Subject: Site Hazard Assessment – Glitsa American Inc.

Ecology FA ID: 63168342 / CS ID:9951

Tenor Company LLC

1313 Washington St.

Sumner, WA 98390

August 15, 2014

Donna Musa

Site Hazard Assessments

Toxics Cleanup Program

Washington State Department of Ecology

Northwest Regional Office

3190 160th Ave SE

Bellevue, WA 98008-5452

Subject: Site Hazard Assessment – Glitsa American Inc.

Ecology FA ID: 63168342 / CS ID:9951

Dear Ms. Musa,

This letter is in response to your letter dated May 23, 2014 regarding conducting a site hazard assessment of this property at 327 S Kenyon St, Seattle, WA 98108.

The attached reports will provide information on past and present waste management activities and other site-specific environmental data to aid you in assessing the site for its potential/actual environmental hazard ranking.

A review of my files and those of Rob Roe's of Environmental Associates, who has consulted extensively on this project, shows that the following reports should already be in the possession of WDOE:

- Underground Storage Tank Removal and Limited Cleanup-Action report, dated April 1, 2009.
- Supplemental Exploration & Further Remediation Feasibility Study (final), dated June 23, 2010
- Independent Cleanup Action – LUST Release #3910 – Status Report, dated June 23, 2010
- 90 Day Notice Re: discovery of buried paint-waste in drums, dated May 6, 2010

Since the last report, dated June 23, 2010, I have continued to operate the UST remediation system with various modifications and have periodically collected and laboratory analyzed samples to monitor the UST remediation progress. Regarding the UST, in the attached reports, I have included a bibliography of the remediation processes and have also tabulated the data that has been generated through lab analysis at each stage of the remediation. The reports conclude with summaries of the remediation

operations that have occurred since the June, 2010 reports and ends with an update on the status of ongoing UST remediation operations.

I have broken out the report generation into two separate reports. One is for the UST remediation. The other report is for the status of the discovery and subsequent monitoring of buried paint waste. They have nothing to do with each other so I think it is prudent that the paint debris issue not be lumped in with the UST matter. That report summarizes test well/monitoring well creation, soil analysis and water analysis required to establish that no contamination from that old buried paint debris extends to the borders of the property. Further analysis profiles the chemical makeup of the buried paint debris.

Rob Roe of Environmental Associates has been of great assistance generating all of the reports listed above and consulting me since then. I am an Industrial engineer with a background in chemistry which has served me well in this ongoing remediation (UST) and monitoring (Paint debris).

If you have any questions please contact me at 206-321-5565 or email me at duanesadventures2296@comcast.net.

Sincerely,

Duane Bartel

Managing partner

Tenor Company LLC

Update Report for WDOE August, 15, 2014

Review of UST Remediation Status from start (Jan 2009) to last report, dated June, 2010

(For more detail, see individual reports)

Note: All wells referred to in this report are monitoring wells.

Jan – Feb 2009 testing and studies performed by EAI and ESN Northwest to prep for UST removal and soils/groundwater remediation. Wells installed around UST and in warehouse.

March-April 2009 – UST and contaminated soil outside warehouse removed. Excavation filled with pit run. Excavation filled with pit run and drain rock and vacuum/drain lines installed for future VES and/or potential ORC treatment. Asphalt for loading dock area replaced.

May to June 2009 – Completed fabrication of water remediation system and vacuum extraction system. Added vacuum lines to all three wells in warehouse. Jet pump pulled water from one well.

July 2009- installed first set of carbon canisters for VES.

July 2009- remediation system went operational 24/7. (See that report for details of system).

August 2009 – replaced jet pump on one well with three peristaltic pumps on all three warehouse wells.

September 2009- Added six more peristaltic pumps, producing approx. 750 gallons per day. Replaced first set of carbon canisters. Odor at wells is dramatically reduced.

October 2009-Jan 2010 – Modified system to add ten more wells in warehouse. All wells connect to VES. Combined pumps generated over 1000 gallons per day. Good test results yield discussing beginning ORC treatments.

Feb 2010- Revised UST remediation system went operational 24/7.

April 2010 – Replaced second set of carbon canisters. Odor at wells is barely detectable. Good lab results yield discussions with Rob Roe of EAI to soon begin ORC treatments. Subsequent lab profiling shows the canisters are not spent. So they will go back into service now that the VES is being reactivated (8/2014).

Timeline for UST Remediation since last report, dated June, 2010

May 2010 - Dec 2010 – Best lab test results to date! Rob estimates that at this point, based on lab results, 90% of total mineral spirits may have been extracted by VES and water extraction (peristaltic pumps). After receiving latest test results, it was observed that seasonal water table height raised from summer low of 12 feet below ground level to about 8 feet below ground level.

Jan 2011 – New test results (Jan 21) showed moderate increases in mineral spirit concentrations at all wells. Rob suspects higher test results were due to smear zone recontamination of water. Discussed ORC treatment options with Jack Peabody of Regenesis.

May 2011 – Shut down VES and water pumping systems after almost a year of operating 24/7.

June 2011 – Performed first Regenox treatment. Consulted by Jack Peabody of Regenox and Rob Rowe of EAI. Ratio of Regenox to water was 1260/4000.

Sept 2011 - Tested three warehouse wells. Results show significant reduction (37%,53%,84% respectively) in mineral spirit level (see tabulation section).

Oct 2011 - Tested many additional warehouse wells after stormy, high groundwater inducing weather period. Test results showed higher levels of mineral spirits across all samples. Consensus opinion of Rob Rowe of EAI and Jack Peabody of Regenesis is smear zone effects re-contaminating cleaner water from summer water table.

Jan 2012 – Performed second Regenox treatment. Decided I do not want to work with Regenox again. It is really difficult to work with, does not mix well, falls out of solution easily, and is messy and really expensive. Began research into alternative.

Nov 2012 - Test results show average of all warehouse and UST related wells currently is about 25,000 ppb. Cannot go back to pulling water with peristaltic pumps because they are worn out and the ¼" lines are totally plugged with a plaque-like buildup in the lines that will not blow out. Decided best to continue trying chemical treatment to reduce mineral spirit concentration.

Dec 2012 – Lab test results show increase in concentrations in line with seasonal increase due to water table causing smear zone effects.

Jan 2013 – Performed first ORC treatment using hydrogen peroxide (8% solution) mixed with water at a ratio of 1/50.

March 2013 – Treatment

July 2013 – Treatment

Oct 2013 – Lab Test Results – Higher concentrations typical – consensus is H202 is being really effective at flushing trapped mineral spirits from smear zone into water table.

Dec 2013 – Final H202 treatment

Jan 2014-March 2014 – Researched other pumping options, especially air pump. Only systems available on market use check valves. Decided from previous bad experiences with shallow well check valves to build my own pump and use an air cylinder controlled valve instead. Built my own air pump incorporating air cylinder water supply valve.

May 2014 – June 2014 – Built new air pump with control and supply systems.

June 2014 - Received Letter from WDOE requesting update on remediation of this property. Started compiling report.

July 2014 – New air pump system became operational. Worked well for a couple of weeks. Now finding the air cylinder is experiencing sticky operation, decreasing its efficiency. A dual action air cylinder would relieve some of the problem but I have decided "sticking" issues will always be an issue with this approach. Have decided to replace it with a shallow well submersible pump.

August 2014 – Researched, designed and installed shallow well submersible pump system. Went operational August 14. VES is back in operation to process vapors from water processing tanks where air stripping and skimming is operational once more. Carbon canisters are being regularly monitored using MAP tester with Shraeder tubes.

Summary:

Original remediation efforts using VES and pumping from (ultimately) thirteen wells inside the warehouse for almost a year resulted in a dramatic reduction in concentrations of mineral spirits. I think it was the best possible solution for the time, but it was complicated (using 16 peristaltic pumps), expensive and required a lot of weekly maintenance. After almost a year of 24/7 operation, the VES and pumping systems were shut down in order to begin ORC treatments. Regenox treatments flushing through a 4 foot deep drain field system I purpose-built for this purpose in 2009-2010, directly above the contaminated area, showed mixed results because at the same time that oxygenation of the effected soil and water was occurring, flushing of entrapped mineral spirits in the smear zone above the water table into the water table, caused mineral spirit concentrations to actually increase.

Unfortunately, the Regenox product (in solution with water) is awful to work with and is outrageously expensive, especially considering the mixed lab results. That is why, after only two Regenox treatments, I switched to hydrogen peroxide treatments (in solution with water). They seemed every bit as effective, but are incredibly easy to work with and, comparatively, inexpensive. By spring of 2013 I reached the conclusion the best way to proceed is a combination approach. From this point on, I anticipate remediation will amount to periods of pumping water, accumulating it and separating it from the solvent for an extended time (through air stripping, settling and skimming) followed by occasionally flushing the smear zone using hydrogen peroxide in solution with water. I think this is the best long term approach.

Also, the mineral spirits are so old at this point (over 60 years) they are highly corroded and shear forces (i.e. air stripping and agitating) seem really effective at breaking the solvent down.

I am optimistic the final pump solution will be to use one or more shallow well submersible pumps, pumping to two accumulator tanks that will be agitated and percolated with pumped air feeding through carbon canisters. I may also eventually add a couple more accumulator tanks. After sitting in the agitation/air stripping tanks for a few weeks, the processed (cleaned and skimmed) water is reintroduced back into the groundwater system for reprocessing. Lab testing has shown this water to be have over 90% of the solvent removed/broken down at that point.

While I am pleased with the progress I have made to date, I think it may take years to achieve the targets expected by WDOE. The current tenant on the property has demanded and is paying exceptionally low rent. Because of the pollution, he has decided he will not exercise an option to buy the property. I am tolerating the low rent, on a month to month lease, even though that means I have next to no funds available for remediation. That is why I must keep working toward a solution that is simple, low maintenance, and affordable. If that means it has to be slow, I can accept that. Once this tenant moves on, then I may be able to take other remediation steps.

To date, I have spent in excess of $250,000 and well over 3000 hours of labor (over about 5 years) on this remediation. While, your agency has apparently recorded this LUST site as Glitsa American's, I would like to go on record to clarify that neither Glitsa American, Inc. (which was sold in 2008 and is no longer in existence), or myself had anything to do with the creation of any of the pollution on this property. Neither Glitsa or I have ever had any operational need for mineral spirits and have never manufactured paint. It was the prior tenant, Farwest Paint, Inc. (who disputes they ever owned the property – claiming they only leased it), never the less, created the pollution on this property. In the 1950's they took out a permit for the UST, even filing an MSDS for the same offending mineral spirits pertaining to this remediation. The tank was plumbed to the warehouse where it apparently leaked along the supply line to their paint manufacturing equipment. They used the tank for storing mineral spirits for over 20 years. Farwest is the only tenant ever to occupy the property who used mineral spirits in their operations making alkyd and lead paints.

(Note: I feel compelled to add a commentary here about remediation in general. I think it is grossly unfair that I am stuck cleaning up Farwest's mess, exhausting resources I had planned to use to retire (I'm approaching 61). I have approached Farwest several times about this matter and their glib response is simply, "It's your problem now", which infuriates me every time I think about it. I have spoken to several attorneys and their recommendation is to not take it to court. They advise me that the courts are full of judges who are so wishy-washy in their judgments and remedies that even if I won after years in court, I would likely receive back only a small portion of what I put into it. It is my hope that WDOE will reform its position on who should pay for remediation. It should be the polluter, not the current property owner. In Farwest's case, they are still in business manufacturing paint on property they own just a few miles South-East of my property. They must renew business licenses and permits each year to stay in business. Why doesn't WDOE work with other state agencies to force polluters like Farwest to pay for remediation projects like mine, that they caused, or be denied the ability to renew their business licenses and/or permits? Thank you for contemplating this complaint. DB)

Duane Bartel August 15, 2014

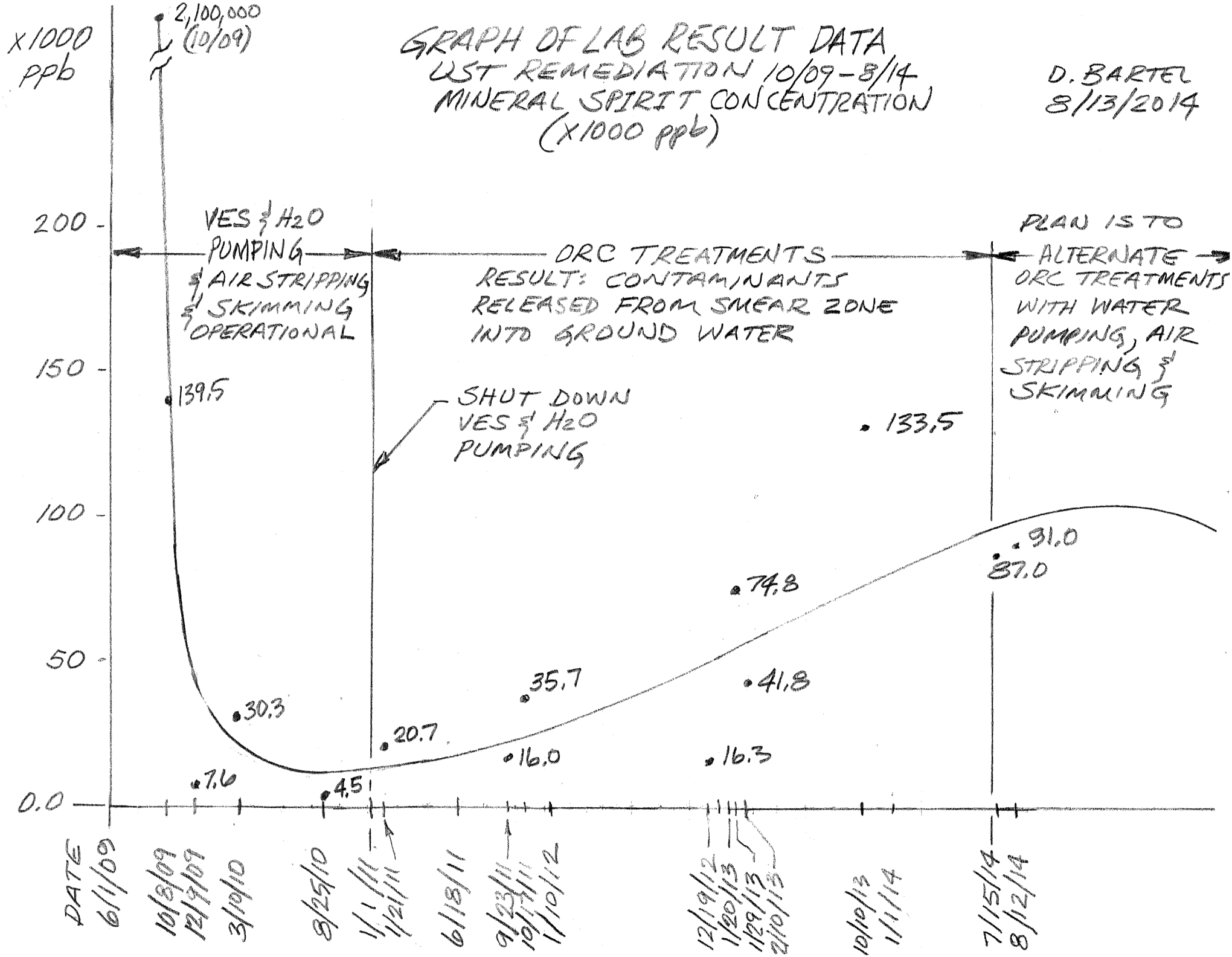
The rest of this report consists of the following:

- Graph showing change of concentrations of mineral spirits in the groundwater over the time period from July 2009 to August 15, 2014. The data points in the graph are the average of each lab report, with the highest value and the lowest value of each report excluded from the calculation to eliminate "fliers".
- Tabulated data test results from lab reports from July 2009 to August 2014.
- Lab reports from July 2009 to August 2014
- Photos of Regenox ORC treatment process

- Photos of H2O2 ORC treatment process

- Photos of air pump system (designed and built May 2014 – July 2014). Used July- August 2014.

- Photos of new shallow well submersible pump in current operation. Looks like this is going to be the best solution for pumping used to date. It pumps as much as 2 gallons per minute but is limited by the well recovery rate. That is why I may eventually add a few more pumps to a few more wells.


GRAPH OF LAB RESULT DATA
UST REMEDIATION 10/09 - 8/14
MINERAL SPIRIT CONCENTRATION
(X1000 ppb)
D. BARTEL
8/13/2014
X1000 ppb
2,100,000 (10/09)
200
150
100
50
0.0
VES & H2O PUMPING & AIR STRIPPING & SKIMMING OPERATIONAL
ORC TREATMENTS
RESULT: CONTAMINANTS RELEASED FROM SMEAR ZONE INTO GROUND WATER
PLAN IS TO ALTERNATE ORC TREATMENTS WITH WATER PUMPING, AIR STRIPPING & SKIMMING
SHUT DOWN VES & H2O PUMPING
139.5
30.3
7.6
4.5
20.7
35.7
16.0
74.8
41.8
16.3
133.5
87.0
91.0
DATE
6/1/09
10/8/09
12/3/09
3/10/10
9/25/10
1/1/11
1/21/11
6/18/11
9/23/11
10/21/11
1/10/12
12/19/12
1/20/13
1/29/13
2/10/13
10/10/13
1/1/14
7/15/14
8/12/14

TABULATED LAB RESULT DATA
UST REMEDIATION 10/09 TO 8/14
MINERAL SPIRIT CONCENTRATION
(X 1000 ppb)

D. BARTEL
8/13/2014

NOTE: SEE APPENDIX FOR LAB REPORTS

VES & H_2O PUMPING BEGINS
VES & H_2O PUMPING ENDS
FIRST REGENOX ORC TREATMENT
SECOND REGENOX "
FIRST H_2O_2 "
RESUMED PUMPING H_2O & AIR STRIPPING @ ACCUM. TANK W/CARBON CANISTERS

WELL NUMBER	7/2009	10/8/2009	12/9/2009	3/10/2010	8/25/2010	1/2011	1/21/2011	6/18/2011	9/23/2011	10/11/2011	11/10/2012	12/19/2012	1/20/2013	1/29/2013	2/10/2013	10/10/2013	7/15/2014	7/15/2014	7/15/2014	8/12/2014
1		-	-	-	11		6.4	-		140		7.1		19	47	15	-	-		-
2		-	3.5	-	11		35	22		28		5.9		36	37	180	620	280		25
3		-	.12	-	11		27	-		-		-		53	33	390	87	-		92
4		19	-	-	4.8		13	-		130		120		100	50	210	-	-		-
5	(N)	260	-	6.1	4.8		34	16		-		-		110	68	87	9.6	-		91
6		-	24	13	3.5		22	-		80		18		140	29	57	-	-		-
7		-	24	16	2.4		37	-		14		-		-	-	-	-	-		-
8	(S)	900	3.5	6.4	0.8		-	-		3.1		-		-	-	-	-	-		-
9		-	-	4.5	2.1		3.7	-		4.5		-		-	-	-	-	-		-
10		-	3.3	-	1.9		12	-		24		-		-	-	-	-	-		-
11		-	3.6	4.8	1.9		-	-		2.3		-		-	-	-	-	-		-
12		-	-	-	-		-	-		2.1		-		-	-	-	-	-		-
13	(W)	2.2	-	-	0.2		-	-		-		-		-	-	-	-	-		-
14		-	-	-	14		16	2.6		-		0.3		-	-	-	-	-		-
15		-	-	-	0.2		-	-		-		-		-	-	-	-	-		-
16		-	-	-	0.7		-	-		-		-		-	-	-	-	-		-

ORC TREATMENTS LEACH CONTAMINANT FROM SMEAR ZONE

SEASONAL WATER TABLE RISE ACTIVATES SMEAR ZONE LEACHING OF CONTAMINANT

12/9/2009

XFINITY Connect

duanesadventures2296@comcast.net

Font Size

ESN Northwest Lab

Lab Results - Farwest

Wed, Dec 09, 2009 03:10 PM

1 attachment

From : Lab <lab@esnnw.com>

Subject : Lab Results - Farwest

To : Duane Bartel <duanesadventures2296@comcast.net>

Good Afternoon Duane,

Attached are the Mineral Spirit results requested for the 11/30/09 samples from the Farwest project. Please let us know if there is anything else we can do for you.

Thank you,
Jennifer

ESN Northwest Chemistry Laboratory
1210 Eastside St. SE Ste 200
Olympia, WA 98501
PH: 360.459.4670
FX: 360.459.3432
EM: lab@esnnw.com

_1209145452_001.pdf
168 KB

ESN NORTHWEST CHEMISTRY LABORATORY

Duane Bartel
FARWEST PROJECT
Seattle, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

WATER

Analysis of Mineral Spirit in Water by Method NWTPH-Dx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Mineral Spirits (ug/L)
Method Blank	11/30/2009	12/9/2009	92	nd
SGB1-W	11/30/2009	12/9/2009	103	nd
SGB2-W	11/30/2009	12/9/2009	108	**3600**
SGB3-W	11/30/2009	12/9/2009	99	**3300**
SGB4-W	11/30/2009	12/9/2009	94	**3500**
SGB5-W	11/30/2009	12/9/2009	int	**24000**
SGB6-W	11/30/2009	12/9/2009	int	**24000**
SGB7-W	11/30/2009	12/9/2009	100	**3500**
SGB8-W	11/30/2009	12/9/2009	94	**120**
Reporting Limits				100

"nd" Indicates not detected at the listed detection limits.
"int" indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

Duane Bartel
FARWEST PROJECT
Seattle, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

SOIL

Analysis of Mineral Spirit in Soil by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Mineral Spirits (mg/kg)
Method Blank	12/3/2009	12/8/2009	108	nd
SGB1-4	12/3/2009	12/8/2009	106	**13**
SGB1-4 DUP	12/3/2009	12/8/2009	95	**15**
SGB1-8	12/3/2009	12/9/2009	int	**4700**
SGB1-12	12/3/2009	12/9/2009	int	**9000**
SGB2-4	12/3/2009	12/8/2009	93	nd
SGB2-8	12/3/2009	12/9/2009	int	**2100**
SGB3-4	12/3/2009	12/8/2009	99	nd
SGB3-8	12/3/2009	12/8/2009	93	**318**
SGB5-4	12/3/2009	12/8/2009	96	nd
SGB5-8	12/3/2009	12/9/2009	int	**4700**
SGB6-4	12/3/2009	12/9/2009	96	nd
SGB6-8	12/3/2009	12/9/2009	int	**1700**
SGB7-4	12/3/2009	12/8/2009	104	nd
SGB7-8	12/3/2009	12/9/2009	int	**9800**
SGB8-4	12/3/2009	12/9/2009	int	**9400**
SGB8-8	12/3/2009	12/9/2009	int	**7700**
Reporting Limits				10

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

SOIL

ESN NORTHWEST, INC. | Environmental Services Network

Duane Bartel Ventures 22961 comcast.net

CHAIN-OF-CUSTODY RECORD

CLIENT: Duane Bartel

ADDRESS: 1313 Washington St, Sumner, WA 98390

PHONE: 1-206-321-5565 FAX:

CLIENT PROJECT #: PROJECT MANAGER:

DATE: 11/30/09 PAGE 1 OF 2

PROJECT NAME: Forwest

LOCATION: 327 S Kenyon st, Seattle, WA

COLLECTOR: DATE OF COLLECTION

Sample Number	Depth	Time	Sample Type	Container Type	NOTES	Total Number of Containers	Laboratory Note Number
1. SGB1-4	3-4	9:19	Soil	Jar	Hold	1	
2. SGB1-8	7-8	9:30	Soil	Jar		1	
3. SGB1-12	11-12	9:37	Soil	Jar	HOLD	1	
4. SGB1-w	15	9:49	Water	Boa		1	
5. SGB1-w	15	9:55	Water	Boa		1	
6. SGB1-w	15	9:57	Water	Boa		1	
7. SGB2-4	3-4	10:07	Soil	Jar	Hold	1	
8. SGB2-8	7-8	10:11	Soil	Jar		1	
9. SGB2-w	15	10:20	water	Boa		1	
10. SGB2-w	15	10:21	water	Boa		1	
11. SGB2-w	15	10:22	water	Boa		1	
12. SGB3-4	3-4	10:29	Soil	Jar	Hold	1	
13. SGB3-8	7-8	10:31	Soil	Jar		1	
14. SGB3-w	15	10:44	water	Boa		1	
15. SGB3-w	15	10:45	water	Boa		1	
16. SGB3-w	15	10:46	Water	Boa		1	
17. SGB4-w	15	11:05	water	Boa		3	
18. SGB5-4	3-4	11:13	Soil	Jar	Hold	1	

ANALYSES: TPH-HCID; TPH - DIESEL & OIL; TPH - GASOLINE; BTEX; VOC 8260/CL; VOC 8260; SemiVol 8270; PAH's 8270; PCB's 8082; CL Pesticides 8081; RCRA 8 Metals; MTCA 5 Metals; Pb; Asbestos-PLM; GRO Suite; DRO Suite; WO Suite; mineral spirits

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Cory Burkhead	11/30/09		11/30/09 1409
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Cory Burkhead	11/30/09		

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	20
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:
Soils - $40
H_2O - $50

Turn Around Time: 24 HR 48 HR 5 DAY

12/14/2009
Enviro. Assoc.
ESN Northwest Lab.

ESN NORTHWEST CHEMISTRY LABORATORY

Duane Bartel
FARWEST PROJECT
Seattle, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Mineral Spirit in Water by Method NWTPH-Gx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Mineral Spirits (ug/L)
Method Blank	11/30/2009	12/9/2009	92	nd
SGB1-W	11/30/2009	12/9/2009	103	nd
SGB2-W	11/30/2009	12/9/2009	108	**3600**
SGB3-W	11/30/2009	12/9/2009	99	**3300**
SGB4-W	11/30/2009	12/9/2009	94	**3500**
SGB5-W	11/30/2009	12/9/2009	int	**24000**
SGB6-W	11/30/2009	12/9/2009	int	**24000**
SGB7-W	11/30/2009	12/9/2009	100	**3500**
SGB8-W	11/30/2009	12/9/2009	94	**120**
Reporting Limits				100

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determinatior

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

(1) Cont.

ESN NORTHWEST CHEMISTRY LABORATORY

Duane Bartel
FARWEST PROJECT
Seattle, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Mineral Spirit in Soil by Method NWTPH-Gx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Mineral Spirits (mg/kg)
Method Blank	12/3/2009	12/8/2009	108	nd
SGB1-4	12/3/2009	12/8/2009	106	**13**
SGB1-4 DUP	12/3/2009	12/8/2009	95	**15**
SGB1-8	12/3/2009	12/9/2009	int	**4700**
SGB1-12	12/3/2009	12/9/2009	int	**9000**
SGB2-4	12/3/2009	12/8/2009	93	nd
SGB2-8	12/3/2009	12/9/2009	int	**2100**
SGB3-4	12/3/2009	12/8/2009	99	nd
SGB3-8	12/3/2009	12/8/2009	93	**318**
SGB5-4	12/3/2009	12/8/2009	96	nd
SGB5-8	12/3/2009	12/9/2009	int	**4700**
SGB6-4	12/3/2009	12/9/2009	96	nd
SGB6-8	12/3/2009	12/9/2009	int	**1700**
SGB7-4	12/3/2009	12/8/2009	104	nd
SGB7-8	12/3/2009	12/9/2009	int	**9800**
SGB8-4	12/3/2009	12/9/2009	int	**9400**
SGB8-8	12/3/2009	12/9/2009	int	**7700**
Reporting Limits				10

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

Dirt Pile Soil Tests

SmartZone Communications Center Collaboration Suite duanesadventures2296@comcast.net

TENOR CO Soil-Water Test 003143

Friday, March 19, 2010 3:22:12 PM

From: friedmanandbruya@gmail.com
To: duanesadventures2296@comcast.net
Reply to: fbi@isomedia.com
Attachments: TENOR CO Soil-Water Test 003143.pdf (94.5KB)

Attached is a copy of your report.

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

Warehouse wells 3/19

&

Soil tests from dirt pile

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

March 18, 2010

Duane Bartel, Project Manager
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on March 15, 2010 from the Soil/Water Test, F&BI 003143 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA0318R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 15, 2010 by Friedman & Bruya, Inc. from the Tenor Co., LLC Soil/Water Test, F&BI 003143 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
003143-01	Well 5
003143-02	Well 6
003143-03	Well 7
003143-04	Well 8
003143-05	Well 9
003143-06	Well 11
003143-07	Soil 1
003143-08	Soil 2
003143-09	Soil 3

All quality control requirements were acceptable.

Date of Report: 03/18/10
Date Received: 03/15/10
Project: Soil/Water Test, F&BI 003143
Date Extracted: 03/17/10
Date Analyzed: 03/18/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 50-150)
Soil 1 003143-07	<50	101
Soil 2 003143-08	<50	100
Soil 3 003143-09	<50	100
Method Blank 00-0393 MB	<50	99

Date of Report: 03/18/10
Date Received: 03/15/10
Project: Soil/Water Test, F&BI 003143
Date Extracted: 03/16/10
Date Analyzed: 03/16/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 50-150)
Well 5 003143-01	6,100	102
Well 6 003143-02	13,000	109
Well 7 003143-03	16,000	109
Well 8 003143-04	6,400	113
Well 9 003143-05	4,500	109
Well 11 003143-06	4,800	100
Method Blank 00-0355 MB	<50	103

Date of Report: 03/18/10
Date Received: 03/15/10
Project: Soil/Water Test, F&BI 003143

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: 003143-09 (Duplicate)

Analyte	Reporting Units	(Wet wt) Sample Result	(Wet wt) Duplicate Result	Relative Percent Difference	Acceptance Criteria
Stoddard Solvent	mg/kg (ppm)	<50	<50	nm	0-20

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	mg/kg (ppm)	5,000	88	90	70-130	2

Date of Report: 03/18/10
Date Received: 03/15/10
Project: Soil/Water Test, F&BI 003143

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	76	83	70-130	9

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

003143 3/14/2010

SAMPLE CH[AIN] OF CUSTODY ME 03/15/10

A04

Page # _____ of _____

Send Report To Duane Bartel

Company Tenor Company LLC

Address 2313 Washington St.

City, State, ZIP Sumner, WA. 98390

Phone # 206-321-5565 Fax # _____

SAMPLERS *(signature)*

PROJECT NAME/NO. | PO #

REMARKS email to: duanesadventures2296@comcast.net

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☒ RUSH _____
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS							Notes
Wall 5	01	3/14/10		water	1													Stoddard ppm
" 6	02	"		"	1													" "
" 7	03	"		"	1													
" 8	04	"		"	1													
" 9	05	"		"	1													" "
" 11	06	"		"	1													stoddard ppm
Soil 1	07	3/14/10		Soil	1													stoddard ppm
Soil 2	08	"		"	1													" "
Soil 3	09	"		"	1													stoddard ppm

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FO COCNCOC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Cory Burkhead	Cory Burkhead	Tenor Co.	3/15/10	10AM
Received by:		Nhan Phan	FEBI	3/15/10	✓
Relinquished by:					
Received by:			Samples received at	16 °C	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

October 8, 2009

Duane Bartel, Project Manager
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on October 1, 2009 from the Farwest UST Cleanup, F&BI 910015 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Rob Roe
NAA1008R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 1, 2009 by Friedman & Bruya, Inc. from the Tenor Co., LLC Farwest UST Cleanup, F&BI 910015 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
910015-01	North Well
910015-02	West Well
910015-03	South Well
910015-04	North Well-3ft E/4'DP
910015-05	West Well-2ft NE/4'DP
910015-06	South Well-3ft.E/4'DP
910015-07	RH Process Tank

← In Warehouse

Please note that sample North Well had 50 ml of product removed from the container prior to sample extraction. All quality control requirements were acceptable.

Date of Report: 10/08/09
Date Received: 10/01/09
Project: Farwest UST Cleanup, F&BI 910015
Date Extracted: 10/02/09
Date Analyzed: 10/05/09

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 51-137)
North Well d 910015-01 1/20	260,000	101
West Well 910015-02	2,200	96
South Well d 910015-03 1/100	900,000	137
RH Process Tank 910015-07	130	94
Method Blank	<50	84

Date of Report: 10/08/09
Date Received: 10/01/09
Project: Farwest UST Cleanup, F&BI 910015
Date Extracted: 10/02/09
Date Analyzed: 10/02/09

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 67-127)
North Well-3ft E/4'DP 910015-04	<50	98
West Well-2ft NE/4'DP 910015-05	<50	88
South Well-3ft.E/4'DP 910015-06	<50	88
Method Blank	<50	94

Date of Report: 10/08/09
Date Received: 10/01/09
Project: Farwest UST Cleanup, F&BI 910015

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	94	91	70-130	3

Date of Report: 10/08/09
Date Received: 10/01/09
Project: Farwest UST Cleanup, F&BI 910015

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: 910015-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	mg/kg (ppm)	5,000	<50	98	108	50-150	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Stoddard Solvent	mg/kg (ppm)	5,000	97	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - The analyte indicated was found in the method blank. The result should be considered an estimate.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - The sample was extracted outside of holding time. Results should be considered estimates.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration should be considered an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The pattern of peaks present is not indicative of diesel.

y - The pattern of peaks present is not indicative of motor oil.

910015

SAMPLE CHAIN OF CUSTODY

ME 10/01/09 C03

Page # _____ of _____

Send Report To: Duane Bartel

Company: Tenor Company LLC

Address: 1313 Washington St.

City, State, ZIP: Skagway, WA. 98390

Phone # 206-321-5565 Fax # N/A.

email: duanesadventures2296@comcast.net

SAMPLERS (signature): Duane Bartel

PROJECT NAME/NO.: Farwest UST Cleanup

PO #:

REMARKS: EAI is working with me on this. Please cc: report to Rob Rowe

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Stddard Shut					Notes
North well	01	10-1-09	11:40 AM	Water	1							✓					
~~West~~ well	02	10-1-09	11:30 AM	Water	1							✓					
South well	03	10-1-09	11:35 AM	Water	1							✓					
North well-3A E/4'W	04	10-1-09	11:50 AM	Soil	1							✓					
West well - 2A NE/4'W	05	10-1-09	11:55 AM	Soil	1							✓					
South well - 3A E/4'W	06	10-1-09	11:55 AM	Soil	1							✓					
RH Process tank	07	10-1-09	11:30 AM	Water	1							✓					

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Duane Bartel	Duane Bartel	Tenor Co LLC	10-1-09	2:50 PM
Received by: Dunh	VINH	FBI	10-1-09	2:50 PM
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

Samples received at 20 °C

XFINITY Connect

duanesadventures2296@comcast.net

Font Size

8/25/10

TENOR CO Water Test 008166

From : Friedman & Bruya, Inc. <friedmanandbruya@gmail.com>

Wed, Aug 25, 2010 05:29 PM

Subject : TENOR CO Water Test 008166

1 attachment

To : Duane Bartel - Tenor <duanesadventures2296@comcast.net>

Reply To : Friedman & Bruya, Inc. <fbi@isomedia.com>

Attached is a copy of your report.

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com

Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

TENOR CO Water Test 008166.pdf
172 KB

– Not same as other 8/25/10 report

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

August 25, 2010

Duane Bartel, Project Manager
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on August 13, 2010 from the Water Test, F&BI 008166 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA0825R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 13, 2010 by Friedman & Bruya, Inc. from the Tenor Co., LLC The Water Test, F&BI 008166 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
008166-01	Well No.1
008166-02	Well No.2
008166-03	Well No.3
008166-04	Well No.4
008166-05	Well No.5
008166-06	Well No.6
008166-07	Well No.7
008166-08	Well No.8
008166-09	Well No.9
008166-10	Well No.10
008166-11	Well No.11
008166-12	Well No.13

All quality control requirements were acceptable.

Date of Report: 08/25/10
Date Received: 08/13/10
Project: The Water Test, F&BI 008166
Date Extracted: 08/19/10
Date Analyzed: 08/23/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 51-134)
Well No.1 008166-01	11,000	96
Well No.2 008166-02	11,000	86
Well No.3 008166-03	11,000	96
Well No.4 008166-04	4,800	108
Well No.5 008166-05	4,800	107
Well No.6 008166-06	3,500	104
Well No.7 008166-07	2,400	95
Well No.8 008166-08	790	113
Well No.9 008166-09	2,100	99
Well No.10 008166-10	1,900	100

Date of Report: 08/25/10
Date Received: 08/13/10
Project: The Water Test, F&BI 008166
Date Extracted: 08/19/10
Date Analyzed: 08/23/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 51-134)
Well No.11 008166-11	1,900	119
Well No.13 008166-12	220	117
Method Blank 00-1287 MB	<50	101

Date of Report: 08/25/10
Date Received: 08/13/10
Project: The Water Test, F&BI 008166

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	90	91	70-130	1

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

008160

SAMPLE CHAIN OF CUSTODY

ME 08/13/10

Send Report To duanesadventures2296@

Company Tenor Company LLC

Address 1313 Washington St.

City, State, ZIP Sumner, WA. 98390

Phone # 206-321-5565 Fax # N/A

SAMPLERS (signature)

PROJECT NAME/NO.	PO #

REMARKS

Page # 1 of 2

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	~~TPH-Diesel~~	~~TPH-Gasoline~~	~~BTEX by 8021B~~	~~VOCs by 8260~~	~~SVOCs by 8270~~	~~HFS~~	Standard					Notes
Well #1	01A											↓					
2	02A																
3	03A																
4	04A																
5	05A																
6	06A																
7	07A																
8	08A																
9	09A																
10	10A																
11	11A																

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Duane Bartel	Tenor Co LLC	8/13/10	3:15 Pm
Received by:	[signature]	A. Podnozova	FBI	8/13/10	3:20 Pm
Relinquished by:					
Received by:					

FORMS\COC\COC.DOC

Samples received at ____ °C

008166

SAMPLE CHAIN OF CUSTODY

Send Report To
Company
Address
City, State, ZIP
Phone # Fax #

SAMPLERS (signature)
PROJECT NAME/NO. | PO #
REMARKS

Page # 2 of 2
TURNAROUND TIME
☐ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	~~TPH Diesel~~	~~TPH-Gasoline~~	~~BTEX by 8021B~~	~~VOCs by 8260~~	~~SVOCs by 8270~~	~~HFS~~	X Stoddard					Notes
13	12 A											←					
Note: Well #12																	
not sampled because																	
it tested below																	
cleanup limits																	
previously DB																	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Duane Bartel	Tenor Co. LLC	8/13/10	3:15 pm
Received by:	[signature]	A. Podnozova	FBI	8/13/10	3:26 pm
Relinquished by:					
Received by:					

FORMS\COC\COC.DOC

Samples received at ____ °C

XFINITY Connect

duanesadventures2296@comcast.net

Font Size

8/25/10

TENOR CO Water Test 008178

From : Friedman & Bruya, Inc. <friedmanandbruya@gmail.com>

Wed, Aug 25, 2010 05:28 PM

Subject : TENOR CO Water Test 008178

1 attachment

To : Duane Bartel - Tenor <duanesadventures2296@comcast.net>

Reply To : Friedman & Bruya, Inc. <fbi@isomedia.com>

Attached is a copy of your report.

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com
Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

TENOR CO Water Test 008178.pdf
88 KB

(18)

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

August 25, 2010

Duane Bartel, Project Manager
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on August 16, 2010 from the Water Test, F&BI 008178 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA0825R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 16, 2010 by Friedman & Bruya, Inc. from the Tenor Co., LLC Water Test, F&BI 008178 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
008178-01	Well 14
008178-02	Well 15
008178-03	Well 16

All quality control requirements were acceptable.

Date of Report: 08/25/10
Date Received: 08/16/10
Project: Water Test, F&BI 008178
Date Extracted: 08/19/10
Date Analyzed: 08/24/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 51-134)
Well 14 008178-01	14,000	108
Well 15 008178-02	150	120
Well 16 008178-03	730	120
Method Blank 00-1287 MB	<50	101

Date of Report: 08/25/10
Date Received: 08/16/10
Project: Water Test, F&BI 008178

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	90	91	70-130	1

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208178 comcast.net

SAMPLE CHAIN OF CUSTODY

DU4 M4 8/1/10

Send Report To duanesadventures2296@comcast.net
Company Tenor Company LLC
Address 1313 Washington St.
City, State, ZIP Sumner, WA. 98390
Phone # 206-321-5565 Fax # N/A

SAMPLERS (*signature*)

PROJECT NAME/NO.

PO #

REMARKS

Page # ____ of ____

TURNAROUND TIME
☐ Standard (2 Weeks)
☐ RUSH ____
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Stoddard Solvent					Notes
Well 14	-01											X					
Well 15	-02											X					
Well 16	-03											X					

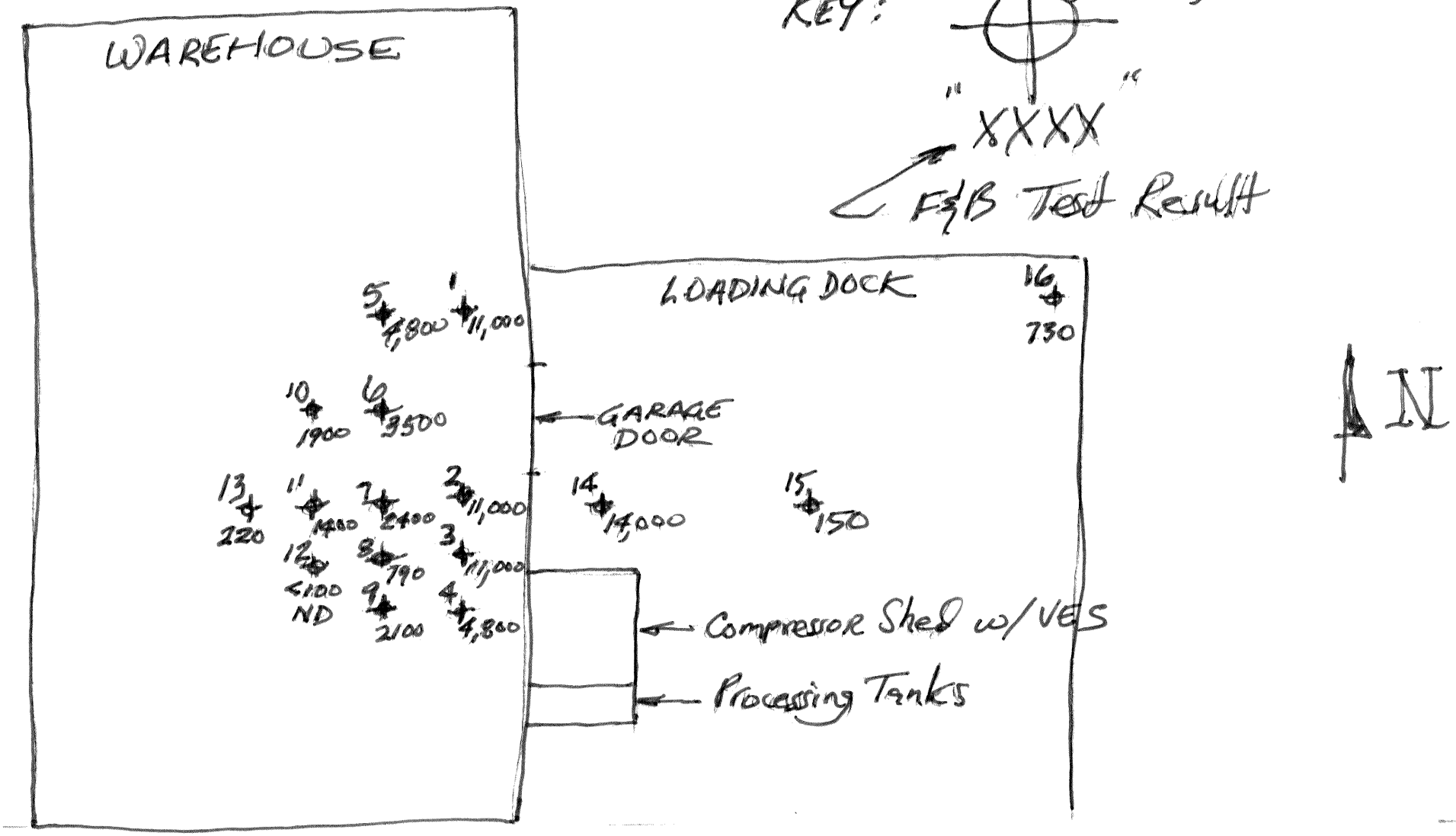
(Columns TPH-Diesel through SVOCs by 8270 / HFS crossed out.)

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Duane Bartel	Tenor Co. LLC	8/16/10	3:00 PM
Received by:	[signature]	Matt Langston	FBI	8/16/10	3:00 PM
Relinquished by:					
Received by:					

MONITORING WELLS KEY

FOR FRIEDMAN'S/BRUYA LAB TESTS, BOTH DATED 8/25/10



Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

August 25, 2010

Duane Bartel, Project Manager
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on August 16, 2010 from the Water Test, F&BI 008178 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA0825R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 16, 2010 by Friedman & Bruya, Inc. from the Tenor Co., LLC Water Test, F&BI 008178 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
008178-01	Well 14
008178-02	Well 15
008178-03	Well 16

All quality control requirements were acceptable.

Date of Report: 08/25/10
Date Received: 08/16/10
Project: Water Test, F&BI 008178
Date Extracted: 08/19/10
Date Analyzed: 08/24/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 51-134)
Well 14 008178-01	14,000	108
Well 15 008178-02	150	120
Well 16 008178-03	730	120
Method Blank 00-1287 MB	<50	101

Date of Report: 08/25/10
Date Received: 08/16/10
Project: Water Test, F&BI 008178

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	90	91	70-130	1

008178 comcast.net

Duy M 8/10/10

SAMPLE CHAIN OF CUSTODY

Page # _____ of _____

Send Report To duanesadventures2296@

Company Tenor Company LLC

Address 1313 Washington St.

City, State, ZIP Sumner, WA. 98390

Phone # 206-321-5565 Fax # N/A

SAMPLERS *(signature)*

PROJECT NAME/NO. | PO #

REMARKS

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Stoddard Solvent					Notes
Well 14	-01											X					
Well 15	-02											X					
Well 16	-03											X					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Duane Bartel	Tenor Co. LLC	8/16/10	3:00 PM
Received by:		Matt Langston	FBI	8/16/10	3:00 PM
Relinquished by:					
Received by:					

XFINITY Connect **duanesadventures2296@comcast.net**

- Font Size -

TENOR CO Farwest UST 101142

From : Friedman & Bruya, Inc. <friedmanandbruya@gmail.com> Fri, Jan 21, 2011 02:56 PM
Subject : TENOR CO Farwest UST 101142 1 attachment
To : Duane Bartel - Tenor <duanesadventures2296@comcast.net>
Reply To : Friedman & Bruya, Inc. <fbi@isomedia.com>

Attached is a copy of your report.

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com
Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

TENOR CO Farwest UST 101142.pdf
92 KB

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

January 21, 2011

Duane Bartel
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on January 13, 2011 from the Farwest UST, F&BI 101142 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA0121R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 13, 2011 by Friedman & Bruya, Inc. from the Tenor Co., LLC Farwest UST project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
101142-01	Well No.1
101142-02	Well No.2
101142-03	Well No.3
101142-04	Well No.4
101142-05	Well No.5
101142-06	Well No.6
101142-07	Well No.7
101142-08	Well No.9
101142-09	Well No.10
101142-10	Well No.14

All quality control requirements were acceptable.

Date of Report: 01/21/11
Date Received: 01/13/11
Project: Farwest UST, F&BI 101142
Date Extracted: 01/17/11
Date Analyzed: 01/19/11

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 51-134)
Well No.1 101142-01	6,400	99
Well No.2 101142-02	35,000	117
Well No.3 101142-03	29,000	114
Well No.4 101142-04	13,000	96
Well No.5 101142-05	34,000	101
Well No.6 101142-06	22,000	96
Well No.7 101142-07	37,000	95
Well No.9 101142-08	3,700	107
Well No.10 101142-09	12,000	98
Well No.14 101142-10	16,000	99
Method Blank 01-0079 MB	<50	102

Date of Report: 01/21/11
Date Received: 01/13/11
Project: Farwest UST, F&BI 101142

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	90	100	70-130	11

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

101142 — Comcast.net — **SAMPLE CHAIN OF CUSTODY** — ME 01-13-11 — 1104

Page # 1 of 1

Send Report To Duanesadventures2296@
Company Teror Company LLC
Address 1313 Washington St.
City, State, ZIP Sumner, WA 98390
Phone # 206-321-5565 **Fax #** None

SAMPLERS (signature)

PROJECT NAME/NO. Farwest UST

PO #

REMARKS

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Mineral Spirits					Notes
Well #1	01	1/12/11	7PM														
2	02	"	"	Water								✓					
3	03	"	"	"								✓					
4	04	"	"	"								✓					
5	05	"	"	"								✓					
6	06	"	"	"								✓					
7	07	"	"	"								✓					
9	08	"	"	"								✓					
10	09	"	"	"								✓					
Well #14	10	1/12/11	7PM	Water								✓					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Duane Bartel	Duane Bartel	Teror Co. LLC	1/13/11	1:45
Received by:	Dave	DD VD	FEBI	"	"
Relinquished by:					
Received by:					

Samples received at 15 °C

XFINITY Connect **duanesadventures2296@comcast.net**

- Font Size -

Attn: Rob Rowe - Fwd: TENOR CO Farwest Paint Contamination 104107

From : duanesadventures2296@comcast.net Tue, Apr 19, 2011 01:34 PM

Subject : Attn: Rob Rowe - Fwd: TENOR CO Farwest Paint Contamination 104107 2 attachments

To : info Environmental Associates Inc. <info@environmentalassociatesinc.com>

Cc : duanesadventures2296 <duanesadventures2296@comcast.net>

Hi Rob,
Attached (scan0007) is a sketch showing the locations of the three monitoring wells ESN installed to permit us to evaluate if contamination from Farwest's paint debris dumping extends beyond the property lines.
Also attached are the results of Friedman & Bruya's analysis of the soil and water samples taken from those wells.
The soil looked clean in all cases (i.e. no noticeable dicoloration due to paint pigment, nor was there any apparent staining or odor of mineral spirits). The soil was mostly sandy silt with some silty clay and bands of fine sand all the way down to the 15 foot depth of each well. There was nothing foreign encountered in the soil in any of the samples - just dirt, clay, sand and silt.
Please give me your interpretation of these lab results and what they mean regarding the potential for encapsulation or if remediation at any of these monitoring well locations is required.
Duane

----- Forwarded Message -----
From: "Friedman & Bruya, Inc." <friedmanandbruya@gmail.com>
To: "Duane Bartel - Tenor" <duanesadventures2296@comcast.net>
Sent: Monday, April 18, 2011 11:35:34 AM
Subject: TENOR CO Farwest Paint Contamination 104107

Attached is a copy of your report.

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com
Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

This message is private or privileged. If you are not the person or party for whom this message is intended, we apologize for the mistake and please forward to us a note that this message was received in error. Do not copy or forward to any other party this message or its contents and please delete it from your records.

scan0007.pdf
495 KB

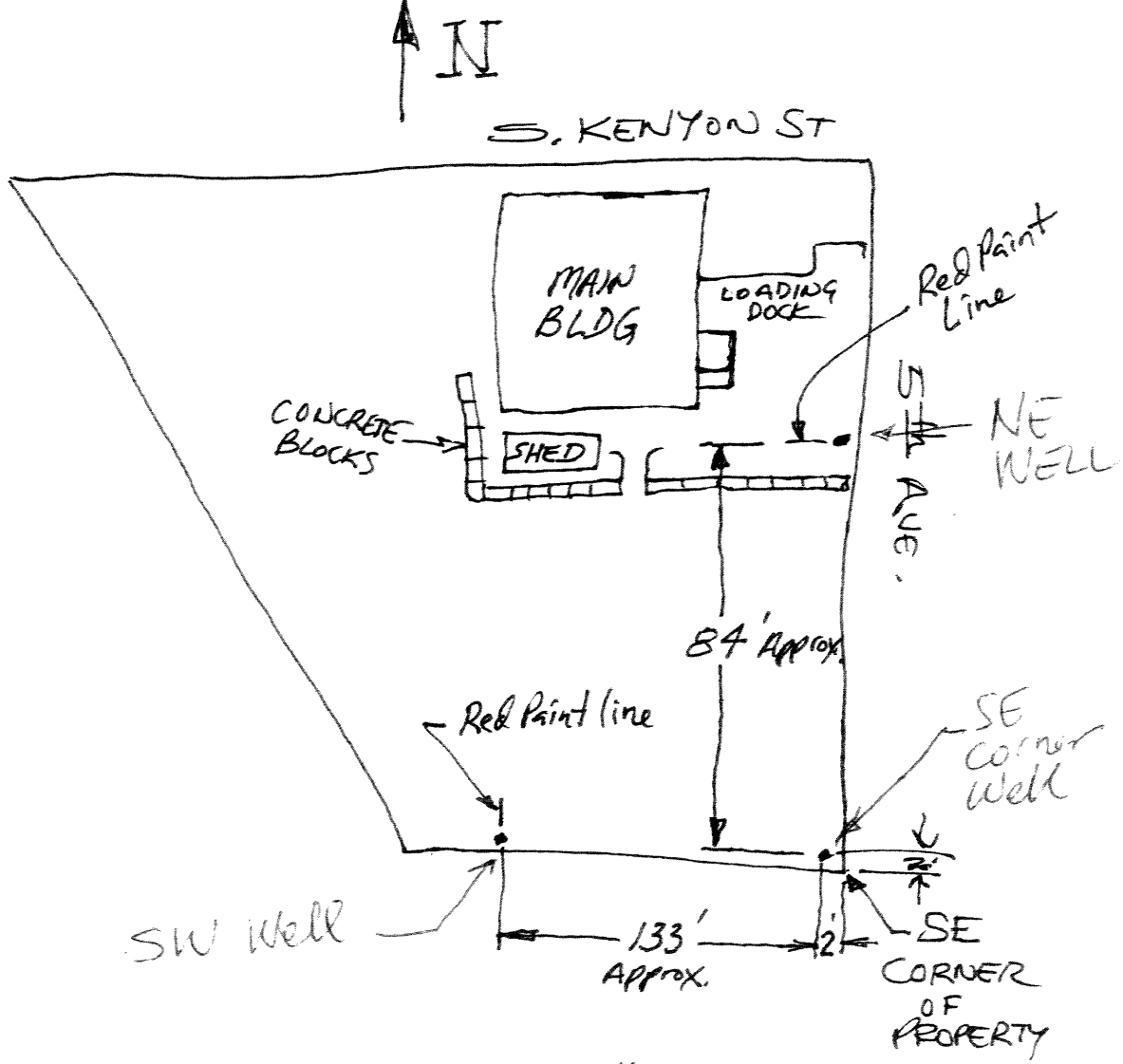
TENOR CO Farwest Paint Contamination 104107.pdf — see prior email
214 KB

70

TENOR COMPANY LLC

PROPERTY @ 327 S. KENYON ST.
SEATTLE, WA. 98108

Need to check for utilities (underground) potential



• ← Depicts proposed well approximate locations. Ground has been marked at each well location using red spray paint.

Questions? — call property owner, Duane Bartel @ 206-321-5565

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

October 5, 2011

Duane Bartel, Project Manager
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

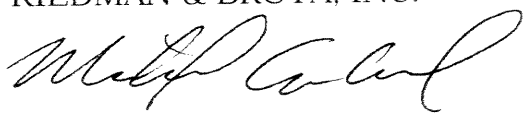
Dear Mr. Bartel:

Included are the results from the testing of material submitted on September 23, 2011 from the Tenor FW UST Remediation, F&BI 109326 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
NAA1005R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 23, 2011 by Friedman & Bruya, Inc. from the Tenor Co., LLC Tenor FW UST Remediation, F&BI 109326 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
109326-01	W2
190326-02	W5
190326-03	W14

All quality control requirements were acceptable.

Date of Report: 10/05/11
Date Received: 09/23/11
Project: Tenor FW UST Remediation, F&BI 109326
Date Extracted: 09/28/11
Date Analyzed: 10/03/11

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 50-150)
W2 109326-01	22,000	123
W5 109326-02	16,000	117
W14 109326-03	2,600	110
Method Blank 01-1777 MB	<50	112

Date of Report: 10/05/11
Date Received: 09/23/11
Project: Tenor FW UST Remediation, F&BI 109326

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	102	109	70-130	7

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

[redacted] BRUYA LAB

109326

ME 09/23/11

CHAIN-OF-CUSTODY RECORD

[redacted] (WP) B02

CLIENT: Tenor Co. LLC

ADDRESS: 1313 Washington St. Sumner, WA 98390

PHONE: 206-321-5565 FAX: —

CLIENT PROJECT #: FW-UST PROJECT MANAGER: D. Bartel

DATE: 9-22-11 PAGE 1 OF 1

PROJECT NAME: Tenor FWUST Remediation

LOCATION: 327 S. Canyon St. Seattle

COLLECTOR: D. Bartel DATE OF COLLECTION: 9/22/11

Sample Number	Depth	Time	Sample Type	Container Type	NOTES	Total Number of Containers	Laboratory Note Number
1. W2	13'	7AM	H2O	G/ASS			01
2. W5	13'	"	"	"			02
3. W14	13'	"	"	"			03
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							

ANALYSES: TPH-HCID; TPH - DIESEL & OIL; TPH - GASOLINE; BTEX; VOC 8260CL; VOC 8260; SemiVol 8270; PAH's 8270; PCB's 8082; CL Pesticides 8081; RCRA 8 Metals; MTCA 5 Metals; Pb; Asbestos-PLM; GRO Suite; DRO Suite; WO Suite

Test all three samples for mineral spirits (stoddard solvent)

D. Bartel 9-22-11

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
		[signature]	9/23/11 0720
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Samples received at 20 °C

Turn Around Time: 24 HR 48 HR 5 DAY

XFINITY Connect **duanesadventures2296@comcast.net**

- Font Size -

TENOR CO Farwest UST 110210

From : Friedman & Bruya, Inc. <friedmanandbruya@gmail.com> Fri, Oct 28, 2011 07:46 AM
Subject : TENOR CO Farwest UST 110210 1 attachment
To : Duane Bartel - Tenor <duanesadventures2296@comcast.net>
Reply To : Friedman & Bruya, Inc. <fbi@isomedia.com>

Attached is a copy of your report.

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com
Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

TENOR CO Farwest UST 110210.pdf
197 KB

90

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

October 28, 2011

Duane Bartel, Project Manager
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

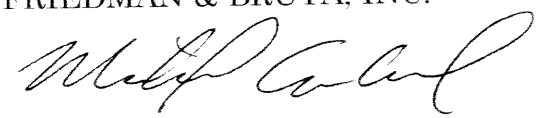
Dear Mr. Bartel:

Included are the results from the testing of material submitted on October 17, 2011 from the Farwest UST, F&BI 110210 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
NAA1028R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 17, 2011 by Friedman & Bruya, Inc. from the Tenor Co., LLC Farwest UST, F&BI 110210 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
110210-01	W1
110210-02	W2
110210-03	W4
110210-04	W6
110210-05	W7
110210-06	W8
110210-07	W9
110210-08	W10
110210-09	W11
110210-10	DRUM 1
110210-11	DRUM 2
110210-12	DRUM 3
110210-13	DRUM 4
110210-14	DRUM 5
110210-15	DRUM 6
110210-16	Sample A
110210-17	Sample B
110210-18	Sample C
110210-19	W12
110210-20	W13

Sample W1 and W4 exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/11
Date Received: 10/17/11
Project: Farwest UST, F&BI 110210
Date Extracted: 10/19/11
Date Analyzed: 10/21/11, 10/22/11, and 10/26/11

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 50-150)
W1 110210-01	140,000 ve	129
W2 110210-02	28,000	119
W4 110210-03	130,000 ve	128
W6 110210-04	80,000	116
W7 110210-05	14,000	130
W8 110210-06	3,100	117
W9 110210-07	4,500	117
W10 110210-08	24,000	124
W11 110210-09	2,300	120
DRUM 1 110210-10	5,500	122
DRUM 2 110210-11	5,000	114

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/11
Date Received: 10/17/11
Project: Farwest UST, F&BI 110210
Date Extracted: 10/19/11
Date Analyzed: 10/21/11, 10/22/11, and 10/26/11

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 50-150)
DRUM 3 110210-12	14,000	120
DRUM 4 110210-13	5,500	124
DRUM 5 110210-14	5,000	122
DRUM 6 110210-15	6,200	138
Sample A 110210-16	38,000	135
Sample B 110210-17	8,500	131
Sample C 110210-18	51,000	125
W12 110210-19	2,100	85
Method Blank 01-1902 MB	<50	92

Mineral Spirits
Water Skimmed
Skimmed from Processing Tanks
Further consolidation drums
Final Consolidation Drum

Date of Report: 10/28/11
Date Received: 10/17/11
Project: Farwest UST, F&BI 110210

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	99	111	70-130	11

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

110210

ME 10/17/11

004

SAMPLE CHAIN OF CUSTODY

Send Report To Duane Bartel
Tenor Co. LLC
Company duanesadventures2296@comcast.net
Address 1313 Washington St.
City, State, ZIP Sumner, WA. 98390
Phone # 206-321-5565 Fax # ——

SAMPLERS (signature) [signature]

PROJECT NAME/NO. FARWEST UST

PO #

REMARKS See note on pg. 2 re: samples W12 & W13.

Page # 1 of 2

TURNAROUND TIME
☐ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	mineral spirits (Stoddard solvent)	Notes
W1	01	10/16/11	5PM	Water	1							X	
W3	02												
W4	03												
W6	04												
W7	05												
W8	06												
W9	07												
W10	08												
W11	09												
DROM 1	10	10/16/11	5PM	Water	1								

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044
FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Duane Bartel	Tenor Co. LLC	10/16/11	8PM
Received by: [signature]	Nhan Phan	FeBT	10/17/11	0715
Relinquished by:				
Received by:				

Samples received at 9 °C

110210

ME 10/17/11

SAMPLE CHAIN OF CUSTODY

Page # 2 of 2

Send Report To

Company Tenor Co. LLC

Address 1313 Washington St.

City, State, ZIP Sumner, WA. 98390

Phone # 206-321-5565 Fax # ——

SAMPLERS (signature) Duane Bartel

PROJECT NAME/NO. Farwest UST

PO #

REMARKS See note below re: W12 & W13. MAY not need to test. DB

TURNAROUND TIME
☐ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Mineral Spirits (stoddard Solvent)	Notes
DRUM 2	11	10/16/11	5PM	Water	1							X	
DRUM 3	12												
DRUM 4	13												
DRUM 5	14												
DRUM 6	15												
Sample A	16												
" B	17												
Sample C	18												
W12	19										*		Test only if W8 or W10 exceed 5000 ppb
W13	20	10/16/11	5PM	Water	1								Test only if W11 exceeds 5000 ppb

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Duane Bartel	Tenor Co. LLC	10/16/11	8 PM
Received by:		Nhan Pham	FEBI	10/17/11	0715
Relinquished by:					
Received by:					

Samples received at 9 °C

XFINITY Connect **duanesadventures2296@comcast.net**

- Font Size -

TENOR CO Farwest UST 212168

From : Friedman & Bruya, Inc. <friedmanandbruya@gmail.com> Wed, Dec 19, 2012 01:32 PM
Subject : TENOR CO Farwest UST 212168 2 attachments
To : Duane Bartel - Tenor <duanesadventures2296@comcast.net>
Reply To : Friedman & Bruya, Inc. <fbi@isomedia.com>

Attached are your document(s).

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com

Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

TENOR CO Farwest UST 212168 Invoice.pdf — bill
10 KB

TENOR CO Farwest UST 212168.pdf
95 KB

116

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

December 19, 2012

Duane Bartel
Tenor Co LLC
1313 Washington St
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on December 11, 2012 from the Farwest UST, F&BI 212168 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA1219R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on December 11, 2012 by Friedman & Bruya, Inc. from the Tenor Co LLC Farwest UST, F&BI 212168 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co LLC
212168-01	W1
212168-02	W2
212168-03	W4
212168-04	W6
212168-05	W14

The sample W4 exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 12/19/12
Date Received: 12/11/12
Project: Farwest UST, F&BI 212168
Date Extracted: 12/12/12
Date Analyzed: 12/13/12 and 12/14/12

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 50-150)
W1 212168-01	7,100	86
W2 212168-02	5,900	103
W4 212168-03	120,000 ve	124
W6 212168-04	18,000	109
W14 212168-05	330	97
Method Blank 02-2288 MB	<50	85

Date of Report: 12/19/12
Date Received: 12/11/12
Project: Farwest UST, F&BI 212168

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	87	98	70-130	12

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

212168 comcast.net **SAMPLE CHAIN OF CUSTODY** ME 12-11-12 AI3

Send Report To duanesadventures2296@
Company Teror Co. LLC
Address 1313 Washington St.
City, State, ZIP Sumner, WA. 98390
Phone # 206-321-5565 Fax # None

SAMPLERS (signature) Duane Bartel
PROJECT NAME/NO. Farwest UST
PO #
REMARKS Test for ppb stoddard solvent (mineral spirits)

Page # ____ of ____

TURNAROUND TIME
☐ Standard (2 Weeks)
☐ RUSH ____
Rush charges authorized by: ____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Stoddard (mineral spirits)				Notes
W1	01	12/11/12	10:55	water	1							✓				
W2	02	"	"	"	1							✓				
W4	03	"	"	"	1							✓				
W6	04	"	"	"	1							✓				
W14	05	12/11/12	10:55	water	1							✓				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Duane Bartel	Duane Bartel	Teror Co. LLC	12/11/12	10:55
Received by: Dave	Dave	F&BI	"	"
Relinquished by:				
Received by:				

FORMS\COC\COC.DOC

XFINITY Connect

duanesadventures2296@comcast.net

Font Size

TENOR CO Farwest UST 301245.pdf

From : Friedman & Bruya, Inc. <friedmanandbruya@gmail.com>
Tue, Jan 29, 2013 10:08 AM

Subject : TENOR CO Farwest UST 301245.pdf
2 attachments

To : Duane Bartel - Tenor <duanesadventures2296@comcast.net>

Reply To : Friedman & Bruya, Inc. <fbi@isomedia.com>

Attached are your document(s).

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com

Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

TENOR CO Farwest UST 301245 Invoice.pdf
10 KB

TENOR CO Farwest UST 301245.pdf
115 KB

120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

January 29, 2013

Duane Bartel, Manager
Tenor Co LLC
1313 Washington St
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on January 21, 2013 from the Farwest UST, F&BI 301245 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA0129R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 21, 2013 by Friedman & Bruya, Inc. from the Tenor Co LLC Farwest UST, F&BI 301245 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co LLC
301245 -01	W1
301245 -02	W2
301245 -03	W3
301245 -04	W4
301245 -05	W5
301245 -06	W6

The NWTPH-Dx Stoddard solvent value for sample W4 exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 01/29/13
Date Received: 01/21/13
Project: Farwest UST, F&BI 301245
Date Extracted: 01/22/13
Date Analyzed: 01/23/13 and 01/24/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 47-140)
W1 301245-01	19,000	53
W2 301245-02	36,000	ip
W3 301245-03	53,000	72
W4 301245-04	100,000 ve	69
W5 301245-05 1/10	110,000	77
W6 301245-06 1/10	140,000	91
Method Blank 03-164 MB	<50	91

Date of Report: 01/29/13
Date Received: 01/21/13
Project: Farwest UST, F&BI 301245

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	88	106	70-130	19

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

301245

SAMPLE CHAIN OF COSTODY

ME 01/21/13 D03

Send Report To duanesadventures2296@comcast.net

Company Tenor Company LLC

Address 1313 Washington St.

City, State, ZIP Sumner, WA. 98390

Phone # 206-321-5565 Fax # ——

SAMPLERS (signature) Duane Bartel

PROJECT NAME/NO. Farwest UST

PO #

REMARKS

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Stoddard solvent (mineral spirits)	Notes
W1	-01	01-20-13	2 pm	water	1							X	
W2	-02				1							X	
W3	-03				1							X	
W4	-04				1							X	
W5	-05				1							X	
W6	-06				1							X	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Duane Bartel	Duane Bartel	Tenor Co. LLC	1/21/13	1:00
Received by: [signature]	Nhan Phan	FeBI	1/21/13	1:00
Relinquished by:				
Received by:				

FORMS\COC\COC.DOC

Samples received at ___ °C

XFINITY Connect

duanesadventures2296@comcast.net

Font Size

TENOR CO Farwest UST 302123

From : Friedman & Bruya, Inc. <friedmanandbruya@gmail.com>
Subject : TENOR CO Farwest UST 302123
To : Duane Bartel - Tenor <duanesadventures2296@comcast.net>
Reply To : Friedman & Bruya, Inc. <fbi@isomedia.com>

Wed, Feb 20, 2013 02:11 PM
2 attachments

Attached are your document(s).

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com

Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

TENOR CO Farwest UST 302123 Invoice.pdf
10 KB

TENOR CO Farwest UST 302123.pdf
99 KB

121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

February 20, 2013

Duane Bartel, Manager
Tenor Co LLC
1313 Washington St
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on February 11, 2013 from the Farwest UST, F&BI 302123 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA0220R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 11, 2013 by Friedman & Bruya, Inc. from the Tenor Co LLC Farwest UST, F&BI 302123 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co LLC
302123 -01	W1
302123 -02	W2
302123 -03	W3
302123 -04	W4
302123 -05	W5
302123 -06	W6

All quality control requirements were acceptable.

Date of Report: 02/20/13
Date Received: 02/11/13
Project: Farwest UST, F&BI 302123
Date Extracted: 02/14/13
Date Analyzed: 02/18/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 47-140)
W1 302123-01	47,000	65
W2 302123-02	37,000	ip
W3 302123-03	33,000	64
W4 302123-04	50,000	ip
W5 302123-05	68,000	110
W6 302123-06	29,000	60
Method Blank 03-265 MB	<50	68

Date of Report: 02/20/13
Date Received: 02/11/13
Project: Farwest UST, F&BI 302123

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	90	94	70-130	4

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

302123

SAMPLE CHAIN OF CUSTODY

ME 2/11/13 E04

Send Report To dvanesadventures2296@comcast.net

Company Tenor Company LLC

Address 1313 Washington St.

City, State, ZIP Sumner, WA 98390

Phone # 206-[illegible]21-5565 Fax # ———

SAMPLERS (signature)

PROJECT NAME/NO.	PO #
Farwest UST	

REMARKS

Page # ___ of ___

TURNAROUND TIME
- ☑ Standard (2 Weeks)
- ☐ RUSH ___

Rush charges authorized by:

SAMPLE DISPOSAL
- ☑ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Stoddard solvent (mineral spirits) ppb					Notes
W1	01	2/10	Noon	Water	1							✓					
W2	02	2/10	|	|	1							✓					
W3	03	2/10	|	|	1							✓					
W4	04	2/10	|	|	1							✓					
W5	05	2/10	|	|	1							✓					
W6	06	2/10	Noon	Water	1							✓					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Duane Bartel	Duane Bartel	Tenor Co. LLC	2/11	1:10
Received by:	(signature)	HONG NGUYEN	FBI	↓	↓
Relinquished by:					
Received by:					

FORMS\COC\COC.DOC

Samples received at ___ °C

XFINITY Connect

duanesadventures2296@comcast.ne

Font Size

TENOR CO Farwest UST 309540

From : Friedman & Bruya, Inc. <friedmanandbruya@gmail.com>

Thu, Oct 10, 2013 04:11 PM

2 attachments

Subject : TENOR CO Farwest UST 309540

To : Duane Bartel - Tenor <duanesadventures2296@comcast.net>

Reply To : Friedman & Bruya, Inc. <fbi@isomedia.com>

Attached are your document(s).

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com

Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

TENOR CO Farwest UST 309540 Invoice.pdf
10 KB

TENOR CO Farwest UST 309540.pdf
96 KB

130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 10, 2013

Duane Bartel, Project Manager
Tenor Co, LLC
1313 Washington St
Summner WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on September 30, 2013 from the Farwest UST, F&BI 309540 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA1010R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 30, 2013 by Friedman & Bruya, Inc. from the Tenor Co, LLC Farwest UST, F&BI 309540 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co, LLC
309540 -01	W1
309540 -02	W2
309540 -03	W3
309540 -04	W4
309540 -05	W5
309540 -06	W6

All quality control requirements were acceptable.

Date of Report: 10/10/13
Date Received: 09/30/13
Project: Farwest UST, F&BI 309540
Date Extracted: 10/02/13
Date Analyzed: 10/08/13 and 10/09/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 47-140)
W1 309540-01	15,000	ip
W2 309540-02 1/10	180,000	ip
W3 309540-03 1/20	390,000	ip
W4 309540-04 1/10	210,000	134
W5 309540-05	87,000	88
W6 309540-06 1/10	57,000	ip
Method Blank 03-1976 MB	<50	107

Date of Report: 10/10/13
Date Received: 09/30/13
Project: Farwest UST, F&BI 309540

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	102	116	70-130	13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

309540

SAMPLE CHAIN OF CUSTODY ME 09/30/13

A04

Send Report To dianesadventures2296@comcast.net

Company Tenor Co. LLC

Address 1313 Washington St.

City, State, ZIP Sumner WA. 98390

Phone # 206-321-3565 Fax # ____

SAMPLERS (signature) Diane Bartel

PROJECT NAME/NO. FARWEST UST

PO #

REMARKS Test for stoddard solvents (mineral spirits)

[redacted]age # ____ of ____

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH____
- Rush charges authorized by

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Stoddard					Notes
W1	01	9/29/13	3 PM	water	1							X					
W2	02	↓	↓	↓	1							X					
W3	03	↓	↓	↓	1							X					
W4	04	↓	↓	↓	1							X					
W5	05	↓	↓	↓	1							X					
W6	06	9/29/13	3 PM	water	1							X					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Diane Bartel	Diane Bartel	Tenor Co LLC	9/29/13	7 PM
Received by:	[signature]	Nhan Phan	FeBI	9/30/13	0730
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

July 15, 2014

Duane Bartel, Project Manager
Tenor Company, LLC
1313 Washington St.
Sumner, WA 98390

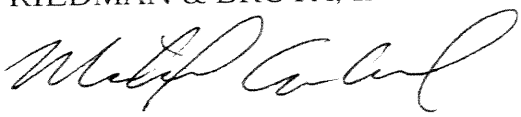
Dear Mr. Bartel:

Included are the results from the testing of material submitted on June 30, 2014 from the Farwest UST, F&BI 406524 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
NAA0715R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 30, 2014 by Friedman & Bruya, Inc. from the Tenor Company, LLC Farwest UST, F&BI 406524 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Company, LLC
406524 -01	W2
406524 -02	W3
406524 -03	W5
406524 -04	P

Sample P was diluted for the 8021B analysis due to the foamy sample matrix. The reporting limits were raised accordingly.

All quality control requirements were acceptable.

Date of Report: 07/15/14
Date Received: 06/30/14
Project: Farwest UST, F&BI 406524
Date Extracted: 06/30/14
Date Analyzed: 06/30/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING METHOD 8021B

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) Limit (52-124)
P pc 406524-04 1/40	<40	<40	250	730	122
Method Blank 04-1320 MB	<1	<1	<1	<3	92

Date of Report: 07/15/14
Date Received: 06/30/14
Project: Farwest UST, F&BI 406524
Date Extracted: 07/02/14
Date Analyzed: 07/10/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 47-140)
W2 406524-01 1/10	620,000	ip
W3 406524-02 1/10	87,000	ip
W5 406524-03	9,600	120
P 406524-04 1/10	280,000	ip
Method Blank 04-1369 MB	<50	93

Date of Report: 07/15/14
Date Received: 06/30/14
Project: Farwest UST, F&BI 406524

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING EPA METHOD 8021B

Laboratory Code: 406511-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	96	65-118
Toluene	ug/L (ppb)	50	97	72-122
Ethylbenzene	ug/L (ppb)	50	96	73-126
Xylenes	ug/L (ppb)	150	96	74-118

Date of Report: 07/15/14
Date Received: 06/30/14
Project: Farwest UST, F&BI 406524

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	64	67	70-130	5

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

406524 (comcast.net) **SAMPLE CHAIN OF CUSTODY** ME 6/30/14 C02

Send Report To duanesadventures2296@ | SAMPLERS (signature) Duane Bartel

Company Tenor Company LLC | PROJECT NAME/NO. Farwest UST | PO #

Address 1313 Washington St. | REMARKS

City, State, ZIP Sumner, WA. 98390

Phone # 206-321-5565 Fax # —

Page # 1 of 1

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	4 Dissolved Metals					Notes
W2	01			water	1							✓					x-added per DB
W3	02			"	1							✓					6/30/14 ac.
W5	03			"	1							✓					
P	04			"	1			X				X					

ANALYSES REQUESTED

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Duane Bartel	Duane Bartel	Tenor Co. LLC	6/30/14	9:30 AM
Received by:	Matt	Matt Langston	FBInc	6/30/14	9:30am
Relinquished by:					
Received by:					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FOR: \COC\COC.DOC

Samples received at 7 1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 12, 2014

Duane Bartel, Project Manager
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

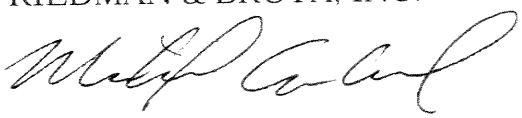
Dear Mr. Bartel:

Included are the results from the testing of material submitted on July 22, 2014 from the Farwest UST, F&BI 407325 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
NAA0812R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 22, 2014 by Friedman & Bruya, Inc. from the Tenor Co., LLC Farwest UST, F&BI 407325 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
407325 -01	W2
407325 -02	W3
407325 -03	W4

The Stoddard solvent laboratory control sample and laboratory control sample duplicate failed the acceptance criteria. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 08/12/14
Date Received: 07/22/14
Project: Farwest UST, F&BI 407325
Date Extracted: 07/28/14
Date Analyzed: 08/06/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 47-140)
W2 407325-01 1/10	25,000 x, jl	75
W3 407325-02 1/10	92,000 x, jl	ip
W4 407325-03 1/10	9,100 x, jl	92
Method Blank 04-1551 MB	<50 jl	79

Date of Report: 08/12/14
Date Received: 07/22/14
Project: Farwest UST, F&BI 407325

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	52 vo	41 vo	60-120	24 vo

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

407325

SAMPLE CHAIN OF CUSTODY ME 07-22-14 E03

Send Report To DugneyAdventures2296@comcast.net
Company Tenor Company LLC
Address 1313 Washington St.
City, State, ZIP Sumner, WA. 98390
Phone # 206-321-5565 Fax # —

SAMPLERS (signature) Duane Bartel
PROJECT NAME/NO. Farwest UST
PO #
REMARKS

Page # ____ of ____

TURNAROUND TIME
☐ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Mineral spirits					Notes
					4	ANALYSIS REQUESTED											
W2	01	7-21	800PM	Water	1							✓					
W3	02	7-21	"	"	1							✓					
W4	03	7-21	"	"	1							✓					
					7/22												

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Duane Bartel	Duane Bartel	Tenor Company	7/22/14	10:30 AM
Received by:	Dave	Dave	FxBI	"	"
Relinquished by:					
Received by:					

Carbon Canisters - Sample

Total of six purchased to date.

Two in use@present

Turns out other four can be returned to service. (Test OK)

VISA/MC CHARGE FORM

H2 Oil Recovery Equipment, Inc. is authorized to make the following charges to the listed credit card account below:

Date: 9/30/2009

Company: Tenor Company/Duane Bartell

Card name: MasterCard

Amount:	$1,040.00
Shipping	$190.00
Tax	$ 120.71
Total	$1,350.71

Items: (2) VSC-200 Vapor Phase Carbon Vessels each filled with Carbon
H2 Ref # 290322

Card #: _____

Exp Date: _____

Signature: _____

Ship to:

AIR PUMP

Air Pump Notes
8-05-2014

Air source:
Craftsman 1.9 HP air pump, 27 gal capacity
115 volt, 15 watt
Driving ½ " diameter air pump

Hobbs Reading:
Date: Wed, July 30 @ 8pm
Hobbs: 89 Hours

Compressor: 115V * 15 amps * 89 Hrs / 1000 = KW
Relay: (15 days * 24 hrs/day * 60 min/hr * 6/60 (or 1/11))

Air pump cycle times:

Normal cycle times of pump operation:
Time pump is off per cycle: 1 minute
Time pump runs per cycle: 6 seconds
Total time for one cycle: 1minute, 6 seconds
Compressor recharges the tank every 10 minutes and takes one minute to recharge the tank.

* 115V * 1.0 amps → Relay Power Draw

Pump Performance

Pump design optimal pump rate: 30 to 50 gpd depending on season (water table height)
Pump rate @ 8/5/2014: Approximately 10 gal per day

Conclusions:

Problematical - Reason: air cylinder exhibits sticky operation after a couple of weeks in 24/7 service (does not return optimally to allow water to refill charge chamber).

Not a viable pumping solution. Any air cylinder would eventually stick. Uses too much air and energy for the small amount it pumps. Cylinders are hard to replace and would require replacement about every two weeks.

.

Solution: Utilize a submersible pump instead…One optimized for shallow wells. Only needs to pump, at most, 2 gal per minute.

REF ONLY

Esisting small pressure pump in compressor shed will be used to aerate the tanks and blow the exhaust through the carbon canisters.
Pump specifics: Fuji Regenerative blower VFD2S
1.0 HP
55SCFM
1 ½" inlets and outlet
Source: Grainger

REGENOX ORC TREATMENT APPARATUS

JET PUMP SUPPLY OF REGENOX TO DRAINFIELD SYSTEM UNDER WAREHOUSE

TOTES FOR MIXING REGENOX PARTS A&B USING HIGH-SHEAR INDUSTRIAL MULTI-BLADE MIXER

REGENOX ORC TREATMENT

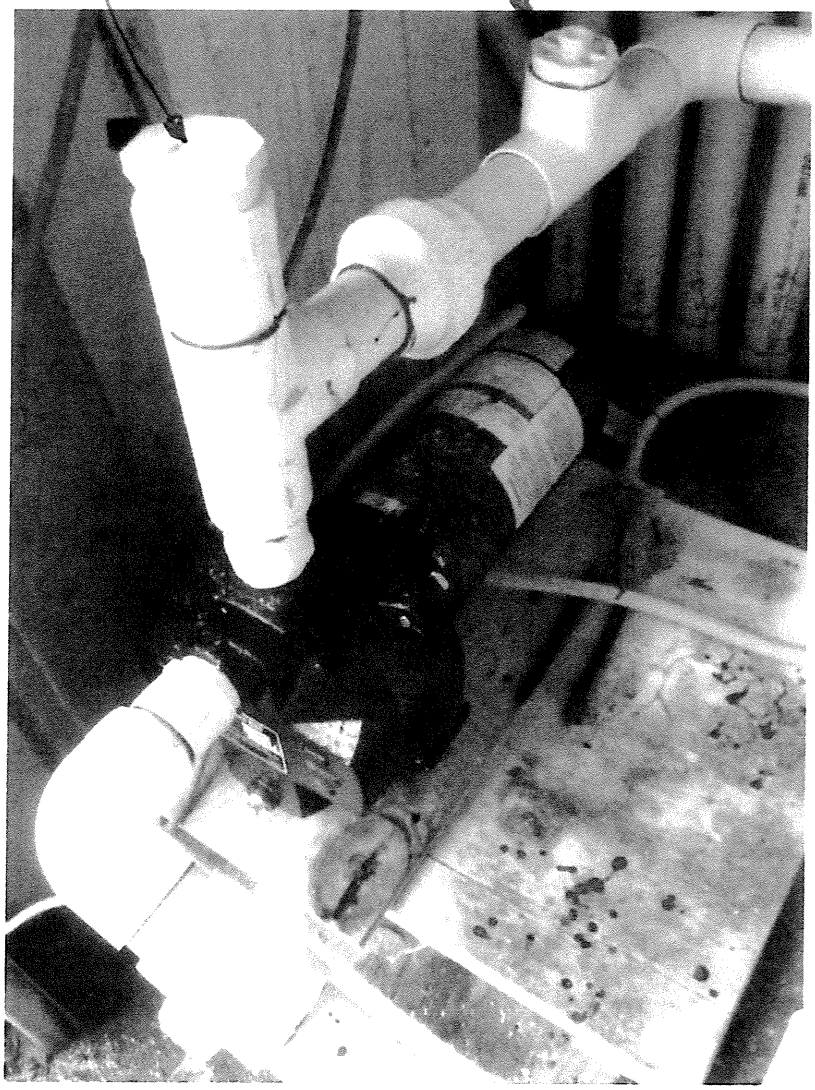
ORC DISTRIBUTION SYSTEM

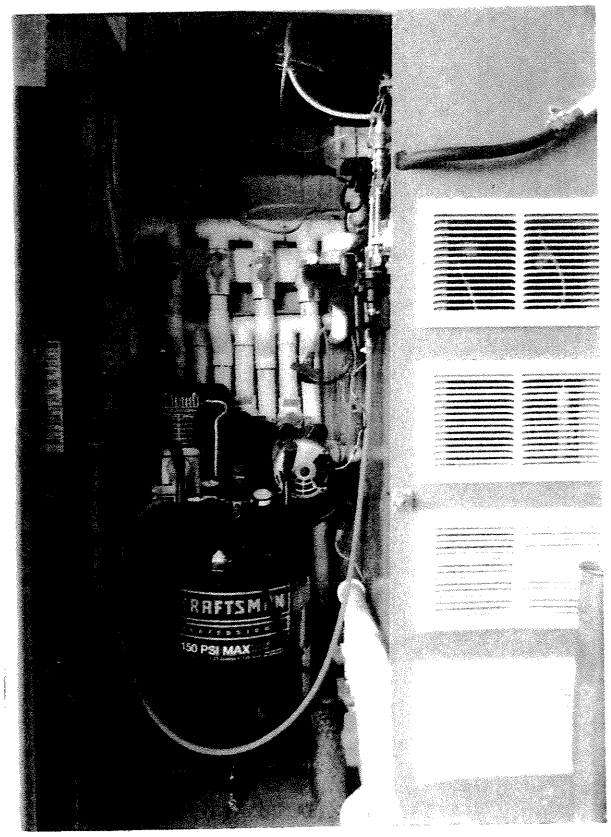
VALVED LINES DISTRIBUTE TO MULTI-CHANNEL DRAIN FIELD 4' BELOW GROUND LEVEL. (SEE EARLIER REPORTS FOR MORE DETAIL)

H_2O_2 ORC DISTRIBUTION SYSTEM

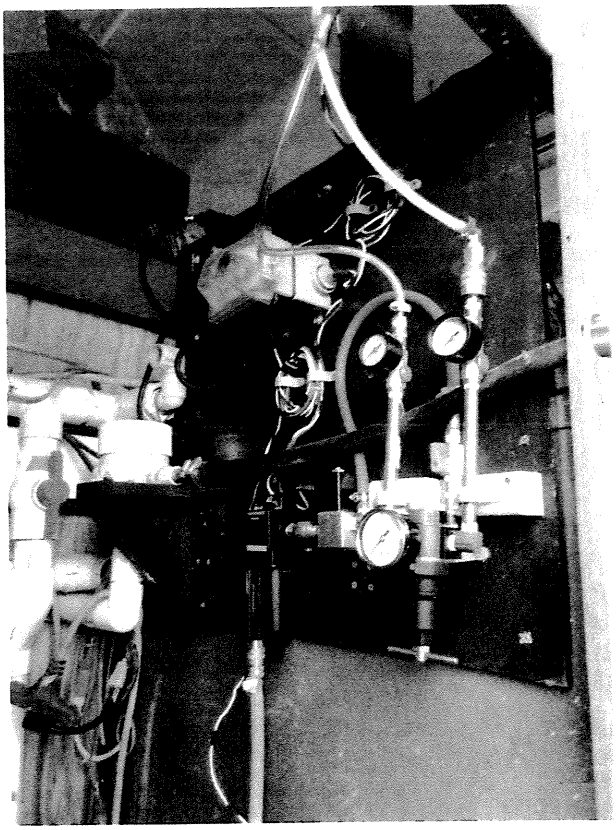
PORT FOR LARGE FUNNEL FOR H_2O_2 ORC TREATMENTS

PORT FOR DIGITALLY METERED WATER SUPPLY

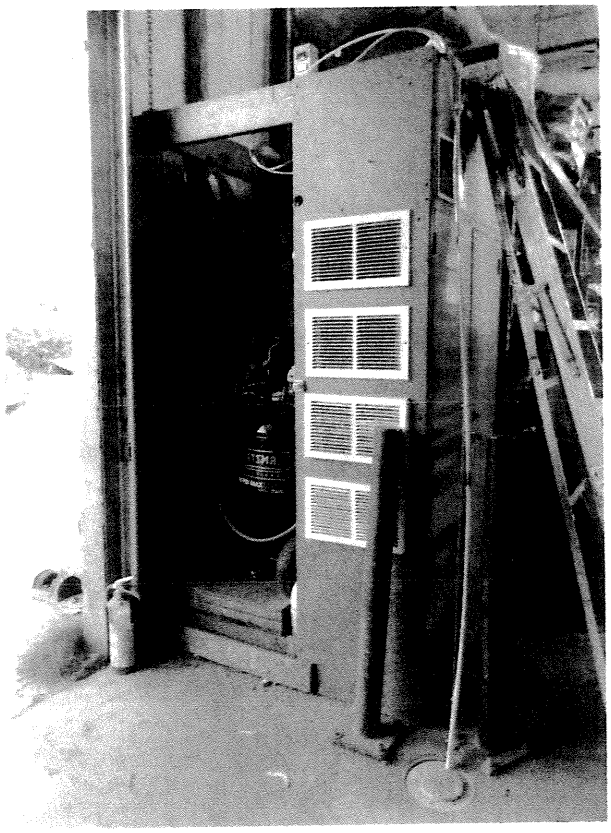




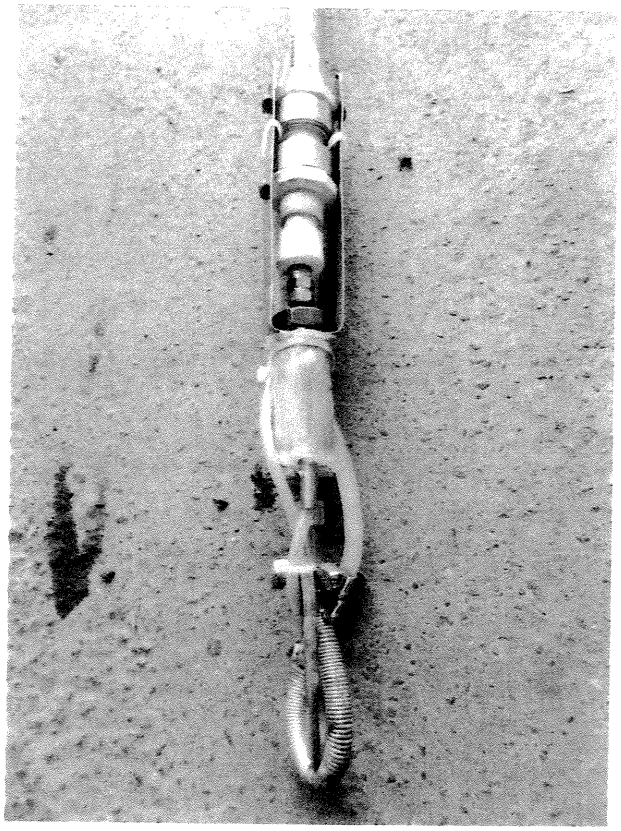
AIR PUMP
AIR COMPRESSOR



AIR PUMP CONTROL PANEL

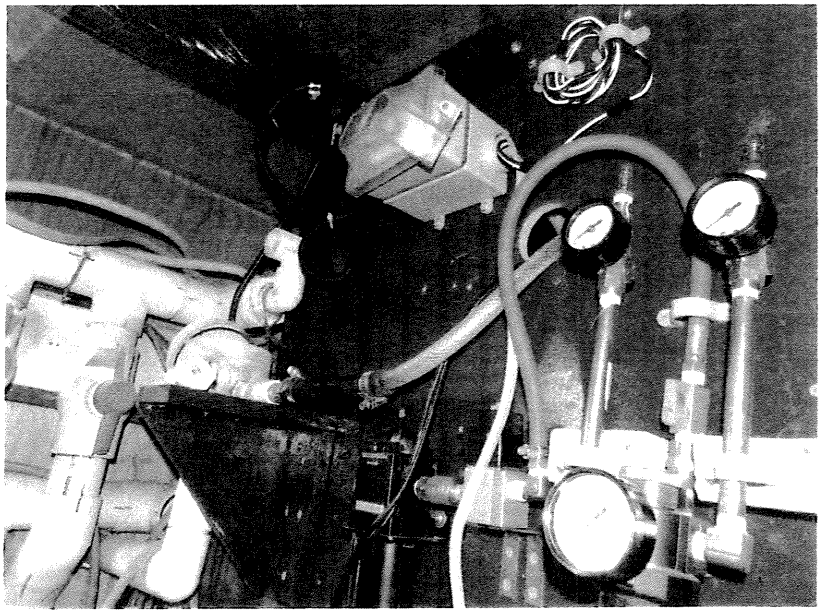


AIR PUMP INSTALLATION

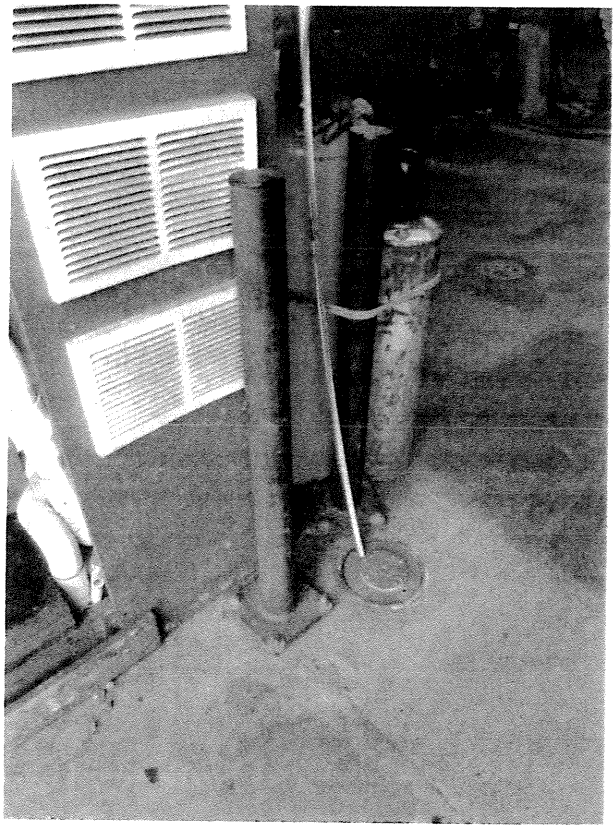


AIR PUMP ASSEMBLY

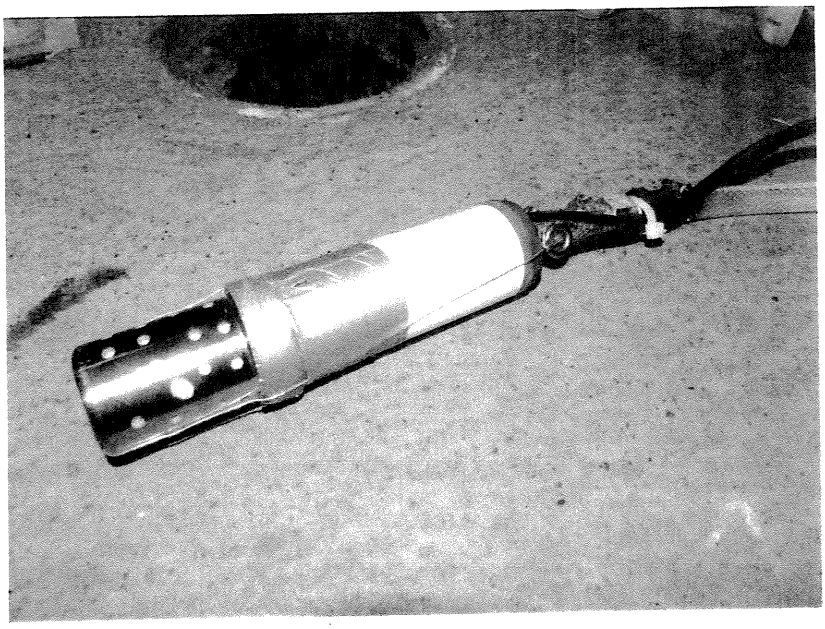
AIR PUMP AFTER TWO WEEKS OF OPERATION



SUBMERSIBLE SHALLOW WELL PUMP CONTROL PANEL



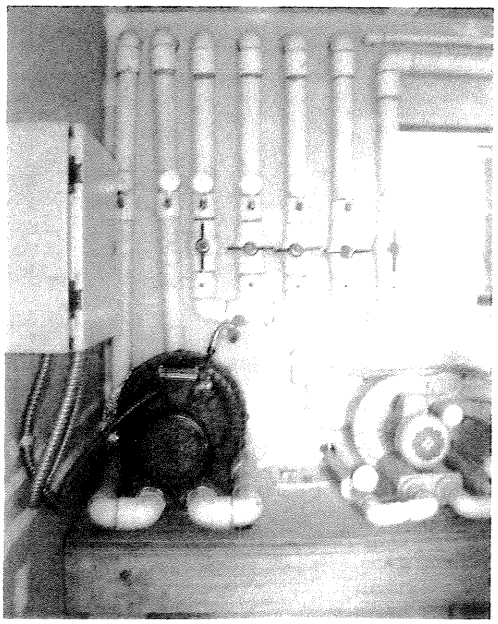
FEED LINE FROM SUBMERSIBLE PUMP IN WELL #2



SUBMERSIBLE SHALLOW WELL PUMP ASSEMBLY

SHALLOW WELL SUBMERSIBLE PUMP WITH FILTER COMPONENTS

PROCESSING SHED CONFIGURATION
AUGUST 2014



VES PUMP INSTALLATIONS
AUGUST 2014

Update Report for WDOE August, 15, 2014 (Paint)

Review of 90 Day Notice Re: discovery of buried paint-waste in drums, dated May 6, 2010 and subsequent study and monitoring

(For more detail, see individual report dated May 6, 2010)

February 2010 – Several remnants of 55-gallon drums discovered at South-East portion of property containing residue from what appeared to be solidified dry paint just below ground level. Began 90-Day Site Discovery Reporting Process. Submitted soil samples to Friedman and Bruya lab for analysis.

Timeline for UST Remediation since last report, dated June, 2010

March 2011- April 2011 – Had ESN Northwest install three monitoring wells in South-East portion of property along the property lines bordering area of discovered paint drum remnants to check for pollution from Stoddard solvents and/or heavy metals at property borders. No contamination from metals or Stoddard solvents detected. See attached map of property for locations of these three monitoring wells.

April 18, 2011 – Lab results from Friedman and Bruya for soil analysis below paint debris and of the paint debris found in buried drums. See attached lab reports. Results indicate paint is alkyd and lead based paint. Some heavy metals leached into soil directly under some debris locations. Paint debris is solidified and dates back to the 1950's to mid-1970's when Farwest Paint Company, now located in Tukwila, manufactured alkyd and lead-based paints on this property.

May 6, 2010 – Submitted 90 Day Notice Re; discovery of buried paint-waste in drums. Subsequently had repeated discussions with Rob Roe of EAI regarding potential of encapsulation of the paint debris. This led to multiple discussions with the current renter of the property. The renter had the option to buy the property but is now considering just renting the property for a few more years, then possibly moving.

Summary:

Until the current renter moves out, there is no way to plan what to do about the buried paint issue. Testing of both water and soil logs at the property perimeter monitoring wells showed no signs of contamination from the paint debris and there is no iminent contamination risk caused by the paint debris.

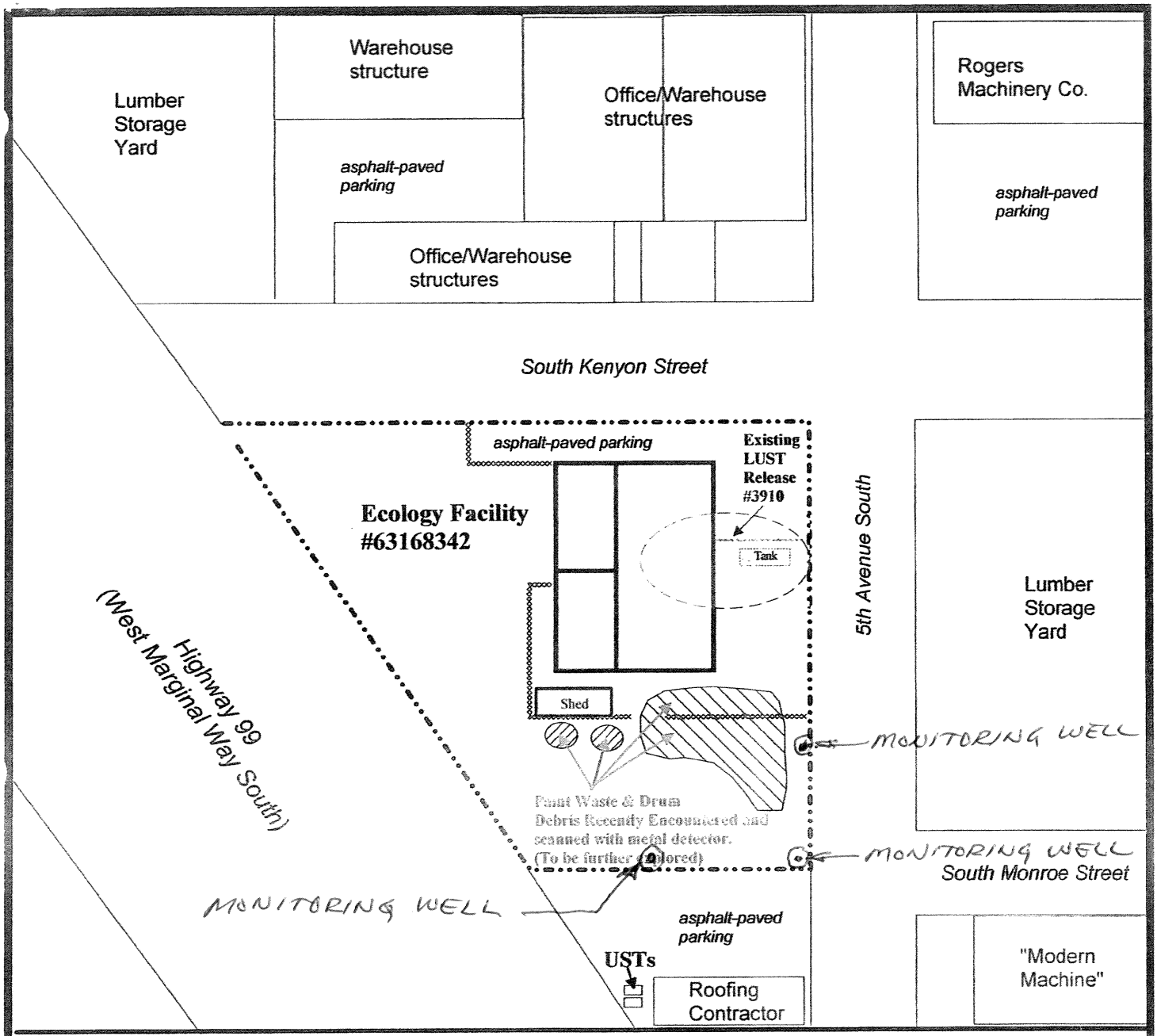
Duane Bartel August 15, 2014

The rest of this report consists of the following:

- Site map showing general locations of discovered buried paint debris in drums and locations of three monitoring wells installed to see if any pollution extended to the property lines. All three monitoring wells came up clean.

- Lab reports from April 2011

- Photos of excavation and buried paint debris in barrels



LEGEND:

Property boundary.

Fence lines segregating portions of the subject property.

Buildings / improvements.

N

ENVIRONMENTAL ASSOCIATES, INC.

1380 - 112th Avenue N.E., Ste. 300
Bellevue, Washington 98004

SITE PLAN

Former Glitsa, Inc. Property
327 South Kenyon Street
Seattle, Washington

Job Number:	Date:		Plate:
JN 28275-5	April 2010		2

XFINITY Connect

duanesadventures2296@comcast.net

- Font Size -

TENOR CO Farwest Paint Contamination 104107

From : Friedman & Bruya, Inc. <friedmanandbruya@gmail.com>

Mon, Apr 18, 2011 11:35 AM

Subject : TENOR CO Farwest Paint Contamination 104107

1 attachment

To : Duane Bartel - Tenor <duanesadventures2296@comcast.net>

Reply To : Friedman & Bruya, Inc. <fbi@isomedia.com>

Attached is a copy of your report.

3 Perimeter Wells @ SE Perimeter of Property

Sula Olson

This e-mail account is for outgoing messages only. Please send messages to

fbi@isomedia.com
Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119
Voice: (206) 285-8282
(800) 487-8231
Fax: (206) 283-5044

TENOR CO Farwest Paint Contamination 104107.pdf
214 KB

69

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

April 18, 2011

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

April 18, 2011

Duane Bartel, Project Manager
Tenor Co., LLC
1313 Washington St.
Sumner, WA 98390

Dear Mr. Bartel:

Included are the results from the testing of material submitted on April 11, 2011 from the Farwest Paint Contamination, F&BI 104107 project. There are 26 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAA0418R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 11, 2011 by Friedman & Bruya, Inc. from the Tenor Co., LLC Farwest Paint Contamination project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Tenor Co., LLC
104107-01	NE Well @ 13'
104107-02	SE Corner Well @ 13'
104107-03	SW Well @ 13'
104107-04	SE Well (84' N of Corner) @ 1'
104107-05	SE Well (84' N of Corner) @ 4'
104107-06	SE Well (84' N of Corner) @ 8'
104107-07	SE Well (84' N of Corner) @ 13'
104107-08	SE Corner Well @ 1'
104107-09	SE Corner Well @ 4'
104107-10	SE Corner Well @ 10'
104107-11	SE Corner Well @ 15'
104107-12	SW Corner Well @ 1'
104107-13	SW Corner Well @ 4'
104107-14	SW Corner Well @ 8'
104107-15	SW Corner Well @ 13'

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE Well (84' N of Corner) @ 1'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-04
Date Analyzed:	04/13/11	Data File:	104107-04.017
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	99	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	45.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE Well (84' N of Corner) @ 4'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-05
Date Analyzed:	04/13/11	Data File:	104107-05.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	15.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE Well (84' N of Corner) @ 8'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-06
Date Analyzed:	04/13/11	Data File:	104107-06.021
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	3.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE Well (84' N of Corner) @ 13'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-07
Date Analyzed:	04/13/11	Data File:	104107-07.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	98	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	5.99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE Corner Well @ 1'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-08
Date Analyzed:	04/13/11	Data File:	104107-08.033
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	46.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE Corner Well @ 4'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-09
Date Analyzed:	04/13/11	Data File:	104107-09.034
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	47.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE Corner Well @ 10'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-10
Date Analyzed:	04/13/11	Data File:	104107-10.035
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	2.76

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE Corner Well @ 15'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-11
Date Analyzed:	04/13/11	Data File:	104107-11.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	4.36

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SW Corner Well @ 1'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-12
Date Analyzed:	04/13/11	Data File:	104107-12.037
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	304

Analysis For Total Metals By EPA Method 200.8

Client ID:	SW Corner Well @ 4'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-13
Date Analyzed:	04/13/11	Data File:	104107-13.038
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	62.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SW Corner Well @ 8'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-14
Date Analyzed:	04/13/11	Data File:	104107-14.039
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	19.3

Analysis For Total Metals By EPA Method 200.8

Client ID:	SW Corner Well @ 13'	Client:	Tenor Co.. LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-15
Date Analyzed:	04/13/11	Data File:	104107-15.040
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	6.19

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Tenor Co., LLC
Date Received:	Not Applicable	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	I1-271 mb
Date Analyzed:	04/13/11	Data File:	I1-271 mb.015
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	NE Well @ 13'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-01
Date Analyzed:	04/13/11	Data File:	104107-01.049
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	98	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SE Corner Well @ 13'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-02
Date Analyzed:	04/13/11	Data File:	104107-02.050
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	98	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	SW Well @ 13'	Client:	Tenor Co., LLC
Date Received:	04/11/11	Project:	Farwest Paint Contamination, F&BI 104107
Date Extracted:	04/13/11	Lab ID:	104107-03
Date Analyzed:	04/13/11	Data File:	104107-03.051
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	102	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Tenor Co., LLC
Date Received:	Not Applicable	Project:	Farwest Paint Contamination. F&BI 104107
Date Extracted:	04/13/11	Lab ID:	I1-270 mb
Date Analyzed:	04/13/11	Data File:	I1-270 mb.025
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	97	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Date of Report: 04/18/11
Date Received: 04/11/11
Project: Farwest Paint Contamination, F&BI 104107
Date Extracted: 04/13/11
Date Analyzed: 04/13/11

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 53-144)
SE Well (84' N of Corner) @ 1' 104107-04	<50	102
SE Well (84' N of Corner) @ 4' 104107-05	<50	100
SE Well (84' N of Corner) @ 8' 104107-06	<50	100
SE Well (84' N of Corner) @ 13' 104107-07	<50	102
SE Corner Well @ 1' 104107-08	<50	101
SE Corner Well @ 4' 104107-09	<50	99
SE Corner Well @ 10' 104107-10	<50	104
SE Corner Well @ 15' 104107-11	<50	100
SW Corner Well @ 1' 104107-12	<50	101
SW Corner Well @ 4' 104107-13	<50	102

Date of Report: 04/18/11
Date Received: 04/11/11
Project: Farwest Paint Contamination, F&BI 104107
Date Extracted: 04/13/11
Date Analyzed: 04/13/11

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 53-144)
SW Corner Well @ 8' 104107-14	<50	103
SW Corner Well @ 13' 104107-15	<50	101
Method Blank 01-681 MB	<50	99

Date of Report: 04/18/11
Date Received: 04/11/11
Project: Farwest Paint Contamination, F&BI 104107
Date Extracted: 04/13/11
Date Analyzed: 04/14/11

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Stoddard Solvent Range (C_8-C_{11})	Surrogate (% Recovery) (Limit 51-134)
NE Well @ 13' 104107-01	350 x	84
SE Corner Well @ 13' dv 104107-02	<100	84
SW Well @ 13' dv 104107-03	<100	83
Method Blank 01-685 MB	<50	88

Date of Report: 04/18/11
Date Received: 04/11/11
Project: Farwest Paint Contamination, F&BI 104107

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 104107-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	45.5	143 b	75 b	65-126	62 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	101	81-120

Date of Report: 04/18/11
Date Received: 04/11/11
Project: Farwest Paint Contamination, F&BI 104107

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 104119-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	4.07	108 b	111 b	76-125	3 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	100	67-135

Date of Report: 04/18/11
Date Received: 04/11/11
Project: Farwest Paint Contamination, F&BI 104107

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: 104107-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	mg/kg (ppm)	5,000	<50	107	106	50-150	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Stoddard Solvent	mg/kg (ppm)	5,000	109	70-130

Date of Report: 04/18/11
Date Received: 04/11/11
Project: Farwest Paint Contamination, F&BI 104107

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Stoddard Solvent	ug/L (ppb)	2,500	89	92	70-130	3

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

104107 Duane Barter

SAMPLE CHAIN OF CUSTODY ME 04-11-11 #14,012

Page # 1 of 2

Send Report To duanesadventures2296@comcast.net

Company Tenor Company LLC

Address 2313 Washington St

City, State, ZIP Sumner, WA. 98390

Phone # 206-321-5565 Fax # ____

SAMPLERS (signature) Duane Barter

PROJECT NAME/NO. Farwest Paint Contamination

PO#

REMARKS

TURNAROUND TIME
☐ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Return samples
☐ Will call with instructions

SAMPLE #	Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Stable Solvents	Heavy metals					Notes
1	NE Well @ 13'	01	4/10/11	7PM	water	1							✓	✓					
2	SE Corner Well @ 13'	02	↓	↓	↓	1							✓	✓					
3	SW Well @ 13'	03	4/10/11	7PM	water	1							✓	✓					
4	SE Well (84' N of Corner) @ 1'	04	4/5/11	3PM	soil	1							✓	✓					
5	" " " " " @ 4'	05	↓	↓	↓	1							✓	✓					
6	" " " " " @ 8'	06				1							✓	✓					
7	SE Well (84' N of Corner) @ 13'	07		3PM		1							✓	✓					
8	SE Corner Well @ 1'	08		10AM		1							✓	✓					
9	SE Corner Well @ 4'	09	↓	10AM	↓	1							✓	✓					
10	SE Corner Well @ 10'	10	4/5/11	10AM	soil	1							✓	✓					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:					
Received by:	[signature]	Nhan phan	FeBI	4/11/11	2:30
Relinquished by:					
Received by:			Samples ~~received~~ at 16 °C		

FORMSVOC.DOC

EXPLORATORY EXCAVATION OF SOUTH-EAST YARD.

DISCOVERY OF BURIED BARRELS CONTAINING DEBRIS OF LEAD & ALKYD PAINT

CRUSHED BARRELS WITH PAINT DEBRIS

TYPICAL BARREL BURIED 2' BELOW GROUND LEVEL

SOLIDIFIED PAINT DEBRIS INSIDE BARREL

ENVIRONMENTAL
ASSOCIATES, INC.

1380 - 112th Avenue Northeast, Suite 300
Bellevue, Washington 98004
(425) 455-9025 Office
(888) 453-5394 Toll Free
(425) 455-2316 Fax

May 6, 2010

JN-28275-5

Toxics Cleanup Program
Washington State Department of Ecology
3190 - 160th Avenue SE
Bellevue, Washington 98008-5452

RE: 90-Day Site Discovery Reporting
WDOE Facility #63168342
King County Tax Parcel 732840-0740
Former Glitsa Property
327 South Kenyon Street
Seattle, Washington

To whom it may concern:

Environmental Associates, Inc (EAI) on behalf of our Client and current owner of the above referenced property (Tenor Company, LLC.) is submitting this written notice of site discovery in fulfillment of the 90-day reporting requirements outlined in the Model Toxic's Control Act (MTCA; WAC 173-340).

On February 24, 2010, a tenant (Alaska Logistics) reported to the property owner the discovery of several buried remnants of 55-gallon drums that appeared to contain residue of solidified material. Subsequent field observations made by the property owner and supplemented by laboratory testing suggested that the solidified material appeared to be dried paint. Some of the paint was found to contain heavy metals at concentrations high enough to represent a potential leaching hazard. Heavy metals and stoddard solvent (mineral spirits) were also detected in some of the soil intermixed with the paint debris. Followup laboratory testing confirmed that some of the paint failed the Toxicity Characteristic Leaching Procedure (TCLP) which would classify the paint debris as a dangerous waste under WAC 173-303.

Specific contaminants of interest identified to date within some of the soil and/or paint waste include; stoddard solvent (mineral spirits), lead, and total chromium, all of which were confirmed to exist within some of the waste material / soil at concentrations above WDOE target compliance levels for unrestricted land use (Methods-A / B).

The paint waste intermixed with soil and the occasional remnants of additional 55-gallon drums were noted in shallow soil over the approximate area depicted on the attached site plan. A metal detector was utilized by the property owner to assist in rough delineation of the depicted area. Further site explorations are anticipated to establish the lateral limits of the impact and finalize a remediation plan, though it is tentatively anticipated that remedial action will consist of an independent cleanup action involving direct excavation of the waste and impacted soil for off-site treatment/disposal.

The source of the debris has not been conclusively established at this juncture, however a former owner / operator of the property, Far West Paint, appears to be a potential candidate for the encountered materials. Far West Paint operated on the property from approximately 1959 to 1977 and according to historical records (previous Phase-I studies) Far West is the only company known to manufacture paint on this property.

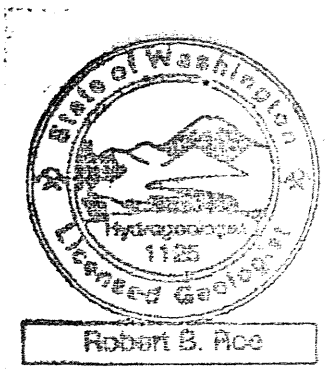
Tenor Company, LLC (the property owner) is currently receiving legal advice in regard to its desire to attempt to recover remediation costs from the suspected responsible party and/or have that entity perform the cleanup directly. No specific time line for achieving site remediation is offered at this early juncture.

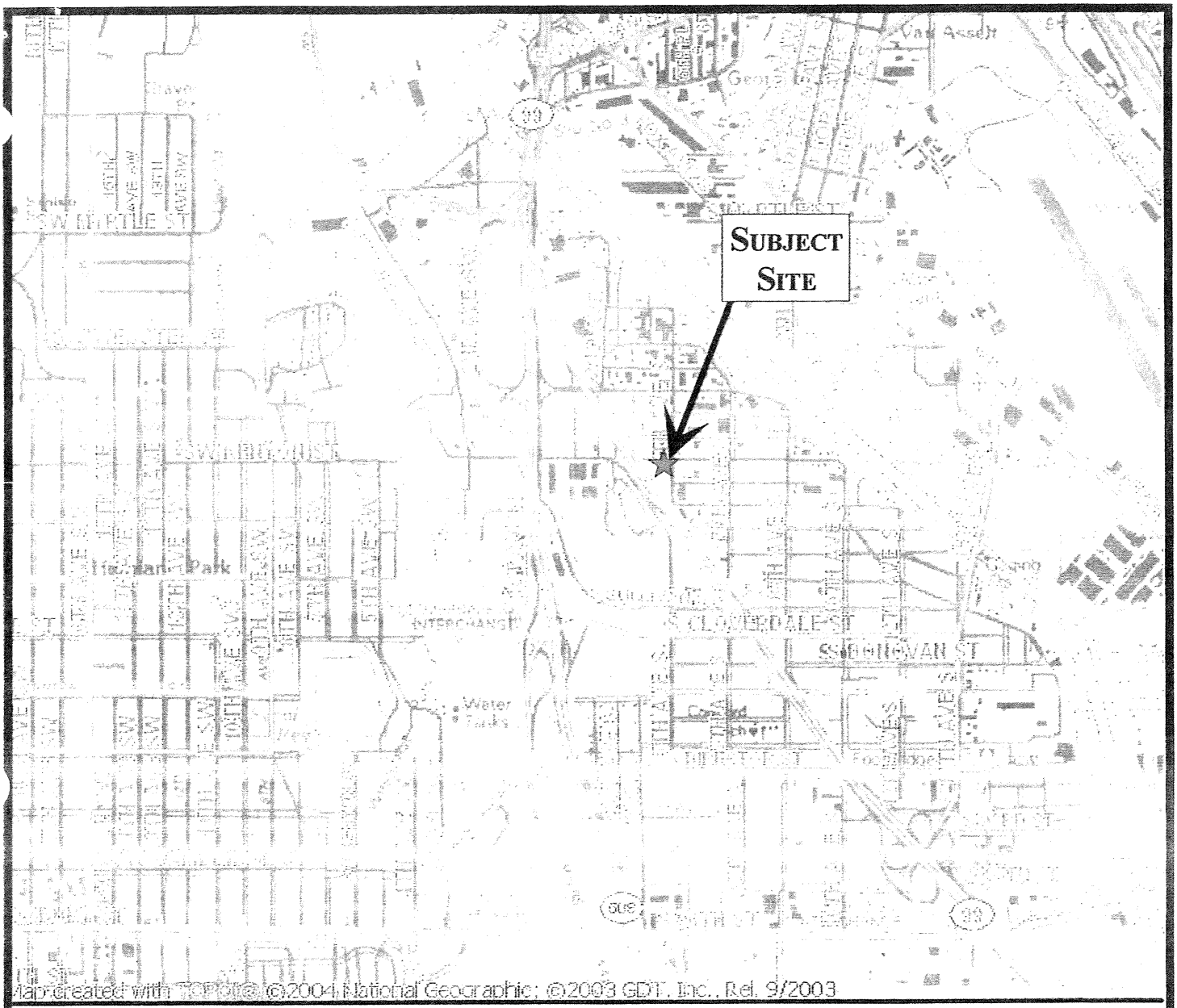
A separate independent cleanup action consisting of dual-phase soil vapor and groundwater extraction, is currently ongoing in regard to stoddard solvent impacted soil and groundwater associated with an underground storage tank removed in March 2009. That release is being managed separately under Leaking Underground Storage Tank (LUST) release number 3910. Again this current discovery of old paint waste appears to be a separate issue. The attached site plan depicts the relationship between the currently ongoing LUST cleanup and the recently discovered paint-waste areas.

Additional reports will be submitted to the WDOE as further site assessment and remediation feasibility options are explored and such reports are prepared. In the interim, inquiries for additional information can be directed to the offices of Environmental Associates, Inc.

Sincerely submitted,
ENVIRONMENTAL ASSOCIATES, INC..

Robert B. Roe, Msc., LHG.
Senior Hydrogeologist
License: 1125 (Washington)





LEGEND:

Approximate Site Location

N

Scale

0 *1/2* *1 mile*

Contour Interval: 5 Meters

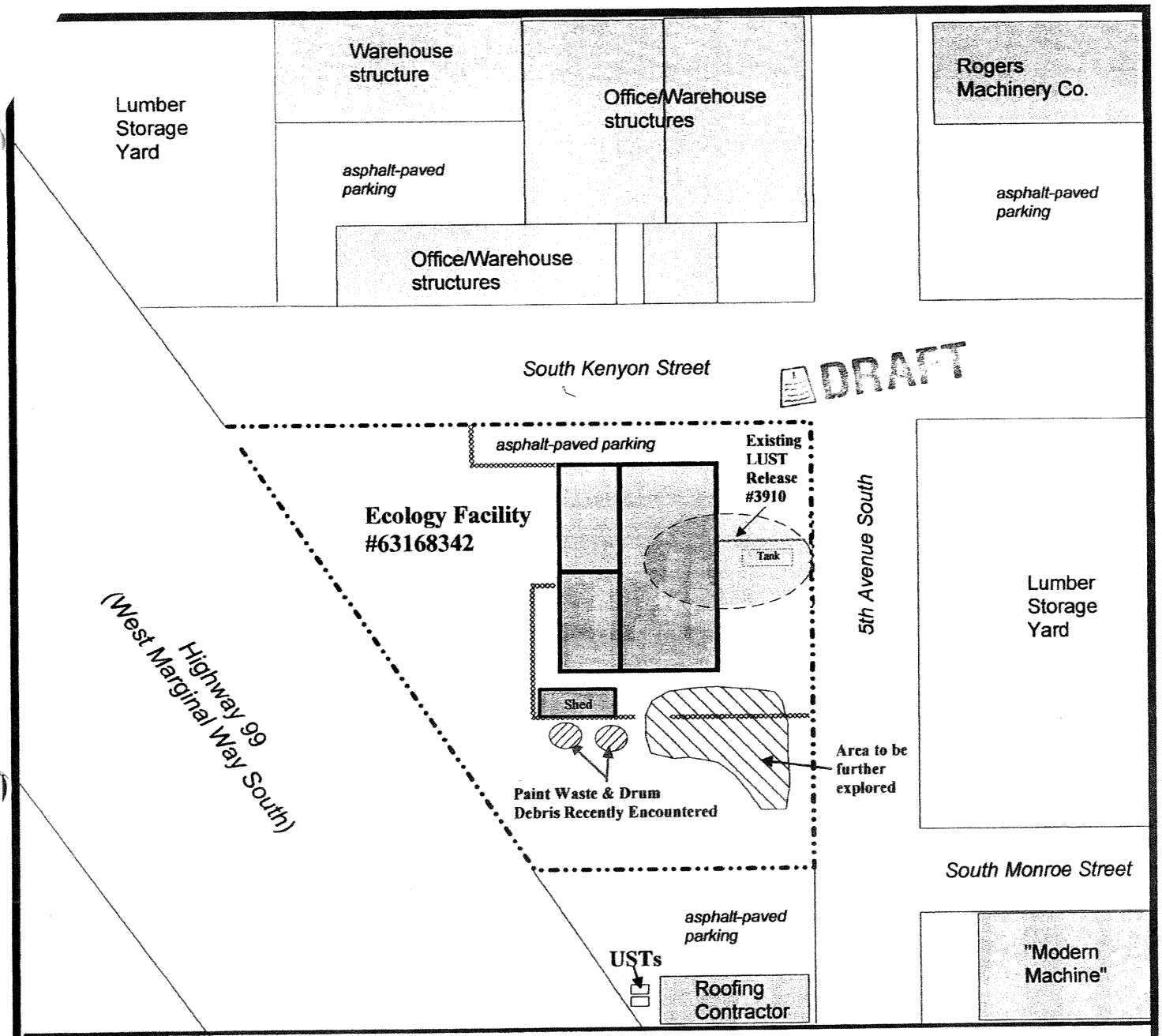
ENVIRONMENTAL ASSOCIATES, INC.

1380- 112th Avenue N.E., Ste. 300
Bellevue, Washington 98004

VICINITY/TOPOGRAPHIC MAP

Former Glitsa, Inc. Property
327 South Kenyon Street
Seattle, Washington

Job Number:	*Date:*		*Plate:*
JN 28275-5	April 2010		1



LEGEND:

Property boundary.

Fence lines segregating portions of the subject proerty.

Buildings / improvements.

N

ENVIRONMENTAL ASSOCIATES, INC.

1380 - 112th Avenue N.E., Ste. 300
Bellevue, Washington 98004

SITE PLAN

Former Glitsa, Inc. Property
327 South Kenyon Street
Seattle, Washington

Job Number:	Date:		Plate:
JN 28275-5	April 2010		2