WHITEGMC™
VOLVO

August 7, 1991

Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
Attn: Ms. Cynthia Chapman

Dear Cynthia:

I have included with this letter, a copy of the final report prepared by Tank Protect Engineering relating to the underground tank closure at our truck dealership, located at 5050 Coliseum Way, Oakland, CA 94601. The Company has awarded a contract to Levine Fricke to develop the workplan as outlined in your letter dated April 10, 1991. The project manager at Levine Fricke is Kathleen Isaacson, should you need to contact her prior to submittal.

We look forward to having a workplan ready for your review within a two to three week period. Should you have any questions concerning our site prior to that time, please do not hesitate to call me at 919-279-2811.

Sincerely,

Volvo GM Heavy Truck Corporation

Denis L. Delehanty
Buyer

cc: Mr. Bob Ware, President
WHITE GMC Trucks of Oakland

Ms. Martha Boyd
Corporate Legal Department

Enclosure

DD(ooo)

Volvo GM Heavy Truck Corporation
7900 National Service Road
P.O. Box 26115
Greensboro, NC 27402-6115

919 279-2000

TANK CLOSURE REPORT

Volvo GM Heavy Truck Corporation
5050 Colisuem Way
Oakland, California

Submitted By:
TANK PROTECT ENGINEERING
Of Northern California
July 2, 1991

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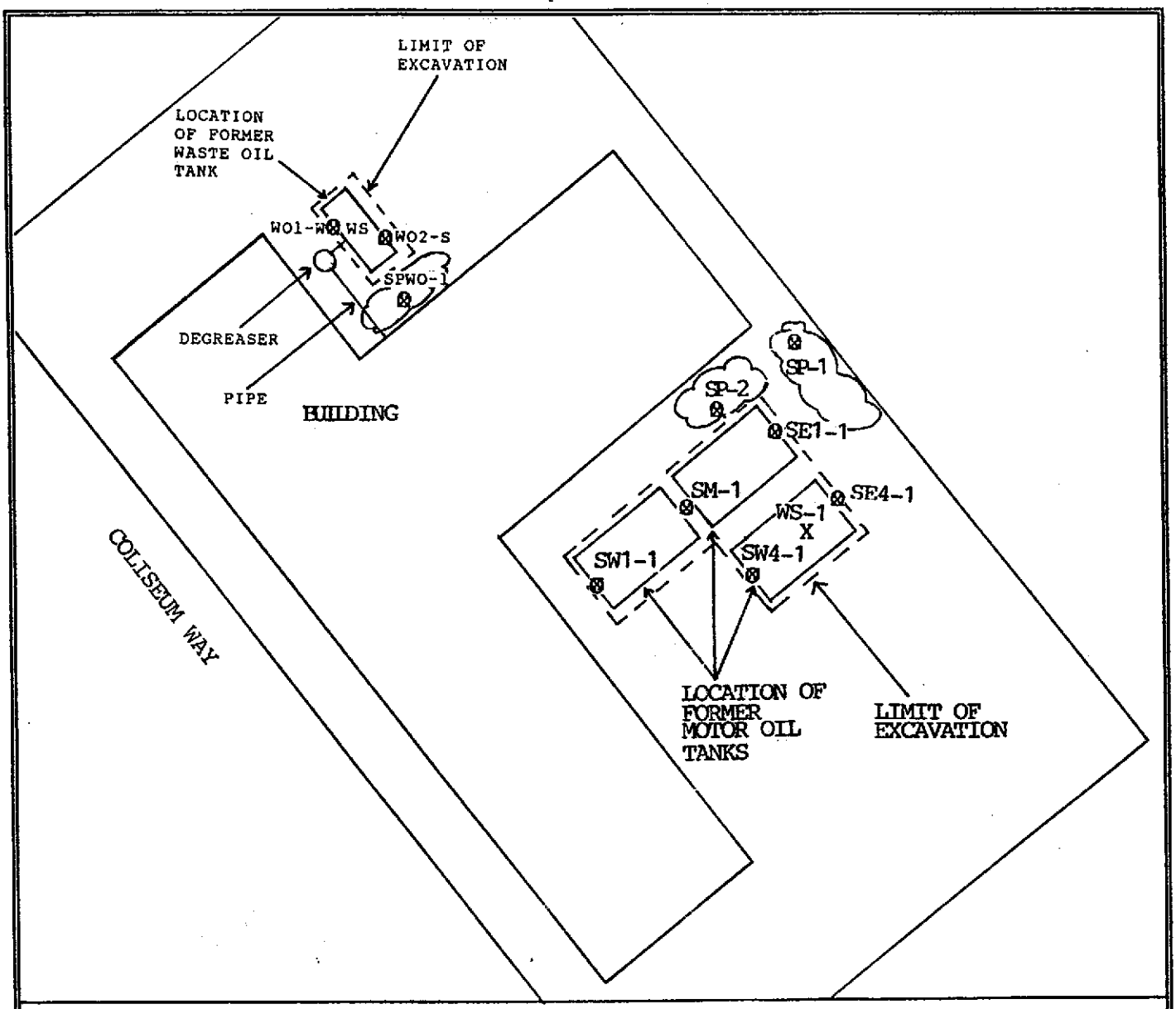
1.0 INTRODUCTION

The subject site is located at 5050 Coliseum Way in the City of Oakland, in Alameda County, California. The site is owned by Volvo GM Heavy Truck Corporation, based in Greensboro, North Carolina. Tank Protect Engineering (TPE) was contracted by Volvo GM Heavy Truck Corporation to remove 4 steel, underground storage tanks. Three of the tanks were 1,000-gallon motor oil tanks. The fourth tank was a 500-gallon waste oil tank. This closure report documents tank removal activities, soil and groundwater sampling, results of chemical analyses, and excavation closures.

2.0 TANK REMOVAL

On March 18, 1991 TPE removed the 3 motor oil tanks and 1 waste oil tank from the site (see Figure 1). An underground tank closure plan had been submitted to the Alameda County Health Care Services Agency (ACHCSA), Department of Environmental Health, Hazardous Materials Division on February 25, 1991. This plan was accepted by the ACHCSA on February 27, 1991 (see Appendix A). A permit to remove inflammable liquid tanks (no. 9417) was obtained from the City of Oakland on February 28, 1991 (see Appendix A). Prior to removal, flammable vapors were purged from within the tank by displacement with dry ice, as indicated by a combustible gas indicator (Gastech model 1314). All tank removal precautions and sampling procedures were conducted under the supervision of inspectors from the ACHCSA and the City of Oakland Fire Department. The tanks were removed by TPE and transported off site by Trident Truck Line, Inc. as hazardous waste under Uniform Hazardous Waste Manifest, State Manifest Document Number 90392347 to Erickson, Inc. located at 255 Parr Blvd., Richmond, California 94801 (see Appendix A). Excavated soil was covered with polyethylene plastic and stockpiled on site.

During the initial stage of excavating soil from above the waste oil tank, soil with visible contamination was encountered by the backhoe. Therefore, all excavated soil was deposited in 1 stockpile on top of a sheet of polyethylene plastic. Also, a pipe from the degreaser to the waste oil tank was found to be lacking an essential coupler fitting near the pipe's connection with the waste oil tank. Visible soil contamination was found in the soil surrounding the missing coupler. Before the tank was removed,



L E G E N D

SW1-1 ⊗ LOCATION AND NAME OF SOIL SAMPLES

WS-1 X LOCATION AND NAME OF WATER SAMPLE IN MOTOR OIL TANK EXCAVATION

WS LOCATION AND NAME OF WATER SAMPLE IN WASTE OIL TANK EXCAVATION

-N-

NOT TO SCALE

TANK PROTECT ENGINEERING
Of Northern California, Inc.

SITE PLAN
VOLVO GM HEAVY TRUCK CORPORATION
5050 COLISEUM WAY
OAKLAND, CALIFORNIA

FIGURE
1

there was an abnormally high level of groundwater (approximate depth: 6.0 feet) in the area of the waste oil tank due to a ruptured terra-cotta sewer pipe (approximate depth: 8 feet). At the time of tank removal, a 3 inch x .5 inch hole was observed on the north end and on the underside of the waste oil tank. An inspector from the ACHCSA requested that 2 soil samples (WO1-W and WO2-S) be collected in the areas above the soil-water interface where the soil appeared to be most contaminated. Because the soil above and beneath the tank contained visible contamination, an Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report was completed (see Appendix A). The excavation was overexcavated horizontally and vertically (to an approximate depth of 9 feet) to remove visibly contaminated soil. Groundwater entering the overexcavated excavation contained floating product and stabilized at an approximate depth of 6 feet. Tank Protect Engineering pumped about 715 gallons of this contaminated water from the excavation into thirteen 55-gallon drums. The next day, on March 19, 1991, a total of 1,500 gallons of contaminated water (including about 715 gallons stored in the drums and about 785 gallons pumped directly from the excavation) was pumped and transported by Allied Oil and Pumping as hazardous waste under Uniform Hazardous Waste Manifest, State Manifest Document Number 90239116 to Refineries Services located at 13331 North Highway 33, Patterson, California 95363 (see Appendix A). Two to three days after removing water from the excavation with the Allied Oil and Pumping vacuum truck, more floating product was once again observed in the groundwater of the excavation. Tank Protect Engineering used approximately one hundred 1.5 foot x 1.5 foot absorbent pads to absorb the floating product.

In the motor oil tanks excavation, minor visible contamination was observed in the soil near SE1-1 (see Figure 1). No holes were observed in any of the 3 motor oil tanks. However, there were signs of motor oil overflow. Groundwater with an oily sheen was encountered at the base of this excavation in the area of the eastern tank at an approximate depth of 9 feet.

2.1 Soil Sampling

Soil sampling was conducted in accordance with "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank

Sites", dated August 10, 1990, and the underground storage tank removal regulations established by the ACHCSA. All soil samples were collected under the supervision of a representative of the ACHCSA. Five soil samples (SW1-1, SM-1, SE1-1, SW4-1, and SE4-1) were collected on March 18, 1991 from the sidewalls of the excavation at the soil-water interface near each end of the 3 motor oil tanks at an approximate depth of 8.5 feet (see Figure 1 for locations). Sample SM-1 was collected between and beneath the ends of 2 adjacent tanks and is representative of the soil near the ends of both of these tanks.

Two soil samples (WO2-S and WO1-W) were collected on March 19, 1991 from non-surficial sidewall material of the waste oil tank excavation in the areas which appeared to be most contaminated at an approximate depth of 5.0 feet (see Figure 1). An area of visibly high soil contamination was on the north wall of the excavation near the degreaser manhole.

Soil samples were collected for analysis by removing about 1 foot of soil from the base or side of the excavation and then collecting an undisturbed soil sample from the newly exposed soil surfaces by excavating soil with a backhoe and driving a clean brass tube into the soil contained in the bucket of the backhoe with a slide-hammer corer. After collection of the soil samples, the brass tube ends were quickly covered with aluminum foil and capped with plastic end caps which were taped to the brass tubes with duct tape. The tubes were then labeled and placed in an iced cooler for transport to a State-certified laboratory accompanied by chain-of-custody documentation (see Appendix B for TPE's protocol relative to Sample Handling Techniques).

Three soil samples [SP-1, SP-2, and SPWO-1 (see Figure 1)] were also collected for analysis from the 2 stockpiles of soil from the motor oil tanks excavation and the stockpile of soil from the waste oil tank excavation, on March 18 and 19, 1991, respectively.

Soil samples from the waste oil tank excavation and stockpile were analyzed for total petroleum hydrocarbons as gasoline (TPHG); total petroleum hydrocarbons as diesel (TPHD); benzene, toluene, ethylbenzene, and xylenes (BTEX); and total recoverable petroleum oil [Total Oil and Grease (TOG)]. Soil samples from the motor oil tanks excavation and stockpile were analyzed for TPHD and BTEX.

2.1.1 Analytical Results of Soil Samples

All soil samples were analyzed by a California Department of Health Services (DHS) certified analytical laboratory (Sequoia Analytical, Concord, California) according to the California Regional Water Quality Control Board (CRWQCB)-San Francisco Bay Region recommended and DHS approved methods. Soil samples analyzed for TPHG, TPHD, BTEX, and TOG were analyzed by United States Environmental Protection Agency (EPA) methods 5030/8015 (Modified), 3550/8015, 5030/8020 (Modified), and 5520 E & F (Gravimetric), respectively. Samples SPWO-1, WO1-W, and WO2-S were additionally analyzed for semi-volatile organics by GC/MS (EPA 8270), and for cadmium, chromium, lead, zinc, and nickel by EPA Methods 6010, 6010, 7421, 6010, and 6010, respectively. Analytical results are summarized in Tables 1 and 2 and documented with certified analytical reports and chain-of-custodies in Appendix C.

Soil samples from the motor oil tanks excavation and stockpile detected TPHD at concentrations of 30 parts per million (ppm), 78 ppm, 2.0 ppm, and 4.7 ppm in samples SE1-1, SW1-1, SP-1, and SP-2, respectively. Sample SP-1 detected the highest concentrations of benzene, toluene, ethylbenzene, and xylenes at concentrations of .36 ppm, .34 ppm, .31 ppm, and 1.1 ppm, respectively.

Soil samples collected from the waste oil tank excavation and stockpile (SPWO-1, WO1-W, and WO2-S) detected TPHD, TPHG, toluene, ethylbenzene, and xylenes to maximum concentrations of 3,300 ppm, 450 ppm, .2 ppm, .4 ppm, and 3.6 ppm, respectively in the stockpile soil sample SPWO-1. Sample WO1-W detected the highest level of TOG at a concentration of 960 ppm. Cadmium, chromium, lead, zinc, and nickel were detected to maximum concentrations of 580 ppm, 29 ppm, 16,000 ppm, 5,600 ppm, and 25 ppm, respectively. In the test for semi-volatile organics, all results were non-detectable with the exception of 6.0 ppm 1,2-dichlorobenzene and .660 ppm 2-methylnaphthalene in sample SPWO-1.

2.2 Groundwater Sampling

Groundwater was encountered in both the motor oil tanks and waste oil tank excavations. Water sample WS-1 was collected at the approximate depth of 9.0 feet

TABLE 1

SUMMARY OF SOIL ANALYTICAL RESULTS
(ppm)

Sample ID Name	TPHD	TPHG	Benzene	Toluene	Ethyl-benzene	Xylenes	Oil & Grease
SE1-1	30	NA*	<.0050	<.0050	<.0050	<.0050	NA*
SM-1	<1.0	NA	0.0096	0.0240	0.0074	0.0540	NA
SE4-1	<1.0	NA	<.0050	0.0086	<.0050	0.0150	NA
SW4-1	<1.0	NA	<.0050	0.0054	<.0050	0.0094	NA
SW1-1	78	NA	<.0050	0.0090	<.0050	0.0260	NA
SP-1	2.0	NA	0.3600	0.3400	0.3100	1.1000	NA
SP-2	4.7	NA	<.0050	<.0050	<.0050	0.0086	NA
SPWO-1**	3,300	450	<.0050	0.2000	0.4000	3.6000	870
WO1-W**	470	320	<.1000	<.1000	0.1400	0.3400	960
WO2-S**	40	<1.0	<.0050	<.0050	<.0050	<.0050	110

NA* = NOT ANALYZED

** ALSO ANALYZED FOR SEMI-VOLATILE ORGANICS BY GC/MS (EPA 8270). ALL RESULTS WERE NON-DETECTABLE WITH THE EXCEPTION OF 6.0 ppm 1,2 - DICHLOROBENZENE AND .660 ppm 2 - METHYLNAPHTHALENE IN SAMPLE SPWO-1.

TABLE 2

SUMMARY OF SOIL ANALYTICAL RESULTS
FOR METALS
(ppm)

Sample ID Name	Cadmium	Chromium	Lead	Zinc	Nickel
SPWO-1	300	22	16,000	5,600	9.4
WO1-W	580	29	1,900	5,300	25
WO2-S	130	22	130	3,600	13

TABLE 3

SUMMARY OF WATER ANALYTICAL RESULTS
(ppb)

Sample ID Name	TPHD	TPHG	Benzene	Toluene	Ethylbenzene	Xylenes	Oil & Grease
WS*	3,100	650	2.60	42	7.60	14	7,900
WS-1	1,700	NA**	<.30	<.30	<.30	.36	NA

* A SECOND WATER SAMPLE, WS (4/4/91), WAS COLLECTED FROM THE WASTE OIL TANK EXCAVATION AND ANALYZED FOR POLYCHLORINATEDBIPHENOLS (PCBs) BY EPA METHOD 8080 AND FOR POLYNUCLEAR AROMATICS (PNAs), POLYCHLORINATEDPHENOLS (PCPs), AND COAL - TAR CREOSOTE BY EPA METHOD 8270. ALL RESULTS WERE NON-DETECTABLE.

NA** = NOT ANALYZED

in the motor oil tanks excavation on March 18, 1991 with a bailer and stored in two 40-milliliter vials with teflon lined caps and two 1-liter brown glass bottles.

Groundwater sample WS was collected from the waste oil tank excavation at an approximate depth of 8 feet on March 26, 1991 [In order to collect a representative groundwater sample, sample WS was collected 1 week after water in the excavation was pumped by Allied Oil and Pumping (see section 2.0 TANK REMOVAL).] in the manner described above.

Both groundwater samples were analyzed for TPHD and BTEX. Sample WS was additionally analyzed for TPHG, TOG, and cadmium, chromium, lead, zinc, and nickel. A second groundwater sample from the waste oil tank excavation, WS (4/4/91), was collected and analyzed for polychlorinatedbiphenols (PCBs), polynuclear aromatics (PNAs), polychlorinatedphenols (PCPs), and coal-tar creosote.

2.2.1 Analytical Results of Groundwater Samples

Groundwater samples were analyzed by DHS certified Trace Analysis Laboratory, Inc. (located in Hayward, California) and Sequoia Analytical (located in Concord, California) according to CRWQCB recommended and DHS approved methods. Both groundwater samples were analyzed for TPHD and BTEX by EPA Methods 3510/8015 and 5030/8020 (Modified), respectively. The sample from the waste oil tank excavation, WS, was also analyzed for TOG, TPHG, cadmium, chromium, lead, zinc, and nickel by Standard Method 5520DF, and EPA Methods: 8015 (Modified), 7130, 7190, 7420, 7950, and 7520, respectively. Analytical results are summarized in Tables 3 and 4 and documented with certified analytical reports and chain-of-custodies in Appendix C.

Groundwater sample WS-1 (from the motor oil tanks excavation) detected TPHD and xylenes at concentrations of 1,700 parts per billion (ppb), and .36 ppb, respectively.

Groundwater sample WS (from the waste oil tank excavation) detected TPHD, TPHG, TOG, benzene, toluene, ethylbenzene, and xylenes at concentrations of 3,100 ppb, 650 ppb, 7,900 ppb, 2.60 ppb, 42 ppb, 7.6 ppb, and 14 ppb, respectively. However, it was

TABLE 4

SUMMARY OF WATER ANALYTICAL RESULTS
FOR METALS
(ppb)

Sample ID Name	Cadmium	Chromium	Lead	Zinc	Nickel
WS	130	<50	320	100,000	<300

noted by Trace Analysis Laboratory, Inc. that the sample, in the test for TPHD, indicated compounds eluting earlier and later than diesel. Therefore, it is probable that the chemical(s) detected is (are) not diesel. Groundwater sample WS detected cadmium, lead, and zinc at concentrations of 130 ppb, 320 ppb, and 100,000 ppb, respectively. A second groundwater sample from the waste oil tank excavation, WS (4/4/91), was collected and analyzed for PCBs by EPA Method 8080 and for PNAs, PCPs, and coal-tar creosote by EPA Method 8270. All results were non-detectable.

3.0 EXCAVATION CLOSURES

The motor oil tanks excavation was backfilled with 124 tons of imported pea gravel. The stockpiled soil from this excavation was covered with polyethylene plastic.

The waste oil tank excavation was covered with plywood and the soil stockpile was covered with polyethylene plastic.

If you have any questions regarding this report, please call TPE at (415) 429-8088.

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
PHONE NO. 415/271-4320

592334
933.00
2/25/91

Project Specialist (print) Cynthia Chapman

UNDERGROUND TANK CLOSURE PLAN
*** * * Complete according to attached instructions * * ***

1. Business Name Volvo GMC Heavy Truck Corporation

   Business Owner Bob Ware

2. Site Address 5050 Coliseum Way

   City Oakland, CA Zip 94601 Phone (415)532-7100

3. Mailing Address 5050 Coliseum Way

   City Oakland, CA Zip 94601 Phone (415)532-7100

4. Land Owner Volvo GMC Heavy Truck Corporation

   Address P.O. Box 26115 Greensboro City, State NC Zip 274026115

5. Generator name under which tank will be manifested

   Volvo GMC Heavy Truck Corporation

   EPA I.D. No. under which tank will be manifested CAC000568648

rev 12/90

Excavation Permit Granted _____ No. _____

CITY OF OAKLAND

Tank Permit No. 9417

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks.

Oakland, California, February 28, 1991

PERMISSION IS HEREBY GRANTED TO ~~install~~ remove ~~xxxxx~~ Gasoline tank and excavate commencing _____ feet inside property line

on the east side of Coliseum Way Street Avenue 75 feet east of Coliseum Way Street Avenue

House No. 5050 Coliseum Way Street Avenue Present Storage _____

Owner Volvo GMC Heavy Truck Address P.O. Box 26115 Greensboro NC 27902-6115 Phone 919-279-2811

Applicant Tank Protect Engineering Address 2821 Whipple Avenue Union City 94587 Phone 429-8088

Dimensions of street (sidewalk) surface to be disturbed _____ X _____ Number of Tanks 3/1 Capacity 1000/500 Gallons, each.

Remarks: _____

This Permit is granted in accordance with existing City Ordinances.
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
When installing, removing or repairing tanks, no open flame to be on or near premises.

Approved _____ Fire Marshal

Approved _____ Drainage Division Engineering Dept.

EXCAVATING PERMIT

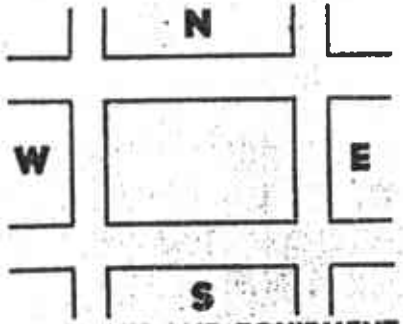
Issued in accordance with Ord. No. 278 CMS, Sec. 6-2.04

_____ square feet of digging or removal granted.

The receipt of $ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.



CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on _____ 19 ____

By _____ Fire Marshal

Inspection Fee Paid - - - - - - - - $200.00 ck#1460 rec#647884

Received by V. Arnold FIRE PREVENTION BUREAU

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.

When ready for inspection notify Fire Prevention Bureau, 273-3851

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.

528.00 (8-87)

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-91)
Please print or type. *Form designed for use on elite (12-pitch typewriter).*

See Instructions on Back of Page 6 and Front of Page 7

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CA D 1 0 1 6 1 3 5 1 4 1 7 1 9 8 1 6
Manifest Document No.:
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
WHITE GMC TRUCKS
5050 COLISEUM WAY OAKLAND, CA. 94601
4. Generator's Phone (415) 532-7100

A. State Manifest Document Number: 90392347
B. State Generator's ID:
C. State Transporter's ID: 1075-74
D. Transporter's Phone: (415) 783-2881
E. State Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID: CA D 0 0 9 4 6 6 9 3 2
H. Facility's Phone: (415) 235-1393

5. Transporter 1 Company Name: TRIDENT TRUCK LINE, INC.
6. US EPA ID Number: C A D 9 8 2 4 8 4 3 7 0
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address
ERICSON INCORPORATED
255 PARR BLVD.
RICHMOND, CA. 94801
10. US EPA ID Number: C A D 0 0 9 4 6 6 3 9 2

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. State Waste No. / J. EPA/Other Waste No.
a. WASTE EMPTY TANK NON-RCRA HAZARDOUS WASTE SOLID	0014	T P	016500	P	State 512 / EPA/Other NONE
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above
QUANTITY 4 EMPTY STORAGE TANK(S) 5861, 5862, 5863, 5864.
HAVE BEEN INERTED WITH 15LBS. DRY ICE PER 1000 GAL. CAPACITY.

K. Handling Codes for Wastes Listed Above
a. 01 b. c. d.

15. Special Handling Instructions and Additional Information
KEEP AWAY FROM SOURCESOF IGNITION. ALWAYS WEAR HARDHATS AND GLASSES WHEN WORKING AROUND UNDERGROUND STORAGE TANKS. 24HR. CONTACT: X Bob Ware AND PHONE: X 415-532-7100.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
X Denis L. Delehanty	X Denis L. Delehanty	10	17	1991

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
MIKE VERNAZZA	Mike Vernazza	10	31	1991

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

DHS 8022 A
EPA 8700—22
(Rev. 6-89) Previous editions are obsolete.

Do Not Write Below This Line

Blue: GENERATOR SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 400, Sacramento, CA. 95812-0400

State of California—Health and Welfare Agency
Approved OMB No. 2050—0039 (Expires 9-30-91)
Please print or type. *(Form designed for use on elite (12-pitch typewriter).*

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAC000516186 | Manifest Document No. 101125
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
VOLVO, GMC, HEAVY TRUCK
5050 COLISEUM WAY OAKLAND, CA, 94601
4. Generator's Phone 415 532 7100

A. State Manifest Document Number 90239116
B. State Generator's ID

5. Transporter 1 Company Name: ALLIED OIL & PUMPING
6. US EPA ID Number: CAT080014277
C. State Transporter's ID
D. Transporter's Phone (408) 432-0333

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
REFINERIES SERVICES
13331 NORTH HWY. 33
PATTERSON, CA. 95363
10. US EPA ID Number: CAD083166728
G. State Facility's ID: CAD083166728
H. Facility's Phone (800) 874-4444

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE OIL N.O.S COMBUSTIBLE LIQUID NA 1270	001	TT	1500	G	State 221 / EPA/Other
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above
1.1 USED OIL
1.2 WATER

K. Handling Codes for Wastes Listed Above
a. 01
b.
c.
d.

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: LYLE THOMAS G. TRAV (ON BEHALF OF GENERATOR) | Signature (ON BEHALF OF GENERATOR) | Month 03 Day 19 Year 91

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RICH JOHNS | Signature | Month 03 Day 19 Year 91

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

GENERATOR — TRANSPORTER — FACILITY

HS 8022 A (1/88)
PA 8700—22
(8-88) Previous editions are obsolete.

Do Not Write Below This Line

Blue: GENERATOR SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 400, Sacramento, CA 95812-0400

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☒ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFTY CODE.
SIGNED _____ DATE _____

REPORT DATE: 04/05/91 CASE #:

REPORTED BY
NAME OF INDIVIDUAL FILING REPORT: Marc Zomorodi
PHONE: (415) 429-8088
SIGNATURE: M. Zomorodi
REPRESENTING: ☒ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER
COMPANY OR AGENCY NAME: Tank Protect Engineering of Northern California
ADDRESS: 2821 Whipple Road (STREET) Union City, (CITY) CA (STATE) 94587 (ZIP)

RESPONSIBLE PARTY
NAME: White GMC Trucks of Oakland, Inc. ☐ UNKNOWN
CONTACT PERSON: Robert L. Ware
PHONE: (415) 532-7100
ADDRESS: 5050 Coliseum Way (STREET) Oakland, (CITY) CA (STATE) 94601 (ZIP)

SITE LOCATION
FACILITY NAME (IF APPLICABLE): White GMC Trucks of Oakland, Inc.
OPERATOR:
PHONE: (415) 532-7100
ADDRESS: 5050 Coliseum Way (STREET) Oakland, (CITY) CA (COUNTY) 94601 (ZIP)
CROSS STREET:

IMPLEMENTING AGENCIES
LOCAL AGENCY / AGENCY NAME: Alameda County Health Care Services Agency
CONTACT PERSON: Cynthia Chapman
PHONE: (415) 271-4320
REGIONAL BOARD: San Francisco Bay Region
PHONE: ( )

SUBSTANCES INVOLVED
(1) NAME: Petroleum Hydrocarbons - See below
QUANTITY LOST (GALLONS): _____ ☐ UNKNOWN
(2) _____ ☐ UNKNOWN

DISCOVERY/ABATEMENT
DATE DISCOVERED: 03/18/91
HOW DISCOVERED: ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☒ TANK REMOVAL ☐ OTHER
DATE DISCHARGE BEGAN: ☐ UNKNOWN
HAS DISCHARGE BEEN STOPPED? ☐ YES ☐ NO IF YES, DATE
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☐ REMOVE CONTENTS ☐ REPLACE TANK ☐ CLOSE TANK
☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURE
☒ OTHER Remove Tanks

SOURCE/CAUSE
SOURCE OF DISCHARGE: ☐ TANK LEAK ☒ UNKNOWN ☐ PIPING LEAK ☐ OTHER
CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☐ UNKNOWN ☐ OTHER

CASE TYPE
CHECK ONE ONLY
☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONE ONLY
☒ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION
☐ LEAK BEING CONFIRMED ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS
☐ REMEDIATION PLAN ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)
☐ CAP SITE (CD) ☐ CONTAINMENT BARRIER (CB) ☐ VACUUM EXTRACT (VE)
☐ EXCAVATE & DISPOSE (ED) ☐ EXCAVATE & TREAT (ET) ☐ NO ACTION REQUIRED (NA) ☐ OTHER (OT)
☐ REMOVE FREE PRODUCT (FP) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ TREATMENT AT HOOKUP (HU)
☐ ENHANCED BIO DEGRADATION (IT) ☐ REPLACE SUPPLY (RS) ☐ VENT SOIL (VS)

COMMENTS
Removed 2-1,000 and 1-4,000 gallon motor oil tank, and 1-500 gallon waste oil tank.

APPENDIX B

SAMPLE HANDLING TECHNIQUES

APPENDIX B

SAMPLE HANDLING TECHNIQUES

Soil and groundwater samples will be packaged carefully to avoid breakage or contamination, and will be delivered to the laboratory at proper storage temperatures. The following sample packaging requirements will be followed.

- Sample bottle/sleeve lids will not be mixed. All sample lids will stay with the original containers and have custody seals affixed to them.
- Samples will be secured in coolers to maintain custody, control temperature, and prevent breakage during transportation to the laboratory.
- A chain-of-custody form will be completed for all samples and accompany the sample cooler to the laboratory.
- Ice, blue ice, or dry ice will be used to keep samples at a constant temperature during transport to the laboratory.
- Each sample will be identified by affixing a pressure sensitive, gummed label, or standardized tag on the container(s). This label will contain the sample identification number, date and time of sample collection, and the collector's initials.

All sample containers will be precleaned and will be obtained at from a State Department of Health Services certified analytical laboratory.

Sample Control/Chain-of-Custody: All field personnel will refer to this work plan to verify the methods to be employed during sample collection. All sample gathering activities will be recorded in the site logbook; all sample transfers will be documented in the site logbook; samples are to be identified with TPE labels and all sample bottles are to be custody-sealed. All information is to be recorded in waterproof ink.

All TPE field personnel are personally responsible for sample collection and the care and custody of collected samples until the samples are transferred or properly dispatched.

The custody record will be completed by the field technician who has been designated by the TPE project manager as being responsible for sample shipment to the appropriate laboratory. The custody record will include, among other things, the following information: name of person collecting the samples; date samples were collected; type of sampling conducted (composite/grab); location of sampling station; number and type of containers used; and signature of the TPE person relinquishing samples to a non-TPE person with the date and time of transfer noted. The relinquishing individual will also put all the specific shipping data on the custody record.

Site log books will be maintained by a designated TPE field employee to record, for each sample, sampling locations, station numbers, dates, times, sampler's name, designation of the samples as a grab or composite, notation of the type of sample (e.g. groundwater, soil boring, etc.), preservatives used, on-site measurement data, and other observations or remarks.

APPENDIX C

CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 18, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 3550/8015	Extracted:	Mar 27, 1991
Attention: Lyle Travis	First Sample #:	103-0729	Analyzed:	3/30-4/4/91
			Reported:	Apr 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
103-0729	SE1-1	30
103-0730	SM-1	N.D.
103-0731	SE4-1	N.D.
103-0732	SW4-1	N.D.
103-0733	SW1-1	78

Detection Limits:	**1.0**

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 18, 1991
2821 Whipple Road	Matrix Descript:	Water	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 3510/8015	Extracted:	Mar 25, 1991
Attention: Lyle Travis	First Sample #:	103-0736 C-D	Analyzed:	Mar 29, 1991
			Reported:	Apr 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons µg/L (ppb)
103-0736 C-D	WS-1	1,700

Detection Limits:	**500**

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Belinda C. Vega
Laboratory Director

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 18, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 5030/8020	Analyzed:	Apr 1, 1991
Attention: Lyle Travis	First Sample #:	103-0729	Reported:	Apr 4, 1991

BTEX DISTINCTION (EPA 8020)

Sample Number	Sample Description	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
103-0729	SE1-1	N.D.	N.D.	N.D.	N.D.
103-0730	SM-1	0.0096	0.024	0.0074	0.054
103-0731	SE4-1	N.D.	0.0086	N.D.	0.015
103-0732	SW4-1	N.D.	0.0054	N.D.	0.0094
103-0733	SW1-1	N.D.	0.0090	N.D.	0.026
Detection Limits:		**0.0050**	**0.0050**	**0.0050**	**0.0050**

Analytes reported as N.D. were not present above the stated limit of detection.

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled: Mar 18, 1991
2821 Whipple Road	Sample Descript:	Water, WS-1	Received: Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 5030/8020	Analyzed: Apr 1, 1991
Attention: Lyle Travis	Lab Number:	103-0736 A-B	Reported: Apr 4, 1991

BTEX DISTINCTION (EPA 8020)

Analyte	Detection Limit µg/L (ppb)	Sample Results µg/L (ppb)
Benzene	0.30	N.D.
Toluene	0.30	N.D.
Ethyl Benzene	0.30	N.D.
Xylenes	0.30	0.36

Analytes reported as N.D. were not present above the stated limit of detection.

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Apr 2, 1991
Attention: Lyle Travis	First Sample #:	103-0734	Reported:	Apr 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
103-0734	WO1-W	320	N.D.	N.D.	0.14	0.34
Detection Limits:		**20**	**0.10**	**0.10**	**0.10**	**0.10**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Apr 2, 1991
Attention: Lyle Travis	First Sample #:	103-0735	Reported:	Apr 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
103-0735	WO2-S	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		**1.0**	**0.0050**	**0.0050**	**0.0050**	**0.0050**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 3550/8015	Extracted:	Mar 29, 1991
Attention: Lyle Travis	First Sample #:	103-0734	Analyzed:	Apr 1, 1991
			Reported:	Apr 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
103-0734	WO1-W	470

Detection Limits:	100

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 3550/8015	Extracted:	Mar 29, 1991
Attention: Lyle Travis	First Sample #:	103-0735	Analyzed:	Apr 1, 1991
			Reported:	Apr 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015) ~d

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
103-0735	WO2-S	40

Detection Limits:	**1.0**

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Belinda C. Vega
Laboratory Director

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted:	Mar 26, 1991
Attention: Lyle Travis	First Sample #:	103-0734	Analyzed:	Mar 26, 1991
			Reported:	Apr 4, 1991

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
103-0734	WO1-W	960
103-0735	WO2-S	110

Detection Limits:	**30**

Analytes reported as N.D. were not present above the stated limit of detection.

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Laboratory Director

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Sample Descript:	Soil, WO1-W	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 8270	Extracted:	Mar 29, 1991
Attention: Lyle Travis	Lab Number:	103-0735	Analyzed:	Apr 1, 1991
			Reported:	Apr 4, 1991

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	2,000	N.D.
Acenaphthylene	2,000	N.D.
Aniline	2,000	N.D.
Anthracene	2,000	N.D.
Benzidine	50,000	N.D.
Benzoic Acid	10,000	N.D.
Benzo(a)anthracene	2,000	N.D.
Benzo(b)fluoranthene	2,000	N.D.
Benzo(k)fluoranthene	2,000	N.D.
Benzo(g,h,i)perylene	2,000	N.D.
Benzo(a)pyrene	2,000	N.D.
Benzyl alcohol	2,000	N.D.
Bis(2-chloroethoxy)methane	2,000	N.D.
Bis(2-chloroethyl)ether	2,000	N.D.
Bis(2-chloroisopropyl)ether	2,000	N.D.
Bis(2-ethylhexyl)phthalate	10,000	N.D.
4-Bromophenyl phenyl ether	2,000	N.D.
Butyl benzyl phthalate	2,000	N.D.
4-Chloroaniline	2,000	N.D.
2-Chloronaphthalene	2,000	N.D.
4-Chloro-3-methylphenol	2,000	N.D.
2-Chlorophenol	2,000	N.D.
4-Chlorophenyl phenyl ether	2,000	N.D.
Chrysene	2,000	N.D.
Dibenz(a,h)anthracene	2,000	N.D.
Dibenzofuran	2,000	N.D.
Di-N-butyl phthalate	10,000	N.D.
1,3-Dichlorobenzene	2,000	N.D.
1,4-Dichlorobenzene	2,000	N.D.
1,2-Dichlorobenzene	2,000	N.D.
3,3-Dichlorobenzidine	10,000	N.D.
2,4-Dichlorophenol	2,000	N.D.
Diethyl phthalate	2,000	N.D.
2,4-Dimethylphenol	2,000	N.D.
Dimethyl phthalate	2,000	N.D.
4,6-Dinitro-2-methylphenol	10,000	N.D.
2,4-Dinitrophenol	10,000	N.D.

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Sample Descript:	Soil, WO1-W	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 8270	Extracted:	Mar 29, 1991
Attention: Lyle Travis	Lab Number:	103-0735	Analyzed:	Apr 1, 1991
			Reported:	Apr 4, 1991

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	2,000	N.D.
2,6-Dinitrotoluene	2,000	N.D.
Di-N-octyl phthalate	2,000	N.D.
Fluoranthene	2,000	N.D.
Fluorene	2,000	N.D.
Hexachlorobenzene	2,000	N.D.
Hexachlorobutadiene	2,000	N.D.
Hexachlorocyclopentadiene	2,000	N.D.
Hexachloroethane	2,000	N.D.
Indeno(1,2,3-cd)pyrene	2,000	N.D.
Isophorone	2,000	N.D.
2-Methylnaphthalene	2,000	N.D.
2-Methylphenol	2,000	N.D.
4-Methylphenol	2,000	N.D.
Naphthalene	2,000	N.D.
2-Nitroaniline	10,000	N.D.
3-Nitroaniline	10,000	N.D.
4-Nitroaniline	10,000	N.D.
Nitrobenzene	2,000	N.D.
2-Nitrophenol	2,000	N.D.
4-Nitrophenol	10,000	N.D.
N-Nitrosodiphenylamine	2,000	N.D.
N-Nitroso-di-N-propylamine	2,000	N.D.
Pentachlorophenol	10,000	N.D.
Phenanthrene	2,000	N.D.
Phenol	2,000	N.D.
Pyrene	2,000	N.D.
1,2,4-Trichlorobenzene	2,000	N.D.
2,4,5-Trichlorophenol	10,000	N.D.
2,4,6-Trichlorophenol	2,000	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Sample Descript:	Soil, WO2-S	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 8270	Extracted:	Mar 28, 1991
Attention: Lyle Travis	Lab Number:	103-0735	Analyzed:	Apr 3, 1991
			Reported:	Apr 4, 1991

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Aniline	100	N.D.
Anthracene	100	N.D.
Benzidine	2,500	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Sample Descript:	Soil, WO2-S	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 8270	Extracted:	Mar 28, 1991
Attention: Lyle Travis	Lab Number:	103-0735	Analyzed:	Apr 3, 1991
			Reported:	Apr 4, 1991

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

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Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Sample Descript:	Soil, WO1-W	Received:	Mar 20, 1991
Union City, CA 94587			Extracted:	Mar 28, 1991
Attention: Lyle Travis	Lab Number:	103-0734	Analyzed:	3/28-4/1/91
			Reported:	Apr 4, 1991

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium	0.50	580
Chromium	0.50	29
Lead	0.25	1,900
Nickel	2.5	25
Zinc	0.50	5,300

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif	Client Project ID:	#153A-032091	Sampled:	Mar 19, 1991
2821 Whipple Road	Sample Descript:	Soil, WO2-S	Received:	Mar 20, 1991
Union City, CA 94587			Extracted:	Mar 28, 1991
Attention: Lyle Travis	Lab Number:	103-0735	Analyzed:	3/28-4/1/91
			Reported:	Apr 4, 1991

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium	0.50	130
Chromium	0.50	22
Lead	0.25	130
Nickel	2.5	13
Zinc	0.50	3,600

Analytes reported as N.D. were not present above the stated limit of detection.

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Tank Protect Engineering of N. Calif Client Project ID: #153A-032091
2821 Whipple Road
Union City, CA 94587
Attention: Lyle Travis QC Sample Group: 1030734-735 Reported: Apr 4, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Cadmium	Chromium	Lead	Nickel	Zinc
Method:	EPA 6010	EPA 6010	EPA 7421	EPA 6010	EPA 6010
Analyst:	S. Foster	S. Foster	R. Eastman	S. Foster	S. Foster
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Apr 1, 1991	Apr 1, 1991	Mar 28, 1991	Apr 1, 1991	Apr 1, 1991
QC Sample #:	103-2919	103-2919	103-3439	103-2919	103-2919
Sample Conc.:	3.3	31	130	36	34
Spike Conc. Added:	250	250	120	250	250
Conc. Matrix Spike:	190	250	270	260	230
Matrix Spike % Recovery:	75	88	120	90	78
Conc. Matrix Spike Dup.:	250	260	270	270	270
Matrix Spike Duplicate % Recovery:	99	92	120	94	94
Relative % Difference:	27	3.9	0	3.8	16

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% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

TANK PROTECT ENGINEERING

2021 WHIPPLE ROAD
UNION CITY, CA 94587
(415)429-8088
(800)523-8088
FAX(415)429-8089

PO-A 178

CHAIN OF CUSTODY

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PAGE 1 OF 1

PROJECT NO.	SITE NAME & ADDRESS
153A-032091	5555 COLISEUM WAY OAKLAND, CA.

SAMPLER NAME, ADDRESS AND TELEPHONE NUMBER
LYLE THOMAS G. TRAVIS
TANK PROTECT ENGINEERING
TEL # (415) 429-8088

ID NO.	DATE	TIME	SOIL	WATER	SAMPLING LOCATION	(1) TYPE OF CONTAINER	ANALYTES REQUESTED: TOTAL LIGHT HC	AROMATIC HC (BTX)	TOTAL HEAVY HC	OIL & GREASE	VOC SCAN (8270) 5276	OTHER	AA FOR METALS	REMARKS
SE1-1	3/19/91	1700	✓		SE1-1 @ 5.5'	BRASS TUBE		✓	✓					1030729
SW1-1	↓	1705	↓		SW1-1 @ 5.5'	↓		↓	↓					730
SE4-1		1710			SE4-1 @ 5.5'									731
SW4-1		1715			SW4-1 @ 5.5'									732
SW1-1		1720			SW1-1 @ 5.5'									733
WC1-W	3/19/91	1050			WC1-W @ 5.0'		✓	✓	✓	✓	✓		✓	→ Cd, Cr, Pb, Zn & Ni 734
WC1-S	↓	1100	↓		WC1-S @ 5.0'	↓	✓	✓	✓	✓	✓		✓	→ Cd, Cr, Pb, Zn & Ni 735
WS-1	3/19/91	1635		✓	WS-1 @ 9.0'	3-VOA'S & 1 AMBER		✓	✓					736 A-D

Relinquished by : (Signature)	Date / Time	Received by : (Signature)	Relinquished by : (Signature)	Date / Time	Received by : (Signature)
[illegible]	[illegible]	[illegible]	James R. Miller	3-20 | 3:35	
Relinquished by : (Signature)	Date / Time	Received by : (Signature)	Relinquished by : (Signature)	Date / Time	Received by : (Signature)
Relinquished by : (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
			3/20 13:30	NORMAL TURN AROUND	

Jean Winer 3/22 12:00

DATE: _____

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Tank Protect Engineering of N. Calif	Client Project ID:	153A-032091/5050 Coliseum Way, Oakland	Sampled: Mar 19, 1991
2821 Whipple Road	Sample Descript.:	Soil, SPWO-1	Received: Mar 25, 1991
Union City, CA 94587	Analysis Method:	EPA 5030/8015/8020	Analyzed: Apr 1, 1991
Attention: Lyle Travis	Lab Number:	103-0728	Reported: Apr 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Low to Medium Boiling Point Hydrocarbons	1.0	450
Benzene	0.0050	N.D.
Toluene	0.0050	0.20
Ethyl Benzene	0.0050	0.40
Xylenes	0.0050	3.6

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Belinda C. Vega
Laboratory Director

Please Note:
The above samples do not appear to contain gasoline.

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Tank Protect Engineering of N. Calif	Client Project ID:	153A-032091/5050 Coliseum Way, Oakland	Sampled:	Mar 19, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 25, 1991
Union City, CA 94587	Analysis Method:	EPA 3550/8015	Extracted:	Mar 26, 1991
Attention: Lyle Travis	First Sample #:	103-0728	Analyzed:	Mar 28, 1991
			Reported:	Apr 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015) - d

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
103-0728	SPWO-1	3,300

Detection Limits:	**1,000**

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Laboratory Director

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Tank Protect Engineering of N. Calif	Client Project ID:	153A-032091/5050 Coliseum Way, Oakland	Sampled:	Mar 19, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 25, 1991
Union City, CA 94587	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted:	Mar 26, 1991
Attention: Lyle Travis	First Sample #:	103-0728	Analyzed:	Mar 26, 1991
			Reported:	Apr 4, 1991

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
103-0728	SPWO-1	870

Detection Limits:	30

Analytes reported as N.D. were not present above the stated limit of detection.

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Laboratory Director

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Tank Protect Engineering of N. Calif	Client Project ID:	153A-032091/5050 Coliseum Way, Oakland	Sampled:	Mar 19, 1991
2821 Whipple Road	Sample Descript:	Soil, SPWO-1	Received:	Mar 25, 1991
Union City, CA 94587	Analysis Method:	EPA 8270	Extracted:	Mar 28, 1991
Attention: Lyle Travis	Lab Number:	103-0728	Analyzed:	Mar 31, 1991
			Reported:	Apr 4, 1991

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	500	N.D.
Acenaphthylene	500	N.D.
Aniline	500	N.D.
Anthracene	500	N.D.
Benzidine	13,000	N.D.
Benzoic Acid	2,500	N.D.
Benzo(a)anthracene	500	N.D.
Benzo(b)fluoranthene	500	N.D.
Benzo(k)fluoranthene	500	N.D.
Benzo(g,h,i)perylene	500	N.D.
Benzo(a)pyrene	500	N.D.
Benzyl alcohol	500	N.D.
Bis(2-chloroethoxy)methane	500	N.D.
Bis(2-chloroethyl)ether	500	N.D.
Bis(2-chloroisopropyl)ether	500	N.D.
Bis(2-ethylhexyl)phthalate	2,500	N.D.
4-Bromophenyl phenyl ether	500	N.D.
Butyl benzyl phthalate	500	N.D.
4-Chloroaniline	500	N.D.
2-Chloronaphthalene	500	N.D.
4-Chloro-3-methylphenol	500	N.D.
2-Chlorophenol	500	N.D.
4-Chlorophenyl phenyl ether	500	N.D.
Chrysene	500	N.D.
Dibenz(a,h)anthracene	500	N.D.
Dibenzofuran	500	N.D.
Di-N-butyl phthalate	2,500	N.D.
1,3-Dichlorobenzene	500	N.D.
1,4-Dichlorobenzene	500	N.D.
1,2-Dichlorobenzene	500	6,000
3,3-Dichlorobenzidine	2,500	N.D.
2,4-Dichlorophenol	500	N.D.
Diethyl phthalate	500	N.D.
2,4-Dimethylphenol	500	N.D.
Dimethyl phthalate	500	N.D.
4,6-Dinitro-2-methylphenol	2,500	N.D.
2,4-Dinitrophenol	2,500	N.D.

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Tank Protect Engineering of N. Calif	Client Project ID:	153A-032091/5050 Coliseum Way, O	Sampled:	Mar 19, 1991
2821 Whipple Road	Sample Descript:	Soil, SPWO-1	Received:	Mar 25, 1991
Union City, CA 94587	Analysis Method:	EPA 8270	Extracted:	Mar 28, 1991
Attention: Lyle Travis	Lab Number:	103-0728	Analyzed:	Mar 31, 1991
			Reported:	Apr 4, 1991

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	500	N.D.
2,6-Dinitrotoluene	500	N.D.
Di-N-octyl phthalate	500	N.D.
Fluoranthene	500	N.D.
Fluorene	500	N.D.
Hexachlorobenzene	500	N.D.
Hexachlorobutadiene	500	N.D.
Hexachlorocyclopentadiene	500	N.D.
Hexachloroethane	500	N.D.
Indeno(1,2,3-cd)pyrene	500	N.D.
Isophorone	500	N.D.
2-Methylnaphthalene	500	660
2-Methylphenol	500	N.D.
4-Methylphenol	500	N.D.
Naphthalene	500	N.D.
2-Nitroaniline	2,500	N.D.
3-Nitroaniline	2,500	N.D.
4-Nitroaniline	2,500	N.D.
Nitrobenzene	500	N.D.
2-Nitrophenol	500	N.D.
4-Nitrophenol	2,500	N.D.
N-Nitrosodiphenylamine	500	N.D.
N-Nitroso-di-N-propylamine	500	N.D.
Pentachlorophenol	2,500	N.D.
Phenanthrene	500	N.D.
Phenol	500	N.D.
Pyrene	500	N.D.
1,2,4-Trichlorobenzene	500	N.D.
2,4,5-Trichlorophenol	2,500	N.D.
2,4,6-Trichlorophenol	500	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Tank Protect Engineering of N. Calif	Client Project ID:	153A-032091/5050 Coliseum Way, Oakland	
2821 Whipple Road	Method:	EPA 8270	Q.C. Sample Dates
Union City, CA 94587	Analyst(s):	L. Saunders	Extracted: Mar 28, 1991
Attention: Lyle Travis	QC Sample #:	BLK03289	Analyzed: Apr 1, 1991
			Reported: Apr 4, 1991

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
Phenol	N.D.	100	87	87	94	94	7.7
2-Chlorophenol	N.D.	100	94	94	100	100	6.2
1,4-Dichloro-benzene	N.D.	50	40	80	42	84	4.9
N-Nitroso-Di-N-propylamine	N.D.	50	46	92	46	92	0
1,2,4-Trichloro-benzene	N.D.	50	41	82	43	86	4.8
4-Chloro-3-Methylphenol	N.D.	100	100	100	100	100	2.9
Acenaphthene	N.D.	50	45	90	46	92	2.2
4-Nitrophenol	N.D.	100	100	100	120	120	10
2,4-Dinitro-toluene	N.D.	50	44	88	45	90	2.2
Pentachloro-phenol	N.D.	100	100	100	110	110	9.3
Pyrene	N.D.	50	56	110	57	110	1.8

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Laboratory Director

$$\text{\% Recovery:} \quad \frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$$

$$\text{Relative \% Difference:} \quad \frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{\text{(Conc. of M.S. + Conc. of M.S.D.) / 2}} \times 100$$

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Tank Protect Engineering of N. Calif	Client Project ID:	153A-032091/5050 Coliseum Way, Oakland	Sampled:	Mar 19, 1991
2821 Whipple Road	Sample Descript:	Soil	Received:	Mar 25, 1991
Union City, CA 94587			Extracted:	Mar 28, 1991
Attention: Lyle Travis	Lab Number:	103-0728	Analyzed:	3/28-4/1/91
			Reported:	Apr 4, 1991

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium	0.50	300
Chromium	0.50	22
Lead	0.25	16,000
Nickel	2.5	9.4
Zinc	0.50	5,600

Analytes reported as N.D. were not present above the stated limit of detection.

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Tank Protect Engineering of N. Calif
2821 Whipple Road
Union City, CA 94587
Attention: Lyle Travis

Client Project ID: 153A-032091/5050 Coliseum Way, Oakland
QC Sample Group: 103-0728
Reported: Apr 4, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Cadmium	Chromium	Lead	Nickel	Zinc
Method:	EPA 6010	EPA 6010	EPA 7421	EPA 6010	EPA 6010
Analyst:	S. Foster	S. Foster	R. Eastman	S. Foster	S. Foster
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Apr 1, 1991	Apr 1, 1991	Mar 28, 1991	Apr 1, 1991	Apr 1, 1991
QC Sample #:	103-2919	103-2919	103-3439	103-2919	103-2919
Sample Conc.:	3.3	31	130	36	34
Spike Conc. Added:	250	250	120	250	250
Conc. Matrix Spike:	190	250	270	260	230
Matrix Spike % Recovery:	75	88	120	90	78
Conc. Matrix Spike Dup.:	250	260	270	270	270
Matrix Spike Duplicate % Recovery:	99	92	120	94	94
Relative % Difference:	27	3.9	0	3.8	16

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Laboratory Director

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

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(415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif	Client Project ID:	153A-032091/5050 Coliseum Way, Oakland	Sampled:	Mar 18, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 20, 1991
Union City, CA 94587	Analysis Method:	EPA 3550/8015	Extracted:	Mar 27, 1991
Attention: Lyle Travis	First Sample #:	103-0726	Analyzed:	Mar 31, 1991
			Reported:	Apr 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
103-0726	SP-1	2.0
103-0727	SP-2	4.7

Detection Limits:	**1.0**

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Belinda C. Vega
Laboratory Director

1030728.TPE <9>

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(415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif	Client Project ID:	153A-032091/5050 Coliseum Way, Oakland	Sampled:	Mar 18, 1991
2821 Whipple Road	Matrix Descript:	Soil	Received:	Mar 25, 1991
Union City, CA 94587	Analysis Method:	EPA 5030/8020	Analyzed:	Mar 27, 1991
Attention: Lyle Travis	First Sample #:	103-0726	Reported:	Apr 4, 1991

BTEX DISTINCTION (EPA 8020)

Sample Number	Sample Description	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
103-0726	SP-1	0.36	0.34	0.31	1.1
103-0727	SP-2	N.D.	N.D.	N.D.	0.0086
Detection Limits:		**0.0050**	**0.0050**	**0.0050**	**0.0050**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

1030728.TPE <10>

TANK PROTECT ENGINEERING
2021 WHIPPLE ROAD
UNION CITY, CA 94587
(415)429-8088
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FAX(415)429-8089

CHAIN OF CUSTODY

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P.O. # 179

PROJECT NO.	SITE NAME & ADDRESS
153A-0320-91	5050 COLISEUM WAY OAKLAND, CA

SAMPLER NAME, ADDRESS AND TELEPHONE NUMBER
LYLE THOMAS G. TRAVIS
TANK PROTECT ENGINEERING
TEL # (415) 639-8058

ID NO.	DATE	TIME	SOIL	WATER	SAMPLING LOCATION	(1) TYPE OF CON-TAINER	ANALYTES REQUESTED: TOTAL LIGHT HC	AROMATIC HC (BTX)	TOTAL HEAVY HC (OIL & GREASE)	VOC SCAN (EPA 8240)	OTHER	TTLC FOR METALS	REMARKS
SP-1	3/15/91	1730	✓		SP-1 @ SPOIL PILE	BRASS TUBE	✓	✓					1030726
SP-2	↓	1735	↓		SP-2 @ SPOIL PILE	↓	✓	✓					727
SPWC-1	3/19/91	1045	↓		SPWC-1 SPOIL PILE	↓	✓	✓	✓	✓	✓	✓	→ Cd, Cr, Pb, Zn & Ni 728

Relinquished by : (Signature)	Date / Time	Received by : (Signature)	Relinquished by : (Signature)	Date / Time	Received by : (Signature)
	3-20 13:35		Janice R Allen		
Relinquished by : (Signature)	Date / Time	Received by : (Signature)	Relinquished by : (Signature)	Date / Time	Received by : (Signature)
Relinquished by : (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
			3/20/91 13:50	NORMAL TURN AROUND	

Jan Winer 3/22 12:00

DATE: _____

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (415) 783-6960
Facsimile (415) 783-1512

TAL

April 4, 1991

Mark Zomorodi
Tank Protect Engineering
2821 Whipple Road
Union City, CA 94587

Dear Mr. Zomorodi:

Trace Analysis Laboratory received one water sample on March 29, 1991, for your Project No. 115A-032891, Volvo GMC Heavy Truck Corp. Oakland, CA (our custody Log Number 9717).

These samples were analyzed for Total Petroleum Hydrocarbons as Diesel, Gasoline, Benzene, Toluene, Xylenes, Ethylbenzene and Oil and Grease (Standard Method 5520DF). Our analytical report and the completed chain of custody form are enclosed for your review.

Trace Analysis Laboratory is certified under the California Environmental Laboratory Accreditation Program. Our certification number is 1199.

If you should have any questions or require additional information, please call me.

Sincerely yours,

Gerald H. Nieder-Westermann
Project Specialist

GNW:gnw

Enclosures

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (415) 783-6960
Facsimile (415) 783-1512

TAL

LOG NO.: 9717
DATE SAMPLED: 3/26/91
DATE RECEIVED: 3/29/91
DATE EXTRACTED: 4/02/91
DATE ANALYZED: 4/04/91
DATE REPORTED: 4/04/91

CUSTOMER: Tank Protect Engineering

REQUESTER: Mark Zomorodi

PROJECT: No. 153A-032891, Volvo GMC Heavy Truck Corp., Oakland

Sample Type: Water

Method and Constituent	Units	WS Concentration	WS Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:					
Total Petroleum Hydrocarbons as Diesel	ug/l	3,100	50	ND	50

QC Summary:

% Recovery: 130
% RPD: 2.5

The sample indicated compounds eluting earlier and later than diesel.

Concentrations reported as ND were not detected at or above the reporting limit.

LOG NO.: 9717
DATE SAMPLED: 3/26/91
DATE RECEIVED: 3/29/91
DATE ANALYZED: 4/04/91
DATE REPORTED: 4/04/91
PAGE: Two

Sample Type: Water

Method and Constituent	Units	WS Concentration	WS Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:					
Total Petroleum Hydrocarbons as Gasoline	ug/l	650	50	ND	50
Modified EPA Method 8020:					
Benzene	ug/l	2.6	0.5	ND	0.5
Toluene	ug/l	42	0.5	ND	0.5
Xylenes	ug/l	14	2	ND	2
Ethylbenzene	ug/l	7.6	0.5	ND	0.5

QC Summary:

% Recovery: 94
% RPD: 5.3

Concentrations reported as ND were not detected at or above the reporting limit.

LOG NO.: 9717
DATE SAMPLED: 3/26/91
DATE RECEIVED: 3/29/91
DATE EXTRACTED: 4/02/91
DATE ANALYZED: 4/04/91
DATE REPORTED: 4/04/91
PAGE: Three

Sample Type: Water

Method and Constituent	Units	WS Concentration	WS Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
Standard Method 5520DF, Hydrocarbons:					
Oil and Grease	ug/l	7,900	1,000	ND	1,000

QC Summary:

% Recovery: 45
% RPD: 20

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis
Quality Assurance/Quality Control Manager

TANK PROTECT ENGINEERING
2821 WHIPPLE ROAD
UNION CITY, CA 94587
(415)429-8088
(800)523-8088
FAX(415)429-8089

3/29/91 4:50pm

CHAIN OF CUSTODY

As per Tri Regional requirements 06 552 DPF

P.O 187

F 9717

PROJECT NO.	SITE NAME & ADDRESS
153A-03289	VOLVO GMC HEAVY TRUCK CORP. OAKLAND

SAMPLER NAME, ADDRESS AND TELEPHONE NUMBER
TANK PROTECT ENGINEERING Tel (415) 429 8088
2821 WHIPPLE ROAD FAX (415) 429 8089
UNION CITY CA

ID NO.	DATE	TIME	SOIL	WATER	SAMPLING LOCATION	(1) TYPE OF CONTAINER	TOTAL LIGHT HC (GAS)	AROMATIC HC (BTX)	TOTAL HEAVY HC (D. FUEL)	OIL & GREASE	VOC SCAN 8270	OTHER	AA FOR METALS	
WS	03/26	1630		✓		2-40ml 2-1 plastic	✓	✓	✓	✓	✓		✓	Cd, Cr, Pb, Zn, Ni
														2-40ml/pres 1-1L
														1-1L/pres H_2SO_4
														1-plastic/HNO_3
														Comp

Relinquished by : (Signature)	Date / Time	Received by : (Signature)	Relinquished by : (Signature)	Date / Time	Received by : (Signature)
[signature]	3/28/91 1:05pm	[signature]			
Relinquished by : (Signature)	Date / Time	Received by : (Signature)	Relinquished by : (Signature)	Date / Time	Received by : (Signature)
[signature]	3/28/91 2:20pm	[redacted]	[signature]	3/29/91 1145	[signature] (TAL) 3-29-91 1145
Relinquished by : (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
		[signature]	3/28/1991	~~None~~ 5 day TAT initiated 3/28/91	

DATE: 03/26/91

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (415) 783-6960
Facsimile (415) 783-1512

TAL

April 8, 1991

Mark Zomorodi
Tank Protect Engineering
2821 Whipple Road
Union City, CA 94587

Dear Mr. Zomorodi:

Trace Analysis Laboratory received one water sample on March 29, 1991, for your Project No. 115A-032891, Volvo GMC Heavy Truck Corp. Oakland, CA (our custody Log Number 9717).

This sample was analyzed for Cadmium, Chromium, Lead, Nickel and Zink. Our analytical report and the completed chain of custody form are enclosed for your review.

Trace Analysis Laboratory is certified under the California Environmental Laboratory Accreditation Program. Our certification number is 1199.

If you should have any questions or require additional information, please call me.

Sincerely yours,

Gerald H. Nieder-Westermann
Project Specialist

GNW:gnw

Enclosures

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (415) 783-6960
Facsimile (415) 783-1512

TAL

LOG NO.: 9717A
DATE SAMPLED: 3/26/91
DATE RECEIVED: 3/29/91
DATE EXTRACTED: 4/05/91
DATE ANALYZED: 4/05/91 and 4/08/91
DATE REPORTED: 4/08/91

CUSTOMER: Tank Protect Engineering

REQUESTER: Mark Zomorodi

PROJECT: No. 153A-032891, Volvo GMC Heavy Truck Corp., Oakland

Sample Type: Water

Method and Constituent	Units	WS Concentration	WS Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit	QC Summary % Recovery	QC Summary % RPD
EPA Method 7130: Cadmium	ug/l	130	10	ND	10	73	12
EPA Method 7190: Chromium	ug/l	ND	50	ND	50	72	8.6
EPA Method 7420: Lead	ug/l	320	100	ND	100	79	25
EPA Method 7520: Nickel	ug/l	ND	300	ND	300	72	8.0
EPA Method 7950: Zinc	ug/l	100,000	50	ND	50	89	0.86

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis
Quality Assurance/Quality Control Manager

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (415) 783-6960
Facsimile (415) 783-1512

TAL

April 15, 1991

Mark Zomorodi
Tank Protect Engineering
2821 Whipple Road
Union City, CA 94587

Dear Mr. Zomorodi:

Trace Analysis Laboratory received one water sample on April 4, 1991, for your Project No. 153A, Volvo GMC Heavy Truck Corp., Oakland, CA (our custody Log Number 9738).

These samples were analyzed for EPA Method 8080 and 8270 for PCBs, PCPs, PNAs, and Creosote. Our analytical report and the completed chain of custody form are enclosed for your review.

Trace Analysis Laboratory is certified under the California Environmental Laboratory Accreditation Program. Our certification number is 1199.

If you should have any questions or require additional information, please call me.

Sincerely yours,

Gerald H. Nieder-Westermann
Project Specialist

GNW:gnw

Enclosures

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (415) 783-6960
Facsimile (415) 783-1512

TAL

LOG NO.: 9738
DATE SAMPLED: 4/04/91
DATE RECEIVED: 4/04/91
DATE EXTRACTED: 4/08/91
DATE ANALYZED: 4/09/91
DATE REPORTED: 4/15/91

CUSTOMER: Tank Protect Engineering

REQUESTER: Mark Zomorodi

PROJECT: No. 153A, Volvo GMC Heavy Truck Corp., Oakland

Sample Type: Water

Method and Constituent:	Units	WS Concentration	WS Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
EPA Method 8080 for PCB:					
Aroclor 1016	ug/l	ND	0.1	ND	0.1
Aroclor 1221	ug/l	ND	0.1	ND	0.1
Aroclor 1232	ug/l	ND	0.1	ND	0.1
Aroclor 1242	ug/l	ND	0.1	ND	0.1
Aroclor 1248	ug/l	ND	0.1	ND	0.1
Aroclor 1254	ug/l	ND	0.1	ND	0.1
Aroclor 1260	ug/l	ND	0.1	ND	0.1

Concentrations reported as ND were not detected at or above the reporting limit.

QC Summary:

% Recovery: 124
% RPD: 2.4

LOG NO.: 9738
DATE SAMPLED: 4/04/91
DATE RECEIVED: 4/04/91
DATE EXTRACTED: 4/08/91
DATE ANALYZED: 4/11/91
DATE REPORTED: 4/15/91
PAGE: Two

Sample Type: Water

Method and Constituent:	Units	WS Concentration	WS Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
EPA Method 8270 for: Polynuclear Aromatics (PNAs)					
Naphthalene	ug/l	ND	10	ND	10
Acenaphthylene	ug/l	ND	10	ND	10
Acenaphthene	ug/l	ND	10	ND	10
Fluorene	ug/l	ND	10	ND	10
Phenanthrene	ug/l	ND	10	ND	10
Pyrene	ug/l	ND	10	ND	10
Anthracene	ug/l	ND	10	ND	10
Benzo(a)Anthracene	ug/l	ND	10	ND	10
Chrysene	ug/l	ND	10	ND	10
Fluoranthene	ug/l	ND	10	ND	10
Benzo(b)Fluoranthene	ug/l	ND	10	ND	10
Benzo(k)Fluoranthene	ug/l	ND	10	ND	10
Benzo(a)Pyrene	ug/l	ND	10	ND	10
Indeno(1,2,3-cd)Pyrene	ug/l	ND	10	ND	10
Dibenzo(a,h)Anthracene	ug/l	ND	10	ND	10
Benzo(g,h,i)Perylene	ug/l	ND	10	ND	10

Concentrations reported as ND were not detected at or above the reporting limit.

LOG NO.: 9738
DATE SAMPLED: 4/04/91
DATE RECEIVED: 4/04/91
DATE EXTRACTED: 4/08/91
DATE ANALYZED: 4/11/91
DATE REPORTED: 4/15/91
PAGE: Three

Sample Type: Water

Method and Constituent:	Units	WS Concentration	WS Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
EPA Method 8270 for: Polychlorinatedphenols (PCPs)					
Pentachlorophenol	ug/l	ND	10	ND	10
2,4-Dichlorophenol	ug/l	ND	10	ND	10
2,4,5-Trichlorophenol	ug/l	ND	10	ND	10
2,4,6-Trichlorophenol	ug/l	ND	10	ND	10

Concentrations reported as ND were not detected at or above the reporting limit.

LOG NO.: 9738
DATE SAMPLED: 4/04/91
DATE RECEIVED: 4/04/91
DATE EXTRACTED: 4/08/91
DATE ANALYZED: 4/11/91
DATE REPORTED: 4/15/91
PAGE: Four

Sample Type: Water

Method and Constituent:	Units	WS Concentration	WS Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
EPA Method 8270 for:					
Coal-Tar Creosote	ug/l	ND	10	ND	10
Surrogate % Recovery:					
Pentaflurophenol		87		107	
4-Fluroaniline		76		50	
Decaflurobiphenol		95		154	

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis
Quality Assurance/Quality Control Manager

TANK PROTECT ENGINEERING
Of Northern California
Environmental Management

TANK PROTECT ENGINEERING

2821 WHIPPLE ROAD
UNION CITY, CA 94587
(415)429-8088
(800)523-8088
FAX(415)429-8089

CHAIN OF CUSTODY

PROJECT NO.	SITE NAME & ADDRESS
153A	VOLVO GMC HEAVY TRUCK CORP. OAKLAND

SAMPLER NAME, ADDRESS AND TELEPHONE NUMBER: TANK PROTECT ENGINEERING 2821 WHIPPLE ROAD UNION CITY CA 94587 Tel (415)429-8080

ID NO.	DATE	TIME	SOIL	WATER	SAMPLING LOCATION	(1) TYPE OF CONTAINER	TOTAL LIGHT HC	AROMATIC HC (BTX)	TOTAL HEAVY HC	OIL & GREASE	VOC SCAN (624's)	OTHER	8270 Acid RPHB AND Creosote	REMARK 9738
WS	04/04			✓	WS	2-1 Liter Bottle							⊗	
														2-day TAT
														2-1l
														Green Dig

Relinquished by : (Signature)	Date / Time	Received by : (Signature)	Relinquished by : (Signature)	Date / Time	Received by : (Signature)
[signature]	4/4/91 3:25 pm	[signature] / TAL 3:25 4/4/91			
Relinquished by : (Signature)	Date / Time	Received by : (Signature)	Relinquished by : (Signature)	Date / Time	Received by : (Signature)
Relinquished by : (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

DATE: 04/04/1991