2016 Tribal Lands and Environment Forum

Underground Storage Tanks

Mohegan

Connecticut

Program Updates

to

Eight Northern Indian Pueblos Council

Underground Storage Tank Program

New Mexico

Leonard Sabatino

Introduction

Leonard Sabatino

Eight Northern Indian Pueblos Council, Inc.

Office of Environmental Technical Assistance

Underground Storage Tank Program

4 Years

Originally from Philadelphia Pennsylvania

Geo-Environmental Studies 2001

9 years at the Los Alamos National Laboratory

19 pueblos

2 tribes

New Mexico, Region 6

Served by ENIPC's UST Program.

46 UST Facilities within the external boundaries of tribal land.

No New Installations, But lots of talk and lots of imagination.

Permanent Closure

Average about 1-2 every 5 years.

Contractor safety is a challenge.

Permanent Closure

How about a Safety Pause?!

Contractor's judgement can be questionable.

Permanent Closure

Almost done.

Did anybody inert the tanks?

Eight Northern Indian Pueblos Council Underground Storage Tank Program

How we are assisting the tribal and pueblo UST facilities in NEW MEXICO today.

Compliance Assistance for Pueblos and Tribes in New Mexico.

What are we up to:

***All assistance visits are on-site training visits that may take up to 7 Hours!**

***Define the requirements for leak detection and leak prevention.**

***Define the facility equipment.**

***Communicate consistently.**

***Have Patience. Lots of Patience.**

***Follow up with reminders, due dates for line testing and corrosion protection testing.**

Operating properly? Good record keeping? Compliance? If not, check your email…

Good morning,

Attached is the UST compliance assistance report for the [redacted]

Thank you for your attention during the compliance assistance training. The training sign in sheet is attached as well (last page).

I do have some recommendations, reminders and important information below associated with operations and maintenance, as well as compliance:

1) As a reminder, the line tightness tests and automatic line leak detector functionality tests will be due on or before 4/28/2016.

2) Recommend renewing the certificate of insurance, the certificate within the compliance assistance binder expired on 1/16/2016. Insurance for UST systems covers cleanups, property damage, and injuries from sudden and non-sudden accidental releases.

3) Recommend utilizing the new assistance binder to train new employees and train to the new UST regulations.

4) Keep up the good work with tank leak testing recordkeeping.

5) Recommend having a spill kit at the facility, a typical spill kit includes: a broom, absorbent material (kitty litter), water tight waste drum or trash can. Recommend the proper disposal of petroleum contaminated absorbent material.

6) Recommend conducting monthly walkthroughs and monitoring deliveries.

7) Recommend installing containment sumps beneath the dispensers to contain drips and leaks coming from within the dispenser above the ground surface.

8) As a reminder, corrosion protection testing for tanks and dispenser sumps will be due June 2017.

All of this information is on page 2 of the report.

I recommend reviewing the report, and print the report for the compliance assistance binder.

Please call me at the number below if you have any questions.

Keep up the good work.

COMPLIANCE ASSISTANCE REPORT FOR UNDERGROUND STORAGE TANKS

FACILITY NAME:	**Date:** 4-19-2016
ADDRESS:	462 North Riverside Drive
CITY:	Espanola
STATE:	NM
ZIP:	87532
COUNTY:	Rio Arriba
FACILITY PHONE NUMBER:	505-747-8168
Facility Operator Rep. Contact:	**Phone:** Cell: 901-8752
UST Owner:	**Phone:** 505 753 7330
Owner Mailing: Address:	PO Box 580
City:	Espanola
State:	NM
Zip:	87532

PERSONNEL	
Report By:	Leonard Sabatino
Date:	4-19-2016
Time:	9AM
Representative Signature:	Not Obtained

COMPLIANCE ASSISTANCE With Release Detection and Release Prevention.

Has the facility met both Significant Operational Compliance Measures for Release **DETECTION** and Release **PREVENTION**: YES

Which compliance measure was not met: NA

Explanation for compliance measure not being met: NA

How the compliance measure not being met can be resolved: NA

C-Store 2

Summary of Facility Monitoring Visit:

C-Store 2

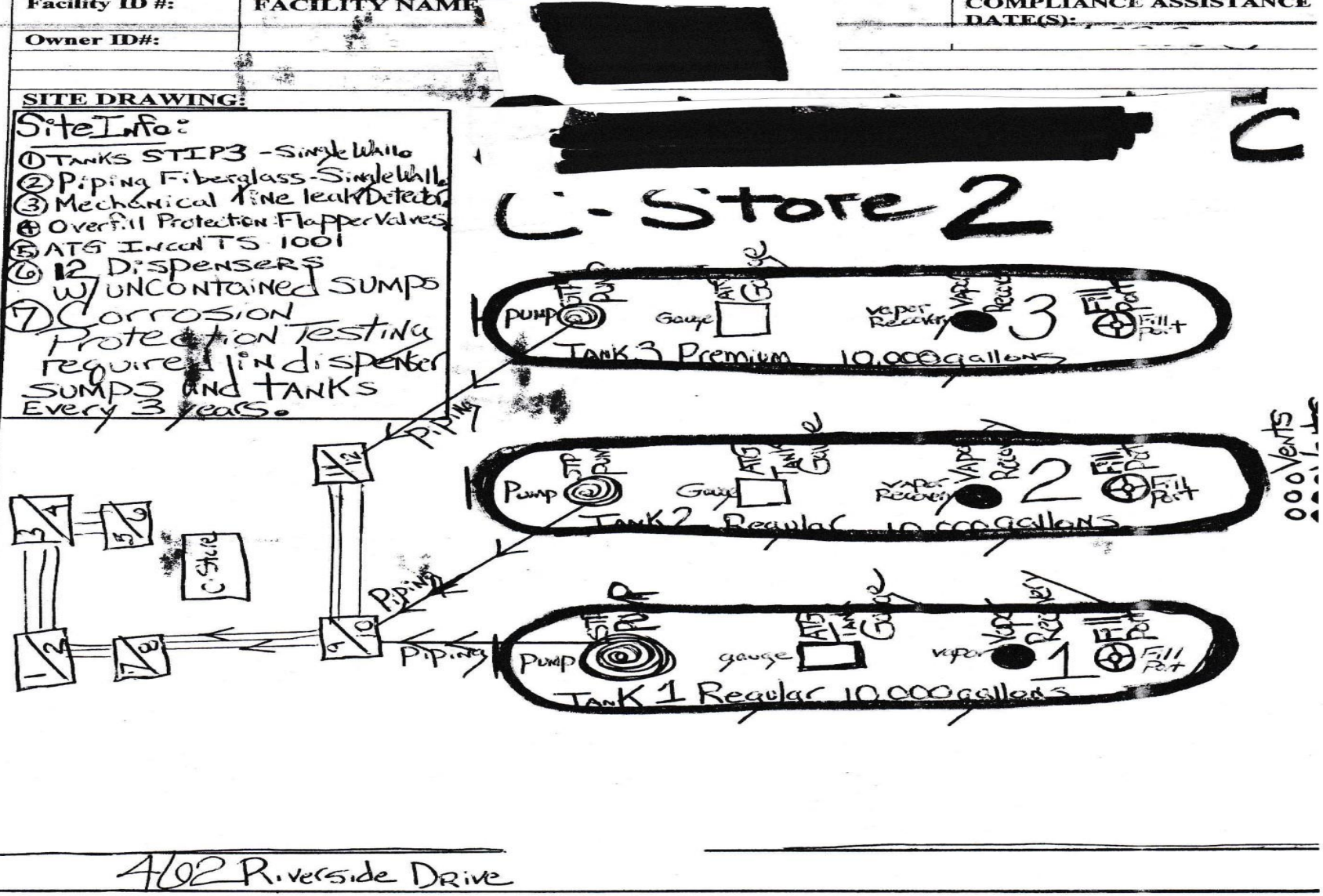
1. Spill Kit: Broom, Absorbent Material, Trash Can - Water tight.
2. Line Tests: Reminder line testing due on or before 4-28-16.
3. Insurance: Recommend Renewing Certificate; Expired 1-16-2016.
4. As a reminder, Corrosion Protection testing for tanks and dispenser sumps will be due June 2017.
5. Tank Leak Detection and Record Keeping organization Looks great.
6. Recommend conducting Monthly Walkthroughs and Monitoring deliveries.
7. Recommend installing containment sumps beneath the dispensers to contain drips and Leaks.

C-STORE 2

Facility ID #:	FACILITY NAME [redacted]	COMPLIANCE ASSISTANCE DATE(S):
Owner ID#:		

SITE DRAWING:

Site Info:
1. Tanks STIP3 - Single Walle
2. Piping Fiberglass - Single Walle
3. Mechanical Line leak Detector
4. Overfill Protection Flapper Valves
5. ATG Incon TS 1001
6. 12 Dispensers w/ UNCONTAINED SUMPS
7. Corrosion Protection Testing required in dispenser SUMPS and TANKS Every 3 years.



402 Riverside Drive

C-Store 2

FACILITY NAME: [redacted] **Date:** 4-19-2016

Underground Storage Tanks Listed Below have been Registered with the Federal EPA

TANK NO.	SIZE of TANK (GALLONS)	PRODUCT STORED	TANK TYPE	STATUS Active or TC	INSTALL DATE	UPGRADE DATE
1	10,000	REGULAR	Coated	Active	9/1994	
2	10,000	REGULAR	AND	↓	9/1994	
3	10,000	PREMIUM	Cathodically	↓	9/1994	
			PROTECTED			
			Steel			
			STI-P3			

TANK TYPE ☑ Single Wall ☐ Double Wall: Single Wall STI-P3

1. Proper design and construction to prevent corrosion? Fiberglass, Metal, or Clad(ACT-100), STIP3 S-P8		☑ Yes ☐ No ☐ NA
EXISTING TANKS: UPGRADES (Tanks installed on or before 12/22/88) ☐ Single Wall OR ☐ Double Wall Tank Type:	PREVENTION	
1. Existing tanks upgraded to meet standard New UST systems? Combination	S-P8	☐ Yes ☐ No ☑ N/A
a. Metal Tank w/ Lining. Date Either was Installed: Last Inspected	S-P7/8	☐ Yes ☐ No ☑ N/A
b. Metal tank with CP. Type of CP: >10 yrs old CP added? Integrity Test and Date?	S-P8	☐ Yes ☐ No ☐ N/A

NOT APPLICABLE

PIPING TYPE ☑ Single Wall ☐ Double Wall: Single Wall Fiberglass Reinforced Plastic

1. Proper design and construction to prevent corrosion? Fiberglass, Non-metallic Flex, Metalw/CP	S-P8	☑ Yes ☐ No ☐ N/A
2. Metal components(flexible connectors, submersible turbine pumps)ProtectedfromCorrosion?How?	S-P8	Anodes
3. Are all **impact valves/shear valves** properly installed (moving parts unobstructed, shear valve properly anchored)? (NFPA 30A Chapter 6 Paragraph 3.9) **(New & Existing Systems-pressurized)**		☑ Yes ☐ No ☐ N/A
1. Is each tank equipped with **Spill Prevention** Equipment?	S-P1	☑ Yes ☐ No ☐ N/A
Spill Prevention equipment has liquid tight sides and bottom (not cracked or broken)?	S-P1	☑ Yes ☐ No ☐ N/A
1. Is each tank equipped with **Overfill Prevention** Equipment?	S-P2	☑ Yes ☐ No ☐ N/A
2. **Overfill Prevention** Equipment designed to: **Shutoff Restrict Alarm**	S-P2	
Automatic flow **shut off** when the tank is no more than ~~95%~~ full? **(device not tampered with or inoperable)**		☑ Yes ☐ No ☐ N/A
Alert the transfer operator when the tank is 90 % full by restricting flow into the tank-**ball float valve.**		☐ Yes ☐ No ☑ N/A
Alert the transfer operator when the tank is 90% full triggering an **overfill alarm** near the fill port? Work?		☐ Yes ☐ No ☑ N/A

OPERATION and MAINTENANCE of CORROSION PROTECTION SYSTEMS		PREVENTION
1. Is the corrosion protection system continuously operated and maintained	S-P5	☑ Yes ☐ No ☐ N/A
2. Are the cathodic protection systems inspected by qualified testers?	S-P5	☑ Yes ☐ No ☐ N/A
3. Was the cathodic protection system tested within **6 months** after installation? Date: ?	S-P4	☐ Yes ☐ No ☐ N/A
4. Is the system tested at least every **3 years**? Dates: 2010, 6-2014	S-P5	☑ Yes ☐ No ☐ N/A
5. Inspection meet the requirements of a code of practice developed by a nationally recognized association?		☑ Yes ☐ No ☐ N/A
6. Does the facility have copies of the **last 2 CP inspections**?		☑ Yes ☐ No ☐ N/A
7. If the UST system has an impressed current, is the **rectifier inspected every 60 days**?	S-P6	☐ Yes ☐ No ☑ N/A
8. As outlined in EPA regulations, does the facility have copies of the last **3 rectifier inspections**?		☐ Yes ☐ No ☑ N/A
9. Are all records of UST system repairs retained for the operating life of the UST system?		☐ Yes ☐ No ☑ N/A
a. Is a tightness test performed on the tank and/or piping within **30 days of a repair**?	S-P3	☐ Yes ☐ No ☑ N/A
b. Is the cathodic protection system tested within **6 months of a repair**?	S-P4	☐ Yes ☐ No ☑ N/A

C-Store 2

FACILITY NAME:	Date: 4-19-2016

Requirements for Tank Leak Testing		DETECTION
1. Does the facility perform a method of release detection? Check "No" if no RD conducted	S-D1	☑ Yes ☐ No ☐ N/A
2. Is the method of release detection capable of detecting a release from any portion of the tank?	S-D2	☑ Yes ☐ No ☐ N/A
3. Is the release detection system installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions including routine maintenance, etc.?		☑ Yes ☐ No ☐ N/A
4. Does the release detection system meet the performance standards? Check **3rd party certification.**	S-D3	☑ Yes ☐ No ☐ N/A
5. Are all USTs monitored at least every **30 days** for releases?	S-D5	☑ Yes ☐ No ☐ N/A
Requirement for Tank Leak Testing Record Keeping **DETECTION**		
1. Does the facility maintain all monitoring results, sampling records, equipment testing, calibration and maintenance records, or leak detection equipment repair records for at least one year?	S-D5	☑ Yes ☐ No ☐ N/A
RELEASE REPORTING, INVESTIGATION, and CONFIRMATION **DETECTION**		
SUSPECTED RELEASES: Report unusual operating conditions, failed tests, product discovery		
1. When a release detection method indicates that a release may have occurred; has the facility notified EPA of a suspected release?	S-D4	☐ Yes ☐ No ☑ NA
2. Facility has resolved suspected releases?	S-D4	☐ Yes ☐ No ☑ NA
SPILLS and OVERFILLS: Report >25 gals, <25 gals can't be cleaned up in 24 hrs, sheen H20		☐ Yes ☐ No ☑ NA

TANKS RELEASE DETECTION/LEAK TESTING METHODS		DETECTION
☑ **1. Automatic Tank Gauging (ATG)**	S-D5	
Make and Model: INCON TS 1001		
a. Is the ATG capable of detecting a leak of 0.2 gal/hr leak rate?	S-D3	☑ Yes ☐ No ☐ N/A
b. As the sole method of release detection, the ATG must test the tank at least once per month in a manner that can detect a 0.2 gal/hr release with a pd > 0.95 and a pfa < 0.05	S-D3	☑ Yes ☐ No ☐ N/A
c. The ATG will generate a hard copy which contains the following:		
i. the time and date of the test		☑ Yes ☐ No ☐ N/A
ii. the tank identification		☑ Yes ☐ No ☐ N/A
iii. the qualitative result either "pass" or "fail"		☑ Yes ☐ No ☐ N/A
☐ **2. Interstitial Monitoring**	S-D5	
Describe the UST system which uses: DW: double walled tank, secondary barrier?		☐ Yes ☐ No ☐ N/A
Can the method detect a release through the inner wall of the tank?	S-D2	☐ Yes ☐ No ☐ N/A
Continuous interstitial monitoring by an automatic leak sensing device that signals to the operator the presence of any regulated substance in the interstitial space or sump: Specify:		☐ Yes ☐ No ☐ N/A
☐ **3. Statistical Inventory Reconciliation (SIR)**	S-D5	
a. Can the SIR method detect a release of 0.2gal/hr from any portion of the UST System that contains product with a pd > 0.95 and a pfa < 0.05?	S-D3	☐ Yes ☐ No ☐ N/A
b. Did the owner/operator receive the monthly report(s) from the SIR provider/vendor within 15 days following the last day of the calendar month for which the analysis was performed?		☐ Yes ☐ No ☐ N/A
c. Did the SIR analysis report include the following information:		
i. the name of the SIR provider and the name and version of the SIR method;		☐ Yes ☐ No ☐ N/A
ii the name and address of the facility at which the analysis was performed;		☐ Yes ☐ No ☐ N/A
iii. a description of the UST system for which the analysis was performed;		☐ Yes ☐ No ☐ N/A
iv. a quantitative statement, in gallons/hr, for each UST system monitored for the month, of the leak threshold, minimum detectable leak rate, and the indicated leak rate;		☐ Yes ☐ No ☐ N/A
v. a qualitative statement of "pass," "fail," or "inconclusive" for each UST system monitored		☐ Yes ☐ No ☐ N/A

NOT APPLICABLE

Notes with regards to SOC Release Detection: REMINDER FOR LINE TESTING

Water in Tank: NONE

Alarm Status: NONE

C-Store 2

FACILITY NAME: [redacted] NTER	Date: 4-19-2016

PIPING RELEASE DETECTION/LEAK TESTING		DETECTION
1. Pressurized Piping: Is release detection performed on the UST system's piping	S-D1	☑ Yes ☐ No ☐ N/A
Automatic Line Leak Detectors (ALLD) installed (one of the following methods is required on all pressurized lines, regardless of line leak detection method used)	S-D5	☑ Yes ☐ No ☐ N/A
TYPE of Line Leak Detectors: MECHANICAL OR ELECTRONIC MODEL: Red Jacket Vapor Less FE PETRO		
1. Automatic flow restrictor-MECHANICAL ***Is a performance test conducted every 12 months on the line leak detector according to manufacturer's requirements?** Previous Testing Dates: 2-14-2014 Most Recent Test Date: 4-28-2015 **AND** ***A line tightness test conducted every 12 months?** Previous Testing Dates: 2-2014 Most Recent test Date: 4-28-2015 Is LTT method capable of detecting a 0.1 gal/hr leak rate from any portion of the piping routinely containing product?	S-D3	☑ Yes ☐ No ☐ N/A
2. Automatic shutoff, Alarm-ELECTRONIC ***3 gal/hr test printed from ATG with a result of PASS** **AND** ***0.1 test printed from ATG with a result of PASS *OR* Monthly 0.2 test with a result of PASS**	S-D5	☐ Yes ☐ No ☑ N/A

TEMPORARY CLOSURE		DETECTION
If greater than **1 inch** of [illegible] remains, is monthly release detection conducted [illegible] of leak test?	S-D7	☐ Yes ☐ No ☑ N/A
If applicable, is the **Cathodic Protection** being maintained?	S-D5	☐ Yes ☐ No ☑ N/A
2. For UST systems temporarily closed for **3 months** or more, did the owner/operator:		
Leave vent line open and functional?		☐ Yes ☐ No ☑ N/A
Cap and secure all other lines, pump, manways, [illegible] equipment?		☐ Yes ☐ No ☑ N/A
3. For any non-upgraded UST system [illegible] temporarily closed for [illegible] owner/operator permanently closed the system?		☐ Yes ☐ No ☑ N/A

NOT APPLICABLE

Additional Record Keeping		
EPA Notification Form/Registration form -current and accurate? -On site? -Amended for acquiring a UST? -Amended change in Service? -Ownership change? -Installer certification? Permanent Closure? Temp. Closure?		☑ Yes ☐ No ☐ NA
Reports of all releases-suspected releases- spills and overfills-confirmed releases?		☐ Yes ☐ No ☑ N/A
Corrective Actions-Descriptions of corrective action plans, site characterizations, free product removal investigation of soil and groundwater cleanup, and corrective action plan?		☐ Yes ☐ No ☑ N/A
Site Assessments-Results of site assessment conducted at permanent closure?		☐ Yes ☐ No ☑ N/A
Repairs-Documentation of UST system repairs? Maintain documentation for the life of the UST System.		☐ Yes ☐ No ☑ N/A
Installation Records-Documentation of the type and construction of the tanks, piping, leak detection equipment, corrosion protection equipment, and spill and overfill protection equipment?		☐ Yes ☐ No ☑ N/A

INSURANCE: Current Certificate and Certification of Financial Responsibility

1. Can the owner/operators demonstrate financial responsibility/Insurance for taking corrective action (Cleanups), and 3rd party liability (property damage and injuries)? YES

Dates of Coverage: 1-16-2016 Expired

Insurance Company: ACE

Typical Owner/Operator ENIPC Training AGENDA

- Welcome, Introductions and Purpose.
- UST Program Overview.
- UST Program Definitions.
- UST Systems: Tanks, Piping, and Sump Areas.
- Submersible Turbine Pumps.
- Dispensers.
- Underground Storage Tank Federal Regulations and Requirements.
- UST Program Scope.
- UST System: Design, Construction, Installation and Notification.
- General Operating Requirements.
- Leak Testing/Release Detection.
- Release Reporting, Investigation and Confirmation.
- Release Response and Corrective Action for UST Systems.
- Out of Service UST Systems and UST Facility Closure.
- Financial Responsibility.
- NEW UST Regulations. Safety. Site Walk Through and Evaluation.

Owner/Operator Training

Average number of participants: 15-25.

1-3 Owner/Operator Trainings per year.

Owner/Operator Training

Incorporate a Site Walkthrough.

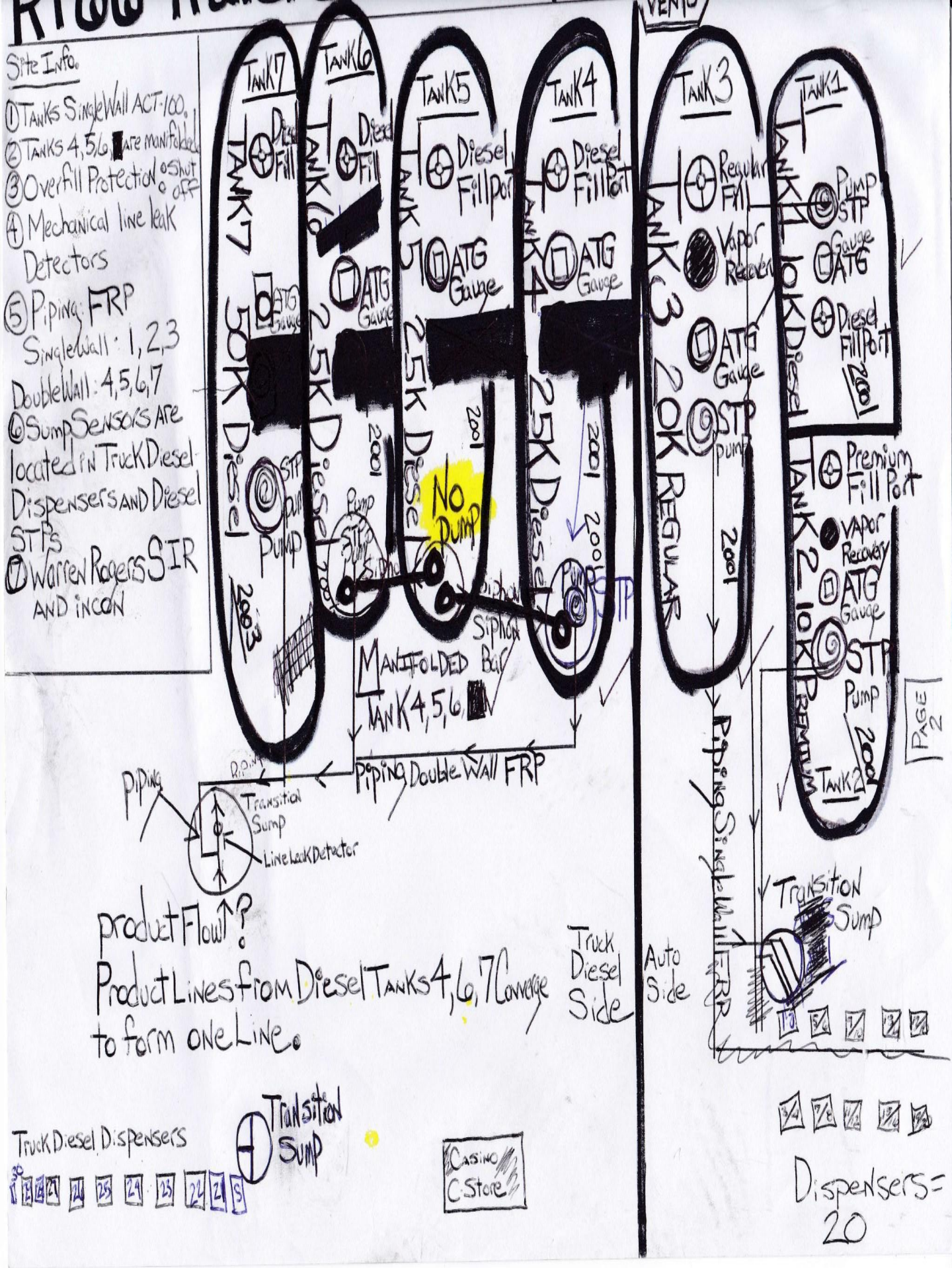
Identifying Equipment.

Every Facility is Unique

R100 Ra...

Site Info.

1. Tanks Single Wall ACT-100.
2. Tanks 4,5,6, [redacted] are manifolded
3. Overfill Protection - Shut off
4. Mechanical line leak Detectors
5. Piping: FRP
   Single Wall: 1, 2, 3
   Double Wall: 4, 5, 6, 7
6. Sump Sensors are located in Truck Diesel Dispensers and Diesel STPs
7. Warren Rogers SIR and INCON



Product Flow?

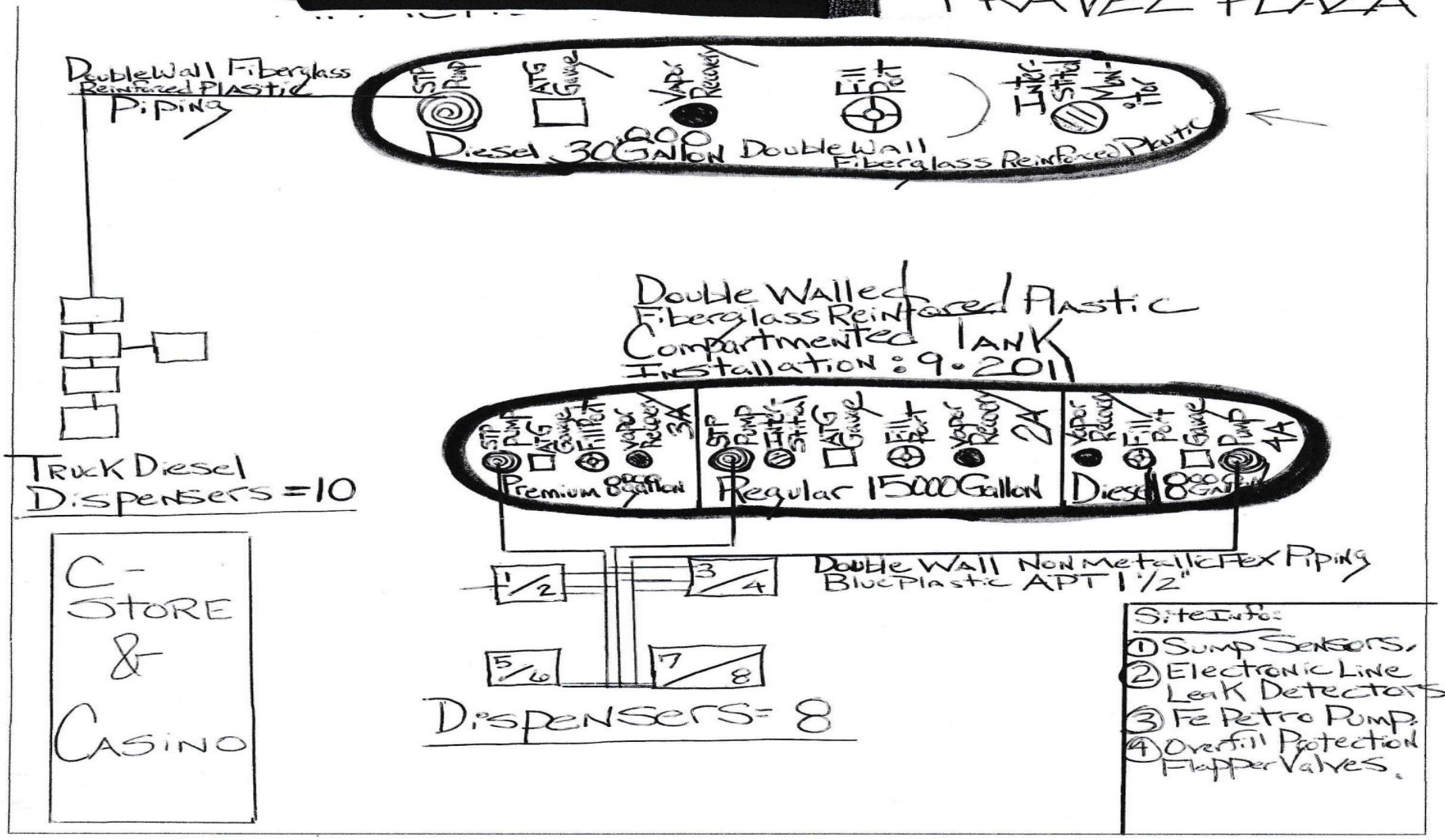
Product Lines from Diesel Tanks 4, 6, 7 Converge to form one Line.


66

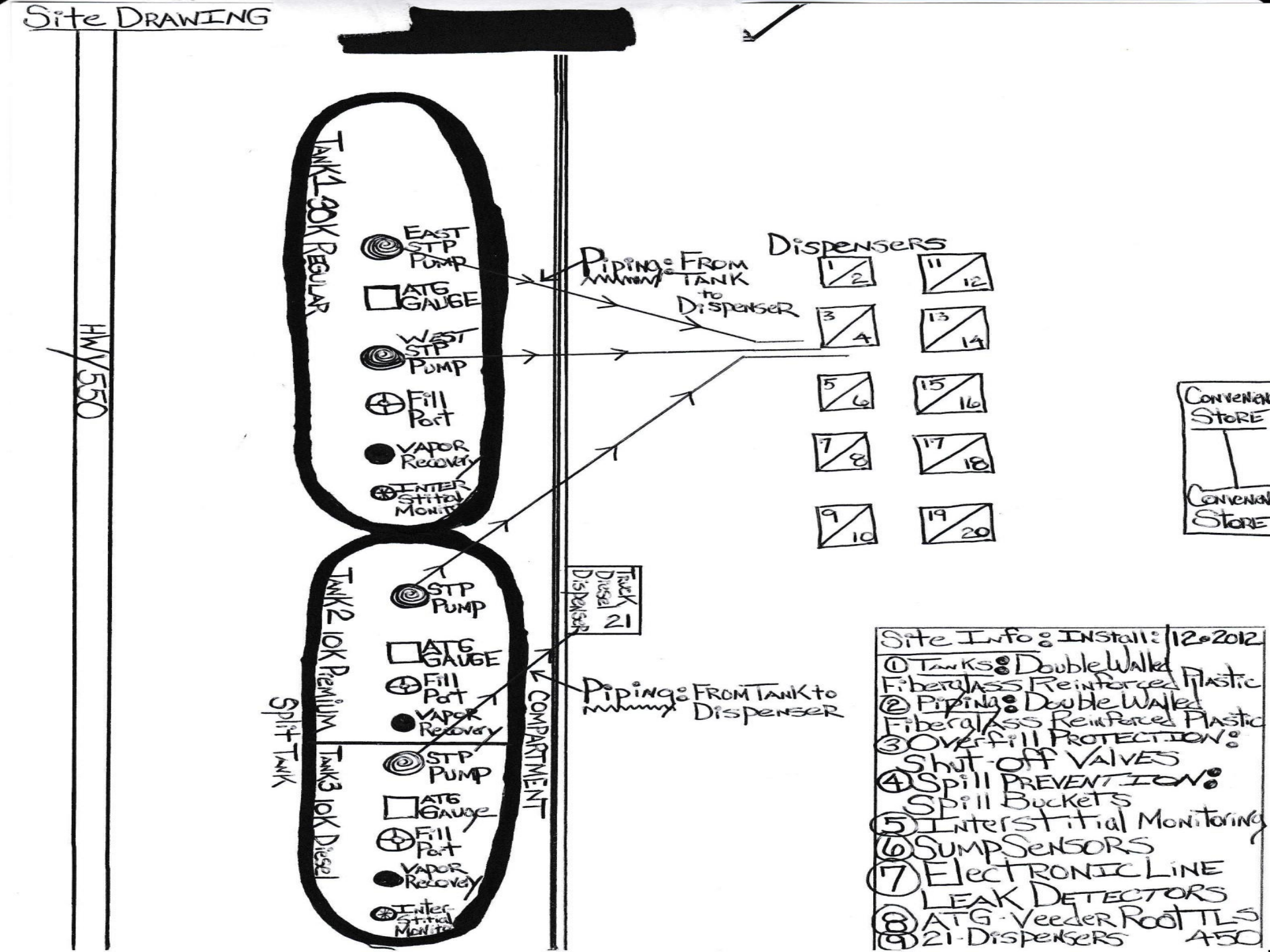
[redacted]

COMPLIANCE ASSISTANCE
DATE(S): 3-24-2015

TRAVEL PLAZA



Tank pad next to dispensers, where traffic flows=


Site Drawing
HWY 550
Tank1 30K Regular
East STP Pump
ATG Gauge
West STP Pump
Fill Port
Vapor Recovery
Inter Stitial Monitor
Tank2 10K Premium
Tank3 10K Diesel
Split Tank
STP Pump
ATG Gauge
Fill Port
Vapor Recovery
STP Pump
ATG Gauge
Fill Port
Vapor Recovery
Inter Stitial Monitor
Compartment
Truck Diesel Dispenser 21
Piping: From Tank to Dispenser
Piping: From Tank to Dispenser
Dispensers
1/2
3/4
5/6
7/8
9/10
11/12
13/14
15/16
17/18
19/20
Convenience Store
Convenience Store
Site Info: Install: 12-2012
① Tanks: Double Walled Fiberglass Reinforced Plastic
② Piping: Double Walled Fiberglass Reinforced Plastic
③ Overfill Protection: Shut-off Valves
④ Spill Prevention: Spill Buckets
⑤ Interstitial Monitoring
⑥ Sump Sensors
⑦ Electronic Line Leak Detectors
⑧ ATG - Veeder Root TLS 450
⑨ 21 - Dispensers

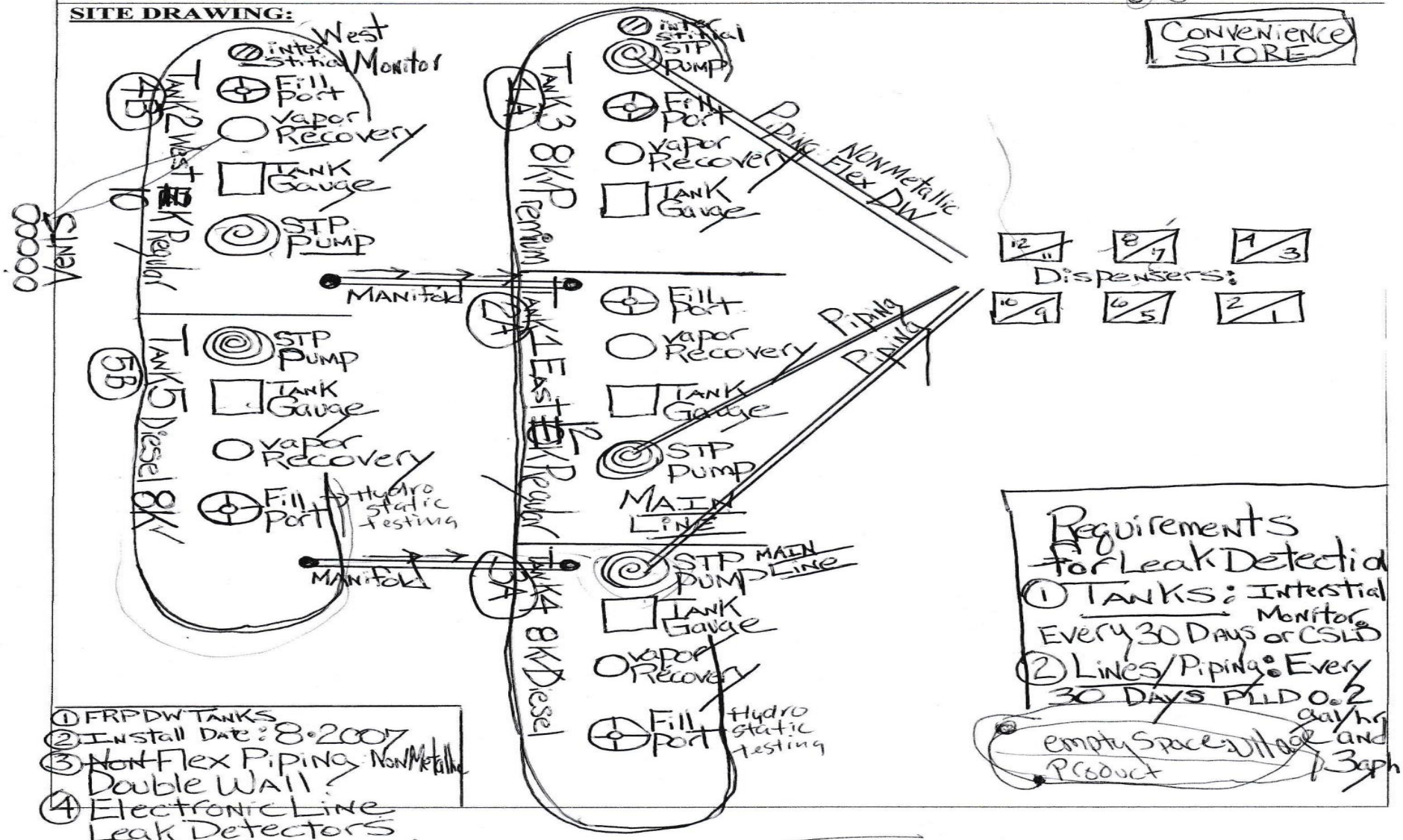
Tanks away from traffic flow=

Facility ID #: [redacted]

Owner ID#:

ANCE ASSISTANCE
: 2·3·2015

SITE DRAWING:



Tank Manifolding

2 Compartment Tank mani-folded to 2 compartments of a 3 compartment tank. 2-Interstitial Monitors provide leak detection for all 5 tanks.

Double-Walled STI-P3 Tanks. Interstitial Monitoring, installation 1998.

Mechanical Line leak Detectors.

Contractors Didn't Install Interstitial Monitoring!

Double Walled Clad Tanks and Double walled FRP piping.

Ball Float overfill protection. Electronic Line leak detectors.

Triple compartment and Double Compartment tanks = 5 Tanks.

Every Facility is unique, challenging, interesting, and in need of a lot of assistance!

Leonard Sabatino
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505-692-8772

Questions?

Thank you EPA, tribes and pueblos!