54	BA	24	13	2	30	54	BFET	WI			30	54	VT	WI	R			30	54	0	6	6			13-BA-24-13-30-54-2	WR
13	13-BA-24-13-90-54	BA	24	13	3	?	54	VT	POR			90	54	VT	POR	R			90	54	0	4	4			13-BA-24-13-90-54-3	WR
13	13-BA-24-13-30-0	BA	24	13								30	0	VT	LOF	R			30	0	3	0	3			13-BA-24-13-30-0-4	WR
13	13-BA-24-13-25-0	BA	24	13								25	0	VT	POR	R			25	0	4	0	4			13-BA-24-13-25-0-5	WR
13	13-BA-24-13-210-0	BA	24	13								210	0	VT	LOF	R			210	0	0	4	4			13-BA-24-13-210-0-6	WR
13	13-BA-24-13-168-0	BA	24	13								168	0	VT	LOF	R			168	0	19	0	19			13-BA-24-13-168-0-7	WR
13	13-BA-24-14-219-60	BA	24	14	2	21	60	VT	POR			219	60	VT	LOF	R			219	60	4	0	4			13-BA-24-14-219-60-1	WR
13	13-BA-24-14-210-58	BA	24	14	3	30	58	VT	POR			210	58	VT	LOF	R			210	58	9	0	9			13-BA-24-14-210-58-2	WR
13	13-BA-24-14-177-60	BA	24	14	4	69	60	VT	POR			177	60	VT	POR	R			177	60	4	0	4			13-BA-24-14-177-60-3	WR
13	13-BA-24-14-10-0	BA	24	14								10	0	VT	LOF	R			10	0	4	0	4			13-BA-24-14-10-0-4	WR
13	13-BA-24-14-25-0	BA	24	14								25	0	VT	LOF	R			25	0	5	0	5			13-BA-24-14-25-0-5	WR
13	13-BA-24-14-179-0	BA	24	14								179	0	VT	CL	R			179	0	5	0	5			13-BA-24-14-179-0-6	WR
13	13-BA-24-14-191-0	BA	24	14								191	0	VT	CL	R			191	0	5	0	5			13-BA-24-14-191-0-7	WR
13	13-BA-24-15-150-60	BA	24	15	2	12 RL	60	VT	UC			150	60	VT	UC	R			150	60	4	0	4			13-BA-24-15-150-60-1	WR
13	13-BA-24-15-99-60	BA	24	15	4	72 RL	60	VT	POR			99	60	VT	POR	R			99	60	4	0	4			13-BA-24-15-99-60-2	WR
13	13-BA-24-15-107-60	BA	24	15								107	60	VT	LOF	R			107	60	4	0	4			13-BA-24-15-107-60-3	WR
13	13-BA-24-15-117-60	BA	24	15								117	60	VT	LOF	R			117	60	4	0	4			13-BA-24-15-117-60-4	WR
13	13-BA-24-15-71-0	BA	24	15								71	0	VT	POR	R			71	0	4	0	4			13-BA-24-15-71-0-5	WR
13	13-BA-24-16-156-60	BA	24	16	4	156	60	VT	POR			156	60	VT	LOF	R			156	60	4	0	4			13-BA-24-16-156-60-1	WR
13	13-BA-24-16-30-0	BA	24	16								30	0	VT	RI	R			30	0	15	0	15			13-BA-24-16-30-0-2	WR
13	13-BA-23-2-29-0	BA	23	2								29	0	VT	RI	R			29	0	4	0	4			13-BA-23-2-29-0-1	WR
13	13-BA-23-7-188-60	BA	23	7	5	188	60	VT	POR			188	60	VT	POR	R			188	60	2	0	2			13-BA-23-7-188-60-1	WR
13	13-BA-23-7-240-58	BA	23	7	6	240	58	VT	POR			240	58	VT	POR	R			240	58	2	0	2			13-BA-23-7-240-58-2	WR
13	13-BA-23-8-156-60	BA	23	8	1	156	60	VT	POR			156	60	VT	POR	R			156	60	4	0	4			13-BA-23-8-156-60-1	WR
13	13-BA-23-8-237-0	BA	23	8								237	0	VT	LOF	R			237	0	10	0	10			13-BA-23-8-237-0-2	WR
13	13-BA-23-9-0-11	BA	23	9	1	0	11	BFET	WI			0	11	VT	WI	R			0	12	0	24	24			13-BA-23-9-0-12-1	WR
13	13-BA-23-9-0-14	BA	23	9	2	0	14	VT	UC			0	14	VT	UC	R			0	12	0	24	24			13-BA-23-9-0-12-1	WR
13	13-BA-23-9-0-19	BA	23	9	3	0	19	BFET	WI			0	19	VT	WI	R			0	12	0	24	24			13-BA-23-9-0-12-1	WR
13	13-BA-23-9-51-0	BA	23	9	4	51	0	BFET	WI			51	0	VT	WI	R			51	0	9	0	9			13-BA-23-9-51-0-2	WR
13	13-BA-23-9-89-0	BA	23	9	5	89	0	VT	POR			89	0	VT	POR	R			89	0	3	4	7			13-BA-23-9-89-0-3	WR
13	13-BA-23-9-81-0	BA	23	9								81	0	VT	LOF	R			81	0	4	0	4			13-BA-23-9-81-0-4	WR
13	13-BA-23-9-30-0	BA	23	9								30	0	VT	POR	R			30	0	8	0	8			13-BA-23-9-30-0-5	WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-23-10-32-59	BA	23	10	1	32	59	VT	POR			32	59	VT	POR	R			32	59					13-BA-24-10-150-0-2	WR	
13	13-BA-23-10-149-58	BA	23	10	3	149	58	VT	POR			149	58	VT	POR	R			149	58	10	0	10		13-BA-23-10-149-58-1	WR	
13	13-BA-23-10-240-60	BA	23	10	5	240	60	VT	POR			240	60	VT	POR	R			240	60	6	0	6		13-BA-23-10-240-60-2	WR	
13	13-BA-23-10-0-58	BA	23	10								0	58	VT	LOF	R			0	58	0	4	4		13-BA-23-10-0-58-3	WR	
13	13-BA-23-10-0-3	BA	23	10								0	3	VT	LOF	R			0	3	0	4	4		13-BA-23-10-0-3-4	WR	
13	13-BA-23-11-36-0	BA	23	11	1	36	0	BFET	WI			36	0	VT	WI	R			36	0	11	0	11		13-BA-23-11-36-0-1	WR	
13	13-BA-23-11-65-0	BA	23	11	2	65	0	BFET	WI			65	0	VT	WI	R			70	0	19	0	19		13-BA-23-11-70-0-2	WR	
13	13-BA-23-11-94-0	BA	23	11	3	94	0	VT	POR			94	0	VT	POR	R			70	0	19	0	19		13-BA-23-11-70-0-2	WR	
13	13-BA-23-11-110-58	BA	23	11	5	110	58	BFET	WI			110	58	VT	WI	R			110	58					13-BA-24-11-225-0-4	WR	
13	13-BA-23-11-120-0	BA	23	11	6	120	0	BFET	WI			120	0	VT	WI	R			127	0	22	0	22		13-BA-23-11-127-0-3	WR	
13	13-BA-23-11-132-0	BA	23	11	7	132	0	BFET	WI			132	0	VT	WI	R			127	0	22	0	22		13-BA-23-11-127-0-3	WR	
13	13-BA-23-11-204-0	BA	23	11	9	204	0	VT	POR			204	0	VT	POR	R			204	0	4	0	4		13-BA-23-11-204-0-4	WR	
13	13-BA-23-11-95-59	BA	23	11								95	59	VT	POR	R			95	59	6	0	6		13-BA-23-11-95-59-5	WR	
13	13-BA-23-12-138-0	BA	23	12	2	138	0	BFET	WI			138	0	VT	WI	R			138	0	5	0	5		13-BA-23-12-138-0-1	WR	
13	13-BA-23-12-173-0	BA	23	12	3	173	0	VT	POR			173	0	VT	LOF	R			173	0	4	0	4		13-BA-23-12-173-0-2	WR	
13	13-BA-23-12-197-0	BA	23	12	4	197	0	BFET	WI			197	0	VT	WI	R			197	0	6	0	6		13-BA-23-12-197-0-3	WR	
13	13-BA-23-12-0-17	BA	23	12	5	0	0-38	BFET	WI			0	17	VT	WI	R			0	17	9	40	49		13-BA-23-12-0-17-4	WR	
13	13-BA-23-12-57-0	BA	23	12	6	57	0	BFET	WI			57	0	VT	WI	R			57	0	9	0	9		13-BA-23-12-57-0-5	WR	
13	13-BA-23-12-90-57	BA	23	12	7	90	57	BFET	WI			90	57	VT	WI	R			90	57	10	0	10		13-BA-23-12-90-57-6	WR	
13	13-BA-23-12-96-0	BA	23	12								96	0	VT	LOF	R			96	0	4	0	4		13-BA-23-12-96-0-7	WR	
13	13-BA-23-13-82-60	BA	23	13	1	82	60	VT	POR			82	60	VT	POR	R			82	60	6	0	6		13-BA-23-13-82-60-1	WR	
13	13-BA-23-13-160-60	BA	23	13	3	160	60	VT	POR			160	60	VT	POR	R			160	60	5	0	5		13-BA-23-13-160-60-2	WR	
13	13-BA-23-13-65-0	BA	23	13								65	0	VT	LOF	R			65	0	4	0	4		13-BA-23-13-65-0-3	WR	
13	13-BA-23-13-144-0	BA	23	13								144	0	VT	LOF	R			144	0	4	0	4		13-BA-23-13-144-0-4	WR	
13	13-BA-23-14-165-60	BA	23	14	2	165	60	VT	POR			165	60	VT	LOF	R			165	60	4	0	4		13-BA-23-14-165-60-1	WR	
13	13-BA-23-14-94-58	BA	23	14								94	58	VT	RI	R			94	58	6	0	6		13-BA-23-14-94-58-2	WR	
13	13-BA-23-14-0-49	BA	23	14								0	49	VT	LOF	R			0	49	0	4	4		13-BA-23-14-0-49-3	WR	
13	13-BA-23-15-33-56	BA	23	15	1	33	56	VT	POR			33	56	VT	POR	R			33	56	0	4	4		13-BA-23-15-33-56-1	WR	
13	13-BA-23-15-132-60	BA	23	15	2	132	60	VT	POR			132	60	VT	LOF	R			132	60	4	0	4		13-BA-23-15-132-60-2	WR	
13	13-BA-23-15-0-56	BA	23	15								0	56	VT	POR	R			0	56	4	2	6		13-BA-23-15-0-56-3	WR	
13	13-BA-23-15-67-0	BA	23	15								67	0	VT	POR	R			67	0	4	0	4		13-BA-23-15-67-0-4	WR	
13	13-BA-22-3-90-0	BA	22	3								90	0	VT	RI	R			90	0	2	0	2		13-BA-22-3-90-0-1	WR	
13	13-BA-22-4-0-16	BA	22	4	1	0	16	VT	POR			0	16	VT	POR	R			0	16	2	0	2		13-BA-22-4-0-16-1	WR	
13	13-BA-22-4-29-0	BA	22	4	2	29	0	VT	POR			29	0	VT	POR	R			29	0	2	0	2		13-BA-22-4-29-0-2	WR	
13	13-BA-22-4-34-0	BA	22	4	4	34	0	BFET	WI			34	0	VT	WI	R			34	0	2	0	2		13-BA-22-4-34-0-3	WR	
13	13-BA-22-5-208-60	BA	22	5	7	208	60	VT	POR			208	60	VT	POR	R			208	60	2	0	2		13-BA-22-5-208-60-1	WR	
13	13-BA-22-8-190-0	BA	22	8								190	0	VT	LOF	R			190	0	6	0	6		13-BA-22-8-190-0-1	WR	
13	13-BA-22-9-138-0	BA	22	9	1	138	0	BFET	WI			138	0	VT	WI	R			138	0	9	0	9		13-BA-22-9-138-0-1	WR	
13	13-BA-22-9-24-60	BA	22	9	3	24	60	VT	POR			24	60	VT	POR	R			24	60	4	0	4		13-BA-22-9-24-60-2	WR	
13	13-BA-22-9-160-0	BA	22	9								160	0	VT	LOF	R			160	0	4	0	4		13-BA-22-9-160-0-3	WR	
13	13-BA-22-9-31-0	BA	22	9								31	0	VT	LOF	R			31	0	5	0	5		13-BA-22-9-31-0-4	WR	
13	13-BA-22-10-168-60	BA	22	10	2	168	60	VT	POR			168	60	VT	POR	R			175	60	16	0	16		13-BA-22-10-175-60-1	WR	
13	13-BA-22-10-192-60	BA	22	10	6	192	60	VT	LOF			192	60	VT	LOF	R			192	60	6	0	6		13-BA-22-10-192-60-2	WR	
13	13-BA-22-10-234-60	BA	22	10	7	234	60	VT	POR			234	60	VT	RI	R			234	60	4	0	4		13-BA-22-10-234-60-3	WR	
13	13-BA-22-11-172-0	BA	22	11	1	172	0	BFET	WI			172	0	VT	WI	R			172	0	10	0	10		13-BA-22-11-172-0-1	WR	
13	13-BA-22-11-207-0	BA	22	11	2	207	0	BFET	WI			207	0	VT	WI	R			216	0	27	0	27		13-BA-22-11-216-0-2	WR	
13	13-BA-22-11-212-0	BA	22	11	3	212	0	BFET	WI			212	0	VT	WI	R			216	0	27	0	27		13-BA-22-11-216-0-2	WR	
13	13-BA-22-11-225-0	BA	22	11	4	225	0	BFET	WI			225	0	VT	WI	R			216	0	27	0	27		13-BA-22-11-216-0-2	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-BA-22-11-88-57	BA	22	11	7	88	57	VT	POR			88	57	VT	POR	R			88	57	4	0	4			13-BA-22-11-88-57-3	WR
13	13-BA-22-11-0-46	BA	22	11								0	46	VT	LOF	R			0	46	0	4	4			13-BA-22-11-0-46-4	WR
13	13-BA-22-12-0-34	BA	22	12	2	0	34	VT	LF			0	34	VT	IF	R			0	34	4	0	4			13-BA-22-12-0-34-1	WR
13	13-BA-22-12-0-8	BA	22	12	3	0	8	BFET	WI			0	8	VT	WI	R			0	8	0	8	8			13-BA-22-12-0-8-2	WR
13	13-BA-22-12-34-0	BA	22	12	6	34	0	VT	POR			34	0	VT	LOF	R			34	0	4	0	4			13-BA-22-12-34-0-3	WR
13	13-BA-22-12-60-0	BA	22	12	7	60	0	BFET	WI			60	0	VT	WI	R			60	0	10	0	10			13-BA-22-12-60-0-4	WR
13	13-BA-22-12-81-0	BA	22	12	8	81	0	BFET	WI			81	0	VT	WI	R			81	0	7	0	7			13-BA-22-12-81-0-5	WR
13	13-BA-22-12-152-2	BA	22	12	9	152	2	BFET	WI			152	2	VT	WI	R			152	2	8	0	8			13-BA-22-12-152-2-6	WR
13	13-BA-22-12-211-58	BA	22	12	10	211	58	VT	POR			211	58	VT	POR	R			211	58	6	0	6			13-BA-22-12-211-58-7	WR
13	13-BA-22-12-90-0	BA	22	12								90	0	VT	LOF	R			90	0	0	3	3			13-BA-22-12-90-0-8	WR
13	13-BA-22-13-0-14	BA	22	13	1	0	14	BFET	WI			0	14	VT	WI	R			0	14	0	5	5			13-BA-22-13-0-14-1	WR
13	13-BA-22-13-144-0	BA	22	13	3	144	0	BFET	WI			144	0	VT	WI	R			144	0	8	0	8			13-BA-22-13-144-0-2	WR
13	13-BA-22-14-144-58	BA	22	14	1	96 RL	58	VT	POR			144	58	VT	POR	R			144	58	6	0	6			13-BA-22-14-144-58-1	WR
13	13-BA-22-14-147-60	BA	22	14	2	93 RL	60	VT	POR			147	60	VT	POR	R			149	60	12	0	12			13-BA-22-14-149-60-2	WR
13	13-BA-22-14-152-60	BA	22	14	3	88 RL	60	VT	POR			152	60	VT	POR	R			149	60	12	0	12			13-BA-22-14-149-60-2	WR
13	13-BA-22-14-204-60	BA	22	14	4	36 RL	60	VT	POR			204	60	VT	POR	R			204	60	5	0	5			13-BA-22-14-204-60-3	WR
13	13-BA-22-14-211-60	BA	22	14	5	29 RL	60	VT	POR			211	60	VT	POR	R			211	60	12	0	12			13-BA-22-14-211-60-4	WR
13	13-BA-22-14-194-4	BA	22	14								194	4	VT	POR	R			194	4	10	0	10			13-BA-22-14-194-4-5	WR
13	13-BA-22-15-28-60	BA	22	15	4	28	60	VT	LF			28	60	VT	LOF	R			28	60	6	3	9			13-BA-22-15-28-60-1	WR
13	13-BA-22-15-60-58	BA	22	15								60	58	VT	RI	R			60	58	6	0	6			13-BA-22-15-60-58-2	WR
13	13-BA-22-15-112-58	BA	22	15								112	58	VT	RI	R			112	58	6	0	6			13-BA-22-15-112-58-3	WR
13	13-BA-22-16-99-60	BA	22	16	1	99	60	VT	POR			99	60	VT	POR	R			99	60	7	0	7			13-BA-22-16-99-60-1	WR
13	13-BA-22-16-1-50	BA	22	16	2	1	50	VT	POR			1	50	VT	POR	R			1	50	0	5	5			13-BA-22-16-1-50-2	WR
13	13-BA-22-16-1-38	BA	22	16	3	1	38	VT	POR			1	38	VT	POR	R			1	38	0	5	5			13-BA-22-16-1-38-3	WR
13	13-BA-22-16-0-60	BA	22	16								0	60	VT	LOF	R			0	60	5	3	8			13-BA-22-16-0-60-4	WR
13	13-BA-21-1-227-0	BA	21	1	3	176	0	VT	POR			227	0	VT	POR	R			225	0	7	0	7			13-BA-21-1-225-0-2	WR
13	13-BA-21-3-206-0	BA	21	3	5	206	0	VT	POR			206	0	VT	POR	R			206	0	2	0	2			13-BA-21-3-206-0-1	WR
13	13-BA-21-3-212-0	BA	21	3	8	212	0	VT	POR			212	0	VT	POR	R			212	0	2	0	2			13-BA-21-3-212-0-2	WR
13	13-BA-21-7-149-58	BA	21	7	4	149	58	VT	POR			149	58	VT	POR	R			149	58	2	0	2			13-BA-21-7-149-58-1	WR
13	13-BA-21-7-206-58	BA	21	7	8	206	58	VT	POR			206	58	VT	POR	R			206	58	2	0	2			13-BA-21-7-206-58-2	WR
13	13-BA-21-8-144-58	BA	21	8	4	144	58	VT	POR			144	58	VT	POR	R			144	58	6	0	6			13-BA-21-8-144-58-1	WR
13	13-BA-21-8-150-59	BA	21	8	5	150	59	VT	POR			150	59	VT	POR	R			150	59	12	0	12			13-BA-21-8-150-59-2	WR
13	13-BA-21-8-215-60	BA	21	8	6	212-218	60	VT	UC			215	60	VT	UC	R			215	60	10	0	10			13-BA-21-8-215-60-3	WR
13	13-BA-21-8-15-0	BA	21	8								15	0	VT	LOF	R			15	0	18	0	18			13-BA-21-8-15-0-4	WR
13	13-BA-21-9-0-21	BA	21	9	2	0	21	BFET	WI			0	21	VT	WI	R			0	28	0	31	31			13-BA-21-9-0-28-1	WR
13	13-BA-21-9-0-27	BA	21	9	3	0	27	BFET	WI			0	27	VT	WI	R			0	28	0	31	31			13-BA-21-9-0-28-1	WR
13	13-BA-21-9-0-36	BA	21	9	4	0	36	BFET	WI			0	36	VT	WI	R			0	28	0	31	31			13-BA-21-9-0-28-1	WR
13	13-BA-21-9-1-58	BA	21	9	5	1	58	VT	POR			1	58	VT	POR	R			1	58	4	8	12			13-BA-21-9-1-58-2	WR
13	13-BA-21-9-31-58	BA	21	9	6	31	58	BFET	WI			31	58	VT	WI	R			31	58	12	0	12			13-BA-21-9-31-58-3	WR
13	13-BA-21-9-34-0	BA	21	9	7	34	0	BFET	WI			34	0	VT	WI	R			34	0	8	0	8			13-BA-21-9-34-0-4	WR
13	13-BA-21-9-67-0	BA	21	9	8	67	0	BFET	WI			67	0	VT	WI	R			67	0	11	0	11			13-BA-21-9-67-0-5	WR
13	13-BA-21-9-97-0	BA	21	9								97	0	VT	RI	R			97	0	4	0	4			13-BA-21-9-97-0-6	WR
13	13-BA-21-10-1-60	BA	21	10	1	1	56-60	VT	UC			1	60	VT	UC	R			1	60	0	4	4			13-BA-21-10-1-60-1	WR
13	13-BA-21-10-88-60	BA	21	10	2	88	58-60	VT	POR			88	60	VT	POR	R			88	60	8	0	8			13-BA-21-10-88-60-2	WR
13	13-BA-21-10-108-60	BA	21	10	3	108	60	VT	POR			108	60	VT	POR	R			108	60	4	0	4			13-BA-21-10-108-60-3	WR
13	13-BA-21-10-116-60	BA	21	10	4	116	60	VT	POR			116	60	VT	POR	R			116	60	4	0	4			13-BA-21-10-116-60-4	WR
13	13-BA-21-10-154-60	BA	21	10	6	154	60	VT	POR			154	60	VT	POR	R			154	60	4	0	4			13-BA-21-10-154-60-5	WR
13	13-BA-21-10-192-60	BA	21	10	7	192	60	VT	POR			192	60	VT	POR	R			192	60	4	0	4			13-BA-21-10-192-60-6	WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Indication Topside	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-21-10-30-0	BA	21	10								30	0	VT	RI	R			30	0	8	0	8		13-BA-21-10-30-0-7	WR	
13	13-BA-21-11-0-21	BA	21	11	1	0	21	BFET	WI			0	21	VT	WI	R			0	21	0	10	10		13-BA-21-11-0-21-1	WR	
13	13-BA-21-11-31-2	BA	21	11	2	31	2	BFET	WI			31	2	VT	RI	R			31	2	0	4	4		13-BA-21-11-31-2-2	WR	
13	13-BA-21-11-238-21	BA	21	11	6	238	21	LFET	BC	0.17		238	21	PAUT	BC	R	< 0.160		238	20	12	12	48	144	13-BA-21-11-238-20-3	PP	
13	13-BA-21-11-150-0	BA	21	11								150	0	VT	LOF	R			150	0	4	0	4		13-BA-21-11-150-0-4	WR	
13	13-BA-21-12-0-21	BA	21	12	1	0	21	BFET	WI			0	21	VT	WI	R			0	21	4	9	13		13-BA-21-12-0-21-1	WR	
13	13-BA-21-12-0-42	BA	21	12	2	0	42	BFET	WI			0	42	VT	WI	R			0	42	0	17	17		13-BA-21-12-0-42-2	WR	
13	13-BA-21-12-0-57	BA	21	12	3	0	57	BFET	WI			0	57	VT	WI	R			0	57	0	4	4		13-BA-21-12-0-57-3	WR	
13	13-BA-21-12-32-2	BA	21	12	4	32	2	BFET	WI			32	2	VT	WI	R			32	2	12	12	24		13-BA-21-12-32-2-4	WR	
13	13-BA-21-12-84-0	BA	21	12	5	84	0	VT	POR			84	0	VT	POR	R			84	0	8	8	16		13-BA-21-12-84-0-5	WR	
13	13-BA-21-12-92-57	BA	21	12	6	92	57	BFET	WI			92	57	VT	WI	R			92	57	4	0	4		13-BA-21-12-92-57-6	WR	
13	13-BA-21-12-154-56	BA	21	12	7	154	56	VT	POR			154	56	VT	POR	R			154	56	4	0	4		13-BA-21-12-154-56-7	WR	
13	13-BA-21-12-150-0	BA	21	12								150	0	VT	LOF	R			150	0	4	0	4		13-BA-21-12-150-0-8	WR	
13	13-BA-21-12-154-0	BA	21	12								154	0	VT	LOF	R			154	0	5	0	5		13-BA-21-12-154-0-9	WR	
13	13-BA-21-12-47-0	BA	21	12								47	0	VT	POR	R			47	0	4	0	4		13-BA-21-12-47-0-10	WR	
13	13-BA-21-12-0-0	BA	21	12								0	0	VT	POR	R			0	0	6	3	9		13-BA-21-12-0-0-11	WR	
13	13-BA-21-13-140-60	BA	21	13	2	140	60	VT	LW			140	60	VT	LOF	R			140	60	5	0	5		13-BA-21-13-140-60-1	WR	
13	13-BA-21-13-148-60	BA	21	13	3	148	60	VT	LF			148	60	VT	LOF	R			148	60	6	0	6		13-BA-21-13-148-60-2	WR	
13	13-BA-21-13-180-60	BA	21	13	4	180	60	VT	LF			180	60	VT	LOF	R			180	60	6	0	6		13-BA-21-13-180-60-3	WR	
13	13-BA-21-13-210-60	BA	21	13								210	60	VT	LOF	R			210	60	0	3	3		13-BA-21-13-210-60-4	WR	
13	13-BA-21-13-28-0	BA	21	13	8	28	0	VT	LOF			28	0	VT	LOF	R			28	0	8	0	8		13-BA-21-13-28-0-5	WR	
13	13-BA-21-13-41-0	BA	21	13	9	41	0	VT	UC			41	0	VT	UC	R			41	0	4	0	4		13-BA-21-13-41-0-6	WR	
13	13-BA-21-14-1-60	BA	21	14	1	1	60	VT	POR			1	60	VT	POR	R			1	60	4	3	7		13-BA-21-14-1-60-1	WR	
13	13-BA-21-14-114-60	BA	21	14	3	114	60	VT	POR			114	60	VT	LOF	R			114	60	4	0	4		13-BA-21-14-114-60-2	WR	
13	13-BA-21-14-127-60	BA	21	14	4	127	60	VT	LF			127	60	VT	IF	R			127	60	4	0	4		13-BA-21-14-127-60-3	WR	
13	13-BA-21-14-144-60	BA	21	14	5	144	60	VT	POR			144	60	VT	POR	R			144	60	4	0	4		13-BA-21-14-144-60-4	WR	
13	13-BA-21-14-0-39	BA	21	14								0	39	VT	LOF	R			0	39	4	7	11		13-BA-21-14-0-39-5	WR	
13	13-BA-21-14-76-4	BA	21	14								76	4	VT	POR	R			76	4	10	0	10		13-BA-21-14-76-4-6	WR	
13	13-BA-21-15-80-58	BA	21	15	2	80	58	VT	POR			80	58	VT	POR	R			80	58	20	0	20		13-BA-21-15-80-58-1	WR	
13	13-BA-21-15-19-0	BA	21	15								19	0	VT	RI	R			19	0	8	0	8		13-BA-21-15-19-0-2	WR	
13	13-BA-21-15-29-0	BA	21	15								29	0	VT	LOF	R			29	0	9	0	9		13-BA-21-15-29-0-3	WR	
13	13-BA-21-15-42-0	BA	21	15								42	0	VT	LOF	R			42	0	4	0	4		13-BA-21-15-42-0-4	WR	
13	13-BA-20-4-155-60	BA	20	4	4	155	60	VT	POR			155	60	VT	POR	R			155	60	2	0	2		13-BA-20-4-155-60-1	WR	
13	13-BA-20-4-165-60	BA	20	4	5	165	60	VT	POR			165	60	VT	POR	R			165	60	2	0	2		13-BA-20-4-165-60-2	WR	
13	13-BA-20-5-36-60	BA	20	5	3	36	60	VT	POR			36	60	VT	POR	R			36	60	2	0	2		13-BA-20-5-36-60-1	WR	
13	13-BA-20-7-96-60	BA	20	7	2	96	58-60	VT	POR			96	60	VT	POR	R			96	60	4	0	4		13-BA-20-7-96-60-1	WR	
13	13-BA-20-8-240-57	BA	20	8	1	240	57	BFET	WI			240	57	VT	WI	R			240	57	0	6	6		13-BA-20-8-240-57-1	WR	
13	13-BA-20-8-93-58	BA	20	8	4	93	58	VT	POR			93	58	VT	POR	R			93	58	6	8	14		13-BA-20-8-93-58-2	WR	
13	13-BA-20-8-144-59	BA	20	8	5	144	59	VT	POR			144	59	VT	POR	R			144	59	4	0	4		13-BA-20-8-144-59-3	WR	
13	13-BA-20-8-234-0	BA	20	8								234	0	VT	POR	R			234	0	4	0	4		13-BA-20-8-234-0-4	WR	
13	13-BA-20-9-210-1	BA	20	9	2	210	1	VT	POR			210	1	VT	POR	R			210	1	4	0	4		13-BA-20-9-210-1-1	WR	
13	13-BA-20-9-130-0	BA	20	9	3	130	0	VT	POR			130	0	VT	POR	R			130	0	30	0	30		13-BA-20-9-130-0-2	WR	
13	13-BA-20-9-171-0	BA	20	9								171	0	VT	LOF	R			171	0	11	0	11		13-BA-20-9-171-0-3	WR	
13	13-BA-20-9-29-0	BA	20	9								29	0	VT	LOF	R			29	0	3	3	6		13-BA-20-9-29-0-4	WR	
13	13-BA-20-9-15-0	BA	20	9								15	0	VT	POR	R			15	0	4	0	4		13-BA-20-9-15-0-5	WR	
13	13-BA-20-10-223-0	BA	20	10	1	223	0	VT	POR			223	0	VT	POR	R			223	0	9	0	9		13-BA-20-10-223-0-1	WR	
13	13-BA-20-10-29-60	BA	20	10	2	29	60	VT	POR			29	60	VT	LOF	R			29	60	5	0	5		13-BA-20-10-29-60-2	WR	
13	13-BA-20-10-0-48	BA	20	10								0	48	VT	LOF	R			0	48	0	4	4		13-BA-20-10-0-48-3	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-20-10-0-5	BA	20	10							0	5	VT	LOF	R			0	5	0	10	10			13-BA-20-10-0-5-4	WR	
13	13-BA-20-11-0-19	BA	20	11	1	0	19	BFET	WI		0	19	VT	WI	R			0	19	0	9	9			13-BA-20-11-0-19-1	WR	
13	13-BA-20-11-10-0	BA	20	11	2	10	0	VT	POR		10	0	VT	POR	R			10	0	7	0	7			13-BA-20-11-10-0-2	WR	
13	13-BA-20-11-35-0	BA	20	11	3	35	0	BFET	WI		35	0	VT	WI	R			52	0	42	0	42			13-BA-20-11-52-0-3	WR	
13	13-BA-20-11-47-0	BA	20	11	4	47	0	VT	POR		47	0	VT	POR	R			52	0	42	0	42			13-BA-20-11-52-0-3	WR	
13	13-BA-20-11-55-0	BA	20	11	5	55	0	VT	POR		55	0	VT	POR	R			52	0	42	0	42			13-BA-20-11-52-0-3	WR	
13	13-BA-20-11-63-0	BA	20	11	6	63	0	VT	POR		63	0	VT	POR	R			52	0	42	0	42			13-BA-20-11-52-0-3	WR	
13	13-BA-20-11-67-0	BA	20	11	7	67	0	VT	POR		67	0	VT	POR	R			52	0	42	0	42			13-BA-20-11-52-0-3	WR	
13	13-BA-20-11-96-0	BA	20	11	9	96	0	BFET	WI		96	0	VT	WI	R			96	0	8	0	8			13-BA-20-11-96-0-4	WR	
13	13-BA-20-11-156-0	BA	20	11	10	156	0	BFET	WI		156	0	VT	WI	R			156	0	12	0	12			13-BA-20-11-156-0-5	WR	
13	13-BA-20-11-156-0	BA	20	11	11	156	0	VT	POR		156	0	VT	POR	R			156	0	0	4	4			13-BA-20-11-156-0-6	WR	
13	13-BA-20-12-240-8	BA	20	12	1	1 RL	8	VT	POR		240	8	VT	LOF	R			240	8	0	6	6			13-BA-20-12-240-8-1	WR	
13	13-BA-20-12-11-0	BA	20	12	2	11	0	BFET	WI		11	0	VT	WI	R			11	0	14	0	14			13-BA-20-12-11-0-2	WR	
13	13-BA-20-12-28-0	BA	20	12	3	28	0	BFET	WI		28	0	VT	WI	R			34	0	28	0	28			13-BA-20-12-34-0-3	WR	
13	13-BA-20-12-40-0	BA	20	12	4	40	0	BFET	WI		40	0	VT	WI	R			34	0	28	0	28			13-BA-20-12-34-0-3	WR	
13	13-BA-20-12-0-43	BA	20	12							0	43	VT	LOF	R			0	43	0	16	16			13-BA-20-12-0-43-4	WR	
13	13-BA-20-12-90-0	BA	20	12							90	0	VT	LOF	R			90	0	4	0	4			13-BA-20-12-90-0-5	WR	
13	13-BA-20-12-216-0	BA	20	12							216	0	VT	POR	R			216	0	4	0	4			13-BA-20-12-216-0-6	WR	
13	13-BA-20-13-210-0	BA	20	13							210	0	VT	RI	R			210	0	8	0	8			13-BA-20-13-210-0-1	WR	
13	13-BA-20-15-106-60	BA	20	15	1	106	60	VT	UC		106	60	VT	LOF	R			106	60	4	0	4			13-BA-20-15-106-60-1	WR	
13	13-BA-20-15-120-60	BA	20	15	2	120	60	VT	POR		120	60	VT	LOF	R			120	60	4	0	4			13-BA-20-15-120-60-2	WR	
13	13-BA-19-2-44-0	BA	19	2							44	0	VT	RI	R			44	0	2	0	2			13-BA-19-2-44-0-1	WR	
13	13-BA-19-3-30-0	BA	19	3							30	0	VT	RI	R			30	0	2	0	2			13-BA-19-3-30-0-1	WR	
13	13-BA-19-4-0-29	BA	19	4	1	0	29	VT	POR		0	29	VT	POR	R			0	29	2	0	2			13-BA-19-4-0-29-1	WR	
13	13-BA-19-8-207-0	BA	19	8							207	0	VT	LOF	R			207	0	0	5	5			13-BA-19-8-207-0-1	WR	
13	13-BA-19-9-30-0	BA	19	9							30	0	VT	POR	R			30	0	8	0	8			13-BA-19-9-30-0-1	WR	
13	13-BA-19-10-94-58	BA	19	10	2	94	58	VT	POR		94	58	VT	POR	R			94	58						13-BA-20-9-210-1-1	WR	
13	13-BA-19-10-118-60	BA	19	10	3	118	60	VT	POR		118	60	VT	POR	R			118	60	7	0	7			13-BA-19-10-118-60-1	WR	
13	13-BA-19-10-211-60	BA	19	10	7	211	58-60	VT	POR		211	60	VT	POR	R			211	60	0	5	5			13-BA-19-10-211-60-2	WR	
13	13-BA-19-11-74-0	BA	19	11	1	74	0	BFET	WI		74	0	VT	WI	R			74	0	9	0	9			13-BA-19-11-74-0-1	WR	
13	13-BA-19-11-92-0	BA	19	11	2	92	0	BFET	WI		92	0	VT	WI	R			92	0	9	0	9			13-BA-19-11-92-0-2	WR	
13	13-BA-19-11-114-0	BA	19	11	3	114	0	BFET	WI		114	0	VT	WI	R			114	0	9	0	9			13-BA-19-11-114-0-3	WR	
13	13-BA-19-12-26-60	BA	19	12	5	26	58	VT	POR		26	60	VT	POR	R			26	60						13-BA-20-11-156-0-5	WR	
13	13-BA-19-12-88-57	BA	19	12	6	88	57	BFET	WI		88	57	VT	WI	R			91	60	12	0	12			13-BA-19-12-91-60-1	WR	
13	13-BA-19-12-94-58	BA	19	12	7	94	58	VT	POR		94	58	VT	POR	R			91	60	12	0	12			13-BA-19-12-91-60-1	WR	
13	13-BA-19-12-92-0	BA	19	12	8	92	0	BFET	WI		92	0	VT	WI	R			92	0	0	9	9			13-BA-19-12-92-0-2	WR	
13	13-BA-19-12-153-0	BA	19	12	9	153	0	BFET	WI		153	0	VT	WI	R			153	0	0	9	9			13-BA-19-12-153-0-3	WR	
13	13-BA-19-12-178-0	BA	19	12	10	178	0	BFET	WI		178	0	VT	WI	R			178	0	5	0	5			13-BA-19-12-178-0-4	WR	
13	13-BA-19-12-203-0	BA	19	12	11	203	0	BFET	WI		203	0	VT	WI	R			203	0	6	0	6			13-BA-19-12-203-0-5	WR	
13	13-BA-19-12-186-37	BA	19	12	12	186	37	BFET	WI		186	37	VT	WI	R			186	37	10	0	10			13-BA-19-12-186-37-6	WR	
13	13-BA-19-12-17-0	BA	19	12							17	0	VT	LOF	R			17	0	4	0	4			13-BA-19-12-17-0-7	WR	
13	13-BA-19-12-57-0	BA	19	12							57	0	VT	LOF	R			57	0	4	0	4			13-BA-19-12-57-0-8	WR	
13	13-BA-19-13-212-58	BA	19	13	3	212	58	VT	POR		212	58	VT	POR	R			212	58	4	0	4			13-BA-19-13-212-58-1	WR	
13	13-BA-19-13-0-9	BA	19	13	5	0	9	BFET	WI		0	9	VT	WI	R			0	9	0	5	5			13-BA-19-13-0-9-2	WR	
13	13-BA-19-13-0-20	BA	19	13	6	0	20	VT	POR		0	20	VT	POR	R			0	20	0	4	4			13-BA-19-13-0-20-3	WR	
13	13-BA-19-13-0-36	BA	19	13	7	0	36	VT	POR		0	36	VT	POR	R			0	39	0	13	13			13-BA-19-13-0-39-4	WR	
13	13-BA-19-13-0-43	BA	19	13	8	0	43	BFET	WI		0	43	VT	WI	R			0	39	0	13	13			13-BA-19-13-0-39-4	WR	
13	13-BA-19-13-0-50	BA	19	13	9	0	50	BFET	WI		0	50	VT	WI	R			0	50	0	5	5			13-BA-19-13-0-50-5	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-19-13-27-0	BA	19	13								27	0	VT	LOF	R			27	0	4	0	4		13-BA-19-13-27-0-6	WR	
13	13-BA-19-13-120-0	BA	19	13								120	0	VT	LOF	R			120	0	26	0	26		13-BA-19-13-120-0-7	WR	
13	13-BA-19-14-68-60	BA	19	14	1	68	60	VT	LF			68	60	VT	LOF	R			68	60	4	0	4		13-BA-19-14-68-60-1	WR	
13	13-BA-19-14-77-60	BA	19	14	2	77	60	VT	POR			77	60	VT	RI	R			77	60	4	0	4		13-BA-19-14-77-60-2	WR	
13	13-BA-19-14-148-58	BA	19	14	3	148	58	VT	LW			148	58	VT	LOF	R			148	58	0	5	5		13-BA-19-14-148-58-3	WR	
13	13-BA-19-14-213-0	BA	19	14								213	0	VT	LOF	R			213	0	4	0	4		13-BA-19-14-213-0-4	WR	
13	13-BA-19-14-147-0	BA	19	14								147	0	VT	LOF	R			147	0	0	5	5		13-BA-19-14-147-0-5	WR	
13	13-BA-19-14-153-0	BA	19	14								153	0	VT	LOF	R			153	0	3	3	6		13-BA-19-14-153-0-6	WR	
13	13-BA-19-14-120-0	BA	19	14								120	0	VT	LOF	R			120	0	7	4	11		13-BA-19-14-120-0-7	WR	
13	13-BA-19-15-140-0	BA	19	15								140	0	VT	RI	R			140	0	8	0	8		13-BA-19-15-140-0-1	WR	
13	13-BA-19-16-1-45	BA	19	16	1	1	45	VT	POR			1	45	VT	POR	R			0	40	0	12	12		13-BA-19-16-0-40-1	WR	
13	13-BA-19-16-1-36	BA	19	16	2	1	36	VT	POR			1	36	VT	POR	R			0	40	0	12	12		13-BA-19-16-0-40-1	WR	
13	13-BA-18-1-30-0	BA	18	1								30	0	VT	RI	R			30	0	2	0	2		13-BA-18-1-30-0-1	WR	
13	13-BA-18-2-149-0	BA	18	2	4	149	0	VT	UC			149	0	VT	UC	R			149	0	2	0	2		13-BA-18-2-149-0-1	WR	
13	13-BA-18-9-0-43	BA	18	9	1	0	43	BFET	WI			0	43	VT	WI	R			0	43	0	10	10		13-BA-18-9-0-43-1	WR	
13	13-BA-18-9-204-60	BA	18	9	2	204	60	VT	POR			204	60	VT	POR	R			204	60	5	0	5		13-BA-18-9-204-60-2	WR	
13	13-BA-18-9-27-0	BA	18	9								27	0	VT	POR	R			27	0	3	4	7		13-BA-18-9-27-0-3	WR	
13	13-BA-18-10-168-0	BA	18	10	1	168	0	BFET	WI			168	0	VT	WI	R			173	0	29	0	29		13-BA-18-10-173-0-1	WR	
13	13-BA-18-10-182-0	BA	18	10	2	182	0	BFET	WI			182	0	VT	WI	R			173	0	29	0	29		13-BA-18-10-173-0-1	WR	
13	13-BA-18-10-24-60	BA	18	10	3	24	60	VT	POR			24	60	VT	LOF	R			24	60	4	0	4		13-BA-18-10-24-60-2	WR	
13	13-BA-18-10-27-58	BA	18	10	4	27	58	VT	POR			27	58	VT	POR	R			27	58	8	0	8		13-BA-18-10-27-58-3	WR	
13	13-BA-18-10-36-60	BA	18	10	5	36	60	VT	POR			36	60	VT	POR	R			36	60	0	4	4		13-BA-18-10-36-60-4	WR	
13	13-BA-18-10-69-60	BA	18	10	6	69	60	VT	POR			69	60	VT	LOF	R			69	60	4	0	4		13-BA-18-10-69-60-5	WR	
13	13-BA-18-10-94-60	BA	18	10	8	94	58-60	VT	POR			94	60	VT	LOF	R			94	60	6	0	6		13-BA-18-10-94-60-6	WR	
13	13-BA-18-10-0-17	BA	18	10								0	17	VT	LOF	R			0	17	0	4	4		13-BA-18-10-0-17-7	WR	
13	13-BA-18-11-45-0	BA	18	11	1	45	0	VT	POR			45	0	VT	POR	R			45	0	4	0	4		13-BA-18-11-45-0-1	WR	
13	13-BA-18-11-96-56	BA	18	11	5	96	56	VT	POR			96	56	VT	LOF	R			96	56	3	0	3		13-BA-18-11-96-56-2	WR	
13	13-BA-18-11-0-59	BA	18	11	6	0	59	BFET	WI			0	59	VT	WI	R			0	59	0	5	5		13-BA-18-11-0-59-3	WR	
13	13-BA-18-11-7-0	BA	18	11	7	7	0	BFET	WI			7	0	VT	WI	R			7	0	9	0	9		13-BA-18-11-7-0-4	WR	
13	13-BA-18-11-0-39	BA	18	11	8	0	39	BFET	WI			0	39	VT	WI	R			0	39	0	14	14		13-BA-18-11-0-39-5	WR	
13	13-BA-18-11-100-0	BA	18	11								100	0	VT	LOF	R			100	0	4	0	4		13-BA-18-11-100-0-6	WR	
13	13-BA-18-11-150-0	BA	18	11								150	0	VT	LOF	R			150	0	0	4	4		13-BA-18-11-150-0-7	WR	
13	13-BA-18-11-210-0	BA	18	11								210	0	VT	LOF	R			210	0	8	0	8		13-BA-18-11-210-0-8	WR	
13	13-BA-18-11-225-0	BA	18	11								225	0	VT	LOF	R			225	0	4	0	4		13-BA-18-11-225-0-9	WR	
13	13-BA-18-12-0-33	BA	18	12	1	0	33	BFET	WI			0	33	VT	WI	R			0	40	35	18	53		13-BA-18-12-0-40-1	WR	
13	13-BA-18-12-0-40	BA	18	12	2	0	40	BFET	WI			0	40	VT	WI	R			0	40	35	18	53		13-BA-18-12-0-40-1	WR	
13	13-BA-18-12-0-55	BA	18	12	3	0	55	BFET	WI			0	55	VT	WI	R			0	40	35	18	53		13-BA-18-12-0-40-1	WR	
13	13-BA-18-12-27-0	BA	18	12	4	27	0	BFET	WI			27	0	VT	WI	R			27	0	11	0	11		13-BA-18-12-27-0-2	WR	
13	13-BA-18-12-61-0	BA	18	12	5	61	0	BFET	WI			61	0	VT	WI	R			61	0	7	0	7		13-BA-18-12-61-0-3	WR	
13	13-BA-18-12-86-0	BA	18	12	6	86	0	BFET	WI			86	0	VT	WI	R			86	0	6	0	6		13-BA-18-12-86-0-4	WR	
13	13-BA-18-12-128-0	BA	18	12	7	128	0	BFET	WI			128	0	VT	WI	R			128	0	6	0	6		13-BA-18-12-128-0-5	WR	
13	13-BA-18-12-154-0	BA	18	12	8	154	0	BFET	WI			154	0	VT	WI	R			154	0	6	0	6		13-BA-18-12-154-0-6	WR	
13	13-BA-18-12-213-0	BA	18	12	9	213	0	BFET	WI			213	0	VT	WI	R			213	0	12	0	12		13-BA-18-12-213-0-7	WR	
13	13-BA-18-12-0-4	BA	18	12								0	4	VT	POR	R			0	4	0	4	4		13-BA-18-12-0-4-8	WR	
13	13-BA-18-13-0-0	BA	18	13	1	0	0	VT	POR			0	0	VT	POR	R			0	0	6	4	10		13-BA-18-13-0-0-1	WR	
13	13-BA-18-13-0-13	BA	18	13	2	0	13	BFET	WI			0	13	VT	WI	R			0	13	0	12	12		13-BA-18-13-0-13-2	WR	
13	13-BA-18-13-0-50	BA	18	13	3	0	50	BFET	WI			0	50	VT	WI	R			0	50	0	5	5		13-BA-18-13-0-50-3	WR	
13	13-BA-18-13-86-0	BA	18	13	4	86	0	BFET	WI			86	0	VT	WI	R			86	0	6	0	6		13-BA-18-13-86-0-4	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-BA-18-13-117-0	BA	18	13	5	117	0	BFET	WI			117	0	VT	WI	R			117	0	4	0	4			13-BA-18-13-117-0-5	WR
13	13-BA-18-13-228-60	BA	18	13	7	228	60	VT	POR			228	60	VT	POR	R			228	60	4	0	4			13-BA-18-13-228-60-6	WR
13	13-BA-18-13-146-0	BA	18	13								146	0	VT	LOF	R			146	0	4	0	4			13-BA-18-13-146-0-7	WR
13	13-BA-18-13-19-0	BA	18	13								19	0	VT	LOF	R			19	0	4	0	4			13-BA-18-13-19-0-8	WR
13	13-BA-18-13-28-0	BA	18	13								28	0	VT	RI	R			28	0	13	0	13			13-BA-18-13-28-0-9	WR
13	13-BA-18-14-115-60	BA	18	14	1	115	60	VT	POR			115	60	VT	LOF	R			115	60	4	0	4			13-BA-18-14-115-60-1	WR
13	13-BA-18-14-144-60	BA	18	14	2	144	60	VT	POR			144	60	VT	LOF	R			144	60	0	5	5			13-BA-18-14-144-60-2	WR
13	13-BA-18-14-53-0	BA	18	14								53	0	VT	LOF	R			53	0	4	0	4			13-BA-18-14-53-0-3	WR
13	13-BA-18-16-210-58	BA	18	16	4	210	58	VT	POR			210	58	VT	POR	R			210	58	2	0	2			13-BA-18-16-210-58-1	WR
13	13-BA-18-16-211-0	BA	18	16								211	0	VT	RI	R			211	0	2	0	2			13-BA-18-16-211-0-2	WR
13	13-BA-17-2-30-0	BA	17	2								30	0	VT	RI	R			30	0	2	0	2			13-BA-17-2-30-0-1	WR
13	13-BA-17-5-150-58	BA	17	5	3	150	58	VT	POR			150	58	VT	POR	R			150	58	2	0	2			13-BA-17-5-150-58-1	WR
13	13-BA-17-5-201-60	BA	17	5	4	201	60	VT	POR			201	60	VT	POR	R			201	60	2	0	2			13-BA-17-5-201-60-2	WR
13	13-BA-17-8-94-2	BA	17	8								94	2	VT	POR	R			94	2	3	0	3			13-BA-17-8-94-2-1	WR
13	13-BA-17-9-87-59	BA	17	9	2	87	59	BFET	WI			87	59	VT	WI	R			87	59	3	6	9			13-BA-17-9-87-59-1	WR
13	13-BA-17-9-90-0	BA	17	9								90	0	VT	LOF	R			90	0	8	0	8			13-BA-17-9-90-0-2	WR
13	13-BA-17-10-58-1	BA	17	10	1	58	1	VT	POR			58	1	VT	POR	R			58	1	4	0	4			13-BA-17-10-58-1-1	WR
13	13-BA-17-10-86-58	BA	17	10	2	86	58	VT	POR			86	58	VT	LOF	R			86	58	14	0	14			13-BA-17-10-86-58-2	WR
13	13-BA-17-10-108-60	BA	17	10	3	108	60	VT	POR			108	60	VT	LOF	R			108	60	4	0	4			13-BA-17-10-108-60-3	WR
13	13-BA-17-10-148-58	BA	17	10	4	148	58	VT	POR			148	58	VT	LOF	R			148	58	14	0	14			13-BA-17-10-148-58-4	WR
13	13-BA-17-10-189-60	BA	17	10	5	189	60	VT	POR			189	60	VT	LOF	R			189	60	4	0	4			13-BA-17-10-189-60-5	WR
13	13-BA-17-10-228-60	BA	17	10	7	228	60	VT	POR			228	60	VT	LOF	R			228	60	4	0	4			13-BA-17-10-228-60-6	WR
13	13-BA-17-10-193-0	BA	17	10								193	0	VT	RI	R			193	0	4	0	4			13-BA-17-10-193-0-7	WR
13	13-BA-17-11-210-0	BA	17	11								210	0	VT	LOF	R			210	0	3	0	3			13-BA-17-11-210-0-1	WR
13	13-BA-17-11-148-0	BA	17	11								148	0	VT	LOF	R			148	0	6	0	6			13-BA-17-11-148-0-2	WR
13	13-BA-17-12-0-24	BA	17	12	1	0	24	VT	LF			0	24	VT	LOF	R			0	24	0	4	4			13-BA-17-12-0-24-1	WR
13	13-BA-17-12-96-0	BA	17	12	2	96	0	BFET	WI			96	0	VT	WI	R			96	0	16	0	16			13-BA-17-12-96-0-2	WR
13	13-BA-17-12-144-0	BA	17	12	3	144	0	BFET	WI			144	0	VT	WI	R			144	0	9	0	9			13-BA-17-12-144-0-3	WR
13	13-BA-17-12-166-0	BA	17	12	4	166	0	BFET	WI			166	0	VT	WI	R			166	0	7	0	7			13-BA-17-12-166-0-4	WR
13	13-BA-17-12-208-0	BA	17	12	5	208	0	BFET	WI			208	0	VT	WI	R			208	0	5	0	5			13-BA-17-12-208-0-5	WR
13	13-BA-17-12-151-0	BA	17	12								151	0	VT	RI	R			151	0	0	5	5			13-BA-17-12-151-0-6	WR
13	13-BA-17-13-0-55	BA	17	13	1	0	55	VT	POR			0	55	VT	POR	R			0	55	0	4	4			13-BA-17-13-0-55-1	WR
13	13-BA-17-13-52-0	BA	17	13	2	52	0	BFET	WI			52	0	VT	WI	R			56	0	11	0	11			13-BA-17-13-56-0-2	WR
13	13-BA-17-13-59-0	BA	17	13	3	59	0	BFET	WI			59	0	VT	WI	R			56	0	11	0	11			13-BA-17-13-56-0-2	WR
13	13-BA-17-13-137-0	BA	17	13								137	0	VT	LOF	R			137	0	4	0	4			13-BA-17-13-137-0-3	WR
13	13-BA-17-14-96-59	BA	17	14	1	96	58-60	VT	LF/POR			96	59	VT	IF	R			96	59	7	0	7			13-BA-17-14-96-59-1	WR
13	13-BA-17-14-134-60	BA	17	14	2	132-136	60	VT	LF/POR			134	60	VT	IF	R			134	60	7	0	7			13-BA-17-14-134-60-2	WR
13	13-BA-17-14-150-0	BA	17	14	3	150	58	VT	POR			150	0	VT	POR	R			153	0	18	0	18			13-BA-17-14-153-0-3	WR
13	13-BA-17-14-158-0	BA	17	14	4	158	60	VT	POR			158	0	VT	POR	R			153	0	18	0	18			13-BA-17-14-153-0-3	WR
13	13-BA-17-15-84-58	BA	17	15	1	84	58	VT	UC			84	58	VT	UC	R			84	58	16	0	16			13-BA-17-15-84-58-1	WR
13	13-BA-17-15-87-60	BA	17	15	2	87	60	VT	UC			87	60	VT	LOF	R			84	58	16	0	16			13-BA-17-15-84-58-1	WR
13	13-BA-17-15-115-58	BA	17	15	3	115	58	VT	POR			115	58	VT	LOF	R			115	58	6	0	6			13-BA-17-15-115-58-2	WR
13	13-BA-17-15-114-58	BA	17	15	4	114	58	VT	UC			114	58	VT	LOF	R			114	58	6	0	6			13-BA-17-15-114-58-3	WR
13	13-BA-16-1-70-0	BA	16	1	1	70	0	VT	POR			70	0	VT	POR	R			70	0	4	0	4			13-BA-16-1-70-0-1	WR
13	13-BA-16-5-73-60	BA	16	5	3	73	60	VT	POR			73	60	VT	POR	R			73	60	2	0	2			13-BA-16-5-73-60-1	WR
13	13-BA-16-7-157-60	BA	16	7	6	157	60	VT	POR			157	60	VT	POR	R			157	60	2	0	2			13-BA-16-7-157-60-1	WR
13	13-BA-16-9-2-0	BA	16	9	1	2	0	BFET	WI			2	0	VT	WI	R			2	0	10	0	10			13-BA-16-9-2-0-1	WR
13	13-BA-16-9-0-32	BA	16	9	2	0	32	BFET	WI			0	32	VT	WI	R			0	32	0	9	9			13-BA-16-9-0-32-2	WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)				EEI repair No.	Repair Type (Patch, Weld)
13	13-BA-16-9-84-0	BA	16	9	4	84	0	VT	POR			84	0	VT	POR	R			84	0	4	0	4			13-BA-16-9-84-0-3	WR
13	13-BA-16-9-30-0	BA	16	9								30	0	VT	POR	R			30	0	8	0	8			13-BA-16-9-30-0-4	WR
13	13-BA-16-9-210-60	BA	16	9								210	60	VT	LOF	R			210	60	4	0	4			13-BA-16-9-210-60-5	WR
13	13-BA-16-10-238-0	BA	16	10	1	238	0	BFET	WI			238	0	VT	WI	R			238	0						13-BA-16-11-8-0-1	WR
13	13-BA-16-10-223-0	BA	16	10	2	223	0	BFET	WI			223	0	VT	WI	R			223	0						13-BA-16-11-8-0-1	WR
13	13-BA-16-10-87-58	BA	16	10	3	87	58	VT	POR			87	58	VT	POR	R			87	58	3	0	3			13-BA-16-10-87-58-1	WR
13	13-BA-16-10-135-60	BA	16	10	4	135	60	VT	POR			135	60	VT	POR	R			135	60	5	0	5			13-BA-16-10-135-60-2	WR
13	13-BA-16-10-145-60	BA	16	10	5	145	60	VT	POR			145	60	VT	POR	R			145	60	0	3	3			13-BA-16-10-145-60-3	WR
13	13-BA-16-11-17-0	BA	16	11	1	17	0	BFET	WI			17	0	VT	WI	R			8	0	67	0	67			13-BA-16-11-8-0-1	WR
13	13-BA-16-11-37-0	BA	16	11	2	37	0	BFET	WI			37	0	VT	WI	R			8	0	67	0	67			13-BA-16-11-8-0-1	WR
13	13-BA-16-11-96-0	BA	16	11	3	96	0	BFET	WI			96	0	VT	WI	R			96	0	12	0	12			13-BA-16-11-96-0-2	WR
13	13-BA-16-11-180-0	BA	16	11	6	180	0	VT	POR			180	0	VT	POR	R			180	0	10	2	12			13-BA-16-11-180-0-3	WR
13	13-BA-16-11-210-58	BA	16	11	8	210	58	BFET	WI			210	58	VT	WI	R			210	58						13-BA-17-12-96-0-2	WR
13	13-BA-16-11-150-0	BA	16	11								150	0	VT	POR	R			150	0	0	4	4			13-BA-16-11-150-0-4	WR
13	13-BA-16-12-90-0	BA	16	12	1	90	0	VT	POR			90	0	VT	POR	R			90	0	4	0	4			13-BA-16-12-90-0-1	WR
13	13-BA-16-12-86-0	BA	16	12	2	86	0	VT	POR			86	0	VT	POR	R			86	0	0	3	3			13-BA-16-12-86-0-2	WR
13	13-BA-16-12-120-0	BA	16	12	3	120	0	BFET	WI			120	0	VT	WI	R			125	0	15	0	15			13-BA-16-12-125-0-3	WR
13	13-BA-16-12-130-0	BA	16	12	4	130	0	BFET	WI			130	0	VT	WI	R			130	0	15	0	15			13-BA-16-12-130-0-3	WR
13	13-BA-16-12-149-57	BA	16	12	5	149	57	VT	POR			149	57	VT	POR	R			149	57	4	0	4			13-BA-16-12-149-57-4	WR
13	13-BA-16-12-157-59	BA	16	12	6	157	59	BFET	WI			157	59	VT	WI	R			157	59	6	0	6			13-BA-16-12-157-59-5	WR
13	13-BA-16-12-38-0	BA	16	12								38	0	VT	POR	R			38	0	4	0	4			13-BA-16-12-38-0-6	WR
13	13-BA-16-12-3-0	BA	16	12								3	0	VT	POR	R			3	0	4	0	4			13-BA-16-12-3-0-7	WR
13	13-BA-16-12-0-7	BA	16	12								0	7	VT	LOF	R			0	7	0	9	9			13-BA-16-12-0-7-8	WR
13	13-BA-16-13-207-60	BA	16	13	1	33 RL	60	VT	POR			207	60	VT	POR	R			210	60	20	0	20			13-BA-16-13-210-60-1	WR
13	13-BA-16-13-213-60	BA	16	13	2	27 RL	60	VT	POR			213	60	VT	POR	R			210	60	20	0	20			13-BA-16-13-210-60-1	WR
13	13-BA-16-13-30-0	BA	16	13	4	30	0	BFET	WI			30	0	VT	WI	R			30	0	29	0	29			13-BA-16-13-30-0-2	WR
13	13-BA-16-13-89-0	BA	16	13	5	89	0	BFET	WI			89	0	VT	WI	R			89	0	6	0	6			13-BA-16-13-89-0-3	WR
13	13-BA-16-14-144-0	BA	16	14	1	144	60	VT	POR			144	0	VT	LOF	R			146	0	13	0	13			13-BA-16-14-146-0-1	WR
13	13-BA-16-14-146-0	BA	16	14	2	146	60	VT	POR			146	0	VT	LOF	R			146	0	13	0	13			13-BA-16-14-146-0-1	WR
13	13-BA-16-14-150-0	BA	16	14	3	150	60	VT	POR			150	0	VT	LOF	R			146	0	13	0	13			13-BA-16-14-146-0-1	WR
13	13-BA-16-14-30-60	BA	16	14	6	30	60	VT	POR			30	60	VT	POR	R			30	60	12	0	12			13-BA-16-14-30-60-2	WR
13	13-BA-16-14-71-0	BA	16	14								71	0	VT	LOF	R			71	0	4	0	4			13-BA-16-14-71-0-3	WR
13	13-BA-16-14-0-10	BA	16	14								0	10	VT	LOF	R			0	10	0	4	4			13-BA-16-14-0-10-4	WR
13	13-BA-16-15-96-58	BA	16	15	2	96	58	VT	POR			96	58	VT	POR	R			96	58	0	6	6			13-BA-16-15-96-58-1	WR
13	13-BA-16-16-40-0	BA	16	16	1	40	0	VT	POR			40	0	VT	POR	R			40	0	2	0	2			13-BA-16-16-40-0-1	WR
13	13-BA-15-1-213-0	BA	15	1	4	213	0	VT	POR			213	0	VT	POR	R			213	0	2	0	2			13-BA-15-1-213-0-1	WR
13	13-BA-15-2-208-0	BA	15	2	6	208	0	VT	POR			208	0	VT	POR	R			208	0	2	0	2			13-BA-15-2-208-0-1	WR
13	13-BA-15-3-83-56	BA	15	3	8	73-94	55-58	LFET	BC			83	56	PAUT	BC	R	0.160		84	56	28	14	84	392		13-BA-15-3-84-56-1	PP
13	13-BA-15-4-213-59	BA	15	4	6	213	58-60	VT	POR/LF			213	59	VT	POR	R			213	59	2	0	2			13-BA-15-4-213-59-1	WR
13	13-BA-15-8-212-0	BA	15	8								212	0	VT	POR	R			212	0	4	0	4			13-BA-15-8-212-0-1	WR
13	13-BA-15-10-33-58	BA	15	10	1	33	58	VT	POR			33	58	VT	LOF	R			33	58	5	0	5			13-BA-15-10-33-58-1	WR
13	13-BA-15-10-93-58	BA	15	10	2	93	58	VT	POR			93	58	VT	LOF	R			93	58	8	0	8			13-BA-15-10-93-58-2	WR
13	13-BA-15-10-146-58	BA	15	10	3	146	58	VT	POR			146	58	VT	LOF	R			146	58	3	0	3			13-BA-15-10-146-58-3	WR
13	13-BA-15-11-0-48	BA	15	11	1	0	48	BFET	WI			0	48	VT	WI	R			0	48	0	8	8			13-BA-15-11-0-48-1	WR
13	13-BA-15-11-82-0	BA	15	11	2	82	0	VT	POR			82	0	VT	POR	R			89	0	23	0	23			13-BA-15-11-89-0-2	WR
13	13-BA-15-11-95-0	BA	15	11	3	95	0	BFET	WI			95	0	VT	WI	R			89	0	23	0	23			13-BA-15-11-89-0-2	WR
13	13-BA-15-11-144-0	BA	15	11	4	144	0	BFET	WI			144	0	VT	WI	R			144	0	11	0	11			13-BA-15-11-144-0-3	WR
13	13-BA-15-11-146-58	BA	15	11								146	58	VT	LOF	R			146	58	3	0	3			13-BA-15-11-146-58-4	WR

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-15-11-210-0	BA	15	11								210	0	VT	LOF	R			210	0	0	4	4		13-BA-15-11-210-0-5	WR	
13	13-BA-15-12-0-2	BA	15	12	1	0	0-2	BFET	WI			0	2	VT	WI	R			0	2	9	8	17		13-BA-15-12-0-2-1	WR	
13	13-BA-15-12-0-46	BA	15	12	2	0	46	BFET	WI			0	46	VT	WI	R			0	46	0	10	10		13-BA-15-12-0-46-2	WR	
13	13-BA-15-12-135-0	BA	15	12	3	135	0	BFET	WI			135	0	VT	WI	R			135	0	5	0	5		13-BA-15-12-135-0-3	WR	
13	13-BA-15-12-160-0	BA	15	12	4	160	0	BFET	WI			160	0	VT	WI	R			160	0	4	0	4		13-BA-15-12-160-0-4	WR	
13	13-BA-15-12-145-59	BA	15	12	5	145	59	VT	POR			145	59	VT	LOF	R			145	59	0	3	3		13-BA-15-12-145-59-5	WR	
13	13-BA-15-12-217-0	BA	15	12	6	217	0	BFET	WI			217	0	VT	WI	R			221	0	18	0	18		13-BA-15-12-221-0-6	WR	
13	13-BA-15-12-226-0	BA	15	12	7	226	0	BFET	WI			226	0	VT	WI	R			221	0	18	0	18		13-BA-15-12-221-0-6	WR	
13	13-BA-15-12-11-0	BA	15	12								11	0	VT	POR	R			11	0	4	0	4		13-BA-15-12-11-0-7	WR	
13	13-BA-15-13-0-0	BA	15	13	1	0	0	BFET	WI			0	0	VT	WI	R			0	0	10	5	15		13-BA-15-13-0-0-1	WR	
13	13-BA-15-13-56-0	BA	15	13	2	56	0	BFET	WI			56	0	VT	WI	R			56	0	14	0	14		13-BA-15-13-56-0-2	WR	
13	13-BA-15-13-183-0	BA	15	13	3	183	0	BFET	WI			183	0	VT	WI	R			183	0	6	0	6		13-BA-15-13-183-0-3	WR	
13	13-BA-15-13-197-0	BA	15	13	4	197	0	BFET	WI			197	0	VT	WI	R			200	0	10	0	10		13-BA-15-13-200-0-4	WR	
13	13-BA-15-13-202-0	BA	15	13	5	202	0	BFET	WI			202	0	VT	WI	R			200	0	10	0	10		13-BA-15-13-200-0-4	WR	
13	13-BA-15-13-30-0	BA	15	13								30	0	VT	POR	R			30	0	8	0	8		13-BA-15-13-30-0-5	WR	
13	13-BA-15-14-148-58	BA	15	14	2	148	58	VT	POR			148	58	VT	POR	R			148	58	20	0	20		13-BA-15-14-148-58-1	WR	
13	13-BA-15-14-90-0	BA	15	14								90	0	VT	POR	R			90	0	12	0	12		13-BA-15-14-90-0-2	WR	
13	13-BA-14-1-86-58	BA	14	1	3	86	58	VT	POR			86	58	VT	POR	R			86	58	2	0	2		13-BA-14-1-86-58-1	WR	
13	13-BA-14-2-26-0	BA	14	2	9	26	0	VT	POR			26	0	VT	POR	R			26	0	2	0	2		13-BA-14-2-26-0-1	WR	
13	13-BA-14-4-49-0	BA	14	4	7	49	0	VT	POR			49	0	VT	POR	R			49	0	2	0	2		13-BA-14-4-49-0-1	WR	
13	13-BA-14-4-72-0	BA	14	4	8	72	0	VT	POR			72	0	VT	POR	R			72	0	2	0	2		13-BA-14-4-72-0-2	WR	
13	13-BA-14-5-89-59	BA	14	5	4	84-96	58	VT	POR			89	59	VT	POR	R			89	59	3	0	3		13-BA-14-5-89-59-1	WR	
13	13-BA-14-6-96-58	BA	14	6	2	96	58	VT	POR			96	58	VT	POR	R			96	58	2	0	2		13-BA-14-6-96-58-1	WR	
13	13-BA-14-8-210-60	BA	14	8	7	210	60	VT	POR			210	60	VT	POR	R			210	60	2	0	2		13-BA-14-8-210-60-1	WR	
13	13-BA-14-12-177-0	BA	14	12	1	177	0	BFET	WI			177	0	VT	WI	R			177	0	10	0	10		13-BA-14-12-177-0-1	WR	
13	13-BA-14-12-195-0	BA	14	12	2	195	0	VT	POR			195	0	VT	POR	R			195	0	4	0	4		13-BA-14-12-195-0-2	WR	
13	13-BA-14-12-154-0	BA	14	12								154	0	VT	LOF	R			154	0	5	0	5		13-BA-14-12-154-0-3	WR	
13	13-BA-14-13-12-60	BA	14	13	1	12	60	VT	POR			12	60	VT	POR	R			12	60	4	0	4		13-BA-14-13-12-60-1	WR	
13	13-BA-14-13-26-60	BA	14	13	2	26	60	BFET	WI			26	60	VT	WI	R			26	60	7	0	7		13-BA-14-13-26-60-2	WR	
13	13-BA-14-13-45-60	BA	14	13	3	45	60	VT	POR			45	60	VT	POR	R			45	60	4	0	4		13-BA-14-13-45-60-3	WR	
13	13-BA-14-13-212-58	BA	14	13	5	212	58	VT	POR			212	58	VT	POR	R			212	58	0	4	4		13-BA-14-13-212-58-4	WR	
13	13-BA-14-13-150-60	BA	14	13								150	60	VT	POR	R			150	60	8	0	8		13-BA-14-13-150-60-5	WR	
13	13-BA-14-14-120-0	BA	14	14	1	120	0	BFET	WI			120	0	VT	WI	R			134	0	39	0	39		13-BA-14-14-134-0-1	WR	
13	13-BA-14-14-123-0	BA	14	14	2	123	0	BFET	WI			123	0	VT	WI	R			134	0	39	0	39		13-BA-14-14-134-0-1	WR	
13	13-BA-14-14-130-0	BA	14	14	3	130	0	BFET	WI			130	0	VT	WI	R			134	0	39	0	39		13-BA-14-14-134-0-1	WR	
13	13-BA-14-14-138-0	BA	14	14	4	138	0	BFET	WI			138	0	VT	WI	R			134	0	39	0	39		13-BA-14-14-134-0-1	WR	
13	13-BA-14-14-140-0	BA	14	14	5	140	0	BFET	WI			140	0	VT	WI	R			140	0	39	0	39		13-BA-14-14-140-0-1	WR	
13	13-BA-14-14-195-0	BA	14	14	6	95	0	BFET	WI			195	0	VT	WI	R			200	0	20	0	20		13-BA-14-14-200-0-2	WR	
13	13-BA-14-14-202-0	BA	14	14	7	102	0	VT	UC			202	0	VT	UC	R			200	0	20	0	20		13-BA-14-14-200-0-2	WR	
13	13-BA-14-14-208-0	BA	14	14	8	208	0	BFET	WI			208	0	VT	WI	R			200	0	20	0	20		13-BA-14-14-200-0-2	WR	
13	13-BA-14-14-226-0	BA	14	14	9	226	0	BFET	WI			226	0	VT	WI	R			236	0	29	0	29		13-BA-14-14-236-0-3	WR	
13	13-BA-14-14-237-0	BA	14	14	10	237	0	BFET	WI			237	0	VT	WI	R			236	0	29	0	29		13-BA-14-14-236-0-3	WR	
13	13-BA-14-14-30-58	BA	14	14	11	30	58	VT	POR			30	58	VT	POR	R			30	58	8	0	8		13-BA-14-14-30-58-4	WR	
13	13-BA-14-14-108-60	BA	14	14	12	108	60	VT	POR			108	60	VT	POR	R			108	60	4	0	4		13-BA-14-14-108-60-5	WR	
13	13-BA-14-15-1-0	BA	14	15	1	1	0	BFET	WI			1	0	VT	WI	R			1	0					13-BA-14-14-236-0-3	WR	
13	13-BA-14-15-24-0	BA	14	15	2	24	0	VT	POR			24	0	VT	LOF	R			24	0	4	0	4		13-BA-14-15-24-0-1	WR	
13	13-BA-14-15-56-0	BA	14	15	3	56	0	VT	POR			56	0	VT	LOF	R			56	0	4	0	4		13-BA-14-15-56-0-2	WR	
13	13-BA-14-15-149-57	BA	14	15	6	149	57	BFET	WI			149	57	VT	WI	R			149	57	16	0	16		13-BA-14-15-149-57-3	WR	

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-14-15-210-0	BA	14	15								210	0	VT	RI	R			210	0	12	0	12		13-BA-14-15-210-0-4	WR	
13	13-BA-14-16-32-58	BA	14	16	1	32	58	BFET	WI			32	58	VT	WI	R			32	58	4	0	4		13-BA-14-16-32-58-1	WR	
13	13-BA-14-16-59-0	BA	14	16	2	59	0	BFET	WI			59	0	VT	WI	R			59	0	4	0	4		13-BA-14-16-59-0-2	WR	
13	13-BA-14-16-95-58	BA	14	16	3	95	58	BFET	WI			95	58	VT	WI	R			95	58	8	0	8		13-BA-14-16-95-58-3	WR	
13	13-BA-14-16-109-0	BA	14	16	4	109	0	VT	POR			109	0	VT	POR	R			109	0	4	0	4		13-BA-14-16-109-0-4	WR	
13	13-BA-14-16-115-3	BA	14	16	5	115	3	BFET	WI			115	3	VT	WI	R			115	3	5	0	5		13-BA-14-16-115-3-5	WR	
13	13-BA-14-16-165-0	BA	14	16	6	165	0	BFET	WI			165	0	VT	WI	R			165	0	7	0	7		13-BA-14-16-165-0-6	WR	
13	13-BA-14-17-29-0	BA	14	17	1	29	0	VT	POR			29	0	VT	LOF	R			29	0	6	0	6		13-BA-14-17-29-0-1	WR	
13	13-BA-14-17-58-0	BA	14	17	2	58	0	BFET	WI			58	0	VT	WI	R			58	0	4	0	4		13-BA-14-17-58-0-2	WR	
13	13-BA-14-17-150-60	BA	14	17								150	60	VT	POR	R			150	60	8	0	8		13-BA-14-17-150-60-3	WR	
13	13-BA-14-20-74-60	BA	14	20	1	74	60	VT	POR			74	60	VT	LOF	R			74	60	4	0	4		13-BA-14-20-74-60-1	WR	
13	13-BA-14-20-168-0	BA	14	20	3	168	0	VT	POR			168	0	VT	RI	R			168	0	4	0	4		13-BA-14-20-168-0-2	WR	
13	13-BA-14-20-30-0	BA	14	20								30	0	VT	LOF	R			30	0	6	0	6		13-BA-14-20-30-0-3	WR	
13	13-BA-13-3-0-16	BA	13	3	1	0	16	VT	POR			0	16	VT	POR	R			0	16	0	2	2		13-BA-13-3-0-16-1	WR	
13	13-BA-13-7-96-58	BA	13	7	2	96	58	VT	POR			96	58	VT	POR	R			96	58	2	0	2		13-BA-13-7-96-58-1	WR	
13	13-BA-13-8-204-59	BA	13	8	1	204	59	VT	POR			204	59	VT	POR	R			204	59	3	4	7		13-BA-13-8-204-59-1	WR	
13	13-BA-13-8-138-0	BA	13	8								138	0	VT	POR	R			138	0	4	0	4		13-BA-13-8-138-0-2	WR	
13	13-BA-13-8-154-3	BA	13	8								154	3	VT	LOF	R			154	3	10	0	10		13-BA-13-8-154-3-3	WR	
13	13-BA-13-9-25-0	BA	13	9	1	25	0	BFET	WI			25	0	VT	WI	R			25	0	9	0	9		13-BA-13-9-25-0-1	WR	
13	13-BA-13-9-128-0	BA	13	9								128	0	VT	POR	R			128	0	4	0	4		13-BA-13-9-128-0-2	WR	
13	13-BA-13-9-41-0	BA	13	9								41	0	VT	LOF	R			41	0	4	0	4		13-BA-13-9-41-0-3	WR	
13	13-BA-13-9-91-0	BA	13	9								91	0	VT	LOF	R			91	0	0	4	4		13-BA-13-9-91-0-4	WR	
13	13-BA-13-9-30-0	BA	13	9								30	0	VT	LOF	R			30	0	8	0	8		13-BA-13-9-30-0-5	WR	
13	13-BA-13-9-0-7	BA	13	9								0	7	VT	LOF	R			0	7	3	0	3		13-BA-13-9-0-7-6	WR	
13	13-BA-13-10-32-58	BA	13	10	1	32	58	VT	POR			32	58	VT	LOF	R			32	58	8	0	8		13-BA-13-10-32-58-1	WR	
13	13-BA-13-10-49-60	BA	13	10	2	49	60	VT	POR			49	60	VT	POR	R			41	60	14	0	14		13-BA-13-10-41-60-2	WR	
13	13-BA-13-10-168-60	BA	13	10	4	168	60	VT	POR			168	60	VT	LOF	R			168	60	4	0	4		13-BA-13-10-168-60-3	WR	
13	13-BA-13-10-218-60	BA	13	10	5	218	60	VT	POR			218	60	VT	LOF	R			218	60	4	0	4		13-BA-13-10-218-60-4	WR	
13	13-BA-13-11-29-58	BA	13	11	1	29	58	BFET	WI			29	58	VT	WI	R			29	58					13-BA-14-14-140-0-1	WR	
13	13-BA-13-11-132-0	BA	13	11	2	132	0	BFET	WI			132	0	VT	WI	R			132	0	9	0	9		13-BA-13-11-132-0-1	WR	
13	13-BA-13-11-172-0	BA	13	11	4	172	0	BFET	WI			172	0	VT	WI	R			172	0	9	0	9		13-BA-13-11-172-0-2	WR	
13	13-BA-13-12-0-34	BA	13	12	1	0	34	BFET	WI			0	34	VT	WI	R			0	34	0	21	21		13-BA-13-12-0-34-1	WR	
13	13-BA-13-12-207-2	BA	13	12	2	207	2	BFET	WI			207	2	VT	WI	R			207	2	5	0	5		13-BA-13-12-207-2-2	WR	
13	13-BA-13-12-208-58	BA	13	12	3	208	58	BFET	WI			208	58	VT	WI	R			208	58	0	4	4		13-BA-13-12-208-58-3	WR	
13	13-BA-13-12-232-0	BA	13	12	4	232	0	VT	POR			232	0	VT	POR	R			232	0	10	0	10		13-BA-13-12-232-0-4	WR	
13	13-BA-13-12-148-0	BA	13	12								148	0	VT	LOF	R			148	0	4	0	4		13-BA-13-12-148-0-5	WR	
13	13-BA-13-12-30-0	BA	13	12								30	0	VT	LOF	R			30	0	10	0	10		13-BA-13-12-30-0-6	WR	
13	13-BA-13-13-0-57	BA	13	13	1	0	57	BFET	WI			0	57	VT	WI	R			0	57	0	7	7		13-BA-13-13-0-57-1	WR	
13	13-BA-13-13-29-57	BA	13	13	2	29	57	BFET	WI			29	57	VT	WI	R			29	57	10	0	10		13-BA-13-13-29-57-2	WR	
13	13-BA-13-13-91-57	BA	13	13	3	91	57	BFET	WI			91	57	VT	WI	R			91	57	8	0	8		13-BA-13-13-91-57-3	WR	
13	13-BA-13-13-98-0	BA	13	13	4	98	0	BFET	WI			98	0	VT	WI	R			98	0	5	0	5		13-BA-13-13-98-0-4	WR	
13	13-BA-13-13-177-0	BA	13	13	6	177	0	BFET	WI			177	0	VT	WI	R			177	0	5	0	5		13-BA-13-13-177-0-5	WR	
13	13-BA-13-13-210-0	BA	13	13	7	210	0	VT	POR			210	0	VT	POR	R			210	0	0	6	6		13-BA-13-13-210-0-6	WR	
13	13-BA-13-13-90-0	BA	13	13								90	0	VT	RI	R			90	0	20	0	20		13-BA-13-13-90-0-7	WR	
13	13-BA-13-13-30-0	BA	13	13								30	0	VT	LOF	R			30	0	6	0	6		13-BA-13-13-30-0-8	WR	
13	13-BA-13-14-40-60	BA	13	14	1	40	60	VT	POR			40	60	VT	POR	R			40	60	6	0	6		13-BA-13-14-40-60-1	WR	
13	13-BA-13-14-167-0	BA	13	14								167	0	VT	LOF	R			167	0	4	0	4		13-BA-13-14-167-0-2	WR	
13	13-BA-13-14-6-0	BA	13	14								6	0	VT	CL	R			6	0	4	0	4		13-BA-13-14-6-0-3	WR	

Indication Identification		Shell Location			TesTex NDE						EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)
13	13-BA-13-15-66-0	BA	13	15								66	0	VT	POR	R			66	0	4	0	4		13-BA-13-15-66-0-1	WR
13	13-BA-13-15-19-0	BA	13	15								19	0	VT	LOF	R			19	0	6	0	6		13-BA-13-15-19-0-2	WR
13	13-BA-13-15-78-0	BA	13	15								78	0	VT	POR	R			78	0	6	0	6		13-BA-13-15-78-0-3	WR
13	13-BA-13-16-30-0	BA	13	16								30	0	VT	POR	R			30	0	8	0	8		13-BA-13-16-30-0-1	WR
13	13-BA-12-1-105-60	BA	12	1	3	105	60	VT	POR			105	60	VT	POR	R			105	60	4	0	4		13-BA-12-1-105-60-1	WR
13	13-BA-12-2-0-53	BA	12	2	1	0	53	VT	POR			0	53	VT	POR	R			0	53	0	3	3		13-BA-12-2-0-53-1	WR
13	13-BA-12-2-184-0	BA	12	2	7	184	0	VT	POR			184	0	VT	POR	R			184	0	2	0	2		13-BA-12-2-184-0-2	WR
13	13-BA-12-8-144-58	BA	12	8	2	144	58	VT	POR			144	58	VT	POR	R			144	58	2	0	2		13-BA-12-8-144-58-1	WR
13	13-BA-12-8-208-0	BA	12	8								208	0	VT	LOF	R			208	0	0	5	5		13-BA-12-8-208-0-2	WR
13	13-BA-12-9-155-0	BA	12	9	1	155	0	VT	POR			155	0	VT	POR	R			155	0	4	0	4		13-BA-12-9-155-0-1	WR
13	13-BA-12-9-159-20	BA	12	9	2	159	20	LFET	BC	0.143		159	20	PAUT	BC	R	0.118		159	20	10	10	40	100	13-BA-12-9-159-20-2	PP
13	13-BA-12-9-90-59	BA	12	9	4	90	59	VT	POR			90	59	VT	POR	R			90	59	3	7	10		13-BA-12-9-90-59-3	WR
13	13-BA-12-9-21-0	BA	12	9								21	0	VT	POR	R			21	0	3	0	3		13-BA-12-9-21-0-4	WR
13	13-BA-12-10-32-56	BA	12	10	2	32	56	VT	POR			32	56	VT	POR	R			32	56	6	0	6		13-BA-12-10-32-56-1	WR
13	13-BA-12-10-96-0	BA	12	10	4	96	0	VT	POR			96	0	VT	LOF	R			96	0	4	0	4		13-BA-12-10-96-0-2	WR
13	13-BA-12-10-149-60	BA	12	10	5	149	58-60	VT	POR			149	60	VT	LOF	R			149	60	12	0	12		13-BA-12-10-149-60-3	WR
13	13-BA-12-10-216-60	BA	12	10	6	216	58-60	VT	POR			216	60	VT	LOF	R			216	60	4	0	4		13-BA-12-10-216-60-4	WR
13	13-BA-12-10-236-38	BA	12	10								236	38	VT	POR	R			236	38	6	0	6		13-BA-12-10-236-38-5	WR
13	13-BA-12-11-206-0	BA	12	11	1	206	0	BFET	WI			206	0	VT	WI	R			206	0	8	0	8		13-BA-12-11-206-0-1	WR
13	13-BA-12-11-209-57	BA	12	11	2	209	57	VT	POR			209	57	VT	POR	R			209	57	11	0	11		13-BA-12-11-209-57-2	WR
13	13-BA-12-11-224-0	BA	12	11	3	224	0	BFET	WI			224	0	VT	WI	R			232	0	25	0	25		13-BA-12-11-232-0-3	WR
13	13-BA-12-11-229-0	BA	12	11	4	229	0	BFET	WI			229	0	VT	WI	R			232	0	25	0	25		13-BA-12-11-232-0-3	WR
13	13-BA-12-11-239-1	BA	12	11	5	239	1	BFET	WI			239	1	VT	WI	R			232	0	25	0	25		13-BA-12-11-232-0-3	WR
13	13-BA-12-11-18-60	BA	12	11	6	18	60	VT	POR			18	60	VT	LOF	R			18	60	4	0	4		13-BA-12-11-18-60-4	WR
13	13-BA-12-11-27-58	BA	12	11	8	27	58	VT	POR			27	58	VT	LOF	R			27	58	3	0	3		13-BA-12-11-27-58-5	WR
13	13-BA-12-11-210-0	BA	12	11								210	0	VT	LOF	R			210	0	16	0	16		13-BA-12-11-210-0-6	WR
13	13-BA-12-11-150-0	BA	12	11								150	0	VT	RI	R			150	0	16	0	16		13-BA-12-11-150-0-7	WR
13	13-BA-12-12-0-4	BA	12	12	1	0	4	BFET	WI			0	4	VT	WI	R			0	4	0	8	8		13-BA-12-12-0-4-1	WR
13	13-BA-12-12-29-0	BA	12	12	2	24-34	0	BFET	WI			29	0	VT	WI	R			29	0	12	0	12		13-BA-12-12-29-0-2	WR
13	13-BA-12-12-152-0	BA	12	12	3	152	0	VT	POR			152	0	VT	POR	R			152	0	14	0	14		13-BA-12-12-152-0-3	WR
13	13-BA-12-12-202-0	BA	12	12	4	202	0	BFET	WI			202	0	VT	WI	R			202	0	8	0	8		13-BA-12-12-202-0-4	WR
13	13-BA-12-12-86-0	BA	12	12								86	0	VT	LOF	R			86	0	4	0	4		13-BA-12-12-86-0-5	WR
13	13-BA-12-13-8-36	BA	12	13	1	8	36	VT	POR			8	36	VT	POR	R			8	36	6	0	6		13-BA-12-13-8-36-1	WR
13	13-BA-12-13-14-0	BA	12	13	2	14	0	BFET	WI			14	0	VT	WI	R			14	0	5	0	5		13-BA-12-13-14-0-2	WR
13	13-BA-12-13-144-0	BA	12	13	6	144	0	BFET	WI			144	0	VT	WI	R			148	0	38	0	38		13-BA-12-13-148-0-3	WR
13	13-BA-12-13-152-0	BA	12	13	7	152	0	BFET	WI			152	0	VT	WI	R			148	0	38	0	38		13-BA-12-13-148-0-3	WR
13	13-BA-12-13-186-25	BA	12	13	8	186	25	BFET	WI			186	25	VT	WI	R			186	25	8	0	8		13-BA-12-13-186-25-4	WR
13	13-BA-12-13-30-0	BA	12	13								30	0	VT	RI	R			30	0	8	0	8		13-BA-12-13-30-0-5	WR
13	13-BA-12-14-116-0	BA	12	14	2	116	0	VT	POR			116	0	VT	POR	R			116	0	6	3	9		13-BA-12-14-116-0-1	WR
13	13-BA-12-14-162-58	BA	12	14	5	78	58	VT	POR			162	58	VT	POR	R			162	58	8	0	8		13-BA-12-14-162-58-2	WR
13	13-BA-12-14-158-58	BA	12	14	6	82	58	VT	POR/LF			158	58	VT	POR	R			158	58	12	0	12		13-BA-12-14-158-58-3	WR
13	13-BA-12-14-30-0	BA	12	14								30	0	VT	LOF	R			30	0	5	3	8		13-BA-12-14-30-0-4	WR
13	13-BA-12-15-114-59	BA	12	15								114	59	VT	RI	R			114	59	6	0	6		13-BA-12-15-114-59-1	WR
13	13-BA-12-15-127-0	BA	12	15								127	0	VT	RI	R			127	0	8	5	13		13-BA-12-15-127-0-2	WR
13	13-BA-11-9-0-46	BA	11	9	1	0	46	BFET	WI			0	46	VT	WI	R			0	35	0	31	31		13-BA-11-9-0-35-1	WR
13	13-BA-11-9-240-51	BA	11	9	3	240	51	VT	POR			240	51	VT	POR	R			240	51	0	4	4		13-BA-11-9-240-51-2	WR
13	13-BA-11-9-240-29	BA	11	9	4	240	29	VT	POR			240	29	VT	POR	R			240	29	0	5	5		13-BA-11-9-240-29-3	WR
13	13-BA-11-10-45-60	BA	11	10	2	42-48	60	VT	POR			45	60	VT	POR	R			45	60	6	0	6		13-BA-11-10-45-60-1	WR

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-11-10-72-60	BA	11	10	3	72	60	VT	POR			72	60	VT	POR	R			72	60	5	0	5		13-BA-11-10-72-60-2	WR	
13	13-BA-11-10-90-60	BA	11	10	5	90	60	VT	POR			90	60	VT	POR	R			90	60	4	0	4		13-BA-11-10-90-60-3	WR	
13	13-BA-11-10-96-58	BA	11	10	6	96	58	VT	POR			96	58	VT	POR	R			96	58	6	0	6		13-BA-11-10-96-58-4	WR	
13	13-BA-11-10-149-58	BA	11	10	7	149	58	VT	POR			149	58	VT	POR	R			149	58	0	4	4		13-BA-11-10-149-58-5	WR	
13	13-BA-11-11-94-59	BA	11	11								94	59	VT	RI	R			94	59	6	0	6		13-BA-11-11-94-59-1	WR	
13	13-BA-11-12-28-59	BA	11	12	1	28	59	BFET	WI			28	59	VT	WI	R			28	59					13-BA-12-12-152-0-3	WR	
13	13-BA-11-12-149-57	BA	11	12	2	149	57	BFET	WI			149	57	VT	WI	R			149	57	6	0	6		13-BA-11-12-149-57-1	WR	
13	13-BA-11-12-165-0	BA	11	12	3	165	0	BFET	WI			165	0	VT	WI	R			165	0	7	0	7		13-BA-11-12-165-0-2	WR	
13	13-BA-11-12-209-58	BA	11	12	4	209	58	BFET	WI			209	58	VT	WI	R			209	58	0	4	4		13-BA-11-12-209-58-3	WR	
13	13-BA-11-14-12-60	BA	11	14	2	12	60	VT	LF			12	60	VT	LOF	R			12	60	6	0	6		13-BA-11-14-12-60-1	WR	
13	13-BA-11-14-28-60	BA	11	14	3	28	60	VT	POR			28	60	VT	POR	R			28	60	8	0	8		13-BA-11-14-28-60-2	WR	
13	13-BA-11-14-37-60	BA	11	14	4	37	60	VT	POR			37	60	VT	POR	R			37	60	4	0	4		13-BA-11-14-37-60-3	WR	
13	13-BA-11-14-96-59	BA	11	14	5	96	58-60	VT	POR/LF			96	59	VT	POR	R			96	59	6	4	10		13-BA-11-14-96-59-4	WR	
13	13-BA-11-14-155-60	BA	11	14	6	155	60	VT	POR			155	60	VT	RI	R			155	60	4	0	4		13-BA-11-14-155-60-5	WR	
13	13-BA-11-14-30-0	BA	11	14								30	0	VT	RI	R			30	0	8	0	8		13-BA-11-14-30-0-6	WR	
13	13-BA-11-14-209-0	BA	11	14								209	0	VT	POR	R			209	0	4	0	4		13-BA-11-14-209-0-7	WR	
13	13-BA-10-1-213-0	BA	10	1								213	0	VT	RI	R			213	0	2	0	2		13-BA-10-1-213-0-1	WR	
13	13-BA-10-9-87-58	BA	10	9	2	87	58	VT	POR			87	58	VT	POR	R			87	58	6	0	6		13-BA-10-9-87-58-1	WR	
13	13-BA-10-9-150-0	BA	10	9								150	0	VT	LOF	R			150	0	8	0	8		13-BA-10-9-150-0-2	WR	
13	13-BA-10-9-90-0	BA	10	9								90	0	VT	LOF	R			90	0	0	4	4		13-BA-10-9-90-0-3	WR	
13	13-BA-10-11-30-0	BA	10	11								30	0	VT	IF	R			30	0	4	0	4		13-BA-10-11-30-0-1	WR	
13	13-BA-10-12-150-0	BA	10	12	1	150	0	VT	POR			150	0	VT	POR	R			150	0	8	0	8		13-BA-10-12-150-0-1	WR	
13	13-BA-10-12-225-0	BA	10	12	2	225	0	BFET	WI			225	0	VT	WI	R			225	0	5	0	5		13-BA-10-12-225-0-2	WR	
13	13-BA-10-12-216-0	BA	10	12								216	0	VT	POR	R			216	0	4	0	4		13-BA-10-12-216-0-3	WR	
13	13-BA-10-13-132-0	BA	10	13	1	132	0	VT	POR			132	0	VT	POR	R			132	0	6	0	6		13-BA-10-13-132-0-1	WR	
13	13-BA-10-13-200-0	BA	10	13	2	200	0	VT	POR			200	0	VT	POR	R			200	0	4	0	4		13-BA-10-13-200-0-2	WR	
13	13-BA-10-13-212-0	BA	10	13	3	212	0	BFET	WI			212	0	VT	WI	R			214	0	32	0	32		13-BA-10-13-214-0-3	WR	
13	13-BA-10-13-215-0	BA	10	13	4	215	0	BFET	WI			215	0	VT	WI	R			214	0	32	0	32		13-BA-10-13-214-0-3	WR	
13	13-BA-10-14-150-0	BA	10	14								150	0	VT	RI	R			150	0	8	0	8		13-BA-10-14-150-0-1	WR	
13	13-BA-10-15-136-0	BA	10	15								136	0	VT	LOF	R			136	0	8	5	13		13-BA-10-15-136-0-1	WR	
13	13-BA-10-16-1-15	BA	10	16	1	1	15	VT	POR			1	15	VT	POR	R			1	15	0	8	8		13-BA-10-16-1-15-1	WR	
13	13-BA-9-1-156-0	BA	9	1	1	156	0	VT	POR			156	0	VT	POR	R			156	0	2	0	2		13-BA-9-1-156-0-1	WR	
13	13-BA-9-3-150-0	BA	9	3								150	0	VT	RI	R			150	0	2	0	2		13-BA-9-3-150-0-1	WR	
13	13-BA-9-4-150-46	BA	9	4								150	46	VT	DENT	R			150	46	6	0	18.84956	28.27433	13-BA-9-4-150-46-1	PP	
13	13-BA-9-6-145-58	BA	9	6	4	145	58	VT	POR			145	58	VT	POR	R			145	58	2	0	2		13-BA-9-6-145-58-1	WR	
13	13-BA-9-9-0-37	BA	9	9	1	0	37	BFET	WI			0	37	VT	WI	R			0	37	0	11	11		13-BA-9-9-0-37-1	WR	
13	13-BA-9-9-66-0	BA	9	9	2	66	0	BFET	WI			66	0	VT	WI	R			66	0	9	0	9		13-BA-9-9-66-0-2	WR	
13	13-BA-9-9-87-0	BA	9	9	3	87	0	VT	POR			87	0	VT	POR	R			87	0	4	0	4		13-BA-9-9-87-0-3	WR	
13	13-BA-9-9-238-0	BA	9	9	6	238	0	VT	POR			238	0	VT	POR	R			238	0	4	0	4		13-BA-9-9-238-0-4	WR	
13	13-BA-9-9-28-0	BA	9	9								28	0	VT	LOF	R			28	0	0	5	5		13-BA-9-9-28-0-5	WR	
13	13-BA-9-10-150-58	BA	9	10	1	150	58	VT	POR			150	58	VT	POR	R			150	58					13-BA-10-11-30-0-1	WR	
13	13-BA-9-11-90-58	BA	9	11	1	90	58	BFET	WI			90	58	VT	WI	R			90	58	0	7	7		13-BA-9-11-90-58-1	WR	
13	13-BA-9-11-0-57	BA	9	11								0	57	VT	POR	R			0	57	0	4	4		13-BA-9-11-0-57-2	WR	
13	13-BA-9-11-148-0	BA	9	11								148	0	VT	LOF	R			148	0	4	0	4		13-BA-9-11-148-0-3	WR	
13	13-BA-9-12-29-0	BA	9	12	1	29	0	BFET	WI			29	0	VT	WI	R			29	0	8	0	8		13-BA-9-12-29-0-1	WR	
13	13-BA-9-12-154-58	BA	9	12	2	154	58	VT	POR			154	58	VT	POR	R			154	58	4	0	4		13-BA-9-12-154-58-2	WR	
13	13-BA-9-12-213-0	BA	9	12	3	213	0	BFET	WI			213	0	VT	WI	R			213	0	6	0	6		13-BA-9-12-213-0-3	WR	
13	13-BA-9-12-235-0	BA	9	12	4	235	0	BFET	WI			235	0	VT	WI	R			235	0	5	0	5		13-BA-9-12-235-0-4	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-9-12-90-0	BA	9	12								90	0	VT	LOF	R			90	0	5	0	5		13-BA-9-12-90-0-5	WR	
13	13-BA-9-13-0-48	BA	9	13	2	0	48	BFET	WI			0	48	VT	WI	R			0	51	4	20	24		13-BA-9-13-0-51-1	WR	
13	13-BA-9-13-0-55	BA	9	13	3	0	55	BFET	WI			0	55	VT	WI	R			0	51	4	20	24		13-BA-9-13-0-51-1	WR	
13	13-BA-9-13-25-0	BA	9	13	4	25	0	BFET	WI			25	0	VT	WI	R			25	0	33	0	33		13-BA-9-13-25-0-2	WR	
13	13-BA-9-13-154-0	BA	9	13	5	154	0	BFET	WI			154	0	VT	WI	R			154	0	5	0	5		13-BA-9-13-154-0-3	WR	
13	13-BA-9-13-210-0	BA	9	13								210	0	VT	LOF	R			210	0	3	0	3		13-BA-9-13-210-0-4	WR	
13	13-BA-9-13-90-0	BA	9	13								90	0	VT	LOF	R			90	0	12	0	12		13-BA-9-13-90-0-5	WR	
13	13-BA-9-15-60-58	BA	9	15	1	60	58	VT	POR			60	58	VT	POR	R			60	58	6	0	6		13-BA-9-15-60-58-1	WR	
13	13-BA-9-15-84-58	BA	9	15	2	84	58	VT	POR			84	58	VT	POR	R			84	58	8	0	8		13-BA-9-15-84-58-2	WR	
13	13-BA-8-1-210-0	BA	8	1								210	0	VT	RI	R			210	0	2	0	2		13-BA-8-1-210-0-1	WR	
13	13-BA-8-3-61-0	BA	8	3	3	61	0	VT	POR			61	0	VT	POR	R			61	0	2	0	2		13-BA-8-3-61-0-1	WR	
13	13-BA-8-4-5-0	BA	8	4	4	5	0	VT	POR			5	0	VT	POR	R			5	0	2	0	2		13-BA-8-4-5-0-1	WR	
13	13-BA-8-9-210-0	BA	8	9								210	0	VT	CL	R			210	0	8	0	8		13-BA-8-9-210-0-1	WR	
13	13-BA-8-9-150-0	BA	8	9								150	0	VT	RI	R			150	0	5	0	5		13-BA-8-9-150-0-2	WR	
13	13-BA-8-10-150-58	BA	8	10	1	150	58	VT	POR			150	58	VT	LOF	R			150	58	0	5	5		13-BA-8-10-150-58-1	WR	
13	13-BA-8-10-56-0	BA	8	10								56	0	VT	LOF	R			56	0	4	0	4		13-BA-8-10-56-0-2	WR	
13	13-BA-8-10-193-0	BA	8	10								193	0	VT	LOF	R			193	0	4	0	4		13-BA-8-10-193-0-3	WR	
13	13-BA-8-11-30-59	BA	8	11	1	30	59	VT	POR			30	59	VT	POR	R			30	59	0	4	4		13-BA-8-11-30-59-1	WR	
13	13-BA-8-11-0-5	BA	8	11								0	5	VT	LOF	R			0	5	0	9	9		13-BA-8-11-0-5-2	WR	
13	13-BA-8-11-209-0	BA	8	11								209	0	VT	LOF	R			209	0	0	5	5		13-BA-8-11-209-0-3	WR	
13	13-BA-8-11-149-0	BA	8	11								149	0	VT	LOF	R			149	0	0	5	5		13-BA-8-11-149-0-4	WR	
13	13-BA-8-12-150-0	BA	8	12								150	0	VT	RI	R			150	0	12	0	12		13-BA-8-12-150-0-1	WR	
13	13-BA-8-13-64-0	BA	8	13	2	64	0	BFET	WI			64	0	VT	WI	R			64	0	4	0	4		13-BA-8-13-64-0-1	WR	
13	13-BA-8-13-86-0	BA	8	13	3	86	0	BFET	WI			86	0	VT	WI	R			86	0	5	0	5		13-BA-8-13-86-0-2	WR	
13	13-BA-8-13-145-0	BA	8	13	4	145	0	BFET	WI			145	0	VT	WI	R			150	0	18	0	18		13-BA-8-13-150-0-3	WR	
13	13-BA-8-13-155-0	BA	8	13	5	155	0	BFET	WI			155	0	VT	WI	R			150	0	18	0	18		13-BA-8-13-150-0-3	WR	
13	13-BA-8-13-132-0	BA	8	13								132	0	VT	LOF	R			132	0	5	0	5		13-BA-8-13-132-0-4	WR	
13	13-BA-8-14-0-31	BA	8	14	1	0	31	BFET	WI			0	31	VT	WI	R			0	40	0	20	20		13-BA-8-14-0-40-1	WR	
13	13-BA-8-14-0-41	BA	8	14	2	0	41	BFET	WI			0	41	VT	WI	R			0	40	0	20	20		13-BA-8-14-0-40-1	WR	
13	13-BA-8-14-0-46	BA	8	14	3	0	46	BFET	WI			0	46	VT	WI	R			0	40	0	20	20		13-BA-8-14-0-40-1	WR	
13	13-BA-8-14-3-0	BA	8	14	4	3	0	BFET	WI			3	0	VT	WI	R			3	0	5	0	5		13-BA-8-14-3-0-2	WR	
13	13-BA-8-14-38-0	BA	8	14	5	38	0	BFET	WI			38	0	VT	WI	R			38	0	4	0	4		13-BA-8-14-38-0-3	WR	
13	13-BA-8-14-87-0	BA	8	14	6	87	0	BFET	WI			87	0	VT	WI	R			87	0	5	0	5		13-BA-8-14-87-0-4	WR	
13	13-BA-8-14-121-0	BA	8	14	7	121	0	BFET	WI			121	0	VT	LOF	R			121	0	4	0	4		13-BA-8-14-121-0-5	WR	
13	13-BA-8-14-157-0	BA	8	14	8	157	0	BFET	WI			157	0	VT	WI	R			157	0	14	0	14		13-BA-8-14-157-0-6	WR	
13	13-BA-8-14-162-0	BA	8	14	9	162	0	BFET	WI			162	0	VT	WI	R			157	0	14	0	14		13-BA-8-14-157-0-6	WR	
13	13-BA-8-14-183-0	BA	8	14	10	183	0	BFET	WI			183	0	VT	WI	R			183	0	16	0	16		13-BA-8-14-183-0-7	WR	
13	13-BA-8-14-190-0	BA	8	14	11	190	0	BFET	WI			190	0	VT	WI	R			183	0	16	0	16		13-BA-8-14-183-0-7	WR	
13	13-BA-8-14-220-0	BA	8	14	12	220	0	BFET	WI			220	0	VT	WI	R			220	0	11	0	11		13-BA-8-14-220-0-8	WR	
13	13-BA-8-14-223-0	BA	8	14	13	223	0	BFET	WI			223	0	VT	WI	R			220	0	11	0	11		13-BA-8-14-220-0-8	WR	
13	13-BA-8-14-142-0	BA	8	14	14	142	0	BFET	WI			142	0	VT	WI	R			142	0	14	0	14		13-BA-8-14-142-0-9	WR	
13	13-BA-8-15-56-0	BA	8	15	1	56	0	BFET	WI			56	0	VT	WI	R			56	0	6	0	6		13-BA-8-15-56-0-1	WR	
13	13-BA-8-15-58-55	BA	8	15	3	58	55	BFET	WI			58	55	VT	LOF	R			58	55	5	0	5		13-BA-8-15-58-55-2	WR	
13	13-BA-8-15-99-0	BA	8	15								99	0	VT	LOF	R			99	0	4	0	4		13-BA-8-15-99-0-3	WR	
13	13-BA-7-4-150-0	BA	7	4								150	0	VT	RI	R			150	0	3	0	3		13-BA-7-4-150-0-1	WR	
13	13-BA-7-6-153-58	BA	7	6	6	153	58	VT	POR			153	58	VT	POR	R			153	58	2	0	2		13-BA-7-6-153-58-1	WR	
13	13-BA-7-8-200-58	BA	7	8	4	200	58	VT	POR			200	58	VT	POR	R			200	58	4	0	4		13-BA-7-8-200-58-1	WR	
13	13-BA-7-8-213-0	BA	7	8								213	0	VT	RI	R			213	0	3	0	3		13-BA-7-8-213-0-2	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Indication Topside	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-7-8-171-0	BA	7	8								171	0	VT	RI	R			171	0	3	0	3		13-BA-7-8-171-0-3	WR	
13	13-BA-7-9-0-43	BA	7	9	1	0	43	BFET	WI			0	43	VT	WI	R			0	43	0	10	10		13-BA-7-9-0-43-1	WR	
13	13-BA-7-9-33-0	BA	7	9	2	33	0	VT	POR			33	0	VT	POR	R			33	0	5	0	5		13-BA-7-9-33-0-2	WR	
13	13-BA-7-9-94-58	BA	7	9								94	58	VT	RI	R			94	58	3	0	3		13-BA-7-9-94-58-3	WR	
13	13-BA-7-10-111-60	BA	7	10	1	111	60	VT	POR			111	60	VT	LOF	R			111	60	4	0	4		13-BA-7-10-111-60-1	WR	
13	13-BA-7-10-149-60	BA	7	10	2	147-150	58-60	VT	POR			149	60	VT	LOF	R			149	60	4	0	4		13-BA-7-10-149-60-2	WR	
13	13-BA-7-10-215-59	BA	7	10	3	215	59	VT	POR			215	59	VT	LOF	R			215	59	0	4	4		13-BA-7-10-215-59-3	WR	
13	13-BA-7-10-28-3	BA	7	10								28	3	VT	RI	R			28	3	10		10		13-BA-7-10-28-3-4	WR	
13	13-BA-7-11-58-0	BA	7	11	1	58	0	BFET	WI			58	0	VT	WI	R			58	0	9	0	9		13-BA-7-11-58-0-1	WR	
13	13-BA-7-11-151-0	BA	7	11								151	0	VT	LOF	R			151	0	0	3	3		13-BA-7-11-151-0-2	WR	
13	13-BA-7-12-150-0	BA	7	12								150	0	VT	LOF	R			150	0	0	3	3		13-BA-7-12-150-0-1	WR	
13	13-BA-7-12-30-0	BA	7	12								30	0	VT	LOF	R			30	0	8	0	8		13-BA-7-12-30-0-2	WR	
13	13-BA-7-13-4-0	BA	7	13	1	0	4	BFET	WI			4	0	VT	WI	R			4	0	8	0	8		13-BA-7-13-4-0-1	WR	
13	13-BA-7-13-24-0	BA	7	13	2	0	24	BFET	WI			24	0	VT	WI	R			24	0	13	0	13		13-BA-7-13-24-0-2	WR	
13	13-BA-7-13-79-0	BA	7	13	3	0	79	BFET	WI			79	0	VT	WI	R			87	0	26	0	26		13-BA-7-13-87-0-3	WR	
13	13-BA-7-13-87-0	BA	7	13	4	0	87	BFET	WI			87	0	VT	WI	R			87	0	26	0	26		13-BA-7-13-87-0-3	WR	
13	13-BA-7-13-96-0	BA	7	13	5	0	96	VT	POR			96	0	VT	POR	R			87	0	26	0	26		13-BA-7-13-87-0-3	WR	
13	13-BA-7-13-178-0	BA	7	13	6	0	178	BFET	WI			178	0	VT	WI	R			182	0	10	0	10		13-BA-7-13-182-0-4	WR	
13	13-BA-7-13-185-0	BA	7	13	7	0	185	BFET	WI			185	0	VT	WI	R			182	0	10	0	10		13-BA-7-13-182-0-4	WR	
13	13-BA-7-13-43-0	BA	7	13								43	0	VT	LOF	R			43	0	4	0	4		13-BA-7-13-43-0-5	WR	
13	13-BA-7-14-0-27	BA	7	14	1	0	27	BFET	WI			0	27	VT	WI	R			0	27	0	11	11		13-BA-7-14-0-27-1	WR	
13	13-BA-7-14-186-0	BA	7	14	2	186	0	BFET	WI			186	0	VT	WI	R			186	0	7	0	7		13-BA-7-14-186-0-2	WR	
13	13-BA-7-14-205-0	BA	7	14	3	205	0	BFET	WI			205	0	VT	LOF	R			205	0	7	0	7		13-BA-7-14-205-0-3	WR	
13	13-BA-7-14-230-0	BA	7	14	4	230	0	BFET	WI			230	0	VT	LOF	R			230	0	6	0	6		13-BA-7-14-230-0-4	WR	
13	13-BA-7-15-19-58	BA	7	15	1	19	58	VT	POR			19	58	VT	POR	R			19	58	8	0	8		13-BA-7-15-19-58-1	WR	
13	13-BA-7-15-1-47	BA	7	15	2	1	47	VT	POR			1	47	VT	POR	R			1	47	0	4	4		13-BA-7-15-1-47-2	WR	
13	13-BA-7-15-142-58	BA	7	15	3	142	58	VT	POR			142	58	VT	LOF	R			142	58	0	4	4		13-BA-7-15-142-58-3	WR	
13	13-BA-7-15-140-0	BA	7	15								140	0	VT	LOF	R			140	0	0	4	4		13-BA-7-15-140-0-4	WR	
13	13-BA-7-16-27-58	BA	7	16	2	27	58	VT	POR			27	58	VT	POR	R			27	58	2	2	4		13-BA-7-16-27-58-1	WR	
13	13-BA-6-1-0-12	BA	6	1	2	0	12	VT	POR			0	12	VT	POR	R			0	12	0	12	12		13-BA-6-1-0-12-1	WR	
13	13-BA-6-3-0-38	BA	6	3	1	0	38	BFET	WI			0	38	VT	WI	R			0	38	6	0	6		13-BA-6-3-0-38-1	WR	
13	13-BA-6-4-148-0	BA	6	4	3	148	0	VT	POR			148	0	VT	POR	R			148	0	2	0	2		13-BA-6-4-148-0-1	WR	
13	13-BA-6-7-33-58	BA	6	7	2	33	58	VT	POR			33	58	VT	POR	R			33	58	2	0	2		13-BA-6-7-33-58-1	WR	
13	13-BA-6-9-108-0	BA	6	9	1	108	0	VT	POR			108	0	VT	POR	R			108	0	4	0	4		13-BA-6-9-108-0-1	WR	
13	13-BA-6-10-154-58	BA	6	10	1	154	58	VT	POR			154	58	VT	POR	R			154	58	8	0	8		13-BA-6-10-154-58-1	WR	
13	13-BA-6-10-94-58	BA	6	10								94	58	VT	LOF	R			94	58	4	0	4		13-BA-6-10-94-58-2	WR	
13	13-BA-6-11-213-0	BA	6	11	2	213	0	BFET	WI			213	0	VT	WI	R			220	0	19	0	19		13-BA-6-11-220-0-1	WR	
13	13-BA-6-11-225-0	BA	6	11	3	225	0	BFET	WI			225	0	VT	WI	R			220	0	19	0	19		13-BA-6-11-220-0-1	WR	
13	13-BA-6-11-93-58	BA	6	11	5	93	58	VT	LF			93	58	VT	LOF	R			93	58	0	4	4		13-BA-6-11-93-58-2	WR	
13	13-BA-6-12-220-0	BA	6	12	1	220	0	BFET	WI			220	0	VT	LOF	R			220	0	4	0	4		13-BA-6-12-220-0-1	WR	
13	13-BA-6-12-150-0	BA	6	12								150	0	VT	LOF	R			150	0	5	0	5		13-BA-6-12-150-0-2	WR	
13	13-BA-6-12-138-0	BA	6	12								138	0	VT	LOF	R			138	0	9	0	9		13-BA-6-12-138-0-3	WR	
13	13-BA-6-13-73-0	BA	6	13	1	73	0	VT	POR			73	0	VT	LOF	R			73	0	4	0	4		13-BA-6-13-73-0-1	WR	
13	13-BA-6-13-118-0	BA	6	13	3	118	0	BFET	WI			118	0	VT	WI	R			120	0	13	0	13		13-BA-6-13-120-0-2	WR	
13	13-BA-6-13-122-0	BA	6	13	4	122	0	BFET	WI			122	0	VT	WI	R			120	0	13	0	13		13-BA-6-13-120-0-2	WR	
13	13-BA-6-13-136-0	BA	6	13	5	136	0	BFET	WI			136	0	VT	WI	R			136	0	7	0	7		13-BA-6-13-136-0-3	WR	
13	13-BA-6-13-191-0	BA	6	13	6	191	0	BFET	WI			191	0	VT	WI	R			191	0	9	0	9		13-BA-6-13-191-0-4	WR	
13	13-BA-6-13-230-0	BA	6	13	7	230	0	BFET	WI			230	0	VT	WI	R			230	0	5	0	5		13-BA-6-13-230-0-5	WR	

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-6-13-31-0	BA	6	13								31	0	VT	LOF	R			31	0	4	0	4		13-BA-6-13-31-0-6	WR	
13	13-BA-6-14-16-0	BA	6	14	1	16	0	BFET	WI			16	0	VT	WI	R			16	0	6	0	6		13-BA-6-14-16-0-1	WR	
13	13-BA-6-14-121-0	BA	6	14	2	121	0	BFET	WI			121	0	VT	WI	R			121	0	12	0	12		13-BA-6-14-121-0-2	WR	
13	13-BA-6-14-202-0	BA	6	14	3	202	0	VT	POR			202	0	VT	POR	R			205	0	15	5	20		13-BA-6-14-205-0-3	WR	
13	13-BA-6-14-208-0	BA	6	14	4	208	0	BFET	WI			208	0	VT	WI	R			205	0	15	5	20		13-BA-6-14-205-0-3	WR	
13	13-BA-6-14-228-0	BA	6	14	5	228	0	BFET	WI			228	0	VT	WI	R			228	0	15	0	15		13-BA-6-14-228-0-4	WR	
13	13-BA-6-15-8-0	BA	6	15	1	8	0	VT	POR			8	0	VT	LOF	R			8	0	4	0	4		13-BA-6-15-8-0-1	WR	
13	13-BA-6-15-88-0	BA	6	15	2	88	0	BFET	WI			88	0	VT	WI	R			88	0	7	0	7		13-BA-6-15-88-0-2	WR	
13	13-BA-6-15-106-0	BA	6	15	3	106	0	BFET	WI			106	0	VT	WI	R			106	0	6	0	6		13-BA-6-15-106-0-3	WR	
13	13-BA-6-15-206-58	BA	6	15	4	29 RL	58	VT	POR			206	58	VT	POR	R			206	58	0	5	5		13-BA-6-15-206-58-4	WR	
13	13-BA-6-15-90-0	BA	6	15								90	0	VT	LOF	R			90	0	4	0	4		13-BA-6-15-90-0-5	WR	
13	13-BA-6-16-26-58	BA	6	16	1	26	58	VT	POR			26	58	VT	POR	R			26	58	0	8	8		13-BA-6-16-26-58-1	WR	
13	13-BA-5-1-1-57	BA	5	1	2	1	57	VT	POR			1	57	VT	POR	R			1	57	0	2	2		13-BA-5-1-1-57-1	WR	
13	13-BA-5-9-95-0	BA	5	9	1	95	0	VT	POR			95	0	VT	POR	R			95	0	0	4	4		13-BA-5-9-95-0-1	WR	
13	13-BA-5-9-95-58	BA	5	9	2	95	58	VT	POR			95	58	VT	POR	R			95	58	4	0	4		13-BA-5-9-95-58-2	WR	
13	13-BA-5-9-0-25	BA	5	9								0	25	VT	LOF	R			0	25	0	4	4		13-BA-5-9-0-25-3	WR	
13	13-BA-5-9-30-0	BA	5	9								30	0	VT	POR	R			30	0	8	0	8		13-BA-5-9-30-0-4	WR	
13	13-BA-5-9-210-0	BA	5	9								210	0	VT	UC	R			210	0	0	5	5		13-BA-5-9-210-0-5	WR	
13	13-BA-5-10-36-59	BA	5	10	1	36	59	VT	POR			36	59	VT	POR	R			36	59	5	0	5		13-BA-5-10-36-59-1	WR	
13	13-BA-5-11-0-3	BA	5	11	1	0	3	VT	POR			0	3	VT	POR	R			0	3	0	4	4		13-BA-5-11-0-3-1	WR	
13	13-BA-5-11-0-42	BA	5	11	2	0	42	VT	POR			0	42	VT	POR	R			0	42	3	3	6		13-BA-5-11-0-42-2	WR	
13	13-BA-5-12-87-0	BA	5	12	1	87	0	BFET	WI			87	0	VT	WI	R			87	0	16	0	16		13-BA-5-12-87-0-1	WR	
13	13-BA-5-12-155-0	BA	5	12	3	155	0	VT	POR			155	0	VT	POR	R			155	0	0	6	6		13-BA-5-12-155-0-2	WR	
13	13-BA-5-12-212-0	BA	5	12	5	212	0	BFET	WI			212	0	VT	WI	R			213	0	8	0	8		13-BA-5-12-213-0-3	WR	
13	13-BA-5-12-214-0	BA	5	12	6	214	0	BFET	WI			214	0	VT	WI	R			213	0	8	0	8		13-BA-5-12-213-0-3	WR	
13	13-BA-5-12-211-59	BA	5	12	7	211	59	BFET	WI			211	59	VT	WI	R			211	59	6	0	6		13-BA-5-12-211-59-4	WR	
13	13-BA-5-13-56-0	BA	5	13	1	56	0	BFET	WI			56	0	VT	WI	R			56	0	8	0	8		13-BA-5-13-56-0-1	WR	
13	13-BA-5-13-84-0	BA	5	13	2	84	0	BFET	WI			84	0	VT	WI	R			84	0	6	0	6		13-BA-5-13-84-0-2	WR	
13	13-BA-5-13-211-0	BA	5	13	3	211	0	BFET	WI			211	0	VT	WI	R			211	0	7	0	7		13-BA-5-13-211-0-3	WR	
13	13-BA-5-13-130-0	BA	5	13	4	130	0	BFET	WI			130	0	VT	WI	R			130	0	7	0	7		13-BA-5-13-130-0-4	WR	
13	13-BA-5-13-146-0	BA	5	13	5	146	0	VT	POR			146	0	VT	POR	R			146	0	4	0	4		13-BA-5-13-146-0-5	WR	
13	13-BA-5-13-168-0	BA	5	13	6	168	0	BFET	WI			168	0	VT	WI	R			168	0	5	0	5		13-BA-5-13-168-0-6	WR	
13	13-BA-5-13-90-0	BA	5	13								90	0	VT	LOF	R			90	0	10	0	10		13-BA-5-13-90-0-7	WR	
13	13-BA-5-13-231-0	BA	5	13								231	0	VT	LOF	R			231	0	4	0	4		13-BA-5-13-231-0-8	WR	
13	13-BA-5-14-0-33	BA	5	14	1	0	33	VT	POR			0	33	VT	POR	R			0	33	0	10	10		13-BA-5-14-0-33-1	WR	
13	13-BA-5-14-19-0	BA	5	14	2	19	0	BFET	WI			19	0	VT	WI	R			27	0	39	0	39		13-BA-5-14-27-0-2	WR	
13	13-BA-5-14-27-0	BA	5	14	3	27	0	BFET	WI			27	0	VT	WI	R			27	0	39	0	39		13-BA-5-14-27-0-2	WR	
13	13-BA-5-14-36-0	BA	5	14	4	36	0	BFET	WI			36	0	VT	WI	R			27	0	39	0	39		13-BA-5-14-27-0-2	WR	
13	13-BA-5-14-82-0	BA	5	14	5	82	0	BFET	WI			82	0	VT	WI	R			82	0	21	5	26		13-BA-5-14-82-0-3	WR	
13	13-BA-5-14-88-0	BA	5	14	6	88	0	BFET	WI			88	0	VT	WI	R			82	0	21	5	26		13-BA-5-14-82-0-3	WR	
13	13-BA-5-14-116-0	BA	5	14	7	116	0	BFET	WI			116	0	VT	WI	R			120	0	17	0	17		13-BA-5-14-120-0-4	WR	
13	13-BA-5-14-125-0	BA	5	14	8	125	0	BFET	WI			125	0	VT	WI	R			120	0	17	0	17		13-BA-5-14-120-0-4	WR	
13	13-BA-5-15-79-59	BA	5	15	2	76-82	58-60	VT	POR			79	59	VT	POR	R			79	59	16	0	16		13-BA-5-15-79-59-1	WR	
13	13-BA-5-15-24-60	BA	5	15	3	24	60	VT	POR			24	60	VT	RI	R			24	60	9	0	9		13-BA-5-15-24-60-2	WR	
13	13-BA-4-1-0-43	BA	4	1	2	0	43	VT	POR			0	43	VT	POR	R			0	43	0	2	2		13-BA-4-1-0-43-1	WR	
13	13-BA-4-8-210-0	BA	4	8								210	0	VT	RI	R			210	0	8	0	8		13-BA-4-8-210-0-1	WR	
13	13-BA-4-9-125-0	BA	4	9	1	125	0	VT	WI			125	0	VT	WI	R			125	0	9	0	9		13-BA-4-9-125-0-1	WR	
13	13-BA-4-9-148-0	BA	4	9	2	148	0	VT	WI			148	0	VT	WI	R			148	0	18	0	18		13-BA-4-9-148-0-2	WR	

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-4-9-152-0	BA	4	9	3	152	0	VT	WI			152	0	VT	WI	R			148	0	18	0	18		13-BA-4-9-148-0-2	WR	
13	13-BA-4-9-222-0	BA	4	9	4	222	0	VT	WI			222	0	VT	WI	R			222	0	19	0	19		13-BA-4-9-222-0-3	WR	
13	13-BA-4-9-124-60	BA	4	9	5	24	60	VT	POR			124	60	VT	POR	R			130	60	16	6	22		13-BA-4-9-130-60-4	WR	
13	13-BA-4-9-133-60	BA	4	9	6	33	60	VT	POR			133	60	VT	POR	R			130	60	16	6	22		13-BA-4-9-130-60-5	WR	
13	13-BA-4-10-30-3	BA	4	10	2	?	?	VT	POR			30	3	VT	POR	R			30	3	0	5	5		13-BA-4-10-30-3-1	WR	
13	13-BA-4-10-153-60	BA	4	10	3	153	60	VT	POR			153	60	VT	LOF	R			153	60	8	0	8		13-BA-4-10-153-60-2	WR	
13	13-BA-4-10-240-37	BA	4	10	4	240	37	VT	POR			240	37	VT	LOF	R			240	37	0	4	4		13-BA-4-10-240-37-3	WR	
13	13-BA-4-11-155-0	BA	4	11	1	155	0	BFET	WI			155	0	VT	WI	R			155	0	6	0	6		13-BA-4-11-155-0-1	WR	
13	13-BA-4-11-206-0	BA	4	11	2	206	0	BFET	WI			206	0	VT	WI	R			206	0	7	0	7		13-BA-4-11-206-0-2	WR	
13	13-BA-4-11-216-0	BA	4	11	3	216	0	BFET	WI			216	0	VT	WI	R			216	0	4	0	4		13-BA-4-11-216-0-3	WR	
13	13-BA-4-11-94-58	BA	4	11	5	94	58	VT	POR			94	58	VT	POR	R			94	58	0	4	4		13-BA-4-11-94-58-4	WR	
13	13-BA-4-12-149-0	BA	4	12	1	149	0	BFET	WI			149	0	VT	WI	R			149	0	16	0	16		13-BA-4-12-149-0-1	WR	
13	13-BA-4-12-211-58	BA	4	12	2	211	58	VT	POR			211	58	VT	POR	R			211	58					13-BA-5-12-87-0-1	WR	
13	13-BA-4-12-237-0	BA	4	12	3	237	0	BFET	WI			237	0	VT	WI	R			239	0	10	0	10		13-BA-4-12-239-0-2	WR	
13	13-BA-4-13-0-0	BA	4	13	1	0	0	BFET	WI			0	0	VT	WI	R			0	0					13-BA-4-12-239-0-2	WR	
13	13-BA-4-13-0-59	BA	4	13	2	0	59	BFET	WI			0	59	VT	WI	R			0	59	3	3	6		13-BA-4-13-0-59-1	WR	
13	13-BA-4-13-58-0	BA	4	13	3	58	0	BFET	WI			58	0	VT	WI	R			58	0	5	3	8		13-BA-4-13-58-0-2	WR	
13	13-BA-4-13-95-0	BA	4	13	4	95	0	BFET	WI			95	0	VT	WI	R			95	0	5	0	5		13-BA-4-13-95-0-3	WR	
13	13-BA-4-13-144-0	BA	4	13	5	144	0	BFET	WI			144	0	VT	WI	R			144	0	7	0	7		13-BA-4-13-144-0-4	WR	
13	13-BA-4-13-32-0	BA	4	13								32	0	VT	RI	R			32	0	4	0	4		13-BA-4-13-32-0-5	WR	
13	13-BA-4-13-116-0	BA	4	13								116	0	VT	LOF	R			116	0	4	0	4		13-BA-4-13-116-0-6	WR	
13	13-BA-4-13-210-0	BA	4	13								210	0	VT	LOF	R			210	0	8	0	8		13-BA-4-13-210-0-7	WR	
13	13-BA-4-14-50-0	BA	4	14	1	50	0	BFET	WI			50	0	VT	WI	R			55	0	14	0	14		13-BA-4-14-55-0-1	WR	
13	13-BA-4-14-59-0	BA	4	14	2	59	0	BFET	WI			59	0	VT	WI	R			55	0	14	0	14		13-BA-4-14-55-0-1	WR	
13	13-BA-4-14-81-0	BA	4	14	3	81	0	VT	POR			81	0	VT	RI	R			81	0	4	0	4		13-BA-4-14-81-0-2	WR	
13	13-BA-4-14-0-46	BA	4	14	4	0	46	BFET	WI			0	46	VT	WI	R			0	46	7	0	7		13-BA-4-14-0-46-3	WR	
13	13-BA-4-14-211-0	BA	4	14	5	211	0	BFET	WI			211	0	VT	WI	R			211	0	28	0	28		13-BA-4-14-211-0-4	WR	
13	13-BA-4-14-216-0	BA	4	14	6	216	0	BFET	WI			216	0	VT	WI	R			211	0	28	0	28		13-BA-4-14-211-0-4	WR	
13	13-BA-4-14-90-0	BA	4	14								90	0	VT	RI	R			90	0	4	0	4		13-BA-4-14-90-0-5	WR	
13	13-BA-4-14-148-0	BA	4	14								148	0	VT	POR	R			148	0	3	3	6		13-BA-4-14-148-0-6	WR	
13	13-BA-4-15-0-47	BA	4	15	1	0	47	BFET	WI			0	47	VT	WI	R			0	47	3	5	8		13-BA-4-15-0-47-1	WR	
13	13-BA-4-15-36-0	BA	4	15	2	36	0	BFET	WI			36	0	VT	WI	R			36	0	7	0	7		13-BA-4-15-36-0-2	WR	
13	13-BA-4-15-59-0	BA	4	15	3	59	0	BFET	WI			59	0	VT	WI	R			59	0	7	0	7		13-BA-4-15-59-0-3	WR	
13	13-BA-4-15-87-0	BA	4	15	4	87	0	BFET	WI			87	0	VT	WI	R			87	0	7	0	7		13-BA-4-15-87-0-4	WR	
13	13-BA-4-15-58-28	BA	4	15	5	58	28	VT	POR			58	28	VT	LOF	R			58	28	0	4	4		13-BA-4-15-58-28-5	WR	
13	13-BA-4-15-131-58	BA	4	15	6	36 RL	58	VT	POR			131	58	VT	LOF	R			131	58	8	0	8		13-BA-4-15-131-58-6	WR	
13	13-BA-4-15-94-0	BA	4	15								94	0	VT	LOF	R			94	0	11	0	11		13-BA-4-15-94-0-7	WR	
13	13-BA-4-16-0-32	BA	4	16	3	1	32	VT	POR			0	32	VT	POR	R			0	32	0	5	5		13-BA-4-16-0-32-1	WR	
13	13-BA-4-16-210-0	BA	4	16	5	210	0	VT	LF			210	0	VT	LOF	R			210	0	4	4	8		13-BA-4-16-210-0-2	WR	
13	13-BA-4-16-220-0	BA	4	16	6	220	0	VT	POR			220	0	VT	POR	R			220	0	12	4	16		13-BA-4-16-220-0-3	WR	
13	13-BA-4-16-237-0	BA	4	16	7	237	0	VT	POR			237	0	VT	POR	R			237	0	8	0	8		13-BA-4-16-237-0-4	WR	
13	13-BA-4-16-30-1	BA	4	16								30	1	VT	RI	R			30	1	8	0	8		13-BA-4-16-30-1-5	WR	
13	13-BA-3-1-214-0	BA	3	1	1	214	0	BFET	WI			214	0	VT	WI	R			214	0	4	0	4		13-BA-3-1-214-0-1	WR	
13	13-BA-3-2-36-0	BA	3	2	2	36	0	BFET	WI			36	0	VT	WI	R			36	0	4	0	4		13-BA-3-2-36-0-1	WR	
13	13-BA-3-7-26-58	BA	3	7	1	26	58	VT	POR			26	58	VT	POR	R			26	58	2	0	2		13-BA-3-7-26-58-1	WR	
13	13-BA-3-8-196-60	BA	3	8	3	196	60	VT	POR			196	60	VT	POR	R			200	60	10	0	10		13-BA-3-8-200-60-1	WR	
13	13-BA-3-8-204-60	BA	3	8	4	204	60	VT	POR			204	60	VT	POR	R			200	60	20	0	20		13-BA-3-8-200-60-1	WR	
13	13-BA-3-8-194-0	BA	3	8								194	0	VT	LOF	R			194	0	4	0	4		13-BA-3-8-194-0-2	WR	

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Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TesTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Topside Indication	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-3-8-180-0	BA	3	8								180	0	VT	LOF	R			180	0	4	0	4		13-BA-3-8-180-0-3	WR	
13	13-BA-3-9-200-60	BA	3	9	2	200	60	VT	LF			200	60	VT	LOF	R			200	60	4	0	4		13-BA-3-9-200-60-1	WR	
13	13-BA-3-9-146-59	BA	3	9								146	59	VT	LOF	R			146	59	6	0	6		13-BA-3-9-146-59-2	WR	
13	13-BA-3-9-154-0	BA	3	9								154	0	VT	RI	R			154	0	4	0	4		13-BA-3-9-154-0-3	WR	
13	13-BA-3-9-84-0	BA	3	9								84	0	VT	IF	R			84	0	4	0	4		13-BA-3-9-84-0-4	WR	
13	13-BA-3-9-47-0	BA	3	9								47	0	VT	RI	R			47	0	4	0	4		13-BA-3-9-47-0-5	WR	
13	13-BA-3-10-92-60	BA	3	10	1	92	60	VT	POR			92	60	VT	POR	R			92	60	4	0	4		13-BA-3-10-92-60-1	WR	
13	13-BA-3-11-62-0	BA	3	11	1	62	0	BFET	WI			62	0	VT	WI	R			62	0	18	0	18		13-BA-3-11-62-0-1	WR	
13	13-BA-3-11-144-0	BA	3	11	2	144	0	BFET	WI			144	0	VT	WI	R			144	0	9	0	9		13-BA-3-11-144-0-2	WR	
13	13-BA-3-11-36-60	BA	3	11	3	36	60	VT	POR			36	60	VT	POR	R			36	60	0	4	4		13-BA-3-11-36-60-3	WR	
13	13-BA-3-12-74-0	BA	3	12	1	74	0	BFET	WI			74	0	VT	WI	R			74	0	11	0	11		13-BA-3-12-74-0-1	WR	
13	13-BA-3-13-96-0	BA	3	13	1	96	0	BFET	WI			96	0	VT	WI	R			107	0	29	0	29		13-BA-3-13-107-0-1	WR	
13	13-BA-3-13-105-0	BA	3	13	2	105	0	BFET	WI			105	0	VT	WI	R			107	0	29	0	29		13-BA-3-13-107-0-1	WR	
13	13-BA-3-13-111-0	BA	3	13	3	111	0	BFET	WI			111	0	VT	WI	R			107	0	29	0	29		13-BA-3-13-107-0-1	WR	
13	13-BA-3-13-119-0	BA	3	13	4	119	0	BFET	WI			119	0	VT	WI	R			107	0	29	0	29		13-BA-3-13-107-0-1	WR	
13	13-BA-3-13-207-0	BA	3	13	5	207	0	BFET	WI			207	0	VT	WI	R			207	0	7	0	7		13-BA-3-13-207-0-2	WR	
13	13-BA-3-13-90-0	BA	3	13								90	0	VT	LOF	R			90	0	8	0	8		13-BA-3-13-90-0-3	WR	
13	13-BA-3-14-138-1	BA	3	14	1	138	1	BFET	WI			138	1	VT	WI	R			138	1	19	4	23		13-BA-3-14-138-1-1	WR	
13	13-BA-3-14-146-0	BA	3	14	2	146	0	BFET	WI			146	0	VT	WI	R			146	0	7	0	7		13-BA-3-14-146-0-2	WR	
13	13-BA-3-14-239-14	BA	3	14	3	239	14	BFET	WI			239	14	VT	WI	R			239	14	0	3	3		13-BA-3-14-239-14-3	WR	
13	13-BA-3-14-89-0	BA	3	14								89	0	VT	LOF	R			89	0	5	0	5		13-BA-3-14-89-0-4	WR	
13	13-BA-3-14-210-0	BA	3	14								210	0	VT	LOF	R			210	0	4	0	4		13-BA-3-14-210-0-5	WR	
13	13-BA-3-15-117-60	BA	3	15	1	51 RL	60	VT	POR			117	60	VT	LOF	R			117	60	4	0	4		13-BA-3-15-117-60-1	WR	
13	13-BA-3-15-78-58	BA	3	15	2	90 RL	58	VT	POR			78	58	VT	LOF	R			78	58	6	0	6		13-BA-3-15-78-58-2	WR	
13	13-BA-3-15-55-58	BA	3	15	3	113 RL	58	VT	POR			55	58	VT	LOF	R			55	58	5	0	5		13-BA-3-15-55-58-3	WR	
13	13-BA-3-15-20-0	BA	3	15	4	20	0	BFET	WI			20	0	VT	WI	R			20	0	8	0	8		13-BA-3-15-20-0-4	WR	
13	13-BA-3-15-30-0	BA	3	15								30	0	VT	LOF	R			30	0	0	4	4		13-BA-3-15-30-0-5	WR	
13	13-BA-2-7-172-60	BA	2	7	4	172	60	VT	UC			172	60	VT	UC	R			172	60	3	0	3		13-BA-2-7-172-60-1	WR	
13	13-BA-2-10-38-60	BA	2	10	1	38	60	VT	LF			38	60	VT	LOF	R			38	60	5	0	5		13-BA-2-10-38-60-1	WR	
13	13-BA-2-10-174-60	BA	2	10	3	174	60	VT	POR			174	60	VT	LOF	R			174	60	4	0	4		13-BA-2-10-174-60-2	WR	
13	13-BA-2-10-205-60	BA	2	10	4	205	58-60	VT	POR			205	60	VT	LOF	R			205	60	4	0	4		13-BA-2-10-205-60-3	WR	
13	13-BA-2-10-28-3	BA	2	10								28	3	VT	LOF	R			28	3	5	0	5		13-BA-2-10-28-3-4	WR	
13	13-BA-2-11-89-58	BA	2	11	1	89	58	BFET	WI			89	58	VT	WI	R			89	58	12	0	12		13-BA-2-11-89-58-1	WR	
13	13-BA-2-11-94-57	BA	2	11	2	94	57	BFET	WI			94	57	VT	WI	R			94	57	6	0	6		13-BA-2-11-94-57-2	WR	
13	13-BA-2-11-0-39	BA	2	11								0	39	VT	RI	R			0	39	0	4	4		13-BA-2-11-0-39-3	WR	
13	13-BA-2-12-96-0	BA	2	12	1	96	0	VT	WI			96	0	VT	WI	R			96	0	16	0	16		13-BA-2-12-96-0-1	WR	
13	13-BA-2-13-27-0	BA	2	13	2	27	0	BFET	WI			27	0	VT	WI	R			27	0	16	0	16		13-BA-2-13-27-0-1	WR	
13	13-BA-2-13-151-0	BA	2	13	3	151	0	VT	POR			151	0	VT	RI	R			151	0	5	0	5		13-BA-2-13-151-0-2	WR	
13	13-BA-2-13-208-0	BA	2	13	4	208	0	VT	POR			208	0	VT	RI	R			208	0	4	0	4		13-BA-2-13-208-0-3	WR	
13	13-BA-2-13-94-58	BA	2	13								94	58	VT	LOF	R			94	58	4	0	4		13-BA-2-13-94-58-4	WR	
13	13-BA-2-14-28-58	BA	2	14	1	28	58	BFET	WI			28	58	VT	WI	R			28	58					13-BA-3-14-146-0-2	WR	
13	13-BA-2-15-23-57	BA	2	15	1	20-27	57	VT	UC/POR			23	57	VT	POR	R			23	57	17	0	17		13-BA-2-15-23-57-1	WR	
13	13-BA-2-15-32-59	BA	2	15	2	32	59	VT	UC	0.09		32	59	VT	LOF	R			32	59	7	0	7		13-BA-2-15-32-59-2	WR	
13	13-BA-2-16-232-59	BA	2	16								232	59	VT	POR	R			232	59	4	0	4		13-BA-2-16-232-59-1	WR	
13	13-BA-1-5-34-2	BA	1	5	1	34	1-4	VT	LF/POR			34	2	VT	POR	R			34	2	0	2	2		13-BA-1-5-34-2-1	WR	
13	13-BA-1-5-92-2	BA	1	5	2	92	1-4	VT	POR			92	2	VT	POR	R			92	2	0	2	2		13-BA-1-5-92-2-2	WR	
13	13-BA-1-8-89-60	BA	1	8	1	89	58-60	VT	POR			89	60	VT	POR	R			89	60	8	0	8		13-BA-1-8-89-60-1	WR	
13	13-BA-1-8-230-38	BA	1	8								230	38	VT	LOF	R			230	38	6	0	6		13-BA-1-8-230-38-2	WR	

Indication Identification		Shell Location			TesTex NDE							EEI NDE							Recommended Repairs								Repair Type
Tank No.	Overall ID	General Location			TesTex Indication ID on Plate	TexTex Reported Indication Location		TesTex NDE		Minimum Wall Thickness	Depth of Indication Topside	Center of Indication: X (in)	Center of Indication: Y (in)	Method	Indication Type	EEI Recommendation	Minimum Thickness (in)	Depth (in)	Center of Repair: X (in)	Center of Repair: Y (in)	Width or Dia (in)	Height (in)			EEI repair No.	Repair Type (Patch, Weld)	
13	13-BA-1-9-149-58	BA	1	9	1	149	58	VT	POR			149	58	VT	LOF	R			149	58	4	4	8		13-BA-1-9-149-58-1	WR	
13	13-BA-1-10-146-60	BA	1	10	1	146	60	VT	POR			146	60	VT	POR	R			146	60	6	0	6		13-BA-1-10-146-60-1	WR	
13	13-BA-1-10-144-2	BA	1	10	2	144	0-4	VT	POR			144	2	VT	POR	R			144	2	9	0	9		13-BA-1-10-144-2-2	WR	
13	13-BA-1-10-212-2	BA	1	10	3	212	1-3	VT	POR			212	2	VT	POR	R			212	2	3	3	6		13-BA-1-10-212-2-3	WR	
13	13-BA-1-11-30-58	BA	1	11	1	30	58	VT	POR			30	58	VT	POR	R			30	58	0	4	4		13-BA-1-11-30-58-1	WR	
13	13-BA-1-12-22-0	BA	1	12	1	22	0	BFET	WI			22	0	VT	WI	R			22	0	5	0	5		13-BA-1-12-22-0-1	WR	
13	13-BA-1-13-115-0	BA	1	13	1	115	0	BFET	WI			115	0	VT	WI	R			115	0	6	0	6		13-BA-1-13-115-0-1	WR	
13	13-BA-1-13-201-0	BA	1	13	2	201	0	VT	TC		0.094	201	0	VT	TC	R			201	0	2	0	2		13-BA-1-13-201-0-2	WR	
13	13-BA-1-14-210-2	BA	1	14								210	2	VT	RI	R			210	2	12	0	12		13-BA-1-14-210-2-1	WR	
13	13-BA-1-15-145-2	BA	1	15								145	2	VT	LOF	R			145	2	8	0	8		13-BA-1-15-145-2-1	WR	
13	13-BA-1-16-150-1	BA	1	16								150	1	VT	LOF	R			150	1	4	0	4		13-BA-1-16-150-1-1	WR	
13	13-LD-4-8-0-88	LD	4	8	1	0	88	BFET	WI			0	88	VT	WI	R			0	88	8	0	8		13-LD-4-8-0-88-1	WR	
13	13-LD-4-9-0-61	LD	4	9	3	0	61	BFET	WI			0	61	VT	WI	R			0	61	0	6	6		13-LD-4-9-0-61-1	WR	
13	13-LD-4-35-0-87	LD	4	35								0	87	VT	LOF	R			0	87	6	4	10		13-LD-4-35-0-87-1	WR	
13	13-LD-4-35-14-87	LD	4	35								14	87	VT	POR	R			14	87	4	0	4		13-LD-4-35-14-87-2	WR	
13	13-LD-4-41-36-87	LD	4	41								36	87	VT	LOF	R			36	87	12	0	12		13-LD-4-41-36-87-1	WR	
13	13-LD-4-45-19-8	LD	4	45								19	8	VT	LOF	R			19	8	4	0	4		13-LD-4-45-19-8-1	WR	
13	13-LD-4-49-11-87	LD	4	49								11	87	VT	LOF	R			11	87	16	0	16		13-LD-4-49-11-87-1	WR	
13	13-LD-4-52-0-87	LD	4	52								0	87	VT	LOF	R			0	87	4	2	6		13-LD-4-52-0-87-1	WR	
13	13-LD-4-53-0-21	LD	4	53	1	0	21	BFET	WI			0	21	VT	WI	R			0	21	0	11	11		13-LD-4-53-0-21-1	WR	
13	13-LD-4-55-33-0	LD	4	55	1	33	0	BFET	WI			33	0	VT	WI	R			35	0	13	0	13		13-LD-4-55-35-0-1	WR	
13	13-LD-4-55-40-0	LD	4	55	2	40	0	BFET	WI			40	0	VT	WI	R			35	0	13	0	13		13-LD-4-55-35-0-1	WR	
13	13-LD-4-56-0-51	LD	4	56	1	0	51	BFET	WI			0	51	VT	WI	R			0	51	0	9	9		13-LD-4-56-0-51-1	WR	
13	13-LD-4-56-27-9	LD	4	56	2	27	9	BFET	WI			27	9	VT	WI	R			27	9	10	0	10		13-LD-4-56-27-9-2	WR	
13	13-LD-4-56-42-0	LD	4	56	3	42	0	BFET	WI			42	0	VT	WI	R			42	0	11	0	11		13-LD-4-56-42-0-3	WR	
13	13-LD-4-57-13-0	LD	4	57	1	13	0	VT	POR			13	0	VT	POR	R			13	0	4	0	4		13-LD-4-57-13-0-1	WR	
13	13-LD-4-57-26-7	LD	4	57	2	26	7	BFET	WI			26	7	VT	WI	R			26	7	10	0	10		13-LD-4-57-26-7-2	WR	
13	13-LD-4-58-0-80	LD	4	58	2	0	80	BFET	WI			0	80	VT	WI	R			0	80	0	7	7		13-LD-4-58-0-80-1	WR	
13	13-LD-4-58-52-0	LD	4	58	3	52	0	BFET	WI			52	0	VT	WI	R			52	0	7	0	7		13-LD-4-58-52-0-2	WR	
13	13-LD-4-60-1-72	LD	4	60	1	1	72	VT	POR			1	72	VT	POR	R			1	72	0	6	6		13-LD-4-60-1-72-1	WR	
13	13-LD-4-60-55-88	LD	4	60	2	55	88	VT	POR			55	88	VT	POR	R			55	88	4	0	4		13-LD-4-60-55-88-2	WR	
13	13-LD-4-61-1-83	LD	4	61	1	1	83	VT	POR			1	83	VT	POR	R			1	83	0	5	5		13-LD-4-61-1-83-1	WR	
13	13-LD-3-1-76-238	LD	3	1	1	76	238	VT	TC		0.094	76	238	VT	TC	R			76	238	2	0	2		13-LD-3-1-76-238-1	WR	
13	13-LD-3-2-22-68	LD	3	2	1	22	68	BFET	WI			22	68	VT	WI	R			22	68	0	6	6		13-LD-3-2-22-68-1	WR	
13	13-LD-3-3-0-151	LD	3	3	1	0	148	BFET	WI			0	151	VT	WI	R			0	151	0	4	4		13-LD-3-3-0-151-1	WR	
13	13-LD-3-5-0-114	LD	3	5	10	0	114	BFET	WI			0	114	VT	WI	R			0	114	0	6	6		13-LD-3-5-0-114-1	WR	
13	13-LD-3-6-0-160	LD	3	6	3	0	155-164	VT	UC			0	160	VT	UC	R			0	160	0	2	2		13-LD-3-6-0-160-1	WR	
13	13-LD-3-36-24-48	LD	3	36	1	24	48	BFET	WI			24	48	VT	WI	R			24	48	58	0	58		13-LD-3-36-24-48-1	WR	
13	13-LD-3-38-58-234	LD	3	38	1	58	234	BFET	WI			58	234	VT	WI	R			58	234	10	0	10		13-LD-3-38-58-234-1	WR	
13	13-LD-3-39-25-233	LD	3	39	1	25	233	BFET	WI			25	233	VT	WI	R			25	233	8	0	8		13-LD-3-39-25-233-1	WR	
13	13-LD-3-39-0-173	LD	3	39	2	0	173	BFET	WI			0	173	VT	WI	R			0	173	0	9	9		13-LD-3-39-0-173-2	WR	
13	13-LD-3-43-0-235	LD	3	43	1	0	235	BFET	WI			0	235	VT	WI	R			0	235	0	7	7		13-LD-3-43-0-235-1	WR	
13	13-LD-3-43-2-193	LD	3	43	2	2	193	BFET	WI			2	193	VT	WI	R			2	193	18	0	18		13-LD-3-43-2-193-2	WR	
13	13-LD-2-39-29-126	LD	2	39	1	29	126	BFET	WI			29	126	VT	WI	R			29	126	6	0	6		13-LD-2-39-29-126-1	WR	

Glossary of Abbreviations used in the Master Table

BA	Barrel
BB	Backing Bar
BC	Bottom or back side corrosion indication
BFET	Balanced Field Electromagnetic Testing (an eddy current technique, TexTex occasionally refers to this as "Hawkeye" after their instrumentation model that utilizes the technique)
B, Bulge	Bulge
Bracket	Existing bracket
CL	Cold Lap
Dent, D	Dent
ER	Extension Ring
G	Gouge
GA	"Ground Area" Areas found to be cleared of coating by grinding.
HW	Horizontal Weld in the manway penetration. Y=0 at the inside edge of the manway, X=0 at the weld, positive x is ccw from the weld looking out of the tank.
IC	Inside of manway cover.
IF	Incomplete Fill
IP	Incomplete Penetration
L, Linear	Linear indication having length greater than three times width
LAM, Lamination	Lamination (original plate manufacture defect)
LD	Lower Dome
LFET	Low Frequency Electromagnetic Testing (an eddy current technique)
LOF	Lack of Fusion
MT	Magnetic Particle Testing
N	Nozzle (A Pipe Cap installed over an original construction feature such as grout nozzle, strain gauge nozzle, etc.)
N/A	Not Applicable
NR	As found in EEI Recommendation Column: "No Repair" An indication that met reporting criteria but, following prove-up, did not meet criteria for providing a repair.
NRI	No Recordable Indication
OC	Outside of manway cover.
P	Porosity (also denoted by "POR")
PA	Plate Anchor
PAUT	Phased Array Ultrasound Testing
PC	Pipe Cap: A method repair by which a short length of pipe with an attached end cap is placed over the affected area and welded in place around the circumference with a full fillet weld. Existing repairs of this type are marked "N" in the Master Table.
POR	Porosity (also denoted by "P")
PP	Patch Plate (see also TSPP)
R	As found in EEI Recommendation Column: "Repair" An indication that met reporting criteria and, following prove-up, met criteria for providing a repair.
RI	Rounded Indication (width to length ratio 3 or less)
SG	Strain Gauge Fitting
SP	Shell Plate
TC	Top side corrosion
TO	Tear or Tear Out
TS	Top Side indication: a general term to identify an indication on the surface facing the examiner.
TSP	Top Side Pit
TSPP	Tombstone patch plate, as described in API 653
TTH	Telltale Penetration
UC	Undercut
UD	Upper Dome
UF	"under fill", also see IF
UT	Ultrasound Testing
VB	Vacuum Box Testing
VT	Visual Testing
W	Weld
WC	Weld Cover: often an channel section placed over backing bars in the upper dome
WI	Weld Indication: A generic term reported by TesTex to identify an indication found in a weld, typically found with an eddy current method
WR	Weld Repair: A repair made solely by the application of weld filler and appropriate grinding. No patch plate or other additional metal other than filler is added.

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ATTACHMENT G

CALCULATIONS

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NAVY0014678

1.0 TANK 13 CORROSION RATES

Overview

EEI is providing the information below as formulas for calculating corrosion rates for the steel liner. See Clean Inspect Repair TANKS 4 AND 13 (TO 004) Clean Inspect Repair Tanks 14, 17, AND 18 (TO 005) Design Analysis – Basis of Design document, Rev 3.0 dated October 2017 which establishes remaining minimum remaining wall thickness accept/reject criteria.

Record drawings of the Red Hill tanks indicate the steel liner plates in the upper dome, barrel, and lower dome in all of the tanks are 250 mils thick plate nominal. The floor (referred to as “base plate” on record drawings) of the lower dome in all of the tanks is indicated as 500 mils thick plate. Record drawings indicate formed cover plates were installed circa 2002 over the backing bars of the upper dome welds. This document prepared by EEI provides a calculation of corrosion rates for 250 mils thick steel liner plates and formed cover plates of the upper dome.

2.0 MAXIMUM CALCULATED CORROSION RATES FOR TANK 13

Maximum calculated corrosion rates for Tank 13 based on wall plate with least remaining wall thickness is as follows:

Upper Dome – Maximum wall loss was 170 mils of metal which occurred in 75 years of service making the corrosion rate:

- Corrosion Rate = $170 \text{ mils} / 75 \text{ years} = 2.267 \text{ mils} / \text{year}$

Extension Ring – Maximum wall loss was 250 mils of metal which occurred in 75 years of service making the corrosion rate:

- Corrosion Rate = $250 \text{ mils} / 75 \text{ years} = 3.333 \text{ mils} / \text{year}$

Barrel Maximum wall loss was 152 mils of metal which occurred in 75 years of service making ion rate:

- Corrosion Rate = $152 \text{ mils} / 75 \text{ years} = 2.027 \text{ mils} / \text{year}$

Lower Dome – Maximum wall loss was 73 mils of metal which occurred in 75 years of service making the corrosion rate:

- Corrosion Rate = $73 \text{ mils} / 75 \text{ years} = .973 \text{ mils} / \text{year}$

Floor – Negligible – measured plate thickness was within mill tolerance.

See attached shell roll out for location in tank.

Tank 13 corrosion rate reported by plate number (worst case, not entire plate).
All rates are in mils per year

Legend	
	= Thickness of plate greater than 0.200"
	= Measureable corrosion
	= No Plate Exists in this Shell Course

		Plate Number																							
Region	Column1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Upper Dome	F																								
	E																		1.373						
	D				0.88				0.667				0.667								1.2				0.667
	C														0.667				0.667						
	B																				1.427				
	A																				1.2				
Extension Ring	E4	1.2	1.2				2.44	2.6	1.52	1.507	1.2	1.867		1.493	2.013	2.04	1.853								
	E3						1.73	2.16	0.76	1.693	1.2	1.6	2.267		1.787	1.92	1.547								
	E2			0.667	0.667	0.92	0.84	1.627	1.04	0.933	2.267	3.333	1.947	1.373	2.5	1.24	1.453								
	E1				0.667		1.733	0.84	1.333	1.24	1.72	0.667		1.36	1.613	1.2	1.36								
		0.667									1.2	2.013	1.827	1.2	1.04		1.227								
Barrel	28																								
	27						0.667		0.867	1.36	2.027	1.04	0.667		1.293	1.707									
	26									1.33	1.27	0.67		0.67											
	25						0.667				1.36														
	24									0.667						0.667									
	23										0.933														
	22																								
	21											1.2													
	20																								
	19								0.667		0.667	0.667	0.667												
	18																								
	17																								
	16																								
	15			1.20																					
	14																								
	13																								
	12									1.760					0.667	0.667									
	11																								
	10																								
	9																								
	8																								
	7																								
	6																								
	5													0.667		0.667									
	4																								
	3																								
	2																								
	1				1.200																				
Lower Dome	4																								
	3																								
	2							0.973																	
	1															0.667									
	Floor																								

		Plate Number																											
Region	Column1	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Upper Dome	F																												
	E																												
	D													0.667	0.667														
	C		0.933			0.667	1.2	0.667			0.667					0.667		0.667	1.2	0.667	0.667	0.667							
	B			0.667			0.667					0.667			1.147		1.2133	1.373	1.507	1.493	2.267	0.667	1.1333	1.107			0.667		0.667
	A					1.853				1.787		2.04	1.2		1.2		1.2	1.2	1.2	1.2	1.2	1.2	1.48	1.387	1.987				
Extension Ring	E4																												
	E3																												
	E2																												
	E1																												
Barrel	28																												
	27																												
	26																												
	25																												
	24																												
	23																												
	22																												
	21																												
	20																												
	19																												
	18																												
	17																												
	16																												
	15																												
	14																												
	13																												
	12																												
	11																												
	10																												
	9																												
	8																												
	7																												
	6																												
	5																												
	4																												
	3																												
	2																												
	1																												
Lower Dome	4																												
	3																												
	2																												
	1																												
	Floor																												

		Plate Number																			
Region	Column1	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Upper Dome	F																				
	E																				
	D																				
	C																				
	B			0.667			1.333		0.667	1.2	1.2	0.667							0.66667		
	A	0.667			0.667	1.2	1.2	1.907	1.88	2.013	1.973	1.733	1.587	1.387		1.2	1.133		1.267	0.667	
Extension Ring	E4																				
	E3																				
	E2																				
	E1																				
Barrel	28																				
	27																				
	26																				
	25																				
	24																				
	23																				
	22																				
	21																				
	20																				
	19																				
	18																				
	17																				
	16																				
	15																				
	14																				
	13																				
	12																				
	11																				
	10																				
	9																				
	8																				
	7																				
	6																				
	5																				
	4																				
	3																				
	2																				
	1																				
Lower Dome	4																				
	3																				
	2																				
	1																				
	Floor																				

ATTACHMENT H
TESTEX API 653 PERSONNEL TESTING

S003867

NAVY0014683

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S003868

NAVY0014684

TESTEX PERSONNEL TEST RESULTS

The following TesTex personnel successfully passed a blind screening test given by:

Karl Schlenker, EEI Senior NDE staff at the Red Hill field trailer:

Agustin Nava

Scott Keller

Andrew Kim

Emmanuel Ugochukwu

Bradley Chambers

Kyle Byassee

Joe Stanishewski

Tom Hardin

Joseph Miller

Ron Allen

Dennis Stefanko

Bill Cole

Marc Detisch

NAME: Agustin Nave

DATE: 12/4/17

TOP-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
001				

TOP-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
004	10	14 ✓		
	9.5	10 ✓		
	8	4 ✓		
	15	6.5 ✓	7.5	18.5
	5	8	7.5	4
	2	7 ✓	2	16
	4	20		

BOTTOM-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
003	7	15		
	8	8	?	
	4	18	?	
	7	8		
	2	18		
	4	14		
	1.5	9.5		

BOTTOM-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
004	7	15		
	8	8		
	4	18		
	7	8		
	2	18		
	4	14		

S003870

NAVY0014686

testex

NAME: Scott Keuse

DATE: 12/4/17

TOP-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
001				

TOP-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
002				

BOTTOM-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
003	2	18		
	4	14		
	2	8		
	8	15		
	8	8		
	4-5	14		
	7	8-9		

BOTTOM-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
004	3-4	20		
	2	16		
	2	7		
	9	14		
	9	10		
	9	4		
	1	18		

S003871

NAME: Andrew KimDATE: 10-25-17

TOP-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
001	2 7/8"	3 3/4"		
	1"	19 1/2"		
	7 1/2"	9 3/4"		
	4 1/4"	16 1/8"		
	7 1/2"	3 3/4"		
	10"	12 1/4"		
	8 1/2"	20 1/8"		

BOTTOM-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
003	2 1/2"	17 5/8"		
	4 3/8"	13 3/8"		
	1 3/4"	9 1/2"		
	8 1/4"	7 3/4"		
	7 3/4"	19"		
	7-8 1/2"	8 1/8"		
	11"	12 1/4"		
	8 1/4"	15"		

TOP-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
002	2 1/2"	8 1/2"		
	4"	12 1/2"		
	3 1/2"	19"		
	7 7/8"	13 3/4"		
	9 3/4"	2 3/4"		
	11"	9 1/4"		
	9 7/8"	20 1/2"		

BOTTOM-SIDE PITTING				
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"			
	X	Y		
004	2 1/4"	7"		
	4"	20"		
	6 1/4"	19"		
	5"	20"		
	6 3/8"	15"		
	8"	18"		
	7 1/2"	14"		
	7 1/2"	10"		
	8 1/2"	4"		
	10 1/2"	14"		
	9 1/2"	10 1/4"		

S003872

NAVY0014688

NAME: Emmanuel Ugochukwu

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
001	8 1/2	20			
	1	19			
	4 1/2	16			
	10	12			
	4 1/2	10			
	7 1/2	5			
	2 1/2	4			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
002 7xVT 5xLEFT	10	3			
	5	9			
	10	7			
	4	12 1/2			
	8	14			
	3 1/2	19			
	10	20 1/2			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003 *	3	8	—	—	240
	2	14	—	—	237
	4	18 1/2	—	—	242
	7 1/2	5 1/2	—	—	240
	6	8 1/2	—	—	104
	6	14	—	—	240
	8 1/2	9	—	—	242
	9	15 1/2	—	—	135

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	5	7	—	—	230
	5	20	—	—	160
	8	8	—	—	233
	4	16	—	—	230
	9	16	—	—	235
	6 1/2	19	—	—	236
	11	10	—	—	236
	7 1/2	14	—	—	232

S003873

NAME: Brad

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
001	1	19			
	2	4			
	4	9½			
	4	15			
	7½	5			
	8½	20			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
7x17 002 5x16ET	4	19			
	4 1/2	8 1/2			
	4	12			
	8	14			
	9 1/2	3			
	10	20 1/2			
	11	9			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003	✓ 5	5			
	✓ 7	8			
	✓ 5	14			
	✓ 6	20			
	✓ 7	8			
	✓ 8 1/2	15			
	✓ 2 1/2	8 1/2			
	✓ 4	14			
	✓ 2	14			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	.75	7	2/7		.175
	2 1/2	16			.204
	4	8			.198
	7 1/2	15			.238
	8	18 1/2			.115
	6	18 1/2			.230
	7 1/2	10			—
	10	10	9/10		.119
	10 1/2	13 1/2	10/14		.103
	10 1/2	17 1/2			
	10	21	10/22		.123
	9	4			.161
	4	19 1/2	3 1/2/19 1/2		.204

BASE
0.230

FALSE (+) Plate Defect

S003874

NAVY0014690

NAME: Kyle

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
001	2 1/2	3 1/2			
	7 1/2	4			
	4 1/2	9 1/2			
	10	12 1/2			
	4 1/2	16			
	1	19 1/2			
	8 1/2	20			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
002	10	3			
	4.5	3.5			
	11	9.5			
	4	12.5			
	8	14			
	3.5	14			
	10	20.5			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003	✓ 4	8 1/2			
	✓ 3	18 1/2	✓		
	✓ 6	14 1/2			
	9	8 1/2			
	✓ 9 1/2	15 1/2			
	10 1/2	8 1/2			
	✓ 1	8 1/2	✓		
	5	5 1/2	✓		
	4 1/2	14 1/2	✓		
	8	8 1/2	✓		
	8	15 1/2	✓		
	11	12	✓		

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	3	7			
	2	16			
	5	8			
	4	15			
	4	20			
	9	10			
	9	14			
	8	18			
	9	9			

S003875

NAVY0014691

NAME: Joe Stanishewski

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
001	2 5/16"	3 5/8"			
	7 1/2"	3 7/8"			
	4 1/2"	9 3/4"			
	10 1/16"	12 1/4"			
	4 3/8"	16 1/8"			
	1"	19 1/2"			
	8 5/8"	20 1/8"			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
002	9 7/8"	3 3/4"			
	4 1/2"	8 9/16"			
	10 5/16"	9 1/4"			
	4 1/8"	12 3/8"			
	7 7/8"	13 7/8"			
	3 1/2"	19 1/16"			
	9 7/8"	20 5/8"			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003	2	18			
	5	14			
	1	8			
	3	3			
	8	15			
	7	8			
	6	11			
	9	7			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	6	20			
	2	16			
	3	7			
	4	3			
	7	18			
	7	15			
	5	8			
	8-9	4			
	10	14			
	9	10			

S003876

NAME: Tom HARDIN

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
001	3"	2.5"			
	7.5"	1"			
	10"	4.5"			
	16"	4.5"			
	4"	7.5"			
	12"	10"			
	20"	8.5"			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003 002	8"	9"			
	4"	14"			
	6"	21"			
	1"	19"			
	2"	22"			
	7"	8"			
	7"	15"			
	11"	12"			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
002 003	4.5"	8.5"			
	4"	12.5"			
	3.5"	19"			
	8"	14"			
	10"	3"			
	11"	9.5"			
	10"	21"			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	2"	8"			
	4"	21"			
	8"	10"			
	10"	14"			
	4"	7"			
	6"	16"			
	8"	21"			

S003877

NAME: Joseph Miller

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
001	2 1/4	3 1/2			
	7 1/2	3 3/4			
	4 1/2	9 3/4			
	10	17 1/2			
	4 1/2	16 1/4			
	1	19 1/2			
	8 1/2	20 1/4			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
002	3	10			
	4 1/2	8 1/2			
	11	9			
	4	12			
	8	14			
	3	19			
	10	21			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003	✓ 1	9			
	✓ 5	14			
	✓ 2	18			
	✓ 7	8			
	✓ 8	8			
	✓ 11	12			
	✓ 8	15			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	2	7			
	2	16			
	4	20			
	5	8			
	7	15			
	9	10			
	10	14			
	11 1/2	16			
	7	19			

S003878

AME: RON ALLEN

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
001	2 1/2	3 1/2			
	7 1/2	4			
	4 1/2	10			
	10	12			
	4 1/2	16			
	1	19 1/2			
	8 1/2	20			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
002	10 1/2	3 1/2			
	4 1/2	8 1/2			
	11	9 1/4			
	4	12 1/2			
	8	14			
	3 1/2	19			
	10	20 1/2			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003	✓ 2	9			
	✓ 3 1/2	14			
	✓ 3	19			
	✓ 8	9			
	✓ 8	15			
	✓ 5	5			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	2 1/2	7			
	4	20			
	5	7			
	3	15			
	7	7			
	7	15			
	7	19			
	9	10			
	7	14			

S003879

NAME: Dennis Stefanko

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X →	Y ↑			
001	2 3/8	3 3/4			
	7 5/8	4			
	4 1/2	9 3/4			
	10	12 1/4			
	4 1/4	16 1/4			
	1	19 1/2			
	8 1/2	20 1/2			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
002	9 3/4	2 3/4			
	4 1/2	8 1/2			
	11	9 1/4			
	4 1/4	12 1/2			
	8	14			
	3 1/2	19			
	10	20 1/2			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003	2 1/2	18			
	2	8 1/4			
	2	3 3/4			
	4 1/2	14			
	5	5			
	5	3 1/2	END of plate		
	8	15			
	7 1/2	8			
	9	4			
	9 1/2	3 1/4			
	11	12			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	3	20			
	2	7			
	3	5			
	4	20			
	5	15			
	5	8			
	5	4			
	8	19			
	9 1/2	14			
	9	10			
	8	4			

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NAME: Bill

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
All located 001 VT +3 ET	3	2			
	7	1			
	10	4			
	17	5			
	5	8			
	12	10			
	20	8			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
7xVT 5xET 002	9	2			
	10	9			
	4	12			
	7	13			
	4	8			
	3	19			
	9	20			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003	2 1/2	18 1/2	—	—	242
	5	14	—	—	245
	2	8 1/2	—	—	242
	8 1/4	15	—	—	245
	4	14	—	—	246
	8	8	—	—	169
	5	5	—	—	185
	7 1/2	15	—	—	129
	11 1/2	12	—	—	170
	7	8 1/2	—	—	186

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	2	7			
	2	15			
	4	19			
	5	9			
	7	15			
	9	11			
	9.5	14			
	11	16			
	7	19			

S003881

NAME: Mark

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
11 x VT LF 3 x ET 001	2	3 1/2			
	7	5			
	4	9 3/4			
	10	12			
	4	16			
	1	19 1/2			
	8	20			

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
7 x VT LF 5 x ET 002	10	3			
	5	9			
	11	9			
	4	12 1/2			
	8	14			
	4	19			
	10	20 1/2			

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003	1	14	—	—	240
	3 1/2	18 1/2	—	—	238
	5	8 3/4	—	—	216
	7	8 9	—	—	240
	6 1/2	15	—	—	243
	8	15	—	—	242
	12	12	—	—	174

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	2	7			
	2	16			
	4	20			
	5	8			
	6	15			
	9	10			
	10	14			
	7	19			

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TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
001	2 3/8	3 5/8	0.250	0.060	0.190
	7 1/2	4 7/8	0.250	0.068	0.182
	4 1/2	9 3/4	0.375	0.145	0.105
	10 1/16	12 1/4	0.375	0.125	0.125
	4 3/8	16 1/8	0.250	0.085	0.165
	1	19 1/2	0.250	0.091	0.159
	8 5/8	20 1/8	0.375	0.153	0.097

TOP-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
002	9 7/8	2 3/4	0.375	0.123	0.127
	4 9/16	8 9/16	0.375	0.169	0.081
	10 15/16	9 1/4	0.250	0.090	0.160
	4 1/8	12 3/8	0.250	0.083	0.167
	7 7/8	13 7/8	0.375	0.128	0.122
	3 7/16	19 1/8	0.250	0.083	0.167
	9 13/16	20 5/8	0.250	0.084	0.166

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
003	2 1/2	3 3/16	0.500	0.178	0.072
	9 3/4	2 3/16	0.375	0.145	0.105
	5 1/4	5 1/4	0.250	0.083	0.167
	7 7/16	8 1/8	0.500	0.170	0.080
	1 5/16	8 3/8	0.375	0.142	0.108
	10 7/8	12 1/8	0.250	0.098	0.152
	4 7/16	13 7/8	0.500	0.210	0.040
	7 3/16	15 1/16	0.375	0.123	0.127
	2 1/8	18 5/16	0.375	0.138	0.112
	9 5/8	21 1/8	0.500	0.160	0.090
	5	21 3/4	0.375	0.130	0.120

BOTTOM-SIDE PITTING					
PLATE NUMBER	INCHES FROM LOWER RIGHT CORNER MARKED "TOP"		DIA.	DEPTH	REMAINING WALL (APPROX.)
	X	Y			
004	3 1/16	3	0.500	0.180	0.070
	7 7/8	4	0.500	0.190	0.060
	2	7	0.375	0.162	0.088
	5 3/16	7 15/16	0.250	0.098	0.152
	9	10	0.375	0.155	0.095
	10	13 15/16	0.500	0.195	0.055
	6 1/16	14 13/16	0.375	0.150	0.100
	2	15 7/8	0.250	0.083	0.167
	7 5/16	18 9/16	0.375	0.150	0.100
	4	20 15/16	0.500	0.195	0.055
	10	21 15/16	0.375	0.152	0.098

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ATTACHMENT I
VENT INSPECTION REPORT

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NAVY0014702

04 December 2019

TANK 13 VENTILATION LINE INSPECTION REPORT

RED HILL UNDERGROUND FUEL STORAGE FACILITY

CLEAN, INSPECT REPAIR (CIR) RED HILL TANKS 4 AND 13

PROJECT: Clean, Inspect Repair (CIR) Tanks 4 and 13
NAVFAC EXWC Contract No. N39430-15-D-1632
Task Order 004
EEI Project No. 8853.02

TRIP TO: Joint Base Pearl Harbor Hickam (JBPHH), Red Hill
Honolulu, Hawaii

DATE OF TRIP: 09-16 August 2019

PREPARED BY: Matthew C. McGowan

PURPOSE: Visually inspect Tank 13's ventilation line via robotic
crawler

SUMMARY

Enterprise Engineering Inc. (EEI), performed a visual inspection of the atmospheric ventilation line for Tank 13 at the Red Hill Underground Fuel Storage Facility in Honolulu, Hawaii under contract to Naval Facilities Expeditionary Warfare (NAVFAC EXWC) as a modification to a Clean, Inspect, Repair project. Since the exterior of the ventilation line is encased in concrete, the piping could not be visually inspected via traditional means. EEI employed the use of a robotic crawler with cameras to inspect the condition of the internal ventilation piping.

The ventilation line is significantly corroded with large corrosion formations along most of its spiral welding, several large holes, and general corrosion along the bottom and top of the vent line. Consequently, it is recommended that the ventilation line is not returned to service as primary containment piping and either replaced or flexible lines be routed through the existing vent line.

DESCRIPTION OF FACILITY

Tank 13 and other tanks at the Red Hill Underground Fuel Storage Facility were constructed between 1940-1943 with reinforced concrete and a welded steel liner. Tank 13 stores F-76 fuel and has a nominal capacity of 300,000 bbl. The tank has a 24" diameter, spiral welded, tank atmospheric ventilation line that currently measures .07" in thickness. The line spans roughly 100 linear feet from the upper dome gauging chamber to a butterfly isolation valve at the Tank 13 alcove near the 96" manway. The piping follows overhead and to the right of the ladder and stairway going to the upper dome gauging chamber. It is sprayed in 4-6" of reinforced concrete making the pipe integral to the tunnel walls.

DESCRIPTION OF COMPLETED ACTIVITIES

In accordance with the Scope of Work, EEI performed an internal visual inspection of Tank 13's ventilation line in July and August 2019. Video was taken via cameras attached to a robotic crawler in order to determine the overall internal condition of the ventilation piping.

FIELD FINDINGS

Tank 13's ventilation line was found to have significant corrosion throughout the piping in the form of both general corrosion and pitting. Spot corrosion was noted to exist along most of the circumferential and spiral welds.



Photo 1: General corrosion and scaling of the top of ventilation line.



Photo 2: Widespread pitting throughout ventilation line.

In addition to the general corrosion and pitting, several holes were seen with what appears to be calcium deposits forming around their edges. The presence of calcium would indicate the hole penetrates the entire wall thickness, allowing the mineral to leech in from the surrounding concrete.



Photo 3: Corrosion resulting in hole along welds with possible calcium deposits.



Photo 4: Several large holes on top left side of pipe with possible calcium deposit forming on closest hole.

Without access to the exterior of the piping, UT data could not be taken to determine the remaining wall thickness of pits and corrosion formations along the ventilation piping. The presence of the large, visible holes with possible calcium deposits and the widespread pitting lead EEI to believe the ventilation line between the gauging chamber and the upper cross tunnel is not in a condition to be returned to service and needs to be replaced.

CLOSURE

EEI will proceed to prepare repair plans for Tank 13's atmospheric ventilation line considering the extent of corrosion, location of vent line, and access to work. Please forward this document to additional project stakeholders as appropriate.

Prepared By,

Matthew C. McGowan
Mechanical Integrity Engineer
ENTERPRISE ENGINEERING, INC.

Submitted By,

Terry Strack P.E.
Project Manager
ENTERPRISE ENGINEERING, INC.

ATTACHMENT J
TOWER STRUCTURE INSPECTION REPORT

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NAVY0014708



HAWAII
ENGINEERING
GROUP, INC.

Reference #17-001

Consulting Civil Engineers, Structural Engineers & Land Surveyors
US (SBA) SDB & DBE Certified

July 19, 2017

Mr. Jaymes Barlos, Construction Manager
CB&I – Federal Services LLC
1725 Duke Street, Suite 400
Alexandria, VA 22314

Subject: Red Hill Tanks Project
Inspection of Tank #13 tower and walkway

Dear Mr. Barlos

The center tower structure and walkway were inspected on July 19, 2017. During inspection the following deficiencies were noted. For reference the four tower legs were consecutively numbered with leg #1 being the first leg counter clockwise from the leg supporting the walkway and the leg supporting the walk way being leg #4.

1. 1 bolt has a loose nut in connections located at elevation 30 of tower leg #4
2. 1 bolt has a damaged nut in connection located at elevation 70 of tower leg #4.
3. 1 bolt has a loose nut in connection located at elevation 80 of tower leg #3.
4. 1 bolt has a loose nut in connection located at elevation 110 of tower leg #2.
5. 1 bolt has a loose nut in connection located at elevation 120 of tower leg #3.
6. 1 bolt has a loose nut in connection located at elevation 160 of tower leg #3.
7. 1 bolt has a damaged nut in connection located at elevation 170 of tower leg #3.
8. 10 bolt are missing in each connection located at elevation 210 of tower leg #1 and leg #3.
9. 7 bolt are missing in each connection located at elevation 220 of tower leg #1.
10. 2 bolt are missing in each connection located at elevation 220 of tower leg #2 and leg #3.
11. Gusset plates located at all four corners at elevation 225 have multiple large holes.

CB&I should install the missing bolts and weld cover plates on holes in gusset plates. The loose nuts conditions, damaged nut conditions and missing bolt conditions should be addressed immediately before installation of boom cranes. The repair of gusset plates can done after the boom cranes have been installed.

The replacement bolts should be grade A325 and match the size and length of existing bolts. Use flat washers under the nut side of the connection. Gusset plate should be repaired using A36 steel plate material of same or greater thickness of the gusset plate being repaired. The plate will be welded using SMAW method by qualified welder using a fillet weld. Plate shall be welded on all four sides. Plate size shall be at least twice the size of the gusset plate opening.



The tower and the walkway structure are in good condition and should be okay for service once the deficiencies are eliminated.

This report does not address portions of the buildings other than those areas mentioned, nor does it provide any warranty either expressed or implied for any portion of the existing buildings.

If there are any comments or questions on any items above, please do not hesitate in calling.

Sincerely,

STRUCTURAL CONSULTANT
HAWAII ENGINEERING GROUP, INC.

Ather R. Dar, SE
President



EXP. DATE: 4-30-18

Attachments: Photographic Record



Photographic Record

HEG job #: 17-001

Project name: Red Hill Tank #13
Center tower and walkway inspection

Site visit date: July 19, 2017

Photos by: Ather R. Dar, SE

Hawaii Engineering Group, Inc.
1088 Bishop Street, Suite 2506 • Honolulu, Hawaii 96813
Tel: 808.533.2092 • Fax: 808.533.2059
Email: heg@hawaiiengineering.net • Web: www.hawaiiengineering.net

S003895

NAVY0014711



Summary

- Inspection date July 19, 2017
- 1 bolt has a loose nut in connections located at elevation 30 of tower leg #4
- 1 bolt has a damaged nut in connection located at elevation 70 of tower leg #4.
- 1 bolt has a loose nut in connection located at elevation 80 of tower leg #3.
- 1 bolt has a loose nut in connection located at elevation 110 of tower leg #2.
- 1 bolt has a loose nut in connection located at elevation 120 of tower leg #3.
- 1 bolt has a loose nut in connection located at elevation 160 of tower leg #3.
- 1 bolt has a damaged nut in connection located at elevation 170 of tower leg #3.
- 10 bolt are missing in each connection located at elevation 210 of tower leg #1 and leg #3.
- 7 bolt are missing in each connection located at elevation 220 of tower leg #1.
- 2 bolt are missing in each connection located at elevation 220 of tower leg #2 and leg #3.
- Gusset plates located at all four corners at elevation 225 have multiple large holes



Photo 1: Tower base



Photo 2: Tower base



Photo 3: Tower base



Photo 4: Tower base



Photo 5: Underside view of walkway framing



Photo 6: Underside view of walkway framing



Photo 7: Underside view of walkway framing



Photo 8: Underside view of walkway framing

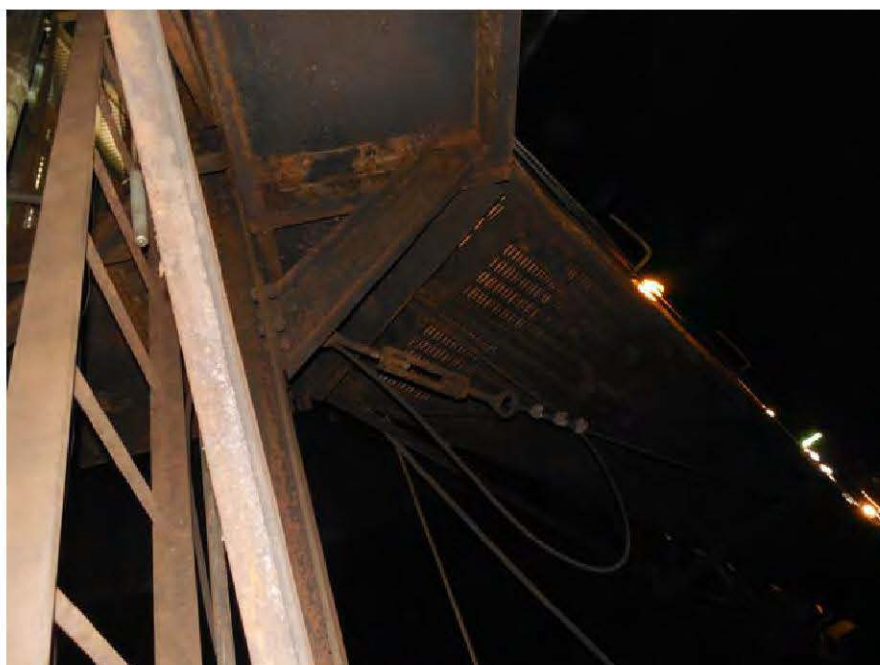


Photo 9: Underside view of walkway framing



Photo 10: Underside view of walkway framing



Photo 11: Multiple large holes in gusset plates at elevation 225



Photo 10: Multiple large holes in gusset plates at elevation 225



Photo 11: Tower leg connection to tank wall at the top



Photo 10: Tower leg connection to tank wall at the top



Photo 11: Support structure and cables for spider basket.

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ATTACHMENT K
PRESSURE TEST REPORT

S003905

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JANUARY 2018

**HYDROSTATIC (STRENGTH) AND LEAK TESTING
RESULTS TANK 13**

**Clean Inspect Repair Storage Tanks 4 & 13
Joint Base Pearl Harbor-Hickam, Hawaii**

NAVFAC EXWC Contract No. N39430-15-D-1632

APTIM Federal Services LLC Project No. 500769
Task Order 0004

Revision 0

Submitted by:

APTIM Federal Services LLC
12005 Ford Road, Suite 600
Dallas, Texas 75234

S003907

NAVY0014723



JANUARY 2018

**HYDROSTATIC (STRENGTH) AND LEAK TESTING
RESULTS TANK 13**

**Clean Inspect Repair Storage Tanks 4 & 13
Joint Base Pearl Harbor-Hickam, Hawaii**

NAVFAC EXWC Contract No. N39430-15-D-1632

APTIM Federal Services LLC Project No. 500769
Task Order 0004

Revision 0

Prepared by:

Eric Yatabe
Project Engineer

Date: January 5, 2018

Approved by:

Mark Kravec
Project Manager

Date: January 5, 2018

S003908

NAVY0014724

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Acronyms and Abbreviations	i
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2.2.1 Tank 13 – 32x20 Segment	2-1
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4.0 References	4-2

List of Appendices

Appendix A	Pressure Test Segments
Appendix B	T13 - 32x20 Strength Test Data
Appendix C	T13 – 18x12 Strength Test Data
Appendix D	T13 – 8x6 Strength Test Data
Appendix E	Leak Test Results
Appendix F	Pressure Test Setup
Appendix G	Methodology to Remove Air from System

Acronyms and Abbreviations

EEI	Enterprise Engineering, Inc.
NWGLDE	National Work Group on Leak Detection Equipment
psig	pound per square inch gauge
VISTA	Vista Precision Solutions
APTIM	APTIM Federal Services, LLC (Formerly known as CBI Federal Services, LLC)
BOD	Basis of Design
PTP	Pressure Test Plan

1.0 Purpose and Result Summary

1.1 Purpose

The purpose of this report is to provide data and results from the strength and leak testing performed on the tank bottom connections for tank 13.

Strength and Leak Tests were performed in accordance with the EEI prepared Appendix A.1 Tank Nozzle Pressure Testing Requirements. Appendix A.1 is found in the Government approved Basis of Design, (Reference 1; hereafter referred to as the BOD). Strength and Leak Tests also complied with the Government approved, PRESSURE TESTING PLAN (Reference 2; Hereafter referred to as the PTP).

EEI approved VISTA in the BOD as one of the qualified third party NWGLDE companies to perform the leak tests.

APTIM performed this work under Task Order 0004, Naval Facilities Engineering and Expeditionary Warfare Center Contract No. N39430-15-D-1632, entitled, "Multiple Award Construction Contract for Petroleum, Oils, and Lubricants Fuel Systems at Various Locations Worldwide."

1.2 Result Summary

Strength and leak tests were performed on the tank 13 bottom piping connections (pressure test segments) on November 20 and 21, 2017. See Appendix A for the individual pressure test segments.

The APTIM Project Engineer accepted all strength tests as passing. All pressures during strength test met the BOD requirement of 145 minimum test pressure at the high point of the segment. The high point represents the area under the lowest pressure for that segment.

The VISTA on-site team submitted preliminary report stating that all precision leak tests passed. The leak tests were certified as passing at the BOD requirement of 140 psig minimum at the high point of the segment. The final reports from VISTA dated December 18, 2017 for tank 13 confirmed those passing results.

Tank 4 will be taken out of service after tank 5 is returned to service. Once Tank 4 can be entered, the pressure test segments will be identified by the Designer of Record (EEI).

2.0 Strength Testing

2.1 Test Apparatus and Methodology

See Appendix F Pressure Test Setup for schematic of pressure test setup. The testing method was compliant with the Government approved BOD, PTP and Accident Prevention Plan (Reference 3).

2.2 Results

All pressure test segments passed the strength tests. Details follow below and in Appendices.

2.2.1 Tank 13 – 32x20 Segment

The APTIM project engineer Eric Yatabe indicated the strength test passed on 11/21/17. See Appendix B for:

- 1) Pressure Chart Recorder,
- 2) Manual Data,
- 3) Reverse Squeeze Results.

The strength test was run at a minimum of 162 psig based on the reading from the calibrated pressure gauge on the pressure injection tree in the lower tunnel. There is approximately an 8' elevation drop from the high point of this pressure segment and the pressure test gage. Thus, the pressure range at the high point of the test segment met the goal of a minimum strength test of 145 psig.

2.2.2 Tank 13 – 18x12 Segment

The APTIM project engineer Eric Yatabe indicated the strength test passed on 11/20/17. See Appendix C for:

- 1) Pressure Chart Recorder,
- 2) Manual Data,
- 3) Reverse Squeeze Results.

The strength test was run at a minimum of 168 psig based on the reading from the calibrated pressure gauge on the pressure injection tree in the lower tunnel. There is approximately an 8' elevation drop from the high point of this pressure segment and the pressure test gage. Thus, the pressure range at the high point of the test segment met the goal of a minimum strength test of 145 psig.

2.2.3 Tank 13 - 8x6 Segment

The APTIM project engineer Eric Yatabe indicated the strength test passed on 11/20/17. See Appendix D for:

- 1) Pressure Chart Recorder,
- 2) Manual Data,
- 3) Reverse Squeeze Results.

The strength test was run at a minimum of 163 psig based on the reading from the calibrated pressure gauge on the pressure injection tree in the lower tunnel. There is approximately an 10' elevation drop from the high point of this pressure segment and the pressure test gage. Thus, the pressure range at the high point of the test segment met the goal of a minimum strength test of 145 psig.

2.3 Air Removal

See Appendix G for the methodology used to remove air from test segments and calculate effectiveness of air removal. The purpose of this Appendix G is for reference on future testing when working with a third party NWGLDE certified company.

3.0 Leak Tests

All pressure test segments passed precision leak tests. See Appendix E Leak Test Results.

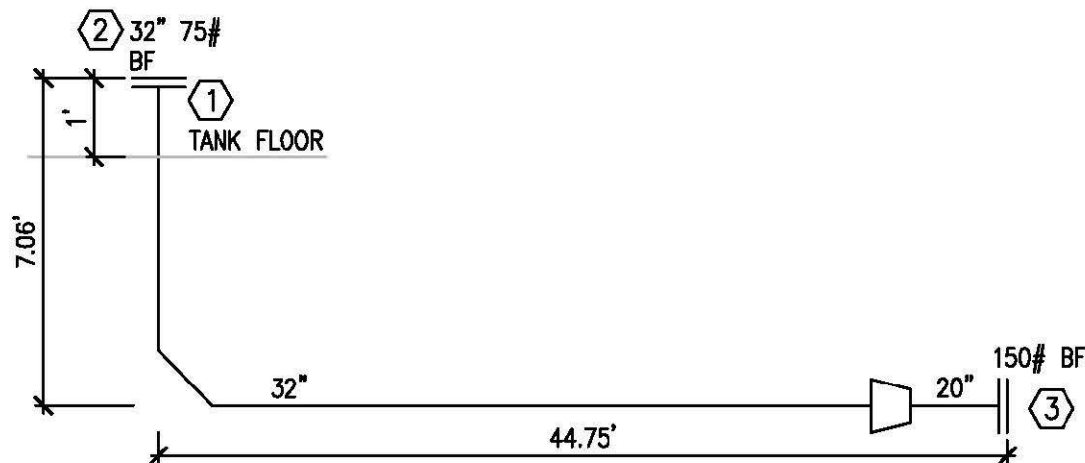
4.0 References

- 1) ENTERPRISE ENGINEERING, INC, 2017, CLEAN INSPECT REPAIR TANKS 4 AND 13 (TO 004); CLEAN INSPECT REPAIR TANKS 14, 17, AND 18 (TO 005), RED HILL UNDERGROUND FUEL STORAGE COMPLEX, JBPHH, HI; DESIGN ANALYSIS – BASIS OF DESIGN; Rev 2.0 Issue – Initial Submission and Government Review 20 April 2017.
- 2) CB&I Federal Services LLC, 2017, Clean Inspect Repair Storage Tanks 4&13, Joint Base Pearl Harbor, Hickam, Hawaii.
- 3) CB&I Federal Services LLC, 2017, *Accident Prevention Plan, Clean Inspect Repair Storage Tanks 4&13, Joint Base Pearl Harbor-Hickam, Hawaii* Revision 1, February.

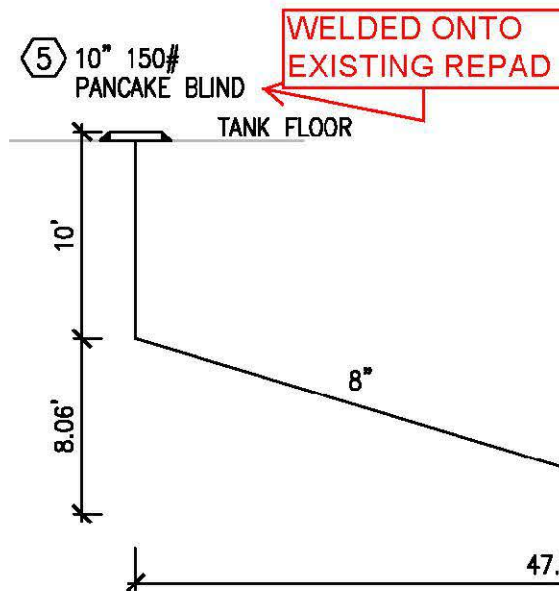
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Appendix A

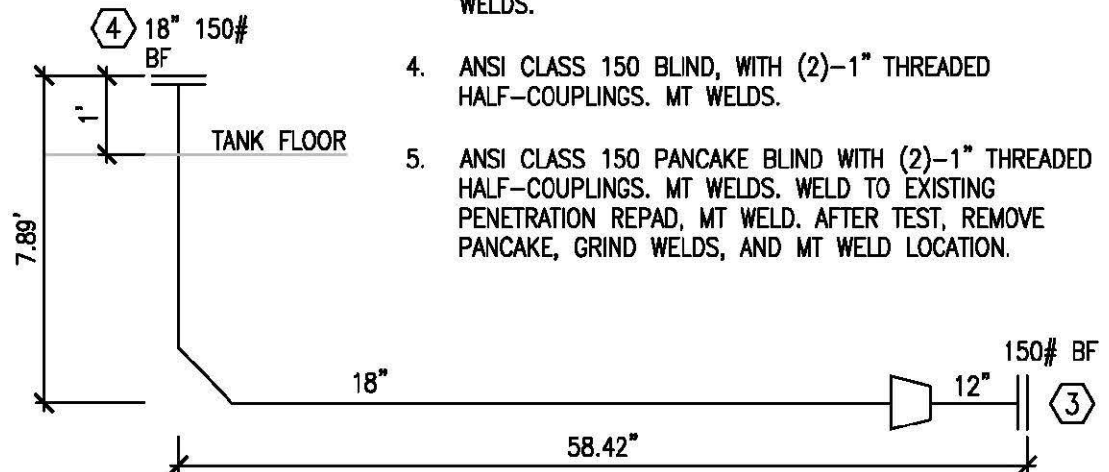
Pressure Test Segments



TANK 13 - TEST SEGMENT A
SCALE: N.T.S.



TANK 13 - TEST SEGMENT C
SCALE: N.T.S.



TANK 13 - TEST SEGMENT B
SCALE: N.T.S.

GENERAL NOTES:

1. ANSI CLASS 75 WNF, WELDED TO EXISTING STUB AFTER CUTTING OFF EXISTING LINE. WELDING GTAW ROOT, SMAW FILL AND CAP (OPTION IS ALL GTAW). NDE SHALL CONSIST OF VT OF ROOT WELD AND MT OF COMPLETED EXPOSED WELDS.
2. ANSI CLASS 75 BLIND FLANGE, WITH (2)-1" THREADED HALF-COUPPLINGS. MT WELDS.
3. ANSI CLASS 150 BLIND, WITH (1)-2" THREADED HALF-COUPPLING AT LOW POINT AND (1)-1" THREADED HALF COUPLING APPROXIMATELY IN CENTER OF BLIND. MT WELDS.
4. ANSI CLASS 150 BLIND, WITH (2)-1" THREADED HALF-COUPPLINGS. MT WELDS.
5. ANSI CLASS 150 PANCAKE BLIND WITH (2)-1" THREADED HALF-COUPPLINGS. MT WELDS. WELD TO EXISTING PENETRATION REPAD, MT WELD. AFTER TEST, REMOVE PANCAKE, GRIND WELDS, AND MT WELD LOCATION.

ALL SCALES ARE INDICATED FOR "A" SIZE DRAWINGS.

SHEET 1

CLEAN INSPECT REPAIR STORAGE TANK 4 & 13
JOINT BASE PEARL HARBOR-HICKAM, HI
PROJECT 500769

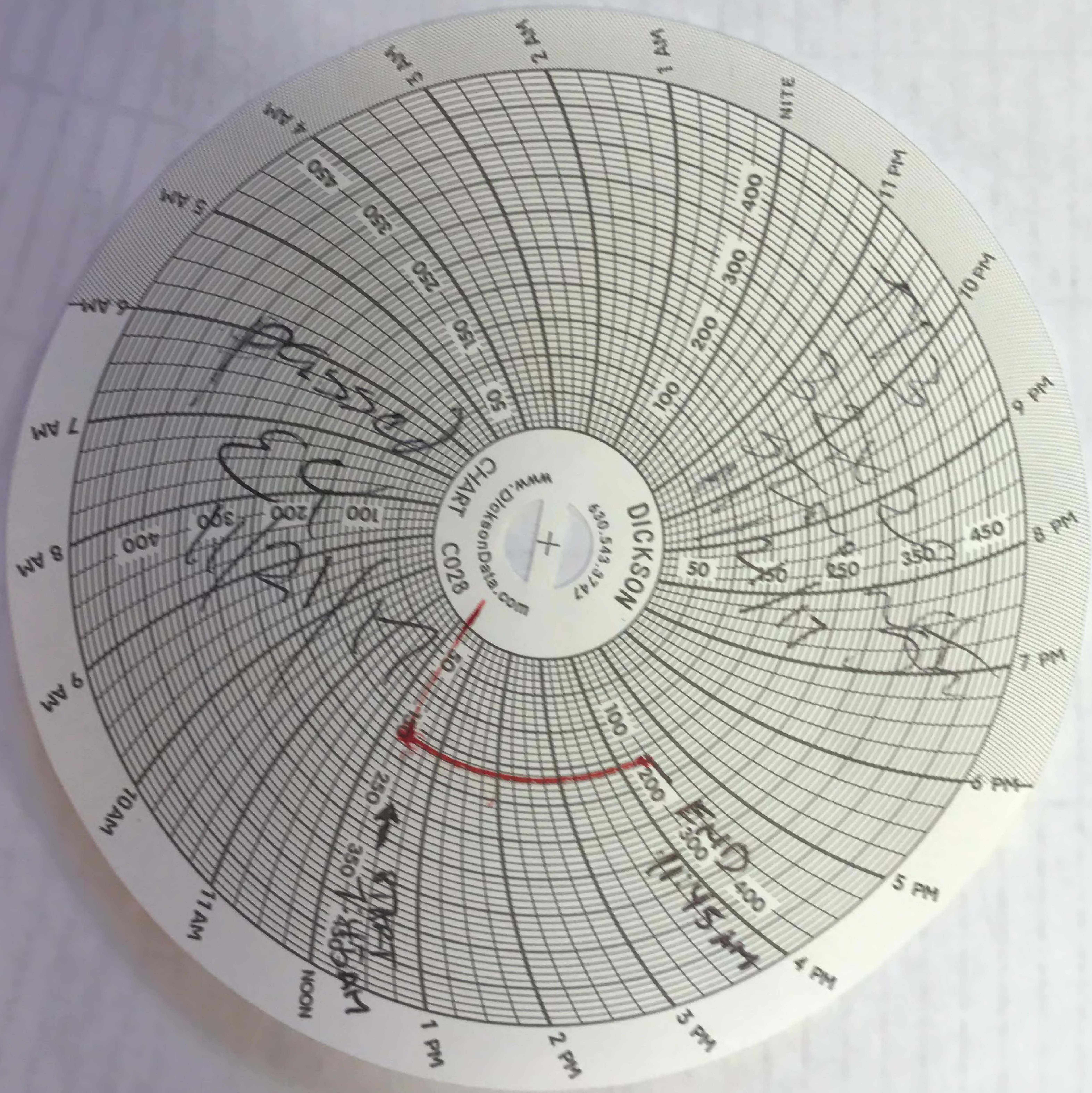
TANK 13 PRESSURE TEST SEGMENTS



Designed by:	Date:
Drawn by:	DAY MONTH YEAR
Reviewed by:	Specification No.
Submitted by:	Contract No.
	Delivery Order No.

REVISION SCHEDULE		
Rev #	Description	Date

Appendix B
T13 - 32x20 Strength Test Data



Pressure Testing Calculations for Tank 13 - Segment A

	Exposed	Exposed	Total	Notes
weighted percent by volume	95.91%	4.09%		
inside pipe diameter, inches	d = 31.250	19.250		
wall thickness, inches	t = 0.375	0.375		
pipe length, ft	L = 44.5	5.0	49.5	linear feet
volume, gal (based on dimensions)	V = 1,773.0	75.6	1,848.6	gallons
Young's modulus	E = 3.00E+07	3.00E+07		for carbon steel
liquid bulk modulus	Beta = 3.225E+05	3.225E+05		for water at 77°F, 150 psig
compressibility (1/Beta)	C = 3.10E-06	3.10E-06		
	Kp = 5.80E-06	4.79E-06	1.06E-05	(non-weighted value)
Poisson's ratio	v = 0.3	0.3		for carbon steel
find Kt, where Kt = 3a-g				
linear coeff of thermal expansion	a = 6.50E-06	6.50E-06		
liquid volume expansion coeff.	g = 1.20E-04	1.20E-04		
	Kt = -1.01E-04	-1.01E-04		
from pressure testing data table:	dP = 50.0	50.0		
	dT = 0.00	0.00		
	VKpdP = 0.51	0.02	0.53	gallons
	VKtdT = 0.00	0.00	0.00	gallons
	dV = 0.51	0.02	0.53	gallons
theoretical loss during test	dV = 65.8	2.3	68.2	ounces
theoretical dV/dP for test segment =	dV/dP = 1.03E-02	3.62E-04	1.065E-02	packing ratio
gallons added/subtracted =		0.0		
Unaccounted loss during test =		0.5 gallons		
Percentage to total volume		0.0288% percent		

References:

The theoretical DV/DP for aboveground (unrestrained) pipe is calculated through the following equation:

$$\frac{DV}{DP} = V * \left[\left(\frac{D}{E * t} \right) \left(\frac{S}{4} - v \right) + C \right]$$

The theoretical DV/DP for buried (restrained) pipe is calculated through the following equation:

$$\frac{DV}{DP} = V * \left[\left(\frac{D}{E * t} \right) (1 - v^2) + C \right]$$

where,

V = volume of the segment for the individual pipe diameter, D (gallons).
D = outside diameter of pipe (in).
E = elastic modulus of steel pipe (psi).
t = wall thickness of pipe (in).
v = poisson's ratio of steel pipe.
C = compressibility of test media (in³/in³/psi).

CSFM Standardized formula for performing pressure – temperature calculations to determine volume change.

Basic Formula: $\Delta V / V = Kp \Delta P + Kt \Delta T$

Where: $Kp = [(D / t) (5 / 4 - \mu) / E] + 1 / \beta = (1.9 D / 2 E t) + 1 / \beta$

And: $Kt = 3a - g$

ΔP = Liquid Pressure Change
 ΔT = Liquid Temperature Change
 ΔV = Liquid Volume added to that inside the pipe (negative if flows out)
V = Nominal Pipe Volume = $\pi D^2 L / 4$
D = Inside Pipe Diameter
L = Pipe Length
t = Pipe wall thickness
 μ = Poisson's ratio = 0.3
E = Young's Modulus = $30 * 10^6$ psi
 β = Liquid Bulk Modulus, a function of Pressure and Temperature
g = Liquid Volumetric expansion coefficient, a function of Pressure and Temperature
a = Linear coefficient of Thermal Expansion = $6.5 * 10^{-6} - 6.1 / ^\circ F$

11/20/2017 actual gallons in = 1880

11/20/2017 2063.63091 ml theoretical for 50 psig drop

20-Nov actual 2080 ml for actual 50 psig drop ... did great job on getting air out

S003918

NAVY0014734

Project Name/No.: 500769
Personnel: Eric Yatabe
Shayne Tector
Todd Lelepali

Test PKG	
Customer:	NEXWC
Test Pressure, psig:	154
Min Test Pressure, psi	149
Max Test Pressure, psi	159
Pump DH:	160
total gallons of water installed in segment to fill:	1880

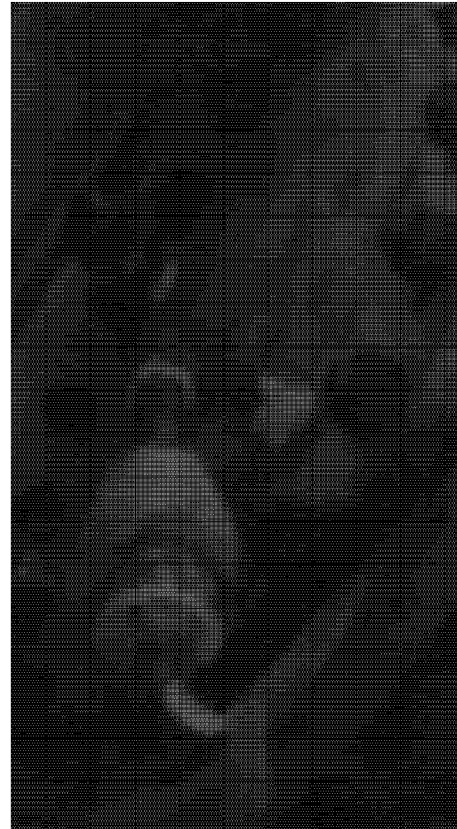
[illegible]

S003919

NAVY0014735



32"



20"

S003920

NAVY0014736

Appendix C
T13 – 18x12 Strength Test Data

Pressure Testing Calculations for Tank 13 - Segment B

	Exposed	Exposed	Total	Notes
weighted percent by volume	96.23%	3.77%		
inside pipe diameter, inches	d = 17.250	12.000		Standard
wall thickness, inches	t = 0.375	0.375		
pipe length, ft	L = 61.8	5	66.8	linear feet
volume, gal (based on dimensions)	V = 750.3	29.4	779.7	gallons
Young's modulus	E = 3.00E+07	3.00E+07		for carbon steel
liquid bulk modulus	Beta = 3.225E+05	3.225E+05		for water at 77°F, 150 psig
compressibility (1/Beta)	C = 3.10E-06	3.10E-06		
	Kp = 4.62E-06	4.18E-06	8.80E-06	(non-weighted value)
Poisson's ratio	v = 0.3	0.3		for carbon steel
find Kt, where Kt = 3a-g				
linear coeff of thermal expansion	a = 6.50E-06	6.50E-06		
liquid volume expansion coeff.	g = 1.20E-04	1.20E-04		
	Kt = -1.01E-04	-1.01E-04		
from pressure testing data table:	dP = 50.0	50.0		
	dT = 0.00	0.00		
	VKpdP = 0.17	0.01	0.18	gallons
	VKtdT = 0.00	0.00	0.00	gallons
	dV = 0.17	0.01	0.18	gallons
theoretical loss during test	dV = 22.2	0.8	23.0	ounces
theoretical dV/dP for test segment =	dV/dP = 3.47E-03	1.23E-04	3.590E-03	packing ratio
gallons added/subtracted =		0.0		
Unaccounted loss during test =		0.2 gallons		
Percentage to total volume		0.0230% percent		

References:

The theoretical DV/DP for aboveground (unrestrained) pipe is calculated through the following equation:

$$\frac{DV}{DP} = V * \left[\left(\frac{D}{E * t} \right) \left(\frac{S}{4} - v \right) + C \right]$$

The theoretical DV/DP for buried (restrained) pipe is calculated through the following equation:

$$\frac{DV}{DP} = V * \left[\left(\frac{D}{E * t} \right) (1 - v^2) + C \right]$$

where,

V = volume of the segment for the individual pipe diameter, D (gallons).
D = outside diameter of pipe (in).
E = elastic modulus of steel pipe (psi).
t = wall thickness of pipe (in).
v = poisson's ratio of steel pipe.
C = compressibility of test media (in³/in³/psi).

CSFM Standardized formula for performing pressure – temperature calculations to determine volume change.

Basic Formula: $\Delta V / V = Kp \Delta P + Kt \Delta T$

Where: $Kp = [(D / t) (5 / 4 - \mu) / E] + 1 / \beta = (1.9 D / 2 E t) + 1 / \beta$

And: $Kt = 3a - g$

ΔP = Liquid Pressure Change
 ΔT = Liquid Temperature Change
 ΔV = Liquid Volume added to that inside the pipe (negative if flows out)
V = Nominal Pipe Volume = $\pi D^2 L / 4$
D = Inside Pipe Diameter
L = Pipe Length
t = Pipe wall thickness
 μ = Poisson's ratio = 0.3
E = Young's Modulus = $30 * 10^6$ psi
 β = Liquid Bulk Modulus, a function of Pressure and Temperature
g = Liquid Volumetric expansion coefficient, a function of Pressure and Temperature
a = Linear coefficient of Thermal Expansion = $6.5 * 10^{-6} - 6.1 / ^\circ F$

11/20/2017 607 total gallon fill before filling again

11/20/2017 778 total gallon fill

695.484738 ml theoretical for 50 psig drop

50 psig actual drop and 700 ml actual removed = minimal air

S003923

NAVY0014739

Project Name/No.: 500769
Personnel: Eric Yatabe
Shayne Tector
Todd Lelepali

Test PKG	
Customer:	NEXWC
Test Pressure, psig:	154
Min Test Pressure, psi	149
Max Test Pressure, psi	159
Pump DH:	165
total gallons of water installed in segment to fill:	778 gal

[illegible]



18"

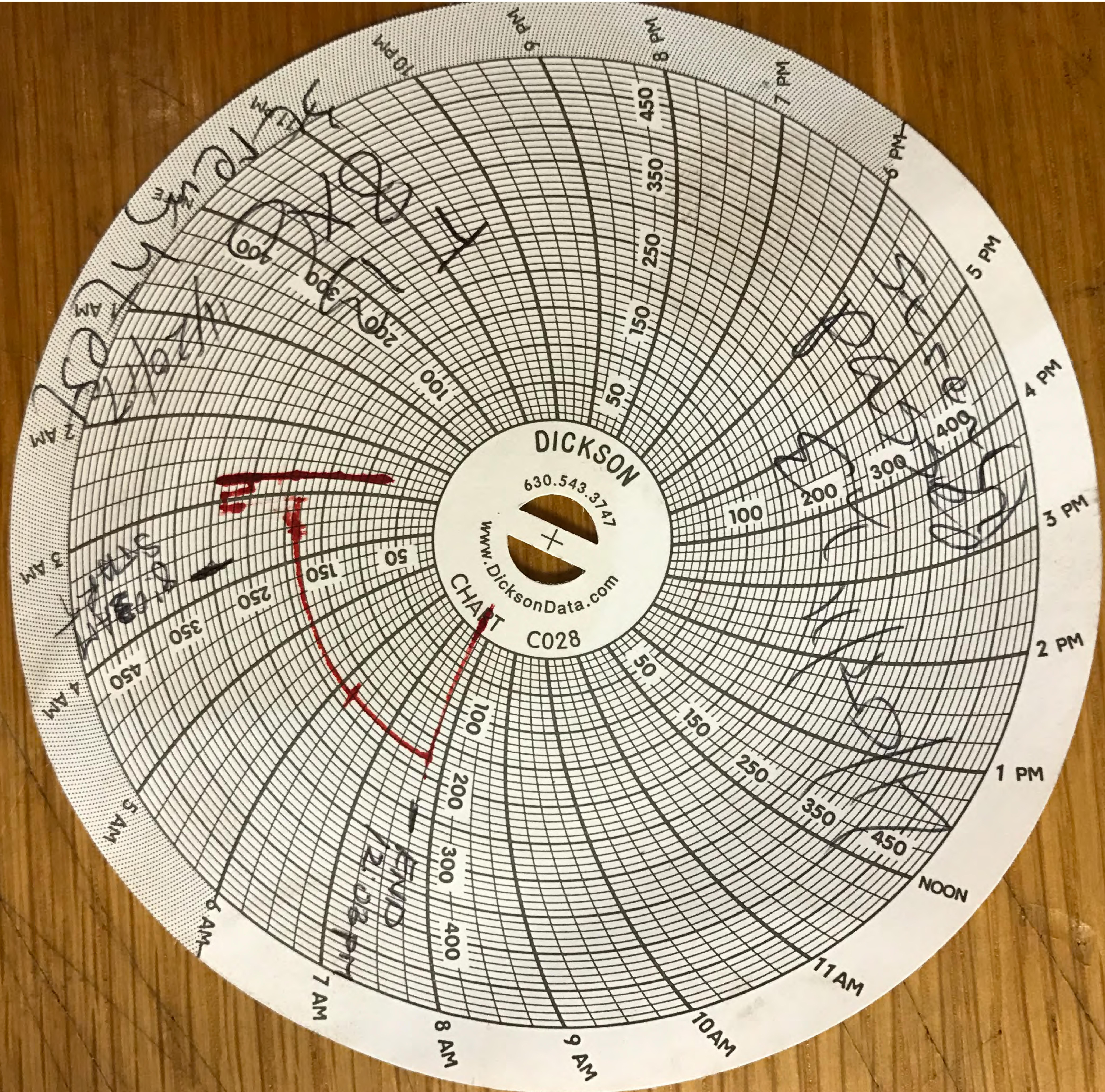


12"

S003925

NAVY0014741

Appendix D
T13 – 8x6 Strength Test Data



Pressure Testing Calculations for Tank 13 - Segment C

	Exposed	Exposed	Total	Notes
weighted percent by volume	94.39%	5.61%		
inside pipe diameter, inches	d = 7.981	6.625		Standard
wall thickness, inches	t = 0.322	0.28		
pipe length, ft	L = 58.0	5	63.0	linear feet
volume, gal (based on dimensions)	V = 150.7	9.0	159.7	gallons
Young's modulus	E = 3.00E+07	3.00E+07		for carbon steel
liquid bulk modulus	Beta = 3.225E+05	3.225E+05		for water at 77°F, 150 psig
compressibility (1/Beta)	C = 3.10E-06	3.10E-06		
	Kp = 3.95E-06	3.91E-06	7.86E-06	(non-weighted value)
Poisson's ratio	v = 0.3	0.3		for carbon steel
find Kt, where Kt = 3a-g				
linear coeff of thermal expansion	a = 6.50E-06	6.50E-06		
liquid volume expansion coeff.	g = 1.20E-04	1.20E-04		
	Kt = -1.01E-04	-1.01E-04		
from pressure testing data table:				
dP =	50.0	50.0		
dT =	0.00	0.00		
VKpdP =	0.03	0.00	0.03	gallons
VKtdT =	0.00	0.00	0.00	gallons
dV =	0.03	0.00	0.03	gallons
theoretical loss during test	dV = 3.8	0.2	4.0	ounces
theoretical dV/dP for test segment =	dV/dP = 5.95E-04	3.50E-05	6.303E-04	packing ratio
gallons added/subtracted =		0.0		
Unaccounted loss during test =		0.0 gallons		
Percentage to total volume		0.0197% percent		

References:

The theoretical DV/DP for aboveground (unrestrained) pipe is calculated through the following equation:

$$\frac{DV}{DP} = V * \left[\left(\frac{D}{E * t} \right) \left(\frac{5}{4} - v \right) + C \right]$$

The theoretical DV/DP for buried (restrained) pipe is calculated through the following equation:

$$\frac{DV}{DP} = V * \left[\left(\frac{D}{E * t} \right) (1 - v^2) + C \right]$$

where,

V = volume of the segment for the individual pipe diameter, D (gallons),
D = outside diameter of pipe (in).
E = elastic modulus of steel pipe (psi).
t = wall thickness of pipe (in).
v = poisson's ratio of steel pipe;
C = compressibility of test media (in³/in³/psi).

CSFM Standardized formula for performing pressure – temperature calculations to determine volume change.

Basic Formula: $\Delta V / V = Kp \Delta P + Kt \Delta T$

Where: $Kp = [(D / t) (5 / 4 - \mu) / E] + 1 / \beta = (1.9 D / 2 E t) + 1 / \beta$

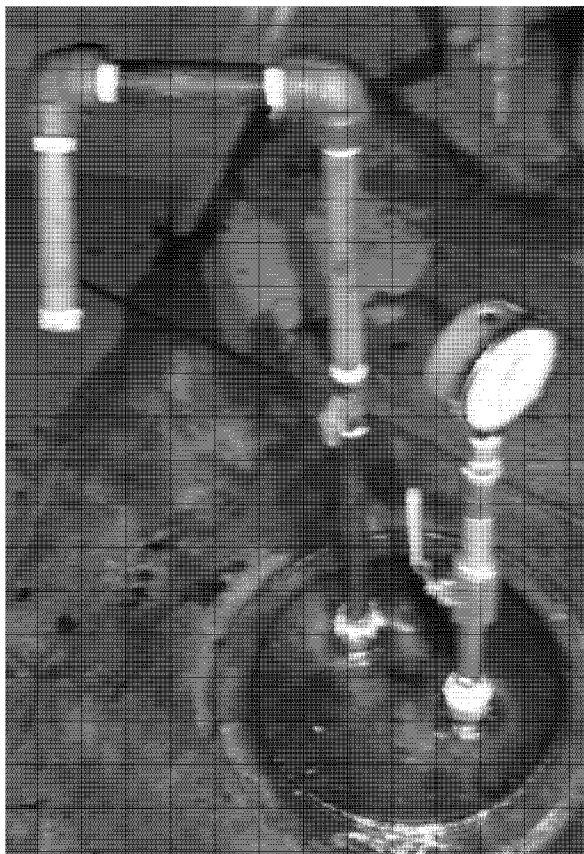
And: $Kt = 3a - g$

ΔP = Liquid Pressure Change
 ΔT = Liquid Temperature Change
 ΔV = Liquid Volume added to that inside the pipe (negative if flows out)
V = Nominal Pipe Volume = $\pi D^2 L / 4$
D = Inside Pipe Diameter
L = Pipe Length
t = Pipe wall thickness
 μ = Poisson's ratio = 0.3
E = Young's Modulus = $30 * 10^6$ psi
 β = Liquid Bulk Modulus, a function of Pressure and Temperature
g = Liquid Volumetric expansion coefficient, a function of Pressure and Temperature
a = Linear coefficient of Thermal Expansion = $6.5 * 10^{-6} 1 / ^\circ F$

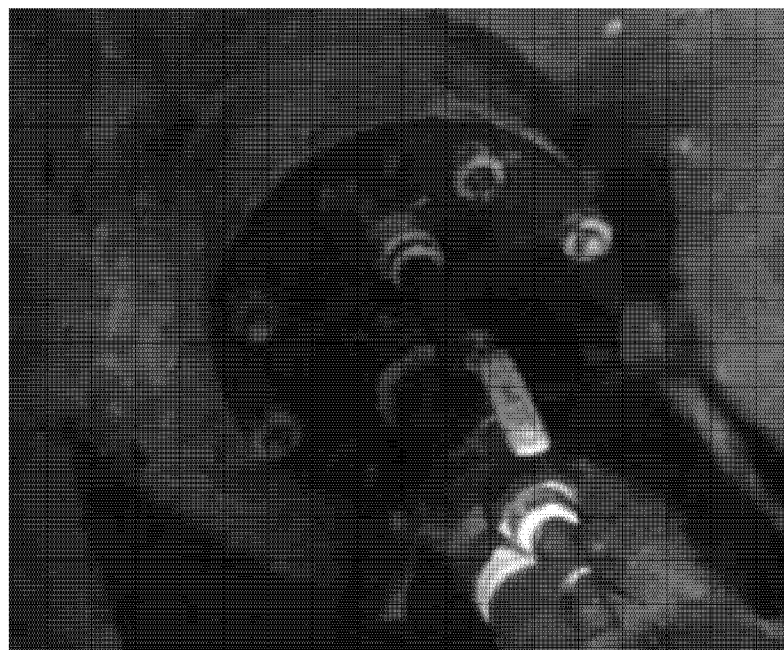
122.114967 theoretical is 122 ml for a 50 psig drop at 600 gallons
160 ml actual for 50 psig drop Best we could do to get air out. Left 160 psig on system overnight

S003928

NAVY0014744



8"



6"

S003930

NAVY0014746

Appendix E
Leak Test Results

Red Hill, JBPHH, HI

2017 PIPELINE PRESSURE TESTING SERVICES

TANK 13

Prepared For:

APTIM Federal Services, LLC
Attn: Mr. Eric Yatabe
12005 Ford Road, Suite 600
Dallas, TX 75234

Prepared Under:

Subcontract No.: 203688
Project No.: 500769

Prepared By:

Vista Precision Solutions, Inc.
2350 Lindberg Loop
Richland, WA 99354
Tel (509) 943-2484
www.VistaPrecision.com

18 December 2017

S003932

NAVY0014748

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Acronyms and Abbreviations

KWA	Ken Wilcox Associates
LDS	Leak Detection System
MDLR	Minimum Detectable Leak Rate
NOP	Normal Operating Pressure
NWGLDE	National Work Group on Leak Detection Evaluations
PD	Probability of Detection
PFA	Probability of False Alarm
PLC	Programmable Logic Controller
USEPA	United States Environmental Protection Agency
VPSI	Vista Precision Solutions, Inc.

Vista Precision Solutions Report
Pipeline Leak Detection Testing Services
Red Hill, JBPHH, HI

EXECUTIVE SUMMARY

Under Delivery Order 500769 from APTIM Federal Services, LLC (APTIM), Vista Precision Solutions, Inc. (VPSI) has conducted leak detection tests of fuel piping located at Red Hill Bulk Storage Facility, JB Pearl Harbor-Hickam, Hawaii. Leak detection testing was conducted as a component of the *Pressure Testing Plan for Clean, Inspect, Repair POL Storage Tanks 14, 17 & 18, Joint Base Pearl Harbor-Hickam, Hawaii* (APTIM, 2017).

VPSI was contracted to conduct leak detection tests of line segments associated with Tanks 4 and 13 with estimated volumes of <3,400 gallons. Only the line segments associated with Tank 13 were tested during this mobilization. The line segments were tested using the LT-100 pipeline leak detection system with minimum detectable leak rate of 0.10 gallons per hour. The three test segments ranged in volume between 160 and 1,880 gallons.

VPSI mobilized to the site and tested the three sections of pipeline between 20 and 21 November. The pipelines were tested using the Vista LT-100 pipeline leak detection system, Version 1.0 (PD=97%, PFA=3%) and yielded no detectable leak above the minimum detectable leak rate (MDLR), resulting in a passing test.

VPSI would like to thank Eric Yatabe, Jaymes Barlos and Jon Nicholson of APTIM for their support in accomplishing this project.

1.0 Introduction

Vista Precision Solutions has conducted leak detection tests on fuel piping located at Red Hill Bulk Storage Facility, JB Pearl Harbor-Hickam, HI using the LT-100 volumetric leak detection system. Descriptions of the testing set up, requirements and procedures are presented in Section 2. Test results and the recommendations and conclusions are presented in Sections 3 through 4. The test certification page is presented in Appendix A and test segment drawings are presented in Appendix B.

1.1 Purpose of Inspection

APTIM (formerly CB&I Federal Services, LLC) contracted VPSI to perform leak detection testing of pipeline segments at Red Hill, JBPHH, HI. Leak detection testing is conducted as a component of the *Pressure Testing Plan for Clean, Inspect, Repair POL Storage Tanks 14, 17 & 18, Joint Base Pearl Harbor-Hickam, Hawaii* (APTIM, 2017).

1.2 Leak Detection System Certifications

The Vista Precision Solutions technology employed on this project has the following certifications:

- a. ***Third Party Evaluation and Certification - Final Report*** by KWA Associates, dated April 15, 1996, LT-100 Monitoring Method and Line Tightness Test Method Version 1.0
- b. ***National Work Group on Leak Detection Evaluations***, listing denotes Third Party Evaluation conformed to applicable USEPA testing protocols. Listing issue date: April 18, 1997, Revision date: December 4, 2002

2.0 Testing Overview

2.1 Coordination Activities

A preparatory meeting was held on 13 November 2017. The kick-off meeting was conducted by personnel from APTIM and VPSI.

The following personnel were identified as the Primary Points of Contact during the kick-off meeting:

- Jon Nicholson – Project Manager, APTIM
- Jaymes Barlos – Construction Manager, APTIM
- Eric Yatabe – Construction Manager/Pressure Testing Lead, APTIM
- Brian Humann – Vista Project Engineer

The following is a list of subjects that were covered during the kick-off meeting:

- Formal introductions
- Identification of Primary Points of Contact with contact numbers given
- Project Scope of Work – Overview
- Test Schedule – Review
- Safety Requirements – Overview
- Testing Support Requirements

2.2 Testing Setup Overview

Segment A: Tank 13 Fill Line

- Description: 32" (inside tank) x 20" (lower tunnel) Fill Line
- Volume: 1,880 gallons
- Isolation: Blind flange inside tank and blind flange in lower tunnel
- Test Connection: ½" test connection fitting on ¾" test tree connected to upper port on blind flange
- Test Pressure: 161 psig

Segment B: Tank 13 Suction / Discharge Line

- Description: 18" (inside tank) x 12" (lower tunnel) Suction / Discharge Line
- Volume: 778 gallons
- Isolation: Blind flange inside tank and blind flange in lower tunnel
- Test Connection: ½" test connection fitting on ¾" test tree connected to upper port on blind flange
- Test Pressure: 165 psig

Segment C: Tank 13 Water Draw / Sump Line

- Description: 8" x 6" Water Draw / Sump Line
- Volume: 160 gallons
- Isolation: Pancake blind flange inside tank and blind flange in lower tunnel
- Test Connection: ½" test connection fitting on ¾" test tree connected to upper port on blind flange
- Test Pressure: 165 psig

2.3 Test Method

The testing procedures used were those defined as the Vista Research, Inc. method. Determination of leakage is based on the criteria established in the Ken Wilcox Associates third party evaluation. The Vista LT-100 Version 1.0 is certified with a capability to detect leaks of 0.10 gallons per hour, a probability of detection (P_D) of 97 percent, and probability of false alarm (P_{FA}) less than or equal to 3 percent.

The method is Third Party Certified and currently listed by the National Work Group on Leak Detection Evaluations (NWGLDE).

2.4 Test Procedures

Conducting an LT-100 leak detection test consists of several basic activities: preparation of the line segment, attachment of the sensor equipment, initiating the test, data collection and analysis,

disconnecting the equipment, and returning the pipeline to service. The LT-100 leak detection system is operated manually and attended constantly during a test.

The following procedures were followed for each pipe segment tested.

- Line segment preparation – The piping is filled with the test fluid while venting air from the system. The test segment must be as nearly full of the test fluid as possible to ensure a successful test. Close all valves and install blinds, isolating the line segment.
- Test Pressure – Prior to initiating a test, the maximum test pressure is determined. The piping test pressure (provided by APTIM site personnel) used as the maximum test pressure, was 150 psig. Since the LT-100 would be located at the lowest point of each test segment the test pressure was increased to a minimum of 160 psig to ensure that the high points of the test segments would have a 150 psig test pressure. The test pressure used was provided in the approved Pressure Testing Plan (APTIM, 2017).
- Connect leak detection equipment – The LT-100 is connected to the test segment with piping isolated by a manual ball valve. The test segment is initially brought up to test pressure.
- Initiating a test – The test equipment is powered on and confirmed operational. At this point the LT-100 measurement cylinder is determined to be containing an appropriate amount of test medium by the leak detection engineer. Test medium is added/removed as required. The test tree isolation ball valve is opened and a test is initiated.
 - a. Precision Leak Detection Test – The leak test is performed using the LT-100 Version 1.0 Primary Method as listed with the National Work Group for Leak Detection Evaluations (NWGLDE). Test pressure is maintained while volume measurements are logged for the first hour of the test. The pressure is then reduced for the second hour (low pressure portion). The low pressure portion of the leak test is performed at or near 0 psig as volume measurements continue.
- Data Collection and Analysis – Data is collected automatically by the PLC/operating computer. The test operator monitors the test progress and proceeds with the test based on the observed behavior. Once adequate data is collected it is analyzed and a test result is determined.
- Disconnection of Equipment – At the end of the test the line is left in a slack condition and the test equipment is disconnected from the test segment.

3.0 Test Results

All line segments tested for Tank 13 at Red Hill achieved a passing test result.

The results are summarized in Table 1.

Table 1. Summary of Tests

Line No.	Line Segment	Date	Diameter (in)	Volume (gal)	MDLR (gal/h)	Test Result
A	32" (inside tank) x 20" (lower tunnel) Fill Line	11/21/17	32/20	1,880	0.10	Pass
B	18" (inside tank) x 12" (lower tunnel) Suction / Discharge Line	11/21/17	18/12	778	0.10	Pass
C	8" x 6" Water Draw / Sump Line	11/20/17	8/6	160	0.10	Pass

The line segments described in Table 1 were tested with Vista LT-100, Version 1.0 pipeline leak detection method.

4.0 Conclusions and Recommendations

All three (3) lines tested passed their respective tests. All tests were completed with little difficulty due to the excellent line preparation provided by APTIM.

Appendix A

Test Certification



TEST CERTIFICATION

Red Hill, JBPHH, HI				21 November 2017			
Line Segment		Test Date	Test Pressure (psig)	Product	Segment Volume (gal)	Minimum Detectable Leak Rate (gal/h)	Test Result
1	Tank 13 Test Segment A: 32" to 20"	11/21/17	161	Water	1880	0.10	Pass
2	Tank 13 Test Segment B: 18" to 12"	11/21/17	165	Water	778	0.10	Pass
3	Tank 13 Test Segment C: 8" to 6"	11/20/17	165	Water	160	0.10	Pass

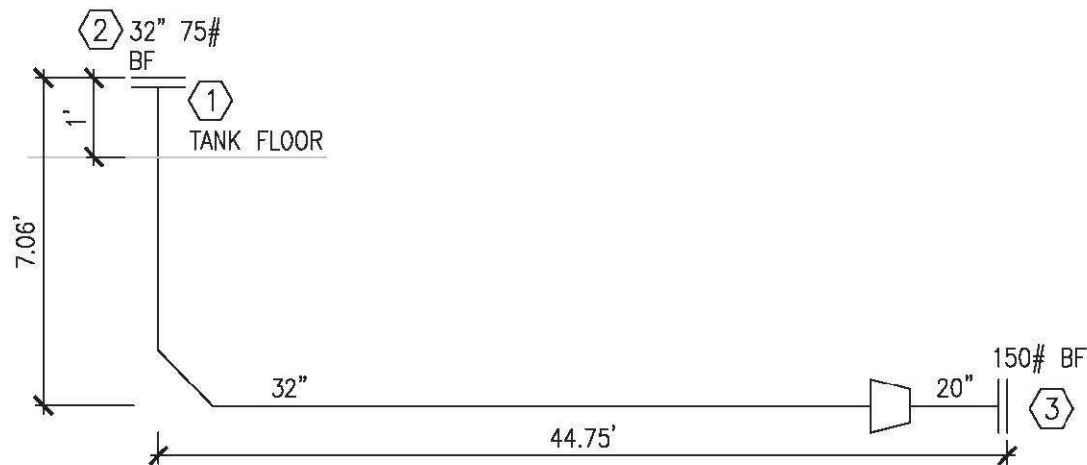
Vista Precision Solutions, Inc. hereby certifies that it has tested the above-listed piping with the Vista LT-100, Version 1.0 pipeline leak detection method. This method has been evaluated by an independent third party, in accordance with U.S. EPA (or equivalent) test procedures for evaluating pipeline leak detection systems.



Vista Precision Solutions, Inc.

Appendix B

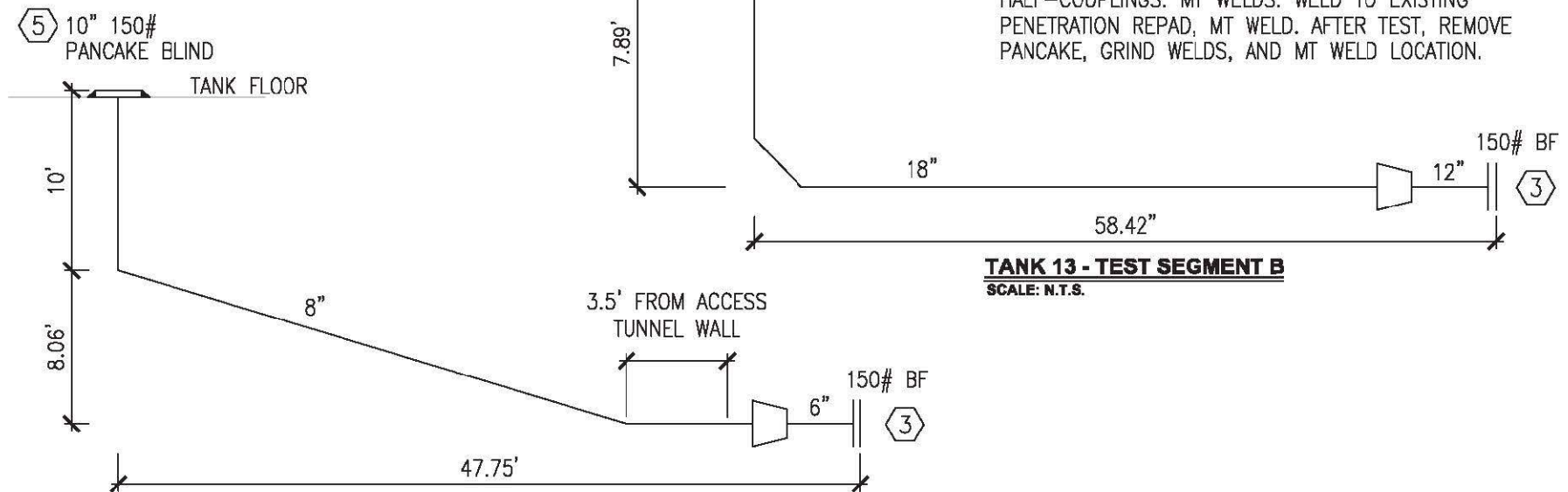
Drawings



TANK 13 - TEST SEGMENT A
SCALE: N.T.S.

GENERAL NOTES:

1. ANSI CLASS 75 WNF, WELDED TO EXISTING STUB AFTER CUTTING OFF EXISTING LINE. WELDING GTAW ROOT, SMAW FILL AND CAP (OPTION IS ALL GTAW). NDE SHALL CONSIST OF VT OF ROOT WELD AND MT OF COMPLETED EXPOSED WELDS.
2. ANSI CLASS 75 BLIND FLANGE, WITH (2)-1" THREADED HALF-COUPPLINGS. MT WELDS.
3. ANSI CLASS 150 BLIND, WITH (1)-2" THREADED HALF-COUPPLING AT LOW POINT AND (1)-1" THREADED HALF COUPLING APPROXIMATELY IN CENTER OF BLIND. MT WELDS.
4. ANSI CLASS 150 BLIND, WITH (2)-1" THREADED HALF-COUPPLINGS. MT WELDS.
5. ANSI CLASS 150 PANCAKE BLIND WITH (2)-1" THREADED HALF-COUPPLINGS. MT WELDS. WELD TO EXISTING PENETRATION REPAD, MT WELD. AFTER TEST, REMOVE PANCAKE, GRIND WELDS, AND MT WELD LOCATION.



TANK 13 - TEST SEGMENT B
SCALE: N.T.S.

TANK 13 - TEST SEGMENT C
SCALE: N.T.S.

ALL SCALES ARE INDICATED FOR "A" SIZE DRAWINGS.

SHEET 1

CLEAN INSPECT REPAIR STORAGE TANK 4 & 13
JOINT BASE PEARL HARBOR-HICKAM, HI
PROJECT 500769

TANK 13 PRESSURE TEST SEGMENTS

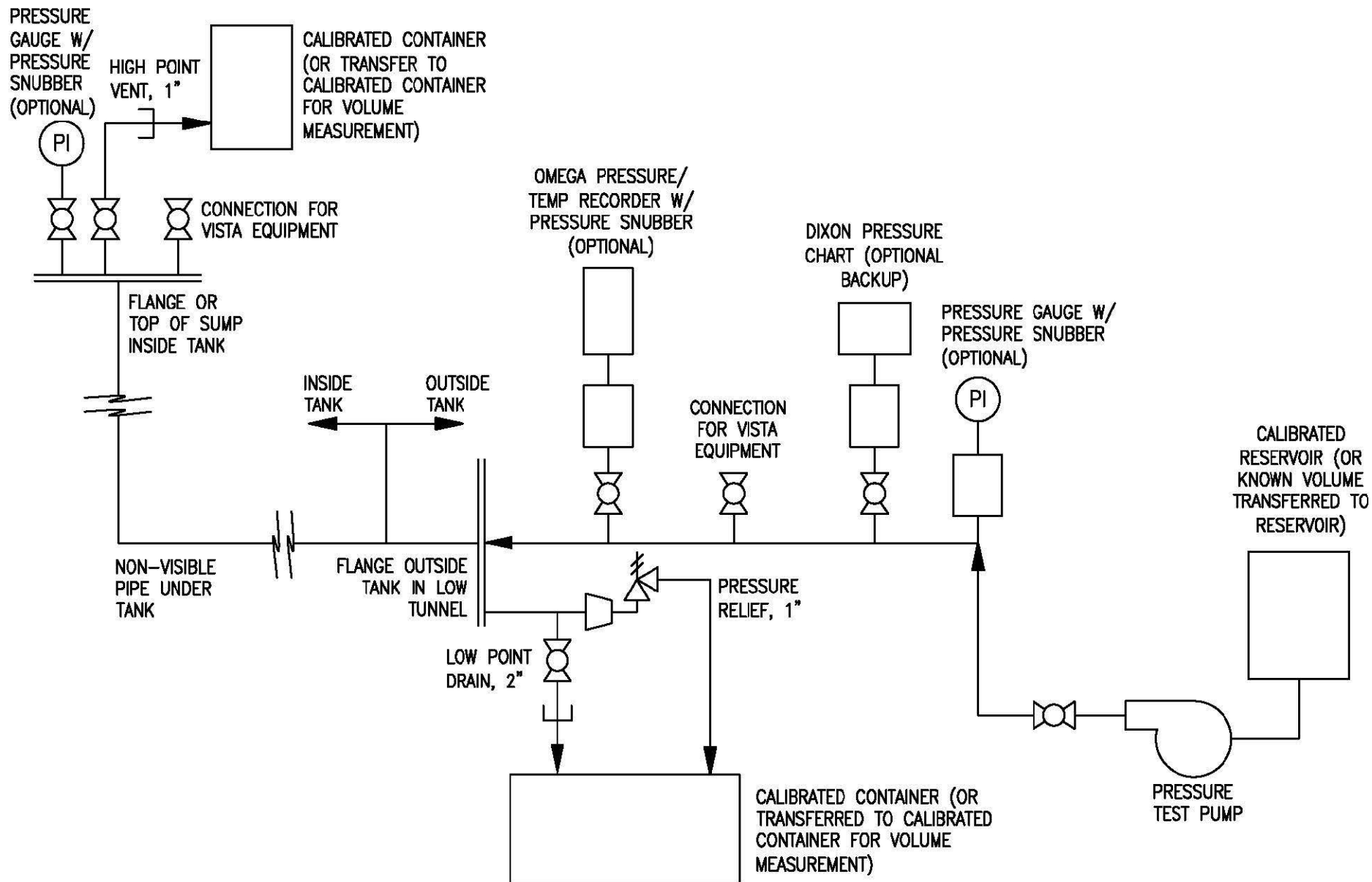


12005 FORC ROAD, SUITE 600
DALLAS, TEXAS 75234

Designed by: _____
Date: DAY MONTH YEAR
Drawn by: _____
Solicitation No. _____
Reviewed by: _____
Contract No. _____
Submitted by: _____
Delivery Order No. _____

REVISION SCHEDULE		
Rev #	Description	Date

Appendix F
Pressure Test Setup



ALL SCALES ARE INDICATED FOR "A" SIZE DRAWINGS.

SHEET 3

CLEAN INSPECT REPAIR STORAGE TANK 14, 17, AND 18
JOINT BASE PEARL HARBOR-HICKAM, HI
PROJECT 500770

PRESSURE TEST SYSTEM SCHEMATIC



Designed by:	Date:
Drawn by:	DAY MONTH YEAR
Reviewed by:	Site/location No.
Submitted by:	Contract No.
	Delivery Order No.

REVISION SCHEDULE		
Rev #	Description	Date

Appendix G
Methodology to Remove Air from System

- 1) A known quantity of water was pumped into connection on flange in lower tunnel using a 2" air diaphragm pump at ~15 gpm,
- 2) Water was allowed to settle and temperature equilibrate for at least 24 hours,
- 3) Water was backed from test segment towards lower tunnel to bleed air from each high point on the injection test tree. The high points on the injection test tree included the calibrated pressure gage, Dickson Chart Recorder, Omega Pressure/Temperature Recorder and quick disconnect connection for the VISTA leak test equipment.
- 4) Water was pumped through end of pressure test pump hose to ensure air was cleared from end of pump hose before attaching to pressure test tree,
- 5) Pressure test pump was used to pump water through high point vent in tank until visible air was removed from high point vent and then another 10 gallons was pumped through,
- 6) System was pressured up to 50 psig and any air in the pressure gage inside tank at high point was vented of any air,
- 7) System was pressured up to 50 psig and all leaks were fixed and pressure held for 15 minutes,
- 8) System was pressured to 100 psig and all leaks were fixed and pressure held for 15 minutes,
- 9) System was pressured to 160 psig and all leaks were fixed and pressure held for 15 minutes,
- 10) The volume of water needed to reduce the system approximately 50 psig was taken from the high point vent inside the tank. The actual volume and pressure drop were recorded and compared against the theoretical amount of volume expected for that pressure drop. This, "reverse squeeze," was utilized as it was much easier to measure the amount of water removed from the system than what was injected. The volumes to cause a pressure change of 50 psig for these segments ranged from approximately 100 to 2100 ml,
- 11) If there was air, then another attempt to bleed air was made by trying to bleed air from injection tree in lower tunnel and high point vent and pressure gage inside tank. If no air was present the pressure was held overnight and strength test run the next morning.
- 12) In all cases during the strength test, temperature was constant.

13) In all cases, VISTA plugged their system into the pressure test injection tree at the end of the strength test while there was pressure on the system. Note: For all segments the pressure test hose discharge was disconnected from the pressure test system and this connection was plugged. This was the last place that water could have leaked through in the pressure test apparatus without being detected by inspections conducted at every 15 minute reading. Thus, no unaccounted for leaks from the pressure test apparatus occurred during leak test.

Difference in Actual vs. Theoretical Reverse Squeeze quantities at actual pressure drops:

Tank	Segment	Reverse Squeeze Pressure Drop	Theoretical, ml	Actual, ml
13	8x6	50	122	160
13	18x12	50	695	700
13	32x20	50	2063	2080

Any air left in segment was assumed to be trapped in horizontal portion of segment and unable to be removed by any practicable means. Based on conversations with VISTA personnel, it was recommended to re-pressurize system and determine if the pressure drop rate decreased. This flattening out of the pressure drop over time was indicative of air entrainment in the water according to VISTA personnel. VISTA personnel indicated that their proprietary method would fail a test that had too much air.

In all cases, when the leak test was run, VISTA indicated that sufficient air had been bled during strength test preparations to obtain a pass using their equipment.

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