BEFORE THE
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: INTERNATIONAL PETROLEUM CORPORATION
105 South Alexander Street
Plant City, Florida 33599

RESPONSE TO FDEP
WARNING LETTER #187521
DATED DECEMBER 1, 1997

VOLUME I OF II

Respectfully submitted,

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August 11, 1998

VIA FEDERAL EXPRESS

James M. Dregne
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Division of Waste Management
Southwest District
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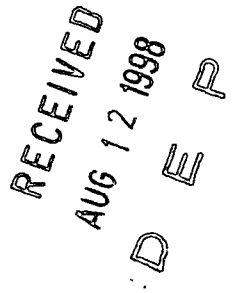

Re: International Petroleum Corporation,
EPA ID # FLD 065680613
(1) Warning Letter #187521, Hillsborough County
(2) FDEP Unauthorized RCRA Policy for Generators of Used Antifreeze
(3) Request for Placement on FDEP Vendors List of Antifreeze Recyclers

Dear Mr. Dregne:

On behalf of International Petroleum Corporation ("IPC"), this letter (1) responds to the Department's Warning Letter of December 1, 1997 and subsequent letter of June 25, 1998, the latter proposing a civil penalty of $54,150.00; (2) objects to the Department's unauthorized attempt to favor one form of antifreeze recycling over another; and (3) requests corrective action, including immediate recission of an illicit RCRA policy together with placement of International Petroleum Corporation on the Department's published "Vendor List of Antifreeze Recyclers."

I.
FDEP WARNING LETTER

The Warning Letter and proposed penalty are based on alleged RCRA violations primarily relating to the processing of small quantities of waste anti-freeze from eight generators and to the disposal of eleven truckloads of used oil tank and railcar bottoms.

For the reasons given below, most of the alleged violations are unsubstantiated and the proposed penalty, unwarranted. We would like to reach an amicable resolution, however, and to that end offer to pay a civil penalty of $1530, with no admission of liability.

Factual Background

As you know, International Petroleum operates a state-of-the-art used oil re-refinery located at 105 South Alexander Street, Plant City, Florida. The refining process utilizes a unique multi-stage distillation system including atmospheric and vacuum distillation columns. Through this process, used oil and contaminated petroleum products, including off-specification virgin fuels, are recycled into on-specification used oil fuel that is equivalent to Virgin No. 5 Fuel Oil. The Virgin No. 5 equivalent oil may also be blended with other virgin fuels to meet the specifications of customers.

The two-stage distillation process is unique. No comparable re-refinery operates in the eastern United States. Other used oil processors use more rudimentary methods, which do little more than extract water and remove solids.

The International Petroleum re-refinery does not knowingly accept off-specification used oil or hazardous waste. Used oil and oil contaminated material are pre-screened prior to pick-up, tested at the plant before they are unloaded, and tested again after processing. The company's drivers are trained and retrained on the importance of screening materials closely in order to ensure that unauthorized wastes are not delivered to the plant.

Water, which is distilled from the used oil, is pretreated in the wastewater treatment unit prior to discharge to the Plant City POTW, where it is recycled for agricultural use.

Light distillates, condensed by the process, are used as the primary fuel for the on-site Born furnace which provides energy for the recycling process. These light hydrocarbons consist mainly of gasoline, kerosene, and diesel fuel with a low flash point, and hydrocarbons resulting from the processing of used antifreeze. This

off-specification used oil is burned incidental to used oil processing in accordance with 40 C.F.R. §279.60(a)(2) and an FDEP approved Air Operating Permit.

The violations alleged in the FDEP Warning Letter, and the June 25, 1998 letter, are addressed below:

A. Failure To Make A Waste Determination of Eleven Truckloads of Used Oil Tank Bottoms

Of the $54,150.00 penalty proposed by the June 25, 1998 FDEP letter, $25,000.00 is attributed to International's alleged failure to make a waste determination on eleven truckloads of tank bottoms in violation of 40 C.F.R. § 262.11.

The Warning Letter alleges that on March 10, 14, and 17, 1997, eleven truckloads of soil, sand and sludge were manifested to Clark Environmental for disposal as non-hazardous waste "using the 1991 profile document." The waste was generated during the cleaning of used oil storage tanks and rail cars.

Contrary to the allegations, however, a waste determination was made in accordance with 40 C.F.R. § 262.11(c)(2). While it was made without TCLP (Toxic Characteristic Leaching Procedure) testing, no such testing was required. A waste determination based on process or generator knowledge is equally valid under federal and state rules.[1]

Under 40 C.F.R. § 262.11, it is the burden of the generator to initially determine whether a waste is hazardous. If the waste is not excluded under 40 C.F.R. § 261.4 or listed under Subpart D of 40 C.F.R. Part 261, the generator must determine whether the waste exhibits a hazardous characteristic identified in Subpart C of 40 C.F.R. Part 261. This may be done by using one of two distinct and equally valid methods.

One method entails "[t]esting the waste according to methods set forth in Subpart C of 40 C.F.R. Part 261;" the other requires

[1] 40 C.F.R. § 262.11(c)(2); § 62-730.160, F.A.C.

"[a]pplying knowledge of the hazard characteristic of the waste in light of the materials or the processes used."[2]

In a preamble to regulations published in 1980, EPA explained what it meant by a waste determination based on process knowledge:

> [a] person may declare his waste hazardous or nonhazardous, but this must be based on his knowledge of the materials and processes involved. A person need not test to determine a waste nonhazardous . . . rather he may review the processes and materials spent in the generation of that waste . . . . The deletion of the retesting requirements that were contained in the proposed regulations does not relieve the generator from his continuing responsibility to know whether his wastes are hazardous. If there is a significant change in the materials, processes, or operations which indicate that the waste has become hazardous, the generator must repeat the determination.[3]

The benefit of relying on general knowledge to determine whether a waste is subject to RCRA Subtitle C is that it avoids the time and expense of testing for each waste stream, both of which can be considerable. EPA recognizes the value of using generator knowledge:

> [I]f a waste does not contain a [toxic constituent under RCRA] a decision that the waste does not exhibit the characteristic can reliably be made without testing . . . . EPA does not expect to undertake testing when it can otherwise be determined with reasonable

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[2] 40 C.F.R. § 262.11(c)(1), (2).

[3] 45 Fed. Reg. 12727 (Feb. 26, 1980).

> certainty whether or not the waste will exhibit a characteristic.[4]

EPA and FDEP rules do not, however, set out any criteria on which a generator may rely in using "knowledge of materials or processes used" to determine whether a waste must be managed as hazardous. According to EPA, all that is required is that a generator's belief that the waste is hazardous or non-hazardous be "based on an objective review of the materials and processes involved in the generation of the waste."[5]

Nor has case law provided any additional standards. In an administrative appeal In The Matter Of Humpko Products[6] the EPA administrative law judge required no definitive documentation of the generator's use of process knowledge:

> [T]he requirement of 40 C.F.R. § 262.11 is simply that a determination be made as to whether the waste is hazardous. One must look elsewhere in the regulations for the waste management requirements which flow from that determination. It is concluded that Humpko determined [its wastes] were hazardous by applying knowledge of the characteristics of the waste as permitted by § 262.11.[7]

Thus no legal authority identifies what documentation is necessary to substantiate waste characterization based on process

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[4] 55 Fed. Reg. 8666, 8762 (March 8, 1990) (replying to comments on proposed rule for the National Contingency Plan under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601-9675, concerning how to determine whether a RCRA hazardous waste was present at a CERCLA site.)

[5] 45 Fed. Reg. 12724, 12727 (Feb. 26, 1980).

[6] No. V-W-84-R-014 (EPA ALJ Mar. 7, 1985).

[7] Id.

used oil TANKS & RAIL CARS

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knowledge. We can only discern from EPA pronouncements that the use of generator knowledge is intended to be an objective, not subjective determination, which must be made in good faith.[8] The sufficiency of the determination must necessarily rest on a case-by-case review.

B. **Sufficiency of IPC's Characterization of Eleven Truckloads of Used Oil Tank Bottoms**

Contrary to the assertion in the Warning Letter, a waste determination in accordance with 40 C.F.R. § 262.11 was made on the eleven truckloads of soil, sand and sludge before shipment to Clark Environmental in March, 1997.

As the generator, IPC determined that the waste was non-hazardous by using knowledge of the materials and the processes involved. The determination and its correctness are based on the following:

1. **The eleven shipments of soil, sand and sludge were generated from the clean-out of used oil tanks and railcars. On June 28, 1993, IPC had voluntarily initiated a 5-month program of extensive laboratory analysis of sump waste and pump filter basket lint. Such sump waste and pump filter basket lint consist of the larger particles which settle from or are filtered out of used oil as it is pumped to the receiving tank. The soil, sand and sludge removed by the tank clean-out is the same essential material, just smaller particles not removed by the sump and filter. Consequently, the extensive analysis of the sump waste and pump filter basket lint provides an objective basis for making a waste determination for the tank bottoms.**

As shown in the "Final Report, Waste Characterization Program," prepared by Edward E. Clark, Engineers-Scientists, Inc. on January 5, 1994 (Attachment 1) the sludge samples were collected and tested using the TCLP

NOT THE SAME AS FILTER LINT

[8] 45 Fed. Reg. 12724, 12727 (Feb. 26, 1980).

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method. FDEP, on one occasion, split samples. A comparison of the analysis by the Spectrum Lab (utilized by Clark, Engineers-Scientists) and the FDEP lab show no significant differences:

> The FDEP results were consistent with previously obtained results; the combined sump waste and pump filter basket lint are classified as non-hazardous, as defined by TCLP criteria.[9]

Although not required, in 1994 and in every year since, IPC has re-collected and re-analyzed the sump waste and pump filter basket lint.[10] The results of this annual re-evaluation have confirmed the non-hazardous characterization. (Attachment 2.) In December of 1997, the sump waste and pump filter basket lint were again sampled and analyzed, and again shown to be non-hazardous. (Attachment 3.)

Finally, in December 1997, IPC tested a sludge sample removed from a railcar clean-out. The lab analysis confirmed that the sludge was not hazardous. (Attachment 4.)

2. International Petroleum Corporation is a subsidiary of World Fuel Services, Inc., which is the parent company of two other used oil recycling facilities: International Petroleum Corp. of Delaware, at 505 South Market Street,

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[9] Final Report, Waste Characterization Program, January 5, 1994, pp. 3, 4.

[10] Such annual re-evaluation is not required. See, Letter from U.S. EPA David Bussard to Mark Clements, dated February 26, 1980: "If the waste proves non-hazardous, as long as the process or type of material . . . doesn't change, further testing should be unnecessary as documented generator knowledge has proven it does not pose a hazard." Also, in promulgating its 1980 RCRA regulations, EPA deleted the proposed requirement for periodic or annual waste retesting and re-evaluation, 45 Fed. Reg. 12724, 12727.

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Wilmington, Delaware; and International Petroleum Corporation, at 14890 Intracoastal Drive, New Orleans, Louisiana.

The Delaware facility, generating similar wastes, had its filtered debris and tank bottoms tested using the TCLP method in October 1995; microseparator debris, was tested in October 1996; and microseparator/filtered debris and tank bottoms were tested in October 1997. In each case, the waste was shown to be non-hazardous. (Attachment 5.)

The Louisiana facility collected used oil tank bottoms and submitted them for waste characterization. Lab analysis in June 1995 confirmed that it was non-hazardous. (Attachment 6.)

3. Over the years, IPC has relied on expert advice from David F. Strahorn. A certified California environmental assessor, Mr. Strahorn specializes in consulting with used oil recycling facilities throughout the nation, and has developed a national reputation in this area. Prior to shipment of tank bottoms in March 1997, he had specifically informed Garry Allen, president of IPC, that industry-wide data, together with data from other World Fuel Services facilities, established that soil, sand and sludge of the kind generated from tank and railcar clean-out had shown to be non-hazardous. He further recommended that with such process knowledge there was no need to submit such waste to TCLP testing. Based on his analysis of industry-wide data, "[u]sed oil tank bottoms never fail TCLP." (Attachment 7.)

Taken as a whole, these documents show that IPC's determination that the tank and railcar bottoms were non-hazardous was based on an "objective review of the materials and processes involved in the generation of the waste,"[11] The determination was made in good faith

[11] 45 Fed. Reg. 12724, 12727 (Feb. 26, 1980).

and undoubtedly accurate. Since no violation of 40 C.F.R. § 262.11 occurred, no penalty is warranted.

II.
TRANSPORT AND PROCESSING OF USED ANTIFREEZE

A. Alleged RCRA Violations

The remainder of the proposed penalty[12] ($29,000.00) is based on alleged RCRA violations relating to the transport, storage, and treatment of used antifreeze from eight generators. The Warning Letter asserts that this particular antifreeze was hazardous under RCRA. Hence, it was not transported as required by 40 C.F.R. § 263.20; and it was stored and treated by IPC without the required hazardous waste permit and notification required by § 403.727(3)(b).

According to the Warning Letter, twenty-one shipments of hazardous waste antifreeze were accepted and processed by IPC between December 12, 1995 and September 1997, as set out below:

#	Generator	Date of Analysis	Laboratory	Contaminant	Results	Pickups
1.	Daytona Linc/ Merc	5/29/97	Progress Env.	Tetrachloro	.891 mg/L	1
2.	Halifax Ford	7/14/97	Progress	Tetrachloro	.714 mg/L	3
3.	Honda, Merritt Island	1/28/97	Enco	Tetrachloro	.700 mg/L	3

6 items SPG
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[12] Except for a $150.00 proposed penalty for alleged violation of 40 C.F.R. § 279.22(c) (failure to label container "used oil"). The container was a 25-gallon keg beneath a filter inspection/draining table. Used oil from the filters was drained to and pumped from the keg as part of the process; it was not a fixed storage unit. The day before the FDEP RCRA inspection an IPC employee had replaced the existing keg, properly labeled, with a new keg for housekeeping purposes. A new "used oil" label was to be attached the next day. Nevertheless, without admitting a violation, IPC is willing to pay the $150.00 penalty to resolve the matter.

4.	Jim's Import Auto	8/1/97	Progress	Lead	10.0 mg/L	2
5.	Mazda Village	12/12/95	Enco	Trichloro Tetrachloro	11.3 mg/L 18.4 mg/L	5
6.	McNamara Pontiac	3/5/97	Progress	Tetrachloro	1.41 mg/L	3
7.	Moody Truck Center	4/25/97	Progress	Tetrachloro	1.24 mg/L	2
8.	Florida Clark Lift	8/17/97	HOWCO	Lead	38.1 mg/L	2

Each of these alleged shipments of hazardous antifreeze are addressed separately in this response:

1. Daytona Linc/Merc - Generator. The Warning Letter alleges that an analysis by Progress Environmental Laboratories dated May 29, 1997 showed that the used antifreeze from this generator exhibited the toxicity characteristic for Tetrachloroethene.

Under RCRA and state rules, a solid waste is a hazardous waste if it exhibits the toxicity characteristic using the Toxicity Characteristic Leaching Procedure ("TCLP"), Test Method 1311.[13] The procedure is specifically defined in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," EPA Publication SW-846.[14] If the extract from a representative sample of the waste contains a contaminant listed in the Table found in § 261.24 at a concentration equal to or greater than the value in the Table, the waste, by definition, exhibits the toxicity characteristic and is hazardous. Importantly, however, "[w]here the waste contains less than 0.5% filterable solids, the waste itself, after filtering, using the methodology outlined in Method 1311 is considered to be extract for the purpose of the section."[15] (e.s.) Conversely, and necessarily,

[13] 40 C.F.R. § 261.24(a).

[14] Id.

[15] Id.

if these specified procedures are not followed the resulting concentration of a contaminant cannot be used to determine whether the waste exhibits the toxicity characteristic.

But that is, nonetheless, what the Warning Letter attempts to do. The Progress Lab analysis and subsequent explanatory letter (Attachment 8) show that the May 29, 1997 analysis indicating a Tetrachloroethene concentration of .891 mg/L is ineffectual for the purpose of determining whether the waste is hazardous under RCRA. Only EPA Method 8010 was used, which measures the total concentrations of a chemical in a medium. The TCLP test specified in § 261.24 was not used. Moreover, the lab analysis does not show that the waste contained less than 0.5% filterable solids. But even if it did, the toxicity characteristic was not exhibited because the waste was not filtered using the methodology set out in § 261.24.

Subsequent communication between IPC and Vince Giampa, Director of the Progress Lab, has confirmed that none of the samples identified in the Warning Letter as analyzed by Progress Lab were filtered using the methodology outlined in Method 1311. According to Mr. Giampo, the results of the "totals" analysis cannot, therefore, be considered the extract for purposes of determining the toxicity characteristic in accordance with 40 C.F.R. § 261.24.

Results vary significantly, depending on the method used. For comparative purposes, on August 6 and 7, 1998, Progress Lab analyzed samples of used antifreeze from two generators using "totals" (unfiltered) and the TCLP test. The amount of Tetrachloroethene detected using the "totals" method was almost 10-fold the amount detected using the TCLP test. (Attachment 9.)

Two additional documents demonstrate that the single shipment of used antifreeze on June 26, 1997 was not hazardous. The generator, in accordance with its duties under 40 C.F.R. § 262.11 certified in writing that the used antifreeze was not a hazardous waste under RCRA; that it did not exhibit a hazardous characteristic as defined in 40 C.F.R. § 261; and that it was classified as non-hazardous in its state of generation. (Attachment 10.) On the manifest which accompanied the shipment the generator also certified that the used

antifreeze had not been mixed with hazardous waste. (Attachment 11.) Furthermore, used antifreeze generated by the same facility was tested using the correct TCLP, EPA Method 1311, on October 10, 1997 and shown to be non-hazardous. (Tetrachloroethene had a concentration of less than .01 mg/L; the TCLP regulatory limit is .7 mg/L.) (Attachment 12.)

Because the shipment of June 26 was not shown to be hazardous waste as defined by RCRA regulations, and FDEP rules, and the generator had made a waste determination and certified that the used antifreeze was non-hazardous, the alleged violations are unsubstantiated.

2. **Halifax Ford Mercury - Generator**. The Warning Letter alleges that a Progress Environmental Laboratory analysis of this generator's used antifreeze dated July 14, 1997 indicated the RCRA toxicity characteristic for Tetrachloroethene (.714 mg/L) and that there were three pickups of hazardous antifreeze. These allegations are unsubstantiated.

The laboratory analysis was for total concentrations, using EPA Method 8010 (Attachment 13); the TCLP test, Method 1311, was not run. The lab analysis does not show that the used antifreeze contained less than 0.5% filterable solids and Progress Lab admits that the samples were not filtered. (Attachments 8, 13.) The generator had also certified, under threat of criminal prosecution, that the antifreeze was non-hazardous. (Attachment 14.) On the manifests which accompanied each of these shipments, the generator certified that the used antifreeze had not been mixed with hazardous waste. (Attachment 15.) A true TCLP test performed on used antifreeze two months later showed concentrations of Tetrachloroethene at less than 0.01 mg/L (Attachment 16.)

3. **Honda, Merritt Island - Generator**. Here, three pickups of hazardous waste antifreeze are alleged based on a single Enco Lab analysis dated January 28, 1997. The analysis indicated total Tetrachloroethene at .700 mg/L. (The TCLP regulatory threshold is .700 mg/L or greater.)

The allegations are unsubstantiated. The value for Tetrachloroethene (at .700 mg/L, the lowest possible exceedance) is undercut by the Quality Control Data which accompanied the analysis. (Attachment 17.) The quality control value for Tetrachloroethene was identified as "exceed[ing] [the] established limit for precision."

Moreover, as discussed later, used antifreeze does not normally exhibit the toxicity characteristic unless it has been improperly mixed with hazardous waste. For each of these shipments, the generator had certified that the antifreeze had not been mixed with hazardous waste. (Attachment 18.)

Finally, there is strong evidence that Honda, Merritt Island was a Conditionally Exempt Small Quantity Generator[16] at the time of the January 15, 1997 pick-up and for the next four months. (Attachments 18, 19.) Such generators, and the small amounts of hazardous waste they generate, are not subject to regulation under 40 C.F.R. Parts 262-266.

4. Jim's Import Auto - Generator. Two pickups of hazardous waste antifreeze are alleged based on a Progress Laboratory analysis dated August 1, 1997. The waste is alleged to have exhibited the toxicity characteristic for lead. (10.0 mg/L was detected; the 40 C.F.R. § 261.4 regulatory threshold is 5.0 mg/L.)

The allegations are unsubstantiated. First, the Progress Lab analysis shows that TCLP Method 1311 was not used. Rather, total lead was run using Method 8010. (Attachment 20.) The analysis does not indicate less than 0.5% filterable solids; and even if it did the "totals" analysis could not be used to determine the toxicity characteristic because the waste was not filtered as required by § 261.24. (Attachment 8, 20.)

This generator had certified under threat of criminal prosecution, that its used antifreeze was non-hazardous (Attachment

[16] A Conditionally Exempt Small Quantity Generator generates less than 100 kg (about 25 gallons) in the particular calendar month. See, 40 C.F.R. § 261.5.

21), and it had signed a manifest for each shipment certifying that the antifreeze had not been mixed with hazardous waste. (Attachment 22.) (Used antifreeze does not ordinarily exhibit a hazardous characteristic unless it is mixed with a hazardous waste.)

Second, and dispositive, is the fact that Jim's Import Auto was at that time a Conditionally Exempt Small Quantity Generator not subject to regulation under 40 C.F.R. Parts 262-266.

Here, the IPC pickup history shows that Jim's Import Auto, although an episodic generator, typically generated less than 25 gallons a month prior to September 4, 1997. (Attachment 23.) Moreover, IPC's generator profile sheet, prepared when the customer account was opened in July 1997, identified the generator as a Conditionally Exempt Small Quantity Generator. (Attachment 21.)

Consistent with Jim's Import Auto's Conditionally Exempt Small Quantity Generator status, it had not been assigned an EPA ID number (required for all generators other than Conditionally Exempt Small Quantity) and was not found on FDEP's list of Small Quantity Generators.

5. **Mazda Village - Generator**. Based on an Enco lab analysis dated December 12, 1995, the Warning Letter asserts that there were five pickups of hazardous waste antifreeze. According to the Letter, the used antifreeze exhibited the toxicity characteristic for Trichloroethene and Tetrachloroethene. The analysis shows that using EPA Method 8010 - TCLP 8010, Trichloroethene was detected at 11.3 mg/L (compared to the § 261.24 regulatory limit of .5 mg/L) and Tetrachloroethene at 18.4 (compared the regulatory limit of .7 mg/L). (Attachment 24.) The analysis does not, on its face, show that the lab analysis – performed over three years ago – used Method 1311; that the used antifreeze contained less than .5% filterable solids; or that – if it did – the waste was analyzed only after filtering using the methodology outlined in Method 1311.[17]

[17] 40 C.F.R. § 261.4(a).

Agree to penalty of $1380.00

Nonetheless, the Enco analysis was marked with the notation "TCE/Tetrachloro hazardous – do not pick-up" by IPC's independent consultant. The IPC driver was unaware of the results and the consultant's instructions and prematurely picked up the used antifreeze on the same day the lab report was issued.

IPC accepts responsibility for this communication failure and is agreeable to paying a penalty of $1380 in settlement of and without admitting the allegations relating to the pick-up of used antifreeze on December 12, 1995. (The amount is calculated as follows: $29,000 divided by 21 shipments = $1380/pick-up.)

The alleged pick-ups of hazardous waste antifreeze on four subsequent dates (March 14, 1996; May 14, 1996; July 24, 1996; and September 19, 1996) are, however, unsubstantiated. In each case, the generator certified that the used antifreeze had not been mixed with hazardous waste so there was no basis to believe that the antifreeze was hazardous. (Attachment 25.) Retesting by Enco of newly generated used antifreeze on December 20, 1996 confirmed that the antifreeze was non-hazardous. (Attachment 26.)

6. **McNamara Pontiac - Generator**. Three pick-ups of hazardous waste antifreeze are alleged based on a Progress Lab analysis of March 5, 1997. The toxicity characteristic for Tetrachloroethene is alleged to have been exhibited. (Attachment 27.) The allegations are unsubstantiated.

As was Progress Lab's habit, the testing method specified by 40 C.F.R. § 261.24(a) was not used. So the waste cannot, as a matter of law, be deemed to have exhibited the toxicity characteristic. Instead of using the method appropriate to the toxicity characteristic, Progress Lab used EPA Method 8010 to run total concentrations, without filtering using Method 1311 and without a determination that the waste contained less than 0.5% filterable solids.

Moreover, the generator certified on February 26, 1997, under penalties of criminal prosecution, that its used antifreeze was non-hazardous under RCRA; that the waste did not exhibit a hazardous

characteristic as defined in 40 C.F.R. 261; and that the waste was classified as non-hazardous in its state of generation. (Attachment 28.) Each of the three shipments was accompanied by a manifest, with the generator certifying that its antifreeze had not been mixed with hazardous waste. (Attachment 29.) Absent such mixture, the antifreeze would not be expected to exhibit the toxicity characteristic. A TCLP test of later-generated used antifreeze, performed by Phosolab on September 30, 1997, confirmed that this generator's used antifreeze is non-hazardous. (Attachment 30.)

7. **Moody Truck Center - Generator**. Two pick-ups of hazardous waste antifreeze are alleged based on a Progress Lab analysis dated April 25, 1997. (Tetrachloroethene was detected at 1.24 mg/L.) The allegations are unfounded because, as previously stated, Progress Lab analysis were run only for "totals" using Method 8010. No filtering in accordance with Method 1311 was done. (Attachments 8, 31.)

The generator also certified, under penalties of criminal prosecution that the used antifreeze was non-hazardous under RCRA. (Attachment 32.) Each shipment was accompanied by a manifest, certifying that the antifreeze had not been mixed with hazardous waste. (Attachment 33.) In the absence of such mixing the used antifreeze would not be expected to exhibit the toxicity characteristic. A subsequent TCLP testing performed in accordance with § 261.24(a) confirmed that the used antifreeze was non-hazardous. (Attachment 34.)

8. **Florida Clark Lift - Generator**. Two pick-ups of hazardous waste antifreeze are alleged based on an analysis dated August 17, 1997 by HOWCO lab. (Lead was detected at 38.1 mg/L.)

The allegations are unsubstantiated. The HOWCO analysis was performed on August 17, 1994, not 1997, as alleged. (Attachment 35.) It appears to have been an analysis for "totals", not a TCLP test in accordance with § 261.24(a). There is no indication that the sample was filtered using Method 1311 or that the waste contained less than 0.5% filterable solids. Thus, the waste, itself, could not be considered the extract in accordance with § 261.24(a).

Moreover, the generator profile sheet completed when Florida Clark Lift became an IPC customer on January 7, 1997, shows that the generator certified, under penalties of criminal prosecution, that the used antifreeze was non-hazardous under RCRA; that it had not been assigned an EPA identification number; and that it was a Conditionally Exempt Small Quantity Generator. (Attachment 36.) Thus, hazardous waste generated by it was not subject to regulation under Parts 262-266.[18] Florida Clark Lift has notified FDEP that it is a Conditionally Exempt Small Quantity Generator and it has not been assigned an EPA ID number – a prerequisite if it was other than a Conditionally Exempt Small Quantity Generator.

Finally, the generator certified on each shipping manifest that its used antifreeze had not been mixed with hazardous waste. (Attachment 37.) Absent such mixing, the antifreeze would not be expected to exhibit the toxicity characteristic.

B. "Totals" Compared to TCLP Regulatory Levels

As mentioned earlier, a toxicity characteristic determination under § 261.24 typically requires application of the TCLP test followed by analysis of the TCLP extract. EPA has recognized, however, that a total waste analysis can be useful as a convenient and low cost screening device.

> If a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run.[19]

Only wastes containing less than 0.5% dry solids do not require extraction. The waste, after filtration as specified in Method 1311,

[18] 40 C.F.R. § 261.5(b).

[19] EPA Office of Solid Waste, Monthly Hotline Report, EPA 540-R-94-005a; NTIS: PB 94-922401.

is defined as the TCLP extract and the concentration in the resulting filtrate can be compared to the regulatory limits of § 261.24.[20] If the waste is not filtered in accordance with Method 1311, it cannot be considered the extract and compared with the regulatory limits of § 261.4.

Without proper filtration, a "totals" analysis can provide "worst case" concentrations of chemicals listed on the Table of §261.24. It is useful because if the concentrations are low enough one can be certain that the waste would not "fail" a TCLP test. In contrast, high "totals" cannot be used to establish that the waste would "fail" a TCLP test. The plain wording of § 261.24 would not allow it; and a "totals" analysis can result in a concentration more than 10-fold the concentration from a TCLP test. (Attachment 9.)

C. Used Antifreeze Is Typically Non-Hazardous

When a generator determines that its used antifreeze is non-hazardous under RCRA (using process knowledge), such a determination is consistent with the results of numerous governmental and industry studies and with EPA's proposed national policy statement on the subject.

On April 23, 1998, EPA published in the Federal Register a "Request for Comments on Proposed Statement of Policy Regarding Spent Antifreeze." The notice provided:

> EPA is currently considering issuing a statement announcing that data available to the Agency indicates that spent antifreeze rarely fails the Toxicity Characteristic Leaching Procedure (TCLP) test. TCLP is used for determining whether or not a secondary material that is a solid waste is subject to regulation as a hazardous waste by virtue of exhibiting a "toxicity characteristic" (TC). The purpose of such a statement and any supporting information

[20] Id.

> would be to assist generators in determining whether their spent antifreeze exhibits a hazardous waste characteristic. In today's notice, EPA is providing the data and qualitative information that we would use to support such a finding.[21]

EPA explained that such a position statement would assist a generator in making waste determinations required by § 262.11(c) "as to whether the spent antifreeze it generates exhibits a hazardous waste characteristic."[22] Noting that since a generator may either test the waste or rely on knowledge of the waste in light of the materials and processes used, "EPA's statement on this issue would assist the generators by directing them to a compilation of data which they would rely on or give weight to when making their hazardous waste determination."[23]

EPA cited numerous studies and compilations of raw data on which it based its determination. One antifreeze study was conducted by Dames and Moore for the New Jersey Automobile Dealers Association. The study concluded that its analysis of spent antifreeze collected from auto dealers indicates that antifreeze "lacks the characteristic of a hazardous waste."[24] (Attachment 38.)

In its determination, EPA also relied on a request for regulatory clarification dated October 14, 1990 from Lynn L. Bergeson on behalf of Union Carbide Corporation and Ecogard, Inc.[25] This submittal included a Pilot Study analyzing spent antifreeze collected from 96 auto service centers. The study limited characterization pursuant to § 262.11 to TCLP lead levels because – based on generator

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[21] 63 Fed. Reg. 20187 (April 23, 1998).

[22] Id. at 20188.

[23] Id.

[24] Id.

[25] Id., RCRA Document No. S0025.

knowledge – there were no chlorinated solvents in the antifreeze. The TCLP testing detected no concentrations meeting or exceeding the 5.0 mg/L regulatory limit for lead set out in § 261.24. (Attachment 39.)

Also included in the docket, and relied on by EPA, was a position statement by the State of New Jersey Department of Environmental Protection on the management of used antifreeze. (Attachment 40.) The position statement, dated July 20, 1994, was based on a study performed by the New Jersey Automobile Dealers Association. The used antifreeze evaluated in the study was analyzed for various parameters including TCLP metals, TCLP volatiles, corrosivity and ignitability. "When samples were taken from antifreeze which was not cross contaminated the study revealed that no characteristics exceeded regulatory hazardous waste levels."[26]

EPA also relied on information submitted by John J. Rigby on behalf of the Antifreeze Coalition.[27] These documents, including memoranda and analysis by EPA and the Federal Aviation Administration, show that ethylene glycol[28] presents little environmental concern and that widespread changes in automobile radiators (to plastic and aluminum tanks) had significantly decreased the possibility of lead contamination. (Attachment 41.)

III.
USED ANTIFREEZE SHOULD BE REGULATED AS USED OIL

The management of used oil in Florida is governed by 40 C.F.R. Part 279 and Chapters 62-701 and 62-710, Florida Administrative Code. "Used oil" is defined as:

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[26] Id., p. 1.

[27] Id., RCRA Docket No. S0014, S0019.

[28] Typical antifreeze purchased over the counter contains 80-95% ethylene glycol. (Attachment 38, Waste Antifreeze Characterization Study, p. 1, Washington State Department of Ecology.)

> Any oil that has been refined from crude oil, or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities.[29]

FDEP recently declared that "[a]ny material which meets this definition must be managed as used oil."[30] (e.s.)

In interpreting the virtually identical federal and state definitions of "used oil," FDEP has determined that:

> [u]sed oil includes synthetic oils, transmission and brake fluids, lubricating greases, etc. Used oil does not include products derived from vegetable or animal fat.[31]

EPA and FDEP interpret the definition of used oil as based on three criteria: origin, use, and contamination.

> First, the used oil must be derived from crude oil or synthetic oil (i.e., derived from coal, shale, or polymers). Examples of crude-oil derived oils or synthetic oils are motor oil, mineral oil, laminating surface agents and metalworking oils. The origin-based definition would not include animal or vegetable oils. Second, the oil must have been used as a lubricant, coolant, heat (non-contact) transfer fluid, hydraulic fluid, or for a similar use. Lubricants include, but are not limited to, used motor oil, metalworking lubricants, and emulsions. An example of a hydraulic fluid is

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[29] 40 C.F.R. § 279.1; also see § 62-701.200(117), F.A.C.

[30] FDEP "Florida Fact Sheet On The Management of Used Oil and Used Oil Filters," dated June 2, 1997.

[31] Id.

> transmission fluid. Heat transfer fluids can be materials such as coolants, heating media, refrigeration oils, and electrical insulation oils. Authorized states or regions determine what is considered a "similar use" on a site-specific basis according to whether the material is used and managed in a manner consistent with Part 279 (e.g., used as a buoyant). Third, the used oil must be contaminated by physical (e.g., high water content) or chemical (e.g., lead, halogens, or other hazardous constituents) impurities as a result of use.[32]

Although EPA does not yet consider used antifreeze as falling within the definition of used oil, it provides no explanation for its failure to do so. Indeed, EPA acknowledges that "it is possible for antifreeze to meet all three criteria for used oil."[33] (e.s.)

It is more than "possible"; it is compelled by the broad wording of the definition. At IPC's request, David Strahorn of Professional Resource Management – an expert on management and processing of used oil – measured antifreeze against the three EPA criteria. He determined that used antifreeze qualifies, concluding that "used antifreeze meets all of EPA's criteria for the definition of used oil:"

> **1. Used Oil must be derived from crude oil or synthetic oil.**
>
> Antifreeze is ethylene glycol or propylene glycol and additives. Ethylene glycol is produced from ethylene which is produced from naphtha which is produced from crude oil. Used antifreeze meets this test.

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[32] Monthly RCRA Hotline Report, April 1997, EPA 530R-97-005d.

[33] Id.

2. Used Oil must have been used as a lubricant, coolant, heat transfer fluid, hydraulic fluid, or for a similar use.

Used antifreeze was used as an engine coolant and as a heat transfer fluid. Used antifreeze meets this second test.

3. Used Oil must be contaminated by physical or chemical impurities as a result of use.

Used antifreeze was contaminated by rust, wear metals, and degraded additives as a result of its use. Used antifreeze meets this last test.

(Attachment 42.)

Mr. Strahorn also noted that:

> [E]thylene is chemically related to many materials that are generally considered Used Oil. For example, brake fluid is composed primarily of triethylene glycol (a byproduct of making ethylene glycol) and ethylene glycol mono butyl ether (made from ethylene glycol and butyl alcohol). Also, ethylene glycol is a primary starting material in the manufacture of synthetic oils like polyethelene glycols which are used in specialty lubricants.

(Attachment 42.)

This conclusion is supported by EPA's public justification for including synthetic oils in the definition of "used oil."[34] EPA compared synthetic oils (not petroleum-based), and oils that are petroleum based but are water soluble, such as metalworking oils/fluids, and those that are polymer-type, concluding that "all

[34] 57 Fed. Reg. 41573, 41575 (Sept. 10, 1992).

used oils, including synthetic oils, should be regulated in a similar fashion . . . ."[35]

EPA declined to list specific types of materials in the used oil definition, opting instead for a definition which it believed:

> covers the majority of oils used as lubricants, coolants (non-contact heat transfer fluids), emulsions, and for similar uses and are likely to get contaminated through use.[36]

The Department has a legal obligation to give effect to the stated purpose and broad language of its "used oil" definition and to regulate used antifreeze as falling within it. Used oil and antifreeze come from the same source: motor vehicles. The comprehensive Used Oil Management Standards codified in 40 C.F.R. Part 279 have proven workable and adequate to protect human health and the environment. These standards would apply whether or not the used antifreeze exhibited a hazardous characteristic.[37] It would be presumed that the used antifreeze is to be recycled unless the handler disposes of it or transports it for disposal.[38]

If it were mixed with a listed hazardous waste the mixture would be regulated as hazardous waste under Subtitle C.[39] The "rebuttable presumption" would also apply.[40] If the antifreeze contained more than 1000 parts per million of total halogens, it would be presumed to have been mixed with a regulated halogenated hazardous waste and

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35 Id. at 41574.

36 Id. at 41574.

37 See, 40 C.F.R. § 279.10(a).

38 40 C.F.R. § 279.10.

39 40 C.F.R. § 279.10(b)(1).

40 40 C.F.R. § 279.10(b)(1)(ii).

therefore be subject to regulation as hazardous waste under Subtitle C.

Since used antifreeze falls squarely within the definition of used oil the regulatory standards found in 40 C.F.R. Part 279 and state analogues, not RCRA Subtitle C, apply. The allegations of the Warning Letter with regard to the pick-up of used antifreeze from eight generators would regulate used antifreeze by the wrong standards.

IV.
INTERNATIONAL PETROLEUM CORPORATION RECYCLES USED ANTIFREEZE

The International Petroleum re-refinery is a legitimate recycler of used antifreeze. Just as used oil is processed into fuel and recycled by burning for energy recovery,[41] so too is used antifreeze.

Used antifreeze, i.e., ethylene glycol has a bonafide, legitimate and beneficial use as fuel. It has a heating value of 8200 Btu/lb,[42] well above the 5000 Btu/lb criterion used by EPA to determine whether burning activities constitute legitimate recycling.[43]

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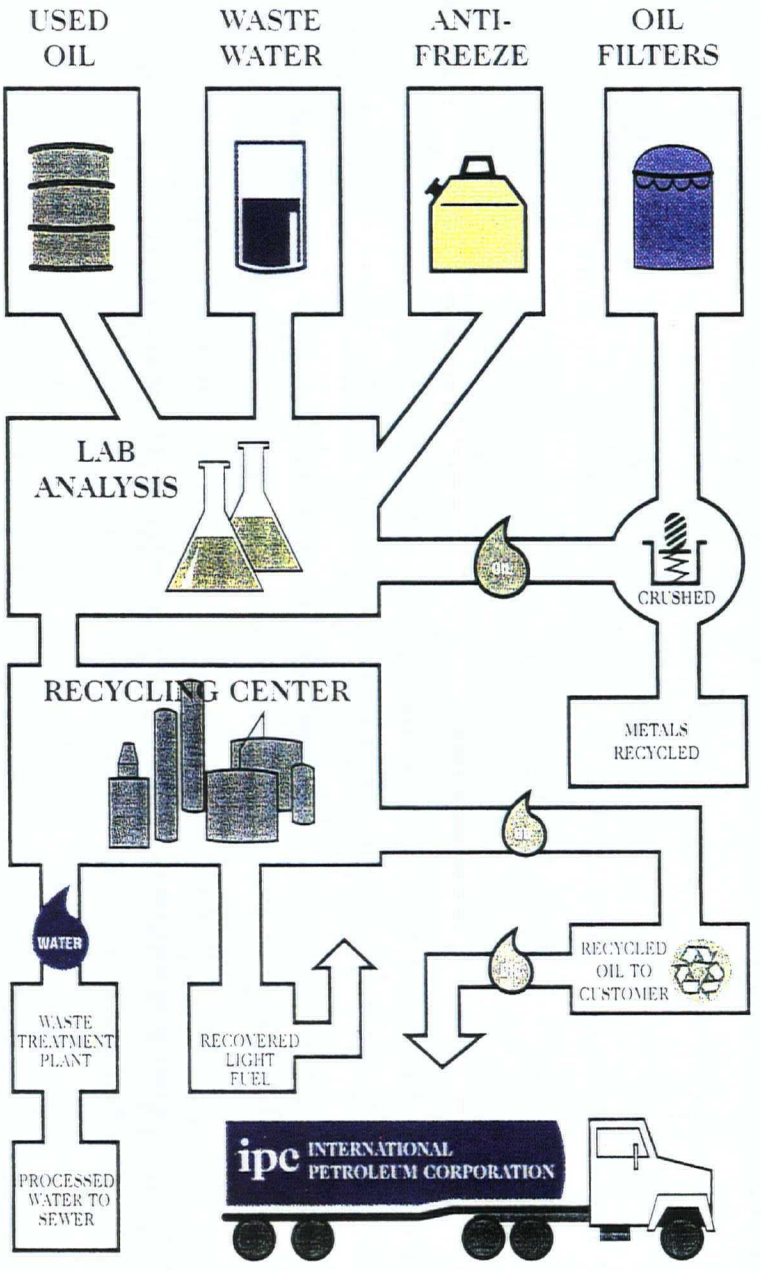
[41] 40 C.F.R. § 279.11; RCRA § 1004, (defining "recycled oil" as including used oil being re-refined into fuel); 40 C.F.R. § 261.6(a)(4) (recycled used oil includes used oil which is burned for energy recovery); § 62-710.210(1), F.A.C., incorporating § 62-701.200(94) ("recycling" means a process by which materials are processed or reused or returned to use in the form of raw materials or products; § 62-710.210(2), F.A.C., incorporating the definitions of 40 C.F.R. Part 279.

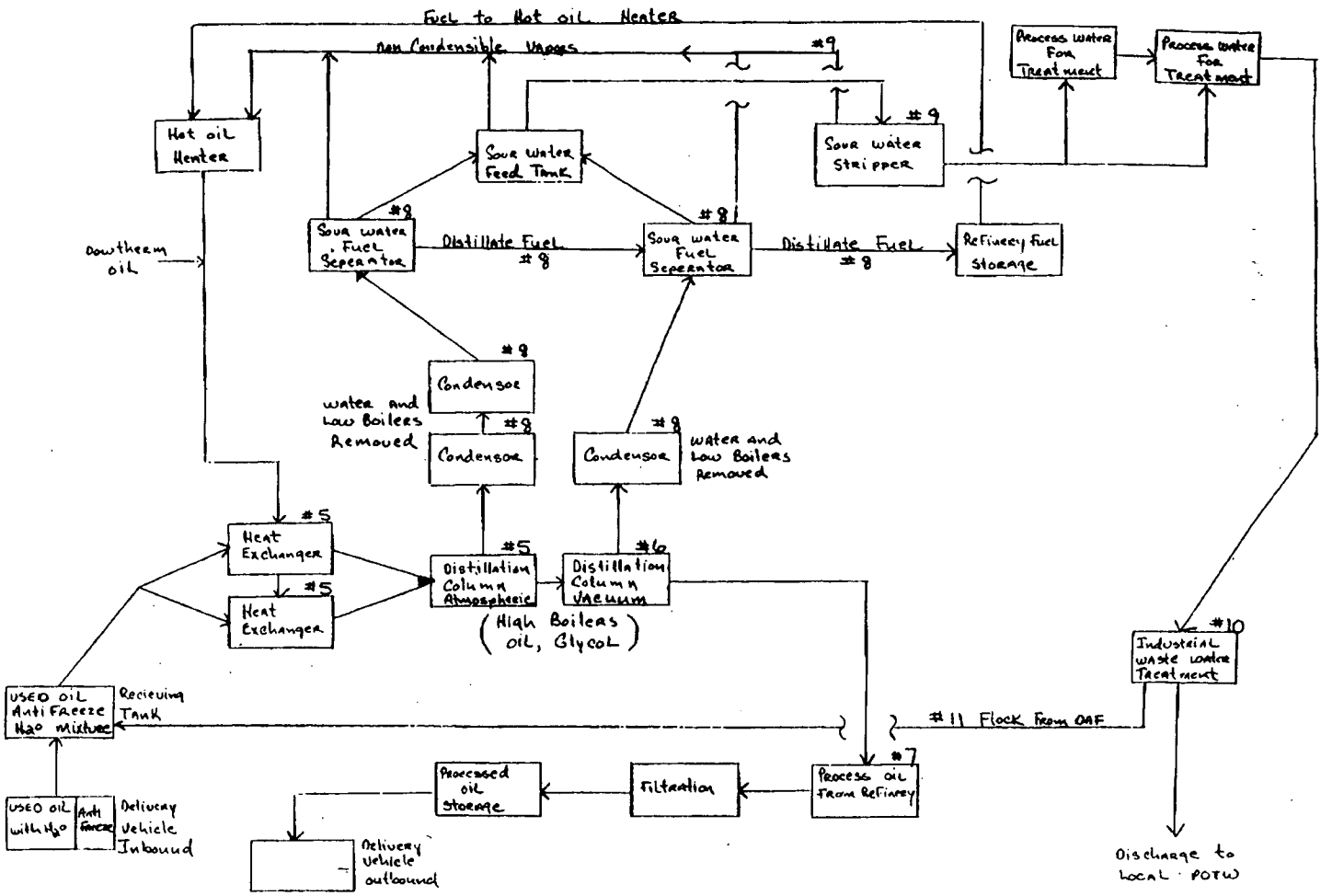
[42] Attachment 42, p. 1.

[43] EPA Recycling Policy, 48 Fed. Reg. 11157, 11159 (March 16, 1983).

A general flow chart for the International Petroleum refinery may be depicted as follows:



A more detailed block diagram of the process is set out below:



As shown above, antifreeze (glycol) and "used oil" are pumped to a feed tank and are the feedstock for the distillation process. Antifreeze has a boiling point of approximately 198 degrees C (around 387 degrees F). The typical bottoms temperature of the atmospheric distillation column is kept below 250 degrees F. The used oil, antifreeze, water, and "light ends" mixture enters the atmospheric column where the water turns into steam and the "light ends or low boilers" turn into vapor. Those liquids with a boiling point above 250 degrees F are left as a liquid and are pumped to the vacuum column where when the vacuum is applied additional "low boilers" and water are removed. The remaining oil (which contains the unboiled glycol) is then cooled and pumped into a storage tank for testing and sold as on-specification fuel burned for energy recovery.

The complete used antifreeze recycling process – from pick-up to use as a valuable fuel -- consists of the following steps:

1. Antifreeze (glycol) is pumped into an International Oil Service tank truck.

2. Truck is received at the Plant City Tank Farm.

3. The truck contains "used oil" in one compartment and used antifreeze/water in another.

4. Both the "used oil" and glycol are pumped into a feed tank which has a high volume circulating pump to keep the feedstock for the refinery blended. Blending keeps the refinery operating at a level water/oil mixture, which is necessary for a smooth flow rate.

5. This feedstock is pumped to a heat exchanger, heated in the exchanger and then flows to an atmospheric distillation column. Column temperatures are kept to a

minimum in an effort to remove most of the water and those low boilers that typically boil at or below that of water. Note: The residual oil must have a flash point in excess of 100 degrees F. to meet EPA guidelines.

6. The partially distilled feedstock is then pumped to a vacuum distillation column where due to loss of heat to the atmosphere from the "skin" of the columns, pumps, valves and piping, it is processed at a lower temperature than the atmospheric column. A vacuum is pulled allowing more water to be evaporated from the feed stock along with a small amount of additional low boilers.

7. The remaining product (dehydrated used oil and glycol along with any other high boilers) is cooled through chilling exchangers and pumped into a storage tank for testing to meet EPA and FDEP used oil specifications for burning before it is shipped to a customer.

8. Low boilers and water extracted as vapor from both the atmospheric and vacuum distillation system are chilled back to a liquid and separated by gravity to remove the low boilers for use as a fuel to fire the hot oil heater furnace.

9. The "distilled" water phase is pumped to a sour water stripper column where it is heated with steam to "steam strip" remaining low boilers from the water. These "steam stripped" low boilers are piped back to the condensing tank for use

as a liquid fuel or piped as a vapor directly to a designated burner in the furnace to be burned for energy recovery.

10. All low boilers are burned for energy recovery. All "distilled" and "steam stripped" waters are treated in a dissolved air flotation system (D.A.F.) before discharge by permit to the City of Plant City P.O.T.W.

11. All "FLOC" which comes off the D.A.F. is pumped back to the feed tank for the refinery.

V.

BY AN ILLICIT UNPROMULGATED RULE THE DEPARTMENT HAS IMPROPERLY RELIEVED USED ANTIFREEZE GENERATORS OF THEIR RCRA DUTY TO MAKE A WASTE DETERMINATION

On June 14, 1996, FDEP provided copies of a "Draft Guidance on the Management of Antifreeze Destined for Recycling" to antifreeze recyclers and handlers. (Attachment 43.) In the letter accompanying the "Draft Guidelines," FDEP announced that while it was in the process of adopting rules to add hazardous waste antifreeze to the list of "universal wastes" it would be issuing interim guidelines to promote collection and recycling.

These guidelines were incorporated in a so-called "Florida Fact Sheet On The Best Management Practices For Managing Antifreeze Destined For Recycling." (Attachment 44.) The guidelines, expressed in mandatory terms, contain serious omissions or errors which adversely affect the substantial interests of International Petroleum. First, they improperly limited "recycling" of used antifreeze to reclamation, rejecting other forms of recycling such as burning for energy recovery. Second, they purported to relieve the generators of their duty to make the waste determinations as required by 40 C.F.R. § 262.11. As explained by the accompanying memorandum

from the Director of the Division of Waste Management, dated August 6, 1996:

> One important provision of these best management practices is that a generator or handler that is recycling used antifreeze on-site or sending it off-site for recycling will not be requested to make a hazardous waste determination as required by 40 C.F.R. § 262.11.

(Attachment 45.)

The attempt to restrict "recycling" of used antifreeze to reclamation is not supported or required by any statute or FDEP rule, nor consistent with the Department's overall recycling program. Contrary to Section 120.54(1)(a), Florida Statutes (1997), FDEP's policy of favoring one form of recycling over another was not subjected to rulemaking proceedings, public notice or hearings, or evaluation of alternatives or economic impacts.[44]

Moreover, in an effort to encourage reclamation, FDEP's attempt to relieve generators of used antifreeze destined for reclamation from their mandatory duty to make a waste determination under §262.11 violates federal and state RCRA regulations. Under such regulations, used or spent antifreeze is a solid waste because it is a "discarded material."[45] A "discarded material" includes any material which is recycled.[46] Section 261.2(c) provides:

> Materials are solid wastes if they are *recycled* or accumulated, stored, or treated before

---

[44] § 120.54(1)(a): Rulemaking is not a matter of agency discretion. Each agency statement defined as a rule by § 120.52 shall be adopted by the rulemaking procedure provided by this section as soon as feasible and practicable.

[45] 40 C.F.R. § 261.2.

[46] 40 C.F.R. § 261.2(2)(ii).

> recycling as specified in (c)(1) - (4) of this section.

Section 261.2(c)(3), in turn, states that spent materials which are reclaimed are solid wastes.[47]

FDEP thus announced its policy choice by publishing "guidelines" or "fact sheets", ignoring the clear legislative mandate of Section 120.54(1)(a), Florida Statutes (1997). The policy favored reclamation over other forms of recycling – by relieving generators of used antifreeze destined for reclamation of their duty to make a RCRA waste determination.[48] The Department then began publishing a "Vendor List of Antifreeze Recyclers", restricting it to companies or mobile vehicles which purport to reclaim used antifreeze. (Attachment 46.) Notably absent are any enforceable standards or review procedures which would enable the Department and other affected persons to determine whether these so-called reclamation activities truly produce a product suitable for re-marketing or reuse as antifreeze.

VI.
CORRECTIVE ACTION

The illicit, unpromulgated "fact sheets" and "guidelines", and their implementation by FDEP constitute an invalid exercise of delegated legislative authority. The Department should withdraw them immediately and refrain from selectively applying RCRA requirements to favor one form of recycling over another.

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[47] 40 C.F.R. § 261.2(e) identifies three kinds of materials which are not solid wastes when they are recycled, but spent antifreeze is not one of them.

[48] At the same time, FDEP issued a companion policy which increased RCRA burdens on generators of used antifreeze destined for recycling by energy recovery. In a "clarification" letter dated November 2, 1995, to Richard R. Morris of Safety Kleen, presumably a reclaimer, FDEP announced that such generators could make the required waste determination only by costly TCLP testing. This policy interpretation also violated Section 120.54(1)(a).

VII.
CONCLUSION

In addition, by this letter, International Petroleum Corporation respectively requests that its re-refinery at 105 South Alexander Street, Plant City, Florida (813) 229-1739 (Fla. Watts 1-800-282-9585) be immediately added to the Vendor List of Used Antifreeze Recyclers.

The alleged RCRA violations relating to the eleven truckloads of soil, sand, and sludge are unsubstantiated, as are most of those relating to the pick-up and processing of used antifreeze. International Petroleum is, however, agreeable to paying $1530.00 in settlement of any and all of the alleged violations so long as such payment does not admit liability or that such violations occurred.

Used antifreeze falls squarely within the Department's broad definition of "used oil" and International Petroleum is a legitimate recycler of both. The Department has announced and systematically employed a policy of favoring a single form of recycling – reclamation – over other equally legitimate forms. It has done so without adopting the policy as a rule in violation of Section 120.54(1)(a), Florida Statutes (1997).

In its haste to provide incentives to reclamation, the Department improperly and selectively relieved some generators of their duty to make waste determinations required by § 262.11 while increasing RCRA testing requirements for other generators. Such agency action has adversely affected the substantial interests of International Petroleum.

The illicit "guidelines" and "fact sheets" which announce and implement the unauthorized policies should be immediately withdrawn and the policies rescinded until adopted through rulemaking. Finally, International Petroleum Corporation should be immediately added to FDEP's Vendor List of Used Antifreeze Recyclers.

Thank you for consideration and attention to our concerns.

Sincerely,

R. L. Caleen, Jr.

xc: Dr. Richard D. Garrity, Director, FDEP Southwest District
Garry Allen, President, IPC

1039:RLC:kj

CLARK
engineers - scientists

FINAL REPORT
WASTE CHARACTERIZATION PROGRAM

for

International Petroleum Corporation
105 South Alexander Street
Plant City, Florida 33599
Project 9277

Prepared For:

International Petroleum Corporation
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January 5, 1994

Edward E. Clark
1-5-94

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1.0 INTRODUCTION

On June 28, 1993 International Petroleum Corporation (IPC) voluntarily initiated a five month program of extensive laboratory analyses of its waste material. The purpose of this sampling program was to develop a more extensive data base on "sludge" consisting of sump waste and pump filter basket lint. This effort involved sampling of the monthly accumulation of sludge and TCLP analysis. The Florida Department of Environmental Protection (FDEP) had the opportunity to split samples and split samples were collected during one of the five sampling events.

International Petroleum Corporation (IPC) located at 105 South Alexander Street, Plant City, Hillsborough County, Florida and operates a used oil re-refinery. Process waste from the sumps and in-line pump filter baskets are collected into 55-gallon DOT shipping drums throughout the month. At the end of each month, this combined non-hazardous waste is manifested and transported to Clark Environmental, Inc., located at 755 Prairie Industrial Parkway, Mulberry, Florida for solidification prior to disposal at a permitted disposal facility.

This report summarizes the sampling procedures used to collect the sludge samples and includes a discussion of the analytical results that have been obtained during the testing program.

2.0 SLUDGE SAMPLING PROCEDURE

Representative samples of the combined sump and filter basket lint sludge were collected from each drum accumulated during a specific monthly period. Samples were collected from each individual drum and placed in a pre-cleaned stainless steel mixing bowl. After sampling each drum, the composite sludge sample was thoroughly mixed and then transferred to pre-cleaned sample jars supplied by Spectrum Laboratories, Inc.(SPECTRUM) of Ft. Lauderdale, Florida. Samples were stored in a shipping container with wet ice and transported to the laboratory for analysis.

SPECTRUM analyzed the TCLP leachate from the combined sample for volatile and extractable TCLP compounds by gas chromatography/mass spectrometry (GC/MS) by EPA Methods 624/625. TCLP metals were analyzed by either graphite furnace and cold vapor atomic absorption spectrophotometry, as appropriate. All analytical procedures were performed in accordance with SPECTRUM's FDEP approved Comprehensive Quality Assurance Plan (ComQAP) # 870206G.

Samples of the accumulated sludge were collected by representatives of CLARK on the following dates:

- June 28, 1993
- July 27, 1993
- August 30, 1993 *
- September 28, 1993
- October 28, 1993 **

* sample split with Tampa FDEP
** sample was collected by Spectrum Laboratories, Inc.

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3.0 DISCUSSION OF RESULTS

The combined sump and filter basket composite samples collected on August 30, 1993 were split with Mr. Tim Rice, Hazardous Waste Section, FDEP, Tampa. Mr. Rice collected samples for TCLP volatile compounds and TCLP metals only.

A review of the analytical data, for the five combined sludge samples, shows that the sludge is classified as non-hazardous, as defined by the TCLP criteria. The amounts of benzene, tetrachloroethylene, other organics and metals present in each of the samples were well below maximum concentration for Toxicity Characteristic. The results of the five monthly sampling episodes are summarized in Table 1. Copies of the analytical results for the five sampling events and the split sample analyzed by FDEP are enclosed in Appendix A.

The results of the split sample by the two laboratories are very comparable and well within acceptable limits of one another. A comparison of the TCLP volatile data shows good agreement between the concentrations reported by both SPECTRUM and FDEP for benzene and tetrachloroethene, as shown in Table 1. A comparison of the metals concentrations, also shown in Table 1, shows slight differences in the concentrations reported for lead and barium. These differences may be attributed to the different methodologies employed by the two laboratories. SPECTRUM utilized graphite furnace AA for metal analysis, while FDEP utilized inductively coupled argon plasma (ICP). These methods have different detection limits - ICP limits are usually higher than graphite furnace. However, these slight differences have no significance as to the issue of waste characterization. The FDEP results where consistant

with previously obtained results; the combined sump waste and pump filter basket lint is classified as non-hazardous, as defined by the TCLP criteria.

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TABLES

Table 1: Summary of Sludge TCLP Analysis
June 1993 to September 1993

Compound	Concentration (mg/l)						
	Sampled 06/28/93	Sampled 07/27/93	Sampled 08/30/93	FDEP Split	Sampled 09/27/93	Sampled 10/28/93	TCLP * Criteria
Arsenic	0.003	0.009	0.004	BDL	BDL	0.003	5.0
Barium	0.72	3.77	BDL	0.5	1.02	0.31	100
Cadmium	0.002	BDL	BDL	BDL	0.04	0.02	1.0
Chromium	0.003	0.30	BDL	BDL	0.04	0.04	5.0
Lead	0.071	0.14	0.09	BDL	0.14	0.15	5.0
Mercury	BDL	BDL	BDL	BDL	BDL	0.0002	0.2
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	1.0
Silver	BDL	BDL	BDL	BDL	BDL	BDL	5.0
Benzene	0.005	0.003	0.007	0.010	BDL	0.0011	0.5
Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Chlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	100
Chloroform	BDL	BDL	BDL	BDL	BDL	0.008	6.0
1,2–Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	0.5
1,1–Dichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	0.7
Hexachloroethane	BDL	BDL	BDL	NR	BDL	BDL	3.0
Methyl Ethyl Ketone	BDL	BDL	BDL	NR	BDL	0.034	200
Tetrachloroethylene	0.002	0.002	0.005	0.007	0.003	BDL	0.7
Trichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Vinyl Chloride	BDL	BDL	BDL	BDL	BDL	BDL	0.2
o–Cresol	0.041	0.016	BDL	NR	BDL	0.001	200
m–Cresol	BDL	BDL	BDL	NR	BDL	BDL	200
p–Cresol	0.018	0.004	BDL	NR	BDL	0.006	200
1,4–Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	7.5
2,4–Dinitrotoluene	BDL	BDL	BDL	NR	BDL	BDL	0.13
Hexachlorobenzene	BDL	BDL	BDL	NR	BDL	BDL	0.13
Hexachlorbutadiene	BDL	BDL	BDL	NR	BDL	BDL	0.5
Nitrobenzene	BDL	BDL	BDL	NR	BDL	BDL	2.0
Pentachlorophenol	BDL	BDL	BDL	NR	BDL	0.042	100
Pyridine	BDL	BDL	BDL	NR	BDL	BDL	5.0
2,4,5–Trichlorophenol	BDL	BDL	BDL	NR	BDL	BDL	400
2,4,6–Trichlorophenol	BDL	BDL	BDL	NR	BDL	BDL	2.0

(BDL) Below Laboratory Detection Limits (NR) Not Reported by FDEP (*) Maximum concentration for non–hazardous

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APPENDIX A

Florida Department of
Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619
813-744-6100

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL SHEET

12/15/93
Date

TO: KEN BAUGHMAN

DEPT.: CLARK

FAX #: (305) 591-1549

FROM: TIMYN RICE

DEPT.: D.E.P., Tampa Office

PHONE: 813-744-6100 or SunCom 542-6100 Ext.
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SUBJECT: INTERNATIONAL PETROLEUM

COMMENT:

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 16

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PHONE:

18-OCT-1993

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTRAL LABORATORY
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

CHEMICAL ANALYSIS REPORT

Request ID: RQ-93-AUG-30-25
Job ID: 93-SEP-01-10 Project: OTHER
Job Name: INTERNATIONAL PETROLEUM - Job created on 1-SEP
Date Received: 1-SEP-1993 Customer ID: SW-TAM-WSM
Authorized: 30-SEP-1993 By: Liang T. Lin

Submitted By: SW DIST. OFFICE (TAMPA) - WASTE MANAGEMEN
3804 Coconut Palm Drive
Tampa, Florida 33619

Attn: Kent Edwards

For Additional Information, Please Contact
G. William Coppenger, Ph.D.
Yuh-Hsu Pan, Ph.D.
Timothy W. Fitzpatrick
Liang-Tsair Lin, Ph.D.
Suncom 277-2571
(904) 487-2571

Preliminary Review Copy Date: 18-OCT-1993

Abbreviations & Storet Codes:

A - Value reported is the mean of two or more determinations
B - Results based on colony counts outside the acceptable range.
I - Value reported is less than the minimum quantitation limit, and greater than or equal to the minimum detection limit.
J - Estimated value
K - Actual value is known to be less than value given
L - Actual value is known to be greater than value given
N - Presumptive evidence of presence of material.
O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
U - Material was analyzed for but not detected; The value reported is the minimum detection limit.

V - Analyte was detected in both sample and method blank.
Z - Colonies were too numerous to count (TNTC).

18-OCT-1993

Sample ID: 61364/93-SEP-01-10-01 Matrix: S-OTHER
Location: INTERNATIONAL PETROLEUM
Field ID: FILTER BASKET
Collected: 30-AUG-1993 08:45 By: TANYA RICE
Authorized: 29-SEP-1993 By: Mei-Fang Shyu
Type: Grab Sample
Lab Comments:
DEP TEMP=1DC
Field Comments:
MATRIX=SLUDGE

Analysis ID: TCLP-VOC
Volatiles in TCLP ZHE extract by 5030-8260
Prepared: 9-SEP-1993 00:00 By: Kevin Everett
Analyzed: 14-SEP-1993 00:00 By: Jusheng Qi
Authorized: 24-SEP-1993 By: Jusheng Qi

Storet#	Analyte	Value	Units
	Benzene	9.6	ug/l
	Bromoform	2.5 U	ug/l
	Carbon tetrachloride	2.5 U	ug/l
	Chlorobenzene	2.5 U	ug/l
	Chloroform	2.5 U	ug/l
	1,2-Dichlorobenzene	5.0	ug/l
	1,3-Dichlorobenzene	2.5 U	ug/l
	1,4-Dichlorobenzene	2.5 U	ug/l
	Dibromochloromethane	2.5 U	ug/l
	1,1-Dichloroethane	2.5 U	ug/l
	1,2-Dichloroethane	2.5 U	ug/l
	1,1-Dichloroethene	2.5 U	ug/l
	1,2-Dichloropropane	2.5 U	ug/l
	Ethylbenzene	35	ug/l
	Methylene chloride	11	ug/l
	1,1,2,2-Tetrachloroethane	2.5 U	ug/l
	Tetrachloroethene	7.0	ug/l
	1,1,1-Trichloroethane	7.6	ug/l
	1,1,2-Trichloroethane	2.5 U	ug/l
	Trichloroethene	2.5 U	ug/l
	Toluene	89	ug/l
	Vinyl chloride	2.5 U	ug/l
	Xylenes	240	ug/l

Comments(1): Elevated detection limits due to sample matrix interference.
(2): Tentative identification: total purgeable petroleum hydrocaons=est. 920 ug/L.

********** END OF REPORT **********

20-SEP-1993

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTRAL LABORATORY
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

CHEMICAL ANALYSIS REPORT

Request ID: RQ-93-AUG-30-25
Job ID: 93-SEP-01-06 Project: OTHER
Job Name: INTERNATIONAL PETROLEUM - Job created on 1-SEP
Date Received: 1-SEP-1993 Customer ID: SW-TAM-WSM
Authorized: 15-SEP-1993 By: Liang T. Lin

Submitted By: SW DIST. OFFICE (TAMPA) - WASTE MANAGEMEN
3804 Coconut Palm Drive
Tampa, Florida 33619

Attn: Kent Edwards

For Additional Information, Please Contact
G. William Coppenger, Ph.D.
Yuh-Hsu Pan, Ph.D.
Timothy W. Fitzpatrick
Liang-Tsair Lin, Ph.D.
Suncom 277-2571
(904) 487-2571

Preliminary Review Copy Date: 20-SEP-1993

Abbreviations & Storet Codes:

A - Value reported is the mean of two or more determinations
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J - Estimated value
K - Actual value is known to be less than value given
L - Actual value is known to be greater than value given
N - Presumptive evidence of presence of material.
O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
U - Material was analyzed for but not detected; The value reported is the minimum detection limit.

V - Analyte was detected in both sample and method blank.
Z - Colonies were too numerous to count (TNTC).

Sample ID: 61357/93-SEP-01-06-01 Matrix: W-FIELD-BK
Location: INTERNATIONAL PETROLEUM
Field ID: FIELD BLANK
Collected: 30-AUG-1993 08:30 By: TANYA RICE
Authorized: 13-SEP-1993 By: Mei-Fang Shyu
Type: Grab Sample
Lab Comments:
DEP TEMP=1DC
Field Comments:

Analysis ID: W-VOC-MS-A
Volatiles in wtr or waste wtr by 624/5030-8240
Prepared: NA By:
Analyzed: 4-SEP-1993 00:00 By: Jusheng Qi
Authorized: 7-SEP-1993 By: Jusheng Qi

Storet#	Analyte	Value	Units
34030	Benzene	0.50 U	ug/L
32101	Bromodichloromethane	0.50 U	ug/L
32104	Bromoform	0.50 U	ug/L
34413	Bromomethane	O	ug/L
32102	Carbon tetrachloride	0.50 U	ug/L
34301	Chlorobenzene	0.50 U	ug/L
34311	Chloroethane	0.50 U	ug/L
34576	2-Chloroethylvinyl ether	0.50 U	ug/L
32106	Chloroform	0.50 U	ug/L
34418	Chloromethane	0.50 U	ug/L
34536	1,2-Dichlorobenzene	0.50 U	ug/L
34566	1,3-Dichlorobenzene	0.50 U	ug/L
34571	1,4-Dichlorobenzene	0.50 U	ug/L
32105	Dibromochloromethane	0.50 U	ug/L
34496	1,1-Dichloroethane	0.50 U	ug/L
34531	1,2-Dichloroethane	0.50 U	ug/L
34501	1,1-Dichloroethene	0.50 U	ug/L
34546	trans-1,2-Dichloroethene	0.50 U	ug/L
34541	1,2-Dichloropropane	0.50 U	ug/L
34561	cis-1,3-Dichloropropene	0.50 U	ug/L
34561	trans-1,3-Dichloropropene	0.50 U	ug/L
34371	Ethylbenzene	0.50 U	ug/L
34423	Methylene chloride	0.50 U	ug/L
34516	1,1,2,2-Tetrachloroethane	0.50 U	ug/L
34475	Tetrachloroethene	0.50 U	ug/L
34506	1,1,1-Trichloroethane	0.50 U	ug/L
34511	1,1,2-Trichloroethane	0.50 U	ug/L
39180	Trichloroethene	0.50 U	ug/L
34910	Toluene	0.50 U	ug/L
39175	Vinyl chloride	0.50 U	ug/L
81551	Xylenes	0.50 U	ug/L
	Trichlorofluoromethane	0.50 U	ug/L

Comments(1): O due to analytical problem only associated

61357/93-SEP-01-06-01/W-VOC-MS-A

Continued on Page 3

20-SEP-1993

61357/93-SEP-01-06-01/W-VOC-MS-A

Continued from Page 2

Storet#	Analyte	Value	Units
	(2): with Bromomethane.		

Sample ID: 61358/93-SEP-01-06-02 Matrix: W-TRIP-BLK
Location: DEP LABORATORY
Field ID: TRIP BLANK
Collected: 25-AUG-1993 07:40 By: F MEISIEK
Authorized: 13-SEP-1993 By: Mei-Fang Shyu
Type: Grab Sample
Lab Comments:
DEP TEMP=1DC
Field Comments:

Analysis ID: W-VOC-MS-A
Volatiles in wtr or waste wtr by 624/5030-8240
Prepared: NA By:
Analyzed: 4-SEP-1993 00:00 By: Jusheng Qi
Authorized: 7-SEP-1993 By: Jusheng Qi

Storet#	Analyte	Value	Units
34030	Benzene	0.50 U	ug/L
32101	Bromodichloromethane	0.50 U	ug/L
32104	Bromoform	0.50 U	ug/L
34413	Bromomethane	O	ug/L
32102	Carbon tetrachloride	0.50 U	ug/L
34301	Chlorobenzene	0.50 U	ug/L
34311	Chloroethane	0.50 U	ug/L
34576	2-Chloroethylvinyl ether	0.50 U	ug/L
32106	Chloroform	0.50 U	ug/L
34418	Chloromethane	0.50 U	ug/L
34536	1,2-Dichlorobenzene	0.50 U	ug/L
34566	1,3-Dichlorobenzene	0.50 U	ug/L
34571	1,4-Dichlorobenzene	0.50 U	ug/L
32105	Dibromochloromethane	0.50 U	ug/L
34496	1,1-Dichloroethane	0.50 U	ug/L
34531	1,2-Dichloroethane	0.50 U	ug/L
34501	1,1-Dichloroethene	0.50 U	ug/L
34546	trans-1,2-Dichloroethene	0.50 U	ug/L
34541	1,2-Dichloropropane	0.50 U	ug/L
34561	cis-1,3-Dichloropropene	0.50 U	ug/L
34561	trans-1,3-Dichloropropene	0.50 U	ug/L
34371	Ethylbenzene	0.50 U	ug/L
34423	Methylene chloride	0.50 U	ug/L
34516	1,1,2,2-Tetrachloroethane	0.50 U	ug/L
34475	Tetrachloroethene	0.50 U	ug/L
34506	1,1,1-Trichloroethane	0.50 U	ug/L

61358/93-SEP-01-06-02/W-VOC-MS-A Continued on Page 4

20-SEP-1993 Page 4 of 4

61358/93-SEP-01-06-02/W-VOC-MS-A Continued from Page 3

Storet#	Analyte	Value	Units
34511	1,1,2-Trichloroethane	0.50 U	ug/L
39180	Trichloroethene	0.50 U	ug/L
34910	Toluene	0.50 U	ug/L
39175	Vinyl chloride	0.50 U	ug/L
81551	Xylenes	0.50 U	ug/L
	Trichlorofluoromethane	0.50 U	ug/L

Comments(1): O due to analytical problem only associated
(2): with Bromomethane.

********** END OF REPORT **********

14/15

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTRAL LABORATORY
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

CHEMICAL ANALYSIS REPORT

Request ID: RQ-93-AUG-30-25
Job ID: 93-SEP-01-09 Project: OTHER
Job Name: INTERNATIONAL PETROLEUM - Job created on 1-SEP
Date Received: 1-SEP-1993 Customer ID: SW-TAM-WSM
Authorized: 21-SEP-1993 By: Tim Fitzpatrick

Submitted By: SW DIST. OFFICE (TAMPA) - WASTE MANAGEMEN
3804 Coconut Palm Drive
Tampa, Florida 33619

Attn: Kent Edwards

For Additional Information, Please Contact
G. William Coppenger, Ph.D.
Yuh-Hsu Pan, Ph.D.
Timothy W. Fitzpatrick
Liang-Tsair Lin, Ph.D.
Suncom 277-2571
(904) 487-2571

Preliminary Review Copy Date: 29-SEP-1993

Abbreviations & Storet Codes:

A - Value reported is the mean of two or more determinations
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K - Actual value is known to be less than value given
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O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
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V - Analyte was detected in both sample and method blank.
Z - Colonies were too numerous to count (TNTC).

Sample ID: 61363/93-SEP-01-09-01 Matrix: S-OTHER
Location: INTERNATIONAL PETROLEUM
Field ID: FILTER BASKET
Collected: 30-AUG-1993 08:45 By: TANYA RICE
Authorized: 21-SEP-1993 By: Tim Fitzpatrick
Type: Grab Sample
Lab Comments:
DEP TEMP=1DC
Field Comments:
MATRIX=SLUDGE

Analysis ID: HG-H-TCLP
Mercury in TCLP extracts by Method 7470, modified
Prepared: 7-SEP-1993 00:00 By: Jason Hatcher
Analyzed: 7-SEP-1993 15:00 By: Jason Hatcher
Authorized: 21-SEP-1993 By: Tim Fitzpatrick

Storet#	Analyte	Value	Units
	Mercury	0.0001 U	mg/L

Analysis ID: TCLP-ICP
ICP multielement analysis of TCLP extracts, Method 6010
Prepared: 3-SEP-1993 17:59 By: Jason Hatcher
Analyzed: 8-SEP-1993 14:56 By: Jin-Chaun Liu
Authorized: 21-SEP-1993 By: Tim Fitzpatrick

Storet#	Analyte	Value	Units
	Antimony	0	mg/L
	Aluminum	0	mg/L
	Arsenic	0.2 U	mg/L
	Barium	0.5 A	mg/L
	Cadmium	0.03 U	mg/L
	Chromium	0.1 U	mg/L
	Beryllium	0	mg/L
	Cobalt	0	mg/L
	Copper	0	mg/L
	Calcium	0	mg/L
	Lead	0.15 U	mg/L
	Manganese	0	mg/L
	Nickel	0	mg/L
	Selenium	0.3 U	mg/L
	Iron	0	mg/L
	Silver	0.03 U	mg/L
	Zinc	0	mg/L
	Magnesium	0	mg/L
	Potassium	0	mg/L
	Sodium	0	mg/L

61363/93-SEP-01-09-01/TCLP-ICP Continued on Page 3

29-SEP-1993

61363/93-SEP-01-09-01/TCLP-ICP Continued from Page 2

Storet#	Analyte	Value	Units
	Strontium	0	mg/L
	Thallium	0	mg/L
	Vanadium	0	mg/L

Comment Raw Data Transferred to LIMS Electronically

********** END OF REPORT **********

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SPECTRUM Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

☐ 1460 W. McNab Road
Ft. Lauderdale, FL 33309
(305) 978-6400

☐ 630 Indian Street
Savannah, GA 31401
(912) 238-5050

Project Name or Number	Client Name
001	International Flavors & Fragrances
Project Location: IPC Plant City	

LCN	Sample Number	Date	Time	Sample Matrix	Container (s)	Laboratory Analysis: TCLP Metals							Comments
131-4683	001-WE	10/28/93	2:20	Solid	Glass 2 Soil Jars	X							Tampa Pricing
				Filter Basket Leaf [illegible]									

SAMPLED BY: [illegible signature]	Transfer Number	Item Number	• Transfers Relinquished by:	Accepted by:	Date	Time
	1		[illegible signature]			
	2					
	3					
	4					

• Samples that ... will be returned ...

SPECTRUM

Laboratories, Inc. FORT LAUDERDALE · SAVANNAH

TOXICITY CHARTERISTIC LEACHING PROCEDURE

CLIENT: INTERNATIONAL PETROLEUM
SAMPLE NUMBER: 036-102893
LOCATION: 001-WS
ADDITIONAL DATA: IPC PLANT CITY
SAMPLED BY: JIM OLIVER, SPECTRUM
SUBMITTED BY: GREYHOUND
DATE SAMPLED: 10/28/93 1420
DATE REPORTED: NOV. 15 1993
REVISION: 0

FL DRINKING WATER: #86144
FL ENVIRONMENTAL: #E86006
GEORGIA: #828,829
SOUTH CAROLINA: #96015
EPA: #FL095
FDER CQAP: #870206G
DATE RECEIVED: 10/29/93
SAMPLE MATRIX: SOIL

ANALYTE	METHOD	RESULT (- = <)	UNITS	REGULATORY CONC.	
ARSENIC TCLP	1311/7060	0.003	mg/l	5.0	mg/l
BARIUM TCLP	1311/7080	0.31	mg/l	100.0	mg/l
CADMIUM TCLP	1311/7131	0.02	mg/l	1.0	mg/l
CHROMIUM TCLP	1311/7191	0.04	mg/l	5.0	mg/l
LEAD TCLP	1311/7421	0.15	mg/l	5.0	mg/l
MERCURY TCLP	1311/7471	0.0002	mg/l	0.2	mg/l
SELENIUM TCLP	1311/7740	-0.002	mg/l	1.0	mg/l
SILVER TCLP	1311/7760	-0.01	mg/l	5.0	mg/l
CHLORDANE TCLP	1311/608	-1	ug/l	30	ug/l
2,4-D TCLP	1311/615	1.4	ug/l	10000	ug/l
ENDRIN TCLP	1311/608	-1	ug/l	20	ug/l
HEPTACHLOR TCLP	1311/608	-1	ug/l	8	ug/l
LINDANE TCLP	1311/608	-1	ug/l	400	ug/l
METHOXYCHLOR TCLP	1311/608	-1	ug/l	10000	ug/l
TOXAPHENE TCLP	1311/608	-10	ug/l	500	ug/l
SILVEX TCLP	1311/615	-1	ug/l	1000	ug/l
BENZENE TCLP	1311/624	1.13	ug/l	500	ug/l
CARBN TETRACHLORIDE TCLP	1311/624	-1	ug/l	500	ug/l
CHLOROBENZENE TCLP	1311/624	-1	ug/l	100000	ug/l
CHLOROFORM TCLP	1311/624	8.17	ug/l	6000	ug/l
1,2-DICHLOROETHANE TCLP	1311/624	-1	ug/l	500	ug/l
1,1-DICHLORETHYLENE TCLP	1311/624	-1	ug/l	700	ug/l
HEXACHLOROETHANE TCLP	1311/624	-1	ug/l	3000	ug/l
METHYL ETHYL KETONE TCLP	1311/624	34.2	ug/l	200000	ug/l
TETRACHLOROETHYLENE TCLP	1311/624	-1	ug/l	700	ug/l
TRICHLOROETHYLENE TCLP	1311/624	-1	ug/l	500	ug/l
VINYL CHLORIDE TCLP	1311/624	-1	ug/l	200	ug/l
O-CRESOL TCLP	1311/625	1.2	ug/l	200000	ug/l
M-CRESOL TCLP	1311/625	-1	ug/l	200000	ug/l
P-CRESOL TCLP	1311/625	6.4	ug/l	200000	ug/l
1,4-DICHLOROBENZENE TCLP	1311/625	-1	ug/l	7500	ug/l
2,4-DINITROTOLUENE TCLP	1311/625	-5	ug/l	130	ug/l
HEXACHLOROBENZENE TCLP	1311/625	-1	ug/l	130	ug/l
HEXACHLOROBUTADIENE TCLP	1311/625	-1	ug/l	500	ug/l
NITROBENZENE TCLP	1311/625	-1	ug/l	2000	ug/l
PENTACHLOROPHENOL TCLP	1311/625	42.1	ug/l	100000	ug/l
PYRIDINE TCLP	1311/625	-5	ug/l	5000	ug/l
245-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	400000	ug/l
246-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	2000	ug/l

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.

LYLE A. JOHNSON
LAB MANAGER

1460 W. McNab Road, Ft. Lauderdale, FL 33309 · Phone: (305) 978-6400 · 630 Indian Street, Savannah, Ga. 31401 · Phone: (912) 238-5050

CHAIN OF CUSTODY RECORD

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Ft. Lauderdale, FL 33309
(305) 978-6400

☐ 630 Indian Street
Savannah, GA 31401
(912) 238-5050

Project Name or Number	Client Name
9277.02	Clark Engineers
Project Location	
Plant City	

LCN	Sample Number	Date	Time	Sample Matrix	Container (s)	Laboratory Analysis: Full TCLP	Laboratory Analysis: Not Pest. or Herb.	Comments
142.093093	Lint basket waste	9-28-93		S.	1	X		

SAMPLED BY:	Transfer Number	Item Number	• Transfers Relinquished by:	Accepted by:	Date	Time
	1			Ralph Faudy	9-28-93	10:35
	2					
	3					
	4					

" be returned

SPECTRUM

Laboratories, Inc. FORT LAUDERDALE · SAVANNAH

TOXICITY CHARTERISTIC LEACHING PROCEDURE

CLIENT: ENGINEERS & SCIENTIST
SAMPLE NUMBER: 142-093093
LOCATION: 9277.02/LINT BASKET WASTE
ADDITIONAL DATA: PLANT CITY
SAMPLED BY: PAT FOX,CLARK
SUBMITTED BY: RALPH TARDIF,SPECTRUM
DATE SAMPLED: 09/28/93
DATE REPORTED: OCT. 15 1993
REVISION: 0

FL DRINKING WATER: #86144
FL ENVIRONMENTAL: #E86006
GEORGIA: #828,829
SOUTH CAROLINA: #96015
EPA: #FL095
FDER CQAP: #870206G
DATE RECEIVED: 09/30/93
SAMPLE MATRIX: SOIL

ANALYTE	METHOD	RESULT (- = <)	UNITS	REGULATORY CONC.	
ARSENIC TCLP	1311/7060	-0.002	mg/l	5.0	mg/l
BARIUM TCLP	1311/7080	1.02	mg/l	100.0	mg/l
CADMIUM TCLP	1311/7131	0.04	mg/l	1.0	mg/l
CHROMIUM TCLP	1311/7191	0.04	mg/l	5.0	mg/l
LEAD TCLP	1311/7421	0.14	mg/l	5.0	mg/l
MERCURY TCLP	1311/7471	-0.0002	mg/l	0.2	mg/l
SELENIUM TCLP	1311/7740	-0.002	mg/l	1.0	mg/l
SILVER TCLP	1311/7760	-0.04	mg/l	5.0	mg/l
CHLORDANE TCLP	1311/608			30	ug/l
2,4-D TCLP	1311/615			10000	ug/l
ENDRIN TCLP	1311/608			20	ug/l
HEPTACHLOR TCLP	1311/608			8	ug/l
LINDANE TCLP	1311/608			400	ug/l
METHOXYCHLOR TCLP	1311/608			10000	ug/l
TOXAPHENE TCLP	1311/608			500	ug/l
SILVEX TCLP	1311/615			1000	ug/l
BENZENE TCLP	1311/624	-1	ug/l	500	ug/l
CARBN TETRACHLORIDE TCLP	1311/624	-1	ug/l	500	ug/l
CHLOROBENZENE TCLP	1311/624	-1	ug/l	100000	ug/l
CHLOROFORM TCLP	1311/624	-1	ug/l	6000	ug/l
1,2-DICHLOROETHANE TCLP	1311/624	-1	ug/l	500	ug/l
1,1-DICHLORETHYLENE TCLP	1311/624	-1	ug/l	700	ug/l
HEXACHLOROETHANE TCLP	1311/624	-1	ug/l	3000	ug/l
METHYL ETHYL KETONE TCLP	1311/624	-5	ug/l	200000	ug/l
TETRACHLOROETHYLENE TCLP	1311/624	2.93	ug/l	700	ug/l
TRICHLOROETHYLENE TCLP	1311/624	-1	ug/l	500	ug/l
VINYL CHLORIDE TCLP	1311/624	-1	ug/l	200	ug/l
O-CRESOL TCLP	1311/625	-1	ug/l	200000	ug/l
M-CRESOL TCLP	1311/625	-1	ug/l	200000	ug/l
P-CRESOL TCLP	1311/625	-1	ug/l	200000	ug/l
1,4-DICHLOROBENZENE TCLP	1311/625	-1	ug/l	7500	ug/l
2,4-DINITROTOLUENE TCLP	1311/625	-5	ug/l	130	ug/l
HEXACHLOROBENZENE TCLP	1311/625	-1	ug/l	130	ug/l
HEXACHLOROBUTADIENE TCLP	1311/625	-1	ug/l	500	ug/l
NITROBENZENE TCLP	1311/625	-1	ug/l	2000	ug/l
PENTACHLOROPHENOL TCLP	1311/625	-1	ug/l	100000	ug/l
PYRIDINE TCLP	1311/625	-5	ug/l	5000	ug/l
245-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	400000	ug/l
246-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	2000	ug/l

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.

LYLE A. JOHNSON
LAB MANAGER

1460 W. McNab Road, Ft. Lauderdale, FL 33309 · Phone: (305) 978-6400 · 630 Indian Street, Savannah, Ga. 31401 · Phone: (912) 238-5050

EDWARD E. CLARK ENGINEERS-SCIENTISTS, INC.
ENGINEERS-SCIENTISTS LABORATORY, INC.

GROUNDWATER MONITORING WELL DATA

PROJECT No: 9277.02 DATE: 9-28-93 TIME: _____

SITE LOCATION: E. P.C. Plant City SAMPLERS(s): W/Top

SAMPLE ID:	WELL DIAMETER (inches)	GROUND LEVEL TO H2O SURFACE IN FEET	SURFACE TO WELL BOTTOM IN FEET	SCREEN DEPTH (ft)	WELL CAPACITY (gallons)	EVACUATION VOLUME (GALLONS)	EVACUATION METHOD	COMMENTS:
LNT Basket Composite	4 Drums Composited for total TCLP.							

8/9

SPECTRUM

Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

CHAIN OF CUSTODY RECORD

☒ 1460 W. McNab Road
Ft. Lauderdale, FL 33309
(305) 978-6400

☐ 630 Indian Street
Savannah, GA 31401
(912) 238-5050

Project Name or Number: I.P.C. 9277

Client Name: CLARK Engineers

Project Location: Plant City, FLA.

LCN	Sample Number	Date	Time	Sample Matrix	Container (s)	Laboratory Analysis: Total TCLP except-Herbicides/Pesticides	Comments
220-083193	Drum Composite Lint Bagnell	8-30-93		Composite Sludge	1	X	

Transfer Number	Item Number	* Transfers Relinquished by:	Accepted by:	Date	Time
1				8-30-93	
2					
3					
4					

SAMPLED BY:

* Samples that are determined to be hazardous will be returned to submitter.

CLARK ENGINEERS-SCIENTIST, INC.

FIELD QUALITY CONTROL CHECKLIST

		GENERAL COMMENTS
NO:		Split Sample w/ Tommy Rice
DATE:	8-30-93	Hazardous Waste Compliance Section
SITE LOCATION:	I.P.C. Plant city	DER.
FIELD SAMPLER(s):	[illegible]	

SAMPLE ID	BAILER RINSED	TAPES CLEANED	WATER LEVEL INDICATOR RINSED	PUMP/HOSES CLEANED	pH METER CALIB.	DD METER CALIB.	CONDUCT METER CALIB.	REMARKS/ OBSERVATIONS
Drum Comp Sand Basket	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
			Sampled two drums seperatley, Mixed in a teflon pan and Sampled.					

SPECTRUM
Laboratories, Inc. FORT LAUDERDALE · SAVANNAH

TOXICITY CHARTERISTIC LEACHING PROCEDURE

CLIENT: ENGINEERS & SCIENTIST
SAMPLE NUMBER: 022-062993
LOCATION: 9277.02/WS-1
ADDITIONAL DATA: IPC PLANT CITY
SAMPLED BY: JAMAL
SUBMITTED BY: DWIGHT SLUSHER
DATE SAMPLED: 06/28/93 1040
DATE REPORTED: JULY 21 1993
REVISION: 0

FL DRINKING WATER: #86144
FL ENVIRONMENTAL: #E86006
GEORGIA: #828,829
SOUTH CAROLINA: #96015
EPA: #FL095
FDER CQAP: #870206G
DATE RECEIVED: 06/28/93
SAMPLE MATRIX: SOIL

ANALYTE	METHOD	RESULT (- = <)	UNITS	REGULATORY CONC.	
ARSENIC TCLP	1311/7060	0.003	mg/l	5.0	mg/l
BARIUM TCLP	1311/7080	0.72	mg/l	100.0	mg/l
CADMIUM TCLP	1311/7131	0.0021	mg/l	1.0	mg/l
CHROMIUM TCLP	1311/7191	0.003	mg/l	5.0	mg/l
LEAD TCLP	1311/7421	0.071	mg/l	5.0	mg/l
MERCURY TCLP	1311/7471	-0.0002	mg/l	0.2	mg/l
SELENIUM TCLP	1311/7740	-0.002	mg/l	1.0	mg/l
SILVER TCLP	1311/7760	-0.01	mg/l	5.0	mg/l
CHLORDANE TCLP	1311/608	-1	ug/l	30	ug/l
2,4-D TCLP	1311/615	-1	ug/l	10000	ug/l
ENDRIN TCLP	1311/608	-1	ug/l	20	ug/l
HEPTACHLOR TCLP	1311/608	-1	ug/l	8	ug/l
LINDANE TCLP	1311/608	-1	ug/l	400	ug/l
METHOXYCHLOR TCLP	1311/608	-1	ug/l	10000	ug/l
TOXAPHENE TCLP	1311/608	-10	ug/l	500	ug/l
SILVEX TCLP	1311/615	-1	ug/l	1000	ug/l
BENZENE TCLP	1311/624	4.62	ug/l	500	ug/l
CARBN TETRACHLORIDE TCLP	1311/624	-1	ug/l	500	ug/l
CHLOROBENZENE TCLP	1311/624	-1	ug/l	100000	ug/l
CHLOROFORM TCLP	1311/624	-1	ug/l	6000	ug/l
1,2-DICHLOROETHANE TCLP	1311/624	-1	ug/l	500	ug/l
1,1-DICHLORETHYLENE TCLP	1311/624	-1	ug/l	700	ug/l
HEXACHLOROETHANE TCLP	1311/624	-1	ug/l	3000	ug/l
METHYL ETHYL KETONE TCLP	1311/624	-5	ug/l	200000	ug/l
TETRACHLOROETHYLENE TCLP	1311/624	1.82	ug/l	700	ug/l
TRICHLOROETHYLENE TCLP	1311/624	-1	ug/l	500	ug/l
VINYL CHLORIDE TCLP	1311/624	-1	ug/l	200	ug/l
O-CRESOL TCLP	1311/625	41.1	ug/l	200000	ug/l
M-CRESOL TCLP	1311/625	-1	ug/l	200000	ug/l
P-CRESOL TCLP	1311/625	17.7	ug/l	200000	ug/l
1,4-DICHLOROBENZENE TCLP	1311/625	-1	ug/l	7500	ug/l
2,4-DINITROTOLUENE TCLP	1311/625	-5	ug/l	130	ug/l
HEXACHLOROBENZENE TCLP	1311/625	-1	ug/l	130	ug/l
HEXACHLOROBUTADIENE TCLP	1311/625	-1	ug/l	500	ug/l
NITROBENZENE TCLP	1311/625	-1	ug/l	2000	ug/l
PENTACHLOROPHENOL TCLP	1311/625	-1	ug/l	100000	ug/l
PYRIDINE TCLP	1311/625	-10	ug/l	5000	ug/l
245-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	400000	ug/l
246-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	2000	ug/l

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.

LYLE A. JOHNSON
LAB MANAGER

CHAIN OF CUSTODY RECORD

SPECTRUM
Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

☐ 1460 W. McNab Road
Ft. Lauderdale, FL 33309
(305) 978-6400

☐ 630 Indian Street
Savannah, GA 31401
(912) 238-5050

Project Name or Number	Client Name
I.P.C. Inc.	Clark Engineers
Project Location	
104 S. Alexander St. Plant City	

LCN	Sample Number	Date	Time	Sample Matrix	Container (s)	Laboratory Analysis: Total Fld.							Comments
013-072993	Filter Basket Cont Composite	7-27-93	0810	Drum composite A & B	1	X							

SAMPLED BY:	Transfer Number	Item Number	• Transfers Relinquished by:	Accepted by:	Date	Time
	1				7-27-93	1:16
	2					
	3					
	4					

EDWARD E. CLARK ENGINEERS-SCIENTISTS, INC.
ENGINEERS-SCIENTISTS LABORATORY, INC.

GROUNDWATER MONITORING WELL DATA

PROJECT No: _____ DATE: 7-27-93 TIME: _____

SITE LOCATION: I.P.C. Plant
Plant City, FLA
104 S ALEXANDER ST

SAMPLERS(s): JJBC

SAMPLE ID:	WELL DIAMETER (inches)	GROUND LEVEL TO H2O SURFACE IN FEET	SURFACE TO WELL BOTTOM IN FEET	SCREEN DEPTH (ft)	WELL CAPACITY (gallons)	EVACUATION VOLUME (GALLONS)	EVACUATION METHOD	COMMENTS:
Filter Basket Ent Composite.	2 drums (E Labled	A & B) and	Composited in					
	there	Lab. Found	on Tray and	stirred	w/	spatula		
	and	Collected.						

8/90

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TOXICITY CHARTERISTIC LEACHING PROCEDURE

CLIENT: ENGINEERS & SCIENTIST
SAMPLE NUMBER: 020-083193
LOCATION: DRUM COMPOSITE LINT BASKET
ADDITIONAL DATA: IPC/PLANT CITY
SAMPLED BY: PAT FOX,CLARK
SUBMITTED BY: PAT FOX,CLARK
DATE SAMPLED: 08/30/93
DATE REPORTED: SEPT 17 1993
REVISION: 0

FL DRINKING WATER: #86144
FL ENVIRONMENTAL: #E86006
GEORGIA: #828,829
SOUTH CAROLINA: #96015
EPA: #FL095
FDER CQAP: #870206G
DATE RECEIVED: 08/31/93
SAMPLE MATRIX: SOIL

ANALYTE	METHOD	RESULT (- = <)	UNITS	REGULATORY CONC.	
ARSENIC TCLP	1311/7060	0.004	mg/l	5.0	mg/l
BARIUM TCLP	1311/7080	-0.05	mg/l	100.0	mg/l
CADMIUM TCLP	1311/7131	-0.05	mg/l	1.0	mg/l
CHROMIUM TCLP	1311/7191	-0.05	mg/l	5.0	mg/l
LEAD TCLP	1311/7421	0.09	mg/l	5.0	mg/l
MERCURY TCLP	1311/7471	-0.0002	mg/l	0.2	mg/l
SELENIUM TCLP	1311/7740	-0.002	mg/l	1.0	mg/l
SILVER TCLP	1311/7760	-0.01	mg/l	5.0	mg/l
CHLORDANE TCLP	1311/608			30	ug/l
2,4-D TCLP	1311/615			10000	ug/l
ENDRIN TCLP	1311/608			20	ug/l
HEPTACHLOR TCLP	1311/608			8	ug/l
LINDANE TCLP	1311/608			400	ug/l
METHOXYCHLOR TCLP	1311/608			10000	ug/l
TOXAPHENE TCLP	1311/608			500	ug/l
SILVEX TCLP	1311/615			1000	ug/l
BENZENE TCLP	1311/624	6.45	ug/l	500	ug/l
CARBN TETRACHLORIDE TCLP	1311/624	-1	ug/l	500	ug/l
CHLOROBENZENE TCLP	1311/624	-1	ug/l	100000	ug/l
CHLOROFORM TCLP	1311/624	-1	ug/l	6000	ug/l
1,2-DICHLOROETHANE TCLP	1311/624	-1	ug/l	500	ug/l
1,1-DICHLORETHYLENE TCLP	1311/624	-1	ug/l	700	ug/l
HEXACHLOROETHANE TCLP	1311/624	-1	ug/l	3000	ug/l
METHYL ETHYL KETONE TCLP	1311/624	-5	ug/l	200000	ug/l
TETRACHLOROETHYLENE TCLP	1311/624	5.26	ug/l	700	ug/l
TRICHLOROETHYLENE TCLP	1311/624	-1	ug/l	500	ug/l
VINYL CHLORIDE TCLP	1311/624	-1	ug/l	200	ug/l
O-CRESOL TCLP	1311/625	-2.5	ug/l	200000	ug/l
M-CRESOL TCLP	1311/625	-2.5	ug/l	200000	ug/l
P-CRESOL TCLP	1311/625	-2.5	ug/l	200000	ug/l
1,4-DICHLOROBENZENE TCLP	1311/625	-1	ug/l	7500	ug/l
2,4-DINITROTOLUENE TCLP	1311/625	-12.5	ug/l	130	ug/l
HEXACHLOROBENZENE TCLP	1311/625	-2.5	ug/l	130	ug/l
HEXACHLOROBUTADIENE TCLP	1311/625	-1	ug/l	500	ug/l
NITROBENZENE TCLP	1311/625	-2.5	ug/l	2000	ug/l
PENTACHLOROPHENOL TCLP	1311/625	-2.5	ug/l	100000	ug/l
PYRIDINE TCLP	1311/625	-5	ug/l	5000	ug/l
245-TRICHLOROPHENOL TCLP	1311/625	-2.5	ug/l	400000	ug/l
246-TRICHLOROPHENOL TCLP	1311/625	-2.5	ug/l	2000	ug/l

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.

LYLE A. JOHNSON
LAB MANAGER

1460 W. McNab Road, Ft. Lauderdale, FL 33309 • Phone: (305) 978-6400 • 630 Indian Street, Savannah, Ga. 31401 • Phone: (912) 238-5050

CLARK
engineers - scientists

July 29, 1993

Mr. Garry R. Allen
President
International Petroleum Corporation
105 South Alexander Street
Plant City, Florida 33566

Re: Soil sampling results

Dear Mr. Allen:

Enclosed please find the Spectrum laboratory results for the soil sample collected by a representative of Edward E. Clark Engineers-Scientists, Inc. (CLARK) on June 28, 1993. The sample was collected from the grass area at the west end of the IPC facility, from the area show in the picture attached to the Warning Notice dated April 19, 1993.

The soil sample (labeled SB-1) was collected in accordance with procedures specified in the CLARK approved ComQAP (870224G) by using a stainless steel hand-held split spoon sampler. The soil sample was taken from land surface to a depth of 1-foot below land surface (BLS). The sampler was decontaminated prior to use and the soil placed in pre-cleaned 250 ml glass sample jars, properly labeled and transported to the laboratory. The sample was analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH) using EPA Method 9073.

Please contact me if you have any questions or comments.

Yours truly,

Edward E. Clark, Ph.D., P.E.
President

EEC/bjk

9277

CHAIN OF CUSTODY RECORD

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Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

☑ 1460 W. McNab Road
Ft. Lauderdale, FL 33309
(305) 978-6400

☐ 630 Indian Street
Savannah, GA 31401
(912) 238-5050

Project Name or Number	Client Name
9277.02	CLARK ENGINEERS-SCIENTISTS
Project Location	7270 NW 12th St., Suite 140
IAC PLANT City	MIAMI, FL 33126

LCN	Sample Number	Date	Time	Sample Matrix	Container (s)	Laboratory Analysis: TRPH	TCLP-10 (6)						Comments
021-062993	SB-1	6/28/93	10:20	SOIL	2	X							SB=Soil boring
022-062993	WS-1	6/28/93	10:40	FILTER BASKET LINT Composite	2		X						WS=waste sample

SAMPLED BY: JAMAR	Transfer Number	Item Number	• Transfers Relinquished by:	Accepted by:	Date	Time
	1			Dwight Alsobrook	6-28-93	4:16 PM
	2					
	3					
	4					

SPECTRUM

Laboratories, Inc. FORT LAUDERDALE · SAVANNAH

RESULTS OF ANALYSIS

CLIENT:	**ENGINEERS & SCIENTIST**	FL DRINKING WATER:	#86144
SAMPLE NUMBER:	021-062993	FL ENVIRONMENTAL:	#E86006
LOCATION:	**9277.02/SB-1**	GEORGIA:	#828,829
ADDITIONAL DATA:	**IPC PLANT CITY**	SOUTH CAROLINA:	#96015
SAMPLED BY:	JAMAL	EPA:	#FL095
SUBMITTED BY:	DWIGHT SLUSHER	FDER CQAP:	#870206G
DATE SAMPLED:	06/28/93 1020	DATE RECEIVED:	06/28/93
DATE REPORTED:	JULY 13 1993	SAMPLE MATRIX:	SOIL
REVISION:	0		

Parameter	Method	Results (- = <)	Units	Analysis Date and Time	Analyst
TRPH IN SOLID	EPA 9073	20.7	mg/kg	930712 165630	RLH

LYLE A. JOHNSON
LAB MANAGER

SPECTRUM
Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

TOXICITY CHARTERISTIC LEACHING PROCEDURE

CLIENT: ENGINEERS & SCIENTIST
SAMPLE NUMBER: 022-062993
LOCATION: 9277.02/WS-1
ADDITIONAL DATA: IPC PLANT CITY
SAMPLED BY: JAMAL
SUBMITTED BY: DWIGHT SLUSHER
DATE SAMPLED: 06/28/93 1040
DATE REPORTED: JULY 21 1993
REVISION: 0

FL DRINKING WATER: #86144
FL ENVIRONMENTAL: #E86006
GEORGIA: #828,829
SOUTH CAROLINA: #96015
EPA: #FL095
FDER CQAP: #870206G
DATE RECEIVED: 06/28/93
SAMPLE MATRIX: SOIL

ANALYTE	METHOD	RESULT (- = <)	UNITS	REGULATORY CONC.	
ARSENIC TCLP	1311/7060	0.003	mg/l	5.0	mg/l
BARIUM TCLP	1311/7080	0.72	mg/l	100.0	mg/l
CADMIUM TCLP	1311/7131	0.0021	mg/l	1.0	mg/l
CHROMIUM TCLP	1311/7191	0.003	mg/l	5.0	mg/l
LEAD TCLP	1311/7421	0.071	mg/l	5.0	mg/l
MERCURY TCLP	1311/7471	-0.0002	mg/l	0.2	mg/l
SELENIUM TCLP	1311/7740	-0.002	mg/l	1.0	mg/l
SILVER TCLP	1311/7760	-0.01	mg/l	5.0	mg/l
CHLORDANE TCLP	1311/608	-1	ug/l	30	ug/l
2,4-D TCLP	1311/615	-1	ug/l	10000	ug/l
ENDRIN TCLP	1311/608	-1	ug/l	20	ug/l
HEPTACHLOR TCLP	1311/608	-1	ug/l	8	ug/l
LINDANE TCLP	1311/608	-1	ug/l	400	ug/l
METHOXYCHLOR TCLP	1311/608	-1	ug/l	10000	ug/l
TOXAPHENE TCLP	1311/608	-10	ug/l	500	ug/l
SILVEX TCLP	1311/615	-1	ug/l	1000	ug/l
BENZENE TCLP	1311/624	4.62	ug/l	500	ug/l
CARBN TETRACHLORIDE TCLP	1311/624	-1	ug/l	500	ug/l
CHLOROBENZENE TCLP	1311/624	-1	ug/l	100000	ug/l
CHLOROFORM TCLP	1311/624	-1	ug/l	6000	ug/l
1,2-DICHLOROETHANE TCLP	1311/624	-1	ug/l	500	ug/l
1,1-DICHLORETHYLENE TCLP	1311/624	-1	ug/l	700	ug/l
HEXACHLOROETHANE TCLP	1311/624	-1	ug/l	3000	ug/l
METHYL ETHYL KETONE TCLP	1311/624	-5	ug/l	200000	ug/l
TETRACHLOROETHYLENE TCLP	1311/624	1.82	ug/l	700	ug/l
TRICHLOROETHYLENE TCLP	1311/624	-1	ug/l	500	ug/l
VINYL CHLORIDE TCLP	1311/624	-1	ug/l	200	ug/l
O-CRESOL TCLP	1311/625	41.1	ug/l	200000	ug/l
M-CRESOL TCLP	1311/625	-1	ug/l	200000	ug/l
P-CRESOL TCLP	1311/625	17.7	ug/l	200000	ug/l
1,4-DICHLOROBENZENE TCLP	1311/625	-1	ug/l	7500	ug/l
2,4-DINITROTOLUENE TCLP	1311/625	-5	ug/l	130	ug/l
HEXACHLOROBENZENE TCLP	1311/625	-1	ug/l	130	ug/l
HEXACHLOROBUTADIENE TCLP	1311/625	-1	ug/l	500	ug/l
NITROBENZENE TCLP	1311/625	-1	ug/l	2000	ug/l
PENTACHLOROPHENOL TCLP	1311/625	-1	ug/l	100000	ug/l
PYRIDINE TCLP	1311/625	-10	ug/l	5000	ug/l
245-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	400000	ug/l
246-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	2000	ug/l

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.

LYLE A. JOHNSON
LAB MANAGER

CHAIN OF CUSTODY RECORD

SPECTRUM
Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

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Ft. Lauderdale, FL 33309
(305) 978-6400

☐ 630 Indian Street
Savannah, GA 31401
(912) 238-5050

Project Name or Number	Client Name
9277.02	CLARK ENGINEERS-SCIENTISTS
Project Location	7270 NW 12th St., Suite 140
IFC PLANT City	MIAMI, FL 33126

LCN	Sample Number	Date	Time	Sample Matrix	Container (s)	Laboratory Analysis: TRPH	Laboratory Analysis: TCLP-10	Comments
021-062993	SB-1	6/28/93	10:20	SOIL	2	X		SB=soil boring
022-062993	WS-1	6/28/93	10:40	FILTER BASKET LINT Composite	2		X	WS=waste sample

Transfer Number	Item Number	• Transfers Relinquished by:	Accepted by:	Date	Time
1			Dwight Shelton	6-28-93	4:16 PM
2					
3					
4					

PLED BY: JAMAL

SPECTRUM

Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

TOXICITY CHARTERISTIC LEACHING PROCEDURE

CLIENT: ENGINEERS & SCIENTIST
SAMPLE NUMBER: 013-072993
LOCATION: FILTER BASKET LINT COMP.
ADDITIONAL DATA: I.P.C. INC.
SAMPLED BY: PAT FOX,CLARK
SUBMITTED BY: RALPH TARDIF,SPECTRUM
DATE SAMPLED: 07/27/93 0810
DATE REPORTED: AUG. 9 1993
REVISION: 0

FL DRINKING WATER: #86144
FL ENVIRONMENTAL: #E86006
GEORGIA: #828,829
SOUTH CAROLINA: #96015
EPA: #FL095
FDER COAP: #870206G
DATE RECEIVED: 07/29/93
SAMPLE MATRIX: SOIL

ANALYTE	METHOD	RESULT (- = <)	UNITS	REGULATORY CONC.	
ARSENIC TCLP	1311/7060	0.009	mg/l	5.0	mg/l
BARIUM TCLP	1311/7080	3.77	mg/l	100.0	mg/l
CADMIUM TCLP	1311/7131	-0.1	mg/l	1.0	mg/l
CHROMIUM TCLP	1311/7191	0.30	mg/l	5.0	mg/l
LEAD TCLP	1311/7421	0.14	mg/l	5.0	mg/l
MERCURY TCLP	1311/7471	-0.0002	mg/l	0.2	mg/l
SELENIUM TCLP	1311/7740	-0.002	mg/l	1.0	mg/l
SILVER TCLP	1311/7760	-0.01	mg/l	5.0	mg/l
CHLORDANE TCLP	1311/608	-1	ug/l	30	ug/l
2,4-D TCLP	1311/615	-1	ug/l	10000	ug/l
ENDRIN TCLP	1311/608	-1	ug/l	20	ug/l
HEPTACHLOR TCLP	1311/608	-1	ug/l	8	ug/l
LINDANE TCLP	1311/608	-1	ug/l	400	ug/l
METHOXYCHLOR TCLP	1311/608	-1	ug/l	10000	ug/l
TOXAPHENE TCLP	1311/608	-10	ug/l	500	ug/l
SILVEX TCLP	1311/615	-1	ug/l	1000	ug/l
BENZENE TCLP	1311/624	2.7	ug/l	500	ug/l
CARBN TETRACHLORIDE TCLP	1311/624	-1	ug/l	500	ug/l
CHLOROBENZENE TCLP	1311/624	-1	ug/l	100000	ug/l
CHLOROFORM TCLP	1311/624	-1	ug/l	6000	ug/l
1,2-DICHLOROETHANE TCLP	1311/624	-1	ug/l	500	ug/l
1,1-DICHLORETHYLENE TCLP	1311/624	-1	ug/l	700	ug/l
HEXACHLOROETHANE TCLP	1311/624	-1	ug/l	3000	ug/l
METHYL ETHYL KETONE TCLP	1311/624	-5	ug/l	200000	ug/l
TETRACHLOROETHYLENE TCLP	1311/624	2.0	ug/l	700	ug/l
TRICHLOROETHYLENE TCLP	1311/624	-1	ug/l	500	ug/l
VINYL CHLORIDE TCLP	1311/624	-1	ug/l	200	ug/l
O-CRESOL TCLP	1311/625	15.8	ug/l	200000	ug/l
M-CRESOL TCLP	1311/625	-1	ug/l	200000	ug/l
P-CRESOL TCLP	1311/625	3.7	ug/l	200000	ug/l
1,4-DICHLOROBENZENE TCLP	1311/625	-1	ug/l	7500	ug/l
2,4-DINITROTOLUENE TCLP	1311/625	-5	ug/l	130	ug/l
HEXACHLOROBENZENE TCLP	1311/625	-1	ug/l	130	ug/l
HEXACHLOROBUTADIENE TCLP	1311/625	-1	ug/l	500	ug/l
NITROBENZENE TCLP	1311/625	-1	ug/l	2000	ug/l
PENTACHLOROPHENOL TCLP	1311/625	-1	ug/l	100000	ug/l
PYRIDINE TCLP	1311/625	-5	ug/l	5000	ug/l
245-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	400000	ug/l
246-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	2000	ug/l

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.

LYLE A. JOHNSON
LAB MANAGER

CHAIN OF CUSTODY RECORD

SPECTRUM
Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

☒ 1460 W. McNab Road
Ft. Lauderdale, FL 33309
(305) 978-6400

☐ 630 Indian Street
Savannah, GA 31401
(912) 238-5050

Project Name or Number	Client Name
1277.02	CLARK ENGINEER-SCIENTISTS INC
Project Location	7975 NW 12 STREET SUITE 340
IT'S PLANT CITY FLA	MIAMI, FLA 33126

LCN	Sample Number	Date	Time	Sample Matrix	Container (s)	Laboratory Analysis: FULL TCLP	Comments
22-66/193	1	6/10/93		SOLID	1	X	TRIAL RUN LINT SHAKEL PROCESS
							Clear Vertical
							in Benzene
							To Kail HSHP

SAMPLED BY:	Transfer Number	Item Number	• Transfers Relinquished by:	Accepted by:	Date	Time
	1					
	2					
	3					
	4					

* Samples that are determined to be hazardous will be returned to submitter

SPECTRUM

Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

TOXICITY CHARTERISTIC LEACHING PROCEDURE

CLIENT: ENGINEERS & SCIENTIST
SAMPLE NUMBER: 022-061193
LOCATION: 9277.02/1
ADDITIONAL DATA: IPC PLANT CITY, FL
SAMPLED BY: CLIENT
SUBMITTED BY: AIR EXPRESS
DATE SAMPLED: 06/10/93
DATE REPORTED: JUNE 27 1993
REVISION: 0

FL DRINKING WATER: #86144
FL ENVIRONMENTAL: #E86006
GEORGIA: #828,829
SOUTH CAROLINA: #96015
EPA: #FL095
FDER CQAP: #870206G
DATE RECEIVED: 06/11/93
SAMPLE MATRIX: SOLID

ANALYTE	METHOD	RESULT (- = <)	UNITS	REGULATORY CONC.	
ARSENIC TCLP	1311/7060	-0.002	mg/l	5.0	mg/l
BARIUM TCLP	1311/7080	0.70	mg/l	100.0	mg/l
CADMIUM TCLP	1311/7131	-0.0001	mg/l	1.0	mg/l
CHROMIUM TCLP	1311/7191	-0.001	mg/l	5.0	mg/l
LEAD TCLP	1311/7421	-0.001	mg/l	5.0	mg/l
MERCURY TCLP	1311/7471	-0.0002	mg/l	0.2	mg/l
SELENIUM TCLP	1311/7740	-0.002	mg/l	1.0	mg/l
SILVER TCLP	1311/7760	-0.01	mg/l	5.0	mg/l
CHLORDANE TCLP	1311/608			30	ug/l
2,4-D TCLP	1311/615			10000	ug/l
ENDRIN TCLP	1311/608			20	ug/l
HEPTACHLOR TCLP	1311/608			8	ug/l
LINDANE TCLP	1311/608			400	ug/l
METHOXYCHLOR TCLP	1311/608			10000	ug/l
TOXAPHENE TCLP	1311/608			500	ug/l
SILVEX TCLP	1311/615			1000	ug/l
BENZENE TCLP	1311/624	7.6	ug/l	500	ug/l
CARBN TETRACHLORIDE TCLP	1311/624	-0.5	ug/l	500	ug/l
CHLOROBENZENE TCLP	1311/624	-0.5	ug/l	100000	ug/l
CHLOROFORM TCLP	1311/624	-0.5	ug/l	6000	ug/l
1,2-DICHLOROETHANE TCLP	1311/624	-0.5	ug/l	500	ug/l
1,1-DICHLORETHYLENE TCLP	1311/624	-0.5	ug/l	700	ug/l
HEXACHLOROETHANE TCLP	1311/624	-0.5	ug/l	3000	ug/l
METHYL ETHYL KETONE TCLP	1311/624	28.9	ug/l	200000	ug/l
TETRACHLOROETHYLENE TCLP	1311/624	2.5	ug/l	700	ug/l
TRICHLOROETHYLENE TCLP	1311/624	-0.5	ug/l	500	ug/l
VINYL CHLORIDE TCLP	1311/624	-0.5	ug/l	200	ug/l
O-CRESOL TCLP	1311/625	30.0	ug/l	200000	ug/l
M-CRESOL TCLP	1311/625	-1	ug/l	200000	ug/l
P-CRESOL TCLP	1311/625	44.2	ug/l	200000	ug/l
1,4-DICHLOROBENZENE TCLP	1311/625	-0.5	ug/l	7500	ug/l
2,4-DINITROTOLUENE TCLP	1311/625	-5	ug/l	130	ug/l
HEXACHLOROBENZENE TCLP	1311/625	-1	ug/l	130	ug/l
HEXACHLOROBUTADIENE TCLP	1311/625	-0.5	ug/l	500	ug/l
NITROBENZENE TCLP	1311/625	-1.0	ug/l	2000	ug/l
PENTACHLOROPHENOL TCLP	1311/625	-1	ug/l	100000	ug/l
PYRIDINE TCLP	1311/625	-0.5	ug/l	5000	ug/l
245-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	400000	ug/l
246-TRICHLOROPHENOL TCLP	1311/625	-1	ug/l	2000	ug/l

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.

LYLE A. JOHNSON
LAB MANAGER

1460 W. McNab Road, Ft. Lauderdale, FL 33309 • Phone: (305) 978-6400 • 630 Indian Street, Savannah, Ga. 31401 • Phone: (912) 238-5050

Table 1: Summa Sludge TCLP Analysis
June 1993 ough October 1996

Compound	Concentration (mg/l)									
	Sampled 06/28/93	Sampled 07/27/93	Sampled 08/30/93	FDEP Split	Sampled 09/27/93	Sampled 10/28/93	Sampled 09/16/94	Sampled 11/20/95	Sampled 10/17/96	TCLP * Criteria
Arsenic	0.003	0.009	0.004	BDL	BDL	0.003	BDL	0.003	BDL	5.0
Barium	0.72	3.77	BDL	0.5	1.02	0.31	0.55	0.22	6.33	100
Cadmium	0.002	BDL	BDL	BDL	0.04	0.02	BDL	BDL	0.002	1.0
Chromium	0.003	0.30	BDL	BDL	0.04	0.04	BDL	BDL	BDL	5.0
Lead	0.071	0.14	0.09	BDL	0.14	0.15	0.20	0.14	0.025	5.0
Mercury	BDL	BDL	BDL	BDL	BDL	0.0002	0.001	0.0005	BDL	0.2
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.0
Silver	BDL	BDL	BDL	BDL	BDL	BDL	0.09	BDL	BDL	5.0
Benzene	0.005	0.003	0.007	0.010	BDL	0.0011	BDL	0.00085	BDL	0.5
Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Chlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	100
Chloroform	BDL	BDL	BDL	BDL	BDL	0.008	BDL	BDL	BDL	6.0
1,2-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
1,1-Dichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.7
Hexachloroethane	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	3.0
Methyl Ethyl Ketone	BDL	BDL	BDL	NR	BDL	0.034	BDL	0.00758	BDL	200
Tetrachloroethylene	0.002	0.002	0.005	0.007	0.003	BDL	BDL	0.00129	BDL	0.7
Trichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Vinyl Chloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2
o-Cresol	0.041	0.016	BDL	NR	BDL	0.001	BDL	0.00244	BDL	200
m-Cresol	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	200
p-Cresol	0.018	0.004	BDL	NR	BDL	0.006	BDL	0.00135	BDL	200
1,4-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	7.5
2,4-Dinitrotoluene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	0.13
Hexachlorobenzene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	0.13
Hexachlorbutadiene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	0.5
Nitrobenzene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	2.0
Pentachlorophenol	BDL	BDL	BDL	NR	BDL	0.042	BDL	BDL	BDL	100
Pyridine	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	5.0
2,4,5-Trichlorophenol	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	400
2,4,6-Trichlorophenol	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	2.0

(BDL) Below Laboratory Detection Limits (NR) Not Reported by FDEP (*) Maximum concentration for non-hazardous

[redacted] Laboratories, [redacted] FORT LAUDERDALE - SAVANNAH [redacted]

☒ [redacted]60 W[redacted]cNa[redacted]oad [redacted]
Ft. Lauderdale, FL 33309
(305) 978-6400

☐ 6[redacted]n [redacted]eet
Savan[redacted]GA 31401
(912) 238-5050

Project Name or Number	Client Name
	INTERNATIONAL PETROLEUM CORP
Project Location PLANT CITY, FL	105 S ALEXANDER STREET, PLANT CITY, FL 33599

Laboratory Analysis

LCN	Sample Number	Date	Time	Sample Matrix	Container (s)	TCLP LESS HERB/PEST							Comments
001-1018916	FILTER BASKET LINT COMPOSITE	10/17/96	0830	FILTER BASKET LINT COMPOSITE	4	X							COMPOSITE FOUR BOTTLES PRIOR TO ANALYSES
													ATTN: GARRY ALLE[illegible]

SAMPLED BY: [signature]

Transfer Number	Item Number	Transfers Relinquished by:	Accepted by:	Date	Time
1		FED EX	Cindy McElwee	10/18/96	[illegible]
2					
3					
4					

Samples that are determined to be hazardous will be returned to submitter.

SPECTRUM
Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

TOXICITY CHARTERISTIC LEACHING PROCEDURE

CLIENT: ENGINEERS & SCIENTISTS
SAMPLE NUMBER: 007-101896
LOCATION: FILTER BASKET LINT
ADDITIONAL DATA: INT. PETROLEUM-COMP.
SAMPLED BY: KEN BAUGHMAN, CLARK
SUBMITTED BY: FEDERAL EXPRESS
DATE SAMPLED: 10/17/96 0830
DATE REPORTED: NOV. 5 1996
REVISION: 0

FL DRINKING WATER: #86144
FL ENVIRONMENTAL: #E86006
GEORGIA: #2000
SOUTH CAROLINA: #96015
EPA: #FL095
FDEP CQAP: #870206G
DATE RECEIVED: 10/18/96
SAMPLE MATRIX: SOLID

ANALYTE	METHOD	RESULT (- = <)	UNITS	REGULATORY CONCENTRATION	
ARSENIC TCLP	1311/7060	0.00	mg/l	5.0	mg/l
BARIUM TCLP	1311/7080	6.33	mg/l	100.0	mg/l
CADMIUM TCLP	1311/7131	0.0020	mg/l	1.0	mg/l
CHROMIUM TCLP	1311/7191	0.00	mg/l	5.0	mg/l
LEAD TCLP	1311/7421	0.025	mg/l	5.0	mg/l
MERCURY TCLP	1311/7471	0.00	mg/l	0.2	mg/l
SELENIUM TCLP	1311/7740	0.00	mg/l	1.0	mg/l
SILVER TCLP	1311/7760	0.00	mg/l	5.0	mg/l
CHLORDANE TCLP	1311/608		ug/l	30	ug/l
2,4-D TCLP	1311/615		ug/l	10000	ug/l
SILVEX TCLP	1311/615		ug/l	1000	ug/l
ENDRIN TCLP	1311/608		ug/l	20	ug/l
HEPTACHLOR TCLP	1311/608		ug/l	8	ug/l
LINDANE TCLP	1311/608		ug/l	400	ug/l
METHOXYCHLOR TCLP	1311/608		ug/l	10000	ug/l
TOXAPHENE TCLP	1311/608		ug/l	500	ug/l
BENZENE TCLP	1311/624	0.00	ug/l	500	ug/l
CARBN TETRACHLORIDE TCLP	1311/624	0.00	ug/l	500	ug/l
CHLOROBENZENE TCLP	1311/624	0.00	ug/l	100000	ug/l
CHLOROFORM TCLP	1311/624	0.00	ug/l	6000	ug/l
1,2-DICHLOROETHANE TCLP	1311/624	0.00	ug/l	500	ug/l
1,1-DICHLORETHYLENE TCLP	1311/624	0.00	ug/l	700	ug/l
METHYL ETHYL KETONE TCLP	1311/624	0.00	ug/l	200000	ug/l
TETRACHLOROETHYLENE TCLP	1311/624	0.00	ug/l	700	ug/l
TRICHLOROETHYLENE TCLP	1311/624	0.00	ug/l	500	ug/l
VINYL CHLORIDE TCLP	1311/624	0.00	ug/l	200	ug/l
O-CRESOL TCLP	1311/625	0.00	ug/l	200000	ug/l
M-CRESOL TCLP	1311/625	0.00	ug/l	200000	ug/l
P-CRESOL TCLP	1311/625	0.00	ug/l	200000	ug/l
1,4-DICHLOROBENZENE TCLP	1311/625	0.00	ug/l	7500	ug/l
2,4-DINITROTOLUENE TCLP	1311/625	0.00	ug/l	130	ug/l
HEXACHLOROBENZENE TCLP	1311/625	0.00	ug/l	130	ug/l
HEXACHLOROBUTADIENE TCLP	1311/625	0.00	ug/l	500	ug/l
HEXACHLOROETHANE TCLP	1311/625	0.00	ug/l	3000	ug/l
NITROBENZENE TCLP	1311/625	0.00	ug/l	2000	ug/l
PENTACHLOROPHENOL TCLP	1311/625	0.00	ug/l	100000	ug/l
PYRIDINE TCLP	1311/625	0.00	ug/l	5000	ug/l
245-TRICHLOROPHENOL TCLP	1311/625	0.00	ug/l	400000	ug/l
246-TRICHLOROPHENOL TCLP	1311/625	0.00	ug/l	2000	ug/l

LYLE A. JOHNSON

WASTE CHARACTERIZATION PROGRAM

1997 REPORT

International Petroleum Corporation
105 South Alexander Street
Plant City, Florida 33599

Yearly Sampling and Analysis for Sump Waste and Filter Basket Lint

November 1997

Project 9277

Prepared By:

Edward E. Clark Engineers-Scientists, Inc.
Miami, Florida

December 2, 1997

CLARK

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
7270 NW 12th Street Suite 540 Miami Florida 33126

WASTE CHARACTERIZATION PROGRAM
1997 REPORT

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105 South Alexander Street
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Sump Waste and Filter Basket Lint
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Edward E. Clark Engineers-Scientists, Inc.
Miami, Florida

December 2, 1997

Edward E. Clark 12-2-97

CLARK
engineers-scientists

EDWARD E. CLARK ENGINEERS-SCIENTISTS, INC.
7270 NW 12th Street, Suite 740, Miami, FL 33126

1.0 INTRODUCTION

International Petroleum Corporation (IPC) is located at 105 South Alexander Street, Plant City, Hillsborough County, Florida and operates a used oil re-refinery. Process waste from the sumps and in-line pump filter baskets are collected into 55-gallon DOT shipping drums throughout the month. At the end of each month, this combined non-hazardous waste is manifested and transported to Clark Environmental, Inc.(CEI) located at 755 Prairie Industrial Parkway, Mulberry, Florida, for solidification prior to disposal at a permitted disposal facility.

In June 1993 IPC initiated a five month program of extensive laboratory analyses of its waste material. The purpose of this sampling program was to develop a more extensive data base on "sludge" consisting of sump waste and pump filter basket lint. This effort involved sampling of the monthly accumulation of waste material and TCLP analysis. The results of the five month study confirmed that the waste material is characterized as non-hazardous (RCRA). Following the five month program, IPC has voluntarily continued to collect and analyze the sump waste and pump filter basket lint on a yearly basis.

This report summarizes the sampling procedures used to collect the sludge samples and includes a discussion of the analytical results for the sample collected on November 5, 1997.

2.0 SLUDGE SAMPLING PROCEDURE

Samples from the accumulated waste material were collected by representatives of CLARK on November 5, 1997 in accordance with sampling procedures specified in CLARK'S approved Comprehensive Quality Assurance Plan (CompQAP # 870224). Aliquots of the combined sump and filter basket lint solids were collected from each accumulated drum and stored on-site during the sampling episode and placed in a pre-cleaned stainless steel mixing bowl. After sampling each drum, the composite waste sample was thoroughly mixed and then transferred into four (4) pre-cleaned sample jars supplied by Spectrum Laboratories, Inc. (SPECTRUM) of Ft. Lauderdale, Florida. The four sample jars were stored in a shipping container with wet ice and transported to the laboratory for analysis.

SPECTRUM analyzed the TCLP leachate from the combined sample for volatile and extractable TCLP compounds by gas chromatography/mass spectrometry (GC/MS) using EPA Methods 624/625. TCLP metals were analyzed by either graphite furnace or cold vapor atomic absorption spectrophotometry, as appropriate. All analytical procedures were performed in accordance with SPECTRUM's FDEP approved Comprehensive Quality Assurance Plan (CompQAP # 870206).

3.0 DISCUSSION OF RESULTS

The TCLP leachate from the combined sump and filter basket composite sample collected on November 5, 1997 and reported on November 14, 1997 was analyzed for TCLP volatile and extractable compounds and metals. A review of the analytical data, for the combined solid sample, shows that the solid sample, reported as sludge, shows that the material is classified as non-hazardous, as defined by the TCLP criteria. All TCLP parameters were below laboratory detection limits (BDL) except for small concentrations of the following: arsenic, barium, cadmium, lead, benzene and methyl ethyl ketone; all of which were well below maximum concentration for Toxicity Characteristic. The results of the 1997 sample are summarized in Table 1 along with the results from all previous sampling events. Copies of the laboratory's analytical results for the 1997 sampling event are enclosed in Appendix A.

TABLES

Table 1: Summary of TCLP Analyses
June 1993 through November 1997

Compound	Concentration (mg/l)										
	Sampled 06/28/93	Sampled 07/27/93	Sampled 08/30/93	FDEP Split	Sampled 09/27/93	Sampled 10/28/93	Sampled 09/16/94	Sampled 11/20/95	Sampled 10/17/96	Sampled 11/5/97	TCLP * Criteria
Arsenic	0.003	0.009	0.004	BDL	BDL	0.003	BDL	0.003	BDL	0.004	5.0
Barium	0.72	3.77	BDL	0.5	1.02	0.31	0.55	0.22	6.33	0.5	100
Cadmium	0.002	BDL	BDL	BDL	0.04	0.02	BDL	BDL	0.002	0.09	1.0
Chromium	0.003	0.30	BDL	BDL	0.04	0.04	BDL	BDL	BDL	BDL	5.0
Lead	0.071	0.14	0.09	BDL	0.14	0.15	0.20	0.14	0.025	0.16	5.0
Mercury	BDL	BDL	BDL	BDL	BDL	0.0002	0.001	0.0005	BDL	BDL	0.2
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.0
Silver	BDL	BDL	BDL	BDL	BDL	BDL	0.09	BDL	BDL	BDL	5.0
Benzene	0.005	0.003	0.007	0.010	BDL	0.0011	BDL	0.00085	BDL	0.00063	0.5
Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Chlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	100
Chloroform	BDL	BDL	BDL	BDL	BDL	0.008	BDL	BDL	BDL	BDL	6.0
1,2-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
1,1-Dichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.7
Hexachloroethane	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	3.0
Methyl Ethyl Ketone	BDL	BDL	BDL	NR	BDL	0.034	BDL	0.00758	BDL	0.123	200
Tetrachloroethylene	0.002	0.002	0.005	0.007	0.003	BDL	BDL	0.00129	BDL	BDL	0.7
Trichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Vinyl Chloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2
o-Cresol	0.041	0.016	BDL	NR	BDL	0.001	BDL	0.00244	BDL	BDL	200
m-Cresol	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	200
p-Cresol	0.018	0.004	BDL	NR	BDL	0.006	BDL	0.00135	BDL	BDL	200
1,4-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	7.5
2,4-Dinitrotoluene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	0.13
Hexachlorobenzene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	0.13
Hexachlorbutadiene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Nitrobenzene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	2.0
Pentachlorophenol	BDL	BDL	BDL	NR	BDL	0.042	BDL	BDL	BDL	BDL	100
Pyridine	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	5.0
2,4,5-Trichlorophenol	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	400
2,4,6-Trichlorophenol	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	2.0

(BDL) Below Laboratory Detection Limits (NR) Not Reported by FDEP (*) Maximum concentration for non-hazardous

Appendix A

CHAIN OF CUSTODY RECORD

SPECTRUM
Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

☐ 1460 W. McNab Road
Ft. Lauderdale, FL 33309
(305) 978-6400

☐ 630 Indian Street
Savannah, GA 31401
(912) 238-5050

Project Name or Number	Client Name
9277.02	CLARK Engineers
Project Location	
PLANT City, FLA.	

LCN	Sample Number	Date	Time	Sample Matrix	Container (s)	Laboratory Analysis: TCLP / Less Hard, Part	Comments
0335-110697	Filter Bag Lint	11/5/97	0900	S	2	X	

SAMPLED BY:	Transfer Number	Item Number	• Transfers Relinquished by:	Accepted by:	Date	Time
RJA	1		RJA		11/6/97	1230
	2					
	3					
	4					

SPECTRUM

Laboratories, Inc. FORT LAUDERDALE • SAVANNAH

TOXICITY CHARTERISTIC LEACHING PROCEDURE

CLIENT: ENGINEERS & SCIENTISTS
SAMPLE NUMBER: 035-110697
LOCATION: FILTER LINT BASKET
ADDITIONAL DATA: 9277.02
SAMPLED BY: PAT FOX
SUBMITTED BY: PAT FOX
DATE SAMPLED: 11/05/97 0900
DATE REPORTED: NOV. 14 1997
REVISION: 0

FL DRINKING WATER: #8614
FL ENVIRONMENTAL: #E860
GEORGIA: #2000
SOUTH CAROLINA: #9601
EPA: #FL09
FDEP CQAP: #8702
DATE RECEIVED: 11/06
SAMPLE MATRIX: SOIL

ANALYTE	METHOD	RESULT (- = <)	UNITS	REGULATORY CONCENTRATION	
ARSENIC TCLP	1311/7060	0.004	mg/l	5.0	mg/l
BARIUM TCLP	1311/6010	0.50	mg/l	100.0	mg/l
CADMIUM TCLP	1311/6010	0.09	mg/l	1.0	mg/l
CHROMIUM TCLP	1311/6010	0.00	mg/l	5.0	mg/l
LEAD TCLP	1311/6010	0.16	mg/l	5.0	mg/l
MERCURY TCLP	1311/7471	0.00	mg/l	0.2	mg/l
SELENIUM TCLP	1311/7740	0.00	mg/l	1.0	mg/l
SILVER TCLP	1311/6010	0.00	mg/l	5.0	mg/l
CHLORDANE TCLP	1311/608		ug/l	30	ug/l
2,4-D TCLP	1311/615		ug/l	10000	ug/l
SILVEX TCLP	1311/615		ug/l	1000	ug/l
ENDRIN TCLP	1311/608		ug/l	20	ug/l
HEPTACHLOR TCLP	1311/608		ug/l	8	ug/l
LINDANE TCLP	1311/608		ug/l	400	ug/l
METHOXYCHLOR TCLP	1311/608		ug/l	10000	ug/l
TOXAPHENE TCLP	1311/608		ug/l	500	ug/l
BENZENE TCLP	1311/624	0.63	ug/l	500	ug/l
CARBN TETRACHLORIDE TCLP	1311/624	0.00	ug/l	500	ug/l
CHLOROBENZENE TCLP	1311/624	0.00	ug/l	100000	ug/l
CHLOROFORM TCLP	1311/624	0.00	ug/l	6000	ug/l
1,2-DICHLOROETHANE TCLP	1311/624	0.00	ug/l	500	ug/l
1,1-DICHLORETHYLENE TCLP	1311/624	0.00	ug/l	700	ug/l
METHYL ETHYL KETONE TCLP	1311/624	123	ug/l	200000	ug/l
TETRACHLOROETHYLENE TCLP	1311/624	0.00	ug/l	700	ug/l
TRICHLOROETHYLENE TCLP	1311/624	0.00	ug/l	500	ug/l
VINYL CHLORIDE TCLP	1311/624	0.00	ug/l	200	ug/l
O-CRESOL TCLP	1311/625	0.00	ug/l	200000	ug/l
M-CRESOL TCLP	1311/625	0.00	ug/l	200000	ug/l
P-CRESOL TCLP	1311/625	0.00	ug/l	200000	ug/l
1,4-DICHLOROBENZENE TCLP	1311/625	0.00	ug/l	7500	ug/l
2,4-DINITROTOLUENE TCLP	1311/625	0.00	ug/l	130	ug/l
HEXACHLOROBENZENE TCLP	1311/625	0.00	ug/l	130	ug/l
HEXACHLOROBUTADIENE TCLP	1311/625	0.00	ug/l	500	ug/l
HEXACHLOROETHANE TCLP	1311/625	0.00	ug/l	3000	ug/l
NITROBENZENE TCLP	1311/625	0.00	ug/l	2000	ug/l
PENTACHLOROPHENOL TCLP	1311/625	0.00	ug/l	100000	ug/l
PYRIDINE TCLP	1311/625	0.00	ug/l	5000	ug/l
245-TRICHLOROPHENOL TCLP	1311/625	0.00	ug/l	400000	ug/l
246-TRICHLOROPHENOL TCLP	1311/625	0.00	ug/l	2000	ug/l

LYLE A. JOHNSON
LABORATORY MANAGER

12/29/97

PHOSLAB

Phone 941-682-5897 806 W. Beacon Road • Lakeland, Florida 33803 Fax 941-683-3279

Client: International Environmental Services, Inc.
105 South Alexander Street
Plant City, Florida 33566

Attn.: Mr. Mark Giaquinto
P. O. #:
Project: International Petroleum Corporation
Reference: Sludge Sample #970407
RAIL CARS

Sampled By: MG
Sample Date: 12-29-97
Date Received: 12-29-97
Analysis Date: 12-30-97
Analyzed By: GJF/JMC

CERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
EPA METHOD 1311

(expressed as mg/L)

Parameters:	970407	Regulatory Limits, mg/L
Arsenic	<0.01	5.00
Barium	0.73	100.00
Cadmium	<0.01	1.00
Chromium	0.03	5.00
Lead	0.01	5.00
Mercury	<0.01	0.20
Selenium	<0.10	1.00
Silver	<0.01	5.00

QA OFFICER

FDER QA/QC #870308G

CHEMIST

PRC

ENVIRONMENTAL LABORATORY, INC.

L-955491

Tank Bottoms

ANALYTICAL REPORT

CLIENT: International Petroleum Corp. of DE
505 S. Market Street
Wilmington DE 19801

REPORTED: 10-25-95
RECEIVED: 10-09-95
WORK ORDER: L-955491

SAMPLE ID: Oil (Filter Debris) (Tank Bottoms)

SAMPLING DATE: - - TIME: BY:

REPORT TO: Ms. Kelly Brown

TCLP VOLATILES

ANALYSIS	METHOD		RESULT	UNIT	DATE/INITIAL
1,1-Dichloroethene	8260	<	25	ug/L	10-17-95/DBC
1,2-Dichloroethane	8260	<	25	ug/L	10-17-95/DBC
Benzene	8260	<	25	ug/L	10-17-95/DBC
Carbon Tetrachloride	8260	<	25	ug/L	10-17-95/DBC
Chlorobenzene	8260	<	25	ug/L	10-17-95/DBC
Chloroform	8260	<	25	ug/L	10-17-95/DBC
Methyl ethyl ketone	8260	<	25	ug/L	10-17-95/DBC
Tetrachloroethene	8260	<	25	ug/L	10-17-95/DBC
Trichloroethene	8260	<	25	ug/L	10-17-95/DBC
Vinyl Chloride	8260	<	25	ug/L	10-17-95/DBC

TCLP SEMIVOLATILES

ANALYSIS	METHOD		RESULT	UNIT	DATE/INITIAL
1,4-Dichlorobenzene	8270	<	100	ug/L	10-20-95/DBC
2,4-Dinitrotoluene	8270	<	100	ug/L	10-20-95/DBC
2,4,5-Trichlorophenol	8270	<	100	ug/L	10-20-95/DBC
2,4,6-Trichlorophenol	8270	<	100	ug/L	10-20-95/DBC
Cresol, total	8270	<	100	ug/L	10-20-95/DBC
Hexachlorobenzene	8270	<	100	ug/L	10-20-95/DBC
Hexachlorobutadiene	8270	<	100	ug/L	10-20-95/DBC
Hexachloroethane	8270	<	100	ug/L	10-20-95/DBC
Nitrobenzene	8270	<	100	ug/L	10-20-95/DBC
Pentachlorophenol	8270	<	250	ug/L	10-20-95/DBC
Pyridine	8270	<	100	ug/L	10-20-95/DBC
m/p-Cresol	8270	<	100	ug/L	10-20-95/DBC
o-Cresol	8270	<	100	ug/L	10-20-95/DBC

TCLP PESTICIDES

ANALYSIS	METHOD		RESULT	UNIT	DATE/INITIAL
Chlordane	8081	<	15	ug/L	10-18-95/KLS
Endrin	8081	<	10	ug/L	10-18-95/KLS
Heptachlor	8081	<	4	ug/L	10-18-95/KLS
Heptachlor epoxide	8081	<	4	ug/L	10-18-95/KLS

5629 WYNNOMIN ROAD • SPRING GROVE, PA 17362 • TEL 610-670-8505 • FAX 610-670-8513

L-955491

TCLP PESTICIDES
ANALYSIS

	METHOD		RESULT	UNIT	DATE/INITIAL
Lindane	8081	<	50	ug/L	10-18-95/KLG
Methoxychlor	8081	<	500	ug/L	10-18-95/KLG
Toxaphene	8081	<	250	ug/L	10-18-95/KLG

TCLP INORGANICS
ANALYSIS

	METHOD		RESULT	UNIT	DATE/INITIAL
Arsenic	6010	<	0.50	mg/L	10-24-95/BAK
Barium	6010		0.53	mg/L	10-24-95/BAK
Cadmium	6010	<	0.030	mg/L	10-24-95/BAK
Chromium	6010	<	0.05	mg/L	10-24-95/BAK
Lead	6010	<	0.20	mg/L	10-24-95/BAK
Mercury	7470	<	0.0005	mg/L	10-23-95/BTT
Selenium	6010	<	0.50	mg/L	10-24-95/BAK
Silver	6010	<	0.06	mg/L	10-24-95/BAK
pH, Final	9040		5.01	Units	10-13-95/BAK
pH, Initial	9040		7.58	Units	10-12-95/CEG

TCLP HERBICIDES
ANALYSIS

	METHOD		RESULT	UNIT	DATE/INITIAL
2,4-D	8150*	<	5000	ug/L	10-20-95/KLG
2,4,5-TP (Silvex)	8150*	<	500	ug/L	10-20-95/KLG

*Esterification by Standard Method 5640.

Reviewed by:

Karen L. Merrill
Laboratory Director

BEST AVAILABLE COPY

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LABS AMERICA

•Quality Environmental Testing

ANALYTICAL REPORT

REPORTED 10/18/96
RECEIVED 10/03/96
WORK ORDER L-967184
SAMPLING DATE 09/29/96
TIME 12 30
BY KB

CLIENT: International Petroleum Corp. of DE
505 S. Market Street
Wilmington, DE 19801

SAMPLE ID: Microseparator Debris

REPORT TO: Ms. Kelly Brown

TCLP (1311) SEMIVOLATILES ANALYSIS		RESULT	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
1,4-Dichlorobenzene	<	100	ug/L	8270	100	BLB	10/14/96	23:47
2,4,5-Trichlorophenol	<	100	ug/L	8270	100	BLB	10/14/96	23:47
2,4,6-Trichlorophenol	<	100	ug/L	8270	100	BLB	10/14/96	23:47
2,4-Dinitrotoluene	<	100	ug/L	8270	100	BLB	10/14/96	23:47
Cresol total		377	ug/L	8270	100	BLB	10/14/96	23:47
Hexachlorobenzene	<	100	ug/L	8270	100	BLB	10/14/96	23:47
Hexachlorobutadiene	<	100	ug/L	8270	100	BLB	10/14/96	23:47
Hexachloroethane	<	100	ug/L	8270	100	BLB	10/14/96	23:47
Nitrobenzene	<	100	ug/L	8270	100	BLB	10/14/96	23:47
Pentachlorophenol	<	100	ug/L	8270	100	BLB	10/14/96	23:47
Pyridine	<	100	ug/L	8270	100	BLB	10/14/96	23:47
m/p-Cresol		180	ug/L	8270	100	BLB	10/14/96	23:47
o-Cresol		197	ug/L	8270	100	BLB	10/14/96	23:47

TCLP (1311) HERBICIDES ANALYSIS		RESULT	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
2,4,5-TP (Silvex)	<	500	ug/L	8150#	500	PDB	10/17/96	15:[illegible]
2,4-D	<	5000	ug/L	8150#	5000	PDB	10/17/96	15:[illegible]

TCLP (1311) INORGANICS ANALYSIS		RESULT	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
Arsenic	<	0.50	mg/L	7060	0.50	BAK	10/10/96	13:39
Barium		0.39	mg/L	6010	0.30	BAK	10/10/96	13:39
Cadmium	<	0.03	mg/L	6010	0.03	BAK	10/10/96	13:39
Chromium	<	0.05	mg/L	6010	0.05	BAK	10/10/96	13:39
Lead	<	0.20	mg/L	6010	0.20	BAK	10/10/96	13:39
Mercury	<	0.0005	mg/L	7470	0.0005	JAB	10/10/96	14:49
Selenium	<	0.50	mg/L	6010	0.50	BAK	10/10/96	13:39
Silver	<	0.06	mg/L	6010	0.06	BAK	10/10/96	13:39
pH, Final		5.26	Units	9040		PDB	10/08/96	08:00
pH, Initial		7.99	Units	9040		PDB	10/07/96	15:14

TCLP (1311) PESTICIDES ANALYSIS	RESULT	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS

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LABS AMERICA

•Quality Environmental Testing

TCLP (1311) PESTICIDES

ANALYSIS		RESULT	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS
Chlordane	<	10	ug/L	3081	10	PDB	10/15/96 / 15:05
Endrin	<	15	ug/L	8081	15	PDB	10/15/96 / 15:05
Heptachlor	<	4	ug/L	8081	4	PDB	10/15/96 / 15:05
Heptachlor epoxide	<	4	ug/L	8081	4	PDB	10/15/96 / 15:05
Lindane	<	50	ug/L	8081	50	PDB	10/15/96 / 15:05
Methoxychlor	<	500	ug/L	8081	500	PDB	10/15/96 / 15:05
Toxaphene	<	250	ug/L	8081	250	PDB	10/15/96 / 16:05

TCLP (1311) VOLATILES

ANALYSIS		RESULT	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS
1,1-Dichloroethene	<	50.0	ug/L	8260	50.0	BLB	10/11/96 / 05:38
1,2-Dichloroethane	<	50.0	ug/L	8260	50.0	BLB	10/11/96 / 05:38
Benzene	<	50.0	ug/L	8260	50.0	BLB	10/11/96 / 05:38
Carbon Tetrachloride	<	50.0	ug/L	8260	50.0	BLB	10/11/96 / 05:38
Chlorobenzene	<	50.0	ug/L	8260	50.0	BLB	10/11/96 / 05:38
Chloroform	<	50.0	ug/L	8260	50.0	BLB	10/11/96 / 05:38
Methyl ethyl ketone	<	200	ug/L	8260	200	BLB	10/11/96 / 05:38
Tetrachloroethene	<	50.0	ug/L	8260	50.0	BLB	10/11/96 / 05:38
Trichloroethene	<	50.0	ug/L	8260	50.0	BLB	10/11/96 / 05:38
Vinyl Chloride	<	50.0	ug/L	8260	50.0	BLB	10/11/96 / 05:38

Esterification by Standard Methods 6640

NOTE: All results, except leachate analysis, reported on a dry weight basis.

Respectfully submitted by

Kathy L. Merrill
Laboratory Director

2905 Windmill Road • Sinking Spring, PA 19608 • Tel: 610-670-8505 • FAX 610-670-0503

PRC

ENVIRONMENTAL LABORATORY, INC.

L-955491

ANALYTICAL REPORT

CLIENT: International Petroleum Corp. of DE
505 S. Market Street
Wilmington DE 19801

REPORTED: 10-25-95
RECEIVED: 10-09-95
WORK ORDER: L-955491

SAMPLE ID: Oil (Filter Debris) (Tank Bottoms)

SAMPLING DATE: - - TIME: BY:

REPORT TO: Ms. Kelly Brown

TCLP VOLATILES
ANALYSIS

	METHOD		RESULT	UNIT	DATE/INITIAL
1,1-Dichloroethene	8260	<	25	ug/L	10-17-95/DBC
1,2-Dichloroethane	8260	<	25	ug/L	10-17-95/DBC
Benzene	8260	<	25	ug/L	10-17-95/DBC
Carbon Tetrachloride	8260	<	25	ug/L	10-17-95/DBC
Chlorobenzene	8260	<	25	ug/L	10-17-95/DBC
Chloroform	8260	<	25	ug/L	10-17-95/DBC
Methyl ethyl ketone	8260	<	25	ug/L	10-17-95/DBC
Tetrachloroethene	8260	<	25	ug/L	10-17-95/DBC
Trichloroethene	8260	<	25	ug/L	10-17-95/DBC
Vinyl Chloride	8260	<	25	ug/L	10-17-95/DBC

TCLP SEMIVOLATILES
ANALYSIS

	METHOD		RESULT	UNIT	DATE/INITIAL
1,4-Dichlorobenzene	8270	<	100	ug/L	10-20-95/DBC
2,4-Dinitrotoluene	8270	<	100	ug/L	10-20-95/DBC
2,4,5-Trichlorophenol	8270	<	100	ug/L	10-20-95/DBC
2,4,6-Trichlorophenol	8270	<	100	ug/L	10-20-95/DBC
Cresol, total	8270	<	100	ug/L	10-20-95/DBC
Hexachlorobenzene	8270	<	100	ug/L	10-20-95/DBC
Hexachlorobutadiene	8270	<	100	ug/L	10-20-95/DBC
Hexachloroethane	8270	<	100	ug/L	10-20-95/DBC
Nitrobenzene	8270	<	100	ug/L	10-20-95/DBC
Pentachlorophenol	8270	<	100	ug/L	10-20-95/DBC
Pyridine	8270	<	250	ug/L	10-20-95/DBC
m/p-Cresol	8270	<	100	ug/L	10-20-95/DBC
o-Cresol	8270	<	100	ug/L	10-20-95/DBC

TCLP PESTICIDES
ANALYSIS

	METHOD		RESULT	UNIT	DATE/INITIAL
Chlordane	8081	<	15	ug/L	10-18-95/KLC
Endrin	8081	<	10	ug/L	10-18-95/KLC
Heptachlor	8081	<	4	ug/L	10-18-95/KLC
Heptachlor epoxide	8081	<	4	ug/L	10-18-95/KLC

L-955491

TCLP PESTICIDES ANALYSIS	METHOD		RESULT	UNIT	DATE/INITIAL
Lindane	8081	<	50	ug/L	10-18-95/KLG
Methoxychlor	8081	<	500	ug/L	10-18-95/KLG
Toxaphene	8081	<	250	ug/L	10-18-95/KLG

TCLP INORGANICS ANALYSIS	METHOD		RESULT	UNIT	DATE/INITIAL
Arsenic	6010	<	0.50	mg/L	10-24-95/BAK
Barium	6010		0.53	mg/L	10-24-95/BAK
Cadmium	6010	<	0.030	mg/L	10-24-95/BAK
Chromium	6010	<	0.05	mg/L	10-24-95/BAK
Lead	6010	<	0.20	mg/L	10-24-95/BAK
Mercury	7470	<	0.0005	mg/L	10-23-95/BTT
Selenium	6010	<	0.50	mg/L	10-24-95/BAK
Silver	6010	<	0.06	mg/L	10-24-95/BAK
pH, Final	9040		5.01	Units	10-13-95/BAK
pH, Initial	9040		7.58	Units	10-12-95/CEG

TCLP HERBICIDES ANALYSIS	METHOD		RESULT	UNIT	DATE/INITIAL
2,4-D	8150*	<	5000	ug/L	10-20-95/KLG
2,4,5-TP (Silvex)	8150*	<	500	ug/L	10-20-95/KLG

*Esterification by Standard Method 6640.

Reviewed by:

Karen L. Merrill
Laboratory Director

Labs America

Quality Environmental Testing

ANALYTICAL REPORT

Client: International Petroleum Corp. of DE
505 S.Market Street
Wilmington, DE 19801
Sample ID : Microseparator/Filter Debris/Tank Bottoms
REPORT TO: Mr.Tom Burdeshaw

Reported : 10/18/97
Received : 10/03/97
Work Order: L-967184
Sampling Date : 09/20/97
Time : 12:20
BY: TB

TCLP (1311) SEMIVOLATIVES

ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
1,4-Dichlorobenzens	< 100	ug/L	8270	100	BLB	10/14/97	23:47
2,4,5-Trichlorophenol	< 100	ug/L	8270	100	BLB	10/14/97	23:47
2,4,5-Trichlorophenol	< 100	ug/L	8270	100	BLB	10/14/97	23:47
2,4-Dinitrotoluene	< 100	ug/L	8270	100	BLB	10/14/97	23:47
Cresol Total	377	ug/L	8270	100	BLB	10/14/97	23:47
Hexachlorobenzene	< 100	ug/L	8270	100	BLB	10/14/97	23:47
Hexachlorobutadiene	< 100	ug/L	8270	100	BLB	10/14/97	23:47
Hexachloroethane	< 100	ug/L	8270	100	BLB	10/14/97	23:47
Nitrobenzens	< 100	ug/L	8270	100	BLB	10/14/97	23:47
Partachlorophenol	< 100	ug/L	8270	100	BLB	10/14/97	23:47
Pyndine	< 100	ug/L	8270	100	BLB	10/14/97	23:47
m/p-Cresol	180	ug/L	8270	100	BLB	10/14/97	23:47
o-Cresol	197	ug/L	8270	100	BLB	10/14/97	23:47

TCLP (1311) HERBICIDES

ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
2,4,5-TP(Silvex)	< 500	ug/L	8150#	500	PDB	10/17/97	15:15
2,4-C	< 5000	ug/L	8150#	5000	PDB	10/17/97	15:15

TCLP(1311)INORGANICS

ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
Arsenic	< 0.50	mg/L	7060	0.50	BAK	10/10/97	13:39
Barium	0.59	mg/L	6010	0.30	BAK	10/10/97	13:39
Cadmium	< 0.03	mg/L	6010	0.03	BAK	10/10/97	13:39
Chromium	< 0.05	mg/L	6010	0.05	BAK	10/10/97	13:39
Load	< 0.20	mg/L	6010	0.20	BAK	10/10/97	13:39
Mercury	< 0.0005	mg/L	7470	0.0005	JAB	10/10/97	13:39
Selenium	< 0.50	mg/L	6010	0.50	BAK	10/10/97	13:39
Silver	< 0.05	mg/L	6010	0.05	BAK	10/10/97	13:39
pH,Final		Units	9040		PDS	10/08/97	08:00
pH,Initial		Units	9040		PDS	10/07/97	15:14

1

Labs America

Quality Environmental Testing

TCLP (1311)PESTICIDES ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
Chlordano	< 10	ug/L	8081	10	PDB	10/15/97	16:05
Endrin	< 15	ug/L	8081	15	PDB	10/15/97	16:05
Haptachlor	< 4	ug/L	8081	4	PDB	10/15/97	16:05
Heptachlor epoxide	< 4	ug/L	8081	4	PDB	10/15/97	16:05
Lindane	< 50	ug/L	8081	50	PDB	10/15/97	16:05
Methoxychlor	< 500	ug/L	8081	500	PDB	10/15/97	16:05
Toxaphene	< 250	ug/L	8081	250	PDB	10/15/97	16:05

TCLP (1311)VOLATILES ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
1,1-Dichloroethene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
1,2-Dichloroethene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Benzene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Carbon Tetrachloride	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Chlorobenzens	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Chloroform	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Methylethylketone	< 200	ug/L	8260	200	BLB	10/11/97	05:38
Tetrachloroethene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Trichloroethene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Vinyl Chloride	< 50	ug/L	8260	50	BLB	10/11/97	05:38

Esterification by Standard Methods 6640

NOTE: All results, except leachate analysis, reported on a dry weight basis.

Respectfully submitted by:

K. Merrill

Karen L Merrill
Laboratory Director

Labs America

Quality Environmental Testing

ANALYTICAL REPORT

Client:	International Petroleum Corp. of DE	Reported:	10/18/97
	505 S.Market Street	Received:	10/03/97
	Wilmington, DE 19801	Work Order:	L-977184
Sample ID:	Microseparator/Filter Debris/Tank Bottoms	Sampling Date:	09/20/97
REPORT TO:	Mr.Tom Burdeshaw	Time:	12:20
		BY:	TB

TCLP (1311) SEMIVOLATIVES

ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS
1,4-Dichlorobenzens	< 100	ug/L	8270	100	BLB	10/14/97 23:47
2,4,5-Trichlorophenol	< 100	ug/L	8270	100	BLB	10/14/97 23:47
2,4,5-Trichlorophenol	< 100	ug/L	8270	100	BLB	10/14/97 23:47
2,4-Dinitrotoluene	< 100	ug/L	8270	100	BLB	10/14/97 23:47
Cresol Total	377	ug/L	8270	100	BLB	10/14/97 23:47
Hexachlorobenzene	< 100	ug/L	8270	100	BLB	10/14/97 23:47
Hexachlorobutadiene	< 100	ug/L	8270	100	BLB	10/14/97 23:47
Hexachloroethane	< 100	ug/L	8270	100	BLB	10/14/97 23:47
Nitrobenzens	< 100	ug/L	8270	100	BLB	10/14/97 23:47
Partachlorophenol	< 100	ug/L	8270	100	BLB	10/14/97 23:47
Pyridine	< 100	ug/L	8270	100	BLB	10/14/97 23:47
m/p-Cresol	180	ug/L	8270	100	BLB	10/14/97 23:47
o-Cresol	197	ug/L	8270	100	BLB	10/14/97 23:47

TCLP (1311) HERBICIDES

ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS
2,4,5-TP(Silvex)	< 500	ug/L	8150#	500	PDB	10/17/97 15:15
2,4-C	< 5000	ug/L	8150#	5000	PDB	10/17/97 15:15

TCLP(1311)INORGANICS

ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS
Arsenic	< 0.50	mg/L	7060	0.50	BAK	10/10/97 13:39
Barium	0.59	mg/L	6010	0.30	BAK	10/10/97 13:39
Cadmium	< 0.03	mg/L	6010	0.03	BAK	10/10/97 13:39
Chromium	< 0.05	mg/L	6010	0.05	BAK	10/10/97 13:39
Lead	< 0.20	mg/L	6010	0.20	BAK	10/10/97 13:39
Mercury	< 0.0005	mg/L	7470	0.0005	JAB	10/10/97 13:39
Selenium	< 0.50	mg/L	6010	0.50	BAK	10/10/97 13:39
Silver	< 0.05	mg/L	6010	0.05	BAK	10/10/97 13:39
pH,Final		Units	9040		PDS	10/08/97 08:00
pH,Initial		Units	9040		PDS	10/07/97 15:14

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Labs America

Quality Environmental Testing

TCLP (1311)PESTICIDES ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
Chlordano	< 10	ug/L	8081	10	PDB	10/15/97	16:05
Endrin	< 15	ug/L	8081	15	PDB	10/15/97	16:05
Haptachlor	< 4	ug/L	8081	4	PDB	10/15/97	16:05
Heptachlor epoxide	< 4	ug/L	8081	4	PDB	10/15/97	16:05
Lindane	< 50	ug/L	8081	50	PDB	10/15/97	16:05
Methoxychler	< 500	ug/L	8081	500	PDB	10/15/97	16:05
Toxaphene	< 250	ug/L	8081	250	PDB	10/15/97	16:05

TCLP (1311)VOLATILES ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
1,1-Dichloroethene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
1,2-Dichloroethene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Benzene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Carbon Tetrachloride	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Chlorobenzens	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Chloroform	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Methylethylketone	< 200	ug/L	8260	200	BLB	10/11/97	05:38
Tetrachloroethene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Trichloroethene	< 50	ug/L	8260	50	BLB	10/11/97	05:38
Vinyl Chloride	< 50	ug/L	8260	50	BLB	10/11/97	05:38

Esterification by Standard Methods 6640

NOTE: All results, except leachate analysis, reported on a dry weight basis.

Respectfully submitted by:

Karen L Merrill
Laboratory Director

TAB: TECHNICAL DATA INFORMATION

Knight Corporation Distributor Binder

CROSS REFERENCE - FILTRATION APERTURES

MONOFILAMENT MESH	INCHES	MICRONS	MILLIMETERS
10	.0787	2000	2.00
20	.0315	800	.80
30	.0236	600	.60
40	.0157	400	.40
50	.0118	300	.30
60	.0098	250	.250
80	.0082	210	.210
100	.0059	150	.150
125	.0049	125	.125
150	.0039	100	.100
180	.0035	90	.090
200	.0030	75	.075
250	.0025	65	.065
280	.0021	55	.055
300	.0020	50	.050
330	.0016	40	.040
350	.0014	35	.035
400	.0012	30	.030
460	.00079	20	.020
560	.00038	10	.010

INTERNATIONAL PETROLEUM CORPORATION

June 13, 1995

Browning Ferris Industries
Highway 70
Sorrento, La. 70778

Attention: Ms. Mandy Fontenot

RE: International Petroleum Corp.- Waste Disposal Submission Set

Dear Ms. Fontenout (Mandy);

Per request of Bobby Baker of Gauthier Brothers, Inc., I have compiled a complete submission package relative to a proposed series of waste shipments that we would like BFI to consider accepting from International Petroleum Corp.(IPC).

IPC and Gauthier Bros. feels that this waste stream is suitable for acceptance to your facility and we are submitting for your and your company's review the following items:

* Hard sample of proposed waste
* Special Waste Characterization Data
* Generator Process Knowledge Letter
* Credit Application - For IPC Direct Billing
* TCLP Metals Analysis
* TCLP Benzene Analysis
* Chain of Custody
* MSDS for planned or contingent materials to be co-mingled with primary waste.

After reviewing the attached -and assuming you have interest in receiving this waste stream presently and again in the near future- would you be so kind as to quote me your best competitive gate-rate. If you are the successful bidder, we would plan to ship approximately 500-600 tons during July-August.

Please contact me for any additional questions / clarification / or qualification.

Thank you for your consideration.

Your very truly,

Richard Lane - President
cc: B. Baker

14890 Intracoastal Drive • New Orleans, Louisiana 70129 • Phone 504 254-9030 • FAX 504 254-4315

BFI Waste Systems™
BROWNING-FERRIS INDUSTRIES

WCD # B 83905

/ / /
BFI WASTE CODE

WASTE APPROVAL REQUEST

BFI to complete this area.

BFI Initiator: _____
Location: _____
Company Number: _____
Telephone: ( ) _____
Fax: ( ) _____
Date: _____

Action Requested: ☐ New Waste Approval
☐ Up-Date Approval - Previous Number: _____
Disposal Site Requested: _____
Company Number: _____
Management Method Requested: ☐ Landfill ☐ Hauling
☐ Other _____

WASTE CHARACTERIZATION DATA
SPECIAL WASTE

IMPORTANT: THIS FORM IS TO BE COMPLETED BY A REPRESENTATIVE OF THE WASTE GENERATOR. PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS FORM. THIS FORM IS TO BE USED ONLY ONE TIME, AND MUST BE TYPEWRITTEN OR LEGIBLY PRINTED IN INK, AND SIGNED.

1. GENERATOR INFORMATION

a) Generator's Name: INTERNATIONAL PETROLEUM
b) Generating Facility's Address: 14890 INTRACOASTAL DR
City: NEW ORLEANS State: LA Zip: 70129
c) Generator's Representative: RICHARD LANE
Title: PRESIDENT
Telephone: (504) 254-9030 x 17
Fax: (504) 254-4316
d) Emergency/Information Contact: SAME
Title: _____
Telephone: ( ) _____

e) State/Provincial/Local Registration No.: —
Generator's EPA Id. No.: LAD 092096106
Industry Description/SIC Code: 2992

f) Customer's Name: SAME
g) Customer's Mailing Address: _____
City: _____ State: ___ Zip: _____
h) Representative: _____
Telephone: ( ) _____
Fax: ( ) _____

2. GENERAL WASTE STREAM INFORMATION

a) Name/Description of The Waste: PETROLEUM TANK BOTTOMS = NON-HAZ
b) Process Generating Waste: DECANTATION / CENTRIFUGE

c) Is this a treatment residue of a waste which was previously a restricted hazardous waste? ☐ Yes ☑ No
If yes, describe the waste and the process generating the waste prior to treatment. _____
d) Is this a "Hazardous Waste" as defined by State, Provincial, or local Regulations? ☐ Yes ☑ No
If yes, enter the Waste Identification Number if one has been assigned: _____
e) Is this a "Special Waste", an "Industrial Process Waste", or a "Pollution Control Waste" as defined by State, Provincial, or local Regulations?
☑ Yes ☐ No If yes, enter Waste Identification Number: 5515-239
f) Recommended personal protection equipment and special handling procedures: NONE

g) Anticipated Volume: 500+ ☐ Cubic Yards ☑ Tons ☐ Gallons ☐ Cubic Meters ☐ Tonnes(metric)
Other _____ Per: ☐ Year ☐ Month ☐ Week ☐ Day ☑ One Time ☐ Other _____
To be transported in: ☐ Bulk ☐ Drums (type/size) _____ ☑ Other OPEN END DUMP
h) Is a representative sample included? ☐ Yes ☐ No

3. WASTE PROPERTIES AT 72°F

a) Physical State:
☑ Solid ☐ Semi-solid
☐ Powder ☐ Liquid
☐ Combination

b) Layers:
☑ Single-layered ☐ Bi-layered ☐ Multi-layered

c) Colors(s):
Describe BROWN / BLACK

d) Odor:
Describe _____
☐ None ☑ Mild ☐ Strong

e) Density Range: 1800 to 2500
☐ N/D ☐ lbs/gal. ☐ g./cc.
☑ lbs./yd.^{3} ☐ Kg/m^3 ☐ Other

f) Flash Point, °F:
☐ ≤ 72 ☐ 73-100 ☐ 101-140
☐ 141-200 ☐ ≥ 201 ☑ N/A ☐ N/D

g) pH:
☐ ≤ 2 ☐ 2.1 - 5.0 ☐ 5.1 - 9.0
☐ 9.1 - 12.4 ☐ ≥ 12.5 ☑ N/A ☐ N/D

BFI WASTE CODE

4. REACTIVITY

Note if the waste exhibits any of the following reactive properties:

- ☐ Water Reactive
- ☐ Acid Reactive
- ☐ Alkaline Reactive
- ☐ Oxidizer
- ☐ Autopolymerizable
- ☐ Pyrophoric
- ☐ Explosive
- ☐ Thermally Sensitive
- ☐ Shock Sensitive
- ☑ None of the above

5. THIS WASTE CONTAINS

Note if the waste contains any of the following: If any are checked "Yes", specify type (if applicable) and include its concentration as part of the waste composition, Section 6.

- ☐ Free Liquids
- ☐ Free Cyanide
- ☐ Free Sulfide
- ☐ Free Ammonia
- ☐ Dioxins
- ☐ Organic Solvents
- ☐ Virgin Oils
- ☐ Used Oils
- ☐ OSHA Substances
- ☐ Etiological Agents
- ☐ Pathogens
- ☐ Biological Materials
- ☐ Radioactive Materials
- ☐ PCBs not regulated by TSCA 40 CFR 761
- ☑ None of the Above

6. SPECIAL WASTE COMPOSITION

Concentration ranges are suggested and units must be identified in percentages (%) and/or parts per million (ppm). Attach additional pages if necessary.

Components	% VOL	% Range Min. / Max.
SOLIDS		
SAND & INERT	23	4[illegible]
WATER	57	4[illegible]
PETROLEUM	20	13
TOTAL	100	100

7. TRANSPORTATION INFORMATION

If the waste is a DOT Hazardous Material, complete the following:

Proper USDOT Shipping Name: N/A

USDOT Hazard Class: _____ UN or NA Number: _____ CERCLA Reportable Quantity: _____

8. SUPPLEMENTAL INFORMATION

☐ None ☑ MSD Sheets ☑ Analytical Data ☑ Chain of Custody ☐ Memo/Letter ☐ Waste Composition

☐ Other - describe: _____ No. of Pages: _____

9. GENERATOR'S CERTIFICATION

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine, that no deliberate or willful omissions of composition or properties exist, that all known or suspected hazards have been disclosed, and that the waste is not a regulated hazardous waste by the USEPA, by an applicable State or Provincial authority, or by any applicable local authority, and does not contain PCBs regulated by TSCA (i.e., 40 CFR 761) or any Provincial authority.

GENERATOR'S AUTHORIZED SIGNATORY as identified in Section 1 (c):

DATE	PRINT NAME	SIGNATURE	TITLE
6-12-95	RICHARD LANE	Richard Lane	PRESIDENT

REPRESENTATIVE SAMPLE CERTIFICATION

This Section is to be completed by the person obtaining the sample of the above described waste.

I certify that the sample for which analytical data was provided on the waste described above is representative of that waste and was collected and preserved in a manner consistent with accepted technical standards.

Lab sample assigned to: MANDY FONTENOT - BFI (peel off label)

Collector's Name: RICHARD LANE

Signature: Richard Lane

Company: INTERNATIONAL PETROLEUM

Title: PRESIDENT

Telephone Number: 504 254-9030 x 14

Date Collected: 6-1-95

Generator's Name: _____

Waste Description: _____

Date Collected: _____

WCD No. AB 03905

GENERATOR PROCESS KNOWLEDGE LETTER

Generator Name: INTERNATIONAL PETROLEUM	WCD#

PLEASE INDICATE BY PROCESS KNOWLEDGE THE ANALYSIS THAT IS NOT REQUIRED. (TCLP - Toxic Characteristic Leaching Procedure)

☑ RCI	☑ Reactivity, ☑ Corrosivity, ☑ Ignitability.
☐ TCLP Metals	☐ Arsenic, ☐ Barium, ☐ Cadmium, ☐ Chromium, ☐ Lead, ☐ Mercury, ☐ Selenium, ☐ Silve
☑ TCLP Semivolatiles	☑ o-Cresol, ☑ m-Cresol, ☑ p-Cresol, ☑ Cresol (total), ☑ 2,4-Dinitrotoluene, ☑ Pyridine,
	☑ Hexachlorobenzene, ☑ Hexachloroethane, ☑ Hexachlorbutadiene, ☑ Nitrobenzene,
	☑ Pentachlorophenol, ☑ 2,4,5-Trichlorophenol, ☑ 2,4,6-Trichlorophenol.
☑ TCLP Volatiles	☐ Benzene, ☑ Carbon Tetrachloride, ☑ Chlorobenzene, ☑ Chloroform, ☑ Methyl Ethyl Keton
	☑ 1,4-Dichlorobenzene, ☑ 1,2-Dichloroethane, ☑ 1,1-Dichloroethylene, ☑ Trichloroethylene
	☑ Tetrachloroethylene, ☑ Vinyl Chloride.
☑ TCLP Herbicides and Pesticides	☑ 2,4-D, ☑ 2,4,5-TP (Silvex), ☑ Chlordane, ☑ Endrin, ☑ Heptachlor, ☑ Heptachlor Epoxid
	☑ Lindane, ☑ Methoxychlor, ☑ Toxaphene.

PLEASE DESCRIBE IN DETAIL THE PROCESS GENERATING THE WASTE:

PETROLEUM TANK BOTTOM SEDIMENT / DECANTATION

I certify that the above information is complete and accurate to the best of my knowledge and ability to determine, that no deliberate or willful omissions of composition or properties exists, that all known or suspect hazards have been disclosed, that the waste is not designated a Hazardous Waste as defined by the USEPA per 40 CFR 261.3 or contains PCBs regulated by TSCA 40 CFR 761.

Print Name: RICHARD LANE	Signature: Richard Lane	Date: 6-12-95
Print Name:	Signature:	Date:

I certify that I understand the definition of an industrial waste per LAC 33.VII.115 and believe that this waste is not an industrial process waste and does not require an industrial waste code number as required for industrial waste streams per LAC 33.VII.701.B. (Write N/A if the waste stream is an industrial waste.)

Print Name: N/A	Signature:	Date:
Print Name:	Signature:	Date:

THIS SECTION FOR INDUSTRIAL WASTE UPDATES ONLY

Date of most current ☐ TCLP analysis or ☐ process knowledge submitted to BFI is ______	I certify that I understand the requirements of LAC 33.VII.711.D.3.d for waste testing and annual update requirements for industrial waste and that this waste stream must updated annually on ______ according to the most current TCLP analysis on file with the disposer (BFI).	
Print Name:	Signature:	Date:
Print Name:	Signature:	Date:

LAFAYETTE AREA LAB
500 AMBASSADOR CAFFERY P
SCOTT, LOUISIANA
ZIP 70583-8544
PHONE: (318) 237-4775

Certificate of Analysis No. L1-9506117-01

GAUTHIER BROTHERS
305 TURNROW
LAFAYETTE, LA 70508
ATTN: J.C. BRIANT

DATE: 06/06/9

PROJECT: GAUTHIER BROTHERS
SITE:
SAMPLED BY: GAUTHIER BROS.
SAMPLE ID: #1

PROJECT NO:
MATRIX: SOLID
DATE SAMPLED: 05/25/95
DATE RECEIVED: 05/26/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
Silver, TCLP Leachate Method 7760 *** Analyzed by: KJ Date: 06/05/95 15:50:00	ND	0.01	mg/
Arsenic, TCLP Leachate Method 7060 *** Analyzed by: GS Date: 06/05/95 12:17:00	0.013	0.001	mg/
Barium, TCLP Leachate Method 7080 *** Analyzed by: KJ Date: 06/05/95 13:50:00	0.6	0.1	mg/I
Cadmium, TCLP Leachate Method 7130 *** Analyzed by: KJ Date: 06/05/95 14:50:00	0.006	0.005	mg/I

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results reported on a Wet Weight Basis unless otherwise noted.

CAG/John Troost/ Laboratory Manager

LAFAYETTE AREA LAB
500 AMBASSADOR CAFFERY PKY
SCOTT, LOUISIANA
ZIP 70583-8544
PHONE: (318) 237-4775

Certificate of Analysis No. L1-9506117-01

GAUTHIER BROTHERS
305 TURNROW
LAFAYETTE, LA 70508
ATTN: J.C. BRIANT

DATE: 06/06/9

PROJECT: GAUTHIER BROTHERS
SITE:
SAMPLED BY: GAUTHIER BROS.
SAMPLE ID: #1

PROJECT NO:
MATRIX: SOLID
DATE SAMPLED: 05/25/95
DATE RECEIVED: 05/26/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Chromium, TCLP Leachate Method 7190 *** Analyzed by: KJ Date: 06/05/95 15:20:00	ND	0.05	mg/L
Mercury, TCLP Leachate METHOD 7470 *** Analyzed by: GH Date: 06/05/95 16:00:00	ND	0.0002	mg/L
Lead, TCLP Leachate Method 7420 *** Analyzed by: KJ Date: 06/05/95 14:20:00	0.2	0.1	mg/L
TCLP Leachate extraction Method 1311 *** Analyzed by: BP Date: 06/02/95 17:00:00	06/02/95		NA
Selenium, TCLP Leachate Method 7740 *** Analyzed by: GS Date: 06/05/95 16:25:00	0.003	0.002	mg/L

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results reported on a Wet Weight Basis unless otherwise noted.

CAG/John Troost, Laboratory Manager

LAFAYETTE AREA LAB
500 AMBASSADOR CAFFERY PKY.
SCOTT, LOUISIANA
ZIP 70583-8544
PHONE: (318) 237-4775

Certificate of Analysis No. L1-9505A04-01

GAUTHIER BROTHERS
305 TURNROW
LAFAYETTE, LA 70508
ATTN: J.C. BRIANT

INVOICE COPY

DATE: 06/01/

PROJECT: GAUTHIER BROTHERS
SITE:
SAMPLED BY: GAUTHIER BROTHERS
SAMPLE ID: #1

PROJECT NO:
MATRIX: SOLID
DATE SAMPLED: 05/25/95
DATE RECEIVED: 05/26/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
TCLP Benzene Method 1311/8020 *** Analyzed by: TB Date: 05/30/95 11:57:00	36	1	µg/
Zero Headspace extraction Method 1311 *** Analyzed by: BP Date: 05/26/95 17:00:00	05/26/95		n

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results reported on a Wet Weight Basis unless otherwise noted.

Karen Testelle

CAG/John Troost, Laboratory Manager

ENVIRONMENTAL LABORATORIES

REPORT OF LABORATORY ANALYSIS

Analytical Results - TCLP Volatile Organics by Method 8240
International Petroleum Corporation

Client ID: TANK BOTTOM SLUDGE
Description: SLUDGE
Sample ID: XMQ-001
Matrix: Other
Wet/Dry Basis: NA

Collected: 05/25/95
Received: 05/26/95
Leached & Prepared: 06/01,06/95
Analyzed: 06/06/95
Percent Moisture: NA

		Concentration, ug/l (ppb)				
CAS No.	Parameter	Sample	TCLP Blank	Lab Blank	Detection Limit	Regulatory Level
71-43-2	Benzene	ND	ND	ND	50.0	500

ND-Not Detected at or above the detection limit stated.

161 James Drive West, Suite 100
St. Rose, LA 70087
TEL: 504-469-0333
FAX: 504-469-0555

ACE LABORATORIES

REPORT OF LABORATORY ANALYSIS

Analytical Results - TCLP Volatile Organics by Method 8240
International Petroleum Corporation

t ID: T-110 CETRIFUGE SLUDGE
tion: SLUDGE
e ID: XFS-001
trix: Other
asis: NA

Collected: 05/09/95
Received: 05/09/95
Leached & Prepared: 05/12,15/95
Analyzed: 05/15/95
Percent Moisture: NA

	Concentration, ug/l (ppb)				
Parameter	Sample	TCLP Blank	Lab Blank	Detection Limit	Regulatory Level
Benzene	ND	ND	ND	50.0	500

d at or above the detection limit stated.

Pace INCORPORATED
ENVIRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client: [illegible] Corp

Address:

Phone:

Report To: Mr Richard [illegible]

Bill To:

P.O. # / Billing Reference

Project Name / No.

Pace Client No.

Pace Project Manager

Pace Project No.

*Requested Due Date: 10 days

Sampled By (PRINT): [illegible] B. Barr

Sampler Signature: [signature]

Date Sampled: 5/9/95

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	UNPRESERVED	H_2SO_4	HNO_3	VOA		ANALYSES REQUEST: TCLP-[illegible]	REMARKS
1	T-110 Centrifuge Sludge	0800	sludge		1	X					X	
2	T-110 Filter Press Sludge	0800	sludge		1	X					X	
3												
4												
5												
6												
7												
8												

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT / DATE	RETURNED / DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
				1 thru 2	[signature] / Pace / 5/9/95 10:11	[signature] / Pace	5/9/95	1015

Additional Comments

Stockhausen

Material Safety Data Sheet
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List): Praestol 655K

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name: STOCKHAUSEN, INC.

Emergency Telephone Number: (919) 378-9393

Address (Number, Street, City, State, and ZIP Code): 2408 Doyle St. Greensboro, N.C. 27406

Telephone Number for Information: (919) 333-3500

Date Prepared: July 27, 1992

NA = Not Applicable
NE = Not Established

Signature of Preparer (optional): Walter R. Pett

Section II — Hazardous Ingredients/Identity Information

Serial No. 0384

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Copolymer of acrylate salt and acrylamide - Coagulant CAS No. 69418-26-4	N/E	N/E	irritant (eye)	major
Adipic acid CAS No. 00124-04-9	N/E	N/E	irritant (eye)	minor

SARA Section 313 Reportable Toxic Chemicals - none.

Section III — Physical/Chemical Characteristics

Boiling Point: Solid material	N/A	Specific Gravity (H_2O = 1)	Bulk Density	600-700 gm/L
Vapor Pressure (mm Hg.): Less than	30	Melting Point	Greater than	200°C
Vapor Density (AIR = 1): Nil	N/E	Evaporation Rate (Butyl Acetate = 1)	Less than	1

Solubility in Water: Miscible (soluble to approximately 2% by wt.) - forms very viscous solutions.

Appearance and Odor: White granulated solid: faint amine odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Greater than 100°C (PMCC)		N/E	N/E

Extinguishing Media: Any available extinguishant media.

Special Fire Fighting Procedures: None: Spilled product creates slippery conditions in contact with water.

Unusual Fire and Explosion Hazards: None

Propanol 655K

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		None Known
	Stable	X	

Incompatibility (*Materials to Avoid*)

None Known

Hazardous Decomposition or Byproducts

Thermal decomposition: Oxides of Carbon (CO, CO_2), and Nitrogen (NO, NO_2).

Hazardous Polymerization			Conditions to Avoid
	May Occur		None Known
	Will Not Occur		

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Yes Skin? No Ingestion? Yes

Health Hazards (*Acute and Chronic*)

Contact with the eyes and/or prolonged/repeated skin contact may cause irritation.

Inhaled particles may cause respiratory irritation.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Signs and Symptoms of Exposure

Reddening, swelling of affected area with possible itching, burning, or other discomfort.

Medical Conditions Generally Aggravated by Exposure: Existing cuts, rashes, allergies, or other sensitive areas.

Emergency and First Aid Procedures

Eyes and Skin: Flush thoroughly with water. Inhalation: Move to fresh air.

Ingestion: If ill effects occur, seek medical attention as with any prolonged discomfort.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled

Contain and collect dry granulate material using scoop, shovel, or other suitable device.

Avoid use of water, as slippery conditions will be created. Flush residuals thoroughly with water to normal wastewater drain.

Waste Disposal Method

Dispose of in accordance with local, state, and federal regulations. Incineration or landfill as non-hazardous solid waste with approval of authorities.

Precautions to Be Taken in Handling and Storing

Handle as an irritant. Do not get into eyes. Avoid prolonged/repeated skin contact.

Avoid inhalation of dust. Do not ingest.

Other Precautions

Spilled product creates slippery conditions.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*)

For dusty conditions (nuisance dust mask). Insure compliance with Section II.

Ventilation		
	Local Exhaust: Recommended for dusty conditions	Special: None required.
	Mechanical (General): Recommended	Other: None required.

Protective Gloves: Impervious neoprene or rubber. Eye Protection: Safety glasses or goggles.

Other Protective Clothing or Equipment

Shoes, apron, or other as needed to prevent prolonged/repeated skin contact.

Work/Hygienic Practices

Wash thoroughly after handling.

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List): BAYOU ASH CLASS "C" FLY ASH

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate such.

Section I

Manufacturer's Name: BAYOU ASH DIVISION OF BIG RIVER INDUSTRIES

Address (Number, Street, City, State, and ZIP Code): P.O. BOX 66377 BATON ROUGE, LA 70896

Emergency Telephone Number: (504) 627-4242, 638-6373, OR 1-800-462-2968

Telephone Number for Information: SAME AS ABOVE

Date Prepared: 11-30-94

Signature of Preparer (Optional): James J. Boisseau Vice Pres.

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
(SiO_2) SILICON DIOXIDE	Info. Not Avail.	10*	Info. Not Avail.	47.5
(Al_2O_3) ALUMINUM OXIDE	" " "	10*	" " "	15.3
(Fe_2O_3) IRON OXIDE	" " "	10*	" " "	4.2
(CaO) CALCIUM OXIDE	" " "	3*	" " "	24.0
(MgO) MAGNESIUM OXIDE	" " "	10*	" " "	4.8
(S) SULFUR	" " "	N/A	" " "	0.3
(K_2O) POTASSIUM OXIDE	" " "	10*	" " "	0.6

*Milligrams Per Cubic Meter (Mg/M^3)

Class "C" Fly Ash is not considered a hazardous material under RCRA. (Resource Conservation Recovery Act) In fact Class "C" Fly Ash is widely used in controlling hazardous waste.

Section III — Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H_2O = 1)	2.61TG
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water

Appearance and Odor: Very fine odorless flowable granular material-12 to 10% retained on #325 sieve.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used): N/A

Flammable Limits: Loss on Ignition 0.5to2.5 LEL: N/A UEL: N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: NONE

(Reproduce locally)

OSHA 174, Sept. 1985

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid
		X	DRY MATERIAL WILL NOT HOLD WEIGHT-EXAMPLE PERSON CAN DRAW
	Stable	X	PRODUCT MIXED WITH MOISTURE WILL HARDEN IN ½ to 2 HOURS.

Incompatibility (Materials to Avoid) NONE

Hazardous Decomposition or Byproducts NONE

Hazardous Polymerization	May Occur		Conditions to Avoid N/A
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry Inhalation? X Skin? X Ingestion? X

Health Hazards (Acute and Chronic)
IRRITATION OF RESPIRATORY SYSTEM AND EYES, FIBROUS OR LUNG TISSUE WITH PROLONGED EXPOSURE, DRYNESS OF SKIN OR IRRITATION OF OPEN SORE OR CUT.

Carcinogenicity NO NTP? NO IARC Monographs? NO OSHA Regulated? NO

A FLY ASH IS NOT CANCER CAUSING TO OUR KNOWLEDGE AT THIS TIME.

Signs and Symptoms of Exposure
RED & WATERY EYES, DRY SKIN & DRY NOSE & THROAT.

Medical Conditions Generally Aggravated by Exposure RESPIRATORY SYSTEM, IRRITATION OF EYES OR OPEN CUTS.

Emergency and First Aid Procedures
WASH THOROUGHLY WITH CLEAN WATER, SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
HANDLING SPILLED FLY ASH REQUIRES THE SAME CAUTIONS AS USING FLY ASH NORMALLY.
AVOID CONTACT WITH SKIN & EYES, WETTING WILL REDUCE AIRBORNE DUST.

Waste Disposal Method
FLY ASH MAY BE DISPOSED OF AS A COMMON SOLID WASTE BY SOLIDIFICATION IN WATER.
IT IS NOT CONSIDERED A HAZARDOUS WASTE UNDER RCRA.

Precautions to Be Taken in Handling and Storing
AVOID ABRASION OF SKIN, USE APPROVED DUST MASK, STORE IN DRY PLACE AND PRACTICE NORMAL INDUSTRIAL HYGIENE OR FIRST AID SHOULD EXPOSURE OCCUR.

Other Precautions
AVOID WALKING IN SPILLAGE THAT IS WET -- IT BECOMES VERY SLIPPERY

Section VIII — Control Measures

Respiratory Protection (Specify Type)
NIOSH - APPROVED FOR PNEUMOCONIOSIS PRODUCING DUSTS

Ventilation	Local Exhaust N/A		Special	N/A
	Mechanical (General) N/A		Other	N/A

Protective Gloves
USE OF GLOVES IS RECOMMENDED BUT NOT REQUIRED

Eye Protection
GOGGLES RECOMMENDED WHEN SPLASH HAZARD IS PR

Other Protective Clothing or Equipment
BARRIER CREAMS, RUBBER BOOTS, LONG TROUSERS RECOMMENDED BUT NOT REQUIRED

Work/Hygienic Practices
NORMAL HYGIENE PRACTICE USUALLY SUFFICIENT.

FOR ADDITIONAL INFORMATION

NOTICE

ALL INFORMATION APPEARING HEREIN IS BASED UPON DATA OBTAINED FROM THE MANUFACTURER AND/OR RECOGNIZED TECHNICAL SOURCES. WHILE THE INFORMATION IS BELIEVED TO BE ACCURATE, VW&R MAKES NO REPRESENTATIONS AS TO ITS ACCURACY OR SUFFICIENCY. CONDITIONS OF USE ARE BEYOND VW&RS CONTROL AND THEREFORE USERS ARE RESPONSIBLE TO VERIFY THIS DATA UNDER THEIR OWN OPERATING CONDITIONS TO DETERMINE WHETHER THE PRODUCT IS SUITABLE FOR THEIR PARTICULAR PURPOSES AND THEY ASSUME ALL RISKS OF THEIR USE, HANDLING, AND DISPOSAL OF THE PRODUCT, OR FROM THE PUBLICATION OR USE OF, OR RELIANCE UPON , INFORMATION CONTAINED HEREIN. THIS INFORMATION RELATES ONLY TO THE PRODUCT DESIGNATED HEREIN, AND DOES NOT RELATE TO ITS USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY OTHER PROCESS.

* * * E N D O F M S D S * * *

[illegible] GLACIAL ACETIC ACID

ORDER NO: [illegible]
PROD NO: [illegible]

TRANSPORT INFORMATION
DOT (USA) Status: regulated.
Class 8, packing group II
Proper Shipping Name and Number: acetic acid, glacial, UN 2789
DOT Reportable Quantity: 5000 lb (2270 kg)
TDG (Canada) Status: regulated.
Class 8, packing group II
Proper Shipping Name and Number: acetic acid, glacial, UN 2789
TDG Regulated Limit: 50 kg (110 lb)
AIR - International Civil Aviation Organization (ICAO)
ICAO Status: regulated.
Class 8, packing group II
Proper Shipping Name and Number: acetic acid, glacial, UN 2789
Sea - International Maritime Dangerous Goods (IMDG)
IMDG Status: regulated.
Class 8, packing group II
Proper Shipping Name and Number: acetic acid, glacial, UN 2789

REGULATORY INFORMATION
This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
OSHA hazardous chemical(s): acetic acid
- California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): material(s) known to the State to cause cancer: none
California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): material(s) known to the State to cause adverse reproductive effects: none
Massachusetts Substance List: acetic acid
- New Jersey Workplace Hazardous Substance List: acetic acid
Pennsylvania Hazardous Substance List: acetic acid
This document has been prepared in accordance with the MSDS requirements of the WHMIS Controlled Products Regulation.
- WHMIS (Canada) Ingredient Disclosure List: acetic acid
WHMIS (Canada) Status: controlled
WHMIS (Canada) controlled material(s): acetic acid
- WHMIS (Canada) Hazard Classification: B/3, E
Carcinogenicity Classification (components present at 0.1% or more):
- International Agency for Research on Cancer (IARC): not listed
- American Conference of Governmental Industrial Hygienists (ACGIH): not listed
- National Toxicology Program (NTP): not listed
- Occupational Safety and Health Administration (OSHA): not listed
Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372: none
- SARA (U.S.A.) Sections 311 and 312 hazard classification(s): fire hazard, immediate (acute) health hazard

PRODUCT: Glacial Acetic Acid

ORDER NO: 152127
PROD NO : 193371

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be worn. Respirator type: acid gas. If respirators are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1910.134
Eye Protection: Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.
Skin Protection: Wear impervious gloves, boots, and protective clothing appropriate for the risk of exposure.
Recommended Decontamination Facilities: eye bath, washing facilities, safety shower

9. PHYSICAL AND CHEMICAL PROPERTIES
- Physical Form: Liquid
- Color: colorless
- Odor: pungent vinegar
- Odor Threshold: 0.47 ppm
- Specific Gravity at 20 C (68 F): (water = 1): 1.05
- Vapor Pressure at 20 C (68 F): 15 mbar (11.4 mm Hg)
- Vapor Density (Air = 1): 2.1
- Evaporation Rate (n-butyl acetate = 1): 0.97
- Volatile Fraction By Weight: 100 %
- Boiling Point: 118 C (239 F)
- Melting Point: 17 C (63 F)
- Viscosity at 20 C (68 F): 1.13 mPa.s or cP
- Solubility in Water: complete
- pH: 2.4 (at 60 g/l water)
- Octanol/Water Partition Coefficient: log P = -0.31, P = 0.49
- Flash Point (Tag closed cup): 39 C (103 F)
- Lower Explosive Limit at 39 C (102 F): 6.6 volume %
- Upper Explosive Limit at 93 C (199 F): 19.3 volume %
- Autoignition Temperature (ASTM D 2155): 516 C (960 F)
- Sensitivity to Mechanical Impact: not available
- Explosive Power: not available
- Sensitivity to Static Discharge: Material is unlikely to accumulate a static charge which could act as an ignition source.

10. STABILITY AND REACTIVITY
Stability: stable
Incompatibility: Material can react violently with strong oxidizing agents. Material can react with metals, strong bases, amines.
Hazardous Polymerization: will not occur

11. TOXICOLOGICAL INFORMATION
Effects of Exposure:
Inhalation: Vapor irritating.
Eyes: Causes severe burns. Vapor irritating.
Skin: Causes severe burns.
Ingestion: May cause burns of the gastrointestinal tract if swallowed.
Acute Toxicity Data:
Oral LD-50 (rat): 3310-3530 mg/kg

PRODUCT: Glacial Acetic Acid

ORDER NO: 156822
PROD NO : 193391

GAUTHIER BROTHERS RENTALS
TRAILER TOWN ROAD

LAKE ARTHUR ,LA 70549

VAN WATERS & ROGERS INC. TOXICOLOGY & ENVIRONMENTAL (206)889-9400
5500 CARILLON POINT KIRKLAND WA 98033

EMERGENCY ASSISTANCE

FOR EMERGENCY ASSISTANCE INVOLVING [illegible] - CHEMTREC
(800)424-9300

PRODUCT NAME:
Glacial Acetic Acid

MSDS #: EZ060403

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
Product Name: Glacial Acetic Acid
Molecular Formula: C2H4O2
Molecular Weight: 60.05
Product Use: solvent

2. COMPOSITION/INFORMATION ON INGREDIENTS
Weight % - Component - (CAS Registry No.)
100 acetic acid (000064-19-7)

3. HAZARDS IDENTIFICATION
DANGER!
CAUSES SEVERE SKIN AND EYE BURNS
HARMFUL IF SWALLOWED
VAPOR IRRITATING TO THE EYES AND RESPIRATORY TRACT
COMBUSTIBLE LIQUID AND VAPOR
HMIS Hazard Ratings: Health - 3, Flammability - 2, Chemical Reactivity - 0
NFPA Hazard Ratings: Health - 3, Flammability - 2, Chemical Reactivity - 0
NOTE: HMIS and NFPA ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately

REPORT NUMBER: 971
MSDS NO: P125620
EFFECTIVE DATE: 04/09/93

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

PAGE: 001
VERSION: 001

PRODUCT: FERRIC SULFATE 30%

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 6

To G. C.	From Val Braun
Co. Brothers BBQ	Co. VWR
Dept.	Phone # 800-960-930
Fax # 225-3739	Fax #

VAN WATERS & ROGERS INC. , SUBSIDIARY OF UNIVER (206)889-3400
5100 CARILLON POINT , KIRKLAND , WA 98033

---------- EMERGENCY ASSISTANCE ----------

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL - CHEMTREC
(800)424-9300

SECTION I. PRODUCT IDENTIFICATION

PRODUCT NAME: FERRIC SULFATE 30%

MSDS #: P125620

DATE ISSUED: 04/93

TRADE NAME: Fe-3

SYNONYMS: Ferric sulfate solution

SHIPPING NAME: DOT: Corrosive liquid, N.O.S., Corrosive Material (Liquid Ferric Sulfate - 50% water) NA1760

SECTION II. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	CAS NO.	% W/W
Ferric Sulfate	10028-22-5	29%
Free sulfuric acid	7664-93-9	1.0

REPORT NUMBER: 971 VAN WATERS & ROGERS INC. PAGE: 002
MSDS NO: P105620 MATERIAL SAFETY DATA SHEET
EFFECTIVE DATE: 04/09/92 VERSION: 001

PRODUCT: FERRIC SULFATE 30%

ORDER NO:
PROD NO :

Water (balance of formulation)

HEALTH HAZARD:Product is toxic orally, is corrosive to the eye, and will burn the skin.

AQUATIC TOXICITY: Ferric sulfate is listed as toxic to aquatic life, Category C. 40 CFR Parts 116-118.

SECTION III. PHYSICAL DATA

BOILING POINT, 760 mmHg: Approx. 212 deg F
SPECIFIC GRAVITY (H2O = 1): 1.325 to 1.355
VAPOR DENSITY (AIR = 1): NA
% VOLATILES BY VOL.: NA
APPEARANCE AND ODOR: Red-brown solution. No detectable odor.
FREEZING POINT: Does not freeze at 0 deg F
VAPOR PRESSURE: NA
SOLUBILITY IN H2O % BY WT.: Infinite
EVAPORATION RATE (Butyl Acetate = 1): Not given
pH (AS IS): Approx. 1.0
pH: (1% SOLN). Approx. 4.8

SECTION IV. FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED): N.A.

FLAMMABLE LIMITS IN AIR, % BY VOL.: LOWER: N.A.; UPPER: N.A.

EXTINGUISHING MEDIA: Product does not burn or support flame. If product is present in a fire, water, CO2, or dry chemical may be used. Product is highly acidic and if in open container avoid splashing.

SPECIAL FIRE FIGHTING PROCEDURES: Do not allow product or water containing product to enter a navigable stream. At temperatures above 600 deg C, product decomposes to iron oxide and sulfur trioxide.

UNUSUAL FIRE & EXPLOSION HAZARD: None known.

AUTOIGNITION TEMPERATURE: N.A.

SECTION V. HEALTH INFORMATION

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MSDS NO: P125820 MATERIAL SAFETY DATA SHEET
EFFECTIVE DATE: 04/09/92 VERSION: 001

PRODUCT: FERRIC SULFATE 30%

ORDER NO:
PROD NO :

ROUTES OF EXPOSURE:

INHALATION:
HAZARD CLASSIFICATION: Not determined, but expected to be low due to other toxicological tests, physical and chemical characteristics.
BASIS FOR CLASSIFICATION: NA
SOURCE: NA

SKIN CONTACT:
HAZARD CLASSIFICATION: Not a primary skin irritant by FHSA standards.
BASIS FOR CLASSIFICATION: Primary dermal irritation index = 0.0 for 24 and 72 hours.
SOURCE: Laboratory test in accord with FHSA procedure.

SKIN ABSORPTION:
HAZARD CLASSIFICATION: Not toxic dermally by FHSA standards.
BASIS FOR CLASSIFICATION: Est. dermal LD50 (rabbit) = (male) greater than 2.0 g/kg body weight; (female) greater than 2.0 g/kg body weight.
SOURCE: Laboratory test in accord with FHSA procedure.

EYE CONTACT:
HAZARD CLASSIFICATION: Corrosive to the eye by FHSA standards.
BASIS FOR CLASSIFICATION: Eye irritation scores:
24 hours.....40.2
48 hours.....56.0
72 hours.....56.0
7 days.....60.4
SOURCE: Laboratory tests in accord with FHSA procedure

INGESTION:
HAZARD CLASSIFICATION: Toxic by FHSA standards.
BASIS FOR CLASSIFICATION: Oral LD50 (rat-male) = between 2.5 and 5.0 g/kg body weight. (rats-female) = between 2.5 and 5.0 g/kg body weight.
SOURCE: Laboratory tests accord with FHSA procedure.

EFFECTS OF OVEREXPOSURE:

ACUTE OVEREXPOSURE: None known except as listed in Section V above.
CHRONIC OVEREXPOSURE: None known except as listed in Section V above.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Immediately irrigate with large amounts of water for at least 15 minutes. Hold eyelids apart during irrigation. Send patient to a physician immediately.

SKIN: Flush with water while removing clothing and shoes. Continue to

REPORT NUMBER: 971 VAN WATERS & ROGERS INC. PAGE: 004
MSDS NO: P126624 MATERIAL SAFETY DATA SHEET
EFFECTIVE DATE: 04/09/92 VERSION: 001

PRODUCT: FERRIC SULFATE 30%

ORDER NO:
PROD NO :

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flush for at least 15 minutes. Call a physician. Wash clothes before reuse.

INHALATION: Remove from area and give artificial respiration if needed and seek medical assistance.

INGESTION: Treat as a corrosive liquid. Drink large quantities of water or milk to reduce concentration and neutralize acid. Do not induce vomiting. Call physician immediately.

SECTION VI. REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY: None known.

INCOMPATIBILITY: Product solution is corrosive to mild steel, copper, copper alloys and galvanized steel. May be corrosive to paints, cements, and concrete. Reacts with lime and other basic materials to form insoluble iron salts.

HAZARDOUS DECOMPOSITION PRODUCTS: None normally. At temperatures above 600 deg C, sulfur trioxide may be released.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: None known.

SECTION VII. DISPOSAL, SPILL OR LEAK PROCEDURE

AQUATIC TOXICITY (e.g., 96 HR. TLM): No data is known to be available. EPA has rated ferric sulfate in Category C in the Waters Program hazardous substance list in 40 CFR Parts 116-118.

WASTE DISPOSAL METHOD: Neutralize with lime, soda ash, or bicarbonate and remove to approved landfill.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Prohibit product from running into streams or navigable waters. Neutralize and remove to approved landfill. Wash down spill area with water. Check with waste treatment plant before flushing down large amounts of spilled product.

NEUTRALIZING CHEMICALS: Lime (calcium carbonate, calcium hydroxide, calcium oxide), soda ash or sodium bicarbonate.

SECTION VIII. SPECIAL PROTECTION INFORMATION

REPORT NUMBER: 971
MSDS NO: P125624
EFFECTIVE DATE: 04/09/92

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

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PRODUCT: FERRIC SULFATE 30%

ORDER NO:
PROD NO :

VENTILATION REQUIREMENTS: No special ventilation is believed to be necessary under normal use conditions.

SPECIFIC PERSONAL PROTECTION EQUIPMENT:

RESPIRATORY: None known necessary under normal use. If mists occur, or may occur, use a respiratory having an activated carbon filter suitable for sulfuric acid mists.

EYE: Chemical goggles should be worn when handling this product as it is corrosive to the eye.

GLOVES: Chemical or rubber gloves should be worn.

OTHER CLOTHING AND EQUIPMENT: Acid resistant clothing is recommended. Safety shoes are recommended when handling product in drums.

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SECTION IX. SPECIAL PRECAUTIONS

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PRECAUTIONARY STATEMENTS: Product is corrosive to mild steel and containers should bear a corrosive D.O.T. label. There should be a substance placard with UN1760.

OTHER HANDLING AND STORAGE REQUIREMENTS: Liquid Ferric sulfate solution is corrosive to mild steel. Storage and equipment materials should include fiberglass, reinforced plastics, rubber, lead, type 304 or better grades of stainless steel.

ADDITIONAL REGULATORY CONCERNS:

TSCA: Is this product, or all its ingredients, being certified for inclusion on the Toxic Substances Control Act inventory of chemical substances? Yes.

OTHER: The Ferric Sulfate meets the AWWA standard for Ferric Sulfate in potable water. Standard AWWA B406-87.

OSHA: Product is a hazardous material as defined by 29 CFR Paragraph 1910. 1200 because it is corrosive to the eye.

Product is not listed by the National Toxicology Program, the International Agency for Research on Cancer, nor the Registry of Toxic Effects of Chemical Substances (1981-82) as a carcinogen or potential carcinogen.

SARA TITLE III: Product contains the following listed toxic chemicals

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MSDS NO: P12582V
EFFECTIVE DATE: 04/09/92

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

PAGE: 006

VERSION: 001

PRODUCT: FERRIC SULFATE 30%

ORDER NO:
PROD NO :

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which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA TITLE III) and 40 CFR, Part 372.

LISTED TOXIC CHEMICAL: Sulfuric acid

CAS#: 7664-93-9

MAX. % BY WGT: 0.5

---------- FOR ADDITIONAL INFORMATION ----------

CONTACT: MSDS COORDINATOR VAN WATERS & ROGERS INC.
DURING BUSINESS HOURS, PACIFIC TIME (206)889-3400

05/24/95 13:59 PRODUCT: CUST NO: ORDER NO

---------- NOTICE ----------

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*** E N D O F M S D S ***

PRM
Allen R. Forester
David F. Strahorn

July 10, 1998

Mr. Rip Caleen
Watkins, Tomasello, & Caleen
1315 East Lafayette Street Suite B
Tallahassee, FL 32301

Dear Mr. Caleen:

Confirming our discussions, I am quite confident that IPC properly characterized its Used Oil tank bottoms as non-hazardous before shipment off-site for disposal in a landfill. There is no information that suggests that this material would have failed the TCLP criteria.

I have been active in the Used Oil recycling industry since 1980. I am a State of California Registered Environmental Assessor (No. 220). Over the years, I have reviewed a huge amount of data from Used Oil recyclers across the country, both EP TOX and TCLP, and know of no example of a Used Oil tank bottoms sample ever failing. This material and similar solid wastes from Used Oil recyclers are routinely disposed of in non-hazardous landfills across the country.

I have reviewed the relevant information at the following recyclers:

DeMenno/Kerdoon	California
Research Oil	Ohio
Consolidated Recycling	Indiana
IPC of Delaware	Delaware
IPC of Louisiana	Louisiana

All available information supports IPC's determination that the waste in question was non-hazardous.

I am attaching some TCLP data from the IPC facilities that are representative of this waste stream and would not be expected to be significantly different from the material in Florida.

The first two pages are from Labs America and represent a major cleanout of the large Used Oil tanks at the IPC of Delaware facility in 1997. Although this

sample contained some filter debris from Used Oil and centrifuged DAF solids from wastewater treatment, the vast percentage, 90+, was tank bottoms.

The next page is from Pace Labs and it is a TCLP for benzene only on the solids removed from the Used Oil tanks at IPC Louisiana in 1995. The next three pages are TCLP on the same sample at a different lab, SPL.

The last page is a summary of TCLP results at IPC for their filter solids from Used Oil over five years. This is not exactly the same waste stream although it is derived from the same Used Oil prior to it going into the tank where more solids settled over time. This filter solids stream was deoiled with a petroleum fuel to recover the maximum salable oil and minimize waste. The tank bottoms that are generated infrequently but at a much higher rate, are not deoiled. These results do however indicate that there is not something inherently different or worse about the Used Oil processed by IPC in Florida.

I can provide a large quantity of TCLP data for waste similar to IPC's from DeMenno/Kerdoon, the largest Used Oil recycler west of the Mississippi. This will take two to three weeks since I am going to be on the road. I can be reached at 1 (800) 489-2306 X600.

Sincerely,

David Strahorn

Attachments

cc Mr. Jerrold Blair
Mr. Garry Allen

Labs America

Quality Environmental Testing

ANALYTICAL REPORT

Client: International Petroleum Corp. of DE
505 S.Market Street
Wilmington, DE 19801
Sample ID : Microseparator/Filter Debris/Tank Bottoms
REPORT TO: Mr.Tom Burdeshaw

Reported : 10/18/97
Received : 10/03/97
Work Order: L-977184
Sampling Date: 09/20/97
Time : 12:20
BY: TB

TCLP (1311) SEMIVOLATIVES

ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
1,4-Dichlorobenzens	< 100	ug/L	8270	100	BLB	10/14/97	3:47
2,4,5-Trichlorophenol	< 100	ug/L	8270	100	BLB	10/14/97	3:47
2,4,6-Trichlorophenol	< 100	ug/L	8270	100	BLB	10/14/97	3:47
2,4-Dinitrotoluene	< 100	ug/L	8270	100	BLB	10/14/97	3:47
Cresol Total	377	ug/L	8270	100	BLB	10/14/97	3:47
Hexachlorobenzene	< 100	ug/L	8270	100	BLB	10/14/97	3:47
Hexachlorobutadiene	< 100	ug/L	8270	100	BLB	10/14/97	3:47
Hexachloroethane	< 100	ug/L	8270	100	BLB	10/14/97	3:47
Nitrobenzens	< 100	ug/L	8270	100	BLB	10/14/97	3:47
Pantachlorophenol	< 100	ug/L	8270	100	BLB	10/14/97	3:47
Pyridine	< 100	ug/L	8270	100	BLB	10/14/97	3:47
m/p-Cresol	180	ug/L	8270	100	BLB	10/14/97	3:47
o-Cresol	197	ug/L	8270	100	BLB	10/14/97	3:47

TCLP (1311) HERBICIDES

ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
2,4,5-TP(Silvex)	< 500	ug/L	8150#	500	PDB	10/17/97	5:15
2,4-C	< 5000	ug/L	8150#	5000	PDB	10/17/97	5:15

TCLP(1311)INORGANICS

ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
Arsenic	< 0.50	mg/L	7060	0.50	BAK	10/10/97	3:39
Barium	0.59	mg/L	6010	0.30	BAK	10/10/97	3:39
Cadmium	< 0.03	mg/L	6010	0.03	BAK	10/10/97	3:39
Chromium	< 0.05	mg/L	6010	0.05	BAK	10/10/97	3:39
Lead	< 0.20	mg/L	6010	0.20	BAK	10/10/97	3:39
Mercury	< 0.0005	mg/L	7470	0.0005	JAB	10/10/97	3:39
Selenium	< 0.50	mg/L	6010	0.50	BAK	10/10/97	3:39
Silver	< 0.05	mg/L	6010	0.05	BAK	10/10/97	3:39
pH,Final		Units	9040		PDS	10/08/97	8:00
pH,Initial		Units	9040		PDS	10/07/97	5:14

Labs America

Quality Environmental Testing

TCLP (1311)PESTICIDES ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
Chlordano	< 10	ug/L	8081	10	PDB	10/15/97	6:05
Endrin	< 15	ug/L	8081	15	PDB	10/15/97	6:05
Heptachlor	< 4	ug/L	8081	4	PDB	10/15/97	6:05
Heptachlor epoxide	< 4	ug/L	8081	4	PDB	10/15/97	6:05
Lindane	< 50	ug/L	8081	50	PDB	10/15/97	6:05
Methoxychlor	< 500	ug/L	8081	500	PDB	10/15/97	6:05
Toxaphene	< 250	ug/L	8081	250	PDB	10/15/97	6:05

TCLP (1311)VOLATILES ANALYSIS	RESULTS	UNIT	METHOD	DETECTION LIMIT	ANALYST INITIALS	DATE/TIME OF ANALYSIS	
1,1-Dichloroethene	< 50	ug/L	8260	50	BLB	10/11/97	5:38
1,2-Dichloroethene	< 50	ug/L	8260	50	BLB	10/11/97	5:38
Benzene	< 50	ug/L	8260	50	BLB	10/11/97	5:38
Carbon Tetrachloride	< 50	ug/L	8260	50	BLB	10/11/97	5:38
Chlorobenzens	< 50	ug/L	8260	50	BLB	10/11/97	5:38
Chloroform	< 50	ug/L	8260	50	BLB	10/11/97	5:38
Methylethylketone	< 200	ug/L	8260	200	BLB	10/11/97	5:38
Tetrachloroethene	< 50	ug/L	8260	50	BLB	10/11/97	5:38
Trichloroethene	< 50	ug/L	8260	50	BLB	10/11/97	5:38
Vinyl Chloride	< 50	ug/L	8260	50	BLB	10/11/97	5:38

Esterification by Standard Methods 6640

NOTE. All results, except leachate analysis, reported on a dry weight basis.

Respectfully submitted by:

Karen L Merrill
Laboratory Director

ENVIRONMENTAL LABORATORIES

REPORT OF LABORATORY ANALYSIS

Analytical Results - TCLP Volatile Organics by Method 8240
International Petroleum Corporation

Client ID: TANK BOTTOM SLUDGE
Description: SLUDGE
Sample ID: XMQ-001
Matrix: Other
Wet/Dry Basis: NA

Collected: 05/25/95
Received: 05/26/95
Leached & Prepared: 06/01,06/95
Analyzed: 06/06/95
Percent Moisture: NA

		Concentration, ug/l (ppb)				
CAS No.	Parameter	Sample	TCLP Blank	Lab Blank	Detection Limit	Regulatory Level
71-43-2	Benzene	ND	ND	ND	50.0	500

ND-Not Detected at or above the detection limit stated.

161 James Drive West, Suite 100
St. Rose, LA 70087
TEL: 504-469-0333
FAX: 504-469-0555

LAFAYETTE AREA LAB
500 AMBASSADOR CAFFERY PKWY
SCOTT, LOUISIANA
ZIP 70583-3544
PHONE: (318) 237-4775

Certificate of Analysis No. L1-9506117-01

GAUTHIER BROTHERS
305 TURNROW
LAFAYETTE, LA 70508
ATTN: J.C. BRIANT

DATE: 06/06/95

PROJECT: GAUTHIER BROTHERS
SITE:
SAMPLED BY: GAUTHIER BROS.
SAMPLE ID: #1

PROJECT NO:
MATRIX: SOLID
DATE SAMPLED: 05/25/95
DATE RECEIVED: 05/26/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Silver, TCLP Leachate Method 7760 *** Analyzed by: KJ Date: 06/05/95 15:50:00	ND	0.01	mg/L
Arsenic, TCLP Leachate Method 7060 *** Analyzed by: GS Date: 06/05/95 12:17:00	0.013	0.001	mg/L
Barium, TCLP Leachate Method 7080 *** Analyzed by: KJ Date: 06/05/95 13:50:00	0.6	0.1	mg/L
Cadmium, TCLP Leachate Method 7130 *** Analyzed by: KJ Date: 06/05/95 14:50:00	0.006	0.005	mg/L

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results reported on a Wet Weight Basis unless otherwise noted.

CAG/John Troost/Laboratory Manager

LAFAYETTE AREA LAB
500 AMBASSADOR CAFFERY PKWY
SCOTT, LOUISIANA
ZIP 70583-8544
PHONE: (318) 237-4775

Certificate of Analysis No. L1-9506117-01

GAUTHIER BROTHERS
305 TURNROW
LAFAYETTE, LA 70508
ATTN: J.C. BRIANT

DATE: 06/06/95

PROJECT: GAUTHIER BROTHERS
SITE:
SAMPLED BY: GAUTHIER BROS.
SAMPLE ID: #1

PROJECT NO:
MATRIX: SOLID
DATE SAMPLED: 05/25/95
DATE RECEIVED: 05/26/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Chromium, TCLP Leachate Method 7190 *** Analyzed by: KJ Date: 06/05/95 15:20:00	ND	0.05	mg/L
Mercury, TCLP Leachate METHOD 7470 *** Analyzed by: GH Date: 06/05/95 16:00:00	ND	0.0002	mg/L
Lead, TCLP Leachate Method 7420 *** Analyzed by: KJ Date: 06/05/95 14:20:00	0.2	0.1	mg/L
TCLP Leachate extraction Method 1311 *** Analyzed by: BP Date: 06/02/95 17:00:00	06/02/95		NA
Selenium, TCLP Leachate Method 7740 *** Analyzed by: GS Date: 06/05/95 16:25:00	0.003	0.002	mg/L

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results reported on a Wet Weight Basis unless otherwise noted.

CAG/John Troost, Laboratory Manager

LAFAYETTE AREA LAB
500 AMBASSADOR CAFFERY PKWY.
SCOTT, LOUISIANA
ZIP 70583-8544
PHONE: (318) 237-4775

Certificate of Analysis No. L1-9505A04-01

GAUTHIER BROTHERS
305 TURNROW
LAFAYETTE, LA 70508
ATTN: J.C. BRIANT

INVOICE COPY

DATE: 06/01/95

PROJECT: GAUTHIER BROTHERS
SITE:
SAMPLED BY: GAUTHIER BROTHERS
SAMPLE ID: #1

PROJECT NO:
MATRIX: SOLID
DATE SAMPLED: 05/25/95
DATE RECEIVED: 05/26/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
TCLP Benzene Method 1311/8020 *** Analyzed by: TB Date: 05/30/95 11:57:00	36	1	µg/L
Zero Headspace extraction Method 1311 *** Analyzed by: BP Date: 05/26/95 17:00:00	05/26/95		na

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control. Results reported on a Wet Weight Basis unless otherwise noted.

Karen Testelle for
CAG/John Troost, Laboratory Manager

Table 1: Summary of TCLP Analyses
June 1993 through November 1997

Compound	Concentration (mg/l)										
	Sampled 06/28/93	Sampled 07/27/93	Sampled 08/30/93	FDEP Split	Sampled 09/27/93	Sampled 10/28/93	Sampled 09/16/94	Sampled 11/20/95	Sampled 10/17/96	Sampled 11/5/97	TCLP * Criteria
Arsenic	0.003	0.009	0.004	BDL	BDL	0.003	BDL	0.003	BDL	0.004	5.0
Barium	0.72	3.77	BDL	0.5	1.02	0.31	0.55	0.22	6.33	0.5	100
Cadmium	0.002	BDL	BDL	BDL	0.04	0.02	BDL	BDL	0.002	0.09	1.0
Chromium	0.003	0.30	BDL	BDL	0.04	0.04	BDL	BDL	BDL	BDL	5.0
Lead	0.071	0.14	0.09	BDL	0.14	0.16	0.20	0.14	0.025	0.16	5.0
Mercury	BDL	BDL	BDL	BDL	BDL	0.0002	0.001	0.0005	BDL	BDL	0.2
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.0
Silver	BDL	BDL	BDL	BDL	BDL	BDL	0.09	BDL	BDL	BDL	5.0
Benzene	0.005	0.003	0.007	0.010	BDL	0.0011	BDL	0.00085	BDL	0.00063	0.5
Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Chlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	100
Chloroform	BDL	BDL	BDL	BDL	BDL	0.008	BDL	BDL	BDL	BDL	6.0
1,2-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
1,1-Dichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.7
Hexachloroethane	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	3.0
Methyl Ethyl Ketone	BDL	BDL	BDL	NR	BDL	0.034	BDL	0.00758	BDL	0.123	200
Tetrachloroethylene	0.002	0.002	0.005	0.007	0.003	BDL	BDL	0.00129	BDL	BDL	0.7
Trichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Vinyl Chloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2
o-Cresol	0.041	0.016	BDL	NR	BDL	0.001	BDL	0.00244	BDL	BDL	200
m-Cresol	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	200
p-Cresol	0.018	0.004	BDL	NR	BDL	0.006	BDL	0.00135	BDL	BDL	200
1,4-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	7.5
2,4-Dinitrotoluene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	0.13
Hexachlorobenzene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	0.13
Hexachlorbutadiene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	0.5
Nitrobenzene	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	2.0
Pentachlorophenol	BDL	BDL	BDL	NR	BDL	0.042	BDL	BDL	BDL	BDL	100
Pyridine	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	5.0
2,4,5-Trichlorophenol	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	400
2,4,6-Trichlorophenol	BDL	BDL	BDL	NR	BDL	BDL	BDL	BDL	BDL	BDL	2.0

(BDL) Below Laboratory Detection Limits (NR) Not Reported by FDEP (*) Maximum concentration for non-hazardous

Professional Resource Management

PRM
Allen R. Forester
David F. Strahorn

July 30, 1998

Mr. Rip Caleen
Watkins, Tomasello, & Caleen
1315 East Lafayette Street Suite B
Tallahassee, FL 32301

Dear Mr. Caleen:

Pursuant to your request, I am attaching some typical examples of Used Oil tank bottoms from DeMenno/Kerdoon, the largest Used Oil recycler west of the Mississippi.

The first attachment is a complete TCLP from a Used Oil tank clean out in 1993.

The second attachment includes five TCLP metals tests on Used Oil tank bottoms from 1995. Also included are total lead analysis for these samples. Please note that even when the total lead was 1337 PPM the TCLP was only 1.05 PPM. This is typical of the Used Oil tank bottoms matrix.

The third attachment includes analysis of tank bottoms from four Used Oil tanks in 1996. These analysis are labeled TTLC and STLC. TTLC is a California regulatory designation for total metals whereas STLC is soluble metals. The STLC test is identical to TCLP except citric acid is used in place of acetic acid because metal citrates are more soluble in water than metal acetates. STLC yields consistently higher results than TCLP which is why California requires it.

Used Oil tank bottoms never fail TCLP.

Sincerely,

David Strahorn

Attachment

cc Mr. Jerrold Blair
Mr. Garry Allen

190 Silver Pine Lane • Danville, CA 94506 • (925) 736-9575

Attachment I

1993 TCLP on Used Oil Tank Bottoms

Generated by DeMenno/Kerdoon

Weck Laboratories, Inc.
Analytical & Environmental Services

Client: Dameron Kerdoon
2000 North Alameda Street
Compton, CA 90222

Report Date: March 23, 1993

Received Date: March 19, 1993
Friday 01:30P/JM

Attn.: J. A. Judson x237 (310) 537-7100 FAX (310) 639-2946

Project Name:
Location:
Purchase Order #

Project #
Collected By: Client

Certificate of Analysis

Lab #9303153 Client Sample ID: Soil #1 Composite Matrix: Soil Collection Date: 03/17/93 11:00

Parameter	Result	Units	Method	MDL	Analyzed
Soluble Arsenic on TCLP Extract	< 0.2	mg/l	EPA 6010	0.2	03/22/93
Soluble Barium on TCLP Extract	0.65	mg/l	EPA 6010	0.01	03/22/93
Soluble Cadmium on TCLP Extract	< 0.05	mg/l	EPA 6010	0.05	03/22/93
Soluble Chromium on TCLP Extract	1.2	mg/l	EPA 6010	0.02	03/22/93
Soluble Lead on TCLP Extract	< 0.2	mg/l	EPA 6010	0.2	03/22/93
Soluble Mercury on TCLP Extract	< 0.003	mg/l	EPA 7470	0.003	03/22/93
Soluble Selenium on TCLP Extract	< 0.01	mg/l	EPA 7741	0.01	03/22/93
Soluble Silver on TCLP Extract	< 0.05	mg/l	EPA 6010	0.05	03/22/93
Soluble Chloromethane on TCLP-[illegible]	< 50	ug/l	EPA 8240	50	03/22/93
Soluble Vinyl Chloride on TCLP-[illegible]	< 50	ug/l	EPA 8240	50	03/22/93
Soluble Bromoethane on TCLP-[illegible]	< 25	ug/l	EPA 8240	25	03/22/93
Soluble Chloroethane on TCLP-[illegible]	< 50	ug/l	EPA 8240	50	03/22/93
Soluble Acrolein on TCLP-[illegible]	< 50	ug/l	EPA 8240	50	03/22/93
Soluble Acrylonitrile on TCLP-[illegible]	< 50	ug/l	EPA 8240	50	03/22/93
Soluble Acetone on TCLP-[illegible]	< 250	ug/l	EPA 8240	250	03/22/93
Soluble Trichlorofluoromethane TCLP-[illegible]	< 50	ug/l	EPA 8240	50	03/22/93
Soluble 1,1-Dichloroethene on TCLP-[illegible]	< 13	ug/l	EPA 8240	13	03/22/93
Soluble Methylene Chloride on TCLP-[illegible]	31	ug/l	EPA 8240	25	03/22/93
Soluble Carbon Disulfide on TCLP-[illegible]	< 130	ug/l	EPA 8240	130	03/22/93
Soluble trans-1,2-Dichloroethene TCLP[illegible]	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 1,1-Dichloroethane on TCLP-[illegible]	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 2-Butanone (MEK) on TCLP-[illegible]	< 250	ug/l	EPA 8240	250	03/22/93
Soluble cis-1,2-Dichloroethene TCLP-[illegible]	< 13	ug/l	EPA 8240	13	03/22/93
Soluble Chloroform on TCLP-[illegible]	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 1,1,1-Trichloroethane TCLP-[illegible]	120	ug/l	EPA 8240	13	03/22/93
Soluble 1,2-Dichloroethane on TCLP-[illegible]	< 13	ug/l	EPA 8240	13	03/22/93

14859 East Clark Avenue, Industry, California 91745-1396 (818) 336-2139 FAX (818) 336-2634

Weck Laboratories, Inc.
Analytical & Environmental Services

Client: Demenno Kerdoon
Project Name:
Location:
Purchase Order #
Report Date: March 23, 1993

Project #
Collected By: Client

Lab #[illegible] Client Sample ID: Soil #1 Composite Matrix: Soil Collection Date: 03/17/93 11:00

Parameter	Result	Units	Method	MDL	Analyzed
Soluble Benzene on TCLP-ZHE	170	ug/l	EPA 8240	13	03/22/93
Soluble Carbon Tetrachloride on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble Bromodichloromethane on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 1,2-Dichloropropane on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble Trichloroethene on TCLP-ZHE	17	ug/l	EPA 8240	13	03/22/93
Soluble 2-Chloroethyl Vinyl Ether TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble cis-1,3-Dichloropropene TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 4-Methyl-2-Pentanone on TCLP-ZHE	< 130	ug/l	EPA 8240	130	03/22/93
Soluble trans-1,3-Dichloropropene TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble Toluene on TCLP-ZHE	520	ug/l	EPA 8240	13	03/22/93
Soluble 1,1,2-Trichloroethane TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble Dibromochloromethane on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 2-Hexanone on TCLP-ZHE	< 250	ug/l	EPA 8240	250	03/22/93
Soluble Tetrachloroethene on TCLP-ZHE	37	ug/l	EPA 8240	13	03/22/93
Soluble Chlorobenzene on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble Ethylbenzene on TCLP-ZHE	180	ug/l	EPA 8240	13	03/22/93
Soluble Xylenes on TCLP-ZHE	600	ug/l	EPA 8240	13	03/22/93
Soluble Bromoform on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble Styrene on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 1,1,2,2-Tetrachloroethane TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 1,3-Dichlorobenzene on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 1,4-Dichlorobenzene on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble 1,2-Dichlorobenzene on TCLP-ZHE	< 13	ug/l	EPA 8240	13	03/22/93
Soluble N-Nitroso-dimethylamine on TCLP	< 2.5	ug/l	EPA 8270	2.5	03/22/93
Soluble Phenol on TCLP Extract	8.3	ug/l	EPA 8270	5	03/22/93
Soluble 2-Chlorophenol on TCLP Extract	< 2.5	ug/l	EPA 8270	2.5	03/22/93
Soluble 1,4-Dichlorobenzene on TCLP Ext.	< 2	ug/l	EPA 8270	2	03/22/93
Soluble 1,2-Dichlorobenzene on TCLP Ext.	3.1	ug/l	EPA 8270	1	03/22/93
Soluble bis(2-Chloroisopropyl)Ether TCLP	< 3.5	ug/l	EPA 8270	3.5	03/22/93
Soluble N-Nitroso-Di-n-Propylamine TCLP	< 2	ug/l	EPA 8270	2	03/22/93
Soluble Nitrobenzene on TCLP Extract	< 13	ug/l	EPA 8270	13	03/22/93
Soluble 2-Nitrophenol on TCLP Extract	< 50	ug/l	EPA 8270	50	03/22/93
Soluble bis(2-Chloroethoxy)Methane TCLP	< 7.5	ug/l	EPA 8270	7.5	03/22/93
Soluble Benzoic Acid on TCLP Extract	< 50	ug/l	EPA 8270	50	03/22/93
Soluble Naphthalene on TCLP Extract	100	ug/l	EPA 8270	1	03/22/93
Soluble Hexachlorobutadiene on TCLP Ext.	< 1.5	ug/l	EPA 8270	1.5	03/22/93
Soluble 2-Methylnaphthalene on TCLP Ext.	28	ug/l	EPA 8270	1.5	03/22/93
Soluble 2,4,6-Trichlorophenol on TCLP	< 25	ug/l	EPA 8270	25	03/22/93

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Weck Laboratories, Inc.

Analytical & Environmental Services

Client: Demenno Kerdoon
Project Name:
Location:
Purchase Order #
Report Date: March 23, 1993

Project #
Collected By: Client

Lab #93[illegible]11 Client Sample ID: Soil #1 Composite Matrix: Soil Collection Date: 03/17/93 11:00

Parameter	Result	Units	Method	MDL	Analyzed
Soluble 2-Chloronapthalene on TCLP Ext.	< 1	ug/l	EPA 8270	1	03/22/93
Soluble Dimethyl Phthalate on TCLP Ext.	< 1	ug/l	EPA 8270	1	03/22/93
Soluble 2,6-Dinitrotoluene on TCLP Ext.	< 7.5	ug/l	EPA 8270	7.5	03/22/93
Soluble Acenaphthene on TCLP Extract	< 1.5	ug/l	EPA 8270	1.5	03/22/93
Soluble 4-Nitrophenol on TCLP Extract	< 25	ug/l	EPA 8270	25	03/22/93
Soluble 2,4-Dinitrotoluene on TCLP Ext.	< 5	ug/l	EPA 8270	5	03/22/93
Soluble Fluorene on TCLP Extract	< 1	ug/l	EPA 8270	1	03/22/93
Soluble 4-Nitroaniline on TCLP Extract	< 100	ug/l	EPA 8270	100	03/22/93
Soluble N-Nitrosodiphenylamine on TCLP	< 1.5	ug/l	EPA 8270	1.5	03/22/93
Soluble 4-Bromophenyl-phenylether TCLP	< 2.5	ug/l	EPA 8270	2.5	03/22/93
Soluble Hexachlorobenzene on TCLP Ext.	< 2	ug/l	EPA 8270	2	03/22/93
Soluble Pentachlorophenol on TCLP Ext.	< 50	ug/l	EPA 8270	50	03/22/93
Soluble Phenanthrene on TCLP Extract	1.9	ug/l	EPA 8270	1	03/22/93
Soluble Delta-BHC on TCLP Extract	< 1	ug/l	EPA 8270	1	03/22/93
Soluble Di-n-Buthylphthalate on TCLP Ext	20	ug/l	EPA 8270	1	03/22/93
Soluble Heptachlor Epoxide on TCLP Ext.	< 5	ug/l	EPA 8270	5	03/22/93
Soluble Pyrene on TCLP Extract	< 1.5	ug/l	EPA 8270	1.5	03/22/93
Soluble 4,4'-DDE on TCLP Extract	< 2.5	ug/l	EPA 8270	2.5	03/22/93
Soluble Endrin on TCLP Extract	< 3	ug/l	EPA 8270	3	03/22/93
Soluble 4,4'-DDD on TCLP Extract	< 2	ug/l	EPA 8270	2	03/22/93
Soluble Butylbenzylphthalate on TCLP Ext	5.6	ug/l	EPA 8270	1.5	03/22/93
Soluble Endosulfan Sulfate on TCLP Ext	< 15	ug/l	EPA 8270	15	03/22/93
Soluble 3,3-Dichlorobenzidine TCLP Ext.	< 7.5	ug/l	EPA 8270	7.5	03/22/93
Soluble bis(2-ethylhexyl)Phthalate TCLP	15	ug/l	EPA 8270	5	03/22/93
Soluble Benzo(b)Fluoranthene on TCLP Ext	< 5	ug/l	EPA 8270	5	03/22/93
Soluble Benzo(a)Pyrene on TCLP Ext	< 5	ug/l	EPA 8270	5	03/22/93
Soluble Dibenzo(a,h)Anthracene on TCLP	< 100	ug/l	EPA 8270	100	03/22/93
Soluble Aniline on TCLP Extract	< 10	ug/l	EPA 8270	10	03/22/93
Soluble bis(2-Chloroethyl) Ether TCLP	< 1	ug/l	EPA 8270	1	03/22/93
Soluble 1,3-Dichlorobenzene on TCLP Ext	< 1	ug/l	EPA 8270	1	03/22/93
Soluble Benzyl Alcohol on TCLP Extract	< 500	ug/l	EPA 8270	500	03/22/93
Soluble 2-Methylphenol on TCLP Extract	22	ug/l	EPA 8270	20	03/22/93
Soluble 4-Methylphenol on TCLP Extract	32	ug/l	EPA 8270	25	03/22/93
Soluble Hexachloroethane on TCLP Extract	< 1.5	ug/l	EPA 8270	1.5	03/22/93
Soluble Isophorone on TCLP Extract	< 1	ug/l	EPA 8270	1	03/22/93
Soluble 2,4-Dimethylphenol on TCLP Ext.	< 50	ug/l	EPA 8270	50	03/22/93
Soluble 2,4-Dichlorophenol on TCLP Ext.	< 25	ug/l	EPA 8270	25	03/22/93
Soluble 1,2,4-Trichlorobenzene on TCLP	< 1	ug/l	EPA 8270	1	03/22/93

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Weck Laboratories, Inc.

Analytical & Environmental Services

Client: Demenno Kerdoon
Project Name:
Location:
Purchase Order #
Report Date: March 23, 1993

Project #
Collected By: Client

Lab #P303532 Client Sample ID: Soil #1 Composite Matrix: Soil Collection Date: 03/17/93 11:00

Parameter	Result	Units	Method	MDL	Analyzed
Soluble 4-Chloroaniline on TCLP Extract	< 5	ug/l	EPA 8270	5	03/22/93
Soluble 4 Chloro-3-Methylphenol on TCLP	< 25	ug/l	EPA 8270	25	03/22/93
Soluble Hexachlorocyclopentadiene TCLP	< 50	ug/l	EPA 8270	50	03/22/93
Soluble 2,4,5-Trichlorophenol on TCLP	< 25	ug/l	EPA 8270	25	03/22/93
Soluble 2-Nitroaniline on TCLP Extract	< 5	ug/l	EPA 8270	5	03/22/93
Soluble Acenaphthylene on TCLP Extract	< 1	ug/l	EPA 8270	1	03/22/93
Soluble 3-Nitroaniline on TCLP Extract	< 25	ug/l	EPA 8270	25	03/22/93
Soluble 2,4-Dinitrophenol on TCLP Ext	< 500	ug/l	EPA 8270	500	03/22/93
Soluble Dibenzofuran on TCLP Extract	< 2	ug/l	EPA 8270	2	03/22/93
Soluble Diethylphthalate on TCLP Extract	12	ug/l	EPA 8270	1	03/22/93
Soluble 4-Chlorophenyl-phenylether TCLP	< 1.5	ug/l	EPA 8270	1.5	03/22/93
Soluble 4,6-Dinitro-2-Methylphenol TCLP	< 50	ug/l	EPA 8270	50	03/22/93
Soluble Azobenzene on TCLP Extract	< 1	ug/l	EPA 8270	1	03/22/93
Soluble Alpha-BHC on TCLP Extract	< 25	ug/l	EPA 8270	25	03/22/93
Soluble Beta-BHC on TCLP Extract	< 3	ug/l	EPA 8270	3	03/22/93
Soluble Gamma-BHC (Lindane) on TCLP Ext	< 3	ug/l	EPA 8270	3	03/22/93
Soluble Anthracene on TCLP Extract	< 1.5	ug/l	EPA 8270	1.5	03/22/93
Soluble Heptachlor on TCLP Extract	< 2	ug/l	EPA 8270	2	03/22/93
Soluble Aldrin on TCLP Extract	< 3.5	ug/l	EPA 8270	3.5	03/22/93
Soluble Fluoranthene on TCLP Extract	< 1.5	ug/l	EPA 8270	1.5	03/22/93
Soluble Endosulfan I on TCLP Extract	< 25	ug/l	EPA 8270	25	03/22/93
Soluble Dieldrin on TCLP Extract	< 3.5	ug/l	EPA 8270	3.5	03/22/93
Soluble Endosulfan II on TCLP Extract	< 25	ug/l	EPA 8270	25	03/22/93
Soluble Endrin Aldehyde on TCLP Extract	< 5	ug/l	EPA 8270	5	03/22/93
Soluble 4,4'-DDT on TCLP Extract	< 2.5	ug/l	EPA 8270	2.5	03/22/93
Soluble Benzo(a)Anthracene on TCLP Ext.	< 2	ug/l	EPA 8270	2	03/22/93
Soluble Chrysene on TCLP Extract	< 2	ug/l	EPA 8270	2	03/22/93
Soluble Di-n-Octyl Phthalate on TCLP Ext	< 7.5	ug/l	EPA 8270	7.5	03/22/93
Soluble Benzo(k)Fluoranthene on TCLP Ext	< 5	ug/l	EPA 8270	5	03/22/93
Soluble Indeno(1,2,3-cd)Pyrene on TCLP	< 100	ug/l	EPA 8270	100	03/22/93
Soluble Benzo(g,h,i)Perylene on TCLP Ext	< 100	ug/l	EPA 8270	100	03/22/93
Soluble Pyridine on TCLP Extract	< 2.5	ug/l	EPA 8270	2.5	03/22/93

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Attachment II

1995 TCLP Metals on Used Oil Tank Bottoms
Last page includes total lead for these samples

Generated by DeMenno/Kerdoon

DEMENNO/KERDOON
LABORATORY DEPARTMENT
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
EPA METHOD 1311

METALS

GENERATOR: DeMenno /Kerdoon
TRANSPORTER: N/A
DATE SAMPLED:06/06/1995
SAMPLED BY: D/K
DATE RECIVED: 06/06/1995

SAMPLE ID: B285-B342
DATE OF EXTRACTION: 10/17/95
DATE OF ANALYSIS: 10/20/95
WASTE TYPE: SOLID
ATTN: DAVE S.

	CAS #	UNITS	DETECTION LIMIT	RESULT	MCL(REG)
Arsenic	7440-38-2	MG/L	0.25	ND	5.0
Barium	7440-39-3	MG/L	0.50	0.50	100.0
Cadmium	7440-43-9	MG/L	0.25	ND	1.0
Chromium	7440-47-3	MG/L	0.50	ND	5.0
Lead	7439-92-1	MG/L	0.50	1.05	5.0
Selenium	7782-49-2	MG/L	0.50	ND	1.0
Silver	7740-22-4	MG/L	0.50	ND	5.0

MCL = Maximum Contaminant Level (Regulatory)
ND = None Detected
UG/L = Microgram per Liter
MG/L = Milligram per Liter

Cyrus Pourmassanian
Laboratory Manager

Faten Attalla
Senior Chemist

((CALIFORNIA STATE CERTIFIED))

DEMENNO/KERDOON
LABORATORY DEPARTMENT
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
EPA METHOD 1311

METALS

GENERATOR: DeMenno /Kerdoon
TRANSPORTER: N/A
DATE SAMPLED: 08/23/1995
SAMPLED BY: D/K
DATE RECIVED: 08/23/1995

SAMPLE ID: LAD50823-1
DATE OF EXTRACTION: 10/17/95
DATE OF ANALYSIS: 10/20/95
WASTE TYPE: SOLID
ATTN: DAVE S.

	CAS #	UNITS	DETECTION LIMIT	RESULT	MCL(REG)
Arsenic	7440-38-2	MG/L	0.25	ND	5.0
Barium	7440-39-3	MG/L	0.50	ND	100.0
Cadmium	7440-43-9	MG/L	0.25	ND	1.0
Chromium	7440-47-3	MG/L	0.50	ND	5.0
Lead	7439-92-1	MG/L	0.50	ND	5.0
Selenium	7782-49-2	MG/L	0.50	ND	1.0
Silver	7740-22-4	MG/L	0.50	ND	5.0

MCL = Maximum Contaminant Level (Regulatory)
ND = None Detected
UG/L = Microgram per Liter
MG/L = Milligram per Liter

Cyrus Pourhassanian
Laboratory Manager

Faten Attalla
Senior Chemist

((CALIFORNIA STATE CERTIFIED))

DEMENNO/KERDOON
LABORATORY DEPARTMENT
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
EPA METHOD 1311

METALS

GENERATOR: DeMenno /Kerdoon
TRANSPORTER: N/A
DATE SAMPLED:10/02/1995
SAMPLED BY: D/K
DATE RECIVED: 10/02/1995

SAMPLE ID: LAD51002
DATE OF EXTRACTION: 10/17/95
DATE OF ANALYSIS: 10/20/95
WASTE TYPE: SOLID
ATTN: DAVE S.

	CAS #	UNITS	DETECTION LIMIT	RESULT	MCL(REG)
Arsenic	7440-38-2	MG/L	0.25	ND	5.0
Barium	7440-39-3	MG/L	0.50	ND	100.0
Cadmium	7440-43-9	MG/L	0.25	ND	1.0
Chromium	7440-47-3	MG/L	0.50	ND	5.0
Lead	7439-92-1	MG/L	0.50	ND	5.0
Selenium	7782-49-2	MG/L	0.50	ND	1.0
Silver	7740-22-4	MG/L	0.50	ND	5.0

MCL = Maximum Contaminant Level (Regulatory)
ND = None Detected
UG/L = Microgram per Liter
MG/L = Milligram per Liter

Cyrus Pourmassanian
Laboratory Manager

Faten Attalla
Senior Chemist

((CALIFORNIA STATE CERTIFIED))

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TOXICITY CHARACTERISTIC LEACHING PROCEDURE
EPA METHOD 1311

METALS

GENERATOR: DeMenno /Kerdoon
TRANSPORTER: N/A
DATE SAMPLED:10/16/1995
SAMPLED BY: D/K
DATE RECIVED: 10/16/1995

SAMPLE ID: LAD 51016 M#95119134
DATE OF EXTRACTION: 10/17/95
DATE OF ANALYSIS: 10/20/95
WASTE TYPE: SOLID
ATTN: DAVE S.

	CAS #	UNITS	DETECTION LIMIT	RESULT	MCL(REG)
Arsenic	7440-38-2	MG/L	0.25	ND	5.0
Barium	7440-39-3	MG/L	0.50	ND	100.0
Cadmium	7440-43-9	MG/L	0.25	ND	1.0
Chromium	7440-47-3	MG/L	0.50	ND	5.0
Lead	7439-92-1	MG/L	0.50	ND	5.0
Selenium	7782-49-2	MG/L	0.50	ND	1.0
Silver	7740-22-4	MG/L	0.50	ND	5.0

MCL = Maximum Contaminant Level (Regulatory)
ND = None Detected
UG/L = Microgram per Liter
MG/L = Milligram per Liter

Cyrus Pourhassanian
Laboratory Manager

Faten Attalla
Senior Chemist

((CALIFORNIA STATE CERTIFIED))

DEMENNO/KERDOON
LABORATORY DEPARTMENT
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
EPA METHOD 1311

METALS

GENERATOR: DeMenno /Kerdoon
TRANSPORTER: N/A
DATE SAMPLED:10/16/1995
SAMPLED BY: D/K
DATE RECIVED: 10/16/1995

SAMPLE ID: LAD 51016 -1
DATE OF EXTRACTION: 10/17/95
DATE OF ANALYSIS: 10/20/95
WASTE TYPE: SOLID
ATTN: DAVE S.

	CAS #	UNITS	DETECTION LIMIT	RESULT	MCL(REG)
Arsenic	7440-38-2	MG/L	0.25	ND	5.0
Barium	7440-39-3	MG/L	0.50	ND	100.0
Cadmium	7440-43-9	MG/L	0.25	ND	1.0
Chromium	7440-47-3	MG/L	0.50	ND	5.0
Lead	7439-92-1	MG/L	0.50	ND	5.0
Selenium	7782-49-2	MG/L	0.50	ND	1.0
Silver	7740-22-4	MG/L	0.50	ND	5.0

MCL = Maximum Contaminant Level (Regulatory)
ND = None Detected
UG/L = Microgram per Liter
MG/L = Milligram per Liter

Cyrus Pourhassanian
Laboratory Manager

Faten Attalla
Senior Chemist

((CALIFORNIA STATE CERTIFIED))

DEMENNO/KERDOON
LABORATORY DEPARTMENT

GENERATOR: DeMenno/Kerdoon
TRANSPORTER: N/A
WASTE TYPE: Solid
SUBMITED BY: D/K
ATTN: Dave S.

SAMPLE I.D. NO.: See Below
DATE SAMPLED: See Below
DATE RECIVED: Various
SAMPLED BY: D/K
DATE OF REPORT: 10/24/1995

SAMPLE ID	SAMPLE DATE	ANALYTE	METHOD	UNIT	RESULT	MDL
B285-342	6/6/95	LEAD	EPA3050	MG/KG	1165	10.0
LAD 50614-1	6/14/95	LEAD	EPA3050	MG/KG	1028	10.0
LAD 50823-1	8/23/95	LEAD	EPA3050	MG/KG	1337	10.0
LAD 51002-1	10/2/95	LEAD	EPA3050	MG/KG	707	10.0
LAD 51010/M95119134	10/10/95	LEAD	EPA3050	MG/KG	593	10.0
LAD 51016	10/16/95	LEAD	EPA3050	MG/KG	413	10.0

CYRUS POURHASSANIAN
LABORATORY MANAGER

FATEN ATTALLA
SENIOR CHEMIST

((CALIFORNIA STATE CERTIFIED))

2000 North Alameda Street, Compton, California 90222-2799 (213) 537-7100 FAX (213) 639-2946

Attachment III

1996 TTLC and STLC on Used Oil Tank Bottoms
TTLC represents total metals
STLC represents soluble maetals

Generated by DeMenno/Kerdoon

DEMENNO/KERDOON
LABORATORY DEPARTMENT

GENERATOR: DEMENNO/KERDOON
TRANSPORTER: N/A
MATRIX: SOIL
SUBMITTED BY:KEVIN STORMS
REF#: SOLIDS FROM TK 1007

SAMPLE I.D. NO.: TK 1007 PURE
DATE/TIME SAMPLED:6/25/1996 17:40
DATE/TIME RECIVED:6/25/1996 19:00
SAMPLED BY: KEVIN STORMS
DATE OF REPORT:07/05/1996

	TTLC				STLC			
ANALYTE	MCL	UNITS	MDL	RESULT	MCL	UNITS	MDL	RESULT
As	500.0	Mg/Kg	10.0	ND	5.0	MG/L	1.0	ND
Se	100.0	Mg/Kg	75.0	170.0	1.0	MG/L	0.5	0.9
Pb	1000.0	Mg/Kg	10.0	866.0	5.0	MG/L	1.0	1.8
Tl	700.0	Mg/Kg	10.0	84.0	7.0	MG/L	1.0	ND
Cr	2500.0	Mg/Kg	10.0	181.0	5.0	MG/L	1.0	ND
Cu	2500.0	Mg/Kg	10.0	1610.0	25.0	MG/L	1.0	ND
Ni	2000.0	Mg/Kg	10.0	378.0	20.0	MG/L	1.0	ND
Cd	100.0	Mg/Kg	10.0	ND	1.0	MG/L	1.0	ND
Ag	500.0	Mg/Kg	10.0	ND	5.0	MG/L	1.0	ND
Zn	5000.0	Mg/Kg	10.0	2400.0	250.0	MG/L	1.0	12.7
Ba	10000.0	Mg/Kg	10.0	576.0	100.0	MG/L	1.0	3.5
Hg	20.0	Mg/Kg	0.50	8.5	0.2	MG/L	0.005	ND
Co	8000.0	Mg/Kg	10.0	59.4	80.0	MG/L	1.0	ND
Be	75.0	Mg/Kg	10.0	ND	0.75	MG/L	0.5	ND
V	2400.0	Mg/Kg	10.0	42.0	24.0	MG/L	1.0	ND
Mo	3500.0	Mg/Kg	10.0	77.0	350.0	MG/L	1.0	ND
Sb	500.0	Mg/Kg	10.0	ND	15.0	MG/L	1.0	ND

MCL= MAXIMUM CONTAMINANT LEVEL (REGULATORY)
MDL= MINIMUM DETECTION LIMIT
ND = NONE DETECTED

CYRUS POURHASSANIAN
LABORATORY MANAGER

GALINA ALEXANDROV
CHEMIST

DEMENNO/KERDOON
LABORATORY DEPARTMENT

GENERATOR: DEMENNO/KERDOON
TRANSPORTER: N/A
MATRIX: SOIL
SUBMITTED BY:KEVIN STORMS
REF#: SOLIDS FROM TK 1008

SAMPLE I.D. NO.: TK 1008 PURE
DATE/TIME SAMPLED:6/25/1996 18:00
DATE/TIME RECIVED:6/25/1996 19:00
SAMPLED BY: KEVIN STORMS
DATE OF REPORT:07/05/1996

	TTLC				STLC			
ANALYTE	MCL	UNITS	MDL	RESULT	MCL	UNITS	MDL	RESULT
As	500.0	Mg/Kg	10.0	ND	5.0	MG/L	1.0	ND
Se	100.0	Mg/Kg	75.0	165.0	1.0	MG/L	0.5	1.9
Pb	1000.0	Mg/Kg	10.0	1220.0	5.0	MG/L	1.0	1.3
Tl	700.0	Mg/Kg	10.0	55.8	7.0	MG/L	1.0	1
Cr	2500.0	Mg/Kg	10.0	336.0	5.0	MG/L	1.0	2.9
Cu	2500.0	Mg/Kg	10.0	2260.0	25.0	MG/L	1.0	ND
Ni	2000.0	Mg/Kg	10.0	526.0	20.0	MG/L	1.0	1.6
Cd	100.0	Mg/Kg	10.0	17.7	1.0	MG/L	1.0	ND
Ag	500.0	Mg/Kg	10.0	13.8	5.0	MG/L	1.0	ND
Zn	5000.0	Mg/Kg	10.0	616.0	250.0	MG/L	1.0	33.5
Ba	10000.0	Mg/Kg	10.0	129.0	100.0	MG/L	1.0	11.5
Hg	20.0	Mg/Kg	0.50	1.7	0.2	MG/L	0.005	ND
Co	8000.0	Mg/Kg	10.0	85.0	80.0	MG/L	1.0	ND
Be	75.0	Mg/Kg	10.0	ND	0.75	MG/L	0.5	ND
V	2400.0	Mg/Kg	10.0	49.0	24.0	MG/L	1.0	ND
Mo	3500.0	Mg/Kg	10.0	191.0	350.0	MG/L	1.0	1.7
Sb	500.0	Mg/Kg	10.0	ND	15.0	MG/L	1.0	ND

MCL= MAXIMUM CONTAMINANT LEVEL (REGULATORY)
MDL= MINIMUM DETECTION LIMIT
ND = NONE DETECTED

CYRUS POURHASSANIAN
LABORATORY MANAGER

GALINA ALEXANDROV
CHEMIST

DEMENNO/KERDOON
LABORATORY DEPARTMENT
STLC METALS

GENERATOR: DEMENNO/KERDOON
TRANSPORTER: N/A
MATRIX: SOIL
SUBMITTED BY: KEVIN STORMS
REF#: SOUTHWEST TANK FARM PROJECT

SAMPLE I.D. NO.: TK 2001 SLUDGE
DATE SAMPLED: 08/29/1996
DATE RECIVED:08/29/1996
SAMPLED BY: N/A
DATE OF REPORT:09/03/1996

ANALYTE	MCL	UNITS	RESULT	MDL
As	5.0	MG/L	ND	1.0
Se	1.0	MG/L	2.4	0.5
Pb	5.0	MG/L	1.7	1.0
Tl	7.0	MG/L	1.4	1.0
Cr	5.0	MG/L	4.1	1.0
Cu	25.0	MG/L	ND	1.0
Ni	20.0	MG/L	3.2	1.0
Cd	1.0	MG/L	ND	1.0
Ag	5.0	MG/L	ND	1.0
Zn	250.0	MG/L	25.0	1.0
Ba	100.0	MG/L	8.7	1.0
Co	80.0	MG/L	ND	1.0
Be	0.75	MG/L	ND	0.5
V	24.0	MG/L	ND	1.0
Mo	350.0	MG/L	ND	1.0
Sb	15.0	MG/L	ND	1.0

MCL= MAXIMUM CONTAMINANT LEVEL (REGULATORY)
MDL= MINIMUM DETECTION LIMIT
ND = NONE DETECTED

CYRUS POURHASSANIAN
LABORATORY MANAGER

GALINA ALEXANDROV
CHEMIST

DEMENNO/KERDOON
LABORATORY DEPARTMENT
TTLC METALS

GENERATOR: DEMENNO/KERDOON
TRANSPORTER: N/A
MATRIX: SOIL
SUBMITTED BY:
REF#: SOUTHWEST TANK FARM PROJECT

SAMPLE I.D. NO.: TK 2001 SLUDGE
DATE/TIME SAMPLED:08/29/1996
DATE/TIME RECIVED: 08/29/1996
SAMPLED BY: N/A
DATE OF REPORT:09/03/1996

ANALYTE	MCL	UNITS	RESULT	MDL
As	500.0	Mg/Kg	ND	10.0
Se	100.0	Mg/Kg	120	75.0
Pb	1000.0	Mg/Kg	780	10.0
Tl	700.0	Mg/Kg	62	10.0
Cr	2500.0	Mg/Kg	218	10.0
Cu	2500.0	Mg/Kg	1880	10.0
Ni	2000.0	Mg/Kg	210	10.0
Cd	100.0	Mg/Kg	19	10.0
Ag	500.0	Mg/Kg	14	10.0
Zn	5000.0	Mg/Kg	2160	10.0
Ba	10000.0	Mg/Kg	158	10.0
Co	8000.0	Mg/Kg	39	10.0
Be	75.0	Mg/Kg	ND	10.0
V	2400.0	Mg/Kg	22	10.0
Mo	3500.0	Mg/Kg	17	10.0
Sb	500.0	Mg/Kg	ND	10.0

MCL= MAXIMUM CONTAMINANT LEVEL (REGULATORY)
MDL= MINIMUM DETECTION LIMIT
ND = NONE DETECTED

CYRUS POURHASSANIAN
LABORATORY MANAGER

GALINA ALEXANDROV
CHEMIST

DEMENNO/KERDOON
LABORATORY DEPARTMENT
STLC METALS

GENERATOR: DEMENNO/KERDOON
TRANSPORTER: N/A
MATRIX: SOIL
SUBMITTED BY: KEVIN STORMS

SAMPLE I.D. NO.: TK55001,CENTRIFUGE
DATE SAMPLED:07/19/1996
DATE RECEIVED: 07/19/1996
SAMPLED BY: PLANT
DATE OF REPORT:09/16/1996

REF#:TREATABILITY STUDY OF CENTRIFUGE/TANK55001 SOLIDS USING METABOND#2 FROM DIVERSIFIED MATERIAL INC.

ANALYTE	MCL	UNITS	TK 55001 AS IS	TK 55001 8.5%METABOND #2	CENTRIFUGE AS IS	CENTRIFUGE 7.5%METABOND #2	MDL
As	5.0	MG/L	ND	ND	ND	ND	1.0
Se	1.0	MG/L	3.7	3.2	3.2	3.2	0.5
Pb	5.0	MG/L	1.4	ND	ND	ND	1.0
Tl	7.0	MG/L	1.5	<5.0	3.0	<5.0	1.0
Cr	5.0	MG/L	3.5	2.7	2.6	<2.8	1.0
Cu	25.0	MG/L	ND	ND	ND	ND	1.0
Ni	20.0	MG/L	5.6	2.6	7.7	4.2	1.0
Cd	1.0	MG/L	ND	ND	ND	ND	1.0
Ag	5.0	MG/L	ND	ND	ND	ND	1.0
Zn	250.0	MG/L	20.7	16.0	18.2	18.0	1.0
Ba	100.0	MG/L	12.8	8.7	9.5	6.6	1.0
Hg	0.2	MG/L	ND	**	ND	**	0.05
Co	80.0	MG/L	ND	ND	ND	ND	1.0
Be	0.75	MG/L	ND	ND	ND	ND	1.0
V	24.0	MG/L	ND	<2.0	ND	ND	0.5
Mo	350.0	MG/L	ND	ND	ND	ND	1.0
Sb	15.0	MG/L	ND	ND	ND	ND	1.0
INITIAL pH				11.0		11.4	

MCL= MAXIMUM CONTAMINANT LEVEL (REGULATORY)
MDL= MINIMUM DETECTION LIMIT
ND = NONE DETECTED

** RESULTS TO FOLLOW

CYRUS POURHASSANIAN

GALINA ALEXANDROV

DEMENNO/KERDOON
LABORATORY DEPARTMENT
TTLC METALS

GENERATOR: DEMENNO/KERDOON
TRANSPORTER: N/A
MATRIX: SOIL
SUBMITTED BY: KEVIN STORMS

SAMPLE I.D. NO.: TK55001,CENTRIFUGE
DATE SAMPLED:07/19/1996
DATE RECEIVED: 07/19/1996
SAMPLED BY: PLANT
DATE OF REPORT:09/16/1996

REF#:TREATABILITY STUDY OF CENTRIFUGE/TANK55001 SOLIDS USING METABOND#2 FROM DIVERSIFIED MATERIAL INC.

ANALYTE	MCL	UNITS	TK 55001 AS IS	TK 55001 8.5%METABOND #2	CENTRIFUGE AS IS	CENTRIFUGE 7.5%METABOND #2	MDL
As	500.0	Mg/Kg	12.4	ND	ND	ND	10.0
Se	100.0	Mg/Kg	204.0	165.0	140.0	126.0	75.0
Pb	1000.0	Mg/Kg	998.0	800.0	410.0	348.0	10.0
Tl	700.0	Mg/Kg	400.0	428.0	212.0	<525	10.0
Cr	2500.0	Mg/Kg	236.0	208.0	222.0	216.0	10.0
Cu	2500.0	Mg/Kg	2340.0	1790.0	960.0	608.0	10.0
Ni	2000.0	Mg/Kg	100.0	<300	108.0	<300	10.0
Cd	100.0	Mg/Kg	18.8	16.0	ND	ND	10.0
Ag	500.0	Mg/Kg	ND	ND	ND	ND	10.0
Zn	5000.0	Mg/Kg	4140.0	2080.0	1450.0	770.0	10.0
Ba	10000.0	Mg/Kg	174.0	<300	216.0	384.0	10.0
Hg	20.0	Mg/Kg	13.4	**	1.3	**	0.50
Co	8000.0	Mg/Kg	46.0	40.0	45.6	42.0	10.0
Be	75.0	Mg/Kg	ND	ND	ND	ND	10.0
V	2400.0	Mg/Kg	43.0	<50	52.8	<100	10.0
Mo	3500.0	Mg/Kg	90.0	20.0	118.0	26.0	10.0
Sb	500.0	Mg/Kg	ND	ND	ND	ND	10.0
pH				11.0		11.4	

MCL= MAXIMUM CONTAMINANT LEVEL (REGULATORY)
MDL= MINIMUM DETECTION LIMIT
ND = NONE DETECTED

** RESULTS TO FOLLOW

CYRUS POURHASSANIAN

GALINA ALEXANDROV

Progress Environmental Laboratories
4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #584207 and FDER CompQap #900306G)

To: International Oil Service
105 South Alexander Street
Plant City, FL 33566

Report Date: 5/29/97
Page: 1 of 2

Attn: Leo Jamros

PEL Lab # : 9705-00255-1
Client ID : Used Anti-Freeze
Project ID :
Location : Daytona Linc/Merc
Matrix : Liquid

Collection Information:
Sample Date: 5/21/97
Sample Time: 10:45
Sampled By : Client
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles	EPA 8010			
Dichlorodifluoromethane	EPA 8010	ND	ug/l	4.8
cis-1,2-Dichloroethene	EPA 8010	ND	ug/l	2.0
Chloromethane	EPA 8010	ND	ug/l	7.4
Vinyl Chloride	EPA 8010	ND	ug/l	2.5
Bromomethane	EPA 8010	ND	ug/l	5.1
Chloroethane	EPA 8010	ND	ug/l	2.9
Trichlorofluoromethane	EPA 8010	ND	ug/l	3.6
1,1-Dichloroethene	EPA 8010	ND	ug/l	3.6
Methylene Chloride	EPA 8010	ND	ug/l	10.0
Trans-1,2-dichloroethene	EPA 8010	ND	ug/l	4.2
1,1-Dichloroethane	EPA 8010	ND	ug/l	3.5
Chloroform	EPA 8010	ND	ug/l	10.0
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	3.0
Carbontetrachloride	EPA 8010	ND	ug/l	3.4
1,2-Dichloroethane	EPA 8010	ND	ug/l	4.2
Trichloroethene	EPA 8010	ND	ug/l	3.6
1,2-Dichloropropane	EPA 8010	ND	ug/l	3.8
Bromodichloromethane	EPA 8010	ND	ug/l	4.1
2-Chloroethylvinyl ether	EPA 8010	ND	ug/l	13.0
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	3.8
Trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	4.2
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	5.1
Tetrachloroethene	EPA 8010	891	ug/l	18.0
Dibromochloromethane	EPA 8010	ND	ug/l	4.8
Bromoform	EPA 8010	ND	ug/l	8.0
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	8.2
Analysis date	EPA 8010	05-27-97		

- CONTINUED ON NEXT PAGE -

Progress Environmental Laboratories

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: International Oil Service
105 South Alexander Street
Plant City, FL 33566

Report Date: 5/29/97
Page: 2 of 2

Attn: Leo Jamros

PEL Lab # : 9705-00255-1 (Continued ...)
Client ID : Used Anti-Freeze

ND = Less than MDL

Parameter	Method	Results	Units	MDL
*1,4Dichlorobutane(10-150%)	EPA 8010	108	%R	
*4-BFB (10-150%)	EPA 8010	116	%R	
GC Volatiles	EPA 8020			
MTBE	EPA 8020	ND	ug/l	6.3
Benzene	EPA 8020	6.3	ug/l	2.5
Toluene	EPA 8020	54.8	ug/l	3.1
Chlorobenzene	EPA 8020	ND	ug/l	4.3
Ethylbenzene	EPA 8020	11.2	ug/l	4.3
m,p-Xylene	EPA 8020	47.5	ug/l	4.7
o-Xylene	EPA 8020	40.7	ug/l	5.3
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	5.7
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	5.9
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	7.0
Analysis date	EPA 8020	05-27-97		
*Fluorobenzene (81-124%)	EPA 8020	98.3	%R	
Lead	EPA 6010	196	ug/l	29.2

Respectfully submitted, Vincent M. Giampa
Vincent M. Giampa, Laboratory Manager.

Progress Environmental Laboratories
4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2505
FAX: (813) 246-1537

July 31, 1998

Mr. Gary Allen
105 South Alexander Street
Plant City, Florida 33566

Dear Mr. Allen,

SUBJECT: TOTALS VS. TCLP

In regards to your letter dated July 23, 1998, two questions were presented concerning used antifreeze analysis conducted at Progress Environmental Laboratories. Project numbers 9702-00242, 9704-00266 9705-00255, 9707-00095, 9707-00291 were analyzed for total volatiles EPA 8010, 8020 and total lead EPA 6010.

Question 1: Were the samples filtered to determine percent solids as specified in TCLP analysis?

Samples are not filtered for the analysis of total constituents.

Question 2: Please indicate the extent to which the quality control data shown on the laboratory analyses affects the weight to be given the circled "totals" figures, and whether the QC data justifies an adjustment downward?

Progress Environmental Laboratories does not use precision and accuracy "QC data" values to adjust results.

If I can be of further assistance in this matter please contact me.

Sincerely,

Vincent M. Giampa
Laboratory Manager

Progress Environmental Laboratories
4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306)

To: Gulf Coast Thermo King
7802 Hwy 301
Tampa, FL 33637

Report Date: 8/06/98
Page: 1 of 1

Attn: Keith Northrup

PEL Lab # : 9807-00384-1
Client ID : Antifreeze Liq
Project ID : Gulf Coast Thermo King
Location :
Matrix : Liquid

Collection Information:
Sample Date: 7/28/98
Sample Time: 14:05
Sampled By : Client
Sample Quality:

ND = Less than RL

Parameter	Method	Results	Units	RL
Lead	EPA 6010	2510	ug/l	1.8
Halogenated Volatiles by GC	EPA 8021			
Trichloroethene	EPA 8021	ND	ug/l	2.5
Tetrachloroethene	EPA 8021	13	ug/l	3.2
Analysis date	EPA 8021	8-4-98		
*1,4Dichlorobutane(10-150%)	EPA 8021	119	%R	
*4-BFB (10-150%)	EPA 8021	108	%R	
Aromatic Volatiles by GC	EPA 8021			
Benzene	EPA 8021	9.5	ug/l	1.7
Analysis date	EPA 8021	8/4/98		
*4-BFB (10-150%)	EPA 8021	112	%R	
TCLP Lead	1311/6010	2.64	mg/l	0.03
TCLP Volatiles	1311/8260			
TCLP Tetrachloroethene	1311/8260	ND	mg/l	0.0014
TCLP Trichloroethene	1311/8260	ND	mg/l	0.004
TCLP Benzene	1311/8260	ND	mg/l	0.0039
Analysis Date	EPA 8260	8-5-98		

Respectfully submitted,
Vincent M. Giampa, Laboratory Manager.

Progress Environmental Laboratories
4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306)

To: Southwest FL Water Dist.
2379 Broad St.
Brooksville, FL 34609

Report Date: 8/07/98
Page: 1 of 1

Attn: Anne Jacques

PEL Lab # : 9807-00392-1
Client ID : Antifreeze
Project ID :
Location : Antifreeze
Matrix : Liquid

Collection Information:
Sample Date: 7/29/98
Sample Time: 15:00
Sampled By : Client
Sample Quality:

ND = Less than RL

Parameter	Method	Results	Units	RL
Lead	EPA 6010	1350	ug/l	1.8
TCLP Lead	1311/6010	0.10	mg/l	0.03
Aromatic Volatiles by GC	EPA 8021			
Benzene	EPA 8021	111	ug/l	1.7
Analysis date	EPA 8021	08-05-98		
*4-BFB (10-150%)	EPA 8021	84.7	%R	
TCLP Volatiles	1311/8260			
TCLP Tetrachloroethene	1311/8260	0.51	mg/l	0.0036
TCLP Trichloroethene	1311/8260	ND	mg/l	0.0083
TCLP Benzene	1311/8260	ND	mg/l	0.0036
Analysis Date	EPA 8260	08-05-98		
Halogenated Volatiles by GC	EPA 8021			
Trichloroethene	EPA 8021	ND	ug/l	2.5
Tetrachloroethene	EPA 8021	1440	ug/l	16
Analysis date	EPA 8021	08-05-98		
*1,4Dichlorobutane(10-150%)	EPA 8021	87.0	%R	
*4-BFB (10-150%)	EPA 8021	78.7	%R	

Respectfully submitted,
Vincent M. Giampa, Laboratory Manager.

INTERNATIONAL PETROLEUM CORPORATION
GENERATOR'S WASTE MATERIAL
PROFILE SHEET

A. GENERAL INFORMATION

GENERATOR NAME: Daytona Lincoln Mercury Inc
FACILITY ADDRESS: 960 International Speedway Blvd
Daytona Beach 32114
TRANSPORTER:
TRANSPORTER PHONE:
GENERATOR US EPA ID#: FLD055954871
GENERATOR STATUS:
TECHNICAL CONTACT: Leo D'Amico TITLE: Supvr PHONE: 904 255 6462 FAX
NAME OF WASTE: Used Antifreeze
PROCESS GENERATING WASTE:
QUANTITY:

B. PHYSICAL CHARACTERISTICS OF WASTE

Color: Brwn + Green

ODOR: ☐ NONE ☑ MILD ☐ STRONG
DESCRIBE: Rubbery

PHYSICAL STATE @ 70°F: ☐ SOLID ☐ SEMI-SOLID ☑ LIQUID ☐ POWDER

LAYERS: ☐ MULTILAYERED ☐ BI-LAYERED ☐ SINGLE PHASED

FREE LIQUIDS: ☑ YES ☐ NO VOLUME 100 %

pH: ☐ < 2 ☐ 2-4 ☐ 4.1-6.9 ☐ 7 ☐ EXACT ☑ 7.1-10 ☐ 10.1-12.5 ☐ > 12.5 ☐ N/A

SPECIFIC GRAVITY: ☐ < .8 ☐ .8-1.0 ☐ 1.1-1.2 ☐ EXACT ☐ 1.3-1.4 ☐ 1.6-1.7 ☐ > 1.7

FLASH POINT: ☐ < 70°F ☐ 70°F -100°F ☐ 101°F-139°F ☐ 140°F- 200°F ☐ > 200°F ☐ NO FLASH ☐ EXACT

☐ CLOSED CUP ☐ OPEN CUP

C. CHEMICAL COMPOSITION (TOTALS MUST ADD TO 100%) (mg/L)

	%
	%
	%
	%
	%
	%
	%

D. METALS ☐ TOTAL (ppm) ☐ EPA EXTRACTION PROCEDURE

ARSENIC (as)	SELENIUM (se)
BARIUM (ba)	SILVER (ag)
CADMIUM(cd)	COPPER(cu)
CHROMIUM(cr)	NICKEL(ni)
MERCURY(hg)	ZINC(zn)
LEAD(pb)	HALLIUM(li)
CHROMIUM-HEX (cr + 6):	

CHECK ONE BOX

- ☐ SOLIDS OR SLUDGES THAT ARE NOT PETROLEUM RELATED: EXPLAIN:
- ☐ SOLIDS OR SLUDGES CONTAMINATED WITH USED OIL
- ☐ SOLIDS OR SLUDGES CONTAMINATED WITH VIRGIN PETROLEUM OIL
- ☐ WASTE WATER THAT IS NOT PETROLEUM RELATED : EXPLAIN:
- ☐ WASTE WATER CONTAMINATED WITH USED OIL
- ☐ WASTE WATER CONTAMINATED WITH VIRGIN OIL
- ☐ WASTE WATER CONTAMINATED WITH FUEL
- ☐ USED OIL
- ☐ VIRGIN FUEL
- ☑ OTHER: used Antifreeze
- ☐ SOIL THAT IS NOT PETROLEUM RELATED : EXPLAIN:
- ☐ SOIL CONTAMINATED WITH USED OIL
- ☐ SOIL CONTAMINATED WITH VIRGIN OIL
- ☐ SOIL FROM UST REGULATED BY 40 CFR, PART 280

NON-HAZARDOUS CERTIFICATION

I, the undersigned, under penalty of law do hereby certify to the best of my knowledge, the recyclable material submitted for acceptance to International Petroleum Corporation is not a listed hazardous waste and does not exhibit any of the characteristics of a hazardous waste as defined in 40 CFR 261 of the toxicity characteristic revision rules as specified in the March 29,1990 Federal register. I further certify that the recyclable material submitted for acceptance to International Petroleum Corporation is classified as non hazardous in its state of generation, and that I am authorized to execute this document.

INITIAL

TOXIC SUBSTANCE CONTROL ACT

I, the undersigned, under penalty of law do hereby certify that the materials submitted for acceptance to International Petroleum Corporation does not contain any detectable concentrations of PCB's as defined in Section 6 (E) of TSCA (ISUSC2605) and (40 CFR Part 761).

INITIAL

CERTIFICATION

I certify under penalty of law that this document and all attachments were 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 persons responsible for gathering information, the information submitted 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 fine and imprisonment for knowing violations.

Daytona Lincoln Mercury		Parts & Service Mgr.	5.21.97
COMPANY	AUTHORIZED SIGNATURE	TITLE	DATE

DLMWASTE.DOC

INTERNATIONAL OIL SERVIC

DAY TANK CHIC

TRANSPORTATION AND RECEIVING MANIFEST

DIV. OF INTERNATIONAL PETROLEUM CORP.

STATE CERTIFIED RECYCLER, TRANSPORTER AND COLLECTION FACILITY

EPA I.D. No. FLD 065680613
SO 29-181143

LAD 092096106

MOD 981114051
LA I.D. No. GT—186

☐ PLANT CITY, FL 33566
105 S. ALEXANDER ST.
(813) 754-1504
TAMPA, FL
(813) 229-1739
(800) 282-9585
FAX 1 (813) 754-3789

☐ WILMINGTON, DE 19801
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(800) 523-9071

☐ BALTIMORE, MD 21224
6305 E. LOMBARD ST.
(800) 222-2511

IDENTIFICATION

Daytona Lincoln Mercury — GENERATOR/SHIPPER — Date Shipped 6/26/97

966 International Sq — ADDRESS — Time

Daytona — CITY — 32114 — ZIP — Phone

L3356

INFORMATION

257.1657F

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

PO # 40862

SPECIAL HANDLING INSTRUCTIONS	EMERGENCY RESPONSE NUMBER
END USE CODE MINI/SR	CHEMTREC 1-800-424-9300

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

This is to further certify under penalty of law that the above-named materials have not been mixed with hazardous waste according to the rules of the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection.

6-26

X _____ GENERATOR'S SIGNATURE — DATE

TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE — DATE

CONTAINERS		QUANTITY	UNIT
1	TT	350 est	GAL
No.	TYPE		

DEDUCTIONS 200 Garage

NET GALLONS 325

PRICE PER GALLON

FREIGHT 50.00

TOTAL

☐ CASH ☒ CHARGE (INVOICE TO FOLLOW)

97-PC 9787
MANIFEST DOCUMENT NO.

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

prestige printing pp-2004R 7/96

PHOSLAB

941-682-5897 806 W. Beacon Road • Lakeland, Florida 33803 Fax 941-683-3279

Client: International Petroleum Corporation
105 South Alexander Street
Plant City, Florida 33566

Attn: Mr. Leo James
P. O. #:
Project: Daytona Lincoln/Mercury
Reference: Used Antifreeze

Sampled By: A.M. Malatino
Sample Date: 09-30-97
Date Received: 09-30-97
Analysis Date: 10-01-97
Analyzed By: GJF/JMC

CERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
EPA METHOD 1311

Sample ID: Use

	Conc., mg/L	Regulatory Limit
Tetrachloroethene	<0.01	0.70
Trichloroethene	<0.01	0.50
Benzene	<0.01	0.50
Lead	<0.01	5.00

QA OFFICER

CHEMIST

Progress Environmental Laboratories
4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306)

To: International Oil Service
105 South Alexander Street
Plant City, FL 33566

Report Date: 7/14/97
Page: 1 of 4

Attn: Bill Posey

PEL Lab # : 9707-00095-1
Client ID : Used Anti Freeze
Project ID : New Smyrna Beach
Location : Halifax Ford/Mercury
Matrix : Anti Freeze

Collection Information:
Sample Date: 7/09/97
Sample Time: 13:30
Sampled By : Client
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles	EPA 8010			
Dichlorodifluoromethane	EPA 8010	ND	ug/l	120
cis-1,2-Dichloroethene	EPA 8010	ND	ug/l	50.0
Chloromethane	EPA 8010	ND	ug/l	185
Vinyl Chloride	EPA 8010	ND	ug/l	62.5
Bromomethane	EPA 8010	ND	ug/l	127
Chloroethane	EPA 8010	ND	ug/l	72.5
Trichlorofluoromethane	EPA 8010	ND	ug/l	90.0
1,1-Dichloroethene	EPA 8010	ND	ug/l	90.0
Methylene Chloride	EPA 8010	ND	ug/l	250
Trans-1,2-dichloroethene	EPA 8010	ND	ug/l	105
1,1-Dichloroethane	EPA 8010	ND	ug/l	87.5
Chloroform	EPA 8010	ND	ug/l	250
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	75.0
Carbontetrachloride	EPA 8010	ND	ug/l	85.0
1,2-Dichloroethane	EPA 8010	ND	ug/l	105
Trichloroethene	EPA 8010	96.3	ug/l	90.0
1,2-Dichloropropane	EPA 8010	ND	ug/l	95.0
Bromodichloromethane	EPA 8010	ND	ug/l	102
2-Chloroethylvinyl ether	EPA 8010	ND	ug/l	325
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	95.0
Trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	105
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	127
Tetrachloroethene	EPA 8010	741	ug/l	90.0
Dibromochloromethane	EPA 8010	ND	ug/l	120
Bromoform	EPA 8010	ND	ug/l	200
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	205
Analysis date.	EPA 8010	07-12-97		

- CONTINUED ON NEXT PAGE -

Progress Environmental Laboratories

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306)

To: International Oil Service
105 South Alexander Street
Plant City, FL 33566

Report Date: 7/14/97
Page: 2 of 4

Attn: Bill Posey

PEL Lab # : 9707-00095-1 (Continued ...)
Client ID : Used Anti Freeze

ND = Less than MDL

Parameter	Method	Results	Units	MDL
*1,4Dichlorobutane(10-150%)	EPA 8010	95.0	%R	
*4-BFB (10-150%)	EPA 8010	94.7	%R	
GC Volatiles	EPA 8020			
MTBE	EPA 8020	ND	ug/l	157
Benzene	EPA 8020	ND	ug/l	62.5
Toluene	EPA 8020	ND	ug/l	77.5
Chlorobenzene	EPA 8020	ND	ug/l	108
Ethylbenzene	EPA 8020	ND	ug/l	108
m,p-Xylene	EPA 8020	ND	ug/l	118
o-Xylene	EPA 8020	ND	ug/l	132
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	142
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	147
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	175
Analysis date	EPA 8020	07-13-97		
*Fluorobenzene (81-124%)	EPA 8020	105	%R	
Lead	EPA 6010	288	ug/l	29.2

- CONTINUED ON NEXT PAGE -

Progress Environmental Laboratories

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306)

To: International Oil Service
105 South Alexander Street
Plant City, FL 33566

Report Date: 7/14/97
Page: 3 of 4

Attn: Bill Posey

PEL Lab # : 9707-00095-2
Client ID : Trip Blank
Project ID : New Smyrna Beach
Location : Halifax Ford/Mercury
Matrix : Anti Freeze

Collection Information:
Sample Date: 6/30/97
Sample Time: 0:00
Sampled By : PEL
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles	EPA 8010			
Dichlorodifluoromethane	EPA 8010	ND	ug/l	0.48
cis-1,2-Dichloroethene	EPA 8010	ND	ug/l	0.20
Chloromethane	EPA 8010	ND	ug/l	0.74
Vinyl Chloride	EPA 8010	ND	ug/l	0.25
Bromomethane	EPA 8010	ND	ug/l	0.51
Chloroethane	EPA 8010	ND	ug/l	0.29
Trichlorofluoromethane	EPA 8010	ND	ug/l	0.36
1,1-Dichloroethene	EPA 8010	ND	ug/l	0.36
Methylene Chloride	EPA 8010	ND	ug/l	1.0
Trans-1,2-dichloroethene	EPA 8010	ND	ug/l	0.42
1,1-Dichloroethane	EPA 8010	ND	ug/l	0.35
Chloroform	EPA 8010	ND	ug/l	1.0
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	0.30
Carbontetrachloride	EPA 8010	ND	ug/l	0.34
1,2-Dichloroethane	EPA 8010	ND	ug/l	0.42
Trichloroethene	EPA 8010	ND	ug/l	0.36
1,2-Dichloropropane	EPA 8010	ND	ug/l	0.38
Bromodichloromethane	EPA 8010	ND	ug/l	0.41
2-Chloroethylvinyl ether	EPA 8010	ND	ug/l	1.3
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.38
Trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.42
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	0.51
Tetrachloroethene	EPA 8010	ND	ug/l	0.36
Dibromochloromethane	EPA 8010	ND	ug/l	0.48
Bromoform	EPA 8010	ND	ug/l	0.80
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	0.82
Analysis date	EPA 8010	07-12-97		

- CONTINUED ON NEXT PAGE -

Progress Environmental Laboratories

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306)

To: International Oil Service
105 South Alexander Street
Plant City, FL 33566

Report Date: 7/14/97
Page: 4 of 4

Attn: Bill Posey

PEL Lab # : 9707-00095-2 (Continued ...)
Client ID : Trip Blank

ND = Less than MDL

Parameter	Method	Results	Units	MDL
*1,4Dichlorobutane(10-150%)	EPA 8010	94.0	%R	
*4-BFB (10-150%)	EPA 8010	100	%R	
GC Volatiles	EPA 8020			
MTBE	EPA 8020	ND	ug/l	0.63
Benzene	EPA 8020	ND	ug/l	0.25
Toluene	EPA 8020	ND	ug/l	0.31
Chlorobenzene	EPA 8020	ND	ug/l	0.43
Ethylbenzene	EPA 8020	ND	ug/l	0.43
m,p-Xylene	EPA 8020	ND	ug/l	0.47
o-Xylene	EPA 8020	ND	ug/l	0.53
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	0.57
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	0.59
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	0.70
Analysis date	EPA 8020	07-13-97		
*Fluorobenzene (81-124%)	EPA 8020	108	%R	

Respectfully submitted, Vincent M. Giampa
Vincent M. Giampa, Laboratory Manager.

INTERNATIONAL PETROLEUM CORPORATION
GENERATOR'S WASTE MATERIAL
PROFILE SHEET

A. GENERAL INFORMATION

GENERATOR NAME: Halifax Ford Mercury
FACILITY ADDRESS: 1307 N Dixie Freeway
New Smyrna Beach Fl 32168
TECHNICAL CONTACT: Bill Posey TITLE: Svc Mgr PHONE: FAX
NAME OF WASTE: Used Antifreeze
PROCESS GENERATING WASTE: Auto Repair QUANTITY: 165 per car

TRANSPORTER:
TRANSPORTER PHONE:
GENERATOR US EPA ID#: FLD982153827
GENERATOR STATUS: SQG

B. PHYSICAL CHARACTERISTICS OF WASTE

Color: Brown / Green

ODOR ☐ NONE ☑ MILD ☐ STRONG
DESCRIBE Rubbery

PHYSICAL STATE @ 70°F: ☐ SOLID ☐ SEMI-SOLID ☑ LIQUID ☐ POWDER

LAYERS: ☐ MULTILAYERED ☐ BI-LAYERED ☐ SINGLE PHASED

FREE LIQUIDS: ☑ YES ☐ NO VOLUME ____%

pH: ☐ < 2 ☐ 2-4 ☐ 4.1-6.9 ☐ 7 ☐ EXACT ____ ☐ 7.1-10 ☐ 10.1-12.5 ☐ > 12.5 ☐ N/A

SPECIFIC GRAVITY: ☐ < .8 ☐ .8-1.0 ☐ 1.1-1.2 ☐ 1.3-1.4 ☐ 1.6-1.7 ☐ > 1.7 ☐ EXACT ____

FLASH POINT: ☐ < 70°F ☐ 70°F -100°F ☐ 101°F-139°F ☐ 140°F- 200°F ☐ > 200°F ☐ NO FLASH ☐ EXACT ____ ☐ CLOSED CUP ☐ OPEN CUP

C. CHEMICAL COMPOSITION (TOTALS MUST ADD TO 100%) (mg/L)

____ ____%
____ ____%
____ ____%
____ ____%
____ ____%.
____ ____%
____ ____%

D. METALS ☐ TOTAL (ppm) ☐ EPA EXTRACTION PROCEDURE

ARSENIC (as) ____ SELENIUM (se) ____
BARIUM (ba) ____ SILVER (ag) ____
CADMIUM(cd) ____ COPPER(cu) ____
CHROMIUM(cr) ____ NICKEL(ni) ____
MERCURY(hg) ____ ZINC(zn) ____
LEAD(pb) ____ HALLIUM(ti) ____
CHROMIUM-HEX (cr + 6): ____

CHECK ONE BOX

- ☐ SOLIDS OR SLUDGES THAT ARE NOT PETROLEUM RELATED: EXPLAIN: ____
- ☐ SOLIDS OR SLUDGES CONTAMINATED WITH USED OIL:
- ☐ SOLIDS OR SLUDGES CONTAMINATED WITH VIRGIN PETROLEUM OIL
- ☐ WASTE WATER THAT IS NOT PETROLEUM RELATED : EXPLAIN: ____
- ☐ WASTE WATER CONTAMINATED WITH USED OIL
- ☐ WASTE WATER CONTAMINATED WITH VIRGIN OIL
- ☐ WASTE WATER CONTAMINATED WITH FUEL
- ☐ USED OIL
- ☐ VIRGIN FUEL
- ☑ OTHER: Used Antifreeze
- ☐ SOIL THAT IS NOT PETROLEUM RELATED : EXPLAIN: ____
- ☐ SOIL CONTAMINATED WITH USED OIL
- ☐ SOIL CONTAMINATED WITH VIRGIN OIL
- ☐ SOIL FROM UST REGULATED BY 40 CFR, PART 280

NON-HAZARDOUS CERTIFICATION

I, the undersigned, under penalty of law do hereby certify to the best of my knowledge, the recyclable material submitted for acceptance to International Petroleum Corporation is not a listed hazardous waste and does not exhibit any of the characteristics of a hazardous waste as defined in 40 CFR 261 of the toxicity characteristic revision rules as specified in the March 28,1990 Federal register. I further certify that the recyclable material submitted for acceptance to International Petroleum Corporation is classified as non hazardous in its state of generation, and that I am authorized to execute this document.

X ____ INITIAL

TOXIC SUBSTANCE CONTROL ACT

I, the undersigned, under penalty of law do hereby certify that the materials submitted for acceptance to International Petroleum Corporation does not contain any detectable concentrations of PCB's as defined in Section 6 (E) of TSCA (ISUSC2605) and (40 CFR Part 761).

X ____ INITIAL

CERTIFICATION

I certify under penalty of law that this document and all attachments were 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 these persons responsible for gathering information, the information submitted 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 fine and imprisonment for knowing violations.

Halifax Ford/Mercury	Bill Posey	Svc Mgr	7.9.96
COMPANY	AUTHORIZED SIGNATURE	TITLE	DATE

INTERNATIONAL OIL SERV

RAV CHIC

TRANSPORTATION AND RECEIVING MANIFEST

DIV. OF INTERNATIONAL PETROLEUM CORP.

STATE CERTIFIED RECYCLER, TRANSPORTER AND COLLECTION FACILITY

EPA I.D. No. FLD 065680613
SO 29-181143

LAD 092096106

MOD 981114051
LA I.D. No. GT—186

☐ PLANT CITY, FL 33566
105 S. ALEXANDER ST.
(813) 754-1504
TAMPA, FL
(813) 229-1739
(800) 282-9585
FAX 1 (813) 754-3789

☐ WILMINGTON, DE 19801
505 S. MARKET ST.
(302) 421-9307

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- USED OIL FILTERS
- USED ANTIFREEZE
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(800) 523-9071

☐ BALTIMORE, MD 21224
6305 E. LOMBARD ST.
(800) 222-2511

IDENTIFICATION

Halifax Ford — GENERATOR/SHIPPER — Date Shipped 8-18-9?

1207 Dixie Freeway — ADDRESS — Time

New Smyrna Bch — CITY — STATE — ZIP — Phone

F3858

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

100 Freeze
Bill to Rodant Oil

SPECIAL HANDLING INSTRUCTIONS
END USE CODE MINI/SR

EMERGENCY RESPONSE NUMBER
CHEMTREC 1-800-424-9300

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

This is to further certify under penalty of law that the above-named materials have not been mixed with hazardous waste according to the rules of the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection.

X [signature] 8-18-9?
GENERATOR'S SIGNATURE — DATE

[signature]
TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE — DATE

CONTAINERS		QUANTITY	UNIT
1	TT	100	GAL.
No.	TYPE		

DEDUCTIONS O/I

NET GALLONS N/C

PRICE PER GALLON .25

FREIGHT 0

TOTAL 25.00

97-PC 12942
MANIFEST DOCUMENT NO.

☐ CASH ☑ CHARGE (INVOICE TO FOLLOW)

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

prestige printing pp-2004R 7/96

INTERNATIONAL OIL SERV.

RAD09

TRANSPORTATION AND RECEIVING MANIFEST

DIV. OF INTERNATIONAL PETROLEUM CORP.

STATE CERTIFIED RECYCLER, TRANSPORTER AND COLLECTION FACILITY

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SO 29-181143

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(800) 222-2511

IDENTIFICATION

GENERATOR/SHIPPER: Halifax Ford
Date Shipped: 7-14-97

ADDRESS: 1300 Dixie Freeway
Time:

CITY: New Smyrna Bch STATE: ZIP:
Phone:

F3858

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

Anti Freeze Billed to Radiant Oil

SPECIAL HANDLING INSTRUCTIONS
END USE CODE MINI/SR

EMERGENCY RESPONSE NUMBER
CHEMTREC 1-800-424-9300

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

This is to further certify under penalty of law that the above-named materials have not been mixed with hazardous waste according to the rules of the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection.

X [signature] 7-14-97
GENERATOR'S SIGNATURE DATE

[signature]
TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE DATE

CONTAINERS No.	CONTAINERS TYPE	QUANTITY	UNIT
1	TT	200 oil	GAL.

DEDUCTIONS
NET GALLONS 100 Freeze
PRICE PER GALLON .25
FREIGHT
TOTAL 25.00 N/C

97-PC 11260
MANIFEST DOCUMENT NO.

☐ CASH ☐ CHARGE (INVOICE TO FOLLOW)

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

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INTERNATIONAL OIL SERVICE

RADOS

CICA

TRANSPORTATION AND RECEIVING MANIFEST

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EPA I.D. No. FLD 065680613
SO 29-181143

LAD 092096106

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LA I.D. No. GT—186

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FAX 1 (813) 754-3789

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RECYCLING

- USED OIL
- USED OIL FILTERS
- USED ANTIFREEZE
- PETROLEUM CONTACT WATER

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(800) 523-9071

☐ BALTIMORE, MD 21224
6305 E. LOMBARD ST.
(800) 222-2511

IDENTIFICATION

Halcolah Ford — Date Shipped 10-4-97
GENERATOR/SHIPPER
1307 Wayne Freeway — Time 4p
ADDRESS
New Haven — Phone
CITY STATE ZIP

F385F

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

Freight Billed to Radiant Oil

SPECIAL HANDLING INSTRUCTIONS
END USE CODE-MINI/SR

EMERGENCY RESPONSE NUMBER
CHEMTREC 1-800-424-9300

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

This is to further certify under penalty of law that the above-named materials have not been mixed with hazardous waste according to the rules of the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection.

X _____ 10-4
GENERATOR'S SIGNATURE DATE

TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE DATE

CONTAINERS		QUANTITY	UNIT
1	TT	400 est	GAL.
No.	TYPE		

DEDUCTIONS _____
NET GALLONS 120 Freight
PRICE PER GALLON .25
FREIGHT _____
TOTAL 3000

☐ CASH ☑ CHARGE (INVOICE TO FOLLOW)

97-PC 15630
MANIFEST DOCUMENT NO.

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

prestige printing pp-2004R 7/96

INTERNATIONAL OIL SERV

RAD.

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TRANSPORTATION AND
RECEIVING MANIFEST

DIV. OF INTERNATIONAL PETROLEUM CORP.

STATE CERTIFIED RECYCLER, TRANSPORTER AND COLLECTION FACILITY

EPA I.D. No. FLD 065680613
SO 29-181143

LAD 092096106

MOD 981114051
LA I.D. No. GT—186

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(813) 229-1739
(800) 282-9585
FAX 1 (813) 754-3789

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RECYCLING

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- USED ANTIFREEZE
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(504) 254-9021
(800) 523-9071

☐ BALTIMORE, MD 21224
6305 E. LOMBARD ST.
(800) 222-2511

IDENTIFICATION

GENERATOR/SHIPPER: Haladay Ford — Date Shipped: 6 20 97

ADDRESS: 1307 Dixie Freeway

CITY / STATE / ZIP: New Smyrna Bch Fla

F3858

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID 50	NA-1993	III	128

SOURCE TYPE (USED OIL)
CO/A

used Anti Freeze to 6c
Billed to Radiat oil Co

SPECIAL HANDLING INSTRUCTIONS
END USE CODE MINI/SR

EMERGENCY RESPONSE NUMBER
CHEMTREC 1-800-424-9300

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

This is to further certify under penalty of law that the above-named materials have not been mixed with hazardous waste according to the rules of the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection.

X ______ GENERATOR'S SIGNATURE ______ DATE 6-20-97

SIGNATURE ______ TRANSPORTER No. 2 SIGNATURE & DATE ______ DATE

CONTAINERS No.	CONTAINERS TYPE	QUANTITY	UNIT
1	TT	350	GAL.

DEDUCTIONS ______

NET GALLONS 100 Freeze

PRICE PER GALLON .25

FREIGHT ______

TOTAL $25.00

97-PC 9765
MANIFEST DOCUMENT NO.

☐ CASH ☒ CHARGE (INVOICE TO FOLLOW)

White - Original   Yellow - Receiving Facility   Pink - Transporter   G'rod - Generator

prestige printing pp-2004R 7/96

PHOSLAB

Phone 941-682-5897 806 W. Beacon Road • Lakeland, Florida 33803 Fax 941-683-3279

Client: International Petroleum Corporation
105 South Alexander Street
Plant City, Florida 33566

Attn: Mr. Bill Posey
P. O. #:
Project: Halifax Ford/Mercury
Reference: Used Antifreeze

Sampled By: A.M. Malatino
Sample Date: 09-30-97
Date Received: 09-30-97
Analysis Date: 10-01-97
Analyzed By: GJF/JMC

CERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
EPA METHOD 1311

Sample ID: Used Antifreeze

	Conc., mg/L	Regulatory Limit
Tetrachloroethene	<0.01	0.70
Trichloroethene	<0.01	0.50
Benzene	<0.01	0.50
Lead	<0.01	5.00

QA OFFICER

CHEMIST

FDER QA/QC #870308G

Environmental Conservation Laboratories
10207 General Drive
Orlando, Florida 32824
407 / 826-5314
Fax 407 / 850-6945

ENCO Laboratories

DHRS Certification No. E83182

CLIENT : Malatino & Associates
ADDRESS: P.O. Box 6630
Lakeland, FL 33807

REPORT # : OR6319
DATE SUBMITTED: January 21, 1997
DATE REPORTED : January 28, 1997

ATTENTION: Tony Malatino

SAMPLE IDENTIFICATION

Sample submitted and
identified by client as:

Honda

01/20/97

#1 - WASTE ANTI-FREEZE 13:33

NON Hazardous

A.M. (Tony) Malatino

ANTHONY M. MALATINO
Environmental Assessment Association
#13110
Certified Environmental Inspector

MALATINO & ASSOCIATES, INC.
"Specialists in Environmental Testing and Services"
TONY MALATINO, C.H.M.S., C.E.I.
President

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Mailing Address: P.O. Box 6630
Lakeland, Florida 33807-6630
(941) 646-2828
Tel. & Fax (941) 648-4285

LABORATORY MANAGER David J. Yesey

ENCO LABORATORIES
REPORT # : OR6319
DATE REPORTED: January 28, 1997
PROJECT NAME : Honda

RESULTS OF ANALYSIS

EPA METHOD 8010 - TCLP VOLATILE HALOCARBONS	WASTE ANTI-FREEZE	LAB BLANK	Units
Trichloroethene	200 U D1	1 U	µg/L
Tetrachloroethene	700 D1	2 U	µg/L
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	111	105	45-141
Date Analyzed	01/27/97	01/27/97	

EPA METHOD 8020 - TCLP VOLATILE AROMATICS	WASTE ANTI-FREEZE	LAB BLANK	Units
Benzene	200 U D1	1 U	µg/L
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	117	109	65-138
Date Analyzed	01/27/97	01/27/97	

TCLP METALS	METHOD	WASTE ANTI-FREEZE	LAB BLANK	Units
TCLP Lead	7420	2.39	0.50 U	mg/L
Date Analyzed		01/28/97	01/28/97	

D1 = Analyte value determined from a 1:200 dilution.
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : OR6319
DATE REPORTED: January 28, 1997
PROJECT NAME : Honda

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8010				
Methylene chloride	100/118/ 98	43-148	16	29
Chloroform	81/102/ 90	61-118	23 J	15
Carbon Tetrachloride	92/112/103	51-126	20 J	14
Trichloroethene	84/100/ 94	61-121	17	22
Tetrachloroethene	78/100/ 93	69-117	25 J	18
Chlorobenzene	79/ 95/ 89	67-119	18 J	10
A Method 8020				
enzene	103/103/108	72-134	<1	20
oluene	102/104/107	72-124	2	19
Ethylbenzene	103/104/103	67-129	<1	21
o-Xylene	103/104/103	66-131	<1	21
TCLP Metals				
Lead, 7420	89/ 93/ 98	75-115	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

J = Value exceeds established limit for precision
< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

INTERNATIONAL OIL SER

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DIV. OF INTERNATIONAL PETROLEUM CORP.

STATE CERTIFIED RECYCLER, TRANSPORTER AND COLLECTION FACILITY

EPA I.D. No. FLD 065680613
SO 29-181143

LAD 092096106

MOD 981114051
LA I.D. No. GT—186

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(800) 222-2511

IDENTIFICATION

Merritt Island Honda — Date Shipped 4-9-97
GENERATOR/SHIPPER

900 Merritt Island Causeway — Time
ADDRESS

CITY Merritt Island STATE 32952 ZIP — Phone 459-3364

1-1251

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

PO #14907

SPECIAL HANDLING INSTRUCTIONS
END USE CODE MINI/SR

EMERGENCY RESPONSE NUMBER
CHEMTREC 1-800-424-9300

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

This is to further certify under penalty of law that the above-named materials have not been mixed with Hazardous waste according to the rules of the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection.

GENERATOR'S SIGNATURE — DATE 4-9-97

TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE — DATE

CONTAINERS No.	CONTAINERS TYPE	QUANTITY	UNIT
1	TT	250 est	GAL.

DEDUCTIONS
NET GALLONS 100 Freight
PRICE PER GALLON 100 Prop Water
FREIGHT 200
TOTAL $50.00

☐ CASH ☒ CHARGE (INVOICE TO FOLLOW)

97-PC 5389
MANIFEST DOCUMENT NO.

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

prestige printing pp-2004R 7/96

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LA I.D. No. GT—186

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(800) 222-2511

IDENTIFICATION

Merritt Island Honda — Date Shipped 6-12-97
GENERATOR/SHIPPER

1700 Merritt Island Cswy — Time
ADDRESS

Merritt Island 32952 — 459-3344
CITY STATE ZIP Phone

INFORMATION

1425

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

PO # 15396

SPECIAL HANDLING INSTRUCTIONS	EMERGENCY RESPONSE NUMBER
END USE CODE MINISR	CHEMTREC 1-800-424-9300

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

This is to further certify under penalty of law that the above-named materials have not been mixed with hazardous waste according to the rules of the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection.

X [signature] 6-12-97
GENERATOR'S SIGNATURE DATE

TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE DATE

CONTAINERS		QUANTITY	UNIT
1	TT	2000	GAL.
No.	TYPE		

DEDUCTIONS 100 Freight
NET GALLONS 25
PRICE PER GALLON
FREIGHT 25.00
TOTAL

97-PC 9513
MANIFEST DOCUMENT NO.

☐ CASH ☒ CHARGE (INVOICE TO FOLLOW)

Whtie - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

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IDENTIFICATION

GENERATOR/SHIPPER: Merritt Island Honda — Date Shipped: 8-27-97

ADDRESS: 700 Merritt Island Cswy — Time:

CITY: Merritt Island — STATE: — ZIP: — Phone: 453-3344

H-1251

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

PO# 15924

SPECIAL HANDLING INSTRUCTIONS
END USE CODE MINI/SR

EMERGENCY RESPONSE NUMBER
CHEMTREC 1-800-424-9300

CERTIFICATION

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X [signature] 8-27-97
GENERATOR'S SIGNATURE — DATE

[signature]
TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE — DATE

CONTAINERS		QUANTITY	UNIT
1	TT	250 oil	GAL.
No.	TYPE		

DEDUCTIONS
NET GALLONS 100 freeze
25
PRICE PER GALLON
FREIGHT @ 25.00
TOTAL

97-PC 13350
MANIFEST DOCUMENT NO.

☐ CASH ☒ CHARGE (INVOICE TO FOLLOW)

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

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STATE CERTIFIED RECYCLER, TRANSPORTER AND COLLECTION FACILITY

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☐ BALTIMORE, MD 21224
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(800) 222-2511

IDENTIFICATION

Merritt Island Hyd — Date Shipped 1-15-97
GENERATOR/SHIPPER

1700 Merritt Island Causeway
ADDRESS

CITY Merritt Island STATE FL ZIP — Phone 459-3344

H1251

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993.	III	128

SOURCE TYPE (USED OIL)
CO/A

14259

SPECIAL HANDLING INSTRUCTIONS
END USE CODE MIN/SR)

EMERGENCY RESPONSE NUMBER
CHEMTREC 1-800-424-9300

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

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X _____ 1-15-97
GENERATOR'S SIGNATURE DATE

TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE DATE

CONTAINERS		QUANTITY	UNIT
1	TT	175 ot	GAL.
No.	TYPE		

DEDUCTIONS 150 Fudge
NET GALLONS 25
PRICE PER GALLON $37.50
FREIGHT _____
TOTAL _____

☐ CASH ☒ CHARGE (INVOICE TO FOLLOW)

97-PC 0786
MANIFEST DOCUMENT NO.

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

prestige printing pp-2004R 7/96

Progress Environmental Laboratories
4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #584207 and FDER CompQap #900306)

To: International Oil Service
105 South Alexander Street
Plant City, FL 33566

Report Date: 8/01/97
Page: 1 of 2

Attn: Cale Reed

PEL Lab # : 9707-00291-1
Client ID : Used Antifreeze
Project ID : #1
Location : Jim's Import Auto
Matrix : Used Antifreeze

Collection Information:
Sample Date: 7/24/97
Sample Time: 14:30
Sampled By : Client
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles				
Dichlorodifluoromethane	EPA 8010	ND	ug/l	48.0
cis-1,2-Dichloroethene	EPA 8010	ND	ug/l	20.0
Chloromethane	EPA 8010	ND	ug/l	74.0
Vinyl chloride	EPA 8010	ND	ug/l	25.0
Bromomethane	EPA 8010	ND	ug/l	51.0
Chloroethane	EPA 8010	ND	ug/l	29.0
Trichlorofluoromethane	EPA 8010	ND	ug/l	36.0
1,1-Dichloroethene	EPA 8010	ND	ug/l	36.0
Methylene chloride	EPA 8010	ND	ug/l	100
trans-1,2-Dichloroethene	EPA 8010	ND	ug/l	42.0
1,1-Dichloroethane	EPA 8010	ND	ug/l	35.0
Chloroform	EPA 8010	ND	ug/l	100
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	30.0
Carbontetrachloride	EPA 8010	ND	ug/l	34.0
1,2-Dichloroethane	EPA 8010	ND	ug/l	42.0
Trichloroethene	EPA 8010	ND	ug/l	36.0
1,2-Dichloropropane	EPA 8010	ND	ug/l	38.0
Bromodichloromethane	EPA 8010	ND	ug/l	41.0
2-Chloroethyl vinyl ether	EPA 8010	ND	ug/l	130
cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	38.0
trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	42.0
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	51.0
Tetrachloroethene	EPA 8010	ND	ug/l	36.0
Dibromochloromethane	EPA 8010	ND	ug/l	48.0
Bromoform	EPA 8010	ND	ug/l	80.0
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	82.0
Analysis date	EPA 8010	07-30-97		

- CONTINUED ON NEXT PAGE -

Progress Environmental Laboratories

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306)

To: International Oil Service
105 South Alexander Street
Plant City, FL 33566

Report Date: 8/01/97
Page: 2 of 2

Attn: Cale Reed

PEL Lab # : 9707-00291-1 (Continued ...)
Client ID : Used Antifreeze

ND = Less than MDL

Parameter	Method	Results	Units	MDL
*1,4Dichlorobutane(10-150%)	EPA 8010	113	%R	
*4-BFB (10-150%)	EPA 8010	78.3	%R	
GC Volatiles	EPA 8020			
MTBE	EPA 8020	ND	ug/l	63.0
Benzene	EPA 8020	ND	ug/l	25.0
Toluene	EPA 8020	ND	ug/l	31.0
hlorobenzene	EPA 8020	ND	ug/l	43.0
thylbenzene	EPA 8020	ND	ug/l	43.0
m,p-Xylene	EPA 8020	ND	ug/l	47.0
o-Xylene	EPA 8020	ND	ug/l	53.0
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	57.0
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	59.0
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	70.0
Analysis date	EPA 8020	07-30-97		
*Fluorobenzene (81-124%)	EPA 8020	106	%R	
Lead	EPA 6010	10000	ug/l	29.2

Respectfully submitted,
Vincent M. Giampa, Laboratory Manager.

INTERNATIONAL PETROLEUM CORPORATION
GENERATOR'S WASTE MATERIAL
PROFILE SHEET

A. GENERAL INFORMATION

GENERATOR NAME: Jim Import Auto Salvage
FACILITY ADDRESS: 3636 Desoto Rd
Sebring FL 33870
TECHNICAL CONTACT: Cale Reed TITLE: VP
NAME OF WASTE: Used Antifreeze
PROCESS GENERATING WASTE: Auto Disassembling Repair

TRANSPORTER: I.O.S
TRANSPORTER PHONE:
GENERATOR US EPA ID#:
GENERATOR STATUS: CESQG
PHONE: 800 447 4707 FAX
QUANTITY: 100 gallon

B. PHYSICAL CHARACTERISTICS OF WASTE

Color: Green / Brown

ODOR: ☐ NONE ☑ MILD ☐ STRONG
DESCRIBE Rubbery

PHYSICAL STATE @ 70°F: ☐ SOLID ☐ SEMI-SOLID ☑ LIQUID ☐ POWDER

LAYERS: ☐ MULTILAYERED ☐ BI-LAYERED ☐ SINGLE PHASED

FREE LIQUIDS: ☑ YES ☐ NO VOLUME 100%

pH: ☐ < 2 ☐ 2-4 ☐ 4.1-6.9 ☐ 7 ☐ EXACT ☐ 7.1-10 ☐ 10.1-12.5 ☐ > 12.5 ☐ N/A

SPECIFIC GRAVITY: ☐ < .8 ☐ .8-1.0 ☐ 1.1-1.2 ☐ EXACT ☐ 1.3-1.4 ☐ 1.6-1.7 ☐ > 1.7

FLASH POINT: ☐ < 70°F ☐ 70°F -100°F ☐ 101°F-139°F ☐ 140°F- 200°F ☐ > 200°F ☐ NO FLASH ☐ EXACT

☐ CLOSED CUP ☐ OPEN CUP

C. CHEMICAL COMPOSITION (TOTALS MUST ADD TO 100%) (mg/L)

_____ %
_____ %
_____ %
_____ %
_____ %.
_____ %
_____ %

D. METALS ☐ TOTAL (ppm) ☐ EPA EXTRACTION PROCEDURE

ARSENIC (as) _____ SELENIUM (se) _____
BARIUM (ba) _____ SILVER (ag) _____
CADMIUM(cd) _____ COPPER(cu) _____
CHROMIUM(cr) _____ NICKEL(ni) _____
MERCURY(hg) _____ ZINC(zn) _____
LEAD(pb) _____ HALLIUM(ti) _____
CHROMIUM-HEX (cr + 6): _____

CHECK ONE BOX

- ☐ SOLIDS OR SLUDGES THAT ARE NOT PETROLEUM RELATED: EXPLAIN:
- ☐ SOLIDS OR SLUDGES CONTAMINATED WITH USED OIL:
- ☐ SOLIDS OR SLUDGES CONTAMINATED WITH VIRGIN PETROLEUM OIL
- ☐ WASTE WATER THAT IS NOT PETROLEUM RELATED : EXPLAIN:
- ☐ WASTE WATER CONTAMINATED WITH USED OIL
- ☐ WASTE WATER CONTAMINATED WITH VIRGIN OIL
- ☐ WASTE WATER CONTAMINATED WITH FUEL
- ☐ USED OIL
- ☐ VIRGIN FUEL
- ☑ OTHER:
- ☐ SOIL THAT IS NOT PETROLEUM RELATED : EXPLAIN:
- ☐ SOIL CONTAMINATED WITH USED OIL
- ☐ SOIL CONTAMINATED WITH VIRGIN OIL
- ☐ SOIL FROM UST REGULATED BY 40 CFR, PART 280

NON-HAZARDOUS CERTIFICATION

I, the undersigned, under penalty of law do hereby certify to the best of my knowledge, the recyclable material submitted for acceptance to International Petroleum Corporation is not a listed hazardous waste and does not exhibit any of the characteristics of a hazardous waste as defined in 40 CFR 261 of the toxicity characteristic revision rules as specified in the March 28,1990 Federal register. I further certify that the recyclable material submitted for acceptance to International Petroleum Corporation is classified as non-hazardous in its state of generation, and that I am authorized to execute this document.

INITIAL

TOXIC SUBSTANCE CONTROL ACT

I, the undersigned, under penalty of law do hereby certify that the materials submitted for acceptance to International Petroleum Corporation does not contain any detectable concentrations of PCB's as defined in Section 6 (E) of TSCA (ISUSC2605) and (40 CFR Part 761).

INITIAL

CERTIFICATION

I certify under penalty of law that this document and all attachments were 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 these persons responsible for gathering information, the information submitted 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 fine and imprisonment for knowing violations.

COMPANY | AUTHORIZED SIGNATURE | TITLE: Vice President | DATE: 7-24-97

GNWASTE.DOC

8-21-96

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DIV. OF INTERNATIONAL PETROLEUM CORP.

STATE CERTIFIED RECYCLER, TRANSPORTER AND COLLECTION FACILITY

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SO 29-181143

LAD 092096106

MOD 981114051
LA I.D. No. GT—186

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- USED OIL FILTERS
- USED ANTIFREEZE
- PETROLEUM CONTACT WATER

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(800) 523-9071

☐ BALTIMORE, MD 21224
6305 E. LOMBARD ST.
(800) 222-2511

A4414

IDENTIFICATION

Tom Clark Salvage
GENERATOR/SHIPPER

Date Shipped 9/29/97

Time

ADDRESS

Selma Tx 37820
CITY STATE ZIP

Phone

Hayfield

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

SPECIAL HANDLING INSTRUCTIONS	EMERGENCY RESPONSE NUMBER
END USE CODE MINI/SR	CHEMTREC 1-800-424-9300

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

This is to further certify under penalty of law that the above-named materials have not been mixed with hazardous waste according to the rules of the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection.

X Robert Lee
GENERATOR'S SIGNATURE DATE

TRANSPORTER No. 2 SIGNATURE & DATE
Clark
SIGNATURE DATE

CONTAINERS		QUANTITY	UNIT
1	TT	200	GAL
No.	TYPE		

DEDUCTIONS 150 40
NET GALLONS 50 AE
PRICE PER GALLON .25
FREIGHT
TOTAL 12 50

☐ CASH ☑ CHARGE (INVOICE TO FOLLOW)

97-PC 15434
MANIFEST DOCUMENT NO.

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

prestige printing pp-2004R 7/96

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☐ BALTIMORE, MD 21224
6305 E. LOMBARD ST.
(800) 222-2511

IDENTIFICATION

GENERATOR/SHIPPER

ADDRESS

CITY STATE ZIP

Date Shipped 9/4/97

Time

Phone

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

SPECIAL HANDLING INSTRUCTIONS END USE CODE MINI/SR	EMERGENCY RESPONSE NUMBER CHEMTREC 1-800-424-9300

CERTIFICATION

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This is to further certify under penalty of law that the above-named materials have not been mixed with hazardous waste according to the rules of the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection.

X
GENERATOR'S SIGNATURE DATE

TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE DATE

CONTAINERS		QUANTITY	UNIT
1	TT	100	GAL.
No.	TYPE		

DEDUCTIONS 140 40

NET GALLONS 40 AE

PRICE PER GALLON .25

FREIGHT

TOTAL $10 —

☐ CASH ☑ CHARGE (INVOICE TO FOLLOW)

97-PC 14052
MANIFEST DOCUMENT NO.

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

prestige printing pp-2004R 7/96

7

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Jim, Clas

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STATE CERTIFIED RECYCLER, TRANSPORTER AND COLLECTION FACILITY

EPA I.D. No. FLD 065680613
SO 29-181143

LAD 092096106

MOD 981114051
LA I.D. No. GT—186

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IDENTIFICATION

A4414

GENERATOR/SHIPPER: F3232 Jim ... [illegible] Date Shipped 7/25/97

ADDRESS: 363 ... [illegible] Time

CITY [illegible] STATE ZIP 33870 Phone 941-471-1177

[illegible]

INFORMATION

PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	N.A.E.R.G.
COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM OIL)	COMBUSTIBLE LIQUID	NA 1993	III	128

SOURCE TYPE (USED OIL)
CO/A

[illegible] 10 [illegible] cycle 14 days

SPECIAL HANDLING INSTRUCTIONS END USE CODE MINI/SR	EMERGENCY RESPONSE NUMBER CHEMTREC 1-800-424-9300

CERTIFICATION

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X [signature] GENERATOR'S SIGNATURE DATE

TRANSPORTER No. 2 SIGNATURE & DATE

[signature] SIGNATURE DATE

CONTAINERS No.	TYPE	QUANTITY	UNIT
1	TT	360	GAL.

DEDUCTIONS 320 w/o

NET GALLONS 40 [illegible]

PRICE PER GALLON .25

FREIGHT

TOTAL $10 —

97-PC 11749
MANIFEST DOCUMENT NO.

☐ CASH ☑ CHARGE (INVOICE TO FOLLOW)

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

prestige printing pp-2004R 7/96

?eport Date : 10/20/97
.PC FLORIDA
PRODUCT PICK-UP HISTORY FOR A CUSTOMER (DETAIL) : 07/01/97 - 10/20/97
BY CUSTOMER KEY . FOR RANGE: CUST = A4414 - A4414 , DRIVER = -BEG- - -END-
PRODUCT = ATF - ATF , ACTIVE =

****
Customer: A4414 AUTO JIM'S IMPORT SALVAGE
3636 DESOTO RD
SEBRING FL 33870
Driver: CLARK,JOE
****

DATE	MANIFEST	PRODUCT	GROSS	SALE	COS'
07/28/97	000000000011749	ATF	40.00	00.2500	
09/04/97	000000000014052	ATF	40.00	00.2500	
09/29/97	000000000015434	ATF	50.00	00.2500	
TOTAL RECORDS: 3			130.00	00.2500	00.0000
TOTAL REPORT RECORDS: 3			130.00	00.2500	00.0000

CESQG X
Profile
NOT IN STATE LIST

FROM : ENVIRONMENTAL CONSERVATION LAB PHONE NO. : 4078506945 Dec. 12 1995 05:27PM P1

Environmental Conservation Laboratories
10207 General Drive
Orlando, Florida 32824
407 / 826-5314
Fax 407 / 850-6945

ENCO Laboratories
DHRS Certification No. 83316, 880182

CLIENT : Malatino & Associates
ADDRESS: 4415 Florida National Dr.
Suite 101 & 103
Lakeland, FL 33807

REPORT # : OR3014
DATE SUBMITTED: December 8, 1995
DATE REPORTED : December 12, 199!

ATTENTION: Tony Malatino

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

Mazda Village

12/07/95

#1 - 5-DRUM COMPOSITE

TCE / Tetrachloro
Hazardous
do not
pick-up

PROJECT MANAGER

ENCO LABORATORIES
REPORT # : OR3014
DATE REPORTED: December 12, 1995
PROJECT NAME : Mazda Village

RESULTS OF ANALYSIS

EPA METHOD 8010 - TCLP 8010	5-DRUM COMPOSITE	LAB BLANK	Units
Trichloroethene	11300 D	1 U	µg/L
Tetrachloroethene	18400 D	1 U	µg/L
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene (surr)	92	102	66-125
Date Analyzed	12/09/95	12/08/95	

EPA METHOD 8020 - TCLP 8020	5-DRUM COMPOSITE	LAB BLANK	Units
Benzene	200 U D2	1 U	µg/L
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene (surr)	84	90	66-129
Date Analyzed	12/09/95	12/08/95	

D = Analyte value determined from a 1:500 dilution of the sample
D2 = Analyte value determined from a 1:100 dilution of the sample
U = Compound was analyzed for but not detected

ENCO LABORATORIES
REPORT # : OR3014
DATE REPORTED: December 12, 1995
PROJECT NAME : Mazda Village

RESULTS OF ANALYSIS

TCLP METALS	METHOD	8-DRUM COMPOSITE	Units
TCLP Lead	7420	0.50 U	mg/L
Date Analyzed		12/10/95	

ENCO LABORATORIES
REPORT # : OR3014
DATE REPORTED: December 12, 1995
PROJECT NAME : Mazda Village

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
TCLP 8010				
Methylene Chloride	125/115/105	49-154	8	32
Chloroform	105/110/105	62-145	5	28
Carbon Tetrachloride	105/100/105	53-151	5	32
Trichloroethene	85/ 85/ 85	59-139	<1	29
Tetrachloroethene	100/105/110	62-147	5	27
Chlorobenzene	100/110/110	64-137	10	28
TCLP 8020				
Benzene	90/ 95/ 90	68-136	5	24
Toluene	90/ 90/ 90	73-121	<1	21
Ethylbenzene	85/ 85/ 90	68-126	<1	24
o-Xylene	85/ 90/ 85	65-130	6	22
TCLP Metals				
Lead, 7420	93/ 95/ 85	81-110	2	10

LABORATORY MANAGER David J. Vesey

Environmental Conservation Laboratories Comprehensive QA Plan #880617G

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

MOP
RUMA

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IDENTIFICATION

M1088 MAZDA Village — GENERATOR/SHIPPER — Date Shipped 3-14-96

21154 US 19 — ADDRESS — Time

Clw FL 34625 — CITY / STATE / ZIP — Phone 813-791-8171

INFORMATION

SOURCE TYPE	DESCRIPTION AND CLASSIFICATION Proper Shipping Name, Class and Identification Number C.F.R. 172.101, 172.202, 172.203	UN No. or NA No.	EXEMPTION OR NO LABELS REQUIRED	FLASH POINT (IN°C) WHEN REQ'D
CO/A	(Used Oil) Fuel Oil Combustible Liquid Packaging Group III Used Coolant	1993 PG # 13560		> 60°

SPECIAL HANDLING INSTRUCTIONS
END USE CODE MINI/SR

EMERGENCY RESPONSE NUMBER
1-800-282-9585

CERTIFICATION

This is to certify under penalty of law that the above-named materials have not been mixed with hazardous waste and are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the U.S. Environmental Protection Agency.

X Bob Henkel 3-14-96
GENERATOR'S SIGNATURE — DATE

3-14-96
TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE — DATE

GROSS GALLONS _____
Coolant
DEDUCTIONS 285
O.I.
NET GALLONS 356
PRICE PER GALLON .50
FREIGHT -0-
TOTAL #142.50

☐ CASH ☑ CHARGE (INVOICE TO FOLLOW)

96-PC 4476
MANIFEST DOCUMENT NO.

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

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M003-

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IDENTIFICATION

M1088 Mazda Village — GENERATOR/SHIPPER — Date Shipped 5-14-96

21154 US 19 — ADDRESS — Time

Clwr — CITY — FL — STATE — 34625 — ZIP — Phone 813-791-8171

INFORMATION

SOURCE TYPE	DESCRIPTION AND CLASSIFICATION Proper Shipping Name, Class and Identification Number C.F.R. 172.101, 172.202, 172.203	UN No. or NA No.	EXEMPTION OR NO LABELS REQUIRED	FLASH POINT (INºC) WHEN REQ'D
CO/A	(Used Oil) Fuel Oil Packaging Group III Combustible Liquid	1993	PO 13791	> 60°

Used Coolant

SPECIAL HANDLING INSTRUCTIONS
END USE CODE MINI/SR

EMERGENCY RESPONSE NUMBER
1-800-282-9585

CERTIFICATION

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X [signature] 5-14-96
GENERATOR'S SIGNATURE — DATE

[signature] 5-14-96
TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE — DATE

GROSS GALLONS _____
COOLANT DEDUCTIONS 110
OIL
NET GALLONS 305
PRICE PER GALLON .50
FREIGHT —
TOTAL $ 55.00

☐ CASH ☑ CHARGE (INVOICE TO FOLLOW)

96-PC 7335

MANIFEST DOCUMENT NO.

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

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— My. RUNA

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IDENTIFICATION

M1088 MAZDA Village — GENERATOR/SHIPPER — Date Shipped 7-24-96

21154 US 19 — ADDRESS — Time

Clwr — CITY — FL — STATE — 34625 — ZIP — Phone 813-791-8171

INFORMATION

SOURCE TYPE	DESCRIPTION AND CLASSIFICATION Proper Shipping Name, Class and Identification Number C.F.R. 172.101, 172.202, 172.203	UN No. or NA No.	EXEMPTION OR NO LABELS REQUIRED	FLASH POINT (IN°C) WHEN REQ'D
CO/A	(Used Oil) Fuel Oil Combustible Liquid Packaging Group III Used COOLANT	1993 NA 1416		> 60°

SPECIAL HANDLING INSTRUCTIONS
END USE CODE MINI/SR

EMERGENCY RESPONSE NUMBER
1-800-282-9585

CERTIFICATION

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X [signature] 7-24-96
GENERATOR'S SIGNATURE — DATE

[signature] 7-24-96
TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE — DATE

GROSS GALLONS _____
COOLANT DEDUCTIONS 165
NET GALLONS 355
PRICE PER GALLON .50
FREIGHT _____
TOTAL $ 82.50

☐ CASH ☑ CHARGE (INVOICE TO FOLLOW)

96-PC 10280

MANIFEST DOCUMENT NO.

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

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M44- Rumor

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IDENTIFICATION

GENERATOR/SHIPPER: M1088 Mazda Village — Date Shipped: 9-19-96

ADDRESS: 21154 US 19 — Time:

CITY: Clw — STATE: FL — ZIP: 34625 — Phone: 813-791-8171

INFORMATION

SOURCE TYPE CO/A	DESCRIPTION AND CLASSIFICATION Proper Shipping Name, Class and Identification Number C.F.R. 172.101, 172.202, 172.203	UN No. or NA No.	EXEMPTION OR NO LABELS REQUIRED	FLASH POINT (IN°C) WHEN REQ'D
(Used Oil)	Fuel Oil Combustible Liquid Packaging Group III	1993		> 60°
90 Used COOLANT		PO # 14284		

SPECIAL HANDLING INSTRUCTIONS

END USE CODE MINI/SR

EMERGENCY RESPONSE NUMBER 1-800-282-9585

CERTIFICATION

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X [signature] 9-19-96
GENERATOR'S SIGNATURE DATE

[signature] 9-19-96
TRANSPORTER No. 2 SIGNATURE & DATE

SIGNATURE DATE

GROSS GALLONS

DEDUCTIONS Coolant 110

NET GALLONS Oil 260

PRICE PER GALLON .25

FREIGHT —

TOTAL $27.50

96-PC 13718

MANIFEST DOCUMENT NO.

☐ CASH ☑ CHARGE (INVOICE TO FOLLOW)

White - Original Yellow - Receiving Facility Pink - Transporter G'rod - Generator

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