

*Ecology Rec'd  
8/27/92*

UNDERGROUND STORAGE TANK  
REMOVAL REPORT

# 2450		DEPARTMENT OF ECOLOGY NWRO/TCP TANK UNIT		9-2-92
INTERIM CLEANUP REPORT				
SITE CHARACTERIZATION				
FINAL CLEANUP REPORT				
OTHER _____				
AFFECTED MEDIA:		SOIL		
OTHER _____		GW		
INSPECTOR (UNIT) _____		DATE 9-2-92		

Submitted to:

UNDERGROUND STORAGE TANK SECTION  
STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
Mail Stop PV-11  
Olympia, WA 98504-8711

Property Located at:

Firestone Tire and Auto Center # 31K7  
1012 164th S.E.  
Mill Creek, Washington


Submitted to WA-DOE on behalf of:

Ms. Kathleen Scheutzow  
Bridgestone/Firestone, Inc.  
Environmental Affairs  
Floor 5, Wing 3  
1200 Firestone Parkway  
Akron, Ohio 44317

Prepared by:

  
Neal Holdridge  
Project Manager

Reviewed by:

  
Gary Johnson  
Program Manager

UST REMOVAL REPORT

Tankage: One (1) - 550 gallon fiberglass UST

Tank Residuals: none

Transporter Firm: A.G.A. Systems, Inc.  
13655 S.E. 132nd Avenue  
Clackamas, Oregon 97015

Disposal Firm: Schnitzer Steel Products  
12005 N. Burgard  
Portland, Oregon 97203

RMI Local  
Subcontractor: A.G.A. Systems, Inc.  
13655 S.E. 132nd Avenue  
Clackamas, Oregon 97015

RMI Project  
Supervisor: Jesus Cuellar

Analytical Laboratory: Analytical Technologies, Inc.  
560 Naches Ave. SW, Suite 101  
Renton, WA 98055

Date of Report: December 10, 1991

### TANK REMOVAL PROCEDURES

Bridgestone/Firestone, Incorporated maintained one (1) 550 gallon fiberglass underground storage tank for the purpose of storing used motor oil at the Company's retail facility located at 1012 164th S.E., Mill Creek, Washington.

A 30 day notice of removal was filed with the State of Washington Department of Ecology (DOE) in December of 1990 by Ryan-Murphy, Inc. (RMI). Prior to mobilization on to the jobsite, a permit for the tank removal was also acquired from the local Fire Department by Mr. Mike Osborne of A.G.A. Systems (RMI's subcontractor).

On August 6, 1991, Jesus Cuellar of RMI, along with Mike Osborne and a crew from A.G.A. Systems, mobilized to the site. The asphalt surface cover from over the tank location was removed and hauled off to a disposal facility. The tank was partially located beneath an adjacent concrete slab, but only asphalt was removed with the intent that the tank could be removed without breaking up the concrete slab. Excavation of the tank was begun, with generated excavated soils stockpiled adjacent to the tank excavation.

The tank was tied down to a concrete slab, and surrounded with a form of shoring consisting of plywood sheeting. The straps to the hold down slab were cut and after inerting the tank atmosphere and verifying the absence of combustible vapors, the tank was removed from the excavation and visually examined for signs of leakage. No holes were visible.

The tank was loaded onto transport and transported to Schnitzer Steel Products in Portland for scrapping (see certificate of tank destruction in the appendix).

### INITIAL SITE SAMPLING

At the end of the tank removal procedures, two soil samples were collected from the tank pit; Under Tank Composite: UTC-1, and a Sidewall Composite: SWC-1. (Please see sampling diagram and analytical results presented in the appendix of this report.)

An inspection of the tank pit at the time of sampling revealed very wet conditions, but no visual evidence of contamination was present.

Soil samples were collected by Mike Osborne of A.G.A. Systems, who is registered by the State of Washington DOE to perform site assessment sampling.

All samples were gathered utilizing latex gloves to prevent cross contamination. Soil samples were collected by grab method, in which an undisturbed backhoe bucket of soil was brought to grade level, whereupon a glass sample jar was packed with the soil in such a manner so as to eliminate any head space. After the sample jar was filled, it was covered with a teflon lined lid

capped, and the cap secured with duct tape. Samples were then labeled and placed in an ice chest with blue ice to maintain laboratory storage temperatures during transport.

The soil samples were transported under chain of custody documentation to Analytical Technologies Incorporated in Renton, Washington for the performance of a Hydrocarbon identification scan, and analysis for Total Petroleum Hydrocarbons (TPH) by EPA method 418.1, as per the DOE guidelines.

The hydrocarbon I.D. scan revealed that the predominant hydrocarbons present in the samples were those heavier than the diesel range hydrocarbons, as would be expected with a used oil storage tank.

#### OVEREXCAVATION FOR REMEDIATION

Upon receiving the results of the TPH analysis for the initial samples gathered at the time of the tank removal, it was documented that the sample from beneath the tank (under tank composite UTC-1), exhibited TPH results of 260 mg/kg, which is in excess of the State of Washington DOE action levels of 200 mg/kg.

Mr. Roger Nye of the Department of Ecology was consulted with the results of the soil samples taken at the time of the tank removal, and it was agreed that based upon the analytical results it would be necessary to return to the site and continue to overexcavate to capture the remaining impacted soil. On September 9th, Mr. Jay Johnson of the DOE's Southwest regional office was advised by phone of our intent to overexcavate.

On Wednesday, September 11th, the overexcavation of the tank pit was commenced, with all excavated soils being stockpiled on plastic sheeting and covered with the same.

After excavating approximately 20 cubic yards of soil, samples were collected to confirm that all of the impacted material had indeed been removed.

#### CONFIRMATION SAMPLING

Soil samples were collected from each excavation sidewall, from the tank pit bottom, and from the excavated stockpile (see overexcavation sampling diagram in the appendix).

A total of five (5) confirmation samples were gathered utilizing the same sample collection techniques as described in the initial sampling section above. Additionally, one sample was collected from the stockpiled contaminated soil, in order to profile this material for disposal. Samples were transported under chain of custody documentation to Analytical Technologies in Renton, Washington.

TPH was analyzed on a fast turnaround rush basis, so that the removal of all impacted soil could be confirmed as rapidly as possible. The results of the TPH analysis, were faxed to RMI's office upon completion. All TPH results for the five excavation confirmation samples were below 50 mg/kg.

The sample with the highest TPH result (WW-2 @ 42 mg/kg) was selected for additional analyses, as per the DOE's recommendations, and to verify that other compounds were not present, thus alleviating any concerns about other compounds which might hamper site closure. The soil sample from the stockpiled impacted material (SC-2) was also analyzed for additional compounds, so that the results could be presented to the selected disposal facility to gain acceptance of the soil. The additional analyses performed on these two samples were; volatile organics (EPA 8010), aromatic volatiles (EPA 8020), PCB's (EPA 8080), and metals (by TCLP). All results of these additional tests were below DOE action limits.

#### REMEDATION OF IMPACTED SOIL

Once the analytical results were obtained for the stockpiled material, they were forwarded to Mr. Mike Tolkuehn of Woodworth and Company. Woodworth and Company operates an asphalt processing unit which is authorized by the Tacoma-Pierce County Health Department to handle and process small quantities of hydrocarbon impacted soil, providing the presence of other regulated compounds can be shown to be absent. The soil must also meet Woodworth's guidelines with regards to the soil's physical characteristics, so that it can be inserted into their asphalt rendering process.

After reviewing the laboratory analytical results for the stockpiled soil, Mr. Tolkuehn visited the site and examined the physical properties of the soil. It was at this point that acceptance of this material was denied by Woodworth, due to the fact that the soil's physical characteristics were such that Woodworth would be unable to process the material readily.

An alternative disposal location was sought, and upon the recommendation of Mr. Steve Burke of the Seattle/Kings County Health Department, Waste Screening Program, the nearby Coal Creek Landfill was contacted. A letter along with copies of the stockpiled soil analytical results were forwarded to Mr. Burke for review. Upon his review, a letter granting authorization from the Waste Screening Program to take the material into the Coal Creek landfill was forwarded to the landfill, and acceptance was granted.

Jess Cuellar and RMI's subcontractor re-mobilized to the site on Wednesday, November 6th for the loading and transport of the stockpiled soil.

Approximately 30 tons of soil were transported to the Coal Creek Landfill for disposal. A copy of the weight ticket/receipt is included in the appendix of this report.

### SITE FINISHING ACTIVITIES

All laboratory results on the overexcavation confirmation samples were below the State of Washington Department of Ecology's recommended action levels, therefore the site was backfilled and repaved, and site finishing activities were carried out.

A log of the soil samples taken, plus a table of all analytical results are present in the appendix of this report. Copies of the laboratory analyses for all samples, and diagrams showing the initial sampling locations and the confirmatory sampling locations are also included in the appendix of this report.

### CONCLUSION

To the best of our knowledge, RMI has met all of the requirements set forth by the State of Washington Department of Ecology, and the Seattle/Kings County Health Department concerning the closure of the subject tank.

If you have any questions, or require any additional information concerning this project, please contact the Project Manager listed on the front page of this report.

APPENDIX:

- State of WA 30 day notification
- Photographs of site activities
- Certificate of tank destruction
- Soil sample log
- Table of soil sample analytical results
- Initial soil sampling diagram
- Initial samples laboratory analytical results
- Initial samples chain of custody documentation
- Confirmation soil sampling diagram
- Confirmation samples laboratory analytical results
- Confirmation samples chain of custody documentation
- Soil disposal acceptance letters
- Soil disposal receipt
- State of WA DCE closure checklist

## APPENDIX





STATE OF WA

30 DAY NOTIFICATION

2/308

NOTICE OF PERMANENT CLOSURE OF UNDERGROUND STORAGE TANK(S)

Site Owner/Operator: Bridgestone - Firestone  
 Site Address: 1012 164th St. Mill Creek, ILk.  
 Telephone: (206) 742-1790

Site Notification Number (If known; this is assigned by Ecology): \_\_\_\_\_  
 Tank has been registered with Ecology ☐; tank was not registered ☐.

Local closure permit (if any) obtained from: \_\_\_\_\_  
 (Always contact local authorities regarding permit requirements.)

Tank closure performed by:  
 Company/Individual: AGA, Systems Inc., Clackamas, Or.  
 Telephone: (503) 698-7070 Date of Tank Closure: 8/6/91  
 Method of Closure: ☒ Removal ☐ In-Place Closure  
 If closed in place, type of fill material used: \_\_\_\_\_

If removed, how will the tank(s) be disposed of? ☐ Scrap ☒ Landfill  
☐ Other method (please specify: \_\_\_\_\_)  
 Disposal Location: Hillsboro, OR

Tank ID Number	Tank(s) Closed		Last Material Stored
	Age	Size	
<u>A894775C</u>	<u>7 yrs.</u>	<u>SSD</u>	<u>Waste Oil</u>

Will the tanks be replaced by new underground tanks? ☐ Yes ☒ No  
 (NOTE: If YES, you need to submit a notification form for the new tanks.)

Was a site assessment completed? ☒ Yes ☐ No If so, was contamination found? ☐ Yes ☒ No

(NOTE: The appropriate regional office of the Washington Department of Ecology should be contacted for assistance if contamination is found (see attached map). Records of the site closure must also be maintained at the site and must be available upon an inspector's request for at least three years after closure.)

Inspecting Agency: \_\_\_\_\_ Inspector Name: \_\_\_\_\_  
 (NOTE: This is generally the local fire department or agency enforcing the Uniform Fire Code; in some cases (usually involving contamination) it may be Ecology. In some instances there may be no inspecting agency.)

Signature: Michael D. Osborne Date: Aug. 6, 1991  
 Title: PRES. AGA, Systems INC.

Please return the completed form to:

Storage Tank Unit  
 Department of Ecology  
 M/S PV-11  
 Olympia, WA 98504-8711

444 West 6th  
5031



# UNDERGROUND STORAGE TANK

## 30 Day Notice of Intent to Close/Decommission Tanks

The purpose of this form is to provide the Department of Ecology with notice of intent to close/decommission an UST. It must be received 30 days prior to the closure activities. It must be signed and dated by either the owner/operator of the UST to be closed or his/her authorized representative. (This could be the firm contracted to do the work.) Ecology will notify the identified person of the earliest date closure/decommissioning activities may commence.

For questions on completing this form please call (206) 459-6293.

Please type or use ink.

The completed checklist should be mailed to:

Underground Storage Tank Section  
Department of Ecology  
Mail Stop PV-11  
Olympia, WA 98504-8711

### 1. TANK OWNER AND LOCATION

UST Owner/Operator: BRIDGESTONE / FireStone Inc.

Owners Mailing Address: 1200 FireStone PKwy.  
Akron OHio 44317  
City State ZIP-Code

Telephone: (216) 379-3737

Site ID Number (on invoice or available from Ecology if tank is registered): \_\_\_\_\_

Site/Business Name: Fire Stone Service Center

Site Address: 1012 164<sup>TH</sup> Street SE King  
Seattle - Mill Creek WA  
City State ZIP-Code

### 2. TANK PERMANENT CLOSURE TO BE PERFORMED BY (If known):

Firm: A.S.A. SYSTEMS

Address: 13655 SE 132ND AVE CLACKAMIN Oregon 97015  
Street City State ZIP-Code

Telephone: (800) 433-5583 Contact Name: MIKE COOPER

### 3. TANK INFORMATION

Tank Identification	Approx. Closure Date	Tank Capacity (gallons)	Tank Age (years)	Last Substance Stored
	<u>AFTER 7/10/91</u>	<u>550</u>	<u>UNK</u>	<u>used oil</u>

### 4. SIGNATURE OF TANK OWNER/OPERATOR OR AUTHORIZED REPRESENTATIVE:

Michael Walker  
Signature

Project Supervisor  
Title

6/6/91  
Date

PHOTOGRAPHS OF SITE ACTIVITIES



Waste Oil  
Underground Storage  
Tank (UST) Fill  
Receptacle

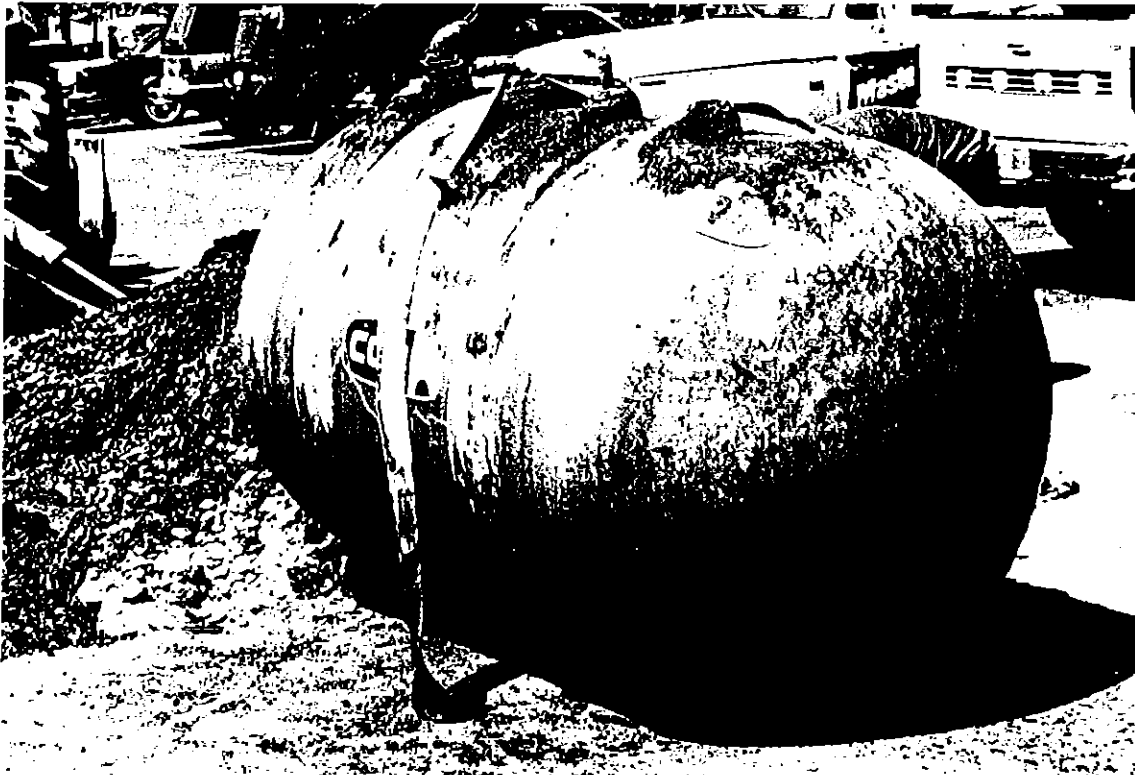


Tank Excavation at  
Edge of Concrete  
Slab in Front of  
Service Bay

SEE PHOTOGRAPH  
1012 164th Street SE  
Mill Creek, WA



Tank During  
Excavation  
Proceedings



Removed Fiberglass  
Tank

CERTIFICATE OF TANK DESTRUCTION



NOV 14 1991

A.G.A. Systems

1 800 433 5583

Certificate of Destruction

Date: 10-15-91

Scrapping/disposal Company:

Site of Destruction:

A.G.A. Systems Inc.

A.G.A. System Inc.

13655 SE 132<sup>ND</sup> AVE

7810 SE 267<sup>TH</sup>

~~13655 SE 132<sup>ND</sup> AVE~~  
Clackamas OR 97015

Grassham, OR 97080

Tank Removal Contractor:

A.G.A. SYSTEMS INC.

13655 S.E. 132<sup>ND</sup> AVE.

CLACKAMAS, OREGON 97015

Tank Identification:

Tank No: 4

Size: 500 gal (Fiberglass)

Location:

Company: BRIDGESTONE/FIRESTONE

Address: 1012 164<sup>TH</sup> S.E.

City/State: MILL CREEK, WA

Destruction Date: 10-15-91

I certify that the above described tank has been rendered unusable for the storage of any fluids, and all removed fluids, sludges, and the tanks were disposed of in accordance with all applicable local, state, and federal regulations.

Michael D. Osborne  
By

Pres. A.G.A. Systems Inc.  
Title

SOIL SAMPLE LOG

TABLE #1

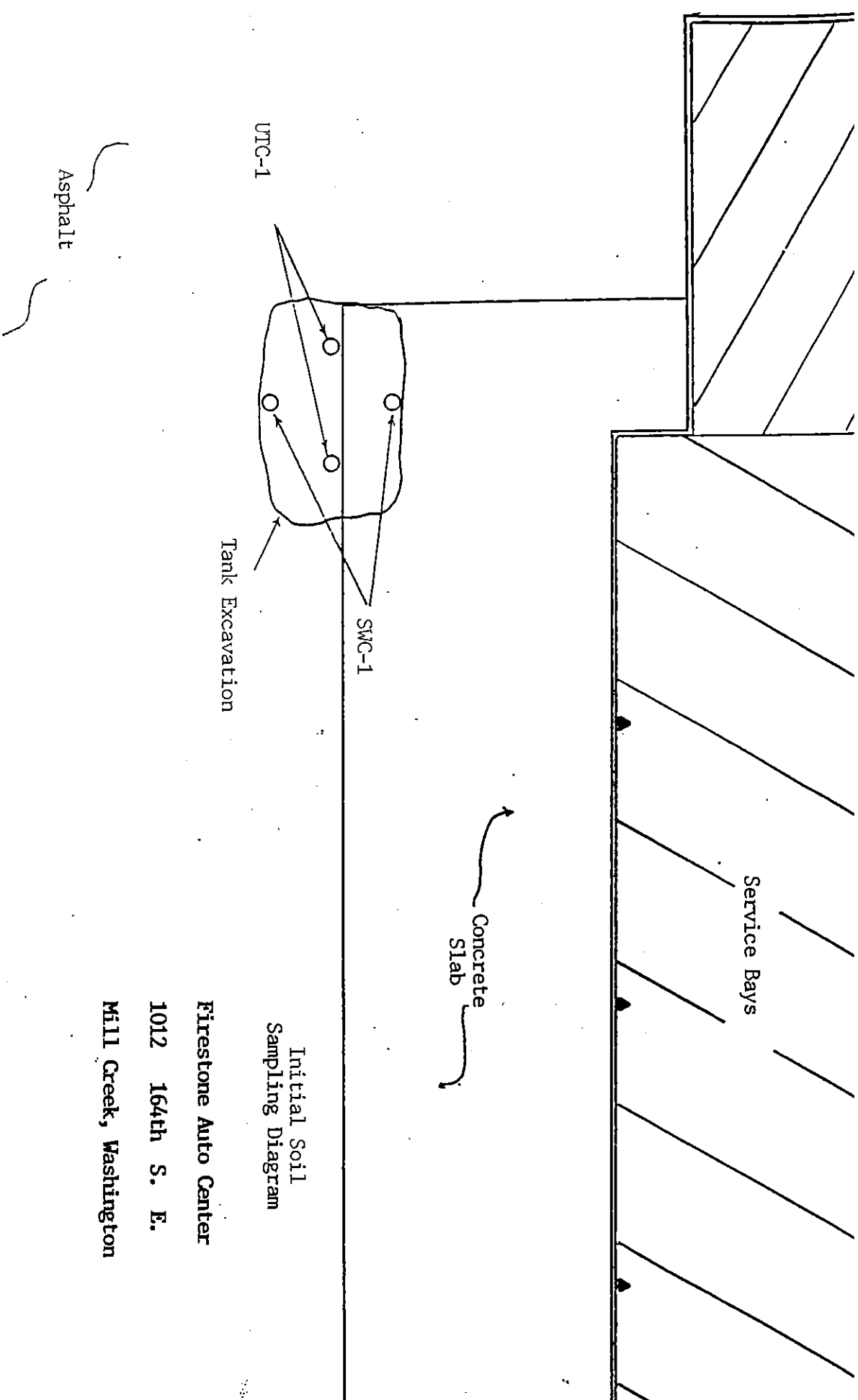
CHEMICAL CONSTITUENT	INITIAL SOIL SAMPLES			OVEREXCAVATION CONFIRMATION SAMPLES						
	SAMPLE # UTC-1	SAMPLE # SUC-1		SAMPLE # UT-2	SAMPLE # NW-2	SAMPLE # SW-2	SAMPLE # EW-2	SAMPLE # WW-2	SAMPLE # SC-2	
IPH-HCID Scan:										
C7-C10 as gasoline	(5	(5								
C10-C28 as diesel	21 *	30								
(mg/kg)										
TRPH (EPA 418.1)	260	120		33	23	40	37	42	11	
(mg/kg)										
VOLATILE ORGANICS (EPA 8010/8020):										
Methylene Chloride								0.110 **	0.170 **	
Total Xylenes								ND	0.036	
(all results reported in mg/kg)										
All other compounds were below detection limits, see laboratory list.										
PCB'S (EPA 8080)										
(mg/kg)								ND	ND	
All compounds were below detection limits, see laboratory list.										
TCMP METALS:										
Arsenic								(0.050	(0.050	
Barium								0.330	0.260	
Cadmium								(0.002	(0.002	
Chromium								(0.010	(0.010	
Lead								(0.030	(0.030	
Mercury								(0.0002	(0.0004	
Selenium								(0.050	(0.050	
Silver								(0.005	(0.005	
(all results reported in mg/L)										

\* Sample chromatogram indicates a petroleum hydrocarbon-like contamination heavier than diesel.

\*\* Analyte was found in the associated blank as well as the sample.

All analyses were performed at Analytical Technologies, Inc. in Renton, WA.

INITIAL SOIL SAMPLING DIAGRAM



Initial Soil  
Sampling Diagram

Firestone Auto Center  
1012 164th S. E.  
Mill Creek, Washington

No Scale



164TH STREET S. E.

INITIAL SAMPLES LABORATORY RESULTS

AUG 30 1991



Analytical Technologies, Inc.

560 Naches Avenue, S.W., Suite 101, Renton, WA 98055, (206) 228-8335

ATI I.D. # 9108-075

August 23, 1991

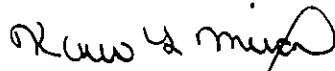
Ryan-Murphy, Inc.  
211 Granite St  
Suite E  
Corona, CA 91719

Attention : Neil Holdridge


Project Number : 2132

Project Name : Firestone

On August 6, 1991, Analytical Technologies, Inc., received 2 soil samples for analysis. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The results, sample cross reference, and quality control data are enclosed.

  
Karen Nixon  
Project Manager

FWG/hal/cn

  
Frederick W. Grothkopp  
Technical Manager

## SAMPLE CROSS REFERENCE SHEET

CLIENT : RYAN-MURPHY INC.  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

ATI #	CLIENT DESCRIPTION	DATE SAMPLED	MATRIX
9108-075-1	UTC-1	08/06/91	SOIL
9108-075-2	SWC-1	08/06/91	SOIL

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	2

## ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of the report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.





## ANALYTICAL SCHEDULE

CLIENT : RYAN-MURPY INC.  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

ANALYSIS	TECHNIQUE	REFERENCE	LAB
HYDROCARBON IDENTIFICATION	GC/FID	WA DOE WTPH-HCID	R
TOTAL PETROLEUM HYDROCARBONS	IR	EPA 418.1	R

R = ATI - Renton  
SD = ATI - San Diego  
T = ATI - Tempe  
PNR = ATI - Pensacola  
FC = ATI - Fort Collins  
SUB = Subcontract



ATI I.D. # 9108-075

HYDROCARBON IDENTIFICATION  
DATA SUMMARY

CLIENT	: RYAN-MURPHY, INC.	DATE SAMPLED	: N/A
PROJECT #	: 2132	DATE RECEIVED	: N/A
PROJECT NAME	: FIRESTONE	DATE EXTRACTED	: 08/07/91
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 08/07/91
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: TPH-HCID	DILUTION FACTOR	: 1

-----  
COMPOUNDSRESULTS  
-----

FUEL HYDROCARBONS  
HYDROCARBON RANGE  
HYDROCARBON QUANTITATION USING

<5  
C7 - C10  
GASOLINE

FUEL HYDROCARBONS  
HYDROCARBON RANGE  
HYDROCARBON QUANTITATION USING

<5  
C10 - C28  
DIESEL



ATI I.D. # 9108-075-1

HYDROCARBON IDENTIFICATION  
DATA SUMMARY

CLIENT	: RYAN-MURPHY, INC.	DATE SAMPLED	: 08/06/91
PROJECT #	: 2132	DATE RECEIVED	: 08/06/91
PROJECT NAME	: 213200 FIRESTONE	DATE EXTRACTED	: 08/07/91
CLIENT I.D.	: UTC-1	DATE ANALYZED	: 08/08/91
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: TPH-HCID	DILUTION FACTOR	: 1

-----  
COMPOUNDSRESULTS  
-----

FUEL HYDROCARBONS  
HYDROCARBON RANGE  
HYDROCARBON QUANTITATION USING

<5  
C7 - C10  
GASOLINE

FUEL HYDROCARBONS  
HYDROCARBON RANGE  
HYDROCARBON QUANTITATION USING

21 \*  
C10 - C28  
DIESEL

\* - Sample chromatogram indicates a petroleum hydrocarbon-like contamination heavier than diesel.



ATI I.D. # 9108-075-2

HYDROCARBON IDENTIFICATION  
DATA SUMMARY

CLIENT : RYAN-MURPHY, INC.  
PROJECT # : 2132  
PROJECT NAME : ~~SWC-1~~ FIRESTONE  
CLIENT I.D. : SWC-1  
SAMPLE MATRIX : SOIL  
METHOD : TPH-HCID

DATE SAMPLED : 08/06/91  
DATE RECEIVED : 08/06/91  
DATE EXTRACTED : 08/07/91  
DATE ANALYZED : 08/07/91  
UNITS : mg/Kg  
DILUTION FACTOR : 1

-----  
COMPOUNDSRESULTS  
-----

FUEL HYDROCARBONS  
HYDROCARBON RANGE  
HYDROCARBON QUANTITATION USING

<5  
C7 - C10  
GASOLINE

FUEL HYDROCARBONS  
HYDROCARBON RANGE  
HYDROCARBON QUANTITATION USING

30  
C10 - C28  
DIESEL

HYDROCARBON IDENTIFICATION  
QUALITY CONTROL DATA

CLIENT : RYAN-MURPHY, INC.	SAMPLE I.D. # : 9108-075-2
PROJECT # : 2132	DATE EXTRACTED : 08/07/91
PROJECT NAME : FIRESTONE	DATE ANALYZED : 08/07/91
EPA METHOD : TPH-HCID	UNITS : mg/Kg
SAMPLE MATRIX : SOIL	

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
DIESEL	29.8	500	591	112	555	105	6

$$\% \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

## GENERAL CHEMISTRY RESULTS

CLIENT : GEOENGINEERS, INC.  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

DATE EXTRACTED : 08/07/91  
DATE ANALYZED : 08/07/91  
MATRIX : SOIL  
UNITS : mg/Kg

-----  
ATI I.D. #                      CLIENT I.D.                      PETROLEUM HYDROCARBONS  
-----

REAGENT BLANK	-	<5
9108-075-1	UTC-1	260
9108-075-2	SWC-1	120

## GENERAL CHEMISTRY QUALITY CONTROL

CLIENT : GEOENGINEERS, INC.  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

SAMPLE MATRIX : SOIL

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
PETROLEUM HYDROCARBONS	mg/Kg	9108-052-3	12	15	22	275	252	104

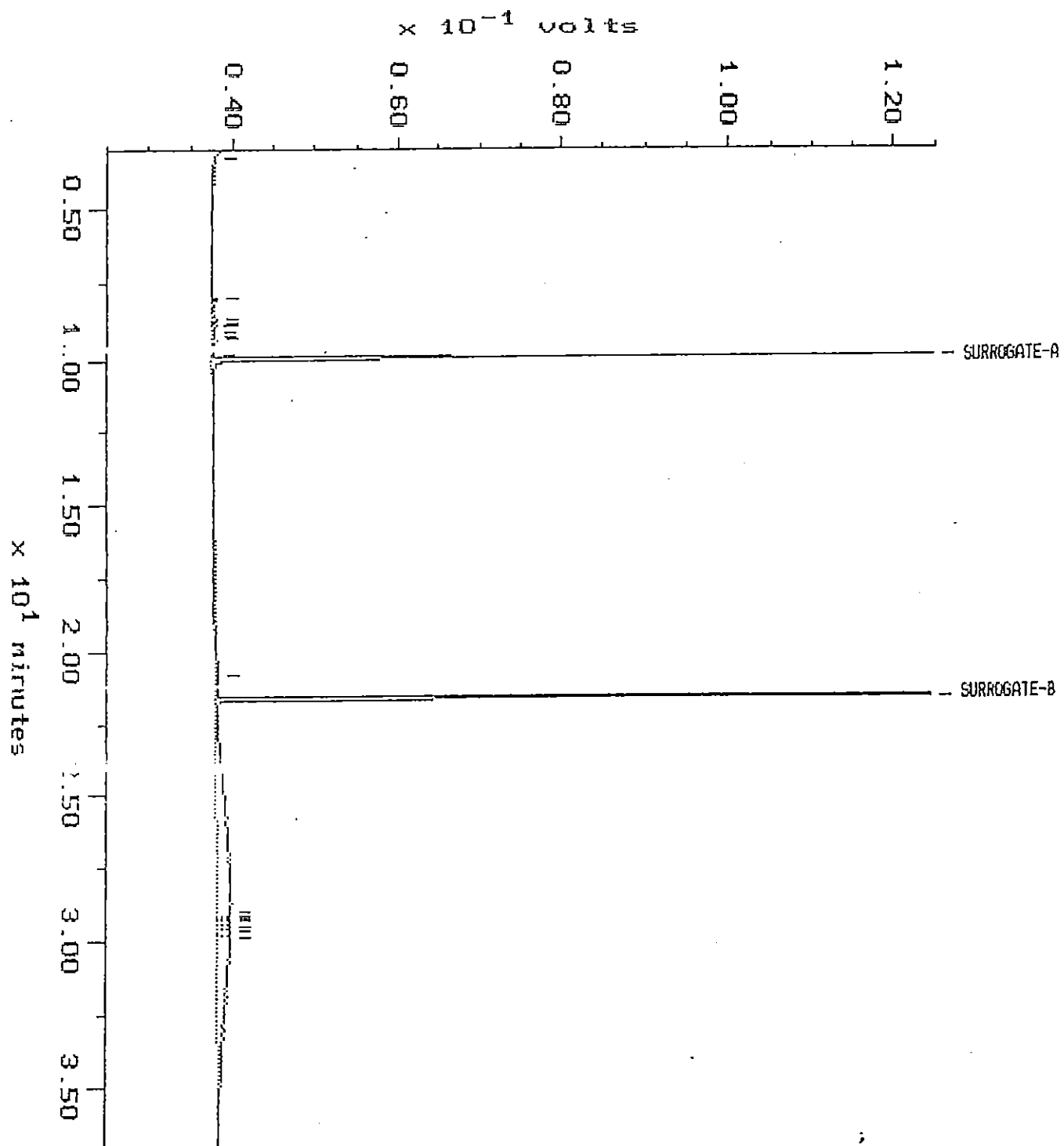
$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Sample: 9108-075-1  
Acquired: 08-AUG-91 1:43  
Inj Vol: 1.00

Channel: ERNIE  
Method: L:\BR02\MAXDATA\ERNIE\FUEL0807

Filename: 0807ER21  
Operator:

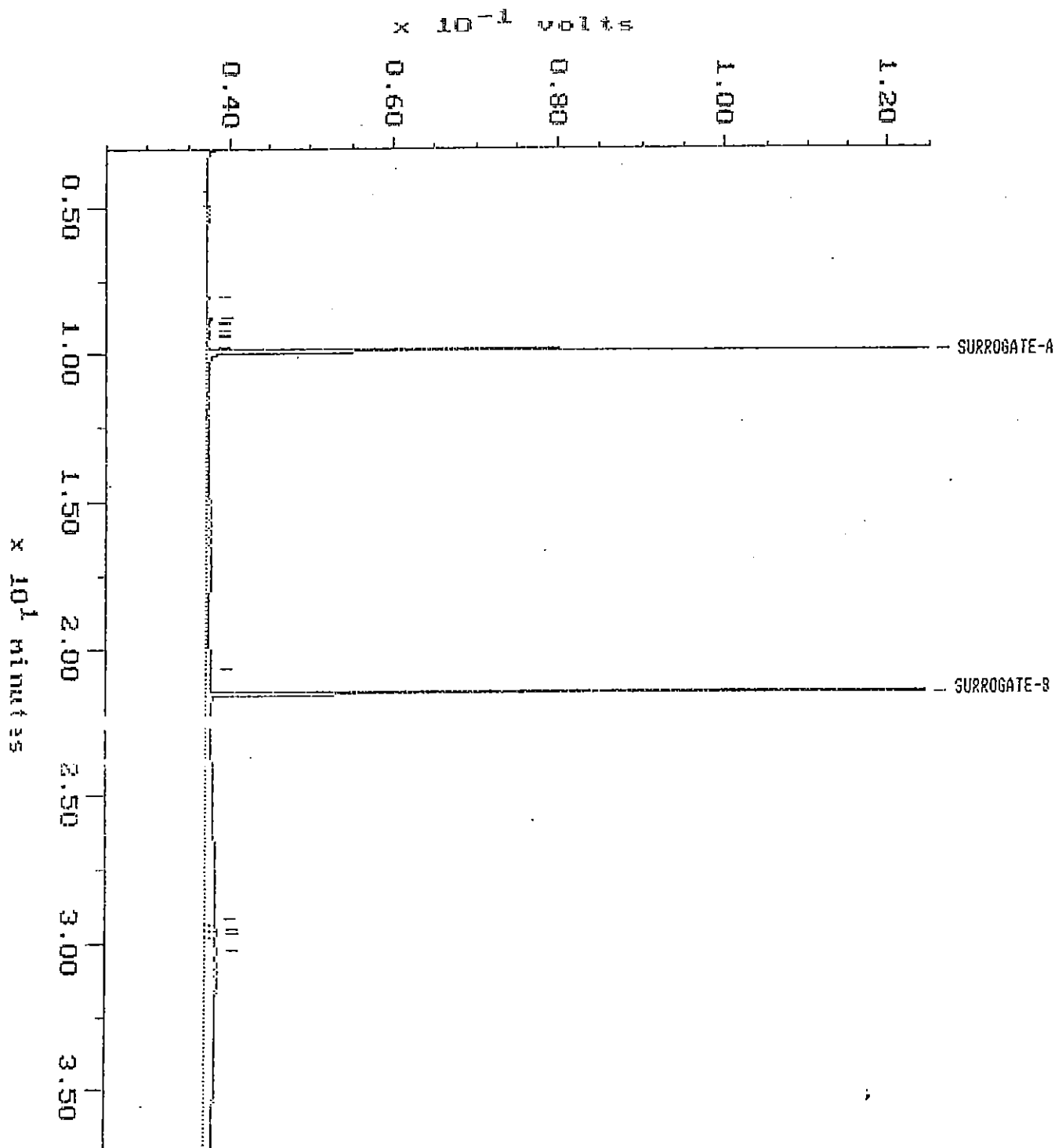




Sample: 9108-075-2  
Acquired: 07-AUG-91 13:06  
Inj Vol: 1.00

Channel: ERNIE  
Method: L:\BRO2\MAXDATA\ERNIE\FUEL0807

Filename: 0807ER05  
Operator:



INITIAL SAMPLES  
CHAIN OF CUSTODOY  
DOCUMENTATION



**Chain of Custody** LABORATORY NUMBER: 2108-075

☐ ATI Disposal @ \$5.00 each      ☐ Return

Return

Return

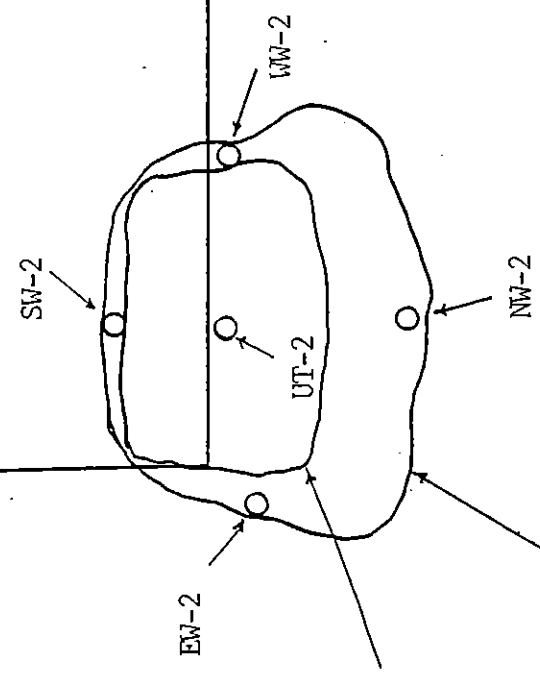
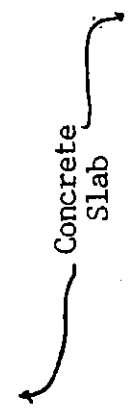
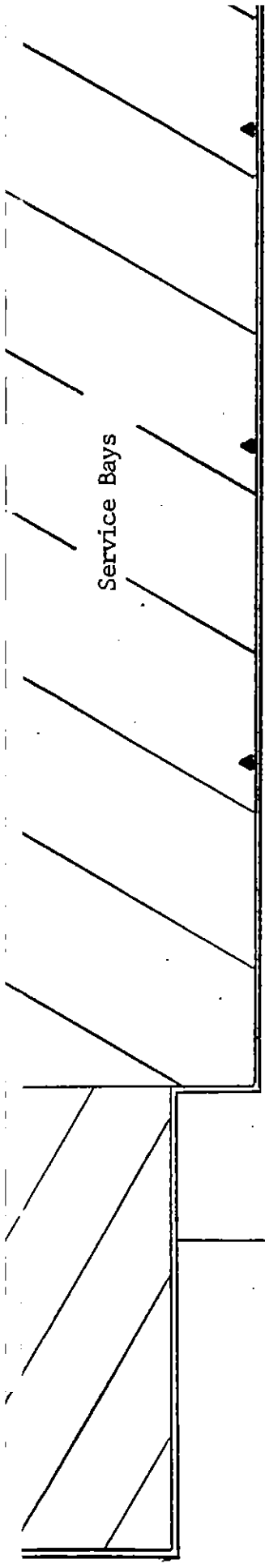
[illegible]

ANALYSIS REQUEST		NUMBER OF CONTAINERS	
8010 Halogenated Volatiles		2	2
8020 Aromatic Volatiles			
8020 BETX ONLY			
8240 GCMS Volatiles			
8270 GCMS BNA			
8310 HPLC PNA			
8080 Pesticides & PCB's			
8080 PCB's ONLY			
8140 Phosphate Pesticides			
8150 Herbicides			
WDOE PAHHH (MAC 173)			
41816 (TPH)			
41322 Grease & Oil			
80158 (Modified) HCTD			
TOC 9060			
TOX 9020			
% Moisture			
EP TOX Metals (6) EP EXT			
Priority Pollutant Metals (13)			
8080 Pesticide (4)			
8240 ZH-EXT			
8270			
8150 Herbicides (2)			
Metals (6)			
<del>8010 Halogenated Volatiles</del>			

PROJECT INFORMATION		SAMPLE RECEIPT		RELINQUISHED BY: 1		RELINQUISHED BY: 2		RELINQUISHED BY: 3	
PROJECT NUMBER:	2132	TOTAL NUMBER OF CONTAINERS	4	Signature:	[Signature]	Signature:	[Signature]	Signature:	[Signature]
PROJECT NAME:	Geotrich/E. coli	OOC SEALS/INTACT?	Y/N	Printed Name:	[Name]	Printed Name:	[Name]	Printed Name:	[Name]
PURCHASE ORDER NUMBER:		RECEIVED GOOD COND./COLD	Y/N	Date:	[Date]	Date:	[Date]	Date:	[Date]
ONGOING PROJECT?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	RECEIVED VIA:	HAND DLVR	Company:	[Company]	Company:	[Company]	Company:	[Company]
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS				RECEIVED BY: 1		RECEIVED BY: 2		RECEIVED BY: 3	
TAT: (NORMAL)	<input checked="" type="checkbox"/> 2WKS	(RUSH)	<input type="checkbox"/> 24HR <input type="checkbox"/> 48 HRS <input type="checkbox"/> 72 HRS <input type="checkbox"/> 1 WK	Signature:	[Signature]	Signature:	[Signature]	Signature:	[Signature]
GREATER THAN 24 HR. NOTICE?				Time:	[Time]	Time:	[Time]	Time:	[Time]
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (LAB USE ONLY)				Printed Name:		Printed Name:		Printed Name:	
SPECIAL INSTRUCTIONS:				Date:		Date:		Date:	
Rm 8020 (BTXE) 8010 (Purgable) TCP (metals) + 8080 PCB's only after RMF receives IFH = F.D. results				[Date]		[Date]		[Date]	
Company:				Company:		Company:		Analytical Technologies, Inc.	

ATI Labs: San Diego (619)458-9141 • Phoenix (602)438-1530 • Seattle (206)228-8335 • Pensacola (904)474-1001 • DISTRIBUTION: White: Canav:ATI • Pink: ORIGINATOR

CONFIRMATION SOIL SAMPLING DIAGRAM

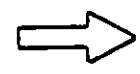


Overexcavation Confirmation Soil  
Sampling Diagram

Firestone Auto Center  
1012 164th S. E.  
Mill Creek, Washington

Asphalt

No Scale



N

164TH STREET S. E.

CONFIRMATION

SAMPLES LABORATORY ANALYTICAL RESULTS



Analytical**Technologies, Inc.**

560 Naches Avenue, S.W., Suite 101, Renton, WA 98055, (206) 228-8335

ATI I.D. # 9109-089

October 2, 1991

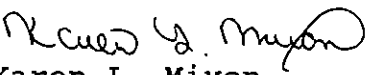
Ryan-Murphy Incorporated  
211 Granite Street  
Suite E  
Corona, CA 91719

Attention : Neil Holdridge


Project Number : 2132

Project Name : Firestone

On September 11, 1991, Analytical Technologies, Inc. received six soil samples for analysis. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The results, sample cross reference, and the quality control data are enclosed.

  
Karen L. Nixon  
Senior Project Manager

FWG/hbb/elf

  
Frederick W. Grothkopp  
Laboratory Manager



ATI I.D. # 9109-089

## SAMPLE CROSS REFERENCE SHEET

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

ATI #	CLIENT DESCRIPTION	DATE SAMPLED	MATRIX
9109-089-1	UT-2	09/11/91	SOIL
9109-089-2	NW-2	09/11/91	SOIL
9109-089-3	SW-2	09/11/91	SOIL
9109-089-4	EW-2	09/11/91	SOIL
9109-089-5	WW-2	09/11/91	SOIL
9109-089-6	SC-2	09/11/91	SOIL

## ----- TOTALS -----

MATRIX	# SAMPLES
SOIL	6

## ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.



ATI I.D. # 9109-089

## ANALYTICAL SCHEDULE

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

ANALYSIS	TECHNIQUE	REFERENCE	LAB
PURGEABLE HALOCARBONS	GC/ELCD	EPA 8010	R
PURGEABLE AROMATICS	GC/PID	EPA 8020	R
POLYCHLORINATED BIPHENYLS (PCBs)	GC/ECD	EPA 8080	SD
TCLP PREPARATION	-	EPA 1311	R
ARSENIC	ICAP	EPA 6010	R
BARIUM	ICAP	EPA 6010	R
CADMIUM	ICAP	EPA 6010	R
CHROMIUM	ICAP	EPA 6010	R
LEAD	ICAP	EPA 6010	R
MERCURY	AA/COLD VAPOR	EPA 7470	R
SELENIUM	ICAP	EPA 6010	R
SILVER	ICAP	EPA 6010	R
PETROLEUM HYDROCARBONS	IR	EPA 418.1	R
MOISTURE	GRAVIMETRIC	CLP SOW ILM01.0	R
MOISTURE	GRAVIMETRIC	METHOD 7-2.2	SD

R = ATI - Renton  
SD = ATI - San Diego  
PHX = ATI - Phoenix  
PNR = ATI - Pensacola  
FC = ATI - Fort Collins  
SUB = Subcontract



ATT I.D. # 9109-089

## GENERAL CHEMISTRY ANALYSIS

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

MATRIX : SOIL

PARAMETER	DATE PREPARED	DATE ANALYZED
-----------	---------------	---------------

PETROLEUM  
HYDROCARBONS

09/12/91

09/12/91

Bridgestone/Firestone, Inc.  
1012 164th S.E.  
Mill Creek, Washington

SOIL SAMPLE LOG

SAMPLE #	LOCATION	DEPTH	DATE
UTC-1	Under tank composite	6' bg1	8/6/91
SWC-1	North & South sidewall composite	3' bg1	8/6/91
UT-2	Under old tank location	7' bg1	9/11/91
NW-2	North wall of overexcavation	4' bg1	9/11/91
SW-2	South wall of overexcavation	4' bg1	9/11/91
EW-2	East wall of overexcavation	4' bg1	9/11/91
WW-2	West wall of overexcavation	4' bg1	9/11/91
SC-2	Overexcavation spoils pile	-	9/11/91



ATI I.D. # 9109-089

GENERAL CHEMISTRY ANALYSIS  
DATA SUMMARY

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

MATRIX : SOIL

UNITS : mg/Kg

ATI I.D. #	CLIENT I.D.	PETROLEUM HYDROCARBONS
------------	-------------	------------------------

9109-089-1	UT-2	33
9109-089-2	NW-2	23
9109-089-3	SW-2	40
9109-089-4	EW-2	37
9109-089-5	WW-2	42
9109-089-6	SC-2	11
REAGENT BLANK	-	<5



Analytical Technologies, Inc.

ATI I.D. # 9109-089

GENERAL CHEMISTRY ANALYSIS  
QUALITY CONTROL DATA

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

MATRIX : SOIL

UNITS : mg/Kg

PARAMETER	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
PETROLEUM HYDROCARBONS	9109-080-2	<5	<5	NC	260	250	104

NC = Not Calculable.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

ATI I.D. # 9109-089

GENERAL CHEMISTRY ANALYSIS  
DATA SUMMARY

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

MATRIX : SOIL

UNITS : %

ATI I.D. #	CLIENT I.D.	MOISTURE	MOISTURE *
9109-089-5	WW-2	-	13.7
9109-089-6	SC-2	7.5	7.2

\* Analyzed at ATI - San Diego, California laboratory.

ATI I.D. # 9109-089

GENERAL CHEMISTRY ANALYSIS  
QUALITY CONTROL DATA

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

MATRIX : SOIL

UNITS : %

PARAMETER	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
MOISTURE	9109-105-4	16	15	6	N/A	N/A	N/A
MOISTURE *	109185-01	13.7	13.6	1	N/A	N/A	N/A

\* Analyzed at ATI - San Diego, California laboratory.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

ATI I.D. # 9109-089

GENERAL CHEMISTRY ANALYSIS  
QUALITY CONTROL DATACLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

MATRIX : SOIL

UNITS : %

PARAMETER	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
MOISTURE	9109-105-4	16	15	6	N/A	N/A	N/A
MOISTURE *	109185-01	13.7	13.6	1	N/A	N/A	N/A

\* Analyzed at ATI - San Diego, California laboratory.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



ATI I.D. # 9109-089

VOLATILE ORGANIC ANALYSIS  
DATA SUMMARY

CLIENT : RYAN-MURPHY INCORPORATED  
 PROJECT # : 2132  
 PROJECT NAME : FIRESTONE  
 CLIENT I.D. : REAGENT BLANK  
 SAMPLE MATRIX : SOIL  
 EPA METHOD : 8010/8020  
 RESULTS BASED ON DRY WEIGHT

DATE SAMPLED : N/A  
 DATE RECEIVED : N/A  
 DATE EXTRACTED : 09/13/91  
 DATE ANALYZED : 09/13/91  
 UNITS : mg/Kg  
 DILUTION FACTOR : 1

COMPOUND	RESULT
BENZENE	<0.025
BROMODICHLOROMETHANE	<0.010
BROMOFORM	<0.010
BROMOMETHANE	<0.050
CARBON TETRACHLORIDE	<0.010
CHLOROBENZENE	<0.025
CHLOROETHANE	<0.050
CHLOROFORM	<0.010
CHLOROMETHANE	<0.10
DIBROMOCHLOROMETHANE	<0.010
1,2-DICHLOROBENZENE	<0.025
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
1,1-DICHLOROETHANE	<0.010
1,2-DICHLOROETHANE	<0.010
1,1-DICHLOROETHENE	<0.010
CIS-1,2-DICHLOROETHENE	<0.010
TRANS-1,2-DICHLOROETHENE	<0.010
1,2-DICHLOROPROPANE	<0.010
CIS-1,3-DICHLOROPROPENE	<0.010
TRANS-1,3-DICHLOROPROPENE	<0.010
ETHYLBENZENE	<0.025
METHYLENE CHLORIDE	0.045 J
1,1,2,2-TETRACHLOROETHANE	<0.010
TETRACHLOROETHENE	<0.010
TOLUENE	<0.025
1,1,1-TRICHLOROETHANE	<0.010
1,1,2-TRICHLOROETHANE	<0.010
TRICHLOROETHENE	<0.010
TRICHLOROFLUOROMETHANE	<0.025
VINYL CHLORIDE	<0.050
TOTAL XYLENES	<0.025

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	80
BROMOFLUOROBENZENE	113

J = Estimated value.



ATI I.D. # 9109-089-5

VOLATILE ORGANIC ANALYSIS  
DATA SUMMARY

CLIENT	: RYAN-MURPHY INCORPORATED	DATE SAMPLED	: 09/11/91
PROJECT #	: 2132	DATE RECEIVED	: 09/11/91
PROJECT NAME	: FIRESTONE	DATE EXTRACTED	: 09/13/91
CLIENT I.D.	: WW-2	DATE ANALYZED	: 09/20/91
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8010/8020	DILUTION FACTOR	: 1
RESULTS BASED ON DRY WEIGHT			

COMPOUND	RESULT
BENZENE	<0.025
BROMODICHLOROMETHANE	<0.010
BROMOFORM	<0.010
BROMOMETHANE	<0.050
CARBON TETRACHLORIDE	<0.010
CHLOROBENZENE	<0.025
CHLOROETHANE	<0.050
CHLOROFORM	<0.010
CHLOROMETHANE	<0.10
DIBROMOCHLOROMETHANE	<0.010
1,2-DICHLOROBENZENE	<0.025
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
1,1-DICHLOROETHANE	<0.010
1,2-DICHLOROETHANE	<0.010
1,1-DICHLOROETHENE	<0.010
CIS-1,2-DICHLOROETHENE	<0.010
TRANS-1,2-DICHLOROETHENE	<0.010
1,2-DICHLOROPROPANE	<0.010
CIS-1,3-DICHLOROPROPENE	<0.010
TRANS-1,3-DICHLOROPROPENE	<0.010
ETHYLBENZENE	<0.025
METHYLENE CHLORIDE	0.11 B
1,1,2,2-TETRACHLOROETHANE	<0.010
TETRACHLOROETHENE	<0.010
TOLUENE	<0.025
1,1,1-TRICHLOROETHANE	<0.010
1,1,2-TRICHLOROETHANE	<0.010
TRICHLOROETHENE	<0.010
TRICHLOROFLUOROMETHANE	<0.025
VINYL CHLORIDE	<0.050
TOTAL XYLENES	<0.025

## SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	100
BROMOFLUOROBENZENE	116

B = Analyte is found in the associated blank as well as the sample.

ATI I.D. # 9109-089-6

VOLATILE ORGANIC ANALYSIS  
DATA SUMMARY

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE  
CLIENT I.D. : SC-2  
SAMPLE MATRIX : SOIL  
EPA METHOD : 8010/8020  
RESULTS BASED ON DRY WEIGHT

DATE SAMPLED : 09/11/91  
DATE RECEIVED : 09/11/91  
DATE EXTRACTED : 09/13/91  
DATE ANALYZED : 09/20/91  
UNITS : mg/Kg  
DILUTION FACTOR : 1

COMPOUND	RESULT
BENZENE	<0.025
BROMODICHLOROMETHANE	<0.010
BROMOFORM	<0.010
BROMOMETHANE	<0.050
CARBON TETRACHLORIDE	<0.010
CHLOROBENZENE	<0.025
CHLOROETHANE	<0.050
CHLOROFORM	<0.010
CHLOROMETHANE	<0.10
DIBROMOCHLOROMETHANE	<0.010
1,2-DICHLOROBENZENE	<0.025
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
1,1-DICHLOROETHANE	<0.010
1,2-DICHLOROETHANE	<0.010
1,1-DICHLOROETHENE	<0.010
CIS-1,2-DICHLOROETHENE	<0.010
TRANS-1,2-DICHLOROETHENE	<0.010
1,2-DICHLOROPROPANE	<0.010
CIS-1,3-DICHLOROPROPENE	<0.010
TRANS-1,3-DICHLOROPROPENE	<0.010
ETHYLBENZENE	<0.025
METHYLENE CHLORIDE	0.17 B
1,1,2,2-TETRACHLOROETHANE	<0.010
TETRACHLOROETHENE	<0.010
TOLUENE	<0.025
1,1,1-TRICHLOROETHANE	<0.010
1,1,2-TRICHLOROETHANE	<0.010
TRICHLOROETHENE	<0.010
TRICHLOROFLUOROMETHANE	<0.025
VINYL CHLORIDE	<0.050
TOTAL XYLENES	0.036

## SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	128
BROMOFLUOROBENZENE	101

B = Analyte is found in the associated blank as well as the sample.

ATI I.D. # 9109-089

VOLATILE ORGANIC ANALYSIS  
QUALITY CONTROL DATA

CLIENT : RYAN-MURPHY INCORPORATED	SAMPLE I.D. # : 9109-072-4
PROJECT # : 2132	DATE EXTRACTED : 09/13/91
PROJECT NAME : FIRESTONE	DATE ANALYZED : 09/18/91
EPA METHOD : 8010/8020	UNITS : mg/Kg
SAMPLE MATRIX : SOIL	

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
BENZENE	<0.025	0.400	0.444	111	0.391	98	13
CHLOROBENZENE	<0.025	0.400	0.389	97	0.363	91	7
1,1-DICHLOROETHENE	<0.010	0.400	0.285	71	0.269	67	6
TETRACHLOROETHENE	<0.010	0.400	0.293	73	0.260	65	12
TOLUENE	<0.025	0.400	0.408	102	0.380	95	7
TRICHLOROETHENE	<0.010	0.400	0.342	86	0.286	71	18
TOTAL XYLENES	<0.025	1.20	1.18	98	1.05	88	12

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

ATI I.D. # 9109-089

PCB ANALYSIS  
DATA SUMMARY

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE  
CLIENT I.D. : REAGENT BLANK  
SAMPLE MATRIX : SOIL  
EPA METHOD : 8080  
RESULTS BASED ON DRY WEIGHT

DATE SAMPLED : N/A  
DATE RECEIVED : N/A  
DATE EXTRACTED : 09/14/91  
DATE ANALYZED : 09/16/91  
UNITS : mg/Kg  
DILUTION FACTOR : 1

-----  
COMPOUNDRESULT  
-----

PCB 1016	<0.025
PCB 1221	<0.025
PCB 1232	<0.025
PCB 1242	<0.025
PCB 1248	<0.025
PCB 1254	<0.025
PCB 1260	<0.025

ATI I.D. # 9109-089-5

PCB ANALYSIS  
DATA SUMMARY

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE  
CLIENT I.D. : WW-2  
SAMPLE MATRIX : SOIL  
EPA METHOD : 8080  
RESULTS BASED ON DRY WEIGHT

DATE SAMPLED : 09/11/91  
DATE RECEIVED : 09/11/91  
DATE EXTRACTED : 09/14/91  
DATE ANALYZED : 09/16/91  
UNITS : mg/Kg  
DILUTION FACTOR : 1

-----  
COMPOUNDRESULT  
-----

PCB 1016	<0.025
PCB 1221	<0.025
PCB 1232	<0.025
PCB 1242	<0.025
PCB 1248	<0.025
PCB 1254	<0.025
PCB 1260	<0.033

ATI I.D. # 9109-089-6

PCB ANALYSIS  
DATA SUMMARY

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE  
CLIENT I.D. : SC-2  
SAMPLE MATRIX : SOIL  
EPA METHOD : 8080  
RESULTS BASED ON DRY WEIGHT

DATE SAMPLED : 09/11/91  
DATE RECEIVED : 09/11/91  
DATE EXTRACTED : 09/14/91  
DATE ANALYZED : 09/16/91  
UNITS : mg/Kg  
DILUTION FACTOR : 1

-----  
COMPOUNDRESULT  
-----

PCB 1016	<0.025
PCB 1221	<0.025
PCB 1232	<0.025
PCB 1242	<0.025
PCB 1248	<0.025
PCB 1254	<0.025
PCB 1260	<0.033

ATI I.D. # 9109-089

PCB ANALYSIS  
QUALITY CONTROL DATA

CLIENT : RYAN-MURPHY INCORPORATED	SAMPLE I.D. # : 109185-02
PROJECT # : 2132	DATE EXTRACTED : 09/14/91
PROJECT NAME : FIRESTONE	DATE ANALYZED : 09/16/91
EPA METHOD : 8080	UNITS : mg/Kg
SAMPLE MATRIX : SOIL	

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PCB 1260	<0.025	0.36	0.31	86	0.29	81	7

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$



ATI I.D. # 9109-089

PCB ANALYSIS  
QUALITY CONTROL DATA

CLIENT : RYAN-MURPHY INCORPORATED	SAMPLE I.D. # : BLANK SPIKE
PROJECT # : 2132	DATE EXTRACTED : 09/14/91
PROJECT NAME : FIRESTONE	DATE ANALYZED : 09/16/91
EPA METHOD : 8080	UNITS : mg/Kg
SAMPLE MATRIX : SOIL	

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PCB 1260	<0.025	0.33	0.28	85	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

ATI I.D. # 9109-089

TCLP  
METALS ANALYSISCLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

MATRIX : LEACHATE

ELEMENT	DATE LEACHED	DATE PREPARED	DATE ANALYZED
ARSENIC (SAMPLE -5)	09/16/91	09/17/91	09/18/91
ARSENIC (SAMPLE -6)	09/12/91	09/17/91	09/18/91
BARIUM (SAMPLE -5)	09/16/91	09/17/91	09/18/91
BARIUM (SAMPLE -6)	09/12/91	09/17/91	09/18/91
CADMIUM (SAMPLE -5)	09/16/91	09/17/91	09/18/91
CADMIUM (SAMPLE -6)	09/12/91	09/17/91	09/18/91
CHROMIUM (SAMPLE -5)	09/16/91	09/17/91	09/18/91
CHROMIUM (SAMPLE -6)	09/12/91	09/17/91	09/18/91
LEAD (SAMPLE -5)	09/16/91	09/17/91	09/18/91
LEAD (SAMPLE -6)	09/12/91	09/17/91	09/18/91
MERCURY (SAMPLE -5)	09/16/91	09/18/91	09/19/91
MERCURY (SAMPLE -6)	09/12/91	09/18/91	09/19/91
SELENIUM (SAMPLE -5)	09/16/91	09/17/91	09/19/91
SELENIUM (SAMPLE -6)	09/12/91	09/17/91	09/19/91
SILVER (SAMPLE -5)	09/16/91	09/17/91	09/18/91
SILVER (SAMPLE -6)	09/12/91	09/17/91	09/18/91

ATI I.D. # 9109-089

TCLP  
METALS ANALYSIS  
DATA SUMMARYCLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

MATRIX : LEACHATE

UNITS : mg/L

ELEMENT	WW-2 -5	SC-2 -6	REAGENT BLANK
ARSENIC	<0.050	<0.050	<0.050
BARIUM	0.33	0.26	<0.010
CADMIUM	<0.0020	<0.0020	<0.0020
CHROMIUM	<0.010	<0.010	<0.010
LEAD	<0.030	<0.030	<0.030
MERCURY	<0.00020	<0.00040	<0.00020
SELENIUM	<0.050	<0.050	<0.050
SILVER	<0.0050	<0.0050	<0.0050

ATI I.D. # 9109-089

TCLP  
METALS ANALYSIS  
QUALITY CONTROL DATA

CLIENT : RYAN-MURPHY INCORPORATED  
PROJECT # : 2132  
PROJECT NAME : FIRESTONE

MATRIX : LEACHATE

UNITS : mg/L

ELEMENT	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
ARSENIC	9109-089-5	<0.050	<0.050	NC	0.97	1.0	97
BARIUM	9109-089-5	0.33	0.33	0	1.2	1.0	87
CADMIUM	9109-089-5	<0.0020	<0.0020	NC	0.92	1.0	92
CHROMIUM	9109-089-5	<0.010	<0.010	NC	0.94	1.0	94
LEAD	9109-089-5	<0.030	<0.030	NC	0.94	1.0	94
MERCURY	9109-089-6	<0.00020	<0.00020	NC	0.0011	0.0010	110
SELENIUM	9109-089-5	<0.050	<0.050	NC	0.99	1.0	99
SILVER	9109-089-5	<0.0050	<0.0050	NC	0.91	1.0	91

NC = Not Calculable.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

CONFIRMATION

SAMPLES CHAIN OF CUSTODY

DOCUMENTATION



SOIL DISPOSAL ACCEPTANCE LETTERS

October 22, 1991

Mr. Steve Burke  
Waste Screening Program  
Seattle/Kings County Health Agency  
172 20th Avenue  
Seattle, WA 98122

Re: Approval to landfill used oil contaminated soil  
from Firestone Store @ 1012 164th Street S.E.  
Mill Creek, WA

Dear Mr. Burke:

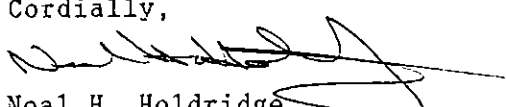
As per our phone conversation of last week, and with regards to the referenced site, enclosed please find copies of the analytical results for approximately 50 tons of soil from around an old underground tank location, that has been minimally impacted with used oil.

I have had a phone conversation with Mr. Dick Daniels at the Coal Creek Landfill, and based upon the analytical results which I described to him by phone, the soil would be acceptable to his facility, providing that its acceptance is granted by your agency.

I would appreciate it if you could review the attached data at your earliest convenience, so that we may remove the soil from this site and dispose of it as soon as possible.

Thank you for your time and efforts. I look forward to hearing from you.

Cordially,

  
Neal H. Holdridge  
Western Operations

enclosure

cc: Addressee  
Corona file

el Systems Consulting

derground Storage  
Tank Management  
Programs

Fuel Systems  
Instruction and  
Service

neral Contracting  
Complete  
Build-Up

Site Remedial Action

Good Earth  
Machine™

P.O. Box 16863  
17 Broadway  
Denver, Colorado 80216  
(303) 293-Fuel (3835)  
(303) 296-7911

Granite, Suite E  
Corona, California 91719  
(714) 279-6210  
Fax (714) 279-6215



NOTE:

Samples were taken during overexcavation proceedings, at which time all excavated material was stockpiled. Sample numbers correspond thusly:

UT-2	under old tank location
NW-2	north wall of excavation
SW-2	south wall of excavation
EW-2	east wall of excavation
WW-2	west wall of excavation
SC-2	spoils pile

TPH was run on all six samples. Additional analyses for VOC's, PCB's and TCLP metals was run on samples WW-2 and SC-2.

NOV - 4 1991



City of Seattle      King County  
Norman B. Rice, Mayor      Tim Hill, Executive

**Seattle-King County Department of Public Health**

**TO:** Richard Ramsey, Rebanco  
Jay Underwood, Site Foreman, Coal Creek Landfill

**FROM:** Steve Burke, *[Signature]* Senior Environmental Health Specialist  
Chemical/Physical Hazards Program

**DATE:** October 29, 1991

**SUBJECT:** WASTE MATERIAL CLEARED FOR DISPOSAL AT COAL CREEK LANDFILL

This is to advise you that we find that the waste material listed from the following company currently acceptable for the landfill at Coal Creek.

Generator:                      Bridgestone/Firestone      Contact: Kathleen Scheutzow  
                                         Tire and Rubber                      (216) 379-3737  
                                         Environmental Affairs  
                                         45 Wing 3  
                                         1200 Firestone Parkway  
                                         Akron Ohio 44317

Transporter:                      \*will be determined at a later date\*

Material:                              Soil excavated with the removal of an underground used  
                                         oil tank at 1912 - 164th St., S.E., Mill Creek, Wa.

Amount:                              Approximately 50 tons.  
                                         Approximate total weight 50 tons.

Frequency:                              This one time only.

Expiration Date:                      January 29, 1991

The above substances were found not to meet the State DOE definitions for either extremely hazardous waste or dangerous waste or Federal EPA criteria for hazardous waste or toxic substances. A summary of the available chemical analysis is attached, if applicable.

**Downtown Public Health Center**  
2124 Fourth Avenue Seattle, Washington 98121 (206) 296-4755

**Central Environmental Health Center**  
172-20th Avenue Seattle, Washington 98122 (206) 296-4632

Waste Screening Memo *SS*  
October 29, 1991  
Page 2

Please note that it is only the described materials that are acceptable for disposal. Any other type of questionable waste from this company will require separate review and analysis.

If you have any questions or need additional information, please call me at 296-4633 (FAX 296-0188).

SJB:ab<steve4>firestone

cc: Winnie Hooker, EPA  
John Conroy, Hazardous Waste, Northwest Office DOE  
Gary Irvine, EHS Supervisor, Southeast EHS Office  
Wallace Swofford, EHS Supervisor, Smith Tower, SKCDPH  
Generator and Transporter listed above.  
Ryan-Murphy, Inc., Attn: N. Holdridge, 211 Granite, Suite E., Corona,  
CA 91719

Attachment

WASTE SCREENING CHECKLIST *4*  
Seattle-King County Department of Public Health

W.S.#           N/A          

Generator: Bridgestone/Firestone

Date: October 29, 1991

Materials: Soil

Page 2 of 2

WAC 173-303	TITLE OR TEST	DONE	RESULT	COMMENTS
-090	D.W. Characteristics a) Ignitability b) Corrosivity c) Reactivity d) T.C.L.P.	d) Y	d) Not D.W.	
-101	Toxic D.W. a) Equivalent Conc. b) Bioassay			
-102	Persistent D.W. a) Halogenates b) PAH's	a) Y	a) Not D.W.	a) l.t. MTCA
-103	Carcinogenic D.W.			
Other	a) TPH b) B-E-T-X c) PCB's	a) Y b) Y c) Y	a) l.t. 100 ppm b) Not D.W. c) Not D.W.	a) l.t. MTCA b) l.t. MTCA c) l.t. MTCA

Abbreviations:

Y = Yes; N = No; NA = Not Applicable; WAC = Washington Administrative Code  
D.W. = Dangerous Waste; PAH = Polycyclic Aromatic Hydrocarbons;  
D.O.E. = Department of Ecology; l.t. = less than; g.t. = greater than;  
B = Benzene; E = Ethylbenzene; T = Toluene; X = Xylenes - total unless  
otherwise specified  
TPH = total petroleum hydrocarbons; ND = Not Detected;  
TCLP = Toxicity Characteristic Leaching Procedure

SB:jl(Steve)WSTSCRCK

SOIL DISPOSAL RECEIPT

## INVOICE

## COAL CREEK DEVELOPMENT CORPORATION

Dump Site Location

Billing Office

15401 NEW CASTLE ROAD  
ISSAQUAH, WA 98027  
(206) 277-02704730 32ND AVENUE SOUTH  
SEATTLE, WA 98118  
(206) 725-1700file 2131  
274175

Date

11-6-91

Job #

S  
O  
L  
D  
T  
O

RYAN MURPHY, INC.

P.O. #

PLACE OF ORIGIN

MILL CREEK  
HAULER

STOVE # 33

Acct. #

Pick-Up ☐Cash ☐Check ☒ # 2233

Load Description	Check One	Type Code	Yards	Price	Area Code	Amount
A. Dirt, clean fill	<input checked="" type="checkbox"/>	Dirt 31	20	3.25	2	65.00
B. Sand, black-top, concrete, brick and ash	<input type="checkbox"/>	Sand 32				
C. Demolition materials including: wood, rubble, roofing, wet dirt, lumber, large rocks and all mixed construction wastes	<input type="checkbox"/>	Demo 33		10.75	2	59
D. Wood products: large stumps, logs, piling, lumber and timbers longer than six feet	<input type="checkbox"/>	Wood 34			10	67.58
E. Debris: appliances and furniture, etc.	<input type="checkbox"/>	DB3 35				
F. Yard waste: leaves, brush, branches, compacted or mulched material	<input type="checkbox"/>	Brsh 36				
G. Glass	<input type="checkbox"/>	Glas 37				
H. Mud	<input type="checkbox"/>	Mud 38				
I. King County approved cleaned soils & dredges	<input type="checkbox"/>	Drt1 39				
Assistance: <input type="checkbox"/> Unloading <input type="checkbox"/> Gas <input type="checkbox"/> Backhoe						

A monthly statement will be sent.  
Billings by the 25th are due by the  
10th of the following month.

Finance Charge: 1 1/2% per month  
charged on past due balance over 30  
days with a minimum charge of \$1.00.

ITEMS NOT ACCEPTED: LIQUID WASTES OR HAZARDOUS MATERIALS OF ANY KIND!  
ALL DAMAGES INCURRED BY THESE MATERIALS WILL BE CUSTOMER'S LIABILITY.  
NOTICE: FACILITIES USED AT CUSTOMER'S RISK.

X Dan Bratten

Customer Signature

KEEP FOR YOUR RECORDS

ORIGINAL

STATE OF WA DOE CLOSURE CHECKLIST



A separate checklist must be completed for each UST system (tank and associated piping), except that UST systems at one site may be reported together by completing page 2 of this form separately for each system. The completed checklist should be mailed to the following address within 30 days of the completion of the closure or change-in-service.

Underground Storage Tank Section  
Department of Ecology  
Mail Stop PV-11  
Olympia, WA 98504-8711

Firm: A.G.A. Systems Inc. License Number: 5002032

Address: 13655 S.E. 132<sup>ND</sup> AVE.  
Street P.O. Box  
Clackamas OR 97015  
City State ZIP-Code

Telephone: (503) 698-2070

Licensed Supervisor: Michael D. Osborne Decommissioning License Number: W001446



### 3. TANK INFORMATION

1. Tank ID Number (as registered with Ecology): \_\_\_\_\_ 2. Year installed: \_\_\_\_\_
3. Tank capacity in gallons: 500 4. Last substance stored: WASTE OIL

### 4. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

- ☐ Investigate suspected release due to on-site environmental contamination
- ☐ Investigate suspected release due to off-site environmental contamination
- ☐ Extend temporary closure of UST system for more than 12 months
- ☐ UST system undergoing change-in-service
- ☐ UST system permanently closed-in-place
- ☒ UST system permanently closed with tank removed
- ☐ Required by Ecology or delegated agency for UST system closed before December 22, 1988
- ☐ Other (describe): \_\_\_\_\_

### 5. CHECKLIST

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.

Yes No

- |                                                                                                                                                                                                                                                                                                          |                                     |                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 1. Has the site check/site assessment been conducted according to applicable procedures specified in the UST site check/site assessment guidance issued by the Department of Ecology?                                                                                                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Has a release from the UST system been confirmed?<br><i>NOTE: Owners/operators must report all confirmed releases to the Department of Ecology or delegated agency within 24 hours.</i>                                                                                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Are the results of the site check/site assessment enclosed with this checklist?<br><i>NOTE: Two copies of the site check/site assessment results must be submitted to the Department of Ecology according to the reporting requirements specified in the UST site check/site assessment guidance.</i> | <input type="checkbox"/>            | <input type="checkbox"/> |

*I hereby certify that I have been in responsible charge of performing the site check/site assessment described above.  
Persons submitting false information are subject to penalties under Chapter 173.360 WAC.*

11-27-91  
Date

Michael D. Osborne  
Signature of Person Registered with Ecology

### 6. OWNER'S SIGNATURE

11-27-91  
Date

Michael D. Osborne FOR FIRESTONE  
Signature of Tank Owner or Authorized Representative



# UNDERGROUND STORAGE TANK Site Check/Site Assessment Checklist

The purpose of this form is to certify the proper investigation of an UST site for the presence of a release. These activities shall be conducted in accordance with Chapter 173.360 WAC. A description of the various situations requiring a site check or site assessment is provided in the guidance document for UST site checks and site assessments.

This Site Check/Site Assessment Checklist shall be completed and signed by a person registered with the Department of Ecology to perform site assessments.

Two copies of the results of the site check or site assessment should be included with this checklist according to the reporting requirements in the guidance document for UST site checks and site assessments.

For further information about completing this form, please contact the Department of Ecology UST Program.

The completed checklist should be mailed to the following address:

Underground Storage Tank Section  
Department of Ecology  
Mail Stop PV-11  
Olympia, WA 98504-8711

## 1. UST SYSTEM OWNER AND LOCATION

UST Owner/Operator: Bridgestone/Firestone

Owners Address: 1200 Firestone Parkway  
Street  
Akron Ohio 44317  
City State P.O. Box ZIP Code

Telephone: ( )

Site ID Number (on invoice or available from Ecology if tank is registered): \_\_\_\_\_

Site/Business Name: Bridgestone/Firestone

Site Address: 1012 164<sup>th</sup> SE Mill Creek  
Street  
City State ZIP Code

## 2. SITE CHECK/SITE ASSESSMENT CONDUCTED BY:

Registered Person: Michael D. Osborne

Address: 7632 SE 267<sup>th</sup>  
Street  
Gresham OR 97030  
City State P.O. Box ZIP Code

Telephone: (503) 698-7070



 **Analytical Technologies, Inc.**  
560 Naches Avenue SW, Suite 101 Renton, WA 98055 (206) 228-8335

# Chain of Custody

560 Naches Avenue SW, Suite 101 Renton, WA 98055 (206)228-8335

DATE 11/11/11 PAGE 1 OF 1

PAGE 1 OF 1

PROJECT MANAGER: Noel Anderson  
COMPANY: Aaron-Murphy Inc.  
ADDRESS: 611 Granite Suite E  
Gallatin, Pa. 91719  
PHONE: 714/279-6210 SAMPLED BY: Les Cullen

**SAMPLE DISPOSAL INSTRUCTIONS**

☒ ATTI Disposal @ \$5.00 each      ☐ Return

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
WT-2	9/11/91	12:30		-1
NW-2	9/11/91	12:40		2
SW-2	9/11/91	12:45		3
FW-2	9/11/91	12:50		4
WW-2	9/11/91	12:55		5
SC-2	9/11/91	13:30		
(SRR white)				

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT NUMBER:	2132	TOTAL NUMBER OF CONTAINERS	11
PROJECT NAME:	Fertilizer	COC SEALS/INTACT?	Y/Y
PURCHASE ORDER NUMBER:		RECEIVED GOOD COND./COLD	Y/Y
ONGOING PROJECT?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	RECEIVED VIA:	HAND DELIV.
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS			
TAT: (NORMAL) <input type="checkbox"/> 2WKS	(RUSH) <input checked="" type="checkbox"/> 24HR	<input type="checkbox"/> 48 HRS	<input type="checkbox"/> 72 HRS <input type="checkbox"/> 1WK
GREATER THAN 24 HR. NOTICE?		YES <input type="checkbox"/>	NO <input type="checkbox"/> (LAB USE ONLY)
SPECIAL INSTRUCTIONS: NO 24 hr. rush on sample SC-21! Run 8030 (betx) 8010 (Purgeables, TCLP (anals) and 8080 (PCBs) on highest ranking sample only (Run 1-5)			

[illegible]

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: [Signature] Time: 1545	Signature: [Signature] Time: [Blank]	Signature: [Signature] Time: [Blank]
Printed Name: Jones, David (L. 9/11/67)	Date: [Blank]	Date: [Blank]
Company: [Blank]	Company: [Blank]	Company: [Blank]
RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: [Signature] Time: [Blank]	Signature: [Signature] Time: [Blank]	Signature: [Signature] Time: [Blank]
Printed Name: [Signature] Time: 1540	Date: [Blank]	Date: [Blank]
Company: [Blank]	Company: [Blank]	Company: Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 438-1530 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • DISTRIBUTION: White, Carway, ATI • PINK - ORIGINATOR

TABLE OF SOIL SAMPLE  
ANALYTICAL RESULTS