TECHNICAL MEMORANDUM

To: Mr. Mark Chandler
From: Craig Hultgren
Date: March 23, 2016
Subject: Assessment of Current Site Conditions – TOC 01-172

HydroCon Environmental, LLC (HydroCon) has prepared this memorandum on behalf of TOC Holdings Co. (TOC) for Facility No. 01-172 located at 4231 Rucker Avenue, Everett, Washington (Figure 1). The Property has undergone extensive remedial actions and current contaminant concentrations in soil and groundwater indicate that these actions have reduced petroleum hydrocarbon concentrations below applicable cleanup levels (CULs).

Ecology (2016[1]) expressed concern that the impacts observed at a former Site monitoring well (RW01) in 2014 may reflect problems with the existing underground storage tank (UST) system, such as leakage from subsurface piping.

This memorandum provides a brief background summarizing site conditions and remedial actions followed by a presentation of groundwater analytical data, an assessment of groundwater flow at the Site, and the results of recent UST equipment testing to demonstrate that Site conditions warrant regulatory closure.

Background

The Site is currently being used as a retail gasoline station. Site features include an active Union 76-brand retail gasoline station, a 1986-vintage convenience store operating as Rucker Food Mart, a drive-through espresso stand, an asphalt-paved parking lot, and perimeter landscaping. Based on Washington State Department of Ecology (Ecology) and Snohomish County Assessor records, the subject site is equipped with three 1986-vintage, 10,000-gallon USTs containing various grades of gasoline. Two fuel-dispensing pump islands are also present on the western portion of the Property. Information is not readily available regarding the installation or removal of the USTs located on the Property prior to 1986; however, records indicate that a retail gasoline station has operated on the Property since at least 1938.

Based on analytical data collected from subsurface investigations conducted since 2003, the concentrations of gasoline-range petroleum hydrocarbons (GRPH) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) exceeded the Washington State Model Toxics Control Act (MTCA) Method A CULs (CULs) in soil and groundwater beneath the Property. Total and dissolved lead have also historically been detected at concentrations exceeding the CUL in groundwater collected from the Property. Petroleum-impacted soil and groundwater extended beneath the southern portion of the Property and may have also extended a short distance beneath the west-adjoining Rucker Avenue right-of-way. The vertical extent of the petroleum-contaminated soil appears to have been limited to depths ranging from 10 to 20 feet below ground surface.

[1] *Ecology 2016. Email from Eugene Freeman, Department of Ecology, to Craig Hultgren, HydroCon. February 18.*

A dual-phase extraction (DPE) remediation system was installed in March 2009 to mitigate the residual soil and groundwater contamination. The DPE remediation system includes seven wells (MW05, MW07, MW12, and RW01 through RW04) that were used to apply a vacuum to the vadose zone to induce air flow and enhance recovery of volatile organic contaminants from the soil. Groundwater was extracted from four of the seven wells (MW05, MW07, RW03, and RW04) using down-well pumps to expose more of the vadose zone to enhanced vapor recovery via the vacuum extraction system. On September 14, 2011, the DPE system was turned off when groundwater data indicated that the system had effectively reduced concentrations of petroleum hydrocarbons in groundwater. Petroleum hydrocarbon concentrations increased in some of the site wells and the remediation system was restarted and operated between February 17 and 29, 2012, prior to conducting the Second Quarter 2012 monitoring event. Beginning in May 2012, the down-well pumps were cycled on and off on alternating 2-week periods of operation, with the vacuum system running continuously. An air sparge packer assembly was installed in remediation well RW01 on August 8, 2012, to provide oxygen for aerobic degradation of residual soil contamination. The remediation system was turned off on September 12, 2012, to initiate compliance groundwater sampling.

A Supplemental Subsurface Investigation (SSI) was conducted in 2013[2] to evaluate the soil conditions beneath the Property in areas where PCS was encountered prior to the operation of the remediation system. Soil samples collected from six soil borings (B19 through B24) at locations with historical concentrations above applicable CULs did not have detections of GRPH or BTEX above MTCA Method B CULs (CULs).

A detailed summary of each previous investigation and interim action (prior to the 2013 SSI), as well as documentation of the field work including lab reports and boring logs, are presented in the Remedial Investigation Report (SES 2009[3]) and Cleanup Action Plan (SoundEarth 2013[4]).

Former well RW01 was located within the fueling area of the operating service station. In November 2014, RW01 was abandoned and replaced by RW01A due to the presence of gasoline observed in the well monument and detections above CULs in groundwater. Well RW01A was located about 10 feet to the west of RW01 (Figure 2)[5].

The remediation system was turned off on December 10, 2014 in anticipation of final confirmational monitoring demonstrating compliance with CULs. The system has remained off ever since.

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[2] *SoundEarth Strategies, 2014. Supplemental Subsurface Investigation Report. TOC Facility No. 01-172, 4231 Rucker Avenue, Everett, Washington. Prepared for TOC Holdings Co. February 11.*

[3] *SoundEarth Strategies, 2009. Remedial Investigation Report. TOC Facility No. 01-172, 4231 Rucker Avenue, Everett, Washington. Prepared for TOC Holdings Co. June 29.*

[4] *SoundEarth Strategies, 2009. Cleanup Action Plan. TOC Facility No. 01-172, 4231 Rucker Avenue, Everett, Washington. Prepared for TOC Holdings Co. March 21.*

[5] *HydroCon, 2015. Remediation System Relocation and System Modification Technical Memorandum. Prepared for TOC Holdings Co. May 20.*

HydroCon reviewed exposure pathways at the Site and calculated MTCA Method B CULs using the MTCA TPH calculation spreadsheets[6]. Results indicated that the soil TPH Method B concentration protective of the direct contact pathway is 2,989 milligrams per kilogram (mg/kg). The protection of groundwater MTCA Method B CULs for TPH and benzene were determined to be 427 micrograms per liter (µg/L) and 0.785 µg/L, respectively. An exposure assessment for groundwater at the site demonstrated that the groundwater/drinking water exposure pathway is incomplete since impacted groundwater is limited to small areas of the site, no drinking water supply wells are likely present in the area, and water has been provided by the City of Everett since the 1920's from a reservoir 30 miles to the east of the Site. Therefore, the direct contact value is the only TPH soil cleanup value applicable to the Site.

Groundwater Quality – Site Monitoring Wells

Groundwater sampling began at the site in 2003. In general, the sampling has been performed on a quarterly basis. A total of 18 monitoring wells and 4 recovery wells have been included in the quarterly groundwater monitoring program.

A summary of the historical monitoring results for each well is provided in the attached Table 1. The table identifies the number of quarters results for all COCs were below Method A or Method B CULs (CULs), the number of quarters non-detects were below Method B CULs and the date of the most recent detection of benzene.

This data indicates that the chemicals of concern (COC) in groundwater have remained below the MTCA Method A CULs for several quarters in a row (in many cases for several years). Since the site was originally being sampled to comply with MTCA Method A CULs, BTEX was analyzed using EPA Method 8021B which typically provides a detection limit of 1 µg/L. EPA Method 8260 was selectively used during the monitoring history at each well when a fuller list of VOCs was being analyzed. HydroCon used EPA Method 8260 during the last two quarterly sampling events to achieve a detection limit below the Method B CUL for benzene in groundwater (0.785 µg/L; the detection limits for these last two events were 0.5 µg/L and 0.35 µg/L, respectively). In all cases where the lower detection limits were achieved, detections were below Method B CULs.

The number of quarters with benzene below the Method B CUL are not consecutive and do not represent the most recent 4 quarters. However, the lack of detections above the Method B CUL at various points in the monitoring history strongly suggest that non detected benzene levels for all sampling events are below Method B CULs.

Contaminant Migration

As noted above, Well RW01 was abandoned in November 2014 and replaced by RW01A due to the presence of gasoline in the well monument of RW01. HydroCon[7] concluded that the presence of the gasoline in the monument was due to operations at the active pump island where the well was located and that detections of hydrocarbon between September 2013 and June 2014 were due to the leakage from the monument to the subsurface. However, Ecology (2016) expressed concern that the impacts observed at

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[6] *HydroCon, 2015. Exposure Assessment – Groundwater Technical Memorandum. Prepared for TOC Holdings Co. December 3.*

[7] *HydroCon, 2015. Cleanup Action Status. TOC Facility No. 01-172. 4231 Rucker Avenue, Everett. Washington. Letter to Eugene Freeman, Washington State Department of Ecology. April 15.*

former well RW01 may be due to a slow release from leaky joints in the piping to the dispensers and asked for an estimate of travel time to wells downgradient from a hypothetical leak.

Groundwater flow and contaminant fate and transport models can be used to help understand and evaluate hydrogeological systems, including travel time. Modeling results depend on the quality and quantity of the field data available to define input parameters and boundary conditions. Modeling inputs typically require characterization of:

- Horizontal and vertical distribution of average linear ground water velocity (direction and magnitude) determined by a calibrated flow model or through accurate determination from field data.
- Initial distribution of solute.
- Location, history, and mass loading rate of chemical sources or sinks.
- Effective porosity.
- Soil bulk density.
- Cation exchange capacity.
- Fraction of organic carbon in soils.
- Octanol-water partition coefficient for chemicals of concern.
- Density and viscosity of non-aqueous fluid.
- Longitudinal and transverse dispersivity.
- Diffusion coefficient.
- Chemical decay rate or degradation constant.

Many of these variables are not characterized in typical site investigations at leaking UST sites and are not well understood at the Site. As a result, TOC Holdings Co. is reluctant to pursue and publish modeling results that could be misleading. Therefore, HydroCon is suggesting that Ecology evaluate the presence of ongoing fuel leaks based on the more definitive UST tank tightness testing rather than less definitive contaminant transport modeling.

UST System Testing

Concerns about leakage from the UST system can be addressed through the Washington State Department of Ecology's compliance monitoring procedures that are conducted at the Site. These procedures include tank testing every 5 years and pressurized line testing every year. Attachment A includes the **Washington State Department of Ecology Tightness Checklist** reports for tests conducted in December of 2014 and 2015. These tests included testing of leak detectors, tank monitors, and annual line testing. As shown in the reports, the UST system meets the State requirements.

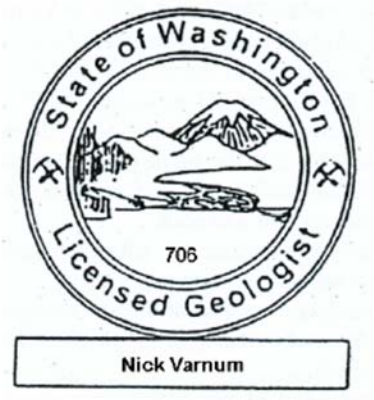
Conclusions

Groundwater monitoring and soil sampling have demonstrated that remedial actions conducted at the site have reduced petroleum hydrocarbon concentrations in soil and groundwater to levels below the Method A CULs and apparently now below the Method B CULs. Annual UST line testing conducted in 2014 and 2015 show that the product lines meet regulatory requirements and are not leaking. The latest groundwater monitoring results reaffirm that detections of petroleum hydrocarbons from former well RW01 were the result of spills in the fueling area entering the well vault. Since this well was abandoned and replaced by well RW01A, there have been no detections of GRPH or benzene above the respective Method A CULs in groundwater.

Considering that the UST system tightness has been confirmed and concentrations of chemicals of concern in the media of concern have remained below Method A CULs for several quarters, and have been documented below the Method B CULs for at least two quarters, a determination of No Further Action is warranted for this Site.

Prepared by:

Nick Varnum, LHG
Project Scientist



Reviewed by:

Craig Hultgren, LHG
Project Manager

March 23, 2016

Attachments

Table 1 – Summary of Groundwater Quality in Site Monitoring Wells

Attachment A - Washington State Department of Ecology Tightness Checklist Reports – 2014, 2015

TABLES

Table 1
Summary of Groundwater Quality in Site Monitoring Wells

Well Identification Number	Number of Consecutive Quarters Below MTCA Method A or B CUL for all COCs	Number of Quarters Benzene Non-detect Below Method B CUL	Most Recent Detection of Benzene Above Method B CUL	Notes/Comments
MW01	37	6	August 2006 (3.53 µg/L)	
MW02	47	5	Never	
MW03	47	9	Never	
MW04	30	6	June 2008 (2 µg/L)	
MW05	25	6	September 2009 (2.5 µg/L)	
MW06	22	6	August 2006 (6.21 µg/L)	
MW07	24	6	December 2008 (3 µg/L)	
MW08	47	9	Never	
MW09	27	6	March 2009 (1 µg/L)	
MW10	38	6	Never	
MW11	38	6	Never	
MW12	20	3	September 2010 (1.2 µg/L)	
MW13	36	5	Never	
MW14	35	6	Never	
MW15	6	2	September 2014 (8.3 µg/L)	Well had 31 consecutive quarters below CULs before anomalous spike in benzene occurred on September 15, 2014, no detection above CULs have been observed since that date.
MW16	15	6	March 2009 (10 µg/L)	
MW17	22	7	Never	
MW18	22	7	Never	
RW01	0	0	September 2013 (1.1 µg/L)	Well had 6 consecutive quarters below CULs between March 2012 and June 2013. Well was abandoned and replaced with RW01A in November 2014 due to presence of gasoline in well monument.
RW01A	5		Never	Well has been sampled 5 times.
RW02	27	6	January 2009 (6 µg/L)	
RW03	20	2	December 2010 (2.1 µg/L)	
RW04	19	4	Never	

ATTACHMENT A
Washington State Department of Ecology Tightness Checklist Reports – 2014, 2015

Northwest Tank & Environmental Services, Inc.
17407 59th Ave SE
Snohomish, WA 98296
PH: (800) 742-9620 FAX: (425) 645-7881
http://www.nwtank.com

Friday, December 12, 2014

Rucker Food Mart
4231 Rucker Ave
Everett, WA 98203-2244

Rucker Food Mart
4231 Rucker Ave
Everett, WA 98203-2244

RE: Job ID 43798

Dear Valued Customer:

The **Official Report** including all test results and any supporting documentation are enclosed. The test data covered in this report are specific to each test conducted. For your convenience, a summary of testing conducted is provided on the report cover page.

Unless stated otherwise, all compliance testing data must be maintained on site for a minimum of **5 years**. Instructions for specific test types may follow.

Please call if you have any questions or require additional information.

Washington State Department of Ecology Tightness Checklist

As an added service to you, Northwest Tank has sent a copy of the Tightness Testing Checklist to the Department of Ecology. Please sign the final page of the DOE checklist marked "Tank Owner / Authorized Representative" if applicable and keep a copy on site for Five years. You DO NOT need to send an additional copy to the DOE.

Sincerely,

Svetlana Vovkalin

Northwest Tank & Environmental Services, Inc.

Maintain all test reports on-site for a minimum of 5 years.

OFFICIAL REPORT

Test Report For:

Client
Rucker Food Mart
4231 Rucker Ave
Everett, WA 98203-2244
Job #: 43798

Site
Rucker Food Mart
4231 Rucker Ave
Everett, WA 98203-2244

Date Testing Conducted

Thursday December 4 2014

Testing Summary

Leak Detector Test Annual	Pass
Tank Monitor Certification Annual	Pass
Line Test Annual	Pass

Report Analyst: Bob Wise Certified Supervisor: Scott Pike Certificate #: 5053249-U3

Work Acknowledgement Form

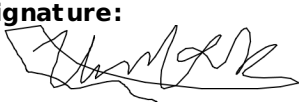
Customer Name: Rucker Food Mart
Site Name: Rucker Food Mart
Site Address: 4231 Rucker Ave, Everett
Job Number: 43798
Ticket / PO#: COD
Date Of Service: 12/04/2014

Testing Company:	Northwest Tank & Environmental Services, Inc.
Primary Technician:	Scott Pike
Address:	17407 59th Ave SE
City/State/Zip:	Snohomish, WA 98296
	PH: (800) 742-9620

Start Time:	12:05:37	**End Time:**	13:42:30	**Number of Technicians:**	1

Scope of work scheduled:
Leak Detector Test Annual
Tank Monitor Certification Annual
Line Test Annual

Site Representative Upon Checkin: Thinh
Signature:



Monitoring System Issues Observed Upon Arrival:
None

Dispenser and UST System Issues Observed Upon Arrival:
None

Dispatch Notes:

Technician Comments:
Site has all 12 months .2gal test results

Parts Installed

Qty	Part #	Model	Name	Serial #	Core Retained	Repair Time
1	FUEL	NWT	Fuel Surcharge	null	null	0
1	DISC	NWT	Discount	null	null	0

Monitoring System Issues Noted at Departure:
None

Dispenser and UST System Issues Noted at Departure:
None

Monthly Monitoring Records for the last 12 Months

Tanks					
Tank State ID	**Product**	**Tank Overfill and Monthly Monitoring Verification**	**Verification Method**	**Monthly Monitor**	**Records Maintained 12 Months**
2	Premium	DTFV = Drop Tube Flapper Valve	Visual	ATG	Yes
3	Regular	DTFV = Drop Tube Flapper Valve	Visual	ATG	Yes
1	Diesel	DTFV = Drop Tube Flapper Valve	Visual	ATG	Yes

Lines			
Line ID	**Tank State ID**	**Line Monthly Monitoring Verification**	**Records Maintained 12 Months**
1	3	Annual Line Test	Yes
2	2	Annual Line Test	Yes
3	1	Annual Line Test	Yes

Post-Operation Checks

Technician has pumped from each product? Yes
Technician has walked the site for remaining tools and hazards? Yes
Technician Signature:

Have all isolated mechanisms been removed? Yes
Dispensers out of stand-alone? N/A

Site Representative at Checkout:

Monitoring System Certification

This form must be used to document testing and servicing of monitoring equipment. A separate certification or report must be prepared for each monitoring system control panel by the technician who performs the work. A copy of this form must be provided to the tank system owner/operator. The owner/operator must submit a copy of this form to the local agency regulating UST systems within 30 days of test date.

A. General Information

Company Name: Rucker Food Mart
Site Address: 4231 Rucker Ave
Facility Contact Person: Mr. Kim
Make / Model Monitoring System: V-R TLS 250

Date Of Testing: 12/04/2014
Site Name: Rucker Food Mart
City, State, ZIP: Everett, WA 98203-2244
Facility Phone Number: 425-339-1212
Serial #: 4774

B. Inventory of Equipment Tested/Certified

Tank #: 2 Premium	
In-Tank Gauging Probe	Mag 1 Probe
Annular Space or Vault Sensor:	N/A
Piping Sump / Trench Sensor:	N/A
Fill Sump Sensor:	N/A
Mechanical Line Leak Detector:	FX1V
Electronic Line Leak Detector:	N/A
Tank Overfill / High Level Sensor:	Emco DT
Other:	

Tank #: 3 Regular	
In-Tank Gauging Probe	Mag 1 Probe
Annular Space or Vault Sensor:	N/A
Piping Sump / Trench Sensor:	N/A
Fill Sump Sensor:	N/A
Mechanical Line Leak Detector:	FX1V
Electronic Line Leak Detector:	N/A
Tank Overfill / High Level Sensor:	Emco DT
Other:	

Tank #: 1 Diesel	
In-Tank Gauging Probe	Mag 1 Probe
Annular Space or Vault Sensor:	N/A
Piping Sump / Trench Sensor:	N/A
Fill Sump Sensor:	N/A
Mechanical Line Leak Detector:	FX1DV
Electronic Line Leak Detector:	N/A
Tank Overfill / High Level Sensor:	Emco DT
Other:	

Dispenser ID:	1/2	Dispenser ID:	3/4
Dispenser Containment Sensors Model:	N/A	Dispenser Containment Sensors Model:	N/A
Shear Valves: Yes	**Floats & Chains:** N/A	**Shear Valves:** Yes	**Floats & Chains:** N/A

Dispenser ID:	5/6	Dispenser ID:	7/8
Dispenser Containment Sensors Model:	N/A	Dispenser Containment Sensors Model:	N/A
Shear Valves: Yes	**Floats & Chains:** N/A	**Shear Valves:** Yes	**Floats & Chains:** N/A

C. Certification

I certify that the equipment identified in this document was inspected/serviced in accordance with the manufacturers' guidelines. Attached to this certification is information (e.g. manufacturers' checklists) necessary to verify that this information is correct and a Plot Plan showing the layout of monitoring equipment. For any equipment capable of generating such reports, I have also attached a copy of the report (check all that apply):

Technician Name: Scott Pike
Certification Number: 5053249-U3
Expiration Date: 11/22/2015
Signature:

Testing Company Name: Northwest Tank & Environmental Services, Inc.
Address: 17407 59th Ave SE Snohomish, WA 98296
Date of Testing: 12/04/2014

D. Results of Testing/Service

Yes	Is the audible alarm operational?
Yes	Is the visual alarm operational?
N/A	Were all sensors visually inspected, functionally tested, and confirmed operational?
N/A	If alarms are relayed to a remote monitoring station, is all communications equipment operational?
N/A	For pressurized piping systems, does the turbine automatically shut down if the piping secondary containment monitoring system detects a leak, fails to operate, or is electrically disconnected?
N/A	If yes: which sensors initiate positive shut-down?
N/A	Did you confirm positive shut-down due to leaks and sensor failure/disconnection?
Yes	For tank systems that utilize the monitoring system as the primary tank overfill warning device (i.e. no mechanical overfill prevention valve is installed), is the overfill warning alarm visible and audible at the tank fill point(s) and operating properly?
N/A	If so, at what percent of tank capacity does the alarm trigger?
No	Was any monitoring equipment replaced? If yes, identify specific sensors, probes or other equipment replaced and list the manufacturer name and model for all replacement parts in Section E below.
No	Was liquid found in any secondary containment systems designed as dry systems?
N/A	If yes, what type of liquid?
Yes	Was monitoring system set-up reviewed to ensure proper settings? Attach setup reports, if applicable.
Yes	Is all monitoring equipment operational per manufacturers specifications?

In section E. below, describe how and when these deficiencies were or will be corrected.

E. Comments

State Tank ID	Product	Manual Stick Readings(inches)	Gauge Readings(inches)	Difference
2	Premium	18	18.25	-.25
3	Regular	31	30.45	.55
1	Diesel	27.5	27.09	.41

F. In-Tank Gauging / SIR Equipment

This section must be completed if in-tank gauging equipment is used to perform leak detection monitoring.

Yes	Has all input wiring been inspected for proper entry and termination, including testing for ground faults?
N/A	Were all tank gauging probes visually inspected for damage and residue buildup?
Yes	Was accuracy of system product level readings tested?
Yes	Was accuracy of system water level readings tested?
Yes	Were all probes reinstalled properly?
Yes	Were all items on the equipment manufacturer's maintenance checklist completed?

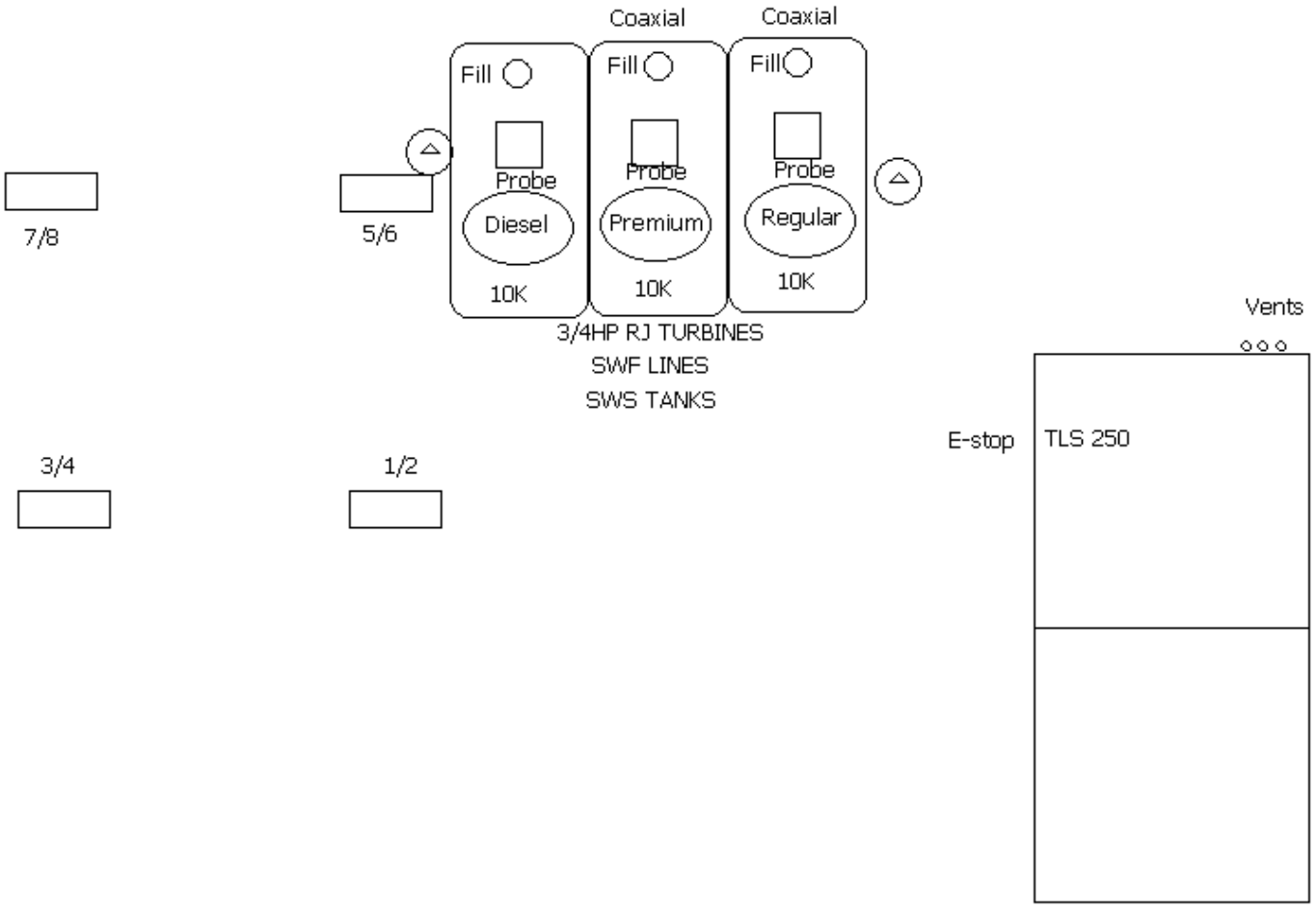
G. Line Leak Detectors (LLD):

Yes	For equipment startup or annual equipment certification, was leak simulated to verify LLD performance?
3 GPH	Leak Rate
Yes	Were all LLDs confirmed operational and accurate within regulatory requirements?
Yes	Was the testing apparatus properly calibrated?
Yes	For mechanical LLDs, does the LLD restrict product flow if it detects a leak?
N/A	For electronic LLDs, does the turbine automatically shut off if the LLD detects a leak?
N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system is disabled or disconnected?
N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system malfunctions or fails a test?
N/A	For electronic LLDs, have all accessible wiring connections been visually inspected?
Yes	Were all items on the equipment manufacturer's maintenance checklist completed?

Site Map

Customer Name: Rucker Food Mart **Site Name:** Rucker Food Mart

Site Address: 4231 Rucker Ave, Everett
Job Number: 43798



Automatic Line Leak Detector Test Results

Company Name: Rucker Food Mart
Site Name: Rucker Food Mart
Address: 4231 Rucker Ave Everett, WA 98203-2244
Test Date/Time: 12/04/2014 12:05:37 pm

Job ID Number: 43798
Technician Name: Scott Pike
License Number: 5053249-U3
Expiration Date: 11/22/2015

Product: Diesel Tank ID: 1 LD Type: Mechanical	Make: Red Jacket Model: FX1DV Serial#: UNK	Operating Pressure: 30 Holding Pressure: 10 Bleedback (ml): 100	**Result:** Pass
Additional Data For Mechanical Leak Detectors Only Metering Pressure: 8 Step Through Time: 8			
Product: Premium Tank ID: 2 LD Type: Mechanical	Make: Red Jacket Model: FX1V Serial#: UNK	Operating Pressure: 23 Holding Pressure: 13 Bleedback (ml): 200	**Result:** Pass
Additional Data For Mechanical Leak Detectors Only Metering Pressure: 9 Step Through Time: 2			
Product: Regular Tank ID: 3 LD Type: Mechanical	Make: Red Jacket Model: FX1V Serial#: UNK	Operating Pressure: 25 Holding Pressure: 14 Bleedback (ml): 200	**Result:** Pass
Additional Data For Mechanical Leak Detectors Only Metering Pressure: 9 Step Through Time: 2			

Leak detector testing conducted in accordance with the procedures and limitations of the LDT 890 leak detector tester. A leak is simulated at the highest point in the line using the LDT 890 calibrated to 3 gph at a metering pressure of 10 psi. The owner or operator of the UST system is required to ensure any failed leak detector is replaced before placing the line back in service.

The results of any sampling, testing, or monitoring shall be maintained for at least five years, or for another reasonable period of time determined by the department or delegated agency, except that the results of tank tightness testing conducted in accordance with CFR 40 Part 280.44 shall be retained until the next test is conducted.

Comments:

Technician Name: Scott Pike
Signature:

Date: 12/04/2014

Underground Storage Tank Tightness Testing Checklist

1. UST SYSTEM LOCATION AND OWNER

UBI Number: 602-886-207	Site ID Number: 4063
Site / Business Name	Rucker Food Mart Rucker Food Mart
Site Address	4231 Rucker Ave Snohomish Everett, WA 98203-2244
Telephone	425-339-1212
UST Owner/Operator	Rucker Food Mart
Mailing Address	4231 Rucker Ave Everett, WA 98203-2244
Telephone	425-339-1212

2. FIRM PERFORMING WORK

Service Company	Northwest Tank & Environmental Services, Inc.
Service Co Address	17407 59th Ave SE Snohomish, WA 98296
IFCI Certification Number: 5053249-U3	Certification Issue Date (Month/Year): 2013-11-22 00:00:00
Telephone	(800) 742-9620

I. TIGHTNESS TESTING METHOD

Date Of Test: 12/04/2014

1. Tightness testing method(s) used (indicate if more than one method was used):
Test method name/version/Manufacturer:
ATG

Note: A tank must be tested up to the product level limited by the overfill prevention device. If an overfill prevention device is not installed, a tank must be tested up to the 95% full level. When underfill volumetric testing methods are used, the tank must be: 1) filled with product to the 95% full level or 2) the portion of the tank above the product level must be tested using a non volumetric method which meets performance standards, for tightness testing.

2. Indicate the method used to determine if groundwater was present above the bottom of the tank during the test (required for single wall tanks): N/A

3. Method used for release detection: ATG	4. Reason for conducting tightness test: Required Release Detection Method
5. Type of test conducted: Line and Leak Detectors	6. Test method type: Volumetric

II. TEST METHOD CHECKLIST

The following items shall be initialed by the Certified Supervisor whose signature appears on this form:

	Yes/No/NA	Initials
1. Has the tightness testing method used been demonstrated to meet the performance standard specified in the UST rules for the conditions under which the test was conducted? (e.g. detecting a 0.10 gallon per hour leak rate with probability of detection of at least 95% and a probability of false alarm no more than 5%)	Yes	
2. Have all written testing procedures developed by the manufacturer of the testing equipment and method been followed while the test was being setup.	Yes	
3. Was the product level in the tank during the test within the limitations of the test methods performance standards?	N/A	
4. If groundwater was present above the bottom of the tank, have the testing procedures accounted for its presence? (required for single wall tanks)	N/A	
5. If the tightness test is considered a failed test, has the owner/operator been notified of the test results? (Note: Tank owner must report a failed tightness test as a suspected release within 24 hours to UST staff at the appropriate Ecology office.	N/A	

III. TANK INFORMATION CHECKLIST

1. Tank ID Number (tank name registered with Ecology)	2	3	1			
2. Date Installed	1986-01-01	1986-01-01	1986-01-01			
3. Tank capacity in gallons	10000	10000	10000			
4. Last substance stored	Premium	Regular	Diesel			
5. Number of tank compartments	1	1	1			
6. Tank type (S) Single Wall; (D) Double Wall; (P) Partitioned	SW	SW	SW			
7. Is overfill device present? (Yes/No)	DTFV = Drop Tube Flapper Valve	DTFV = Drop Tube Flapper Valve	DTFV = Drop Tube Flapper Valve			
Tank ID associated to each tank	2	3	1			
8. Percentage of product in tank during test? (Volume % must comply with test method certification requirements)						
9. The test method used can detect a leak of how many GPH?	.05	.05	.05	.05	.05	.05
10. The numerical tank test results are? (In gallons per hour)						
11. Based on evaluating test results and conducting any retesting as necessary as per test protocol to obtain conclusive test results; the test results are?						

IV. LINE AND LEAK DETECTOR INFORMATION

Tank ID associated to each line	3	2	1			
1. Piping Type: (S) Single Wall; (D) Double Wall	Single	Single	Single			
2. Pump Type: (T) Turbine; (S) Suction	Pressure	Pressure	Pressure			
3. (a) If turbine is leak detector present (Yes/No)	Yes	Yes	Yes			
If present, was lead seal intact (Yes/No)	N/A	N/A	N/A			
(b) If suction, check valve located at: (T)tank; (P)pump	N/A	N/A	N/A			
4. The numerical line test results are? (gallons per hour)	.00750	.00750	.00750			
5. Line tightness test results? (Pass/Fail)	Pass	Pass	Pass			
Tank ID associated to each leak detector	1	2	3			
Leak Detector Test Results (Pass/Fail)	Pass	Pass	Pass			

V. REQUIRED SIGNATURES

I hereby attest, that I have been the Certified Supervisor present during the above listed testing activities, and to the best of my knowledge they have been conducted in compliance with all applicable state and federal laws, regulations and procedures, pertaining to underground storage tanks.

12/04/2014		Scott Pike
Date	**Signature of Certified Supervisor**	**Printed Name**

Date	**Signature of Tank Owner/Authorized Representative**	**Printed Name**

Line Tightness Test Results

Company Name:	Rucker Food Mart	Job ID Number:	43798
Site Name:	Rucker Food Mart	Technician Name:	Scott Pike
Address:	4231 Rucker Ave Everett, WA 98203-2244	License Number:	5053249-U3
Test Date:	12/04/2014	Expiration Date:	11/22/2015

Line Tightness Test Data

Product:	Regular	Tank ID:	3	Start Time:	12:55
Approx Length:	25	STP MFG:	Red Jacket 3/4 HP	End Time:	13:35
Size:	2	Operating Pressure:	25	Total Test Time:	40mins
Line Material:	SWF	Test Pressure:	37.5	Final Leak Rate:	.00750
Wall Type:	Single	Isolation Dispenser:	Impact Valve	Impact Valves Operational:	Yes
Boot Back:	N/A	Isolation Pump:	Ball Valve	Check Valve Location:	N/A
LD Present:	25	Initial Cylinder Level:	.035	**Result:**	Pass
Line Type:	Pressure	Final Cylinder Level:	.030		

Product:	Premium	Tank ID:	2	Start Time:	12:55
Approx Length:	25	STP MFG:	Red Jacket 3/4 HP	End Time:	13:35
Size:	2	Operating Pressure:	23	Total Test Time:	40mins
Line Material:	SWF	Test Pressure:	34.5	Final Leak Rate:	.00750
Wall Type:	Single	Isolation Dispenser:	Impact Valve	Impact Valves Operational:	Yes
Boot Back:	N/A	Isolation Pump:	Ball Valve	Check Valve Location:	N/A
LD Present:	25	Initial Cylinder Level:	.035	**Result:**	Pass
Line Type:	Pressure	Final Cylinder Level:	.030		

Product:	Diesel	Tank ID:	1	Start Time:	12:55
Approx Length:	25	STP MFG:	Red Jacket 3/4 HP	End Time:	13:35
Size:	2	Operating Pressure:	30	Total Test Time:	40mins
Line Material:	SWF	Test Pressure:	45	Final Leak Rate:	.00750
Wall Type:	Single	Isolation Dispenser:	Impact Valve	Impact Valves Operational:	Yes
Boot Back:	N/A	Isolation Pump:	Check Valve	Check Valve Location:	N/A
LD Present:	25	Initial Cylinder Level:	.035	**Result:**	Pass
Line Type:	Pressure	Final Cylinder Level:	.030		

Line tightness testing conducted in accordance with the procedures and limitations of the Accurite Training and Services Corp. pipeline tester. A consistent leak rate of .01 gph or higher at 150% of normal operating pressure is considered a failure. The owner or operator of the UST system is required to report all failures to the appropriate agency within 24 hours.

The results of any sampling, testing, or monitoring shall be maintained for at least five years, or for another reasonable period of time determined by the department or delegated agency, except that the results of tank tightness testing conducted in accordance with CFR 40 Part 280.44 shall be retained until the next test is conducted.

Comments:

Technician Name: Scott Pike
Signature:

Date: 12/04/2014

Permit to work for Petroleum/Convenience Sites

Worker Signatures: I have reviewed and understand the conditions of this permit and its attachments. I will report hazardous conditions or acts identified on this jobs ite to my supervisor or customer representative.	1: 2: 3:

Person In Charge: Scott Pike
Location: Rucker Food Mart, 4231 Rucker Ave Everett, WA
Date: 12/04/2014
Time Issued: 12/04/2014 12:11 pm
Work Order#: 43798
Time Expires: 12/05/2014 12:11 pm
Nearest Hospital: (see hospital map)
Emergency Phone#: 911

REQUIRED PERMITS AND/OR PROCEDURES

[ ] Hot Work
[ ] Excavation Checklist
[X] Lock-Out Tag-Out
[ ] Pre Entry Checklist
[ ] Confined Space
[ ] One Call
[ ] Hoisting/Rigging
[ ] Management Of Change
[ ] Work Notification
[ ] Other

HAZARDOUS ENERGY LOCK-OUT TAG-OUT (LOTO)- API 1646 Section 12

Has piece of equipment or system been properly isolated? Yes
Has energy isolation been reviewed by all affected workers? Yes
List All Affected Workers: Scott Pike

CONFINED SPACE PRE-ENTRY CHECKLIST / RECLASSIFICATION - API 1646 Section 11

Surrounding areas free of hazards? Yes
Proper notifications made? Yes
Does your knowledge indicate that the area will remain free from all atmoshperic hazards? Yes
Are you trained in confined space entry? Yes
Are you trained in the operation of the air monitor used? Yes
Has the monitor been calibrated before use? Yes
Did you test the atmoshphere in the space before entry? Yes
Did the atmosphere check as acceptable? Yes
Will the atmosphere be continuously monitored? Yes

Sump	Time	Isolation	Lel	Oxygen	Toxicity	Atmosphere	Electrical Loto	Lines Disconnected	Pumps Off	Valves Shut

I ensure this permit has been filled out completely and in conjunction with all applicable OSHA requirements to provide a safe workplace for all workers and myself. I will take action to eliminate hazardous conditions or acts identified on this job site.

Person in Charge Signature:

Job Clearance Form

Contractor instructions prior to start of work. 1. Review form, check appropriate boxes, read and sign at the bottom of this form. 2. Inform dealer, manager or representative of the job to be performed and potential safety concerns and obtain signature.

Station #:	Station Address:	Work Order Number:	Date:
Rucker Food Mart	4231 Rucker Ave, Everett	43798	12/04/2014

Contractor Company Name:	Contact Person in Charge:	Number of Workers:	JFA Reference Number (if required):	Start Time:	End Time:	Labor:	Travel Time:	Travel Distance:
Northwest Tank & Environmental Services, Inc.	Scott Pike				12/4/2014 1:42:30 PM	0.00	0.00	0

Problem / Work Description	Return Call: No Damage Claim: No

PPE REQUIRED (CHECK ALL THAT APPLY AND/OR FILL IN "OTHER" BLANK SPACE)

Safety Vest: Yes	Hard Hat: N/A	Shoes/Boots: Yes	Hearing Protection: N/A	Respirator: N/A
Protective Clothing: Yes	Gloves: Yes	Safety glasses/goggles: Yes	Fire Resist Clothing/Welding PPE: N/A	Other:

Contractor to complete section below if circumstances on site or specific to this job may generate additional hazards not described in the JSA.

Task Step	Hazards not covered by JSA	How to reduce or eliminate risk - include extra PPE to be worn
Site Info Work Permit Leak Detector Tank Monitor		

Work documentation requirements: Lower Risk - This form may be used as JSA Medium Risk/Higher Risk - JSA Required Higher Risk - JSA Required and other customer requirements may apply

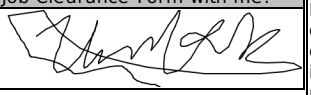
Examples of higher/medium Risk Tasks:
Hot Work
Excavation Checklist
Lock-Out Tag-Out
Pre Entry Checklist
Confined Space
One Call
Hoisting/Rigging
Management Of Change
Work Notification
Other

This form must be completed for each job and updated and re-signed if circumstances change or additional hazards are identified.

SIGN IN

Operating sites: to be signed by the site representative. Non-Operating sites: to be signed by contractor representative only.
Contractor responsibility to inform site of:

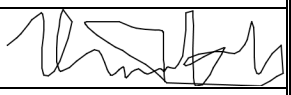
Hazards of the job,
Effects on the site or operation,
Any affect to gasoline deliveries,
Energy isolation needed,
Areas to be barricaded for worker/public safety.

Contractor Representative Name	Signature
Scott Pike	
Site Representative Name	Signature
Contractor has discussed Job Clearance Form with me.	
Thinh	

SIGN OUT AND OPERATOR VERIFICATION OF WORK

General safety checks by contractor

Has the work area been left tidy and safe?
Is the site operator aware of status of work including any remaining isolation
Are changes to equipment documented and communicated?
All incidents, near misses, unsafe situations reported?

Contractor Representative Name	Signature
Scott Pike	
Site Representative Name	Signature
Thinh	
Site Representative Comments	
None	

Please refer to work acknowledgement form for a complete list of parts installed.

Permit to Work

Date:	12/04/2014
Job ID:	43798
Company:	Rucker Food Mart
Site:	Rucker Food Mart
Technician:	Scott Pike

Scope of Work:
Leak Detector Test Annual
Tank Monitor Certification Annual
Line Test Annual

Hazard Analysis:
Hot Work
Excavation Checklist
Lock-Out Tag-Out
Pre Entry Checklist
Confined Space
One Call
Hoisting/Rigging
Management Of Change
Work Notification
Other

Site Evaluation	
E-Stop switch located	Yes
Storm drain(s) located	Yes
Hand/Eyewash facility located	Yes
Identify other contractors	N/A
Identify traffic ingress/egress	Yes
Identify evacuation routes	Yes
Assembly Area:	Away

Personal Protective Equipment	
First Aid Kit stocked	Yes
Note Depleted Stock:	
Nitrile Gloves	Yes
Safety Vest	Yes
Safety Glasses	Yes
Hard Hat	N/A
Hearing Protection	N/A
Knee Pads	Yes
Back Brace	N/A
Harness / Lanyard	N/A

Safety Equipment	
Lockout / Tagout	Yes
Oxygen / Vapor Sensor	Yes
Ventilator	N/A
Retrieval Equipment	N/A
Delineators / Perimeter Fencing	Yes
Ground Fault Circuit Interruptor	N/A
20# Fire Extinguisher	Yes
Static Grounds	N/A
Explosion-Proof Pump	N/A
Absorbant Rags	N/A
Communication Equipment (cell phone)	Yes
Scissor Lift**	N/A
** For work above 6', an elevated work permit is required.	
Refer to your Company Safety manual for standard operating procedures and equipment standards. Please contact your immediate supervisor to clarify procedures not covered in your safety manual.	

Pre-Operation Checks	
Ladder Inspection **	N/A
Extension Cord Inspection	N/A
Oxygen / Vapor Sensor Calibrated	Yes
Tools / Equipment in Good Repair	Yes
Equipment Grounding	N/A
Hazard Communication	Yes
** Work cannot be performed on ladder above 6'.	

Pre-Entry Checklist for Confined Space	
Is the sump greater than 5' deep?	No
Is there hazardous liquid/vapor present?	No
Is there a lack of oxygen within the space?	No
IF ANY OF THESE ARE ANSWERED YES A PERMIT MUST BE ISSUED!	

Job Completion Checklist	
Have all isolation mechanisms been removed	Yes
Have you pumped from each product?	Yes
Are all dispensers out of "stand-alone"	N/A
Have you walked the site for tools or hazards?	N/A

VEEDER-ROOT
TLS-250
TANK LEVEL SENSOR

CALENDAR CLOCK:
DEC 4, 2014
1:43 PM

LEAK DETECT START:
12:01 AM

LEAK DETECT STOP:
5:01 AM

AUTO PRINT :1
DISABLED

AUTO PRINT :2
DISABLED

AUTO PRINT :3
DISABLED

SECURITY CODE:
000000

RELAY CONFIGURATION

	RLY 1	RLY
LEAK ALM	NO	NO
HI WATER	NO	NO
OVERFILL	NO	YES
LO LIMIT	NO	NO
THEFT ALM	YES	NO
EXT.INPUT	NO	NO

VEEDER-ROOT
TLS-250
TANK LEVEL SENSOR

INVENTORY REPORT
DEC 4, 2014
1:44 PM

TANK 1
PRODUCT 1

2347	GALLONS FUE
7674	GALS ULLAGE
27.08	INCHES FUEL
1.7	INCHES WATE
54.1	DEGREES F

TANK 2
PRODUCT 2

1343	GALLONS FUE
8678	GALS ULLAGE
18.26	INCHES FUEL
0.0	INCHES WATE
52.3	DEGREES F

TANK 3
PRODUCT 3

2759	GALLONS FUE
7262	GALS ULLAGE
30.43	INCHES FUEL
0.0	INCHES WATE
54.8	DEGREES F

Northwest Tank & Environmental Services, Inc.
17407 59th Ave SE
Snohomish, WA 98296
PH: (800) 742-9620 FAX: (425) 645-7881
http://www.nwtank.com

Monday, December 14, 2015

Rucker Food Mart
4231 Rucker Ave
Everett, WA 98203-2244

Rucker Food Mart
4231 Rucker Ave
Everett, WA 95959

RE: Job ID 50778

Dear Valued Customer:

The **Official Report** including all test results and any supporting documentation are enclosed. The test data covered in this report are specific to each test conducted. For your convenience, a summary of testing conducted is provided on the report cover page.

Unless stated otherwise, all compliance testing data must be maintained on site for a minimum of **5 years**. Instructions for specific test types may follow.

Please call if you have any questions or require additional information.

Washington State Department of Ecology Tightness Checklist

As an added service to you, Northwest Tank has sent a copy of the Tightness Testing Checklist to the Department of Ecology. Please sign the final page of the DOE checklist marked "Tank Owner / Authorized Representative" if applicable and keep a copy on site for Five years. You DO NOT need to send an additional copy to the DOE.

Sincerely,

Svetlana Vovkulin

Northwest Tank & Environmental Services, Inc.

Maintain all test reports on-site for a minimum of 5 years.

OFFICIAL REPORT

Test Report For:

Client
Rucker Food Mart
4231 Rucker Ave
Everett, WA 98203-2244
Job #: 50778

Site
Rucker Food Mart
4231 Rucker Ave
Everett, WA 95959

Date Testing Conducted

Tuesday December 1, 2015

Testing Summary

Leak Detector Test Annual	Pass
Tank Monitor Certification Annual	Pass
Line Test Annual	Pass

Report Analyst: _____ Certified Supervisor: Scott Pike Certificate #: 5053249-U3

Work Acknowledgement Form

Customer Name: Rucker Food Mart
Site Name: Rucker Food Mart
Site Address: 4231 Rucker Ave, Everett
Job Number: 50778
Ticket / PO#: COD
Date Of Service: 12/01/2015

Testing Company: Northwest Tank & Environmental Services, Inc.
Primary Technician: Scott Pike
Address: 17407 59th Ave SE
City/State/Zip: Snohomish, WA 98296
PH: (800) 742-9620

Start Time:	09:14:03	End Time:	10:31:21	Number of Technicians:	2

Scope of work scheduled:
Leak Detector Test Annual
Tank Monitor Certification Annual
Line Test Annual

Site Representative Upon Checkin: Thinh
Signature:

Monitoring System Issues Observed Upon Arrival:
None

Dispenser and UST System Issues Observed Upon Arrival:
None

Dispatch Notes:

Technician Comments:
All Good

-----Leak Detector-----
Comments - Site pass all LLD's restricted the flow when a leak was simulated

Parts Installed

Qty	Part #	Model	Name	Serial #	Core Retained	Repair Time
1	DISC	NWT	Discount	null	null	0

Monitoring System Issues Noted at Departure:
None

Dispenser and UST System Issues Noted at Departure:
None

Monthly Monitoring Records for the last 12 Months

Tanks					
Tank State ID	**Product**	**Tank Overfill and Monthly Monitoring Verification**	**Verification Method**	**Monthly Monitor**	**Records Maintained 12 Months**
2	Premium	DTFV = Drop Tube Flapper Valve	Visual	ATG	Yes
3	Regular	DTFV = Drop Tube Flapper Valve	Visual	ATG	Yes
1	Diesel	DTFV = Drop Tube Flapper Valve	Visual	ATG	Yes

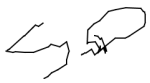
Lines			
Line ID	**Tank State ID**	**Line Monthly Monitoring Verification**	**Records Maintained 12 Months**
1	3	Annual Line Test	Yes
2	2	Annual Line Test	Yes
3	1	Annual Line Test	Yes

Post-Operation Checks

Technician has pumped from each product? Yes

Technician has walked the site for remaining tools and hazards? Yes

Technician Signature:



Have all isolated mechanisms been removed? Yes

Dispensers out of stand-alone? N/A

Site Representative at Checkout:

Monitoring System Certification

This form must be used to document testing and servicing of monitoring equipment. A separate certification or report must be prepared for each monitoring system control panel by the technician who performs the work. A copy of this form must be provided to the tank system owner/operator. The owner/operator must submit a copy of this form to the local agency regulating UST systems within 30 days of test date.

A. General Information

Company Name: Rucker Food Mart
Site Address: 4231 Rucker Ave
Facility Contact Person: Mr. Kim
Make / Model Monitoring System: V-R TLS 250

Date Of Testing: 12/01/2015
Site Name: Rucker Food Mart
City, State, ZIP: Everett, WA 95959
Facility Phone Number: 425-339-1212
Serial #: 4774

B. Inventory of Equipment Tested/Certified

Tank #: 2 Premium	
In-Tank Gauging Probe	Mag 1 Probe
Annular Space or Vault Sensor:	N/A
Piping Sump / Trench Sensor:	N/A
Fill Sump Sensor:	N/A
Mechanical Line Leak Detector:	FX1V
Electronic Line Leak Detector:	N/A
Tank Overfill / High Level Sensor:	Emco DT
Other:	

Tank #: 3 Regular	
In-Tank Gauging Probe	Mag 1 Probe
Annular Space or Vault Sensor:	N/A
Piping Sump / Trench Sensor:	N/A
Fill Sump Sensor:	N/A
Mechanical Line Leak Detector:	FX1V
Electronic Line Leak Detector:	N/A
Tank Overfill / High Level Sensor:	Emco DT
Other:	

Tank #: 1 Diesel	
In-Tank Gauging Probe	Mag 1 Probe
Annular Space or Vault Sensor:	N/A
Piping Sump / Trench Sensor:	N/A
Fill Sump Sensor:	N/A
Mechanical Line Leak Detector:	FX1DV
Electronic Line Leak Detector:	N/A
Tank Overfill / High Level Sensor:	Emco DT
Other:	

Dispenser ID:	1/2
Dispenser Containment Sensors Model:	N/A
Shear Valves: Yes	**Floats & Chains:** N/A

Dispenser ID:	3/4
Dispenser Containment Sensors Model:	N/A
Shear Valves: Yes	**Floats & Chains:** N/A

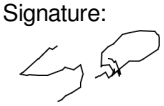
Dispenser ID:	5/6
Dispenser Containment Sensors Model:	N/A
Shear Valves: Yes	**Floats & Chains:** N/A

Dispenser ID:	7/8
Dispenser Containment Sensors Model:	N/A
Shear Valves: Yes	**Floats & Chains:** N/A

C. Certification

I certify that the equipment identified in this document was inspected/serviced in accordance with the manufacturers' guidelines. Attached to this certification is information (e.g. manufacturers' checklists) necessary to verify that this information is correct and a Plot Plan showing the layout of monitoring equipment. For any equipment capable of generating such reports, I have also attached a copy of the report (check all that apply):

Technician Name: Scott Pike
Certification Number: 5053249-U3
Expiration Date: 11/22/2015
Signature:



Testing Company Name: Northwest Tank & Environmental Services, Inc.
Address: 17407 59th Ave SE Snohomish, WA 98296
Date of Testing: 12/01/2015

D. Results of Testing/Service

Yes	Is the audible alarm operational?
Yes	Is the visual alarm operational?
N/A	Were all sensors visually inspected, functionally tested, and confirmed operational?
N/A	If alarms are relayed to a remote monitoring station, is all communications equipment operational?
N/A	For pressurized piping systems, does the turbine automatically shut down if the piping secondary containment monitoring system detects a leak, fails to operate, or is electrically disconnected?
N/A	If yes: which sensors initiate positive shut-down?
N/A	Did you confirm positive shut-down due to leaks and sensor failure/disconnection?
N/A	For tank systems that utilize the monitoring system as the primary tank overfill warning device (i.e. no mechanical overfill prevention valve is installed), is the overfill warning alarm visible and audible at the tank fill point(s) and operating properly?
N/A	If so, at what percent of tank capacity does the alarm trigger?
No	Was any monitoring equipment replaced? If yes, identify specific sensors, probes or other equipment replaced and list the manufacturer name and model for all replacement parts in Section E below.
N/A	Was liquid found in any secondary containment systems designed as dry systems?
	If yes, what type of liquid?
Yes	Was monitoring system set-up reviewed to ensure proper settings? Attach setup reports, if applicable.
Yes	Is all monitoring equipment operational per manufacturers specifications?

In section E. below, describe how and when these deficiencies were or will be corrected.

E. Comments

State Tank ID	Product	Manual Stick Readings(inches)	Gauge Readings(inches)	Difference
2	Premium	34	32.13	1.87
3	Regular	32.5	30.98	1.52
1	Diesel	73	71.14	1.86

F. In-Tank Gauging / SIR Equipment

This section must be completed if in-tank gauging equipment is used to perform leak detection monitoring.

Yes	Has all input wiring been inspected for proper entry and termination, including testing for ground faults?
No	Were all tank gauging probes visually inspected for damage and residue buildup?
Yes	Was accuracy of system product level readings tested?
Yes	Was accuracy of system water level readings tested?
No	Were all probes reinstalled properly?
Yes	Were all items on the equipment manufacturer's maintenance checklist completed?

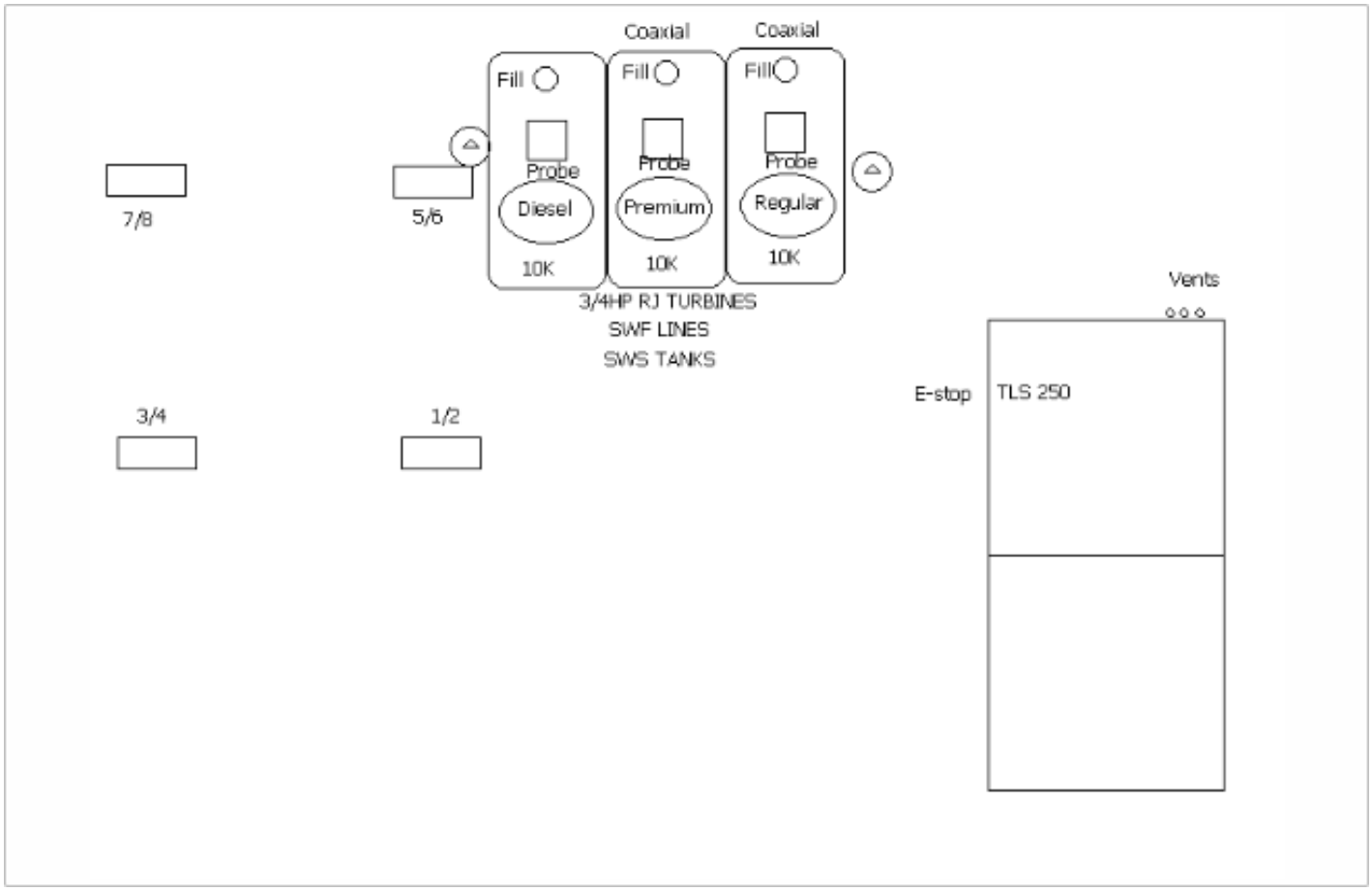
G. Line Leak Detectors (LLD):

Yes	For equipment startup or annual equipment certification, was leak simulated to verify LLD performance?
3 GPH	Leak Rate
Yes	Were all LLDs confirmed operational and accurate within regulatory requirements?
Yes	Was the testing apparatus properly calibrated?
Yes	For mechanical LLDs, does the LLD restrict product flow if it detects a leak?
N/A	For electronic LLDs, does the turbine automatically shut off if the LLD detects a leak?
N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system is disabled or disconnected?
N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system malfunctions or fails a test?
N/A	For electronic LLDs, have all accessible wiring connections been visually inspected?
N/A	Were all items on the equipment manufacturer's maintenance checklist completed?

Site Map

Customer Name: Rucker Food Mart **Site Name:** Rucker Food Mart

Site Address: 4231 Rucker Ave, Everett
Job Number: 50778



Automatic Line Leak Detector Test Results

Company Name: Rucker Food Mart
Site Name: Rucker Food Mart
Address: 4231 Rucker Ave Everett, WA 95959
Test Date/Time: 12/01/2015 09:14:03 am

Job ID Number: 50778
Technician Name: Scott Pike
License Number: 5053249-U3
Expiration Date: 11/22/2015

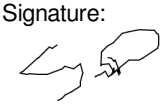
Product: Diesel Tank ID: 1 LD Type: Mechanical	Make: Red Jacket Model: FX1DV Serial#: UNK	Operating Pressure: 30 Holding Pressure: 30 Bleedback (ml): 100	**Result:** Pass
Additional Data For Mechanical Leak Detectors Only Metering Pressure: 17 Step Through Time: 3			
Product: Premium Tank ID: 2 LD Type: Mechanical	Make: Red Jacket Model: FX1V Serial#: UNK	Operating Pressure: 25 Holding Pressure: 25 Bleedback (ml): 200	**Result:** Pass
Additional Data For Mechanical Leak Detectors Only Metering Pressure: 13 Step Through Time: 3			
Product: Regular Tank ID: 3 LD Type: Mechanical	Make: Red Jacket Model: FX1V Serial#: UNK	Operating Pressure: 27 Holding Pressure: 27 Bleedback (ml): 200	**Result:** Pass
Additional Data For Mechanical Leak Detectors Only Metering Pressure: 14 Step Through Time: 3			

Leak detector testing conducted in accordance with the procedures and limitations of the LDT 890 leak detector tester. A leak is simulated at the highest point in the line using the LDT 890 calibrated to 3 gph at a metering pressure of 10 psi. The owner or operator of the UST system is required to ensure any failed leak detector is replaced before placing the line back in service.

The results of any sampling, testing, or monitoring shall be maintained for at least five years, or for another reasonable period of time determined by the department or delegated agency, except that the results of tank tightness testing conducted in accordance with CFR 40 Part 280.44 shall be retained until the next test is conducted.

Comments: Site pass all LLD's restricted the flow when a leak was simulated

Technician Name: Scott Pike
Signature:



Date: 12/01/2015

Underground Storage Tank Tightness Testing Checklist

1. UST SYSTEM LOCATION AND OWNER

UBI Number: 602-886-207	Site ID Number: 4063
Site / Business Name	Rucker Food Mart Rucker Food Mart
Site Address	4231 Rucker Ave Snohomish
	Everett, WA 98203-2244
Telephone	425-339-1212
UST Owner/Operator	Rucker Food Mart
Mailing Address	4231 Rucker Ave
	Everett, WA 98203-2244
Telephone	425-339-1212

2. FIRM PERFORMING WORK

Service Company	Northwest Tank & Environmental Services, Inc.
Service Co Address	17407 59th Ave SE
	Snohomish, WA 98296
IFCI Certification Number: 5053249-U3	Certification Issue Date (Month/Year): 2013-11-22 00:00:00
Telephone	(800) 742-9620

I. TIGHTNESS TESTING METHOD

Date Of Test: 12/01/2015

1. Tightness testing method(s) used (indicate if more than one method was used):
Test method name/version/Manufacturer:
ATG

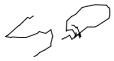
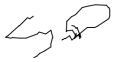
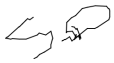
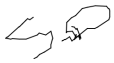
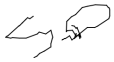
Note: A tank must be tested up to the product level limited by the overfill prevention device. If an overfill prevention device is not installed, a tank must be tested up to the 95% full level. When underfill volumetric testing methods are used, the tank must be: 1) filled with product to the 95% full level or 2) the portion of the tank above the product level must be tested using a non volumetric method which meets performance standards, for tightness testing.

2. Indicate the method used to determine if groundwater was present above the bottom of the tank during the test (required for single wall tanks): N/A

3. Method used for release detection: ATG	4. Reason for conducting tightness test: Required Release Detection Method
5. Type of test conducted: Line and Leak Detectors	6. Test method type: Volumetric

II. TEST METHOD CHECKLIST

The following items shall be initialed by the Certified Supervisor whose signature appears on this form:

	Yes/No/NA	Initials
1. Has the tightness testing method used been demonstrated to meet the performance standard specified in the UST rules for the conditions under which the test was conducted? (e.g. detecting a 0.10 gallon per hour leak rate with probability of detection of at least 95% and a probability of false alarm no more than 5%)	Yes	
2. Have all written testing procedures developed by the manufacturer of the testing equipment and method been followed while the test was being setup.	Yes	
3. Was the product level in the tank during the test within the limitations of the test methods performance standards?	Yes	
4. If groundwater was present above the bottom of the tank, have the testing procedures accounted for its presence? (required for single wall tanks)	N/A	
5. If the tightness test is considered a failed test, has the owner/operator been notified of the test results? (Note: Tank owner must report a failed tightness test as a suspected release within 24 hours to UST staff at the appropriate Ecology office.	N/A	

III. TANK INFORMATION CHECKLIST

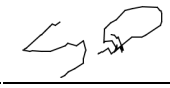
1. Tank ID Number (tank name registered with Ecology)	2	3	1			
2. Date Installed	1986-01-01	1986-01-01	1986-01-01			
3. Tank capacity in gallons	10000	10000	10000			
4. Last substance stored	Premium	Regular	Diesel			
5. Number of tank compartments	1	1	1			
6. Tank type (S) Single Wall; (D) Double Wall; (P) Partitioned	SW	SW	SW			
7. Is overfill device present? (Yes/No)	DTFV = Drop Tube Flapper Valve	DTFV = Drop Tube Flapper Valve	DTFV = Drop Tube Flapper Valve			
Tank ID associated to each tank	2	3	1			
8. Percentage of product in tank during test? (Volume % must comply with test method certification requirements)						
9. The test method used can detect a leak of how many GPH?	.05	.05	.05	.05	.05	.05
10. The numerical tank test results are? (In gallons per hour)						
11. Based on evaluating test results and conducting any retesting as necessary as per test protocol to obtain conclusive test results; the test results are?						

IV. LINE AND LEAK DETECTOR INFORMATION

Tank ID associated to each line	3	2	1			
1. Piping Type: (S) Single Wall; (D) Double Wall	Single	Single	Single			
2. Pump Type: (T) Turbine; (S) Suction	Pressure	Pressure	Pressure			
3. (a) If turbine is leak detector present (Yes/No)	Yes	Yes	Yes			
If present, was lead seal intact (Yes/No)	N/A	N/A	N/A			
(b) If suction, check valve located at: (T)tank; (P)pump	N/A	N/A	N/A			
4. The numerical line test results are? (gallons per hour)	.00000	.00000	.00000			
5. Line tightness test results? (Pass/Fail)	Pass	Pass	Pass			
Tank ID associated to each leak detector	1	2	3			
Leak Detector Test Results (Pass/Fail)	Pass	Pass	Pass			

V. REQUIRED SIGNATURES

I hereby attest, that I have been the Certified Supervisor present during the above listed testing activities, and to the best of my knowledge they have been conducted in compliance with all applicable state and federal laws, regulations and procedures, pertaining to underground storage tanks.

12/01/2015  Scott Pike

Date	**Signature of Certified Supervisor**	**Printed Name**

Date	**Signature of Tank Owner/Authorized Representative**	**Printed Name**

Line Tightness Test Results

Company Name:	Rucker Food Mart	Job ID Number:	50778
Site Name:	Rucker Food Mart	Technician Name:	Scott Pike
Address:	4231 Rucker Ave Everett, WA 98203-2244	License Number:	5053249-U3
Test Date:	12/01/2015	Expiration Date:	11/22/2015

Line Tightness Test Data

Product:	Regular	Tank ID:	3	Start Time:	09:40
Approx Length:	25	STP MFG:	Red Jacket 3/4 HP	End Time:	10:10
Size:	2	Operating Pressure:	25	Total Test Time:	30mins
Line Material:	SWF	Test Pressure:	37.5	Final Leak Rate:	.00000
Wall Type:	Single	Isolation Dispenser:	Impact Valve	Impact Valves Operational:	Yes
Boot Back:	N/A	Isolation Pump:	Ball Valve	Check Valve Location:	N/A
LD Present:	25	Initial Cylinder Level:	0.060	**Result:**	Pass
Line Type:	Pressure	Final Cylinder Level:	0.060		

Product:	Premium	Tank ID:	2	Start Time:	09:40
Approx Length:	25	STP MFG:	Red Jacket 3/4 HP	End Time:	10:10
Size:	2	Operating Pressure:	27	Total Test Time:	30mins
Line Material:	SWF	Test Pressure:	40.5	Final Leak Rate:	.00000
Wall Type:	Single	Isolation Dispenser:	Impact Valve	Impact Valves Operational:	Yes
Boot Back:	N/A	Isolation Pump:	Ball Valve	Check Valve Location:	N/A
LD Present:	25	Initial Cylinder Level:	0.060	**Result:**	Pass
Line Type:	Pressure	Final Cylinder Level:	0.060		

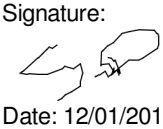
Product:	Diesel	Tank ID:	1	Start Time:	09:40
Approx Length:	25	STP MFG:	Red Jacket 3/4 HP	End Time:	10:10
Size:	2	Operating Pressure:	30	Total Test Time:	30mins
Line Material:	SWF	Test Pressure:	45	Final Leak Rate:	.00000
Wall Type:	Single	Isolation Dispenser:	Impact Valve	Impact Valves Operational:	Yes
Boot Back:	N/A	Isolation Pump:	Ball Valve	Check Valve Location:	N/A
LD Present:	25	Initial Cylinder Level:	0.060	**Result:**	Pass
Line Type:	Pressure	Final Cylinder Level:	0.060		

Line tightness testing conducted in accordance with the procedures and limitations of the Accurite Training and Services Corp. pipeline tester. A consistent leak rate of .01 gph or higher at 150% of normal operating pressure is considered a failure. The owner or operator of the UST system is required to report all failures to the appropriate agency within 24 hours.

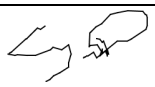
The results of any sampling, testing, or monitoring shall be maintained for at least five years, or for another reasonable period of time determined by the department or delegated agency, except that the results of tank tightness testing conducted in accordance with CFR 40 Part 280.44 shall be retained until the next test is conducted.

Comments:

Technician Name: Scott Pike
Signature:



Date: 12/01/2015

Worker Signatures: I have reviewed and understand the conditions of this permit and its attachments. I will report hazardous conditions or acts identified on this jobs ite to my supervisor or customer representative.	1:  2: 3:

Person In Charge: Scott Pike
Location: Rucker Food Mart, 4231 Rucker Ave Everett, WA
Date: 12/01/2015
Time Issued: 12/01/2015 09:40 am
Work Order#: 50778
Time Expires: 12/02/2015 09:40 am
Nearest Hospital: (see hospital map)
Emergency Phone#: 911

REQUIRED PERMITS AND/OR PROCEDURES

[ ] Hot Work
[ ] Excavation Checklist
[ ] Lock-Out Tag-Out
[ ] Pre Entry Checklist
[ ] Confined Space
[ ] One Call
[ ] Hoisting/Rigging
[ ] Management Of Change
[ ] Work Notification
[ ] Other

HAZARDOUS ENERGY LOCK-OUT TAG-OUT (LOTO)- API 1646 Section 12

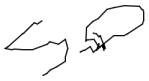
Has piece of equipment or system been properly isolated? Yes
Has energy isolation been reviewed by all affected workers? Yes
List All Affected Workers: Scott Pike Juan Carrillo

CONFINED SPACE PRE-ENTRY CHECKLIST / RECLASSIFICATION - API 1646 Section 11

Surrounding areas free of hazards? Yes
Proper notifications made? Yes
Does your knowledge indicate that the area will remain free from all atmoshperic hazards? Yes
Are you trained in confined space entry? Yes
Are you trained in the operation of the air monitor used? Yes
Has the monitor been calibrated before use? Yes
Did you test the atmoshphere in the space before entry? Yes
Did the atmosphere check as acceptable? Yes
Will the atmosphere be continuously monitored? Yes

Sump	Time	Isolation	Lel	Oxygen	Toxicity	Atmosphere	Electrical Loto	Lines Disconnected	Pumps Off	Valves Shut

I ensure this permit has been filled out completely and in conjunction with all applicable OSHA requirements to provide a safe workplace for all workers and myself. I will take action to eliminate hazardous conditions or acts identified on this job site.

Person in Charge Signature: 

Job Clearance Form

Contractor instructions prior to start of work. 1. Review form, check appropriate boxes, read and sign at the bottom of this form. 2. Inform dealer, manager or representative of the job to be performed and potential safety concerns and obtain signature.

Station #:	Station Address:	Work Order Number:	Date:
Rucker Food Mart	4231 Rucker Ave, Everett	50778	12/01/2015

Contractor Company Name:	Contact Person in Charge:	Number of Workers:	JFA Reference Number (if required):	Start Time:	End Time:	Labor:	Travel Time:	Travel Distance:
Northwest Tank & Environmental Services, Inc.	Scott Pike				12/1/2015 10:31:21 AM	0.00	0.00	0

Problem / Work Description	Return Call: No Damage Claim: No

PPE REQUIRED (CHECK ALL THAT APPLY AND/OR FILL IN "OTHER" BLANK SPACE)

Safety Vest: Yes	Hard Hat: N/A	Shoes/Boots: Yes	Hearing Protection: N/A	Respirator: N/A
Protective Clothing: Yes	Gloves: Yes	Safety glasses/goggles: Yes	Fire Resist Clothing/Welding PPE: N/A	Other:

Contractor to complete section below if circumstances on site or specific to this job may generate additional hazards not described in the JSA.

Task Step	Hazards not covered by JSA	How to reduce or eliminate risk - include extra PPE to be worn
Line Test Site Info Work Permit Leak Detector Tank Monitor		

Work documentation requirements: Lower Risk - This form may be used as JSA Medium Risk/Higher Risk - JSA Required Higher Risk - JSA Required and other customer requirements may apply

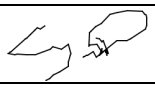
Examples of higher/medium Risk Tasks:
Hot Work
Excavation Checklist
Lock-Out Tag-Out
Pre Entry Checklist
Confined Space
One Call
Hoisting/Rigging
Management Of Change
Work Notification
Other

This form must be completed for each job and updated and re-signed if circumstances change or additional hazards are identified.

SIGN IN

Operating sites: to be signed by the site representative. Non-Operating sites: to be signed by contractor representative only. Contractor responsibility to inform site of:

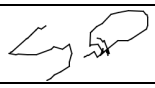
Hazards of the job,
Effects on the site or operation,
Any affect to gasoline deliveries,
Energy isolation needed,
Areas to be barricaded for worker/public safety.

Contractor Representative Name	Signature
Scott Pike	
Site Representative Name	Signature
Contractor has discussed Job Clearance Form with me.	
Thinh	

SIGN OUT AND OPERATOR VERIFICATION OF WORK

General safety checks by contractor

Has the work area been left tidy and safe?
Is the site operator aware of status of work including any remaining isolation
Are changes to equipment documented and communicated?
All incidents, near misses, unsafe situations reported?

Contractor Representative Name	Signature
Scott Pike	
Site Representative Name	Signature
Thinh	
Site Representative Comments	
None	

Please refer to work acknowledgement form for a complete list of parts installed.

Permit to Work

Date:	12/01/2015
Job ID:	50778
Company:	Rucker Food Mart
Site:	Rucker Food Mart
Technician:	Scott Pike

Scope of Work:
Leak Detector Test Annual
Tank Monitor Certification Annual
Line Test Annual

Hazard Analysis:
Hot Work
Excavation Checklist
Lock-Out Tag-Out
Pre Entry Checklist
Confined Space
One Call
Hoisting/Rigging
Management Of Change
Work Notification
Other

Site Evaluation	
E-Stop switch located	Yes
Storm drain(s) located	No
Hand/Eyewash facility located	Yes
Identify other contractors	Yes
Identify traffic ingress/egress	Yes
Identify evacuation routes	Yes
Assembly Area:	away

Personal Protective Equipment	
First Aid Kit stocked	Yes
Note Depleted Stock:	
Nitrile Gloves	Yes
Safety Vest	Yes
Safety Glasses	Yes
Hard Hat	N/A
Hearing Protection	N/A
Knee Pads	Yes
Back Brace	N/A
Harness / Lanyard	N/A

Safety Equipment	
Lockout / Tagout	Yes
Oxygen / Vapor Sensor	Yes
Ventilator	N/A
Retrieval Equipment	N/A
Delineators / Perimeter Fencing	Yes
Ground Fault Circuit Interruptor	N/A
20# Fire Extinguisher	Yes
Static Grounds	N/A
Explosion-Proof Pump	N/A
Absorbant Rags	N/A
Communication Equipment (cell phone)	Yes
Scissor Lift**	N/A
** For work above 6', an elevated work permit is required.	
Refer to your Company Safety manual for standard operating procedures and equipment standards. Please contact your immediate supervisor to clarify procedures not covered in your safety manual.	

Pre-Operation Checks	
Ladder Inspection **	N/A
Extension Cord Inspection	N/A
Oxygen / Vapor Sensor Calibrated	Yes
Tools / Equipment in Good Repair	Yes
Equipment Grounding	N/A
Hazard Communication	Yes
** Work cannot be performed on ladder above 6'.	

Pre-Entry Checklist for Confined Space	
Is the sump greater than 5' deep?	No
Is there hazardous liquid/vapor present?	No
Is there a lack of oxygen within the space?	No
IF ANY OF THESE ARE ANSWERED YES A PERMIT MUST BE ISSUED!	

Job Completion Checklist	
Have all isolation mechanisms been removed	Yes
Have you pumped from each product?	Yes
Are all dispensers out of "stand-alone"	N/A
Have you walked the site for tools or hazards?	N/A

VEEDER-ROOT
TLS-250
TANK LEVEL SENSOR
- - - - - - - - - -

ALENDAR CLOCK:
EC 1, 2015
0:03 AM

EAK DETECT START:
2:01 AM

EAK DETECT STOP:
5:31 AM

JTO PRINT :1
SABLED

ITO PRINT :2
SABLED

TO PRINT :3
SABLED

CURITY CODE:
0000

LAY CONFIGURATION:

	RLY 1	RLY 2
AK ALM	NO	NO
WATER	NO	NO
ERFILL	NO	YES
LIMIT	NO	NO
EFT ALM	YES	NO
.INPUT	NO	NO

VEEDER-ROOT
TLS-250
NK LEVEL SENSOR
- - - - - - - - -

ENTORY REPORT
1, 2015
04 AM

K 1
DUCT 1
935 GALLONS FUEL
065 GALS ULLAGE
.13 INCHES FUEL
1.8 INCHES WATER
3.2 DEGREES F

K 2
DUCT 2
790 GALLONS FUEL
210 GALS ULLAGE
.98 INCHES FUEL
0.0 INCHES WATER
51.9 DEGREES F

NK 3

PRODUCT 3
7940 GALLONS FUEL
2060 GALS ULLAGE
71.09 INCHES FUEL
0.0 INCHES WATER
50.9 DEGREES F