

DEPARTMENT OF FISH AND GAME

Petroleum Chemistry Laboratory
1995 Nimbus Road
Rancho Cordova, CA 95670
(916) 445-9326



May 12, 1999

Mr. Kevin Foster
US Fish and Wildlife Service
Pacific Islands Ecoregion, Room 3-122
300 Ala Moana Blvd., Box 50088
Honolulu, Hawaii 96850

Dear Mr Foster:

We have completed our analysis of the two samples submitted for petroleum hydrocarbon fingerprinting. The samples submitted were whole oil extracts in dichloromethane. One sample was identified as SPM HOSE 001, oil, and the second was identified as LOG23 MOKAPU, feather. The samples were analyzed as submitted except, for concentration purposes, the feather extract was concentrated by a factor of 40 from 1 mL to 25 μ L. The final result states that the concentrations of the hydrocarbon components in the feather sample were too low to compare to the oil extract. The concentration level of the biomarkers and PAH in the feather extract utilized for the fingerprinting process are, in fact, low, but after reviewing the data I believe we can further state that the petroleum hydrocarbons in the two samples are not from the same source due to the differences observed in the Pristane, Phytane, Hopanes, Triaromatic Steranes, Fluorenes and Dibenzothiophenes.

We appreciate the confidence you have shown in our analytical capabilities by requesting our assistance with this sample analysis. If you have need for our service in the future please do not hesitate to call. An invoice in the amount of \$950.00 for these services will be coming within the next week or so.

Sincerely Yours,

A handwritten signature in black ink that reads "Bill Castle".

Bill Castle, Laboratory Director

cc: Chris Jansen, Tesoro Hawaii Corp.
Judy Nedoff, ENTRIX, Inc.



DFG REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY RECORD

Page of

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SAMPLER ADDRESS ADLITE INC CITY: CA ZIP: <u> </u> DATE REQUIRED/REASON: <u> </u> SHIPPED VIA: <u> </u>	SEND RESULTS TO ADDRESS: <u> </u> CITY: CA ZIP: <u> </u> COPIES TO: <u> </u> ADDRESS: <u> </u> CITY: STATE: ZIP: <u> </u>	PHONE # <u> </u> REGION: <u> </u> DATE: <u> </u> ANALYSIS REQUESTED <input type="checkbox"/> Fish & Wildlife Loss <input type="checkbox"/> DFG Code Violation <input type="checkbox"/> Suspected or Potential Problem <input type="checkbox"/> Routine Analysis
Sample Identification/Location <small>(Draw Map on Separate Sheet if Necessary)</small>		
Problem Description Suspect/Incident Location Comments/Special Instructions	SAMPLE(S) RELINQUISHED BY (SIGNATURE) PRINT NAME DATE	RECEIVED BY (SIGNATURE) PRINT NAME
POLLUTION ACTION KIT REQUESTED: YES <input type="checkbox"/> NO <input type="checkbox"/> GLOVE SIZE: LARGE <input type="checkbox"/> MEDIUM <input type="checkbox"/> HAZMAT SHIPPER REQUESTED: YES <input type="checkbox"/> NO <input type="checkbox"/>		

Collection Date	Time	PETROLEUM FINGERPRINT	TRACE ELEMENTS (SPECIFY BELOW)	PESTICIDES (SPECIFY BELOW)	Water Temp: °f or °C	pH	DO:	mgl Conductivity:				umhos/cm	
								WATER	FILTERED WATER	SOIL	TISSUE		PLASTIC
1/27/04	11:00	X			50	7.5							
1/27/04	11:00	X			50	7.5							
1/27/04	11:00	X			50	7.5							

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Water Pollution Control Lab 2005 Nimbus Road Rancho Cordova, CA 95670

FG 1000 (Rev. 11/94)