SDMS DOCID # 1149966

POWERINE OIL COMPANY

12345 Lakeland Road
Santa Fe Springs, CA 90670
Telephone Number: (562) 944-6111
EPA ID NO.: CAD008383291

Inspected by: Ahmed Hegab

Date of Inspection: January 27, 28 and
February 9, 11, 1998

CENCO Refining Company

12345 Lakeland Road • Santa Fe Springs, CA 90670 • Phone (562) 944-6111 • Fax (562) 903-8911

January 8, 1999

Mr. Mukul Agarwal
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, CA 91201

Dear Mr. Agarwal:

During the week of December 14, we discussed CENCO's status and I gave you an update on CENCO's financing activities. Despite some of the problems CENCO has experienced, which are further described below, financing is imminent and should be in place by March 1999. As we discussed, CENCO's restart of refinery operations has been delayed by several factors. First, the high yield bond market collapsed in August 1998. There were essentially no issues of bonds of the quality CENCO anticipates selling to raise its required capital in the latter part of 1998. Second, CENCO's other financing option, a traditional bank loan has also been delayed. In the latter part of 1998 CENCO identified a bank which is interested in making a loan. However, funding through this source is more expensive than a high yield bond issue and therefore is not CENCO's preferred financing option. Third, delays in receiving a reinstated refinery permit, further described below, hindered CENCO's ability to obtain financing from either source. Underwriters were hesitant to issue bonds and lending institutions would not loan funds to a refinery without an air quality permit.

Reinstatement of Powerine/CENCO's air quality permit has taken longer than CENCO anticipated. The Hearing Board of the SCAQMD adopted a Stipulated Abatement Order (SAO) on December 11, 1998 which gives the SCAQMD staff confidence in the enforceability of their startup oversight, and they reinstated the refinery permit on December 29, 1998.

Fortunately, the high yield bond market is improving rapidly. These improvements in market conditions, along with receipt of the refinery's reinstated permit, causes us to believe that CENCO can go to the market with its bond offering in February 1999. Therefore funding is expected to be available in March 1999.

Receipt of the financing proceeds will enable CENCO to complete the planned refinery turnaround (refurbishment) activities and capital project work required to resume operation of the refinery under the terms of its permits and the abatement order. Completion of the turnaround, permitting and procurement activities, construction of

capital projects and restart of the refinery should be completed within eight months of receipt of financing. CENCO estimates that the oil-bearing materials in Tanks 10006 and 27105 can be recycled within eight months of continuous Coker operations.

Given the fact that financing now appears to be imminent, CENCO wishes to make the following changes to its August 13, 1998 proposal to you:

1. CENCO will obtain financing for the significant commitment required to complete the modifications and maintenance projects at the refinery to enable a full refinery startup by late 1999. If financing is not obtained, CENCO will comply with Condition 2, below.

2. If financing is not in hand or imminent on April 30, 1999, CENCO will submit a proposal to the Department by May 31, 1999 to dispose of the oil-bearing material in Tanks 10006 and 27105.

If financing is obtained and refinery startup ensues:

3. CENCO will provide month-end updates on the status of startup activities beginning March 31, 1999 and continuing until stable operation of the Coker Unit is achieved.

4. CENCO will begin injection of the oil-bearing sludge from Tanks 10006 and 27105 to the Coker no later than one week after achieving stable operation of the Coker Unit.

5. CENCO will inject the oil-bearing sludge at a maximum rate which will not cause adverse affects to operation of the Coker Unit or coke quality until all the sludge in Tanks 10006 and 27105 has been recycled to the Coker.

6. Upon beginning injection to the Coker, CENCO will monitor the recycling of the oil-bearing sludge and will submit monthly progress reports to the Department.

7. CENCO will conduct and document visual inspections of the tanks for leakage on a weekly basis, until all the oil-bearing sludge is recycled.

8. CENCO will ensure that at a minimum, on a 24-hour basis, one person per shift will conduct rounds that include driving in the vicinity of Tanks 10006 and 27105.

We discussed several other issues in our phone conversation. You commented that if Powerine/CENCO believed it was recycling the material in these tanks, reporting under

Health and Safety Code 25143.10 is required. You asked whether Powerine or CENCO had completed such reports. In response to your question, attached is a copy of Powerine's June 30, 1994 Recyclable Materials report. You will note that the report lists materials other than the oil-bearing material in Tanks 10006 and 27105 that were recycled under section 25143. Please remember that Powerine/CENCO is not relying on recycling exemptions from 25143 which require the reporting per 25143.10 for the oil-bearing material in Tanks 10006 and 27105. The oil bearing material in Tanks 10006 and 27105 is exempt from regulation under Health and Safety Code 25144 which does not require reporting under 25143.10.

You also asked several questions about the specific violations alleged in the Complaint Inspection Report (Report). With the exception of the lead contaminated soil which was the subject of my December 14, 1998 letter to you, my staff assures me that every violation alleged in the Report has been corrected and that we have provided you documentation to you to verify that these corrections have been made. I suggest that we select a time for a conference call that is convenient for both of us to review the documents that have been submitted by CENCO/Powerine in response to the Report and to complete an item by item review of the violations alleged in the Report. I am available at your convenience on any day during the weeks of January 11 and 18 with the exception of January 12 and 20.

Please feel free to contact me with any questions you may have and to schedule a conference call.

Sincerely,

June Christman

June M. Christman

POWERINE Oil Company

12354 Lakeland Road, P.O. Box 2108
Santa Fe Springs, California 90670

(310) 944-9861
(310) 944-6111

TLX No: 4720404
A/B Powerine
Telecopy No: 944-8522

June 30, 1994

Mr. George Baker
Hazardous Materials Specialist
Los Angeles County Fire Department
7300 Alondra Blvd.
Paramount, California 90723

Re: Recyclable Materials Report Form Pursuant to Health & Safety Code 25143.10

Dear Mr. Baker:

Pursuant to the Health and Safety Code Section 25143.10, enclosed for your review are Powerine's Recyclable Materials Reporting Forms for 1994. Page two of the form has been completed for the following 4 materials that are generated and recycled on-site. This list of recyclable materials is limited to the materials that would be classified as hazardous wastes if not excluded or exempted, because of recycling.

- Charcoal and Carbon
- Purged Stretford Solution
- Used Oil
- Spent or Residual Solvents

In the past we sent this report to Erlinda MacLinthal of the Los Angeles County Fire Department. Please forward this report if necessary or advise our office for future submittals. Should you have any additional questions, contact Judi Gardner of my staff at (310) 944-6111.

Sincerely,

June Christman

June M. Christman
Manager - Environmental Engineering

JRG:aj\rcylmatl.doc

cc: Dave Klunk (Santa Fe Springs Fire Department), J. Gardner (w/o attachment), T. Metrose (w/o attachment), Reader File, File 48005

RECYCLABLE MATERIALS REPORTING FORM
PLEASE PRINT OR TYPE ALL INFORMATION
(See instructions on reverse)

WHEN COMPLETED, RETURN THIS FORM TO
THE LOCAL HEALTH OFFICER OR OTHER AUTHORIZED PUBLIC OFFICER AT:

LOS ANGELES COUNTY FORESTER AND FIRE WARDEN
HAZARDOUS WASTE CONTROL PROGRAM
2615 S. GRAND AVENUE, ROOM 601
LOS ANGELES, CA 90007

I. DATES OF REPORTING PERIOD: Beginning Date: JAN 1 1993 Ending Date: DEC 31 1993

II. FACILITY THAT RECYCLES THE MATERIAL (Please print or type).

A. RECYCLING FACILITY.

Facility EPA Identification Number: CAD008383291
Facility Name: Powerine Refinery
Facility Address: 12354 Lakeland Road
City: Santa Fe Springs County: Los Angeles
State: California Zip: 90670
Contact: Last Name: Christman First Name: June
Telephone: 310/944-6111 FAX: 310/944-8522

B. OWNER OR OPERATOR OF THE RECYCLING FACILITY.

Name: Powerine Oil Company
Address: 12354 Lakeland Road
City: Santa Fe Springs State: CA Zip: 90670
Telephone: 310/944-6111 FAX: 310/944-8522

III. GENERATOR OF THE RECYCLABLE MATERIAL (Please print or type).

Was the generator of the material the same as the recycler? ☐ No ☒ Yes
If Yes, then leave Section III blank and proceed to Section IV.

A. GENERATING FACILITY.

Facility EPA Identification Number:
Facility Name:
Facility Address:
City: County:
State: Zip:
Contact: Last Name: First Name:
Telephone: FAX:

B. OWNER OR OPERATOR OF THE GENERATING FACILITY.

Name:
Address:
City: State: Zip:
Telephone: FAX:

PAGE.003
JUN 10 '92 13:02

RECYCLABLE MATERIALS REPORTING FORM
PLEASE PRINT OR TYPE ALL INFORMATION
(See instructions on reverse)

IV. MEETING EXEMPTIONS OR EXCLUSIONS.

A. Was the recycler of the material the same as the generator of the material? ☐ Yes ☐ No
If No then complete items 1 and 2. If Yes then proceed to IV.B.
1. Include documentation that there was a known market for disposition of the recyclable material and any products manufactured from the recyclable material, AND
2. Provide a completed copy of this form to the generator on or before July 1, 1992, and every two years thereafter.

B. Indicate the subdivision(s), paragraph(s), and subparagraph(s) (if applicable) of Section 25143.2 that served as the basis for your claim of exemption or exclusion. Example: 25143.2(d)(2)(C).

25143.2 (C)(1)

V. DESCRIPTION OF THE RECYCLABLE MATERIAL.

A. Provide a general description of the recyclable material that was used in the recycling process.

Charcoal and Carbon

Benzene and other toxic volatiles are absorbed by charcoal and carbon

B. Provide a general description of the product(s) that resulted from the recycling process.

Coke and fuel products

C. Identify the constituents and their approximate concentrations which rendered the recyclable material hazardous, and the final use or the approximate concentrations of those constituents in the final product.

CONSTITUENT NAME	APPROXIMATE CONCENTRATION IN RECYCLABLE MATERIAL	FINAL USE OR APPROXIMATE CONCENTRATION IN FINAL PRODUCT
Benzene	50 mg/l	0% in coke
		up 2% in gasoline

D. Describe how the recyclable material was beneficially used when recycled in this manner.

Part of commercial coke sales

Benzene is flash off in the coke drum and recovered for use in gasoline

VI. CERTIFICATION BY THE OWNER OR OPERATOR OF THE RECYCLING FACILITY.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

June M. Christman — Name (Print or Type)

Manager - Env. Engineering — Title

June Christman — Signature

6-30-94 — Date Signed

PAGE.004

JUN 10 '92 13:03

RECYCLABLE MATERIALS REPORTING FORM
PLEASE PRINT OR TYPE ALL INFORMATION
(See instructions on reverse)

IV. MEETING EXEMPTIONS OR EXCLUSIONS.

A. Was the recycler of the material the same as the generator of the material? ☐ Yes ☐ No
If No then complete items 1 and 2. If Yes then proceed to IV.B.
1. Include documentation that there was a known market for disposition of the recyclable material and any products manufactured from the recyclable material, AND
2. Provide a completed copy of this form to the generator on or before July 1, 1992, and every two years thereafter.

B. Indicate the subdivision(s), paragraph(s), and subparagraph(s) (if applicable) of Section 25143.2 that served as the basis for your claim of exemption or exclusion. Example: 25143.2(d)(2)(C).
25143.2 (d) (1)

V. DESCRIPTION OF THE RECYCLABLE MATERIAL.

A. Provide a general description of the recyclable material that was used in the recycling process.
Purged stretford solution

B. Provide a general description of the product(s) that resulted from the recycling process.
Purged stretford solution can be reused to make-up circulating volume of the stretford solution. Note: The vanadium is intentionally used to make-up the stretford solution.

C. Identify the constituents and their approximate concentrations which rendered the recyclable material hazardous, and the final use or the approximate concentrations of those constituents in the final product.

CONSTITUENT NAME	APPROXIMATE CONCENTRATION IN RECYCLABLE MATERIAL	FINAL USE OR APPROXIMATE CONCENTRATION IN FINAL PRODUCT
Vanadium	3000-5000 mg/Kg	20,000 mg/l

D. Describe how the recyclable material was beneficially used when recycled in this manner.
After phase separation the stretford solution is moved by vacuum truck to the froth tank.

VI. CERTIFICATION BY THE OWNER OR OPERATOR OF THE RECYCLING FACILITY.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

June M. Christman
Name (Print or Type)

Manager - Env. Engineering
Title

June Christman
Signature

6-30-94
Date Signed

PAGE.004

JUN 10 '94 13:03

RECYCLABLE MATERIALS REPORTING FORM
PLEASE PRINT OR TYPE ALL INFORMATION
(See instructions on reverse)

IV. MEETING EXEMPTIONS OR EXCLUSIONS.

A. Was the recycler of the material the same as the generator of the material? ☐ Yes ☐ No
If No then complete Items 1 and 2. If Yes then proceed to IV.B.
1. Include documentation that there was a known market for disposition of the recyclable material and any products manufactured from the recyclable material, AND
2. Provide a completed copy of this form to the generator on or before July 1, 1992, and every two years thereafter.

B. Indicate the subdivision(s), paragraph(s), and subparagraph(s) (if applicable) of Section 25143.2 that served as the basis for your claim of exemption or exclusion. Example: 25143.2(d)(2)(C).

25143.9 (4)(2)(c)

V. DESCRIPTION OF THE RECYCLABLE MATERIAL.

A. Provide a general description of the recyclable material that was used in the recycling process.

Used lube oils

B. Provide a general description of the product(s) that resulted from the recycling process.

Once reprocessed as feedstocks to refinery process units, lube oils will produce fuel oil, gas oils, and asphalt

C. Identify the constituents and their approximate concentrations which rendered the recyclable material hazardous, and the final use or the approximate concentrations of those constituents in the final product.

CONSTITUENT NAME	APPROXIMATE CONCENTRATION IN RECYCLABLE MATERIAL	FINAL USE OR APPROXIMATE CONCENTRATION IN FINAL PRODUCT
Used lube oils are listed as	Not applicable	
CA Hazardous		

D. Describe how the recyclable material was beneficially used when recycled in this manner.

Unrenewable resurce savings by recycling.

VI. CERTIFICATION BY THE OWNER OR OPERATOR OF THE RECYCLING FACILITY.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

June M. Christman — Name (Print or Type)

Manager - Env. Engineering — Title

June Christman — Signature

6-30-94 — Date Signed

PAGE.004

JUN 10 '92 10:03

RECYCLABLE MATERIALS REPORTING FORM
PLEASE PRINT OR TYPE ALL INFORMATION
(See instructions on reverse)

IV. MEETING EXEMPTIONS OR EXCLUSIONS.

A. Was the recycler of the material the same as the generator of the material? ☐ Yes ☐ No
If No then complete items 1 and 2. If Yes then proceed to IV.B.
1. Include documentation that there was a known market for disposition of the recyclable material and any products manufactured from the recyclable material, AND
2. Provide a completed copy of this form to the generator on or before July 1, 1992, and every two years thereafter.

B. Indicate the subdivision(s), paragraph(s), and subparagraph(s) (if applicable) of Section 25143.2 that served as the basis for your claim of exemption or exclusion. Example: 25143.2(d)(2)(C).
25143.9 (2)

V. DESCRIPTION OF THE RECYCLABLE MATERIAL.

A. Provide a general description of the recyclable material that was used in the recycling process.
Spent or residual solvents

B. Provide a general description of the product(s) that resulted from the recycling process.
Broad range of fuel products including gasoline, diesel, fuel oil, and coke.

C. Identify the constituents and their approximate concentrations which rendered the recyclable material hazardous, and the final use or the approximate concentrations of those constituents in the final product.

CONSTITUENT NAME	APPROXIMATE CONCENTRATION IN RECYCLABLE MATERIAL	FINAL USE OR APPROXIMATE CONCENTRATION IN FINAL PRODUCT
Benzene	5 mg/l	up to 2% in gasoline

D. Describe how the recyclable material was beneficially used when recycled in this manner.
Spent and residual solvents are added rack as feedstocks for various refinery process units.

VI. CERTIFICATION BY THE OWNER OR OPERATOR OF THE RECYCLING FACILITY.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

June M. Christman
Name (Print or Type)

Manager - Env. Engineering
Title

June Christman
Signature

6-30-94
Date Signed

PAGE.004

JUN 10 '94 13:03

From: Denise Hoffman
To: DTSCR3GW.DTSCR3.FGharibi, DTSCR3GW.DTSCR3.AHegab, ...
Date: 12/22/98 1:59PM
Subject: Powerine

After our conference call I did some more thinking about the violations and wanted to share my thoughts with you. I do not believe that we have any evidence that Powerine violated the law with regard to the constituents in the soil. 25187 allows you to issue an order for corrective action both when there has been a violation and when there has been a release of hazardous waste or constituent. We have the latter situation. Therefore, the order should not cite a violation but should order corrective action. As you know, the Department adopted emergency corrective action regulations which apply to this situation. Please review the corrective action regulations and let me know what you would like me to order them to do in the way of corrective action. Do you want them to do a full site investigation? Take interim measures? Powerine has options under the regs with regard to establishing cleanup levels. It might be able to use one of the listed soil screening levels or it might want to proceed with a risk assessment. It may be that the corrective action is exempt from the regs if it meets the requirements under the applicability section. I realize that this is probably the first time you have had to deal with the regs. Please let me know if you need some guidance in making it through the regs and deciding what to do. In addition, I don't think we can apply a labeling violation with regard to tanks 10006 and 27105 since they got charged with illegal storage and labeling is like any other requirement once you are storing hazardous waste. Also, I deleted the reference to acid batteries in the labeling violation because they had less than 10 and our regs do not apply to storage of less than 10. Any comments?

CC: DTSCR1GW.DTSCR1.GWhite

Powerine Oil Company

Via Facsimile (818) 551-2901 and U.S. Mail

August 5, 1998

Mr. Mukul Agarwal
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, CA 91210

Re: Reduction of Volume and Reuse of Materials from Tanks 10006 and 27105

Dear Mr. Agarwal:

As agreed between Powerine and the Department during our meeting of June 11, 1998, Powerine has decanted the oil layer from Tanks 10006 and 27105 and transferred it into another tank. Powerine is now awaiting your acknowledgment that transfer of this approximately 1,000 barrels of recovered oil to another local refinery for reuse in their refinery process is exempt from hazardous waste regulations. An aqueous layer has also been decanted from Tank 10006 and has been transferred to the wastewater system for further oil-water separation. To date, approximately 2,000 barrels of oil and water have been transferred out of Tanks 10006 and 27105. Another approximately 3,500 barrels of the aqueous layer in Tank 10006 will also be transferred to the wastewater system for further oil water separation. Upon completion, Tanks 10006 and 27105 will have approximately 5,400 and 13,000 barrels of oil-bearing sludge remaining, respectively.

As discussed with you last week, because of the recovered oil exemption in Health and Safety Code Section 25144(c) (summarized below) Powerine is confident that the recovered oil from Tanks 10006 and 27105 is exempt from regulation as a hazardous waste. In fact, Powerine maintains that the entire tank systems and oil-bearing materials in the tanks are also excluded from classification as a waste. Our regulatory analysis follows.

Tanks 10006 and 27105 and the material in the tanks are not subject to regulation under the hazardous waste program because the tanks are part of Powerine's oil recovery operations. Specifically, the tanks are used to separate oil from oil- bearing materials through gravity separation. Health and Safety Code Section 25144(c) provides that "units, including associated piping, that are part of a system used to recover oil from oil-bearing materials, and the associated storage of oil-bearing materials and the recovered oil, are exempt" from the hazardous waste regulations provided certain conditions are met.

12345 Lakeland Road • Santa Fe Springs, CA 90670 • Phone (562) 944-6111 • Fax (562) 944-8522

Powerine meets all the conditions in Section 25144(c). First, in accordance with Subsection (c)(1), Tanks 10006 and 27105 perform oil recovery operations at Powerine's petroleum refinery, which bears the SIC classification of 2911. Second, the oil-bearing materials consist of sludges and slop generated at Powerine's refinery, and thus qualify under subsection (c)(2) because they were generated at the same facility at which the oil recovery operations are being conducted. Third, Powerine intends to have the recovered oil inserted into petroleum refinery process units to produce fuel or other refined products. While the generation of oil-bearing material and the oil recovery operations must take place at the same facility, there is no requirement that reuse of recovered oil also take place at the same facility. To expedite reuse of recovered oil, Powerine proposes to have the recovered oil inserted into the refining process units of another local refinery. Fourth, Powerine has not stored recovered oil in a surface impoundment or accumulated recovered oil speculatively. Gravity separation has taken place in above-ground storage tanks, and has been continuous since the material entered the tanks. Once oil is recovered by removing the top hydrocarbon layer from the tanks, Powerine intends to promptly ship the recovered oil to another local refinery for insertion into the refining process units. Per 22 CCR Section 66260.10, material which has been removed for recycling is not being accumulated speculatively. Thus, Powerine has satisfied and will continue to satisfy the requirements of Subsection (c)(4). Fifth, as required by Subsection (c)(5), when Powerine ceases to use Tanks 10006 and 27105 for gravity separation, or when it removes any residual water and sludge in the tanks, it will separately evaluate whether these materials are subject to regulation as hazardous waste.

did not insert recovered oil into coker or other coker for over 3 yrs

They did

Finally, Section 25144(c)(6) requires that the "oil-bearing materials would be excluded from classification as a waste pursuant to, or would otherwise meet the requirements for an exemption under, Section 24153.2" as modified by Section 25144(c)(6)(A) through (D). Section 25143.2(b), (c) and (d) offer three independent sets of criteria under which material maybe excluded from classification as waste or exempted from regulation. In this case, the materials in tanks 10006 and 27105 are excluded from classification as a waste under Section 25143.2(b)(1). The material in the tanks will be "used or reused as an ingredient in an industrial process to make a product". In explaining similar language in the federal regulations, EPA has used the example of distillation bottoms from one process used as feedstock in another process (40 CFR §261.1(c)(5)(I)). Here, the recovered oil will be re-introduced into the refining process as feedstock to make fuels and other products. (It should be noted that although Subsections (c) and (d) also refer to certain refinery processes and wastes, those sections do not preclude a material qualifying for exclusion from classification as waste under Subsection (b)).

Finally, Section 25143.2(b) allows a material to be excluded from classification as a waste only if none of the disqualifying circumstances described in Subsections (e), (f) and (g) apply. None of those disqualifying circumstances apply to Tanks 10006 and 27105. As noted above, although the tanks have been still for some period of time, there has not been any speculative accumulation. Gravity separation requires that the material remain in the tank undisturbed for a period of time. Now that some of the oil has separated and floated to the surface, it will be recovered by removing the top layer from the tanks. Accumulation will begin once the recovered oil is removed from the tank. This is consistent with the provision in Section 25143.10(e) that a recyclable material is not generated until it exits the unit in which it is stored, where, as here, storage and gravity separation are continuing. Powerine intends to have the recovered oil reused at another local refinery as soon as it is removed from Tanks 10006 and 27105, and the company will ensure that the accumulation periods are not exceeded once the recovered oil is removed from the tanks.

Tanks 10006 and 27105 are an integral part of Powerine's oil recovery system. The tanks contain oil-bearing material that is excluded from classification as a waste. The tank system itself is exempt from hazardous waste control requirements. The material in these tanks is not a hazardous waste nor is it a non-hazardous waste, it is simply not a waste.

For the reasons outlined above, there is no question that the recovered oil is exempt from regulation as hazardous waste. Approximately 1,000 barrels of recovered oil have been recovered from Tanks 10006 and 27105 and are waiting to be transferred to another refinery for reuse. This local refinery would, upon receiving the recovered oil, insert it directly into their process stream. It can be shipped to the other local refinery on a bill of lading. Powerine is prepared to ship the recovered oil to the other local refinery upon receiving your verbal acknowledgment that the Department agrees with Powerine's interpretation of the regulations. If the Department disagrees with Powerine's interpretation of the regulation, then we must confer with your legal department to discuss this issue. Misclassification of the recovered oil as hazardous waste by DTSC would eliminate the possibility of allowing another refinery to process this material. The other refinery is not a TSDF. The other refinery and Powerine are confident that Section 25144, known to refiners as "the recovered oil exemption" does exactly that...exempts recovered oil from regulation as a hazardous waste.

As discussed during our June meeting and in our July submittal, the optimum solution to eliminating the remaining oil-bearing sludge in Tanks 10006 and 27105 is to reinject this material into Powerine's Coker. A third party is currently negotiating to acquire Powerine. The third party's intent is to complete required upgrade and maintenance projects at Powerine to enable a full refinery startup that will in turn enable the refinery

to once again produce quality finished California fuels. Full refinery start-up is projected for 1999. Re-injection of the oil-bearing material from Tanks 10006 and 27105 to the Coker will be a high priority. Re-injection will commence within one week of stable operation of the Coker Unit. It is estimated that the entire inventory of the oil-bearing material in these two tanks can be recycled in eight (8) months of continuous Coker operations. Powerine will further define this proposal in our next submittal.

In summary, Powerine requests your concurrence with our interpretation of the recovered oil exemption so that Powerine can transfer its recovered oil to another refinery for processing. Powerine's next submittal will include a Professional Engineer's certified external inspection of Tanks 10006 and 27105 and Powerine's proposal and justification for recycling the remaining oil-bearing sludge into Powerine's Coker.

Please feel free to contact me or Ray Huie of my staff with any questions you may have.

Sincerely,

June M. Christman
Manager - Environmental Engineering

JMC:md

cc: Ahmed Hegab
Ray Huie
File 41005.07
Reader File

\ray\dtsc\reply\dec-oil.doc

JUN 2 6 1998

June 23, 1998

Ahmed Hegub, PhD.
California Environmental Protection Agency
Department of Toxics Substances Control
1011 N. Grandview Avenue
Glendale, CA 91201

Dear Dr. Hegub:

Powerine is diligently working on a comprehensive reply to Department's Report of Violation (ROV). We received the Department's laboratory results for TCLP organics today and wish to include this issue in our response. Therefore we must request an extension, until June 29 to complete our response.

As you may be aware, Powerine is presently resource limited. In addition to responding to the ROV, which is a high priority, the environmental staff has many other issues; including due diligence for our potential third party purchaser.

Powerine requires an extension until June 29, 1998 to submit its formal response to your ROV.

Your understanding is much appreciated. Please feel free to contact me with any questions you may have.

Sincerely,

June Christman

June M. Christman
Manager - Environmental Engineering

JMC:md

cc: Ray Huie
File 41005.07
Reader File
(jmc/dtscsov3.doc)

12345 Lakeland Road • Santa Fe Springs, CA 90670 • Phone (562) 944-6111 • Fax (562) 944-8522

JUL 0 6 1998

July 2, 1998

Mr. Mukul Agarwal
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, CA 91201

Re: Response to the Department's April 2, 1998 Complaint Inspection Report

Dear Mr. Agarwal:

This letter is in response to the Department of Toxic Substances Control's (the "Department's") Complaint Inspection Report (the "Report") of April 2, 1998 to Powerine Oil Company ("Powerine"). Powerine is confident that most of the violations cited by the Department do not apply. The Department has focused on oil recovery and storage activities in Tank 10006 and 27105. Oil recovery in a refinery is exempt from many of the hazardous waste codes cited by the Department. Material stored in Tank 27105 and Tank 10006 that were cited as hazardous and listed wastes, are in fact viable recyclable oil-bearing material. This material is gravity separating and recovery operations are ongoing. These activities are exempt from hazardous waste control laws as further described in Sections 2 and 4 attached.

As described in Powerine's March 13, 1998 letter to you and in more detail during our June 11, 1998 meeting, Powerine's Management continues to diligently pursue every possible option to restart the refinery. Negotiations continue with a party interested in purchasing and operating the refinery. Financing options for Powerine are also progressing. Powerine remains optimistic that the refinery will resume operations and that the oil-bearing materials in Tanks 10006 and 27105 can be recycled to Powerine's Delayed Coker. This would be the optimum resolution of the situation at hand. Regardless of the regulatory status of the material in the tanks, the material would be recycled, meeting both the Department's and Powerine's requirements for a safe, efficient and economic way to empty Tanks 10006 and 27105. Until financing or an ownership change is resolved, Powerine remains resource limited. Disposal of the materials in Tanks 10006 and 27105 is not a project Powerine can undertake at this time.

At our meeting, the Department raised several issues that I want to clarify for Powerine's file with the Department. First, the Department described their experience at a facility that had been abandoned with light (high vapor pressure) odiferous hydrocarbon substances remaining in inventory. The Department queried whether Powerine's refinery might be in a similar condition. I assure you it is not. When

12345 Lakeland Road • Santa Fe Springs, CA 90670 • Phone (562) 944-6111 • Fax (562) 944-8522

Powerine temporarily suspended refining operations in 1995, all processing equipment was purged of product, steamed out and all equipment sensitive to oxidation was put under a nitrogen blanket. All crude, product and intermediate tanks were deinventoried and properly degassed. Specifically, tanks on vapor recovery were degassed to Powerine's flare and floating roof tanks were liquid balanced with water. Many tanks have been cleaned and are open to the atmosphere. However, residual bottoms do remain in tanks at the refinery. All major pipelines, with the exception of Pipeline No. 4 (which is leased to another party), have been laid-down in water.

The Department also mentioned potential safety and environmental issues associated with storage of ignitable materials in tanks. The Department analyzed samples from these tanks and attributed the hazardous characteristic of ignitability to the material in the tanks. Powerine has scrutinized the sampling methodology and analytical methods employed by the Department and found problems with them. Powerine is currently recovering oil from these tanks. Once the oil is removed and if the tank contents are properly characterized, Powerine does not believe ignitability will be an issue. In any event, Powerine's refinery is not an abandoned facility. Powerine maintains 24-hour operations coverage of the refinery. Any unusual occurrence would be detected by the operations staff during their routine refinery rounds. Powerine's fire water system, designed to address significant refinery emergencies, remains functional. The material in Tanks 10006 and 27105 is stable and is not a threat to human health or the environment. A refinery equipment inspector has performed ultrasonic thickness gauging on the tank shell walls. The remaining wall thickness of both tanks is above the minimum thickness required.

Powerine's storage of substances in aboveground storage tanks ("ASTs") is regulated by the Los Angeles Regional Water Quality Control Board ("LARWQCB"), the lead agency which oversees ASTs. Powerine has a monitoring well system of 27 wells that will detect any releases from ASTs. LARWQCB conducts an annual AST inspection program. Powerine's latest inspection occurred on May 15, 1998. The inspector toured the refinery and inspected the tanks. He did not have issues with any of Powerine's ASTs. No violations nor repair orders were issued as a result of this inspection.

Other issues raised by the Department include soil contaminated with asphalt which the Department believed was hazardous. Both Powerine and the Department have analytical data confirming that asphalt is nonhazardous. The Department also found hazardous levels of soluble lead in the soil in the asphalt area. Powerine is convinced that any lead present must have come from leaded paint on the tanks, either from simple weathering of paint or possibly from sand blasting at some time in the distant past. It is not from leaking tanks or pipes in the area.

There were a few barrels of hazardous waste remaining in the Hazardous Waste Accumulation Area ("HWAA") during the Department's initial August, 1997 inspection. This waste has since been disposed of or recycled. The last of the drums of hazardous waste from the HWAA were shipped for disposal or recycling on February 19, 1998. Currently, there are no hazardous wastes stored in the refinery.

As discussed with you during our June 11, 1998 meeting, Powerine is currently recovering oil from Tanks 10006 and 27105. With the Department's concurrence, the recovered oil will be reinserted into petroleum refinery process units at another local refinery. Given a refinery startup, Powerine will prioritize the contents of Tanks 10006 and 27105 for injection into the Coker. Preliminary calculations estimate up to eight months to complete injection of the sludge from the two tanks. If in the future, the startup plans fail to materialize, Powerine will be forced to liquidate. At that time Powerine will initiate refinery-wide remediation. Powerine would clean and dismantle the refinery equipment. Obviously, residual materials in the tanks would be properly disposed of at that time.

Powerine's detailed response to the Department's Report is attached and is organized as indicated on the attached Table of Contents.

Please feel free to contact me with any questions you may have.

Sincerely,

June M. Christman
Manager - Environmental Engineering

JMC:md

cc: Ray Huie
File 41005.07
Reader File

Table of Contents

	Page No.
Section 1: General Comments	1-2
Section 2: Response to Allegations #1 through #5	3-5
Section 3: Response to Sampling Methodology and Analysis	6-9
Section 4: Response to Alleged Violations	10-16

Class I Violations:

1. Illegal Storage
2. Integrity Assessment
3. Illegal Disposal
4. Operation
5. Incomplete Labeling

Class II Violations:

1. Waste Analysis

/ray/dtsc/reply/rov4298.doc

Section 1: General Comments

The initial inspection by the Department was conducted on August 12, 1997 and the Initial Complaint Inspection Report ("Initial Report") was issued on October 11, 1997. Powerine formally responded to the Initial Report and Summary of Violations ("SOV") associated with the Department's follow up inspections during January, 1998 on March 13, 1998. Please incorporate by reference Powerine's March 13, 1998 response to the Department.

Document-wide General Comments:

1. The term waste oil appears throughout the report. This term is incorrect. The material referred to as waste oils in tanks 27105 and 10006 should be referred to as oil-bearing material as defined in §25144(a)(2). Additionally, hydrocarbon impacted soil is not contaminated with waste oil.
2. Wastewater treatment sludge was indicated by the inspector as being mixed with the oil-bearing material. This is not the case as explained later in this response.
3. The correct spelling for Powerine's Environmental Engineer is Ray Huie.

Item Specific Comments:

III. Owner / Operator and Management
The correct fax numbers are:
(212) 319-3587, EMC corporate office in New York, NY
(562) 903-8911 or (562) 944-8522, Powerine Refinery in Santa Fe Springs, CA

Environmental Manager: Ms. Christman's responsibilities include overall facility compliance with environmental rules and regulations. However, Ms. Christman and her staff perform roles similar to that of consultants, they communicate compliance requirements to refinery operations and maintenance ("field") staff. Field staff in turn are directly responsible for field compliance activities (such as hazardous waste disposal).

V. Observations:

A. Tanks:

1. Tank #27105:
... material from product bottom tanks, wastewater treatment sludge and oil and any other random spills on the site...

Powerine is aware that wastewater treatment sludge is a listed waste and does not mix this sludge with other process or waste streams. Specifically, Ray Huie did not say that tanks 27105 and 10006 contained wastewater treatment sludge.

... outflow pipes and connectors were made for sampling purposes as well as adding or removing sludge.

The 2 inch taps at various heights are for sampling purposes; the 6 and 8 inch connectors at the bottom of the tank are for adding and removing material.

We also observed that the surrounding area of the tank was contaminated with waste oil and other hydrocarbon constituents ...

The area may have hydrocarbon impacted soil, but not waste oil contamination.

B. Storage Areas:

1. Drum Storage Area:

c. ... 230 Kilograms acid batteries under a bill of lading to Inter State Battery ...

The estimated weight on the bill of lading for the batteries is 300 lbs (136 kg).

3. Asphalt Area:
c. ... not observe any other information related to the contents or start accumulation dates. ...

Because asphalt is a non-hazardous substance, the above information is not required.

VIII. Exit Interview with Management

... POC has been segregating the listed waste sludge and they did not store it in the sludge tanks. Then I asked her to provide me with any documentation to prove her claim but she did not. ...

The inspector was requesting a paper trail which would trace the different process streams entering Tanks 27105 and 10006. Powerine does not and is not required to keep records on oil recovery operations.

Section 2: Response to Allegations

Allegation #1: *Since 1995, POC has been storing F and K RCRA listed wastes (F037, F038 and K050) in two tanks (#27105 and #10006) and neither of these tanks have been emptied.*

Allegation #2: *The above wastes include API separator wastes, exchange waste and other listed wastes.*

Allegation #3: *For several years, F and K RCRA wastes (F037, F038 and K050) has been stored, accumulated and illegally stored because the Coker unit was being shut down. F & K wastes used to be recycled when the Coker unit was in operation.*

The materials stored in Tank 27105 and Tank 10006 are oil bearing materials, recyclable sludge/slop with recoverable oil. Under §25144(c), "...units, including associated piping, that are part of a system used for the recovery of oil from oil bearing materials and the associated storage of oil-bearing materials and the recovered oil, are exempt from control as hazardous wastes." As described in Powerine's March 13, 1998 response to the Department's February 9, 1998 Summary of Violations, "Reusable sludges" (such as residuals from Powerine's numerous process units or product intermediate/storage tanks) "and slop (off-specification products and intermediates) were routed to one of several tanks in the refinery. These tanks sit for some time to allow for gravity separation to occur and the resulting free floating hydrocarbon product to be recovered." Tanks 10006 and 27105 have been, and continue to be, storage and oil recovery units that are an integral part of Powerine's in-process oil recovery system. During normal refinery operations, the tanks would be routinely skimmed. The skimmed recovered oil was routed to slop oil tanks and reinserted into Powerine's refining process. Powerine estimates that Tanks 10006 and 27105 currently contain a significant quantity of recoverable oil. Powerine plans in the near future to recover this oil. With the Department's concurrence, the recovered oil will be reinserted into petroleum refinery process units to produce fuel or other refined products at another local refinery, per §25144(c)(3).

To Powerine's knowledge, neither tank has stored listed waste. It is Powerine's practice to segregate waste streams at the point of origin, if necessary, because of the nature of the material or if a decision has not been made as to the final disposition of the material. Attachment 1 is Powerine's 1991 interoffice memorandum prioritizing modifications to the Delayed Coker Unit to allow sludge injection. As demonstrated by this memo, Powerine is aware of the increasing land disposal restrictions and took pro-active measures to reduce off-site disposal.

Upon generation, listed waste and other waste streams are temporarily stored in Baker Tanks or other portable containers prior to recycling or disposal. As discussed in detail during our June 11, 1998 meeting, Attachment 2 is a spreadsheet documenting portable tank usage and rental costs among other things, generated for internal use by Powerine. Portable tanks from Baker and Rain for Rent were specifically brought in for storage of material such as API separator or sewer sludge. For instance, Purchase Order # 73092 in the above spreadsheet was for a 500 bbl Baker Tank from Rain for Rent to hold sludge from an API cleaning project. After each specific project, the tanks were emptied, cleaned and returned or reused to contain another waste stream. Most materials temporarily stored in these tanks were recycled to Powerine's Delayed Coker.

F037 and F038 listed wastes are associated with the separation of sludge from process wastewater and oily cooling wastewater. These wastes are infrequently generated during wastewater system cleaning projects. Process wastewaters and any associated sludges remain segregated within the process units (the wastewater system). Powerine has not generated any F037 or F038 waste since the early 1990s. At that time F037 and F038 wastes were temporarily stored in a Baker tank and then recycled to Powerine's Delayed Coker as discussed above. Specifically, Powerine has not generated any F037 or F038 waste since the refinery temporarily suspended operations in 1995.

K050 wastes are heat exchanger bundle cleaning sludges from the petroleum refining industry. Powerine generates and handles heat exchanger bundle cleaning sludge in the following manner: the sludge along with any recoverable oil is generated and entrained in hydroblasting water which flows through the wash pad sump to the Lomax API separator. The Lomax API separator functions, as usual, to gravity separate sludge and water and to float oil for recovery. Wastewater from the Lomax API flows to the wastewater treatment plant. After treatment, the wastewater is then discharged from Powerine's outfall to the county sewer (LACSD). Powerine has not generated any K050 or K051 (API separator sludge) waste since the early 1990s. At that time K050 and K051 wastes were temporarily stored in a Baker tank and then recycled to Powerine's Delayed Coker as discussed above. Specifically, Powerine has not generated any K050 or K051 waste since the refinery temporarily suspended operations in 1995.

The material in tanks 27105 and 10006 is stored for gravity separation of oil from the oil-bearing sludge and for the future re-injection of remaining sludge into the Coker unit. The material is not F nor K waste. The plan remains for oil to be recovered and for the residual material to be re-injected into the Coker once the unit comes back on-line.

Allegation #4: *The waste handling process and tanks has been in poor condition and the soil has been contaminated near the tanks.*

Powerine's Refinery has been in operation since the 1930's. There is evidence of past spills of hydrocarbons to the ground in the Refinery. These past spills were likely not regulated at the time the releases occurred. The asphalt area in which Tank 10006 is located is one of the oldest areas of the refinery. In fact, particularly in the vicinity of Tank 10006 a tank overflow resulting in a large asphalt release occurred sometime in the past. Powerine and the Department have analyses that prove that asphalt material is non-hazardous. Remediation of these past releases will be part of Powerine's facility closure plan, the details which will be negotiated with the Los Angeles Regional Water Quality Control Board ("LARWQCB"), if and when the refinery is put to another land use. Drums and bins of non-hazardous asphalt material remain in the area. Powerine acknowledges that better housekeeping may be appropriate for this area, but wishes to emphasize the non-hazardous nature of any asphalt spilled in the area. Powerine is consolidating all the asphalt material into the bins and cleaning up the area.

Various memorandums have been issued to field staff during the course of operations on the correct methods in segregation and handling of different waste streams. Attachment 3 is a copy of a typical internal waste handling guidance memorandum.

Allegation #5: *General hazardous wastes are often stored longer than 90 days.*

Storage of hazardous wastes over 90 days is unusual for Powerine. During normal operations, Powerine's hazardous waste handling procedures comply with applicable regulations. Waste streams are kept segregated and disposal/recycling is done prior to the 90 day storage limit, if applicable. Powerine has not received a NOV for untimely handling of hazardous waste during previous periods of operation.

Powerine assumes this allegation refers to the few barrels of hazardous waste remaining in its Hazardous Waste Accumulation Area ("HWAA") during the Department's initial inspection in August 1997. This waste has since been disposed/recycled and the Hazardous Waste Manifest and the Certificate of Disposal or Reclamation for this waste is enclosed in Attachment 4.

At present, there is no hazardous waste stored in the refinery. The last of the hazardous waste from the HWAA was shipped for disposal/recycling by HTS, Inc. of Santa Fe Springs on February 19, 1998.

Section 3: Response to Sampling Methodology and Analysis

Sampling Methodology Issues for Tanks 10006 and 27105.

The Department sampled and analyzed several specific locations in the tanks. Powerine believes that this incorrectly skewed the results and that none of the individual samples are representative of the entire tank contents. The amount of material in each phase is not equal in these tanks, either volumetrically or gravimetrically.

Powerine believes that the correct representation of the contents of the tanks is to homogenize samples of all the tank's layers before analysis[1]. Simple averaging of multiple samples is meaningless for flashpoint. This is mainly due to the fact that certain compounds may dampen the flashpoint more than their volumetric or weighted percentage. A better method may be to take a volumetric composite of the tank and analyze it as a composite sample.

Sample Analyses: POC-1-128 and POC-4-128

Although not included in the Report, Powerine was verbally informed and on June 23, 1998 received laboratory data from the Department's analyses that POC-1-128A and POC-4-128A exceeded the regulatory limit for TCLP benzene. TCLP analyses for POC-1-128A and POC-4-128A were 140 ppm and 43 ppm respectively. These samples were obtained from the oil layer of tanks 27105 and 10006, respectively.

Benzene is a hydrocarbon that is not only prevalent but valuable for its energy content throughout the oil refining process, from crude oil to intermediate feedstocks to finished gasoline. Therefore, it is not surprising but also valuable to find benzene in the oil layer. Simply because benzene is present in the oil layer does not classify the material in the tank as a hazardous waste. For example, finished gasoline contains benzene, yet it is a product and is not classified as a hazardous waste. Similarly, the material in Tanks 27105 and 10006 is by definition not hazardous waste because it is oil bearing material and the oil layer will be recovered.

---

[1] API, Manual of Petroleum Measurement Standards, Ch. 8 Sampling, Section 10.1
If the sampling procedure requires that multiple samples be taken from a single tank, ..., analytical tests may be performed on each sample or on a composite of the various samples. When analytical tests are performed on individual samples, ..., the tests are generally averaged .

Sample Analyses: POC-3-128, POC-5-128

POC-3-128 *Evidence obtained by the above laboratory analysis and the walk-through inspection indicated the following:*

1. *The bottom content of Tank 27105 contained an ignitable hazardous waste.*
2. *This result substantiates the complaint allegation that the facility illegally has been storing a hazardous waste in excess of 5000 gallons without the Department's permit or grant of authorization.*

POC-5-128 *The above chemical analysis indicates that the bottom content of Tank #10006 exhibit the hazardous waste characteristics for ignitability. It is also listed hazardous waste F037, F038 and K050 as it was generated from wastewater treatments, heat exchange and tank bottom sludge or residue.*

This result substantiates the complaint allegation that the facility illegally has been storing hazardous waste in excess of 5000 gallons without the Department's permit or grant of authorization.

Powerine does not consider the results from samples POC-3-128 and POC-5-128 to be valid, because the analytical procedures utilized were invalid. Additionally, the contents of Tanks 10006 and 27105 are not listed wastes as discusses in Section 2 pages 3 and 4.

The procedure used by the Department was EPA method 1020 Setaflash Closed-Cup Method for Determining Ignitability. This method is meant to be used for liquids only with a flash point between 0° C and 110° C and a viscosity lower than 150 stokes at 25° C.[2]

The results are not valid for the following reasons:

1. Sample POC-3-128A is tank bottom sludge with a high solid content (~30%).
2. Sample POC-5-128A is tank bottom sludge with a viscosity above 150 stokes.

The correct method for samples POC-3-128A and POC-5-128A should be EPA method 1030 Ignitability for Solids.

Most laboratories run EPA method 1010 Pensky-Martens Closed-Cup Method for Determining Ignitability. Powerine was not able to find a laboratory familiar with the Setaflash method to comment on how the variance of the viscosity and the solid content affected the results.

---

[2] SW 846, EPA method 1020.

Even though most laboratories run the Pensky-Martens Method for Ignitability on solids, neither the Setaflash nor the Pensky-Martens method is suitable for solids, according to EPA. Attachment 5 is Powerine's December, 1992 letter to the Department which addresses this issue. The scope and application for the these methods are attached in Attachment 6.

Sample Analyses: POC-6-128, POC-7-128

POC-6-128 *This sample exhibited the hazardous waste characteristics of toxicity due to the presence of lead constituents above the Soluble Threshold Limit Concentration (STLC). The presence of lead constituents with the concentration above STLC limits suggests that an appreciable amount of leaded wastes were leaked to the ground of area south of Lake Rothschild. It is also an evidence of poor operation and maintenance that resulted in the disposal of hazardous waste to the ground of the site.*

POC-7-128 *This sample exhibited the hazardous waste characteristics of toxicity due to the presence of lead constituents above the Soluble Threshold Limit Concentration (STLC). The presence of lead constituents with the concentration more than five fold of the STLC limits suggests that an appreciable amount of leaded wastes were leaked to the ground of area under Tank 10006. The laboratory results support the allegation of poor waste handling procedures for Tank 10006. It is also an evidence of poor operation and maintenance of the facility that resulted in the disposal of hazardous waste to the ground of the site.*

Powerine used the Department's split sample to further analyze the lead content of POC-6-128 and POC-17-182. Core Laboratories in Anaheim, CA ran the analyses. The lead detected was not organic in either sample. As discussed in more detail in Section 4 page 13, the presence of lead which is not organic is not an indication of leaks or spills, but an indication that lead paint may have impacted the area at some time in the distant past. The result from the organic lead analysis was non-detect (<1.0 ppm) for both samples. Copies of the analyses are included in Attachments 7 and 8.

For POC-6-128 the TTLC was 140 ppm, which is well below the regulatory limit of 1,000 ppm. The STLC was 3.2 ppm, which is also well below the regulatory limit of 5.0 ppm. The Department's sample analysis resulted in a STLC result of 5.3 ppm. The average of 5.3 ppm and 3.2 ppm is 4.25 ppm. which is below the STLC for lead per §22-66261.24. (See Attachment 7.)

For POC -7-128 the TTLC was 360 ppm, which is well below the regulatory limit of 1,000 ppm. The STLC was 12 ppm. (See Attachment 8.)

Sample Analysis: POC-1-211, POC-2-211 and POC-3-211

The analytical laboratory results for POC-1-211, POC-2-211 and POC-3-211 provided by the Department to Powerine on May 28, 1998 shows these asphalt samples to be non-hazardous.

Section 4: Response to Violations

Class I Violations:

1. **Illegal Storage:**
   Allegation: *POC violated Health and Safety Code (HSC), Section 25201(a) and 25213 (b) and 66261.21, in that on or about January 27-28, 1998, Powerine stored in excess of 5000 gallons of hazardous waste in excess of one year and failed to obtain from the Department a hazardous waste permit or grant of authorization, to wit: Powerine stored in Tank #10006 and Tank #27105 (excess of 400,000 gallons) a listed hazardous waste (K050, F037 and F038) and ignitable hazardous waste (D001) without the Department's permit or grant of authorization.*

2. **Integrity Assessment:**
   Allegation: *POC violated Title 22, California Code of Regulations (Cal. Code Regs.), Section 66262.34 and 66265.191, in that on or about January 28, 1998, Powerine failed to have on file a written integrity assessment reviewed by an independent, qualified, professional engineer that attests that its hazardous waste tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to transferred, stored or treated to ensure that it will not collapse, rupture or fail to wit: there is no documented report to indicate the integrity of Tank #10006 and Tank #27105.*

   Response: As explained in detail below, Powerine is confident that storage of oil-bearing material in Tanks 10006 and 27105 does not constitute storage of a hazardous waste. Therefore, the Integrity Assessment Violation listed as item 2 above does not apply. Nevertheless, Powerine acknowledges that it is prudent, as suggested by the Department, that Powerine document the integrity of these tanks. Given that these tanks remain in service and an internal tank inspection cannot be performed, Powerine will, with its available resources, document the integrity of the tanks.

   Specifically, the following were listed in the alleged violation: §25201(a) ... shall accept, treat, store or dispose of a hazardous waste ...

   §66261.21 Characteristic of Ignitability. (a) A waste exhibits the characteristic of ignitability if representative samples of the waste have any of the following properties:...

   §25201(a) and §66261.21 regulate hazardous waste. The materials stored in Tank 27105 and Tank 10006 are oil-bearing materials (recyclable sludge/slop with recoverable oil). From process knowledge, the material is not a F037, F038 nor a K050 waste stream. In addition, oil-bearing material satisfying the criteria listed in

§25144(c) and §25143.2(b), (c) or (d) are excluded from being classified as a waste as discussed below.

§25213(b) does not seem relevant. Powerine requests clarification of this alleged violation.

Tanks 10006 and 27105 and the material in the tanks are not subject to regulation under the hazardous waste program because the tanks are part of Powerine's oil recovery operations. Specifically, the tanks are used to separate oil from oil-bearing materials through gravity separation. Health and Safety Code Section 24144(c) provides that "units, including associated piping, that are part of a system used to recover oil from oil-bearing materials, and the associated storage of oil-bearing materials and the recovered oil, are exempt" from the hazardous waste regulations provided certain conditions are met.

Powerine meets all the conditions in Section 25144(c). First, in accordance with Subsection (c)(1), Tanks 10006 and 27105 perform oil recovery operations at Powerine's petroleum refinery, which bears the SIC classification of 2911. Second, the oil-bearing materials consist of sludges and slop generated at Powerine's refinery, and thus qualify under subsection (c)(2) because they were generated at the same facility at which the oil recovery operations are being conducted. Third, Powerine intends to have the recovered oil inserted into petroleum refinery process units to produce fuel or other refined products. While the generation of oil-bearing material and the oil recovery operations must take place at the same facility, there is no requirement that reuse of recovered oil also take place at the same facility. To expedite reuse of recovered oil, Powerine proposes to have the recovered oil inserted into the refining process units of another local refinery. Fourth, Powerine has not stored recovered oil in a surface impoundment or accumulated recovered oil speculatively. Gravity separation has taken place in above-ground storage tanks, and has been continuous since the material entered the tanks. Once oil is recovered by removing the top hydrocarbon layer from the tanks, Powerine intends to promptly ship the recovered oil to another local refinery for insertion into the refining process units. Per 22 CCR Section 66260.10, material which has been removed for recycling is not being accumulated speculatively. Thus, Powerine has satisfied and will continue to satisfy the requirements of Subsection (c)(4). Fifth, as required by Subsection (c)(5), when Powerine ceases to use Tanks 10006 and 27105 for gravity separation, or when it removes any residual water and sludge in the tanks, it will separately evaluate whether these materials are subject to regulation as hazardous waste.

Finally, Section 25144(c)(6) requires that the "oil-bearing materials would be excluded from classification as a waste pursuant to, or would otherwise meet the requirements for an exemption under, Section 24153.2" as modified by Section 25144(c)(6)(A) through (D). Section 25143.2(b), (c) and (d) offer three independent sets of criteria under which material maybe excluded from

classification as waste or exempted from regulation. In this case, the materials in tanks 10006 and 27105 are excluded from classification as a waste under Section 25143.2(b)(1). The material in the tanks will be "used or reused as an ingredient in an industrial process to make a product". In explaining similar language in the federal regulations, EPA has used the example of distillation bottoms from one process used as feedstock in another process (40 CFR §261.1(c)(5)(I)). Here, the recovered oil will be re-introduced into the refining process as feedstock to make fuels and other products. (It should be noted that although Subsections (c) and (d) also refer to certain refinery processes and wastes, those sections do not preclude a material qualifying for exclusion from classification as waste under Subsection (b)).

Finally, Section 25143.2(b) allows a material to be excluded from classification as a waste only if none of the disqualifying circumstances described in Subsections (e), (f) and (g) apply. None of those disqualifying circumstances apply to Tanks 10006 and 27105. As noted above, although the tanks have been still for some period of time, there has not been any speculative accumulation. Gravity separation requires that the material remain in the tank undisturbed for a period of time. Now that some of the oil has separated and floated to the surface, it will be recovered by removing the top layer from the tanks. Accumulation will begin once the recovered oil is removed from the tank. This is consistent with the provision in Section 25143.10(e) that a recyclable material is not generated until it exits the unit in which it is stored, where, as here, storage and gravity separation are continuing. Powerine intends to have the recovered oil reused at another local refinery as soon as it is removed from Tanks 10006 and 27105, and the company will ensure that the accumulation periods are not exceeded once the recovered oil is removed from the tanks.

As discussed in detail in Section 2 pages 3 and 4, Tanks 10006 and 27105 are an integral part of Powerine's oil recovery system. The tanks contain oil-bearing material that is excluded from classification as a waste. The tank system itself is exempt from hazardous waste control requirements. The material in these tanks is not a hazardous waste nor is it a non-hazardous waste, it is simply not a waste.

Powerine is confident that Tanks 10006 and 27105 are structurally sound. A recent inspection of Tank 10006 and Tank 27105 was performed for a third party interested in purchasing Powerine. The inspection was performed by an individual experienced in refinery equipment inspections and Non Destructive Testing ("NDT") methods such as ultrasonic metal thickness measurement (UT gauging). The shells of Tanks 10006 and 27105 were UT gauged. The inspection for Tank 10006 revealed a minimum wall thickness of 0.20 inch for the bottom shell plates. The minimum required thickness (" t_{min}") is 0.19 inch for the bottom shell plates of this tank[3]. For Tank 27105, the inspection revealed a minimum wall thickness of 0.34 inch for the bottom shell plates. The minimum required thickness t_{min}, is 0.30

[3]API Standard 653 section 2.3.3 "Minimum Thickness Calculation for Welded Tank Shell"

inch for the bottom shell plates of Tank 27105[4]. No liquid leaks were detected during the inspection on either tanks. Although the Department's inspector observed that the insulation on Tank 10006 was in poor condition, weathered looking equipment does not necessarily mean that the equipment is in disrepair. Powerine must remove some insulation from Tank 10006 in order to complete inspection of the tanks. Inspection reports will be submitted to the Department when they are complete.

The Los Angeles Regional Water Quality Control Board ("LARWQCB"), which is the lead agency with jurisdiction over aboveground storage tanks ("ASTs"), conducts annual AST inspections. Powerine's latest inspection occurred on May 15, 1998. The inspector toured the refinery and inspected the ASTs. He did not have concerns with any of Powerine's ASTs. No violations nor repair orders were issued. Additionally, Powerine's groundwater monitoring well network would detect any significant leakage from ASTs which might occur at Powerine's refinery, as required by AB1050, the Aboveground Storage Tank Act. All tank systems at Powerine's refinery have secondary containment berms. These containment berms meet the regulations set forth for secondary containment for refinery tankage.

3. **Illegal Disposal:**
Allegations: POC violated Health and Safety Code (HSC), Section 25189(a) and (c), and 66261.24(a) in that on or about January 27-28, 1998, Powerine disposed of hazardous waste at an unauthorized point, to wit: disposed a toxic hazardous waste containing lead to the area located at the south of Lake Rothschild as well as on the ground around Tank 10006.

4. **Operation:**
Allegations: POC violated Title 22, Cal. Code Regs., Section 66262.34 (a)(3), and 66265.31, in that on or about January 28, 1998, Powerine failed to maintain and operate the facility in a manner that minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous wastes for off-site transfer, treatment, storage or hazardous waste constituents to air or soil which could threaten human health and environment, to wit: leaks or spills of material containing toxic heavy metals from pipes, connectors or bottom to Tank 10006. Also leaks and spills of toxic heavy metals at south of Lake Rothschild area.

Response: Powerine did not dispose of nor allow leakage of toxic hazardous waste containing lead to the area south of Lake Rothschild or at the base of Tank 10006. Powerine acknowledges that the Department may have found lead in levels above the soluble hazardous thresholds at the foot of Tank 10006. However, any lead contamination did not originate from the contents of the tank or piping in the area.

[4] ibid.

There are no leaded residuals such as tank bottoms in Tank 10006, the adjacent piping, or any of Powerine's process equipment. Moreover, if leaded residuals were present, they would contain organic lead (or tetra-ethyl lead; "TEL"). Powerine ran the duplicate samples from the soil by Tank 10006 and south of Lake Rothschild provided by the Department for organic lead. The organic lead analysis was non-detect (<1.0 ppm).

In the past, TEL was added to gasoline to boost its octane rating. This is only lead additive predominantly used in the past in the petroleum industry. There are only minimal quantities of naturally occurring lead in crude oil, and lead is a catalyst poison so it is avoided in the refining process. Powerine is convinced that any lead present must be from lead paint that either chipped off, or at some time in the distant past, was sandblasted off Tank 10006 or other tanks in the area. Metallic lead was also used in the past in gaskets and washers throughout the refinery. Although a less likely source than leaded paint, it is possible that the lead in gaskets and washers used on tank appurtenances may have partially disintegrated into the surrounding soil.

Powerine has obtained signed declarations from former Maintenance and Operations Managers stating that they know for a fact that the tanks in the asphalt area have not been sandblasted nor painted since they started working at Powerine in 1979 and 1986 respectively (Attachments 9 and 10). These declarations date the lead contamination, if caused by sandblasting, to pre-RCRA and pre-1984 Powerine bankruptcy.

Powerine believes that additional sampling of the soil pile forming the berm south of Lake Rothschild would determine it to be non-hazardous. Powerine ran the duplicate sample from this location provided by the Department. Organic lead analysis was non-detect (<1.0 ppm); TTLC was 140 ppm, which is well below the regulatory limit of 1,000 ppm; and STLC was 3.2 ppm, which is also well below the regulatory limit of 5.0 ppm. These results are well below the regulatory limits for lead per §22-66261.24. If the STLC results from Powerine and the Department were to be averaged, the result would be 4.25 ppm; which is still below the regulatory limit of 5.0 ppm. Additionally, the asphalt/soil layer of the berm was subsequently tested by the Department on February 11, 1998 (POC-2-211). The results for this sample were non-hazardous for pH, metal-scan and hydrocarbon-scan.

Historic subsurface information obtained by Powerine reveals that background levels of lead in soil varies from less than 2.5 ppm to 4.9 ppm on the perimeter of the refinery and from less than 2.5 ppm to 6.8 ppm on the Metropolitan State Hospital grounds (just south of the refinery property). All hospital samples tested positive for lead except for a single sample at 80 feet depth. Three (3) perimeter locations were tested for total lead ("TTLC") on the refinery grounds. The sample with the most lead detected, which tested positive for lead to 60 feet depth, is one

that is furthest from the asphalt tank area. Five (5) locations were tested for TTLC at the hospital. The background levels were generally higher than the samples taken on the refinery grounds. Each location was tested at approximately four depths, 10 feet, 20 feet, 70 feet and 80 feet. All but a single sample at 80 feet depth tested positive for lead. The most contaminated location ranged between 5.5 ppm to 6.8 ppm throughout the entire 80 feet depth boring.[5] This data indicates that the background level of lead is quite high in the soil. It also indicates that the background lead is not surfical. Soluble lead ("STLC") was not performed on these samples, therefore the soluble concentrations are not known.

Powerine proposes to evaluate the lateral extent of lead contamination in the asphalt area. The initial sampling plan will be to sample the soil in the asphalt area radially outward from Tank 10006. The proposed location of the samples is presented in Attachment 11. Initially, four (4) surficial samples will be taken and one sample will be taken at one (1) foot below ground surface at the location of the Department's sample POC-7-128. Samples will be taken according to EPA methods outlined in SW-846. The samples will be analyzed by EPA method 6010 for TTLC and STLC as required. A sampling plan to delineate the extent of lead contamination will be developed if warranted by results from the initial sampling.

The Report also alleges that Powerine violated §25189(a) which provides: "Any person who intentionally or negligently makes false statement or representation..." Powerine would not and does not make false statements or mis-representations to any government agency. This is a serious accusation which is unsubstantiated. If this section was not cited in error, please provide additional information so that Powerine can respond to this alleged violation.

5. **Incomplete Labeling:**
Allegation: *POC violated Title 22, Cal. Code Regs., Section 66262.34 (a)(2) and (f)(1)(3), in that on or about January 28, 1998, Powerine failed to label Tank #10006 and Tank #27105, two 55-gallon drums of sulfuric acid sludge, acid batteries and other containers of hazardous wastes with the date the initial waste accumulation began, or the composition and physical state of the waste.*

Response: Tanks 10006 and 27105 do not require hazardous waste labeling per Section 25144(c)(6)(D). Powerine acknowledges that some of the material in these tanks (particularly the oil layer) may be ignitable material; but it is not ignitable waste requiring classification. The ignitable property of these materials is illustrated by Uniform Fire Code ("UFC") diamond placards stating flammability that is painted on the side of the respective tanks.

[5] TriHydro, Corp., Laramie, WY for Powerine Oil; Subsurface Offsite Investigation, February 19, 1996.

Powerine assumes this allegation refers to the few barrels of hazardous waste remaining at its HWAA during the Department's initial inspection, in August. This waste has since been disposed/recycled and the Hazardous Waste Manifest and the Certificate of Disposal or Reclamation for this waste was provided in Powerine's March 13, 1998 response to the Department's SOV issued February 9, 1998. Currently, there are no hazardous wastes stored in the refinery. The last of the hazardous wastes formerly stored at the HWAA were shipped for disposal/recycling by HTS, Inc. of Santa Fe Springs on February 19, 1998.

Powerine's storage of spent lead-acid batteries was not in violation per §66266.81(a)(1) "...ten or fewer spent lead-acid storage batteries...shall be exempted from requirements...". At the time of the inspection, January 28, 1998, there were seven (7) spent lead-acid batteries in the HWAA. Currently, there are no spent lead-acid batteries in the refinery. They have all been recycled.

Class II Violations:

1. **Waste Analysis:**
   Allegation: *POC violated Title 22, Cal. Code Regs., Section 66262.11, in that on or about January 28. 1998, Powerine failed to determine if the waste generated by the facility were hazardous, to wit: Powerine failed to identify or categorize RCRA hazardous waste for the waste in tanks (#10006 and #27105) and drums (drum storage area).*

   Response: The oil-bearing material in Tank 27105 and Tank 10006 was not analyzed because Powerine is not required to analyze process streams. As stated previously, the contents of these two tanks is oil-bearing material.

   The contents of all the drums in the HWAA are known. Drums were classified as hazardous unless and until determined non-hazardous. Because of limited resources, Powerine was unable to analyze the material in these drums. Powerine suspected that most, if not all, of the drums would contain non-hazardous materials.

   Of the 79 totally and partially filled drums, all but twenty-one (21) drums were determined to be non-hazardous. Of the 21 drums, four (4) drums contained sealed PCB fluorescent light ballasts which, from a risk assessment point of view, had minimum potential for exposure to human health and the environment. Eleven (11) drums contained only California hazardous waste and several drums contained usable products, not wastes. However, given Powerine's extended suspension of operations, Powerine disposed of the material to address the Department's issues. All drums containing hazardous substances from the HWAA were disposed of or recycled by February 19, 1998.

POWERINE Oil Company

CONFIDENTIAL

INTEROFFICE MEMORANDUM

TO: Buck Petersen DATE: May 20, 1991

FROM: June Christman JMC

SUBJECT: Upgrade Priority of Coker Waste Injection Project

We need to upgrade the priority of the project to install facilities to allow injection of waste streams into the coker. The rising cost of hazardous waste disposal, new federal waste listings, California waste minimization laws, and compliance with recycling and hazardous waste storage regulations make this project a necessity now.

We routinely generate API separator sludge at the refinery. API separator sludge is a federally listed waste currently subject to land disposal restrictions. Unless we can process at least 75% of the sludge generated through the coker within one year of the generation of this waste, we will be required to treat (incinerate or process via solvent extraction) the separator sludge prior to land disposal. Golden West Refinery recently investigated incinerating some API separator sludge in New Jersey because there are no closer incinerators that have available capacity to process their sludge. An order of magnitude estimate for incineration costs is $2000/ton. Transportation and disposal costs are in addition to this.

Land Disposal Restrictions (LDR) or "Land Bans" were mandated in 1984 by the federal Hazardous and Solid Waste Amendments (HSWA). HSWA requires that "...levels of treatment which substantially diminish the toxicity of the waste...be established." EPA and California have developed standards for various waste streams. Initial LDR went into effect in 1985 (land disposal of liquid wastes was prohibited). Additional restrictions continue to be imposed since the initial restrictions. Standards for more generic waste streams took longer to develop and extensions on some treatment requirements have been granted.

The full impact of LDR will be felt by Powerine by May 1992. This is when "hard hammer" (unextendable) deadlines kick in. All solid and liquid petroleum wastes will require treatment prior to disposal. We have one year to pull together a comprehensive waste

management and minimization plan for Powerine facilities. Enabling Powerine to inject sludges into the coker for recycling will be a major step towards waste minimization.

JMC:aj/cokerwst.doc

CC:

A. Gualtieri
M. Egner
M. Abbasfard
W. Chiang
J. Garcia
M. Gnagy
M. Jacquez
[redacted]

Portable Tanks on Site

Delivery Date	Tank#	Tank brought in for	Tanks present contents	P.O.# AFE#	Contractor	Present Location	daily rental $	Acc rent thru print date	Monthly rental
11/08/93	238926	Stretford sulfur(V)	dedicated for Alky neutr.material	Needs prj. AFE# 80329-M/7285	Rain for Rent	TGU	$27.00	$1,728	$810
11/08/93	238922	Stretford sulfur(V)	dedicated for API Sludge sewer prj.	Needs prj. AFE# 80329-M/7285	Rain for Rent	74111	$27.00	$1,728	$810
10/03/93	1245	Water from fire at Coker (O)	Clean/Empty on stand-by for sewer prj.	80026-E/7279	Baker Tanks	Coke Barn	$17.00	$1,700	$510
10/03/93	1983	Water from fire at Coker (O)	"	80026-E/7279	Baker Tanks	Coke Barn	$17.00	$1,700	$510
10/03/93	97GRD	Water from fire at Coker (C)	"	80026-M/7279	Baker Tanks	Coke Barn	$20.50	$2,050	$615
10/01/93	1349	Water from fire at Coker (O)	"	80026-E/7279	Baker Tanks	Coke Barn	$17.00	$1,734	$510
10/03/93	1573D	Water from fire at Coker (C)	"	28422-M/7279	Baker Tanks	Coke Barn	$20.50	$2,050	$615
09/30/93	B110D	Water from fire at Coker (C)	"	28422-M/7279	Baker Tanks	Coke Barn	$20.50	$2,112	$615
09/27/93	238438	Water from fire at Coker (C)	dedicated for API Sludge sewer prj.	Needs prj. AFE# 80026-E/7279	Rain for Rent	74111	$24.00	$2,544	$720
09/27/93	238576	Water from fire at Coker (C)	Alky neut. Material	new P.O.#	Rain for Rent	Alky Unit	$20.00	$2,120	$600
09/24/93	238977	Water from fire at Coker (V)	dedicated for API Sludge sewer prj.	Needs prj. AFE# 80026-M/7279	Rain For Rent	74111	$27.00	$2,943	$810
07/15/93	238848	Tank sludge by lomax/lab(C)	Same	26782-MCC606	Rain For Rent	By TK 74111	$20.00	$3,600	$600
06/28/93	238970	sludge fr Lomax tank(C)	Same	26565-MCC625	Rain For Rent	By TK 74111	$20.00	$3,940	$600
06/23/93	238966	Tk 57/58 sludge(C)	Same	25990-MCC625	Rain For Rent	By TK 74111	$20.00	$4,040	$600
03/02/93	238830	API sludge & Water(V)	Tank 57/58 sludge	23854-M	Rain For Rent	By TK 74111	$27.00	$8,505	$810
03/02/93	238826	API sludge & Water(V)	Tank 57/58 sludge	23854-M	Rain For Rent	By TK 74111	$27.00	$8,505	$810
02/25/93	238832	API Sludge & Water(V)	dedicated for Storm drains	Needs prj. AFE# 23854-M	Rain For Rent	By TK 74111	$27.00	$8,640	$810
02/25/93	238430	API Sludge & Water(V)	Same	23854-M	Rain For Rent	By TK 74111	$27.00	$8,640	$810
02/23/93	238822	API Sludge & Water(V)	dedicated for Storm drains	Needs prj. AFE# 73092-M	Rain For Rent	By TK 74111	$27.00	$8,694	$810
02/23/93	238827	Crude API Sludge & Water(V)	Same	73092-M	Rain For Rent	By TK 74111	$27.00	$8,694	$810
01/26/93	238320	Tk 110(C)	Same	7149/71965	Rain For Rent	By TK 74111	$20.00	$7,000	$600
01/26/93	238010	TK 110(C)	Same	7149/71965-M	Rain For Rent	By TK 74111	$20.00	$7,000	$600
01/19/93	238365	Tk 110(C)	Same	7149/71884-M	Rain For Rent	By TK 74111	$20.00	$7,140	$600
01/19/93	238409	Tk 110(C)	Same	7149/71884-M	Rain For Rent	By TK 74111	$20.00	$7,140	$600

Attachment 2

01/19/93	238442	Tk 110(C)	Clean/dedicated for Storm drains	Needs prj. AFE# 7149/71884-M	Rain For Rent	By TK 74111	$20.00	$7,140	$600
10/26/92	238784	Oily Water(V)	dedicated for Storm drains	Needs prj. AFE# 7099/71025-M	Rain For Rent	Tail Gas Unit	$27.00	$11,934	$810
08/26/92	241019	Urea(poly tk)	Urea	22342-OCC618	Rain For Rent	FCC DIV B	$18.50	$9,306	$555
								$142,326	$18,150

c = closed top tank
o = open top tank
v = vapor tight tank (material that exceeds 1.5 PSIA needs a vapor tight tank)

REMOVED	Pick up Date									
07/07/93	09/13/93	238971	Holding h20 for alky gravel(C)	caustic	26662-MCC610	Rain For Rent	Coke Barn	$20.00	$1,360	$600
10/07/92	09/14/93	238388	Neutralized Alky (C)	Caustic 2030	21944-OCC610	Rain For Rent	Alky Unit	$20.00	$6,840	$600
09/28/93	10/13/93	146NSD	Water from fire at Coker		73374-M/7279	Baker Tanks	Coke Barn	$24.00	$360	$720
10/02/92	10/18/93	238436	API Sludge & Water(O)	h20 fr. fire	21938-0625	Rain For Rent	N. of Coke Barn	$20.00	$7,620	$600
09/27/93	10/15/93	238971	Water from fire at Coker		73306-M/7279	Rain for Rent	Coke Barn	$20.00	$360	$600
09/27/93	10/18/93	238388	Water from fire at Coker		73306-M/7279	Rain for Rent	Coke Barn	$20.00	$420	$600
09/28/93	10/19/93	180NSD	Water from fire at Coker		?	Baker Tanks	Coke Barn	$24.00	$504	$720
									$17,464	

4450

POWERINE Oil Company

MEMORANDUM

TO: Distribution DATE: January 31, 1992

FROM: June M. Christman JMC

SUBJECT: Waste Disposal Minimization

The 1992 turnarounds will produce a lot of hazardous and nonhazardous waste from the units. There will be a great deal of trash produced as well. To minimize waste disposal costs, we would like to keep these three (3) different waste streams separated. The following guidelines are issued for your review. As a reminder, we are also reissuing guidelines for labeling containers and the proper procedure to expedite removal of all drummed waste from the units.

- Please keep all trash out of drums and bins marked hazardous waste.
- Put all used shop towels and white rags (except H.F. contaminated) in recyclable yellow shop towel containers.
- If a material is recyclable, please put an "exclude recyclable material" label on the drum or bin.
- Do not mix waste i.e. if you have 1/2 bin full of contaminated sulfur (as an example). Do not add contaminated dirt on top. KEEP WASTE STREAMS SEPARATE.
- Keep all drums and roll-off bins closed or covered when not in use. Label all drums and bins with a preprinted POC label and a hazardous waste label if applicable. If you have any question on labeling, please contact the Environmental Department.

We request the following procedures be followed to expedite removal of all drummed waste from all divisions.

The drum movement form is to be filled out by Operations and Maintenance Department when requesting drum(s) to be moved to the Hazardous Waste Accumulation Area (HWAA). A work order must be written for each drum movement form. You may have up to five (5) <u>different</u> waste streams and an unlimited amount of each type of drummed waste per form.

Before requesting drum(s) to be removed:

- Remove all liquid from drum.
- All drums must be free of any valves, fittings, spigots for draining, etc before drums are moved.
- All drum movement forms must include a cost center to which disposal cost may be charged.
- All drum movement forms must be completely filled out with a supervisors signature. Attachment 1 contains instructions on completing the form.
- All drums must have a preprinted POC label completely filled out and a Hazardous Waste label if applicable.

  Note: The only two (2) people certified by OSHA 29CFR 1910.120 to move drummed hazardous waste are David Bales and Sal Grillo. No one else can move drums of hazardous waste.

The name and address is preprinted on the POC label. When you include this POC label on all drums you do not have to fill in the top of a hazardous waste label. Only the bottom.

The information that is to be marked on the hazardous waste label is as follows:

Physical state: solid? liquid?	Hazardous Properties: corrosive? reactive? flammable? Toxic? Other?

If additional information on hazardous waste identification is needed, call the Environmental Department and request the specific guidelines to identifying hazardous waste.

- All hazardous waste labels, excluded recyclable material labels, preprinted POC labels, recyclable catalyst labels (use only when catalyst is to be regenerated off-site) are available from Warehouse #2.

We have established a "No drum" policy in the refinery. Unless a drum contains usable product, or the drum contains a recyclable material and is properly stored (covered/closed) and is properly labeled, it must be removed to the HWAA. (For useable products the product name must be visible. For a recyclable material an "excluded recyclable material" label must be on the drum.)

ELIMINATE STOCKPILING OF EMPTY DRUMS. If a drum is empty, fill out the proper forms and submit them to your supervisor.

1. a drum movement form
2. work order

If you have any questions or comments to improving the current procedure, contact Judi Gardner, ext 374.

hzwstfrm.doc

cc: File

Distribution:

ATTACHMENT 1

DRUM MOVEMENT FORMS

DATE:	Date form is completed
SOURCE OF WASTE GENERATED:	The department/unit the waste was generated from.
COST CENTER:	The cost center number to which the waste disposal will be billed (a list of refinery cost centers is attached for reference).
REQUESTED BY:	Name of person who requested the movement
SUPERVISORS SIGNATURE:	Signature of supervisor that inspected the drums. All drums must have completed labels on them: 1) A POC label with date, material, department/unit; 2) A Hazardous Waste label (if applicable). All drums must be properly sealed. All valves, fittings, and spigots for draining must be removed before requesting movement.
LOCATED AT:	Indicate exact location of drums to be moved.
DRUM QUANTITY:	The number of containers to be moved that are labeled as indicated under description/ material.
DESCRIPTION/ MATERIAL:	Name what the material is. If catalyst or charcoal (as an example), name the vessel or tank it came out of.
EMPTY/FULL:	For empty drums, name what the drum contained and what unit it was from. (This is if the drum is not completely empty and can be used we know where to return the drum, so make sure the drum is empty.) If partially full, estimate the fraction full, i.e. 1/4, 1/3, 1/2, etc. (Only request that partially full drums are removed to the HWAA if the drum has been contaminated and is for disposal. If it is to be returned to Warehouse #1, make sure it is clearly marked on the form. The drum must be sealed, labeled, and weighed before Warehouse #1 will return to inventory.
	New State regulations require the generator (Powerine) to remove all material possible from a drum before it is considered empty.

SOLID/LIQUID: Put an 'X' in the appropriate box.

ADDITIONAL DESCRIPTION: Indicate if the material has a specific safety hazard or special equipment needed or conditions to avoid, i.e. If the material is pyrophoric (will burn on contact with air); if there is an acid hazard; if waste contains nickel, etc.

LABELED: Indicate that there is a preprinted POC material identification label (this should have already been attached to the drum), a manufacturer's label, or other type of label. If other please explain. Check as many as applicable.

HOLDING AREA DATE: This will be filled out by the person moving the drum.

NAME OF DRUM MOVER: Completed by person moving the drum. Person(s) moving drum must be certified by OSHA 29 CFR 1910.120 to move hazardous waste.

SPECIAL INSTRUCTIONS: If any special precautions or moving instructions are required, please indicate.

DRUM WT. FULL/EMPTY: This is if the drum needs to be weighed (i.e. catalyst that needs to be returned to warehouse #1).

drmfrm.doc

1/21/91

COST CENTER NUMBERS

ADMINISTRATION

600	General

PROCESS AREA

601	General
602	Crude Units A & B
603	Reformer Unit #2
604	Reformer Unit #3
605	Isom Unit
606	Lomax
607	Unifiner
608	Vacuum Unit
609	FCC Unit/Gas Con/Merox
610	Alkylation Unit
611	Sulfur Unit/TGTU
612	Amine Treating Unit
613	Coker/Coke Barn
614	KHT
615	FHT
616	Hydrocracker
617	Hydrogen Plant
618	Steam System
619	Cooling Water System
620	Air System
621	Thermal Oxidizer/Flare System
622	Electrical System
623	Tank Farm & Blending
624	Fire Water System
625	Waste Water System
626	CO2 Plant

MAINTENANCE AREA

640	General
641	Buildings
642	Yards & Roads
643	Warehouse
645	Obsolete Inventory

TECHNICAL SERVICES

650	General
651	Process Engineering
652	Laboratory
653	Inspection
654	Mechanical Engineering

TERMINALS & PIPELINE

660	General
661	Loading
662	Marine Terminal
663	Pipelines
664	Phoenix
665	San Diego

ENVIRONMENTAL

670	General
671	Air
672	Water
673	Soils
674	Hazardous Materials

SAFETY & SECURITY

680	General
681	Safety
682	Fire Equipment
683	Security
684	Training
699	Operator Candidate School

ADMINISTRATIVE

800	Adm General
810	Marketing
820	Finance
830	Accounting
840	Purchasing
850	Human Resources
860	Central Service

ESSEX WASTE MANAGEMENT SERVICES, INC.

CERTIFICATE OF DISPOSAL OR RECLAMATION

Essex Waste Management Services, Inc. hereby certifies that all materials described in manifest/ bill of lading # 00001 were destroyed/reclaimed in compliance with all applicable federal, state and municipal laws.

ESSEX WASTE MANAGEMENT SERVICES, INC.

BY LaVaun R. Hickman

Generator:
Powerine Oil Company
12345 Lakeland Road
Santa Fe Springs, CA 90670

DATE 04/30/98

29761

800749

Attachment 4

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
Hazardous Waste Program
P.O. Box 176 Jefferson City, Missouri 65102
573-751-3176

HAZARDOUS WASTE MANIFEST

THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS. INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.

EMERGY RESPONSE	U.S. COAST GUARD 1-800-424-8802	CHEM TREC 1-800-424-9300	DEPT. OF NATURAL RESOURCES 573-634-2436

Form Approved OMB No 2050-0039, Expires 9-30-99

Print or type (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAD008383291 — Manifest Document No.: 00001
2. Page 1 of 1 — Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address:
POWERINE OIL COMPANY
12345 Lakeland Road
Santa Fe Springs, CA 90670

4. Generator's Phone (562) 944-6111

A. Missouri Manifest Document Number: 034135 [redacted] 0001
B. G.S.I. (Gen. Site Address):

5. Transporter 1 Company Name: Hazardous Waste Transportation Services, INc.
6. US EPA ID Number: CAD981446156
C. MO. Trans. ID:
D. Transporter's Phone: (562) 906-0588

7. Transporter 2 Company Name: Rust & Sons
8. US EPA ID Number: CAD981634116
E. MO Trans. ID: H2026 6T43782
F. Transporter's Phone: (800) 444-6193

9. Designated Facility Name and Site Address:
Essex Waste Management, Inc.
1483 SW 58 Highway
Kingsville, MO 64061
10. US EPA ID Number: MOD980962849
G. State Facility's ID: 004037RR0257
H. Facility's Phone: (816) 732-5561

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. Waste Ethylene Dichloride, 3, UN1184, PGII	001	DM	00055	G	EPA WASTE CODE D001; STATE 211
b. RQ, Waste Corrosive Liquid, n.o.s., (Sulfuric Acid) 8, UN1760, PGIII	003	DF	00165	G	EPA WASTE CODE D002; STATE 491
c. Hazardous Waste Liquid, n.o.s., 9, NA3082, PGIII (K051)	002	DM	00110	G	EPA WASTE CODE K51; STATE 491
NON-RCRA Hazardous Waste Solid (Support Balls) (California Regulated Only)	011	DM	03900	P	EPA WASTE CODE NONE; STATE 352

J. Additional Descriptions for Materials Listed Above	K. HANDLING CODE (FACILITY USE ONLY) INTERIM	FINAL	COMMENTS
a. 9800469: Waste Ethylene Dichloride U077	a. S01	T04	Treatment
b. 9800468: Sulfuric Acid Sludge	b. S01	T04	Neutralization
c. ~~9800467~~: API Sludge 98-00774	c. S01	T03	
d. 9800470: Ceramic Support Balls	d. S01	T03	

15. Special Handling Instructions and Additional Information
USE PROPER SAFETY EQUIPMENT
DOT Emergency Guidebook
a) 129 b) 154 c) 171 d) None

BILL TO: HTS
Emergency Response Contact
(562)944-6111 or (562)906-0588

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 and applicable state 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 available to me that I can afford.

Printed/Typed Name: ROBERT A. WENOM — Signature: [signature] — Month 02 Day 19 Year 98

17. Transporter 1 Acknowledgement of Receipt of Materials — Date
Printed/Typed Name: STEVE BACHMAN — Signature: [signature] — Month 02 Day 19 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials — Date
Printed/Typed Name: BILL HERZOG — Signature: [signature] — Month 03 Day 03 Year 98

19. Discrepancy Indication Space
11.a: EPA Code U077 added per Ron Leahy.
11.c: K051 indluded in DOT Description per Ron Leahy.
11.c: DOT Description should read Hazardous Waste Solid, n.o.s., 9, NA3077, III, (K051) per Ron Heahy.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. — Date
Printed/Typed Name: Ronald J. Scully Jr for Essex — Signature: [signature] — Month 03 Day 06 Year 98

GENERATOR — TRANSPORTER — FACILITY

GENERATOR FINAL COPY - PART 2

THIS COPY MUST BE RETAINED BY THE GENERATOR AFTER ITS RETURN FROM

EPA Form 8700-22 (Rev. 8-91) MDNR-HWG 10 — PREVIOUS EDITIONS ARE OBSOLETE

CONTAINS 50% RECYCLED PAPER WHICH INCLUDES NOT LESS THAN 20% POST CONSUMER WASTE.

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD008383291 Manifest Document No. 98001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Powerine Oil Company
12345 Lakeland Road
Santa Fe Springs CA 90670

4. Generator's Phone (562) 944-6111

5. Transporter 1 Company Name
Hazardous Waste Transportation Services, Inc.

6. US EPA ID Number CAD981446156

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
The Azusa Land Reclamation
1211 Gladstone Street
Azusa CA 91701

10. US EPA ID Number CAD009007626

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. RQ, Waste Asbestos, 9, NA2212, PGIII	014	DM	02400	P
b.				
c.				
d.				

15. Special Handling Instructions and Additional Information
USE PROPER SAFETY EQUIPMENT
DOT Emergency Guidebook
a) 171

BILL TO: HTS
Emergency Response Contact
(562) 944-6111 or (562) 906-0588

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: [illegible] Signature: [illegible] Month 03 Day 05 Year 98

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: STEVE BACHMAN Signature: [illegible] Month 03 Day 05 Year 98

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: Gloria Barrera Signature: Gloria Barrera Month 03 Day 06 Year 98

DO NOT WRITE BELOW THIS LINE.

Yellow: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS. (Generators who submit hazardous waste for transport out-of-state, produce completed copy of this copy and send to DTSC within 30 days.)

GENERATOR

TRANSPORTER

FACILITY

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

97303534

DTSC 8022A (4/97)
EPA 8700—22

MINNESOTA POLLUTION CONTROL AGENCY
HAZARDOUS WASTE DIVISION
520 LAFAYETTE ROAD
ST. PAUL, MINNESOTA 55155
ATTN: HWIMS

Please TYPE (Form designed for use on elite (12-pitch) typewriter) or print LEGIBLY. Instructions on cover page.

OMB No. 2050-0039
EXPIRES 9/30/98

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD008383291 Manifest Document No. 97032

2. Page 1 of

Information in shaded area not required by Federal law. Minnesota rules require Items H. and I.

3. Generator's Name and Mailing Address (Also location of waste generation if different from mailing address.) Powerline Oil Co. 12345 Lakeland Rd., 90670

4. Generator's Phone 562 944-6111 County: Santa Fe Springs, CA.

A. State Manifest Document Number MN 27232

B. State Generator's ID

5. Transporter 1 Company Name Luminaire Recyclers

6. US EPA ID Number MNR000000586

C. State Transporter's ID

D. Transporter's Phone

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 Luminaire Recyclers Inc. - 2161 W. University Ave. #206 St. Paul, MN. 55114

10. U.S EPA ID Number MNR000000586

G. State Facility's ID

H. Facility's Phone 612 649-0079

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	RQ Waste Polychlorinated Biphenyls 9, UN2315, PG III	X	4	DM	2600	P	
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: Response Guide 171

15. Special Handling Instructions and Additional Information: Emergency Responce # 1-800-535-5053

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 and all applicable state laws and 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: June Christman — Signature: June Christman — Date (Month Day Year): 01 19 98

TRANSPORTER — 17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: Mark Eldridge — Signature: Mark Eldridge — Date (Month Day Year): 01 19 98

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name: — Signature: — Date (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: [illegible] — Signature: [illegible] — Date (Month Day Year): [illegible]

In case of spill or emergency, immediately call the Minnesota Duty Officer (the Minnesota Pollution Control Agency) at 800/422-0798 or 612/649-5451 and the National Response Center at 800/424-8802. Outside Minnesota, call the National Response Center and appropriate state agency.

Minnesota Form PQ-00371-04 (9/90) (Previous editions obsolete)

Copy 3: Facility mails to Generator

This Shipping Order Must be legibly filled in, in ink, in indelible Pencil, or in Carbon and retained by the Agent.

Shipper's #

Carrier Agent's No.

RECEIVE, subject to the classifications and tariffs in effect on the date of the issue of this Shipping Order,

at SANTA FE SPRINGS 19 from POWERINE

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown) marked, consigned and destined as shown below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own railroad, water line, highway route or routes, or within the territory of its highway operations, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

(Mail or street address of consignee—For purposes of notification only.)

Consigned to HTS 11910 GRFFENSTONE (INTERSTATE BATTERY)

Destination SANTA FE SPRINGS State of _____ Zip Code _____ County of _____

Routing _____ Delivering Carrier _____ Vehicle or Car Initial _____ No. _____

Collect On Delivery

$ _____ and remit to: _____

_____ Street _____ City _____ State

No. Packages	HM	Description of Articles, Special Marks, and Exceptions	*Weight (Sub. to Cor.)	Class or Rate	Check Column
7	X	BATTERIES, WET, ACID 8, UN2794 III	300	P	

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____

C. O. D. charge to be paid by { Shipper ☐ Consignee ☐

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statements:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor.)

If charges are to be prepaid, write or stamp here, "TO BE PREPAID."

Received $ _____ to apply to prepayment of the charges on the property described hereon.

Agent or Cashier

Per _____

(the signature here acknowledges only the amount Prepaid.)

Charges Advanced:

$ _____

Shipper, Per _____

Permanent post-office address of shipper, 12345 LAKELAND ROAD, SANTA FE SPRINGS

☛ Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

2

(This Bill of Lading is to be signed by the shipper and agent of the carrier issuing same.)

POWERINE Oil Company

12354 Lakeland Road, P.O. Box 2108
Santa Fe Springs, California 90670-3857

(310) 944-9861
(310) 944-6111

TLX No: 4720404
A/B Powerne
Telecopy No: 944-8522

December 17, 1992

Mr. Guillermo Hernandez
California Environmental Protection Agency
Department of Toxic Substance Control
Hazardous Materials Specialists
1405 N. San Fernando Blvd., Suite 300
Burbank, California 91504

Re: Jet Clay Characterization

Dear Mr. Hernandez:

This letter is to correct our characterization of Jet Clay to nonhazardous from RCRA hazardous based on a flash point that is less than 140° F as described in our letter of November 6, 1992.

After consultation with DTSC staff in Burbank, Sacramento and Berkeley as well as independent attorneys, we believe that our characterization of the jet clay was overly conservative and inappropriate. On November 30, 1992, Ted Metrose of my staff spoke with Mr. Bart Simmons of the Health Services Hazardous Materials Management Lab in Berkeley, California. Mr. Simmons informed us that EPA Method 1010, the Pensky-Martens Closed-Cup Method for determining ignitibility, is inappropriate for solid waste. At this time DTSC could neither suggest nor recommend an alternative. Further, Mr. Simmons stated that he has already contacted the EPA seeking guidance on this issue, and the EPA has provided no response, nor are they expected to in the near future.

Since there is no appropriate test method jet clay does not exhibit the ignitibility characterization. According to the rest of our lab data, the jet clay is more appropriately characterized as non-hazardous.

This correction in and of itself will not alter how we handle the material in the future. The principle reason Powerine is making this clarification is to promote consistency between Powerine, the generator, and receiving facilities such as the cement kilns (California Portland and Mitsubishi Cement) and Landfills (Laidlaw and US Ecology) that would currently characterize our jet clay as non-hazardous.

POWERINE Oil Company

Should you have any questions, please contact Ted Metrose of my staff at extension 373.

Sincerely,

June M. Christman
Manager - Environmental Engineering

TKM:aj/jt-cly.doc

cc: Jay Grady (California Portland Cement)
Vince Bartleman (US Ecology)
Ted Metrose
Judi Gardner

METHOD 1010

PENSKY-MARTENS CLOSED-CUP METHOD FOR DETERMINING IGNITABILITY

1.0 SCOPE AND APPLICATION

1.1 Method 1010 uses the Pensky-Martens closed-cup tester to determine the flash point of liquids including those that tend to form a surface film under test conditions. Liquids containing non-filterable, suspended solids shall also be tested using this method.

2.0 SUMMARY OF METHOD

2.1 The sample is heated at a slow, constant rate with continual stirring. A small flame is directed into the cup at regular intervals with simultaneous interruption of stirring. The flash point is the lowest temperature at which application of the test flame ignites the vapor above the sample.

For further information on how to conduct a test by this method, see Reference 1 below.

3.0 METHOD PERFORMANCE

3.1 The Pensky-Martens and Setaflash Closed Testers were evaluated using five industrial waste mixtures and p-xylene. The results of this study are shown below in °F along with other data.

Sample	Pensky-Martens	Setaflash
1[2]	143.7 ± 1.5	139.3 ± 2.1
2[2]	144.7 ± 4.5	129.7 ± 0.6
3[2]	93.7 ± 1.5	97.7 ± 1.2
4[2]	198.0 ± 4.0	185.3 ± 0.6
5[2]	119.3 ± 3.1	122.7 ± 2.5
p-xylene[2]	81.3 ± 1.1	79.3 ± 0.6
p-xylene[3]	77.7 ± 0.5[a]	--
Tanker oil	125, 135	--
Tanker oil	180, 180	--
Tanker oil	110, 110	--
DIBK/xylene	102 ± 4[b]	107

[b]75/25 v/v analyzed by four laboratories.
[a]12 determinations over five-day period.

4.0 REFERENCES

1. D 93-80, Test Methods for Flash Point by Pensky-Martens Closed Tester, American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103, 04.09, 1986.

2. Umana, M., Gutknecht, W., Salmons, C., et al., Evaluation of Ignitability Methods (Liquids), EPA/600/S4-85/053, 1985.

3. Gaskill, A., Compilation and Evaluation of RCRA Method Performance Data, Work Assignment No. 2, EPA Contract No. 68-01-7075, September 1986.

METHOD 1020

SETAFLASH CLOSED-CUP METHOD FOR DETERMINING IGNITABILITY

1.0 SCOPE AND APPLICATION

1.1 Method 1020 makes use of the Setaflash Closed Tester to determine the flash point of liquids that have flash points between 0° and 110°C (32° and 230°F) and viscosities lower than 150 stokes at 25°C (77°F).

1.2 The procedure may be used to determine whether a material will or will not flash at a specified temperature or to determine the finite temperature at which a material will flash.

1.3 Liquids that tend to form surface films under the test conditions or those that contain non-filterable suspended solids shall be tested for ignitability using Method 1010 (Pensky-Martens Closed-Cup).

2.0 SUMMARY OF METHOD

2.1 By means of a syringe, 2-mL of sample is introduced through a leak-proof entry port into the tightly closed Setaflash Tester or directly into the cup which has been brought to within 3°C (5°F) below the expected flash point.

2.2 As a flash/no-flash test, the expected flash-point temperature may be a specification (e.g., 60°C). For specification testing, the temperature of the apparatus is raised to the precise temperature of the specification flash point by slight adjustment of the temperature dial. After 1 min, a test flame is applied inside the cup and note is taken as to whether the test sample flashes or not. If a repeat test is necessary, a fresh sample should be used.

2.3 For a finite flash measurement, the temperature is sequentially increased through the anticipated range, the test flame being applied at 5°C (9°F) intervals until a flash is observed. A repeat determination is then made using a fresh sample, starting the test at the temperature of the last interval before the flash point of the material and making tests at increasing 0.5°C (1°F) intervals.

For further information on how to conduct a test with this method, see Reference 1 below.

3.0 METHOD PERFORMANCE

See Method 1010.

Revision 0
Date September 1986

4.0 REFERENCES

1. D 3828-81, Test Method for Flash Point by Setaflash Closed Tester, American Society for Testing and Materials, 1613 Race Street, Philadelphia, PA 19103, 05.03, 1986.

2. Umana, M., Gutknecht, W., Salmons, C., et al., Evaluation of Ignitability Methods (Liquids), EPA/600/S4-85/053, 1985.

3. Gaskill, A., Compilation and Evaluation of RCRA Method Performance Data, Work Assignment No. 2, EPA Contract No. 68-01-7075, September 1986.

METHOD 1030

IGNITABILITY OF SOLIDS

1.0 SCOPE AND APPLICATION

1.1 This method is suitable for the determination of the ignitability of solids and is appropriate for pastes, granular materials, solids that can be cut into strips, and powdery substances. This method may be used to meet certain regulatory applications; with respect to the characteristic of ignitability in CFR § 261.21, this method may be used, but is not required, to determine whether a solid waste "when ignited, burns so vigorously and persistently that it creates a hazard." If it is impractical to perform the test because of the physical form of the sample, generator knowledge should be used to determine the ignitability hazard posed by the material.

2.0 SUMMARY OF METHOD

2.1 In a preliminary test, the test material is formed into an unbroken strip or powder train 250 mm in length. An ignition source is applied to one end of the test material to determine whether combustion will propagate along 200 mm of the strip within a specified time period. Materials that propagate burning along a 200 mm strip within the specified time period are then subjected to a burning rate test. Materials that do not ignite or propagate combustion as described above do not require further testing. In the burning rate test, the burning time is measured over a distance of 100 mm and the rate of burning is determined. The test method described here is based on the test procedure adopted by the Department of Transportation from the United Nations regulations for the international transportation of dangerous goods and is contained in Appendix E to Part 173 of 49 CFR.

3.0 INTERFERENCES

3.1 In laboratory tests the burning rate of duplicate runs is usually repeatable to within 10%. However, large differences in burning rates may occur if experimental conditions are not held constant. Variation in airflow rates, particle size, and moisture content of the test material will affect test results. Therefore, at least triplicate determinations of the burning rate should be conducted.

3.2 Particle size of test material can affect not only the burning rate, but also the ignition of the material. Therefore, the particle size of the test material should be the same for each test run. The particle size of the test material should be reported in a simple descriptive format (e.g., fine powder, sand, coarse granular).

3.3 Temperature of some test material such as sulfur powder affects the burning rate. For reproducible results, all tests should be performed at approximately the same initial temperature (ambient room or laboratory temperature).

3.4 All tests must be carried out inside a fume hood with the test apparatus situated perpendicular (90°) to the direction of airflow. Airflow parallel (0°) to the test apparatus results in non-reproducible burning rates.

3.5 The rate of airflow through the fume hood affects the burning rate. Too high an airflow distorts the flame and retards its horizontal propagation. The optimum airflow appears to be in the range of 0.7-1 meter per second.

3.6 Materials that are moisture sensitive (i.e., readily absorb moisture from air) should be tested as quickly as possible after removal from the sample container. All materials should be tested as received by the laboratory.

4.0 APPARATUS AND MATERIALS

4.1 Low-heat conducting, non-combustible, impervious ceramic tile or equivalent material, of approximate dimension of 25 cm x 25 cm x 2.5 cm (the tile must be at least 25 cm in length to support a 250 mm test sample).

4.2 High temperature marker or equivalent marking device for marking ceramic plates.

4.3 Powder Train Mold (see Figure 1) for molding powdered and granular materials for the burn rate test. The material of construction can be aluminum, brass, stainless steel, or plastic. The mold is 250 mm in length and has a triangular cross-section, with a width of 20 mm, and a depth of 10 mm as measured from the bottom of the triangular opening to where the sides meet. On both sides of the mold, in the longitudinal direction, two sheets are mounted as lateral limitations which extend 2 mm beyond the upper edge of the triangular cross-section. This device can be fabricated by most machine shops. The complete burn rate apparatus is available from: Associated Design and Manufacturing Co.; 814 N. Henry Street; Alexandria, Virginia 22314.

4.4 A Bunsen (propane gas and air) burner with a minimum diameter of 5 mm capable of attaining a temperature of at least 1,000°C.

4.5 Stop watch.

4.6 Thermocouple to measure the temperature of the gas flame.

4.7 Thermometer to measure initial temperature of material (i.e., room temperature).

4.8 Anemometer to measure airflow in the fume hood.

5.0 REAGENTS

5.1 No special reagents are required to conduct this test.

6.0 SAMPLE COLLECTION, PRESERVATION, AND HANDLING

6.1 All samples are tested on as-received basis unless requested otherwise. No sample preservation is required, but sample containers should be completely filled and tightly sealed to preserve sample integrity.

6.2 Samples should be tested as soon as possible after removal from the sample container (i.e., samples should not be allowed to dry or absorb moisture for excessive periods or to

lose volatiles). Samples that are chilled or cooled upon receipt to the laboratory should be allowed to equilibrate to the ambient laboratory temperature in the sample container.

7.0 PROCEDURE

SAFETY: Prior to starting the preliminary test, all sample materials must be tested to determine if that material is explosive or extremely flammable. Use a very small portion of material (1 gram or less). If the sample displays explosivity or extreme flammability, do not conduct this test.

7.1 Preliminary Screening Test

7.1.1 The preliminary ignitability test is conducted on all waste materials. On a clean, impervious ceramic tile (Section 4.1), clearly mark a 250 mm long test path. Make another mark at exactly 200 mm from the start of the sample path.

7.1.2 Prepare the test material in its "as received" form by forming an unbroken strip or powder train of sample 250 mm long by 20 mm wide by 10 mm high on the ceramic tile. Use the mold to form the material as in 7.2.3 if appropriate.

7.1.3 Place the ceramic tile with the loaded sample in a fume hood about 20 cm (~8 inches) from the front of the hood and in an area of laminar airflow. Position the sample perpendicular to the airflow. (See Figure 2) The airflow across the perpendicular axis of the sample should sufficient to prevent fumes from escaping into the laboratory and should not be varied during the test. The air velocity should be approximately 0.7 meters/second. Measure the air velocity by an anemometer.

7.1.4 Light the Bunsen burner and adjust the height of the flame (6.5 to 7.5 cm) by adjusting the propane gas and air flows. Measure the temperature of the flame (tip of the flame) by a thermocouple. The temperature of the flame must be at least 1000°C.

7.1.5 Apply the tip of the flame to one end of the sample strip . The test period will depend on the sample matrix as follows:

7.1.6 If the waste is non-metallic, hold the flame tip on the sample strip until the sample ignites or for a maximum of 2 minutes. If combustion occurs, begin timing with a stop watch and note whether the combustion propagates up to the 200 mm mark within the 2 minute test period.

7.1.7 If the waste is a metal or metal-alloy powder, hold the flame tip on the sample strip until the sample ignites or for a maximum of 5 minutes. If combustion occurs, begin timing with a stop watch and note whether the combustion propagates up to the 200 mm mark within the 20 minute test period.

7.1.8 If the waste does not ignite and propagate combustion either by burning with open flame or by smoldering along 200 mm of sample strip within the 2 minute test period (or 20 minute test period for metal powders), the waste is not considered flammable and no further testing is required. If the waste propagates burning of 200 mm of the test strip within

the 2 minute test period (20 minute test period for metals), the material must be evaluated by the burning rate test (Section 7.2).

7.2 Burning Rate Test

7.2.1 The preparation of the test sample for the burning rate test will depend on the physical characteristics of the waste. Wastes that exist in a powdered or granular state are molded in a powder train mold shown in Figure 1. Pasty materials are formed into a rope 250 mm in length with a cross-section of 1 cm^2. All tests for the burn rate test are performed on clean, ambient temperature, ceramic plates.

7.2.2 On a clean, impervious ceramic tile (Section 4.1), clearly mark a 250 mm long test path. Make two additional timing marks at 80 mm and 180 mm from the start of the sample path. The distance between the two marks (100 mm) will be used to calculate the rate of burn in Section 7.2.9.

7.2.3 Tighten the side plates on the mold. For powdered or granular materials: Place the mold on the base plate. Pour the material to fill the triangular cross section of the mold loosely.

7.2.4 Drop the unit from a height of 2 cm onto a solid surface three times to settle the powder. Remove the side supports. Lift the mold off the base plate. Place a clean ceramic test plate with the appropriate timing marks (Section 7.2.2) face down on top of the mold. Invert the setup and remove the mold.

7.2.5 Pasty wastes are prepared by spreading the waste on a marked ceramic tile (Section 7.2.2) in the form of a rope 250 mm in length with a cross-section of 1 cm^2.

7.2.6 Place the ceramic tile with the loaded sample prepared in Sections 7.2.3 or 7.2.5 in a fume hood about 20 cm (~8 inches) from the front of the hood and in an area of laminar airflow. Position the sample perpendicular to the airflow. (See Figure 2) The airflow across the perpendicular axis of the sample should sufficient to prevent fumes from escaping into the laboratory and should not be varied during the test. The air velocity should be approximately 0.7 meters/second. Measure the air velocity with an anemometer.

7.2.7 Light the Bunsen burner and adjust the height of the flame (6.5 to 7.5 cm) by adjusting the propane gas and air flows. Measure the temperature of the flame (tip of the flame) by a thermocouple. The temperature of the flame must be at least 1000°C.

7.2.8 Apply the tip of the flame to one end of the sample strip to ignite the test strip as described in Section 7.1.6 and 7.1.7.

7.2.9 When the test strip or powder train has burned up to the 80 mm time marker, begin timing the rate of combustion with a stop watch. Stop the timer when the burned strip reaches the 180 mm time marker. Record the amount of time (in seconds) required to burn the 100 mm test strip. Calculate the rate of burning by dividing the length of the burn test strip (100 mm) by the total time (seconds). Results of the burn rate test should be reported in mm/sec. Wastes that have a rate of burning of more than 2.2 mm/sec (or burn time of less than 45 seconds for 100 mm) are considered to have a positive result for ignitability

according to DOT regulations. For metals, this time is 10 minutes or less for 100 mm (or a burn rate of more than 0.17 mm/sec).

7.2.10 Report and Calculation Section

Test Material Information

Source of Material: e.g., Company, operation or process
Description of material: e.g., powder or paste, metallic or non-metallic
Particle size: e.g., fine powder, granular, sand, etc.
Preliminary Burning Time: ____ seconds.

Test Conditions

Date of Test:
Temperature of test material (°C):
Air velocity through fume hood (m/s):

Ignitability Test Data				
Test Number	Time (sec) elapsed between application of flame and start of ignition	Burning time over 100 mm (sec)	Burning Rate (mm/sec)	Comments
1				
2				
3				

8.0 QUALITY CONTROL

8.1 All tests must be performed on a clean ceramic plate at room temperature. All samples must have been collected using a sampling plan that addresses the considerations discussed in Chapter Nine of this manual.

8.2 All replicate runs must be at the same initial temperature (ambient laboratory temperature).

8.3 All replicate tests must be run at approximately the same airflow through the fume hood.

8.4 Only materials of the same particle size distribution should be used for all replicate tests.

8.5 The burn rate test must be conducted in triplicate if the preliminary screening test is positive. Any burn rate for non-metallic samples that exceeds 2.2 mm/sec (or a burn time of less than 45 seconds for 100 mm) is considered to have a positive result. For metals, a burn rate of more than 0.17 mm/sec (or burn time of less than 10 minutes for 100 mm) is considered to have a positive result.

9.0 METHOD PERFORMANCE

9.1 An independent laboratory validation was conducted on the robustness of the burn rate test procedure. The materials selected for this evaluation included:

1. A 50/50 mixture of metallic silicon and lead dioxide (PbO_2)
2. Excelsior
3. Dextrin (yellow powder)
4. Sulfur (fine yellow powder)
5. Aluminum metal (coarse)
6. Magnesium metal (coarse)
7. Polyethylene high density (granular)
8. Polyethylene low density (fluffy white powder)
9. Scott fertilizer (32-3-10:N-P-K)
10. JP-4 contaminated soil (approximately 5000 ppm)

Of these materials, the 50/50 mixture of metallic silicon and lead dioxide (PbO_2), elemental sulfur, and excelsior were considered to give a positive ignitability result under the conditions of the test. The remaining materials gave negative (nonflammable) results under the conditions of the test. Several test variables including ignition source, ambient temperature, and apparatus orientation, were studied using these materials. Partial results of this study are summarized in Table 1.

9.2 In another evaluation of the DOT burn rate test, potentially ignitable finishing wastes from the furniture industry were collected and tested for burning rates. Each waste was tested in triplicate to establish a mean value for the burning rate. The results for the flammable wastes are summarized in Table 2.

9.3 In order to evaluate the ruggedness of the DOT burn rate test, select ignitable finishing wastes were split and tested by a state laboratory and an independent contract laboratory. The results of this comparison are summarized in Table 3.

10.0 REFERENCES

1. "Test Methods for Readily Combustible Solids. Burning Rate Test." (14.2.2.5). Recommendations on the Transport of Dangerous Goods. Fifth Revised Edition. United Nations, New York. 1988.

2. DOT Regulation. Appendix E to Part 173 of 49 CFR, Chapter 1 (12-31-91 Edition). pp. 597-598.

3. Flammability (solids). Method A.10. Official Journal of the European Communities. 9/19/84. No. L251/63.

4. "Validation of Ignitability Method For Solids" Foster Wheeler Enviresponse, Inc., Edison NJ., Submitted to the Office of Solid Waste, US EPA, February 1994.

5. Internal Report, (AMFA Report) North Carolina Department of Environmental Health and Natural Resources. (Bill Hamner)

TABLE 1
TEST VARIABLES FOR IGNITABILITY

Material Tested	Test Number	Variable combination[1]	Burn Time over 100 mm (sec)	Burn Rate (mm/sec)
50% Metallic Silicon and 50% Lead IV Oxide	1	ABC	0.84	119
	2	Abc	0.50	200
	3	aBc	0.69	145
	4	abC	0.65	154
Excelsior (wood shavings)	1	ABC	13.45	7.43
	2	Abc	9.14	10.9
	3	aBc	13.37	7.47
	4	abC	13.59	7.36

[1]where:

A-flame ignition
a-hot wire ignition source
B-ambient temperature of 20°C
b-ambient temperature of 100°C
C-orientation of test apparatus of 90° to air flow
c-orientation of test apparatus of 0° to air flow

TABLE 2
BURNING RATES FOR IGNITABLE WASTES

Sample No.	Description of Waste	Burn Time over 100 mm (sec)	Burn Rate (mm/sec)
A2	Segregated Lacquer Dust	4.7	21.3
J2	Segregated Lacquer Dust	4.6	21.7
U	Segregated Lacquer Dust	8.6	11.6
K	Consolidated Lacquer Dust	6.0	16.7
H	Catalyzed Lacquer Dust	6.7	14.9
F	Water Based Lacquer Dust	19.4	5.15
P	Booth Coat-Stain Overspray	12.5	8.0
O	Pallet Covered Cardboard	11.1	9.0
Q	Pallet Covered Cardboard	12.3	8.13

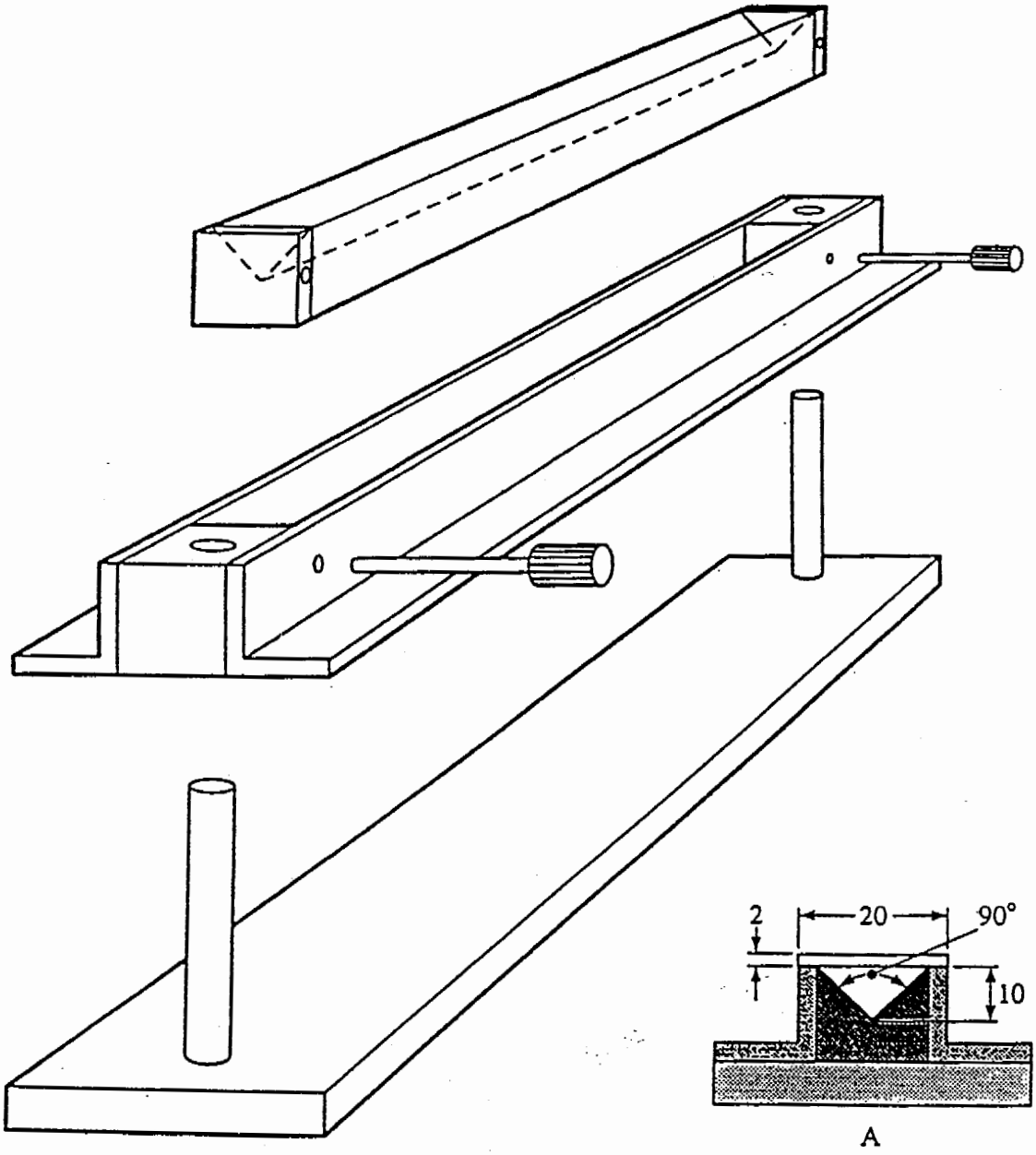
TABLE 3
COMPARISON OF BURN RATES

Sample No.	Description of Waste	Mean Burn Time Over 100 mm in Seconds	
		State Laboratory	Contract Laboratory
A1	Segregated Lacquer Dust	4.7	5
J1	Segregated Lacquer Dust	4.6	4.3
12	Booth Coat-Glaze Overspray	0[1]	0[1]

[1] Waste was found to be nonflammable under conditions of the test.

Figure 1

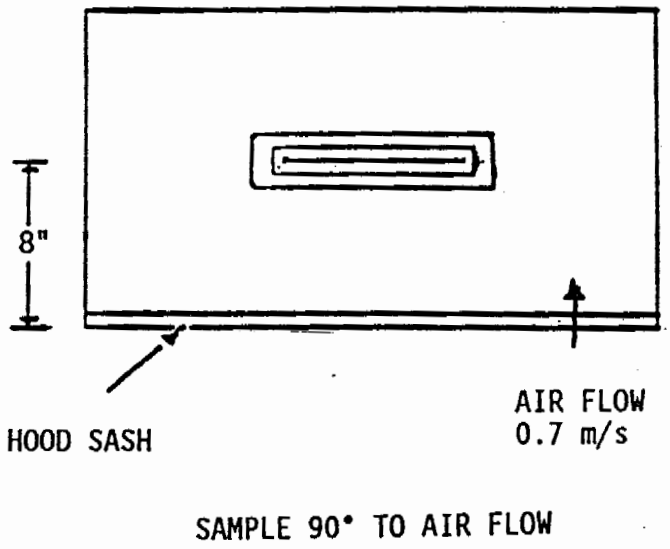
Powder Train Mold



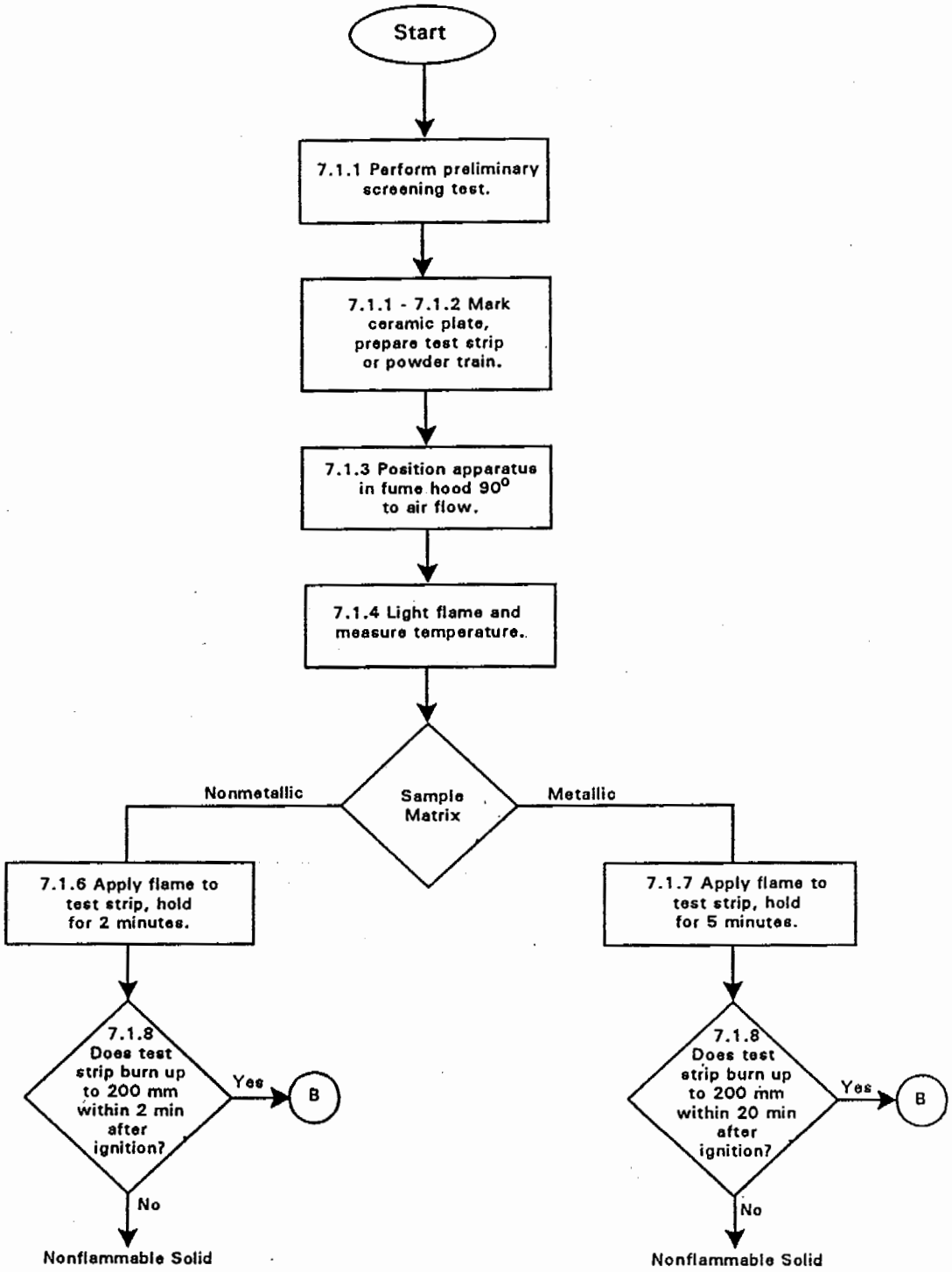
(A) Cross-section of 250 mm long mould

Figure 2

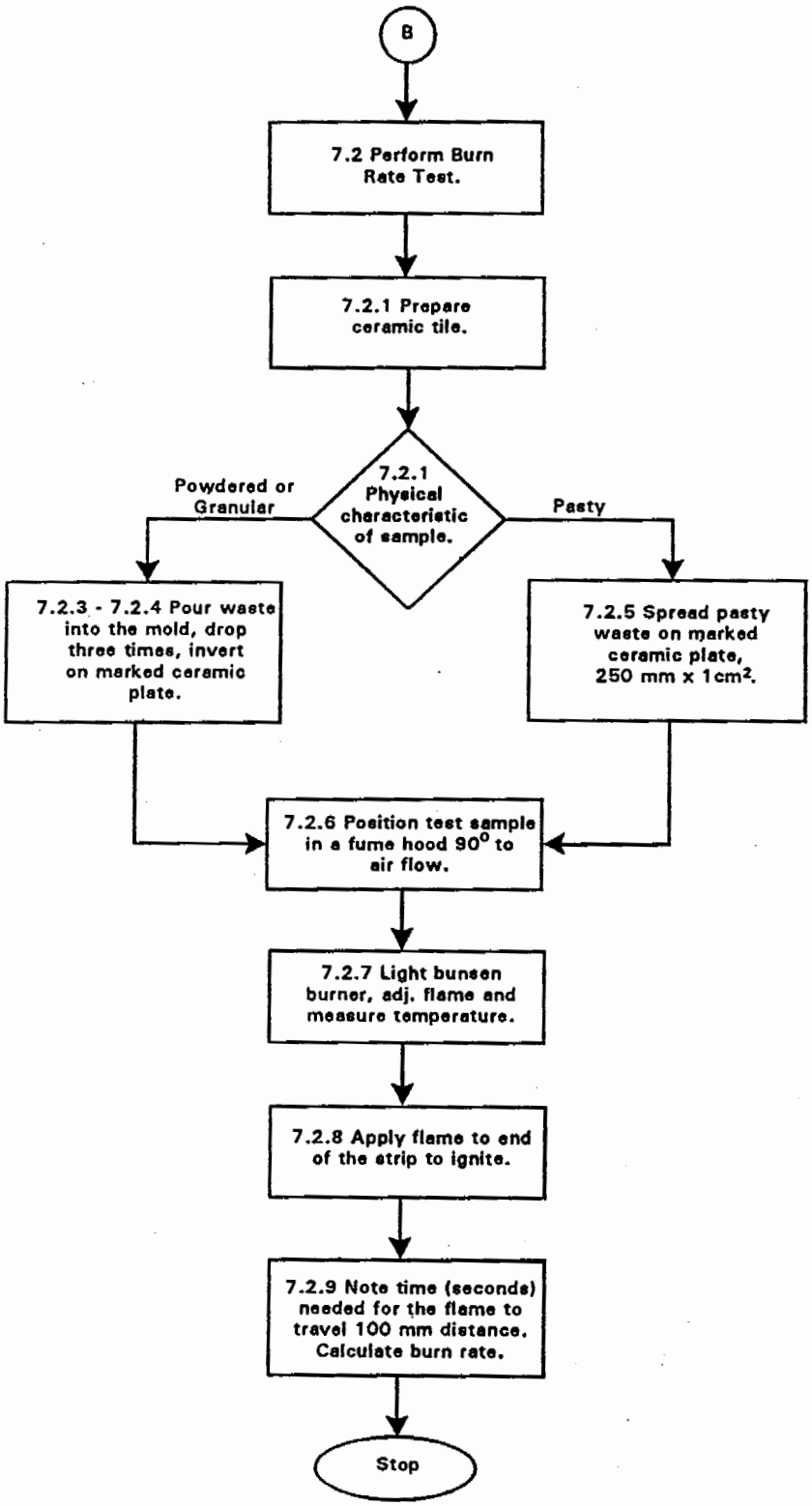
Test Apparatus Position in Fume Hood



METHOD 1030
IGNITABILITY OF SOLIDS



METHOD 1030
IGNITABILITY OF SOLIDS



CORE LABORATORIES

CORE LABORATORIES
A N A L Y T I C A L R E P O R T

Job Number: 980849
Prepared For:

** Powerine Oil Company **
Ray Huie
12354 E. Lakeland Road
Santa Fe Springs, CA 90670

Date: 05/27/98

Signature

Date: 5/27/98

Name: Tim A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: LABORATORY MANAGER

C A. E. L. A. P. 1174
L. A. C. S. D. 10146

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

CORE LABORATORIES

LABORATORY TESTS RESULTS
05/27/98

JOB NUMBER: 980849 CUSTOMER: ** Powerine Oil Company ** ATTN: Ray Huie

CLIENT I.D.....: DBC-1-27-98
DATE SAMPLED.....: 01/27/98
TIME SAMPLED.....: 00:00
WORK DESCRIPTION...: POC-6-128A

LABORATORY I.D...: 980849-0001
DATE RECEIVED....: 05/07/98
TIME RECEIVED....: 11:45
REMARKS.....: soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	05/22/98	G D
Metals Digestion - Solids	COMPLETED	-----	N/A	EPA 3050A	05/08/98	G D
Metals		*50		EPA 6010A	05/12/98	EAW
Lead (Pb)	140	2.50	mg/kg	EPA 6010A		
STLC Metals		*1		EPA 6010	05/22/98	EAW
Lead (Pb)	3.2	0.050	mg/L	EPA 6010		
Metals Extraction	COMPLETED	-----	N/A	Cal. DHS Method	05/20/98	G D
Extraction for Organic Metals	COMPLETED	-----	N/A	Cal. LUFT Manual	05/15/98	G D
Organic Lead	<1.0	1.0	mg/kg	Cal. DHS Method	05/15/98	EAW

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpreta tions expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of

CORE LABORATORIES

QUALITY CONTROL REPORT
05/27/98

JOB NUMBER: 980849 CUSTOMER: ** Powerine Oil Company ** ATTN: Ray Huie

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Organic Lead REPORTING LIMIT/DF: 1.0 UNITS:mg/L				DATE/TIME ANALYZED:05/15/98 00:00 METHOD REFERENCE :Cal. DHS Method						QC BATCH NUMBER:967874 TECHNICIAN:EAW
BLANK	ICB	IB051598	<1.0							
BLANK	CCB	CB051598	<1.0							
STANDARD	ICVS	M80211	4.67			5.0	93			
STANDARD	CCVS	M80211	10.23			10.0	102			
STANDARD	CCVS	M80211	18.93			20.0	95			
SPIKE	BLANK	051598-0	10.23					0	10.0	102
DUPLICATE	BS/BSD	051598-0	10.23	9.98	2					

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

CORE LABORATORIES

QUALITY ASSURANCE REPORT

Metals by ICP
EPA Method 6010A
ICP DATA in ug/L

DATE ANALYZED: 5/12/98

REFERENCE ID: M60293/94

	BLANKS			REFERENCE/CONTINUING CALIBRATION STANDARD		
	CALIBRATION	CONTINUATION	DETECTION LIMIT	TRUE VALUE	ANALYZED VALUE	% REC
Antimony	ND	ND	50	5000	4923	98
Arsenic	ND	ND	50	5000	4936	99
Barium	ND	ND	50	5000	4920	98
Beryllium	ND	ND	50	5000	5010	100
Cadmium	ND	ND	50	5000	5021	100
Chromium	ND	ND	50	5000	4996	100
Cobalt	ND	ND	50	5000	5003	100
Copper	ND	ND	50	5000	4953	99
Lead	ND	ND	50	5000	5009	100
Molybdenum	ND	ND	50	5000	4918	98
Nickel	ND	ND	50	5000	5037	101
Silver	ND	ND	50	5000	4940	99
Thallium	ND	ND	50	5000	4902	98
Vanadium	ND	ND	50	5000	4975	100
Zinc	ND	ND	50	5000	5020	100

DATE ANALYZED: 5/12/98 SPIKES SAMPLE ID: 980824-1

ANALYTE	SPIKE ADDED	ORIGINAL VALUE	MS CONC	MS % REC	MSD CONC	MSD % REC	RPD
Antimony(c)	5000	213	1621	28	1396	24	15
Arsenic	5000	604	4375	75	4171	71	5
Barium	5000	637	4317	74	4429	76	3
Beryllium	5000	ND	4101	82	4066	81	1
Cadmium	5000	ND	3725	75	3705	74	1
Chromium	5000	291	3996	74	4038	75	1
Cobalt(c)	5000	284	3963	74	3951	73	0
Copper	5000	967	4769	76	4858	78	2
Lead(c)	5000	297	3902	72	3890	72	0
Molybdenum	5000	ND	3519	70	3926	79	11
Nickel(c)	5000	262	3947	74	3926	73	1
Silver(c)	5000	110	1997	38	2107	40	5
Thallium	5000	193	3793	72	4139	79	9
Vanadium	5000	1440	5178	75	5325	78	3
Zinc(c)	5000	753	4450	74	4462	74	0

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

CORE LABORATORIES

QUALITY ASSURANCE REPORT

Metals by ICP
EPA Method 6010A
ICP DATA in ug/L

DATE ANALYZED: 5/22/98

REFERENCE ID: M70222/23

	BLANKS			REFERENCE/CONTINUING CALIBRATION STANDARD		
	CALIBRATION	CONTINUATION	DETECTION LIMIT	TRUE VALUE	ANALYZED VALUE	% REC
Antimony	ND	ND	50	5000	4887	98
Arsenic	ND	ND	50	5000	4758	95
Barium	ND	ND	50	5000	4829	97
Beryllium	ND	ND	50	5000	4793	96
Cadmium	ND	ND	50	5000	4965	99
Chromium	ND	ND	50	5000	4869	97
Cobalt	ND	ND	50	5000	4845	97
Copper	ND	ND	50	5000	4863	97
Lead	ND	ND	50	5000	4937	99
Molybdenum	ND	ND	50	5000	4758	95
Nickel	ND	ND	50	5000	4876	98
Silver	ND	ND	50	5000	4470	89
Thallium	ND	ND	50	5000	4571	91
Vanadium	ND	ND	50	5000	4842	97
Zinc	ND	ND	50	5000	4936	99

DATE ANALYZED: 5/22/98 SPIKES SAMPLE ID: 52298

ANALYTE	SPIKE ADDED	ORIGINAL VALUE	BS CONC	BS % REC	BSD CONC	BSD % REC	RPD
Antimony	1000	ND	802	80	869	87	8
Arsenic	1000	ND	1139	114	968	97	16
Barium	1000	ND	924	92	928	93	0
Beryllium	1000	ND	926	93	960	96	4
Cadmium	1000	ND	828	83	861	86	4
Chromium	1000	ND	891	89	922	92	3
Cobalt	1000	ND	854	85	883	88	3
Copper	1000	ND	914	91	938	94	3
Lead	1000	ND	880	88	852	85	3
Molybdenum	1000	ND	797	80	825	83	3
Nickel	1000	ND	867	87	886	89	2
Silver	1000	ND	837	84	858	86	2
Thallium	1000	ND	778	78	841	84	8
Vanadium	1000	ND	892	89	919	92	3
Zinc	1000	ND	852	85	861	86	1

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

No. 07930

WESTERN ATLAS

CORE LABORATORIES

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Powerine	PROJECT NAME/NUMBER: DTSC-1-27-98
SEND REPORT TO: Ray Hace	BILLING INFORMATION
ADDRESS: 12345 Lakeland Rd SFS CA 90670	BILL TO: same
	ADDRESS:
PHONE: 562/944-6111	PHONE:
FAX: 562/903-8911	FAX: PO NO.:

LAB JOB NO. 980849

SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ANALYSIS / METHOD REQUEST: Organic Pb	ANALYSIS / METHOD REQUEST: Total Pb	REMARKS / PRECAUTIONS
POC-6-28A	Soil	1/27/98		Soil	glass	none				

SAMPLER:

SHIPMENT METHOD:

AIRBILL NO.:

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☐ 5 DAYS ☐ 10 DAYS ☒ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: [signature]	5/6/98	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Ray Hace / POC	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE: [signature]	5-7-98	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Manny Core Lab	TIME 11:45	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ **Anaheim, California**
1250 E. Gene Autry Way
Anaheim, California 92805
(714) [illegible]4
(800) [illegible]3

☐ **Long Beach, California**
3700 Cherry Avenue
Long Beach, California 90807
(310) 595-8401
(800) 814-3433

☐ **Denver (Aurora), Colorado**
10703 E. Bethany Drive
Aurora, Colorado 80014
(303) 751-1780
(800) 972-2673

☐ **Casper, Wyoming**
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0603

☐ **Houston, Texas**
8210 Mosely Road
Houston, Texas 77075
(713) 943-9776
(800) 734-2673

☐ **Corpus Christi, Texas**
1733 North Padre Island Drive
Corpus Christi, Texas 78408
(512) 289-2673
(800) 548-8228

☐ **Lake Charles, Louisiana**
3645 Beglis Parkway
Sulphur, Louisiana 70663
(318) 583-4926
(800) 259-4926

ORIGINAL

CORELAB

CORE LABORATORIES

CORE LABORATORIES
A N A L Y T I C A L R E P O R T

Job Number: 980840
Prepared For:

** Powerine Oil Company **
Ray Huie
12354 E. Lakeland Road
Santa Fe Springs, CA 90670

Date: 05/27/98

Signature

Date: 5/27/98

Name: Tim A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: LABORATORY MANAGER

C A. E. L. A. P. 1174
L. A. C. S. D. 10146

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpreta tions expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

CORE LABORATORIES

LABORATORY TESTS RESULTS

05/27/98

JOB NUMBER: 980840 CUSTOMER: ** Powerine Oil Company ** ATTN: Ray Huie

CLIENT I.D.....: DTSC 1-27-98
DATE SAMPLED.....: 01/27/98
TIME SAMPLED.....: 00:00
WORK DESCRIPTION...: POC-7-128A

LABORATORY I.D...: 980840-0001
DATE RECEIVED....: 05/06/98
TIME RECEIVED....: 15:45
REMARKS.....: soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	05/22/98	G D
Metals Digestion - Solids	COMPLETED	-----	N/A	EPA 3050A	05/08/98	G D
Metals		*50		EPA 6010A	05/12/98	EAW
Lead (Pb)	360	2.50	mg/kg	EPA 6010A		
STLC Metals		*1		EPA 6010	05/22/98	EAW
Lead (Pb)	12	0.050	mg/L	EPA 6010		
Metals Extraction	COMPLETED	-----	N/A	Cal. DHS Method	05/20/98	G D
Extraction for Organic Metals	COMPLETED	-----	N/A	Cal. LUFT Manual	05/15/98	G D
Organic Lead	<1.0	1.0	mg/kg	Cal. DHS Method	05/15/98	EAW

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories

CORE LABORATORIES

QUALITY CONTROL REPORT
05/27/98

JOB NUMBER: 980840 CUSTOMER: ** Powerine Oil Company ** ATTN: Ray Huie

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Organic Lead				DATE/TIME ANALYZED:05/15/98 00:00						QC BATCH NUMBER:967874
REPORTING LIMIT/DF: 1.0	UNITS:mg/L			METHOD REFERENCE :Cal. DHS Method						TECHNICIAN:EAW
BLANK	ICB	IB051598	<1.0							
BLANK	CCB	CB051598	<1.0							
STANDARD	ICVS	M80211	4.67			5.0	93			
STANDARD	CCVS	M80211	10.23			10.0	102			
STANDARD	CCVS	M80211	18.93			20.0	95			
SPIKE	BLANK	051598-0	10.23					0	10.0	102
DUPLICATE	BS/BSD	051598-0	10.23	9.98	2					

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

CORE LABORATORIES

QUALITY ASSURANCE REPORT

Metals by ICP
EPA Method 6010A
ICP DATA in ug/L

DATE ANALYZED: 5/12/98

REFERENCE ID: M60293/94

	BLANKS			REFERENCE/CONTINUING CALIBRATION STANDARD		
	CALIBRATION	CONTINUATION	DETECTION LIMIT	TRUE VALUE	ANALYZED VALUE	% REC
Antimony	ND	ND	50	5000	4923	98
Arsenic	ND	ND	50	5000	4936	99
Barium	ND	ND	50	5000	4920	98
Beryllium	ND	ND	50	5000	5010	100
Cadmium	ND	ND	50	5000	5021	100
Chromium	ND	ND	50	5000	4996	100
Cobalt	ND	ND	50	5000	5003	100
Copper	ND	ND	50	5000	4953	99
Lead	ND	ND	50	5000	5009	100
Molybdenum	ND	ND	50	5000	4918	98
Nickel	ND	ND	50	5000	5037	101
Silver	ND	ND	50	5000	4940	99
Thallium	ND	ND	50	5000	4902	98
Vanadium	ND	ND	50	5000	4975	100
Zinc	ND	ND	50	5000	5020	100

DATE ANALYZED: 5/12/98 SPIKES SAMPLE ID: 980824-1

ANALYTE	SPIKE ADDED	ORIGINAL VALUE	MS CONC	MS % REC	MSD CONC	MSD % REC	RPD
Antimony(c)	5000	213	1621	28	1396	24	15
Arsenic	5000	604	4375	75	4171	71	5
Barium	5000	637	4317	74	4429	76	3
Beryllium	5000	ND	4101	82	4066	81	1
Cadmium	5000	ND	3725	75	3705	74	1
Chromium	5000	291	3996	74	4038	75	1
Cobalt(c)	5000	284	3963	74	3951	73	0
Copper	5000	967	4769	76	4858	78	2
Lead(c)	5000	297	3902	72	3890	72	0
Molybdenum	5000	ND	3519	70	3926	79	11
Nickel(c)	5000	262	3947	74	3926	73	1
Silver(c)	5000	110	1997	38	2107	40	5
Thallium	5000	193	3793	72	4139	79	9
Vanadium	5000	1440	5178	75	5325	78	3
Zinc(c)	5000	753	4450	74	4462	74	0

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

CORELAB

CORE LABORATORIES

QUALITY ASSURANCE REPORT

Metals by ICP
EPA Method 6010A
ICP DATA in ug/L

DATE ANALYZED: 5/22/98

REFERENCE ID: M70222/23

	BLANKS			REFERENCE/CONTINUING CALIBRATION STANDARD		
	CALIBRATION	CONTINUATION	DETECTION LIMIT	TRUE VALUE	ANALYZED VALUE	% REC
Antimony	ND	ND	50	5000	4887	98
Arsenic	ND	ND	50	5000	4758	95
Barium	ND	ND	50	5000	4829	97
Beryllium	ND	ND	50	5000	4793	96
Cadmium	ND	ND	50	5000	4965	99
Chromium	ND	ND	50	5000	4869	97
Cobalt	ND	ND	50	5000	4845	97
Copper	ND	ND	50	5000	4863	97
Lead	ND	ND	50	5000	4937	99
Molybdenum	ND	ND	50	5000	4758	95
Nickel	ND	ND	50	5000	4876	98
Silver	ND	ND	50	5000	4470	89
Thallium	ND	ND	50	5000	4571	91
Vanadium	ND	ND	50	5000	4842	97
Zinc	ND	ND	50	5000	4936	99

DATE ANALYZED: 5/22/98 SPIKES SAMPLE ID: 52298

ANALYTE	SPIKE ADDED	ORIGINAL VALUE	BS CONC	BS % REC	BSD CONC	BSD % REC	RPD
Antimony	1000	ND	802	80	869	87	8
Arsenic	1000	ND	1139	114	968	97	16
Barium	1000	ND	924	92	928	93	0
Beryllium	1000	ND	926	93	960	96	4
Cadmium	1000	ND	828	83	861	86	4
Chromium	1000	ND	891	89	922	92	3
Cobalt	1000	ND	854	85	883	88	3
Copper	1000	ND	914	91	938	94	3
Lead	1000	ND	880	88	852	85	3
Molybdenum	1000	ND	797	80	825	83	3
Nickel	1000	ND	867	87	886	89	2
Silver	1000	ND	837	84	858	86	2
Thallium	1000	ND	778	78	841	84	8
Vanadium	1000	ND	892	89	919	92	3
Zinc	1000	ND	852	85	861	86	1

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

CORELAB

CORE LABORATORIES, INC.

NO. 65094

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Powerine	PROJECT NAME/NUMBER: DTSC 1-27-98
SEND REPORT TO: Ray Hure	BILLING INFORMATION
ADDRESS: 12345 Lakeland Rd	BILL TO: Same
SFS CA 90607	ADDRESS:
PHONE: 562/ 944-6111	PHONE:
FAX: 562/ 903-8911	FAX: PO NO.:

LAB JOB NO. 980840

NUMBER OF CONTAINERS

ANALYSIS / METHOD REQUESTED: Organic Pb, Total Pb

SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER	PRESERV.	REMARKS / PRECAUTIONS
POC-7-1258A	SOIL	1/27/98		SOIL	GLASS	NONE	

SAMPLER: SHIPMENT METHOD: AIRBILL NO.:

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☐ 5 DAYS ☐ 10 DAYS ☒ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE:	5/6/98	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Ray Hure / POC	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE:	5/6/98	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Manny Core Lab	TIME 15:45	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☒ Anaheim, CA 1250 E. Gene Autry Way Anaheim, CA 92805 (714) 937-1094 Fax (714) 937-1170

☐ Aurora, CO 10703 E. Bethany Drive Aurora, CO 80014 (303) 751-1780 Fax (303) 751-1784

☐ Casper, WY 420 W. First Street Casper, WY 82601 (307) 235-5741 Fax (307) 266-1676

☐ Corpus Christi, TX 1733 N. Padre Island Drive Corpus Christi, TX 78408 (512) 289-2673 Fax (512) 289-2471

☐ Edison, NJ 284 Raritan Center Parkway Edison, NJ 08837 (908) 225-6700 Fax (908) 225-6777

☐ Houston, TX (Env) 6310 Rothway Drive Houston, TX 77040 (713) 690-4444 Fax (713) 690-5646

☐ Houston, TX (Pe[illegible] 8210 Mosley Ro[illegible] Houston, TX 770[illegible] (713) 943-9776 Fa[illegible] 943-3846

☐ Indianapolis, IN 7726 Moller Road Indianapolis, IN 46268 (317) 875-5894 Fax (317) 872-6189

☐ Lake Charles, LA 3645 Beglis Parkway Sulphur, LA 70663 (318) 583-4926 Fax (318) 583-4929

☐ Long Beach, CA 3700 Cherry Avenue Long Beach, CA 90807 (310) 595-8401 Fax (310) 427-5174

☐ Tampa, FL 5460 Beaumont Center Blvd. Tampa, FL 33634 (813)884-8268 Fax (813) 885-4938

☐ Valparaiso, IN [illegible]0 Cumberland Drive [illegible]raiso, IN 46383 [illegible]84-2389 Fax (219) 462-2953

ORIGINAL

DECLARATION OF KEITH DARNEY

I, KEITH DARNEY, declare as follows:

1. I have held various managerial positions with Powerine from December 1979 to September 1997 working in the pipeline, maintenance and marine terminal departments. I know the facts in this Declaration are true and of my own personal knowledge. If called upon to do so, I could and would testify competently hereto.

2. Since I started working for Powerine in 1979, I know that the tanks in the asphalt area, which includes Tanks 10004, 10006, 10045, 10046, 20091 and 20092 have not been sandblasted nor painted. Any paint that is on the tanks was applied prior to when I joined Powerine.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed on this 29TH day of June, 1998, at Santa Fe Springs, California.

KEITH DARNEY

DECLARATION OF RONALD ROBERTSON

I, RONALD ROBERTSON, declare as follows:

1. I was employed at Powerine Oil Company ("Powerine") from October 27, 1986 to November 13, 1996. I was rehired on April 20, 1998. During my entire employment with Powerine I was involved with the Operations Department. I held the position of Operations Manager when the refinery shut down in 1995. I know the facts in this Declaration are true and of my own personal knowledge. If called upon to do so, I could and would testify competently hereto.

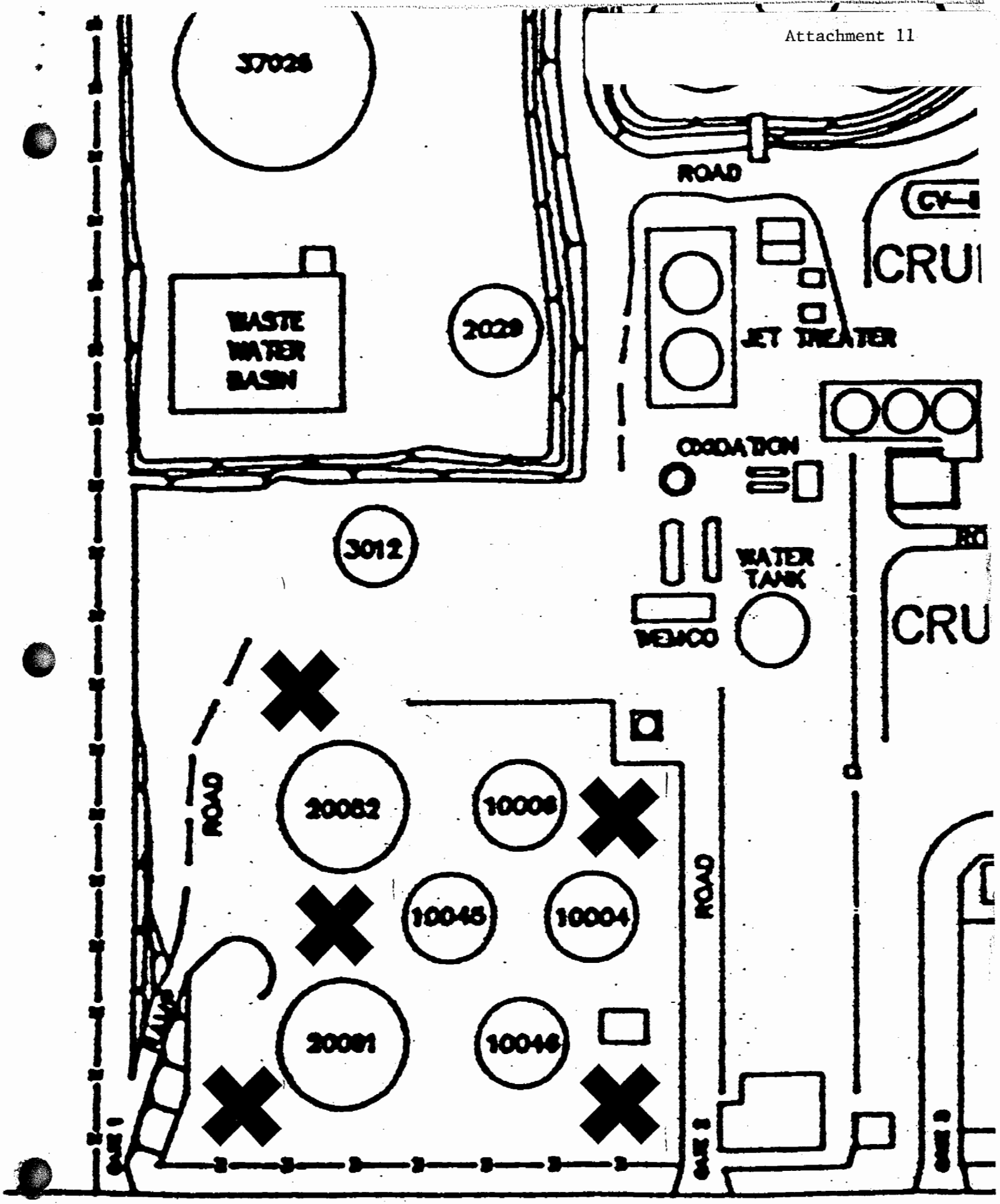
2. Since I started working for Powerine in 1986, I know that the tanks in the asphalt area, which includes Tanks 10004, 10006, 10045, 10046, 20091 and 20092 have not been sandblasted nor painted. Any paint that is on the tanks was applied prior to when I joined Powerine.

3. Due to Powerine's bankruptcy of 1984, and my 1986 hire date corresponding with restart of the refinery, I am confident that these tanks were not painted between 1984 and 1986.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed on this 26 day of June, 1998, at Santa Fe Springs, California.

Ronald Robertson

RONALD ROBERTSON



Proposed sampling locations

JUL 0 2 1998

California Environmental Protection Agency

Air Resources Board • Department of Pesticide Regulation • Department of Toxic Substances Control
Integrated Waste Management Board • Office of Environmental Health Hazard Assessment
State Water Resources Control Board • Regional Water Quality Control Boards

Peter M. Rooney
Secretary for Environmental Protection

Pete Wilson
Governor

MEMORANDUM

TO: Robert P. Hoffman
Chief Counsel
Department of Toxic Substances Control

FROM: Gerald G. Johnston GGJ
Deputy Secretary for Law Enforcement
and Counsel

DATE: May 19, 1998

SUBJECT: RESOURCE CONSERVATION AND RECOVERY ACT NOTICE

Attached please find RCRA notice(s) and/or materials which have been received by the California Environmental Protection Agency. If you have any questions, please call me at 327-2064.

Attachment(s)

555 Capitol Mall • Suite 525 • Sacramento, California 95814 • (916) 445-3846 • Fax: (916) 445-6401

Printed on Recycled Paper

ISOLA ◆ BOWERS, LLP
ATTORNEYS AT LAW

SECOND FLOOR
701 SOUTH HAM LANE
LODI, CALIFORNIA 95242
TELEPHONE (209) 367-7055
FACSIMILE (209) 367-7056

May 1, 1998

VIA REGISTERED MAIL
No. R 785 840 483

TEXACO, INC., AS SUCCESSOR IN
INTEREST TO GETTY OIL COMPANY
Attention: Ms. Christine White
10 Universal City Plaza
Universal City, California 91608-7812

RE: NOTICE OF ENDANGERMENT UNDER §7002(b)(2)(B) OF THE SOLID WASTE DISPOSAL ACT, AS AMENDED BY THE RESOURCE CONSERVATION AND RECOVERY ACT OF 1976, 42 U.S.C. §6972(b)(2)(B).

Dear Ms. White:

This letter constitutes a notice of endangerment under §7002(b)(2)(B) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as further amended by the Hazardous and Solid Waste Amendments of 1984 and further amended by the Asset Conservation, Lender Liability and Deposit Insurance Protection Act of 1996 ("RCRA").

Please be advised that Powerine Oil Company, Inc. ("Powerine") is a corporation organized and existing under the laws of the State of California. Powerine is the owner of real property located at 12345 Lakeland Road, Santa Fe Springs, California and at the northeast corner of Bloomfield Avenue and Lakeland Road, Santa Fe Springs, California ("SFS Properties"). On or about August 23, 1997, the California Regional Water Quality Control Board-Los Angeles Region ("RWQCB") adopted Cleanup and Abatement Order No. 97-118 ("CAO"), requiring *inter alia* that Powerine investigate cleanup, and otherwise abate soil and groundwater contamination allegedly associated with its SFS Properties. Further pursuant to the CAO, Powerine must investigate, cleanup, and otherwise abate soil and groundwater contamination allegedly associated with a historic leasehold interest held by Powerine on a portion of a twenty-two (22) acre parcel of real property located at 11240 Bloomfield Avenue in Santa Fe Springs, California ("Walker Property").

The SFS Properties, and Powerine's use and enjoyment of the SFS Properties have been impacted by Texaco, Inc.'s, as successor in interest to Getty Oil Company ("Texaco"), contributing to and/or

having contributed to the past or present or, potentially, future handling, storage, treatment, transportation or disposal of hazardous waste, as that term is defined in Section 1004(27) of RCRA, 42 U.S.C. §6903(27), including but not limited to: cis-1,2-dichloroethene, Vinyl Chloride, 1,1-dichloroethane, Benzene, Total Petroleum Hydrocarbons as Gasoline (TPH-g), Isopropylbenzene, n-propyl benzene, sec-butyl benzene, PCBs (Aroclor 1248, 1254, and 1260), Lead, Barium, Toluene, Ethylbenzene, Xylenes, Tetrachloroethene (PCE), Trichloroethene (TCE), 2-methyl-naphthalene, Benzo(a)pyrene, Benzo(b)flouranthene, Chrysene, Fluorene, Naphthalene, Phenanthrene, Pyrene, TPH-gasoline, TPH-diesel.

These substances discharged into the environment by Texaco and/or Texaco's lessees (other than Powerine) at the Walker Property have intermingled with other sources of contamination to create a single and indivisible harm at and emanating from the Walker Property, and, as a result, have presented and may present in the future an imminent and substantial endangerment to health and the environment at the Walker Property and in the surrounding environment, including the surface and sub-surface soils and groundwater. Powerine's initial investigation results suggest that contaminants originating from the Walker Property, including but not limited to benzene, have commingled with other contaminants found in regional groundwater. Pursuant to the terms of the CAO, Powerine is presently liable for investigating and remediating this regional groundwater problem.

As such, please be advised that Powerine intends to commence in no fewer than ninety days following issuance of this Notice and diligently prosecute to completion a civil action against Texaco and any other responsible parties that Powerine might subsequently uncover. Powerine has the right to file a civil action following ninety days after issuance of this Notice pursuant to Section 7002(a)(1)(B) of RCRA, 42 U.S.C. §6972(a)(1)(B). Powerine will commence this civil action unless Texaco and Powerine reach a settlement of the matters alleged herein in the form of an Agreed Injunction, Consent Decree, or other appropriate relief which adequately resolves the matters alleged in this Notice, which properly remedies the adverse public health and environmental endangerment, and which receives the approval of the United States District Court for the Central District of California. In this civil action, Powerine will seek preliminary and final injunctive relief pursuant to RCRA Section 7002(a)(1)(B), 42 U.S.C. §6972(a)(1)(B), together with its litigation costs, including attorneys' and expert witness fees and costs.

DEFINITIONS

1. **Barium** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

2. **Benzene** is a listed hazardous v aste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

3. **Benzo(a) pyrene** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(k).

4. **Benzo(b) flouranthene** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(k).

5. **Chrysene** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

6. **cis-1,2-Dichloroethene: cis-1,2-Dichloroethene** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

7. **1,1-Dichloroethane: 1,2-Dichloroethane** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

8. The term **"discharge"** as used herein means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water as provided in 40 C.F.R. §260.10.

9. The term **"disposal"** as used herein means as the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater, as provided in 42 U.S.C. §6903.

10. **Ethylbenzene** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

11. The term **"facility"** as used herein means all contiguous land, and structures, other appurtenances and improvements on land used for treating, storing, or disposing of **hazardous waste** as provided in 40 CFR 260.10.

12. **Fluorene** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

13. The term **"generator"** as used herein means any person, by site, whose act or process produces hazardous waste identified or listed in Subchapter III of RCRA, or whose act first causes a hazardous waste to become subject to regulation.

14. The term **"hazardous waste"** as used herein means shall have the meaning set forth in 40 CFR 261.3.

15. **Isopropylbenzene** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

16. **Lead** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(k).

17. **2-methyl-naphthalene** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

18. **Naphthalene** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

19. **n-propyl benzene** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

20. The term **"operator"** as used herein means the person who is responsible for the overall operation of a facility, as provided in 40 C.F.R. §260.10.

21. The term "**owner**" as used herein means the person who owns a facility or part of a facility, as provided in 40 C.F.R. §260.10.

22. **Phenanthrene** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

23. **Pyrene** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

24. **Sec-butyl benzene** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

25. **Toluene** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

26. **Total Petroleum Hydrocarbons as Gasoline (TPH-g)** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

27. **Total Petroleum Hydrocarbons as Diesel (TPH-d)** is a hazardous waste subject to the provisions of RCRA, as defined by 42 U.S.C. 6903(5).

28. **Tetrachloroethene (PCE)** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

29. **Trichloroethene (TCE): Trichloroethene (TCE)** is a listed **hazardous waste** subject to the provisions of Subchapter III as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

30. **Vinyl Chloride** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

31. **Xylenes** is a listed hazardous waste subject to the provisions of Subchapter III of RCRA, as defined by 42 U.S.C. 6903(5) and further defined in 42 U.S.C. 6921(b) and as further listed pursuant to 40 C.F.R. § 261.33(f).

BACKGROUND

Texaco was the **owner** and **operator** of the Walker Property commencing in the 1920s, and continuing through at least 1979. The Walker Property generally consists of 22 acres, and historically has included a variety of improvements including administrative and operations buildings, above-ground storage tanks, underground storage tanks, sumps, and rail spurs. Over the course of several decades, the Walker Property has been put to many uses by Texaco and/or its lessees, including crude oil storage, oil well drilling waste disposal, waste oil storage and recycling, jet fuel storage, gas oil storage, petroleum product transfer operations, and heavy equipment assembly and repair.

GENERAL ALLEGATIONS

Powerine is a "person" as that term is defined in 42 U.S.C. 6903(15) in that Powerine is a corporation. Texaco is also a "person" as that term is defined in 42 U.S.C. 6903(15), in that Texaco is a corporation. Because Texaco's **owner** and **operator** status at the Walker Property did result and continues to result in the **discharge** of **hazardous waste**, including but not limited to cis-1,2-dichloroethene, Vinyl Chloride, 1,1-dichloroethane, Benzene, Total Petroleum Hydrocarbons as Gasoline (TPH-g), Isopropylbenzene, n-propyl benzene, sec-butyl benzene, PCBs (Aroclor 1248, 1254, and 1260), Lead, Barium, Toluene, Ethylbenzene, Xylenes, Tetrachloroethene (PCE), Trichloroethene (TCE), 2-methyl-naphthalene, Benzo(a)pyrene, Benzo(b)flouranthene, Chrysene, Fluorene, Naphthalene, Phenanthrene, Pyrene, TPH-gasoline, TPH-diesel, Texaco is a **generator** pursuant to 40 CFR 260.10.

Regulations pertaining to **hazardous waste** found at 40 CFR §261-281 were enacted pursuant to RCRA, 42 U.S.C. §§ 6901-6992(k). All state regulations applicable to **owners, operators** and **generators** of **hazardous waste** that are less stringent than those promulgated under Subchapter III of RCRA are expressly pre-empted by Congressional mandate under §3009 of RCRA, 42 U.S.C. §6929, which expressly authorizes states to enact only more stringent standards applicable to **owners, operators** and **generators** of **hazardous waste.**

CONCLUSION

Texaco has contributed to the past and present handling, storage, treatment, transportation, or **disposal** of solid waste or **hazardous waste** that has presented and today presents an immediate, imminent and substantial endangerment to health or the environment at and around the Walker Property and SFS Properties. In particular, Texaco during the course and scope of its ownership and operations at the Walker Property contributed to the past or present handling storage, treatment, transportation or **disposal** of solid waste or **hazardous waste**, including but not limited to the

discharge, dumping, spilling and leaking of cis-1,2-dichloroethene, Vinyl Chloride, 1,1-dichloroethane, Benzene, Total Petroleum Hydrocarbons as Gasoline (TPH-g), Isopropylbenzene, n-propyl benzene, sec-butyl benzene, PCBs (Aroclor 1248, 1254, and 1260), Lead, Barium, Toluene, Ethylbenzene, Xylenes, Tetrachloroethene (PCE), Trichloroethene (TCE), 2-methyl-naphthalene, Benzo(a)pyrene, Benzo(b)flouranthene, Chrysene, Fluorene, Naphthalene, Phenanthrene, Pyrene, TPH-gasoline, TPH-diesel.into the surrounding environment, including the surface and sub-surface soils and groundwater.

The solid waste and **hazardous waste** which Texaco handled, stored, owned, transported, and disposed of at and from the Walker Property at various times, past and present, have commingled in the environment, including sub-surface soils and groundwater at and around the SFS Properties. All of these commingled discharges have created a single indivisible harm and have presented and today present an imminent and substantial endangerment to health and the environment. Further, because the solid waste and **hazardous waste** attributable to the past and present handling, storage, treatment, transportation or disposal of solid waste and **hazardous waste** by Texaco has commingled in sub-surface soils and groundwater, it is scientifically and technologically infeasible to apportion the resulting single indivisible harm and endangerment to health and the environment, nor can that single, indivisible harm and endangerment to health and the environment be abated or remediated by addressing any portion of the solid waste and **hazardous waste** contamination without addressing the entire solid waste and **hazardous waste** contamination problem. Accordingly, Texaco is jointly and severally liable for the investigation and remediation of the single, indivisible harm and imminent and substantial endangerment to health and the environment at and around the Walker Property, and for any and all appropriate legal or equitable remedies.

Should settlement of the subject matter of this Notice not be achieved sooner than ninety (90) days following issuance of this Notice, Powerine will seek appropriate mandatory and prohibitory injunctive relief, as authorized by RCRA §7002(a), 42 U.S.C. 6972(a), ordering Texaco to forthwith undertake and diligently pursue to completion all of the obligations imposed by, among other laws and regulations, RCRA Subtitle C and its implementing regulations, together with any additional or more stringent obligations that have been or may be validly imposed by other federal, state or municipal laws, including but not limited to assuming responsibility for conducting further remedial investigation and implementing the final remedial action as determined by the Court.

Powerine will also seek relief requiring Texaco take such actions as may be necessary, including but not limited to, making restitution to Powerine for the environmental endangerment, response costs, and damages incurred subsequent to issuance of this Notice, as well as costs of litigation including reasonable attorneys and expert witness fees. Finally, Powerine will seek preliminary and final injunctive relief ordering Texaco to indemnify and hold harmless Powerine from any future costs, response and liability arising out of contamination at or in the vicinity of the SFS Properties.

The full name, address and telephone number of the persons giving this Notice is:

Powerine Oil Company, Inc.
Attention: June Christman,
Manager, Environmental Engineering
12345 Lakeland Road
Santa Fe Springs, California 90670

The name, address and telephone number of legal counsel representing the person giving notice is:

David R. Isola, Esq.
701 South Ham Lane, Second Floor
Lodi, California 95242
(209) 367-7055

Very truly yours,

DAVID R. ISOLA

cc: See Attached Mailing List

MAILING LIST

Ms. Carol M. Browner,
Administrator
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, Southwest
Washington, D.C. 20460

Honorable Daniel Lungren
ATTORNEY GENERAL OF CALIFORNIA
1515 K Street
Sacramento, California 94244-2550

Ms. Felicia Marcus
Regional Administrator
UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY - REGION IX
75 Hawthorne Street
San Francisco, California 94105

The Honorable Janet Reno
Attorney General of the United States
UNITED STATES DEPARTMENT OF JUSTICE
Tenth & Constitution Avenue,
Northwest
Washington, D.C. 20530

Office of the Secretary
CALIFORNIA ENVIRONMENTAL
PROTECTION AGENCY
555 Capitol Mall, Suite 525
Sacramento, California 95814

Executive Officer
CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD --
LOS ANGELES REGION
Region 4
101 Centre Plaza Drive
Monterey Park, CA 91754-2156

Cal/EPA

Department of Toxic Substances Control

1011 N. Grandview Ave.
Glendale, CA 91201

MEMORANDUM

Pete Wilson
Governor

Peter M. Rooney
Secretary
for Environmental Protection

TO: Norm Riley, Chief
Statewide Compliance Branch
Northern California Region

FROM: Mukul Agarwal
Supervising Hazardous Substances Scientist I
Statewide Compliance Branch
Southern California Region

DATE:

SUBJECT: POWERINE OIL COMPANY-RECYCLING ISSUE

Powerine Oil Company (POC) is a refinery which has been inactive since June 29, 1995. POC cleaned all the process lines and stored the processed oil and waste in two tanks (#27105 and 10006) at the facility. POC claimed that this is a product or a recoverable oil-bearing material. Region-3, SCD collected samples from these tanks, and found the upper layer of these tanks contained a high level of benzene. Details of sampling and chemical results are in the Complaint Inspection Report dated April 2, 1998.

Please evaluate and provide your opinion on the following issues.

1. Do the contents of these tanks (sludge, slop oil, oily waste, products tank bottom, waste water from wastewater treatment, asphalt oil and other solid or liquid wastes from cleaning tanks) qualify as oil-bearing materials?

2. Are these oil-bearing materials exempt under the recycling regulations?

3. Is POC exempt from hazardous waste regulations under Health and Safety Code (H & S Code, Section 25144(c)(1)(2)(3)(4)(5)(6).

4. POC has been storing the above wastes since the middle of 1995, and the Coker Unit has not been working for over two years. How long can the waste be stored in these tanks?

5. Does H & S Code, sections 25,143.2 and 25143.9 apply to POC? Tanks # 27105 and 10006 that were labeled as Slop Oil. They were not labeled as Excluded Recyclable Material or display any other information. At the time of inspection Tank #27105 contained approximately 900,000 gallons and Tank 10006 contained about 400,000 gallon of the above stored materials.

If you have need more information regarding these issues, please call Ahmed Hegab at (818) 551-2902 or me at (818) 551-2908.

POWERINE OIL COMPANY
6/11/98

Mukul K Agarwal	DTSC	818- 551-2908
Ray Hine	Powerine	562/ 944-6111
June Christman	Powerine	562 / 944-6111
Robert Kou	DTSC	818 / 551-2872
Ahmed Hegab	DTSC	818- 551- 2902
Florence Gharakhan	DTSC	818- 551-2800

Meeting Between DTSC and Powerine re DTSC's Inspection
10:00 a.m. June 11, 1998
Proposed Agenda

	Topic	Minutes
I.	Brief History and Status Update of Powerine	10
II.	Overview of Material and Waste Handling Practices at Powerine	10
III.	Refinery Recovered Oil Exemption	10
IV.	Specific Issues Raised in the Inspection Report No Waste Oil at the Refinery Inappropriate Flash Testing Lead Hits - No Organic Lead	15
V.	Reserved for Issues Raised by the Department	
VI.	Discussion of Resolution of this Matter	

Via Facsimile (818) 551-2901 and U.S. Mail

June 10, 1998

Mr. Mukul Agarwal
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, CA 91201

Re: Oil-Bearing Material Exemption per §25144

Dear Mr. Agarwal:

You requested that I provide you with Powerine's interpretation of regulations and exemptions to hazardous waste regulations that Powerine is relying upon to continue to store oil-bearing material at its Santa Fe Springs refinery. Tanks 27105 and 10006 are part of Powerine's recovered oil system. Per §25144 (attached) Tanks 27105 and 10006 are exempt from regulation under Chapter 6.5 of the Health & Safety Code (Hazardous Waste Control).

As described in Powerine's March 13, 1998 response to the Department's February 9, 1998 Summary of Violations, "These tanks sit for some time to allow for gravity separation to occur and the resulting free-floating hydrocarbon product to be recovered." Powerine estimates that Tanks 27105 and 10006 currently contain at least 3,000 barrels (126,000 gallons) of recoverable oil. With the Department's concurrence, Powerine will recover the oil in these tanks and transport it to another local refinery for resertion into petroleum refinery process units to produce refined petroleum products per §25144(c)(3).

Specifically, if all the conditions under §25144(c) are met (and Powerine is confident they are), then the oil-bearing material stored in Tanks 27105 and 10006 as defined in §25144(a) is exempt from the regulations of this chapter. Attached is a current copy of the regulation, downloaded from the California's Document Repository (please note that only pages 18 and 19 of 21 pages are enclosed; the other pages are of other non-relevant sections downloaded at the same time).

I have also included a proposed agenda for our meeting tomorrow for your consideration.

12345 Lakeland Road • Santa Fe Springs, CA 90670 • Phone (562) 944-6111 • Fax (562) 944-8522

Please feel free to contact me or Ray Huie of my staff with any questions you may have.

Sincerely,

June M. Christman
Manager - Environmental Engineering

JMC:rh

cc: Ahmed Hegab
Ray Huie
File 41005.07
Reader File

(ray/dtsc/dtscsov2.doc)

California **Code** of Regulations, the disposal is made in accordance with the applicable requirements of the California regional water quality control board and the California Integrated Waste Management Board, and, if the waste management unit is a Class II landfill, it is sited, designed, constructed, and operated in accordance with the minimum standards applicable on or after October 9, 1993, to new or expanded municipal solid waste landfills, which are contained in Part 258 (commencing with Section 258.1) of Subchapter I of Chapter 1 of Title 40 of the **Code** of Federal Regulations, as those regulations read on January 1, 1996.

25144. (a) For purposes of this section, the following terms have the following meaning:

(1) "Oil" means crude oil, or any fraction thereof, which is liquid at 60 degrees Fahrenheit and 14.7 pounds per square inch absolute pressure. "Oil" does not include any of the following, unless it is exempt from regulation under paragraph (1) of subdivision (g) of Section 279.10 or paragraph (5) of subdivision (g) of Section 279.10 of Part 279 of Title 40 of the **Code** of Federal Regulations:

(A) Spent lubricating fluids which have been removed from an engine crankcase, transmission, gearbox, or differential of an automobile, bus, truck, vessel, heavy equipment, or machinery powered by an internal combustion engine.

(B) Spent industrial oils, including compressor, turbine, and bearing oil, hydraulic oil, metal-working oil, refrigeration oil, and railroad drainings.

(2) "Oil-bearing materials" means any liquid or semisolid material containing oil, partially refined petroleum products, or petroleum products. "Oil-bearing materials" do not include either of the following:

(A) Soil from remediation projects.

(B) Contaminated groundwater that is generated at, or originating from the operation, maintenance, or cleanup of, service stations, as defined in Section 13650 of the Business and Professions **Code.**

(3) "Oil recovery operations" means the physical separation of oil from oil-bearing materials by means of gravity separation, centrifugation, filter pressing, or other dewatering processes, with or without the addition of heat, chemical flocculants, air, or natural gas to enhance separation.

(4) "Petroleum refinery" means an establishment that has the Standard Industrial Classification **Code** 2911 and which is not subject to the permit requirements for the recycling of used oil imposed pursuant to Article 9 (commencing with Section 25200).

(5) "Subsidiary" means a corporate entity engaged in the exploration, production, transportation, refining, marketing, or distribution or crude oil or petroleum products.

(b) (1) Except as provided in paragraph (2), a biological process on the property of the producer treating oil, its products, and water, which meets the definition of a non-RCRA waste, and which produces an effluent that is continuously discharged to navigable waters in compliance with a permit issued pursuant to Section 402 of the Federal Water Pollution Control Act (33 U.S.C. Sec. 1342), is exempt from this chapter.

(2) Residues produced in the treatment process and subsequently removed that conform to any criterion adopted pursuant to Section 25141 are not exempt.

(c) To the extent consistent with the applicable provisions of the federal act, units, including associated piping, that are part of a system used for the recovery of oil from oil-bearing materials, and the associated storage of oil-bearing materials and the recovered oil, are exempt from this chapter, if all of the following conditions are met:

(1) The oil recovery operations are conducted at a petroleum refinery, or at another facility owned or operated by the corporate entity that owns or operates the refinery, or a corporate parent or subsidiary of the corporate entity.

(2) The oil-bearing materials are generated at the refinery or at another facility owned or operated by the corporate entity that owns or operates the refinery, or a corporate parent or subsidiary, including a sister subsidiary, of the corporate entity, or are generated in the course of oil or gas exploration or production operations conducted by an unrelated entity and placed in a common pipeline.

(3) The recovered oil is inserted into petroleum refinery process units to produce fuel or other refined petroleum products. This paragraph does not allow the direct blending, into final petroleum products, of oil-bearing materials or recovered oil that contain constituents that render these materials hazardous under the regulations adopted pursuant to Sections 25140 and 25141, other than those for which the material is being recycled.

(4) The recovered oil is not stored in a surface impoundment or accumulated speculatively at the refinery or at an offsite facility.

(5) Any residual materials removed from a unit that is exempt under this subdivision are managed in accordance with all other applicable laws.

(6) The oil-bearing materials would be excluded from classification as a waste pursuant to, or would otherwise meet the requirements for an exemption under, Section 25143.2, except that the following provisions do not apply to those oil-bearing materials:

(A) The prohibitions against prior reclamation in paragraphs (1), (2), and (3) of subdivision (b) of Section 25143.2.

(B) Subparagraph (C) of paragraph (2) of subdivision (c) of Section 25143.2.

(C) Paragraph (3) of subdivision (e) of Section 25143.2.

(D) Sections 25143.9 and 25143.10.

25144.6. (a) As used in this section, "reusable soiled textile materials" means textile items, including, but not limited to, shop towels, uniforms, gloves, and linens and towels which may become soiled with hazardous waste during commercial or industrial use, and are made reusable by laundering or comparable methods of cleaning.

(b) Reusable soiled textile materials which meet all of the following requirements are exempt from Section 25205.5 and from Article 6 (commencing with Section 25160) and Article 6.5 (commencing with Section 25167.1):

(1) The materials or the management of the materials are not otherwise regulated by the Environmental Protection Agency pursuant to the federal act.

(2) The materials are not used to clean up or control a spill or release that is required to be reported to any state or federal agency.

(3) No hazardous waste has been added after the materials' original use.

(4) No free liquids, as defined by Section 22-66260.10 of Title 26 of the California **Code** of Regulations, are released during transportation or storage of the materials.

(5) The facility laundering or cleaning the materials maintains records of the date, type, and quantities by piecework or weight of the materials collected and laundered.

(6) The facility laundering or cleaning the materials prepares a contingency plan which specifies procedures for handling both onsite and offsite emergencies involving the materials, and employees are trained in the execution of the plan.

(c) Notwithstanding Sections 25201 and 25245, a facility laundering or using comparable methods of cleaning reusable soiled

Meeting Between DTSC and Powerine re DTSC's Inspection
10:00 a.m. June 11, 1998
Proposed Agenda

	Topic	Minutes
I.	Brief History and Status Update of Powerine	10
II.	Overview of Material and Waste Handling Practices at Powerine	10
III.	Refinery Recovered Oil Exemption	10
IV.	Specific Issues Raised in the Inspection Report No Waste Oil at the Refinery Inappropriate Flash Testing Lead Hits - No Organic Lead	15
V.	Reserved for Issues Raised by the Department	
VI.	Discussion of Resolution of this Matter	

POWERINE Oil Company

CONFIDENTIAL

INTEROFFICE MEMORANDUM

TO: Buck Petersen DATE: May 20, 1991

FROM: June Christman JMC

SUBJECT: Upgrade Priority of Coker Waste Injection Project

We need to upgrade the priority of the project to install facilities to allow injection of waste streams into the coker. The rising cost of hazardous waste disposal, new federal waste listings, California waste minimization laws, and compliance with recycling and hazardous waste storage regulations make this project a necessity now.

We routinely generate API separator sludge at the refinery. API separator sludge is a federally listed waste currently subject to land disposal restrictions. Unless we can process at least 75% of the sludge generated through the coker within one year of the generation of this waste, we will be required to treat (incinerate or process via solvent extraction) the separator sludge prior to land disposal. Golden West Refinery recently investigated incinerating some API separator sludge in New Jersey because there are no closer incinerators that have available capacity to process their sludge. An order of magnitude estimate for incineration costs is $2000/ton. Transportation and disposal costs are in addition to this.

Land Disposal Restrictions (LDR) or "Land Bans" were mandated in 1984 by the federal Hazardous and Solid Waste Amendments (HSWA). HSWA requires that "...levels of treatment which substantially diminish the toxicity of the waste...be established." EPA and California have developed standards for various waste streams. Initial LDR went into effect in 1985 (land disposal of liquid wastes was prohibited). Additional restrictions continue to be imposed since the initial restrictions. Standards for more generic waste streams took longer to develop and extensions on some treatment requirements have been granted.

The full impact of LDR will be felt by Powerine by May 1992. This is when "hard hammer" (unextendable) deadlines kick in. All solid and liquid petroleum wastes will require treatment prior to disposal. We have one year to pull together a comprehensive waste

management and minimization plan for Powerine facilities. Enabling Powerine to inject sludges into the coker for recycling will be a major step towards waste minimization.

JMC:aj/cokerwst.doc

CC:

A. Gualtieri
M. Egner
M. Abbasfard
W. Chiang
J. Garcia
M. Gnagy
M. Jacquez
[redacted]

METHOD 1010

PENSKY-MARTENS CLOSED-CUP METHOD FOR DETERMINING IGNITABILITY

1.0 SCOPE AND APPLICATION

1.1 Method 1010 uses the Pensky-Martens closed-cup tester to determine the flash point of liquids including those that tend to form a surface film under test conditions. Liquids containing non-filterable, suspended solids shall also be tested using this method.

2.0 SUMMARY OF METHOD

2.1 The sample is heated at a slow, constant rate with continual stirring. A small flame is directed into the cup at regular intervals with simultaneous interruption of stirring. The flash point is the lowest temperature at which application of the test flame ignites the vapor above the sample.

For further information on how to conduct a test by this method, see Reference 1 below.

3.0 METHOD PERFORMANCE

3.1 The Pensky-Martens and Setaflash Closed Testers were evaluated using five industrial waste mixtures and p-xylene. The results of this study are shown below in °F along with other data.

Sample	Pensky-Martens	Setaflash
1[2]	143.7 ± 1.5	139.3 ± 2.1
2[2]	144.7 ± 4.5	129.7 ± 0.6
3[2]	93.7 ± 1.5	97.7 ± 1.2
4[2]	198.0 ± 4.0	185.3 ± 0.6
5[2]	119.3 ± 3.1	122.7 ± 2.5
p-xylene[2]	81.3 ± 1.1	79.3 ± 0.6
p-xylene[3]	77.7 ± 0.5[a]	--
Tanker oil	125, 135	--
Tanker oil	180, 180	--
Tanker oil	110, 110	--
DIBK/xylene	102 ± 4[b]	107

[b]75/25 v/v analyzed by four laboratories.
[a]12 determinations over five-day period.

Revision 0
Date September 1986

4.0 REFERENCES

1. D 93-80, Test Methods for Flash Point by Pensky-Martens Closed Tester, American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103, 04.09, 1986.

2. Umana, M., Gutknecht, W., Salmons, C., et al., Evaluation of Ignitability Methods (Liquids), EPA/600/S4-85/053, 1985.

3. Gaskill, A., Compilation and Evaluation of RCRA Method Performance Data, Work Assignment No. 2, EPA Contract No. 68-01-7075, September 1986.

METHOD 1020

SETAFLASH CLOSED-CUP METHOD FOR DETERMINING IGNITABILITY

1.0 SCOPE AND APPLICATION

1.1 Method 1020 makes use of the Setaflash Closed Tester to determine the flash point of liquids that have flash points between 0° and 110°C (32° and 230°F) and viscosities lower than 150 stokes at 25°C (77°F).

1.2 The procedure may be used to determine whether a material will or will not flash at a specified temperature or to determine the finite temperature at which a material will flash.

1.3 Liquids that tend to form surface films under the test conditions or those that contain non-filterable suspended solids shall be tested for ignitability using Method 1010 (Pensky-Martens Closed-Cup).

2.0 SUMMARY OF METHOD

2.1 By means of a syringe, 2-mL of sample is introduced through a leak-proof entry port into the tightly closed Setaflash Tester or directly into the cup which has been brought to within 3°C (5°F) below the expected flash point.

2.2 As a flash/no-flash test, the expected flash-point temperature may be a specification (e.g., 60°C). For specification testing, the temperature of the apparatus is raised to the precise temperature of the specification flash point by slight adjustment of the temperature dial. After 1 min, a test flame is applied inside the cup and note is taken as to whether the test sample flashes or not. If a repeat test is necessary, a fresh sample should be used.

2.3 For a finite flash measurement, the temperature is sequentially increased through the anticipated range, the test flame being applied at 5°C (9°F) intervals until a flash is observed. A repeat determination is then made using a fresh sample, starting the test at the temperature of the last interval before the flash point of the material and making tests at increasing 0.5°C (1°F) intervals.

For further information on how to conduct a test with this method, see Reference 1 below.

3.0 METHOD PERFORMANCE

See Method 1010.

4.0 REFERENCES

1. D 3828-81, Test Method for Flash Point by Setaflash Closed Tester, American Society for Testing and Materials, 1613 Race Street, Philadelphia, PA 19103, 05.03, 1986.

2. Umana, M., Gutknecht, W., Salmons, C., et al., Evaluation of Ignitability Methods (Liquids), EPA/600/S4-85/053, 1985.

3. Gaskill, A., Compilation and Evaluation of RCRA Method Performance Data, Work Assignment No. 2, EPA Contract No. 68-01-7075, September 1986.

CORE LABORATORIES

LABORATORY TESTS RESULTS
05/27/98

JOB NUMBER: 980849 CUSTOMER: ** Powerine Oil Company ** ATTN: Ray Huie

CLIENT I.D.....: DBC-1-27-98
DATE SAMPLED.....: 01/27/98
TIME SAMPLED.....: 00:00
WORK DESCRIPTION...: POC-6-128A

LABORATORY I.D...: 980849-0001
DATE RECEIVED....: 05/07/98
TIME RECEIVED....: 11:45
REMARKS.....: soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	05/22/98	G D
Metals Digestion - Solids	COMPLETED	-----	N/A	EPA 3050A	05/08/98	G D
Metals		*50		EPA 6010A	05/12/98	EAW
Lead (Pb)	140	2.50	mg/kg	EPA 6010A		
STLC Metals		*1		EPA 6010	05/22/98	EAW
Lead (Pb)	3.2	0.050	mg/L	EPA 6010		
STLC Metals Extraction	COMPLETED	-----	N/A	Cal. DHS Method	05/20/98	G D
Extraction for Organic Metals	COMPLETED	-----	N/A	Cal. LUFT Manual	05/15/98	G D
Organic Lead	<1.0	1.0	mg/kg	Cal. DHS Method	05/15/98	EAW

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

CORE LABORATORIES

LABORATORY TESTS RESULTS
05/27/98

JOB NUMBER: 980840 CUSTOMER: ** Powerine Oil Company ** ATTN: Ray Huie

CLIENT I.D.....: DTSC 1-27-98
DATE SAMPLED.....: 01/27/98
TIME SAMPLED.....: 00:00
WORK DESCRIPTION...: POC-7-128A

LABORATORY I.D...: 980840-0001
DATE RECEIVED....: 05/06/98
TIME RECEIVED....: 15:45
REMARKS.....: soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	05/22/98	G D
Metals Digestion - Solids	COMPLETED	-----	N/A	EPA 3050A	05/08/98	G D
Metals		*50		EPA 6010A	05/12/98	EAW
Lead (Pb)	360	2.50	mg/kg	EPA 6010A		
STLC Metals		*1		EPA 6010	05/22/98	EAW
Lead (Pb)	12	0.050	mg/L	EPA 6010		
STLC Metals Extraction	COMPLETED	-----	N/A	Cal. DHS Method	05/20/98	G D
Extraction for Organic Metals	COMPLETED	-----	N/A	Cal. LUFT Manual	05/15/98	G D
Organic Lead	<1.0	1.0	mg/kg	Cal. DHS Method	05/15/98	EAW

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

METHOD 1010

PENSKY-MARTENS CLOSED-CUP METHOD FOR DETERMINING IGNITABILITY

1.0 SCOPE AND APPLICATION

1.1 Method 1010 uses the Pensky-Martens closed-cup tester to determine the flash point of liquids including those that tend to form a surface film under test conditions. Liquids containing non-filterable, suspended solids shall also be tested using this method.

2.0 SUMMARY OF METHOD

2.1 The sample is heated at a slow, constant rate with continual stirring. A small flame is directed into the cup at regular intervals with simultaneous interruption of stirring. The flash point is the lowest temperature at which application of the test flame ignites the vapor above the sample.

For further information on how to conduct a test by this method, see Reference 1 below.

3.0 METHOD PERFORMANCE

3.1 The Pensky-Martens and Setaflash Closed Testers were evaluated using five industrial waste mixtures and p-xylene. The results of this study are shown below in °F along with other data.

Sample	Pensky-Martens	Setaflash
1[2]	143.7 ± 1.5	139.3 ± 2.1
2[2]	144.7 ± 4.5	129.7 ± 0.6
3[2]	93.7 ± 1.5	97.7 ± 1.2
4[2]	198.0 ± 4.0	185.3 ± 0.6
5[2]	119.3 ± 3.1	122.7 ± 2.5
p-xylene[2]	81.3 ± 1.1	79.3 ± 0.6
p-xylene[3]	77.7 ± 0.5[a]	--
Tanker oil	125, 135	--
Tanker oil	180, 180	--
Tanker oil	110, 110	--
DIBK/xylene	102 ± 4[b]	107

[b]75/25 v/v analyzed by four laboratories.
[a]12 determinations over five-day period.

Revision 0
Date September 1986

METHOD 1020

SETAFLASH CLOSED-CUP METHOD FOR DETERMINING IGNITABILITY

1.0 SCOPE AND APPLICATION

1.1 Method 1020 makes use of the Setaflash Closed Tester to determine the flash point of liquids that have flash points between 0° and 110°C (32° and 230°F) and viscosities lower than 150 stokes at 25°C (77°F).

1.2 The procedure may be used to determine whether a material will or will not flash at a specified temperature or to determine the finite temperature at which a material will flash.

1.3 Liquids that tend to form surface films under the test conditions or those that contain non-filterable suspended solids shall be tested for ignitability using Method 1010 (Pensky-Martens Closed-Cup).

2.0 SUMMARY OF METHOD

2.1 By means of a syringe, 2-mL of sample is introduced through a leak-proof entry port into the tightly closed Setaflash Tester or directly into the cup which has been brought to within 3°C (5°F) below the expected flash point.

2.2 As a flash/no-flash test, the expected flash-point temperature may be a specification (e.g., 60°C). For specification testing, the temperature of the apparatus is raised to the precise temperature of the specification flash point by slight adjustment of the temperature dial. After 1 min, a test flame is applied inside the cup and note is taken as to whether the test sample flashes or not. If a repeat test is necessary, a fresh sample should be used.

2.3 For a finite flash measurement, the temperature is sequentially increased through the anticipated range, the test flame being applied at 5°C (9°F) intervals until a flash is observed. A repeat determination is then made using a fresh sample, starting the test at the temperature of the last interval before the flash point of the material and making tests at increasing 0.5°C (1°F) intervals.

For further information on how to conduct a test with this method, see Reference 1 below.

3.0 METHOD PERFORMANCE

See Method 1010.

Revision 0
Date September 1986

CORE LABORATORIES

LABORATORY TESTS RESULTS
05/27/98

JOB NUMBER: 980849 CUSTOMER: ** Powerine Oil Company ** ATTN: Ray Huie

CLIENT I.D.....: DBC-1-27-98
DATE SAMPLED.....: 01/27/98
TIME SAMPLED.....: 00:00
WORK DESCRIPTION...: POC-6-128A

LABORATORY I.D...: 980849-0001
DATE RECEIVED....: 05/07/98
TIME RECEIVED....: 11:45
REMARKS.....: soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	05/22/98	G D
Metals Digestion - Solids	COMPLETED	-----	N/A	EPA 3050A	05/08/98	G D
Metals		*50		EPA 6010A	05/12/98	EAW
Lead (Pb)	140	2.50	mg/kg	EPA 6010A		
STLC Metals		*1		EPA 6010	05/22/98	EAW
Lead (Pb)	3.2	0.050	mg/L	EPA 6010		
STLC Metals Extraction	COMPLETED	-----	N/A	Cal. DHS Method	05/20/98	G D
Extraction for Organic Metals	COMPLETED	-----	N/A	Cal. LUFT Manual	05/15/98	G D
Organic Lead	<1.0	1.0	mg/kg	Cal. DHS Method	05/15/98	EAW

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories

CORE LABORATORIES

LABORATORY TESTS RESULTS

05/27/98

JOB NUMBER: 980840 CUSTOMER: ** Powerine Oil Company ** ATTN: Ray Huie

CLIENT I.D.....: DTSC 1-27-98
DATE SAMPLED.....: 01/27/98
TIME SAMPLED.....: 00:00
WORK DESCRIPTION...: POC-7-128A

LABORATORY I.D...: 980840-0001
DATE RECEIVED....: 05/06/98
TIME RECEIVED....: 15:45
REMARKS.....: soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	05/22/98	G D
Metals Digestion - Solids	COMPLETED	-----	N/A	EPA 3050A	05/08/98	G D
Metals		*50		EPA 6010A	05/12/98	EAW
Lead (Pb)	360	2.50	mg/kg	EPA 6010A		
STLC Metals		*1		EPA 6010	05/22/98	EAW
Lead (Pb)	12	0.050	mg/L	EPA 6010		
STLC Metals Extraction	COMPLETED	-----	N/A	Cal. DHS Method	05/20/98	G D
Extraction for Organic Metals	COMPLETED	-----	N/A	Cal. LUFT Manual	05/15/98	G D
Organic Lead	<1.0	1.0	mg/kg	Cal. DHS Method	05/15/98	EAW

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

EXHIBIT A

CHRONOLOGY OF EVENTS
POWERINE OIL COMPANY

Time Period	Event
1936	Company is established as Rothschild Oil Company.
1982	$230 million refinery Modernization Program completed.
March 1984	Bankruptcy filing (Chapter 13); refinery shuts down and business activities are minimal.
September 1986	Company emerges from bankruptcy and under new ownership of a European businessman.
March - July 1987	Refinery is restarted and business is re-established. Metallgesellshcaft Corp. (MG) becomes involved in financing Powerine business activities.
March 1993	MG acquires an option to purchase (own) Powerine.
October 1, 1993	MG sells option to Castle Energy Corporation (CEC) which was 49% owned by MG. CEC exercises option and acquires Powerine. Powerine enters into a long term (4 years) Offtake Agreement with MG who agrees to purchase all of Powerine's refinery production.
December 1993	Rumors surface about MG's financial difficulty due to huge trading position in futures contracts on NYMEX. MG President resigns and an internal investigation of MG's US operations by its European parent corporation are initiated.
January - March 1994	MG financial situation becomes public knowledge and MG appears to be on brink of bankruptcy.
April 1994	MG banks agree to recapitalization plan which saves MG from bankruptcy. CEC and Powerine are notified by MG of their intent to terminate all relationships between MG and CEC/Powerine.
August 1994	Tentative agreement reached on ending MG and CEC/Powerine business relationship.
October 1994	Agreement is finalized with MG forgiving debt of CEC and subsidiaries of over $321 million, returning CEC stock and other concessions in exchange for MG ending business obligations to CEC/Powerine in early 1995. CEC realizes $391 million gain which has significant tax consequences for CEC.

Time Period	Event
October 1994 (cont'd)	CEC initiates effort to sell Powerine to raise funds to satisfy tax obligation or, if sales price is very low, the corresponding "loss" would offset the capital gain and minimize tax liability.
July 1995	Powerine shuts down refinery and terminates the majority of its work force when CEC's efforts to sell Powerine as on operating refinery business are not successful. In addition, Powerine's operating losses depleted the company's ability to stay in business and CEC is unable to put any money into Powerine.
August 1995	CEC had received and was evaluating two competing proposals for Powerine. One party, Kenyen Projects Ltd., was interested in buying the refinery equipment. Energy Merchant Corp. was interested in buying the company (stock purchase).
September 1995	CEC directs Powerine to sell the refinery equipment to Kenyen Projects Ltd. who intends to dismantle the refinery and ship it to India. Kenyen puts up $3 million earnest money deposit with obligation to pay three quarterly installments of $7 million each beginning April 30, 1996.
December 1995	CEC and Powerine's management came to the view that Kenyen would not be able to conclude the equipment purchase transaction due to the changing political climate in India. India was "closing the door" on business development by western companies, which was causing world financial institutions to back away from financing projects like the "Powerine refinery" project.
January 1996	CEC agrees to sell Powerine to Energy Merchant Corp. (EMC) whose interest is to reacquire refinery equipment, restart the refinery and re-establish Powerine as a refinery business.
February 1996	Powerine (under the ownership of EMC) reacquires refinery equipment from Kenyen by forgiving Kenyen's obligation to pay Powerine the $21 million beginning April 30, 1996. Kenyen agrees to allow the $3 million earnest money deposit to remain with Powerine until June 1997.
March 1996	Effort to recapitalize Powerine begins with Offering Memorandum (Prospectus) sent to numerous equity investors and mortgage lenders. Company seeks to raise $50 million for a full refinery restart and completion of refinery modification projects.
May 1996	Powerine restarts minimum processing activity at the refinery with a Butane Isomerization Unit and various utility systems.

Time Period	Event
July 1996	Powerine receives a commitment for equity investment in Powerine subject to satisfaction on environmental exposure and other due diligence.
August 9, 1996	Powerine enters into a processing agreement with a large Los Angeles refiner. Powerine will process crude oil into intermediate feedstocks for a fee. The agreement is contingent upon Powerine obtaining financing to restart a portion of the refinery.
August 21, 1996	Due to deteriorating market conditions, the equity investment committed to in July, 1996 did not proceed. Powerine receives commitment for startup financing from an entity headquartered in Germany. The anticipated funding date is October 8, 1996.
October 8, 1996	The entity headquartered in Germany failed to provide Powerine financing. Powerine pursues startup financing from an entity headquartered in the United States.
November 8, 1996	The entity headquartered in the United States failed to provide Powerine financing.
November 13-15, 1996	Powerine lays off an additional 35 people. Remaining personnel include mandatory round the clock coverage to provide security at the refinery and Long Beach Marine Terminal and other essential positions. Powerine's current priority is to generate cash flow to fund the refinery startup by selling assets such as the land south of the refinery and north of the coke storage barn. The proceeds from the land sale will be used to restart the refinery. Powerine's existing obligations will be met from revenue generated by refinery operations.
March 14, 1997	Powerine and the purchaser sign the Purchase and Sale Agreement for the Lakeland Property specifying March 15, 1997 as the closing date and obtaining a No Further Action letter from the Regional Water Quality Control Board ("RWQCB") as a requirement to close.
March-May 1997	Powerine demolishes its 28,000 square foot main office building and warehouse, truck fuel loading racks, tanks and associated scalehouse and remediates soil contamination as required the RWQCB.
May 12, 1997	The purchaser notifies Powerine it will not close escrow on the Lakeland Property without a covenant not to sue from the RWQCB.

Time Period	Event
May 14, 1997	The RWQCB issues the No Further Action Letter for the Lakeland Property.
May and June, 1997	Purchaser pursues an insurance policy to address his environmental issues. Purchaser does not find an appropriate insurance policy
August 26, 1997	Powerine obtains a Covenant Not to Sue any future owner of the Lakeland Property from the RWQCB.
September 19, 1997	Powerine closes the Lakeland Property sale. Due to the delay in closing the transaction, the proceeds from the sale are significantly attached by Powerine's creditors.
October 29, 1997	Powerine enters into an agreement with a company who plans to dismantle the refinery and reassemble it in Canada.
February 28, 1998	Powerine terminates the agreement with the dismantler.
March 19, 1998	Powerine executes an agreement with an investor who plans to restart the refinery.

Powerine Oil Company

FAX TRANSMITTAL COVER SHEET

DATE: June 10, 1998

TO: Mukul Agarwal FAX: 818·551·2841

FROM: June Christman

Number of pages including cover page: 6

cc: Ahmed Hegab

The information contained in this facsimile message is confidential information and is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and return the original message to us at the address below via the US Postal Service.

12345 Lakeland Road - PO Box 2108 - Santa Fe Springs, CA 90670 - Tel: (562) 944-6111 - Fax: (562) 903-8911

Powerine Oil Company

Via Facsimile (818) 551-2901 and U.S. Mail

June 10, 1998

Mr. Mukul Agarwal
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, CA 91201

Re: Oil-Bearing Material Exemption per §25144

Dear Mr. Agarwal:

You requested that I provide you with Powerine's interpretation of regulations and exemptions to hazardous waste regulations that Powerine is relying upon to continue to store oil-bearing material at its Santa Fe Springs refinery. Tanks 27105 and 10006 are part of Powerine's recovered oil system. Per §25144 (attached) Tanks 27105 and 10006 are exempt from regulation under Chapter 6.5 of the Health & Safety Code (Hazardous Waste Control).

As described in Powerine's March 13, 1998 response to the Department's February 9, 1998 Summary of Violations, "These tanks sit for some time to allow for gravity separation to occur and the resulting free-floating hydrocarbon product to be recovered." Powerine estimates that Tanks 27105 and 10006 currently contain at least 3,000 barrels (126,000 gallons) of recoverable oil. With the Department's concurrence, Powerine will recover the oil in these tanks and transport it to another local refinery for resertion into petroleum refinery process units to produce refined petroleum products per §25144(c)(3).

Specifically, if all the conditions under §25144(c) are met (and Powerine is confident they are), then the oil-bearing material stored in Tanks 27105 and 10006 as defined in §25144(a) is exempt from the regulations of this chapter. Attached is a current copy of the regulation, downloaded from the California's Document Repository (please note that only pages 18 and 19 of 21 pages are enclosed; the other pages are of other non-relevant sections downloaded at the same time).

I have also included a proposed agenda for our meeting tomorrow for your consideration.

12345 Lakeland Road • Santa Fe Springs, CA 90670 • Phone (562) 944-6111 • Fax (562) 944-8522

Please feel free to contact me or Ray Huie of my staff with any questions you may have.

Sincerely,

June M. Christman
Manager - Environmental Engineering

JMC:rh

cc: Ahmed Hegab
Ray Huie
File 41005.07
Reader File

(ray/dtsc/dtscsov2.doc)

Meeting Between DTSC and Powerine re DTSC's Inspection
10:00 a.m. June 11, 1998
Proposed Agenda

	Topic	Minutes
I.	Brief History and Status Update of Powerine	10
II.	Overview of Material and Waste Handling Practices at Powerine	10
III.	Refinery Recovered Oil Exemption	10
IV.	Specific Issues Raised in the Inspection Report No Waste Oil at the Refinery Inappropriate Flash Testing Lead Hits - No Organic Lead	15
V.	Reserved for Issues Raised by the Department	
VI.	Discussion of Resolution of this Matter	

California Code of Regulations, the disposal is made in accordance with the applicable requirements of the California regional water quality control board and the California Integrated Waste Management Board, and, if the waste management unit is a Class II landfill, it is sited, designed, constructed, and operated in accordance with the minimum standards applicable on or after October 9, 1993, to new or expanded municipal solid waste landfills, which are contained in Part 258 (commencing with Section 258.1) of Subchapter I of Chapter 1 of Title 40 of the Code of Federal Regulations, as those regulations read on January 1, 1996.

25144. (a) For purposes of this section, the following terms have the following meaning:

(1) "Oil" means crude oil, or any fraction thereof, which is liquid at 60 degrees Fahrenheit and 14.7 pounds per square inch absolute pressure. "Oil" does not include any of the following, unless it is exempt from regulation under paragraph (1) of subdivision (g) of Section 279.10 or paragraph (5) of subdivision (g) of Section 279.10 of Part 279 of Title 40 of the Code of Federal Regulations:

(A) Spent lubricating fluids which have been removed from an engine crankcase, transmission, gearbox, or differential of an automobile, bus, truck, vessel, heavy equipment, or machinery powered by an internal combustion engine.

(B) Spent industrial oils, including compressor, turbine, and bearing oil, hydraulic oil, metal-working oil, refrigeration oil, and railroad drainings.

(2) "Oil-bearing materials" means any liquid or semisolid material containing oil, partially refined petroleum products, or petroleum products. "Oil-bearing materials" do not include either of the following:

(A) Soil from remediation projects.

(B) Contaminated groundwater that is generated at, or originating from the operation, maintenance, or cleanup of, service stations, as defined in Section 13650 of the Business and Professions Code.

(3) "Oil recovery operations" means the physical separation of oil from oil-bearing materials by means of gravity separation, centrifugation, filter pressing, or other dewatering processes, with or without the addition of heat, chemical flocculants, air, or natural gas to enhance separation.

(4) "Petroleum refinery" means an establishment that has the Standard Industrial Classification Code 2911 and which is not subject to the permit requirements for the recycling of used oil imposed pursuant to Article 9 (commencing with Section 25200).

(5) "Subsidiary" means a corporate entity engaged in the exploration, production, transportation, refining, marketing, or distribution or crude oil or petroleum products.

(b) (1) Except as provided in paragraph (2), a biological process on the property of the producer treating oil, its products, and water, which meets the definition of a non-RCRA waste, and which produces an effluent that is continuously discharged to navigable waters in compliance with a permit issued pursuant to Section 402 of the Federal Water Pollution Control Act (33 U.S.C. Sec. 1342), is exempt from this chapter.

(2) Residues produced in the treatment process and subsequently removed that conform to any criterion adopted pursuant to Section 25141 are not exempt.

(c) To the extent consistent with the applicable provisions of the federal act, units, including associated piping, that are part of a system used for the recovery of oil from oil-bearing materials, and the associated storage of oil-bearing materials and the recovered oil, are exempt from this chapter, if all of the following conditions are met:

(1) The oil recovery operations are conducted at a petroleum refinery, or at another facility owned or operated by the corporate entity that owns or operates the refinery, or a corporate parent or subsidiary of the corporate entity.

(2) The oil-bearing materials are generated at the refinery or at another facility owned or operated by the corporate entity that owns or operates the refinery, or a corporate parent or subsidiary, including a sister subsidiary, of the corporate entity, or are generated in the course of oil or gas exploration or production operations conducted by an unrelated entity and placed in a common pipeline.

(3) The recovered oil is inserted into petroleum refinery process units to produce fuel or other refined petroleum products. This paragraph does not allow the direct blending, into final petroleum products, of oil-bearing materials or recovered oil that contain constituents that render these materials hazardous under the regulations adopted pursuant to Sections 25140 and 25141, other than those for which the material is being recycled.

(4) The recovered oil is not stored in a surface impoundment or accumulated speculatively at the refinery or at an offsite facility.

(5) Any residual materials removed from a unit that is exempt under this subdivision are managed in accordance with all other applicable laws.

(6) The oil-bearing materials would be excluded from classification as a waste pursuant to, or would otherwise meet the requirements for an exemption under, Section 25143.2, except that the following provisions do not apply to those oil-bearing materials:

(A) The prohibitions against prior reclamation in paragraphs (1), (2), and (3) of subdivision (b) of Section 25143.2.

(B) Subparagraph (C) of paragraph (2) of subdivision (c) of Section 25143.2.

(C) Paragraph (3) of subdivision (e) of Section 25143.2.

(D) Sections 25143.9 and 25143.10.

25144.6. (a) As used in this section, "reusable soiled textile materials" means textile items, including, but not limited to, shop towels, uniforms, gloves, and linens and towels which may become soiled with hazardous waste during commercial or industrial use, and are made reusable by laundering or comparable methods of cleaning.

(b) Reusable soiled textile materials which meet all of the following requirements are exempt from Section 25205.5 and from Article 6 (commencing with Section 25160) and Article 6.5 (commencing with Section 25167.1):

(1) The materials or the management of the materials are not otherwise regulated by the Environmental Protection Agency pursuant to the federal act.

(2) The materials are not used to clean up or control a spill or release that is required to be reported to any state or federal agency.

(3) No hazardous waste has been added after the materials' original use.

(4) No free liquids, as defined by Section 22-66260.10 of Title 26 of the California Code of Regulations, are released during transportation or storage of the materials.

(5) The facility laundering or cleaning the materials maintains records of the date, type, and quantities by piecework or weight of the materials collected and laundered.

(6) The facility laundering or cleaning the materials prepares a contingency plan which specifies procedures for handling both onsite and offsite emergencies involving the materials, and employees are trained in the execution of the plan.

(c) Notwithstanding Sections 25201 and 25245, a facility laundering or using comparable methods of cleaning reusable soiled

Portable T[illegible]on Site

Delivery Date	Tank#	Tank brought in for	Tanks present contents	P.O.# AFE#	Contractor	Present Location	daily rental $	Acc rent thru print date	Monthly rental
11/08/93	238926	Stretford sulfur(V)	dedicated for Alky neutr.material	Needs prj. AFE# 80329-M/7285	Rain for Rent	TGU	$27.00	$1,728	$810
11/08/93	238922	Stretford sulfur(V)	dedicated for API Sludge sewer prj.	Needs prj. AFE# 80329-M/7285	Rain for Rent	74111	$27.00	$1,728	$810
10/03/93	1245	Water from fire at Coker (O)	Clean/Empty on stand-by for sewer prj.	80026-E/7279	Baker Tanks	Coke Barn	$17.00	$1,700	$510
10/03/93	1983	Water from fire at Coker (O)	"	80026-E/7279	Baker Tanks	Coke Barn	$17.00	$1,700	$510
10/03/93	97GRD	Water from fire at Coker (C)	"	80026-M/7279	Baker Tanks	Coke Barn	$20.50	$2,050	$615
10/01/93	1349	Water from fire at Coker (O)	"	80026-E/7279	Baker Tanks	Coke Barn	$17.00	$1,734	$510
10/03/93	1573D	Water from fire at Coker (C)	"	28422-M/7279	Baker Tanks	Coke Barn	$20.50	$2,050	$615
09/30/93	B110D	Water from fire at Coker (C)	"	28422-M/7279	Baker Tanks	Coke Barn	$20.50	$2,112	$615
09/27/93	238438	Water from fire at Coker (C)	dedicated for API Sludge sewer prj.	Needs prj. AFE# 80026-E/7279	Rain for Rent	74111	$24.00	$2,544	$720
09/27/93	238576	Water from fire at Coker (C)	Alky neut. Material	new P.O.#	Rain for Rent	Alky Unit	$20.00	$2,120	$600
09/24/93	238977	Water from fire at Coker (V)	dedicated for API Sludge sewer prj.	Needs prj. AFE# 80026-M/7279	Rain For Rent	74111	$27.00	$2,943	$810
07/15/93	238848	Tank sludge by lomax/lab(C)	Same	26782-MCC606	Rain For Rent	By TK 74111	$20.00	$3,600	$600
06/28/93	238970	sludge fr Lomax tank(C)	Same	26565-MCC625	Rain For Rent	By TK 74111	$20.00	$3,940	$600
06/23/93	238966	Tk 57/58 sludge(C)	Same	25990-MCC625	Rain For Rent	By TK 74111	$20.00	$4,040	$600
03/02/93	238830	API sludge & Water(V)	Tank 57/58 sludge	23854-M	Rain For Rent	By TK 74111	$27.00	$8,505	$810
03/02/93	238826	API sludge & Water(V)	Tank 57/58 sludge	23854-M	Rain For Rent	By TK 74111	$27.00	$8,505	$810
02/25/93	238832	API Sludge & Water(V)	dedicated for Storm drains	Needs prj. AFE# 23854-M	Rain For Rent	By TK 74111	$27.00	$8,640	$810
02/25/93	238430	API Sludge & Water(V)	Same	23854-M	Rain For Rent	By TK 74111	$27.00	$8,640	$810
02/23/93	238822	API Sludge & Water(V)	dedicated for Storm drains	Needs prj. AFE# 73092-M	Rain For Rent	By TK 74111	$27.00	$8,694	$810
02/23/93	238827	Crude API Sludge & Water(V)	Same	73092-M	Rain For Rent	By TK 74111	$27.00	$8,694	$810
01/26/93	238320	Tk 110(C)	Same	7149/71965	Rain For Rent	By TK 74111	$20.00	$7,000	$600
01/26/93	238010	TK 110(C)	Same	7149/71965-M	Rain For Rent	By TK 74111	$20.00	$7,000	$600
01/19/93	238365	Tk 110(C)	Same	7149/71884-M	Rain For Rent	By TK 74111	$20.00	$7,140	$600
01/19/93	238409	Tk 110(C)	Same	7149/71884-M	Rain For Rent	By TK 74111	$20.00	$7,140	$600

01/19/93	238442	Tk 110(C)	Clean/dedicated for Storm drains	Needs prj. AFE# 7149/71884-M	Rain For Rent	By TK 74111	$20.00	$7,140	$600
10/26/92	238784	Oily Water(V)	dedicated for Storm drains	Needs prj. AFE# 7099/71025-M	Rain For Rent	Tail Gas Unit	$27.00	$11,934	$810
08/26/92	241019	Urea(poly tk)	Urea	22342-OCC618	Rain For Rent	FCC DIV B	$18.50	$9,306	$555
								$142,326	$18,150

c = closed top tank
o = open top tank
v = vapor tight tank (material that exceeds 1.5 PSIA needs a vapor tight tank)

REMOVED	Pick up Date									
07/07/93	09/13/93	238971	Holding h20 for alky gravel(C)	caustic	26662-MCC610	Rain For Rent	Coke Barn	$20.00	$1,360	$600
10/07/92	09/14/93	238388	Neutralized Alky (C)	Caustic 2030	21944-OCC610	Rain For Rent	Alky Unit	$20.00	$6,840	$600
09/28/93	10/13/93	146NSD	Water from fire at Coker		73374-M/7279	Baker Tanks	Coke Barn	$24.00	$360	$720
10/02/92	10/18/93	238436	API Sludge & Water(O)	h20 fr. fire	21938-0625	Rain For Rent	N. of Coke Barn	$20.00	$7,620	$600
09/27/93	10/15/93	238971	Water from fire at Coker		73306-M/7279	Rain for Rent	Coke Barn	$20.00	$360	$600
09/27/93	10/18/93	238388	Water from fire at Coker		73306-M/7279	Rain for Rent	Coke Barn	$20.00	$420	$600
09/28/93	10/19/93	180NSD	Water from fire at Coker		?	Baker Tanks	Coke Barn	$24.00	$504	$720
									$17,464	

March 13, 1998

Mr. Mukul Agarwal
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, CA 91201

Re: Response to Summary of Violations Issued February 9, 1998

Dear Mr. Agarwal:

Powerine appreciates the opportunity to respond to the Department of Toxic Substances Control's ("the Department's") Summary of Violations ("SOV") issued by your staff on February 9, 1998. Responses to the individual violations cited by your staff are provided in Attachment 1. First however, I must take this opportunity to review Powerine's status with you.

As you may be aware, Powerine Oil Company's ("Powerine's") Refinery has temporarily suspended refining operations since mid-1995. Since that time, Powerine's Management has diligently pursued every possible option to restart the refinery and remains committed to a refinery restart in 1998. Powerine is currently negotiating with a party interested in purchasing and operating the refinery. In addition, several parties are interested in providing financing for the refinery restart. Powerine will continue to vigorously pursue these restart options.

If in the future, the startup plans fail to materialize, Powerine will be forced to liquidate. At that time Powerine will initiate refinery-wide remediation. Powerine would clean and dismantle the refinery equipment. Obviously, residual materials in the tanks would be properly disposed of at that time. After all equipment is removed, Powerine would remediate any contaminated soil and prepare the refinery property for sale. The lead agency responsible for oversight of Powerine's subsurface remedial activities is the Los Angeles Regional Water Quality Control Board ("LARWQCB"). The LARWQCB has agreed that remediation of any contaminated refinery soil is an activity that will be pursued only after refinery equipment is dismantled. Meanwhile, Powerine continues to monitor groundwater in the vicinity of the refinery.

12345 Lakeland Road • Santa Fe Springs, CA 90670 • Phone (562) 944-6111 • Fax (562) 944-8522

As discussed in more detail in Attachment 1, the allegations of storage of hazardous waste in the SOV are incorrect. All of the material in Tank #10006 and Tank #27105, which the Department has characterized as waste is viable feedstock material that will be further processed in Powerine's Delayed Coker Unit once the refinery is back in operation.

The Department must realize that Powerine is still a viable refinery and not an abandoned site. While the refinery has temporarily suspended refining operations, no hazardous waste is being generated. However, Powerine has, even with its limited resources, disposed of the hazardous waste remaining from past operations. There is currently no hazardous waste being stored at the refinery from past operations.

As mentioned above, Attachment 1 is Powerine's response to the February 9, 1998 SOV. I would have responded to the SOV sooner but, as you may recall, I was out of the country from February 12 through the beginning of March, 1998. Please feel free to contact me or Ray Huie of my staff with any questions you may have.

Sincerely,

June M. Christman
Manager - Environmental Engineering

JMC:rh

cc: Ahmed Hegab
Ray Huie
File 41005.07
Reader File

(ray/dtscsov1.doc)

Attachment 1
Powerine's Response to the SOV

1. Illegal Storage

Health and Safety Code (HSC) section 25201 (a) and 25213 (b).

Allegation: *Powerine stored in excess of 5000 gallons of hazardous waste (K050, F037 and F038) in tanks (#10006 and #27105) and failed to obtain from DTSC a hazardous waste storage permit or other grant of authorization.*

Response: Perhaps beginning here with a general discussion of how waste streams were handled throughout the refinery during normal operations would be helpful to the Department. As was appropriate, waste streams were segregated for recycling or disposal. For example, catalyst from individual reactors in the refinery was segregated, tested for hazardous constituents and appropriately handled. Specific waste streams, such as API separator sludge, were separately stored in Baker Tanks and prioritized for injection in the Delayed Coker Unit.

Reusable sludges and slop (off-specification products and intermediates) were routed to one of several tanks in the refinery. These tanks sit for some time to allow for gravity separation to occur and the resulting free floating hydrocarbon product to be recovered. The remaining sludge was then reused in the Delayed Coker Unit. The tanks may contain any or all of the following recyclable materials: refinery tank bottom sludge, residuals from cleaning process equipment, and slops or off-specification product or intermediate feedstocks.

From process knowledge, the contents of these tanks are known to be non-listed materials. The contents are not a waste, but reusable material within the refinery. Once the refinery resumes operations this material will be reintroduced into the Delayed Coker Unit.

2. Integrity Assessment

Title 22, Cal. Code Regs., section 66262.34 and 66265.191

Allegation: *Powerine failed to have on file a written integrity assessment reviewed by an independent qualified professional engineer that attests that its hazardous waste tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be transferred, stored or treated to ensure that it will not collapse, rupture or fail. To wit, there*

is no documented report to indicate the integrity of tank #10006 or tank #27105.

Response: From Powerine's process knowledge, these tanks do not contain wastes. The material is reusable hydrocarbon material waiting to be reintroduced into the refining process once the refinery comes back on-line. These tanks contain neither RCRA hazardous nor RCRA listed waste. Therefore, an integrity assessment as specified in Title 22 is not required.

Additionally, Section 66265.191 applies only to small and large quantity hazardous waste generators with tanks containing hazardous waste without secondary containment. All tank systems in the Powerine refinery have a secondary containment system. The tank farm areas are all bermed in accordance with Powerine's SPCC plan.

3. Illegal Disposal

HSC section 25189 (c)

Allegation*: Powerine caused the disposal of hazardous waste to a point not authorized by DTSC. Powerine mixed sand with wastewater treatment impoundment sludge (F037) and tank bottom (K052) which is RCRA listed hazardous waste, generated from emptying tanks and shipped these wastes as offsite roadbase feedstock.*

Response: Powerine has never sent any tank bottoms from the refinery to be used as roadbase. Confusion may have resulted from a comment by Powerine Environmental staff that vacuum residuum or asphalt tank bottoms are so benign that they **could** be used as roadbase.

We believe this particular allegation refers to roll-off bins and barrels in the southwest corner of the refinery. The material in these containers is not RCRA listed K037 or K-52 waste. Without question, the material is usable hydrocarbon consisting of vacuum residuum or asphalt tank bottoms and product.

There are two separate and distinct activities that produced this non-hazardous hydrocarbon feedstock.

At an unknown date long ago, one of Powerine's asphalt tanks (either tank 10004 or 10006) overflowed onto the ground in the tank farm. Given the known non-hazardous properties of asphalt, the asphalt was consolidated and left on the ground.

In 1992, Tank 96066 which contained vacuum residuum (asphalt) was taken out of service for roof repairs which required hot work (welding). In order to perform the hot work, the tank was cleaned and the tank bottoms removed during the cleaning of Tank 96066 were placed in drums and roll-off bins. The tank bottoms were analyzed to verify that they were non-hazardous. A copy of the 12-16-92 laboratory results is enclosed as Attachment A.

Powerine decided to handle the asphalt by melting it and returning it to Tank 10046, for asphalt sales or as feed to the Delayed Coker Unit. This project took a long time to accomplish because it was very labor- intensive and it took a long time to find an effective means of melting the asphalt. Eventually, after experiencing success in using Tank 96066 bottoms as asphalt, the former asphalt spill was scooped up from the ground and placed in roll-off bins to also be returned to the asphalt tank to be used as feed to the Delayed Coker or for sale.

The asphalt was never associated with the wastewater system. Therefore, EPA code F037 does not apply. Powerine's wastewater system remains active handling primarily washdown and rain water. Although sediments may be accumulating in the system, these wastes have not yet been generated.

The asphalt is also not leaded tank bottoms, therefore EPA Code K052 does not apply. EPA code K052 applies only to tank bottoms containing organic lead. The only substance which contained organic lead that was stored in the refinery in the past was leaded gasoline. Gasoline, unlike crude and other heavy products, does not tend to leave residuals after being stored in tanks. Powerine has not produced leaded gasoline for over a decade. There is no residual leaded gasoline in the refinery or the tanks. With the absence of organic lead, EPA Code K052 does not apply.

4. Title 22 Section 66262.11

Allegation: *Powerine failed to determine if the waste generated by the facility is hazardous.*

Response: Because the materials stored in Tanks 10006 and 27105 are not wastes, the material need not be characterized in accordance with Section 66262.11. Additionally, Section 66262.11 states "A person who generates a solid waste, as defined in 40CFR261.2, must determine if that waste is a hazardous waste using the following method:...(b)(2) Applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used and the characteristics set forth in Article 3 of Chapter 11 of this division." In short, hazardous characteristics of a waste may be determined by generator process knowledge. Oil refining is an established

chemical process. Materials are from know origins. Most process and waste streams are known. All waste known to Powerine to be hazardous is labeled as such. Materials that are not labeled are either not wastes or are known to be non-hazardous.

5. No Use of the Manifest

Title 22, Cal. Code Regs., section 66262.20 (a)

Allegation: *Powerine offered H.W. for offsite transfer, treatment, storage or disposal without manifests. The facility failed to use manifest for disposal from tank primary oil / water / solid separation sludge tanks (F037) and other listed K-waste and shipped as a recyclable materials.*

Response: Powerine believes this allegation is a result of the confusion over Powerine staff's comments with regard to Allegation 3. Once again, this material was not transferred offsite, is not a waste and is non-hazardous; therefore, no manifest was required. All hazardous waste that were shipped offsite for disposal and/or recycling have been manifested, and shipped by and to licensed facilities.

6. Operations

Title 22, Cal. Code Regs., section 66262.34 (a)(3) and possible 66265.31

Allegation: *Powerine failed to maintain and operate the facility in a manner that minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste constituent to air, soil which could threaten human health and environment. Suspected asbestos, friable, stored on the ground, wastewater, oily and asphalt on different section of facility's ground.*

Response: With regard to asbestos, Powerine never suspected that the pipes laying on the ground contained asbestos insulation. In the 1980's Powerine initiated a program to find and remediate asbestos-containing insulation throughout the refinery. Because of this, Powerine is confident that asbestos insulation has been either removed or encapsulated. To confirm Powerine's knowledge of no exposed asbestos, samples were taken of the insulation on the pipes laying on the ground. A copy of the analyses and photographs denoting sample locations are provided as Attachment B confirming that the pipes do not contain asbestos.

Powerine is permitted (LACSD permit #13539) to discharge wastewater meeting specific criteria to the public sewer system. Wastewater is stored in

tanks (tanks 55, 57 and 58). The wastewater is treated and discharged to LACSD through Powerine's sewer outfall. Before discharging, different layers of the wastewater tank are tested to meet the discharge criteria for pH, oil & grease, sulfides, thiosulfates, ammonia and RSH. Additional discharge parameters are tested and reported quarterly by an independent laboratory. A list of the additional analyses is available upon request. Wastewater is neither stored nor allowed to leak onto unlined, exposed ground. Once collected, even stormwater is not allowed direct contact with the exposed ground.

Asphalt is a product, not a hazardous waste. Additionally, it is non-hazardous. Asphalt on the ground in the asphalt tank farm area is from an overflow of an asphalt tank many years ago. The majority of this past spill was gathered and placed in bins for return to the asphalt tank for further processing in the Delayed Coker Unit or for sales.

7. Labeling

Title 22, Cal. Code Regs., section 66262.34 (a)(2), (f)(1) and (f)(3)

Allegation: *Powerine failed to label tanks 10006 and tank 27105, 55-gallon drums filled with asbestos, 55-gallon drum filled with acid batteries and other containers filled with hazardous waste with*

a- Date of accumulation began
b- Date 90-day storage period began
c- Composition and physical state (flammable,____etc).

Response: Tanks 10006 and 27105 are not labeled according to hazardous waste regulations because they do not contain hazardous waste.

Powerine believes that the remaining items listed in this allegation duplicate issues raised in the Department's Complaint Inspection Report dated October 11, 1997. The following is Powerine's response to the Compliant Inspection Report as well as Allegation 7.

Drums containing asbestos were stored in an area specifically created for the storage of the asbestos. This area is fenced and labeled as an area storing asbestos-containing materials. A single drum which was not covered was corrected before the Department inspector left the facility on his first inspection. All other drums containing asbestos were correctly stored and sealed at the time of the inspection. Since the inspection all drums in the asbestos storage area have been disposed of offsite as hazardous waste. Attachment C is the manifest for asbestos disposal.

The drum containing spent lead-acid batteries was labeled as containing lead-acid batteries; no date was marked. At the time of the inspection, Powerine had seven (7) spent lead-acid batteries in the HWAA. Having fewer than ten (10) batteries, Powerine is exempt from the requirements of storing the batteries as hazardous waste per Article 7, §66266.81. This drum of lead-acid batteries has since been removed from the refinery as documented by Attachment D.

After the Department's first inspection, the Department and Powerine agreed that Powerine would wait for the Department's laboratory analyses before disposing of the wastes described in the Department's report. Powerine received legible copies of the analyses in mid-February 1998. As of February 19, 1998 all RCRA hazardous and non-RCRA hazardous waste in the Hazardous Waste Accumulation Area (HWAA) was removed from the refinery. HTS, Inc. of Santa Fe Springs shipped the waste to a TSD facility in Missouri as documented in Attachment E. As of March 5, 1998, all known asbestos waste was removed from the refinery. HTS, Inc. of Santa Fe Springs shipped the asbestos to a landfill in Azusa, California as documented in Attachment C.

Attachment A

Western Atlas International
A Litton/Dresser Company

CORE LABORATORIES

LABORATORY TESTS RESULTS
01/20/93

JOB NUMBER: 922049 CUSTOMER: Powerine Oil Company ATTN: Ms. Judi R. Gardner

CLIENT I.D.....:
DATE SAMPLED.....: 12/16/92
TIME SAMPLED.....: 00:00
WORK DESCRIPTION...: TANK 66

LABORATORY I.D...: 922049-0007
DATE RECEIVED....: 12/18/92
TIME RECEIVED....: 12:10
REMARKS.....: 2, 8OZ-GLS 2, 4OZ-GLS-SOIL

Reg limits

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TCLP Volatiles		*1		EPA 8240	12/19/92	ST
Benzene 0.5	0.058	0.025	mg/l	EPA 8240		
Carbon tetrachloride	ND	0.025	mg/l	EPA 8240		
Chlorobenzene	ND	0.025	mg/l	EPA 8240		
Chloroform	ND	0.025	mg/l	EPA 8240		
1,2-Dichloroethane	ND	0.025	mg/l	EPA 8240		
1,1-Dichloroethene	ND	0.025	mg/l	EPA 8240		
Methyl ethyl ketone	ND	0.050	mg/l	EPA 8240		
Tetrachloroethene	ND	0.025	mg/l	EPA 8240		
Trichloroethene	ND	0.025	mg/l	EPA 8240		
Vinyl chloride	ND	0.025	mg/l	EPA 8240		
d4-1,2-Dichloroethane (SURROGATE)	112	0	% Recovery	92-133% QC LIMITS		
[illegible]oluene (SURROGATE)	96	0	% Recovery	89-114% QC LIMITS		
[illegible]romofluorobenzene (SURROGATE)	104	0	% Recovery	92-113% QC LIMITS		
TCLP Semivolatiles		*1		EPA 8270	12/28/92	ST
Date Extracted	12-21-92	0				
1,4-Dichlorobenzene	ND	0.020	mg/l	EPA 8270		
2,4-Dinitrotoluene	ND	0.020	mg/l	EPA 8270		
Hexachlorobenzene	ND	0.020	mg/l	EPA 8270		
Hexachlorobutadiene	ND	0.020	mg/l	EPA 8270		
Hexachloroethane	ND	0.020	mg/l	EPA 8270		
Nitrobenzene	ND	0.020	mg/l	EPA 8270		
Pentachlorophenol	ND	0.040	mg/l	EPA 8270		
Pyridine	ND	0.20	mg/l	EPA 8270		
Total Cresols	ND	0.020	mg/l	EPA 8270		
2,4,5-Trichlorophenol	ND	0.020	mg/l	EPA 8270		
2,4,6-Trichlorophenol	ND	0.020	mg/l	EPA 8270		
2-Fluorophenol (SURROGATE)	61	0	% Recovery	21-100% QC LIMITS		
d6-Phenol (SURROGATE)	42	0	% Recovery	10-94% QC LIMITS		
d5-Nitrobenzene (SURROGATE)	87	0	% Recovery	35-114% QC LIMITS		
2-Fluorobiphenyl (SURROGATE)	86	0	% Recovery	43-116% QC LIMITS		
2,4,6-Tribromophenol (SURROGATE)	94	0	% Recovery	10-123% QC LIMITS		
d14-Terphenyl (SURROGATE)	90	0	% Recovery	33-141% QC LIMITS		
CAM METALS SOLID		*1		EPA 6020	12/23/92	RVJ
Antimony (Sb)	ND	5.0	mg/kg	EPA 6020		
Arsenic (As)	ND	5.0	mg/kg	EPA 6020		
Barium (Ba) 10,000	200	5.0	mg/kg	EPA 6020		
Beryllium (Be)	ND	5.0	mg/kg	EPA 6020		
Cadmium (Cd)	ND	5.0	mg/kg	EPA 6020		
Chromium (Cr)	ND	5.0	mg/kg	EPA 6020		

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The analyses, opinions or interpretations contained in this report are based upon observations and material supplied by the client for whose exclusive and confidential use this report is made. The interpretations or opinions expressed represent the best judgement of Core Laboratories. Core Laboratories, however, assumes no responsibility and makes no warranty or representation, express or implied as to the [illegible] property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced except in [illegible]

Western Atlas International
A Litton/Dresser Company

CORE LABORATORIES

LABORATORY TESTS RESULTS
01/20/93

OB NUMBER: 922049 CUSTOMER: Powerine Oil Company ATTN: Ms. Judi R. Gardner

LIENT I.D.....:
ATE SAMPLED.....: 12/16/92
IME SAMPLED.....: 00:00
ORK DESCRIPTION...: TANK 66

LABORATORY I.D...: 922049-0007
DATE RECEIVED....: 12/18/92
TIME RECEIVED....: 12:10
REMARKS.....: 2, 8OZ-GLS 2, 4OZ-GLS-SOIL

EST DESCRIPTION		FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Cobalt (Co)		ND	5.0	mg/kg	EPA 6020		
Copper (Cu)	2,500	21	5.0	mg/kg	EPA 6020		
Lead (Pb)	1,000	18	5.0	mg/kg	EPA 6020		
Mercury (Hg)		ND	10	mg/kg	EPA 6020		
Molybdenum (Mo)		ND	5.0	mg/kg	EPA 6020		
Nickel (Ni)	2,000	7.1	5.0	mg/kg	EPA 6020		
Selenium (Se)		ND	10	mg/kg	EPA 6020		
Silver (Ag)		ND	5.0	mg/kg	EPA 6020		
Thallium (Tl)		ND	5.0	mg/kg	EPA 6020		
Vanadium (V)	2,400	5.1	5.0	mg/kg	EPA 6020		
Zinc (Zn)	5,000	97	10	mg/kg	EPA 6020		
TCLP Glass Jar Extraction		COMPLETED	-----	N/A	EPA 1310	12/21/92	GQ
Extraction For Metals		N/A	N/A	N/A	EPA 1310	12/28/92	CS
TCLP Extraction Metals			*20		EPA 6020	12/29/92	RVJ
Arsenic (As)		ND	0.100	mg/l	EPA 6020		
Barium (Ba)	100	0.27	0.100	mg/l	EPA 6020		
Cadmium (Cd)		ND	0.100	mg/l	EPA 6020		
Chromium (Cr)		ND	0.100	mg/l	EPA 6020		
Lead (Pb)		ND	0.100	mg/l	EPA 6020		
Mercury (Hg)		ND	0.200	mg/l	EPA 6020		
Selenium (Se)		ND	0.200	mg/l	EPA 6020		
Silver (Ag)		ND	0.100	mg/l	EPA 6020		
Soil Aquatic Toxicity		>750	750	mg/l	Static	12/19/92	*AT
TCLP Zero Headspace Extraction		COMPLETED	N/A	N/A	EPA 1310	12/18/92	ST

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

The opinions, opinions or interpretations contained in this report are based upon observations and material supplied by the client to whom and for whose exclusive and confidential use this report is made. The interpretations or opinions expressed represent the best judgement of Core Laboratories. Core Laboratories, however, assumes no responsibility and makes no warranty or representation, express or implied, as to the productivity, proper operation, or profitability of any oil, gas or other mineral property, well or sand in connection with which such report is used or relied upon for any purpose whatsoever. Core Laboratories shall not be liable for any loss, damage or expense incurred by reason of the use of any report or any interpretation or opinion expressed in any report.

Tank-66

GTEL Client Number:
Project I.D.: Core Laboratories
Work Order Number: T212275

ANALYTICAL RESULTS

Semi-Volatile Organics in Water
Modified EPA Method 8270[a]

GTEL Sample Number					
Client Identification		922049-7			
Date Sampled					
Date Extracted					
Date Analyzed		12-28-92			
Analyte	Reporting Limit, ug/L	Concentration, ug/L			
1,2,4-Trichlorobenzene	10	<10			
Naphthalene	10	98			
4-Chloroaniline	20	<20			
Hexachlorobutadiene	10	<10			
4-Chloro-3-methylphenol	20	<20			
2-Methylnaphthalene	10	150			
Hexachlorocyclopentadiene	10	<10			
2,4,6-Trichlorophenol	10	<10			
2,4,5-Trichlorophenol	10	<10			
2-Chloronaphthalene	10	<10			
2-Nitroaniline	50	<50			
Dimethyl phthalate	10	<10			
Acenaphthylene	10	<10			
3-Nitroaniline	50	<50			
Acenaphthene	10	12			
2,4-Dinitrophenol	50	<50			
4-Nitrophenol	50	<50			
Dibenzofuran	10	<10			
2,4-Dinitrotoluene	10	<10			
2,6-Dinitrotoluene	10	<10			

Table continued on next page

GTEL Client Number:
Project I.D.: Core Laboratories
Work Order Number: T212275

ANALYTICAL RESULTS

Semi-Volatile Organics in Water
Modified EPA Method 8270[a]

GTEL Sample Number					
Client Identification		992049-7			
Date Sampled					
Date Extracted					
Date Analyzed		12-28-92			
Analyte	Reporting Limit, ug/L	Concentration, ug/L			
Diethyl phthalate	10	<10			
4-Chlorophenylphenyl ether	10	<10			
Fluorene	10	<10			
4-Nitroaniline	50	<50			
4,6-Dinitro-2-methylphenol	50	<50			
N-Nitrosodiphenylamine[b]	10	<10			
4-Bromophenyl phenyl ether	10	<10			
Hexachlorobenzene	10	<10			
Pentachlorophenol	50	<50			
Phenanthrene	10	<10			
Anthracene	10	<10			
Di-n-butylphthalate	10	<10			
Fluoranthene	10	<10			
Pyrene	10	<10			
Butyl benzyl phthalate	10	<10			
3,3'-Dichlorobenzidine	20	<20			
Benzo[a]anthracene	10	<10			
bis(2-ethylhexyl)phthalate	10	<10			
Chrysene	10	<10			
Di-n-octyl phthalate	10	<10			

Table continued on next page

GTEL Client Number:
Project I.D.: Core Laboratories
Work Order Number: T212275

ANALYTICAL RESULTS

Semi-Volatile Organics in Water
Modified EPA Method 8270[a]

GTEL Sample Number					
Client Identification		922049-7			
Date Sampled					
Date Extracted					
Date Analyzed		12-28-92			
Analyte	Reporting Limit, ug/L	Concentration, ug/L			
Benzo[*b*]fluoranthene	10	<10			
Benzo[*k*]fluoranthene	10	<10			
Benzo[*a*]pyrene	10	<10			
Indeno[1,2,3-*c,d*]pyrene	10	<10			
Dibenz[*a,h*]anthracene	10	<10			
Benzo[*g,h,i*]perylene	10	<10			
Benzidine	50	<50			
Dilution Multiplier[c]					
2-Fluorophenol surrogate[d]	% Recovery				
Phenol-d5 surrogate[d]	% Recovery				
2,4,6-Tribromophenol surrogate[d]	% Recovery				
Nitrobenzene-d5 surrogate[e]	% Recovery				
2-Fluorobiphenyl surrogate[e]	% Recovery				
p-Terphenyl surrogate[e]	% Recovery				

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Extraction by EPA Method 3510.

b. Cannot be separated from diphenylamine.

c. Indicates the adjustments made for sample dilution.

d. Acid surrogates expected results = 100 ug/L. Recovery acceptability limits are derived from US EPA Contract Laboratory Program (CLP) requirements.
2-Fluorophenol = 21-100%, Phenol-d5 = 10-94%, 2,4,6-Tribromophenol = 10-123%. Source = Supelco Lot #20931.

e. Base surrogates expected results = 50 ug/L. Recovery acceptability limits are derived from US EPA Contract Laboratory Program (CLP) requirements.
Nitrobenzene -d5 = 35-114%, 2-Fluorobiphenyl = 43-116%, p-Terphenyl = 33-141%. Source = Supelco Lot #LA30292.

Health Science Associates

Attachment B

LABORATORY REPORT

Report No.: 981802
Purchase Order: CASH
External No.:

RAY HUIE
POWERINE OIL COMPANY
12354 LAKELAND ROAD
SANTA FE SPRINGS CA 90670

Date Received: 10-FEB-98
Date Completed: 12-FEB-98
Date Sent: 17-FEB-98
Page 1 of 1

Analytical Method: EPA 600/R-93-116

RESULTS TABLE
Sample Count (3) / Separable Layers (3)

Sample No.	Description	Sample Homogeneity	Asbestos Fibers	Nonasbestos Fibers
#1 (137449)	BEIGE INSULATION	COMPOSITE	BELOW LIMIT OF DETECTION	CELLULOSE : 10 %
#2 (137450)	BEIGE INSULATION	COMPOSITE	BELOW LIMIT OF DETECTION	FIBROUS GLASS : 5 % SYNTHETIC : 5 %
#3 (137451)	BEIGE INSULATION	COMPOSITE	BELOW LIMIT OF DETECTION	CELLULOSE : 20 %

Remarks : Sample(s) and sampling data as provided by RAY HUIE

Analyst : JMB / LAN

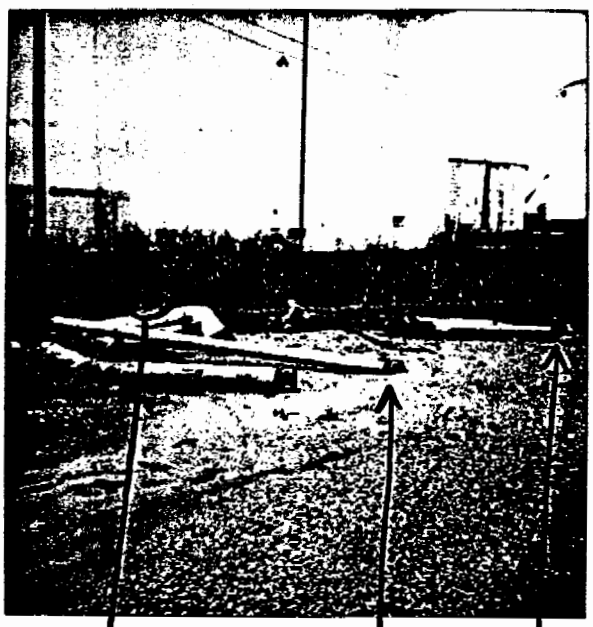
Reviewed by: Donald R. Bissing
Asbestos PLM Supervisor, Donald R. Bissing, PhD

AIHA ELLAP Accreditation No.: 10985
AIHA Accreditation No.: 172
California ELAP No.: 1406
NVLAP Accreditation No.: 101384

Technical Approval: Susan Rosenberg
Laboratory Director, Susan B. Rosenberg, CIH

10771 Noel St., Los Alamitos, CA 90720 714/220-3922 FAX 714/220-2081 e-mail hsa@earthlink.net

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purposes without written authorization is prohibited.



sample 3 sample 2 sample 1
insulation samples

sample 1
insulation sample

sample 2
insulation sample

Sample 3
insulation sample

Attachment C

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewrit*

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAD008383291
Manifest Document No.: 98001
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Powerine Oil Company
12345 Lakeland Road
Santa Fe Springs CA 90670

4. Generator's Phone (562) 944-6111

State Manifest Document Number: 97303534
State Generator's ID:
State Transporter's ID:
Transporter's Phone: (562) 906-0588
State Transporter's ID:
Transporter's Phone:
State Facility's ID: CAD009007626
Facility's Phone: (626) 334-0719

5. Transporter 1 Company Name
Hazardous Waste Transportation Services, Inc.

6. US EPA ID Number: CAD981446156

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
The Azusa Land Reclamation
1211 Gladstone Street
Azusa CA 91701

10. US EPA ID Number: CAD009007626

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste Number
a. RQ, Waste Asbestos, 9, NA2212, PGIII	014	DM	02400	P	
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
11a) Friable Asbestos

K. Handling Codes for Wastes Listed Above
03

15. Special Handling Instructions and Additional Information
USE PROPER SAFETY EQUIPMENT
DOT Emergency Guidebook
a) 171

BILL TO: HTS
Emergency Response Contact
(562)944-6111 or (562)906-0588

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	Signature	Month Day Year
[signature]	[signature]	03 05 98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
STEVE BACHMAN	[signature]	03 05 98

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
Gloria Barrera	Gloria Barrera	03 06 98

GENERATOR

TRANSPORTER

FACILITY

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

97303534

DO NOT WRITE BELOW THIS LINE.

Yellow: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS.
(Generators who submit hazardous waste for transport out-of-state, produce completed copy of this copy and send to DTSC within 30 days.)

DTSC 8022A (4/97)
EPA 8700—22

This Shipping Order Must be legibly filled in, in Ink, in Indelible Pencil, or in Carbon and retained by the Agent.

Shipper's #

Carrier Agent's No.

RECEIVE, subject to the classifications and tariffs in effect on the date of the issue of this Shipping Order,

at SANTA FE SPRINGS 19____ from POWERINE

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown) marked, consigned and destined as shown below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own railroad, water line, highway route or routes, or within the territory of its highway operations, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to HTS 11910 GREENSTONE (Mail or street address of consignee—For purposes of notification only.) (TRANSTATE BATTERY)

Destination SANTA FE SPRINGS State of ____ Zip Code ____ County of ____

Routing ____ Delivering Carrier ____ Vehicle or Car Initial ____ No. ____

Collect On Delivery

$ ____ and remit to: ____

Street ____ City ____ State ____

No. Packages	HM	Description of Articles, Special Marks, and Exceptions	*Weight (Sub. to Cor.)	Class or Rate	Check Column
7	X	BATTERIES, WET, ACID 8, UN2794 III	300	P	

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding ____ per ____

C. O. D. charge to be paid by { Shipper ☐ Consignee ☐

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statements:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor.)

If charges are to be prepaid, write or stamp here, "TO BE PREPAID."

Received $ ____ to apply to prepayment of the charges on the property described hereon.

Agent or Cashier

Per ____ (the signature here acknowledges only the amount Prepaid.)

Charges Advanced:

$ ____

Shipper, Per ____

Permanent post-office address of shipper, 12345 LAKEWOOD BLVD, SANTA FE SPRINGS

☞ Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

2

(This Bill of Lading is to be signed by the shipper and agent of the carrier issuing same.)

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESO[redacted]
DIVISION OF ENVIRONMENTAL [redacted]
Hazardous Waste Program
P.O. Box 176 Jefferson City, Missou
573-751-3176

HAZARDOUS WASTE MANIFEST
Attachment E

[redacted]LL MISSOURI-DESTINED SHIPMENTS.
THIS FORM ARE ON A SEPARATE SHEET.

CHEM TREC 1-800-424-9300 | DEPT. OF NATURAL RESOURCES 573-634-2436

Plea[redacted]t or type (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No 2050-0039, Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAD008383291 | Manifest Document No.:
2. Page 1 of 1 — Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address:
POWERINE OIL COMPANY
12345 Lakeland Road
Santa Fe Springs, CA 90670

4. Generator's Phone (562) 944-6111

A. Missouri Manifest Document Number: [redacted]
B. G.S.I. (Gen. Site Address):

5. Transporter 1 Company Name: Hazardous Waste Transportation Services, INc.
6. US EPA ID Number: CAD981446156
C. MO. Trans. ID:
D. Transporter's Phone: (562) 906-0588

7. Transporter 2 Company Name: Rust & Sons
8. US EPA ID Number: CAD981634116
E. MO Trans. ID: H2026
F. Transporter's Phone: (800) 444-6193

9. Designated Facility Name and Site Address:
Essex Waste Management, Inc.
1483 SW 58 Highway
Kingsville, MO 64061

10. US EPA ID Number: MOD980962849
G. State Facility's ID: 004037RR0257
H. Facility's Phone: (816) 732-5561

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. Waste Ethylene Dichloride, 3, UN1184, PGII	001	DM	00055	G	EPA WASTE CODE D001; STATE 211
b. RQ, Waste Corrosive Liquid, n.o.s., (Sulfuric Acid) 8, UN1760, PGIII	003	DF	00165	G	EPA WASTE CODE D002; STATE 491
c. Hazardous Waste Liquid, n.o.s., 9, NA3082, PGIII	002	DM	00110	G	EPA WASTE CODE K51; STATE 491
NON-RCRA Hazardous Waste Solid (Support Balls) (California Regulated Only)	011	DM	03900	P	EPA WASTE CODE NONE; STATE 352

J. Additional Descriptions for Materials Listed Above	K. HANDLING CODE (FACILITY USE ONLY) INTERIM	FINAL	COMMENTS
a. 9800469: Waste Ethylene Dichloride	a.		
b. 9800468: Sulfuric Acid Sludge	b.		
c. 9800467: API Sludge	c.		
d. 9800470: Ceramic Support Balls	d.		

15. Special Handling Instructions and Additional Information
USE PROPER SAEETY EQUIPMENT
DOT Emergency Guidebook
a) 129 b) 154 c) 171 d) None

BILL TO: HTS
Emergency Response Contact
(562)944-6111 or (562)906-0588

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 and applicable state 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 available to me that I can afford.

Printed/Typed Name: ROBERT A. WENOM | Signature: [signature] | Month Day Year: 02 19 98

17. Transporter 1 Acknowledgement of Receipt of Materials | Date
Printed/Typed Name: STEVE BACHMAN | Signature: [signature] | Month Day Year: 02 19 98

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

19. Discrepancy Indication Space

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

GENERATOR / TRANSPORTER / FACILITY

EPA Form 8700-22 (Rev. 8-91) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

CONTAINS 50% RECYCLED PAPER WHICH INCLUDES NOT LESS THAN 20% POST CONSUMER WASTE

PART 1 - MISSOURI ORIGINAL COPY - RETURN TO THE DESIGNATED

06/11/98 SSCPC03 STATUS INQUIRY PAGE 1 10:13:40.
CPOISTA3

NAME POWERINE OIL COMPANY

CORP NO C1948937 INC. DATE 09/21/1995 STATUS ACTIVE
DOMESTIC STOCK CLASS
NO OF PAGES 02 ST/CTRY

STMNT/OFFICERS LAST COMPLETE C DATE 07/18/96 NO 0339362
COMPL/NC N DATE 07/21/97 NO 0337199
OFFICERS CERT EXEMPTION CODE DATE NO A/P

PRINCIPAL EXECUTIVE ADDR 12354 LAKELAND ROAD

CITY/ST/CNTRY SANTA FE SPRINGS CALIFORNIA
ZIP 90670

CALIFORNIA ADDRESS 12354 LAKELAND ROAD

CITY SANTA FE SPRINGS CA 90670

MAILING ADDRESS
PO BOX 2108

CITY/ST/CNTRY SANTA FE SPRINGS CALIFORNIA
ZIP 90670

CEO NAME SIEGFRIED K HODAPP
ADDRESS 12354 LAKELAND ROAD

CITY/ST/CNTRY SANTA FE SPRINGS CALIFORNIA
ZIP 90670

AGENT NAME A L GUALTIERI
ADDRESS 12354 LAKELAND ROAD

CITY SANTA FE SPRINGS CA 90670

TYPE OF BUSINESS CRUDE OIL REFINING
ENTR=CONTINUE PF2=HISTORY PF3=BACK TO WORKSCREEN PF10=MAIN MENU

NAME POWERINE OIL COMPANY

CORP NO C1948937 INC. DATE 09/21/1995 STATUS ACTIVE
DOMESTIC STOCK CLASS
NO OF PAGES 02 ST/CTRY

STMNT/OFFICERS LAST COMPLETE C DATE 07/18/96 NO 0339362
COMPL/NC N DATE 07/21/97 NO 0337199

MAILING ADDRESS PO BOX 2108

CITY/ST/CNTRY SANTA FE SPRINGS CALIFORNIA
ZIP 90670

DATE	TRANSACTION	DOC NO.	NO.OF PAGES	ADDITIONAL INFORMATION
01/16/1996	MERGER	A0471022	6	MERGED IN C0249684
	POWERINE OIL COMPANY			
				NAME CHANGE FROM:
	POC ACQUISITION CORPORATION			
03/16/1998	AMENDMENT		0	UPDATED

State of California

Bill Jones
Secretary of State

P.O. Box 944230
Sacramento, CA 94244-2300
Phone (916) 657-3537

96-339362

FILED
SACRAMENTO, CALIF.

JUL 18 1996

BILL JONES
SECRETARY OF STATE

STATEMENT BY DOMESTIC STOCK CORPORATION

THIS STATEMENT MUST BE FILED WITH CALIFORNIA SECRETARY OF STATE (SEC. 1502, CORPORATIONS CODE)

A $10 FILING FEE MUST ACCOMPANY THIS STATEMENT.

WHEN COMPLETING FORM, PLEASE USE BLACK TYPEWRITER RIBBON OR BLACK INK

IMPORTANT—Please Read Instructions On Back Of Form

DO NOT ALTER PREPRINTED NAME. IF ITEM NO. 1 IS BLANK, PLEASE ENTER CORPORATE NAME.

1. C1948937 DUE DATE 09-30-96 06886S
POWERINE OIL COMPANY
12354 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

* IF THERE HAS BEEN NO CHANGE IN ANY OF THE INFORMATION ON FILE—PROCEED TO LINE 16.

DO NOT WRITE IN THIS SPACE

THE CALIFORNIA CORPORATION NAMED HEREIN, MAKES THE FOLLOWING STATEMENT

2. STREET ADDRESS OF PRINCIPAL EXECUTIVE OFFICE 12354 Lakeland Road	ROOM NO	2A. CITY AND STATE Santa Fe Springs, CA	2B. ZIP CODE 90670
3. STREET ADDRESS OF PRINCIPAL BUSINESS OFFICE IN CALIFORNIA, IF ANY 12354 Lakeland Road	ROOM NO	3A. CITY Santa Fe Springs CA	3B. ZIP CODE 90670
4. MAILING ADDRESS Post Office Box 2108	ROOM NO	4A. CITY AND STATE Santa Fe Springs, CA	4B. ZIP CODE 90670

THE NAMES OF THE FOLLOWING OFFICERS ARE:
Must have these three officers (Sec. 312, Corporations Code). An officer may hold more than one office.

5. CHIEF EXECUTIVE OFFICER Siegfried K. Hodapp	5A. STREET ADDRESS DO NOT USE P.O. BOX 12354 Lakeland Road	5B. CITY AND STATE Santa Fe Springs, CA	5C. ZIP CODE 90670
6. SECRETARY Michael Egner	6A. STREET ADDRESS DO NOT USE P.O. BOX 12354 Lakeland Road	6B. CITY AND STATE Santa Fe Springs, CA	6C. ZIP CODE 90670
7. CHIEF FINANCIAL OFFICER James C. Button	7A. STREET ADDRESS DO NOT USE P.O. BOX 12354 Lakeland Road	7B. CITY AND STATE Santa Fe Springs, CA	7C. ZIP CODE 90670

INCUMBENT DIRECTORS, INCLUDING DIRECTORS WHO ARE ALSO OFFICERS
Officers may also be directors. Must have one or more directors (Chap. 3, Sec. 301a, Corporations Code). Statements not listing directors will be rejected.

8. NAME Siegfried K. Hodapp	8A. STREET ADDRESS DO NOT USE P.O. BOX 12354 Lakeland Road	8B. CITY AND STATE Santa Fe Springs, CA	8C. ZIP CODE 90670
9. NAME A. L. Gualtieri	9A. STREET ADDRESS DO NOT USE P.O. BOX 12354 Lakeland Road	9B. CITY AND STATE Santa Fe Springs, CA	9C. ZIP CODE 90670
10. NAME James C. Button	10A. STREET ADDRESS DO NOT USE P.O. BOX 12354 Lakeland Road	10B. CITY AND STATE Santa Fe Springs, CA	10C. ZIP CODE 90670

11. THE NUMBER OF VACANCIES ON THE BOARD OF DIRECTORS, IF ANY: _____

DESIGNATED AGENT FOR SERVICE OF PROCESS (Only one agent may be named and must reside in California.)

12. NAME
A. L. Gualtieri

13. CALIFORNIA STREET ADDRESS IF AGENT IS AN INDIVIDUAL (DO NOT USE P.O. BOX; DO NOT INCLUDE ADDRESS IF AGENT IS A CORPORATION.
12354 Lakeland Road Santa Fe Springs, CA 90670

14. DESCRIBE TYPE OF BUSINESS OF THE CORPORATION NAMED IN ITEM 1.
Crude Oil Refining

15. I DECLARE THAT I HAVE EXAMINED THIS STATEMENT AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT IS TRUE, CORRECT AND COMPLETE.

TYPE OR PRINT NAME OF SIGNING OFFICER OR AGENT	SIGNATURE	TITLE	DATE
Michael Egner	Michael Egner	Vice President, Controller & Secretary	7/1/96

*16. I DECLARE THERE HAS BEEN NO CHANGE IN THE INFORMATION CONTAINED IN THE LAST STATEMENT OF THE CORPORATION WHICH IS ON FILE IN THE SECRETARY OF STATE'S OFFICE. DOES NOT APPLY ON INITIAL FILING.

CHECK HERE	TYPE OR PRINT NAME OF SIGNING OFFICER OR AGENT	SIGNATURE	TITLE	DATE

SO-260 N.C. REV. 11-95

FILED
In the office of the Secretary of State
of the State of California
NOV 22 1950
FRANK M. JORDAN, Secretary of State
By Robert Jordan
Assistant Secretary of State

ARTICLES OF INCORPORATION

OF

POWERINE OIL COMPANY

249681

Restriction of right to amend articles Yes No

I

NAME

The name of this corporation is
POWERINE OIL COMPANY.

II

PURPOSES

The purposes for which this corporation is formed are:

(a) The primary business in which the corporation intends initially to engage is to carry on, in all of its branches, the business of prospecting for, producing, purchasing, refining, preparing for market, manufacturing, selling, marketing, and distributing oil, gas, hydrocarbon and similar, kindred or related substances and products the products thereof or related thereto of every kind or character.

(b) To buy, purchase, lease, contract for or otherwise acquire, to manufacture, fabricate, prepare and use, to sell, lease, mortgage, assign, convey or otherwise dispose of oil, gas, petroleum, hydrocarbon gas, or the products of every kind or character of oil, gas, petroleum, hydrocarbon gas, and of all factories, refineries, buildings, machinery, equipment, tools, devices, apparatus, conduits, lines of tubing, lines of piping, tanks, cars, appliances, or any other real or personal property which may be necessary, suitable, useful or convenient in accomplishing any or all of the purposes aforesaid.

(c) To purchase, contract for, lease or otherwise acquire, to own, hold, possess, develop, operate or otherwise make use of, to mortgage, encumber, hypothecate, sell, transfer, assign, exchange, transfer in trust or otherwise dispose of, to deal in, unlimitedly, all such real or personal property of every kind, nature or description as may be necessary, suitable, useful or convenient in connection with any of the purposes or objects herein set forth.

(d) To purchase, either at public or private sale, to buy, sell, own, hold, exchange, invest in or deal with in any manner, the stocks, bonds, mortgages, trust deeds, notes, debentures, evidences of indebtedness and securities of every kind and character of other corporations and of individuals.

(e) To purchase or otherwise acquire its own capital stock as permitted by law.

(f) To borrow or raise money for any of the purposes of the corporation; to issue bonds, debentures, notes or other obligations of any nature or in any manner for money so borrowed and to secure the payment thereof and the interest thereon by mortgage upon, or pledge, or conveyance, or assignment in trust of, the whole or any part of or any interest in the property of the corporation, real or personal; and to sell or pledge such bonds or other obligations of the corporation for its corporate purposes.

(g) To purchase, apply for, register, or otherwise acquire, sell, transfer, and otherwise dispose of, mortgage and otherwise incumber, franchises, easements, rights, privileges, licenses, trade marks, trade names, patents, inventions, improvements and processes.

(h) To acquire, by purchase or otherwise, the goodwill, business, property rights, franchises and assets of every kind, with or without undertaking, either wholly or in part, the liabilities of any person, firm, association or corporation; and to acquire any property or business as a going concern, or otherwise, by the acquisition of shares or in any other manner, and to pay for the same in cash or in shares, bonds or other evidences of indebtedness of this corporation, or otherwise.

(i) To become a partner (either general or limited or both) and to enter into agreements of partnership with one or more other persons or corporations for the purpose of carrying on any business whatsoever which this corporation may lawfully or conveniently in connection with any of the purposes herein set forth or otherwise, and which may be calculated, directly or indirectly, to promote the interests of this corporation or to enhance the value of its property or business.

(j) To promote or to aid in any manner, financially or otherwise, any person, firm, corporation or association of which any shares of stock, bonds, notes, debentures or other securities or evidences of indebtedness are held directly or indirectly by this corporation; and for this purpose to guarantee the contracts, dividends, shares, bonds, debentures, notes and other obligations of such other persons, firms, corporations or associations; and to do any other acts or things designed to protect, preserve, improve or enhance the value of such shares, bonds, notes, debentures or other securities or evidences of indebtedness.

(k) The foregoing clauses shall be deemed and construed both as objects and powers, and it is hereby expressly provided that the foregoing enumerations of specific powers shall not be held to limit or restrict in any manner the powers of this corporation, but that the same shall have the power to do each and everything necessary or proper for the accomplishment of any purpose or the attainment of any one or more of the objects herein enumerated, or which shall at any time appear

conducive to, or expedient for the benefit of this corporation, either as holder of or otherwise interested in any property of any kind, and to generally transact and carry on any business and to exercise any and all other powers which may be necessary, proper, incidental, convenient or required to be exercised in connection with, or in furtherance of any of the foregoing purposes and powers.

(1) This corporation, from time to time, may do any one of, or more of, the acts and things, or purposes herein set forth and may transact business in the State of California and other States; in the District of Columbia; in the districts, dependencies and other colonies of the United States, and in foreign countries.

III

PRINCIPAL OFFICE

The County in the State of California where the principal office for the transaction of the business of this corporation is to be located is Los Angeles County.

IV

AUTHORIZED STOCK

This corporation is authorized to issue only one class of shares of stock; the total number of shares which this corporation shall have authority to issue is One Hundred (100); the aggregate par value of such shares shall be Ten Thousand Dollars ($10,000.00), and the par value of each of such shares shall be One Hundred Dollars ($100.00).

V

DIRECTORS

(a) The number of Directors of this corporation shall be three (3). The number of Directors may be changed by a By-Law duly adopted by the shareholders.

(b) The names and addresses of the persons who are appointed to act as the first Directors of this corporation are

Name	Address
Harry S. Rothschild	Los Angeles, California
Josephine E. Rothschild	Los Angeles, California
John A. Rothschild	Los Angeles, California

IN WITNESS WHEREOF, for the purpose of forming this corporation under the laws of the State of California, the undersigned, constituting the incorporators of this corporation, including the persons named hereinabove as the first Directors of this corporation, have executed these Articles of Incorporation this 17th day of November, 1950.

Harry S. Rothschild

Harry S. Rothschild

Josephine E. Rothschild

Josephine E. Rothschild

John A. Rothschild

John A. Rothschild

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } SS.

On this 17th day of November, 1950, before me, the undersigned, a Notary Public in and for said County and State, personally appeared HARRY S. ROTHSCHILD, JOSEPHINE E. ROTHSCHILD and JOHN A. ROTHSCHILD, known to me to be the persons whose names are subscribed to the foregoing Articles of Incorporation, and acknowledged to me that they executed same.

WITNESS my hand and official seal.

Walter J. Engle

Notary Public in and for said County and State.

My Commission Expires May 10, 1951

Cap stk chg from $10,000 to $10,000,000

349684

CERTIFICATE OF AMENDMENT OF

ARTICLES OF INCORPORATION OF

POWERINE OIL COMPANY,

A California Corporation

FILED
In the office of the Secretary of State of the State of California
OCT 16 1958
FRANK M. JORDAN, Secretary of State
By [signature] Deputy

A13508

HARRY S. ROTHSCHILD and JOSEPHINE E. KEBOW do hereby certify that they are, respectively, two of the three members of the Board of Directors, being two-thirds of the members of the Board of Directors, duly elected and acting, of POWERINE OIL COMPANY, a California corporation, and that

ONE: At a special meeting of the Board of Directors of said corporation duly held at its principal office for the transaction of business in Los Angeles County, California, to wit, 12354 East Lakeland Road, Santa Fe Springs, California, on October 8, 1958, there being at said meeting three Directors, being all of the Directors of the corporation, the following resolution was unanimously adopted by the Board of Directors of said corporation:

"RESOLVED, That the Articles of Incorporation of Powerine Oil Company, a California corporation, be amended in the manner as follows, to wit:

(1) That Paragraph IV of said Articles of Incorporation be amended so as to provide as follows:

' IV

AUTHORIZED STOCK

This corporation is authorized to issue only one class of shares of stock; that the total number of shares which this corporation shall have authority to issue is One Million (1,000,000); the aggregate par value of such shares shall be Ten Million Dollars ($10,000,000.00) and the par value of each of such shares shall be Ten Dollars ($10.00). '

(2) That subdivision (a) of Paragraph V of said Articles of Incorporation be amended so as to provide as follows:

' (a) The number of Directors of this corporation shall be five (5). The number of Directors may be changed by a By-Law duly adopted by the shareholders. '

BE IT FURTHER RESOLVED, That the officers of this corporation shall take whatever steps are required to effectuate the amendment of the Articles of Incorporation of this corporation in the manner as aforesaid."

TWO: That no shares of said corporation have been issued nor have subscriptions for shares of said corporation been taken.

IN WITNESS WHEREOF, the undersigned have executed this

Certificate of Amendment this 9th day of October, 1958.

Harry S. Rothschild

Josephine E. Kebow

Being two-thirds of the members of the Board of Directors of said corporation.

We do each declare, under penalty of perjury, that the foregoing is true and correct.

DATED at Los Angeles, Los Angeles County, California, this 9th day of October, 1958.

Harry S. Rothschild

Josephine E. Kebow

A126844

FILED
In the office of the Secretary of State of the State of California
OCT 26 1972
EDMUND G. BROWN Jr., Secretary of State
By [signature] Deputy

CERTIFICATE OF AMENDMENT OF
ARTICLES OF INCORPORATION OF
POWERINE OIL COMPANY
a California corporation

Harry R. Rothschild and Josephine E. Kebow certify that:

1. They are the President and Secretary, respectively, of Powerine Oil Company, a California corporation.

2. Pursuant to unanimous action of the Board of Directors of the Corporation taken at a meeting duly called and held on September 19, 1972, at 12354 Lakeland Road, Santa Fe Springs, California, there being at said meeting four Directors, being all of the Directors of the Corporation, the following resolution was adopted:

> "RESOLVED, that Article IV of this Corporation's Articles of Incorporation be amended to read as follows:

IV

This corporation is authorized to issue two classes of stock to be designated, respectively, as Preferred Stock and Common Stock. The total number of shares which this corporation shall be authorized to issue is 1,602,000 shares. The number of shares of Preferred Stock shall be 442,000 and the number of shares of Common Stock shall be 1,160,000. The Preferred Stock shall have a par value of $20.00 per share. The Common Stock shall have $1.00 par value. The aggregate par value of all capital stock of the Corporation shall be $10,000,000. Upon this amendment

9

becoming effective the 500,000 issued and outstanding shares of capital stock, $10.00 par value, of this corporation shall become shares of $1.00 par value, Common Stock, on a share for share basis.

1. Dividend Rights of Preferred Stock.

For so long as the Preferred Stock shall be outstanding, the holders of each share of the Preferred Stock shall be entitled to receive, out of any funds legally available therefor, dividends at the rate of thirty-three cents ($.33) per annum payable in cash quarterly on the first days of February, May, August, and November in each year, when and as declared by the Board of Directors of this corporation. If the Board of Directors shall elect to make further distribution of dividends after all cumulative dividends on the Preferred Stock have been paid or declared and set apart for payment to holders of the Preferred Stock, such dividends shall be made equally on all outstanding shares of Preferred Stock and Common Stock; provided, however, that the holders of Preferred Stock shall not participate any one fiscal year in dividends in addition to the $.33 cumulative dividends, which aggregate in excess of $1.27 per share (i.e., in the absence of accrued arrearages, dividends on Preferred Stock shall not exceed $1.60 per share in any fiscal year). After the Preferred Stock shall have received its maximum dividend specified above in any fiscal year, holders of Common Shares shall be entitled to receive further dividends out of any funds of the Corporation legally available therefor as and when declared by the Board of Directors, without any further participation by holders of the Preferred Stock for the

fiscal year, and without creating any additional or cumulative rights for the holders of Preferred Stock with respect to any such distributions. The thirty-three cent annual dividend shall accrue on each such share from the date of its original issuance and shall accrue from day to day whether or not earned or declared. Such thirty-three cent annual dividends (and no others) shall be cumulative so that if such dividends in respect of any previous quarterly dividend period, shall not have been paid on or declared and set apart for all shares of Preferred Stock at the time outstanding, the deficiency shall be fully paid on or declared and set apart for such shares before any dividend or other distribution shall be paid on or declared on or declared or set apart for any other stock of this corporation and before applying any of its assets to the purchase or acquisition of such stock by this corporation. An accumulation of dividends on the Preferred Stock shall not bear interest.

At any time after all cumulative dividends on the Preferred Stock for all previous quarterly dividend periods shall have been declared and paid in full and dividends on the outstanding Preferred Stock for the current quarterly dividend period have been declared and paid or set apart for payment in full, dividends may be paid on outstanding Common Stock out of, and Common Stock may be purchased or acquired by application of, any assets at the time legally available therefor.

2. Liquidation Rights of Preferred Stock.

In the event of any voluntary liquidation, dissolution or winding up of this corporation, the holders of Preferred

Stock shall be entitled to receive a preferential amount in cash equal to (a) the aggregate of the dividends unpaid and accumulated or accrued thereon to the date that payment is available to said holders, whether earned or payable or declared or not, and (b) $21.00 for each share of such Preferred Stock prior to January 1, 1978, and $20.00 for each share of such Preferred Stock on or after January 1, 1978.

In the event of any involuntary liquidation, dissolution or winding up of this corporation, the holders of Preferred Stock shall be entitled to receive from the assets of this corporation a preferential amount in cash equal to the par value thereof, and a further preferential amount in cash equal to all accrued and unpaid dividends thereon whether earned or declared or not, to the date that payment is made available to the holders of Preferred Stock. All of said preferential amounts to be paid to the holders of Preferred Stock as in this Section 2 provided shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any assets of this corporation to, the holders of any other stock of this corporation in connection with such liquidation, dissolution or winding up.

After the payment or the setting apart for payment to the holders of Preferred Stock of the preferential amounts so payable to them, the holders of Common Stock shall be entitled to receive, ratably, all remaining assets of this corporation. A liquidation, dissolution or winding up of this corporation, as such terms are used in this Section 2, shall not be deemed to be

occasioned by or to include any consolidation or merger of this corporation with or into any other corporation or corporations.

3. Redemptions of Preferred Stock.

This corporation may at its option, from time to time upon any quarterly dividend payment date, redeem the whole of the Preferred Stock. The redemption price for each share of the Preferred Stock so redeemed shall be in an amount in cash equal to (i) $21.00 prior to January 1, 1978 or thereafter, the par value thereof, plus (ii) all unpaid dividends accumulated and accrued thereon whether earned or declared or not to the date of redemption.

At least thirty days' previous notice by certified or registered mail, postage prepaid, shall be given to the holders of record of the Preferred Stock to be redeemed, such notice to be addressed to each such shareholder at his post office address as shown by the records of this corporation and in the absence thereof, shall be addressed to the place where the principal office of this corporation is located in the State of California. Notwithstanding the foregoing, the Corporation may purchase at the redemption price shares of Preferred Stock following the death of the owner thereof without making any redemption of shares of other holders of Preferred Stock, so long as the amount of such distribution in redemption of shares of Preferred Stock does not exceed the sum of the estate, inheritance, legacy and succession taxes (including any interest collected as a part of such taxes) imposed because of such owner's death and the amount of funeral and administration expenses actually incurred

with respect to such deceased owner. On or after the date fixed for redemption and stated in said notice, said holder of Preferred Stock called for redemption shall surrender his certificate for such shares to this corporation at the place designated in such notice and shall thereupon be entitled to receive payment of the redemption price. In case less than all the shares represented by any such surrendered certificate are redeemed, a new certificate shall forthwith be issued representing the shares not redeemed. If such notice of redemption shall have been duly given, and if on the date fixed for redemption funds necessary for the redemption shall be available therefor, then notwithstanding that the certificates evidencing any Preferred Stock so called for redemption shall not have been surrendered, all rights with respect to the shares so called for redemption shall forthwith after such date cease and terminate, except only the right of the holders to receive the redemption price thereof, without interest, upon surrender of their certificates therefor.

If, on or prior to any date fixed for redemption of Preferred Stock, this corporation deposits with any bank or trust company in the City and County of Los Angeles, State of California, as a trust fund, a sum sufficient to redeem, on the date fixed for redemption thereof, the shares called for redemption, with irrevocable instructions and authority to the bank or trust company to give the notice of redemption thereof if such notice shall not previously have been given by this corporation, or to complete the giving of such notice if theretofore commenced, and to pay,

on and after the date fixed for redemption or prior thereto, the redemption price of the shares to their respective holders upon the surrender of their share certificates, then from and after the date of the deposit (although prior to the date fixed for redemption), the shares so called shall be deemed to be redeemed and dividends on those shares shall cease to accrue after the date fixed for redemption. The deposit shall be deemed to constitute full payment of the shares to their holders and from and after the date of the deposit the shares shall be deemed to be no longer outstanding, and the holders thereof shall cease to be shareholders with respect to such shares, and shall have no rights with respect thereto except the right to receive from the bank or trust company payment of the redemption price of the shares without interest, upon the surrender of their certificates therefor.

Any shares of Preferred Stock in any manner acquired by this corporation shall be forthwith cancelled and not reissued.

4. Voting Rights.

Except as otherwise provided by law or by the Articles of Incorporation as amended, the holders of the shares of Common Stock issued and outstanding and of the shares of Preferred Stock issued and outstanding shall have and possess the exclusive right to notice of shareholders' meetings and the exclusive voting rights and powers. Except where otherwise provided by law or by the Articles of Incorporation as amended, each holder of Common Stock and each holder of Preferred Stock shall be entitled to cast one vote for each share held of record by him, and the holders of Common Stock and the holders of Preferred Stock shall vote as one class. In electing directors, each holder of Common Stock and each holder of Preferred Stock shall

be entitled to cumulate his votes and give one candidate a number of votes equal the number of directors to be elected, multiplied by the number of votes otherwise represented by his shares, or to distribute the number of votes equal to the number of directors to be elected, multiplied by the number of votes otherwise represented by his shares among as many candidates as he sees fit.

5. Protective Provisions Applicable to the Preferred Stock.

A. As long as any shares of Preferred Stock are outstanding, this corporation shall not, without the prior approval by the vote or written consent (as required by law) of the holders of 66-2/3% or more of the shares of the outstanding Preferred Stock:

(i) Amend or repeal any provisions of, or add any provisions to, this corporation's Articles of Incorporation if such action would alter or change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Preferred Stock so as to affect such Preferred Stock adversely;

(ii) Authorize or create shares of any class of stock having any preference or priority as to dividends or assets superior to or on a parity with any such preference or priority of the Preferred Stock, or authorize or create shares of stock of any class or any bonds, debentures, notes or other obligations convertible into or exchangeable for, or having optional rights to purchase, any shares of stock of the corporation

having any such preference;

(iii) Reclassify any Common Stock or any other shares of stock hereafter created ranking junior to the Preferred Stock as to dividends or assets into shares having any preference or priority as to dividends or assets superior to or on a parity with that of the Preferred Stock;

(iv) Increase the authorized number of shares of Preferred Stock."

3. That the shareholders have adopted said amendment by a resolution at a meeting held at Santa Fe Springs, California on September 19, 1972 at 2:00 P.M.; and that the wording of the amended article, as set forth in the shareholders' resolution, is the same as set forth in the directors' resolution in Paragraph 2 above.

4. That the number of capital shares which voted affirmatively for the adoption of said resolution is 500,000. That the total number of capital shares entitled to vote on or consent to the amendment is 500,000.

HARRY R. ROTHSCHILD, President

JOSEPHINE E. KEBOW, Secretary

Each of the undersigned declares under penalty of perjury that the matters set forth in the foregoing certificate are true and correct. Executed at Santa Fe Springs, California, on September 19, 1972.

HARRY R. ROTHSCHILD, President

JOSEPHINE E. KEBOW, Secretary

A173722

249684 SURV

FILED
In the office of the Secretary of State of the State of California
DEC 31 1976
MARCH FONG EU, Secretary of State
by Bell Hoade
Deputy

CERTIFICATE OF APPROVAL

OF MERGER

POWERINE OIL COMPANY

The undersigned, Ralph J. Becker and Harry S. Rothschild, do hereby certify that they are and have been at all times hereinafter mentioned the duly elected and acting President and Secretary, respectively, of Powerine Oil Company, a California corporation, and do further hereby certify that:

(a) At a meeting of the Board of Directors of this corporation, duly held at Santa Fe Springs, California, on December 20, 1976, the following resolutions were adopted:

WHEREAS, it is deemed to be in the best interests of this corporation and its shareholders that Pan-Nova, Inc., a California corporation ("Pan-Nova"), be merged with and into this corporation; and

WHEREAS, there has been presented to and considered by this Board of Directors a form of Agreement of Merger providing for said merger, and in connection therewith, the amendment of the Articles of Incorporation of this corporation to authorize a second class of preferred stock, to be designated "Class B Preferred Stock", and the conversion of all outstanding shares of capital stock of Pan-Nova into shares of Class B Preferred Stock of this corporation at the effective date of the merger;

NOW, THEREFORE, BE IT RESOLVED, that upon the approval of the shareholders of this corporation of the merger approved herein, Pan-Nova be merged with and into this corporation upon the terms and conditions set forth in the form of Agreement of Merger presented to and considered by this Board of Directors; and

RESOLVED, FURTHER, that the officers of this corporation or any of them be, and they hereby are, authorized and directed to execute any and all documents, including without limitation said Agreement of Merger, and to take any and all further action which they deem necessary or advisable to effectuate the same.

(b) The authorized number of directors of this corporation is three, and all three of said directors consented to the above resolutions approving the merger.

(c) By a written consent filed with the Secretary of this corporation, the shareholders of this corporation approved the terms and conditions of said Agreement of Merger referred to in said resolutions of the Board of

Directors; the total number of shares represented by such consent being 58,000 shares of Common Stock, $1.00 par value, and 398,250 shares of Preferred Stock, $20.00 par value.

(d) The total number of outstanding shares of this corporation is 58,000 shares of Common Stock, $1.00 par value, and 398,250 shares of Preferred Stock, $20.00 par value.

(e) The name of the Surviving Corporation is Powerine Oil Company.

(f) The Agreement of Merger between Pan-Nova, Inc., and Powerine Oil Company, merging Pan-Nova, Inc., with and into Powerine Oil Company, filed with the Secretary of State of the State of California concurrently with this certificate pursuant to Corporations Code §4113, is the agreement hereinabove referred to and sets forth the terms and conditions approved by said resolutions of the directors and written consent of the shareholders.

IN WITNESS WHEREOF, the undersigned have executed this certificate this 20 day of December, 1976.

Ralph J. Becker
Ralph J. Becker, President

Harry S. Rothschild
Harry S. Rothschild, Secretary

Ralph J. Becker and Harry S. Rothschild each declare:

That they are the President and Secretary, respectively, of Powerine Oil Company, a California corporation; that they have read the foregoing certificate and know the contents thereof and that the matters set forth in such certificate are true of their own knowledge.

Executed this 20 day of December, 1976, at Santa Fe Springs, California.

I declare under penalty of perjury that the foregoing is true and correct.

Ralph J. Becker
Ralph J. Becker

Harry S. Rothschild
Harry S. Rothschild

AGG PAR VAL CHGD TO: $12,480,000

A173723

FILED
In the office of the Secretary of State
of the State of California
DEC 31 1976
MARCH FONG EU, Secretary of State
By Bill Hoefer
Deputy

249684
SURV

AGREEMENT OF MERGER
OF
PAN-NOVA, INC.
WITH AND INTO
POWERINE OIL COMPANY

This Agreement of Merger is entered into this 30 day of December, 1976, by and between Pan-Nova, Inc., a California corporation (hereinafter referred to as "Pan-Nova" or the "Merging Corporation"), and Powerine Oil Company, a California corporation (hereinafter referred to as "Powerine" or the "Surviving Corporation"), with reference to the following facts:

A. Powerine is authorized to issue 442,000 shares of Preferred Stock, $20.00 par value, and 1,160,000 shares of Common Stock, $1.00 par value, of which there are issued and outstanding on the date hereof 398,250 shares of Preferred Stock, $20.00 par value, and 58,000 shares of Common Stock, $1.00 par value; and

B. Pan-Nova is authorized to issue 20,000 shares of Class A Common Stock, $1.00 par value, and 180,000 shares of Class B Common Stock, $1.00 par value, of which there are issued and outstanding on the date hereof 2,000 shares of Class A Common Stock, $1.00 par value, and 18,000 shares of Class B Common Stock, $1.00 par value.

NOW, THEREFORE, Powerine and Pan-Nova do hereby agree, in accordance with the provisions of the California Corporations Code, that Powerine and Pan-Nova shall, on the effective date of the merger, be merged into a single corporation on the terms and conditions provided as follows:

1. Merger. At the Effective Date (as hereinafter defined), Pan-Nova shall be merged into Powerine, which latter corporation shall be the Surviving Corporation, the name of

which shall continue to be Powerine Oil Company. The separate corporate existence of Pan-Nova and Powerine shall cease and the Surviving Corporation shall succeed, without other transfer, to all the rights and property and be subject to all the debts and liabilities of Pan-Nova; and the Surviving Corporation shall continue to be vested with all the rights and property and to be subject to all the debts and liabilities of Powerine. Between the date hereof and the Effective Date neither the Merging Corporation nor the Surviving Corporation shall declare or pay any dividends to its shareholders or, except in the ordinary course of business and for adequate value, dispose of any of its assets.

2. Management. The directors and officers of the Surviving Corporation holding office on the Effective Date shall continue to hold office until removed as provided by law or until the election of their successors.

3. Articles of Incorporation and By-Laws.

a. The By-Laws of the Surviving Corporation, as amended and in effect on the Effective Date, shall continue in full force and effect until altered or amended as provided therein or by law.

b. Except as amended in paragraph (c) of this Section 3, the Articles of Incorporation of the Surviving Corporation, as amended and in effect on the Effective Date, shall continue in full force and effect until altered or amended as provided therein or by law.

c. Article IV of the Articles of Incorporation of the Surviving Corporation shall be amended as of the Effective Date to read as set forth in Exhibit "A" attached hereto and by this reference incorporated herein.

4. Basis of Converting Shares.

a. At the Effective Date, all shares of Powerine Common Stock, $1.00 par value, then issued and outstanding shall continue to be issued and outstanding shares of Common Stock, $1.00 par value.

b. At the Effective Date, each share of Powerine Preferred Stock, $20.00 par value, then issued and outstanding shall be converted into one (1) share of Powerine Class A Preferred Stock, $20.00 par value.

c. At the Effective Date, each share of Pan-Nova Class A Common Stock, $1.00 par value, and each share of Pan-Nova Class B Common Stock, $1.00 par value, then issued and outstanding shall be converted into one and twenty-four one hundredths (1.24) shares of Powerine Class B Preferred Stock, $100.00 par value.

d. Each holder of shares of Pan-Nova and each holder of shares of Powerine Preferred Stock, $20.00 par value, shall surrender his shares, properly endorsed, to Powerine and shall thereupon be entitled to receive in exchange therefor a certificate or certificates representing the number of shares of Powerine into which such shares have been converted.

5. Further Assurances. The Merging Corporation shall, from time to time as and when requested by the Surviving Corporation, execute and deliver all such documents and instruments and take all such actions necessary or desirable to evidence or carry out the merger provided for herein.

6. Effective Date. The "Effective Date" shall be, and such term as used herein means, the date on which this Agreement shall be filed for record by the California Secretary of State.

IN WITNESS WHEREOF, this Agreement of Merger has been executed as of the day and year first above written.

POWERINE OIL COMPANY
a California corporation

By Ralph J. Becker
Ralph J. Becker, President

By Harry S. Rothschild
Harry S. Rothschild, Secretary

PAN-NOVA, INC.
a California corporation

By Harry S. Rothschild
Harry S. Rothschild, Vice President

By Harry R. Rothschild
Harry R. Rothschild, Secretary

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On December 20, 1976, before me, the undersigned, a Notary Public in and for said State, personally appeared Ralph J. Becker, known to me to be the President, and Harry S. Rothschild, known to me to be the Secretary, of Powerine Oil Company, a California corporation, the corporation that executed the within instrument, known to me to be the persons who executed the within instrument on behalf of such corporation and acknowledged to me that such corporation executed the within instrument pursuant to its By-Laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Cindy L. Hoffman
Notary Public

OFFICIAL SEAL
CINDY L. HOFFMAN
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
My comm. expires SEP 14, 1980

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On December 20 1976, before me, the undersigned, a Notary Public in and for said State, personally appeared Harry S. Rothschild, known to me to be the Vice President, and Harry R. Rothschild, known to me to be the Secretary, of Pan-Nova, Inc., a California corporation, the corporation that executed the within instrument, known to me to be the persons who executed the within instrument on behalf of such corporation and acknowledged to me that such corporation executed the within instrument pursuant to its By-Laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Cindy L. Hoffman
Notary Public

OFFICIAL SEAL
CINDY L. HOFFMAN
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
My comm. expires SEP 14, 1980

IV

This corporation is authorized to issue three classes of stock to be designated, respectively, as Class A Preferred Stock, Class B Preferred Stock and Common Stock. The total number of shares which this corporation shall be authorized to issue is 1,626,800 shares. The aggregate par value of all shares which this corporation is authorized to issue shall be $12,480,000.00. The number of shares of Class A Preferred Stock shall be 442,000 and the par value of each such share shall be $20.00. The number of shares of Class B Preferred Stock shall be 24,800 and the par value of each such share shall be $100.00. The number of shares of Common Stock shall be 1,160,000 and the par value of each such share shall be $1.00. Upon the amendment of this Article IV to read as herein set forth, each outstanding share of Preferred Stock of a par value of $20.00 is converted into or reconstituted as one share of Class A Preferred Stock of a par value of $20.00, and each outstanding share of Common Stock of a par value of $1.00 shall remain one share of Common Stock of a par value of $1.00.

The preferences, privileges and restrictions granted to or imposed upon the respective classes of shares of stock of this corporation or the holders thereof shall be as follows:

1. <u>Dividend Rights of Class A and Class B Preferred Stock</u>

For so long as any Class A Preferred Stock shall be outstanding, the holders of each share of Class A Preferred Stock shall be entitled to receive, in priority to the payment of any dividends on the Class B Preferred Stock or the Common Stock, out of any funds legally available therefor, dividends at the rate of thirty-three cents ($.33) per annum

payable in cash quarterly on the first days of February, May, August, and November in each year, when and as declared by the Board of Directors of this corporation. The $.33 annual dividend on Class A Preferred Stock shall accrue on each such share from the date of its original issuance and shall accrue from day to day whether or not earned or declared. Such $.33 annual dividends on Class A Preferred Stock shall be cumulative so that, if such dividends in respect of any previous quarterly dividend period shall not have been paid or declared and set apart for all shares of Class A Preferred Stock at the time outstanding, the deficiency shall be fully paid or declared and set apart for such shares before any dividend or other distribution shall be paid or declared and set apart for any other stock of this corporation and before applying any of its assets to the purchase or acquisition of such stock by this corporation. An accumulation of dividends on the Class A Preferred Stock shall not bear interest.

After all cumulative dividends on the outstanding shares of Class A Preferred Stock shall have been paid or declared and set apart for such shares, the holders of each share of Class B Preferred Stock shall be entitled to receive, in priority to the payment of any dividends on the Common Stock, out of any funds legally available therefor, dividends at the rate of nine dollars and fifty cents ($9.50) per annum payable in cash quarterly on the first days of February, May, August and November in each year, when and as declared by the Board of Directors of this corporation. The $9.50 annual dividend on Class B Preferred Stock shall accrue on each such share from the date of its original issuance and shall accrue from day to day whether or not earned or declared. Such $9.50 annual dividends on Class B Preferred Stock shall be cumulative so that, if such dividends

in respect of any previous quarterly dividend period shall not have been paid or declared and set apart for all shares of Class B Preferred Stock at the time outstanding, the deficiency shall be fully paid or declared and set apart for such shares before any dividend or other distribution (other than the $.33 annual cumulative dividend on Class A Preferred Stock) shall be paid or declared and set apart for any other stock of this corporation and before applying its assets to the purchase or acquisition of such stock (other than Class A Preferred Stock) of this corporation. An accumulation of dividends on the Class B Preferred Stock shall not bear interest.

At any time after all cumulative dividends on the Class A Preferred Stock and Class B Preferred Stock for all previous quarterly dividend periods shall have been declared and paid in full and dividends on the outstanding Class A Preferred Stock and Class B Preferred Stock for the current quarterly dividend period shall have been declared and paid or set apart for payment in full, dividends may be paid on outstanding Common Stock out of, and Common Stock may be purchased or acquired by application of, any assets at the time legally available therefor. If the Board of Directors shall elect to make such a further distribution of dividends, such dividends shall be made equally on all outstanding shares of Class A Preferred Stock and Common Stock (specifically excluding all outstanding shares of Class B Preferred Stock); provided, however, that the holders of Class A Preferred Stock shall not participate in any one fiscal year in dividends in addition to the $.33 cumulative dividends which aggregate in excess of $1.27 per share (i.e., in the absence of accrued arrearages, dividends on Class A Preferred Stock shall not

exceed $1.60 per share in any fiscal year). After the Class A Preferred Stock shall have received its maximum dividend specified above in any fiscal year, the holders of Common Stock shall be entitled to receive further dividends out of any funds of this corporation legally available therefor, as and when declared by the Board of Directors, without any further participation by holders of Class A Preferred Stock for the fiscal year and without creating any additional or cumulative rights for the holders of Class A Preferred Stock or Class B Preferred Stock with respect to any such distributions.

2. Liquidation Rights of Class A and Class B Preferred Stock

In the event of any voluntary liquidation, dissolution or winding up of this corporation, the holders of Class A Preferred Stock shall be entitled to receive, in priority to the payment of any distribution to the holders of Class B Preferred Stock or of Common Stock, a preferential amount in cash equal to (a) the aggregate of the dividends unpaid and accumulated or accrued thereon to the date that payment is available to said holders, whether earned or payable or declared or not, and (b) $21.00 for each share of Class A Preferred Stock prior to January 1, 1978, and $20.00 for each share of Class A Preferred Stock on or after January 1, 1978.

In the event of any involuntary liquidation, dissolution or winding up of this corporation, the holders of Class A Preferred Stock shall be entitled to receive from the assets of this corporation, in priority to the payment of any distribution to the holders of Class B Preferred Stock or of Common Stock, a preferential amount in cash equal to the par value thereof, and a further preferential amount in cash equal to all accrued and unpaid dividends

thereon whether earned or declared or not, to the date that payment is made available to the holders of Class A Preferred Stock. All of said preferential amounts to be paid to the holders of Class A Preferred Stock as set forth in this Section 2 shall be paid or set apart for payment before the payment or the setting apart for payment of any amount for, or the distribution of any assets of this corporation to, the holders of any other stock of this corporation in connection with such liquidation, dissolution or winding up.

In the event of any voluntary liquidation, dissolution or winding up of this Corporation and after the payment or the setting apart for payment to the holders of Class A Preferred Stock of the preferential amounts so payable to them, the holders of Class B Preferred Stock shall be entitled to receive, in priority to the payment of any distribution to the holders of Common Stock, a preferential amount in cash equal to (a) the aggregate of the dividends unpaid and accumulated or accrued thereon to the date that payment is available to said holders, whether earned or payable or declared or not, and (b) $105 for each share of Class B Preferred Stock prior to January 1, 1982 and $100 for each share of Class B Preferred Stock on or subsequent to January 1, 1982.

In the event of any involuntary liquidation, dissolution or winding up of this corporation, the holders of Class B Preferred Stock shall be entitled to receive from the assets of this corporation, in priority to the payment of any distribution to the holders of Common Stock, a preferential amount in cash equal to the par value thereof and a further preferential amount in cash equal to all accrued and unpaid dividends thereon whether earned or declared or

not, to the date that payment is made available to the holders of Class B Preferred Stock. All of said preferential amounts to be paid to the holders of Class B Preferred Stock as set forth in this Section 2 shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any assets of this corporation to, the holders of the Common Stock of this corporation in connection with such liquidation, dissolution or winding up.

After the payment or the setting apart for payment to the holders of Class A Preferred Stock and Class B Preferred Stock of the preferential amounts so payable to them, respectively, the holders of Common Stock shall be entitled to receive, ratably, all remaining assets of this corporation, if any, without any participation by holders of Class A Preferred Stock or Class B Preferred Stock. A liquidation, dissolution or winding up of this corporation, as such terms are used in this Section 2, shall not be deemed to be occasioned by or to include any consolidation or merger of this corporation with or into any other corporation or corporations.

3. Redemptions of Class A and Class B Preferred Stock

This corporation may at its option, at any time upon any quarterly dividend payment date, redeem the whole of the Class A Preferred Stock, whether or not the whole or any part of the Class B Preferred Stock is likewise redeemed. The redemption price for each share of Class A Preferred Stock so redeemed shall be in an amount in cash equal to (a) $21.00 prior to January 1, 1978, or thereafter, the par value thereof, plus (b) all unpaid dividends accumulated and accrued thereon whether earned or declared or not to the date of redemption.

This corporation may at its option, at any time or from time to time upon any quarterly dividend payment date, redeem the whole or any part of the Class B Preferred Stock, whether or not the whole of the Class A Preferred Stock is likewise redeemed. The redemption price for each share of Class B Preferred Stock so redeemed shall be in an amount in cash equal to (a) $105.00 prior to January 1, 1982, or thereafter, the par value thereof, plus (b) all unpaid dividends accumulated and accrued thereon whether earned or declared or not to the date of redemption. If only a part of the outstanding shares of Class B Preferred Stock be redeemed, such redemption shall be pro rata; provided, however, that in any event no shares of Class B Preferred Stock shall be redeemed, except as provided below following the death of a holder of Class B Preferred Stock, unless all accrued dividends on all outstanding shares of Class A Preferred Stock shall have been paid for all past quarterly dividend periods and full dividends for the current quarterly period on all outstanding shares of Class A Preferred Stock and on all outstanding shares of Class B Preferred Stock, except those to be redeemed, shall have been paid or declared and set apart for payment.

At least thirty days' previous notice by certified or registered mail, postage prepaid, shall be given to the holders of record of the Class A Preferred Stock or Class B Preferred Stock to be redeemed, whichever the case, such notice to be addressed to each such shareholder at his post office address as shown by the records of this corporation and in the absence thereof, shall be addressed to the place where the principal office of this corporation is located in the State of California. Notwithstanding the foregoing, this corporation may purchase at the redemption price shares

of Class A Preferred Stock or Class B Preferred Stock following the death of the owner thereof without making any redemption of shares of other holders of Class A Preferred Stock or Class B Preferred Stock, so long as the amount of such distribution in redemption of shares of such Preferred Stock does not exceed the sum of the estate, inheritance, legacy and succession taxes (including any interest collected as a part of such taxes) imposed because of such owner's death and the amount of funeral and administration expenses actually incurred with respect to such deceased owner.

On or after the date fixed for redemption and stated in said notice, each holder of Class A Preferred Stock or Class B Preferred Stock called for redemption shall, unless as a holder of Class B Preferred Stock he shall have previously exercised his option to convert his shares of Class B Preferred Stock as provided in Section 4 of this Article IV, surrender his certificate for such shares to this corporation at the place designated in such notice and shall thereupon be entitled to receive payment of the redemption price. In case less than all the shares represented by any such surrendered certificate are redeemed, a new certificate shall forthwith be issued representing the shares not redeemed. If such notice of redemption shall have been duly given, and if on the date fixed for redemption funds necessary for the redemption shall be available therefor, then notwithstanding that the certificates evidencing any such stock so called for redemption shall not have been surrendered, all rights with respect to the shares so called for redemption shall forthwith after such date cease and terminate, except only the right of the holders to receive the redemption price thereof, without interest, upon surrender

of their certificates therefor.

If, on or prior to any date fixed for redemption of Class A Preferred Stock or Class B Preferred Stock, this corporation deposits with any bank or trust company in the City and County of Los Angeles, State of California, as a trust fund, a sum sufficient to redeem, on the date fixed for redemption thereof, the shares called for redemption, with irrevocable instructions and authority to the bank or trust company to give the notice of redemption thereof if such notice shall not previously have been given by this corporation, or to complete the giving of such notice if theretofore commenced, and to pay, on and after the date fixed for redemption or prior thereto, the redemption price of the shares to their respective holders upon the surrender of their share certificates, then from and after the date of the deposit (although prior to the date fixed for redemption), the shares so called shall be deemed to be redeemed and dividends on those shares shall cease to accrue after the date fixed for redemption. The deposit shall be deemed to constitute full payment of the shares to their holders, and from and after the date of the deposit the shares shall be deemed to be no longer outstanding, and the holders thereof shall cease to be shareholders with respect to such shares, and shall have no rights with respect thereto except the right to receive from the bank or trust company payment of the redemption price of the shares without interest, upon the surrender of their certificates therefor.

Any shares of Class A Preferred Stock or Class B Preferred Stock in any manner acquired by this corporation shall be forthwith cancelled and not reissued.

4. Conversion Rights of Class B Preferred Stock

The holders of shares of Class B Preferred Stock shall have conversion rights as follows:

A. Shares of Class B Preferred Stock shall be convertible at the option of the respective holders thereof, at any time and from time to time on or prior to the fifth day prior to such date, if any, as may have been fixed for the redemption thereof in any notice of redemption given as provided in Section 3 of this Article IV, at the principal office of this corporation in the State of California, into fully paid and non-assessable shares of Common Stock of this corporation at the conversion price then in effect, calculated to the nearest one hundredth of a share, fractions of less than one hundredth of a share being disregarded; provided, however, that no payment or adjustment shall be made on account of any dividends declared but unpaid on the shares of Class B Preferred Stock surrendered for conversion.

For the purpose of such conversion, each share of Class B Preferred Stock shall be taken at the value of $100.00 per share, and each share of Common Stock deliverable on such conversion shall initially be taken at the value of $800.00 per share, hereinafter referred to as the "Conversion Price". The Conversion Price shall be adjustable from time to time as hereinafter provided. In case of the call for redemption of any shares of Class B Preferred Stock, such right of conversion shall terminate as to the shares designated for redemption, at the close of business on the fifth day preceding the day fixed for redemption, unless default is made in the payment of the redemption price.

B. Before any holder of shares of Class B Preferred Stock shall be entitled to convert the same into Common Stock, he shall surrender the certificate or certificates therefor, duly endorsed, at the principal office of this corporation in the State of California and shall give

written notice to this corporation at such office that he elects to convert the same and shall state in writing therein the name or names in which he wishes the certificate or certificates for the shares of Common Stock to be issued. This corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Class B Preferred Stock, or to his nominee or nominees, certificates for the number of full shares of Common Stock to which he shall be entitled, as aforesaid, together with a scrip certificate for any fraction of a share as hereinafter provided. Such conversion shall be deemed to have been made as of the date of such surrender of the shares to be converted, and the person or persons entitled to receive the Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such Common Stock on said date.

C. Notwithstanding the provisions of this Section 4, shares of Class B Preferred Stock shall not be convertible prior to January 1, 1982, unless any one of the following events shall have occurred in which event such shares shall be immediately convertible:

(i) The holder or holders in the aggregate of more than 50% of the then outstanding shares of Common Stock shall have entered into a binding agreement to sell more than 50% of the then outstanding shares of Common Stock;

(ii) This corporation shall have entered into a binding agreement to sell or otherwise transfer all or substantially all of the assets of this corporation;

(iii) This corporation shall have entered into a binding agreement to merge or consolidate with one or more other corporations and this corporation shall not be the surviving entity; or

(iv) This corporation shall have given a notice of redeemption as provided in Section 3 of this Article IV, but only as to such shares of Class B Preferred Stock as shall be called for redemption pursuant to any such notice.

D. In case the Conversion Price in effect immediately prior to the close of business on any date shall exceed by as much as 25 cents the amount determined at the close of business on such date by dividing:

(i) a sum equal to (x) $46,400,000 plus (y) the aggregate of the amounts of all consideration received by this corporation upon all issues of shares of Common Stock after January 1, 1977, by

(ii) the total number of outstanding shares of Common Stock,

the Conversion Price shall be reduced, effective at the close of business on such date, by the largest multiple of 25 cents contained in the sum by which such conversion price shall exceed the amount so determined.

For the purposes of this paragraph D, the following provisions shall be applicable:

(i) In the case of an issue or sale for cash of shares of Common Stock, or of any shares or obligations convertible into or exchangeable for Common Stock, the consideration received by this corporation therefor shall be deemed to be the amount of cash received, before deducting therefrom any commissions or expenses paid by this corporation for any underwriting of, or otherwise in connection with, the issue or sale thereof. In the case of the issue or sale of such securities, to an underwriter without payment of any commission, then, the consideration received by this corporation therefor shall be deemed to be the full

amount at which such securities are initially offered by the underwriter to the public, unless the difference between the price of said securities, rights or options to such underwriter and said initial public offering price exceeds 15% of said price to the underwriter, in which event the consideration received by this corporation therefor shall be deemed to be said price to the underwriter, plus 15% of said price to the underwriter.

(ii) In case of the issuance (otherwise than upon conversion or exchange of obligations or shares of stock of this corporation) of additional shares of Common Stock for a consideration other than cash or a consideration partly other than cash, the amount of the consideration other than cash received by this corporation for such shares shall be deemed to be the value of such consideration as determined by the Board of Directors.

(iii) In case of the issuance of additional shares of Common Stock pursuant to stock or option plans for officers or employees of this corporation, for a consideration per share (whether cash, other than cash or partly other than cash) less than the Conversion Price in effect immediately prior to the issuance thereof, the consideration per share received by this corporation for each such share shall be deemed to be the Conversion Price in effect immediately prior to the issuance thereof.

(iv) In case of the issuance by this corporation in any manner of any rights to subscribe for or to purchase shares of Common Stock, or any options for the purchase of shares of Common Stock (other than the issuance referred to in subparagraph (iii) above), at a consideration per share (as computed below) less than the Conversion Price in effect

immediately prior to the date of the offering of such rights or the granting of such options, as the case may be, all shares of Common Stock which the holders of such rights or options shall be entitled to subscribe for or purchase pursuant to such rights or options shall be deemed to be issued or sold as of the date of the offering of such rights or the granting of such options, as the case may be, and the minimum aggregate consideration named in such rights or options for the shares of Common Stock covered thereby, plus the consideration, if any, received by this corporation for such rights or options, shall, be deemed to be the consideration actually received by this corporation (as of the date of the offering of such rights or the granting of such options, as the case may be) for the issuance of such shares.

(v) In case of the issuance by this corporation in any manner of any obligations or of any shares of stock of this corporation (other than the convertible Class B Preferred Stock) that shall be convertible into or exchangeable for shares of Common Stock, at a consideration per share (as computed below) less than the Conversion Price in effect immediately prior to the date such obligations or shares are issued, all shares of Common Stock issuable upon the conversion or exchange of such obligations or shares shall be deemed to be issued as of the date such obligations or shares are issued, and the amount of the consideration received by this corporation for such additional shares of Common Stock shall be deemed to be the total of (a) the amount of consideration received by this corporation upon the issuance of such obligations or shares, as the case may be, plus (b) the minimum aggregate consideration, if any, other than such obligations or shares, receivable by this

corporation upon such conversion or exchange, except in adjustment of interest and dividends.

(vi) The amount of the consideration received by this corporation upon the issuance of any rights or options referred to in subparagraph (iv) above, or upon the issuance of any obligations or shares which are convertible or exchangeable as described in subparagraph (v) above, and the amount of the consideration, if any, other than such obligations or shares so convertible or exchangeable, receivable by this corporation upon the exercise, conversion or exchange thereof shall be determined in the same manner provided in subparagraphs (i) and (ii) above with respect to the consideration received by this corporation in case of the issuance of additional shares of Common Stock; provided, however, that if such obligations or shares of stock so convertible or exchangeable are issued in payment or satisfaction of any dividend upon any stock of this corporation other than Common Stock, the amount of the consideration received by this corporation upon the original issuance of such obligations or shares of stock so convertible or exchangeable shall be deemed to be the value of such obligations or shares of stock, as of the date of the adoption of the resolution declaring such dividend, as determined by the Board of Directors at or as of that date. On the expiration of any rights or options referred to in subparagraph (iv), or the termination of any right of conversion or exchange referred to in subparagraph (v), the Conversion Price then in effect shall forthwith be readjusted to such Conversion Price as would have been obtained had the adjustments made upon the issuance of such option, right or convertible or exchangeable securities been made upon the basis of the delivery of only the number of shares of Common Stock

actually delivered upon the exercise of such rights or options or upon the conversion or exchange of such securities.

(vii) In case of the issuance of additional shares of Common Stock as a dividend, the aggregate number of shares of Common Stock issued in payment of such dividend shall be deemed to have been issued and to be outstanding on the day next succeeding the record date for the determination of shareholders entitled to such dividend and shall be deemed to have been issued without consideration.

(viii) The number of shares of Common Stock at any time outstanding shall include all shares of Common Stock then owned or held by or for the account of this corporation and shares issuable in respect of scrip certificates issued in lieu of fractions of shares of common stock.

(ix) Each share of Common Stock issued upon conversion of the convertible shares of Class B Preferred Stock shall be deemed to have been issued for a consideration equal to the Conversion Price in effect at the time of such issuance.

(x) In case this corporation shall at any time subdivide or combine the outstanding shares of Common Stock, or shall issue as a dividend or dividends on Common Stock shares of Common Stock, the amount of 25 cents referred to above in this Paragraph D (or the amount to which such amount may have been previously adjusted pursuant to the provisions of this subparagraph (x)) shall be proportionately decreased in the case of subdivision or dividend payable in such Common Stock or increased in the case of combination, effective at the close of business on the date of such subdivision or combination or of the declaration of such dividend.

(xi) The term dividend, as used in this Paragraph D shall mean a dividend or other distribution upon stock of this corporation; and, in the event of a declaration of a dividend by this corporation without the fixing of a record date for the determination of shareholders entitled thereto, the first business day during which the stock transfer books of this corporation shall be closed for the purpose of such determination shall be deemed to be the record date.

E. In case this corporation shall at any time subdivide the outstanding shares of Common Stock, or shall issue as a dividend on Common Stock shares of Common Stock, the Conversion Price in effect immediately prior to such subdivision or the issuance of such dividend shall be proportionately decreased, and in case this corporation shall at any time combine the outstanding shares of Common Stock, the Conversion Price in effect immediately prior to such combination shall be proportionately increased, effective at the close of business on the date of such subdivision, dividend or combination, as the case may be. For the purpose of this Paragraph E, the date of issuance of any such dividend shall be determined in accordance with subparagraph (xi) of Paragraph D.

F. No fractional shares of Common Stock shall be issued upon the conversion of shares of Class B Preferred Stock. If any fractional interest in a share of Common Stock would, except for the provisions of this Paragraph F, be deliverable upon the conversion of any shares of Class B Preferred Stock, this corporation shall, in lieu of delivering the fractional share therefor, issue non-dividend bearing and non-voting scrip certificates for fractions of a share

which would otherwise be issuable, in such form and containing such terms and conditions as may be determined by the Board of Directors, and exchangeable together with other scrip certificates of like tenor aggregating one or more full shares, for share certificates representing such full share or shares.

G. Whenever the Conversion Price is adjusted, as herein provided, this corporation shall forthwith maintain at its office a statement, signed by the Chairman of the Board, the President or a Vice President of this corporation and by its Treasurer or an Assistant Treasurer, showing in detail the facts requiring such adjustment and the Conversion Price after such adjustment.

H. In case of any capital reorganization or any reclassification of the capital stock of this corporation or in case of the consolidation or merger of this corporation with or into another corporation or the conveyance of all or substantially all of the assets of this corporation to another corporation, each share of Class B Preferred Stock shall hereafter be convertible into the number of shares of stock or other securities or property to which a holder of the number of shares of Common Stock of this corporation deliverable upon conversion of such shares of Class B Preferred Stock would have been entitled upon such reorganization, reclassification, consolidation, merger or conveyance; and, in any such case, appropriate adjustment (as determined by the Board of Directors) shall be made in the application of the provisions herein set forth with respect to the rights and interests thereafter of the holders of shares of Class B Preferred Stock, to the end that the provisions set forth herein (including provisions with respect to changes in and

other adjustments of the Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any shares of stock or other property thereafter deliverable upon the conversion of such shares.

I. In case:

(i) This corporation shall take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend, or any other distribution, payable otherwise than in cash; or

(ii) This corporation shall take a record of the holders of its Common Stock for the purpose of entitling them to subscribe for or purchase any shares of stock of any class or to receive any other rights; or

(iii) Of any capital reorganization of this corporation, reclassification of the capital stock of this corporation (other than a subdivision or combination of its outstanding shares of Common Stock), consolidation or merger of this corporation with or into another corporation, or conveyance of all or substantially all of the assets of this corporation to another corporation; or

(iv) Of the voluntary or involuntary dissolution, liquidation or winding up of this corporation;

then, and in any such case, this corporation shall cause to be mailed to the holders of record of the outstanding shares of Class B Preferred Stock, at least 10 days prior to the date hereinafter specified, a notice stating the date on which (a) a record is to be taken for the purpose of such dividend, distribution or rights, or (b) such reclassification, reorganization, consolidation, merger, conveyance, dissolution, liquidation or winding up is to take place and the date, if any is to be fixed, as of which holders of Common Stock of record shall be entitled to exchange their

shares of Common Stock for securities or other property deliverable upon such reclassification, reorganization, consolidation, merger, conveyance, dissolution, liquidation or winding up.

J. This corporation shall at all times reserve and keep available, out of its authorized but unissued Common Stock, solely for the purpose of effecting the conversion of the shares of Class B Preferred Stock, the full number of shares of Common Stock deliverable upon the conversion of all the shares of Class B Preferred Stock, from time to time outstanding. This corporation shall from time to time (subject to obtaining necessary director and shareholder action), in accordance with the laws of the State of California, increase the authorized amount of its Common Stock if at any time the authorized number of shares of Common Stock remaining unissued shall not be sufficient to permit the conversion of all of the shares of Class B Preferred Stock at the time outstanding.

K. This corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of Class B Preferred Stock pursuant hereto. This corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock in a name other than that in which the shares so converted were registered, and no such issue or delivery shall be made unless and until the person requesting such issue has paid to this corporation the amount of any such tax, or has established, to the satisfaction of this corporation, that such tax has been paid.

5. Voting Rights

Except as otherwise provided by law or by these Articles of Incorporation as amended, the holders of the shares of Common Stock issued and outstanding and of the shares of Class A Preferred Stock issued and outstanding shall have and possess the exclusive right to notice of shareholders' meetings and the exclusive voting rights and powers. Except as otherwise provided by law or these Articles of Incorporation as amended, the holders of Class B Preferred Stock shall have no voting rights. Except where otherwise provided by law or by these Articles of Incorporation as amended, each holder of Common Stock and each holder of Class A Preferred Stock shall be entitled to cast one vote for each share held of record by him, and the holders of Common Stock and the holders of Class A Preferred Stock shall vote as one class. In electing directors, each holder of Common Stock and each holder of Class A Preferred Stock shall be entitled to cumulate his votes and give one candidate a number of votes equal to the number of directors to be elected, multiplied by the number of votes otherwise represented by his shares, or to distribute the number of votes equal to the number of directors to be elected, multiplied by the number of votes otherwise represented by his shares, among as many candidates as he sees fit.

6. Protective Provisions Applicable to Class A and Class B Preferred Stock

A. As long as any shares of Class A Preferred Stock or Class B Preferred Stock are outstanding, this corporation shall not, without the prior approval by the vote or written consent (as required by law) of the holders of 66-2/3% or more of the outstanding shares of each class of Preferred Stock affected:

(i) Amend or repeal any provisions of, or add any provisions to, this corporation's Articles of Incorporation if such action would alter or change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of either class of Preferred Stock so as to affect such Preferred Stock adversely;

(ii) Authorize or create shares of any class of stock having any preference or priority as to dividends or assets superior to or on a parity with any such preference or priority of either class of Preferred Stock, or authorize or create shares of stock of any class or any bonds, debentures, notes or other obligations convertible into or exchangeable for, or having optional rights to purchase, any shares of stock of this corporation having any such preference;

(iii) Reclassify any Common Stock or any other shares of stock hereafter created ranking junior to either class of Preferred Stock as to dividends or assets into shares having any preference or priority as to dividends or assets superior to or on a parity with that of either class of Preferred Stock;

(iv) Increase the authorized number of shares of either class of Preferred Stock.

249684

A220787

FILED
In the office of the Secretary of State
of the State of California

JUL 11 1980

MARCH FONG EU, Secretary of State

By [signature] Deputy

CERTIFICATE OF AMENDMENT

OF

ARTICLES OF INCORPORATION

OF

POWERINE OIL COMPANY

William P. Burke and Harry S. Rothschild certify that:

1. They are the President and Secretary, respectively, of Powerine Oil Company, a California corporation.

2. Article IV of the Articles of Incorporation of the corporation is amended to read as follows:

"IV

This corporation is authorized to issue four classes of stock to be designated, respectively, as Class A Preferred Stock, Class B Preferred Stock, Class C Preferred Stock, and Common Stock. The total number of shares which this corporation shall be authorized to issue is 1,701,800 shares. The aggregate par value of all shares which this corporation is authorized to issue shall be $12,555,000. The number of shares of Class A Preferred Stock shall be 442,000 and the par value of each such share shall be $20.00. The number of shares of Class B Preferred Stock shall be 24,800 and the par value of each such share shall be $100.00. The number of shares of Class C Preferred Stock shall be 75,000 and the par value of each such share shall be $1.00. The number of shares of Common Stock shall be 1,160,000 and the par value of each such share shall be $1.00.

The preferences, privileges and restrictions granted to or imposed upon the respective classes of shares of stock of this corporation or the holders thereof shall be as follows:

1. <u>Dividend Rights of Class A, Class B and Class C Preferred Stock and Common Stock</u>.

For so long as any Class A Preferred Stock shall be outstanding, the holders of each share of Class A Preferred Stock shall be entitled to receive, in priority to the payment of any dividends on the Class B Preferred Stock, Class C Preferred Stock or the Common Stock, out of any funds legally available therefor, dividends at the rate of thirty-three cents ($.33) per annum payable in cash quarterly on the first days of February, May, August, and November in each year, when and as declared by the Board of Directors of this corporation. The $.33 annual dividend on Class A Preferred Stock shall accrue on each such share from the date of its original issuance and shall accrue from day to day whether or not earned or declared. Such $.33 annual dividends on Class A Preferred Stock shall be cumulative so that, if such dividends in respect of any previous quarterly dividend period shall not have been paid or declared and set apart for all shares of Class A Preferred Stock at the time outstanding, the deficiency shall be fully paid or declared and set apart for such shares before any dividend or other distribution shall be paid or declared and set apart for any other stock of this corporation and before applying any of its assets to the purchase or acquisition of such stock by this corporation. An accumulation of dividends on the Class A Preferred Stock shall not bear interest.

After all cumulative dividends on the outstanding shares of Class A Preferred Stock shall have been paid or

declared and set apart for such shares, the holders of each share of Class B Preferred Stock shall be entitled to receive, in priority to the payment of any dividends on the Class C Preferred Stock or the Common Stock, out of any funds legally available therefor, dividends at the rate of Nine Dollars and Fifty Cents ($9.50) per annum payable in cash quarterly on the first days of February, May, August and November in each year, when and as declared by the Board of Directors of this corporation. The $9.50 annual dividend on Class B Preferred Stock shall accrue on each such share from the date of its original issuance and shall accrue from day to day whether or not earned or declared. Such $9.50 annual dividends on Class B Preferred Stock shall be cumulative so that, if such dividends in respect of any previous quarterly dividend period shall not have been paid or declared and set apart for all shares of Class B Preferred Stock at the time outstanding, the deficiency shall be fully paid or declared and set apart for such shares before any dividend or other distribution (other than the $.33 annual cumulative dividend on Class A Preferred Stock) shall be paid or declared and set apart for any other stock of this corporation and before applying its assets to the purchase or acquisition of such stock (other than Class A Preferred Stock) of this corporation. An accumulation of dividends on the Class B Preferred Stock shall not bear interest.

At any time after all cumulative dividends on Class A and Class B Preferred Stock for all previous quarterly dividend periods shall have been declared and paid in full and dividends on the outstanding Class A and Class B

Preferred Stock for the current quarterly dividend period shall have been declared and paid or set apart for payment in full, dividends may be paid on outstanding shares of Class C Preferred Stock out of any assets at the time legally available therefor; provided, however, that if the Board of Directors shall elect to make such a further distribution of dividends, such dividends shall be made equally on all outstanding shares of Class A Preferred Stock and Class C Preferred Stock; provided, however, that the holders of Class A Preferred Stock shall not participate in any one fiscal year in non-cumulative dividends (in addition to the $.33 cumulative dividends) which aggregate in excess of $1.27 per share (i.e., in the absence of accrued arrearages, dividends on Class A Preferred Stock shall not exceed $1.60 per share in any fiscal year). After the Class A Preferred Stock shall have received its maximum non-cumulative dividend in any fiscal year, the holders of Class C Preferred Stock shall be entitled to receive further dividends out of any funds of the corporation legally available therefor, as and when declared by the Board of Directors, without any further participation by holders of any class of Preferred Stock with respect to any such distributions. Before any distribution shall be made on any outstanding shares of Common Stock, each share of Class C Preferred Stock shall be entitled to an annual non-cumulative dividend equal to $89.37 per share.

At any time after all cumulative dividends on all classes of Preferred Stock for all previous quarterly dividend periods shall have been declared and paid in full

and cumulative dividends on the outstanding Class A and Class B Preferred Stock for the current quarterly dividend period shall have been declared and paid or set apart for payment in full, and all non-cumulative dividends for the Class A Preferred Stock and the Class C Preferred Stock for the current fiscal year shall have been declared and paid or set apart for payment in full, dividends may be paid on outstanding Common Stock out of any assets at the time legally available therefor, as and when declared by the Board of Directors, without any participation by holders of any class of Preferred Stock with respect to any such distributions.

2. Liquidation Rights of Class A, Class B, and Class C Preferred Stock.

In the event of any voluntary liquidation, dissolution or winding up of this corporation, the holders of Class A Preferred Stock shall be entitled to receive, in priority to the payment of any distribution to the holders of Class B Preferred Stock, Class C Preferred Stock or Common Stock, a preferential amount in cash equal to (a) the aggregate of the dividends unpaid and accumulated or accrued thereon to the date that payment is available to said holders, whether earned or payable or declared or not, and (b) $21.00 for each share of Class A Preferred Stock prior to January 1, 1978, and $20.00 for each share of Class A Preferred Stock on or after January 1, 1978.

In the event of any involuntary liquidation, dissolution or winding up of this corporation, the holders of Class A Preferred Stock shall be entitled to receive from the

assets of this corporation, in priority to the payment of any distribution to the holders of Class B Preferred Stock, Class C Preferred Stock or Common Stock, a preferential amount in cash equal to the par value thereof, and a further preferential amount in cash equal to all accrued and unpaid dividends thereon whether earned or declared or not, to the date that payment is made available to the holders of Class A Preferred Stock. All of said preferential amounts to be paid to the holders of Class A Preferred Stock as set forth in this Section 2 shall be paid or set apart for payment before the payment or the setting apart for payment of any amount for, or the distribution of any assets of this corporation to, the holders of any other stock of this corporation in connection with such liquidation, dissolution or winding up.

In the event of any voluntary liquidation, dissolution or winding up of this corporation and after the payment or the setting apart for payment to the holders of Class A Preferred Stock of the preferential amounts so payable to them, the holders of Class B Preferred Stock shall be entitled to receive, in priority to the payment of any distribution to the holders of Class C Preferred Stock or Common Stock, a preferential amount in cash equal to (a) the aggregate of the dividends unpaid and accumulated or accrued thereon to the date that payment is available to said holders, whether earned or payable or declared or not, and (b) $105 for each share of Class B Preferred Stock prior to January 1, 1982 and $100 for each share of Class B Preferred Stock on or subsequent to January 1, 1982.

In the event of any involuntary liquidation, dissolution or winding up of this corporation, the holders of Class B

Preferred Stock shall be entitled to receive from the assets of this corporation, in priority to the payment of any distribution to the holders of Class C Preferred Stock or Common Stock, a preferential amount in cash equal to the par value thereof and a further preferential amount in cash equal to all accrued and unpaid dividends thereon whether earned or declared or not, to the date that payment is made available to the holders of Class B Preferred Stock. All of said preferential amounts to be paid to the holders of Class B Preferred Stock as set forth in this Section 2 shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any assets of this corporation to, the holders of Class C Preferred Stock or Common Stock of this corporation in connection with such liquidation, dissolution or winding up.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of this corporation, after the payment or setting apart for payment to the holders of Class A and Class B Preferred Stock of the preferential amounts so payable to them, respectively, the holders of Class C Preferred Stock shall be entitled to receive, in priority to the payments of any distribution to the holders of Common Stock, a preferential amount in cash (and/or stock, or securities in the event of a reorganization treated as a liquidation under Section 5 below) equal to $2,923.00 for each share of Class C Preferred Stock. Said preferential amount to be paid to holders of Class C Preferred Stock shall be paid or set apart for payment before the payment or

setting apart for payment of any amount for, or the distribution of any assets of this corporation to, the holders of Common Stock of this corporation in connection with such liquidation, dissolution or winding up.

After the payment or the setting apart for payment to the holders of Class A Preferred Stock, Class B Preferred Stock and Class C Preferred Stock of the preferential amounts so payable to them, respectively, the holders of Common Stock shall be entitled to receive, ratably, all remaining assets of this corporation, if any, without any participation by holders of Class A Preferred Stock, Class B Preferred Stock or Class C Preferred Stock. A liquidation, dissolution or winding up of this corporation, as such terms are used in this Section 2, shall not be deemed to be occasioned by or to include any consolidation or merger of this corporation with or into any other corporation or corporations except as provided in Section 5 hereof.

3. <u>Redemptions of Class A, Class B and Class C Preferred Stock</u>.

This corporation may at its option, at any time upon any quarterly dividend payment date, redeem the whole of the Class A Preferred Stock, whether or not the whole or any part of the Class B Preferred Stock is likewise redeemed. The redemption price for each share of Class A Preferred Stock so redeemed shall be in an amount in cash equal to (a) $21.00 prior to January 1, 1978, or thereafter, the par value thereof, plus (b) all unpaid dividends accumulated and accrued thereon whether earned or declared or not to the date of redemption.

This corporation may at its option, at any time or from time to time upon any quarterly dividend payment date, redeem the whole or any part of the Class B Preferred Stock, whether or not the whole of the Class A Preferred Stock is likewise redeemed. The redemption price for each share of Class B Preferred Stock so redeemed shall be in an amount in cash equal to (a) $105.00 prior to January 1, 1982, or thereafter, the par value thereof, plus (b) all unpaid dividends accumulated and accrued thereon whether earned or declared or not to the date of redemption. If only a part of the outstanding shares of Class B Preferred Stock be redeemed, such redemption shall be pro rata; provided, however, that in any event no shares of Class B Preferred Stock shall be redeemed, except as provided below following the death of a holder of Class B Preferred Stock, unless all accrued dividends on all outstanding shares of Class A Preferred Stock shall have been paid for all past quarterly dividend periods and full dividends for the current quarterly period on all outstanding shares of Class A Preferred Stock and on all outstanding shares of Class B Preferred Stock, except those to be redeemed, shall have been paid or declared and set apart for payment.

Class C Preferred Stock may not be redeemed by this corporation.

At least thirty days' previous notice by certified or registered mail, postage prepaid, shall be given to the holders of record of the Class A Preferred Stock or Class B Preferred Stock to be redeemed, whichever the case, such notice to be addressed to each such shareholder at his post office address as shown by the records of this corporation

and in the absence thereof, shall be addressed to the place where the principal office of this corporation is located in the State of California. Notwithstanding the foregoing, this corporation may purchase at the redemption price shares of Class A Preferred Stock or Class B Preferred Stock following the death of the owner thereof without making any redemption of shares of other holders of Class A Preferred Stock or Class B Preferred Stock, so long as the amount of such distribution in redemption of shares of such Preferred Stock does not exceed the sum of the estate, inheritance, legacy and succession taxes (including any interest collected as a part of such taxes) imposed because of such owner's death and the amount of funeral and administration expenses actually incurred with respect to such deceased owner.

On or after the date fixed for redemption and stated in said notice, each holder of Class A Preferred Stock or Class B Preferred Stock called for redemption shall, unless as a holder of Class B Preferred Stock he shall have previously exercised his option to convert his shares of Class B Preferred Stock as provided in Section 4 of this Article IV, surrender his certificate for such shares to this corporation at the place designated in such notice and shall thereupon be entitled to receive payment of the redemption price. In case less than all the shares represented by any such surrendered certificate are redeemed, a new certificate shall forthwith be issued representing the shares not redeemed. If such notice of redemption shall have been duly given, and if on the date fixed for redemption funds necessary for the redemption shall be available therefor, then notwithstanding that the certificates evidencing any such stock so called for

redemption shall not have been surrendered, all rights with respect to the shares so called for redemption shall forthwith after such date cease and terminate, except only the right of the holders to receive the redemption price thereof, without interest, upon surrender of their certificates therefor.

If, on or prior to any date fixed for redemption of Class A Preferred Stock or Class B Preferred Stock, this corporation deposits with any bank or trust company in the City and County of Los Angeles, State of California, as a trust fund, a sum sufficient to redeem, on the date fixed for redemption thereof, the shares called for redemption, with irrevocable instructions and authority to the bank or trust company to give the notice of redemption thereof if such notice shall not previously have been given by this corporation, or to complete the giving of such notice if theretofore commenced, and to pay, on and after the date fixed for redemption or prior thereto, the redemption price of the shares to their respective holders upon the surrender of their share certificates, then from and after the date of the deposit (although prior to the date fixed for redemption), the shares so called shall be deemed to be redeemed and dividends on those shares shall cease to accrue after the date fixed for redemption. The deposit shall be deemed to constitute full payment of the shares to their holders, and from and after the date of the deposit the shares shall be deemed to be no longer outstanding, and the holders thereof shall cease to be shareholders with respect to such shares, and shall have no rights with respect thereto except the right to receive from the bank or trust company

payment of the redemption price of the shares without interest, upon the surrender of their certificates therefor.

Any shares of Class A Preferred Stock or Class B Preferred Stock in any manner acquired by this corporation shall be forthwith cancelled and not reissued.

4. Conversion Rights Of Class B Preferred Stock.

The holders of shares of Class B Preferred Stock shall have conversion rights as follows:

A. Shares of Class B Preferred Stock shall be convertible at the option of the respective holders thereof, at any time and from time to time on or prior to the fifth day prior to such date, if any, as may have been fixed for the redemption thereof in any notice of redemption given as provided in Section 3 of this Article IV, at the principal office of this corporation in the State of California, into fully paid and non-assessable shares of Common Stock of this corporation at the conversion price then in effect, calculated to the nearest one hundredth of a share, fractions of less than one hundredth of a share being disregarded; provided, however, that no payment or adjustment shall be made on account of any dividends declared but unpaid on the shares of Class B Preferred Stock surrendered for conversion.

For the purpose of such conversion, each share of Class B Preferred Stock shall be taken at the value of $100.00 per share, and each share of Common Stock deliverable on such conversion shall initially be taken at the value of $800.00 per share, hereinafter referred to as the "Conversion Price." The Conversion Price shall be adjustable from time to time as hereinafter provided. In case of the

call for redemption of any shares of Class B Preferred Stock, such right of conversion shall terminate as to the shares designated for redemption, at the close of business on the fifth day preceding the day fixed for redemption, unless default is made in the payment of the redemption price.

B. Before any holder of shares of Class B Preferred Stock shall be entitled to convert the same into Common Stock, he shall surrender the certificate or certificates therefor, duly endorsed, at the principal office of this corporation in the State of California and shall give written notice to this corporation at such office that he elects to convert the same and shall state in writing therein the name or names in which he wishes the certificate or certificates for the shares of Common Stock to be issued. This corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Class B Preferred Stock, or to his nominee or nominees, certificates for the number of full shares of Common Stock to which he shall be entitled, as aforesaid, together with a scrip certificate for any fraction of a share as hereinafter provided. Such conversion shall be deemed to have been made as of the date of such surrender of the shares to be converted, and the person or persons entitled to receive the Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such Common Stock on said date.

C. Notwithstanding the provisions of this Section 4, shares of Class B Preferred Stock shall not be convertible prior to January 1, 1982, unless any one of the following

events shall have occurred in which event such shares shall be immediately convertible:

(i) The holder or holders in the aggregate of more than 50% of the then outstanding shares of Common Stock shall have entered into a binding agreement to sell more than 50% of the then outstanding shares of Common Stock;

(ii) This corporation shall have entered into a binding agreement to sell or otherwise transfer all or substantially all of the assets of this corporation;

(iii) This corporation shall have entered into a binding agreement to merge or consolidate with one or more other corporations and this corporation shall not be the surviving entity; or

(iv) This corporation shall have given a notice of redemption as provided in Section 3 of this Article IV, but only as to such shares of Class B Preferred Stock as shall be called for redemption pursuant to any such notice.

D. In case the Conversion Price in effect immediately prior to the close of business on any date shall exceed by as much as 25 cents the amount determined at the close of business on such date by dividing:

(i) a sum equal to (x) $46,400,000.00 plus (y) the aggregate of the amounts of all consideration received by this corporation upon all issues of shares of Common Stock after January 1, 1977 by

(ii) the total number of outstanding shares of Common Stock,

the Conversion Price shall be reduced, effective at the close of business on such date, by the largest multiple of 25

cents contained in the sum by which such conversion price shall exceed the amount so determined.

For the purposes of this Paragraph D, the following provisions shall be applicable:

(i) In the case of an issue or sale for cash of shares of Common Stock, or of any shares or obligations convertible into or exchangeable for Common Stock, the consideration received by this corporation therefor shall be deemed to be the amount of cash received, before deducting therefrom any commissions or expenses paid by this corporation for any underwriting of, or otherwise in connection with, the issue or sale thereof. In the case of the issue or sale of such securities, to an underwriter without payment of any commission, then, the consideration received by this corporation therefor shall be deemed to be the full amount at which such securities are initially offered by the underwriter to the public, unless the difference between the price of said securities, rights or options to such underwriter and said initial public offering price exceeds 15% of said price to the underwriter, in which event the consideration received by this corporation therefor shall be deemed to be said price to the underwriter, plus 15% of said price to the underwriter.

(ii) In case of the issuance (otherwise than upon conversion or exchange of obligations or shares of stock of this corporation) of additional shares of Common Stock for a consideration other than cash or a consideration partly other than cash, the amount of the consideration other than cash received by this corporation for such shares shall

be deemed to be the value of such consideration as determined by the Board of Directors.

(iii) In case of the issuance of additional shares of Common Stock pursuant to stock or option plans for officers or employees of this corporation, for a consideration per share (whether cash, other than cash or partly other than cash) less than the Conversion Price in effect immediately prior to the issuance thereof, the consideration per share received by this corporation for each such share shall be deemed to be the Conversion Price in effect immediately prior to the issuance thereof.

(iv) In case of the issuance by this corporation in any manner of any rights to subscribe for or to purchase shares of Common Stock, or any options for the purchase of shares of Common Stock (other than the issuance referred to in subparagraph (iii) above), at a consideration per share (as computed below) less than the Conversion Price in effect immediately prior to the date of the offering of such rights or the granting of such options, as the case may be, all shares of Common Stock which the holders of such rights or options shall be entitled to subscribe for or purchase pursuant to such rights or options shall be deemed to be issued or sold as of the date of the offering of such rights or the granting of such options, as the case may be, and the minimum aggregate consideration named in such rights or options for the shares of Common Stock covered thereby, plus the consideration, if any, received by this corporation for such rights or options, shall be deemed to be the consideration actually received by this corporation (as of the date of

the offering of such rights or the granting of such options, as the case may be) for the issuance of such shares.

(v) In case of the issuance by this corporation in any manner of any obligations or of any shares of stock of this corporation (other than the convertible Class B Preferred Stock) that shall be convertible into or exchangeable for shares of Common Stock, at a consideration per share (as computed below) less than the Conversion Price in effect immediately prior to the date such obligations or shares are issued, all shares of Common Stock issuable upon the conversion or exchange of such obligations or shares shall be deemed to be issued as of the date such obligations or shares are issued, and the amount of the consideration received by this corporation for such additional shares of Common Stock shall be deemed to be the total of (a) the amount of consideration received by this corporation upon the issuance of such obligations or shares, as the case may be, plus (b) the minimum aggregate consideration, if any, other than such obligations or shares, receivable by this corporation upon such conversion or exchange, except in adjustment of interest and dividends.

(vi) The amount of the consideration received by this corporation upon the issuance of any rights or options referred to in subparagraph (iv) above, or upon the issuance of any obligations or shares which are convertible or exchangeable as described in subparagraph (v) above, and the amount of the consideration, if any, other than such obligations or shares so convertible or exchangeable, receivable by this corporation upon the exercise, conversion

or exchange thereof shall be determined in the same manner provided in subparagraphs (i) and (ii) above with respect to the consideration received by this corporation in case of the issuance of additional shares of Common Stock; provided, however, that if such obligations or shares of stock so convertible or exchangeable are issued in payment or satisfaction of any dividend upon any stock of this corporation other than Common Stock, the amount of the consideration received by this corporation upon the original issuance of such obligations or shares of stock so convertible or exchangeable shall be deemed to be the value of such obligations or shares of stock, as of the date of the adoption of the resolution declaring such dividend, as determined by the Board of Directors at or as of that date. On the expiration of any rights or options referred to in subparagraph (iv), or the termination of any right of conversion or exchange referred to in subparagraph (v), the Conversion Price then in effect shall forthwith be readjusted to such Conversion Price as would have been obtained had the adjustments made upon the issuance of such option, right or convertible or exchangeable securities been made upon the basis of the delivery of only the number of shares of Common Stock actually delivered upon the exercise of such rights or options or upon the conversion or exchange of such securities.

(vii) In case of the issuance of additional shares of Common Stock as a dividend, the aggregate number of shares of Common Stock issued in payment of such dividend shall be deemed to have been issued and to be outstanding on the day next succeeding the record date for the determination of

shareholders entitled to such dividend and shall be deemed to have been issued without consideration.

(viii) The number of shares of Common Stock at any time outstanding shall include all shares of Common Stock then owned or held by or for the account of this corporation and shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock.

(ix) Each share of Common Stock issued upon conversion of the convertible shares of Class B Preferred Stock shall be deemed to have been issued for a consideration equal to the Conversion Price in effect at the time of such issuance.

(x) In case this corporation shall at any time subdivide or combine the outstanding shares of Common Stock, or shall issue as a dividend or dividends on Common Stock shares of Common Stock, the amount of 25 cents referred to above in this Paragraph D (or the amount to which such amount may have been previously adjusted pursuant to the provisions of this subparagraph (x)) shall be proportionately decreased in the case of subdivision or dividend payable in such Common Stock or increased in the case of combination, effective at the close of business on the date of such subdivision or combination or of the declaration of such dividend.

(xi) The term dividend, as used in this Paragraph D shall mean a dividend or other distribution upon stock of this corporation; and, in the event of a declaration of a dividend by this corporation without the fixing of a record date for the determination of shareholders entitled thereto, the first business day during which the stock transfer books of this corporation shall be closed for the purpose of such determination shall be deemed to be the record date.

E. In case this corporation shall at any time subdivide the outstanding shares of Common Stock, or shall issue as a dividend on Common Stock shares of Common Stock, the Conversion Price in effect immediately prior to such subdivision or the issuance of such dividend shall be proportionately decreased, and in case this corporation shall at any time combine the outstanding shares of Common Stock, the Conversion Price in effect immediately prior to such combination shall be proportionately increased, effective at the close of business on the date of such subdivision, dividend or combination, as the case may be. For the purpose of this Paragraph E, the date of issuance of any such dividend shall be determined in accordance with subparagraph (xi) of Paragraph D.

F. No fractional shares of Common Stock shall be issued upon the conversion of shares of Class B Preferred Stock. If any fractional interest in a share of Common Stock would, except for the provisions of this Paragraph F, be deliverable upon the conversion of any shares of Class B Preferred Stock, this corporation shall, in lieu of delivering the fractional share therefor, issue non-dividend bearing and non-voting scrip certificates for fractions of a share which would otherwise be issuable, in such form and containing such terms and conditions as may be determined by the Board of Directors, and exchangeable together with other scrip certificates of like tenor aggregating one or more full shares, for share certificates representing such full share or shares.

G. Whenever the Conversion Price is adjusted, as herein provided, this corporation shall forthwith maintain at

its office a statement, signed by the Chairman of the Board, the President or a Vice President of this corporation and by its Treasurer or an Assistant Treasurer, showing in detail the facts requiring such adjustment and the Conversion Price after such adjustment.

H. In case of any capital reorganization or any reclassification of the capital stock of this corporation or in case of the consolidation or merger of this corporation with or into another corporation or the conveyance of all or substantially all of the assets of this corporation to another corporation, each share of Class B Preferred Stock shall hereafter be convertible into the number of shares of stock or other securities or property to which a holder of the number of shares of Common Stock of this corporation deliverable upon conversion of such shares of Class B Preferred Stock would have been entitled upon such reorganization, reclassification, consolidation, merger or conveyance; and, in any such case, appropriate adjustment (as determined by the Board of Directors) shall be made in the application of the provisions herein set forth with respect to the rights and interests thereafter of the holders of shares of Class B Preferred Stock, to the end that the provisions set forth herein (including provisions with respect to changes in and other adjustments of the Conversion Price) shall thereafter be applicable as nearly as reasonably may be, in relation to any shares of stock or other property thereafter deliverable upon the conversion of such shares.

I. In case:

(i) This corporation shall take a record of the holders of its Common Stock for the purpose of entitling them

to receive a dividend, or any other distribution, payable otherwise than in cash; or

(ii) This corporation shall take a record of the holders of its Common Stock for the purpose of entitling them to subscribe for or purchase any shares of stock of any class or to receive any other rights; or

(iii) Of any capital reorganization of this corporation, reclassification of the capital stock of this corporation (other than a subdivision or combination of its outstanding shares of Common Stock), consolidation or merger of this corporation with or into another corporation, or conveyance of all or substantially all of the assets of this corporation to another corporation; or

(iv) Of the voluntary or involuntary dissolution, liquidation or winding up of this corporation; then, and in any such case, this corporation shall cause to be mailed to the holders of record of the outstanding shares of Class B Preferred Stock, at least 10 days prior to the date hereinafter specified, a notice stating the date on which (a) a record is to be taken for the purpose of such dividend, distribution or rights, or (b) such reclassification, reorganization, consolidation, merger, conveyance, dissolution, liquidation or winding up is to take place and the date, if any is to be fixed, as of which holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reclassification, reorganization, consolidation, merger, conveyance, dissolution, liquidation or winding up.

J. This corporation shall at all times reserve and keep available, out of its authorized but unissued Common

Stock, solely for the purpose of effecting the conversion of the shares of Class B Preferred Stock, the full number of shares of Common Stock deliverable upon the conversion of all the shares of Class B Preferred Stock, from time to time outstanding. This corporation shall from time to time (subject to obtaining necessary director and shareholder action), in accordance with the laws of the State of California, increase the authorized amount of its Common Stock if at any time the authorized number of shares of Common Stock remaining unissued shall not be sufficient to permit the conversion of all of the shares of Class B Preferred Stock at the time outstanding.

K. This corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of Class B Preferred Stock pursuant hereto. This corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock in a name other than that in which the shares so converted were registered, and no such issue or delivery shall be made unless and until the person requesting such issue has paid to this corporation the amount of any such tax, or has established, to the satisfaction of this corporation, that such tax has been paid.

5. <u>Rights Of Class C Preferred Stock Upon Reorganization</u>.

If at any time the corporation undertakes a Reorganization (as defined in Section 181 of the California Corporations Code in effect as of January 1, 1980) in which the corporation is not the surviving entity and which would require shareholder approval pursuant to Section 1201 of

such Code (exclusive of any shareholder approval necessary pursuant to Subsections (c) and (d) of said Section 1201), such Reorganization shall be deemed a liquidation with respect to holders of Class C Preferred Stock and such holders shall be entitled to cash, stock, and/or securities having a fair market value equal to the liquidation preference of Class C Preferred Stock ($2,923.00) specified in Section 2 above. The fair market value of cash, stock or securities shall be determined by the average trading price of the stock or securities to be distributed in the Reorganization during the ten (10) trading days preceding execution of a definitive agreement authorizing the Reorganization, if the stock or securities are traded in an established securities market or regularly in the over-the-counter market, or by appraisal of fair market value by an investment banker hired by this corporation in the event no such trading has occurred.

6. Voting Rights

Except as otherwise provided by law or by these Articles of Incorporation as amended, the holders of the shares of Common Stock issued and outstanding and of the shares of Class A Preferred Stock and Class C Preferred Stock issued and outstanding shall have and possess the exclusive right to notice of shareholders' meetings and the exclusive voting rights and powers. Except as otherwise provided by law or these Articles of Incorporation as amended, the holders of Class B Preferred Stock shall have no voting rights. Except where otherwise provided by law or by these Articles of Incorporation as amended, each holder of Common Stock and each holder of Class A Preferred Stock and Class C Preferred

Stock shall be entitled to cast one vote for each share held of record by him, and the holders of Common Stock and the holders of Class A Preferred Stock and Class C Preferred Stock shall vote as one class. In electing directors, each holder of Common Stock and each holder of Class A Preferred Stock and Class C Preferred Stock shall be entitled to cumulate his votes and give one candidate a number of votes equal to the number of directors to be elected, multiplied by the number of votes otherwise represented by his shares, or to distribute the number of votes equal to the number of directors to be elected, multiplied by the number of votes otherwise represented by his shares, among as many candidates as he sees fit.

7. Protective Provisions Applicable to Class A, Class B and Class C Preferred Stock.

A. As long as any shares of Class A Preferred Stock, or Class B Preferred Stock or Class C Preferred Stock are outstanding, this corporation shall not, without the prior approval by the vote or written consent (as required by law) of the holders of 66-2/3% or more of the outstanding shares of each class of Preferred Stock affected:

(i) Amend or repeal any provisions of, or add any provisions to, this corporation's Articles of Incorporation if such action would alter or change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of any class of Preferred Stock so as to affect such Preferred Stock adversely;

(ii) Authorize or create shares of any class of stock having any preference or priority as to dividends or assets superior to or on a parity with any such preference

or priority of any class of Preferred Stock, or authorize or create shares of stock of any class or any bonds, debentures, notes or other obligations convertible into or exchangeable for, or having optional rights to purchase, any shares of stock of this corporation having any such preference;

(iii) Reclassify any Common Stock or any other shares of stock hereafter created ranking junior to any class of Preferred Stock as to dividends or assets into shares having any preference or priority as to dividends or assets superior to or on a parity with that of any class of Preferred Stock;

(iv) Increase the authorized number of shares of any class of Preferred Stock."

3. The foregoing Amendment has been duly approved by the Board of Directors.

4. The Amendment was approved by the required vote of shareholders in accordance with Section 903 of the California Corporations Code. The total number of outstanding shares of each class entitled to vote with respect to the Amendment is as follows:

Class A Preferred	359,530
Class B Preferred	24,800
Common	58,000

The holders of all of the outstanding shares of each class approved the Amendment which vote exceeded the vote required for the Amendment. The required vote was the

approval by the holders of at least 66-2/3% of the outstanding shares of each class.

William F. Burke, President

Harry S. Rothschild, Secretary

The undersigned declare under penalty of perjury that the matters set forth in the foregoing Certificate are true of their own knowledge.

EXECUTED at Santa Fe Springs, California on June 12, 1980.

William F. Burke

Harry S. Rothschild

Hmy

A334525

FILED
In the office of the Secretary of State
of the State of California

JUN 10 1987

MARCH FONG EU, Secretary of State

CERTIFICATE OF AMENDMENT

OF

ARTICLES OF INCORPORATION

1. HENRY DEL CASTILLO certifies that he is the Vice President and Secretary of POWERINE OIL COMPANY, a California corporation.

2. Article IV of the Articles of Incorporation of this corporation is amended to read as follows:

"IV

AUTHORIZED STOCK

This corporation is authorized to issue only one class of shares of stock which shall be common stock. The par value of each of such shares shall be one dollar ($1.00). The total number of shares which the corporation shall have the authority to issue is five million (5,000,000).

The Board of Directors of the corporation may issue any and all of the authorized shares from time to time for such consideration as it shall determine, and may determine from time to time to credit the paid-in-surplus of the corporation any amount of such consideration which exceeds the par value of any such share or shares."

3. The foregoing amendment has been duly adopted by the Board of Directors.

4. The foregoing amendment of articles of incorporation has been duly approved by the required vote of stockholders in accordance with Sections 902 and 903 of the California Corporations Code. The total number of outstanding shares of the corporation is 1,063,000. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

5. The only outstanding capital stock of the corporation is its common stock, par value one dollar ($1.00) per share.

I further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of my own knowledge.

Dated: June 9, 1987

Henry Del Castillo,
Vice President and
Secretary

A352335

FILED
In the office of the Secretary of State
of the State of California

MAY 24 1988

March Fong Eu
MARCH FONG EU, Secretary of State

249684

CERTIFICATE OF AMENDMENT

OF

ARTICLES OF INCORPORATION

OF

POWERINE OIL COMPANY

James Seaburn and Henry del Castillo certify that:

1. They are the President and Secretary, respectively, of Powerine Oil Company, a California corporation.

2. Article V of the Articles of Incorporation of the corporation is amended to add two new provisions to read as follows:

"V
DIRECTORS

(c) The liability of the directors of the corporation for monetary damages shall be eliminated to the fullest extent permissible under California law.

(d) The corporation is authorized to provide indemnification of agents (as defined in Section 317 of the Corporations Code) for breach of duty to the corporation and its stockholders through bylaw provisions or through agreements with the agents, or both, in excess of the indemnification otherwise permitted by Section 317 of the Corporations Code, subject to the limits on such excess indemnification set forth in Section 204 of the Corporations Code."

3. The foregoing amendment of Articles of Incorporation has been duly approved by the board of directors.

4. The foregoing amendment of Articles of Incorporation has been duly approved by the sole shareholder in accordance with Section 902 of the Corporations Code.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

DATED: March 30, 1988

James T Seaburn
JAMES T. SEABURN, President

Henry Del Castillo
HENRY DEL CASTILLO, Secretary

POWERINE:CERTAMND.INC.MAF

C249684

A429511

FILED
in the office of the Secretary of State
of the State of California

MAR 10 1993

MARCH FONG EU, Secretary of State

CERTIFICATE OF AMENDMENT OF ARTICLES OF INCORPORATION OF POWERINE OIL COMPANY, a California Corporation

A. L. Gualtieri and Henry Del Castillo certify that:

1. They are the duly elected President and Secretary, respectively, of Powerine Oil Company, a California corporation.

2. The Articles of Incorporation of this corporation are amended to add a new Article VI to read as follows:

"VI

CORPORATE ACTIONS REQUIRING UNANIMOUS APPROVAL OF BOARD OF DIRECTORS AND SHAREHOLDERS

The affirmative vote of all of the members of the Board of Directors of this corporation and, to the extent that such matter is required to be or is submitted to a vote of the shareholders of this corporation, of all of the outstanding voting shares of this corporation, shall be required to approve any of the following actions by this corporation:

(a) Amendment, repeal or alteration in any way of any provision of the Articles of Incorporation or the Bylaws of this corporation;

(b) Merger, consolidation, reorganization or liquidation of this corporation;

(c) Sale or other transfer or encumbrance of all or a material part of the assets of this corporation;

(d) Issuance or redemption of any shares of capital stock of this corporation or issuance of any options or other rights to acquire any shares of capital stock of this corporation;

(e) Declaration or payment of any distribution on the capital stock of this corporation;

(f) Loaning of funds or the payment or transfer of any asset of this corporation, or extension of credit by this corporation to Oskar J. Schmidt or any company, partnership, joint venture, person or other entity or association affiliated in any way with Oskar J. Schmidt;

(g) Filing of a voluntary petition on behalf of this corporation under the U.S. Bankruptcy Code or any other bankruptcy or insolvency law or any other law for relief of debtors;

(h) Appointment or removal from office of any officer of this corporation; and

(i) Payment, discharge, waiver, compromise or adjustment of any claim, liability or obligation (absolute, accrued, contingent or otherwise) of an amount in excess of $500,000, other than in the ordinary course of business."

3. The foregoing amendment of Articles of Incorporation has been duly approved by the Board of Directors.

4. The foregoing amendment of Articles of Incorporation has been duly approved by the sole shareholder pursuant to Section 902 of the Corporations Code.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this Certificate are true and correct of our own knowledge.

DATED: March 9, 1993

By: A. L. Gualtieri
Name: A. L. Gualtieri
Title: President

By: Henry Del Castillo
Name: Henry Del Castillo
Title: Secretary

A439784

249684

FILED
in the office of the Secretary of State
of the State of California

DEC 01 1993

MARCH FONG EU Secretary of State

CERTIFICATE OF AMENDMENT
OF
ARTICLES OF INCORPORATION
OF
POWERINE OIL COMPANY

A.L. Gualtieri and Craig R. Culbertson hereby certify:

1. They are the duly elected and qualified President and Secretary, respectively of POWERINE OIL COMPANY, a California corporation (the "Corporation").

2. That Article VI of the Articles of Incorporation entitled CORPORATE ACTIONS REQUIRING UNANIMOUS APPROVAL OF BOARD OF DIRECTORS AND SHAREHOLDERS is hereby deleted in its entirety.

3. The foregoing amendment of the Articles of Incorporation has been duly approved by the unanimous vote of the board of directors of the Corporation.

4. The foregoing amendment of the Articles of Incorporation has been duly authorized by the required vote of the shareholders in accordance with Section 902 of the California Corporations Code. The Corporation has one class of shares issued and entitled to vote. The total number of outstanding shares of the Corporation entitled to vote with respect to the foregoing amendment is 3,330,885. The number of shares voting in favor of the amendment equaled or exceeded the vote required in that the affirmative vote of all of the outstanding voting shares was required for the approval of the foregoing amendment and the amendment was approved by the affirmative vote of all of the outstanding voting shares.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

Dated: October 1, 1993

A.L. Gualtieri

A.L. Gualtieri, President

Craig R. Culbertson

Craig R. Culbertson, Secretary

A453992

249684

FILED BJM
In the office of the Secretary of State of the State of California

NOV 23 1994

Tony Miller
Acting Secretary of State

CERTIFICATE OF AMENDMENT OF THE ARTICLES OF INCORPORATION OF POWERINE OIL COMPANY, a California corporation

A.L. Gualtieri and Craig R. Culbertson certify that:

1. They are the duly elected President and Secretary, respectively, of Powerine Oil Company, a California corporation (the "Corporation").

2. Article IV of the Articles of Incorporation of the Corporation is hereby amended in its entirety to read as follows:

"IV

AUTHORIZED STOCK

(a) Authorized Capital. This Corporation is authorized to issue two classes of stock to be designed, respectively, as Preferred Stock and Common Stock. The total number of shares which this Corporation shall be authorized to issue is five million and one hundred (5,000,100) shares. The number of shares of Preferred Stock shall be one hundred (100) and the number of shares of Common Stock shall be five million (5,000,000). The par value of each of the shares of Preferred Stock and Common Stock shall be one dollar ($1.00). The Board of Directors of the Corporation may issue any and all of the authorized shares from time to time for such consideration as it shall determine, and may determine from time to time to credit the paid-in-surplus of the Corporation any amount of such consideration which exceeds the par value of any such share or shares.

(b) Rights and Privileges of Preferred Shareholders. If (i) a bankruptcy petition is filed by the Corporation, (ii) the holders of the Preferred Stock shall have been duly noticed and its vote solicited and shall have voted against the filing of such petition pursuant to Article VI, and (iii) such petition shall not have been dismissed within thirty (30) days of such filing, the holders of the Preferred Stock shall be entitled to elect that number of directors to the Board of Directors such that the holders of the Preferred Stock shall have elected a majority of the directors then serving on the Board of Directors of the Corporation. The aggregate number of directors serving on the Board of Directors shall be increased as necessary to give full effect to this Article IV(b) of the Articles of Incorporation of the Corporation. The right of the holders of the Preferred Stock to so elect a majority of directors to the Board of Directors shall not be exclusive of any other right or remedy such holder may have, at law or in equity.

(c) Redemption of the Preferred Stock. The Corporation shall redeem all of the shares of the preferred Stock issued and outstanding, effective immediately upon the first to occur (the "Termination Event") of (i) the receipt by the holders of shares of the Preferred Stock of evidence of the payment, satisfaction and discharge of all obligations of the corporation under the Amended and Restated Loan Agreement (as amended, the "POC Revolver"), dated as of October 1, 1993, between MG Trade Finance Corp. ("MGTF") and the Corporation, (ii) two business days after the receipt by the holders of shares of Preferred Stock of a certificate (the statements therein being true and correct) signed by Joseph L. Castle II or his successor, in his capacity as Chairman of the Board of Castle Energy Corporation, certifying that any of the MG Entities (as such term is defined in the Settlement Agreement, dated August 31, 1994, among the parties defined therein as the Castle Entities and the parties defined therein as the MG Entities) has materially defaulted in any material term under or pursuant to any material agreement now or hereafter in existence to which any of the Castle Entities and any of the MG Entities are parties, (iii) the date of the authorization by the Board of Directors of MGTF, Metallgesellschaft Corp., MG Natural Gas Corp. or MG Refining and Marketing, Inc. (or any similar corporate action) of any Insolvency Event (as defined in Section 3 of the Stock Option Agreement (the "Agreement"), dated as of October 14, 1994, among Castle Energy Corporation ("CEC"), Powerine Holding Company, as Grantee, and the Corporation, as Grantor), or (iv) such time as when any of the MG Entities materially breaches any of the terms of that certain Temporary Standstill Letter delivered by the MG Entities to certain of the Castle Entities, dated as of October 14, 1994, at a price per share equal to two dollars ($2.00). Upon the occurrence of a Termination Event, all rights of the holders of the Preferred Stock (including, without limitation, the rights designated in Article IV(b)) will automatically terminate (regardless of whether or not such redemption is effected or permitted to be effected under applicable law), except for the right to thereafter receive the redemption price, without interest.

(d) Liquidation Preference of Shares of Preferred Stock. IN the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Corporation, the holders of shares of the Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its shareholders an amount equal to $2.00 per share outstanding before any payment shall be made or any assets distributed to the holders of shares of Common Stock."

3. The Articles of Incorporation of the Corporation shall be further amended to add a new Article VI to read in its entirety as follows:

"VI

CORPORATE ACTIONS REQUIRING UNANIMOUS APPROVAL OF PREFERRED SHAREHOLDERS

The affirmative vote of all of the issued and outstanding shares of Preferred Stock of the Corporation (whether such shares shall have been issued or

deemed to have been issued pursuant to the Agreement) shall be required to approve any of the following actions by the Corporation:

(a) any waiver, repeal, modification, supplement or amendment with respect to any provision contained in Article IV or Article VI of the Articles of Incorporation of the Corporation, or Sections 2.01, 2.02 or 2.03 or Article VI of the Bylaws of the Corporation;

(b) (i) a merger, consolidation or reorganization of or with the Corporation in which the surviving corporation does not agree to be bound by Article IV and Article VI of the Articles of Incorporation of the Corporation, and the Agreement; or

(ii) any Change of Control in which the entity or entities which will obtain such control and/or purchase substantially all of the assets of the Corporation do not agree to be bound by Article IV and Article VI of the Articles of Incorporation of the Corporation, or to amend its or their articles of incorporation or other governing documents to incorporate the provisions contained in Article IV and Article VI of the Articles of Incorporation, and the Agreement ("Change of Control" as referred to herein shall mean (in each case, only with respect to such events which are not conditioned upon the payment, satisfaction and discharge of all of the obligations of the corporation to MGTF under the POC Revolver) such time as (A) CEC ceases to own, directly and indirectly, 100% of the equity interests of the Corporation, (B) CEC or the Corporation sells all or substantially all of its respective assets, (C) any "person" or "group", as such terms are defined within the meaning of Rules 13d-3 and 13d-5 under the Securities and Exchange Act of 1934, becomes the "beneficial owner", directly or indirectly, of more than 20% of the total voting power of the issued and voting stock of CEC then outstanding, or (D) either of the corporation or CEC dissolves or liquidates); or

(c) the institution by the corporation of any proceedings seeking to adjudicate it bankrupt or insolvent, or seeking liquidation, winding up, reorganization, arrangement, adjustment, protection, relief or composition of it or its debts under any law relating to bankruptcy, insolvency or reorganization or relief of debtors, or seeking the entry of an order for relief or the appointment of a receiver, trustee or other similar official for it or for any substantial part of its property; provided that until the occurrence of a Termination Event, no such proceeding shall be instituted unless all of the shares of the Preferred Stock are issued and outstanding."

4. The foregoing amendments of the Articles of Incorporation have been duly approved by the Board of Directors.

5. The foregoing amendments of the Articles of Incorporation have been duly approved by the sole shareholder pursuant to Section 902 of the California Corporations Code. The Corporation has one class of shares issued and entitled to vote. The total number of outstanding shares of the Corporation entitled to vote with

respect to the foregoing amendment is 3,330,885. The number of shares voting in favor of the amendment equaled or exceeded the vote required in that affirmative vote of the majority of the outstanding voting shares was required for the approval of the foregoing amendment and the amendment was approved by the affirmative vote of all of the outstanding shares.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this Certificate are true and correct of our own knowledge.

DATED: October 31, 1994

By: A.L. Gualtieri
Name: A.L. Gualtieri
Title: President

By: Craig Culbertson
Name: Craig R. Culbertson
Title: Secretary

NNM41008.REV/cb

I 249684

A460397

FILED
In the office of the Secretary of State
of the State of California

APR 2 8 1995

BILL JONES, Secretary of State

CERTIFICATE OF AMENDMENT AND RESTATEMENT
OF
THE ARTICLES OF INCORPORATION
OF
POWERINE OIL COMPANY,
a California corporation

A.L. Gualtieri and Craig R. Culbertson certify that:

1. They are the duly elected President and Secretary, respectively, of Powerine Oil Company, a California corporation (the "Corporation").

2. The Articles of Incorporation of the Corporation are hereby amended and restated in their entirety to read as follows:

"ARTICLES OF INCORPORATION
OF
POWERINE OIL COMPANY

I

NAME

The name of this corporation is POWERINE OIL COMPANY.

II

PURPOSES

The purposes for which this corporation is formed are:

(a) The primary business in which the corporation intends initially to engage is to carry on, in all of its branches, the business of prospecting for, producing, purchasing, refining, preparing for market, manufacturing, selling, marketing, and distributing, oil, gas, hydrocarbon and similar, kindred or related substances and also all of the products thereof or related thereto of every kind or character.

(b) To buy, purchase, lease, contract for or otherwise acquire, to manufacture, fabricate, prepare and use, to sell, lease, mortgage, assign, convey or otherwise dispose of oil, gas, petroleum, hydrocarbon gas, or the products of every kind or character of oil, gas, petroleum, hydrocarbon gas, and of all factories, refineries, buildings, machinery, equipment, tools, devices, apparatus, conduits, lines of tubing, lines of piping, tanks, cars, appliances, or any other real or personal property which may be necessary, suitable, useful or convenient in accomplishing any or all of the purposes aforesaid.

(c) To purchase, contract for, lease or otherwise acquire, to own, hold, possess, develop, operate or otherwise make use of, to mortgage, encumber, hypothecate, sell, transfer, assign, exchange, transfer in trust or otherwise dispose of, to deal in, unlimitedly, all such real or personal property of every kind, nature or description as may be necessary, suitable, useful or convenient in connection with any of the purposes or objects herein set forth.

(d) To purchase, either at public or private sale, to buy, sell, own, hold, exchange, invest in or deal with in any manner, the stocks, bonds, mortgages, trust deeds, notes, debentures, evidence of indebtedness and securities of every kind and character of other corporations and of individuals.

(e) To purchase or otherwise acquire and own capital stock as permitted by law.

(f) To borrow or raise money for any of the purposes of the corporation; to issue stocks, debentures, notes or other obligations of any nature or in any manner for money so escrowed and to secure the payment thereof and the interest thereon by mortgage upon, or pledge, or conveyance, or assignment in trust of, the whole or any part of or any interest in the property of the corporation, real or personal; and to sell or pledge such bonds or other obligations of the corporation for its corporate purposes.

(g) To purchase, apply for, register, or otherwise acquire, sell, transfer, and otherwise dispose of, mortgage and otherwise incumber, franchises, easements, rights, privileges, licenses, trade marks, trade names, patents, inventions, improvements and processes.

(h) To acquire, by purchase or otherwise, the goodwill, business, property rights, franchises and assets of every kind, with or without undertaking, either wholly or in part, the liabilities of any person, firm, association or corporation; and to acquire any property or business as a going concern, or otherwise, by the acquisition of shares or in any other manner, and to pay for the same in cash or in shares, bonds, or other evidences of indebtedness of this corporation, or otherwise.

(i) To become a partner (either general or limited or both) and to enter into agreements of partnership, with one or more other persons or corporations, for the purpose of carrying on any business whatsoever which this corporation may deem proper or convenient in connection with any of the purposes herein set forth or otherwise, or which may be calculated, directly or indirectly, to promote the interests of this corporation or to enhance the value of its property or business.

(j) To promote or to aid in any manner, financially or otherwise, any person, firm, corporation or association of which any shares of stock, bonds, notes, debentures or other securities or evidences of indebtedness are held directly or indirectly by this corporation; and for this purpose to guarantee the contracts, dividends,

shares, bonds, debentures, notes and other obligations of such other persons, firms, corporations or associations; and to do any other acts or things designed to protect, preserve, improve or enhance the value of such shares, bonds, notes, debentures or other securities or evidences of indebtedness.

(k) The foregoing clauses shall be deemed and construed both as objects and powers and it is hereby expressly provided that the foregoing enumerations of specific powers shall not be held to limit or restrict in any manner the powers of this corporation, but that the same shall have the power to do each and everything necessary or proper for the accomplishment of any purpose or the attainment of any one or more of the objects herein contained or which shall at any time appear conducive to, or expedient for the benefit of this corporation, either as holder of or otherwise interested in any property of any kind, and to generally transact and carry on any business and to exercise any and all other powers which may be necessary, proper, incidental, convenient or required to be exercised in connection with, or in furtherance of any of the foregoing purposes and powers.

(l) This corporation, from time to time, may do any one of, or more of, the acts and things, or purposes herein set forth and may transact business in the State of California and other States; in the District of Columbia; in the districts, dependencies and other colonies of the United States, and in foreign countries.

III

PRINCIPAL OFFICE

The County in the State of California where the principal office for the transaction of the business of this corporation is to be located in Los Angeles County.

IV

AUTHORIZED STOCK

(a) Authorized Capital. This Corporation is authorized to issue only one class of shares of stock which will be Common Stock. The par value of each of such shares shall be one dollar ($1.00). The total number of shares which the Corporation shall have the authority to issue is five million (5,000,000).

The Board of Directors of the Corporation may issue any and all of the authorized shares from time to time for such consideration as it shall determine, and may determine from time to time to credit the paid-in surplus of the Corporation any amount of such consideration which exceeds the par value of any such share or shares.

V

DIRECTORS

(a) The number of directors of this Corporation shall be three (3). The number of directors may be changed by a By-Law duly adopted by the shareholders.

(b) The liability of the directors of the corporation for monetary damages shall be eliminated to the fullest extent permissible under California law.

(c) The corporation is authorized to provide indemnification of agents (as defined in Section 317 of the Corporations Code) for breach of duty to the corporation and its stockholders through bylaw provisions or through agreements with the agents, or both, in excess of the indemnification otherwise permitted by Section 317 of the Corporations Code, subject to the limits on such excess indemnification set forth in Section 204 of the Corporations Code."

3. The foregoing amendments and restatement of the Articles of Incorporation has been duly approved by the Board of Directors.

4. The foregoing amendment and restatement of the Articles of Incorporation has been duly approved by the sole shareholder pursuant to Section 902 of the California Corporations Code. There are no issued and outstanding shares of Preferred Stock of the Corporation. The number of shares voting in favor of the amendment equaled or exceeded the vote required in that affirmative vote of the majority of the outstanding voting shares was required for the approval of the foregoing amendment and the amendment was approved by the affirmative vote of all of the outstanding shares.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this Certificate are true and correct of our own knowledge.

DATED: April 19, 1995

By: A.L. Gualtieri
Name: A.L. Gualtieri
Title: President

By: Craig Culbertson
Name: Craig R. Culbertson
Title: Secretary

D511426

THE COMPLETE MERGER FILING IS UNDER
CORPORATE NUMBER 1948937

FILED
In the office of the Secretary of State
of the State of California

JAN 16 1996

Bill Jones
BILL JONES, Secretary of State

0249684 out

AGREEMENT OF MERGER

OF

POWERINE OIL COMPANY

AND

POC ACQUISITION CORPORATION

AGREEMENT OF MERGER entered into on January 10, 1996 by Powerine Oil Company and POC Acquisition Corporation as approved by the Board of Directors of each of said corporations:

1. Powerine Oil Company, which is a corporation incorporated in the State of California, and which is sometimes hereinafter referred to as the "disappearing corporation", shall be merged with and into POC Acquisition Corporation, which is a corporation incorporated in the State of California, and which is sometimes hereinafter referred to as the "surviving corporation".

2. The separate existence of the disappearing corporation shall cease upon the effective date of the merger in accordance with the provisions of the General Corporation Law of the State of California.

3. The surviving corporation shall continue its existence under the name "Powerine Oil Company" pursuant to the provisions of the General Corporation Law of the State of California.

4. The Articles of Incorporation of the surviving corporation as now in force and effect shall be the Articles of Incorporation of said surviving corporation except that article I thereof, relating to the name of the corporation, is hereby amended and changed so as to read as follows upon the effective date of the merger:

"I

The name of this corporation is Powerine Oil Company".

Said Articles of Incorporation as herein amended and changed shall continue in full force and effect until further amended and changed in the manner prescribed by the provisions of the General Corporation Law of the State of California.

BNA21324.A41
250827152
NLScabe

STATE OF CALIFORNIA
FRANCHISE TAX BOARD
P.O. BOX 942857
SACRAMENTO, CA 94257-0541

TAX CLEARANCE CERTIFICATE

January 10, 1996

EXPIRATION DATE: April 15, 1996

WIILIAM S. GREGORY
COURT PLAZA BLDG.
STE. 400
901 H ST
SACRAMENTO CA 95814

ISSUED TO: POWERINE OIL COMPANY
Corporate Number 0249684 P06C*

This is to certify that all taxes imposed under the Bank and Corporation Tax Law on this corporation have been paid, assumed, or are secured by other means.

If a final return has not been filed, one should be filed within two months and 15 days after the close of the month in which the dissolution or withdrawl takes place. If the corporation was inactive, a statement to that effect should be attached to the tax forms. All returns remain subject to audit until the expiration of the normal statutory period. Failure to file required returns may result in additional assessments.

A copy of this Tax Clearance Certificate has been sent to the Office of the the Secretary of State. This original Tax Clearance Certificate may be retained in the files of the corporation.

By the Expiration Date noted above, this corporation must have filed the documents required by the Secretary of State to dissolve, withdraw or merge. Requests for the appropriate documents must be directed to: Office of the Secretary of State at 1500 11th Street, 3rd Floor, Sacramento CA. 95814, or by telephone,(916) 657-5448.

NOTE: If the required documents are not filed with the Secretary of State prior to the Expiration Date noted above, the corporation will remain subject to the filing requirements of the Bank and Corporation Tax Law.

By H. Hermansen
Special Audit Unit
Corporation Audit Section
Telephone (916) 845-4124

COPY

A471022

FILED
In the office of the Secretary of State
of the State of California

JAN 16 1996

Bill Jones
BILL JONES, Secretary of State

1948937 Sun

AGREEMENT OF MERGER

OF

POWERINE OIL COMPANY

AND

POC ACQUISITION CORPORATION

AGREEMENT OF MERGER entered into on January 10, 1996 by Powerine Oil Company and POC Acquisition Corporation as approved by the Board of Directors of each of said corporations:

1. Powerine Oil Company, which is a corporation incorporated in the State of California, and which is sometimes hereinafter referred to as the "disappearing corporation", shall be merged with and into POC Acquisition Corporation, which is a corporation incorporated in the State of California, and which is sometimes hereinafter referred to as the "surviving corporation".

2. The separate existence of the disappearing corporation shall cease upon the effective date of the merger in accordance with the provisions of the General Corporation Law of the State of California.

3. The surviving corporation shall continue its existence under the name "Powerine Oil Company" pursuant to the provisions of the General Corporation Law of the State of California.

4. The Articles of Incorporation of the surviving corporation as now in force and effect shall be the Articles of Incorporation of said surviving corporation except that article I thereof, relating to the name of the corporation, is hereby amended and changed so as to read as follows upon the effective date of the merger:

"I

The name of this corporation is Powerine Oil Company".

Said Articles of Incorporation as herein amended and changed shall continue in full force and effect until further amended and changed in the manner prescribed by the provisions of the General Corporation Law of the State of California.

BMA21324.A41
238827152
MLB:mbe

5. The bylaws of the surviving corporation upon the effective date of the merger shall be the bylaws of said surviving corporation and shall continue in full force and effect until changed, altered or amended as therein provided and in the manner prescribed by the provisions of the General Corporation Law of the State of California.

6. The directors and officers in office of the surviving corporation upon the effective date of the merger shall continue to be the members of the Board of Directors and the officers of the surviving corporation, all of whom shall hold their directorships and offices until the election, choice and qualification of their respective successors or until their tenure is otherwise terminated in accordance with the bylaws of the surviving corporation.

7. Each issued share of the disappearing corporation shall, upon the effective date of the merger, be converted into the right to receive $.3002205 in cash, for an aggregate of $1,000,000 (the "Payment"). All such shares of the disappearing corporation, when so converted, shall no longer be outstanding and shall automatically be cancelled and retired and cease to exist, and each holder of a certificate representing any such shares of the disappearing corporation shall cease to have any rights with respect thereto, except the right to receive the Payment upon the surrender of such certificate. The issued shares of the surviving corporation shall not be converted or exchanged in any manner nor shall any consideration be paid therefor, but each said share which is issued as of the effective date of the merger shall continue to represent one issued share of the surviving corporation.

8. The Agreement of Merger herein entered into and approved shall be submitted to the shareholders entitled to vote thereon of the disappearing corporation and of the surviving corporation for their approval or rejection in the manner prescribed by the provisions of the General Corporation Law of the State of California.

9. In the event that this Agreement of Merger shall have been approved by the shareholders entitled to vote of the disappearing corporation and of the surviving corporation in the manner prescribed by the provisions of the General Corporation Law of the State of California, the disappearing corporation and the surviving corporation hereby agree that they will cause to be executed and filed and/or recorded any document or documents prescribed by the laws of the State of California, and that they will cause to be performed all necessary acts therein and elsewhere to effectuate the merger.

10. The Board of Directors and the proper officers of the disappearing corporation and of the surviving corporation, respectively, are hereby authorized, empowered and directed to do any and all acts and things, and to make, execute, deliver, file and/or record any and all instruments, papers and documents which shall be or become necessary, proper or convenient to carry out or put into effect any of the provisions of this Agreement of Merger or of the merger herein provided for.

11. The merger provided for herein shall become effective upon filing of this Agreement of Merger together with an officers' certificate of each constituent corporation with the Secretary of State of the State of California.

Signed on January 10, 1996.

POWERINE OIL COMPANY,
a California corporation

By: _____
A.L. Gualtieri
President

By: _____
Michael H. Egner
Secretary

Signed on January 10, 1996.

POC ACQUISITION CORPORATION,
a California corporation

By: _____
A.L. Gualtieri
President

By: _____
Michael H. Egner
Secretary

BHA21324.A41
238827152
HLB:mbe

CERTIFICATE OF APPROVAL OF
AGREEMENT OF MERGER
POWERINE OIL COMPANY

A.L. Gualtieri and Michael H. Egner hereby certify that:

1. They are the President and Secretary, respectively, of Powerine Oil Company, a California corporation.

2. The Agreement of Merger in the form attached was duly approved by the board of directors and shareholders of the corporation.

3. There is only one class of shares and the number of shares outstanding is 3,330,885.

4. The affirmative vote of a majority of the outstanding shares was required for the aforesaid approval.

5. The principal terms of the Agreement of Merger in the form attached were approved by the corporation by a vote of the number of shares which equaled or exceeded the vote required.

The undersigned declare under penalty of perjury under the laws of the State of California that the matters set forth in this Certificate are true and correct of their own knowledge.

Date: January 10, 1996

A.L. Gualtieri
President

Michael H. Egner
Secretary

BMA21320.X01

BMA21320.X11
238827152
12/29/95 MLB:mbe

CERTIFICATE OF APPROVAL OF
AGREEMENT OF MERGER
POC ACQUISITION CORPORATION

A.L. Gualtieri and Michael H. Egner hereby certify that:

1. They are the President and Secretary, respectively, of POC Acquisition Corporation, a California corporation.

2. The Agreement of Merger in the form attached was duly approved by the board of directors and shareholders of the corporation.

3. There is only one class of shares and the number of shares outstanding is 100.

4. The affirmative vote of a majority of the outstanding shares was required for the aforesaid approval.

5. The principal terms of the Agreement of Merger in the form attached were approved by the corporation by a vote of the number of shares which equaled or exceeded the vote required.

The undersigned declare under penalty of perjury under the laws of the State of California that the matters set forth in this Certificate are true and correct of their own knowledge.

Date: January 10, 1996

A.L. Gualtieri
President

Michael H. Egner
Secretary

BMA21319.X11

BMA21319.X11
238827152
MLB:mbe

Cal/EPA

Department of
Toxic Substances
Control

1011 N. Grandview Ave.
Glendale, CA 91201

Pete Wilson
Governor

Peter M. Rooney
Secretary
for Environmental
Protection

COMPLAINT INSPECTION REPORT

POWERINE OIL COMPANY

12345 Lakeland Road
Santa Fe Springs, CA 90670
Telephone Number: (562) 944-6111
EPA ID NO.: CAD008383291

Inspected by: Ahmed Hegab

Date of Inspection: January 27, 28 and
February 9, 11, 1998

Date of Report: April 2, 1998

POC'S INSPECTION REPORT
MARCH, 1998

I. PURPOSE:

The purpose was to investigate a complaint inspection for two complaints received on December 22, 1997 and January 5, 1998. Powerine Oil Company (POC), the subject of this complaint, is an inactive refinery and generator of hazardous waste. These complaints consist of the following allegations:

Allegation #1. Since 1995, POC has been storing F and K RCRA listed wastes (F037, F038) and K050) in two tanks (# 27105 and # 10006) and neither of these tanks have been emptied.

Allegation #2. The above wastes include API separator wastes, exchange waste and other listed wastes.

Allegation #3. For several years, F and K RCRA wastes (F037, F038 and K050) has been stored, accumulated and illegally stored because the coker unit was being shut down. F & K wastes used to be recycled when the coker unit was in operation.

Allegation #4. The waste handling process and tanks has been in poor condition and the soil has been contaminated near the tanks.

Allegation #5. General hazardous wastes are often stored longer than 90 days.

II. REPRESENTATIVES PRESENT:

Powerine Oil Company

June Crhistman, Environmental Engineering Manager
Ray Hui, Environmental Engineer

Department of Toxic Substances Control (DTSC):

Ahmed E. Hegab, Ph.D., Hazardous Substances Scientist (HSS)
David Stuck, Hazardous Substances Scientist
Kathleen Yokota, Industrial Hygienist

III. OWNER/OPERATOR AND MANAGEMENT:

Owner: Energy Merchant Corporation (EMC)
General Motors Building

Cal/EPA

Department of
Toxic Substances
Control

1011 N. Grandview Ave.
Glendale, CA 91201

April 2, 1998

Pete Wilson
Governor

Peter M. Rooney
Secretary
for Environmental
Protection

CERTIFIED MAIL **Return Requested**
P388 574 242

Ms. June Christman,
Environmental Engineering Manager
Powerine Oil Company
12345 Lakeland Road
Santa Fe Springs, Ca. 90670

RE: COMPLAINT INSPECTION REPORT

Dear Ms. Christman:

On January 27-28, February 9 and 11, 1998, the California Environmental Protection Agency, Department of Toxic Substances Control (Department), conducted a complaint inspection of Powerine Oil Company (POC), located at 12345 Lakeland Road, Santa Fe Springs, Ca. 90670.

The enclosed report describes the findings of this inspection, including violations and any actions that should be taken by POC to correct the violations.

You are required by section 25185(c)(3) of the Health and Safety Code to submit a written response to the Department within 60 days describing the corrective actions that you have taken or propose to take to bring your facility into compliance. If you dispute the violation, you should explain your disagreement in this written response. The issuance of this letter and report do not preclude the Department from taking administrative, civil, or criminal action as a result of the violations noted in this report.

If you have any questions regarding this letter, or if you wish to meet with the Department to discuss any questions or concerns you have with the inspection, the report, the violation, or the required corrective action, please call me at (818) 551-2902.

Sincerely,

Ahmed E. Hegab

Ahmed Hegab, Ph.D
Hazardous Substances Scientist
Statewide Compliance Division

Enclosures
P388 574 242
Certified Mail

(Return Receipt Requested)

767 Fifth Avenue
New York, NY 10022
Telephone Number: (212) 319-2560
Fax Number (212) 319-2587

Operator: Powerine Oil Company
12345 Lakeland Road
Santa Fe Springs, CA 90670
Telephone Number: (562) 944-6111
Fax Number: (562) 319-3587
EPA ID NO.: CAD008383291

Environmental Manager: June Christman is the responsible person for the hazardous waste management at POC.

IV. **BACKGROUND:**

According to DTSC's file. The facility has the following background information:

1936 Powerine started a small refinery operation.

1954-1967 POC added significant new equipments to the refinery and the facility was able to refine up to 7,0000 barrels per day crude oil or naphtha.

1968 POC added the "cat cracker" and "alkylation" units. It also expanded the crude storage capacity so the refinery could process 20,000 barrels per day.

1974 POC added a new crude oil process unit and increased the above process capacity to about 44,000 from 20,000 barrels per day.

1981 DTSC issued to POC an Interim Status Document (ISD) for the Alky Neutralization Unit (ANU).

1982 POC started the oil upgrading project for coke operation and storage. It also added tanks and increased the tanks storage capacity for products and wastes. This increased POC's refining process capacity to 49,500 barrels per day. The facility processed raw material(crude oil and naphtha) to produce transportation fuel such as kerosene, jet

A fuel, unleaded gasoline, high and low sulfur diesel, fuel oil and petroleum coke. POC also produced refinery gases and hydrogen as well as non-fuel by-product such as sulfur and carbon dioxide.

3/84	POC declared Chapter 11 bankruptcy protection and shutdown the refinery except for some product storage and maintenance of existing equipments.
9/86	POC returned to operation.
2/92	POC requested to withdraw of converting the ANU, the ISD unit to Permit-by-Rule (PBR) as a fixed treatment unit.
4/92	POC notified DTSC that it would discontinue the use of ANU. ANU was consisted of two retention basin units, one at the east of the facility and another one at the west side. The retention basin units were used to neutralize acidic wastewater that was generated from the refinery's hydrofluoric alkylation plant.
6/95	The facility shutdown the refinery operation and laid-off more than 300 employees.
10/95	DTSC notified POC of the acceptance of closure certification for ANU and terminated the Interim Status Documents for the unit.
8/97	DTSC conducted a complaint investigation and discovered violations related to illegal storage and labeling. POC corrected the minor violation on the day of inspection.

V. **OBSERVATIONS**:

On Thursday, January 27, 1998, David Stuck, Kathleen Yokota and I arrived unannounced at POC at 1030 hours We signed the visitor log and asked to see Ms. June Christman, the Environmental Compliance Manager. Then we met Ms. Christman and Ray Hui and explained that the reason of our visit was to conduct a complaint inspection. I also asked for their consent to conduct the inspection. Then, I

explained that we would need to review records, take photographs, and, if necessary, take samples. Ms. Christman granted her consent to us.

I asked Ms. Christman to discuss any changes that had occurred at the facility since the previous inspection on August 1997. Ms. Christman stated that no change had occurred since August of last year. She also added they still waiting for buyer or refinance for the refinery to start POC operation.

I asked Ms. Christman to provide us with the information and documents related to POC's owner and operator as well as the waste analysis for tanks and drums. Ms. Christman stated that Mr. Robert Wenon is the Chief Operating Officer and the Refinery Manager. She also provided us with the facility's owner and operator (Section III). Then she told us that Mr. Ray Hui would check POC's records and provide us with a copy of available documents. Next, Ms. Christman stated that POC do not perform any hazardous waste determination for tanks because she expected that the facility would go for operation. Ms. Christman also stated that POC did not have any tank that contains a hazardous waste but did have a hazardous material on site which is good. I then asked Ms. Christman to provide us with the information pertaining to the waste management for tanks that numbered 10006 and 27105. She said that since POC was shutdown in July 1995, we had some sludge movement of tanks bottom residue to one of the two sludge tanks (tank# 10006 and tank #27105). I also asked her for a map that could show the layout of tanks at the site which she provided (Attachment #1). She also provided us with several copies of tank usage at the site (Attachment #2). Next, I asked her to provide us with the waste management information on tanks #27105 and #10006. She told us that Ray Hui, Environmental Engineer, would need to check the file and would provide us with the available information they had on the site. I also asked Ms. Christman about POC's product bottom tanks sludge and she said that most of sludge and residue in the bottom tanks came from diesel, gas, and oil product bottom tanks. I also asked Ms. Christman about POC's current financial situation. She said that after POC was shut down on June 1995, they sold about 15 acre of land for approximately $15 million as well as the water right for approximately $3 million. Ms. Christman also informed us that she was expecting POC to

return to operation during 1998. Ms. Christman asked Mr. Ray Hui to make available to us all the hazardous waste manifests for through January 1998 and he did.

At the end of opening conference, we discussed the afternoon plan and agreed to return to the site at 1230 hours to start the facility walk-through.

At 1230 hours, after the lunch, we returned to POC and met with Ray Hui who escorted us during the walk-through inspection. The following observations were noted during our walk-through inspection:

A. Tanks:

1. **Tank #27105**

This tank (Photo #1 and #17, Attachment #3) displayed a slop oil label and sticker that showed the normal capacity of 27,500 barrel (1,155,000 or 1.155 million gallons), height (12 meters), and diameter (20 meters).

According to DTSC files, prior to June 1995, POC kept in the slop tanks all the oil and grease that were generated from oil skimmer or other process.

Mr. Hui stated that the tank contained recyclable sludge material from product bottom tanks, wastewater treatment sludge and oil and any other random spills on the site. We observed two outflow pipes (approximately three centimeters diameter) were coming from the tank reaching ground (Attachment #3). Each pipe had two manual shutoff valves one about 15 centimeters from tank side and the other at the end of it. The upper pipe outflow was located at about 2.5 meters from the top of the tank while the other outflow pipe at the middle of it. At the bottom of the tank (approximately .3 meter from ground), ten centimeters steel sludge outflow connectors was also coming out of the tank, secured with safety control shutoff valves and fittings (Attachment #3, Photos #2 & #3). Mr. Hui stated that those outflow pipes and connectors were made for sampling purposes as well as adding or removing sludge.

Mr. Ray Hui also explained to us the tank numbersystem. He said that 27105 number mean that 27 is referred to tank

capacity and 105 for tank number for that size. Mr. Ray Hui also stated that the gauge of this read approximately 23 barrel capacity (approximately 900,000 gallons).

During the opening conference and walk-through inspection, I followed a number of questions regarding the secondary containment and integrity testing. POC 's employees' statements, our visual observation and documents provided by Mr. Hui did not answer the above questions. We also observed that the surrounding area of the tank was contaminated with waste oil and other hydrocarbon constituents (Please see attachment 3, photos. 3 and 4).

2. Tank 10006

This tank was located in the west section of the facility. It displayed also the slop oil label (Attachment #3, Photo #9). The tank looked to be deteriorated rusted and parts of the outer insulation were gone. According to Ray Hui, the tank held approximately 400,000 gallons sludge. I asked Ray whether the tank was installed on a concrete bed. Mr. Ray Hui said that he did not know. Mr. Ray Hui also stated that the sludge in the tank came from the same source as in tank 27105. According to June Christman and Ray Hui Tanks #27105 and #10006 had been used for sludge consolidation after the refinery was shut down.

POC's tank usage chart (Attachment #2) shows that tank type for Tank #10006 was a cone roof, insulated with no vapor recovery and used for sludge.

We also observed that the surrounding area of the tank was contaminated with waste oil and other hydrocarbon constituents (Please see attachment 3,photos. 9,13 and 16).

B. Storage Areas:

1. Drum Storage Area

This area is about 20 X 50 meters and located at the North west corner section of the facility and adjacent to Florence Avenue. The following observations were noted as we toured the facility drum storage area:

a. Empty drums: At the north east section of area, we

observed approximately 78 empty drums (Attachment #3 Photo #8).

b. Twenty-four drums at south of the area displayed a non-hazardous label. Mr. Ray Hui said that the drums contained a non-hazardous cutting soil which came from the sold property.

c. One drum contained acid batteries near the corner of south west. On February 25, 1998, the facility notified the Department that it has transported about 230 Kilograms acid batteries under a bill of lading to Inter State Battery located at 11910 Grainstone, Santa Fe Spring, California (Attachment 4).

d. Eleven drums contained oily supporting balls and displayed a hazardous waste label. DTSC cited POC in August 1997, for storing the above hazardous waste for more than one year.

e. Two full plastic containers were labeled with sulfuric acid and did not display a hazardous waste sign or start accumulation dates. Mr. Ray Hui stated these containers contained a sulfuric acid product which is hazardous material. However, based on the attachment 5, these two containers contained sulfuric acid sludge (D002) which was a RCRA hazardous waste and the facility was in violation with the federal and state regulations. Based on August 12, 1997, complaint inspection that was conducted by DTSC. POC promised to manifest all hazardous waste containers in the Drum Storage Area by January 20, 1998. Then the facility had requested an extension for manifesting these drums by February 20, 1998, and the DTSC agreed (Attachment #4). On February 25, 1998, Ray Hui faxed me a copy of hazardous waste manifest (Attachment #5) for one 55-gallon drum Ethylene Dichloride (D001), two 55-gallon drums of sulfuric acid sludge (D002), two 55-gallons drums API sludge (K051) and eleven 55-gallon drums of oily supporting balls(California waste 352). These hazardous wastes were manifested to Essex Waste Management, Inc. located at 1483 SW 58 Highway, Kingsville, Missouri (Attachment #5).

2. Asbestos Storage Area

During the walk-through inspection of this area, we observed three pipe connectors covered with suspected friable asbestos (Photos # 10,11 and 12, Attachment #3). I explained this problem to Mr. Ray Hui who said that he would take care of it. However, Mr. Ray Hui later responded with his above faxed laboratory report, the friable suspected Asbestos material as it turns out was a cellulose-fiber-synthetic mix and a non-hazardous waste.

3. Asphalt Area

The following observations were noted as we toured the asphalt area:

a. Two 55-gallon drums containing waste oil and heavy oil displayed excluded recyclable material labels (Photo. #13, Attachment #3).

b. One 15-gallon open drum similar to the above waste, was overflowing with spilled material on the ground. Another drum of the same capacity and the same label description was closed (Photo #14, Attachment #3).

c. Three roll-off bins were located at about ten (10) meters from the west of Tank# 10006, we observed partially open and exposed to rain three roll-off bins displayed excluded recyclable material. We also did not observe any other information related to the contents or start accumulation dates. We saw also one roll-off bins, painted white, contained heavy oil on the top layer and other two roll-off bins that were painted in blue color contained sludge waste. According to Ray Hui, the sludge in the roll-off bins would be shipped as a recyclable material that can be used for road base.

d. Spills of oil and asphalt onto the ground. We also noted that the west section corner of the asphalt area and adjacent to the fence had a spill of asphalt, oily and other hydrocarbon constituents on the ground.

Next we toured areas of the east tank farm, crude units, west tank farms and returned to June Christman office. We told Ms. Christman and Hui that we would return the next day

for sampling. We thanked them for their cooperation and left around 1600 hours.

RECORDS REVIEW:

According to June Christman, POC did not has any change in the facility's operation, records or plans and she provided me with the following records that I requested:

POC's Closure Certification.

I reviewed the document and discovered no violations Attachment #6).

Groundwater Monitoring Report (GMR).

I reviewed the GMR document (Attachment #7) and called also Keith Elliot of Regional Water Quality Control Board (RWQCB), Los Angles Branch. Mr. Elliottold me that his office has been working with POC to implement Order No. 97-118. Please read Attachment #8 for details.

Hazardous Waste Manifests.

Ray Hui provided me with manifests for 1994 through 1998. I found out that POC had one manifest for 1998 as it shipped about 1273 kilograms of polychlorinated biphenyl solid waste (Attachment 9). The facility did not have the waste code on the manifest and it is considered a minor violation.

VI. **SAMPLING:**

January 28, 1998, Sampling:

On January 28, 1998, at about 9:30 a.m., David Stuck, Kathleen Yokota and I returned to Powerine and met with June Christman. We discussed our sampling plan for tank #27105, tank #10006 and the asphalt area. During the meeting Ms. Christman told us that she would send Stan Fousha, Operating Engineer to join us during the sampling. I then thanked her for her cooperation and requested to provide us with the integrity tests for tank #27105 and tank #10006 before the end of the day. June Christman then told me she would be searching for it in their file.

At about 1000 hours, Ray, Hui directed David Stuck, Kathleen Yokota, Stan Fousha and I (sampling teams) to Tank #27105 where we started the sampling activity.

The sampling team took a total of ten pairs of samples, six of sludge, three soils and one of liquid. The samples were labeled POC-1-128 through POC-10-128. Each container of the pair was labeled "a" or "b"; those labeled "b" were given to Ray Hui of the facility, those labeled "a" were retained by DISC and taken, the same day, to the laboratory for analysis.

The sludge and liquid sampling was conducted from about 1030 hours to 1530 hours in Tank #27105 on the eastern side of the facility and Tank #10006 on the west of the site. David Stuck, Kathleen Yokota and Stan Fousha took the sludge and liquid samples from the above two tanks.

Later, about 1400 hours I (Ahmed) took three samples of the surface soil/oil sludge (POC-06-128, POC-07-128 and POC-10-128). Detail of sample descriptions, laboratory chemical analysis and results for each sample are below:

POC-1-128 a:

Sample description: one liter narrow mouth glass jars of oily liquid taken from about three meters from the top of Tank # 27105 (Photo #18). Kathleen Yokota, David Stuck and Stan Fousha collected these samples using the weighted bottle sampler. First, Stan Fousha lowered the weighted bottle sampler with one liter bottle to about three meters depth into the tank. He also yanked on the cord, popping the cork allowing the one liter bottle to fill. The bottle was then hauled up and the contents evenly spilled between 2-liter bottles. A second drop into the tank was enough to fill the 2-liter bottles to complete the samples. David and Kathleen cleaned the surface of the samples and labeled them. Second, David Stuck and Kathleen Yokota put the lids on the jars and placed a length of evidence tape over the tops of the jars and sealed them. Finally, David Stuck photographed them at the sample location, we also placed samples individually in plastic bags and put them in a cooler with blue ice.

Sample analysis:

Please see below the analytical summary and Attachment # 10 for the detail of sample chemical analysis.

Flash point

a. Method EPA 1020 seta flash closed-cup method for Flammability.
b. Regulatory Limit **140°F**
c. Results **122°F**

Hazardous

Sample result:

Evidence obtained by the above laboratory analysis and the walk-through inspection indicated the following:

1. The upper strata of tank 27105 contained a ignitable hazardous waste (D001).

2. This result substantiates the complaint allegation that the facility illegally has been storing an hazardous waste in excess of 5000 gallons without DTSC's permit or grant of authorization. On January 28, 1998, Ray Hui, stated that tank #27105contained 900,000 gallons waste.

POC-2-128 a:

Sample description: one liter narrow mouth glass jars of sludge taken from the depth of six meters of Tank #10006 (middle of the tank). We took this sample (Photos 21, 22, 23) by using the same method described in the previous sample.

Sample analysis:

Flash point non-detected (ND)

Sample results:

This sample did not exhibit hazardous waste characteristics of ignitability or toxicity.

POC-3-128 a:

Sample description:

500 ml wide mouth glass jars of slurry and oily sludge, taken from the bottom section of Tank #27105 at about 1240 hours. Stan Fousha, Ray Hui and I collected these samples from the wide connector (eight centimeters) that was attached connected to the bottom tank for adding or removing sludge, oily and asphalt (Photo #19)

Sample analysis:

Flash points

a. Method EPA 1020 (as in POC-1-128A)
b. Regulatory Limit 140F°
c. Result 133 F° Hazardous

Sample results:

Evidence obtained by the above laboratory analysis and the walk-through inspection indicated the following:

1. The bottom content of tank 27105 contained an ignitable hazardous waste.
2. This result substantiates the complaint allegation that the facility illegally has been storing a hazardous waste in excess of 5000 gallons without DTSC's permit or grant of authorization.

PAC-4-128 a:

Sample description: 500 ml wide mouth glass jars of slurry, oily liquid or sludge taken from about two meters from the top surface of Tank #10006 (Photo #24). At about 1305 hours David Stuck and Kathleen Acadia collected these samples by the same procedure used in sample POC-1-128 and b.

Sample analysis:

Flash point

a. Method - EPA 1020 Setaflash closed - cub method for

igitability.
b. Regulatory Limit 140°F
c. Result 135°F **Hazardous**

Sample results:

Evidence obtained by the above laboratory analysis and the walk-through inspection indicated the following:

1. The upper strata of tank 10006 contained a flammable hazardous waste.
2. This result substantiates the complaint allegation that the facility illegally has been storing a hazardous waste in excess of 5000 gallons without DTSC's permit or grant of authorization.

POC-5-128 a:

Sample description: 500 ml wide mouth glass jars of heavy sludge, taken from the bottom of the Tank #10006 (Photo #25). At about 1400 hours, Stan Fousha collected these samples in the same manner described in samples POC-3-128 a.

Sample analysis:

Flash point

a. Method - EPA 1020 Setaflash closed - cub method for ignitability.
b. Regulatory Limit 140°F
c. Result 128 °F - **Hazardous**

Sample results:

The above chemical analysis indicates that the bottom contents of tank # 10006 exhibit the hazardous waste characteristics for ignitability. It is also listed hazardous waste F037, F038 and K050 as it was generated from waste water treatments, heat exchange and tank bottom sludge or residue.

This result substantiates the complaint allegation that the facility illegally has been storing hazardous waste in

excess of 5000 gallons without DTSC's permit or grant of authorization.

POC-6-128 a:

Sample description: 500 ml wide mouth glass jars of surface soil contaminated with oily and other hydrocarbon constituents (Photo #27). At about 1300 hours, I used a clean plastic scoop to collect these samples from the south of Lake Rothchild area. David Stuck assisted me in these samples by mixing about three centimeter of the upper surface of an area of about eighty centimeters square in the center of the contaminated area. The two jars were filled by placing alternate scoops of soil, with the same plastic trowel in jars a and b.

Sample analysis:

a. Flash point ND
b. Metal Determination:
Method Extraction HML method 910
Analysis: EPA 6010 B
(STLC) Wet Analysis
Results: in MG/L
Lead 5.3 " Regulatory Limit is 5.0- **Hazardous**

Sample results:

This sample exhibited the hazardous waste characteristics of toxicity due to the presence of lead constituents above the Soluble Threshold Limit Concentration (STLC). The presence of lead constituents with the concentration above STLC limits suggests that an appreciable amount of leaded wastes were leaked to the ground of area south of lake Rothchild. It is also an evidence of poor of operation and maintenance that resulted in the disposal of hazardous waste to the ground of the site.

POC-7-128 a:

Sampling description: 500 ml wide mouth glass jars of brown sandy soil taken from top surface of an area at edge of the bottom of Tank #10006 (Photo #28). At 1315 hours, Ahmed and assisted by David Stuck collected these samples using a new clean plastic scoop. We removed and threw aside the top

centimeter of soil at the sampling area, mixed the next three centimeters thoroughly, and placed alternate scoops of the soil into the two sampling jars.

Sample analysis:

STLC results in mg/l:
Lead 27 Regulatory Limit is 5.0
Hazardous

Sample results:

This sample exhibited the hazardous waste characteristics of toxicity due to the presence of lead constituents above the Soluble Threshold Limit Concentration (STLC). The presence of lead constituents with the concentration more than five fold of the TLC limits suggests that an appreciable amount of leaded wastes were leaked to the ground of area under tank 10006. The laboratory results support the allegation of poor waste handling procedures for tank 10006. It is also an evidence of poor of operation and maintenance of the facility that resulted in the disposal of hazardous waste to the ground of the site.

POC-8-128 a:

Sample description: 500 ml wide mouth glass jars of black sandy soil heavily contaminated with asphalt, sludge and waste oil from top surface of an area between Tank #35 and Tank #3072 (Photo #29). At 1320 hours, David Stuck and I collected these samples using the same procedure used for the above sample.

Sample analysis and results:

This sample did not exhibit hazardous waste characteristic signitability or toxicity. However, it could be hazardous as a listed RCRA hazardous waste and will be further investigated by DTSC.

POC-9-128 a:

Sample description: one liter ml narrow mouth glass bottle of sludge taken from the depth of six meters of Tank

#27105 (Photo #30) (middle of the tank). Stan Fousha collected took this sample by using the same method described in sample POC-1-128 a and b.

Sample analysis and results:

This sample did not exhibit hazardous waste characteristics of ignitabilty or toxicity.

POC-10-128 a:

Sample description: 500 ml wide mouth glass jars of black sandy soil that was taken from top surface of an area adjacent to Tank #1002 (Photo #15). The sampling area was heavily contaminated with waste oil and other hydrocarbon constituents. At 1520 hours, I collected these samples and used the same procedure of the above sample. All the above samples were sealed with a lid and evidence tape, and photographed by David Stuck and then placed into the a cooler with blue ice.

Sample analysis and results:

This sample did not exhibit hazardous waste characteristics of signitabilityty or toxicity. However,it could be hazardous as a listed RCRA hazardous waste. The sampled area showed the evidence of significant spills of sludge, asphalt constituents and waste oil.

<u>February 11, 1998, Sampling:</u>

On February 11, 1998, David Stuck and I arrived at POC at approximately 1100 hours. We went to the office of June Christman. Then, we met with her and Ray Hui and asked for the consent to conduct sampling in the asphalt area which they granted.

Ray Hui directed David Stuck and I to the asphalt area where we collected the following samples:

POC-1-211

a: 500 ml wide mouth glass jars of heavy sludge was taken from an open 15-gallon drum which over flowed and spilled on the ground. The sampling area was

heavily contaminated with asphalt and other hydrocarbon constituents. At about 1315 hours, I collected the sample using a plastic scoop to remove the sludge from the drum and placed it into the two sampling jars. The relabeled jars were sealed with a lid and evidence tape, photographed by David Stuck at the sample location, placed individually in plastic bags and placed in a cooler with blue ice.

POC-2-211

a: 500 ml wide mouth glass bottles of surface of soil contaminated with asphalt, oily and other hydrocarbon constituents, located at the west of the asphalt area.

At about 1326 hours, Ahmed and assisted by David Stuck collected these samples using clean individually wrapped plastic scoop. Ahmed and David took these samples by mixing about four centimeters of the upper surface of about 1.4 meters square in the center of the contaminated area. Then we filled the two jars by placing alternate scoops, with the same plastic scoop of soil, in each jar. The relabeled jars were sealed with a lid and evidence tape, photographed, and placed in a cooler with blue ice as described in the above samples.

POC-3-211

a: 500 ml wide mouth glass jars of heavy sludge was taken from the top layer of a roll-off bin in the asphalt area. At about 1415 hours, I collected these samples using a plastic scoop to remove the sludge from the drum and placed it into the two sampling jars. We also placed a length of evidence tape over the tops of the jars. These samples were sealed, photographed, placed these samples in plastic bags and in a cooler with blue ice as explained in sample POC-1-211 a and b.

At the end of the sampling activity, we gave the sample containers marked "b" to Ray Hui and thanked Ray Hui for his cooperation we then left the facility at approximately 1440 hours and took the samples marked "a" to HML in Los Angeles for analysis.

Samples marked "a" were taken to HML at Los Angles for

semivolatile organic, volatile organic, metal scanning, pH, and other chemical analysis. HML result for the above samples is not available at this time.

VII. **VIOLATIONS:**

A. Class I Violations:

1. Illegal Storage:

POC violated Health and Safety Code (HSC), Section 25201(a) and 25213(b) and 66261.21, in that on or about January 27-28, 1998, POC stored in excess of 5000 gallons of hazardous waste in access of one year and failed to obtain from DTSC a hazardous waste permit or grant of authorization, to wit: POC stored in Tank #10006 and Tank #27105 (excess of 400,000 gallons) a listed hazardous waste (K050, F037 and F038) and ignitable hazardous waste (D001) without DISC's permit or grant of authorization.

Evidence: Attachment #3, photos 2, 3, 9, 17, 20 and 28.
Attachment #10 and sampling Lab results.
Witnesses: David Stuck, Kathleen Yokota and Ahmed Hegab

2. Integrity Assessment:

POC violated Title 22, California Code of Regulations (Cal. Code Regs.), Section 66262.34 and 66265.191, in that on or about January 28, 1998, POC failed to have on file a written integrity assessment reviewed by an Independent, qualified, professional engineer that attests that its hazardous waste tank system is adequately deigned and has sufficient structural strength and compatibility with the waste(s) to transferred, stored or treated to ensure that it will not collapse, rupture or fail, to wit: there is no documented report to indicate the integrity of tank #10006 and tank #27105.

Evidence: Attachment #3, photos 2, 9, 17, 20, 22, 24, 28 and 30.

Attachment #10 and sampling Lab results.
Witnesses: David Stuck, Kathleen Yokota and Ahmed Hegab

3. Illegal Disposal:

POC violated Health and Safety Code (HSC), Section 25189(a) and (c), and 66261.24 (a), in that on or aboutJanuary 27-28, 1998, POC disposed of hazardous waste at an unauthorized point, to wit: disposed a toxic hazardous waste containing lead to the area located at the south of lake Rothchild as well as on the ground around tank 10006.

Samples analysis for soil collected from area around tank #10006 and south of lake Rothchild.

Evidence: Attachment #3, photos 2, 3, 7, 9, 13 and 14.
Attachment #10 and sampling Lab results.
Witnesses: David Stuck, Kathleen Yokota and Ahmed Hegab

4. Operation:

POC violated Title 22, Cal. Code Regs., Section 66262.34(a)(3), and 66265.31, in that on or about January 28, 1998, POC failed to maintain and operate the facility in a manner that minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous wastes for off-site transfer, treatment, storage or hazardous waste constituents to air or soil which could threaten human health and environment, to wit: leaks or spills of material containing toxic heavy metals from pipes, connectors or bottom of tank 10006. Also leaks and spills of toxic heavy metals at south of lake Rothchild area.

Evidence: Attachment #3, photos 13, 14 and 15.
Attachment #10 and sampling Lab results.
Witnesses: David Stuck, Kathleen Yokota and Ahmed Hegab.

5. Incomplete Labeling:

POC violated Title 22, Cal. Code Regs., Section 66262.34(a)(2) and (f)(1)(3), in that on or about January 28, 1998, POC failed to label tank #10006 and tank #27105, two, 55-gallon drums of sulfuric acid sludge, acid batteries and other containers of hazardous wastes with the date the initial waste accumulation began, or the composition and physical state of the waste.

Evidence: Attachment #3, photos 2, 3, 7, 9, 13 and 14.
Attachment #10 and sampling Lab results.
Witnesses: David Stuck, Kathleen Yokota and Ahmed Hegab

B. Class II Violations:

1. Waste Analysis:

POC violated Title 22, Cal. Code Regs., Section 66262.11, in that on or about January 28, 1998, POC failed to determine if the waste generated by the facility were hazardous, to wit: POC failed to identify or categorize RCRA hazardous waste for the wastes in tanks (#10006 and #27105) and drums (drum storage area).

Evidence: Attachment #3, photos 2, 3, 7 and 9.
Attachment #10 and sampling Lab results.
Witnesses: David Stuck, Kathleen Yokota and Ahmed Hegab

VIII. **EXIT INTERVIEW WITH MANAGEMENT:**

On February 9, 1998, I held an exit interview with Ms. June Christman and Ray Hui. I gave them a Summary of Violations (SOV) in Attachment #11. Then I discussed with them the violations that we had observed during the inspection and they disagreed with DTSC determination. Ms. June also stated that POC has been segregating the listed waste sludge and they did not store it in the sludge tanks. Then I asked her to provide me with any document to prove her claim but she did not. After giving them the opportunity to ask us the questions they had regarding the inspection, I thanked them for their cooperation. I left the facility at approximately 1150 hours.

Ahmed E. Hegab Ph.D

Hazardous Substances Scientist

4-2-1998

Date

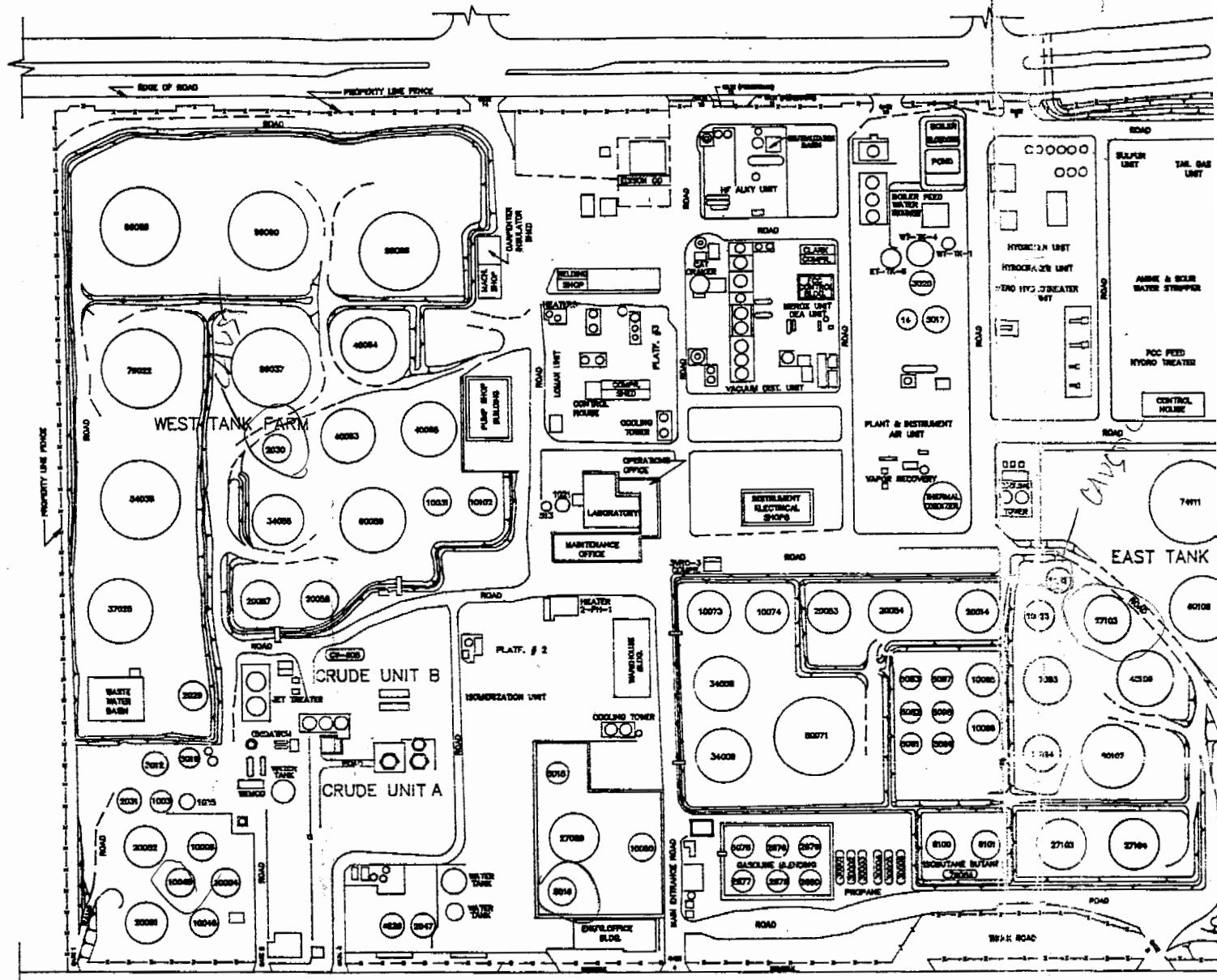
IX. LIST OF ATTACHMENTS

Attachment 1: POC's overall plot plan, site map -1 pg.
Attachment 2: Tank usages -2 pgs.
Attachment 3: Photographs - 16 pgs.
Attachment 4: POC's request for 30-day extension - 1 pg.
Attachment 5: Hazardous Waste Manifests, Bill of lading and asbestos analysis - 4 pgs.
Attachment 6: POC's Closure Certification - 6 pgs.
Attachment 7: Groundwater Monitoring Data - 11 pgs.
Attachment 8: Regional Water Quality Control Board Order - 8 pgs.
Attachment 9: Hazardous Waste Manifest for 1996-1998 -5 pgs.
Attachment 10: Hazardous Materials Sample Analysis Request Form, spilled samples form and HML Sample Request, Chain of Custody Form and lab analysis. - 29 pgs.

Attachment 11: Summary of Violations - 4 pgs.

ATTACHMENT 1

POC's overall plot plan, site map



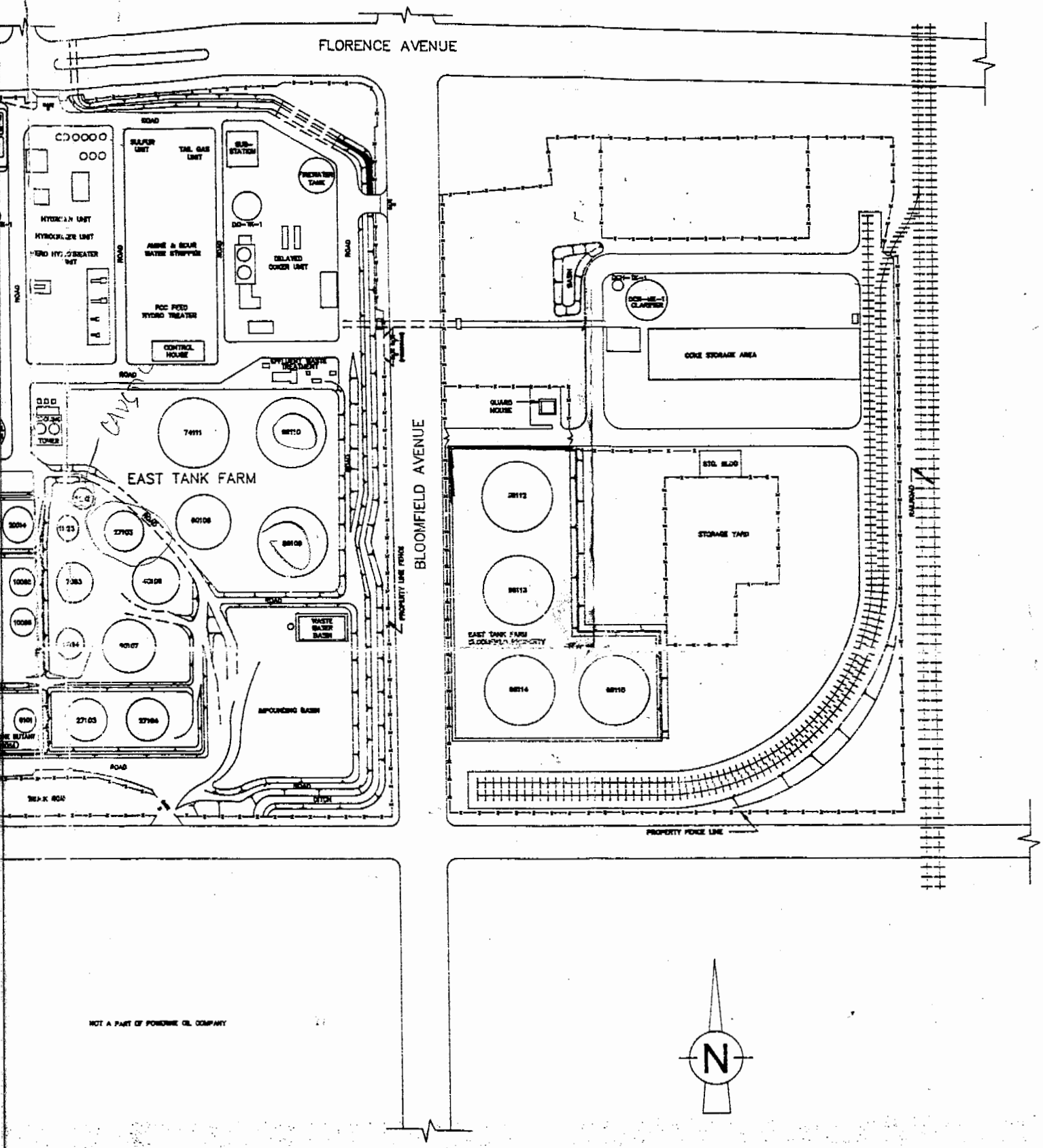
	DATE	REVISIONS	BY
0	11/7/90	CONVERTED TO ACAD & AS-BUILT	BI

REFERENCE DWGS

PROJECT NO. | DATE
DESIGNED BY
DRAWN BY
CHECKED BY
ENGINEER
REGISTRATION NO. DATE

R. L. WOOD & ASSOCIATES, INC.
• Engineers •
18321 Gothard Ave., Suite H (714) 848-6774
Huntington Beach, California, 92647

POWERI
12354 Lakeland
Santa Fe Spring



INC.

POWERINE Oil Company
12354 Lakeland Road, P.O. Box 2108
Santa Fe Springs, CA 90670-9883

REFINERY OVERALL PLOT PLAN

SCALE 1" = 80'

DRAWING NUMBER APE-3315

ATTACHMENT 2

Tank Usages

Tank #	Type	Vapor Recovery	Service
20057	CONE ROOF	NO	TREATED WATER
20058	CONE ROOF	NO	TREATED WATER
60059	EXT. FLOAT. ROOF	NO	HEAVY NAPHTHA
40063	CONE ROOF	NO	DIESEL
40064	CONE ROOF	NO	DIESEL
40065	CONE ROOF	NO	TREATED HVGO
96066	CONE ROOF	NO	VACUUM RESID
80071	CONE ROOF	YES	GASOLINE
3072	CONE ROOF	NO	SLOP
10073	CONE ROOF	NO	STRIPPED SOUR WATER
10074	CONE ROOF	NO	STRIPPED SOUR WATER
5075	CONE ROOF	YES	GASOLINE
5081	CONE ROOF	YES	#2 PLATFORM
5082	CONE ROOF	YES	#2 PLATFORM
5083	CONE ROOF	YES	TRANSMIX
79084	CONE ROOF	NO	OLEFIN / ISO
96086	CONE ROOF	NO	CRUDE
27089	CONE ROOF	NO	UNL GASOLINE
96090	CONE ROOF	NO	SOUR WATER
20091	CONE ROOF	NO	LIGHT COKER GAS OIL
20092	CONE ROOF	NO	DIESEL
27093	CONE ROOF	NO	COKER SLOP
20094	CONE ROOF	NO	LIGHT COKER GAS OIL
10095	CONE ROOF	YES	GASOLINE
10096	CONE ROOF	YES	GASOLINE
5097	CONE ROOF	YES	SLOPS
5098	CONE ROOF	YES	ALKYLATE
5099	CONE ROOF	YES	ALKYLATE
10102	CONE ROOF	YES	UNIFINATE
27103	CONE ROOF	YES	LIGHT STRAIGHT RUN
27104	CONE ROOF	YES	JET A
27105	CONE ROOF	NO	SLUDGE
40106	CONE ROOF	NO	TOPPED CRUDE
60107	CONE ROOF	YES	HVGO / HCGO
60108	EXT. FLOAT. ROOF	NO	CAT GAS
96109	EXT. FLOAT. ROOF	NO	CRUDE SLOPS
96110	EXT. FLOAT. ROOF	NO	CRUDE
74111	CONE ROOF	NO	JET FUEL
96112	EXT. FLOAT. ROOF	NO	DIESEL
96113	EXT. FLOAT. ROOF	NO	JET FUEL
96114	EXT. FLOAT. ROOF	NO	UNL GASOLINE
96115	EXT. FLOAT. ROOF	NO	UNL GASOLINE

POWERINE OIL COMPANY
TANK USAGE

Tank #	Type	Vapor Recovery	Service
30001	BULLET	N/A	PROPANE
30002	BULLET	N/A	PROPANE
30003	BULLET	N/A	PROPANE
30004	BULLET	N/A	PROPANE
30005	BULLET	N/A	OLEFIN
30006	BULLET	N/A	OLEFIN
8100	SPHERE	N/A	ISOBUTANE
6101	SPHERE	N/A	ISOBUTANE
3001	CONE ROOF	YES	OUT OF SERVICE
1002	CONE ROOF	NO	CAUSTIC
3002	CONE ROOF	YES	OUT OF SERVICE
5004	CONE ROOF	YES	GASOLINE
5005	CONE ROOF	YES	GASOLINE
5006	CONE ROOF	YES	GASOLINE
5012	CONE ROOF	NO	SLOPS
5015	CONE ROOF	NO	DIESEL
5516	FLAT FIXED	NO	DECANT
5017	CONE ROOF	NO	BOILER FEED WATER
3020	CONE ROOF	NO	BOILER FEED WATER
10004	CONE ROOF INS	NO	VACUUM RESID
10006	CONE ROOF INS	NO	SLUDGE
34008	CONE ROOF	YES	GASOLINE
43009	CONE ROOF	YES	GASOLINE
20014	CONE ROOF	NO	LIGHT VAC GAS OIL
79022	CONE ROOF	NO	STRIPPED SOUR WATER
10023	CONE ROOF	NO	OUT OF SERVICE
10024	CONE ROOF	NO	UNTREATED DIESEL
37025	CONE ROOF	NO	RAW GAS OIL
2029	CONE ROOF	NO	DECANT
2094	CONE ROOF	NO	WELL WATER
96037	INT. FLOAT. ROOF	NO	CRUDE
54039	CONE ROOF	NO	SOUR WATER
10045	CONE ROOF	NO	SOUR WATER
10046	CONE ROOF	NO	VACUUM RESID
2047	CONE ROOF	NO	WATER
10050	CONE ROOF	NO	DIESEL
10051	CONE ROOF	YES	UNIFINATE
20053	CONE ROOF	NO	LIGHT CYCLE OIL
34055	CONE ROOF	NO	TREATED WATER
5056	CONE ROOF	NO	WELL WATER

ATTACHMENT 4

POC's Request for 30-day Extension

JAN 2 2 1998

Powerine Oil Company

January 20, 1998

Ahmend E. Hegub, Ph.D.
Cal/EPA
Dept. of Toxic Substance Control
1011 N. Grandview Avenue
Glendale, CA 91201

Dear Dr. Hegub:

Powerine requests an additional 30-day extension to respond to your Complaint Inspection Report received by Powerine on October 23, 1997. As discussed with you in our prior correspondence, Powerine is waiting for the Department's official laboratory analyses prior to disposing of the wastes discussed in your report. Powerine is prepared to correct the violations as soon as we have the information required for disposal.

Powerine has requested and received several quotes for disposal of the hazardous waste drums noted in your report. In fact, the light ballasts potentially containing PCB that you noticed during your inspection were shipped off site for proper disposal yesterday. Once Powerine has received the Department's official analytical results for the other wastes, Powerine will need a few days in order to select the vendor and initiate the disposal process. In order not to rush the process and to ensure that all wastes are properly handled, Powerine requests an additional 30-day extension for waste disposal. This extension request is based on the assumption that Powerine will receive the Department's official laboratory analyses in January or early February.

In summary, Powerine requests a 30-day extension until February 20, 1998 to respond to your Complaint and Inspection Report. Please feel free to contact me or Ray Huie of my staff if you have questions.

Sincerely,

June Christman

June M. Christman
Manager - Environmental Engineering

JMC:md

cc: Ray Huie
File 41005.07
Reader File
(ray\dtscwext.doc)

12345 Lakeland Road • Santa Fe Springs, CA 90670 • Phone (562) 944-6111 • Fax (562) 944-8522

ATTACHMENT 5

Hazardous Waste Manifests, Bill of Lading and Asbestos Analysis

Powerine Oil Company

FAX TRANSMITTAL COVER SHEET

DATE: 2/25/98

TO: Ahmed Hegab FAX: 818/551-2841

FROM: Ray Hice

Number of pages including cover page: 4

Ahmed,

Enclosed are the haz waste manifest, batteries bill of lading and the lab report for asbestos.

If there're questions, please call me.

Thanks

Ray

The information contained in this facsimile message is confidential information and is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and return the original message to us at the address below via the US Postal Service.

12345 Lakeland Road - PO Box 2108 - Santa Fe Springs, CA 90670 - Tel: (562) 944-6111 - Fax: (562) 903-8911

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
Hazardous Waste Program
P.O. Box 176 Jefferson City, Missouri 65102
573-751-3176

HAZARDOUS WASTE

THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS. INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.

EMERGY RESPONSE	U.S. COAST GUARD 1-800-424-8802	CHEM TREC 1-800-424-9300	DEPT. OF NATURAL RESOURCES 573-634-2436

Form Approved OMB No 2050-0039, Expires 9-30-99

Please print or type (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAD008383291 — Manifest Document No.:
2. Page 1 of 1 — Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address:
POWERINE OIL COMPANY
12345 Lakeland Road
Santa Fe Springs, CA 90670

4. Generator's Phone: (562) 944-6111

A. Missouri Manifest Document Number: [redacted]
B. G.S.I. (Gen. Site Address):

5. Transporter 1 Company Name: Hazardous Waste Transportation Services, INc.
6. US EPA ID Number: CAD981446156
C. MO. Trans. ID:
D. Transporter's Phone: (562) 906-0588

7. Transporter 2 Company Name: Rust & Sons
8. US EPA ID Number: CAD981634116
E. MO Trans. ID: H2026
F. Transporter's Phone: (800) 444-6193

9. Designated Facility Name and Site Address:
Essex Waste Management, Inc.
1483 SW 58 Highway
Kingsville, MO 64061
10. US EPA ID Number: MOD980962849
G. State Facility's ID: 004037RR0257
H. Facility's Phone: (816) 732-5561

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. Waste Ethylene Dichloride, 3, UN1184, PGII	001	DM	00055	G	EPA WASTE CODE D001; STATE 211
b. RQ, Waste Corrosive Liquid, n.o.s., (Sulfuric Acid) 8, UN1760, PGIII	003	DF	00165	G	EPA WASTE CODE D002; STATE 491
c. Hazardous Waste Liquid, n.o.s., 9, NA3082, PGIII	002	DM	00110	G	EPA WASTE CODE K51; STATE 491
d. NON-RCRA Hazardous Waste Solid (Support Balls) (California Regulated Only)	011	DM	03900	P	EPA WASTE CODE NONE; STATE 352

J. Additional Descriptions for Materials Listed Above	K. HANDLING CODE (FACILITY USE ONLY) INTERIM	FINAL	COMMENTS
a. 9800469: Waste Ethylene Dichloride	a.		
b. 9800468: Sulfuric Acid Sludge	b.		
c. 9800467: API Sludge	c.		
d. 9800470: Ceramic Support Balls	d.		

15. Special Handling Instructions and Additional Information
USE PROPER SAEETY EQUIPMENT
DOT Emergency Guidebook
a) 129 b) 154 c) 171 d) None

BILL TO: HTS
Emergency Response Contact
(562)944-6111 or (562)906-0588

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 and applicable state 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 available to me that I can afford.

Printed/Typed Name: ROBERT A. WENOM — Signature: [signature] — Month Day Year: 02 19 98

17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: STEVE BACHMAN — Signature: [signature] — Date: 02 19 98

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

19. Discrepancy Indication Space

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

GENERATOR — TRANSPORTER — FACILITY

EPA Form 8700-22 (Rev. 8-91) MONR-HWG 10 — PREVIOUS EDITIONS ARE OBSOLETE

CONTAINS 50% RECYCLED PAPER WHICH INCLUDES NOT LESS THAN 20% POST CONSUMER WASTE

THIS COPY MUST BE SENT BACK TO THE GENERATOR BY THE DESIGNATED

Shipper's #

Carrier Agent's No.

RECEIVE, subject to the classifications and tariffs in effect on the date of the issue of this Shipping Order,

at SANTA FE SPRINGS 19 from POWERINE

Consigned to HTS 11910 GREENSTONE (Mail or street address of consignee. For purposes of notification only.) (TURNSTONE BATTERY)

Destination SANTA FE SPRINGS State of Zip Code County of

Routing Delivering Carrier Vehicle or Car Initial No.

Collect On Delivery

$ and remit to:

Street City State

No. Packages	HM	Description of Articles, Special Marks, and Exceptions	*Weight (Sub. to Corr.)	Class or Rate	Check Column
7	X	BATTERIES, WET, ACID 8, UN2794 III	300	P	

C. O. D. charge to be paid by { Shipper ☐ Consignee ☐

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statements:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor.)

If charges are to be prepaid, write or stamp here, "TO BE PREPAID."

Received $ to apply in prepayment of the charges on the property described hereon.

Agent or Cashier

Per

(The signature here acknowledges only the amount Prepaid.)

Charges Advanced:

$

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." NOTE.—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding per

Shipper, Per

Permanent post office address of shipper, 12345 LAKELAND ROAD, SANTA FE SPRINGS

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

2

(This Bill of Lading is to be signed by the shipper and agent of the carrier issuing same.)

Health Science Associates

LABORATORY REPORT

Report No.: 981802
Purchase Order: CASH
External No.:

RAY HUIE
POWERINE OIL COMPANY
12354 LAKELAND ROAD
SANTA FE SPRINGS CA 90670

Date Received: 10-FEB-98
Date Completed: 12-FEB-98
Date Sent: 17-FEB-98
Page 1 of 1

Analytical Method: EPA 600/R-93-116

RESULTS TABLE
Sample Count (3) / Separable Layers (3)

Sample No.	Description	Sample Homogeneity	Asbestos Fibers	Nonasbestos Fibers
#1 (137449)	BEIGE INSULATION	COMPOSITE	BELOW LIMIT OF DETECTION	CELLULOSE : 10 %
#2 (137450)	BEIGE INSULATION	COMPOSITE	BELOW LIMIT OF DETECTION	FIBROUS GLASS : 5 % SYNTHETIC : 5 %
#3 (137451)	BEIGE INSULATION	COMPOSITE	BELOW LIMIT OF DETECTION	CELLULOSE : 20 %

Remarks : Sample(s) and sampling data as provided by RAY HUIE

Analyst : JMB / LAN

Reviewed by: Donald R. Bissing
Asbestos PLM Supervisor, Donald R. Bissing, PhD

AIHA ELLAP Accreditation No.: 10985
AIHA Accreditation No.: 172
California ELAP No.: 1406
NVLAP Accreditation No.: 101384

Technical Approval: Susan Rosenberg
Laboratory Director, Susan B. Rosenberg, CIH

10771 Noel St., Los Alamitos, CA 90720 714/220-3922 FAX 714/220-2081 e-mail hsa@earthlink.net

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purposes without written authorization is prohibited.

Attachment 6

POC's Closure Certification

DEC 1 8 1997

Powerine Oil Company

December 17, 1997

Mr. Mukul Agarwal
Cal/EPA
DTSC Region 3
1011 N. Grandview Avenue
Glendale, CA 91201

Dear Mr. Agarwal:

Enclosed is a copy of the Closure Certification issued on October 2, 1995 for Powerine Oil Company's Alky Neutralization Unit Basins. The soil beneath the basins was analyzed and found to be non-hazardous. The basins were capped on June 19, 1995.

Please feel free to contact with any questions you may have.

Sincerely,

June Christman

June M. Christman
Manager - Environmental Engineering

JMC:md

cc: Ahmed Hegub
Ray Huie
File
Reader File

12345 Lakeland Road • Santa Fe Springs, CA 90670 • Phone (562) 944-6111 • Fax (562) 944-8522

FILE: 40505.01

STATE OF CALIFORNIA — ENVIRONMENTAL PROTECTION AGENCY

PETE WILSON, *Governor*

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
REGION 1
1011 CROYDON WAY, SUITE 3
SACRAMENTO, CA 95827-2106
(916) 255-3602

October 2, 1995

RECEIVED
OCT 04 1995

Ms. June M. Christman
Manager-Environmental Engineering
Powerine Oil Company
12354 Lakeland Road
Santa Fe Springs, California 90670-3857

ACCEPTANCE OF CLOSURE CERTIFICATION FOR THE ALKY NEUTRALIZATION UNIT BASINS, POWERINE FACILITY, SANTA FE SPRINGS, CALIFORNIA, LOS ANGELES COUNTY, E.P.A. I.D. NO. CAD008383291

Dear Ms. Christman:

The Department of Toxic Substances Control (DTSC) has received both your certification as Manager of Environmental Engineering and an independent engineer's certification that the Alky Neutralization Unit (ANU) East and West basins at the Powerine facility located at 12354 Lakeland Road, Santa Fe Springs, California have been clean closed in accordance with the revised closure plan submitted to DTSC in January 1994. A summary of actions taken to close the ANU accompanies this letter in Attachment A. This letter is to acknowledge that DTSC considers the Alky Neutralization Unit East and West basins at the Powerine Facility officially closed and interim status originally granted to Powerine Oil officially terminated.

This acceptance is based on the assumption that the information submitted in the certifications as well as any information used as a basis for this decision is true and accurate. Any inaccuracies found in this information may be grounds for nullification of this clean closure certification and potential enforcement action. The Owner/Operator must inform DTSC of any deviation from or changes in the information provided which would affect the clean closure certification. This acknowledgement shall not relieve Powerine Oil of any liabilities associated with the past hazardous waste management practices which occurred on the site. This closure certification acknowledgement does not limit or preclude any future investigations of any other on-site operations by any agency, nor in resulting corrective action deemed necessary for closure and remediation of any solid waste management units at the facility.

DA.ja
DA37.085/jka29

Any questions about this acceptance can be directed to Mr. Dan Aguirre, Project Manager, at (916) 255-3602.

Sincerely,

James M. Pappas

James M. Pappas, P. E.
Chief
Facility Permitting Branch

Enclosure

DA.ja
DA37.085/jka29

ATTACHMENT A
SUMMARY OF CLOSURE ACTIONS

Interim Status was granted to the Powerine Oil Company in April 6, 1981, for the Alky Neutralization Unit. Powerine Oil Company notified the DTSC that use of the ANU was discontinued in early June 1992, the non-hazardous contents of the ANU basins had been removed and disposed at a Class II disposal facility, and an In-Line-Neutralization (ILN) system had been installed. The new ILN system will prevent the generation of hazardous waste.

The ANU basins were used to neutralize acidicregeneration bottoms produced as an undesirable by-product of the refinery's hydrofluoric alkyation plant. The combined dimensions of the East and West ANU basins were approximately 23 feet long, 22 feet wide and 10 feet deep. During the operation of the ANU basins, a minimum freeboard of three feet was maintained, yielding a design capacity of approximately 26,460 gallons or 630 barrels. Ancillary equipment included steel lids, valves and pipes to form an acid/water/polymer/lime slurry. The alkylation plant facility has a dedicated operator 24 hours a day, 365 days a year. The slurry was contained within 10 inch thick concrete walls and bottoms. These ANU basins have been replaced with an above-ground storage tank that is manifolded to an ILN system. The wastes stored in the ANU East and West basins closely resembled California Waste Code 791, liquids with pH < 2. Calcium Fluoride (CaF_2) was immediately formed in the ANU basins from the reaction between the inflowing acidic stream and the hydrated lime in the ANU basins. The calcium fluoride slurry stored in the ANU basins was in a liquid state with a specific gravity between 1.1 and 1.2. The maximum volume of CaF_2 slurry stored at any given time was approximately 630 barrels.

The objective of sampling during the closure was to determine whether a hazardous waste release had occurred as a result of operating the ANU East and West basins. Both soil samples and wipe samples were taken. AeroVironment drilled soil borings from the West ANU basin on September 2, 1994, and from the East ANU basin on September 6, 1994. Weathered areas were located in the 10 inch thick concrete bottom of the basins, during field observations. The weathered areas exposed the underlying reinforcement bars and were approximately two and a half feet in diameter. A concrete coring machine was used to cut a four-inch diameter hole through the center of each weathered area for access to the underlying soil. Soil borings to a total depth of 10 feet underneath the concrete floor of the ANU basins were taken using a hand auger. The concrete floor of the basins was measured to be nine feet below the ground surface. Soil samples were taken at one, five, and 10 feet beneath the bottom of each basin.

The soil encountered during the sampling was logged and described according to the Unified Soil Classification System. The soil samples were screened for volatile organic compounds (VOCs) using an organic vapor analyzer flame ionization detector (OVA-FID). The soil samples were analyzed for free fluoride using United States Environmental Protection Agency (U.S. EPA) Method 340.2 and U.S. EPA Method 9045 for pH. The analytical results for fluoride ranged from 1.4 milligrams per kilogram (mg/kg) to 25 mg/kg. These concentrations are within the range of naturally occurring fluoride concentrations in soil in the western United States. The analytical results for pH ranged from 7.5 to 9.5. The pH values are not considered corrosive, according to Title 22 of the California Code of Regulations (Cal. Code of Regs.). The soil borings were backfilled with bentonite chips and capped with concrete flush with the concrete flooring.

The steel basin lids were decontaminated by flushing them with a basic solution of soda ash and water. Two lids covered the East basin and two lids covered the West basin. There were two wipe samples collected from each of the four lids for a total of eight wipe samples. Each wipe sample was analyzed for total fluoride using U.S. EPA Method 340.2 and U.S. EPA Method 9045 for pH. The analytical results show total fluoride concentrations between 0.011 mg/kg and 1.2 mg/kg. The results of pH sampling were between 8.9 and 9.6. Based on the analytical results the lids are non-hazardous.

The quality control and the quality assurance procedures use at the Powerine ANU were exhaustive. All soil sampling equipment and hand augering equipment was decontaminated with a solution of Alconox and tap water, rinsed with tap water, and rinsed a second time with distilled water before sampling began and between soil samples. Wipe samples were collected from the barrel tubes that were used to collect soil samples. These wipe samples were collected to document any interference's that may have occurred during the field soil sampling activities and to check the field equipment decontamination procedures. One duplicate soil sample was collected from each soil boring at one foot below the ANU basin concrete bottoms. These four samples were analyzed using U.S. EPA Method 340.2 and 9045. In addition, a matrix spike and matrix spike duplicate analysis were performed on these duplicate samples. Also Golden West/CAS Laboratories ran reference standards and method blanks for U.S. EPA Method 340.2 and 9045.

Because the ANU basins were clean closed there will be no need for a post-closure permit. Powerine currently monitors fifteen groundwater wells at the refinery or in the vicinity of the refinery.

On June 14, 1995, Powerine personnel filled the ANU East and West Basins with slurry. On June 19, 1995, Powerine personnel capped the slurry-filled basins with concrete until the basins were flush with the surrounding concrete pad. Confirmation sampling has confirmed that contaminants associated with a chemical release are not present in the soil beneath the ANU basins, and that pH levels in the soil are above level 2 and below level 12.5, therefore the soil is not considered hazardous or corrosive.

ATTACHMENT 6

POC's Closure Certification

ATTACHMENT 7

Groundwater Monitoring Data

PROJECT: 063-004

SEMIANNUAL GROUNDWATER MONITORING REPORT
POWERINE OIL COMPANY
SANTA FE SPRINGS, CALIFORNIA
(July 1996 - December 1996)

February 26, 1997

Submitted to:

Powerine Oil Company
12354 Lakeland Road
Santa Fe Springs, California, 90670

Submitted by:

TriHydro Corporation
920 Sheridan Street
Laramie, WY 82070

TriHydro Corporation

920 Sheridan Street
Laramie, Wyoming 82070

(307) 745-7474
FAX: (307) 745-7729

H:\PROJECTS\POWERINE\063-004\1REPORT

CERTIFICATION

I certify that the work presented in this report was performed under my supervision. To the best of my knowledge, the data contained herein are true and accurate and the work was performed in accordance with professional standards.

REGISTERED GEOLOGIST
LINDA J. BARNES
No. RG6423
STATE OF CALIFORNIA

2-25-97

Linda J. Barnes Date
California Registered Geologist #6423
License expires October 31, 1997

H:\PROJECTS\CERTIF\CERT3.LJB

TABLE OF CONTENTS

Section	Page
1.0 INTRODUCTION	1
2.0 GROUNDWATER FLOW	1
3.0 GROUNDWATER QUALITY	2
3.1 Water Quality Monitoring Procedures	2
3.2 Water Quality Results	2
3.3 Quality Control Results	3
4.0 FUTURE ACTIVITIES	3

LIST OF APPENDICES

Appendix

A GROUNDWATER ELEVATION AND GROUNDWATER QUALITY DATA

B LABORATORY ANALYTICAL REPORT, CHAIN-OF-CUSTODY/SAMPLE-ANALYSIS-REQUEST FORMS, GROUNDWATER QUALITY FIELD RECORDS

C GROUNDWATER NATURAL ATTENUATION STUDY

LIST OF TABLES

Table

A-1 Groundwater Elevation Data, Powerine Oil Company, Santa Fe Springs, California

A-2 BTEX and MTBE Groundwater Data, Powerine Oil Company, Santa Fe Springs, California

A-3 Chlorinated Organic Compounds Groundwater Data, Powerine Oil Company, Santa Fe Springs, California

LIST OF FIGURES

Figure

1 Location Map, Powerine Oil Company, Santa Fe Springs, California

2 Groundwater Elevation Contour Map, Powerine Oil Company, Santa Fe Springs, California (December, 1996)

3 Isoconcentration Map, Benzene, Powerine Oil Company, Santa Fe Springs, California (December, 1996)

4 Isoconcentration Map, Total Petroleum Hydrocarbon as Gasoline, Powerine Oil Company, Santa Fe Springs, California (December, 1996)

1.0 INTRODUCTION

Powerine Oil Company (POC) owns and operates a petroleum refinery located at 12354 Lakeland Road in Santa Fe Springs, California (Figure 1). The POC refinery has historically processed crude oil to make several grades of petroleum, including diesel, gasoline, and jet fuel. Powerine expects to resume operations of the refinery some time in 1997.

Groundwater quality monitoring is being conducted semiannually at POC. This report presents: the results of the monitoring event conducted in December 1996; field and analytical data collected from POC and Walker Property wells; and a study of groundwater intrinsic bioremediation/natural attenuation indicators. POC has prepared this report to satisfy the requirements of the semiannual groundwater monitoring program as directed by the State of California, Los Angeles Region, Regional Water Quality Control Board (LARWQCB).

The semiannual groundwater monitoring well network at POC currently consists of three up-gradient wells (MW-104, MW-105 and MW-106), twenty refinery and down-gradient wells, and four wells (W-1, W-2, W-3, and W-4) located on the nearby Walker Property (Figure 1).

2.0 GROUNDWATER FLOW

Fluid levels and total well depths were measured in all POC monitoring wells as part of the semiannual monitoring event. Fluid levels were measured using an oil water interface meter to verify the presence/absence of light non aqueous phase liquid (LNAPL). Based on previous water quality data for the site, fluid levels were measured in order of increasing groundwater contamination to reduce the possibility of cross contamination. Recent and historical groundwater elevation data are summarized in Table A-1 in Appendix A. As indicated on Table A-1, LNAPL was detected in two monitoring wells during this sampling event; Well MW-504 (0.3 feet) and Well MW-600 (2.55 feet). No LNAPL was detected in Well MW-601, which contained 0.28 feet of product during the previous monitoring event.

A groundwater elevation contour map was constructed using the fluid-level data collected in December 1996 (Figure 2). Prior to constructing the groundwater elevation contour map, fluid levels in both monitoring wells containing LNAPL were corrected to account for the presence of LNAPL on the groundwater. An average specific gravity of 0.75 was used as the correction factor (Table A-1).

As shown on Figure 2, groundwater in the vicinity of POC generally flows toward the south. Based on the December 1996 fluid level data, the hydraulic gradient underlying the site is approximately 0.008 feet/foot.

3.0 GROUNDWATER QUALITY

Groundwater samples were collected from 27 monitoring wells located at POC and nearby properties from December 16 through December 19, 1996. Samples were collected for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl-tertiary butyl ether (MTBE) and chlorinated hydrocarbons by EPA Method 8260, and total petroleum hydrocarbons as gasoline (TPH-G) by Modified EPA Method 8015. Blakely Environmental Investigations, Inc. (Wrightwood, California) also collected samples in support of a natural attenuation study. Their report is presented in Appendix C. Groundwater monitoring procedures used and the results of the December 1996 sampling event are discussed below.

3.1 Water Quality Monitoring Procedures

Groundwater sample collection procedures and field quality control procedures consisted of the following:

- Monitoring wells were sampled in order of increasing contamination based on historical water quality data to reduce cross contamination.
- Each monitoring well was purged with a decontaminated PVC bailer until the field parameters (specific conductivity, pH, and temperature) stabilized. At least one casing volume of standing water was removed from the well prior to the first field parameter measurement.
- One field blank and one equipment blank were collected each day sampling activities were conducted. The field blank was made up of reagent free distilled water and the equipment blank was made up of the same distilled water rinsate used in the decontamination of the sampling bailer.
- After field parameters had stabilized (two consecutive measurements within 10%), a stainless steel sampling bailer was lowered into the monitoring well and the sample was collected.

Field parameters were measured on the groundwater sample from each monitoring well immediately following sample collection by field personnel. Laboratory analyses (EPA methods 8260 and Modified 8015) were performed by Core Laboratories of Anaheim, California.

3.2 Water Quality Results

The results of the water quality analyses for BTEX/MTBE, TPH-G, and chlorinated hydrocarbons are summarized in data tables presented in Appendix A. A benzene isoconcentration map is presented on Figure 3. An isoconcentration map for total petroleum hydrocarbons as gasoline is presented on Figure 4. An isoconcentration map for toluene was not produced due to a lack of detected toluene during this monitoring event. Laboratory

analytical reports and groundwater quality field records are presented in Appendix B. The types and levels of hydrocarbon constituents detected in the monitoring wells were similar to previous monitoring results.

3.3 Quality Control Results

Quality control samples analyzed during the December 1996 sampling event included four field blanks and four equipment blanks. One field blank and one equipment blank were collected for each day samples were collected. Analytical results for the quality control samples are included in the laboratory analytical report presented in Appendix B. Generally, the analytical data from this monitoring event are consistent with analytical data from previous events.

Although there were anomalies in some of the laboratory QA/QC results, these anomalies did not affect the overall integrity of the reported analytical results from the groundwater monitoring wells. Groundwater samples from wells MW-600, MW-601, and W-2 were analyzed by the laboratory for EPA Method 8260 up to three days after the fourteen-day holding time had expired. The groundwater sample from Well W-2 was also analyzed for TPH-G two days after the fourteen day holding time had expired. Laboratory results for the groundwater samples from wells MW-600 and MW-601 were comparable with previous groundwater analytical results from these wells. POC does not have historical TPH-G or Method 8260 data from the Walker Property Well W-2, but will obtain groundwater analyses from this location during the next monitoring event. The surrogate recovery for the MTBE analyses on the groundwater sample from Well MW-101 was outside acceptable ranges (by one percentage point) due to matrix effects. However, MTBE was not detected in the groundwater sample from this well, a result which is consistent with historical groundwater analytical data.

4.0 FUTURE ACTIVITIES

The next semiannual groundwater monitoring event is scheduled for June, 1997.

FIGURES

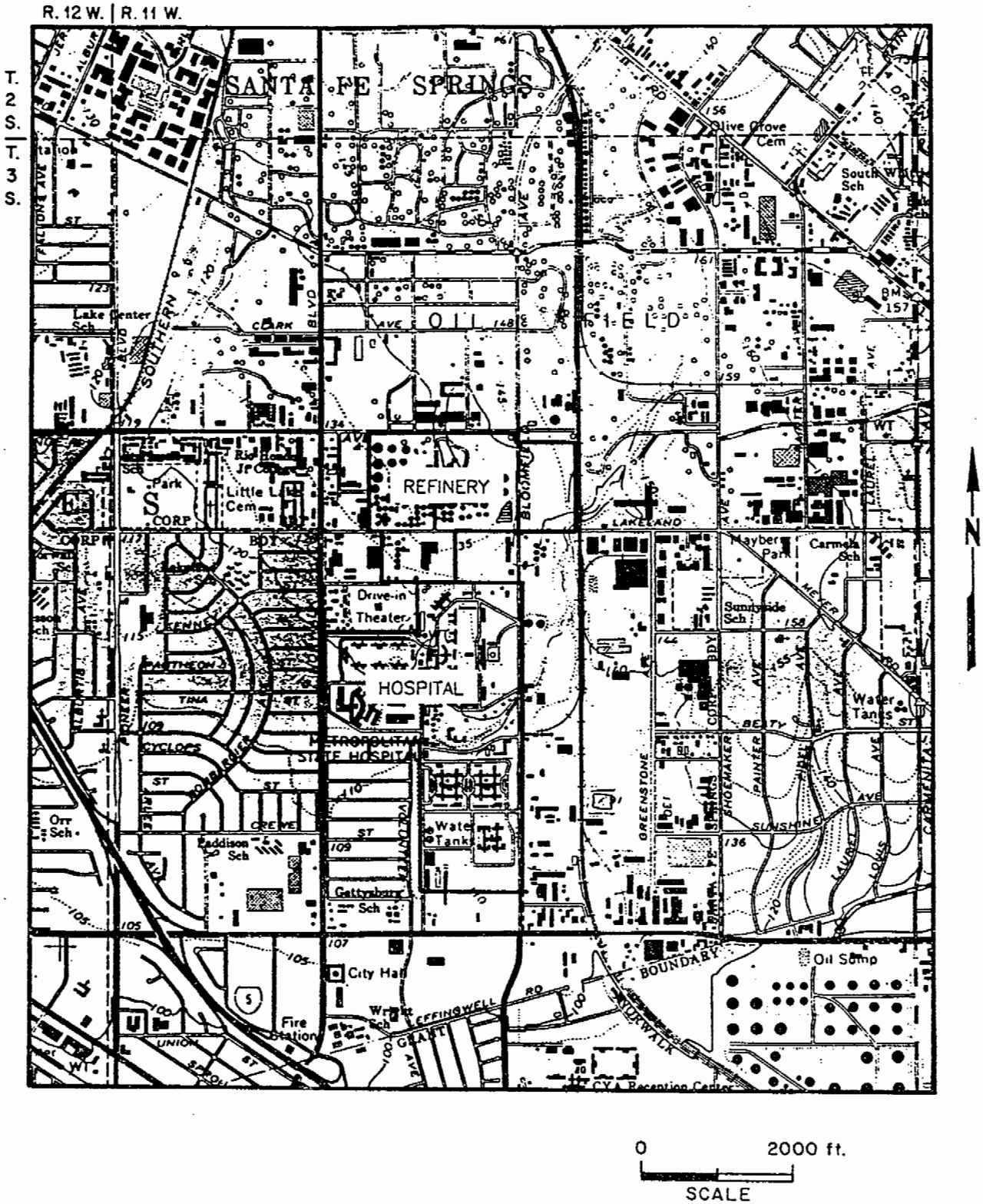


FIGURE 1-1 :LOCATION MAP, POWERINE REFINERY, SANTA FE SPRINGS, CALIFORNIA

ATTACHMENT 8

Regional Water Quality Control Board Order

Attachment 8

Regional Water Quality Control Board Order

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 8

To Ahmed Heyab	From Keith Elliott
Co. DTSC - 3	Co. DTSC
Dept.	Phone # 213/266-7604
Fax # (818) 557-2841	Fax #

213-897-1560

alifornia
QUALITY CONTROL BOARD
LOS ANGELES REGION

CLEANUP AND ABATEMENT ORDER NO. 97-118

REQUIRING POWERINE OIL COMPANY
TO CLEANUP AND ABATE THE EFFECTS OF UNCONTROLLED RELEASES OF
PETROLEUM HYDROCARBONS
TO SOIL AND GROUND WATER

(File No. 85-18)

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. The Powerine Oil Company, a California corporation, (hereafter referred to as the Discharger), operates a 88 acre Refinery, located at 12345 Lakeland Road. The refinery includes the Bloomfield Property, located at 10820 Bloomfield Avenue, and interconnecting pipelines from the refinery to its former Marine Terminal located at Berth 73 Port of Long Beach. The Powerine Oil Company is currently owned by Energy Merchant Corporation.

2. The refinery site has been used for refining purposes since 1936. The refinery processes raw materials, including crude oil, raw naphtha to produce petroleum products. The components 1,2-dichloroethane and tetrachloroethene were used at the site and stored near the refinery laboratory in above ground tanks. Tetrachlorethene may have been used at the site as a catalyst activator and 1,2-dichloroethane may have been used as a lead scavenger. The main products produced by the refinery are transportation fuels, including kerosene, jet A fuel, unleaded gasoline, high and low sulfur diesel, fuel oil, and petroleum coke. The refinery also produces refinery gas and hydrogen, which are consumed internally by the refinery. In addition, the refinery produces revenue generating non-fuel by-products such as sulfur and carbon dioxide.

3. From 1968 to March 1986, the Discharger leased a small portion of the Walker property, located at 11240 Bloomfield Avenue, Santa Fe Springs, as a terminalling facility for storage and transferring of asphalt, jet fuel, gas oil, fuel oil, butane, carbon dioxide, and liquified petroleum gas. The two large tanks existed at the site as early as 1945, prior to Powerine use of the tanks.

4. In March 1984, Powerine sought Chapter 11 bankruptcy protection and shut down the refinery. In September, 1986, Powerine Oil Company emerged from bankruptcy. The refinery operated from 1986 until 1995 undergoing a series of ownership changes that ultimately resulted in a July, 1995 shutdown of their 49,500 barrel per day refining process and layoff of most of their 400 employees. During this time, Order No. 85-17 was adopted by this Regional Board directing Powerine Oil Company to conduct a subsurface investigation of their Refinery and to detect and assess any conditions of soil and ground water pollution which may be present. This Order provides that additional Orders shall be issued to correct any condition of pollution found. In response to this Order, the Discharger: Investigated the extent of ground water contamination originating from the

refinery and initiated some soil cleanup and operation of a free-phase petroleum hydrocarbon product removal system. In 1991, free-phase hydrocarbon removal was suspended due to the unrecoverability of the remaining free-phase petroleum hydrocarbon on the ground water. Little free-phase petroleum hydrocarbon contamination remains but extensive dissolved-phase contamination remain on-site and off-site, including under the State Hospital to the south. In early 1996 the Energy Merchant Corporation acquired Powerine with the intent of restarting the refinery and reestablishing Powerine in the petroleum refining business. Powerine stated that the sale of its former administrative building and terminalling facility property located at 12354 Lakeland Road, is key to the financing of the proposed refinery start-up. To facilitate this sale, on June 24, 1997, Powerine requested that this Regional Board enter into a Prospective Purchaser Agreement covering only the Lakeland Road portion of their refinery property.

5. Prior to their request for a Prospective Purchaser Agreement, Powerine initiated shallow soil remediation on the Lakeland Property and requested a no further action letter to facilitate the sale of the land. This remediation action consisted of demolition of the above ground tanks and associated pipelines at the Lakeland Property and removal of about 5,100 cubic yards of petroleum hydrocarbon saturated soils for staging prior to treatment or off-site disposal.

6. After Powerine's remediation efforts, on May 14, 1997, staff issued a "No Further Action" letter regarding soil contamination which provided that reasonable precautions are to be taken by those involved in any excavation, borings or related activities involving the subsurface of the subject site. This no further action letter was based upon:

   a. Shallow soils meet the Board's cleanup goals for low risk sites. Deeper soil contamination remaining contain up to 27,000 mg/kg total petroleum hydrocarbon (TPH) as gasoline, up to 3.3 mg/kg methyl tertiary butyl ether (MTBE), 200 mg/kg benzene and up to 110 mg/kg naphthalene and pose no risk to surface development.

   b. A "Fate and Transport/Human Health Risk Assessment", dated March 21, 1997, and update of May 12, 1997, indicate that remaining site soil contaminants will not impact the ground water, the incremental cancer risk was predicted to be less than 0.5 in one million for a site industrial worker, and the non-carcinogenic hazard index was predicted to be less than 0.013.

   c. Existing ground water contamination with up to 14,000 mg/ℓ benzene was deferred from the no further action letter for later cleanup under the refinery cleanup and abatement Order. Analyses for three on-site production wells, screened in the Silverado aquifer, were below detection limits for all constituents except for 0.88 µg/ℓ toluene in production well number 6, which appeared to be an anomaly.

7. The refinery is underlain by several water-bearing zones. The uppermost water-bearing zone is the unconfined Artesia aquifer. The depth to ground water underlying the refinery is generally 80 feet to 100 feet below ground surface (bgs). Ground water flow direction is generally south in the vicinity of the refinery with an apparent ground water divide about one mile south of the refinery. A deeper probable water-bearing zone at about 200 feet to 400 feet bgs located in the Lynwood formation and a water bearing zone at about 600 to 800 feet bgs called the Silverado aquifer, is a drinking water source for the area.

8. Ground water production wells, screened in the Silverado aquifer, within four miles of the refinery supply drinking water for approximately 114,000 people, supplied by five water purveyors.

9. Free-floating hydrocarbon product was identified in the Artesia aquifer underlying the refinery and is known to have migrated off-site in this aquifer. The discharger initiated recovery of free floating hydrocarbon from the Artesia aquifer in the summer of 1990. As of March 1995, about 520 gallons of hydrocarbon have been recovered from the Artesia aquifer and the maximum hydrocarbon thickness has been reduced to from 2.96 feet to 0.3 feet.

10. The U.S. EPA conducted a Site Inspection Prioritization (SIP) of the refinery and prepared a report, dated September 11, 1995. This report indicated that further assessment is needed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), the Regional Board is the lead agency for this site and that EPA will continue to monitor the sites progress.

11. The Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region on June 13, 1994. This Water Quality Control Plan designates beneficial uses and establishes water quality objectives for all ground water within the Region. Existing or potential beneficial uses for ground water in the Coastal Plain, where the site is located, are municipal and domestic supply, agricultural supply, and industrial service and process supply. Ground water in the Silverado aquifer is usually of best quality and quantity.

12. The California Water Code, Section 13304, "Cleanup and Abatement Orders", requires in part, that any discharge of waste into the waters of the state, that creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the Regional Board cleanup such waste or abate the effects thereof. If such waste is cleaned up, the effects thereof abated, the person or persons who discharged the waste, shall be liable to that governmental agency [for its supervision] to the extent of the reasonable costs actually incurred in cleaning up such waste and abating the effects thereof.

13. Additionally, under the Aboveground Tank Act (SB 1050), the discharger is required to reimburse the State of California for staff oversight costs associated with cleanup and abatement activities. To that end, the discharger, via a letter dated March 11, 1993, agreed to reimburse the State of California for staff oversight costs associated with cleanup activities at this facility.

14. This enforcement action is being taken for the protection of the environment and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et. seq.) in accordance with Section 15321, Chapter 3, Title 14, California Code of Regulations.

The Regional Board has notified the discharger of its intent to issue an Order requiring it to cleanup and abate conditions of soil and ground water pollution caused by the release of petroleum hydrocarbon products from their properties and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the tentative Order.

IT IS HEREBY ORDERED, pursuant to California Water Code 13304, that Powerine Oil Company shall:

1. Cleanup and abate the effects of on-site and off-site soil and ground water contamination originating from its refinery, including its Bloomfield Property, activities associated with two above ground storage tanks on the "Walker Property" located at 11240 Bloomfield Avenue, and its interconnecting pipelines to its former Marine Terminal, located at Berth 73 in the Port of Long Beach, Long Beach, California. In addition, cleanup and abate the effects of on-site and off-site ground water contamination which may have originated from its Lakeland Property, as required by this Regional Board.

2. Submit to this Regional Board by March 15, 1998, a Master Work Plan and time schedule for approval by the Executive Officer, that details all known on-site and off-site ground water and soil contaminated areas for cleanup. The Master Work Plan shall provide a time schedule for cleanup of all detailed ground water and soil contamination. These activities shall be conducted according to approved work plans, the requirements of the State Water Resources Control Board Resolution No. 92-49 "Policies and Procedure", and the time schedule specified in the Master Work Plan. The Master Work Plan shall include at a minimum the following items:

   a. An updated refinery source identification and elimination plan including a plan and time schedule for implementation of the site source identification and elimination program within 90 days of approval of the plan by the Executive Officer. The plan is to detect leakage from above ground tanks and associated piping, identify free phase petroleum hydrocarbon in the vadose zone, and remediate any petroleum hydrocarbon contamination in a timely manner.

   b. A plan and schedule for final site assessment of all soil and ground water contamination to:

      1) Fully delineate the extent of free-phase and dissolved phase ground water contamination in the upper saturated zone and underlying saturated zones. Off-site investigations coordinated to include neighboring facilities are

considered a vital part of this effort. Complete the preliminary investigation and characterization of all known on-site vadose zone contamination. Define the lateral and vertical extent of such contamination, characterize and evaluate contaminant behavior, and evaluate the potential impact on ground water quality.

2) Develop specific aquifer characteristics, such as hydraulic conductivity, for the uppermost saturated zone and any underlying contaminated aquifers;

3) Assess the saturated zone hydraulic characteristics and conductivity (i.e., determine the connection between saturated units or aquitards underlying any soil or ground water contamination).

c. A description of the current facility ground water cleanup strategy to remediate any on-site and off-site free-phase and dissolved phase ground water contamination.

d. A schedule for initiating cleanup of all known ground water contamination.

e. A schedule for initiating cleanup of all known vadose zone contamination. Cleanup levels shall be approved in Waste Discharge Requirements issued by this Regional Board.

3. After completion of any phase of ground water or soil investigation or cleanup, according to the approved time schedule in the Master Work Plan, a detailed report describing the activities and results shall be submitted to this Regional Board. Semi-annual progress reports shall be submitted until all required activities are completed.

4. Pursuant to Section 13267 of the Water Code, the discharger shall submit, under penalty of perjury, to this Regional Board technical reports to include semi-annual progress and ground water elevation gauging and sampling reports until completion of all Regional Board mandated work. These reports must contain, at a minimum, the following information:

a. A summary of all ground water elevation measurements from mean sea level and depths to ground water from all site monitoring wells. Monitoring wells should be sounded for total depth at each gauging event. This information should be presented in tabular form to include well location (latitude/longitude or x/y coordinate system) and on a plot plan depicting the location of the borings/wells with ground water contours depicting groundwater flow direction and gradient information. Also, include a free phase hydrocarbon isothickness map and a dissolved phase contaminant isoconcentration contour map, if applicable.

b. Analyses of ground water collected from selected site monitoring wells during the sampling period, as approved by the Executive Officer, together with an evaluation

of the test results. Ground water sample collection procedures and analyses shall be according to an approved work plan.

c. The above data shall be submitted by hard-copy in a report and if requested, electronically in a format acceptable to the Executive Officer.

d. Investigative and remedial activities completed during the reporting period and activities proposed for the next reporting period.

5. Any request for time extensions of the completion dates, shown in the approved Master Work Plan, must include justification for such time extension and be submitted in writing to the Executive Officer for approval.

6. Abandonment of any ground water well(s) at the site must be reported to the Executive Officer in advance when possible, but no later than 14 days after removal. Any ground water well removed must be replaced within a reasonable time, at a location approved by the Executive Officer. With justification, the Executive Officer may approve of the abandonment of ground water wells without replacement. When a well is removed, all work shall be completed in accordance with all applicable well abandonment requirements.

7. All work, except the source elimination program, performed pursuant to this Order shall be under the direction and supervision of a registered Civil Engineer or Geologist or a Certified Engineering Geologist. The Discharger's contractor or consultant shall have the technical expertise sufficient to adequately perform all aspects of the work for which they are responsible.

8. When required, it is the intent of this Regional Board to issue Waste Discharge Requirements or other Orders pursuant to Section 13260, Section 13304, and/or Section 13350 of the Water Code to facilitate this cleanup and abatement activity.

9. The Regional Board and other Regional Board authorized representative shall be allowed:

a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;

b. Access to copy any records that are kept under the conditions of this order;

c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this order; and

d. To photograph, sample, and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the California Water Code.

10. Any investigation and cleanup and mitigation activities required by this Order, currently in progress or conducted in the past, shall be included and made a part of the cleanup program.

11. This Order is not intended to permit or allow the discharger to cease any work required by any other Order issued by this Regional Board, nor shall it be used as a reason to stop or redirect any investigation or mitigation activities not required by this Order or any other agency.

12. This Order in no way limits the authority of the Regional Board as contained in the California Water Code, to require additional investigation and cleanup pertinent to this project. It is the intent of this Regional Board to issue Waste Discharge Requirements or other Orders pursuant to Section 13260, Section 13304, and/or Section 13350 of the Water Code when appropriate to facilitate this cleanup and abatement activity. Additionally, continued monitoring of the ground water quality beneath this facility after the completion of this cleanup and abatement activity may be required.

13. Provide to the Regional Board advance notice of any planned physical alterations to the facility or planned changes in the facility's activities that may affect compliance with this Order.

14. This Order does not exempt the discharger from compliance with any other laws, regulations, or ordinances which may be applicable, nor does it legalize these waste treatment and disposal facilities and it leaves unaffected any further restraints on those facilities which may be contained in other statues or required by other agencies.

15. Provide to the Regional Board advance notice of any planned change in name, ownership, or control of the facility; provide notice to any succeeding owner or operator of the existence of this Order by letter; forward a copy of such notification to the Regional Board.

16. Pursuant to Section 13304 of the Water Code, the discharger shall reimburse the State Water Resources Control Board (SWRCB) for all reasonable costs incurred by the State Board and this Regional Board in overseeing the cleanup and abatement activities required by this order.

17. This order may be revised by the Regional Board through its Executive Officer as additional information on this site becomes available. Upon request by the discharger, and for good cause shown the Executive Officer may defer, delete or extend the date of compliance for any action required of the discharger under this Order. The authority of the Regional Board, as contained in the California Water code, to order investigation and cleanup additional to that described herein, is in no way limited by this Order.

Powerine Oil Company
Cleanup and Abatement Order No. 97-118

File No. 85-18

Failure to comply with the terms or conditions of this Order may result in the imposition of civil liabilities, either administratively by the Regional Board or judicially by the Superior Court, in accordance with Section 13350, et seq., of the California Water Code, and/or referral to the Attorney General of the State of California for such action as he may deem appropriate.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on August 25, 1997.

Dennis A. Dickerson

DENNIS A. DICKERSON
Executive Officer

ATTACHMENT 9

Hazardous Waste Manifest for 1996-1998

Attachment 9

Hazardous Waste Manifest for 1996-1998

DATE	DOCUMENT #	TRANSPORTER	FACILITY	ST	DESCRIPTION	AMOUNT/UNIT		Number	Type	Fed Waste Code	State Waste Code
1/18/95	AR-735578	DART TRUCKING INCORP	ENSCO	AR	REF11A: DI-TERTIARY METHY-POLYSULFIDE	7,380	LBS	15	DM	D003	
1/18/95	AR-735578	DART TRUCKING INCORP	ENSCO	AR	REF11B: DIMETHY DISULFIDE	4,380	LBS	6	DM	D001,D003	
1/20/95	92892996	THOMAS CRANE & TRUCKING	US ECOLOGY	NV	SPENT UNIFINER CATALYST WS 07-012-3026	26,600	LBS	62	DM	N/A	162
2/8/95	95309781	SECURITY ENV. SYSTEM	US ECOLOGY	NV	SOLID WASTE FILTERS 07-012-3740	14,390	LBS	1	CM	N/A	181
3/29/95	92892994	ROMIC ENVIRONMENTAL TECH	ROMIC ENVIRONMENTAL TECH	CA	TRICHLOROTRIFLUOROETHANE	796	LBS	1	DM	F002	741
4/6/95	92649555	ENVIROCON INC	AZUSA LAND RECLAMATION	CA	RQ ASBESTOS, 9, NA2212, PG III	1,960	LBS	107	BA	N/A	151
4/28/95	92892946	TRI-STATE MOTOR TRANSIT	KETTLEMAN HILLS DISPOSAL	CA	BC 4937-049 (TRASH W/DIRT)	1,021	LBS	2	DM	N/A	181
4/28/95	92892946	TRI-STATE MOTOR TRANSIT	KETTLEMAN HILLS DISPOSAL	CA	BH 2786 (SANDBLAST W/DIRT)	825	LBS	1	DM	N/A	181
5/19/95	95327108	TRI-STATE MOTOR TRANSIT	KETTLEMAN HILLS DISPOSAL	CA	HAZARDOUS WASTE (CHROMIUM, LEAD)	6,090	LBS	12	DM	D007,D008	#####
5/19/95	95327108	TRI-STATE MOTOR TRANSIT	KETTLEMAN HILLS DISPOSAL	CA	NON-RCRA HAZ WASTE DRIED PAINT	850	LBS	2	DM	N/A	61[illegible]
5/19/95	95327095	TRI-STATE MOTOR TRANSIT	CHEMICAL WASTE MGMT INC	CA	HAZARDOUS WASTE SOLIDE NOS (API/EXCH SLUDGE)	1,050	LBS	2	DM	K050, K051	35[illegible]
5/19/95	95327095	TRI-STATE MOTOR TRANSIT	CHEMICAL WASTE MGMT INC	CA	RQ WASTE FLAMMABLE LIQUID, NOS (WASTE THINNER)	210	LBS	1	DM	01, F003,F	212
5/19/95	95327095	TRI-STATE MOTOR TRANSIT	CHEMICAL WASTE MGMT INC	CA	RQ WASTE FLAMMABLE SOLID, NOS (METAL DEACTIVAT	250	LBS	1	DM	D001	352
8/10/95	LAA3283261	KVS SERVICES	AMAX METALS RECOVERY, INC	CA	WASTE SELF-HEATING SUBSTANCES, DHT CATALYST	27,620	LBS	53	DM	D018R	162
8/10/95	LAA3283264	KVS SERVICES	AMAX METALS RECOVERY, INC	CA	WASTE SELF-HEATING SUBSTANCES, DHT CATALYST	23,160	LBS	49	DM	D018R	162
8/16/95	95203676	TRI-STATE MOTOR TRANSIT	KETTLEMAN HILLS DISPOSAL	CA	RQ WASTE SODIUM NITRITE SOLID	118	LBS	1	DM	D001	141
8/16/95	95203674	TRI-STATE MOTOR TRANSIT	CHEMICAL WASTE MGMT INC	CA	RQ WASTE FLAMMABLE LIQUID, NOS	330	LBS	2	DM	D001, F003	212
8/17/95	95503670	ROMIC ENVIRONMENTAL TECH	ROMIC ENV TECH CORP	CA	HAZ WASTE LIQUID(TRICHLOROTRIFLUOROETHANE)	219	LBS	1	DM	F002	741
9/7/95	92649623	BDC SERVICES	AZUSA LAND RECLAMATION	CA	RQ ASBESTOS 9 NA2212, PG III	9	YDS	90	BA		151
11/13/95	92892985	RUEL SMITH	UOP-SHREVEPORT	LA	SPENT CATALYST, ALUMINUM OXIDE WITH PLAT.	10,000	lbs	20	DM	D018	491
1996											
7/9/96	92892984	JOHN THOMAS TRUCKING	DURA THERM	TX	HAZ SOLID WASTE NOS ORM-E NA 9188, K048,K049, KO	15	YDS	1	CM		
1997											
4/24/97	95916171	BDC*FALCON	AZUSA LAND RECLAMATION	CA	R.Q. ASBESTOS, 9, NA 2212, PGIII (NAERG#171)	20	YDS	1	CM	N/A	151

State of California—Environmental Protection Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-94)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

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

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

A. State Manifest Document Number: 92892984

B. State Generator's ID

5. Transporter 1 Company Name: 13351 Stewart St. Huntington Beach

6. US EPA ID Number: CAD

C. State Transporter's ID: 619425

D. Transporter's Phone: 310 592 2839

7. Transporter 2 Company Name: 912643

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone: 713 894 1352

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 Number
a.					State / EPA/Other
b. 52,840					State / EPA/Other
c. 7 tons Hets					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above

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

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of the 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 federal, state and international laws.

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 | Signature | Month | Day | Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: TOM TELLER | Signature: Tom Teller | Month: 07 | Day: 19 | Year: 96

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

DO NOT WRITE BELOW THIS LINE.

GENERATOR — TRANSPORTER — FACILITY

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

92892984

DTSC 8022A (7/92)
EPA 8700—22

YELLOW — GENERATOR RETAINS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-94)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacromento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAT 080012091
Manifest Document No.:
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: [illegible]
4. Generator's Phone ( ) 310 944 6111

5. Transporter 1 Company Name: JOHN THOMAS TRUCKING
18851 Stewart. St. Huntington Beach CA 92648
6. US EPA ID Number: CAD061605036

7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address: [illegible]
10. US EPA ID Number: ~~TXD~~ ~~TX981053770~~ TXD981053770

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. ~~[illegible]~~ HAZARDOUS [illegible] NOS ORM-E NA9188, K048, K049, K050, K051	001	CM	15 YARD	CY
b. GROSS WT 52,840				
c. 7 tons Nets				
d.				

15. Special Handling Instructions and Additional Information: REFINERY OILY SLUDGES HAS BENZENE AND OTHER TOXIC CHEMICALS

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of the 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 federal, state and international laws.

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	Signature	Month	Day	Year
THEODORE K METROS	[signature]	07	09	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Tom TELFER	Tom Telfer	07	09	96

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

DO NOT WRITE BELOW THIS LINE.

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-75[illegible]

92032984

DTSC 8022A (7/92)
EPA 8700—22

Yellow: GENERATOR RETAINS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAD008383291
Manifest Document No.: 16171
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
POWERINE
P.O. BOX 2108
SANTA FE SPRINGS, CA 90670
SITE: POWERINE
12354 LAKELAND RD.
SANTA FE SPRINGS, CA.

4. Generator's Phone (562) 944-6111

5. Transporter 1 Company Name
BDC*FALCON
SPECIAL WASTE SERVICES

6. US EPA ID Number: CAR000017657

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
AZUSA LAND RECLAMATION
1201 W. GLADSTONE
AZUSA, CA 91702

10. US EPA ID Number: CAD009007626

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. R.Q. ASBESTOS, 9, NA 2212, PGIII (NAERG#171)	001	CM	00020	Y
b.				
c.				
d.				

15. Special Handling Instructions and Additional Information
24 HRS. EMERGENCY 1-800-535-5053
BDC*FALCON 766 SOUTH AYON AVE. AZUSA, CA 91702

EPA REGION IX 75 HAWTHORNE ST. SAN FRANCISCO, CA. 94105 CLEVELAND
ASBESTOS REMOVAL REQUIREMENT 40CFR61 (BAGGED SEALED & LABELED)

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	Signature	Month Day Year
Matt Winefield	[signature]	04 24 97

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Ed Guerrero	Ed Guerrero	04 24 97

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
[signature]	[signature]	04 24 97

GENERATOR

TRANSPORTER

FACIL

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

DO NOT WRITE BELOW THIS LINE.

Yellow: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS.
(Generators who submit hazardous waste for transport out-of-state, produce completed copy of this copy and send to DTSC within 30 days.)

DTSC-8022A (1/95)
EPA 8700—22

MINNESOTA POLLUTION CONTROL AGENCY
HAZARDOUS WASTE DIVISION
520 LAFAYETTE ROAD
ST. PAUL, MINNESOTA 55155
ATTN: HWIMS

For MPCA use only

Please TYPE (Form designed for use on elite (12-pitch) typewriter) or print LEGIBLY. Instructions on cover page.

OMB No. 2050-0039
EXPIRES 9/30/98

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD008383291 Manifest Document No. 97032
2. Page 1 of

Information in shaded area not required by Federal law. Minnesota rules require Items H. and I.

3. Generator's Name and Mailing Address (Also location of waste generation if different from mailing address.)
Powerine Oil Co. 12345 Lakeland Rd., 90670
County: Santa Fe Springs, CA.

4. Generator's Phone (562) 944-6111

A. State Manifest Document Number MN 27232
B. State Generator's ID

5. Transporter 1 Company Name: Luminaire Recyclers
US EPA ID Number: MNR000000588
C. State Transporter's ID
D. Transporter's Phone

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: Luminaire Recyclers Inc. - 2161 W. University Ave, #206 St. Paul, MN. 55114
10. U.S EPA ID Number: MNR000000588
G. State Facility's ID
H. Facility's Phone: 612-649-0079

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM		12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Waste Polychlorinated Biphenyls 9, UN2315, PG III	4	DM	2600	P	
b.							
c.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: Response Guide 171

15. Special Handling Instructions and Additional Information
Emergency Response # 1-800-535-5053

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 and all applicable state laws and 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: June Christman
Signature: June Christman
Date (Month Day Year): 0 1 1 9 9 8

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Mark Eldridge
Signature: Mark Eldridge
Date (Month Day Year): 0 1 1 9 9 8

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

GENERATOR
TRANSPORTER
FACILITY

Outside Minnesota, call the National Response Center and appropriate state agency.

ATTACHMENT 10

Hazardous Materials Sample Analysis Request Form, Spilled Samples Form and HML Sample Request, Chain of Custody Form and Lab Analysis

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

APR 0 7 1998

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16920 - 16924,16926

2. SAMPLES WERE COLLECTED ON 1/27/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE:

RECEIVED ON 1/29/98 BY HAZARDOUS MATERIALS LABORATORY-SO. CAL

EXTRACTED ON 02/05/98 - 02/09/98 BY SCL METHOD 815 GC/FID FOR TPH GASOLINE RANGE ORGANICS

ANALYZED ON 02/04/95 - 02/09 /98 BY SCL METHOD 815

NOTE: SCL=HAZARDOUS MATERIALS LABORATORY-SO.CAL.

DATA PACKAGE WAS COMPLETED ON 2/11/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO 16920 - 16924

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA.90670

DATE REPORTED: 2/11/98

METHOD(S): SCL 815 GC/FID FOR TPH-GASOLINE RANGE ORGANICS (GROs)

GASOLINE - GROs ANALYSIS

							QUANTITATION LIMIT				
	SCL NO.	16920	16921	16922	16923	16924	16920	16921	16922	16923	16924
	COL. NO.	POC-1-128A	POC-2-128A	POC-3-128A	POC-4-128A	POC-5-128A					
	MATRIX	OIL	OILY WATER	OILY WATER	OIL	SLUDGE					
ANALYTE	UNIT	MG/KG	MG/L	MG/L	MG/KG	MG/KG	MG/KG	MG/L	MG/L	MG/KG	MG/KG
GASOLINE-GROs		62,000	29	11	28,000	820	4500	1.8	0.9	900	45

NOTES: ND = NOT DETECTED
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

SAMPLE PREPARATION: Lucia Yap 3/10/98
LUCIA YAP DATE

ANALYST: Lucia Yap 3/10/98
LUCIA YAP DATE

SUPERVISOR 3/10/98
RUSS CHIN DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO 16926

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA.90670

DATE REPORTED: 2/11/98

METHOD(S): SCL 815 GC/FID FOR TPH-GASOLINE RANGE ORGANICS (GROs)

GASOLINE - GROs

							QUANTITATION LIMIT				
	SCL NO.	16926					16926				
	COL. NO.	POC-7 128A									
	MATRIX	SOIL									
ANALYTE	UNIT	MG/KG					MG/KG				
GASOLINE - GROs		ND					45				

NOTES: ND = NOT DETECTED
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

SAMPLE PREPARATION: Lucia Yap 3/10/98
LUCIA YAP DATE

ANALYST: Lucia Yap 3/10/98
LUCIA YAP DATE

SUPERVISOR 3/10/98
RUSS CHIN DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER'S NAME: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA.90670

DATE SAMPLE PREPARED: 02/05/98 - 02/09/9

DATE SAMPLE ANALYZED: 02/0498 - 02/09/98

METHOD(S): SCL 815

QC REPORT FOR

A: METHOD BLANK
B: METHOD STANDARD RECOVERY
C: LABORATORY CONTROL SAMPLE
D: SAMPLE DUPLICATE ANALYSIS

	A	B		C	
	METHOD BLANK	METHOD STANDARD		LABORATORY CONTROL SAMPLE	
		RECOVERY	CONTROL LIMIT	FOUND	CONTROL LIMIT
COMPOUND	MG/KG	%	%	MG/KG	MG/KG
GASOLINE - GROs	<45	80.9	NDY		

D			
SAMPLE DUPLICATE ANALYSIS			
PERFORMED ON :	SCL NO.	16926	
MATRIX :			
	RUN 1	RUN 2	RPD
COMPOUND	MG/KG	MG/KG	%
NO DATA			
		CONTROL LIMIT	

NOTES:

NDY = NOT DETERMINED YET

SAMPLE PREPARATION

Lucia Yap 3/10/98
LUCIA YAP DATE

ANALYST

Lucia Yap 3/10/98
LUCIA YAP DATE

SUPERVISOR

3/10/98
RUSS CHIN DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 - 5795

REQUESTER'S NAME: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND RD.,
SANTA FE SPRINGS, CA 90670

DATE SAMPLE PREPARED: 02/05/98 - 02/09/98

DATE SAMPLE ANALYZED: 02/04/98 - 02/09/98

METHOD(S): SCL 815 GC/FID FOR GASOLINE ANALYSIS

QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON 16926
TYPE OF MATRIX SOIL
TYPE OF SPIKE GASOLINE

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE	AMOUNT OF ANALYTE ADDED	MATRIX SPIKE		MATRIX SPIKE DUPLICATE		AVE % REC	CONTROL LIMITS FOR % REC	R % D BETWEEN MS/MSD	CONTROL LIMITS FOR RPD
			AMOUNT RECOVERE	%REC	AMOUNT RECOVERE	%REC				
	MG/KG	MG/KG	MG/KG	%	MG/KG	%	%	%	%	%
GASOLINE	<45	1500	1658.9	110.6	1367.9	91.2	100.9	NDY	19.2	NDY

NOTES: NDY = NOT DETERMINED YET

SAMPLE PREPARATION	ANALYST	SUPERVISOR
Lucia Yap 3/10/98	Lucia Yap 3/10/98	3/10/98
LUCIA YAP DATE	LUCIA YAP DATE	RUSS CHIN DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16920 - 16924 ; 16926

2. SAMPLES WERE COLLECTED ON 1/27/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE:

RECEIVED ON	1/29/98	BY HAZARDOUS MATERIALS LABORATORY-SO. CAL		
EXTRACTED ON	2/3/98	BY EPA METHOD	3580	WASTE DILUTION
		BY EPA METHOD	3510	SEPARATORY FUNNEL LIQUID/LIQUID EXTRACTION
		BY EPA METHOD	3540	SOXHLET EXTRACTION
		BY SCL METHOD	106M	MECHANICAL SHAKER
CLEANED UP ON	2/4/98	BY EPA METHOD	3620	FLORISIL COLUMN CLEAN UP
ANALYZED ON	2/5/98 - 2/6/98	BY SCL METHOD	816	DIESEL BY GC/FID

NOTE: SCL=HAZARDOUS MATERIALS LABORATORY-SO.CAL.

DATA PACKAGE WAS COMPLETED ON 2/10/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTE R: AHMED E. HEGAB

SCL NO 16920 - 16924

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE REPORTED: 02/09/98

METHOD(S): SCL 816 DIESEL BY GC/FID

							QUANTITATION LIMIT				
	SCL NO.	16920	16921	16922	16923	16924	16920	16921	16922	16923	16924
	COL. NO.	POC-1 128A	POC-2 128A	POC-3 128A	POC-4 128A	POC-5 128A					
	MATRIX	LIQUID	LIQUID	LIQUID	LIQUID	SLUDGE					
ANALYTE	UNIT	MG/KG	MG/L	MG/L	MG/KG	MG/KG	MG/KG	MG/L	MG/L	MG/KG	MG/KG
DIESEL		250,000	140	2,100	390,000	52,000	10,500	105	105	10,500	5,250

NOTES: ND = NOT DETECTED
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

SAMPLE PREPARATION: Monina Ligao 2/25/98
MONINA LIGAO DATE

ANALYST: Monina Ligao 2/23/98
MONINA LIGAO DATE

SUPERVISOR 2/23/98
RUSS CHIN DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTE R: AHMED E. HEGAB

SCL NO 16926

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE REPORTED: : 2/9/98

METHOD(S): SCL 816 DIESEL BY GC/FID

							QUANTITATION LIMIT				
	SCL NO.	16926					16926				
	COL. NO.	POC-7 128A									
	MATRIX	SOIL									
ANALYTE	UNIT	MG/KG					MG/KG				
DIESEL		ND					105				

NOTES: ND = NOT DETECTED
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

SAMPLE PREPARATION: Monina Ligao 2/23/98
MONINA LIGAO DATE

ANALYST: Monina Ligao 2/23/98
MONINA LIGAO DATE

SUPERVISOR 2/23/98
RUSS CHIN DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER'S NAME: AHMED E. HEGAB

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRI

METHOD(S): SCL 816 DIESEL BY GC/FID

DATE SAMPLE RECEIVED: 01/29/98

DATE SAMPLE PREPARED: 02/03/98-02/04/98

DATE SAMPLE ANALYZED: 02/05/98-02/06/98

QC REPORT FOR

A: METHOD BLANK
B: METHOD STANDARD RECOVERY
C: LABORATORY CONTROL SAMPLE
D: SAMPLE DUPLICATE ANALYSIS

	A	B		C	
	METHOD BLANK	METHOD STANDARD		LABORATORY CONTROL SAMPLE	
		RECOVERY	CONTROL LIMIT	FOUND	CONTROL LIMIT
COMPOUND	MG/L	%	%	MG/KG	MG/KG
DIESEL	< 105	88.9			

D			
SAMPLE DUPLICATE ANALYSIS			
PERFORMED ON : SCL NO. 16923			
MATRIX : LIQUID			
	RUN 1	RUN 2	RPD
COMPOUND	MG/KG	MG/KG	%
DIESEL	385,167	394,516	2.4
		CONTROL LIMIT	NDY

NOTES:
NDY = NOT DETERMINED YET

SAMPLE PREPARATION

Monina Ligao 2/23/98
MONINA LIGAO DATE

ANALYST

Monina Ligao 2/23/98
MONINA LIGAO DATE

SUPERVISOR

2/23/98
RUSS CHIN DATE

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLES 16920-16924,16926

2. SAMPLES WERE COLLECTED ON 01/27/98 AT POWERLINE OIL COMPANY 12345 LAKELAND ROAD, SANTA FE SPRING CA 90670

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED HEGAB

4. SAMPLES WERE :

RECEIVED	ON	01/29/98	BY HML-SO.CAL.		
EXTRACTED	ON	01/29-30/98	BY EPA METHOD	3540	(SOXHLET EXTRACTION)
			EPA METHOD	3510	(SEPARATORY FUNNEL LIQ/LIQ EXTRACTION)
			SOP METHOD	106	(SHAKER WITH METHYLENE CHLORIDE)
			EPA METHOD	3580	(WASTE DILUTION WITH METHYLENE CHLORIDE)
CLEANED	ON	02/02-03/98	BY EPA METHOD	3640	(GEL PERMEATION COLUMN)
ANALYZED	ON	02/04-09/98	BY EPA METHOD	8270	(SEMIVOLATILE ORGANICS BY GC/MS)

DATA PACKAGE WAS COMPLETED ON 02/10/98

5. NO MAJOR PROBLEMS WERE ENCOUNTERED DURING THE COURSE OF THESE ANALYSES. ONE OUT 11 R%D BETWEEN MS/MSD WAS OUTSIDE THE ADVISORY CONTROL LIMITS. BASED ON THE ACCEPTANCE CRITERIA ESTABLISHED FOR THIS METHOD.NO IMMEDIATE CORRECTIVE ACTION IS NECESSARY.

6. ALL OTHER QC PARAMETERS /INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

LABORATORY REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 5795

lector's Name: AHMED HEGAB

SCL NO. : 16920-16923

Sample Location : POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING CA 90670

Date Reported : 02/09/98

Analytical Procedures Used : EPA 8270

GC/MS SEMIVOLATILE ORGANICS ANALYSIS

							QUANTITATION LIMIT				
	SCL NO.	Method Blank	16920	16921	16922	16923	Method Blank	16920	16921	16922	16923
	COL.NO.		POC-1 128A	POC-2 128A	POC-3 128A	POC-4 128A					
	MATRIX	SOLVENT	OIL	LIQUID	LIQUID	OIL					
COMPOUNDS	UNIT	MG/KG	MG/KG	MG/L	MG/L	MG/KG	MG/KG	MG/KG	MG/L	MG/L	MG/KG
	CAS No.										
1,3-DICHLOROBENZENE	541-73-1	ND	ND	ND	ND	ND	50	100	3	1	150
BIS(2-CHLOROETHYL) ETHER	111-44-4	ND	ND	ND	ND	ND	50	100	3	1	150
1,4-DICHLOROBENZENE	106-46-7	ND	ND	ND	ND	ND	50	100	3	1	150
1,2-DICHLOROBENZENE	95-50-1	ND	ND	ND	ND	ND	50	100	3	1	150
HEXACHLOROETHANE	67-72-1	ND	ND	ND	ND	ND	50	100	3	1	150
BIS(2-CHLOROISOPROPYL)ETHER	39638-32-9	ND	ND	ND	ND	ND	50	100	3	1	150
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	ND	ND	ND	ND	ND	50	100	3	1	150
NITROBENZENE	98-95-3	ND	ND	ND	ND	ND	50	100	3	1	150
ISOPHORONE	78-59-1	ND	ND	ND	ND	ND	50	100	3	1	150
1,2,4-TRICHLOROBENZNE	120-82-1	ND	ND	ND	ND	ND	50	100	3	1	150
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ND	ND	ND	ND	ND	50	100	3	1	150
HEXACHLOROBUTADIENE	87-68-3	ND	ND	ND	ND	ND	50	100	3	1	150
HEXACHLOROCYCLOPENTADIENE	77-47-4	ND	ND	ND	ND	ND	50	100	3	1	150
2-CHLORONAPHTHALENE	91-58-7	ND	ND	ND	ND	ND	50	100	3	1	150
DIMETHYLPHTHALATE	131-11-3	ND	ND	ND	ND	ND	50	100	3	1	150
2,6-DINITROTOLUENE	606-20-2	ND	ND	ND	ND	ND	50	100	3	1	150
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	ND	ND	ND	ND	ND	50	100	3	1	150
2,4-DINITROTOLUENE	121-14-2	ND	ND	ND	ND	ND	50	100	3	1	150
DIETHYL PHTHALATE	84-66-2	ND	ND	ND	ND	ND	50	100	3	1	150

NOTE : QUANTITATION LIMIT = (CONCENTRATION OF THE LOWEST CALIBRATION STANDARD) TIMES (DILUTION FACTOR)
ND = NOT DETECTED

SAMPLE PREPARATION

MARY NEE

ANALYST

MARY NEE

LABORATORY REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 5795

lector's Name: AHMED HEGAB

SCL NO. : 16924,16926

Sample Location : POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA 90670

Date Reported : 02/09/98

Analytical Procedures Used : EPA 8270

GC/MS SEMIVOLATILE ORGANICS ANALYSIS

COMPOUNDS	SCL NO.	Method Blank	Method Blank	16924	16926	QUANTITATION LIMIT Method Blank	Method Blank	16924	16926
	COL.NO.			POC-5 128A	POC-7 128A				
	MATRIX	SAND	WATER	SLUDGE	SOIL	SAND	WATER		
	UNIT	MG/KG	MG/L	MG/KG	MG/KG	MG/KG	MG/L	MG/KG	MG/KG
1,3-DICHLOROBENZENE	CAS No. 541-73-1	ND	ND	ND	ND	5	0.2	50	5
BIS(2-CHLOROETHYL) ETHER	111-44-4	ND	ND	ND	ND	5	0.2	50	5
1,4-DICHLOROBENZENE	106-46-7	ND	ND	ND	ND	5	0.2	50	5
1,2-DICHLOROBENZENE	95-50-1	ND	ND	ND	ND	5	0.2	50	5
HEXACHLOROETHANE	67-72-1	ND	ND	ND	ND	5	0.2	50	5
BIS(2-CHLOROISOPROPYL)ETHER	39638-32-9	ND	ND	ND	ND	5	0.2	50	5
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	ND	ND	ND	ND	5	0.2	50	5
NITROBENZENE	98-95-3	ND	ND	ND	ND	5	0.2	50	5
ISOPHORONE	78-59-1	ND	ND	ND	ND	5	0.2	50	5
1,2,4-TRICHLOROBENZNE	120-82-1	ND	ND	ND	ND	5	0.2	50	5
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ND	ND	ND	ND	5	0.2	50	5
HEXACHLOROBUTADIENE	87-68-3	ND	ND	ND	ND	5	0.2	50	5
HEXACHLOROCYCLOPENTADIENE	77-47-4	ND	ND	ND	ND	5	0.2	50	5
2-CHLORONAPHTHALENE	91-58-7	ND	ND	ND	ND	5	0.2	50	5
DIMETHYLPHTHALATE	131-11-3	ND	ND	ND	ND	5	0.2	50	5
2,6-DINITROTOLUENE	606-20-2	ND	ND	ND	ND	5	0.2	50	5
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	ND	ND	ND	ND	5	0.2	50	5
2,4-DINITROTOLUENE	121-14-2	ND	ND	ND	ND	5	0.2	50	5
DIETHYL PHTHALATE	84-66-2	ND	ND	ND	ND	5	0.2	50	5

NOTE : QUANTITATION LIMIT = (CONCENTRATION OF THE LOWEST CALIBRATION STANDARD) TIMES (DILUTION FACTOR)
ND = NOT DETECTED

SAMPLE PREPARATION

MARY NEE

ANALYST

MARY NEE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET LOS ANGELES CA. 90026
TEL:(213) 580 5795

COLLECTOR'S NAME : AHMED HEGAB

DATE SAMPLE RECEIVED: 01/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA 90670

DATE SAMPLE PREPARED: 01/29/98-02/03/98

ANALYTICAL BATCH LAB ID NO.: SCL 16920-16924,16926

DATE SAMPLE ANALYZED: 02/04-09/98

ANALYTICAL PROCEDURES USED:
EPA METHOD 8270 GC/MS FOR SEMIVOLATILE ORGANICS
EPA METHOD 3540 SOXHLET EXTRACTION
EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTION
SOP METHOD 106 SHAKER WITH METHYLENE CHLORIDE
EPA METHOD 3580 WASTE DILUTION WITH METHYLENE CHLORIDE
EPA METHOD 3640 GEL PERMEATION COLUMN CLEANUP

QC REPORT FOR

A: METHOD STANDARD
B: LABORATORY CONTROL SAMPLE
C: DUPLICATE SAMPLE ANALYSIS

	A		B	
	METHOD STANDARD RECOVERY FOR EPA 3540	CONTROL LIMITS FOR METHOD STANDARD % RECOVERY	LAB CONTROL SAMPLE ID NO: LCS-BNA-1-0795 LCS-BNA-2-0795	
			Found	Control Limit
COMPOUND	%	%	mg/kg	mg/kg
PHENOL	103	59.8-117	726	485-940
2-CHLOROPHENOL	102	50.7-137	664	373-831
1,4-DICHLOROBENZENE	95	25.8-100	481	312-534
N-NITROSO-DI-N-PROPYLAMINE	107	60.8-115	878	584-1154
1,2,4-TRICHLOLROBENZENE	105	48.2-115	569	418-774
4-CHLORO-3-METHYL PHENOL	115	68.6-117	704	672-936
ACENAPHTHENE	104	77.8-111	717	424-835
4-NITROPHENOL	123	60.0-128	932	508-1151
2,4-DINITROTOLUENE	118	73.0-119	939	578-1063
PENTACHLOROPHENOL	122	64.7-125	862	589-1020
PYRENE	117	73.1-117	704	386-820

C			
DULPICATE SAMPLE ANALYSIS			
Performed on SCL 16926	Matrix	SOIL	
	Run 1	Run 2	RPD
COMPOUND	mg/kg	mg/kg	%
NO DATA(Target compound detected was below the quantitation limit)			
CONTROL LIMIT			25

SAMPLE PREPARATION: MARY NEE 2/24/98 DATE

ANALYST: MARY NEE 2/24/98 DATE

SUPERVISING CHEMIST: RUSS CHIN 2/24/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES CA. 90026
TEL:(213) 580-5795

COLLECTOR'S NAME : AHMED HEGAB

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD SANTA FE SPRING CA. 90670

ANALYTICAL BATCH LAB ID NO.: SCL 16920-16924,16926

ANALYTICAL PROCEDURES USED:
EPA METHOD 8270 GC/MS FOR SEMIVOLATILE ORGANICS
EPA METHOD 3540 SOXHLET EXTRACTION
EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTION
SOP METHOS 106 SHAKER WITH METHYLENE CHLORIDE
EPA METHOD 3580 WASTE DILUTION WITH METHYLENE CHLORIDE
EPA METHOD 3640 GEL PERMEATION COLUMN CLEANUP

DATE SAMPLE RECEIVED: 01/29/98

DATE SAMPLE PREPARED: 01/29/98-02/03/98

DATE SAMPLE ANALYZED: 02/04-09/98

QC REPORT FOR

MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE REFORMED ON SCL 16926 TYPE OF MATRIX SOIL

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE	AMOUNT ANALYTE ADDED	MATRIX SPIKE		MATRIX SPIKE DUPLICATE		AVE	CONTROL LIMIITS FOR % REC	R % D BETWEEN MS/MSD	CONTROL LIMIITS FOR RPD
			AMOUNT RECOVERED	% REC	AMOUNT RECOVERED	% REC	% REC			
	MG/KG	MG/KG	MG/KG	%	MG/KG	%	%	MG/KG	%	%
PHENOL	<10	1000	952	95	940	94	94	57.0-125	1.1	0-25
2-CHLOROPHENOL	<10	1000	957	96	976	98	97	54.9-118	2.1	0-25
1,4-DICHLOROBENZENE	<5	500	467	93	472	94	94	38.3-117	1.1	0-25
N-NITROSO-DI-N-PROPYLAMINE	<5	500	244	49	360	72	60	48.9-137	* 38	0-25
1,2,4-TRICHLOROBENZENE	<5	500	510	102	492	98	100	63.3-107	4.0	0-25
4-CHLORO-3-METHYL PHENOL	<10	1000	1074	107	1030	103	105	60.8-132	3.8	0-25
ACENAPHTHENE	<5	500	493	99	492	98	98	74.4-114	1.0	0-25
4-NITROPHENOL	<50	1000	1191	119	1396	140	130	35.5-148	16	0-25
2,4-DINITROTOLUENE	<5	500	506	101	540	108	104	54.3-129	6.7	0-25
PENTACHLOROPHENOL	<50	1000	1110	111	1130	113	112	48.5-134	1.8	0-25
PYRENE	<5	500	547	109	521	104	106	52.4-131	4.7	0-25

NOTE : % REC = $\frac{\text{(Amount recovered - Amount found in sample)}}{\text{Amount added}} \times 100\%$

* = R%D BETWEEN MS/MSD WAS OUTSIDE THE ADVISORY CONTROL LIMIT. NO IMMEDIATE CORRECTIVE ACTION IS NECESSARY.

MPLE PREPARATION		ANALYST		SUPERVISING CHEMIST	
MARY NEE	DATE 2/24/98	MARY NEE	DATE 2/24/98	RUSS CHIN	DATE 2/24/98

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES CA. 90026
TEL:(213) 580 5795

COLLECTOR'S NAME : AHMED HEGAB

DATE SAMPLE RECEIVED:01/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA 90670

DATE SAMPLE PREPARED:01/29/98-02/03/98

DATE SAMPLE ANALYZED:02/04-09/98

ANALYTICAL BATCH LAB ID NO.: SCL 16920-16924,16926

ANALYTICAL PROCEDURES USED:

EPA METHOD 8270	GC/MS FOR SEMIVOLATILE ORGANICS
EPA METHOD 3540	SOXHLET EXTRACTION
EPA METHOD 3510	SEPARATORY FUNNEL LIQ/LIQ EXTRACTION
SOP METHOD 106	SHAKER WITH METHYLENE CHLORIDE
EPA METHLD 3580	WASTE DILUTION WITH METHYLENE CHLORIDE
EPA METHOD 3640	GEL PERMEATION COLUMN CLEANUP

QC REPORT FOR
SEMIVOLATILE SURROGATE RECOVERY

	2-FLUOROPHENOL			PHENOL-d6			NITROBENZENE-d5			2-FLUOROBIPHENYL			2,4,6-TRIBROMOPHENOL		
	ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED	
QC SAMPLES / SAMPLE NO.	MG/KG	MG/KG	% REC	MG/KG	MG/KG	% REC	MG/KG	MG/KG	% REC	MG/KG	MG/KG	% REC	MG/KG	MG/KG	% REC
METHOD BLANK - SOIL	200	198	98	200	175	87	100	99	99	100	108	108	200	205	102
METHOD BLANK -WATER	8.0	7.7	96	8.0	6.6	82	4.0	4.0	100	4.0	4.1	102	8.0	8.9	111
METHOD BLANK -SLUDGE	2000	1911	96	2000	1726	86	1000	972	97	1000	958	96	2000	2384	119
METHOD STANDARD	200	204	102	200	204	102	100	100	100	100	99	99	200	237	118
MATRIX SPIKE	1000	927	93	1000	969	97	500	498	100	500	469	94	1000	1129	113
MATRIX SPIKE DUPLICATE	1000	952	95	1000	958	96	500	480	96	500	470	94	1000	1082	108
LAB CONTROL SAMPLE	1000	980	98	1000	941	94	500	482	96	500	500	100	1000	1097	110
SCL 16920	2000	2081	104	2000	1909	95	1000	1076	108	1000	1001	100	2000	1927	96
SCL 16921 (MG/L)	40	44.5	111	40	40.9	102	20	17.5	88	20	18.0	90	40	34.7	87
SCL 16922 (MG/L)	20	18.5	93	20	17.6	88	10	8.5	85	10	8.9	89	20	19.3	96
SCL 16923	2000	2199	110	2000	1903	95	1000	954	95	1000	956	96	2000	1500	75
SCL 16924	2000	1615	81	2000	1605	80	1000	874	87	1000	905	90	2000	1810	90
SCL 16926	200	190	95	200	175	88	100	85	84	100	91	91	200	172	86
SCL 16926 DUPLICATE	200	199	100	200	174	87	100	100	100	100	102	102	200	206	103
CONTROL LIMIT FOR %REC	38.6-149			56.7-141			38.2-138			60.1-123			41.6-128		

NOTE: NR = NOT RECORVERED NA = NOT ANALYZED

SAMPLE PREPARATION:

MARY NEE 2/24/98
DATE

ANALYST:

MARY NEE 2/24/98
DATE

SUPERVISING CHEMIST

RUSS CHIN 2/24/98
DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16920 to 16924, 16926

2. SAMPLES WERE COLLECTED ON 1/28/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE:

   RECEIVED ON 1/29/98 BY HAZARDOUS MATERIALS LABORATORY-SO. CAL

   EXTRACTED AND ANALYZED ON 1/30/98, 2/2/98 BY EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

   DATA PACKAGE WAS COMPLETED ON 2/10/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

QUESTER: AHMED E. HEGAB

SCL NO. 16920-16923

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING
CA 90670

DATE REPORTED: 02/10/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

VOCs BY GC/MS

							QUANTITATION LIMIT				
	SCL NO.		16920	16921	16922	16923		16920	16921	16922	16923
	COL. NO.	METHOD BLANK	POC-1-128A	POC-2 128A	POC-3 128A	POC-4 128A	METHOD BLANK				
	MATRIX	WATER	LIQUID	WATER	WATER	LIQUID					
ANALYTE	UNIT	UG/L	MG/KG	UG/L	UG/L	MG/KG	UG/L	MG/KG	UG/L	UG/L	MG/KG
ACETONE		ND	*7400	ND	ND	ND	50.0	8500	12500	6250	2200
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
METHYLENE CHLORIDE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
trans-1,2-DICHROETHENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
1,1-DICHLOROETHANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
2-BUTANONE (MEK)		ND	ND	ND	ND	ND	50.0	8500	12500	6250	2200
cis-1,2-DICHLOROETHENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
2,2-DICHLOROPROPANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
CHLOROFORM		ND	ND	ND	ND	ND	5.0	850	1250	625	220
BROMOCHLOROMETHANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
1,1,1-TRICHLOROETHANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
1,2 DICHLOROETHANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
BENZENE		ND	*350	1900	1300	280	5.0	850	1250	625	220
1,1-DICHLOROPROPENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
CARBONTETRACHLORIDE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
1,2-DICHLOROPROPANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
TRICHLOROETHENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.
** = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

Inge Ang 2/25/98
INGE ANG DATE

SUPERVISOR

2/25/98
RUSS CHIN DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO. 16924,16926

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING
CA 90670

DATE REPORTED: 2/10/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

VOCs BY GC/MS

					QUANTITATION LIMIT		
	SCL NO.		16924	16926		16924	16926
	COL. NO.	METHOD BLANK	POC-5 128A	POC-7-128A	METHOD BLANK		
	MATRIX	WATER	SLUDGE	SOIL			
ANALYTE	UNIT	UG/L	MG/KG	MG/KG	UG/L	MG/KG	MG/KG
ACETONE		ND	ND	ND	50.0	500	50.0
1,1-DICHLOROETHENE		ND	ND	ND	5.0	50	5.0
METHYLENE CHLORIDE		ND	ND	ND	5.0	50	5.0
trans-1,2-DICHROETHENE		ND	ND	ND	5.0	50	5.0
1,1-DICHLOROETHANE		ND	ND	ND	5.0	50	5.0
2-BUTANONE (MEK)		ND	ND	ND	50.0	500	50.0
cis-1,2-DICHLOROETHENE		ND	ND	ND	5.0	50	5.0
2,2-DICHLOROPROPANE		ND	ND	ND	5.0	50	5.0
CHLOROFORM		ND	ND	ND	5.0	50	5.0
BROMOCHLOROMETHANE		ND	ND	ND	5.0	50	5.0
1,1,1-TRICHLOROETHANE		ND	ND	ND	5.0	50	5.0
1,2 DICHLOROETHANE		ND	ND	ND	5.0	50	5.0
BENZENE		ND	140	ND	5.0	50	5.0
1,1-DICHLOROPROPENE		ND	ND	ND	5.0	50	5.0
CARBONTETRACHLORIDE		ND	ND	ND	5.0	50	5.0
1,2-DICHLOROPROPANE		ND	ND	ND	5.0	50	5.0
TRICHLOROETHENE		ND	ND	ND	5.0	50	5.0

NOTES: ND = NOT DETECTED UG = MICROGRAM
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.
** = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 2/25/98 DATE

SUPERVISOR

RUSS CHIN 2/25/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING
CA 90670

DATE SAMPLE ANALYZED: 1/30/98, 2/2/98

METHODS: EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

QC REPORT FOR SURROGATE SPIKE % RECOVERY

	DIBROMOFLUOROETHANE			TOLUENE - D8			4 - BROMOFLUOROBENZENE		
	ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED	
QC/SAMPLES / SAMPLE NO.	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC
METHOD BLANK	20	20.4	102	20	21.2	106	20	19.3	97
MATRIX SPIKE	20	19.6	98	20	18.1	91	20	19.2	96
MATRIX SPIKE DUP.	20	19.3	96	20	20.4	102	20	19.3	97
SCL 16920	20	19.7	99	20	19.8	99	20	19.8	99
SCL 16921	20	19.2	96	20	18.7	94	20	19.4	97
SCL 16922	20	18.1	91	20	20.5	103	20	18	90
SCL 16923	20	18.7	94	20	20.4	102	20	18.4	92
SCL 16924	20	18.4	92	20	18.2	91	20	18.7	94
SCL 16926	20	19.7	99	20	20.1	101	20	18.1	91
CONTROL LIMIT FOR %REC	83.5 - 111			70.3 - 106			79.6 - 111		

NOTES:

ANALYST

INGE ANG 2/25/98 DATE

SUPERVISOR

RUSS CHIN 2/25/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 - 5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING
CA 90670

DATE SAMPLE ANALYZED : 1/30/98, 2/2/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

QC REPORT FOR SAMPLE DUPLICATE ANALYSIS

PERFORMED ON SCL NO.: 16924

TYPE OF MATRIX : SLUDGE

☐ NOT ANALYZED (SEE NOTES)

ANALYTE	SAMPLE MG/KG	SAMPLE DUPLICATE MG/KG	AVERAGE MG/KG	REL % DIFF(R&D) %	CONTROL LIMIT %
BENZENE	140	130	140	7.1	0-25
ETHYL BENZENE	140	140	140	0	0-25
M. & P.-XYLENES	440	480	460	8.7	0-25
O - XYLENE	190	220	210	14	0-25
NAPTHALENE	150	160	160	6.3	0-25

QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON 16926

TYPE OF MATRIX SOIL

☐ NOT ANALYZED SEE NOTES

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE UG	AMOUNT OF ANALYTE ADDED UG	MATRIX SPIKE AMOUNT RECOVERED UG	MATRIX SPIKE %REC %	MATRIX SPIKE DUPLICATE AMOUNT RECOVERED UG	MATRIX SPIKE DUPLICATE %REC %	AVE % REC %	CONTROL LIMITS FOR % REC %	R % D BETWEEN MS/MSD %	CONTROL LIMITS FOR RPD %
1,1-DICHLOROETHENE	<125	500	412	83	461	92	88	56.6-113	10	0-25
TRICHLOROETHENE	<125	500	372	75	395	79	77	57.7-117	5.2	0-25
CHLOROBENZENE	<125	500	455	91	476	95	93	58.3-119	4.3	0-25
TOLUENE	<125	500	429	86	447	89	88	62.0-120	3.4	0-25
BENZENE	<125	500	458	92	484	97	95	61.3-114	5.2	0-25

NOTES: NDY = NOT DETERMINED YET.

ANALYST

INGE ANG 2/25/98 DATE

SUPERVISOR

RUSS CHIN 2/25/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16928
   SUPPLEMENTAL EPA 8260 ANALYSIS WAS REQUESTED ON 3/3/98

2. SAMPLES WERE COLLECTED ON 1/29/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE:

   RECEIVED ON 1/29/98 BY HAZARDOUS MATERIALS LABORATORY-SO. CAL

   EXTRACTED AND
   ANALYZED ON 3/6/98 BY EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

   DATA PACKAGE WAS COMPLETED ON 3/9/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. RECOMMENDED SAMPLE HOLDING TIME WAS EXCEEDED.

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 - 5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE SAMPLE ANALYZED : 3/6/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

QC REPORT FOR SAMPLE DUPLICATE ANALYSIS

PERFORMED ON SCL NO.: 16928

TYPE OF MATRIX : SLUDGE

[ ] NOT ANALYZED (SEE NOTES)

ANALYTE	SAMPLE MG/KG	SAMPLE DUPLICATE MG/KG	AVERAGE MG/KG	REL % DIFF(R&D) %	CONTROL LIMIT %
BENZENE	110	130	120	17	0-25
ETHYL BENZENE	180	210	200	15	0-25
M. & P -XYLENES	490	570	530	15	0-25
O-XYLENE	240	270	260	12	0-25

QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON _____

TYPE OF MATRIX _____

[X] NOT ANALYZED SEE NOTES

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE	AMOUNT OF ANALYTE ADDED	MATRIX SPIKE AMOUNT RECOVERED	MATRIX SPIKE %REC	MATRIX SPIKE DUPLICATE AMOUNT RECOVERED	MATRIX SPIKE DUPLICATE %REC	AVE % REC	CONTROL LIMITS FOR % REC	R % D BETWEEN MS/MSD	CONTROL LIMITS FOR RPD
1,1-DICHLOROETHENE										
TRICHLOROETHENE										
CHLOROBENZENE										
TOLUENE										
BENZENE										

NOTES: NDY = NOT DETERMINED YET.
X = MS/MSD ANALYSIS WAS NOT APPLICABLE DUE TO HIGH LEVELS OF ANALYTES PRESENT IN THE SAMPLE

ANALYST

INGE ANG 3/11/98 DATE

SUPERVISOR

RUSS CHIN 3/11/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE SAMPLE ANALYZED: 3/6/98

METHODS: EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

QC REPORT FOR SURROGATE SPIKE % RECOVERY

	DIBROMOFLUOROETHANE			TOLUENE - D8			4 - BROMOFLUOROBENZENE		
	ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED	
QC/SAMPLES / SAMPLE NO.	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC
METHOD BLANK	20	21.3	107	20	17.4	87	20	17.2	86
SCL 16928	20	19.3	97	20	18.2	91	20	18.4	92
SCL 16928 DUP.	20	19.5	98	20	18.7	94	20	18.4	92
CONTROL LIMIT FOR %REC	74.2 - 101			74.6 - 127			72.3 - 121		

NOTES:

ANALYST

INGE ANG 3/11/98 DATE

SUPERVISOR

RUSS CHIN 3/11/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO. 16928

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE REPORTED: 3/9/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

VOCs BY GC/MS

							QUANTITATION LIMIT				
	SCL NO.		16928					16928			
	COL. NO.	METHOD BLANK	DOC 9 128A				METHOD BLANK				
	MATRIX	WATER	SLUDGE								
ANALYTE	UNIT	UG/L	MG/KG				UG/L	MG/KG			
ACETONE		ND	ND				50.0	650			
1,1-DICHLOROETHENE		ND	ND				5.0	65			
METHYLENE CHLORIDE		ND	ND				5.0	65			
trans-1,2-DICHROETHENE		ND	ND				5.0	65			
1,1-DICHLOROETHANE		ND	ND				5.0	65			
2-BUTANONE (MEK)		ND	ND				5.0	650			
cis-1,2-DICHLOROETHENE		ND	ND				5.0	65			
2,2-DICHLOROPROPANE		ND	ND				5.0	65			
CHLOROFORM		ND	ND				5.0	65			
BROMOCHLOROMETHANE		ND	ND				5.0	65			
1,1,1-TRICHLOROETHANE		ND	ND				5.0	65			
1,2 DICHLOROETHANE		ND	ND				5.0	65			
BENZENE		ND	120				5.0	65			
1,1-DICHLOROPROPENE		ND	ND				5.0	65			
CARBONTETRACHLORIDE		ND	ND				5.0	65			
1,2-DICHLOROPROPANE		ND	ND				5.0	65			
TRICHLOROETHENE		ND	ND				5.0	65			

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.
** = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 3/11/98 DATE

SUPERVISOR

RUSS CHIN 3/11/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

COLLECTOR'S NAME AHMED E. HEGAB SCL NO: 16928

SAMPLE LOCATION: POWERLINE OIL COMPNY
12345 LAKELAND RD.,
SANTA FE SPRINGS, CA 90670

DATE REPORTED: 3/6/98

METHOD(S): EPA 1020 SETAFLASH CLOSED CUP METHOD FOR IGNITABILITY

FLASH POINT

	SCL NO.	16928					
	COL. NO.	POC 9 128A					
	MATRIX	SLUDGE					
ANALYSIS	UNIT	°F					
FLASH POINT		> 140					

ANALYST:

Monina Ligao 3/11/98
MONINA LIGAO DATE

SUPERVISOR

3/11/98
RUSS CHIN

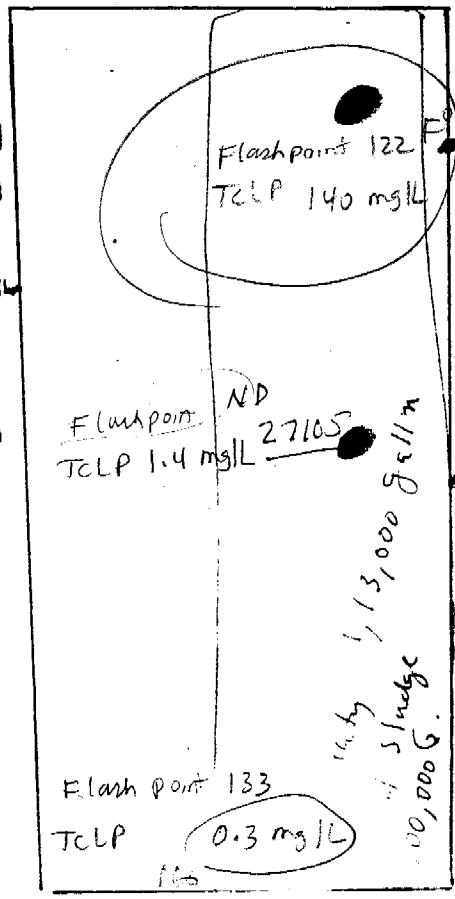
Tanks Samples ~~Bas~~ Chemical anal. results

Tank 27105

Normal Capacity
27,500 barrel
≃
1.155 million Gallon

~~Rig~~
Height = 12 m
Diameter = 20 m

approx has
900,000
gallon.



POC-1-128 A — Flash point 122 (< 140 Li...
TCLP for VOC (benzene) 140 mg/L (Limit ...

* No
Flash point > 140 F°

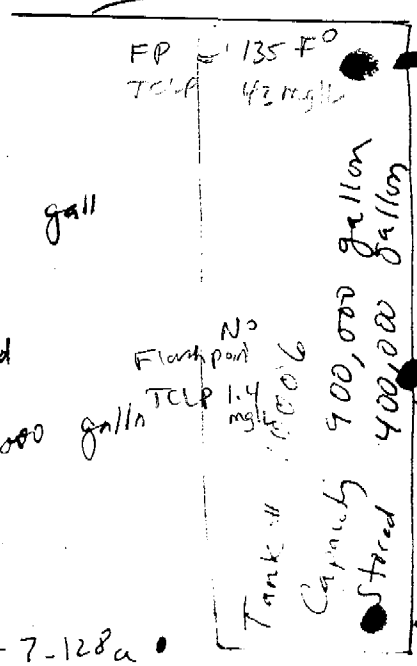
POC-9-128 A — Flash point > 140
TCLP for VOC benzene 1.4 mg/L (Limit 0.5 mg/...

POC-3-128 A — Flash point 133°F (< 140°F Li...

Tank 10006

max. Cap.
900,000 gall

was held
400,000 gallon



POC-4-128 a — Flash point 135°F (< 140°F
TCLP for VOC (Benzene) 43 mg/L (0.5 mg/L Lim...

* No
(Flash point ND)

POC-2-128 a — TCLP for VOC Benzene = 1.4 mg/L (Limit 0...

POC-5-128 a — Flash point 128°F (Limit < 14...
TCLP for VOC Benzene 1.6 mg/L (Limit is 0.5 m... for benzene

POC-7-128 a

EXHIBIT A

CHRONOLOGY OF EVENTS
POWERINE OIL COMPANY

Time Period	Event
1936	Company is established as Rothschild Oil Company.
1982	$230 million refinery Modernization Program completed.
March 1984	Bankruptcy filing (Chapter 13); refinery shuts down and business activities are minimal.
September 1986	Company emerges from bankruptcy and under new ownership of a European businessman.
March - July 1987	Refinery is restarted and business is re-established. Metallgesellshcaft Corp. (MG) becomes involved in financing Powerine business activities.
March 1993	MG acquires an option to purchase (own) Powerine.
October 1, 1993	MG sells option to Castle Energy Corporation (CEC) which was 49% owned by MG. CEC exercises option and acquires Powerine. Powerine enters into a long term (4 years) Offtake Agreement with MG who agrees to purchase all of Powerine's refinery production.
December 1993	Rumors surface about MG's financial difficulty due to huge trading position in futures contracts on NYMEX. MG President resigns and an internal investigation of MG's US operations by its European parent corporation are initiated.
January - March 1994	MG financial situation becomes public knowledge and MG appears to be on brink of bankruptcy.
April 1994	MG banks agree to recapitalization plan which saves MG from bankruptcy. CEC and Powerine are notified by MG of their intent to terminate all relationships between MG and CEC/Powerine.
August 1994	Tentative agreement reached on ending MG and CEC/Powerine business relationship.
October 1994	Agreement is finalized with MG forgiving debt of CEC and subsidiaries of over $321 million, returning CEC stock and other concessions in exchange for MG ending business obligations to CEC/Powerine in early 1995. CEC realizes $391 million gain which has significant tax consequences for CEC.

Time Period	Event
October 1994 (cont'd)	CEC initiates effort to sell Powerine to raise funds to satisfy tax obligation or, if sales price is very low, the corresponding "loss" would offset the capital gain and minimize tax liability.
July 1995	Powerine shuts down refinery and terminates the majority of its work force when CEC's efforts to sell Powerine as on operating refinery business are not successful. In addition, Powerine's operating losses depleted the company's ability to stay in business and CEC is unable to put any money into Powerine.
August 1995	CEC had received and was evaluating two competing proposals for Powerine. One party, Kenyen Projects Ltd., was interested in buying the refinery equipment. Energy Merchant Corp. was interested in buying the company (stock purchase).
September 1995	CEC directs Powerine to sell the refinery equipment to Kenyen Projects Ltd. who intends to dismantle the refinery and ship it to India. Kenyen puts up $3 million earnest money deposit with obligation to pay three quarterly installments of $7 million each beginning April 30, 1996.
December 1995	CEC and Powerine's management came to the view that Kenyen would not be able to conclude the equipment purchase transaction due to the changing political climate in India. India was "closing the door" on business development by western companies, which was causing world financial institutions to back away from financing projects like the "Powerine refinery" project.
January 1996	CEC agrees to sell Powerine to Energy Merchant Corp. (EMC) whose interest is to reacquire refinery equipment, restart the refinery and re-establish Powerine as a refinery business.
February 1996	Powerine (under the ownership of EMC) reacquires refinery equipment from Kenyen by forgiving Kenyen's obligation to pay Powerine the $21 million beginning April 30, 1996. Kenyen agrees to allow the $3 million earnest money deposit to remain with Powerine until June 1997.
March 1996	Effort to recapitalize Powerine begins with Offering Memorandum (Prospectus) sent to numerous equity investors and mortgage lenders. Company seeks to raise $50 million for a full refinery restart and completion of refinery modification projects.
May 1996	Powerine restarts minimum processing activity at the refinery with a Butane Isomerization Unit and various utility systems.

Time Period	Event
July 1996	Powerine receives a commitment for equity investment in Powerine subject to satisfaction on environmental exposure and other due diligence.
August 9, 1996	Powerine enters into a processing agreement with a large Los Angeles refiner. Powerine will process crude oil into intermediate feedstocks for a fee. The agreement is contingent upon Powerine obtaining financing to restart a portion of the refinery.
August 21, 1996	Due to deteriorating market conditions, the equity investment committed to in July, 1996 did not proceed. Powerine receives commitment for startup financing from an entity headquartered in Germany. The anticipated funding date is October 8, 1996.
October 8, 1996	The entity headquartered in Germany failed to provide Powerine financing. Powerine pursues startup financing from an entity headquartered in the United States.
November 8, 1996	The entity headquartered in the United States failed to provide Powerine financing.
November 13-15, 1996	Powerine lays off an additional 35 people. Remaining personnel include mandatory round the clock coverage to provide security at the refinery and Long Beach Marine Terminal and other essential positions. Powerine's current priority is to generate cash flow to fund the refinery startup by selling assets such as the land south of the refinery and north of the coke storage barn. The proceeds from the land sale will be used to restart the refinery. Powerine's existing obligations will be met from revenue generated by refinery operations.
March 14, 1997	Powerine and the purchaser sign the Purchase and Sale Agreement for the Lakeland Property specifying March 15, 1997 as the closing date and obtaining a No Further Action letter from the Regional Water Quality Control Board ("RWQCB") as a requirement to close.
March-May 1997	Powerine demolishes its 28,000 square foot main office building and warehouse, truck fuel loading racks, tanks and associated scalehouse and remediates soil contamination as required the RWQCB.
May 12, 1997	The purchaser notifies Powerine it will not close escrow on the Lakeland Property without a covenant not to sue from the RWQCB.

Time Period	Event
May 14, 1997	The RWQCB issues the No Further Action Letter for the Lakeland Property.
May and June, 1997	Purchaser pursues an insurance policy to address his environmental issues. Purchaser does not find an appropriate insurance policy
August 26, 1997	Powerine obtains a Covenant Not to Sue any future owner of the Lakeland Property from the RWQCB.
September 19, 1997	Powerine closes the Lakeland Property sale. Due to the delay in closing the transaction, the proceeds from the sale are significantly attached by Powerine's creditors.
October 29, 1997	Powerine enters into an agreement with a company who plans to dismantle the refinery and reassemble it in Canada.
February 28, 1998	Powerine terminates the agreement with the dismantler.
March 19, 1998	Powerine executes an agreement with an investor who plans to restart the refinery.

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

COLLECTOR'S NAME AHMED E. HEGAB

SCL NO: 16920-16924,16926

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRINGS, CA 90670

DATE REPORTED: 02/10/98

METHOD(S): EPA 1020 SETAFLASH CLOSED - CUP METHOD FOR IGNITABILITY

FLASH POINT

	SCL NO.	16920	16921	16922	16923	16924	16926
	COL. NO.	POC-1 128A	POC-2 128A	POC-3 128A	POC-4 128A	POC-5 128A	POC-7 128A
	MATRIX	OIL	WATER	SLUDGE	OIL	SLUDGE	SOIL
ANALYSIS	UNIT	°F	°F	°F	°F	°F	°F
FLASH POINT		122	ND	133	135	128	124

NOTE:

ANALYST:

Faina Goretsky 2-16-98
FAINA GORETSKY DATE

SUPERVISOR

2/16/98
RUSS CHIN DATE

APR 0 8 1998

1

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16920 TO 16924, 16928
   SUPPLEMENTAL TCLP-VOC ANALYSIS WAS REQUESTED ON 03/03/98

2. SAMPLES WERE COLLECTED ON 1/28/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE: (TCLP EXTRACTS)

   RECEIVED ON 3/17/98 BY HAZARDOUS MATERIALS LABORATORY-SO. CAL

   ANALYZED ON 3/26/98 - 3/27/98 BY EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

   DATA PACKAGE WAS COMPLETED ON 3/31/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. RECOMMENDED SAMPLE HOLDING TIME WAS EXCEEDED.

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

INDEX

EPA 8260 FOR SAMPLE (S) 16920 - 16924, 16928

		PAGE
1.	CASE NARRATIVE	1
2.	INDEX	2
3.	HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST FORMS	3 - 4
4.	LABORATORY ANALYTICAL REPORT (S)	5 - 6
5.	QC REPORT FOR a. Sample Duplicate Analysis b. Matrix Spike/Matrix Spike Duplicate Analysis	7
6.	QC REPORT FOR SURROGATE SPIKE % RECOVERY	8

TOTAL PAGES = 8

State of California-California Environmental Protection Agency

3 Department of Toxic Substances Control
Hazardous Materials Laboratory

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

1. Authorization Number: S C N 3 4 8 2 $

HML No. 16920 To 16929

2. Page 1 of 2

3. Requester: Ahmed E. Hegab 4. Phone (8) 667-2902
Address (To Receive Results):

5. Priority Level: 1 2 3
a. Authorized by

6. Date Sampled 1-27-1998 7. Time Sampled • Hours

8. Codes (fill in all applicable codes)

a. STC	3 0 3 0
b. Region	0 3
c. INDEX	6 3 1 0
d. PCA	3 7 3 2 2
e. MPC	
f. SITE	3 0 0 1 2 1 3 3
g. County	1 9

9. Activity: ☒ SEB ☐ SMB ☐ FPB ☐ FMB ☐ HQ ☐ OTHER

10. SAMPLING LOCATION

a. EPA ID No. C A D 0 0 8 3 8 3 2 9 1

b. Site Powerine Oil Company

c. Address 12359 Lake Road Santa Fe Spring Ca. 90245
Number Street City Zip

11. SAMPLES

a. ID	b. Collector's No.	c. Lab No.	d. Sample Type	e. Container Type	f. Container Size	g. Field Information
A	POC-1-128A	16920	~~Glass liquid~~	Glass	16 g	Top of Tank 27105 (Hydro Ca
B	POC-2-128B	16921	sludge	Glass	16 g	oily Sludge 20 ft Tank 10006
C	POC-3-128A	16922	Sludge liquid	Glass	16 g wide	Bottom of Tank 27105 (Sludge
D	POC-4-128A	16923	oily liquid	Glass	16 g	Top Tank 10006
E	POC-5-128A	16924	sludge	Glass	16 g	Bottom Tank 10006
F	POC-6-128A	16925	Soil Sample	Glass	16 g	Sudge lake rothchild
G	POC-7-128A	16926	Soil Sample	"	16 g	arround tank 10006
H	POC-8-128B	16927	Sludge	"	16 g	b/n Tank 35 & 3072
I	~~POC-9-128A~~		~~Sludge~~	"		middle Tank 27105
L	~~POC-10-128A~~		~~Sludge Soil~~	"		under tank 10002

12. ANALYSIS REQUESTED

a. ☒ pH E — L
b. ☒ Metal Scan E — L
c. ☐ Metals (Spec)
d. ☐ W.E.T.
e. ☐ VOA-8010
f. ☐ VOA-8020
g. ☐ VOA-H/S
h. ☐ VOA-8240
i. ☒ VOA-8260 for A, B, C, D, E, G
j. ☒ SVO-8270 Same
k. ☒ Diesel/Gasoline Same
l. ☐ Flash Point
m. ☐ C1-Pesticides
n. ☐ OP-Pesticides
o. ☐
p. ☐
q. ☐

13. SPECIAL REMARKS:

14. SUPPLEMENTAL REQUESTS ☐ ☐ ☐ ☐ Initials Date

15. CHAIN OF CUSTODY

	Signature	Name/Title	Inclusive Dates
a.	Ahmed E. Hegab	[illegible]	1/28/ - 1/28/98
b.	Donald Bolungary	DTSC Lab	1/28/98 /
c.	Janice Wakakuwa	Janice Wakakuwa / PHC III	1/29/98 - 1/29/98
d.			/ / - / /

16. LAB REMARKS: HML: TCLP-8260 on 16920 to 16924 & 16928
3/9/98

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

1. Authorization Number: SCN 3482$

HML No. 16920 To 16929

2. Page 2 of 2

3. Requestor: Ahmed E. Hegab 4. Phone (916) 667-2902

5. Address (To Receive Results):

6. FAX ( )

7. TAT Level: 1 2 3 4 (circle one)

Authorized By

8. Date Sampled 1/27/98

9. Codes (fill in all applicable codes)

a. Office	03
b. INDEX	6310
c. PCA	37322
d. MPC	
e. SITE	30012 1+33
f. County	

10. Activity: ☐ SCD ☐ SRPD ☐ SMB ☐ FPB ☐ SPPT ☐ ER/CL ☐ Others

11. SAMPLING LOCATION

a. EPA ID No. CAD008383291

b. Site Powerline Oil Company

c. Address (Number, Street, City, ZIP)

12. SAMPLES

a. ID	b. Collector's No.	c. Lab No.	d. Sample Type	e. Container Type	f. Container Size	g. Field Information
A	D100 1/27/98	16928	Sludge	Glass	16oz.	Middle Tank 2005
B	D100 1/27/98	16929	Sludge/Soil	Glass	16oz.	under Tank 1002
C						
D						
E						
F						
G						
H						

13. ANALYSIS REQUESTED

a. ☒ pH A & B.

b. ☒ Metal Scan A & B

c. ☐ Metals (Spec)

d. ☐ W.E.T.

e. ☒ Flash Point A

f. ☐ PAHs - 8310

g. ☐ PCBs

h. ☐ TPH

i. ☐ Gasoline

j. ☐ Diesel

k. ☐ Cl - Pest

l. ☐ OP - Pest

m. ☐ VOA - 8021

n. ☒ VOA - 8260 A

o. ☐ SVO - 8270

p. ☐ TCLP - (specify)

q. ☐

14. SPECIAL REMARKS/ANALYSIS OBJECTIVE:

15. SUPPLEMENTAL REQUESTS ☐ ☐ ☐ ☐

Initials

Date

16. CHAIN OF CUSTODY

	Signature	Name/Title	Inclusive Dates
a.			/ / - / /
b.			/ / - / /
c.	Janice Wakakuwa	Janice Wakakuwa/CHCTII	1/29/98-3/19/98
d.			/ / - / /

17. LAB REMARKS:

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO. 16920 - 16923

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRING, CA 90670

DATE REPORTED: 3/31/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS MODIFIED FOR TCLP

TCLP VOCs BY GC/MS

							QUANTITATION LIMIT				
	SCL NO.		16920	16921	16922	16923		16920	16921	16922	16923
	COL. NO.	METHOD BLANK	POC-1-128A	POC-2-128A	POC-3 128A	POC-4 128A	METHOD BLANK				
	MATRIX	WATER	TCLP EXTRACT	TCLP EXTRACT	TCLP EXTRACT	TCLP EXTRACT					
ANALYTE	UNIT	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
BENZENE		ND	140	1.4	0.3	43	0.005	47.8	0.63	0.13	11.2
VINYL CHLORIDE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
CHLOROFORM		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
2-BUTANONE (MEK)		ND	ND	ND	ND	ND	0.05	478	6.3	1.3	112
2-DICHLORO ETHANE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
TRICHLOROETHENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
TETRACHLOROETHENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
CHLOROBENZENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
1,4-DICHLOROBENZENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
CARBON TETRACHLORIDE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2

TENTATIVELY IDENTIFIED COMPOUNDS:

SCL 16920,16923: ALIPH.HYDROCARBONS C5-C10,C13, ALKYL CYCLOPENTANES,ALKYL CYCLOHEXANES, ALKYL BENZENES,INDAN, METHYL & DIMETHYL INDANS, NAPTHALENE, DECAHYDRO NAPTHALENE,DECAHYDRO METHYL NAPTHALENE, TETRAHYDRO-METHYL NAPTHALENE.

SCL 16921: MTBE, ACETONE & ALKYL BENZENES.

SCL 16922: MTBE, ALKYL BENZENES,INDAN, METHYL & DIMETHYL INDANS, NAPTHALENE, TETRAHYDRO METHYL NAPTHALENE.

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.
** = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 4/6/98 DATE

SUPERVISOR

RUSS CHIN 4/6/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO. A6924,16928 BLANKS

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRING, CA. 90670

DATE REPORTED: 3/31/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS MODIFIED FOR TCLP

TCLP VOCs BY GC/MS

								QUANTITATION LIMIT			
	SCL NO.		16924	16928	METHOD	STORAGE			16924	METHOD	STORAGE
	COL. NO.	METHOD BLANK	POC-5-128A	DOC-9-128A	BLANK	BLANK		METHOD BLANK	16928	BLANK	BLANK
	MATRIX	WATER	TCLP EXTRACT	TCLP EXTRACT							
ANALYTE	UNIT	MG/L	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	MG/L	MG/L
BENZENE		ND	1.6	1.4	ND	ND		0.005	0.63	0.005	0.005
VINYL CHLORIDE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
CHLOROFORM		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
2-BUTANONE (MEK)		ND	ND	ND	ND	ND		0.05	6.3	0.05	0.05
1,2-DICHLOROETHANE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
TRICHLOROETHENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
TETRACHLOROETHENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
CHLOROBENZENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
1,4-DICHLOROBENZENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
CARBON TETRACHLORIDE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005

TENTATIVELY IDENTIFIED COMPOUNDS:

SCL 16924: ALIPH.HYDROCARBONS C5, C9, MTBE, ALKYL BENZENES, INDAN & NAPTHALENE.

SCL 16928: MTBE, ALKYL BENZENES, INDAN & NAPTHALENE.

INDAN, METHYL & DIMETHYL INDANS, NAPTHALENE, DECAHYDRO NAPTHALENE.

SCL 16924: ALIPH.HYDROCARBONS:C5,C9, ALKYL BENZENES, MTBE, INDAN, NAPTHALENE

SCL 16928: ALKYL BENZENES, INDAN, NAPTHALENE.

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM

QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

~ = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 4/6/98 DATE

SUPERVISOR

RUSS CHIN 4/6/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 - 5795

7

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/28/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRING, CA 90670

DATE SAMPLE ANALYZED : 3/26/98 - 3/27/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS MODIFIED FOR TCLP

QC REPORT FOR SAMPLE DUPLICATE ANALYSIS

PERFORMED ON SCL NO.: 16924

[ ] NOT ANALYZED (SEE NOTES)

TYPE OF MATRIX : TCLP EXTRACTS

ANALYTE	SAMPLE MG/L	SAMPLE DUPLICATE MG/L	AVERAGE MG/L	REL % DIFF(R&D) %	CONTROL LIMIT %
BENZENE	1.5	1.7	1.6	5.9	0-25

QC REPORT FOR
MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON _____

[X] NOT ANALYZED (SEE NOTES)

TYPE OF MATRIX

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE MG/KG	AMOUNT OF ANALYTE ADDED MG/KG	MATRIX SPIKE AMOUNT RECOVERED MG/KG	MATRIX SPIKE %REC %	MATRIX SPIKE DUPLICATE AMOUNT RECOVERED MG/KG	MATRIX SPIKE DUPLICATE %REC %	AVE % REC %	CONTROL LIMITS FOR % REC %	R % D BETWEEN MS/MSD %	CONTROL LIMITS FOR RPD %
BENZENE										
VINYL CHLORIDE										
CHLOROFORM										
2-BUTANONE (MEK)										
1,2-DICHLOROETHENE										
TRICHLOROETHENE										
TETRACHLOROETHENE										
CHLOROBENZENE										
1,1-DICHLOROBENZENE										
1,4-DICHLOROBENZENE										
CARBONTETRACHLORIDE										

NOTES: X = MS/MSD ANALYSIS WAS NOT APPLICABLE

ANALYST
INGE ANG — 4/6/98 DATE

SUPERVISOR
RUSS CHIN — 4/6/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 01/28/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRING, CA 90670

DATE SAMPLE ANALYZED: 3/26/98-3/27/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS MODIFIED FOR TCLP

QC REPORT FOR SURROGATE SPIKE % RECOVERY

	DIBROMOFLUOROETHANE			TOLUENE - D8			4 - BROMOFLUOROBENZENE		
	ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED	
QC/SAMPLES / SAMPLE NO.	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC
LABORATORY BLANK	20	20.5	103	20	18.1	91	20	19.4	97
METHOD BLANK	20	19.4	97	20	15.9	80	20	17.6	88
STORAGE BLANK	20	20	100	20	17.5	88	20	18.5	93
SCL 16920 TCLP EXTRACT	20	19.8	99	20	18.9	95	20	18.5	93
SCL 16920 PRIM.EXTRACT	20	18.2	91	20	19.6	98	20	19.5	98
SCL 16921 TCLP EXTRACT	20	19.7	99	20	18	90	20	18	90
SCL 16922 TCLP EXTRACT	20	20.2	101	20	18.4	92	20	18.1	91
SCL 16922 PRIM EXTRACT	20	20.4	102	20	16.3	82	20	17.2	86
SCL 16923 TCLP EXTRACT	20	19.3	97	20	19.6	98	20	17.7	89
SCL 16923 PRIM EXTRACT	20	17.8	89	20	21.1	106	20	19.5	98
SCL 16924 TCLP EXTRACT	20	19.4	97	20	19.2	96	20	17.3	87
SCL 16928 TCLP EXTRACT	20	20	100	20	18.6	93	20	18.3	92
SCL 16928 PRIM EXTRACT	20	19.6	98	20	18.5	93	20	18.1	91
CONTROL LIMIT FOR %REC	NDY			NDY			NDY		

NOTES: NDY = NOT DETERMINED YET

ANALYST

INGE ANG 4/6/98 DATE

SUPERVISOR

RUSS CHIN 4/6/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO. 16928

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE REPORTED: 3/9/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

VOCs BY GC/MS

							QUANTITATION LIMIT				
	SCL NO.		16928				METHOD BLANK	16928			
	COL. NO.	METHOD BLANK	DOC 9 128A								
	MATRIX	WATER	SLUDGE								
ANALYTE	UNIT	UG/L	MG/KG				UG/L	MG/KG			
ACETONE		ND	ND				50.0	650			
1,1-DICHLOROETHENE		ND	ND				5.0	65			
METHYLENE CHLORIDE		ND	ND				5.0	65			
trans-1,2-DICHROETHENE		ND	ND				5.0	65			
1,1-DICHLOROETHANE		ND	ND				5.0	65			
2-BUTANONE (MEK)		ND	ND				5.0	650			
cis-1,2-DICHLOROETHENE		ND	ND				5.0	65			
2,2-DICHLOROPROPANE		ND	ND				5.0	65			
CHLOROFORM		ND	ND				5.0	65			
BROMOCHLOROMETHANE		ND	ND				5.0	65			
1,1,1-TRICHLOROETHANE		ND	ND				5.0	65			
1,2 DICHLOROETHANE		ND	ND				5.0	65			
BENZENE		ND	120				5.0	65			
1,1-DICHLOROPROPENE		ND	ND				5.0	65			
CARBONTETRACHLORIDE		ND	ND				5.0	65			
1,2-DICHLOROPROPANE		ND	ND				5.0	65			
TRICHLOROETHENE		ND	ND				5.0	65			

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.
** = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 3/11/98 DATE

SUPERVISOR

RUSS CHIN 3/11/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

APR 0 7 1998

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16920 - 16924,16926

2. SAMPLES WERE COLLECTED ON 1/27/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE:

RECEIVED ON 1/29/98 BY HAZARDOUS MATERIALS LABORATORY-SO. CAL

EXTRACTED ON 02/05/98 - 02/09/98 BY SCL METHOD 815 GC/FID FOR TPH GASOLINE RANGE ORGANICS

ANALYZED ON 02/04/95 - 02/09 /98 BY SCL METHOD 815

NOTE: SCL=HAZARDOUS MATERIALS LABORATORY-SO.CAL.

DATA PACKAGE WAS COMPLETED ON 2/11/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO 16920 - 16924

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA.90670

DATE REPORTED: 2/11/98

METHOD(S): SCL 815 GC/FID FOR TPH-GASOLINE RANGE ORGANICS (GROs)

GASOLINE - GROs ANALYSIS

							QUANTITATION LIMIT				
	SCL NO.	16920	16921	16922	16923	16924	16920	16921	16922	16923	16924
	COL. NO.	POC-1-128A	POC-2-128A	POC-3-128A	POC-4-128A	POC-5-128A					
	MATRIX	OIL	OILY WATER	OILY WATER	OIL	SLUDGE					
ANALYTE	UNIT	MG/KG	MG/L	MG/L	MG/KG	MG/KG	MG/KG	MG/L	MG/L	MG/KG	MG/KG
GASOLINE-GROs		62,000	29	11	28,000	820	4500	1.8	0.9	900	45

NOTES: ND = NOT DETECTED
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

SAMPLE PREPARATION: Lucia Yap 3/10/98
LUCIA YAP DATE

ANALYST: Lucia Yap
LUCIA YAP DATE

SUPERVISOR 3/10/98
RUSS CHIN DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB SCL NO 16926

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA.90670

DATE REPORTED: 2/11/98

METHOD(S): SCL 815 GC/FID FOR TPH-GASOLINE RANGE ORGANICS (GROs)

GASOLINE - GROs

							QUANTITATION LIMIT				
	SCL NO.	16926					16926				
	COL. NO.	POC-7 128A									
	MATRIX	SOIL									
ANALYTE	UNIT	MG/KG					MG/KG				
GASOLINE - GROs		ND					45				

NOTES: ND = NOT DETECTED
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

SAMPLE PREPARATION: Lucia Yap 3/10/98
LUCIA YAP DATE

ANALYST: Lucia Yap 3/10/98
LUCIA YAP DATE

SUPERVISOR 3/10/98
RUSS CHIN DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER'S NAME: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA.90670

DATE SAMPLE PREPARED: 02/05/98 - 02/09/9

DATE SAMPLE ANALYZED: 02/0498 - 02/09/98

METHOD(S): SCL 815

QC REPORT FOR

A: METHOD BLANK
B: METHOD STANDARD RECOVERY
C: LABORATORY CONTROL SAMPLE
D: SAMPLE DUPLICATE ANALYSIS

	A	B		C	
	METHOD BLANK	METHOD STANDARD		LABORATORY CONTROL SAMPLE	
		RECOVERY	CONTROL LIMIT	FOUND	CONTROL LIMIT
COMPOUND	MG/KG	%	%	MG/KG	MG/KG
GASOLINE - GROs	<45	80.9	NDY		

D			
SAMPLE DUPLICATE ANALYSIS			
PERFORMED ON :	SCL NO.	16926	
MATRIX :			
	RUN 1	RUN 2	RPD
COMPOUND	MG/KG	MG/KG	%
NO DATA			
		CONTROL LIMIT	

NOTES:

NDY = NOT DETERMINED YET

SAMPLE PREPARATION	ANALYST	SUPERVISOR
Lucia Yap 3/10/98	Lucia Yap 3/10/98	3/10/98
LUCIA YAP DATE	LUCIA YAP DATE	RUSS CHIN DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 - 5795

REQUESTER'S NAME: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND RD.,
SANTA FE SPRINGS, CA 90670

DATE SAMPLE PREPARED: 02/05/98 - 02/09/98

DATE SAMPLE ANALYZED: 02/04/98 - 02/09/98

METHOD(S): SCL 815 GC/FID FOR GASOLINE ANALYSIS

QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON 16926
TYPE OF MATRIX SOIL
TYPE OF SPIKE GASOLINE

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE	AMOUNT OF ANALYTE ADDED	MATRIX SPIKE		MATRIX SPIKE DUPLICATE		AVE % REC	CONTROL LIMITS FOR % REC	R % D BETWEEN MS/MSD	CONTROL LIMITS FOR RPD
			AMOUNT RECOVERE	%REC	AMOUNT RECOVERE	%REC				
	MG/KG	MG/KG	MG/KG	%	MG/KG	%	%	%	%	%
GASOLINE	<45	1500	1658.9	110.6	1367.9	91.2	100.9	NDY	19.2	NDY

NOTES: NDY = NOT DETERMINED YET

SAMPLE PREPARATION

Lucia Yap 3/10/98
LUCIA YAP DATE

ANALYST

Lucia Yap 3/10/98
LUCIA YAP DATE

SUPERVISOR

3/10/98
RUSS CHIN DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16920 - 16924 ; 16926

2. SAMPLES WERE COLLECTED ON 1/27/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE:

RECEIVED ON	1/29/98	BY HAZARDOUS MATERIALS LABORATORY-SO. CAL		
EXTRACTED ON	2/3/98	BY EPA METHOD	3580	WASTE DILUTION
		BY EPA METHOD	3510	SEPARATORY FUNNEL LIQUID/LIQUID EXTRACTION
		BY EPA METHOD	3540	SOXHLET EXTRACTION
		BY SCL METHOD	106M	MECHANICAL SHAKER
CLEANED UP ON	2/4/98	BY EPA METHOD	3620	FLORISIL COLUMN CLEAN UP
ANALYZED ON	2/5/98 - 2/6/98	BY SCL METHOD	816	DIESEL BY GC/FID

NOTE: SCL=HAZARDOUS MATERIALS LABORATORY-SO.CAL.

DATA PACKAGE WAS COMPLETED ON 2/10/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTE R: AHMED E. HEGAB

SCL NO 16920 - 16924

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE REPORTED: 02/09/98

METHOD(S): SCL 816 DIESEL BY GC/FID

							QUANTITATION LIMIT				
	SCL NO.	16920	16921	16922	16923	16924	16920	16921	16922	16923	16924
	COL. NO.	POC-1 128A	POC-2 128A	POC-3 128A	POC-4 128A	POC-5 128A					
	MATRIX	LIQUID	LIQUID	LIQUID	LIQUID	SLUDGE					
ANALYTE	UNIT	MG/KG	MG/L	MG/L	MG/KG	MG/KG	MG/KG	MG/L	MG/L	MG/KG	MG/KG
DIESEL		250,000	140	2,100	390,000	52,000	10,500	105	105	10,500	5,250

NOTES: ND = NOT DETECTED
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

SAMPLE PREPARATION: 2/23/98
MONINA LIGAO DATE

ANALYST: 2/23/98
MONINA LIGAO DATE

SUPERVISOR 2/23/98
RUSS CHIN DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTE R: AHMED E. HEGAB

SCL NO 16926

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE REPORTED: : 2/9/98

METHOD(S): SCL 816 DIESEL BY GC/FID

							QUANTITATION LIMIT				
	SCL NO.	16926					16926				
	COL. NO.	POC-7 128A									
	MATRIX	SOIL									
ANALYTE	UNIT	MG/KG					MG/KG				
DIESEL		ND					105				

NOTES: ND = NOT DETECTED
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

SAMPLE PREPARATION: 2/23/98
MONINA LIGAO DATE

ANALYST: 2/23/98
MONINA LIGAO DATE

SUPERVISOR 2/23/98
RUSS CHIN DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER'S NAME: AHMED E. HEGAB

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRI

METHOD(S): SCL 816 DIESEL BY GC/FID

DATE SAMPLE RECEIVED: 01/29/98

DATE SAMPLE PREPARED: 02/03/98-02/04/98

DATE SAMPLE ANALYZED: 02/05/98-02/06/98

QC REPORT FOR

A: METHOD BLANK
B: METHOD STANDARD RECOVERY
C: LABORATORY CONTROL SAMPLE
D: SAMPLE DUPLICATE ANALYSIS

	A	B		C	
	METHOD BLANK	METHOD STANDARD		LABORATORY CONTROL SAMPLE	
		RECOVERY	CONTROL LIMIT	FOUND	CONTROL LIMIT
COMPOUND	MG/L	%	%	MG/KG	MG/KG
DIESEL	< 105	88.9			

D			
SAMPLE DUPLICATE ANALYSIS			
PERFORMED ON : SCL NO. 16923			
MATRIX : LIQUID			
	RUN 1	RUN 2	RPD
COMPOUND	MG/KG	MG/KG	%
DIESEL	385,167	394,516	2.4
CONTROL LIMIT			NDY

NOTES:
NDY = NOT DETERMINED YET

SAMPLE PREPARATION

Monina Ligao 2/23/98
MONINA LIGAO DATE

ANALYST

Monina Ligao 2/23/98
MONINA LIGAO DATE

SUPERVISOR

2/23/98
RUSS CHIN DATE

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLES 16920-16924,16926

2. SAMPLES WERE COLLECTED ON 01/27/98 AT POWERLINE OIL COMPANY 12345 LAKELAND ROAD, SANTA FE SPRING CA 90670

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED HEGAB

4. SAMPLES WERE :

RECEIVED ON 01/29/98 BY HML-SO.CAL.

EXTRACTED ON 01/29-30/98 BY EPA METHOD 3540 (SOXHLET EXTRACTION)
EPA METHOD 3510 (SEPARATORY FUNNEL LIQ/LIQ EXTRACTION)
SOP METHOD 106 (SHAKER WITH METHYLENE CHLORIDE)
EPA METHOD 3580 (WASTE DILUTION WITH METHYLENE CHLORIDE)

CLEANED ON 02/02-03/98 BY EPA METHOD 3640 (GEL PERMEATION COLUMN)

ANALYZED ON 02/04-09/98 BY EPA METHOD 8270 (SEMIVOLATILE ORGANICS BY GC/MS)

DATA PACKAGE WAS COMPLETED ON 02/10/98

5. NO MAJOR PROBLEMS WERE ENCOUNTERED DURING THE COURSE OF THESE ANALYSES. ONE OUT 11 R%D BETWEEN MS/MSD WAS OUTSIDE THE ADVISORY CONTROL LIMITS. BASED ON THE ACCEPTANCE CRITERIA ESTABLISHED FOR THIS METHOD.NO IMMEDIATE CORRECTIVE ACTION IS NECESSARY.

6. ALL OTHER QC PARAMETERS /INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

LABORATORY REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 5795

lector's Name: AHMED HEGAB

SCL NO. : 16920-16923

Sample Location : POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING CA 90670

Date Reported : 02/09/98

Analytical Procedures Used : EPA 8270

GC/MS SEMIVOLATILE ORGANICS ANALYSIS

COMPOUNDS	SCL NO.	Method Blank	16920	16921	16922	16923	QUANTITATION LIMIT Method Blank	16920	16921	16922	16923
	COL.NO.		POC-1 128A	POC-2 128A	POC-3 128A	POC-4 128A					
	MATRIX	SOLVENT	OIL	LIQUID	LIQUID	OIL					
	UNIT	MG/KG	MG/KG	MG/L	MG/L	MG/KG	MG/KG	MG/KG	MG/L	MG/L	MG/KG
1,3-DICHLOROBENZENE	CAS No. 541-73-1	ND	ND	ND	ND	ND	50	100	3	1	150
BIS(2-CHLOROETHYL) ETHER	111-44-4	ND	ND	ND	ND	ND	50	100	3	1	150
1,4-DICHLOROBENZENE	106-46-7	ND	ND	ND	ND	ND	50	100	3	1	150
1,2-DICHLOROBENZENE	95-50-1	ND	ND	ND	ND	ND	50	100	3	1	150
HEXACHLOROETHANE	67-72-1	ND	ND	ND	ND	ND	50	100	3	1	150
BIS(2-CHLOROISOPROPYL)ETHER	39638-32-9	ND	ND	ND	ND	ND	50	100	3	1	150
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	ND	ND	ND	ND	ND	50	100	3	1	150
NITROBENZENE	98-95-3	ND	ND	ND	ND	ND	50	100	3	1	150
ISOPHORONE	78-59-1	ND	ND	ND	ND	ND	50	100	3	1	150
1,2,4-TRICHLOROBENZNE	120-82-1	ND	ND	ND	ND	ND	50	100	3	1	150
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ND	ND	ND	ND	ND	50	100	3	1	150
HEXACHLOROBUTADIENE	87-68-3	ND	ND	ND	ND	ND	50	100	3	1	150
HEXACHLOROCYCLOPENTADIENE	77-47-4	ND	ND	ND	ND	ND	50	100	3	1	150
2-CHLORONAPHTHALENE	91-58-7	ND	ND	ND	ND	ND	50	100	3	1	150
DIMETHYLPHTHALATE	131-11-3	ND	ND	ND	ND	ND	50	100	3	1	150
2,6-DINITROTOLUENE	606-20-2	ND	ND	ND	ND	ND	50	100	3	1	150
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	ND	ND	ND	ND	ND	50	100	3	1	150
2,4-DINITROTOLUENE	121-14-2	ND	ND	ND	ND	ND	50	100	3	1	150
DIETHYL PHTHALATE	84-66-2	ND	ND	ND	ND	ND	50	100	3	1	150

NOTE : QUANTITATION LIMIT = (CONCENTRATION OF THE LOWEST CALIBRATION STANDARD) TIMES (DILUTION FACTOR)
ND = NOT DETECTED

SAMPLE PREPARATION

MARY NEE

ANALYST

MARY NEE

LABORATORY REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 5795

lector's Name: AHMED HEGAB

SCL NO. : 16924,16926

Sample Location : POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA 90670

Date Reported : 02/09/98

Analytical Procedures Used : EPA 8270

GC/MS SEMIVOLATILE ORGANICS ANALYSIS

COMPOUNDS	SCL NO.	Method Blank	Method Blank	16924	16926	QUANTITATION LIMIT Method Blank	Method Blank	16924	16926
	COL.NO.			POC-5 128A	POC-7 128A				
	MATRIX	SAND	WATER	SLUDGE	SOIL	SAND	WATER		
	UNIT	MG/KG	MG/L	MG/KG	MG/KG	MG/KG	MG/L	MG/KG	MG/KG
1,3-DICHLOROBENZENE	CAS No. 541-73-1	ND	ND	ND	ND	5	0.2	50	5
BIS(2-CHLOROETHYL) ETHER	111-44-4	ND	ND	ND	ND	5	0.2	50	5
1,4-DICHLOROBENZENE	106-46-7	ND	ND	ND	ND	5	0.2	50	5
1,2-DICHLOROBENZENE	95-50-1	ND	ND	ND	ND	5	0.2	50	5
HEXACHLOROETHANE	67-72-1	ND	ND	ND	ND	5	0.2	50	5
BIS(2-CHLOROISOPROPYL)ETHER	39638-32-9	ND	ND	ND	ND	5	0.2	50	5
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	ND	ND	ND	ND	5	0.2	50	5
NITROBENZENE	98-95-3	ND	ND	ND	ND	5	0.2	50	5
ISOPHORONE	78-59-1	ND	ND	ND	ND	5	0.2	50	5
1,2,4-TRICHLOROBENZNE	120-82-1	ND	ND	ND	ND	5	0.2	50	5
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ND	ND	ND	ND	5	0.2	50	5
HEXACHLOROBUTADIENE	87-68-3	ND	ND	ND	ND	5	0.2	50	5
HEXACHLOROCYCLOPENTADIENE	77-47-4	ND	ND	ND	ND	5	0.2	50	5
2-CHLORONAPHTHALENE	91-58-7	ND	ND	ND	ND	5	0.2	50	5
DIMETHYLPHTHALATE	131-11-3	ND	ND	ND	ND	5	0.2	50	5
2,6-DINITROTOLUENE	606-20-2	ND	ND	ND	ND	5	0.2	50	5
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	ND	ND	ND	ND	5	0.2	50	5
2,4-DINITROTOLUENE	121-14-2	ND	ND	ND	ND	5	0.2	50	5
DIETHYL PHTHALATE	84-66-2	ND	ND	ND	ND	5	0.2	50	5

NOTE : QUANTITATION LIMIT = (CONCENTRATION OF THE LOWEST CALIBRATION STANDARD) TIMES (DILUTION FACTOR)
ND = NOT DETECTED

SAMPLE PREPARATION

MARY NEE

ANALYST

MARY NEE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET LOS ANGELES CA. 90026
TEL:(213) 580 5795

COLLECTOR'S NAME : AHMED HEGAB

DATE SAMPLE RECEIVED: 01/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA 90670

DATE SAMPLE PREPARED: 01/29/98-02/03/98

ANALYTICAL BATCH LAB ID NO.: SCL 16920-16924,16926

DATE SAMPLE ANALYZED: 02/04-09/98

ANALYTICAL PROCEDURES USED:
EPA METHOD 8270 GC/MS FOR SEMIVOLATILE ORGANICS
EPA METHOD 3540 SOXHLET EXTRACTION
EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTION
SOP METHOD 106 SHAKER WITH METHYLENE CHLORIDE
EPA METHOD 3580 WASTE DILUTION WITH METHYLENE CHLORIDE
EPA METHOD 3640 GEL PERMEATION COLUMN CLEANUP

QC REPORT FOR

A: METHOD STANDARD
B: LABORATORY CONTROL SAMPLE
C: DUPLICATE SAMPLE ANALYSIS

	A		B	
	METHOD STANDARD RECOVERY FOR EPA 3540	CONTROL LIMITS FOR METHOD STANDARD % RECOVERY	LAB CONTROL SAMPLE ID NO: LCS-BNA-1-0795 LCS-BNA-2-0795	
			Found	Control Limit
COMPOUND	%	%	mg/kg	mg/kg
PHENOL	103	59.8-117	726	485-940
2-CHLOROPHENOL	102	50.7-137	664	373-831
1,4-DICHLOROBENZENE	95	25.8-100	481	312-534
N-NITROSO-DI-N-PROPYLAMINE	107	60.8-115	878	584-1154
1,2,4-TRICHLOLROBENZENE	105	48.2-115	569	418-774
4-CHLORO-3-METHYL PHENOL	115	68.6-117	704	672-936
ACENAPHTHENE	104	77.8-111	717	424-835
4-NITROPHENOL	123	60.0-128	932	508-1151
2,4-DINITROTOLUENE	118	73.0-119	939	578-1063
PENTACHLOROPHENOL	122	64.7-125	862	589-1020
PYRENE	117	73.1-117	704	386-820

C			
DULPICATE SAMPLE ANALYSIS			
Performed on SCL 16926	Matrix SOIL		
	Run 1	Run 2	RPD
COMPOUND	mg/kg	mg/kg	%
NO DATA(Target compound detected was below the quantitation limit)			
CONTROL LIMIT			25

SAMPLE PREPARATION: MARY NEE 2/24/98 DATE

ANALYST: MARY NEE 2/24/98 DATE

SUPERVISING CHEMIST: RUSS CHIN 2/24/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES CA. 90026
TEL:(213) 580-5795

COLLECTOR'S NAME : AHMED HEGAB

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD SANTA FE SPRING CA. 90670

ANALYTICAL BATCH LAB ID NO.: SCL 16920-16924,16926

DATE SAMPLE RECEIVED: 01/29/98

DATE SAMPLE PREPARED: 01/29/98-02/03/98

DATE SAMPLE ANALYZED: 02/04-09/98

ANALYTICAL PROCEDURES USED:

EPA METHOD 8270	GC/MS FOR SEMIVOLATILE ORGANICS
EPA METHOD 3540	SOXHLET EXTRACTION
EPA METHOD 3510	SEPARATORY FUNNEL LIQ/LIQ EXTRACTION
SOP METHOS 106	SHAKER WITH METHYLENE CHLORIDE
EPA METHOD 3580	WASTE DILUTION WITH METHYLENE CHLORIDE
EPA METHOD 3640	GEL PERMEATION COLUMN CLEANUP

QC REPORT FOR

MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE REFORMED ON SCL 16926 TYPE OF MATRIX SOIL

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE	AMOUNT ANALYTE ADDED	MATRIX SPIKE		MATRIX SPIKE DUPLICATE		AVE % REC	CONTROL LIMIITS FOR % REC	R % D BETWEEN MS/MSD	CONTROL LIMIITS FOR RPD
			AMOUNT RECOVERED	% REC	AMOUNT RECOVERED	% REC				
	MG/KG	MG/KG	MG/KG	%	MG/KG	%	%	MG/KG	%	%
PHENOL	<10	1000	952	95	940	94	94	57.0-125	1.1	0-25
2-CHLOROPHENOL	<10	1000	957	96	976	98	97	54.9-118	2.1	0-25
1,4-DICHLOROBENZENE	<5	500	467	93	472	94	94	38.3-117	1.1	0-25
N-NITROSO-DI-N-PROPYLAMINE	<5	500	244	49	360	72	60	48.9-137	* 38	0-25
1,2,4-TRICHLOROBENZENE	<5	500	510	102	492	98	100	63.3-107	4.0	0-25
4-CHLORO-3-METHYL PHENOL	<10	1000	1074	107	1030	103	105	60.8-132	3.8	0-25
ACENAPHTHENE	<5	500	493	99	492	98	98	74.4-114	1.0	0-25
4-NITROPHENOL	<50	1000	1191	119	1396	140	130	35.5-148	16	0-25
2,4-DINITROTOLUENE	<5	500	506	101	540	108	104	54.3-129	6.7	0-25
PENTACHLOROPHENOL	<50	1000	1110	111	1130	113	112	48.5-134	1.8	0-25
PYRENE	<5	500	547	109	521	104	106	52.4-131	4.7	0-25

NOTE : % REC = $\frac{\text{(Amount recovered - Amount found in sample)}}{\text{Amount added}} \times 100\%$

* = R%D BETWEEN MS/MSD WAS OUTSIDE THE ADVISORY CONTROL LIMIT. NO IMMEDIATE CORRECTIVE ACTION IS NECESSARY.

SAMPLE PREPARATION		ANALYST		SUPERVISING CHEMIST	
MARY NEE	2/24/98 DATE	MARY NEE	2/24/98 DATE	RUSS CHIN	2/24/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES CA. 90026
TEL:(213) 580 5795

COLLECTOR'S NAME : AHMED HEGAB

DATE SAMPLE RECEIVED:01/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRING, CA 90670

DATE SAMPLE PREPARED:01/29/98-02/03/98

DATE SAMPLE ANALYZED:02/04-09/98

ANALYTICAL BATCH LAB ID NO.: SCL 16920-16924,16926

ANALYTICAL PROCEDURES USED:
- EPA METHOD 8270 GC/MS FOR SEMIVOLATILE ORGANICS
- EPA METHOD 3540 SOXHLET EXTRACTION
- EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTION
- SOP METHOD 106 SHAKER WITH METHYLENE CHLORIDE
- EPA METHLD 3580 WASTE DILUTION WITH METHYLENE CHLORIDE
- EPA METHOD 3640 GEL PERMEATION COLUMN CLEANUP

QC REPORT FOR
SEMIVOLATILE SURROGATE RECOVERY

	2-FLUOROPHENOL			PHENOL-d6			NITROBENZENE-d5			2-FLUOROBIPHENYL			2,4,6-TRIBROMOPHENOL		
	ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED	
QC SAMPLES / SAMPLE NO.	MG/KG	MG/KG	% REC	MG/KG	MG/KG	% REC	MG/KG	MG/KG	% REC	MG/KG	MG/KG	% REC	MG/KG	MG/KG	% REC
METHOD BLANK - SOIL	200	198	98	200	175	87	100	99	99	100	108	108	200	205	102
METHOD BLANK -WATER	8.0	7.7	96	8.0	6.6	82	4.0	4.0	100	4.0	4.1	102	8.0	8.9	111
METHOD BLANK -SLUDGE	2000	1911	96	2000	1726	86	1000	972	97	1000	958	96	2000	2384	119
METHOD STANDARD	200	204	102	200	204	102	100	100	100	100	99	99	200	237	118
MATRIX SPIKE	1000	927	93	1000	969	97	500	498	100	500	469	94	1000	1129	113
MATRIX SPIKE DUPLICATE	1000	952	95	1000	958	96	500	480	96	500	470	94	1000	1082	108
LAB CONTROL SAMPLE	1000	980	98	1000	941	94	500	482	96	500	500	100	1000	1097	110
SCL 16920	2000	2081	104	2000	1909	95	1000	1076	108	1000	1001	100	2000	1927	96
SCL 16921 (MG/L)	40	44.5	111	40	40.9	102	20	17.5	88	20	18.0	90	40	34.7	87
SCL 16922 (MG/L)	20	18.5	93	20	17.6	88	10	8.5	85	10	8.9	89	20	19.3	96
SCL 16923	2000	2199	110	2000	1903	95	1000	954	95	1000	956	96	2000	1500	75
SCL 16924	2000	1615	81	2000	1605	80	1000	874	87	1000	905	90	2000	1810	90
SCL 16926	200	190	95	200	175	88	100	85	84	100	91	91	200	172	86
SCL 16926 DUPLICATE	200	199	100	200	174	87	100	100	100	100	102	102	200	206	103
CONTROL LIMIT FOR %REC	38.6-149			56.7-141			38.2-138			60.1-123			41.6-128		

NOTE: NR = NOT RECORVERED NA = NOT ANALYZED

SAMPLE PREPARATION:

MARY NEE — DATE 2/24/98

ANALYST:

MARY NEE — DATE 2/24/98

SUPERVISING CHEMIST

RUSS CHIN — DATE 2/24/98

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16920 to 16924, 16926

2. SAMPLES WERE COLLECTED ON 1/28/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE:

   RECEIVED ON 1/29/98 BY HAZARDOUS MATERIALS LABORATORY-SO. CAL

   EXTRACTED AND ANALYZED ON 1/30/98, 2/2/98 BY EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

   DATA PACKAGE WAS COMPLETED ON 2/10/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

QUESTER: AHMED E. HEGAB

SCL NO. 16920-16923

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING
CA 90670

DATE REPORTED: 02/10/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

VOCs BY GC/MS

							QUANTITATION LIMIT				
	SCL NO.		16920	16921	16922	16923		16920	16921	16922	16923
	COL. NO.	METHOD BLANK	POC-1-128A	POC-2 128A	POC-3 128A	POC-4 128A	METHOD BLANK				
	MATRIX	WATER	LIQUID	WATER	WATER	LIQUID					
ANALYTE	UNIT	UG/L	MG/KG	UG/L	UG/L	MG/KG	UG/L	MG/KG	UG/L	UG/L	MG/KG
ACETONE		ND	*7400	ND	ND	ND	50.0	8500	12500	6250	2200
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
METHYLENE CHLORIDE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
trans-1,2-DICHROETHENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
1,1-DICHLOROETHANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
2-BUTANONE (MEK)		ND	ND	ND	ND	ND	50.0	8500	12500	6250	2200
cis-1,2-DICHLOROETHENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
2,2-DICHLOROPROPANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
CHLOROFORM		ND	ND	ND	ND	ND	5.0	850	1250	625	220
BROMOCHLOROMETHANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
1,1,1-TRICHLOROETHANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
1,2 DICHLOROETHANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
BENZENE		ND	*350	1900	1300	280	5.0	850	1250	625	220
1,1-DICHLOROPROPENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
CARBONTETRACHLORIDE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
1,2-DICHLOROPROPANE		ND	ND	ND	ND	ND	5.0	850	1250	625	220
TRICHLOROETHENE		ND	ND	ND	ND	ND	5.0	850	1250	625	220

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.
** = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 2/25/98 DATE

SUPERVISOR

RUSS CHIN 2/25/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO. 16924,16926

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING
CA 90670

DATE REPORTED: 2/10/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

VOCs BY GC/MS

					QUANTITATION LIMIT		
	SCL NO.		16924	16926		16924	16926
	COL. NO.	METHOD BLANK	POC-5 128A	POC-7-128A	METHOD BLANK		
	MATRIX	WATER	SLUDGE	SOIL			
ANALYTE	UNIT	UG/L	MG/KG	MG/KG	UG/L	MG/KG	MG/KG
ACETONE		ND	ND	ND	50.0	500	50.0
1,1-DICHLOROETHENE		ND	ND	ND	5.0	50	5.0
METHYLENE CHLORIDE		ND	ND	ND	5.0	50	5.0
trans-1,2-DICHROETHENE		ND	ND	ND	5.0	50	5.0
1,1-DICHLOROETHANE		ND	ND	ND	5.0	50	5.0
2-BUTANONE (MEK)		ND	ND	ND	50.0	500	50.0
cis-1,2-DICHLOROETHENE		ND	ND	ND	5.0	50	5.0
2,2-DICHLOROPROPANE		ND	ND	ND	5.0	50	5.0
CHLOROFORM		ND	ND	ND	5.0	50	5.0
BROMOCHLOROMETHANE		ND	ND	ND	5.0	50	5.0
1,1,1-TRICHLOROETHANE		ND	ND	ND	5.0	50	5.0
1,2 DICHLOROETHANE		ND	ND	ND	5.0	50	5.0
BENZENE		ND	140	ND	5.0	50	5.0
1,1-DICHLOROPROPENE		ND	ND	ND	5.0	50	5.0
CARBONTETRACHLORIDE		ND	ND	ND	5.0	50	5.0
1,2-DICHLOROPROPANE		ND	ND	ND	5.0	50	5.0
TRICHLOROETHENE		ND	ND	ND	5.0	50	5.0

NOTES: ND = NOT DETECTED UG = MICROGRAM
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.
** = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 2/25/98 DATE

SUPERVISOR

RUSS CHIN 2/25/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING
CA 90670

DATE SAMPLE ANALYZED: 1/30/98, 2/2/98

METHODS: EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

QC REPORT FOR SURROGATE SPIKE % RECOVERY

	DIBROMOFLUOROETHANE			TOLUENE - D8			4 - BROMOFLUOROBENZENE		
	ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED	
QC/SAMPLES / SAMPLE NO.	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC
METHOD BLANK	20	20.4	102	20	21.2	106	20	19.3	97
MATRIX SPIKE	20	19.6	98	20	18.1	91	20	19.2	96
MATRIX SPIKE DUP.	20	19.3	96	20	20.4	102	20	19.3	97
SCL 16920	20	19.7	99	20	19.8	99	20	19.8	99
SCL 16921	20	19.2	96	20	18.7	94	20	19.4	97
SCL 16922	20	18.1	91	20	20.5	103	20	18	90
SCL 16923	20	18.7	94	20	20.4	102	20	18.4	92
SCL 16924	20	18.4	92	20	18.2	91	20	18.7	94
SCL 16926	20	19.7	99	20	20.1	101	20	18.1	91
CONTROL LIMIT FOR %REC	83.5 - 111			70.3 - 106			79.6 - 111		

NOTES:

ANALYST

INGE ANG 2/25/98 DATE

SUPERVISOR

RUSS CHIN 2/25/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 - 5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD, SANTA FE SPRING
CA 90670

DATE SAMPLE ANALYZED : 1/30/98, 2/2/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

QC REPORT FOR SAMPLE DUPLICATE ANALYSIS

PERFORMED ON SCL NO.: 16924

TYPE OF MATRIX : SLUDGE

☐ NOT ANALYZED (SEE NOTES)

ANALYTE	SAMPLE MG/KG	SAMPLE DUPLICATE MG/KG	AVERAGE MG/KG	REL % DIFF(R&D) %	CONTROL LIMIT %
BENZENE	140	130	140	7.1	0-25
ETHYL BENZENE	140	140	140	0	0-25
M. & P.-XYLENES	440	480	460	8.7	0-25
O - XYLENE	190	220	210	14	0-25
NAPTHALENE	150	160	160	6.3	0-25

QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON 16926

TYPE OF MATRIX SOIL

☐ NOT ANALYZED SEE NOTES

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE UG	AMOUNT OF ANALYTE ADDED UG	MATRIX SPIKE AMOUNT RECOVERED UG	MATRIX SPIKE %REC %	MATRIX SPIKE DUPLICATE AMOUNT RECOVERED UG	MATRIX SPIKE DUPLICATE %REC %	AVE % REC %	CONTROL LIMITS FOR % REC %	R % D BETWEEN MS/MSD %	CONTROL LIMITS FOR RPD %
1,1-DICHLOROETHENE	<125	500	412	83	461	92	88	56.6-113	10	0-25
TRICHLOROETHENE	<125	500	372	75	395	79	77	57.7-117	5.2	0-25
CHLOROBENZENE	<125	500	455	91	476	95	93	58.3-119	4.3	0-25
TOLUENE	<125	500	429	86	447	89	88	62.0-120	3.4	0-25
BENZENE	<125	500	458	92	484	97	95	61.3-114	5.2	0-25

NOTES: NDY = NOT DETERMINED YET.

ANALYST

INGE ANG 2/25/98 DATE

SUPERVISOR

RUSS CHIN 2/25/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16928
   SUPPLEMENTAL EPA 8260 ANALYSIS WAS REQUESTED ON 3/3/98

2. SAMPLES WERE COLLECTED ON 1/29/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE:

   RECEIVED ON 1/29/98 BY HAZARDOUS MATERIALS LABORATORY-SO. CAL

   EXTRACTED AND
   ANALYZED ON 3/6/98 BY EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

   DATA PACKAGE WAS COMPLETED ON 3/9/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. RECOMMENDED SAMPLE HOLDING TIME WAS EXCEEDED.

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 - 5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE SAMPLE ANALYZED : 3/6/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

QC REPORT FOR SAMPLE DUPLICATE ANALYSIS

PERFORMED ON SCL NO.: 16928

TYPE OF MATRIX : SLUDGE

[ ] NOT ANALYZED (SEE NOTES)

ANALYTE	SAMPLE MG/KG	SAMPLE DUPLICATE MG/KG	AVERAGE MG/KG	REL % DIFF(R&D) %	CONTROL LIMIT %
BENZENE	110	130	120	17	0-25
ETHYL BENZENE	180	210	200	15	0-25
M. & P -XYLENES	490	570	530	15	0-25
O-XYLENE	240	270	260	12	0-25

QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON _____

TYPE OF MATRIX _____

[X] NOT ANALYZED SEE NOTES

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE	AMOUNT OF ANALYTE ADDED	MATRIX SPIKE		MATRIX SPIKE DUPLICATE		AVE % REC	CONTROL LIMITS FOR % REC	R % D BETWEEN MS/MSD	CONTROL LIMITS FOR RPD
			AMOUNT RECOVERED	%REC	AMOUNT RECOVERED	%REC				
1,1-DICHLOROETHENE										
TRICHLOROETHENE										
CHLOROBENZENE										
TOLUENE										
BENZENE										

NOTES: NDY = NOT DETERMINED YET.
X = MS/MSD ANALYSIS WAS NOT APPLICABLE DUE TO HIGH LEVELS OF ANALYTES PRESENT IN THE SAMPLE

ANALYST

INGE ANG 3/11/98 DATE

SUPERVISOR

RUSS CHIN 3/11/98 DATE

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/29/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CA 90670

DATE SAMPLE ANALYZED: 3/6/98

METHODS: EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

QC REPORT FOR SURROGATE SPIKE % RECOVERY

	DIBROMOFLUOROETHANE			TOLUENE - D8			4 - BROMOFLUOROBENZENE		
	ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED	
QC/SAMPLES / SAMPLE NO.	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC
METHOD BLANK	20	21.3	107	20	17.4	87	20	17.2	86
SCL 16928	20	19.3	97	20	18.2	91	20	18.4	92
SCL 16928 DUP.	20	19.5	98	20	18.7	94	20	18.4	92
CONTROL LIMIT FOR %REC	74.2 - 101			74.6 - 127			72.3 - 121		

NOTES:

ANALYST

INGE ANG 3/11/98 DATE

SUPERVISOR

RUSS CHIN 3/11/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

COLLECTOR'S NAME AHMED E. HEGAB

SCL NO: 16928

SAMPLE LOCATION: POWERLINE OIL COMPNY
12345 LAKELAND RD.,
SANTA FE SPRINGS, CA 90670

DATE REPORTED: 3/6/98

METHOD(S): EPA 1020 SETAFLASH CLOSED CUP METHOD FOR IGNITABILITY

FLASH POINT

	SCL NO.	16928					
	COL. NO.	POC 9 128A					
	MATRIX	SLUDGE					
ANALYSIS	UNIT	°F					
FLASH POINT		> 140					

ANALYST:

Monina Ligao 3/11/98
MONINA LIGAO DATE

SUPERVISOR

3/11/98
RUSS CHIN

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

COLLECTOR'S NAME AHMED E. HEGAB

SCL NO: 16920-16924,16926

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD,
SANTA FE SPRINGS, CA 90670

DATE REPORTED: 02/10/98

METHOD(S): EPA 1020 SETAFLASH CLOSED - CUP METHOD FOR IGNITABILITY

FLASH POINT

	SCL NO.	16920	16921	16922	16923	16924	16926
	COL. NO.	POC-1 128A	POC-2 128A	POC-3 128A	POC-4 128A	POC-5 128A	POC-7 128A
	MATRIX	OIL	WATER	SLUDGE	OIL	SLUDGE	SOIL
ANALYSIS	UNIT	°F	°F	°F	°F	°F	°F
FLASH POINT		122	ND	133	135	128	124

NOTE:

ANALYST:

Faina Goretsky 2-16-98
FAINA GORETSKY DATE

SUPERVISOR

2/16/98
RUSS CHIN DATE

APR 0 8 1998
1

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 16920 TO 16924, 16928
   SUPPLEMENTAL TCLP-VOC ANALYSIS WAS REQUESTED ON 03/03/98

2. SAMPLES WERE COLLECTED ON 1/28/98 AT POWERLINE OIL COMPANY

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS AHMED E. HEGAB

4. SAMPLES WERE: (TCLP EXTRACTS)

   RECEIVED ON 3/17/98 BY HAZARDOUS MATERIALS LABORATORY-SO. CAL

   ANALYZED ON 3/26/98 - 3/27/98 BY EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

   DATA PACKAGE WAS COMPLETED ON 3/31/98

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. RECOMMENDED SAMPLE HOLDING TIME WAS EXCEEDED.

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

INDEX

EPA 8260 FOR SAMPLE (S) 16920 - 16924, 16928

		PAGE
1.	CASE NARRATIVE	1
2.	INDEX	2
3.	HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST FORMS	3 - 4
4.	LABORATORY ANALYTICAL REPORT (S)	5 - 6
5.	QC REPORT FOR a. Sample Duplicate Analysis b. Matrix Spike/Matrix Spike Duplicate Analysis	7
6.	QC REPORT FOR SURROGATE SPIKE % RECOVERY	8

TOTAL PAGES = 8

e of California-California Environmental Protection Agency

3 Department of Toxic Substances Cont
Hazardous Materials Laboratory

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

1. Authorization Number: SCN3482 $

HML No. 16920 To 16929

2. Page 1 of 2

3. Requester: Ahmed E. Hegab 4. Phone (8) 667-2902
Address (To Receive Results):

5. Priority Level: 1 2 3
a. Authorized by

6. Date Sampled 1-27-1998 7. Time Sampled • Hours

8. Codes (fill in all applicable codes)

a. STC	3030
b. Region	03
c. INDEX	6310
d. PCA	37322
e. MPC	
f. SITE	300121.33
g. County	19

9. Activity: ☒ SEB ☐ SMB ☐ FPB ☐ FMB ☐ HQ ☐ OTHER

10. SAMPLING LOCATION CAD008383291
a. EPA ID No.

b. Site Powerine Oil Company

c. Address 12359 (Number) Lake Road (Street) Santa Fe Spring Ca. (City) 90245 (Zip)

11. SAMPLES

a. ID	b. Collector's No.	c. Lab No.	Sample d. Type	Container e. Type	Container f. Size	g. Field Information
A	POC-1-128A	16920	~~Glass liquid~~	Glass	16 oz	Top of Tank 27105 (Hydro Co
B	POC-2-128A	16921	sludge	Glass	16 oz	oily Sludge 20 ft Tank 10006
C	POC-3-128A	16922	Sludge liquid	Glass	16 oz under	Bottom of Tank 27105 (Sludge
D	POC-4-128A	16923	oily liquid	Glass	16 oz	Top Tank 10006
E	POC-5-128A	16924	Sludge	Glass	16 oz	Bottom Tank 10006
F	POC-6-128A	16925	Soil Sample	Glass	16 oz	S of lake rothchild
G	POC-7-128A	16926	Soil Sample	"	16 oz	around tank 10006
H	POC-8-128A	16927	Sludge	"	16 oz	b/n Tank 35 & 3072
I	~~POC-9-128A~~		~~Sludge~~	"		~~middle Tank 2705~~
L	~~POC-10-128A~~		~~Sludge Soil~~	"		~~under tank 1002~~

12. ANALYSIS REQUESTED

a. ☒ pH E — L
b. ☒ Metal Scan E — L
c. ☐ Metals (Spec)
d. ☐ W.E.T.
e. ☐ VOA-8010
f. ☐ VOA-8020
g. ☐ VOA-H/S
h. ☐ VOA-8240
i. ☒ VOA-8260 for A, B, C, D, E, G
j. ☒ SVO-8270 Same
k. ☒ Diesel/Gasoline Same
l. ☐ Flash Point
m. ☐ C1-Pesticides
n. ☐ OP-Pesticides
o. ☐
p. ☐
q. ☐

13. SPECIAL REMARKS:

14. SUPPLEMENTAL REQUESTS ☐ ☐ ☐ ☐ Initials Date

15. CHAIN OF CUSTODY

	Signature	Name/Title	Inclusive Dates
a.	Ahmed E. Hegab	Haz. Sub Sc. Intl	1/28/ 1/28/9
b.	Donald Balungaiz	DTSC Lab	1/28/98 /
c.	Janice Wakakuwa	Janice Wakakuwa / PHC III	1/29/98 3/9/98
d.			/ / / /

16. LAB REMARKS: HML: TCLP-8260 on 16920 to 16924 & 1692
3/9/9

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

1. Authorization Number: SCN 3482$

HML No. 16920. To 16929

2. Page 2 of 2 4

3. Requestor: Ahmed E. Hegab 4. Phone (8) 667-2902

5. Address (To Receive Results): 6. FAX ( )

7. TAT Level: 1 (circle one) 2 3 4 Authorized By

8. Date Sampled 1/27/98

9. Codes (fill in all applicable codes)

a. Office	03
b. INDEX	6310
c. PCA	37322
d. MPC	
e. SITE	300121+33
f. County	

10. Activity: ☐ SCD ☐ SRPD ☐ SMB ☐ FPB ☐ SPPT ☐ ER/CL ☐ Others

11. SAMPLING LOCATION CAD008383291

a. EPA ID No.

b. Site Powerline Oil Company

c. Address Number Street City ZIP

12. SAMPLES

a. ID	b. Collector's No.	c. Lab No.	Sample d. Type	Container e. Type	f. Size	g. Field Information
A	DOC 9 1287	16928	Sludge	Glass	16oz.	Middle Tank 2705
B	DOC 10 1287	16929	Sludge Soil	Glass	16oz.	under Tank 1002.
C						
D						
E						
F						
G						
H						

13. ANALYSIS REQUESTED

a. ☒ pH A & B.

b. ☒ Metal Scan A & B

c. ☐ Metals (Spec)

d. ☐ W.E.T.

e. ☒ Flash Point A

f. ☐ PAHs - 8310

g. ☐ PCBs

h. ☐ TPH

i. ☐ Gasoline

j. ☐ Diesel

k. ☐ Cl - Pest

l. ☐ OP - Pest

m. ☐ VOA - 8021

n. ☒ VOA - 8260 A

o. ☐ SVO - 8270

p. ☐ TCLP - (specify)

q. ☐

14. SPECIAL REMARKS/ANALYSIS OBJECTIVE:

15. SUPPLEMENTAL REQUESTS ☐ ☐ ☐ ☐ Initials Date

16. CHAIN OF CUSTODY

	Signature	Name/Title	Inclusive Dates
a.			/ / - / /
b.			/ / - / /
c.	Janice Wakakuwa	Janice Wakakuwa/PHC III	1/29/98-3/9/9
d.			/ / - / /

17. LAB REMARKS:

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 - 5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 1/28/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRING, CA 90670

DATE SAMPLE ANALYZED : 3/26/98 - 3/27/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS MODIFIED FOR TCLP

QC REPORT FOR SAMPLE DUPLICATE ANALYSIS

PERFORMED ON SCL NO.: 16924

[ ] NOT ANALYZED (SEE NOTES)

TYPE OF MATRIX : TCLP EXTRACTS

ANALYTE	SAMPLE MG/L	SAMPLE DUPLICATE MG/L	AVERAGE MG/L	REL % DIFF(R&D) %	CONTROL LIMIT %
BENZENE	1.5	1.7	1.6	5.9	0-25

QC REPORT FOR
MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON _____

[X] NOT ANALYZED (SEE NOTES)

TYPE OF MATRIX

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE MG/KG	AMOUNT OF ANALYTE ADDED MG/KG	MATRIX SPIKE AMOUNT RECOVERED MG/KG	MATRIX SPIKE %REC %	MATRIX SPIKE DUPLICATE AMOUNT RECOVERED MG/KG	MATRIX SPIKE DUPLICATE %REC %	AVE % REC %	CONTROL LIMITS FOR % REC %	R % D BETWEEN MS/MSD %	CONTROL LIMITS FOR RPD %
BENZENE										
VINYL CHLORIDE										
CHLOROFORM										
2-BUTANONE (MEK)										
1,2-DICHLOROETHENE										
TRICHLOROETHENE										
TETRACHLOROETHENE										
CHLOROBENZENE										
1,1-DICHLOROBENZENE										
1,4-DICHLOROBENZENE										
CARBONTETRACHLORIDE										

NOTES: X = MS/MSD ANALYSIS WAS NOT APPLICABLE

ANALYST
INGE ANG — DATE 4/6/98

SUPERVISOR
RUSS CHIN — DATE 4/6/98

HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO. A6924,16928 BLANKS

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRING, CA. 90670

DATE REPORTED: 3/31/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS MODIFIED FOR TCLP

TCLP VOCs BY GC/MS

	SCL NO.		16924	16928	METHOD	STORAGE		QUANTITATION LIMIT			
	COL. NO.	METHOD BLANK	POC-5-128A	DOC-9-128A	BLANK	BLANK		METHOD BLANK	16924 16928	METHOD BLANK	STORAGE BLANK
	MATRIX	WATER	TCLP EXTRACT	TCLP EXTRACT							
ANALYTE	UNIT	MG/L	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	MG/L	MG/L
BENZENE		ND	1.6	1.4	ND	ND		0.005	0.63	0.005	0.005
VINYL CHLORIDE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
CHLOROFORM		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
2-BUTANONE (MEK)		ND	ND	ND	ND	ND		0.05	6.3	0.05	0.05
1,2-DICHLOROETHANE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
TRICHLOROETHENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
TETRACHLOROETHENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
CHLOROBENZENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
1,4-DICHLOROBENZENE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005
CARBON TETRACHLORIDE		ND	ND	ND	ND	ND		0.005	0.63	0.005	0.005

TENTATIVELY IDENTIFIED COMPOUNDS:

SCL 16924: ALIPH.HYDROCARBONS C5, C9, MTBE, ALKYL BENZENES, INDAN & NAPTHALENE.

SCL 16928: MTBE, ALKYL BENZENES, INDAN & NAPTHALENE.

INDAN, METHYL & DIMETHYL INDANS, NAPTHALENE, DECAHYDRO NAPTHALENE.

SCL 16924: ALIPH.HYDROCARBONS:C5,C9, ALKYL BENZENES, MTBE, INDAN, NAPTHALENE

SCL 16928: ALKYL BENZENES, INDAN, NAPTHALENE.

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM

QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

- = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

JINGE ANG — 4/6/98 DATE

SUPERVISOR

RUSS CHIN — 4/6/9 DATE

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

DATE SAMPLE RECEIVED: 01/28/98

SAMPLING LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRING, CA 90670

DATE SAMPLE ANALYZED: 3/26/98-3/27/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS MODIFIED FOR TCLP

QC REPORT FOR SURROGATE SPIKE % RECOVERY

	DIBROMOFLUOROETHANE			TOLUENE - D8			4 - BROMOFLUOROBENZENE		
	ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED	
QC/SAMPLES / SAMPLE NO.	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC	UG/KG	UG/KG	% REC
LABORATORY BLANK	20	20.5	103	20	18.1	91	20	19.4	97
METHOD BLANK	20	19.4	97	20	15.9	80	20	17.6	88
STORAGE BLANK	20	20	100	20	17.5	88	20	18.5	93
SCL 16920 TCLP EXTRACT	20	19.8	99	20	18.9	95	20	18.5	93
SCL 16920 PRIM.EXTRACT	20	18.2	91	20	19.6	98	20	19.5	98
SCL 16921 TCLP EXTRACT	20	19.7	99	20	18	90	20	18	90
SCL 16922 TCLP EXTRACT	20	20.2	101	20	18.4	92	20	18.1	91
SCL 16922 PRIM EXTRACT	20	20.4	102	20	16.3	82	20	17.2	86
SCL 16923 TCLP EXTRACT	20	19.3	97	20	19.6	98	20	17.7	89
SCL 16923 PRIM EXTRACT	20	17.8	89	20	21.1	106	20	19.5	98
SCL 16924 TCLP EXTRACT	20	19.4	97	20	19.2	96	20	17.3	87
SCL 16928 TCLP EXTRACT	20	20	100	20	18.6	93	20	18.3	92
SCL 16928 PRIM EXTRACT	20	19.6	98	20	18.5	93	20	18.1	91
CONTROL LIMIT FOR %REC	NDY			NDY			NDY		

NOTES: NDY = NOT DETERMINED YET

ANALYST

INGE ANG 4/6/98 DATE

SUPERVISOR

RUSS CHIN 4/6/98 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: AHMED E. HEGAB

SCL NO. 16920 - 16923

SAMPLE LOCATION: POWERLINE OIL COMPANY
12345 LAKELAND ROAD
SANTA FE SPRING, CA 90670

DATE REPORTED: 3/31/98

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS MODIFIED FOR TCLP

TCLP VOCs BY GC/MS

							QUANTITATION LIMIT				
	SCL NO.		16920	16921	16922	16923		16920	16921	16922	16923
	COL. NO.	METHOD BLANK	POC-1-128A	POC-2-128A	POC-3 128A	POC-4 128A	METHOD BLANK				
	MATRIX	WATER	TCLP EXTRACT	TCLP EXTRACT	TCLP EXTRACT	TCLP EXTRACT					
ANALYTE	UNIT	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
BENZENE		ND	140	1.4	0.3	43	0.005	47.8	0.63	0.13	11.2
VINYL CHLORIDE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
CHLOROFORM		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
2-BUTANONE (MEK)		ND	ND	ND	ND	ND	0.05	478	6.3	1.3	112
1,1-DICHLORO ETHANE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
TRICHLOROETHENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
TETRACHLOROETHENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
CHLOROBENZENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
1,4-DICHLOROBENZENE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2
CARBON TETRACHLORIDE		ND	ND	ND	ND	ND	0.005	47.8	0.63	0.13	11.2

TENTATIVELY IDENTIFIED COMPOUNDS:

SCL 16920,16923: ALIPH.HYDROCARBONS C5-C10,C13, ALKYL CYCLOPENTANES,ALKYL CYCLOHEXANES, ALKYL BENZENES,INDAN, METHYL & DIMETHYL INDANS, NAPTHALENE, DECAHYDRO NAPTHALENE,DECAHYDRO METHYL NAPTHALENE, TETRAHYDRO-METHYL NAPTHALENE.

SCL 16921: MTBE, ACETONE & ALKYL BENZENES.

SCL 16922: MTBE, ALKYL BENZENES,INDAN, METHYL & DIMETHYL INDANS, NAPTHALENE, TETRAHYDRO METHYL NAPTHALENE.

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM
QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.
** = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 4/6/98
DATE

SUPERVISOR

RUSS CHIN 4/6/98
DATE

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
5 N. SAN FERNANDO BLVD., SUITE 300
BANK, CA 91504

SPLIT SAMPLE RECEIPT

Received from representatives of the Department of Toxic Substances Control on 2/11/1998, a requested sample split from samples acquired under the authority of Section 66272.1, Title 22, California Code of Regulations.

The samples are numbered as follows:

1.	POC-1-211 B	6.	
2.	POC-2-211 B	7.	
3.	POC-3-211 B	8.	
4.		9.	
5.		10.	

Signatures:

Facility Representative (print and sign)

DTSC Representative (print and sign)

STATE OF CALIFORNIA — ENVIRONMENTAL PRO[illegible]ON AGENCY

PETE WILSON, *Governor*

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

405 N. SAN FERNANDO BLVD., SUITE 300
[illegible]RBANK, CA 91504

SPLIT SAMPLE RECEIPT

Received from representatives of the Department of Toxic Substances Control on January 28, 1998 a requested sample split from samples acquired under the authority of Section 66272.1, Title 22, California Code of Regulations.

The samples are numbered as follows:

1.	POC-1-128 B	6.	POC-6-128 B
2.	POC-2-128 B	7.	POC-7-128 B
3.	POC-3-128 B	8.	POC-8-128 B
4.	POC-4-128 B	9.	POC-9-128 B
5.	POC-5-128 B	10.	POC-10-128 B

Signatures:

June Christman
Facility Representative (print and sign)
June Christman

Ahmad E. Hegab
DTSC Representative (print and sign)

ATTACHMENT 11

Summary of Violations

SUMMARY OF VIOLATIONS

On **January 27-28, 1998**, the Department of Toxic Substances Control, California Environmental Protection Agency, conducted an inspection at:

Facility name: **Powerine Oil Company** (POC).
Facility address: **12354 Lakeland Road, Santa Fe Spring, California 90245**

EPA ID Number: **CAD 008 383 291**

County name: **Los Angles**

As a result of that inspection, violations of hazardous waste laws, regulations, or requirements were discovered. Below are the list of these violations:

I. Illegal Storage.
Health and Safety Code (HSC) section 25 201(a) and 25213(b).
POC stored in excess of 5000 gallons of hazardous waste (K050, F037 and F038) in tanks (#s 10006 and 27105) and failed to obtain from DTSC a hazardous waste Storage Permit or other grant of authorizations

2. Integrity Assessment
Title 22, Cal. Code Regs., section 66262.34 and 66265.191
POC failed to have on file a written integrity assessment reviewed by an Independent, qualified, Proffessional engineer that attests that its hazardous waste tank System is adequately designed and has sufficient Structural Strength and Compatibility with the wast(s) to be transferred, Stored or treated to ensure that it will not collapse, rupture or fail. to wit, there is no documented report to indicate the integrity of tank # 10006 or tank # 27105

Authorized Company Representative* **Authorized State Agent**

I acknowledge receipt of this report only

Name: June Christman
Title: Manager - Environmental Engineering
Signature: June Christman
Date: 2-9-98

Name: Ahmed E. Hegab, Ph.D
Title: Haz. Sub. Scientist
Signature: Ahmed E. Hegab / Ahmed E. Hegab
Date: 2-9-98

SUMMARY OF VIOLATIONS

On **January 27-28, 1998**, the Department of Toxic Substances Control, California Environmental Protection Agency, conducted an inspection at:

Facility name: **Powerine Oil Company.**
Facility address: **12354 Lakeland Road, Santa Fe Spring, California 90245**

EPA ID Number: **CAD 008 383 291**

County name: **Los Angles**

As a result of that inspection, violations of hazardous waste laws, regulations, or requirements were discovered. Below are the list of these violations:

3) Illegal Disposal.

HSC section 25 189 (c)

POC Caused the disposal of hazardous waste to a point not authorized by DTSC POC mixed sand with waste water treatment impoundment sludge F037 and tank bottom (K052) which is RCRA listed hazardous waste, generated from emptying tanks and shipped these waste as offsite road base fed stock.

4) Title 22 Section 66 262.11

POC failed to determine if the waste generated by the facility is hazardous

Authorized Company Representative* **Authorized State Agent**

I acknowledge receipt of this report only

Name: June Christman
Title: Manager-Environmental Engineering
Signature: June Christman
Date: 2-9-98

Name: Ahmed E. Hegab, Ph.D
Title: Haz. Sub. Scientist
Signature: Ahmed E. Hegab
Date: 2/9/98

SUMMARY OF VIOLATIONS

On **January 27-28, 1998**, the Department of Toxic Substances Control, California Environmental Protection Agency, conducted an inspection at:

Facility name: **Powerine Oil Company.**
Facility address: **12354 Lakeland Road, Santa Fe Spring, California 90245**

EPA ID Number: **CAD 008 383 291**

County name: **Los Angles**

As a result of that inspection, violations of hazardous waste laws, regulations, or requirements were discovered. Below are the list of these violations:

5- No use of the manifests

Title 22, Cal. Code Regs. 66262.20(a)

POC offered H.W. for offsite transfer, treatment, storage or disposal without manifests. The facility failed to use manifest. for disposal from tank primary oil / water / solid seperation sludge tanks (F037) and other listed K-waste and shipped as a recycleable materials.

6- Operations

Title 22, Cal. Code Regs., section 66262.34 (a) (3) and possible 66265.31

POC failed to maintain and operate the facility in a manner that minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil which could threaten human health and environment.
Suspected asbestos, friable, stored on the ground, wast water, oily and asphalts on different section of facility's ground.

Authorized Company Representative* **Authorized State Agent**

I acknowledge receipt of this report only.

Name: June Christman
Title: Manager - Env. Eng
Signature: June Christman
Date: 2-9-98

Name: Ahmed E. Hegab, Ph.D
Title: Haz. Sub. Scientist
Signature: Ahmed E. Hegab
Date: 2/9/98

SUMMARY OF VIOLATIONS

On **January 27-28, 1998**, the Department of Toxic Substances Control, California Environmental Protection Agency, conducted an inspection at:

Facility name: **Powerine Oil Company.**
Facility address: **12354 Lakeland Road, Santa Fe Spring, California 90245**

EPA ID Number: **CAD 008 383 291**

County name: **Los Angles**

As a result of that inspection, violations of hazardous waste laws, regulations, or requirements were discovered. Below are the list of these violations:

7- Labelling

Title 22, Cal. Code Regs., sections 66262.34 (a)(2), (f)(1) and (f)(3)

POC failed to label tanks # 10006 and tank # 27105, 55-gallon drums filled with asbestos, 55-gallon drum filled with acid batteries and other containers filled with hazardous waste with

a- Date of accumulation began b- date 90-day storage period began

c- Composition and physical state (flammable... ——— etc).

Authorized Company Representative*
I acknowledge receipt of this report only
Name: June Christman
Title: Manager-Env. Eng.
Signature: June Christman
Date: 2-9-98

Authorized State Agent
Name: Ahmed E. Hegab, Ph.D
Title: Haz. Sub. Scientist
Signature: Ahmed E. Hegab
Date: 2/9/98

Cal/EPA

Department of
Toxic Substances
Control

1011 N. Grandview Avenue
Glendale, CA 91201

October, 11, 1997

Pete Wilson
Governor

James M. Strock
Secretary for
Environmental
Protection

CERTIFIED MAIL

Return Receipt Requested
P 388 574 154

Ms. June Christman
Powerine Oil Company
12345 Lake Road
Santa Fe Springs, CA 90245

Dear Ms. Christman:

COMPLAINT INSPECTION

On August 12, 1997, the California Environmental Protection Agency, Department of Toxic Substances Control (Department), conducted an inspection of Powerine Oil Company located at 12359 Lake Road, Santa Fe Springs, CA 90245.
The enclosed report describes the findings of this inspection, including any violations and any actions that should be taken by the facility to correct the violations.

The following violations which are described in this inspection report (Section VIII), and were listed in the summary of violation left with you at the end of the inspection.

If a violation was found, you are required by section 25185 (c)(3) of the Health and Safety Code to submit a written response to the Department within 60 days describing the corrective actions that you have taken or propose to take to bring your facility into compliance. If you dispute any of the violations, you should explain your disagreement in this written response. The issuance of this letter and report does not preclude the Department from taking administrative, civil, or criminal action as a result of any violations noted in this report.

All pertinent information derived from the inspection is included as an attachment to the report. This report will become a public document; you may request that any trade secret or facility security information be withheld from public disclosure.

Printed on Recycled Paper

If you have any questions regarding this letter, or if you wish to meet with the Department to discuss any questions or concerns you have with the inspection, the reports, the violations, or the required corrective action, please me at (818) 551-2902.

Sincerely,

Ahmed E. Hegab 10/11/97

Ahmed E. Hegab
Hazardous Substances
Scientist
Statewide Compliance Division

Enclosures

Certified Mail
P 388 574 154
Return Receipt Requested

Cal/EPA

Department of
Toxic Substances
Control

1011 N. Grandview Avenue
Glendale, CA 91201

Pete Wilson
Governor

James M. Strock
Secretary for
Environmental
Protection

COMPLAINT INSPECTION REPORT

POWERINE OIL COMPANY

12345 Lake Road
Santa Fe Springs
California 90245

Telephone Number: (562) 944-~~9861~~ 6111

EPA ID NO.: CAD 008 383 291

Inspected By: Ahmed Hegab

Date of Inspection: August 12, 1997

Date of Report: October 10, 1997

Printed on Recycled Paper

POC'S INSPECTION REPORT
OCTOBER, 1997

I. PURPOSE:

To conduct a complaint investigation on an inactive generator of hazardous waste.

Name: Powerine Oil Company
Address: 12359 Lake Road
Santa Fe Springs, CA 90245
Telephone Number: (562) 944-9861

EPA ID NO.: CAD 008 383 291

II. REPRESENTATIVES PRESENT:

Powerine Oil Company, (POC)
June Christman, Environmental Engineering Manager
Ray Huie, Environmental Engineer

Department of Toxic Substances Control (DTSC):
Ahmed E. Hegab, Ph.D , Hazardous Substances Scientist

III. HAZARDOUS WASTE FACILITY STATUS:

According to facility records and Ms. Christman, the facility was a refinery of crude oil and ceased the operation in 1995 due to monetary problem.

IV. HAZARDOUS WASTE ACTIVITY DESCRIPTION:

Ms. Christman stated that POC generates a limited quantities of solid hazardous waste and store it in the hazardous waste storage area for 90- day or less. My walk-through inspection and records review for POC obtain the following information:

1. Asbestos: This waste is generated from demolishing the buildings and stored in 55-gallon drums storage shed of the facility. POC generated about 35 yards of abated asbestos during 1996 and 1997 (Attachment 1).

2. Other solid wastes: Include drill cutting soils, API sludge, used batteries and sand mix rust sludge.

V. HAZARDOUS WASTE FACILITY STATUS:

According to Ms. Christman and DTSC's file, POC has the following hazardous waste status:

1. POC generates a limited quantity of hazardous wastes on-site.
2. May 1994, the Alkylation Neutralization Unit (former ISD) was certified closed as an RCRA hazardous waste.
3. The facility has no longer any permit for storage or treatment of the hazardous waste from DTSC.

VI. NARRATIVE OF OBSERVATIONS/DISCUSSION WITH OPERATOR:

On August 12, 1997, at or about 9:00 a.m. I arrived at POC Refinery. I met with June Christman and informed her that the purpose of my visit and inspection was to conduct a Complaint Investigation. I also asked for her consent to conduct a walk-through inspection, to review records and plans, get copies of documents, take photograph and samples. Ms. Christman granted her Consent to me.

To start the inspection, I asked her to explain to me the facility's operation, hazardous waste activities and management. Ms. Christman mentioned that the facility is inactive and has no permit from DTSC.

After our opening conference, I asked Ms. Christman to tour the facility and I also suggested to her to visit the ninety-day storage areas. Ms. Christman agreed and introduced Ray Huie who was hired by POC two weeks ago. She also stated that he would be the person responsible for the hazardous waste management in the 90-day storage area.

Ray Huie and I started the walk-through inspection, and we visited the hazardous waste storage area. I saw Five 55-gallons drums of solid hazardous waste that were stored for more than 90 -days (Attachment 2 photo. 8). first, I observed two 55-gallon drums that were labeled with hazardous waste sand and sludge with a start accumulation date of 5/1/1996. Second, another drum was labeled with API sludge solid hazardous waste with a start accumulation date of 4/1997. Third, I saw other drum was full of solid hazardous waste, labeled as sand and rust with start accumulation date of 5/15/1996. Forth, another drum was labeled with solid hazardous waste, oily support balls and start accumulation date of 4/1997. I discussed the illegal storage violation (over 90-days) with Mr. Huie who promised me that he would correct it.

Fifth, I also observed another 55-gallon drum that had the hazardous waste solid but was not labeled and marked with the required hazardous waste information (the composition, physical state, name and address of a generator or accumulation start date). I asked Mr. Huie to identify the hazardous waste in the drum and he said that it was a sludge. He also told me that would track all the information for this drum from his office at the site. I discussed with him the violation and the need for POC 's return to compliance (Attachment 2, photo.6).
Sixth, In the middle of the 90-day storage area, I observed about 10 lead acid batteries that were not placed in a container with a crack on one of them (Attachment 2, photo. 4). However, Mr. Huie transferred all the batteries into 55-gallon drum and labeled with the hazardous waste information before the end of the inspection. Mr. Huie also told me that he would send these batteries for a recycle.

Finally, as we were returning to Ms. Christman's office, I also saw an opened 55-gallon drum filled with asbestos without lid (Attachment 2, photo, 4).
Mr. Huie also corrected this violation during the inspection.

I informed Mr. Huie that I need to go to the DTSC's car to bring the sampling equipments to samples from drums in the hazardous waste storage area. Mr. Huie went to the office and I went to the car and brought all the needed equipments for sampling. Then, Mr. Huie and I returned to the hazardous waste storage area. At that time, Mr. Huie introduced Tom Caberelli, POC employee and said that he would assist us in the sampling. We collected a total of 6 samples from three 55-gallon drums. I splitted the samples with Mr. Huie as he requested. Mr. Caberelli collected two samples from ta drum labeled with hazardous waste sludge but without the required hazardous waste information (POC-1-812A &B). We samples also the sand and sludge drum (POC-3-812A &B). Then, we collected two samples from a drum of oily support ballets (POC-2-812A &B). I gave Mr. Huie samples numbers POC-1-812B), POC-2-812B and POC-3-812B. I also kept samples POC-1812A, POC-2-812A and POC-3-812A for DTSC (please see section VII for more details).

After my walk-through inspection and sampling, we returned to Ms. Christman's office for records review. I proceeded with a review of the facility's records and plans. The summary of the records review is below:

a. Manifests, Bills of Lading, LDR's, Exception Reports:

Mr. Huie provided me with only two hazardous waste manifests for 1996, and 1997. The manifests's information showed that

POC manifested only Asbestos during 1996 and 1997 to Dura Therm. and Azuza Land Reclamation disposal facilities. During my review to the above documents I found no violations.

b. Contingency Plan:

I reviewed the POC's Contingency Plan and records I did not observe any violations.

c. Training Plan and Records:

Ms. Christman made available to me the facility's training plan and records. All the training records was in order and POC was in compliance.

VII. Sampling Summary.

On August 12, 1997, at about or 11:10 a.m. we began to collect samples (Attachment 2)[photos 6 thru 8]. Tom Cabarelli, POC employee was the sample collector for POC-1-812A thru POC-3-812A and POC-1-812B thru POC-3-812B. All samples were collected using glass jars (as scoops). Evidence tape was used to seal the jars after all the sample were collected and labeled. I gave Mr. Huie samples POC-1-812B thru POC-3-812B.

I also placed the samples (POC-1-812A thru POC-3-812A) in a cooler in my locked vehicle, transported it to my office, and placed it in a locked refrigerator at the office until I delivered the samples to the Southern California hazardous Material Laboratory (SCHML).

I requested HML to analyze the samples for pH, metal scan and TCLP if necessary. Results is not available at this time. (See Attachment 3)

VIII. <u>VIOLATIONS</u>:

A. Class I Violations:

Illegal Storage:

POC violated Health and Safety Code Section 25201(a), in that on or about August 12, 1997, POC stored five drums of hazardous waste for more than 90 days without permit or authorization from DTSC.

B. Minor Violation:

1. Incomplete Labeling

POC violated Title 22, California Code of Regulations (Cal. Code Regs.), section 66262.34 (f)(2) and (3), in that on or about August 12, 1997, POC did not mark the accumulation start date on one 55-gallon sludge container in the waste storage area and to label it with the composition and physical state of the hazardous waste

2. Open Containers:

POC violated title 22, Cal. Code Regs., Section 66265.173(a), in that on August 12, 1997, POC did not keep containers of hazardous waste Asbestos closed except when adding or removing hazardous waste

IX. CONCLUSIONS:

At or about 1:35 p.m., on August 12, 1997, I held an exit interview with June Christman and Mr. Huie and discussed with them the Summary of Violations (Attachment 4). I explained to them the labeling violation and the illegal storage of hazardous waste for more than 90 days. Ms. Christman then promised to cooperate with the Department in correcting these violations. I also told them that additional violations may be determined during the course of preparing the inspection report.

At or about 1:55 p.m., I left the facility to return to the office.

X. ATTACHMENTS

1. Hazardous waste manifests and tracking- 3pgs.
2. Photos.- 4 pgs.
3. HML Sampling Analysis Request- 1pg.
4. Summary of Violations - 2pgs.

XI. SIGNATURE:

Ahmed. E. Hegab — 10/11/97

Hazardous Substances Scientist — Date

California Department of Toxic Substance Control
Hazardous Materials Laboratory - Southern California
1449 Temple Street, Los Angeles Co. 90026
Telephone 213-580-5795

To : AHMED E. HEGAB

SCL No. : 16789-91

Sampling No. : SEE BELOW

Date of Report : 10/20/97

Sample Location : POWERINE OIL COMPANY

Analytical Procedures Used : Digestion : EPA 3050B. Analysis : EPA 6010B.

Analysis Results:

SCL No.	16789	16790	16791		
Field No.	POC-1-812A	POC-2-812A	POC-3-812A		
Units	MG/KG	MG/KG	MG/KG		
Silver	<50	<50	<50		
Arsenic	<50	110	<50		
Barium	53	140	<50		
Beryllium	<5	<5	<5		
Cadmium	45	<5	41		
Cobalt	<50	90	<50		
Chromium	51	210	60		
Copper	420	<50	110		
Molybdenum	63	8500	<50		
Nickel	98	1900	160		
Lead	120	200	<50		
Antimony	<50	<50	<50		
Selenium	84	36	38		
Thallium	<50	<50	<50		
Vanadium	<50	110	<50		
Zinc	980	320	150		
% Moisture			18		

Analyst's Signature

Noemi Coson — 10/20/97 Date

Supervisor's Signature

Janice Wakakuwa — 10/21/97 Date

CAL-EPA Department of Toxic Substances Control

Hazardous Materials Laboratory - Southern California
1449 Temple Street Los Angeles, CA 90026
Telephone 213-580-5795

QC Summary for Metal Analysis

To AHMED E. HEGAB
Matrix: SOLID
Sample Set SCL Numbers : 16779, 16789-16791, 16806
Date of Analysis: 10/16/97
Duplicate done on : 16791
Spiked Sample No: 16791
Level of Spike: 500 mg/kg. Be,Cd Se 100 mg/kg
Standard Lot Number: SP0497JP100/20
Sample Location: *POWERINE OIL COMPANY*
Analytical Procedures: Digestion: EPA SW 846 Method 3050B
Analysis: SW 846 Method No. 6010B

	Reagent Blank	Standard Recovery	Laboratory Control Sample Expected Range	Found Duplicate A	Found Duplicate B	Relative Percent Difference Reference Material	Relative Percent Difference Sample Duplicates	Spiked Recovery Sample
I.D. of the Reference Material :		RMM1088						
Units	mg/L	%	mg/kg	mg/kg	mg/kg	%	%	%
Silver	<1	103	360-620	457	453	0.88	*	105.93
Arsenic	<1	97.8	1570-2120	1880	1780	5.46	*	114.5
Barium	<1	105	2420-4860	3530	3290	7.04	*	9 **
Beryllium	<0.1	106.5	49-73	56.6	56	1.07	*	109.0
Cadmium	<0.1	106	402-526	469	453	3.47	-14.51	110.4
Cobalt	<1	104	3390-4010	3760	3710	1.34	*	100.8
Chromium	<1	104	2110-2620	2320	2310	0.43	-9.17	105.2
Copper	<1	104	2100-2590	2450	2420	1.23	3.51	113.0
Molybdenum	<1	102	2890-3600	3280	3250	0.92	*	104.4
Nickel	<1	103	1710-2010	1850	1860	-0.54	-11.32	96.4
Lead	<1	107	870-1110	1050	1070	-1.89	*	111.0
Antimony	<1	106	280-490	456	446	2.22	*	114.3
Selenium	<0.2	95	386-610	391	445	-12.92	*	38.4**
Thallium	<1	105	713-1000	835	895	-6.94	*	103.2
Vanadium	<1	102	3200-3740	3580	3490	2.55	*	103.24
Zinc	<1	108	2670-3280	2980	2960	0.67	-20.74	117.7
Acceptable Range		80-100%				<20%	<20%	75%-125%

* This element was not found in the sample at levels higher than the detectable level.
** The out of range spike recoveries of Barium and Selenium might be due to matrix interference.

Analyst's Signature
Noemi Coson

Supervisor's Signature
Janice Wakakuwa

ATTACHMENT #1

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD008329117 — Manifest Document No.
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
POWERINE
P.O. BOX 2102
SANTA FE SPRINGS, CA 90670
SITE: POWERINE
12354 LAKELAND RD.
SANTA FE SPRINGS, CA.
4. Generator's Phone (562) 944-6111

State Manifest Document No.
State Generator's ID

5. Transporter 1 Company Name
BDC*FALCON
SPECIAL WASTE SERVICES
6. US EPA ID Number CAR000017657

State Transporter's ID
Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number

State Transporter's ID
Transporter's Phone

9. Designated Facility Name and Site Address
AZUSA LAND RECLAMATION
1201 W. GLADSTONE
AZUSA, CA 91702
10. US EPA ID Number CAD009007626

State Facility's ID
Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste Number
a. R.Q. ASBESTOS, 9, NA 9212, PGIII (NAERG#171)	001	CM	00020	Y	CA/Other
b.					CA/Other
c.					CA/Other
d.					CA/Other

Additional Descriptions for Materials Listed Above
FRIABLE ASBESTOS CONTAINING WASTE

Handling Codes for Wastes Listed Above
a.
b.

15. Special Handling Instructions and Additional Information
24 HRS. EMERGENCY 1-800-535-5053.
BDC*FALCON 766 SOUTH AYON AVE. AZUSA, CA 91702
EPA REGION IX 75 HAWTHORNE ST. SAN FRANCISCO, CA. 94105 CLEVELAND
ASBESTOS REMOVAL REQUIREMENT 40CFR61 (BAGGED SEALED & LABELED)

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: K Matt Wilson — Signature — Month 04 Day 24 Year 97

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ED Guerrero — Signature: Ed Guerrero — Month 04 Day 24 Year 97

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

DO NOT WRITE BELOW THIS LINE.

Yellow: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS. (Generators who submit hazardous waste for transport out-of-state, produce completed copy of this copy and send to DTSC within 30 days.)

DTSC-8022A (1/95)
EPA 8700—22

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

GENERATOR

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of Page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAD008383291
Manifest Document No.: 15171
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
POWERINE
P.O. BOX 2108
SANTA FE SPRINGS, CA 90670
SITE: POWERINE
12354 LAKELAND RD.
SANTA FE SPRINGS, CA.

4. Generator's Phone (562) 944-6111

5. Transporter 1 Company Name
BDC*FALCON
SPECIAL WASTE SERVICES

6. US EPA ID Number: CAR000017657

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
AZUSA LAND RECLAMATION
1201 W. GLADSTONE
AZUSA, CA 91702

10. US EPA ID Number: CAD009007626

State Manifest Document Number: 95916171
State Generator's ID
State Transporter's ID
Transporter's Phone: (818) 969-[illegible]
State Transporter's ID
Transporter's Phone
State Facility's ID
Facility's Phone: (818) [illegible]

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste Number
a. R.A. ASBESTOS, 9, NA 2212, PGIII (NAERG#171)	001	CM	00020	Y	State 151 EPA/Other
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
FRIABLE ASBESTOS CONTAINING WASTE
Box 165

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
24 HRS. EMERGENCY 1-800-535-5053
BDC*FALCON 766 SOUTH AYON AVE. AZUSA, CA 91702
EPA REGION IX 75 HAWTHORNE ST. SAN FRANCISCO, CA. 94105 CLEVELAND
ASBESTOS REMOVAL REQUIREMENT 40CFR61 (BAGGED SEALED & LABELED)

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	Signature	Month	Day	Year
[illegible]	[illegible]	04	24	97

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
ED Guerrero	[illegible]	04	25	97

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

DO NOT WRITE BELOW THIS LINE.

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

GENERATOR

TRANSPORTER

FACILITY

DTSC-8022A (1/95)
EPA 8700—22

Yellow: GENERATOR RETAINS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-94)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAT 080012091 | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
POLYMINE [illegible]
[illegible] 90670

Manifest Document Number 328929

4. Generator's Phone ( ) 310 944 6111

State Generator's ID

5. Transporter 1 Company Name JOHN THOMAS TRUCKING | 6. US EPA ID Number
18851 Stewart St. Huntington Beach | CAD061645036

State Transporter's ID

Transporter's Phone

7. Transporter 2 Company Name CA 92648 | 8. US EPA ID Number

State Transporter's ID

Transporter's Phone

9. Designated Facility Name and Site Address
WHITE THERM
2700 AVENUE [illegible]
SAN LEAN, TEXAS

10. US EPA ID Number
~~TXD~~
~~TX 810577~~
TXD981053770

State Facility's ID

Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	State Number
a. WHITE THERM HAZARDOUS WASTE NOS CRUDE NAPHTHALENE, KOOS, KOOS	001	CM	15 YARD	CY	
b. GROSS WT 52,840					
c. 7 TONS HeT					
d.					

Additional Descriptions for Materials Listed Above

Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REFINERY ONLY [illegible] HIS [illegible]
AND [illegible] TO [illegible] CHEMICALS

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of the 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 federal, state and international laws.

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: WEDDOME K MERCER | Signature: [illegible] | Month 07 Day 09 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: TOM TELFER | Signature: Tom Telfer | Month 07 Day 09 Year 96

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

DO NOT WRITE BELOW THIS LINE.

GENERATOR

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

928929984

DTSC 8022A (7/92)
EPA 8700-22

Yellow: GENERATOR RETAINS

ATTACHMENT 3

State of California-California Environmental Protection Agency

OCT 2 2 1997
Department of Toxic Substances Control
Hazardous Materials Laboratory

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

1. Authorization Number: SCM-338

HML No. To

2. Page of

3. Requester: Ahmed. E. Hegab
Address (To Receive Results):

4. Phone (8) 667 -2902

5. Priority Level: 1 2 3
a. Authorized by

6. Date Sampled 8/12/97

7. Time Sampled ~~1230~~ 1230 Hours

8. Codes (fill in all applicable codes)
a. STC 3030
b. Region 03
c. INDEX 6310
d. PCA 37322
e. MPC 8000
f. SITE 3001 21/33
g. County 19

9. Activity: [X] SEB [ ] SMB [ ] FPB [ ] FMB [ ] HQ [ ] OTHER

10. SAMPLING LOCATION
a. EPA ID No. CAD008383291
b. Site Powerine Oil Company
c. Address 12359 Lake Road Santa fee Spring Ca. 90245
Number Street City Zip

11. SAMPLES

WP

a. ID	b. Collector's No.	c. Lab No.	d. Sample Type	e. Container Type	f. Container Size	g. Field Information
A	POC-1-812 A	16789	Sludge	Glass	8 oz	Sludge from 55-gallon-drum
B	POC-2-812 A	16790	unknown	Glass	8 oz	black solid absorbed mat
C	POC-3-812A	16791	Soil	Glass	8 oz	Soil from clean up.
D						
E						
F						
G						
H						

FIELD

12. ANALYSIS REQUESTED

a. [X] pH for all above
b. [X] Metal Scan for all above
c. [ ] Metals (Spec)
d. [ ] W.E.T.
e. [ ] VOA-8010
f. [ ] VOA-8020
g. [ ] VOA-H/S
h. [ ] VOA-8240
i. [ ] VOA-8260
j. [ ] SVO-8270
k. [ ] Diesel/ Gasoline
l. [ ] Flash Point
m. [ ] C1-Pesticides
n. [ ] OP-Pesticides
o. [ ]
p. [ ]
q. [ ]

13. SPECIAL REMARKS: Please do TCLP if necessary Thanks A-H

14. SUPPLEMENTAL REQUESTS [ ] [ ] [ ] [ ]
Initials
Date

15. CHAIN OF CUSTODY

	Signature	Name/Title	Inclusive Dates
a.	Ahmed. E. Heg	Ahmed. E. Hegab	8/12/97 to 9/7/97
b.	Janice Wakakuwa	Janice Wakakuwa PHC III	9/7/97 / /
c.			/ / - / /
d.			/ / - / /

16. LAB REMARKS:

LAB

DEC 1 1 1997

State of California-California Environmental Protection Agency

Department of Toxic Substances Control
Hazardous Materials Laboratory

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

1. Authorization Number: SCM3388

HML No.
To

2. Page of

3. Requester: Ahmed. E. Hegab
Address (To Receive Results):

4. Phone (8) 667 -2902

5. Priority Level: 1 2 3
a. Authorized by

6. Date Sampled 8/12/97

7. Time Sampled ~~12:30~~ 1230 Hours

8. Codes (fill in all applicable codes)
a. STC 3030
b. Region 03
c. INDEX 6310
d. PCA 37322
e. MPC 8000
f. SITE 3001211/33
g. County 19

9. Activity: [X] SEB [ ] SMB [ ] FPB [ ] FMB [ ] HQ [ ] OTHER

10. SAMPLING LOCATION
a. EPA ID No. CAD008383291
b. Site Powerine Oil Company
c. Address ~~12357~~ 12345 Lake Road Santa fer Spring Ca. 90245
Number Street City Zip

11. SAMPLES

a. ID	b. Collector's No.	c. Lab No.	d. Sample Type	e. Container Type	f. Container Size	g. Field Information
A	POC-1-812 A	~~16789~~	Sludge	Glass	8 oz	Sludge from 55-gallon-dr
B	POC-2-812 A	16790	unknown	Glass	8 oz	black Solid absorbed md
C	POC-3-812A	16791	Soil	Glass	8 oz	Soil from clean up.
D						
E						
F						
G						
H						

FIELD

12. ANALYSIS REQUESTED

a. [X] pH for all above
b. [X] Metal Scan for all above
c. [ ] Metals (Spec)
d. [ ] W.E.T.
e. [ ] VOA-8010
f. [ ] VOA-8020
g. [ ] VOA-H/S
h. [ ] VOA-8240
i. [ ] VOA-8260
j. [ ] SVO-8270
k. [ ] Diesel/ Gasoline
l. [ ] Flash Point
m. [ ] C1-Pesticides
n. [ ] OP-Pesticides
o. [ ]
p. [ ]
q. [ ]

13. SPECIAL REMARKS: Please do TCLP if necessary Thanks A-H

14. SUPPLEMENTAL REQUESTS [ ] [ ] [ ] [ ]
Initials
Date

15. CHAIN OF CUSTODY

	Signature	Name/Title	Inclusive Dates
a.	Ahmed. E. Heg	Ahmed. E. Hegab	8/12/97 to 9/7/97
b.	Janice Wakakuwa	Janice Wakakuwa PHII	9/7/97 / /
c.			/ / - / /
d.			/ / - / /

16. LAB REMARKS:

Hazardous Mate[illegible]ls Laboratory - Southern [illegible]lifornia
1449 Temple Street, Los Angeles Ca. 90026
Telephone 213-580-5795

To : Ahmed E Hegab

SCL No. :16789-16791

[illegible]pling Nos. : See Below

Date of Report :11/26/97

Sample Location : Powerine Oil Company
12345 ~~12359~~ Lake Road Santa fe Springs,Ca.90245

Analytical Procedures Used:Digestion:WET (Title-22) Analysis:EPA 6010B,7130 and 7520

A M E N D E D

Analysis Results:

SCL No.	16790	16791
Field No.	POC-2-812A	POC-3-812A
Units	Mg/L	Mg/L
Arsenic	2.3	<1
Barium	1.3	<1
Cobalt	6.3	2.2
Chromium	<1	2.4
Molybdenum	110	<1
Nickel	74	9.0
Lead	3.5	2.3
Vanadium	2.4	<1
Zinc	6.2	57

Note:The WET analysis was needed on 16790 & 16791 only.

Analyst's Signature

Prem Hira — 11/26/97 Date

Supervisor's Signature

Janice Wakakuwa by [illegible] — 11/26/97 Date

CAL-EPA Department of Toxic Substances Control

Hazardous Materials Laboratory - Southern California
1449 Temple Street Los Angeles, CA 90026
Telephone 213-580-5795

To Ahmed E Hegab
Sample Set SCL Numbers : 16789-16791
Matrix: Solids& Oils
Date of Analysis 11/18&19/97
Duplicate done on : 16790
Sample Location: Powerine Oil Company
Analytical Procedures: **Extraction:** W.E.T. (Title 22 66261.30 Extraction Test.) STLC
Analysis: SW 846 Method No 6010B,7130,7520

	Reagent Blank	Expected Range	Found Bottle #1	Found Bottle #2	Relative Percent Difference Reference Material	Relative Percent Difference Sample Duplicate
I.D. of the Reference Material : JP030493. TCLP						
Units	mg/L	mg/L	mg/L	mg/L	%	%
Silver	<1	<1	<1	<1	#VALUE!	*
Arsenic	<1	30 - 35	42	39	7.41	<1
Barium	<1	97 - 114	79	73	7.89	<1
Beryllium	<0.1	2.2 - 4.4	2.8	2.6	7.41	*
Cadmium	<0.1	5.1 - 6.7	6.7	6.8	-1.48	*
Cobalt	<1	58 - 75	55	51	7.55	16
Chromium	<1	55 - 67	50	46	8.33	*
Copper	<1	13 - 28	26	23	12.24	*
Molybdenum	<1	50 - 75	61	56	8.55	10
Nickel	<1	19 - 27	26	25	3.92	1.2
Lead	<1	51 - 83	56	51	9.35	<1
Antimony	<1	18 -23	19	17	11.11	*
Selenium	<0.2	15 - 17	20	18	10.53	*
Thallium	<1	16 -18	15	14	6.90	*
Vanadium	<1	55 - 79	64	58	9.84	18
Zinc	<1	82 - 91	81	75	7.69	<1
Acceptable Range			20%		20%	20%

* This element was not found in the sample at levels higher than the detectable level.

Analyst's Signature
PSH 11/21/97
Prem S Hira

Supervisor's Signature
Janice Wakakuwa

QC Summary for WET Extraction Analysis]

ATTACHMENT #4

SUMMARY OF VIOLATIONS

Facility Name: Powerini Oil Company Date: 8-12-97

SECTION II: OTHER VIOLATIONS

List of violations and compliance actions not included in Section I: Minor Violations

1- No labelling

POC violated title 22 Cal. Code of Regulation, Section 66262.34(a) in that on a about Aug. 12, 1997, POC failed to label a 55-gallon drum of sludge with the composition of hazardous waste, physical state, name and address of generator of haz. waste as well as start accumulation date.

2- Illegal Storage

POC violated Health and Safety Code Section 25201(a) in that on a about August 12, 1997, POC stored ~~approximately~~ Eight drums of hazardous waste for over 90 days, without permit or authorization from DTSC. The start accumulation date (April – May 1, 97) were observed on Eight drums.

Authorized Company Representative*

Name June Christman

Title Environmental Eng. Manager

Signature June Christman

Date 8-12-97

Authorized State Agent

Name Ahmed E. Hegab, Ph.D

Title Hazardous Sub. Scientist

Signature Ahmed E. Hegab

Date 8-12-97

SUMMARY OF VIOLATIONS

Facility Name: Powerine Oil Company Date: 8-12-1997
EPA # CAD000838291

SECTION I: MINOR VIOLATIONS/NOTICE TO COMPLY

Within five working days of achieving compliance, you are required to sign the certification below, and return it to DTSC at the above address.

Failure to correct the violations and certify compliance within the time provided may result in the department taking additional enforcement action for these violations.

1- Open Containers / Sec 66265.173(a) Cal. Code of Reg. title 22

a-Powerine Oil Company (POC) failed to keep Container of hazardous wast closed except when adding or removing of hazardous waste. A drum of 55-gallon filled with the hazardous waste Asbestos was left open with no lid at the time was no waste added or removed.

POC Corrected the above violation before the end of this inspection

b- 66265.173 / title 22, Cal. Code of Reg.

POC failed to keep hazardous waste in closed Containers except adding or removing of the waste. The Cracked lead acid and auto batteries were not in closed Containers

POC Corrected the above minor violation before the end of the inspection

I certify under penalty of law that the above corrective actions have been taken and the violations have been corrected. I am aware that these are significant penalties for submitting false information.

Signature: Jim Christmas Date: 8-12-97
Title: Env. Eng. Manager