FULCRUM
ENVIRONMENTAL CONSULTING, INC.

Fulcrum Environmental Consulting, Inc.
406 North Second Street, Yakima, Washington 98901
Phone: (509) 574-0839 Fax: (509) 575-8453

MEMO

To: Dick Bassett
Department of Ecology

August 26, 2008

From: Jeremy Lynn
Fulcrum Environmental Consulting, Inc.

RE: Limited Soil Investigation Report

As requested attached please find a copy of the Limited Soil Investigation Report for Noland-Decoto Flying Service located at 2810 West Washington Avenue in Yakima, Washington.

If you should have any questions, or need anything further, please feel free to call the office at 574-0839.

Enclosure

NOLAND-DECOTO FLYING SERVICE
LIMITED SOIL INVESTIGATION REPORT

2810 West Washington Avenue
Yakima, Washington

Project Number 08-635

July 25, 2008

Prepared for: Noland-Decoto Flying Service
Attn: Brad Goodspeed
2810 West Washington Avenue
Yakima, Washington 98908

Prepared by: Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839

Authored by: _____ **Date:** 07/25/2008

Jeremy M. Lynn, GIT, Environmental Geologist
Fulcrum Environmental Consulting, Inc.

Reviewed by: _____ **Date:** 07/25/2008

Ryan K. Mathews, CMC, CHMM, Principal
Fulcrum Environmental Consulting, Inc.

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1.0 INTRODUCTION

Fulcrum Environmental Consulting, Inc. (Fulcrum) was retained by Noland-Decoto Flying Service (Noland-Decoto) to perform a limited soil investigation of petroleum contaminated soils located at 2810 West Washington Avenue in Yakima, Washington. The contaminated soil is associated with a historic leak from an aboveground storage tank (AST) located in the northeast portion of the Noland-Decoto site. On October 21, 2005, Fulcrum completed a limited soil sampling event for surface soil associated with the AST. The 2005 soil sampling confirmed the presence of diesel range hydrocarbons above applicable regulatory cleanup levels. The area of concern was recently excavated by Noland-Decoto. Fulcrum was retained to complete soil investigation activities associated with the excavation and stockpiled soils. See appendix A for scope of services.

1.1 Background

The Noland-Decoto facility is located at 2810 West Washington Avenue in Yakima, Washington. The site is located north and adjacent to McAllister Field. Two, approximately 10,000-gallon ASTs utilized for JET A fuel storage are located on the northeastern portion of the site. The tanks are utilized for onsite aircraft refueling.

During onsite activities completed by Fulcrum in 2005, one soil sample was collected from the southeast corner of the south AST, beneath the leaking fuel pipe. The sample confirmed the presence of diesel range hydrocarbons in concentrations in excess of applicable regulatory standards within surface soils.

Prior to current site activities, Noland-Decoto completed excavation of the identified surface contamination. Excavated soil was placed on 6-millimeter polyethylene sheeting adjacent to the excavation pit.

2.0 SCOPE OF WORK

Fulcrum was retained by Noland-Decoto to investigation activities associated with the excavation area. Fulcrum's scope of work for this project included, site investigation, sample collection, laboratory analysis, and final reporting. Jeremy Lynn of Fulcrum was the Certified underground storage tank (UST) Site Assessor (Certificate No: 5296350-U7) and Decommissioner (5296350-U2) for the project. See Appendix B for certifications.

3.0 DISCUSSION OF PERTINENT REGULATIONS AND GUIDANCE

3.1 MTCA Regulations

In March of 1989, the Model Toxics Control Act (MTCA) went into effect in Washington State. The MTCA regulations set standards to ensure quality of cleanup and protection of human health and the environment. A major portion of the MTCA regulation (completed in 1991) was the development of numerical cleanup standards and requirements for cleanup actions. Three options were established under MTCA for site-specific cleanup levels: Method A, B, and C. Method A

defines cleanup levels for 25 of the most common hazardous substances found at sites. Method B levels are set using a site risk assessment, which enables consideration of site-specific characteristics. Method C is similar to Method B, however the individual substance's cancer risk portion of the assessment is set at 1 in 100,000 rather than 1 in 1,000,000.

Rule amendments to MTCA, which became effective August 15, 2001, changed the cleanup levels of petroleum hydrocarbon contamination. Whereas diesel and heavy oil concentrations were increased, the MTCA Method A cleanup levels for gasoline and gasoline components (Benzene, Toluene, Ethylbenzene, and Xylene) were lowered significantly.

3.2 UST Guidance

A site check or site assessment must be conducted at the time of tank closure, change-in-service or when evidence indicates that a release may have occurred. While this is not an UST, petroleum releases to soil are commonly based on UST sampling and analysis regulations and guidance criteria. Pertinent portions of Washington Administrative Code (WAC) 360-173-190 were utilized in completing this investigation.

3.3 Cleanup Standard Selected

Ecology's MTCA Method A cleanup tables were developed to provide conservative cleanup levels for sites undergoing routine cleanup actions or those sites with relatively few hazardous substances. Method A cleanup levels are specifically designated as appropriate for residential facilities and are appropriate for a conservative approach at commercial sites. Therefore, Fulcrum has determined that Ecology's MTCA Method A cleanup levels to be the most appropriate regulatory guidance for evaluating conditions for this project.

4.0 ENVIRONMENTAL SETTING

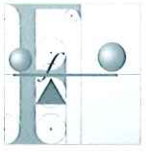
The Yakima Region is located within the Yakima Folds Geomorphic Province on the western margin of the Columbia River Plateau. The Columbia River Basalt Group is comprised of a number of geologic formations. The three youngest formations of the Columbia River Basalt Group are present in the Yakima region. These basalt formations, including the interbedded and overlying sedimentary lithologies of the Ellensburg Formation, comprise the near surface stratigraphy of the Yakima Region. Quaternary alluvial sediments and landslide deposits are present in the valley environments. Anticlinal ridge and synclinal valley structures of the Yakima Fold Belt dominate topography.

5.0 USER PROVIDED INFORMATION

Brad Goodspeed with Noland-Decoto was the primary contact for Fulcrum and can be reached at (509) 248-1370.

6.0 UST INSPECTION ACTIVITIES

On June 19, 2008, Jeremy Lynn of Fulcrum arrived to complete the site investigation. Mr. Goodspeed was unable to meet Fulcrum onsite during the timeframe of the investigation process



due to scheduling issues. Mr. Lynn met with staff of Noland-Decoto who directed Fulcrum to the excavation area. The two ASTs are located on the northeastern portion of the site, west of an adjacent concrete fueling pad, and east of an adjacent hanger building. The excavation area was observed to be located on the southeast corner of the southern AST directly below a small diameter tank pipe. No indications of leakage were identified within the excavation or immediate surrounding area at the time of inspection.

Fulcrum's visual inspection of the excavation area identified clean soil with no odor or petroleum staining. The excavation area was 4-feet by 5-feet wide at the surface and completed to a depth of 4-feet below ground surface (bgs). At a depth of 2-feet bgs, the excavation narrowed to 2-feet by 4-feet wide. Excavated soils totaled approximately 3-cubic yards. See Appendix C for site photographs.

Surface soils consisted of imported gravel from the surface to a depth of 2 to 3-inches. Underlying native soils consisted of dry, light to medium brown, silty loam material to the depth of excavation.

7.0 SAMPLE COLLECTION

7.1 Sample Locations

Six samples were collected from the excavation and stockpiled soils and were labeled 61908-01 through 61908-06. Samples were collected and placed in containers based on the analysis to be performed. Sampling containers utilized included 4-ounce borosilicate glass jars with Teflon lined lids.

Three samples were collected from the excavation pit, consisting of one sample from the bottom of the excavation, and two additional samples from the east and west sidewalls of the excavation.

Three additional samples were collected from the stockpiled soils estimated at 3-cubic yards. Two were collected from the larger eastern stockpile and one from the smaller western stockpile.

7.2 Sampling Techniques and Analysis

Jet fuel is a petroleum based fuel similar to kerosene, contained within the range of diesel hydrocarbons. Prior to sampling, Fulcrum contacted Libby Environmental, LLC (Libby) located in Olympia, Washington, the selected laboratory for the investigation, and confirmed that analysis for diesel range hydrocarbons to be appropriate for both kerosene and jet fuel type products.

Each 4-ounce soil sample was obtained by direct collection from the desired location. All samples were collected by hand using new nitrile gloves. The 4-ounce jars were utilized for diesel analysis by Northwest Total Petroleum Hydrocarbon Diesel Extended analysis (NWTPH-Dx Ext). All samples for laboratory analysis were deposited into labeled containers, packaged with ice, and delivered under chain-of-custody by common carrier to the laboratory.

Concentrations above the cleanup level are shown in **bold**. See Appendix D for laboratory analytical results.

Table 1: NWTPH-Dx Extended Sample Analysis Results

Sample Location	Analyte[1]		
	Diesel	Heavy Oil	Mineral Oil
61908-01: Bottom of excavation	ND	ND	ND
61908-02: East sidewall of excavation	ND	ND	ND
61908-03: West sidewall of excavation	ND	ND	ND
61908-04: North side of east stockpile	ND	ND	ND
61908-05: South side of east stockpile	ND	ND	ND
61908-06: Center of west stockpile	ND	ND	ND
MTCA Method A Cleanup Levels	**2,000**	**2,000**	**4,000**

1 = Concentrations reported in milligrams per Kilogram (mg/Kg) or parts per million (ppm)
ND = None Detected

Laboratory results identified non-detectable concentrations of all constituents including diesel, heavy oil, and mineral oil. No data quality anomalies were noted in the laboratory results for the soil samples. All analytical quality assurance parameters were within acceptable ranges.

8.0 RESULTS AND CONCLUSIONS

Fulcrum was retained by Noland-Decoto to complete site assessment services for identified petroleum contaminated soil associated with a 10,000-gallon AST utilized for Jet A fuel storage. During a limited sampling event completed in 2005 by Fulcrum, documented concentrations of diesel range hydrocarbons above MTCA Method A cleanup levels in site soils below the southeast corner of the AST. Noland-Decoto excavated the area of concern and stockpiled soils on polyethylene sheeting pending soil sampling.

In 2008, Fulcrum conducted sampling of the excavation area and stockpiled soils for analysis by NWTPH-Dx Ext. Laboratory results documented non-detectable concentrations of diesel range hydrocarbons.

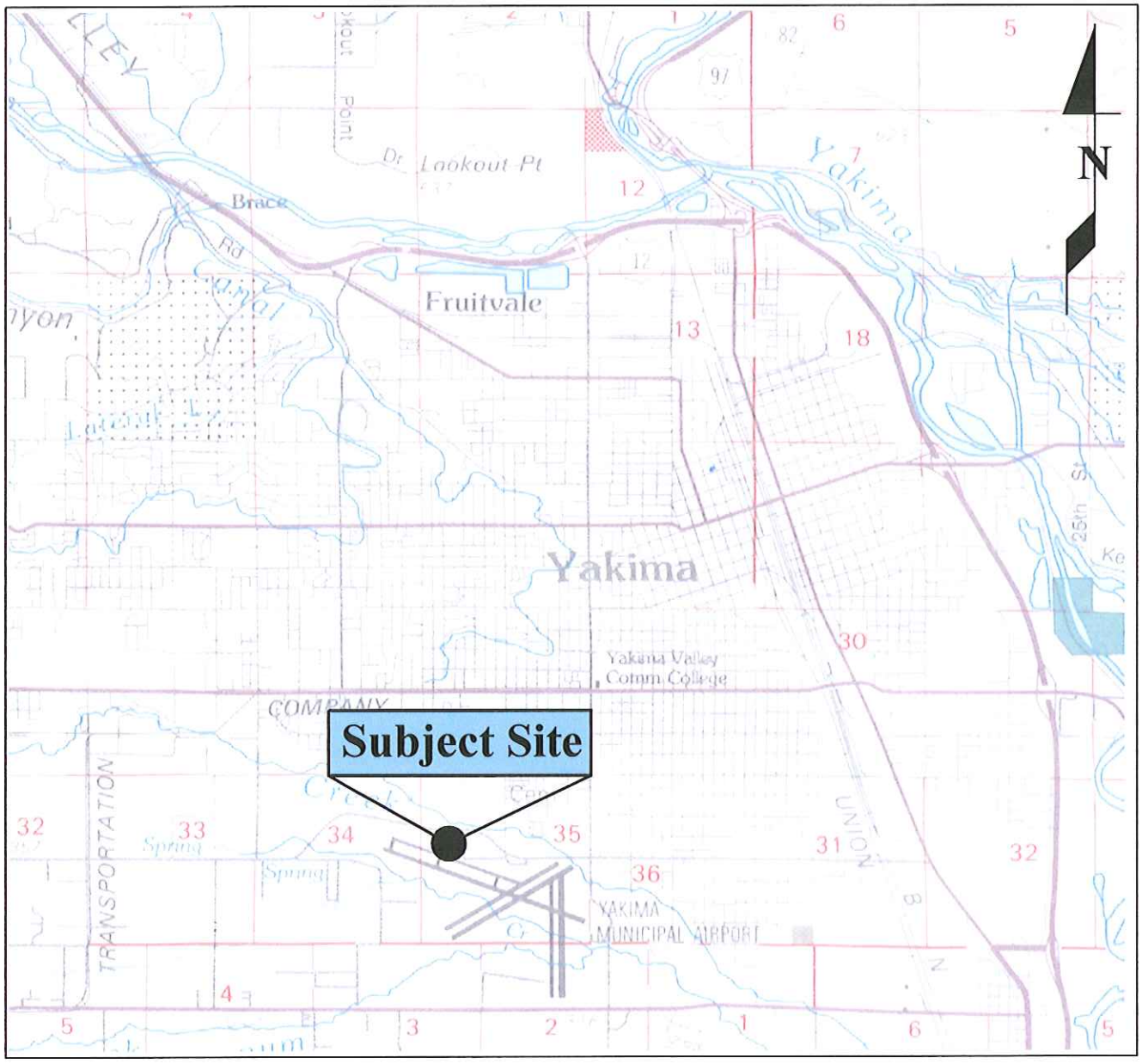
Fulcrum recommends no additional investigation be completed as no further action is warranted.

9.0 LIMITATIONS

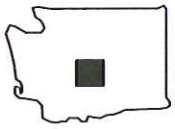
Fulcrum has performed professional services in accordance with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. The conclusions and recommendations are based upon our field observations, field screening, and independent laboratory analysis. The scope of services for this project is limited to the investigation of the identified excavation area associated with the site.

Site assessment services included observation of removal activities, site investigation, and sample collection. Tank cleaning and removal activities were not included within Fulcrum's scope of services. Fulcrum makes no warranties expressed or implied as to the accuracy or completeness of other's work included or referenced herein, nor the use of segregated portions of this report. This document does not imply that the property is free of other environmental concerns. This report is solely for the use and information of our client. Any reliance on this report by a third party is at that party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing at the time services were performed. Fulcrum Environmental Consulting, Inc. is not responsible for the impact of changes in environmental standards, practices, or regulations subsequent to the performance of services. Fulcrum Environmental Consulting, Inc. assumes no liability for conditions that were not included in our scope of services, or conditions not generally recognized as predictable when services were performed.



LEGEND



Subject Site: ●

Scale: 1 mile (2,590 meters) ⊢——⊣

Contour Interval: 20 and 50 meters

Source: WA Dept. of Natural Resources

1:100,000 Planimetric Map

FIGURE 1

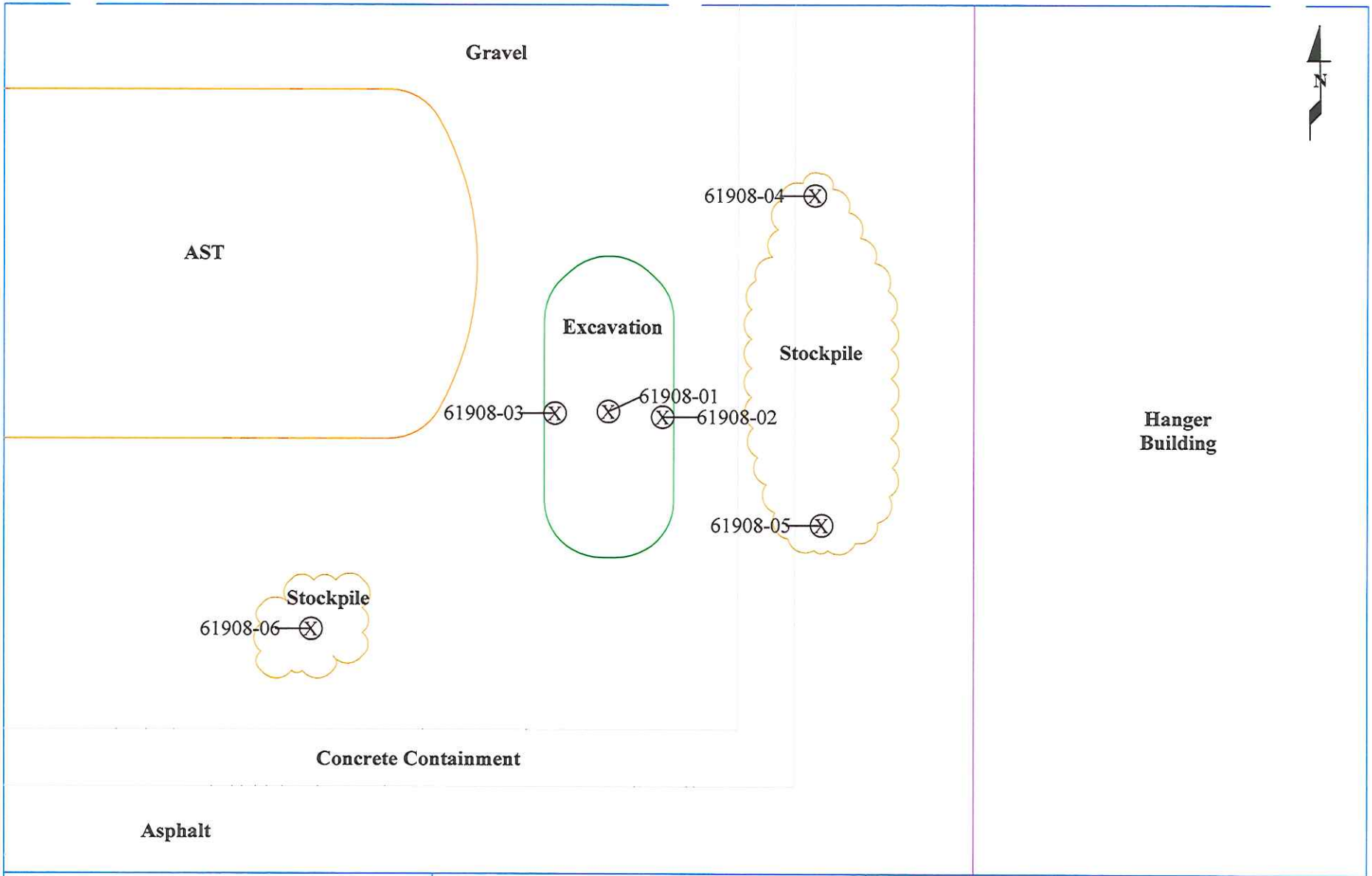
General Site Map

2810 West Washington Avenue

Yakima, Washington

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
Phone (509) 574-0839 Fax (509) 575-8453

DRAWN BY: AMP	PROJECT NUMBER: 08-635
DATE: 7/20/2008	FILE NAME: Noland-Decoto Soil Sampling



Legend

Sample Locations: ⊗

Scale: NTS

Figure 2
Sample Locations Map

2810 West Washington Avenue
Yakima, Washington

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
Phone (509) 574-0839 Fax (509) 575-8453

Drawn by: AMP	Project Number: 08-635
Date: 7/20/2008	File Name: Noland-Decoto Soil Sampling

APPENDIX A

Proposed Scope of Services

FULCRUM
ENVIRONMENTAL CONSULTING

June 19, 2008

Noland-Decoto Flying Service, Inc.
Attn: Brad Goodspeed
2810 West Washington Avenue
Yakima, Washington 98908

RE: Proposal to Provide Soil Sampling Services at the Noland-Decoto Flying Service Facility in Yakima, Washington

Dear Brad:

Thank you for the opportunity for Fulcrum Environmental Consulting, Inc. (Fulcrum) to present this proposal for soil sampling activities for petroleum impacted soils at the Noland-Decoto site in Yakima, Washington. In October 2005, Fulcrum completed a limited soil sampling event for potential petroleum impacted surface soils associated with a leaking pipe on an approximate 10,000-gallon aboveground storage tank (AST). The AST was utilized for Jet A fuel storage and located on the northeastern portion of the site. The 2005 limited investigation documented diesel range hydrocarbons above applicable Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup levels. Fulcrum understands that the area of concern was excavated by Noland-Decoto and confirmation sampling is required.

Fulcrum proposes to conduct the following activities associated with site characterization for impacted soils:

1. Collect a total of six samples from the excavation and stockpiled soils as outlined by Ecology's published guidance criteria.
2. Submit samples to an accredited laboratory for analysis by Northwest Total Petroleum Hydrocarbon Diesel Extended (NWTPH-Dx Ext) methodology; completed within a 24-hour turnaround time.
4. Provide a summary letter report reviewing soil sample investigation results.

The following conditions are inherent in Fulcrum's proposal:

1. Site activities will be limited to one to two-hours of onsite time for one environmental professional.
2. Characterization of site soils will be limited to soils associated with the excavated area of concern.
3. Groundwater is not present within the excavation area.

Fulcrum proposes to provide professional services as outlined above on a time and materials basis as summarized in the following table. This upper amount will not be exceeded without your approval. Actual costs will be invoiced at Fulcrum's standard rates with reimbursable expenses invoiced at cost plus fifteen percent (15%).

222 NORTH 2ND STREET, SUITE A
YAKIMA, WASHINGTON 98901-2361
PHONE: (509) 574-0839 & FAX: (509) 575-8453
www.efulcrum.net

Table 1: Soil Sampling Projected Costs

Cost Type	Lower Range	Upper Range
Professional Fees		
Laboratory Costs		
Equipment/Miscellaneous		
Projected Project Range		

Following completion of onsite soil sampling and receipt of laboratory results, Fulcrum will complete a summary letter to summarize the investigation and to provide recommendations for material management.

If you have any questions, please feel free to contact me at 574-0839. If this scope of work is acceptable to you, please sign below and fax a copy to our office at 575-8453 for our records.

Sincerely,

Jeremy M. Lynn, GIT
Environmental Geologist

ACCEPTANCE OF PROPOSAL:

The above prices, specifications, and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. All work to be completed in a intended for the exclusive use of the client. Third party reliance may not be appropriate and is at the client's sole risk. Any professional manner according to standard practices of care. Work described herein is alteration or deviation from above specifications involving extra costs will be executed upon orders, and will become an extra charge over and above the estimate. Payment will be required within thirty days of receipt of statement. After 30 days, interest at the rate of 1.00% per month will be charged on the unpaid balance.

Signature _____ Date _____

Name _____ Title _____

APPENDIX B

Personnel Certificates

INTERNATIONAL CODE COUNCIL

JEREMY LYNN

The International Code Council attests that the individual named on this certificate has satisfactorily demonstrated knowledge as required by the International Code Council by successfully completing the prescribed written examination based on codes and standards then in effect, and is hereby issued this certification as:

WASHINGTON STATE SITE ASSESSMENT

given this day of February 28, 2007

Wally Bailey

President, ICC Board of Directors

Richard P. Weiland

ICC Chief Executive Officer

5296350-U7

Certificate Number

ICC

INTERNATIONAL CODE COUNCIL®

This certificate is the property of ICC and must be returned to ICC in the event of suspension or revocation of the certificate.

INTERNATIONAL CODE COUNCIL

JEREMY LYNN

The International Code Council attests that the individual named on this certificate has satisfactorily demonstrated knowledge as required by the International Code Council by successfully completing the prescribed written examination based on codes and standards then in effect, and is hereby issued this certification as:

UST DECOMMISSIONING

given this day of October 18, 2006

Wally Bailey

President, ICC Board of Directors

Rick Weiland

ICC Chief Executive Officer

5296350-U2

Certificate Number

ICC

INTERNATIONAL CODE COUNCIL®

APPENDIX C

Site Photographs

Jet A Fuel Aboveground Storage Tanks

Excavation

East Stockpile and Concrete Containment

South Stockpile and Concrete Containment

APPENDIX D

Laboratory Analytical Results

Libby Environmental, Inc.

4139 Libby Road N.E., Olympia, WA 98506-2518

June 24, 2008

Jeremy Lynn
Fulcrum Environmental Consulting, Inc.
406 North 2ND Street
Yakima, WA 98901

Dear Mr. Lynn:

Please find enclosed the analytical data report for the Noland - Dakota Project located in Yakima, Washington. Soil samples were received and analyzed for Diesel & Oil by NWTPH-Dx/Dx Extended on June 20, 2008.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed. All soil samples are reported on a dry weight basis.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
President
Libby Environmental, Inc.

Phone (360) 352-2110 * Fax (360) 352-4154 * libbyenv@aol.com

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

NOLAND DECOTO PROJECT
Yakima, WA
Fulcrum Environmental Consulting

Libby Project No.L080620-1

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Mineral Oil (mg/kg)	Oil (mg/kg)
Method Blank	6/20/2008	96.7	nd	nd	nd
61908-01	6/20/2008	90.0	nd	nd	nd
61908-02	6/20/2008	81.6	nd	nd	nd
61908-03	6/20/2008	89.4	nd	nd	nd
61908-04	6/20/2008	73.8	nd	nd	nd
61908-05	6/20/2008	77.9	nd	nd	nd
61908-06	6/20/2008	73.5	nd	nd	nd
61908-06 dup	6/20/2008	72.5	nd	nd	nd
Practical Quantitation Limit			25	40	40

Jet Fuel is part of the Diesel range.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

Libby Environmental, Inc.

Chain of Custody Record

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Client: _____

Address: _____

Phone: _____ Fax: _____

Client Project # _____

Date: _____ Page: _____ of _____

Project Manager: _____

Project Name: _____

Location: _____

Collector: _____ Date of Collection: _____

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx Ext.	PAH 8270	PCB's 8082	MTCA 5 Metals			Field Note/# Containers
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
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Relinquished by:	Date / Time	Received by	Date / Time
Relinquished by:	Date / Time	Received by	Date / Time
Relinquished by:	Date / Time	Received by	Date / Time

Sample Receipt:	
Good Condition?	
Cold?	
Seals Intact?	
Total Number of Containers	

Remarks:

TAT : 24HR 48HR 5-Day

Distribution White - Lab, Yellow - File, Pink - Originator