Environmental Inspection Services

November 6, 1991

Steve Wilcox, President
Wilcox & Flegel Oil Company
110 Panel Way
Longview, WA 98632

Reference: Analytical test results from samples taken from an excavation at the site of "Johns Shell Service Station located at 1410 Ocean Beach Highway in Longview, Washington

Dear Steve,

A field representative from Environmental Inspection Services, Charles Spear, supervised limited excavation activities performed by Jay Brookhart Excavating. The representative also collected four representative soil samples and one water sample (sample No.s 1 thru 5) from the excavation at the aforementioned property on Friday, October 18, 1991. The four soil samples were collected from representative cavity areas as depicted on the Generalized Site Plan Plate P-1. The soil samples were collected in a manner consistent with proper sampling procedures, presentation, and chain of custody documentation as stated in a prepared sampling plan.

The sampling plan was developed to ensure that sample collection, sample location, sample handling, and data analysis were sufficient to evaluate the effectiveness of limited excavations performed on-site. The four soil samples and one water sample were subsequently analyzed by Columbia Analytical Services, Inc. a Longview based certified laboratory, in a manner consistent with the analytical procedures outlined in the EPA test methods document SW-846. Each of the soil samples and the water sample were analyzed for the presence of Total Petroleum Hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylene (BTEX) in manner consistent with Test Methods 5030/8020 and Modified 8015.

Based on the analytical test results from samples taken at representative locations in the subject excavation, the excavation episode was successful with regards to removing contaminated petroleum-contaminated soils within the subject excavation.

The excavation project was briefly described as follows:

Soil was excavated from the 9 foot wide by 28 foot long by 15 foot deep excavation by an excavation contractor and it was loaded and transported to an off-site Wilcox & Flegel location for either thermal treatment or temporary storage. Representative and confirmation soil samples were subsequently collected from locations at the bottom and sides of the excavation. Four soil samples and one water sample were collected by Charles A. Spear by taking representative soil samples from the backhoe bucket. The soil samples were immediately transferred to a clean 8-ounce glass sample jar by using a clean sampling trowel, packed into the sample container until no headspace was present, and a teflon-lined lid was applied to the sample container. The container was labeled and placed into a plastic vapor-tight bag and preserved on ice until the soil and water samples were analyzed by the laboratory.

The soil sample test results for volatile gasoline constituents (BTEX) and total petroleum hydrocarbons, sample No.s 1 thru 4, were reported in parts per million (ppm). The results are outlined below:

SAMPLE #	SAMPLE LOCATION	BTEX	GAS TPH
1.0	Riser-1 Bottom	ND	10 ppm
2.0	Riser-2 Bottom	Benzene - ND Toluene - ND Ethylbenzene - 0.3 Total xylenes- 0.1	14 ppm
3.0	Riser -2 northwall	BTEX - ND	22 ppm
4.0	Riser - 2 southwall	BTEX - ND	43 ppm
5.0	Water	Benzene - .022 22 ppb Toluene - ND Ethylbenzene - .211 211 ppb Total xylenes - .108 108 ppb	12.8 ppm 12,800 ppb

A single soil sample, sample No. 3, was also analyzed for the presence of total lead and the analytical test result was negative for lead. This soil sample was taken from an area of soil where leaded gasoline may have been present. Since the total lead contaminant level was determined to be less than 100 parts per million it was not necessary to analyze the soil sample for extractable lead by Total Characteristic Leaching procedure (TCLP).

Based on the analytical test results the analytical findings indicate that the most-contaminated soil has been removed from the subject excavation. Soil samples collected from the bottom and sides of the subject excavation indicate that both the vertical and horizontal extents of the contamination have been delineated according to established acceptable clean-up levels for TPH.

The elevated TPH test results from water collected in the bottom of the excavation indicated a collection of contaminants that have leached from adjoining soils into the water that was present in small quantities at the bottom of the excavation. This water sample, sample No. 5, was not a representative sample of groundwater in the excavation.

In our opinion, based on the analytical test results, the limited excavation episode was effective and soils contaminated with TPH or BTEX in levels exceeding clean-up levels were removed from the excavation. If there are any questions feel free to call me at 1-503-644-8526.

Respectfully,

Charles Arthur Spear

Charles Arthur Spear
Director of Professional Services

Environmental Inspection Services

Columbia Analytical Services inc.

1317 South 13th Ave. • Kelso, WA 98626 • (206) 577-7222, FAX (206) 636-1068

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

DATE 10/21/91 PAGE _____ OF _____

PROJECT NAME Ocean Way Site # _____

PROJECT MNGR. Charles Spear

COMPANY/ADDRESS WILCOX & FLEEL

c/o. Environmental Inspection Services

C. Spear PHONE 503 644-8526

SAMPLERS SIGNATURE Charles C. Spear

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	ANALYSIS REQUESTED: TPH/Gas/BTEX 5030/8015/8020 ☑	REMARKS
#1 - River 1 Bottom	10/18	100pm		Soil	1	✓	
#2 - River 2 Bottom	10/18	213pm		Soil	1	✓	
#3 - North Bank River 2	10/18	3:00		Soil	1	✓	
#4 - South Bank River 2	10/18	5:00		Soil	1	✓	
#5 - Groundwater	10/19	5:00		WATER	1	✓	

RELINQUISHED BY:
Charles C. Spear
Signature
Charles A. Spear
Printed Name
Environmental Inspection Services
Firm
10/21/91 - 11:30am
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

RELINQUISHED BY:
Colin Elliott
Signature
Colin Elliott
Printed Name
CAS
Firm
10/21/91 11:45 am
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
___ 24 hr ___ 48 hr ___ 5 day
✓ Standard (~ 10-15 working days)
✓ Provide Verbal Preliminary Results
___ Provide FAX Preliminary Results
Requested Report Date _____

REPORT REQUIREMENTS
___ I. Routine Report
___ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Data Validation Report (includes All Raw Data)
___ IV. CLP Deliverable Report

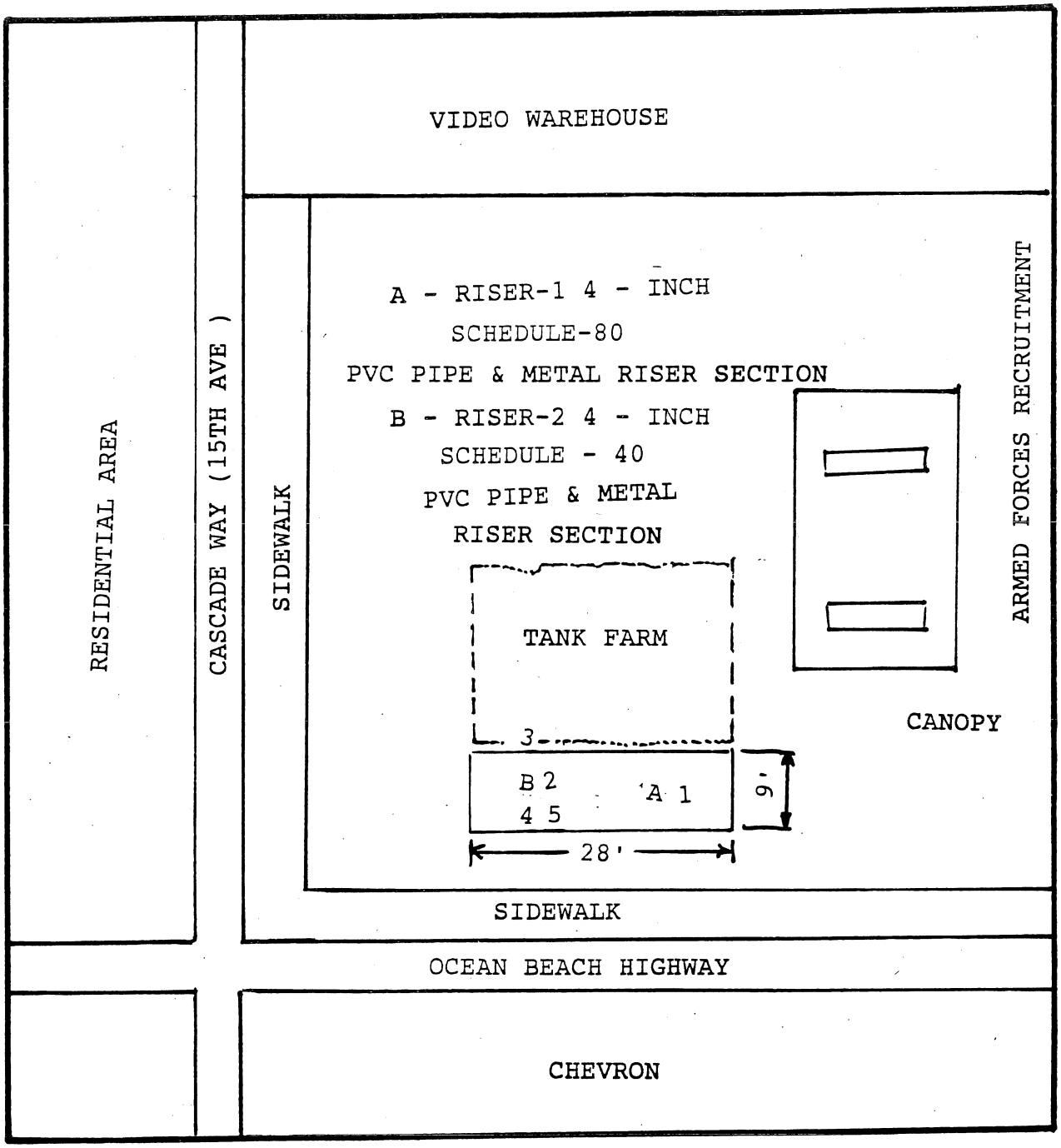
INVOICE INFORMATION:
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Shipping VIA: _____
Shipping #: _____
Condition: _____
Lab No.: _____

SPECIAL INSTRUCTIONS/COMMENTS:

DISTRIBUTION: WHITE - return to originator; YELLOW - lab; PINK - retained by originator

400-05



SITE

NOT TO SCALE

EXCAVATION - 15 FEET DEEP

ENVIRONMENTAL INSPECTION SERVICES	GENERALIZED SITE PLAN 1410 OCEAN BEACH HIGHWAY LONGVIEW, WASHINGTON	**PLATE** P-1
PROJECT NO. 91016		

COLUMBIA ANALYTICAL SERVICE NC.

Analytical Report

Client:

Project:

Sample Matrix: SOIL

Date Received: / /

Date Analyzed: 10/25/91

Work Order #: 916104

TOTAL LEAD
(Method Title)

EPA METHOD 7420
(Method No.)

mg/kg
(Units)

DRY wt Basis

Sample Name	Lab Code	MRL	Result
#3 RISER 2 INCH WITH	6104-3	3	ND
METHOD BLANK	MD	6	ND

MRL Method Reporting Limit
ND None Detected at or above the method reporting limit

Approved by [signature] Date 10/25/91 Filename: GEN1.B/05-10-91

Alaska: Use VPH
Others: Use TPH

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: [redacted]
Project: [redacted]
Sample Matrix: Soil

Date Received: [redacted]
Date Extracted: 10/22/91
Work Order #: K91-6104

PRELIMINARY
These results have not gone through final QA review.

BTEX and TPH/VPH as Gasoline
EPA Methods 5030/8020/Modified 8015
mg/Kg (ppm)
Dry Wt. Basis

Sample Name:		#1-Riser 1 Bottom	#2-Riser 2 Bottom	#3 Riser 2 North wall
Lab Code:		K6104-1	→ 2	→ 3
Date Analyzed:		10-23-91	10-23-91	10-23-91
Analyte	**MRL**			
Benzene	0.05	ND	ND	ND
Toluene	0.05	ND	ND	ND
Ethylbenzene	0.05	ND	~~ND~~ 0.32	ND
Total Xylenes	0.05	ND	~~ND~~ 0.12	ND
TPH/VPH as Gasoline	1	~~ND~~ 10	~~ND~~ 14	~~ND~~ 22

TPH Total Petroleum Hydrocarbons
VPH Volatile Petroleum Hydrocarbons
MRL Method Reporting Limit
ND None Detected at or above the method reporting limit

Approved by________________ Date__________ Filename: 8020A.S/08-16-91

Alaska:
Use VPH
Others:
Use TPH

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:

Project:

Sample Matrix: Soil

Date Received:

Date Extracted: 10/22/91

Work Order #: K91-6104

PRELIMINARY
These results have not gone through final QA review.

BTEX and TPH/VPH as Gasoline
EPA Methods 5030/8020/~~Modified 8015~~ o.k
mg/Kg (ppm)
Dry Wt Basis

Sample Name:	#4 Riser 2 Southside	MethodBlank	
Lab Code:	K6104-4	→MB	
Date Analyzed:	10-23-91	10-22-91	

Analyte	MRL			
Benzene	0.05	ND	ND	ND
Toluene	0.05	ND	ND	ND
Ethylbenzene	0.05	ND	ND	ND
Total Xylenes	0.05	ND	ND	ND
TPH/VPH as Gasoline	1	~~ND~~ 43	ND	ND

TPH Total Petroleum Hydrocarbons
VPH Volatile Petroleum Hydrocarbons
MRL Method Reporting Limit
ND None Detected at or above the method reporting limit

Approved by _____ Date _____ Filename: 8020A.S/08-16-91

JLS

WILSON OIL, INC.

110 Panel Way – P.O. Box 69
Longview, Washington 98632
Phone 423-3300

August 20, 1991

Pattie Martin
Department of Ecology
7272 Clearwater Lane, LU-11
Olympia, Washington 98504-6811

Dear Pattie:

In July, 1991, we reported to you by telephone that a "release to the environment" was discovered at John's Shell, 1410 Ocean Beach Highway, Longview, Washington. John Szkodyn, who is the owner and operator of this site, has decided to retire and sell the property to Wilson Oil. In preparation for the sale we conducted a level three environmental assessment, using Sweet Edward/Emcon, Inc. Gasoline was discovered at one end of the tanks in the soil and ground water. The source of the gasoline was a mystery at first because all lines passed a tightness test (performed by Petroleum Services), the tanks are lined, and the tanks were recently inspected by Tank Liners. We discovered the source was that the Red Jacket line leak detector on the unleaded turbin pump had two bolts that had loosened, allowing a very small release when under pressure. This has now been replaced.

After drilling some additional holes, we believe the plume of contamination to involve an area 20'x20'x10', or about 150 cubic yards. On October 1, 1991, this station is scheduled for a rebuild and will be closed for three months. At that time we will be replacing the steel gas lines with fiberglass lines and will conduct our site clean up.

We anticipate excavating 150 yards of soil and having Spencer Environmental Service "pump and treat" any contaminated ground water we encounter. The soil will be piled on site and treated using soil bioremediation, then replaced in the hole. Three monitoring wells will be installed that will be large enough to serve as a collection point for "pump and treat" ground water collection and additional bioremediation.

Wilson Oil will be assisting John's Shell with this clean up project.

Very truly yours,

Steve Wilcox

Steve C. Wilcox
President

SCW/dlm