

**Pre-RI Soil and Groundwater Site  
Assessment, Wetland Delineation, & Interim  
Action Completion Report**

Colville Post and Pole  
Colville, Washington

for  
**Washington State Department of Ecology**

January 22, 2016



**Pre-RI Soil and Groundwater Site  
Assessment, Wetland Delineation, & Interim  
Action Completion Report**

Colville Post and Pole  
Colville, Washington

*for*

**Washington State Department of Ecology**

January 22, 2016



523 East Second Avenue  
Spokane, Washington 99202  
509.363.3125



**Pre-RI Soil and Groundwater Site Assessment,  
Wetland Delineation, & Interim Action  
Completion Report**

**Colville Post and Pole  
Colville, Washington**

**File No. 0504-098-00**

**January 22, 2016**

Prepared for:

Washington Department of Ecology  
Toxics Cleanup Program – Eastern Region Office  
4601 North Monroe Street  
Spokane, Washington 99205

Attention: Jeremy Schmidt, PE

Prepared by:

GeoEngineers, Inc.  
523 East Second Avenue  
Spokane, Washington 99202  
509.363.3125



John Haney, PE  
Environmental Engineer



Bruce Williams  
Principal

JRH:BDW:tjh

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

# Table of Contents

<b>1.0 INTRODUCTION .....</b>	<b>1</b>
<b>2.0 SITE DESCRIPTION AND BACKGROUND .....</b>	<b>1</b>
<b>3.0 SCOPE OF SERVICES .....</b>	<b>3</b>
3.1. Wetland Delineation and Assessment.....	3
3.2. Pre-RI Soil and Groundwater Assessment.....	3
3.3. Interim Action .....	4
<b>4.0 FIELD ACTIVITIES .....</b>	<b>4</b>
4.1. Wetland Delineation and Assessment.....	4
4.2. Pre-RI Soil and Groundwater Assessment.....	4
4.3. Interim Action .....	5
<b>5.0 SUBSURFACE CONDITIONS .....</b>	<b>6</b>
<b>6.0 CHEMICAL ANALYTICAL RESULTS.....</b>	<b>7</b>
6.1. Soil Chemical Analytical Results .....	7
6.2. Groundwater Chemical Analytical Results.....	7
<b>7.0 SUMMARY &amp; CONCLUSIONS .....</b>	<b>8</b>
7.1. Wetland Delineation and Assessment.....	8
7.2. Soil and Groundwater Assessment Analytical Results .....	9
7.2.1. Soil.....	9
7.2.2. Groundwater .....	9
7.3. Interim Action .....	9
<b>8.0 REFERENCES .....</b>	<b>9</b>

## LIST OF TABLES

- Table 1. Summary of Interim Action Field Activities
- Table 2. Summary of Soil Chemical Analytical Results – SVOCs
- Table 3. Summary of Soil Chemical Analytical Results – PAHs, PCP and TPH
- Table 4. Summary of Groundwater Chemical Analytical Results – SVOCs
- Table 5. Summary of Groundwater Chemical Analytical Results – PAHs, PCP and TPH

## LIST OF FIGURES

- Figure 1. Vicinity Map
- Figure 2. Site Plan
- Figure 3. Interim Action Site Plan
- Figure 4. Wetland Debris Area 1
- Figure 5. Wetland Debris Area 2
- Figure 6. Concrete Pads and Temporary Stockpile Area
- Figure 7. Cross-Section Transects
- Figure 8. Cross-Sections A-A', B-B' and C-C'
- Figure 9. Cross-Sections D-D' and E E'

## **APPENDICES**

Appendix A. Wetland Delineation and Assessment Report

Appendix B. Field Procedures and Boring Logs

Appendix C. Data Validation and Chemical Analytical Laboratory Reports

Electronic copy of Chemical Analytical Laboratory Reports on attached CD

Appendix D. Permit Correspondance

Appendix E. Disposal Documentation

Appendix F. Report Limitations and Guidelines for Use

## ACRONYMS AND ABBREVIATIONS

AST	aboveground storage tank
ASTM	ASTM International
BCI	Burton Construction Incorporated
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene and total xylenes
COC	chain of custody
CPPI	Colville Post and Pole Incorporated
DRPH	diesel-range petroleum hydrocarbons
Ecology	Washington State Department of Ecology
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ev	electron volt
GeoEngineers	GeoEngineers, Inc.
GRPH	gasoline-range petroleum hydrocarbons
GPS	global positioning system
HASP	Health and Safety Plan
IDW	investigation-derived waste
LCS	laboratory control sample
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MRL	method reporting limit
MS	matrix spike
MSD	matrix spike duplicate
MTCA	Model Toxics Control Act

NRC National Response Corporation Environmental Services Incorporated

**ACRONYMS AND ABBREVIATIONS (CONTINUED)**

NWTPH-Dx	Northwest Total Petroleum Hydrocarbon – Diesel Range
ORPH	oil-range petroleum hydrocarbons
Pace	Pace Analytical Services
PAH	polycyclic aromatic hydrocarbons
PID	photoionization detector
PCP	Pentachlorophenol
ppm	parts per million
Pre-RI	Pre-Remedial Investigation
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
RI/FS	Remedial Investigation/Feasibility Study
ROW	right-of-way
RPD	relative percent difference
SAP	Sampling and Analysis Plan
SVOC	Semi-volatile organic carbons
TPH	total petroleum hydrocarbons
USACE	United States Army Corps of Engineers
VOC	volatile organic compound

## 1.0 INTRODUCTION

This report summarizes Pre-Remedial Investigation (Pre-RI) site assessment, wetland delineation, and Interim Action field activities for the Colville Post and Pole Incorporated (CPPI) site (herein designated as the “site”) located at 396 Highway 395 North near Colville in Stevens County, Washington. The site location is provided on Vicinity Map, Figure 1. The site currently is managed by the Washington State Department of Ecology (Ecology). This Pre-RI assessment and Interim Action report has been prepared by GeoEngineers, Inc. (GeoEngineers) for Ecology under Contract Number C1100145.

The Pre-RI site assessment was conducted to support preparation of an RI work plan. One of the primary goals of the Pre-RI site assessment was to better define the top elevation contours of a previously documented clay layer underlying the site and, if possible, to identify low spots where a dense non-aqueous phase liquid (DNAPL) like pentachlorophenol (PCP) might accumulate. These potential low spots could be ongoing sources to groundwater contamination if not addressed.

Herrera Environmental Consultants, Inc. completed a wetland delineation at the site in July 2005 to support US Environmental Protection Agency (EPA) cleanup actions. However the U.S. Army Corps of Engineers (USACE) and Ecology have modified their standard protocols for conducting wetland delineations and ratings since 2005. As part of the Pre-RI site assessment, GeoEngineers updated the wetland delineation using the new protocols to support future permitting needs and developing the RI Work Plan.

The Interim Action was conducted to address conditions that could potentially harm wetland habitat at the site and to remove debris that restricted access to areas requiring assessment during the planned RI/FS field activities. The forthcoming remedial investigation/feasibility study (RI/FS) will be conducted to assess potential on-site soil and groundwater impacts that might have occurred as a result of former wood treating operations at the site.

## 2.0 SITE DESCRIPTION AND BACKGROUND

The site encompasses about 23 acres and formerly was occupied by the CPPI wood-treating facility. The site is located adjacent to and north of the Colville River, south of a BNSF Railway right-of-way (ROW) and tracks, east of a residential/agricultural property, and west of the former Bonanza Mill site (a former metals beneficiation facility). US Highway 395 is located north of the railroad ROW. The site is generally flat and vegetated with native grasses, shrubs, trees and other plants. Previous assessments by others identified wetland areas, including streams draining to the Colville River, in the central and southern portions of the site. Wetland areas likely are remnant meanders of the Colville River (Ecology and Environment, Inc., 2009). Current site features including wetland areas and boring locations are depicted on Site Plan, Figure 2.

According to assessment reports by others, the site geology consists generally of fill material underlain by silt, sand and gravel layers. A clay layer reportedly hundreds of feet thick (Herrera, 2003) has been consistently encountered between 12 to 24 feet below ground surface (bgs) and appears to be located beneath the entire site. Groundwater depths ranged from about 1 to 9 feet bgs during previous assessment and remediation activities conducted by the EPA. Groundwater flow direction reportedly is to the west-southwest beneath the site (Ecology and Environment, 2010).

CPPI and its predecessors operated a wood-treating facility at the site from the 1940s until January 2005. CPPI treated various wood products by soaking them in a solution of about 95 percent diesel fuel and

5 percent PCP and then allowing them to drip dry. Wood products were placed into dip tanks located inside a dedicated treatment building and then freshly treated wood products were placed on drip pads and excess PCP solution was allowed to drain into a sump. Diesel, PCP and recovered PCP solution were stored in separate aboveground storage tanks (ASTs) at the site.

EPA completed two phases of site evaluations and removal actions in 2002 and 2005 to characterize the nature and extent of the hazardous substances at the site. An initial investigation in 2002 indicated contamination was present at the site and EPA took environmental control of the facility in January of 2005, shortly after site wood-treating operations ceased. A removal action was conducted by EPA in 2005 and wood-treating solutions and other chemicals were removed from the site. In addition EPA installed 22 monitoring wells for the site, including 18 on-site wells and 4 located to the west and downgradient of the site.

In the fall of 2006, EPA conducted a second site assessment and removal action. During the 2006 removal action, EPA installed six product recovery wells in areas with free product in groundwater and excavated contaminated soil. EPA recovered approximately 300 gallons of free product using the recovery wells from December 2006 until October 2008, when free product could no longer be recovered using passive recovery techniques.

Excavation as part of the second removal action included off-site disposal of approximately 7,000 tons of contaminated soil. Excavation was halted due to contact with the water table and unstable ground for heavy equipment operations, although free product was still present at the bottom of the excavated area. Excavation areas were backfilled and the site was restored to its original grade. Operational areas were capped with 6 inches of topsoil and seeded as part of the second removal action.

Periodic groundwater sampling was conducted from 2005 through 2009 to monitor on- and off-site groundwater for PCP and diesel. Sampling events after 2006 included domestic wells from neighboring residential properties.

Additional assessment by the EPA after the two removal actions indicated the South Stockpile Area exceeded cleanup levels for PCP and dioxins/furans, the North Stockpile Area exceeded cleanup levels for dioxin/furans and groundwater contained a plume of PCP and diesel contamination underneath the site. Because of the contamination remaining on-site, EPA proposed an Environmental Covenant for the site in June 2009 restricting operations at the site and allowing Ecology the right to enter the site to monitor the Removal Action.

After groundwater assessment results following the removal action documented that the plume had stabilized (Lockheed Martin Technology Services, 2008) and that contaminant concentrations were declining (Ecology and Environment, 2010), EPA decided to conclude the groundwater assessment program and decommissioned the site monitoring and recovery wells in November 2010.

During a site reconnaissance conducted April 25, 2014, GeoEngineers and Ecology observed debris scattered throughout the site (including within ponded surface water in wetland areas) as well as several large debris stockpiles. Debris piles generally consisted of treated and un-treated wood waste, scrap metal, concrete (including foundations that appeared to formerly support ASTs), tires, vehicle maintenance waste and general solid waste. Treated lumber was observed near and in surface water in multiple locations. A large wood waste pile was observed approximately in the center of the property (Figure 2).

### 3.0 SCOPE OF SERVICES

GeoEngineers conducted the following activities in support of this project:

- Wetland Delineation and Assessment
- Pre-RI Soil and Groundwater Assessment
- Interim Action

A site work plan was prepared, which included a Sampling and Analysis Plan (SAP), Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP). The SAP, QAPP and HASP were used to guide field activities during the work completed under each of the three scope items. The following sections provide additional detail on activities completed for each scope item.

#### 3.1. Wetland Delineation and Assessment

GeoEngineers conducted a wetland delineation and assessment in order to characterize existing wetlands at the site and assist with potential future permitting related to additional field investigations and the Interim Action. The wetland delineation and assessment consisted of:

- A literature review of reference materials pertinent to the site;
- A site visit to assess conditions and delineate the site wetlands; and
- Preparing a report documenting the wetland delineation and assessment.

Results of the wetland assessment and delineation are provided in Appendix A, Wetland Delineation and Assessment report. As a result of the wetland assessment, permits for were not required by the USACE or from Ecology for debris removal in the wetlands. Documentation from USACE and Ecology is found in Appendix D, Permit Correspondence.

#### 3.2. Pre-RI Soil and Groundwater Assessment

A limited soil and groundwater assessment was conducted at the CPPI site to obtain preliminary data to focus the scope of the RI. Soil and groundwater assessment services included:

- Notifying the Call-Before-You-Dig utility notification service before beginning drilling activities;
- Subcontracting Environmental West to drill the direct-push soil borings at the site;
- Advancing 37 direct-push borings (DP-1 through DP-36, including an extra boring at the DP-2 location);
- Collecting continuous soil samples during direct-push drilling. Select sub-samples were field-screened using visual observations, water sheen, and headspace vapor measurements with a photoionization detector (PID) to assess possible presence of petroleum-related contaminants;
- Observing and documenting subsurface soil conditions for each boring;
- Collecting grab water samples from temporary wells installed in nine borings;
- Backfilling exploratory boreholes with bentonite;
- Submitting 59 soil samples and 10 groundwater samples to Pace Analytical (Pace) of Minneapolis, Minnesota for chemical analysis; and



- Preparing investigation-derived waste (IDW) for disposal.

### **3.3. Interim Action**

The Interim Action was conducted to reduce immediate contamination sources to surface water and provide safe and unrestricted access for future actions associated with the RI/FS. Treated lumber and other debris in and adjacent to the delineated wetland were removed, consolidated into stockpiles and partially disposed offsite. As part of the interim action GeoEngineers conducted the following:

- Assisted Ecology with permitting requirements to conduct the Interim Action, including discussions with the Army Corps of Engineers and a determination that a Section 10 Department of the Army (DA) permit was not required to conduct the interim action.
- Observed Burton Construction Incorporated's (BCI) subcontractor, National Response Corporation Environmental Services Incorporated (NRC), remove debris from in and around surface water. Material was also relocated to improve site access for anticipated RI field activities. NRC consolidated debris into the North Stockpile Area and segregated waste into individual stockpiles based upon the material type (treated lumber, untreated lumber, concrete and solid waste [metal and plastic]). GeoEngineers assisted NRC with identifying and segregating the debris based on its likely future disposal requirements.

## **4.0 FIELD ACTIVITIES**

This section describes field activities conducted for the wetland delineation, soil and groundwater assessment and Interim Action.

### **4.1. Wetland Delineation and Assessment**

GeoEngineers mobilized to the site on March 16, 2015, to conduct wetland delineation/rating assessment services within the project boundary. Two GeoEngineers field staff walked the project boundary and excavated eight shallow test pits to depths of 12 to 17 inches using hand tools. Observations relative to soil, vegetation and hydrology were documented in each test pit to assist with the wetland delineation. GeoEngineers also assessed the vegetative cover near each test pit and estimated the relative abundance of hydrophytic species. Results of the assessment were used to delineate the boundaries of the two distinct wetlands at the site and to assist with future construction permitting needs. The detailed Wetland Delineation and Assessment Report is found in Appendix A.

### **4.2. Pre-RI Soil and Groundwater Assessment**

On March 16, 2015, Environmental West and GeoEngineers mobilized to the site and attempted to advance seven direct-push borings, but borings would not remain open for accurate discrete sampling as a result of sloughing. Environmental West was successful in advancing boring DP-2a using a discrete soil sampler but the drilling method took additional time and drilling was suspended until more appropriate drilling equipment was available. On May 11, 2015, Environmental West and GeoEngineers returned to the site with a direct push drill equipped with cased sampling tooling and advanced 36 borings (DP-1 through DP-36) between May 11 and May 15, 2015. In general, GeoEngineers followed the process below during the drilling program:

Advanced soil borings were drilled at the site to depths ranging from 1 to 26 feet bgs at the approximate locations shown on Figure 2. Additional details on the borings are summarized by the following:

- DP-1 through DP-8 were advanced to assess conditions along the west property boundary;
- DP-9 through DP-25 were advanced in the area North of Wetland A to assess conditions near the former process area;
- DP-26 through DP-30 were advanced to assess the existing wood debris pile south and southwest of the former process area; and
- DP-31 through DP-36 were step-out borings drilled east of DP-24 to assess the extent of petroleum contamination visually observed in DP-24.

Soil samples from each boring were field-screened for petroleum contamination by visual examination. Headspace vapor monitoring with a PID and water-sheen testing was conducted if petroleum contamination was visible. Field screening did not indicate petroleum contamination for the borings advanced, except for DP-24 and DP-33. Field screening procedures and boring logs are provided in Appendix B. One soil sample was collected every 4 feet and placed in laboratory supplied containers for potential chemical analysis. Soil samples were placed into coolers containing ice and then shipped to Pace under chain of custody for chemical analysis.

GeoEngineers installed temporary wells screens in nine borings (DP-1, DP-4, DP-7, DP-13, DP-15, DP-17, DP-20, DP-24 and DP-26) and collected grab groundwater samples which were submitted to Pace for analysis. A duplicate sample (DP-Duplicate) was collected from boring DP-24. Groundwater sampling locations are depicted on Figure 2. Groundwater was sampled by lowering polyethylene tubing into the temporary well and using a peristaltic pump to purge groundwater from the well until water quality parameters stabilized or after 45 minutes of purging had elapsed, whichever occurred earlier. Water was routed through a water quality meter and flow-through cell during well purging and then the flow-through cell was disconnected before the water sample was collected for chemical analysis. Groundwater samples were placed into coolers containing ice and then shipped to Pace under chain of custody procedures for chemical analysis.

Upon termination of drilling or after groundwater samples were collected, borings were backfilled with bentonite chips. Soil cuttings from the borings were drummed, labeled and placed near the entrance of the site. Composite soil samples were obtained from the soil drums for profiling purposes. Investigation-derived waste (IDW) will be disposed during future RI activities.

### **4.3. Interim Action**

Between September 21 through 24, 2015, NRC removed wood and waste debris from the wetland areas using a Caterpillar 312 and 320 track mounted excavator and assistance from laborers. The 312 excavator was used on September 21, 2015, and was replaced by the 320 excavator the following day in favor of a longer reach. NRC did not enter the larger wetland areas with the excavator, but did track over the small wetland area on the west end of the site for access; care was taken to limit surface disturbance while traversing the wetland. NRC's laborers gathered debris from the wetland areas by hand and constructed temporary stockpiles that were accessible to the excavator. Debris was removed from the former treated wood storage, former south stockpile, and the access to the south stockpile areas. Debris encountered generally consisted of solid waste (metal, plastic), treated wood and untreated wood. Debris was

encountered throughout the site, including wetland areas. The majority of debris in Wetland A was observed in two areas referred to as “Wetland Debris Area 1” and Wetland Debris Area 2,” as shown on Interim Action Site Plan, Figure 3. Photographic documentation of Wetland Debris Areas 1 and 2 pre- and post-debris removal are presented in Figures 4 and 5.

The excavator was used to transfer debris material to the lined stockpile area in the northern portion of the site as shown on Figure 3 and Concrete Pads and Temporary Stockpiles, Figure 6. NRC created eight stockpiles (A through H). Stockpiles were constructed on top of 10-mil and 20-mil plastic approximately 40 feet by 50 feet in size with 20-foot pathways between each stockpile to provide future access during the RI. Stockpiles were then covered with 20-mil string reinforced plastic sheeting to protect against contaminant migration.

Between September 22 and 24, 2015, NRC used the excavator to flip over four concrete pads in the area south of the Temporary Stockpile Area and three concrete pads in the South Stockpile Area. Approximate locations of the concrete pads are shown in Figure 3 and Figure 6. Concrete pads were flipped over to allow access for sampling soil beneath the pads during the RI. Surface soils beneath the pads did not display obvious signs of petroleum contamination such as staining or hydrocarbon odors.

On September 29, 2015, NRC consolidated solid waste (metal and plastic) from the stockpiles and hauled the waste to the Stevens County Landfill. Most of the solid waste material was contained in stockpiles B, E and H. NRC hauled approximately 46.86 tons of waste in nine loads to the Stevens County Landfill using a haul truck and pup trailer. Solid waste disposal documentation is found in Appendix E. Stockpiles A, C, D, F and G remain on Site.

A summary of activities completed during the Interim Action is provided in Summary of Interim Action Field Activities, Table 1.

## **5.0 SUBSURFACE CONDITIONS**

Soil encountered in the borings was classified in the field in general accordance with ASTM International (ASTM) D 2488, the Standard Practice for Classification of Soils, Visual-Manual Procedure. Soil conditions generally consisted of a brown silt with trace of fine to medium sands underlain by gray fine to medium or coarse sands with traces of gravels. Sands were generally underlain by a gray clay layer from 12 to 24 feet bgs to the bottom of each boring, except DP-27 with terminated in sand at 26 feet bgs. Environmental West encountered shallow refusal in borings DP-14 and DP-16 with no sample recovery. Groundwater was encountered at depths ranging from about 2 to 8 feet bgs.

GeoEngineers used boring location information and boring log data to model the subsurface of the site using Global Information System (GIS) software. Using the model we generated cross-sections of the subsurface along transects A-A', B-B', C-C', D-D', and E-E' shown on Cross-Section Transects, Figure 7. The cross sections are presented in Cross-Sections A-A', B-B' and C-C', Figure 8 and Cross-Sections D-D' and E-E', Figure 9. In general, most of the cross-sections depict geologic layers typical of an alluvial depositional environment and most borings intercepted the clay layer previously described.

## 6.0 CHEMICAL ANALYTICAL RESULTS

### 6.1. Soil Chemical Analytical Results

Soil samples from DP-2a advanced on March 16, 2015, were received by Pace on March 18, 2015. Soil samples from direct-push borings advanced on May 11 through May 15, 2015, were received by Pace on May 20, 2015. Soil samples were kept in iced coolers between sampling and shipment to the analytical laboratory. Soil samples from the direct push soil borings were submitted for the following chemical analyses:

- Diesel-range and oil-range petroleum hydrocarbons (DRPH and ORPH, respectively ) (NWTPH-Dx);
- Semi-volatile organic compounds (SVOCs) (EPA 8270D);
- Polycyclic aromatic hydrocarbons (PAHs) (EPA 8270 SIM); and
- Samples from DP-24, DP-35 and DP-36 were additionally analyzed by gasoline-range petroleum hydrocarbons (GRPH) by the Northwest Method (NWTPH-Gx) based on field screening results.

Chemical analytical results are summarized and compared to Model Toxics Control Act (MTCA) Method A and/or Method B cleanup levels in Summary of Chemical Analytical Results – SVOCs, Table 2 and Summary of Soil Chemical Analytical Results – PAHs, PCP and TPH, Table 3. Soil chemical analytical results are generally summarized by the following:

- GRPH were detected in the sample collected from DP-35 from 8 to 9 feet bgs at a concentration less than the MTCA Method A cleanup level of 100 milligrams per kilogram (mg/kg).
- DRPH were detected at concentrations less than the MTCA Method A cleanup level of 2,000 mg/kg in samples collected from DP-35 and DP-36 between 8 and 9 feet bgs.
- ORPH were detected at a concentration less than the MTCA Method A cleanup level of 2,000 mg/kg in samples collected from DP-27 between 24 and 24 ½ feet bgs and DP-35 between 8 and 9 feet bgs.
- PAHs were detected at concentrations less than MTCA Method A and MTCA Method B cleanup levels in the sample collected DP-35 between 8 and 9 feet bgs.
- PCP was detected at a concentration less than MTCA Method B cleanup level of 2,500 mg/kg in the sample collected DP-35 between 8 and 9 feet bgs.

The remaining analytes were not detected. Laboratory analytical reports are included in Appendix C.

### 6.2. Groundwater Chemical Analytical Results.

Groundwater was sampled from DP-1, DP-4, DP-7, DP-13, DP-15, DP-17, DP-20, DP-24, and DP-26. Groundwater samples were collected between May 11 and May 13, 2015, and received by Pace on May 15, 2015. Groundwater samples were analyzed for:

- DRPH and ORPH (NWTPH-Dx);
- PAHs (EPA 8270 SIM);
- SVOCs (EPA 8270 D); and/or
- Benzene, toluene, ethylbenzene and xylenes (BTEX) (EPA 8260B).

Chemical analytical results are summarized and compared to MTCA Method B cleanup levels in Summary of Groundwater Chemical Analytical Results – SVOCs, Table 4, and MTCA Method A and B cleanup levels in Summary of Groundwater Chemical Analytical Results – PAHs, PCP and TPH, Table 5. Groundwater chemical analytical results are generally summarized by the following:

- PAHs were detected at concentrations less than the MTCA Method B cleanup levels in the samples collected from borings DP-15, DP-20, and DP-24 (including the field duplicate from DP-24). (Note: some of the values for the sample analyzed from DP-24 and the duplicate from DP-24 are estimated.)
- PCP was detected at concentrations greater than the MTCA Method B cleanup level of 0.219 micrograms per liter in samples from DP-4, DP-15, DP-17, DP-20, DP-24 and DP-Duplicate (DP-24). (Note: the reported concentrations for the samples collected from DP-4 and DP-17 were estimated values because the samples were analyzed outside of the method holding time.)
- DRPH was detected in samples from DP-4, DP-15, DP-17, DP-20, DP-24 and DP-Duplicate (DP-24). Samples from DP-15, DP-20 and DP-24 contained DRPH at concentrations greater than the MTCA Method A cleanup criteria for unrestricted land use of 0.5 milligrams per liter (mg/L). (Note: the reported concentrations for the sample collected from DP-24 [and the duplicate sample from DP-24] were estimated values because the relative percent difference in the results of the sample pair exceeded the screening criteria [see the data validation discussion in Appendix C].)
- ORPH was detected at a concentration less than the MTCA Method B cleanup level of 0.5 mg/L in the sample analyzed from DP-15.

Additional samples and chemical constituents analyzed were either not detected or detected at concentrations less than MTCA Method A and MTCA Method B cleanup levels. Laboratory analytical results are included in Appendix C. Results of the grab groundwater analyses are depicted graphically on Figure 2.

## **7.0 SUMMARY AND CONCLUSIONS**

Pre-RI soil and groundwater assessment activities were conducted March 16, and May 11 to 15, 2015 at the Colville Post and Pole site located at 396 Highway 395 North near Colville in Stevens County, Washington. Thirty-seven soil borings were advanced using direct push drilling methods to depths of 1 to 36 feet. Groundwater samples were collected from temporary well points installed in nine borings.

### **7.1. Wetland Delineation and Assessment**

GeoEngineers identified, delineated and assessed two wetlands, Wetland A and Wetland B, within the project site boundary. Wetland A was classified as a palustrine emergent/scrub-shrub/forested Category II wetland approximately 212,140 square feet (4.9 acres). Wetland B was classified as a palustrine emergent Category III wetland approximately 4,880 square feet (0.1 acres).

Based on the information obtained from field observations, literature review, historical documentation, previous reports and regulation requirements/definitions outlined above, GeoEngineers' concludes that Wetland A and B, as delineated in Figure 2, are considered jurisdictional wetlands. Our Wetland Delineation and Assessment report is included in Appendix A.

## **7.2. Soil and Groundwater Assessment Analytical Results**

### **7.2.1. Soil**

Field screening indicated that petroleum contamination might have been present in soils from the DP-24 boring. Step out borings (DP-31 through DP-36) were performed to identify the southeast extent of the contamination indicated by field screening from DP-24.

Analytical results indicated DRPH contamination was not present in DP-24, however DRPH was detected in step out borings DP-35 and DP-36 at concentrations less than the MTCA Method A cleanup level for unrestricted land use. DRPH also were detected at concentrations less than the MTCA Method A cleanup level in boring DP-27 around 24 feet bgs. Volatile organic compounds (VOCs) and PAHs either were not detected or detected at concentrations less than MTCA Method A and Method B cleanup levels in soil samples from the remaining borings.

### **7.2.2. Groundwater**

PCP was detected in groundwater samples from DP-4, DP-15, DP-17, DP-20 and DP-24 at concentrations greater than MTCA Method B cleanup levels. DRPH was detected in the same five groundwater samples and the samples from DP-15, DP-20 and DP-24 contained concentrations of DRPH greater than MTCA Method A cleanup levels. Based on the analytical results from grab groundwater samples it appears that there is a DRPH/PCP groundwater contaminant plume running between DP-24 and DP-4 (see Figure 2). It is possible that the groundwater contaminant plume extends east of DP-24 and likely extends off-property to the west (west of DP-4).

## **7.3. Interim Action**

An Interim Action (IA) was completed at the CPPI property to remove waste from the existing wetlands and consolidate them into temporary stockpiles at the site. Waste materials consolidated on site were placed on top of plastic and into one of eight stockpiles. Material from some of the stockpiles was hauled off site and disposed of at the Stevens County Landfill. Additional IA activities included relocating concrete pads to accommodate additional sampling efforts during the RI.

## **8.0 REFERENCES**

Ecology and Environment, Inc. 2009. "Removal Action Report, Colville Post and Poles Site, Colville, Washington." September 29, 2009.

Ecology and Environment, Inc. 2010. "Colville Post and Poles Site, Results of Groundwater Monitoring, June 2008, March 2009, and August 2009." May 21, 2010.

GeoEngineers, Inc. 2014. "Interim Action Sampling and Analysis Plan." GEI File No. 0504-098-00. September 23, 2014.

Herrera Environmental Consultants. 2003. "Removal Site Evaluation, Colville Post & Pole, Colville, Washington." June 5, 2003.

Lockheed Martin Technology Services. 2008. "Executive summary of Flow and Transport Models for the Colville Post and Pole Site, Colville, Washington," August 27, 2008.

United States Environmental Protection Agency (EPA). 2006. "Combined Phase II Removal and \$2 Million Exemption Request Special Circumstances Action Memorandum to conduct a Time Critical Removal Action at the Colville Post and Poles Site, Colville, Stevens County, Washington." September 11, 2006.

**Table 1**  
**Summary of Interim Action Field Activities**  
**Colville Post and Pole**  
**Colville, Washington**

Date	Time On-site	Contractors/Consultants On-site	Equipment On-site	Summary of Daily Activities
September 21, 2015	1000-1700	BCI, NRC, GeoEngineers	CAT 312E excavator, 10-yard dump truck, Ford F450 truck	Conducted a site safety meeting followed by a site walk to orient workers to key features of the property and tasks to be completed. Staged three laydown areas with 10-mil plastic sheeting for temporary stockpiles. Began removing debris from Wetland Debris Area 1 (see Figure 3) using excavator and manual labor. Removed debris is loaded into the 10-yard dump truck and transported to the Temporary Stockpile Area.
September 22, 2015	0700-1700	NRC, GeoEngineers	CAT 312E excavator, CAT 320D extended-arm excavator, 10-yard dump truck, Ford F450 truck	Removed debris from Wetland Debris Area 1 and surrounding upland areas using CAT 312E excavator. Removed debris is loaded into the 10-yard dump truck and transported to the Temporary Stockpile Area. CAT 320D excavator delivered to replace CAT 312E. Debris along fence line and in Former Treated Wood Storage Area is removed by hand and transported by F450 to the Temporary Stockpile Area. A fourth laydown area is constructed with 10-mil plastic sheeting for temporary stockpile. NRC uses excavator to overturn concrete pads south of Temporary Stockpile Area. Ecology Representatives visit site.
September 23, 2015	0650-1700	NRC, GeoEngineers	CAT 320D extended-arm excavator, 10-yard dump truck	NRC lines two more laydown areas for temporary stockpiles with 20-mil plastic sheeting. NRC removes debris from Wetland Debris Area 2 and surrounding upland areas (see Figure 3). Workers manually remove debris from Wetland A areas inaccessible to the excavator and stockpile the debris in upland areas for the excavator to pick up. Removed debris is loaded into the 10-yard dump truck and transported to the Temporary Stockpile Area. By the end of the day Wetland A generally is clear of debris.
September 24, 2015	0700-1715	NRC, GeoEngineers	CAT 320D extended-arm excavator, 10-yard dump truck	NRC lines two more laydown areas for temporary stockpiles with 20-mil plastic sheeting. NRC removes debris from the South Stockpile Area and upland areas on the east and west portions of the site (see Figure 3). Removed debris is loaded into the 10-yard dump truck and transported to the Temporary Stockpile Area. Ecology and additional GeoEngineers representatives visit site. NRC uses the excavator to remove small concrete pads from the South Stockpile Area. NRC removes 5-gallon containers of used oil from the west boundary of the site, drums, and labels the waste.



**Table 2**  
**Summary of Soil Chemical Analytical Results - SVOCs<sup>1</sup>**  
 Colville Post and Pole  
 Colville, Washington

Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-1 (12-13) 5/11/2015 12-13 ft	DP-2a (1-2) 3/16/2015 1-2 ft	DP-2a (15-16) 3/16/2015 15-16 ft	DP-2 (12-12.5) 5/11/2015 12-12.5 ft	DP-2 (12.5-13.5) 5/11/2015 12.5-13.5 ft	DP-3 (12-13) 5/11/2015 12-13 ft	DP-3 (13-14) 5/11/2015 13-14 ft	DP-4 (16-16.5) 5/11/2015 16-16.5 ft	DP-4 (16.5-17.5) 5/11/2015 16.5-17.5 ft	DP-5 (16-16.5) 5/11/2015 16-16.5 ft
<b>Semi-volatile Organic Compounds<sup>2</sup> (µg/kg)</b>											
1,2,4-Trichlorobenzene	34,500	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	7,200,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
1,2-Diphenylhydrazine	1,250	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
1,3-Dichlorobenzene (m-Dichlorobenzene)	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
1,4-Dichlorobenzene (p-Dichlorobenzene)	185,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
2,2'-Oxybis[1-chloropropane]	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
2,4,5-Trichlorophenol	8,000,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
2,4,6-Trichlorophenol	90,900	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
2,4-Dichlorophenol	240,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
2,4-Dimethylphenol	1,600,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
2,4-Dinitrophenol	160,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
2,4-Dinitrotoluene	3,230	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
2,6-Dinitrotoluene	667	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
2-Chloronaphthalene	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
2-Chlorophenol	400,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
2-Nitroaniline	800,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
2-Nitrophenol	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
3 & 4 Methylphenol	NE	843 U	895 U	789 U	738 U	940 U	722 U	961 U	742 UJ	1040 U	942 U
3,3'-Dichlorobenzidine	2,220	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
3-Nitroaniline	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
4,6-Dinitro-2-Methylphenol	NE	2,170 U	2,300 U	2,030 U	1,900 U	2,420 U	1,860 U	2,470 U	1,910 UJ	2,670 U	2,430 U
4-Bromophenyl phenyl ether	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
4-Chloro-3-Methylphenol	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
4-Chloroaniline	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
4-Chlorophenyl-Phenylether	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
4-Nitroaniline	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
4-Nitrophenol (p-Nitrophenol)	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
Bis(2-Chloroethoxy)Methane	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Bis(2-Chloroethyl)Ether	909	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Bis(2-Ethylhexyl) Phthalate	71,400	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Butyl benzyl Phthalate	526,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Carbazole	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Dibenzofuran	80,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Dibutyl Phthalate	8,000,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Diethyl Phthalate	64,000,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U

Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-1 (12-13) 5/11/2015 12-13 ft	DP-2a (1-2) 3/16/2015 1-2 ft	DP-2a (15-16) 3/16/2015 15-16 ft	DP-2 (12-12.5) 5/11/2015 12-12.5 ft	DP-2 (12.5-13.5) 5/11/2015 12.5-13.5 ft	DP-3 (12-13) 5/11/2015 12-13 ft	DP-3 (13-14) 5/11/2015 13-14 ft	DP-4 (16-16.5) 5/11/2015 16-16.5 ft	DP-4 (16.5-17.5) 5/11/2015 16.5-17.5 ft	DP-5 (16-16.5) 5/11/2015 16-16.5 ft
Dimethyl Phthalate	NE	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Di-N-Octyl Phthalate	800,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Hexachlorobenzene	625	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Hexachlorobutadiene	12,800	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Hexachloroethane	25,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Isophorone	1,050,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
Nitrobenzene	160,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
N-Nitrosodimethylamine	19.6 <sup>3</sup>	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
N-Nitrosodi-n-propylamine	143 <sup>3</sup>	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
N-Nitrosodiphenylamine (as diphenylamine)	204,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 UJ	471 U
o-Cresol (2-methylphenol)	4,000,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U
Phenol	24,000,000	422 U	447 U	394 U	369 U	470 U	361 U	480 U	371 UJ	518 U	471 U

Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-5 (16.5-17) 5/11/2015 16.5-17 ft	DP-6 (12-13) 5/11/2015 12-13 ft	DP-6 (13-14) 5/12/2015 13-14 ft	DP-7 (12.5-13.5) 5/12/2015 12.5-13.5 ft	DP-7 (13.5-14.5) 5/12/2015 13.5-14.5 ft	DP-8 (20-20.5) 5/12/2015 20-20.5 ft	DP-8 (20.5-21) 5/12/2015 20.5-21 ft	DP-9 (12.5-13.5) 5/14/2015 12.5-13.5 ft	DP-9 (13.5-14.5) 5/14/2015 13.5-14.5 ft	DP-10 (12-12.5) 5/14/2015 12-12.5 ft	DP-10 (12.5-13) 5/14/2015 12.5-13 ft
<b>Semi-volatile Organic Compounds<sup>2</sup> (µg/kg)</b>												
1,2,4-Trichlorobenzene	34,500	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	7,200,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
1,2-Diphenylhydrazine	1,250	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
1,3-Dichlorobenzene (m-Dichlorobenzene)	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
1,4-Dichlorobenzene (p-Dichlorobenzene)	185,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
2,2'-Oxybis[1-chloropropane]	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
2,4,5-Trichlorophenol	8,000,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
2,4,6-Trichlorophenol	90,900	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
2,4-Dichlorophenol	240,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
2,4-Dimethylphenol	1,600,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
2,4-Dinitrophenol	160,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
2,4-Dinitrotoluene	3,230	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
2,6-Dinitrotoluene	667	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
2-Chloronaphthalene	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
2-Chlorophenol	400,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
2-Nitroaniline	800,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
2-Nitrophenol	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
3 & 4 Methylphenol	NE	998 U	963 U	915 U	741 U	904 U	835 U	895 U	705 U	884 U	909 U	1030 U
3,3'-Dichlorobenzidine	2,220	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
3-Nitroaniline	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
4,6-Dinitro-2-Methylphenol	NE	2,570 U	2,480 U	2,360 U	1,910 U	2,330 U	2,150 U	2,300 U	1,820 U	2,280 U	2,340 U	2,660 U
4-Bromophenyl phenyl ether	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
4-Chloro-3-Methylphenol	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
4-Chloroaniline	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
4-Chlorophenyl-Phenylether	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
4-Nitroaniline	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
4-Nitrophenol (p-Nitrophenol)	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
Bis(2-Chloroethoxy)Methane	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Bis(2-Chloroethyl)Ether	909	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Bis(2-Ethylhexyl) Phthalate	71,400	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Butyl benzyl Phthalate	526,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Carbazole	NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Dibenzofuran	80,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Dibutyl Phthalate	8,000,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Diethyl Phthalate	64,000,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U

Sample ID	Date Collected	MTCA Method B Sample Depth CUL (µg/kg)	DP-5 (16.5-17) 5/11/2015 16.5-17 ft	DP-6 (12-13) 5/11/2015 12-13 ft	DP-6 (13-14) 5/12/2015 13-14 ft	DP-7 (12.5-13.5) 5/12/2015 12.5-13.5 ft	DP-7 (13.5-14.5) 5/12/2015 13.5-14.5 ft	DP-8 (20-20.5) 5/12/2015 20-20.5 ft	DP-8 (20.5-21) 5/12/2015 20.5-21 ft	DP-9 (12.5-13.5) 5/14/2015 12.5-13.5 ft	DP-9 (13.5-14.5) 5/14/2015 13.5-14.5 ft	DP-10 (12-12.5) 5/14/2015 12-12.5 ft	DP-10 (12.5-13) 5/14/2015 12.5-13 ft
Dimethyl Phthalate		NE	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Di-N-Octyl Phthalate		800,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Hexachlorobenzene		625	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Hexachlorobutadiene		12,800	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Hexachloroethane		25,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Isophorone		1,050,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
Nitrobenzene		160,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
N-Nitrosodimethylamine		19.6 <sup>3</sup>	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
N-Nitrosodi-n-propylamine		143 <sup>3</sup>	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
N-Nitrosodiphenylamine (as diphenylamine)		204,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 UJ	517 U
o-Cresol (2-methylphenol)		4,000,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U
Phenol		24,000,000	499 U	481 U	457 U	370 U	452 U	418 U	447 U	353 U	442 U	455 U	517 U

Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-11 (12.5-13.5) 5/12/2015 12.5-13.5 ft	DP-11 (13.5-14.5) 5/12/2015 13.5-14.5 ft	DP-12 (12-12.5) 5/14/2015 12-12.5 ft	DP-12 (16-17) 5/14/2015 16-17 ft	DP-13 (12-13) 5/12/2015 12-13 ft	DP-13 (13-14) 5/12/2015 13-14 ft	DP-15 (12-13) 5/13/2015 12-13 ft	DP-15 (13-14) 5/13/2015 13-14 ft	DP-17 (16-16.5) 5/12/2015 16-16.5 ft	DP-17 (16.5-17.5) 5/12/2015 16.5-17.5 ft	DP-18 (16-17) 5/14/2015 16-17 ft
<b>Semi-volatile Organic Compounds<sup>2</sup> (µg/kg)</b>												
1,2,4-Trichlorobenzene	34,500	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	7,200,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
1,2-Diphenylhydrazine	1,250	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
1,3-Dichlorobenzene (m-Dichlorobenzene)	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
1,4-Dichlorobenzene (p-Dichlorobenzene)	185,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
2,2'-Oxybis[1-chloropropane]	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
2,4,5-Trichlorophenol	8,000,000	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
2,4,6-Trichlorophenol	90,900	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
2,4-Dichlorophenol	240,000	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
2,4-Dimethylphenol	1,600,000	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
2,4-Dinitrophenol	160,000	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
2,4-Dinitrotoluene	3,230	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
2,6-Dinitrotoluene	667	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
2-Chloronaphthalene	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
2-Chlorophenol	400,000	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
2-Nitroaniline	800,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
2-Nitrophenol	NE	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
3 & 4 Methylphenol	NE	709 U	1090 U	745 U	905 U	726 U	980 UJ	728 U	972 UJ	997 U	798 U	710 U
3,3'-Dichlorobenzidine	2,220	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
3-Nitroaniline	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
4,6-Dinitro-2-Methylphenol	NE	1,830 U	2,810 U	1,920 U	2,330 U	1,870 U	2,520 UJ	1,880 U	2,500 UJ	2,570 U	2,050 U	1,830 U
4-Bromophenyl phenyl ether	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
4-Chloro-3-Methylphenol	NE	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
4-Chloroaniline	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
4-Chlorophenyl-Phenylether	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
4-Nitroaniline	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
4-Nitrophenol (p-Nitrophenol)	NE	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
Bis(2-Chloroethoxy)Methane	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Bis(2-Chloroethyl)Ether	909	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Bis(2-Ethylhexyl) Phthalate	71,400	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Butyl benzyl Phthalate	526,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Carbazole	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Dibenzofuran	80,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Dibutyl Phthalate	8,000,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Diethyl Phthalate	64,000,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U

Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-11 (12.5-13.5)	DP-11 (13.5-14.5)	DP-12 (12-12.5)	DP-12 (16-17)	DP-13 (12-13)	DP-13 (13-14)	DP-15 (12-13)	DP-15 (13-14)	DP-17 (16-16.5)	DP-17 (16.5-17.5)	DP-18 (16-17)
		5/12/2015 12.5-13.5 ft	5/12/2015 13.5-14.5 ft	5/14/2015 12-12.5 ft	5/14/2015 16-17 ft	5/12/2015 12-13 ft	5/12/2015 13-14 ft	5/13/2015 12-13 ft	5/13/2015 13-14 ft	5/12/2015 16-16.5 ft	5/12/2015 16.5-17.5 ft	5/14/2015 16-17 ft
Dimethyl Phthalate	NE	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Di-N-Octyl Phthalate	800,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Hexachlorobenzene	625	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Hexachlorobutadiene	12,800	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Hexachloroethane	25,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Isophorone	1,050,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
Nitrobenzene	160,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
N-Nitrosodimethylamine	19.6 <sup>3</sup>	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
N-Nitrosodi-n-propylamine	143 <sup>3</sup>	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
N-Nitrosodiphenylamine (as diphenylamine)	204,000	355 U	546 U	373 U	453 UJ	363 U	490 UJ	364 U	486 UJ	499 U	399 UJ	355 U
o-Cresol (2-methylphenol)	4,000,000	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U
Phenol	24,000,000	355 U	546 U	373 U	453 U	363 U	490 UJ	364 U	486 UJ	499 U	399 U	355 U

Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-18 (17-17.5) 5/14/2015 17-17.5 ft	DP-19 (24-24.5) 5/15/2015 24-24.5 ft	DP-19 (24.5-25) 5/15/2015 24.5-25 ft	DP-20 (24-24.5) 5/13/2015 24-24.5 ft	DP-20 (24.5-25.5) 5/13/2015 24.5-25.5 ft	DP-21 (13-14) 5/15/2015 13-14 ft	DP-21 (14-15) 5/15/2015 14-15 ft	DP-22 (20-20.5) 5/15/2015 20-20.5 ft	DP-22 (24-25) 5/15/2015 24-25 ft	DP-23 (16-16.5) 5/15/2015 16-16.5 ft
<b>Semi-volatile Organic Compounds<sup>2</sup> (µg/kg)</b>											
1,2,4-Trichlorobenzene	34,500	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	7,200,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
1,2-Diphenylhydrazine	1,250	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
1,3-Dichlorobenzene (m-Dichlorobenzene)	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
1,4-Dichlorobenzene (p-Dichlorobenzene)	185,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
2,2'-Oxybis[1-chloropropane]	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
2,4,5-Trichlorophenol	8,000,000	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U
2,4,6-Trichlorophenol	90,900	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U
2,4-Dichlorophenol	240,000	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U
2,4-Dimethylphenol	1,600,000	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U
2,4-Dinitrophenol	160,000	481 U	376 UJ	484 UJ	483 U	492 U	353 UJ	447 UJ	363 UJ	473 UJ	373 UJ
2,4-Dinitrotoluene	3,230	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
2,6-Dinitrotoluene	667	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
2-Chloronaphthalene	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
2-Chlorophenol	400,000	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U
2-Nitroaniline	800,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
2-Nitrophenol	NE	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U
3 & 4 Methylphenol	NE	962 U	753 UJ	969 UJ	966 U	984 U	706 U	894 UJ	727 U	946 U	745 U
3,3'-Dichlorobenzidine	2,220	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
3-Nitroaniline	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
4,6-Dinitro-2-Methylphenol	NE	2,480 U	1,940 UJ	2,500 UJ	2,490 U	2,540 U	1,820 UJ	2,300 UJ	1,870 UJ	2,440 UJ	1,920 UJ
4-Bromophenyl phenyl ether	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
4-Chloro-3-Methylphenol	NE	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U
4-Chloroaniline	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
4-Chlorophenyl-Phenylether	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
4-Nitroaniline	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
4-Nitrophenol (p-Nitrophenol)	NE	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U
Bis(2-Chloroethoxy)Methane	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Bis(2-Chloroethyl)Ether	909	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Bis(2-Ethylhexyl) Phthalate	71,400	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Butyl benzyl Phthalate	526,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Carbazole	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Dibenzofuran	80,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Dibutyl Phthalate	8,000,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Diethyl Phthalate	64,000,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U

Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-18 (17-17.5) 5/14/2015 17-17.5 ft	DP-19 (24-24.5) 5/15/2015 24-24.5 ft	DP-19 (24.5-25) 5/15/2015 24.5-25 ft	DP-20 (24-24.5) 5/13/2015 24-24.5 ft	DP-20 (24.5-25.5) 5/13/2015 24.5-25.5 ft	DP-21 (13-14) 5/15/2015 13-14 ft	DP-21 (14-15) 5/15/2015 14-15 ft	DP-22 (20-20.5) 5/15/2015 20-20.5 ft	DP-22 (24-25) 5/15/2015 24-25 ft	DP-23 (16-16.5) 5/15/2015 16-16.5 ft
Dimethyl Phthalate	NE	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Di-N-Octyl Phthalate	800,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Hexachlorobenzene	625	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Hexachlorobutadiene	12,800	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Hexachloroethane	25,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 UJ	447 UJ	363 UJ	473 UJ	373 UJ
Isophorone	1,050,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
Nitrobenzene	160,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
N-Nitrosodimethylamine	19.6 <sup>3</sup>	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
N-Nitrosodi-n-propylamine	143 <sup>3</sup>	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
N-Nitrosodiphenylamine (as diphenylamine)	204,000	481 UJ	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 UJ	373 U
o-Cresol (2-methylphenol)	4,000,000	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U
Phenol	24,000,000	481 U	376 UJ	484 UJ	483 U	492 U	353 U	447 UJ	363 U	473 U	373 U



Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-23 (20-20.5) 5/15/2015 20-20.5 ft	DP-24 (16-16.5) 5/13/2015 16-16.5 ft	DP-24 (16.5-17.5) 5/13/2015 16.5-17.5 ft	DP-25 (12-12.5) 5/15/2015 12-12.5 ft	DP-25 (12.5-13.5) 5/15/2015 12.5-13.5 ft	DP-26 (16-17) 5/13/2015 16-17 ft	DP-26 (17-18) 5/13/2015 17-18 ft	DP-27 (16-17) 5/13/2015 16-17 ft	DP-27 (24-24.5) 5/13/2015 24-24.5 ft	DP-28 (20.5-21.5) 5/14/2015 20.5-21.5 ft
<b>Semi-volatile Organic Compounds<sup>2</sup> (µg/kg)</b>											
1,2,4-Trichlorobenzene	34,500	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	7,200,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
1,2-Diphenylhydrazine	1,250	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
1,3-Dichlorobenzene (m-Dichlorobenzene)	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
1,4-Dichlorobenzene (p-Dichlorobenzene)	185,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2,2'-Oxybis[1-chloropropane]	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2,4,5-Trichlorophenol	8,000,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2,4,6-Trichlorophenol	90,900	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2,4-Dichlorophenol	240,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2,4-Dimethylphenol	1,600,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2,4-Dinitrophenol	160,000	459 UJ	479 U	515 U	353 UJ	510 UJ	392 U	503 U	387 U	378 U	478 UJ
2,4-Dinitrotoluene	3,230	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2,6-Dinitrotoluene	667	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2-Chloronaphthalene	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2-Chlorophenol	400,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2-Nitroaniline	800,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
2-Nitrophenol	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
3 & 4 Methylphenol	NE	918 U	959 U	1030 U	706 U	1020 U	784 U	1010 U	775 U	756 U	957 UJ
3,3'-Dichlorobenzidine	2,220	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
3-Nitroaniline	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
4,6-Dinitro-2-Methylphenol	NE	2,370 UJ	2,470 U	2,650 U	1,820 UJ	2,630 UJ	2,020 U	2,590 U	2,000 U	1,950 U	2,460 UJ
4-Bromophenyl phenyl ether	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
4-Chloro-3-Methylphenol	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
4-Chloroaniline	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
4-Chlorophenyl-Phenylether	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
4-Nitroaniline	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
4-Nitrophenol (p-Nitrophenol)	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Bis(2-Chloroethoxy)Methane	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Bis(2-Chloroethyl)Ether	909	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Bis(2-Ethylhexyl) Phthalate	71,400	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Butyl benzyl Phthalate	526,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Carbazole	NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Dibenzofuran	80,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Dibutyl Phthalate	8,000,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Diethyl Phthalate	64,000,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ

Sample ID	Date Collected	MTCA Method B Sample Depth	DP-23 (20-20.5) 5/15/2015 20-20.5 ft	DP-24 (16-16.5) 5/13/2015 16-16.5 ft	DP-24 (16.5-17.5) 5/13/2015 16.5-17.5 ft	DP-25 (12-12.5) 5/15/2015 12-12.5 ft	DP-25 (12.5-13.5) 5/15/2015 12.5-13.5 ft	DP-26 (16-17) 5/13/2015 16-17 ft	DP-26 (17-18) 5/13/2015 17-18 ft	DP-27 (16-17) 5/13/2015 16-17 ft	DP-27 (24-24.5) 5/13/2015 24-24.5 ft	DP-28 (20.5-21.5) 5/14/2015 20.5-21.5 ft
Dimethyl Phthalate		NE	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Di-N-Octyl Phthalate		800,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Hexachlorobenzene		625	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Hexachlorobutadiene		12,800	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Hexachloroethane		25,000	459 UJ	479 U	515 U	353 UJ	510 UJ	392 U	503 U	387 U	378 U	478 UJ
Isophorone		1,050,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Nitrobenzene		160,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
N-Nitrosodimethylamine		19.6 <sup>3</sup>	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
N-Nitrosodi-n-propylamine		143 <sup>3</sup>	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
N-Nitrosodiphenylamine (as diphenylamine)		204,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
o-Cresol (2-methylphenol)		4,000,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ
Phenol		24,000,000	459 U	479 U	515 U	353 U	510 U	392 U	503 U	387 U	378 U	478 UJ

Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-28 (21.5-22.5) 5/14/2015 21.5-22.5 ft	DP-29 (24-24.5) 5/14/2015 24-24.5 ft	DP-29 (24.5-25.5) 5/14/2015 24.5-25.5 ft	DP-30 (12-12.5) 5/14/2015 12-12.5 ft	DP-30 (16-17) 5/14/2015 16-17.5 ft	DP-35 (8-9) 5/15/2015 8-9 ft	DP-36 (8-9) 5/15/2015 8-9 ft
<b>Semi-volatile Organic Compounds<sup>2</sup> (µg/kg)</b>								
1,2,4-Trichlorobenzene	34,500	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	7,200,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
1,2-Diphenylhydrazine	1,250	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
1,3-Dichlorobenzene (m-Dichlorobenzene)	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
1,4-Dichlorobenzene (p-Dichlorobenzene)	185,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2,2'-Oxybis[1-chloropropane]	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2,4,5-Trichlorophenol	8,000,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2,4,6-Trichlorophenol	90,900	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2,4-Dichlorophenol	240,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2,4-Dimethylphenol	1,600,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2,4-Dinitrophenol	160,000	481 UJ	387 UJ	528 U	385 U	499 U	377 UJ	360 UJ
2,4-Dinitrotoluene	3,230	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2,6-Dinitrotoluene	667	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2-Chloronaphthalene	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2-Chlorophenol	400,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2-Nitroaniline	800,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
2-Nitrophenol	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
3 & 4 Methylphenol	NE	961 UJ	775 UJ	1060 U	770 U	998 U	754 U	720 U
3,3'-Dichlorobenzidine	2,220	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
3-Nitroaniline	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
4,6-Dinitro-2-Methylphenol	NE	2,480 UJ	2,000 UJ	2,720 U	1,980 U	2,570 U	1,940 UJ	1,860 UJ
4-Bromophenyl phenyl ether	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
4-Chloro-3-Methylphenol	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
4-Chloroaniline	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
4-Chlorophenyl-Phenylether	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
4-Nitroaniline	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
4-Nitrophenol (p-Nitrophenol)	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Bis(2-Chloroethoxy)Methane	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Bis(2-Chloroethyl)Ether	909	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Bis(2-Ethylhexyl) Phthalate	71,400	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Butyl benzyl Phthalate	526,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Carbazole	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Dibenzofuran	80,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Dibutyl Phthalate	8,000,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Diethyl Phthalate	64,000,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U

Sample ID Date Collected Sample Depth	MTCA Method B CUL (µg/kg)	DP-28 (21.5-22.5) 5/14/2015 21.5-22.5 ft	DP-29 (24-24.5) 5/14/2015 24-24.5 ft	DP-29 (24.5-25.5) 5/14/2015 24.5-25.5 ft	DP-30 (12-12.5) 5/14/2015 12-12.5 ft	DP-30 (16-17) 5/14/2015 16-17.5 ft	DP-35 (8-9) 5/15/2015 8-9 ft	DP-36 (8-9) 5/15/2015 8-9 ft
Dimethyl Phthalate	NE	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Di-N-Octyl Phthalate	800,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Hexachlorobenzene	625	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Hexachlorobutadiene	12,800	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Hexachloroethane	25,000	481 UJ	387 UJ	528 U	385 U	499 U	377 UJ	360 UJ
Isophorone	1,050,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Nitrobenzene	160,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
N-Nitrosodimethylamine	19.6 <sup>3</sup>	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
N-Nitrosodi-n-propylamine	143 <sup>3</sup>	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
N-Nitrosodiphenylamine (as diphenylamine)	204,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
o-Cresol (2-methylphenol)	4,000,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U
Phenol	24,000,000	481 UJ	387 UJ	528 U	385 U	499 U	377 U	360 U

**Notes:**

<sup>1</sup>Chemical analyses were conducted by Pace Analytical Services, Inc. located in Minneapolis, Minnesota.

<sup>2</sup>Semi-volatile organic compounds (SVOCs) were analyzed using Environmental Protection Agency (EPA) Method SW8270D.

<sup>3</sup>Laboratory reporting limits and method detection limits were greater than MTCA Method B cleanup levels.

CUL = cleanup level; NE = not established; µg/kg = micrograms per kilogram

J = The holding time for sample extraction was exceeded. Results from field samples are qualified as estimated.

U = result not detected above the reporting limit

**Table 3**

**Summary of Soil Chemical Analytical Results - TPH, PAHs and PCP<sup>1</sup>**

Colville Post & Pole  
Colville, Washington

Sample ID Date Collected Sample Depth	MTCA Method A CUL	MTCA Method B CUL	DP-1 (12-13) 5/11/2015 12-13 ft	DP-2a (1-2) 3/16/2015 1-2 ft	DP-2a (15-16) 3/16/2015 15-16 ft	DP-2 (12-12.5) 5/11/2015 12-12.5 ft	DP-2 (12.5-13.5) 5/11/2015 12.5-13.5 ft	DP-3 (12-13) 5/11/2015 12-13 ft	DP-3 (13-14) 5/11/2015 13-14 ft	DP-4 (16-16.5) 5/11/2015 16-16.5 ft	DP-4 (16.5-17.5) 5/11/2015 16.5-17.5 ft	DP-5 (16-16.5) 5/11/2015 16-16.5 ft	DP-5 (16.5-17) 5/11/2015 16.5-17 ft	DP-6 (12-13) 5/12/2015 12-13 ft	DP-6 (13-14) 5/12/2015 13-14 ft
<b>Petroleum Hydrocarbons (mg/kg)<sup>2</sup></b>															
Gasoline-range Hydrocarbons <sup>3</sup>	100/30	NE	-	-	-	-	-	-	-	-	-	-	-	-	-
Diesel-range Hydrocarbons	2,000	NE	19.0 U	20.1 U	17.9 U	16.7 U	21.4 U	16.5 U	21.6 U	16.5 UJ	23.5 U	21.4 U	22.5 U	21.9 U	20.9 U
Oil-range Hydrocarbons	2,000	NE	12.7 U	13.4 U	11.9 U	11.1 U	14.2 U	11.0 U	14.4 U	11.0 UJ	15.7 U	14.3 U	15.0 U	14.6 U	13.9 U
<b>Non-carcinogenic PAHs (µg/kg)<sup>4</sup></b>															
Naphthalene <sup>5</sup>	5,000 <sup>5</sup>	1,600,000	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
1-Methylnaphthalene <sup>5</sup>		34,500	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
2-Methylnaphthalene <sup>5</sup>		320,000	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
2-Chloronaphthalene	NE	NE	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 UJ	13.9 UJ
Acenaphthene	NE	4,800,000	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Acenaphthylene	NE	NE	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Anthracene	NE	24,000,000	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Benzo(ghi)perylene	NE	NE	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Fluoranthene	NE	3,200,000	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Fluorene	NE	3,200,000	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Phenanthrene	NE	NE	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Pyrene	NE	2,400,000	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
<b>Carcinogenic PAHs (µg/kg)<sup>4</sup></b>															
Benzo(a)anthracene	NE	1,370	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Benzo(a)pyrene	100	137	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Benzo(b)fluoranthene	NE	1,370	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Benzo(k)fluoranthene	NE	13,700	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Chrysene	NE	137,000	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Dibenzo(a,h)anthracene	NE	137	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Indeno(1,2,3-cd)pyrene	NE	1,370	12.8 U	13.6 U	12.0 U	11.3 U	14.2 U	11.0 U	14.6 U	11.2 UJ	15.6 U	14.3 U	15.2 U	14.5 U	13.9 U
Total cPAH TEQ <sup>7</sup>	100	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
<b>SVOCs (µg/kg)<sup>6</sup></b>															
Pentachlorophenol	NE	2,500	856 U	908 U	801 U	750 U	955 U	733 U	975 U	753 UJ	1,050 U	956 U	1,010 U	978 U	929 U

Sample ID Date Collected Sample Depth	MTCA Method A CUL	MTCA Method B CUL	DP-7 (12.5-13.5) 5/12/2015 12.5-13.5 ft	DP-7 (13.5-14.5) 5/12/2015 13.5-14.5 ft	DP-8 (20-20.5) 5/12/2015 20-20.5 ft	DP-8 (20.5-21) 5/12/2015 20.5-21 ft	DP-9 (12.5-13.5) 5/14/2015 12.5-13.5 ft	DP-9 (13.5-14.5) 5/14/2015 13.5-14.5 ft	DP-10 (12-12.5) 5/14/2015 12-12.5 ft	DP-10 (12.5-13) 5/14/2015 12.5-13 ft	DP-11 (12.5-13.5) 5/12/2015 12.5-13.5 ft	DP-11 (13.5-14.5) 5/12/2015 13.5-14.5 ft	DP-12 (12-12.5) 5/14/2015 12-12.5 ft	DP-12 (16-17) 5/14/2015 16-17 ft
<b>Petroleum Hydrocarbons (mg/kg)<sup>2</sup></b>														
Gasoline-range Hydrocarbons <sup>3</sup>	100/30	NE	--	--	--	--	--	--	--	--	--	--	--	--
Diesel-range Hydrocarbons	2,000	NE	16.8 U	20.3 U	19.0 U	20.3 U	16.0 U	20.1 U	20.5 U	23.5 U	16.0 U	24.9 U	17.0 U	20.6 U
Oil-range Hydrocarbons	2,000	NE	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.6 U	15.7 U	10.7 U	16.6 U	11.3 U	13.8 U
<b>Non-carcinogenic PAHs (µg/kg)<sup>4</sup></b>														
Naphthalene <sup>5</sup>	5,000 <sup>5</sup>	1,600,000	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
1-Methylnaphthalene <sup>5</sup>		34,500	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
2-Methylnaphthalene <sup>5</sup>		320,000	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
2-Chloronaphthalene	NE	NE	11.2 UJ	13.6 UJ	12.7 UJ	13.6 UJ	10.7 UJ	13.4 UJ	13.8 UJ	15.7 UJ	10.8 UJ	16.5 UJ	11.3 UJ	13.8 UJ
Acenaphthene	NE	4,800,000	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Acenaphthylene	NE	NE	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Anthracene	NE	24,000,000	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Benzo(ghi)perylene	NE	NE	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Fluoranthene	NE	3,200,000	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Fluorene	NE	3,200,000	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Phenanthrene	NE	NE	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Pyrene	NE	2,400,000	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
<b>Carcinogenic PAHs (µg/kg)<sup>4</sup></b>														
Benzo(a)anthracene	NE	1,370	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Benzo(a)pyrene	100	137	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Benzo(b)fluoranthene	NE	1,370	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Benzo(k)fluoranthene	NE	13,700	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Chrysene	NE	137,000	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Dibenzo(a,h)anthracene	NE	137	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Indeno(1,2,3-cd)pyrene	NE	1,370	11.2 U	13.6 U	12.7 U	13.6 U	10.7 U	13.4 U	13.8 U	15.7 U	10.8 U	16.5 U	11.3 U	13.8 U
Total cPAH TEQ <sup>7</sup>	100	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
<b>SVOCs (µg/kg)<sup>6</sup></b>														
Pentachlorophenol	NE	2,500	752 U	917 U	848 U	908 U	716 U	897 U	923 U	1,050 U	720 U	1,110 U	757 U	919 U

Sample ID Date Collected Sample Depth	MTCA Method A CUL	MTCA Method B CUL	DP-13 (12-13) 5/12/2015 12-13 ft	DP-13 (13-14) 5/12/2015 13-14 ft	DP-15 (12-13) 5/13/2015 12-13 ft	DP-15 (13-14) 5/13/2015 13-14 ft	DP-17 (16-16.5) 5/12/2015 16-16.5 ft	DP-17 (16.5-17.5) 5/12/2015 16.5-17.5 ft	DP-18 (16-17) 5/14/2015 16-17 ft	DP-18 (17-17.5) 5/14/2015 17-17.5 ft	DP-19 (24-24.5) 5/15/2015 24-24.5 ft	DP-19 (24.5-25) 5/15/2015 24.5-25 ft	DP-20 (24-24.5) 5/13/2015 24-24.5 ft	DP-20 (24.5-25.5) 5/13/2015 24.5-25.5 ft
<b>Petroleum Hydrocarbons (mg/kg)<sup>2</sup></b>														
Gasoline-range Hydrocarbons <sup>3</sup>	100/30	NE	-	-	-	-	-	-	-	-	-	-	-	-
Diesel-range Hydrocarbons	2,000	NE	16.5 U	22.0 U	16.6 U	22.0 U	22.4 U	18.2 U	16.1 U	21.9 U	16.9 U	21.9 U	22.0 U	22.2 U
Oil-range Hydrocarbons	2,000	NE	11.0 U	14.7 U	11.1 U	14.7 U	15.0 U	12.2 U	10.8 U	14.6 U	11.3 U	14.6 U	14.6 U	14.8 U
<b>Non-carcinogenic PAHs (µg/kg)<sup>4</sup></b>														
Naphthalene <sup>5</sup>	5,000 <sup>5</sup>	1,600,000	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
1-Methylnaphthalene <sup>5</sup>		34,500	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
2-Methylnaphthalene <sup>5</sup>		320,000	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
2-Chloronaphthalene	NE	NE	11.0 UJ	14.8 UJ	11.1 U	14.8 U	15.1 UJ	12.1 UJ	10.8 UJ	14.6 UJ	11.4 UJ	14.7 UJ	14.6 U	14.9 U
Acenaphthene	NE	4,800,000	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Acenaphthylene	NE	NE	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Anthracene	NE	24,000,000	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Benzo(ghi)perylene	NE	NE	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Fluoranthene	NE	3,200,000	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Fluorene	NE	3,200,000	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Phenanthrene	NE	NE	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Pyrene	NE	2,400,000	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
<b>Carcinogenic PAHs (µg/kg)<sup>4</sup></b>														
Benzo(a)anthracene	NE	1,370	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Benzo(a)pyrene	100	137	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Benzo(b)fluoranthene	NE	1,370	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Benzo(k)fluoranthene	NE	13,700	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Chrysene	NE	137,000	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Dibenzo(a,h)anthracene	NE	137	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Indeno(1,2,3-cd)pyrene	NE	1,370	11.0 U	14.8 U	11.1 U	14.8 U	15.1 U	12.1 U	10.8 U	14.6 U	11.4 U	14.7 U	14.6 U	14.9 U
Total cPAH TEQ <sup>7</sup>	100	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
<b>SVOCs (µg/kg)<sup>6</sup></b>														
Pentachlorophenol	NE	2,500	737 U	994 UJ	739 U	987 UJ	1,010 U	810 U	721 U	977 U	764 UJ	983 UJ	981 U	999 U

Sample ID Date Collected Sample Depth	MTCA Method A CUL	MTCA Method B CUL	DP-21 (13-14) 5/15/2015 13-14 ft	DP-21 (14-15) 5/15/2015 14-15 ft	DP-22 (20-20.5) 5/15/2015 20-20.5 ft	DP-22 (24-25) 5/15/2015 24-25 ft	DP-23 (16-16.5) 5/15/2015 16-16.5 ft	DP-23 (20-20.5) 5/15/2015 20-20.5 ft	DP-24 (16-16.5) 5/13/2015 16-16.5 ft	DP-24 (16.5-17.5) 5/13/2015 16.5-17.5 ft	DP-25 (12-12.5) 5/15/2015 12-12.5 ft	DP-25 (12.5-13.5) 5/15/2015 12.5-13.5 ft	DP-26 (16-17) 5/13/2015 16-17 ft
<b>Petroleum Hydrocarbons (mg/kg)<sup>2</sup></b>													
Gasoline-range Hydrocarbons <sup>3</sup>	100/30	NE	-	-	-	-	-	-	7.2 UJ	7.5 UJ	-	-	-
Diesel-range Hydrocarbons	2,000	NE	16.0 U	20.3 U	16.5 U	21.3 U	16.9 U	20.9 U	21.8 U	23.4 U	15.9 U	23.3 U	17.6 U
Oil-range Hydrocarbons	2,000	NE	10.7 U	13.5 U	11.0 U	14.2 U	11.3 U	14.0 U	14.5 U	15.6 U	10.6 U	15.5 U	11.8 U
<b>Non-carcinogenic PAHs (µg/kg)<sup>4</sup></b>													
Naphthalene <sup>5</sup>	5,000 <sup>5</sup>	1,600,000	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
1-Methylnaphthalene <sup>5</sup>		34,500	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
2-Methylnaphthalene <sup>5</sup>		320,000	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
2-Chloronaphthalene	NE	NE	10.7 UJ	13.5 UJ	11.0 UJ	14.3 UJ	11.3 UJ	14.0 UJ	14.5 U	15.6 U	10.7 UJ	15.5 UJ	11.9 U
Acenaphthene	NE	4,800,000	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Acenaphthylene	NE	NE	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Anthracene	NE	24,000,000	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Benzo(ghi)perylene	NE	NE	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Fluoranthene	NE	3,200,000	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Fluorene	NE	3,200,000	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Phenanthrene	NE	NE	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Pyrene	NE	2,400,000	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
<b>Carcinogenic PAHs (µg/kg)<sup>4</sup></b>													
Benzo(a)anthracene	NE	1,370	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Benzo(a)pyrene	100	137	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Benzo(b)fluoranthene	NE	1,370	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Benzo(k)fluoranthene	NE	13,700	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Chrysene	NE	137,000	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Dibenzo(a,h)anthracene	NE	137	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Indeno(1,2,3-cd)pyrene	NE	1,370	10.7 U	13.5 U	11.0 U	14.3 U	11.3 U	14.0 U	14.5 U	15.6 U	10.7 U	15.5 U	11.9 U
Total cPAH TEQ <sup>7</sup>	100	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
<b>SVOCs (µg/kg)<sup>8</sup></b>													
Pentachlorophenol	NE	2,500	717 U	907 UJ	738 U	961 U	756 U	932 U	974 U	1,050 U	717 U	1,040 U	796 U



Sample ID Date Collected Sample Depth	MTCA Method A CUL	MTCA Method B CUL	DP-26 (17-18) 5/13/2015 17-18 ft	DP-27 (16-17) 5/13/2015 16-17 ft	DP-27 (24-24.5) 5/13/2015 24-24.5 ft	DP-28 (20.5-21.5) 5/14/2015 20.5-21.5 ft	DP-28 (21.5-22.5) 5/14/2015 21.5-22.5 ft	DP-29 (24-24.5) 5/14/2015 24-24.5 ft	DP-29 (24.5-25.5) 5/14/2015 24.5-25.5 ft	DP-30 (12-12.5) 5/14/2015 12-12.5 ft	DP-30 (16-17) 5/14/2015 16-17.5 ft	DP-35 (8-9) 5/15/2015 8-9 ft	DP-36 (8-9) 5/15/2015 8-9 ft
<b>Petroleum Hydrocarbons (mg/kg)<sup>2</sup></b>													
Gasoline-range Hydrocarbons <sup>3</sup>	100/30	NE	--	--	--	--	--	--	--	--	--	<b>11.5</b>	5.5 U
Diesel-range Hydrocarbons	2,000	NE	22.8 U	17.5 U	17.2 U	21.3 U	21.8 U	17.5 U	24.0 U	17.4 U	22.5 U	<b>972</b>	<b>26.3</b>
Oil-range Hydrocarbons	2,000	NE	15.2 U	11.7 U	<b>61.6</b>	14.2 U	14.6 U	11.7 U	16.0 U	11.6 U	15.0 U	<b>74.9</b>	10.8 U
<b>Non-carcinogenic PAHs (µg/kg)<sup>4</sup></b>													
Naphthalene <sup>5</sup>	5,000 <sup>5</sup>	1,600,000	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>59.2</b>	10.9 U
1-Methylnaphthalene <sup>5</sup>		34,500	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>1,200</b>	10.9 U
2-Methylnaphthalene <sup>5</sup>		320,000	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	11.4 U	10.9 U
2-Chloronaphthalene	NE	NE	15.2 U	11.7 U	11.5 U	14.5 UJ	14.5 UJ	11.8 UJ	16.0 UJ	11.6 UJ	15.1 UJ	<b>73.3 J</b>	10.9 UJ
Acenaphthene	NE	4,800,000	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>310</b>	10.9 U
Acenaphthylene	NE	NE	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>78.1</b>	10.9 U
Anthracene	NE	24,000,000	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>221</b>	10.9 U
Benzo(ghi)perylene	NE	NE	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	11.4 U	10.9 U
Fluoranthene	NE	3,200,000	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>124</b>	10.9 U
Fluorene	NE	3,200,000	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>1,020</b>	10.9 U
Phenanthrene	NE	NE	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>2,910</b>	10.9 U
Pyrene	NE	2,400,000	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>290</b>	10.9 U
<b>Carcinogenic PAHs (µg/kg)<sup>4</sup></b>													
Benzo(a)anthracene	NE	1,370	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>23.5</b>	10.9 U
Benzo(a)pyrene	100	137	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	11.4 U	10.9 U
Benzo(b)fluoranthene	NE	1,370	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	11.4 U	10.9 U
Benzo(k)fluoranthene	NE	13,700	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	11.4 U	10.9 U
Chrysene	NE	137,000	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	<b>78.3</b>	10.9 U
Dibenzo(a,h)anthracene	NE	137	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	11.4 U	10.9 U
Indeno(1,2,3-cd)pyrene	NE	1,370	15.2 U	11.7 U	11.5 U	14.5 U	14.5 U	11.8 U	16.0 U	11.6 U	15.1 U	11.4 U	10.9 U
Total cPAH TEQ <sup>7</sup>	100	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.01
<b>SVOCs (µg/kg)<sup>6</sup></b>													
Pentachlorophenol	NE	2,500	1,020 U	786 U	768 U	971 UJ	976 UJ	787 UJ	1,070 U	781 U	1,010 U	<b>891</b>	731 U

**Notes**

<sup>1</sup>Chemical analyses were conducted by Pace Analytical Services, Inc. located in Minneapolis, Minnesota.

<sup>2</sup>Gasoline-range petroleum hydrocarbons were analyzed using NWTPH-Gx. Diesel-range and oil-range petroleum hydrocarbons were analyzed using NWTPH-Dx.

For Samples DP-2a (1-2), DP-2a (15-16) and DP-4 (16-16.5), the reported diesel-range and oil-range petroleum hydrocarbons were analyzed using NWTPH-Dx with an acid silica gel cleanup.

<sup>3</sup>The cleanup level for gasoline-range petroleum hydrocarbons is 100 mg/kg when benzene is not detected and 30 mg/kg when benzene is present.

<sup>4</sup>PAHs were analyzed using EPA Method SW8270D-SIM

<sup>5</sup>The MTCA Method A cleanup level for total naphthalenes (naphthalene, 1-methylnaphthalene, and 2-methylnaphthlene) is 5,000 µg/kg.

<sup>6</sup>SVOCs were analyzed using EPA Method SW8270D-SIM

<sup>7</sup>Carcinogenic PAH (cPAH) toxic equivalency (TEQ) calculated using toxic equivalency factors (TEF) from MTCA Table 708-2, based on methodology described in MTCA Cleanup Regulation WAC 173-340-708.

One Half the reporting limit was used to calculate the TEQ.

CUL = cleanup level; NE = not established

J = The holding time for sample extraction was exceeded. Results from field samples are qualified as estimated. U = result not detected above the reporting limit.

µg/kg = micrograms per kilogram; mg/kg = milligrams per kilogram; PAHs = Polycyclic Aromatic Hydrocarbons; SVOCs = Semi-Volatile Organic Compounds; PCP = Pentachlorophenol; TPH = Total Petroleum Hydrocarbons;

-- = not analyzed; NE = not established; **Bold** indicates analyte was detected above the reporting limit.

**Table 4**  
**Summary of Groundwater Chemical Analytical Results - SVOCs<sup>1</sup>**  
 Colville Post & Pole  
 Colville, Washington

Sample ID Date Collected	MTCA Method B CUL (µg/L)	DP-1:GW:051115 5/11/2015	DP-4:GW:051115 5/11/2015	DP-7:GW:051215 5/12/2015	DP-13:GW:051215 5/11/2015 0:00	DP-15:GW:051315 5/13/2015	DP-17:GW:051215 5/12/2015	DP-20:GW:051315 5/13/2015	DP-24:GW:051315 5/13/2015	DP-DUPLICATE:GW:051315 <sup>3</sup> 5/13/2015	DP-26:GW:051315 5/13/2015
<b>SVOCs<sup>2</sup> (µg/L)</b>											
1,2,4-Trichlorobenzene	1.51 <sup>4</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	720	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
1,2-Diphenylhydrazine	0.109 <sup>4</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
1,3-Dichlorobenzene (m-Dichlorobenzene)	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
1,4-Dichlorobenzene (p-Dichlorobenzene)	8.1 <sup>5</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
1-Methylnaphthalene	1.51 <sup>4</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2,4,5-Trichlorophenol	800	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2,4,6-Trichlorophenol	3.98 <sup>5</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2,4-Dichlorophenol	24.0	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2,4-Dimethylphenol	160	52.1 U	53.2 U	51.8 U	54.3 U	54.3 U	53.2 U	54.3 U	55.6 U	53.8 U	53.2 U
2,4-Dinitrophenol	32.0	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2,4-Dinitrotoluene	0.282 <sup>4</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2,6-Dinitrotoluene	0.0583 <sup>4</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2-Chloronaphthalene	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2-Chlorophenol	40.0	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2-Methylnaphthalene	32	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2-Nitroaniline	160	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
2-Nitrophenol	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
3 & 4 Methylphenol	NE	20.8 U	21.3 U	20.7 U	21.7 U	21.7 U	21.3 U	21.7 U	22.2 U	21.5 U	21.3 U
3,3'-Dichlorobenzidine	0.194 <sup>4</sup>	52.1 U	53.2 U	51.8 U	54.3 U	54.3 U	53.2 U	54.3 U	55.6 U	53.8 U	53.2 U
3-Nitroaniline	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
4,6-Dinitro-2-Methylphenol	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
4-Bromophenyl phenyl ether	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
4-Chloro-3-Methylphenol	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
4-Chloroaniline	0.219 <sup>4</sup>	52.1 U	53.2 U	51.8 U	54.3 U	54.3 U	53.2 U	54.3 U	55.6 U	53.8 U	53.2 U
4-Chlorophenyl-Phenylether	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
4-Nitroaniline	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
4-Nitrophenol (p-Nitrophenol)	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Bis(2-Chloroethoxy)Methane	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Bis(2-Chloroethyl)Ether	0.0398 <sup>4</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
bis(2-chloroisopropyl) ether	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Bis(2-Ethylhexyl) Phthalate	6.25 <sup>5</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Butyl benzyl Phthalate	46.1	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Carbazole	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Dibenzofuran	16	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Diethyl Phthalate	12,800	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Dimethyl Phthalate	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U

Sample ID Date Collected	MTCA Method B CUL (µg/L)	DP-1:GW:051115 5/11/2015	DP-4:GW:051115 5/11/2015	DP-7:GW:051215 5/12/2015	DP-13:GW:051215 5/11/2015 0:00	DP-15:GW:051315 5/13/2015	DP-17:GW:051215 5/12/2015	DP-20:GW:051315 5/13/2015	DP-24:GW:051315 5/13/2015	DP-DUPLICATE:GW:051315 <sup>3</sup> 5/13/2015	DP-26:GW:051315 5/13/2015
Di-N-Butyl Phthalate	NE	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Di-N-Octyl Phthalate	160	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Hexachlorobenzene	0.0547 <sup>4</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Hexachlorobutadiene	0.561 <sup>4</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Hexachloroethane	1.09 <sup>4</sup>	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Isophorone	46.1	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Nitrobenzene	16	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
N-Nitrosodimethylamine	0.000858	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
N-Nitrosodiphenylamine (as diphenylamine)	17.9	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
o-Cresol (2-methylphenol)	400	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U
Phenol	2400	10.4 U	10.6 U	10.4 U	10.9 U	10.9 U	10.6 U	10.9 U	11.1 U	10.8 U	10.6 U

**Notes:**

<sup>1</sup>Chemical analyses conducted by Pace Analytical Services, Inc. located in Minneapolis, Minnesota.

<sup>2</sup>SVOCs analyzed using EPA Method SW8270D-SIM.

<sup>3</sup>Sample DP-Duplicate:GW:051315 is a duplicate sample of DP-24.

<sup>4</sup>Laboratory reporting limits and method detection limits were greater than the corresponding MTCA Method B groundwater cleanup levels.

<sup>5</sup>Analyte was not detected. The reporting limit was greater than the MTCA Method B groundwater CUL; however the compound was not detected greater than the method detection limit which is less than the MTCA Method B groundwater CUL.

SVOCs = Semi-volatile organic compounds

µg/L = micrograms per liter

U = result not detected above the reporting limit

CUL = cleanup level; NE = Not established

**Table 5**

**Summary of Groundwater Chemical Analytical Results - PAHs, PCP and TPH<sup>1</sup>**

Colville Post & Pole  
Colville, Washington

Sample ID Date Collected	MTCA Method A Unrestricted Land Use CUL	MTCA Method B CUL	DP-1:GW:051115 05/11/2015	DP-4:GW:051115 05/11/2015	DP-7:GW:051215 05/12/2015	DP-13:GW:051215 05/12/2015	DP-15:GW:051315 05/13/2015	DP-17:GW:051215 05/12/2015	DP-20:GW:051315 05/13/2015	DP-24:GW:051315 <sup>2</sup> 05/13/2015	DP-DUPLICATE:GW:051315 05/13/2015	DP-26:GW:051315 05/13/2015
<b>Carcinogenic Polycyclic Aromatic Hydrocarbons<sup>3</sup> (cPAHs) (µg/L)</b>												
Benzo(a)anthracene	NE	0.120	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.043 U	0.044 U	0.043 U
Benzo(a)pyrene	0.1	0.0120	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.043 U	0.044 U	0.043 U
Benzo(b)fluoranthene	NE	0.120	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.043 U	0.044 U	0.043 U
Benzo(k)fluoranthene	NE	1.20	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.043 U	0.044 U	0.043 U
Chrysene	NE	1.20	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.043 U	0.044 U	0.043 U
Dibenzo(a,h)anthracene	NE	0.0120	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.043 U	0.044 U	0.043 U
Indeno(1,2,3-cd)pyrene	NE	0.120	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.043 U	0.044 U	0.043 U
cPAH TEQ <sup>4</sup>	0.1	-	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
<b>Polycyclic Aromatic Hydrocarbons<sup>3</sup> (PAHs) (µg/L)</b>												
Acenaphthene	NE	960	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.36 J	0.26 J	0.043 U
Acenaphthylene	NE	NE	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.15 J	0.081 J	0.043 U
Anthracene	NE	4800	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	<b>0.40</b>	0.25 J	0.11 J	0.043 U
Benzo(ghi)perylene	NE	NE	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.043 U	0.044 U	0.043 U
Fluoranthene	NE	640	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	<b>0.054</b>	0.044 U	0.043 U
Fluorene	NE	640	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.79 J	0.43 J	0.043 U
Naphthalene	160	160	0.041 U	0.042 U	0.043 U	0.043 U	<b>0.10</b>	0.042 U	<b>0.092</b>	<b>0.055</b>	<b>0.054</b>	0.043 U
Phenanthrene	NE	NE	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	<b>0.087</b>	1.7 J	0.62 J	0.043 U
Pyrene	NE	480	0.041 U	0.042 U	0.043 U	0.043 U	0.042 U	0.042 U	0.044 U	0.17 J	0.070 J	0.043 U
<b>Semi-volatile Organic Compound<sup>5</sup> (µg/L)</b>												
Pentachlorophenol (PCP)	NE	0.219	0.33 <sup>6</sup> UJ	<b>17.6 J</b>	0.34 <sup>6</sup> UJ	0.33 <sup>6</sup> UJ	<b>123</b>	1.3 J	<b>107</b>	<b>38.0</b>	<b>40.5</b>	0.32 <sup>6</sup> U
<b>Total Petroleum Hydrocarbons (TPH)<sup>7</sup> (mg/L)</b>												
Diesel-range	0.5	NE	0.11 U	<b>0.17</b>	0.11 U	0.11 U	<b>0.62</b>	<b>0.14</b>	<b>0.51</b>	<b>0.65 J</b>	0.41 J	0.11 U
Oil-range	0.5	NE	0.11 U	0.11 U	0.11 U	0.11 U	<b>0.13</b>	0.10 U	0.11 U	0.11 U	0.11 U	0.11 U

**Notes:**

<sup>1</sup>Chemical analyses were conducted by Pace Analytical Services, Inc. located in Minneapolis, Minnesota.

<sup>2</sup>BTEX analysis was run on sample DP-24:GW:051315. Results were all non-detect and are therefore not being represented on this table. Results can be found in the chemical analytical report provided in Appendix C.

<sup>3</sup>PAHs and cPAHs were analyzed using EPA Method SW8270D-SIM.

<sup>4</sup>Carcinogenic PAH (cPAH) toxic equivalency (TEQ) calculated using toxicity equivalency factors (TEF) from MTCA Table 708-2, based on methodology described in MTCA Cleanup Regulation Washington Administrative Code 173-340-708. One half the reporting limit was used to calculate the TEQ.

<sup>5</sup>SVOCs analyzed using EPA Method SW8270D.

<sup>6</sup>PCP was not detected. The reporting limit was greater than the MTCA Method B groundwater CUL; however PCP was not detected at concentrations greater than the method detection limit which is less than the MTCA Method B groundwater CUL.

<sup>7</sup>Total petroleum hydrocarbons were analyzed using NWTPH-Dx.

CUL = cleanup level; NE = not established

J = Results from field samples are qualified as estimated.

U = result not detected above the reporting limit

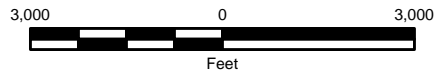
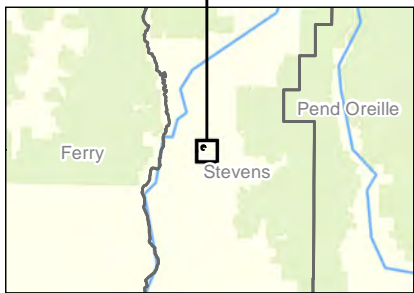
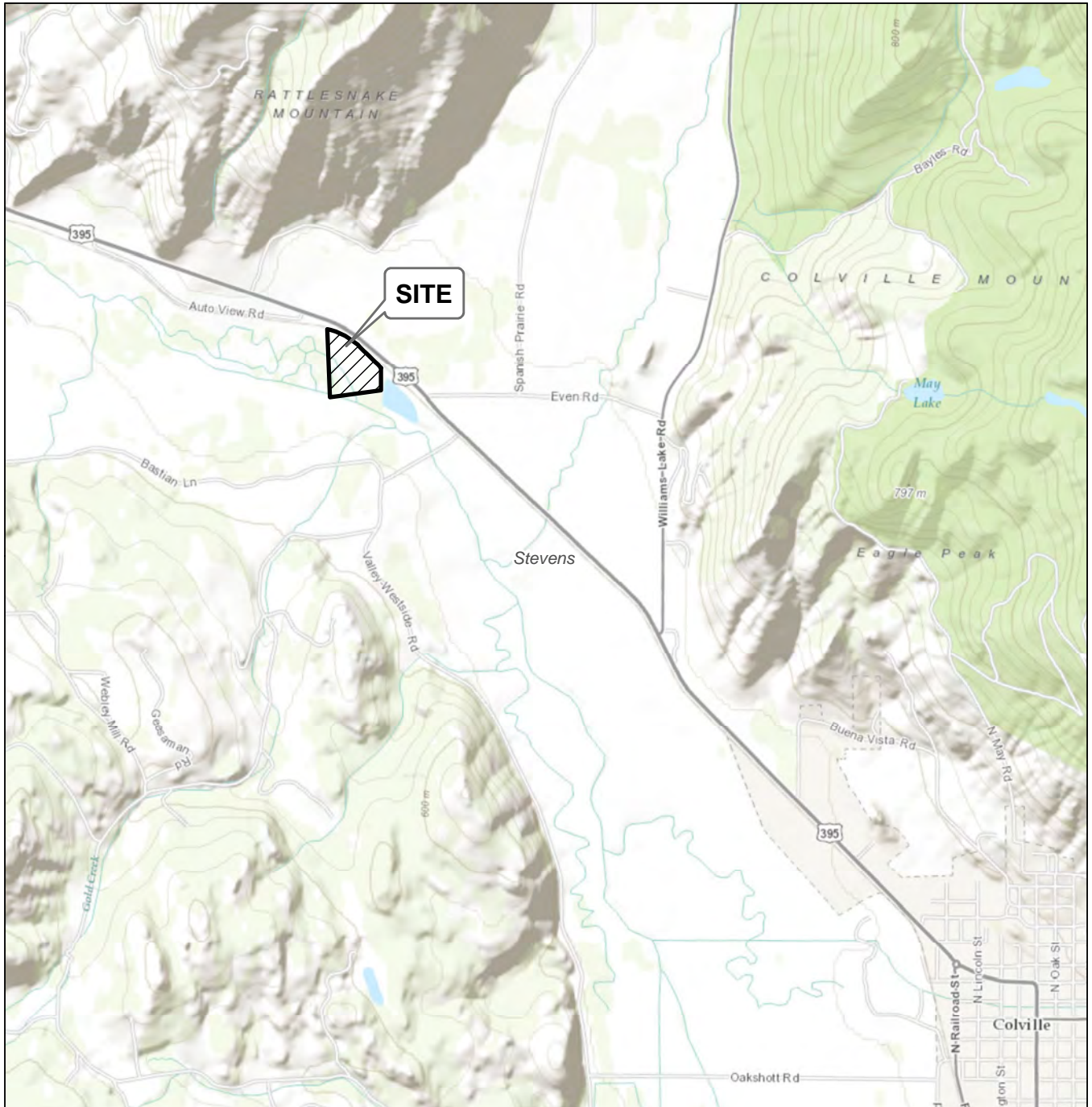
µg/L = micrograms per liter; mg/L = milligrams per liter; PAHs = Polycyclic Aromatic Hydrocarbons; PCP = Pentachlorophenol; TPH = Total Petroleum Hydrocarbons; SVOCs = Semi-volatile organic compounds

**Bold** indicates analyte was detected above the reporting limit

Red outline indicates analyte concentration exceeds referenced regulatory level.

Map Revised: 30 January 2014 ccabrera

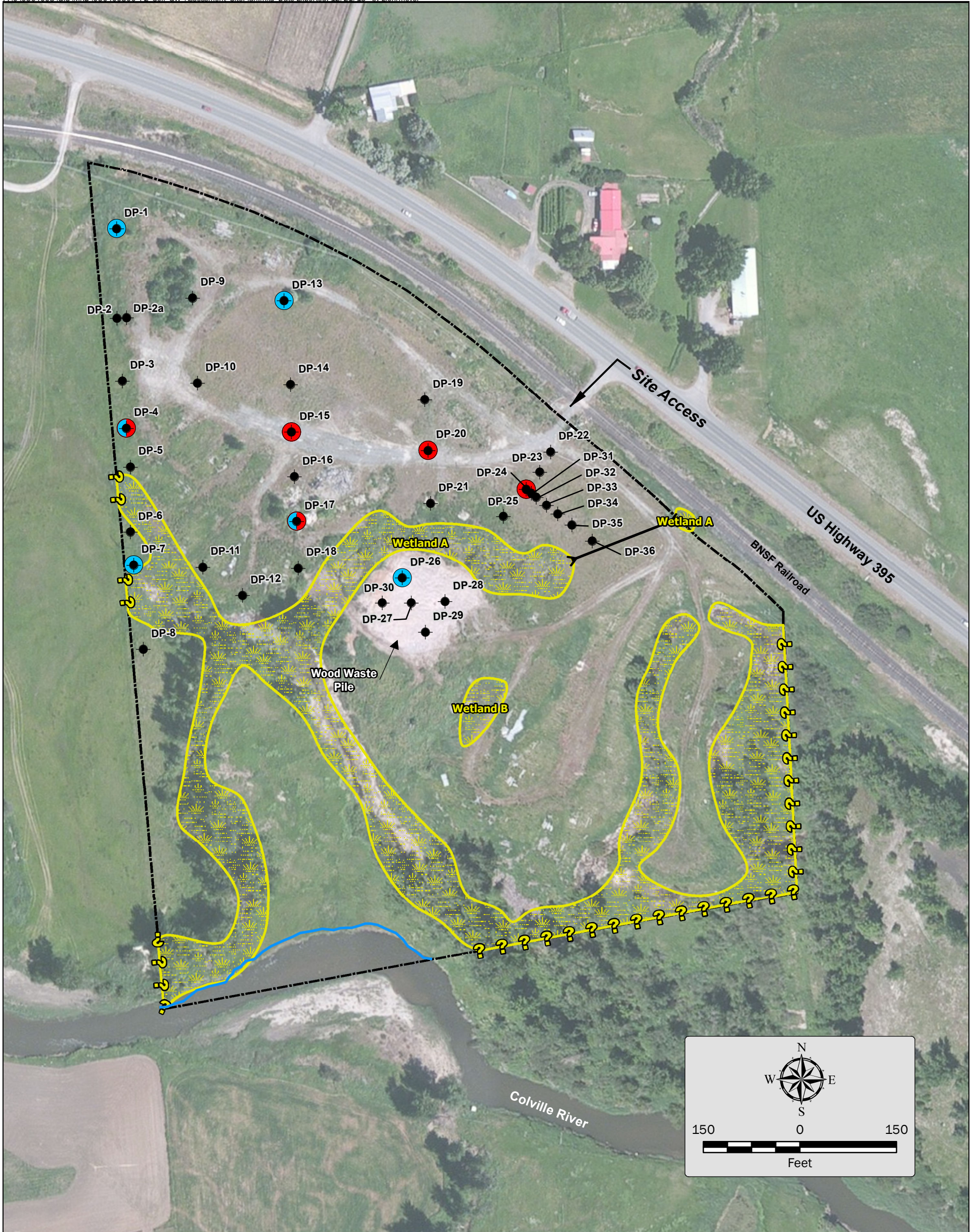
Office: PORT Path: P:\00504098\_GIS\GIS\MXD\050409800\_F1\_VM.mxd











Notes:  
 1. The locations of all features shown are approximate.  
 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document.  
 GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.  
 Data Sources: ESRI Data & Maps, Street Maps 2008.  
 Base map from ESRI Data Online.  
 Projection: NAD 1983, UTM Zone 11 North.

<b>Vicinity Map</b>	
Colville Post and Pole Colville, Washington	
	<b>Figure 1</b>





**Legend**

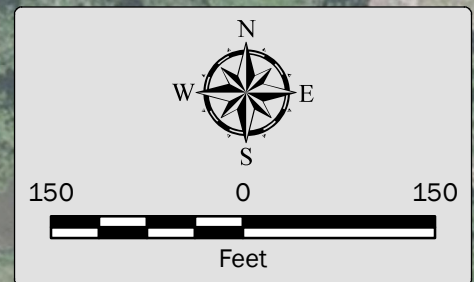
-  Wetland Area Delineated by GeoEngineers
-  Site Boundary
-  Ordinary High Water Mark (OHWM)
-  Approximate Culvert Location
-  DP-1 Direct-Push Soil Boring Location
-  Groundwater Grab Sampling Location
-  Diesel Range Petroleum Hydrocarbon (DRPH) exceeds MTCA Method A Cleanup Level of 0.5 mg/L in Groundwater
-  Pentachlorophenol (PCP) exceeds MTCA Method B Cleanup Level of 0.219 ug/L in Groundwater


**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

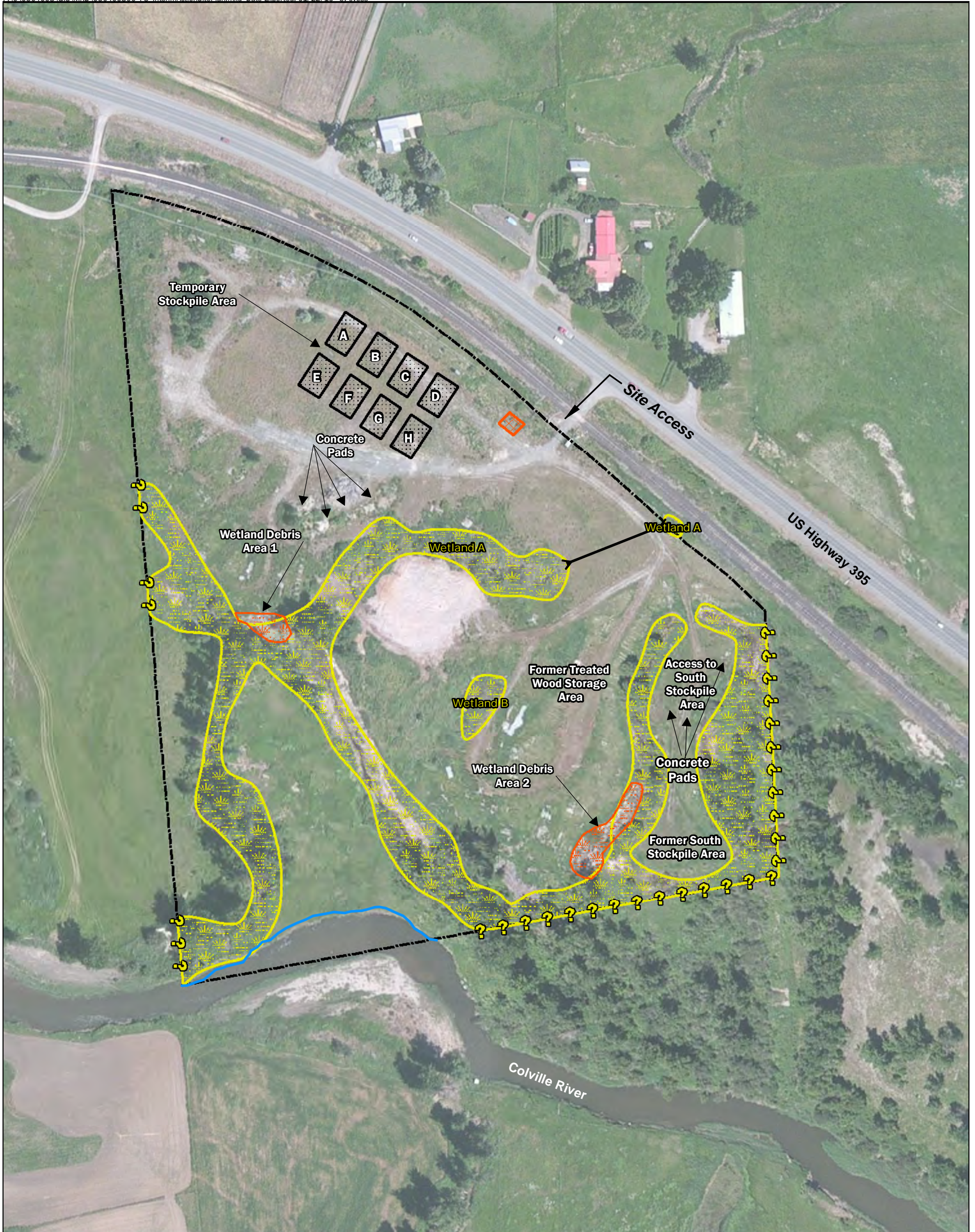
Data Source: Imagery from ESRI ArcGIS Online.

Projection: NAD 1983 HARN StatePlane Washington North FIPS 4601 Feet










<b>Site Plan</b>	
Colville Post and Pole Colville, Washington	
	<b>Figure 2</b>





**Legend**

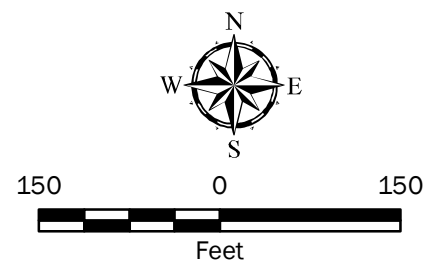
- |   |  |   |                                 |
|---|--|---|---------------------------------|
|  | Wetland Area Delineated by GeoEngineers        |  | Ordinary High Water Mark (OHWM) |
|  | Site Boundary                                  |  | Approximate Culvert Location    |
|  | Investigation Derived Waste (IDW) Drum Storage |  | Interim Action Stockpile        |
|  | Wetland Debris Area                            |   |                                 |

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Imagery from ESRI ArcGIS Online.

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet



<b>Interim Action Site Plan</b>	
Colville Post and Pole Colville, Washington	
	<b>Figure 3</b>





View of Wetland Debris Area 1 facing west prior to debris removal (April 25, 2013).



View of Wetland Debris Area 1 facing west prior to debris removal (November 12, 2014).



Debris removal from Wetland Debris Area 1 on September 21, 2015 (facing west).



Debris removed from Wetland Debris Area 1 on September 22, 2015 (facing west-southwest).



**Wetland Debris Area 1**

Colville Post and Pole  
Colville, Washington



Figure 4





View of Wetland Debris Area 2 facing south prior to debris removal (November 12, 2014).



Debris removal from Wetland Debris Area 2 on September 23, 2015 (facing north[at left] and west [at right]).



Debris removed from Wetland Debris Area 2 on September 24, 2015 (facing west-southwest).

**Wetland Debris Area 2**

Colville Post and Pole  
Colville, Washington



Figure 5





View of concrete pad south of the Temporary Stockpile Area being tipped over (left) and exposed ground beneath (right) on September 22, 2015. See Figure 3 for approximate location.



View of concrete pad in South Stockpile Area being removed (left) and exposed ground beneath (right) on September 24, 2015. See Figure 3 for approximate location.



Views of Temporary Stockpile Area on September 24, 2015. See Figure 3 for approximate location.

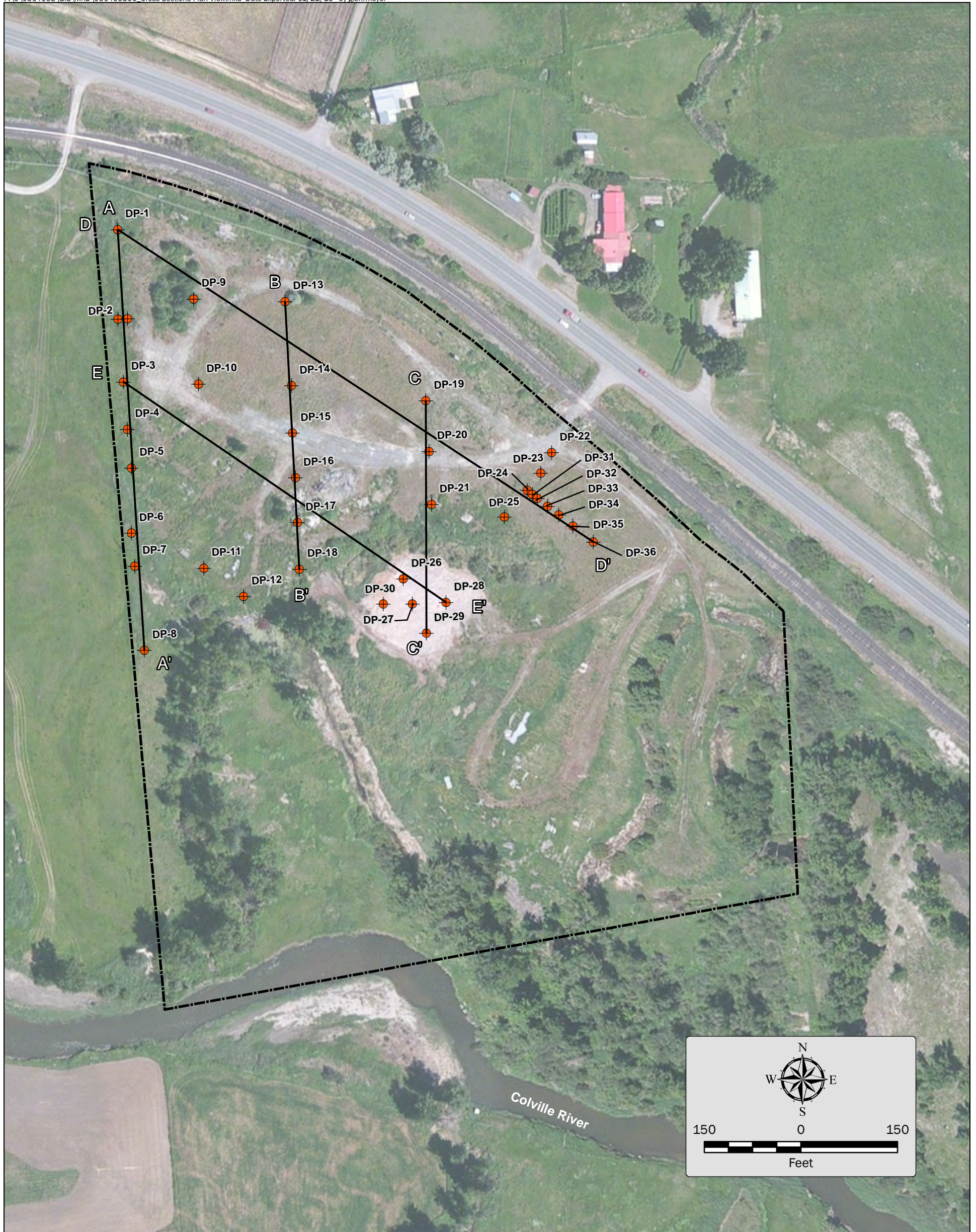
**Concrete Pads and Temporary Stockpile Area**

Colville Post and Pole  
Colville, Washington



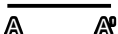


**Figure 6**






**Legend**

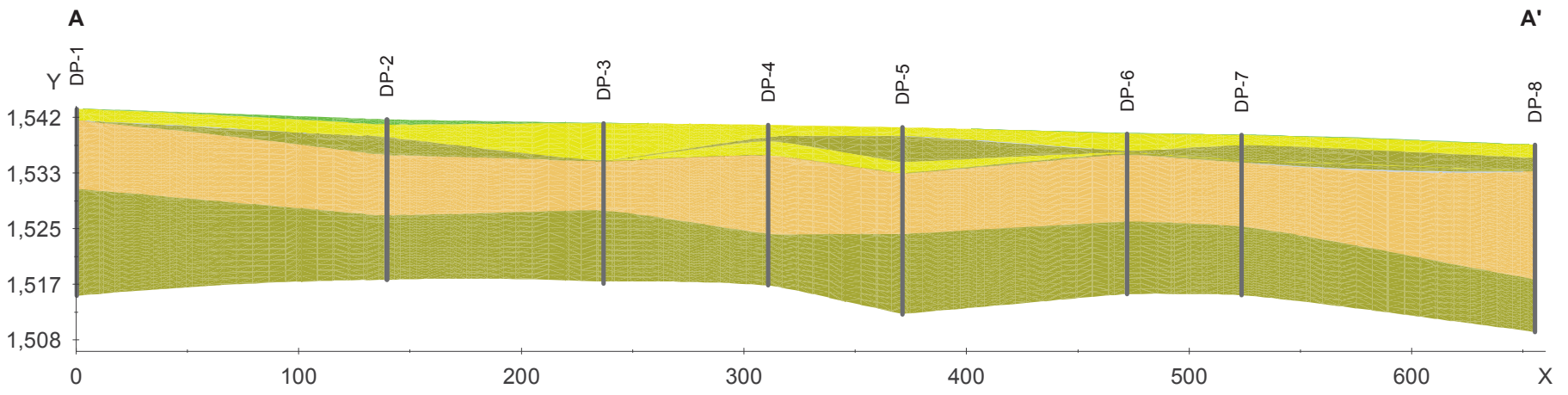
-  Site Boundary
-  DP-1 Direct-Push Soil Boring Location
-  Cross-section

**Notes:**

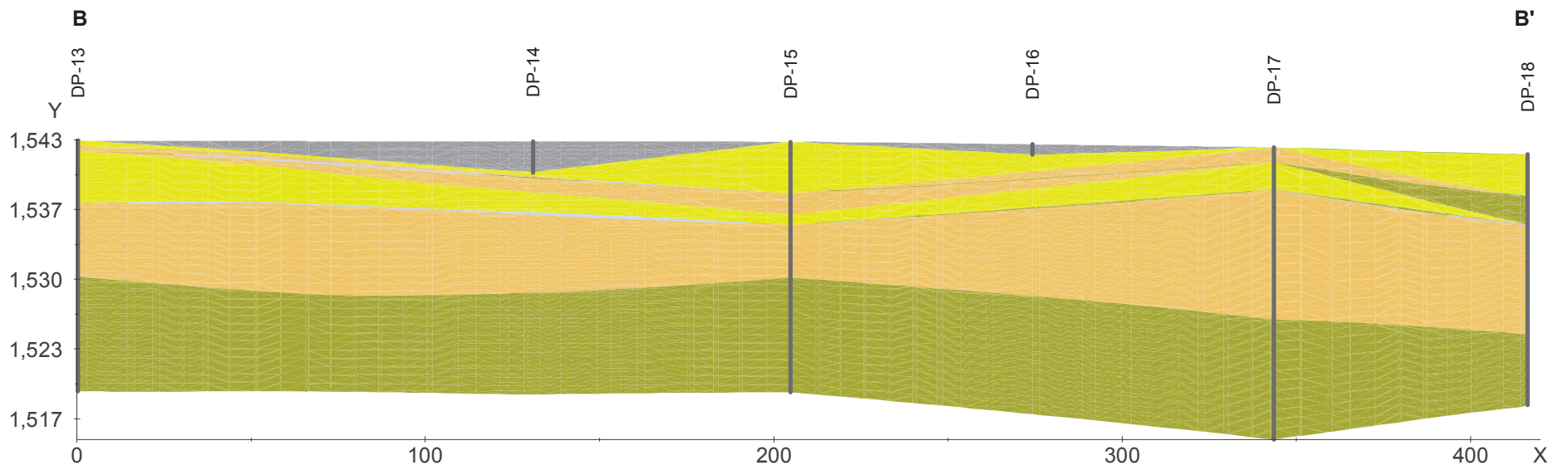
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

<b>Cross-Section Transects</b>	
Colville Post and Pole Colville, Washington	
	<b>Figure 7</b>

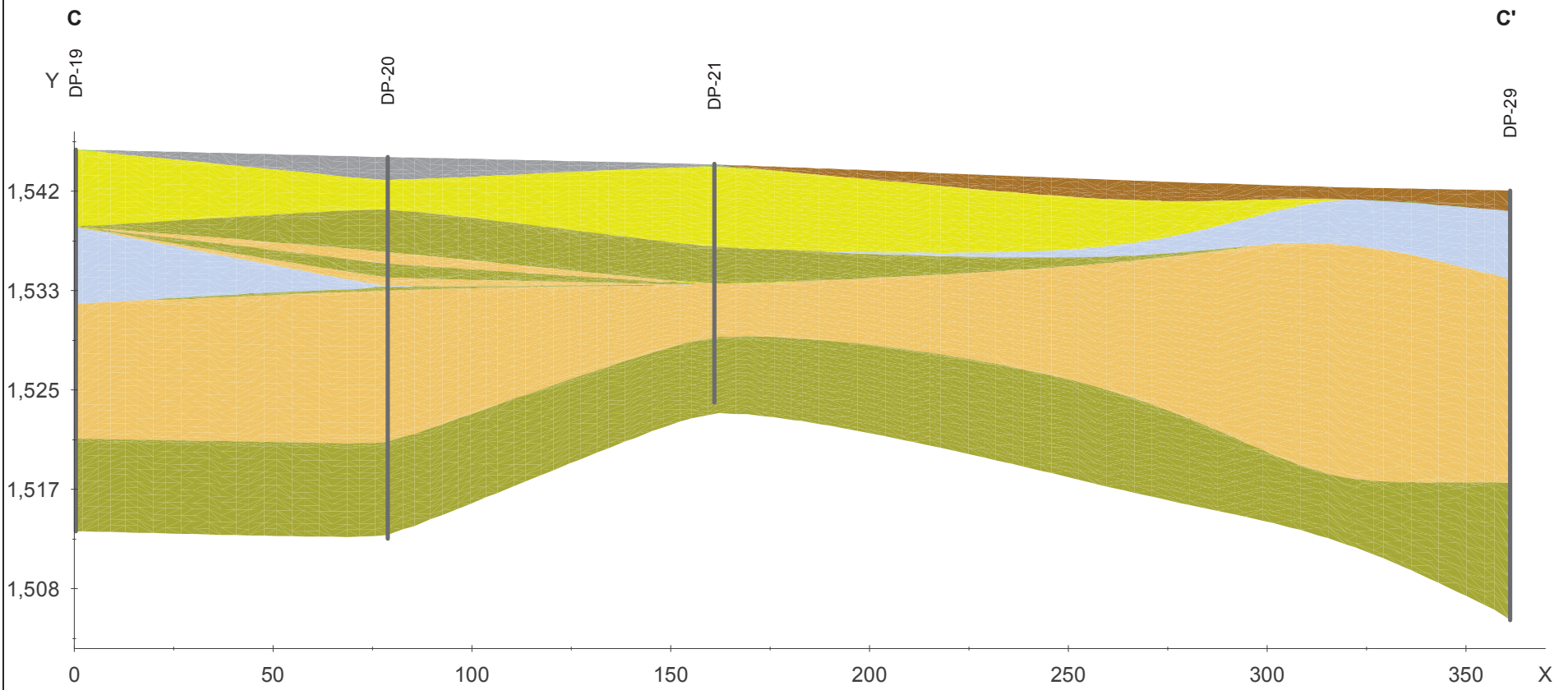




**Cross-section A - A'**



**Cross-section B - B'**



**Cross-section C - C'**

**Soil Layer Legend**

- Wood
- Gravel
- Organic Material
- Sand
- Silt
- Sand and Silt
- Clay

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Vertical exaggeration for all cross-section is 3:1.

Data Source: Imagery from ESRI ArcGIS Online.

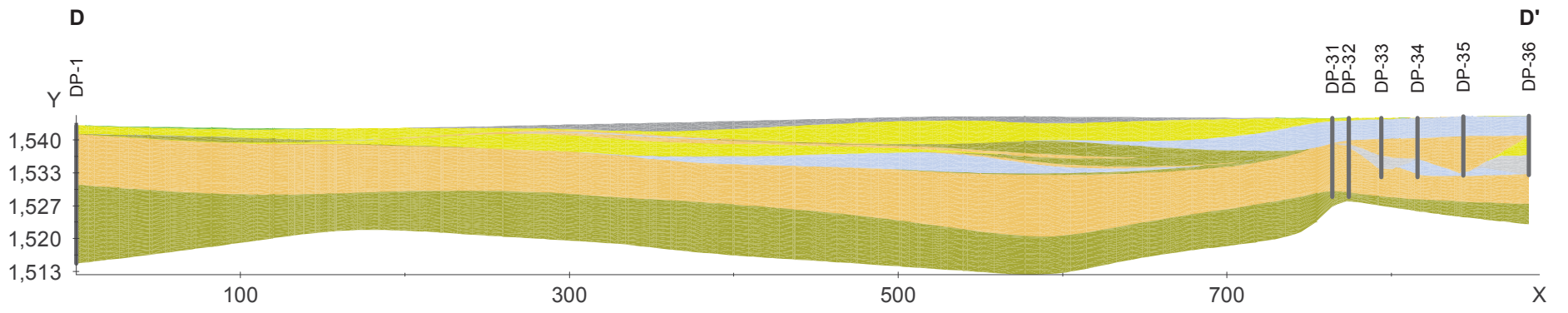
Projection: NAD 1983 HARN StatePlane Washington North FIPS 4601 Feet

**Cross-Sections A - A', B - B', and C - C'**

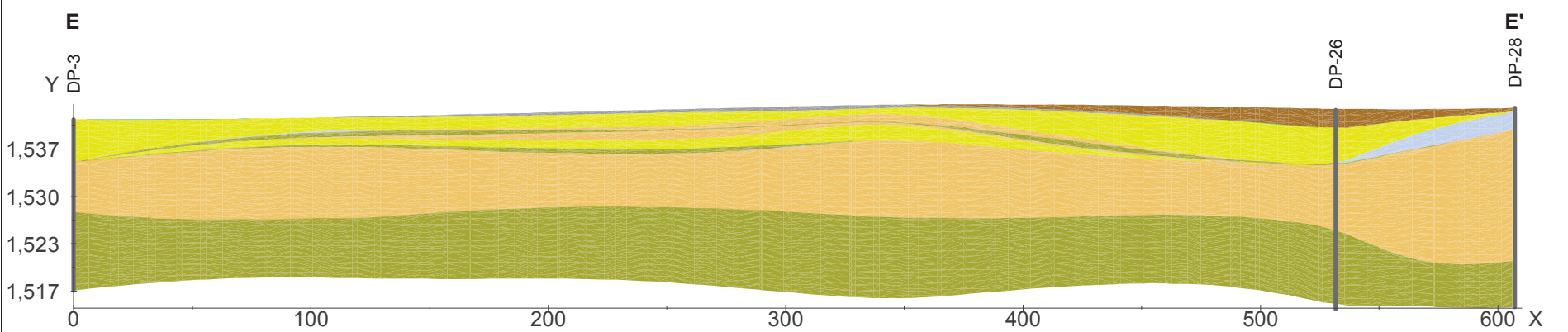
Colville Post and Pole  
Colville, Washington



**Figure 8**



**Cross-section D - D'**



**Cross-section E - E'**

**Soil Layer Legend**

- Wood
- Gravel
- Organic Material
- Sand
- Silt
- Sand and Silt
- Clay

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Vertical exaggeration for all cross-section is 3:1.

Data Source: Imagery from ESRI ArcGIS Online.

Projection: NAD 1983 HARN StatePlane Washington North FIPS 4601 Feet

**Cross-Sections D - D' and E - E'**

Colville Post and Pole  
Colville, Washington



**Figure 9**

**APPENDIX A**  
**Wetland Delineation and Assessment Report**

## **Wetland Delineation and Assessment**

Colville Post and Pole Site  
Colville, Washington

*for*

**Washington State Department of Ecology**

January 22, 2016



523 East Second Avenue  
Spokane, Washington 99202  
509.363.3125

# Wetland Delineation and Assessment

## Colville Post and Pole Site Colville, Washington

File No. 00504-098-00

January 22, 2016

Prepared for:

Washington State Department of Ecology  
Toxics Cleanup Program – Eastern Region Office  
4601 North Monroe Street  
Spokane, Washington 99205

Attention: Jeremy Schmidt, PE

Prepared by:

GeoEngineers, Inc.  
523 East Second Avenue  
Spokane, Washington 99202  
509.363.3125



Jason E. Poulsen, PWS  
Senior Natural Resource Scientist



Jason R. Scott, CFP  
Associate Biologist

JEP:JRS:tjh

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.



# Table of Contents

**INTRODUCTION.....1**

**PROJECT LOCATION / GENERAL SETTING .....1**

**SCOPE OF SERVICES .....1**

**METHODS .....2**

Literature Review .....2

Wetland Delineation .....2

    Field Methods.....3

    Vegetation.....3

    Hydrology .....4

    Soils .....6

Wetland Characterization .....7

    Ordinary High Water Mark Identification .....7

**RESULTS .....8**

Literature Review .....8

    Soils .....8

    NWI Map .....9

    Topographical Map .....9

    Historical Aerial Photographs .....9

    Previous Report..... 10

Field Investigation..... 10

    Wetland Delineation/Assessment ..... 10

    Soil and Hydrology..... 10

    General Vegetation ..... 12

Regulatory Review ..... 12

    Wetland Rating/Buffers..... 13

**CONCLUSIONS..... 13**

**LIMITATIONS..... 13**

**REFERENCES ..... 13**

**LIST OF FIGURES**

- Figure 1. Vicinity Map
- Figure 2. Topographic Map
- Figure 3. Soils Map
- Figure 4. National Wetlands Inventory Map
- Figure 5. Wetland Delineation Map

**APPENDICES**

- Appendix A. Site Photographs
  - Figures A-1 through A-16. Site Photographs
- Appendix B. Wetland Sample Plot Forms
- Appendix C. Eastern Washington Wetland Rating Summary
  - Figure C-1. Washington 303d List Screen Shot

**APPENDICES (CONTINUED)**

Figure C-2. Contributing Basin

Figure C-3. 1 Kilometer Polygon

## INTRODUCTION

GeoEngineers, Inc. (GeoEngineers) was retained by the Washington State Department of Ecology (Ecology) Toxics Cleanup Program – Eastern Region Office to complete a wetland delineation and rating assessment on the Colville Post and Pole project site. The project site was historically developed as a wood treatment and manufacturing facility for posts and poles and is located approximately 3½ miles northwest of Colville, Washington along State Highway 20 (Vicinity Map, Figure 1).

Ecology is currently in the process of developing a Remedial Investigation/Feasibility Study (RI/FS) to assess potential on-site soil and groundwater impact that may have occurred as a result of the historical wood treatment operations. A wetland delineation was completed in July 2005 by Herrera Environmental Consultants, Inc. However, since 2005, the U.S. Army Corps of Engineers (USACE) and Ecology have modified their standard protocols for conducting wetland delineations and ratings. Therefore, the purpose of this report is to provide Ecology with an updated wetland delineation and rating assessment baseline to support future permitting needs and development of Ecology's RI/FS.

Please note, the field work associated with this delineation/assessment was completed on March 16, 2015, which is outside of the typical growing season (May through September) for this region. Ecology required the updated baseline information so that the wetland resources would be documented and could further be protected/avoided during the development and implementation of the RI/FS. Therefore, hydrology and hydric soil parameters were used as the primary indicators of wetland conditions. If both wetland hydrology and hydric soil parameters were observed in a given soil pit, we assumed that conditions are present during the growing season to support hydrophytic vegetation. No information was gathered in regards to hydrophytic vegetation other than general, dominant species observations.

## PROJECT LOCATION / GENERAL SETTING

The project site is located within the Northwest ¼ of the Northwest ¼ of Section 36 Township 36 North, Range 38 East of the Willamette meridian as depicted in the Colville, Washington (Stevens County) 7.5-minute series topographic map dated 1952, photorevised 1986 (Topographic Map, Figure 2). The project site is currently undeveloped and is situated within a rural agricultural, valley bottom lands setting adjacent to the Colville River.

## SCOPE OF SERVICES

GeoEngineers was retained to conduct wetland delineation and rating assessment services within the boundary of the project property. The scope of services associated with this delineation/rating assessment included:

1. **Literature Review/Field Preparation:** GeoEngineers reviewed appropriate reference materials pertinent to the site, including United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, United States Geological Survey (USGS) topographic maps, United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) Web Soil Survey for Stevens County, Washington, recent aerial photographs and other readily available background information to assist in preparation of the wetland delineation/rating assessment. GeoEngineers also

reviewed the applicable Stevens County and Ecology documentation/regulations related to wetlands, as appropriate, to identify standards for rating and minimum buffer requirements and previous wetland delineation report for the site.

2. **Field Delineation/Assessment:** GeoEngineers mobilized to the site to conduct wetland delineation/rating assessment services within the property boundary on March 16, 2015. Wetland boundaries were determined after consideration of three wetland parameters: vegetation, soils and hydrology, in accordance with the *U.S. Army Corps of Engineers Wetland Delineation Manual (1987)* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2.0 dated May 2010)*. Soil pits were hand-excavated throughout the project site, as needed and appropriate, to record soil conditions relative to hydric (soil, vegetation and hydrology) indicators. GeoEngineers assessed the vegetative cover near each soil pit and estimated the relative abundance of hydrophytic species. GeoEngineers also prepared an Eastern Washington Wetland Rating form for each identified wetland in accordance with the Washington State Rating System for Eastern Washington guidance dated March 2007.

An iPad with GPS application capabilities was used during the field assessment to record the approximate location and/or boundaries of existing wetlands on the site. The boundaries were marked in the field by GeoEngineers with flagging, which was left in the field in the event that future surveys are required.

3. **Report Preparation:** GeoEngineers prepared this wetland delineation/rating assessment report, in general accordance with regulatory requirements and guidance, to describe the wetland delineation and rating classification results of the field assessment. The report includes documentation of the wetland areas and a wetland rating classification, supporting illustrations, photographs and reference citations, as necessary. Map excerpts and appropriate appendices are also presented to support GeoEngineers' findings and conclusions.

## METHODS

### Literature Review

GeoEngineers researched existing information on wetlands, streams, ditches and other man-made aquatic features documented within the project boundary prior to conducting the site visit. The list below is the readily available literature we were aware of and reviewed prior to conducting our field work at the site.

- USGS topographic map;
- USFWS NWI maps;
- USDANRCS Web Soil Survey for Stevens County Washington;
- Historical aerial photographs; and
- Herrera Environmental Consultants, Inc. Wetland Delineation Report dated July 7, 2005.

### Wetland Delineation

The wetland delineation and assessment was conducted in accordance with the guidance set forth in the 1987 *USACE Wetland Delineation Manual (Environmental Laboratory 1987)*, the *Washington State Wetlands Identification and Delineation Manual (Ecology 1997)* and the 2010 *Regional Supplement to the*

*USACE Wetland Delineation Manual: Western Mountains, Valleys and Coast Region Version 2.0* (USACE, 2010). These manuals follow the three-parameter approach for conducting wetland determinations. This approach documents: (1) the presence of hydrophytic vegetation; (2) hydric soils; and (3) wetland hydrology, all of which are described in further detail below. The presence of all three criteria is required for a given area to be classified as a wetland. Information wasn't gathered in regards to hydrophytic vegetation other than general, dominant species observations within 20 to 30 feet of the soil pits.

### **Field Methods**

Prior to visiting the site, a health and safety briefing was completed, field gear and travel plans were prepared and a communications protocol for the field crew was established. GeoEngineers' biologists conducted field assessment and delineation services on-site March 16, 2015. The initial effort was to conduct a site walk and look for indicators of the three wetland parameters to indicate the potential presence of a wetland at the site. During the initial site walk we identified evidence of all three wetland parameters at the site and we determined it was warranted to continue the study and conduct a wetland delineation.

Based on site observations relative to topography, hydrology and vegetation, we estimated the wetland boundaries for which we would subsequently test to compare upland characteristics and wetland characteristics. Eight soil pits were hand dug to a depth of between approximately 12 to 16 inches below ground surface (bgs), depending on soil conditions. Soil in each soil pit was evaluated for texture, matrix color, presence or absence of redoximorphic features or gleying, and depth of soil saturation. This information was used to determine the presence/absence of hydric soils and to help define the wetland boundary. Details regarding soils evaluation methodology are described below under the heading "soils."

Wetland hydrology indicators, including drainage patterns, presence of surface water, depth of groundwater within soil pits and vegetation community (observable during the non-growing season period), were also noted at sample plots surrounding soil pits (approximately 20 to 30 foot radius). Vegetation, soil and hydrology information, collected during the field study, are presented on the standard wetland delineation data forms, which are included in Appendix B. Please note, not all of the soils pits dug during the wetland delineation were recorded. Unrecorded soil pits were used for soil and hydrology comparison to the recorded soil pits.

Boundary delineation points and soil pit locations were recorded using an iPad and associated global positioning system (GPS) and GISPro (global information system) software. These locations were uploaded and processed using desktop GIS mapping software to spatially identify the wetland boundary.

A photographic record of site conditions, during our field study, is provided in Appendix A, Figures A-1 through A-15. GeoEngineers' biologist also established sample plots in the field to document the conditions associated with these three parameters within the study boundary. Wetland determination sample plot data forms are provided as Appendix B.

### **Vegetation**

The USACE manual defines hydrophytic vegetation as the community of macrophytes that occur within areas where inundation or soil saturation is either permanent or of sufficient frequency and duration to exert a controlling influence on the plant species present (USACE 2010). Hydrophytic plant species have the ability to grow, compete and become established in areas where anaerobic conditions exist due to the

presence of surface or groundwater. In 1988, the USACE and USFWS (Reed 1988) developed plant indicator categories that describe the probability of vegetation species to occur in wetlands. This list was updated in 2013 and is now the USACE National Wetlands Plant Inventory (NWPI) Version 3.1. Each plant species observed within a given on-site sample plot was categorized according to the Western Mountain Valleys and Coast (WMVC) indicator status under the NWPI. Table 1 provides summarized definitions of the indicator status categories.

**TABLE 1. PLANT INDICATOR STATUS CATEGORIES**

Indicator Status	Indicator Symbol	Description
Obligate Wetland Plants	OBL	Plants that occur in wetlands, under natural conditions, greater than 99 percent of the time
Facultative Wetland Plants	FACW	Plants that occur in wetlands, under natural conditions, between 67 to 99 percent of the time
Facultative Plants	FAC	Plants that occur in wetlands, under natural conditions, between 34 to 66 percent of the time
Facultative Upland Plants	FACU	Plants that occur in wetlands, under natural conditions, between 1 to 33 percent of the time
Obligate Upland Plants	UPL	Plants that occur in wetlands, under natural conditions, less than 1 percent of the time
No Indicator	NI	Indicator status has not been identified for the species
No Occurrence	NO	No known occurrence of the plant in the region

The prevalence of wetland vegetation is characterized by the dominant species comprising the plant community within a wetland. A dominant species is considered any plant species that represents 20 percent or greater total aerial coverage for each vegetative stratum (tree, shrub, herbaceous or aquatic bed). If more than 50 percent of the dominant plant species in an area were categorized as OBL, FACW or FAC, then the plant community is classified as hydrophytic and therefore meets that wetland indicator parameter. Additional observations of hydrophytic plant characteristics included (but not limited to): morphological adaptations (water roots or shallow root systems), physiological adaptations (inflated stems or polymorphic leaves) and reproductive adaptations (delayed flowering or floating seeds).

On-site wetland vegetation communities that could be identified by the field biologists were classified according to the Cowardin Classification System (Cowardin et al. 1979). Vegetation nomenclature described in this report follows the format outlined in the book titled *Flora of the Pacific Northwest* (Hitchcock and Cronquist 1973).

### Hydrology

Hydrologic patterns that may create wetlands can be influenced by precipitation, stratigraphy, topography, soil permeability, plant cover and human disturbance. Wetland hydrology encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Primary and secondary hydrologic indicators that were used by the field biologists to assist the identification of potential wetlands included the following (USACE 2010):

- Surface water or inundation;
- High water table or saturated soil within 12 inches of the ground surface for 14 or more consecutive days at a minimum frequency of 5 years out of 10;
- Water marks;
- Sediment and drift deposits;
- Algal mat or crust;
- Iron deposits;
- Surface soil cracks;
- Salt crust;
- Inundation visible on aerial photography;
- Sparsely vegetated concave surface;
- Aquatic invertebrates;
- Water-stained leaves;
- Hydrogen sulfide odor;
- Oxidized rhizospheres along living roots;
- Presence of reduced iron; and
- Stunted or stressed plants.

Secondary indicators include (USACE 2010):

- Drainage patterns;
- Dry-season water table;
- Saturation visible on aerial photography;
- Geomorphic position;
- Shallow aquitard;
- FAC-neutral test;
- Raised ant mounds; and
- Frost-heave hummocks.

The growing season for a region is dependent upon climate, precipitation and topography. Hydrology must be present for at least 14 consecutive days and within 12 inches of the ground surface during the growing season to be considered a wetland. Two indicators that the growing season has begun include: (1) a soil temperature that is 41 degrees Fahrenheit (°F) measured at 12 inches below the ground surface and/or; (2) above-ground growth and development of vascular plants (USACE 2008).

The growing season has begun on a given site when two or more different non-evergreen vascular plants exhibit one or more of the following indicators of biological activity:

- Emergence of herbaceous plants;
- New growth on vegetative crowns;
- Coleoptiles/cotyledon emergence from seed;
- Bud burst on woody plants;
- Emergence or elongation of woody plant leaves; or
- Emergence or opening of flowers.

The growing season has ended on a given site when woody deciduous species lose their leaves and/or the last herbaceous plants cease flowering and their leaves become dry or brown. Additional information may be collected from the WETS tables available from the USDA NRCS National Water and Climate Center (<http://www.wcc.nrcs.usda.gov/>). The objective of the WETS tables is to define the normal range for monthly precipitation and normal range for growing season required to assess the climatic characteristics for a geographic area over a representative time period throughout the United States for a specific area. The growing season dates in the WETS tables are an estimate of when air temperature averages above 28°F. As previously noted, GeoEngineers deviated from this standard and conducted the delineation/assessment outside of the typical growing season (May through September).

### Soils

Hydric soils are formed under conditions of saturation, flooding or ponding for a period long enough during the growing season that anaerobic conditions develop in the upper soil strata (0 to 20 inches commonly) (USACE 2010). These anaerobic conditions exhibit certain soil characteristics that can be identified in the field to investigate (confirm or deny) the hydric soil wetland parameter. Prolonged anaerobic soil conditions eventually lead to a chemically-reduced state where soil components (iron, manganese, sulfur and carbon compounds) develop soil colors and other physical characteristics that are indicative of hydric soils. These chemically reduced soil components persist when the soil is either wet or dry. Specific hydric soil characteristics that the field biologist use to identify hydric soils include:

- Reduced iron resulting in a soil color that is known as gley (bluish-gray or greenish-gray);
- Loss of iron resulting in a soil color that is known as redox depletion (gray or reddish-gray);
- Loss of iron resulting in concentrated soil patches known as redoximorphic concentrations (orange or red);
- Sulfidic odor; and
- High organic matter content (peat or muck) in the upper 32 inches of the soil profile.

GeoEngineers' study methods for hydric soil analysis included digging soil pits wherever drainage patterns, ponded areas, or indicators of water presence was observed. Soil pits were hand dug to a general depth of 12 to 16 inches bgs along a transect perpendicular to the predicted wetland boundary in a gradient from dry to wet. Soils obtained from each soil pit were observed for color profile, odor and redoximorphic condition. Hydric soil conditions must be met within 12 inches of the ground surface to consider the soil types hydric.



Soil colors were determined using Munsell® Soil Color Charts (Gretag/Macbeth 2000) and their appropriate Hue: spectral colors (ex. 10YR), Value: degree of lightness (ex. 2/) and Chroma: strength or purity of the color (ex. /1). Soil profiles must have a dominant chroma of 2 or less or the layer with dominant chroma of more than 2 must be less than 6 inches thick to meet any hydric soil indicators. Hydric soil indicators commonly found in wetlands are identified in the technical document *Field Indicators of Hydric Soils in the United States, a Field Guide for Identifying and Delineating Hydric Soils, Version 7.0* (USDA 2010). These indicators help identify soils that were formed under saturated, flooded or ponded conditions long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile.

### **Wetland Characterization**

Each of the wetlands and streams delineated by this study were characterized according to their Cowardin classification (Cowardin, et al. 1979). The Cowardin classification system categorizes wetlands and deep water habitats according to five separate systems: Marine, Estuarine, Riverine, Lacustrine and Palustrine. These systems are then stratified into subsystems based off of the plant community type. These systems are further stratified into classes and subclasses based on substrate material. Each class and subclass is then annotated with specific modifiers for water regimes, water chemistry, soil, and other special modifiers. The USFWS uses this classification system on their National Wetland Inventory (NWI) maps and it is used in this report to describe the general structure of wetlands and streams on site.

Wetlands were also classified according to their hydrogeomorphic (HGM) classification to determine their location and function within the watershed. HGM classifications include the following:

- Depressional;
- Riverine;
- Lake-fringe;
- Slope;
- Flats; and
- Freshwater tidal.

### **Ordinary High Water Mark Identification**

To estimate the presence of stream (lotic) features within the study area, we applied the methods set forth by the USACE in their Regulatory Guidance Letter titled *Ordinary High Water Mark Identification* (USACE 2005) and various indicators outlined with the USACE *A Guide to the Identification of the OHWM in the Arid West Region of the Western United States* documentation (USACE 2008). Please note, the Arid West Ordinary High Water Mark (OHWM) document was used because many of the characteristics and attributes of the streams in the region of the study area are similar to those found in the Arid West region. The OHWM is defined by the USACE as:

The term “ordinary high water mark” means that line on the shore established by the fluctuations of weather and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas (USACE 2008).

In our study, we walked the site to identify physical characteristics that are present on the shoreline of a given watercourse. Conditions may vary depending on the type of water body and conditions of the area. There are no required physical indicators that must be present to make an OHWM determination. However, the following physical characteristics were considered when making the OHWM determination:

- Natural line impressed on the bank;
- Shelving or topographic breaks;
- Changes in the character of soil;
- Destruction of terrestrial vegetation;
- Presence of litter or debris (drift lines);
- Wracking;
- Vegetation matted down, bent or absent;
- Sediment sorting;
- Leaf litter disturbed or washed away;
- Scour;
- Deposition;
- Multiple observed flow events;
- Bed and banks;
- Water staining; and
- Change in plant community.

Other methods for determining the OHWM that do not include physical observation:

- Lake and stream gauge data;
- Elevation data;
- Spillway height;
- Flood predictions;
- Historic records of water flow; and
- Statistical evidence.

## **RESULTS**

### **Literature Review**

#### **Soils**

The Stevens County, Washington NRCS Web Soils Soil Survey (USDA 2015) identified two soil types within the boundary of the project site (Soils Map, Figure 3). A general description of each soil type, as defined by

the NRCS Web Soil Survey, is provided below. Both of these soil types are identified on the National Hydric Soils List as a hydric soil.

- **58 – Colville Silt Loam:** 0 to 3 percent slopes / Landform: Depressions and floodplains / Available water storage: High / Parent material: Mixed alluvium / Drainage class: Poorly drained.
- **59 – Colville Silt Loam, Drained:** 0 to 3 percent slopes / Landform: Depressions / Available water storage: High / Parent material: Mixed alluvium / Drainage class: Somewhat poorly drained.

#### **NWI Map**

The USFWS NWI maps (USFWS 2015) identified two wetland habitat types: (1) Palustrine, Emergent, Persistent, Temporarily Flooded (PEM1C); and (2) Palustrine, Emergent, Persistent, Seasonally Flooded (PEM1A); within the project site (National Wetlands Inventory Map, Figure 4). These two habitat types were generally confirmed from the field observations, although size and specific location varied from what was actually depicted by the NWI Map.

#### **Topographical Map**

GeoEngineers reviewed the 1952 and photorevised 1986 Colville, Washington 7.5-minute series topographic map for the project site. The 1952 depiction indicates that a meandering intermittent/seasonal drainage ditch/channel was located within the central and southern portions of the site. The 1986 photo revisions do not depict changes to the site from the original 1952 illustration (Figure 2).

#### **Historical Aerial Photographs**

GeoEngineers reviewed the following readily available historical aerial photographs associated with the site to assist with the evaluation process. Please note, these aerial photographs were not reproduced in the attached figures due to copyright restrictions.

- **July 1995:** The 1995 aerial photograph depicts the site as being developed with multiple structures within the central and northern portions of the site. This same area appears to be heavily graded and cleared. The tree lines associated with former meanders in the Colville River are also visible along the entire southern portion of the site.
- **August 1998:** The 1998 aerial photograph appears similar to the 1995 photograph. However, the Colville River appears to have migrated further north onto the project site near the southwest corner of the site.
- **October 2004:** The October 2004 photo depicts the north and central portions of the site as being developed with multiple building structures and access roads. No significant changes to the waterways or wetland areas were observed.
- **August 2006 / September 2009 / November 2011 / July 2013:** Sometime between October 2004 and August 2006, the building structures were removed from the site. Photographs from August 2006 to July 2013 appear relatively similar with no apparent changes to the site configuration.

## Previous Report

GeoEngineers reviewed the Colville Post and Pole Wetland Delineation Report dated July 2005 that was prepared for the EPA – Region 10 by Herrera Environmental Consultants, Inc. (Herrera Environmental Consultants 2005). In 2005, Herrera delineated one wetland (Wetland Delineation Map, Figure 5) that was approximately 6.2 acres in size and was classified as a Category II. Herrera identified this wetland as having forested, scrub-shrub and emergent wetland components that required a 150 foot buffer in accordance with Stevens County Code (SCC 13.30.020(6)\_2003). No other wetlands were delineated by Herrera during the 2005 survey.

## Field Investigation

### Wetland Delineation/Assessment

As mentioned above, wetland boundaries were recorded using an iPad and associated GPS/GIS application package. Please note, the wetland boundaries identified within the project site were not surveyed by a professional land surveyor and are considered approximate. As wetland indicators were determined to meet the modified wetland criteria, noted above, appropriate pin flagging was labeled and inserted into the ground or hung from an appropriate tree branch along the estimated wetland boundary. A waypoint was also established using the hand-held GPS unit for each soil pit and/or flag location. Following the field survey, these locations were uploaded in the office and used in conjunction with desktop GIS mapping software to depict the wetland boundary as illustrated on Figure 5.

### Soil and Hydrology

The GeoEngineers' biologist established a total of eight soil pits (SP-1 through SP-8) within the area of the project site. Soil pits were located based on site observations such as topography gradient or low points within the terrain, general vegetative cover or color change and data obtained from the NWI maps. Table 2 provides a summary of soil and hydrology data conditions encountered during the delineation/assessment.

**TABLE 2. SOIL/HYDROLOGY DATA SUMMARY**

Soil Pit ID	Approximate Depth (inches bgs)	Hue, Value, Chroma	Redox Features	Soil Description	Sulfide Odor	Depth to Water / Saturation (inches bgs)	Hydric Soils Present? (Yes / No)
SP-1	0 - 12	7.5YR 3/2	No	Sandy clay silt	No	10	No
SP-2	0 - 12	7.5YR 3/2	No	Sandy clay silt	No	No water in soil pit	No
SP-3	0 - 17	10YR 4/3	No	Sandy clay silt	No	No water in soil pit	No
SP-4	0 - 6	10YR 2/2	No	Sandy silt	No	-	Yes
	6 - 17	10YR 5/1	10YR 4/6	Sandy silt	No	15	
SP-5	0 - 17	10YR 2/2	No	Sandy clay silt	No	No water in soil pit	No

Soil Pit ID	Approximate Depth (inches bgs)	Hue, Value, Chroma	Redox Features	Soil Description	Sulfide Odor	Depth to Water / Saturation (inches bgs)	Hydric Soils Present? (Yes / No)
SP-6	0 - 3	10YR 3/2	No	Silty clay with sand and organics (wood chips)	No	-	Yes
	3 - 17	10YR 2/1	10YR 3/2	Silty clay with sand and organics (wood chips)	No	3	
SP-7	0 - 6	Wood Chips	-	-	-	-	Yes
	0 - 12	10YR 2/1	10YR 4/2		No	6	
SP-8	0 - 13	Wood Chips	-	-	-	-	No
	13 - 17	7.5 YR 4/1	No	Silty clay with sand	No	No water in soil pit	

The soils in SP-1 and SP-2 did not exhibit low chroma and/or redoximorphic features (soil color 7.5YR 3/2). It is GeoEngineers' professional opinion that the soils in these two soil pits were significantly disturbed during the construction of the adjacent rail line. Both SP-1 and -2 appeared similar except SP-1 was recorded as having water within 10 inches of the ground surface while SP-2's water level was greater than 12 inches bgs. Because SP-1 met the hydrology and vegetation (Reed canarygrass [*Phalaris arundinacea*]) parameters, we assumed, that if the site had not been disturbed by the rail line construction, hydric soils would be present. Furthermore, the surface water adjacent to SP-1 is connected to Wetland A through a culvert which in turn provides a direct connection to the Colville River. Based on this information, GeoEngineers identified SP-1 as being located within Wetland A.

Soil data gathered from the non-hydric or upland soil pits (SP-3, -5 and -8) revealed a soil profile of sandy clay/silt texturing with the following soil colors 10YR 4/3, 10YR 2/2 and 7.5YR 4/1, respectively. No apparent redoximorphic features were observed within these same three soil pits. Soil pits SP-4, -6 and -7, consistently revealed low chroma soils (10YR 5/1 and 10YR 2/1) with redoximorphic features (10YR 4/6, 10YR 3/2 and 10YR 4/2, respectively) and hydrology (saturation and/or water table) within 10 inches or less of the ground surface. Relatively dark soils are expected in a river bottoms areas similar to the project site. The similarity between soils in upland and wetland areas could also be the product of mixing through historical site operations and earth moving activities. It is GeoEngineers professional opinion that site soils and vegetation have been significantly disturbed due to historical development and site operations.

A photographic record of the soil pit conditions is provided in Appendix A. The wetland determination sample plot data forms are provided in Appendix B.

## General Vegetation

As mentioned above, timing constraints and the need to rapidly respond to Ecology’s requests required that GeoEngineers conduct the delineation/assessment outside of the typical growing season (May through September). Therefore, hydrophytic vegetation was characterized based on general dominant species observed within approximately 20- to 30-foot-diameter sample plot surrounding each soil pit.

The majority of the upland areas have been heavily graded and/or compacted. Vegetation within these areas is sparse and mainly consists of small unidentifiable herbs and invasive weeds. The dominant hydrophytic vegetation, observed on-site, is summarized for each of the two wetlands in Table 3 below.

**TABLE 3 DOMINATE VEGETATION**

Wetland	Herbaceous Layer	Scrub/Shrub Layer	Forested Layer
Wetland A	<ul style="list-style-type: none"> <li>• Reed</li> <li>• Canarygrass - FACW (<i>Phalaris arundinacea</i>)</li> <li>• Water sedge OBI (<i>Carex aquatilis</i>)</li> <li>• Common cattail (<i>Typha latifolia</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Pacific willow (<i>Salix lucida</i>)</li> <li>• Red osier dogwood (<i>Cornus stolonifera</i>)</li> <li>• Common snowberry (<i>Symphoricarpos albus</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Black Cottonwood (<i>Populus balsamifera</i>)</li> <li>• Quaking aspen (<i>Populus tremuloides</i>)</li> <li>• Black hawthorn (<i>Crataegus douglasii</i>)</li> </ul>
Wetland B	<ul style="list-style-type: none"> <li>• Reed</li> <li>• Canarygrass (<i>Phalaris arundinacea</i>)</li> </ul>	No Scrub/Shrub Layer	No Forested Layer

## Regulatory Review

According to the *Washington State Wetlands Identification and Delineation Manual*, dated March 1997, the USACE, Environmental Protection Agency (EPA), Washington State Shoreline Management Act (SMA) and the Growth Management Act (GMA), a wetland is defined as:

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Based on this regulatory definition, and our field observations, historical site data, and previous report documentation, GeoEngineers identified two wetlands that meet USACE, EPA and Ecology’s wetland criteria within the site (wetlands A and B).

Wetland A is classified as palustrine emergent/scrub-shrub/forested wetland approximately 212,140 square feet (4.9 acres). Wetland B is classified as a palustrine depressional emergent wetland approximately 4,880 square feet (0.1 acres).

## **Wetland Rating/Buffers**

Wetland A was rated as a Category II system based on its functional attributes; scoring a total of 20 points on the Eastern Washington Rating (EWR) form. Wetland A meets criteria consistent with a Category II rating with a score of 6 points for water quality functions, 5 points for hydrologic functions and 9 points for habitat functions. Wetland B was rated as a Category III system based on its functional attributes; scoring a total of 18 points on the EWR form. Wetland B meets criteria consistent with a Category III rating with a score of 6 points for water quality functions, 5 points for hydrologic functions and 7 points for habitat functions. Both EWR forms have been provided as Appendix C. Based on these ratings, the Stevens County, Washington Critical Areas Ordinance (SCC 13.10.025) requires a minimum buffer of 150 feet for a Category II wetland (Wetland A) and a minimum buffer of 100 feet for a Category III wetland (Wetland B).

## **CONCLUSIONS**

GeoEngineers identified, delineated and assessed two wetlands, Wetland A and Wetland B, within the project site boundary. Wetland A was classified as a palustrine emergent/scrub-shrub/forested Category II wetland approximately 212,140 square feet (4.9 acres). Wetland B was classified as a palustrine emergent Category III wetland approximately 4,880 square feet (0.1 acres).

Based on the information obtained from field observations, literature review, historical documentation, previous reports and regulation requirements/definitions outlined above, GeoEngineers' concludes that Wetland A and B, as delineated in Figure 5, are considered jurisdictional wetlands.

This report contains opinions from GeoEngineers based on specific site data and previous professional experience, however, GeoEngineers does not have regulatory authority so final determinations will be made by Ecology and the USACE.

## **LIMITATIONS**

GeoEngineers has prepared this wetland delineation report in general accordance with the scope and limitations of our proposal. Within the limitations of scope, schedule and budget, our services have been executed in accordance with the generally accepted practices for wetland delineation in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

This report has been prepared for the exclusive use by the Washington State Department of Ecology and their authorized agents following the described methods and information available at the time of our services. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. The information contained herein should not be applied for any purpose or project except the one originally contemplated.

## **REFERENCES**

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetland and Deep Water Habitats of the United States. Performed for Office of Biological Services, Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C.

- Environmental Laboratory. 1987. "U.S. Army Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Environmental Protection Agency and United States Army Corps of Engineers. 2008. Joint Memorandum Regarding Clean Water Act Jurisdictional Determinations.
- Gretag/Macbeth. 2000. Munsell® Soil Color Charts. New Windsor, New York.
- Hitchcock, L.C. and A. Cronquist. 1973. Flora of the Pacific Northwest: An Illustrated Manual. University of Washington Press, Seattle.
- Hruby, T. 2014. Washington State Wetland Rating System for Eastern Washington: 2014 Update. Washington State Department of Ecology Publication #14-06-030.
- McMillan, A. 1997. Washington State Wetlands Identification and Delineation Manual. Washington State Department of Ecology Publication #96-94.
- Reed, P. 1993. *Supplement to the National List of Plant Species that Occur in Wetlands: Northwest (Region 9)*.
- Stevens County Code (SCC), Critical Areas Ordinance, Protection Regulations. Chapter 13.10.025 Amended 2004.
- United States Army Corps of Engineers. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- United States Army Corps of Engineers (USACE). 2001. *Headwaters, Inc. vs. Talent Irrigation District* court decision 243 F.3d 526 (9th Circuit Court).
- United States Army Corps of Engineers (USACE). 2008. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region Version 2.0. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- United States Army Corps of Engineers (USACE). 2005. Regulatory Guidance Letter - Ordinary High Water Mark Identification. No. 05-05.
- United States Army Corps of Engineers (USACE). 2008. A Guide to the Identification of the OHWM in the Arid West Region of the Western United States documentation.
- U.S. Climate Data. Historical Temperature Data. <http://www.usclimatedata.com/climate/colville/washington/united-states/uswa0606>. Accessed April 30, 2015.
- United States Department of Agriculture - National Resource Conservation Service (USDA-NRCS). 2010. Field Indicators of Hydric Soils in the United States, a Field Guide for Identifying and Delineating Hydric Soils, Version 7.0.



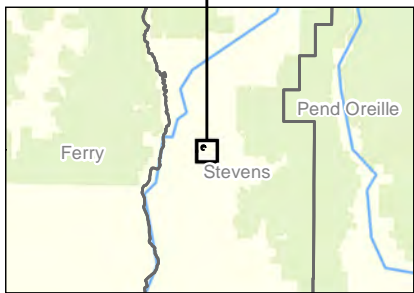
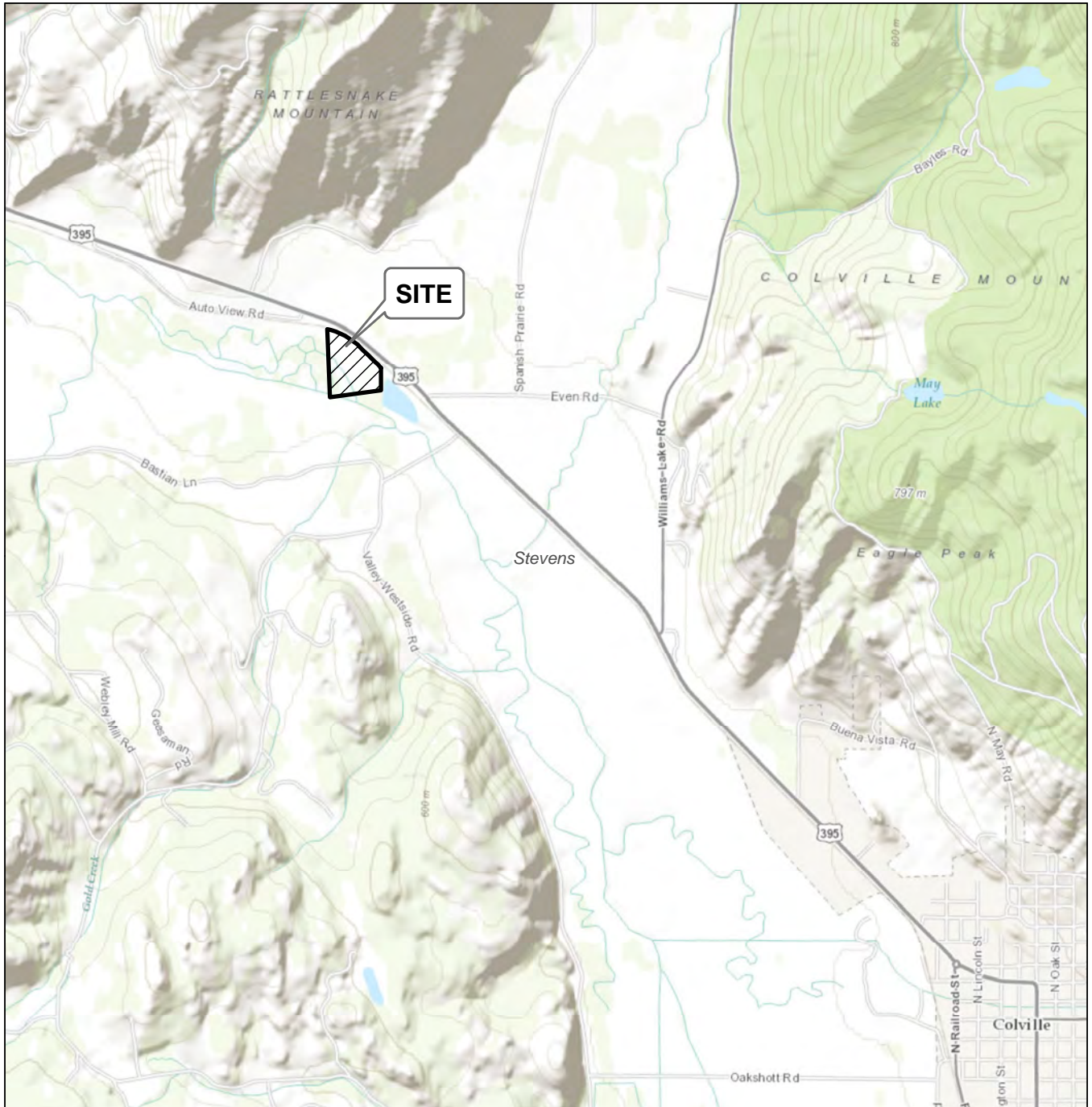
United States Department of Agriculture – National Resource Conservation Service (USDA-NRCS). Web Soil Survey, Stevens County, Washington. <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed April 23, 2015.

United States Department of Agriculture – National Resource Conservation Service (USDA-NRCS). 2009b. National Hydric Soils List by State. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use/hydric/?cid=nrcs142p2\\_053959](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use/hydric/?cid=nrcs142p2_053959). Accessed April 23, 2015.

United States Fish and Wildlife Service (USFWS). Last updated April 8, 2015. Wetlands Mapper. <http://www.fws.gov/wetlands/data/mapper.HTML>. Accessed April 23, 2015.

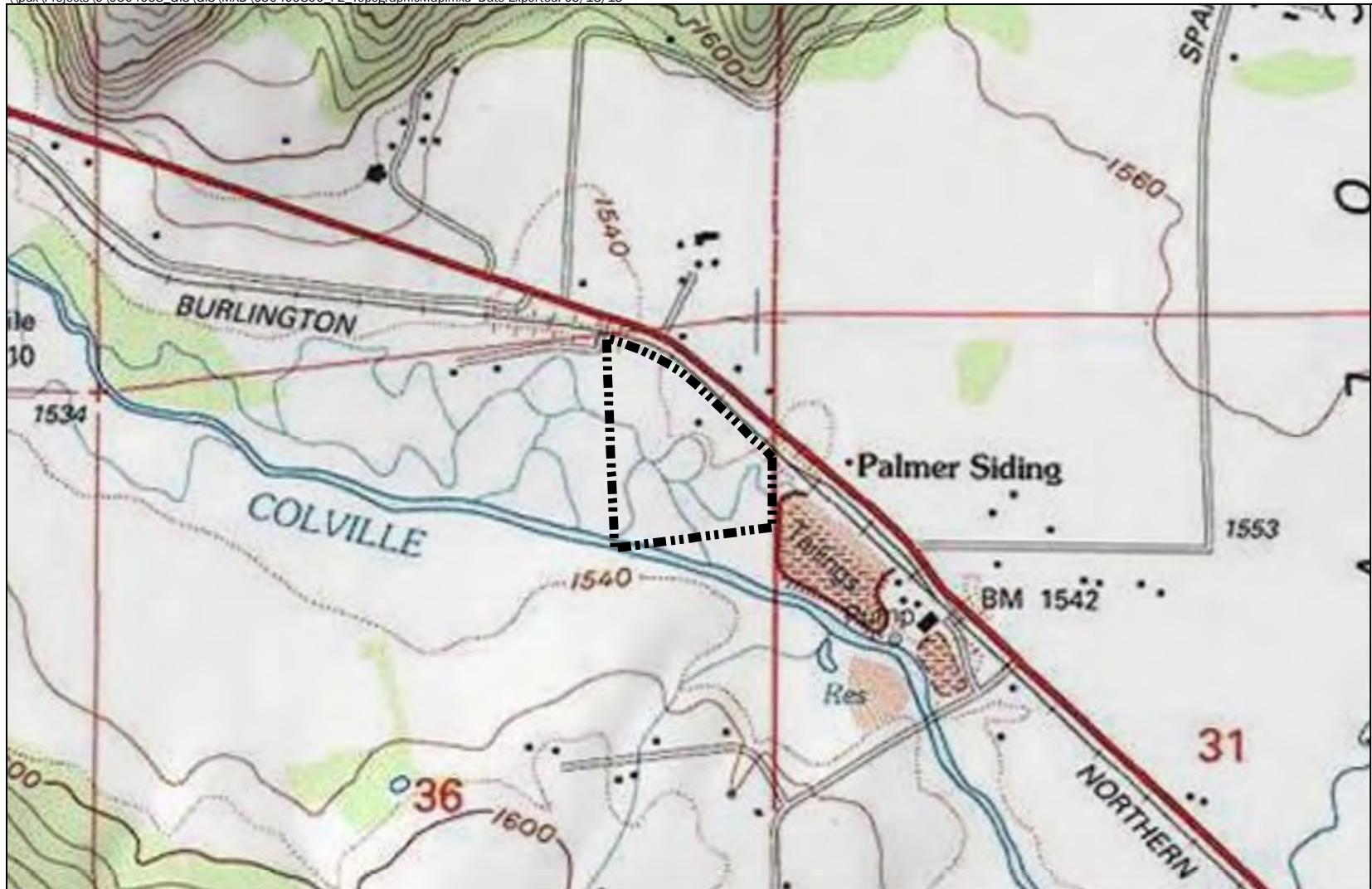
Map Revised: 30 January 2014 ccabrera

Office: PORT Path: P:\00504098\_GIS\GIS\MXD\050409800\_F1\_VM.mxd




Notes:  
 1. The locations of all features shown are approximate.  
 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document.  
 GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.  
 Data Sources: ESRI Data & Maps, Street Maps 2008.  
 Base map from ESRI Data Online.  
 Projection: NAD 1983, UTM Zone 11 North.

<b>Vicinity Map</b>	
Colville Post and Pole Colville, Washington	
	<b>Figure 1</b>



**Legend**

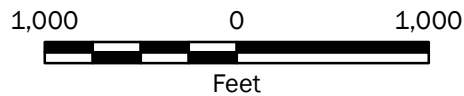
 Site Boundary

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: USGS Quadrangle from ESRI Data Online. Site boundary provided by EPA and Washington Department of Ecology.

Projection: NAD 1983 UTM Zone 11N



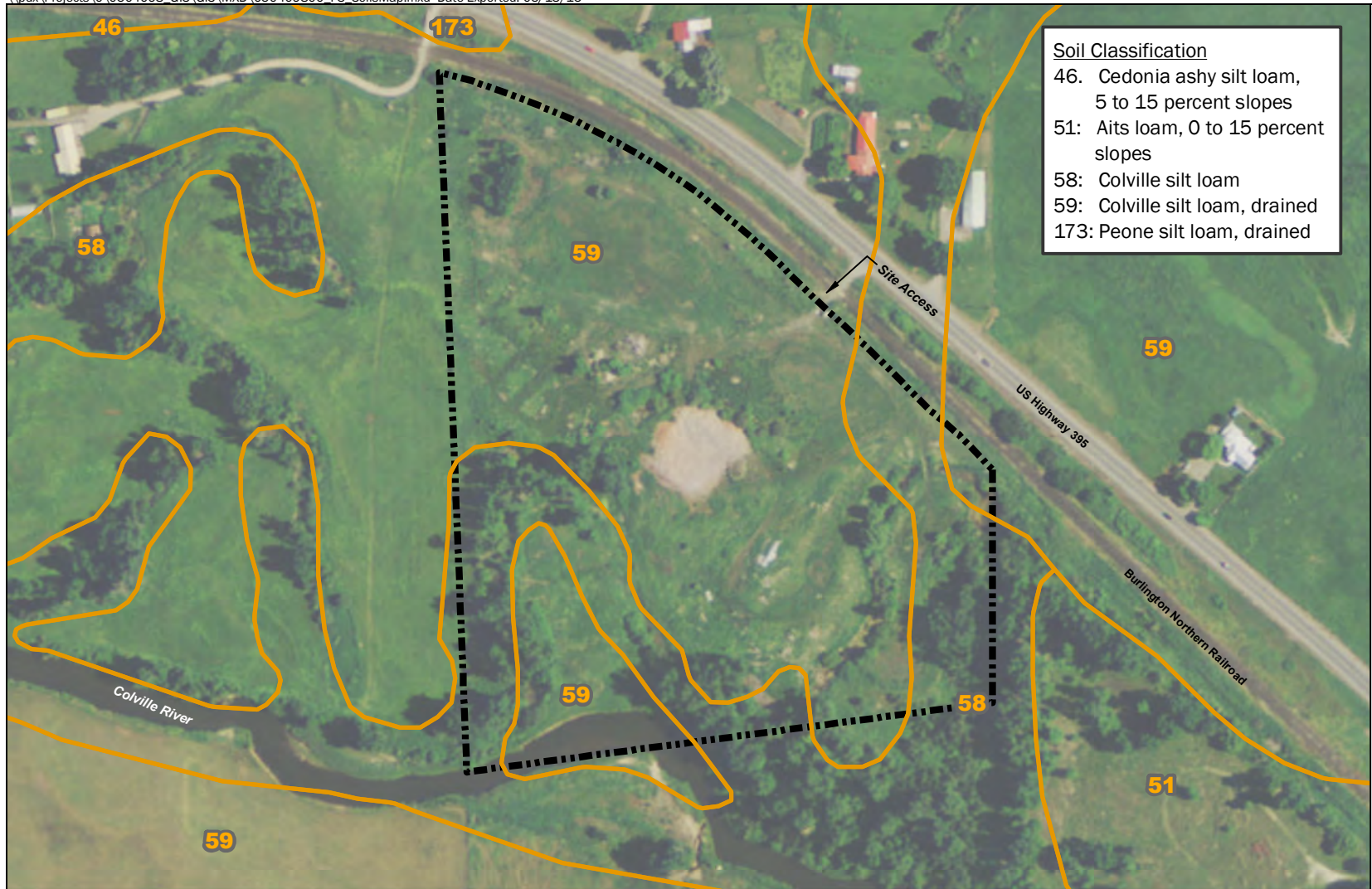
**Topographic Map**

Colville Post and Pole  
Colville, Washington





**Figure 2**





**Soil Classification**  
 46. Cedonia ashy silt loam, 5 to 15 percent slopes  
 51: Aits loam, 0 to 15 percent slopes  
 58: Colville silt loam  
 59: Colville silt loam, drained  
 173: Peone silt loam, drained

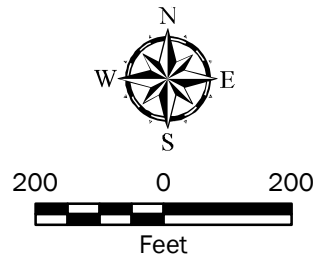
**Legend**  
 Site Boundary  
 Soils Boundary


**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

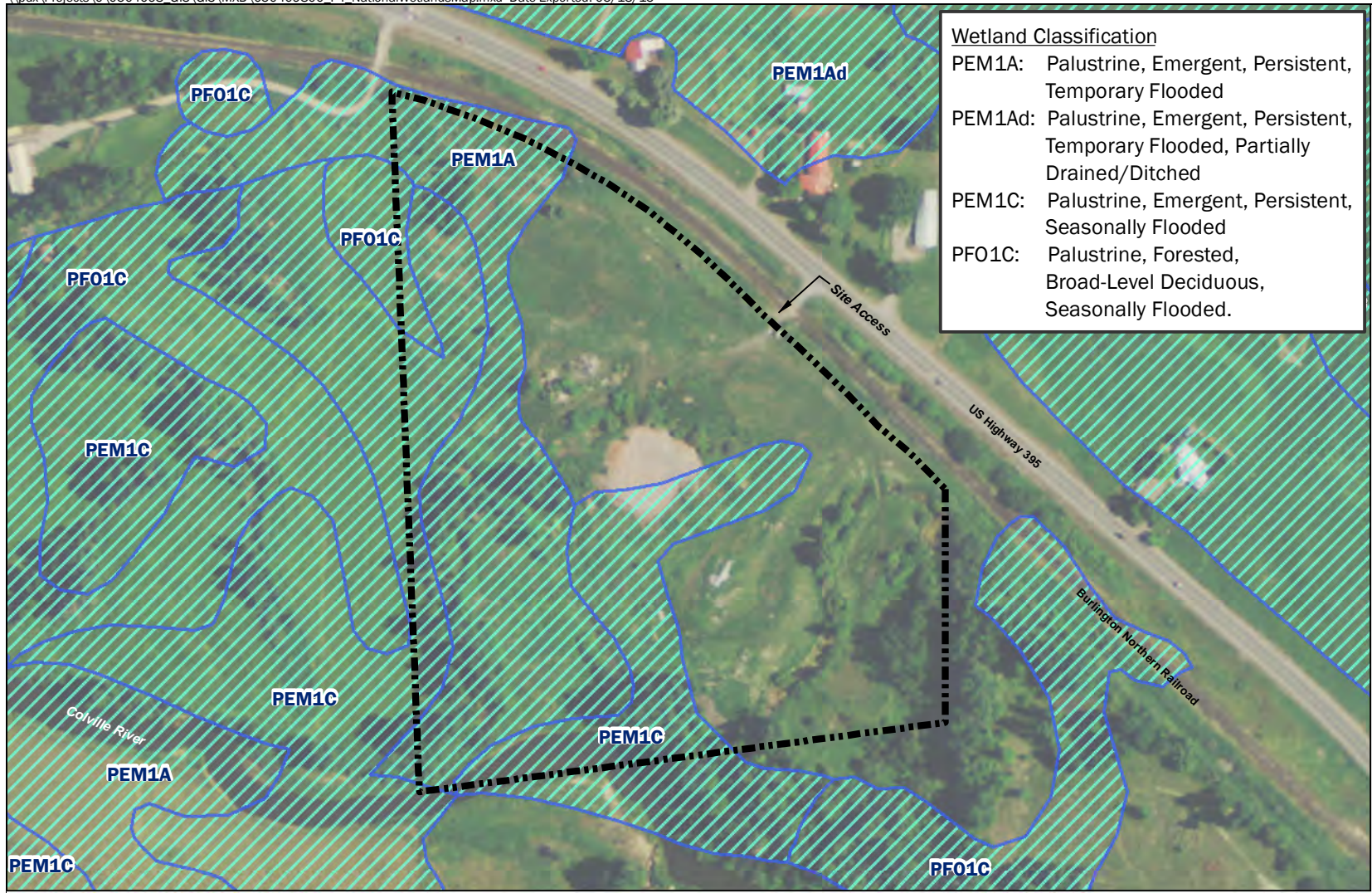
Data Source: Aerial base from ESRI Data Online. Site Boundary provided by EPA and Washington State Department of Ecology.  
 Soils data provided by NRCS.  
<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

Projection: NAD 1983 UTM Zone 11N





<b>Soils Map</b>	
Colville Post and Pole Colville, Washington	
	<b>Figure 3</b>





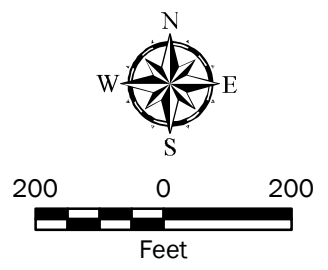
Wetland Classification	
PEM1A:	Palustrine, Emergent, Persistent, Temporary Flooded
PEM1Ad:	Palustrine, Emergent, Persistent, Temporary Flooded, Partially Drained/Ditched
PEM1C:	Palustrine, Emergent, Persistent, Seasonally Flooded
PF01C:	Palustrine, Forested, Broad-Level Deciduous, Seasonally Flooded.

-  Site Boundary
-  Wetland Boundaries

**Notes:**  
 1. The locations of all features shown are approximate.  
 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

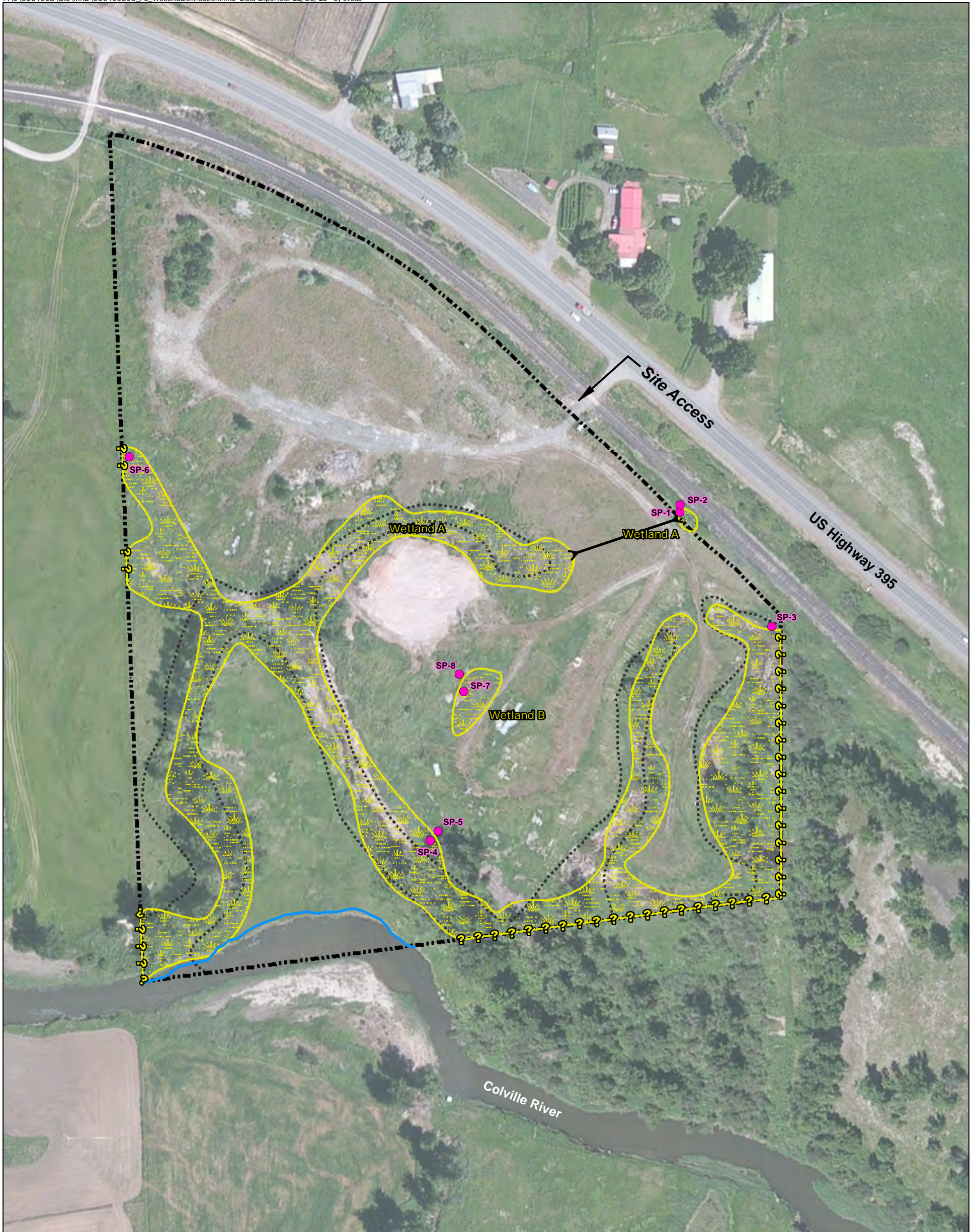
Data Source: Aerial base from ESRI Data Online. Site boundary provided by EPA and Washington Department of Ecology. Wetland Boundaries provided by USFWS <http://www.fws.gov/wetlands/data/mapper.HTML>

Projection: NAD 1983 UTM Zone 11N



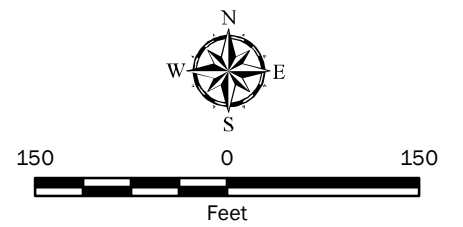
<b>National Wetlands Inventory Map</b>	
Colville Post and Pole Colville, Washington	
	<b>Figure 4</b>





**Legend**

- SP-1 Wetland Sample Point
- Wetland Area Delineated by GeoEngineers
- ?? ? ? Wetland Appears to Extend Beyond Project Boundary (see Note 1)
- Site Boundary
- Previous Wetland Approximate Boundary (Herrera, 2005)
- ~ Ordinary High Water Mark (OHMW)
- Approximate Culvert Location



**Notes:**

1. Although wetlands extend beyond the project boundary, only wetlands within the project boundary were delineated as part of this study.
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Imagery from ESRI ArcGIS Online. Previous wetland boundary digitized from ecology and environment, inc, Figure 3-1, Phase I Removal Action January 2005, 9/6/2007

Projection: NAD 1983 UTM Zone 11N

<b>Wetland Delineation Map</b>	
Colville Post and Pole Colville, Washington	
<b>GEOENGINEERS</b>	<b>Figure 5</b>



**APPENDIX A**  
**Site Photographs**



General view of SP-1 soil pit.



Second view of SP-1 soils.

## Site Photographs

Colville Post and Pole  
Colville, Washington

GEOENGINEERS 

Figure A-1





General view of the are around SP-1.



General view of SP-2 with SP-1 beyond.

## Site Photographs

Colville Post and Pole  
Colville, Washington



Figure A-2





General view of SP-2 Soil pit.



General view of SP-2 in relation to SP-1.

## Site Photographs

Colville Post and Pole  
Colville, Washington



Figure A-3





Wetland A near rail line.



Culvert connecting Wetland A near the rail line to the larger portion of Wetland A.

## Site Photographs

Colville Post and Pole  
Colville, Washington

**GEOENGINEERS** 

**Figure A-4**





General view of SP-3 soil pit.



General view of the area around SP-3.

## Site Photographs

Colville Post and Pole  
Colville, Washington



Figure A-5





Soils associated with SP-4 test pit.



General view of hydrology in SP-4 soil pit.

## Site Photographs

Colville Post and Pole  
Colville, Washington



Figure A-6





General view of the area around SP-4.



General view of SP-5 soil pit.

## Site Photographs

Colville Post and Pole  
Colville, Washington



Figure A-7





General view of SP-5 soils.



General view of the area around SP-5.

## Site Photographs

Colville Post and Pole  
Colville, Washington

**GEOENGINEERS** 

**Figure A-8**





General view of SP-6 test pit.



Second view of SP-6 soil pit.

## Site Photographs

Colville Post and Pole  
Colville, Washington

**GEOENGINEERS** 

**Figure A-9**





General view of the area around SP-6.



General view of the soil from SP-7.

## Site Photographs

Colville Post and Pole  
Colville, Washington

**GEOENGINEERS** 

**Figure A-10**





General view of soil and hydrology in SP-7.



General view of the area around SP-7.

## Site Photographs

Colville Post and Pole  
Colville, Washington



Figure A-11





General view of SP-8 soil pit.



Second view of SP-8.

## Site Photographs

Colville Post and Pole  
Colville, Washington

**GEOENGINEERS** 

**Figure A-12**





General view of the area around SP-8.



General view of the Colville River adjacent to the south project boundary.

## Site Photographs

Colville Post and Pole  
Colville, Washington



Figure A-13





General view of Wetland A.



General view of Wetland A.

## Site Photographs

Colville Post and Pole  
Colville, Washington

**GEOENGINEERS** 

**Figure A-14**



General view of Wetland A near the eastern project boundary.



General view of materials found in/adjacent to Wetland A along the eastern project boundary.

## Site Photographs

Colville Post and Pole  
Colville, Washington



Figure A-15





General View of Wetland A near the central portion of the site.



General view of Wetland A near the central portion of the site.

## Site Photographs

Colville Post and Pole  
Colville, Washington



Figure A-16



**APPENDIX B**  
**Wetland Sample Plot Forms**

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: <b>3/16/15</b>	Sampling Point: <b>SP-1</b>
Project Site: <b>Colville Post and Pole Site</b>	City/County: <b>Stevens</b>
Applicant/Owner: <b>Washington Department of Ecology</b>	State: <b>Washington</b>
Investigator(s): <b>Jason Poulsen</b>	Section, Township, Range: <b>NE1/4, NE1/4, Sec 36, T36N R38E</b>
Landform (hillslope, terrace, ect.): <b>Drainage</b>	Local relief (concave, convex, none): <b>Concave</b>
Subregion (LRR): <b>LRR E - Rocky Mountain Forests and Range Land</b>	Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: <b>58 - Colville Silt Loam</b>	NWI Classification: _____
Are climatic / hydrologic conditions on site typical for this time of year? <b>Yes</b>	
Are Vegetation <input checked="" type="checkbox"/> Soil <input checked="" type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? <b>Yes</b>	Are "Normal Circumstances" present? <b>Yes</b>
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic? <b>No</b>	(if needed, explain any answers in Remarks.)
<b>SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.</b>	
Hydrophytic Vegetation Present? <b>Yes</b>	Is the sampling area within a wetland? <b>YES</b>
Hydric Soils Present? <b>Yes</b>	Remarks: <b>Appears to be connected to Wetland A via culvert.</b>
Wetland Hydrology Present? <b>Yes</b>	

VEGETATION			
Use scientific names of plants.			Dominance Test Worksheet
Tree Stratum (Plot Size): <b>25-ft diameter</b>	Absolute % Cover	Dominant Species	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
Sapling/Shrub Stratum (Plot Size): <b>25-ft diameter</b>			No. of Dominant Species that are OBL, FACW, or FAC: _____
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
Herb Stratum (Plot Size): <b>25-ft diameter</b>			Total No. of Dominant Species Across All Strata: _____
1. <b><i>Phalaris arundinacea</i> (Reed canarygrass)</b>	<b>100</b>	<b>YES</b>	<b>FACW</b>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
Woody Vine Stratum (Plot Size): <b>25-ft diameter</b>			% of Dominant Species that are OBL, FACW, or FAC: _____
1. _____			
2. _____			
% Bare Ground in Herb Stratum _____			Prevalence Index Worksheet
Remarks: _____			Total % Cover of: _____ Multiplied by: _____
_____			OBL sp. _____ x 1 = _____
_____			FACW sp. _____ x 2 = _____
_____			FAC sp. _____ x 3 = _____
_____			FACU sp. _____ x 4 = _____
_____			UP sp. _____ x 5 = _____
_____			Column Totals _____ (A) _____ (B) _____
_____			Prevalence Index = (B/A) _____
_____			Hydrophytic Vegetation Indicators
_____			<b>Yes</b> Dominance Test is >50%
_____			<b>Yes</b> Prevalence Index is < or = 3.0*
_____			Morphological Adaptations* (Provide supporting data in remarks or on separate sheet)
_____			Wetland Non-Vascular Plants*
_____			Problematic Hydrophytic Vegetation* (Explain)
_____			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
_____			Hydrophytic Vegetation Present?
_____			<b>Yes</b>

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: **03/16/15**

Sampling Point: **SP-1**

**SOIL**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type**	LOC***		
0 - 10	7.5 YR 3/2						<b>Silty Loam</b>	<b>No odor</b>
> 10	10YR 5/1						<b>Silty Sand</b>	<b>No odor</b>

\*\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains. \*\*\*Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		****Indicators of Problematic Hydric Soils:
Histosol (A1) <input type="checkbox"/>	Sandy Redox (S5) <input type="checkbox"/>	2cm Muck (A10) <input type="checkbox"/>
Histic Epipedon (A2) <input type="checkbox"/>	Stripped Matrix (S6) <input type="checkbox"/>	Red Parent Material (TF2) <input type="checkbox"/>
Black Histic (A3) <input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/>	Other (Explain in Remarks) <input type="checkbox"/>
Hydrogen Sulfide (A4) <input type="checkbox"/>	Depleted Matrix (F3) <input type="checkbox"/>	
Depleted Below Dark Surface (A11) <input type="checkbox"/>	Redox Dark Surface (F6) <input type="checkbox"/>	
Thick Dark Surface (A12) <input type="checkbox"/>	Depleted Dark Surface (F7) <input type="checkbox"/>	
Sandy Mucky Mineral (S1) <input type="checkbox"/>	Redox Depressions (F8) <input type="checkbox"/>	
Sandy Gleyed Matrix (S4) <input type="checkbox"/>		

Restrictive Layer (if present): Type: _____ Depth (inches) _____	Hydric Soil Present? <b>Yes</b>
--	---------------------------------

Remarks: **Soil is significantly disturbed due to historical site operations and construction of the adjacent rail line.**

**HYDROLOGY**

Wetland Hydrology Indicators

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along living roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? <input type="checkbox"/> Water table present? <input checked="" type="checkbox"/> Saturation Present? <input checked="" type="checkbox"/>	Depth (inches) _____ Depth (inches) <b>10</b> Depth (inches) <b>9</b>
Wetland Hydrology Present? <b>Yes</b>	

Describe Recorded Data (stream gauge, monitoring well, aerial photographs, previous inspections), if available: \_\_\_\_\_

Remarks: \_\_\_\_\_



**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: <b>3/16/15</b>	Sampling Point: <b>SP-2</b>
Project Site: <b>Colville Post and Pole Site</b>	City/County: <b>Stevens</b>
Applicant/Owner: <b>Washington Department of Ecology</b>	State: <b>Washington</b>
Investigator(s): <b>Jason Poulsen</b>	Section, Township, Range: <b>NE1/4, NE1/4 Sec 36, T36N, R38E</b>
Landform (hillslope, terrace, ect.): <b>Drainage</b>	Local relief (concave, convex, none): <b>Concave</b>
Subregion (LRR): <b>LRR E - Rocky Mountain Forests and Range Land</b>	Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: <b>58 - Colville Silt Loam</b>	NWI Classification: _____
Are climatic / hydrologic conditions on site typical for this time of year? <b>Yes</b>	
Are Vegetation <input checked="" type="checkbox"/> Soil <input checked="" type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? <b>Yes</b>	Are "Normal Circumstances" present? <b>Yes</b>
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic? <b>No</b>	(if needed, explain any answers in Remarks.)
<b>SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.</b>	
Hydrophytic Vegetation Present? <b>Yes</b>	Is the sampling area within a wetland? <b>NO</b>
Hydric Soils Present? <b>No</b>	Remarks: _____
Wetland Hydrology Present? <b>No</b>	

VEGETATION			
Use scientific names of plants.			Dominance Test Worksheet
Tree Stratum (Plot Size): <b>25-ft diameter</b>	Absolute % Cover	Dominant Species	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
Sapling/Shrub Stratum (Plot Size): <b>25-ft diameter</b>			No. of Dominant Species that are OBL, FACW, or FAC: _____
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
Herb Stratum (Plot Size): <b>25-ft diameter</b>			Total No. of Dominant Species Across All Strata: _____
1. <b><i>Phalaris arundinacea</i> (Reed canarygrass)</b>	<b>100</b>	<b>YES</b>	<b>FACW</b>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
Woody Vine Stratum (Plot Size): <b>25-ft diameter</b>			% of Dominant Species that are OBL, FACW, or FAC: <b>100 % (A/B)</b>
1. _____			
2. _____			
% Bare Ground in Herb Stratum _____			
Remarks: _____			Prevalence Index Worksheet
			Total % Cover of: Multiplied by:
			OBL sp. <b>0</b> x 1 = <b>0</b>
			FACW sp. <b>1</b> x 2 = <b>2</b>
			FAC sp. <b>0</b> x 3 = <b>0</b>
			FACU sp. <b>0</b> x 4 = <b>0</b>
			UP sp. <b>0</b> x 5 = <b>0</b>
			Column Totals <b>1</b> (A) (B) <b>2</b>
			Prevalence Index = (B/A) <b>2.00</b>
			Hydrophytic Vegetation Indicators
			<b>Yes</b> Dominance Test is >50%
			<b>Yes</b> Prevalence Index is < or = 3.0*
			Morphological Adaptations* (Provide supporting data in remarks or on separate sheet)
			Wetland Non-Vascular Plants*
			Problematic Hydrophytic Vegetation* (Explain)
			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present? <b>Yes</b>

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: **03/16/15**

Sampling Point: **SP-2**

**SOIL**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type**	LOC***		
<b>0 - 14</b>	<b>7.5 YR 3/2</b>						<b>Silty Loam</b>	<b>No odor</b>

\*\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains. \*\*\*Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		****Indicators of Problematic Hydric Soils:
Histosol (A1) <input type="checkbox"/>	Sandy Redox (S5) <input type="checkbox"/>	2cm Muck (A10) <input type="checkbox"/>
Histic Epipedon (A2) <input type="checkbox"/>	Stripped Matrix (S6) <input type="checkbox"/>	Red Parent Material (TF2) <input type="checkbox"/>
Black Histic (A3) <input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/>	Other (Explain in Remarks) <input type="checkbox"/>
Hydrogen Sulfide (A4) <input type="checkbox"/>	Depleted Matrix (F3) <input type="checkbox"/>	
Depleted Below Dark Surface (A11) <input type="checkbox"/>	Redox Dark Surface (F6) <input type="checkbox"/>	****Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Thick Dark Surface (A12) <input type="checkbox"/>	Depleted Dark Surface (F7) <input type="checkbox"/>	
Sandy Mucky Mineral (S1) <input type="checkbox"/>	Redox Depressions (F8) <input type="checkbox"/>	
Sandy Gleyed Matrix (S4) <input type="checkbox"/>		

Restrictive Layer (if present): Type: _____ Depth (inches) _____	Hydric Soil Present? <b>No</b>
--	--------------------------------

Remarks: **Soil is significantly disturbed due to historical site operations and construction of the adjacent rail line.**

**HYDROLOGY**

Wetland Hydrology Indicators

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along living roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? <input type="checkbox"/> Depth (inches) _____ Water table present? <input checked="" type="checkbox"/> Depth (inches) <b>14</b> Saturation Present? <input checked="" type="checkbox"/> Depth (inches) <b>14</b>	Wetland Hydrology Present? <b>No</b>
--	--------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photographs, previous inspections), if available: **Hydrology was present; however, it was greater than 12" below ground surface.**

Remarks:

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: <b>3/16/15</b>	Sampling Point: <b>SP-3</b>
Project Site: <b>Colville Post and Pole Site</b>	City/County: <b>Stevens</b>
Applicant/Owner: <b>Washington Department of Ecology</b>	State: <b>Washington</b>
Investigator(s): <b>Jason Poulsen</b>	Section, Township, Range: <b>NE1/4, NE1/4, Sec 36, T36N, R38E</b>
Landform (hillslope, terrace, ect.): <b>Hillslope</b>	Local relief (concave, convex, none): <b>Concave</b>
Subregion (LRR): <b>LRR E - Rocky Mountain Forests and Range Land</b>	Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: <b>59 - Colville Silt Loam, Drained</b>	NWI Classification: _____
Are climatic / hydrologic conditions on site typical for this time of year? <b>Yes</b>	
Are Vegetation <input type="checkbox"/> Soil <input checked="" type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? <b>Yes</b>	Are "Normal Circumstances" present? <b>Yes</b>
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic? <b>No</b>	(if needed, explain any answers in Remarks.)
<b>SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.</b>	
Hydrophytic Vegetation Present? <b>Yes</b>	Is the sampling area within a wetland? <b>NO</b>
Hydric Soils Present? <b>No</b>	Remarks: _____
Wetland Hydrology Present? <b>No</b>	

VEGETATION			
Use scientific names of plants.			Dominance Test Worksheet
Tree Stratum (Plot Size): <b>25-ft diameter</b>	Absolute % Cover	Dominant Species	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
Sapling/Shrub Stratum (Plot Size): <b>25-ft diameter</b>			No. of Dominant Species that are OBL, FACW, or FAC: _____
1. <b>Salix lucida (Pacific Willow)</b>	<b>5</b>	<b>NO</b>	<b>FACW</b>
2. _____			
3. _____			
4. _____			
5. _____			
Herb Stratum (Plot Size): <b>25-ft diameter</b>			Total No. of Dominant Species Across All Strata: _____
1. <b>Mahonia Aquifolium (Oregon grape)</b>	<b>5</b>	<b>NO</b>	<b>FACU</b>
2. <b>Phalaris arundinacea (Reed canarygrass)</b>	<b>90</b>	<b>YES</b>	<b>FACW</b>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
Woody Vine Stratum (Plot Size): <b>25-ft diameter</b>			% of Dominant Species that are OBL, FACW, or FAC: _____
1. _____			
2. _____			
% Bare Ground in Herb Stratum _____			Prevalence Index Worksheet
			Total % Cover of: Multiplied by:
			OBL sp. <u>0</u> x 1 = <u>0</u>
			FACW sp. <u>2</u> x 2 = <u>4</u>
			FAC sp. <u>0</u> x 3 = <u>0</u>
			FACU sp. <u>1</u> x 4 = <u>4</u>
			UP sp. <u>0</u> x 5 = <u>0</u>
			Column Totals <u>3</u> (A) (B) <u>8</u>
			Prevalence Index = (B/A) <u>2.67</u>
Remarks: _____			Hydrophytic Vegetation Indicators
			<b>Yes</b> Dominance Test is >50%
			<b>Yes</b> Prevalence Index is < or = 3.0*
			Morphological Adaptations* (Provide supporting data in remarks or on separate sheet)
			Wetland Non-Vascular Plants*
			Problematic Hydrophytic Vegetation* (Explain)
			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present?
			<b>Yes</b>



**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: **03/16/15**

Sampling Point: **SP-3**

**SOIL**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type**	LOC***		
<b>0 - 17</b>	<b>10YR 4/3</b>						<b>Silty Loam</b>	<b>No odor</b>

\*\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains. \*\*\*Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		****Indicators of Problematic Hydric Soils:
Histosol (A1) <input type="checkbox"/>	Sandy Redox (S5) <input type="checkbox"/>	2cm Muck (A10) <input type="checkbox"/>
Histic Epipedon (A2) <input type="checkbox"/>	Stripped Matrix (S6) <input type="checkbox"/>	Red Parent Material (TF2) <input type="checkbox"/>
Black Histic (A3) <input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/>	Other (Explain in Remarks) <input type="checkbox"/>
Hydrogen Sulfide (A4) <input type="checkbox"/>	Depleted Matrix (F3) <input type="checkbox"/>	
Depleted Below Dark Surface (A11) <input type="checkbox"/>	Redox Dark Surface (F6) <input type="checkbox"/>	
Thick Dark Surface (A12) <input type="checkbox"/>	Depleted Dark Surface (F7) <input type="checkbox"/>	
Sandy Mucky Mineral (S1) <input type="checkbox"/>	Redox Depressions (F8) <input type="checkbox"/>	
Sandy Gleyed Matrix (S4) <input type="checkbox"/>		

Restrictive Layer (if present): Type: _____ Depth (inches) _____	Hydric Soil Present? <b>No</b>
--	--------------------------------

Remarks: **Baseball sized cobbles within the top 12".**

**HYDROLOGY**

Wetland Hydrology Indicators

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along living roots(C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stresses Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? <input type="checkbox"/> Depth (inches) _____ Water table present? <input type="checkbox"/> Depth (inches) _____ Saturation Present? <input type="checkbox"/> Depth (inches) _____	Wetland Hydrology Present? <b>No</b>
--	--------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photographs, previous inspections), if available: \_\_\_\_\_

Remarks: \_\_\_\_\_

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: <b>3/16/15</b>	Sampling Point: <b>SP-4</b>
Project Site: <b>Colville Post and Pole Site</b>	City/County: <b>Stevens</b>
Applicant/Owner: <b>Washington Department of Ecology</b>	State: <b>Washington</b>
Investigator(s): <b>Jason Poulsen</b>	Section, Township, Range: <b>NE1/4, NE1/4, Sec36, T36N, R38E</b>
Landform (hillslope, terrace, ect.): <b>Drainage</b>	Local relief (concave, convex, none): <b>Concave</b>
Subregion (LRR): <b>LRR E - Rocky Mountain Forests and Range Land</b>	Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: <b>59 - Colville Silt Loam, Drained</b>	NWI Classification: _____
Are climatic / hydrologic conditions on site typical for this time of year? <b>Yes</b>	
Are Vegetation <input checked="" type="checkbox"/> Soil <input checked="" type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? <b>Yes</b>	Are "Normal Circumstances" present? <b>Yes</b>
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic? <b>No</b>	(if needed, explain any answers in Remarks.)
<b>SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.</b>	
Hydrophytic Vegetation Present? <b>Yes</b>	Is the sampling area within a wetland? <b>YES</b>
Hydric Soils Present? <b>Yes</b>	Remarks: _____
Wetland Hydrology Present? <b>Yes</b>	

VEGETATION			
Use scientific names of plants.			Dominance Test Worksheet
Tree Stratum (Plot Size): <b>25-ft diameter</b>	Absolute % Cover	Dominant Species	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
Sapling/Shrub Stratum (Plot Size): <b>25-ft diameter</b>			No. of Dominant Species that are OBL, FACW, or FAC: _____
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
Herb Stratum (Plot Size): <b>25-ft diameter</b>			Total No. of Dominant Species Across All Strata: _____
1. <b><i>Phalaris arundinacea</i> (Reed canarygrass)</b>	<b>100</b>	<b>YES</b>	<b>FACW</b>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
Woody Vine Stratum (Plot Size): <b>25-ft diameter</b>			% of Dominant Species that are OBL, FACW, or FAC: <b>100 % (A/B)</b>
1. _____			
2. _____			
% Bare Ground in Herb Stratum _____			
Remarks: _____			Prevalence Index Worksheet
			Total % Cover of: Multiplied by:
			OBL sp. <b>0</b> x 1 = <b>0</b>
			FACW sp. <b>1</b> x 2 = <b>2</b>
			FAC sp. <b>0</b> x 3 = <b>0</b>
			FACU sp. <b>0</b> x 4 = <b>0</b>
			UP sp. <b>0</b> x 5 = <b>0</b>
			Column Totals <b>1</b> (A) (B) <b>2</b>
			Prevalence Index = (B/A) <b>2.00</b>
			Hydrophytic Vegetation Indicators
			<b>Yes</b> Dominance Test is >50%
			<b>Yes</b> Prevalence Index is < or = 3.0*
			Morphological Adaptations* (Provide supporting data in remarks or on separate sheet)
			Wetland Non-Vascular Plants*
			Problematic Hydrophytic Vegetation* (Explain)
			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present? <b>Yes</b>

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: **03/16/15**

Sampling Point: **SP-4**

**SOIL**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type**	LOC***		
0 - 6	10YR 2/2						Silty Sand	No odor
17-Jun	10YR 5/1		10YR 4/6				Sandy Loam	No odor

\*\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains. \*\*\*Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		****Indicators of Problematic Hydric Soils:
Histosol (A1) <input type="checkbox"/>	Sandy Redox (S5) <input type="checkbox"/>	2cm Muck (A10) <input type="checkbox"/>
Histic Epipedon (A2) <input type="checkbox"/>	Stripped Matrix (S6) <input type="checkbox"/>	Red Parent Material (TF2) <input type="checkbox"/>
Black Histic (A3) <input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/>	Other (Explain in Remarks) <input type="checkbox"/>
Hydrogen Sulfide (A4) <input type="checkbox"/>	Depleted Matrix (F3) <input type="checkbox"/>	
Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/>	Redox Dark Surface (F6) <input type="checkbox"/>	****Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Thick Dark Surface (A12) <input type="checkbox"/>	Depleted Dark Surface (F7) <input type="checkbox"/>	
Sandy Mucky Mineral (S1) <input type="checkbox"/>	Redox Depressions (F8) <input type="checkbox"/>	
Sandy Gleyed Matrix (S4) <input type="checkbox"/>		

Restrictive Layer (if present): Type: _____ Depth (inches) _____	Hydric Soil Present? <b>Yes</b>
--	---------------------------------

Remarks: \_\_\_\_\_

**HYDROLOGY**

Wetland Hydrology Indicators

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along living roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? <input type="checkbox"/> Depth (inches) _____ Water table present? <input checked="" type="checkbox"/> Depth (inches) <b>15</b> Saturation Present? <input checked="" type="checkbox"/> Depth (inches) <b>10</b>	Wetland Hydrology Present? <b>Yes</b>
--	---------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photographs, previous inspections), if available: \_\_\_\_\_

Remarks: \_\_\_\_\_



**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: <b>3/16/15</b>	Sampling Point: <b>SP-5</b>
Project Site: <b>Colville Post and Pole Site</b>	City/County: <b>Stevens</b>
Applicant/Owner: <b>Washington Department of Ecology</b>	State: <b>Washington</b>
Investigator(s): <b>Jason Poulsen</b>	Section, Township, Range: <b>NE1/4, NE1/4, Sec 36, T36N, R38E</b>
Landform (hillslope, terrace, ect.): <b>Drainage</b>	Local relief (concave, convex, none): <b>Concave</b>
Subregion (LRR): <b>LRR E - Rocky Mountain Forests and Range Land</b>	Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: <b>59 - Colville Silt Loam, Drained</b>	NWI Classification: _____
Are climatic / hydrologic conditions on site typical for this time of year? <b>Yes</b>	
Are Vegetation <input checked="" type="checkbox"/> Soil <input checked="" type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? <b>Yes</b>	Are "Normal Circumstances" present? <b>Yes</b>
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic? <b>No</b>	(if needed, explain any answers in Remarks.)
<b>SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.</b>	
Hydrophytic Vegetation Present? <b>Yes</b>	Is the sampling area within a wetland? <b>NO</b>
Hydric Soils Present? <b>No</b>	Remarks: _____
Wetland Hydrology Present? <b>No</b>	

VEGETATION			
Use scientific names of plants.			Dominance Test Worksheet
Tree Stratum (Plot Size): <b>25-ft diameter</b>	Absolute % Cover	Dominant Species	No. of Dominant Species that are OBL, FACW, or FAC: _____
1. _____			_____ <b>1 (A)</b>
2. _____			Total No. of Dominant Species Across All Strata: _____
3. _____			
4. _____			% of Dominant Species that are OBL, FACW, or FAC: _____
			_____ <b>100 % (A/B)</b>
Sapling/Shrub Stratum (Plot Size): <b>25-ft diameter</b>			Prevalence Index Worksheet
1. _____			Total % Cover of: _____ Multiplied by: _____
2. _____			OBL sp. _____ <b>0</b> x 1 = _____ <b>0</b>
3. _____			FACW sp. _____ <b>1</b> x 2 = _____ <b>2</b>
4. _____			FAC sp. _____ <b>0</b> x 3 = _____ <b>0</b>
5. _____			FACU sp. _____ <b>0</b> x 4 = _____ <b>0</b>
			UP sp. _____ <b>0</b> x 5 = _____ <b>0</b>
			Column Totals _____ <b>1 (A)</b> _____ <b>(B) 2</b>
			Prevalence Index = (B/A) _____ <b>2.00</b>
Herb Stratum (Plot Size): <b>25-ft diameter</b>			Hydrophytic Vegetation Indicators
1. <b><i>Phalaris arundinacea</i> (Reed canarygrass)</b>	<b>100</b>	<b>YES</b>	<b>Yes</b> Dominance Test is >50%
2. _____			<b>Yes</b> Prevalence Index is < or = 3.0*
3. _____			Morphological Adaptations* (Provide supporting data in remarks or on separate sheet)
4. _____			Wetland Non-Vascular Plants*
5. _____			Problematic Hydrophytic Vegetation* (Explain)
6. _____			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
Woody Vine Stratum (Plot Size): <b>25-ft diameter</b>			Hydrophytic Vegetation Present?
1. _____			<b>Yes</b>
2. _____			
% Bare Ground in Herb Stratum _____			
Remarks: _____			
_____			
_____			

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: **03/16/15**

Sampling Point: **SP-5**

**SOIL**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type**	LOC***		
<b>0 - 17</b>	<b>10YR 2/2</b>						<b>Silty Loam</b>	<b>No odor</b>

\*\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains. \*\*\*Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		****Indicators of Problematic Hydric Soils:
Histosol (A1) <input type="checkbox"/>	Sandy Redox (S5) <input type="checkbox"/>	2cm Muck (A10) <input type="checkbox"/>
Histic Epipedon (A2) <input type="checkbox"/>	Stripped Matrix (S6) <input type="checkbox"/>	Red Parent Material (TF2) <input type="checkbox"/>
Black Histic (A3) <input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/>	Other (Explain in Remarks) <input type="checkbox"/>
Hydrogen Sulfide (A4) <input type="checkbox"/>	Depleted Matrix (F3) <input type="checkbox"/>	
Depleted Below Dark Surface (A11) <input type="checkbox"/>	Redox Dark Surface (F6) <input type="checkbox"/>	
Thick Dark Surface (A12) <input type="checkbox"/>	Depleted Dark Surface (F7) <input type="checkbox"/>	
Sandy Mucky Mineral (S1) <input type="checkbox"/>	Redox Depressions (F8) <input type="checkbox"/>	
Sandy Gleyed Matrix (S4) <input type="checkbox"/>		

Restrictive Layer (if present): Type: _____ Depth (inches) _____	Hydric Soil Present? <b>No</b>
--	--------------------------------

Remarks: \_\_\_\_\_

**HYDROLOGY**

Wetland Hydrology Indicators

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along living roots(C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stresses Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? <input type="checkbox"/> Depth (inches) _____ Water table present? <input type="checkbox"/> Depth (inches) _____ Saturation Present? <input type="checkbox"/> Depth (inches) _____	Wetland Hydrology Present? <b>No</b>
--	--------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photographs, previous inspections), if available: \_\_\_\_\_

Remarks: \_\_\_\_\_

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: <b>3/16/15</b>	Sampling Point: <b>SP-6</b>
Project Site: <b>Colville Post and Pole Site</b>	City/County: <b>Stevens</b>
Applicant/Owner: <b>Washington Department of Ecology</b>	State: <b>Washington</b>
Investigator(s): <b>Jason Poulsen</b>	Section, Township, Range: <b>NE1/4, NE1/4, Sec 36, T36N, R38E</b>
Landform (hillslope, terrace, ect.): <b>Drainage</b>	Local relief (concave, convex, none): <b>Concave</b>
Subregion (LRR): <b>LRR E - Rocky Mountain Forests and Range Land</b>	Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: <b>59 - Colville Silt Loam, Drained</b>	NWI Classification: _____
Are climatic / hydrologic conditions on site typical for this time of year? <b>Yes</b>	
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? <b>No</b>	Are "Normal Circumstances" present? <b>Yes</b>
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic? <b>No</b>	(if needed, explain any answers in Remarks.)
<b>SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.</b>	
Hydrophytic Vegetation Present? <b>Yes</b>	Is the sampling area within a wetland? <b>YES</b>
Hydric Soils Present? <b>Yes</b>	Remarks: _____
Wetland Hydrology Present? <b>Yes</b>	

VEGETATION			
Use scientific names of plants.			Dominance Test Worksheet
Tree Stratum (Plot Size): <b>25-ft diameter</b>	Absolute % Cover	Dominant Species	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
Sapling/Shrub Stratum (Plot Size): <b>25-ft diameter</b>			No. of Dominant Species that are OBL, FACW, or FAC: _____
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
Herb Stratum (Plot Size): <b>25-ft diameter</b>			Total No. of Dominant Species Across All Strata: _____
1. <b><i>Phalaris arundinacea</i> (Reed canarygrass)</b>	<b>100</b>	<b>YES</b>	<b>FACW</b>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
Woody Vine Stratum (Plot Size): <b>25-ft diameter</b>			% of Dominant Species that are OBL, FACW, or FAC: <b>100 % (A/B)</b>
1. _____			
2. _____			
% Bare Ground in Herb Stratum _____			
Remarks: _____			
_____			
_____			
_____			
			Prevalence Index Worksheet
			Total % Cover of: Multiplied by:
			OBL sp. <b>0</b> x 1 = <b>0</b>
			FACW sp. <b>1</b> x 2 = <b>2</b>
			FAC sp. <b>0</b> x 3 = <b>0</b>
			FACU sp. <b>0</b> x 4 = <b>0</b>
			UP sp. <b>0</b> x 5 = <b>0</b>
			Column Totals <b>1</b> (A) (B) <b>2</b>
			Prevalence Index = (B/A) <b>2.00</b>
			Hydrophytic Vegetation Indicators
			<b>Yes</b> Dominance Test is >50%
			<b>Yes</b> Prevalence Index is < or = 3.0*
			Morphological Adaptations* (Provide supporting data in remarks or on separate sheet)
			Wetland Non-Vascular Plants*
			Problematic Hydrophytic Vegetation* (Explain)
			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present?
			<b>Yes</b>



**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: **03/16/15**

Sampling Point: **SP-6**

**SOIL**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type**	LOC***		
0 - 3	10YR 3/2						Silty Loam	No odor
> 3	10YR 2/1		10YR 3/2				Silty Sand	No odor

\*\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains. \*\*\*Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		****Indicators of Problematic Hydric Soils:
Histosol (A1) <input type="checkbox"/>	Sandy Redox (S5) <input type="checkbox"/>	2cm Muck (A10) <input type="checkbox"/>
Histic Epipedon (A2) <input type="checkbox"/>	Stripped Matrix (S6) <input type="checkbox"/>	Red Parent Material (TF2) <input type="checkbox"/>
Black Histic (A3) <input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/>	Other (Explain in Remarks) <input type="checkbox"/>
Hydrogen Sulfide (A4) <input type="checkbox"/>	Depleted Matrix (F3) <input type="checkbox"/>	
Depleted Below Dark Surface (A11) <input type="checkbox"/>	Redox Dark Surface (F6) <input type="checkbox"/>	****Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Thick Dark Surface (A12) <input type="checkbox"/>	Depleted Dark Surface (F7) <input type="checkbox"/>	
Sandy Mucky Mineral (S1) <input type="checkbox"/>	Redox Depressions (F8) <input type="checkbox"/>	
Sandy Gleyed Matrix (S4) <input type="checkbox"/>		

Restrictive Layer (if present): Type: _____ Depth (inches) _____	Hydric Soil Present? <b>Yes</b>
--	---------------------------------

Remarks: \_\_\_\_\_

**HYDROLOGY**

Wetland Hydrology Indicators

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along living roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? <input type="checkbox"/> Depth (inches) _____ Water table present? <input checked="" type="checkbox"/> Depth (inches) <b>4</b> Saturation Present? <input checked="" type="checkbox"/> Depth (inches) <b>3</b>	Wetland Hydrology Present? <b>Yes</b>
--	---------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photographs, previous inspections), if available: \_\_\_\_\_

Remarks: \_\_\_\_\_

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: <b>3/16/15</b>	Sampling Point: <b>SP-7</b>
Project Site: <b>Colville Post and Pole Site</b>	City/County: <b>Stevens</b>
Applicant/Owner: <b>Washington Department of Ecology</b>	State: <b>Washington</b>
Investigator(s): <b>Jason Poulsen</b>	Section, Township, Range: <b>NE1/4, NE1/4, Sec 36, T36N, R38E</b>
Landform (hillslope, terrace, ect.): <b>Depression</b>	Local relief (concave, convex, none): <b>Concave</b>
Subregion (LRR): <b>LRR E - Rocky Mountain Forests and Range Land</b>	Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: <b>59 - Colville Silt Loam, Drained</b>	NWI Classification: _____
Are climatic / hydrologic conditions on site typical for this time of year? _____	
Are Vegetation <input checked="" type="checkbox"/> Soil <input checked="" type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? <b>Yes</b>	Are "Normal Circumstances" present? <b>Yes</b>
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic? <b>No</b>	(if needed, explain any answers in Remarks.)
<b>SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.</b>	
Hydrophytic Vegetation Present? <b>Yes</b>	Is the sampling area within a wetland? <b>YES</b>
Hydric Soils Present? <b>Yes</b>	Remarks: _____
Wetland Hydrology Present? <b>Yes</b>	

VEGETATION			
Use scientific names of plants.			Dominance Test Worksheet
Tree Stratum (Plot Size): <b>25-ft diameter</b>	Absolute % Cover	Dominant Species	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
Sapling/Shrub Stratum (Plot Size): <b>25-ft diameter</b>			No. of Dominant Species that are OBL, FACW, or FAC: _____
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
Herb Stratum (Plot Size): <b>25-ft diameter</b>			Total No. of Dominant Species Across All Strata: _____
1. <b><i>Phalaris arundinacea</i> (Reed canarygrass)</b>	<b>100</b>	<b>YES</b>	<b>FACW</b>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
Woody Vine Stratum (Plot Size): <b>25-ft diameter</b>			% of Dominant Species that are OBL, FACW, or FAC: <b>100 % (A/B)</b>
1. _____			
2. _____			
% Bare Ground in Herb Stratum _____			
Remarks: _____			Prevalence Index Worksheet
			Total % Cover of: Multiplied by:
			OBL sp. <b>0</b> x 1 = <b>0</b>
			FACW sp. <b>1</b> x 2 = <b>2</b>
			FAC sp. <b>0</b> x 3 = <b>0</b>
			FACU sp. <b>0</b> x 4 = <b>0</b>
			UP sp. <b>0</b> x 5 = <b>0</b>
			Column Totals <b>1</b> (A) (B) <b>2</b>
			Prevalence Index = (B/A) <b>2.00</b>
			Hydrophytic Vegetation Indicators
			<b>Yes</b> Dominance Test is >50%
			<b>Yes</b> Prevalence Index is < or = 3.0*
			Morphological Adaptations* (Provide supporting data in remarks or on separate sheet)
			Wetland Non-Vascular Plants*
			Problematic Hydrophytic Vegetation* (Explain)
			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present?
			<b>Yes</b>

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: **03/16/15**

Sampling Point: **SP-7**

**SOIL**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type**	LOC***		
0 - 6	Wood chips							No odor
12-Jun	10YR 2/1		10YR 4/2				Silty Sand	No odor

\*\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains. \*\*\*Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		****Indicators of Problematic Hydric Soils:
Histosol (A1) <input type="checkbox"/>	Sandy Redox (S5) <input type="checkbox"/>	2cm Muck (A10) <input type="checkbox"/>
Histic Epipedon (A2) <input type="checkbox"/>	Stripped Matrix (S6) <input type="checkbox"/>	Red Parent Material (TF2) <input type="checkbox"/>
Black Histic (A3) <input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/>	Other (Explain in Remarks) <input type="checkbox"/>
Hydrogen Sulfide (A4) <input type="checkbox"/>	Depleted Matrix (F3) <input type="checkbox"/>	
Depleted Below Dark Surface (A11) <input type="checkbox"/>	Redox Dark Surface (F6) <input type="checkbox"/>	
Thick Dark Surface (A12) <input type="checkbox"/>	Depleted Dark Surface (F7) <input type="checkbox"/>	
Sandy Mucky Mineral (S1) <input type="checkbox"/>	Redox Depressions (F8) <input type="checkbox"/>	
Sandy Gleyed Matrix (S4) <input type="checkbox"/>		

Restrictive Layer (if present): Type: _____ Depth (inches) _____	Hydric Soil Present? <b>Yes</b>
--	---------------------------------

Remarks: \_\_\_\_\_

**HYDROLOGY**

Wetland Hydrology Indicators

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along living roots(C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stresses Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? <input type="checkbox"/> Depth (inches) _____ Water table present? <input checked="" type="checkbox"/> Depth (inches) <b>6</b> Saturation Present? <input checked="" type="checkbox"/> Depth (inches) <b>5</b>	Wetland Hydrology Present? <b>Yes</b>
--	---------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photographs, previous inspections), if available: \_\_\_\_\_

Remarks: \_\_\_\_\_



**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: <b>3/16/15</b>	Sampling Point: <b>SP-8</b>
Project Site: <b>Colville Post and Pole Site</b>	City/County: <b>Stevens</b>
Applicant/Owner: <b>Washington Department of Ecology</b>	State: <b>Washington</b>
Investigator(s): <b>Jason Poulsen</b>	Section, Township, Range: <b>NE1/4, NE1/4, Sec 36, T36N, R38E</b>
Landform (hillslope, terrace, ect.): <b>Depression</b>	Local relief (concave, convex, none): <b>Concave</b>
Subregion (LRR): <b>LRR E - Rocky Mountain Forests and Range Land</b>	Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: <b>59 - Colville Silt Loam, Drained</b>	NWI Classification: _____
Are climatic / hydrologic conditions on site typical for this time of year? <b>Yes</b>	
Are Vegetation <input checked="" type="checkbox"/> Soil <input checked="" type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? <b>Yes</b>	Are "Normal Circumstances" present? <b>Yes</b>
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic? <b>No</b>	(if needed, explain any answers in Remarks.)
<b>SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.</b>	
Hydrophytic Vegetation Present? <b>Yes</b>	Is the sampling area within a wetland? <b>NO</b>
Hydric Soils Present? <b>No</b>	Remarks: _____
Wetland Hydrology Present? <b>No</b>	

VEGETATION			
Use scientific names of plants.			Dominance Test Worksheet
Tree Stratum (Plot Size): <b>25-ft diameter</b>	Absolute % Cover	Dominant Species	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
Sapling/Shrub Stratum (Plot Size): <b>25-ft diameter</b>			Prevalence Index Worksheet
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
Herb Stratum (Plot Size): <b>25-ft diameter</b>			Hydrophytic Vegetation Indicators
1. <b><i>Phalaris arundinacea</i> (Reed canarygrass)</b>	<b>95</b>	<b>YES</b>	<b>FACW</b>
2. <b><i>Verbascum thapsus</i> (common Mullein)</b>	<b>5</b>	<b>NO</b>	<b>FACU</b>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
Woody Vine Stratum (Plot Size): <b>25-ft diameter</b>			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____			
2. _____			
% Bare Ground in Herb Stratum _____			Hydrophytic Vegetation Present? <b>Yes</b>
Remarks: _____			

**WETLAND DETERMINATION DATA FORM**  
Western Mountains, Valleys, and Coast Region

Sampling Date: **03/16/15**

Sampling Point: **SP-8**

**SOIL**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type**	LOC***		
0 - 13	Wood chips							No odor
>13	7.5YR 4/1						Silty Loam	No odor

\*\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains. \*\*\*Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		****Indicators of Problematic Hydric Soils:
Histosol (A1) <input type="checkbox"/>	Sandy Redox (S5) <input type="checkbox"/>	2cm Muck (A10) <input type="checkbox"/>
Histic Epipedon (A2) <input type="checkbox"/>	Stripped Matrix (S6) <input type="checkbox"/>	Red Parent Material (TF2) <input type="checkbox"/>
Black Histic (A3) <input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/>	Other (Explain in Remarks) <input type="checkbox"/>
Hydrogen Sulfide (A4) <input type="checkbox"/>	Depleted Matrix (F3) <input type="checkbox"/>	
Depleted Below Dark Surface (A11) <input type="checkbox"/>	Redox Dark Surface (F6) <input type="checkbox"/>	****Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Thick Dark Surface (A12) <input type="checkbox"/>	Depleted Dark Surface (F7) <input type="checkbox"/>	
Sandy Mucky Mineral (S1) <input type="checkbox"/>	Redox Depressions (F8) <input type="checkbox"/>	
Sandy Gleyed Matrix (S4) <input type="checkbox"/>		

Restrictive Layer (if present): Type: _____ Depth (inches) _____	Hydric Soil Present? <b>No</b>
--	--------------------------------

Remarks: \_\_\_\_\_

**HYDROLOGY**

Wetland Hydrology Indicators

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along living roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? <input type="checkbox"/> Depth (inches) _____ Water table present? <input type="checkbox"/> Depth (inches) _____ Saturation Present? <input type="checkbox"/> Depth (inches) _____	Wetland Hydrology Present? <b>No</b>
--	--------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photographs, previous inspections), if available: \_\_\_\_\_

Remarks: \_\_\_\_\_

**APPENDIX C**  
**Eastern Washington Wetland Rating Summary**



## RATING SUMMARY – Eastern Washington

Name of wetland (or ID #): Wetland A Date of site visit: 3/16/2015

Rated by Jason Poulsen Trained by Ecology?  Yes  No Date of training 6/17/2015

HGM Class used for rating Depressional Wetland has multiple HGM classes?  Yes  No

**NOTE: Form is not complete with out the figures requested** (figures can be combined).

Source of base aerial photo/ma See attached Figures 5 and C-1 through C-3.

**OVERALL WETLAND CATEGORY** II (based on functions  or special characteristics  )

### 1. Category of wetland based on FUNCTIONS

- Category I - Total score = 22 - 27
- X   Category II - Total score = 19 - 21
- Category III - Total score = 16 - 18
- Category IV - Total score = 9 - 15

**Score for each function based on three ratings**  
(order of ratings is not important)

9 = H, H, H  
8 = H, H, M  
7 = H, H, L  
7 = H, M, M  
6 = H, M, L  
6 = M, M, M  
5 = H, L, L  
5 = M, M, L  
4 = M, L, L  
3 = L, L, L

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>List appropriate rating (H, M, L)</i>				
Site Potential	M	M	H	
Landscape Potential	H	M	H	
Value	L	L	H	<b>Total</b>
<b>Score Based on Ratings</b>	6	5	9	<b>20</b>

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Vernal Pools	
Alkali	
Wetland of High Conservation Value	
Bog and Calcareous Fens	
Old Growth or Mature Forest - slow growing	
Aspen Forest	
Old Growth or Mature Forest - fast growing	
Floodplain forest	<b>II</b>
None of the above	

## Maps and Figures required to answer questions correctly for Eastern Washington

### Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	D 1.3, H 1.1, H 1.5	5
Hydroperiods (including area of open water for H 1.3)	D 1.4, H 1.2, H 1.3	5
Location of outlet ( <i>can be added to map of hydroperiods</i> )	D 1.1, D 4.1	5
Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )	D 2.2, D 5.2	5
Map of the contributing basin	D 5.3	C-2
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	C-2 / C-3
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	C-1
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	D 3.3	N/A

### Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	N/A
Hydroperiods	H 1.2, H 1.3	N/A
Ponded depressions	R 1.1	N/A
Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )	R 2.4	N/A
Map of the contributing basin	R 2.2, R 2.3, R 5.2	N/A
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	N/A
Width of wetland vs. width of stream ( <i>can be added to another figure</i> )	R 4.1	N/A
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	N/A
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	N/A
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	R 3.2, R 3.3	N/A

### Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	L 1.1, L 4.1, H 1.1, H 1.5	N/A
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	N/A
Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )	L 2.2	N/A
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	N/A
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	N/A
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	L 3.3	N/A

### Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	N/A
Hydroperiods	H 1.2, H 1.3	N/A
Plant cover of <b>dense</b> trees, shrubs, and herbaceous plants	S 1.3	N/A
Plant cover of <b>dense, rigid</b> trees, shrubs, and herbaceous plants ( <i>can be added to figure above</i> )	S 4.1	N/A
Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )	S 2.1, S 5.1	N/A
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	N/A
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	N/A
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	S 3.3	N/A





**NOTE:** Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM Class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine ( the riverine portion is within the boundary of depression)	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

NOTES and FIELD OBSERVATIONS:

<b>DEPRESSIONAL WETLANDS</b>		Points (only 1 score per box)
<b>Water Quality Functions</b> - Indicators that the site functions to improve water quality		
D 1.0. Does the site have the potential to improve water quality?		
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u>		
Wetland has no surface water outlet	points = 5	3
<input checked="" type="checkbox"/> Wetland has an intermittently flowing outlet	points = 3	
<input type="checkbox"/> Wetland has a highly constricted permanently flowing outlet	points = 3	
Wetland has a permanently flowing, unconstricted, surface outlet	points = 1	
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions of soils)</u>		
Yes = 3    No = 0		0
D 1.3. <u>Characteristics of persistent vegetation</u> (Emergent, Scrub-shrub, and/or Forested Cowardin class)		
Wetland has persistent, ungrazed, vegetation for $> \frac{2}{3}$ of area	points = 5	5
Wetland has persistent, ungrazed, vegetation from $\frac{1}{3}$ to $\frac{2}{3}$ of area	points = 3	
Wetland has persistent, ungrazed vegetation from $\frac{1}{10}$ to $< \frac{1}{3}$ of area	points = 1	
Wetland has persistent, ungrazed vegetation $< \frac{1}{10}$ of area	points = 0	
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u>		
<i>This is the area of ponding that fluctuates every year. Do not count the area that is permanently ponded.</i>		
Area seasonally ponded is $> \frac{1}{2}$ total area of wetland	points = 3	3
Area seasonally ponded is $\frac{1}{4}$ - $\frac{1}{2}$ total area of wetland	points = 1	
Area seasonally ponded is $< \frac{1}{4}$ total area of wetland	points = 0	
Total for D 1	Add the points in the boxes above	<b>11</b>
<b>Rating of Site Potential</b> If score is: <input type="checkbox"/> 12 - 16 = H <input checked="" type="checkbox"/> 6 - 11 = M <input type="checkbox"/> 0 - 5 = L <span style="float: right;"><i>Record the rating on the first page</i></span>		

D 2.0. Does the landscape have the potential to support the water quality function of the site?		
D 2.1. Does the wetland receive stormwater discharges?	Yes = 1    No = 0	1
D 2.2. Is $> 10\%$ of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1    No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1    No = 0	0
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3?		1
Source <u>Former post and pole manufacturing facility</u>	Yes = 1    No = 0	
Total for D 2	Add the points in the boxes above	<b>3</b>
<b>Rating of Landscape Potential</b> If score is: <input checked="" type="checkbox"/> 3 or 4 = H <input type="checkbox"/> 1 or 2 = M <input type="checkbox"/> 0 = L <span style="float: right;"><i>Record the rating on the first page</i></span>		

D 3.0. Is the water quality improvement provided by the site valuable to society?		
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, or lake that is on the 303(d) list?	Yes = 1    No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where water quality is an issue in some aquatic resource [303(d) list, eutrophic lakes, problems with nuisance and toxic algae]?	Yes = 1    No = 0	0
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality ( <i>answer YES if there is a TMDL for the drainage or basin in which the wetland is found</i> )?	Yes = 2    No = 0	0
Total for D 3	Add the points in the boxes above	<b>0</b>
<b>Rating of Value</b> If score is: <input type="checkbox"/> 2 - 4 = H <input type="checkbox"/> 1 = M <input checked="" type="checkbox"/> 0 = L <span style="float: right;"><i>Record the rating on the first page</i></span>		

<b>DEPRESSIONAL WETLANDS</b>		Points (only 1 score per box)
<b>Hydrologic Functions</b> - Indicators that the site functions to reduce flooding and erosion		
D 4.0. Does the site have the potential to reduce flooding and erosion?		
D 4.1. <u>Characteristics of surface water outflows from the wetland:</u>		
Wetland has no surface water outlet	points = 8	4
<input checked="" type="checkbox"/> Wetland has an intermittently flowing outlet	points = 4	
<input type="checkbox"/> Wetland has a highly constricted permanently flowing outlet	points = 4	
Wetland has a permanently flowing unconstricted surface outlet	points = 0	
<i>(If outlet is a ditch and not permanently flowing treat wetland as "intermittently flowing")</i>		
D 4.2. <u>Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or deepest part (if drv).</u>		
Seasonal ponding: > 3 ft above the lowest point in wetland or the surface of permanent ponding	points = 8	6
Seasonal ponding: 2 ft - < 3 ft above the lowest point in wetland or the surface of permanent ponding	points = 6	
<input type="checkbox"/> The wetland is a headwater wetland	points = 4	
<input type="checkbox"/> Seasonal ponding: 1 ft - < 2 ft	points = 4	
Seasonal ponding: 6 in - < 1 ft	points = 2	
Seasonal ponding: < 6 in or wetland has only saturated soils	points = 0	
Total for D 4		<b>10</b>

**Rating of Site Potential** If score is:  12 - 16 = H  6 - 11 = M  0 - 5 = L *Record the rating on the first page*

D 5.0. Does the landscape have the potential to support the hydrologic functions of the site?		
D 5.1. Does the wetland receive stormwater discharges?	Yes = 1 No = 0	1
D 5.2. Is > 10% of the area within 150 ft of the wetland in land uses that generates runoff?	Yes = 1 No = 0	0
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses ?	Yes = 1 No = 0	1
Total for D 5		<b>2</b>

**Rating of Landscape Potential** If score is:  3 = H  1 or 2 = M  0 = L *Record the rating on the first page*

D 6.0. Are the hydrologic functions provided by the site valuable to society?		
D 6.1. <u>The wetland is in a landscape that has flooding problems.</u>		
Choose the description that best matches conditions around the wetland being rated. <i>Do not add points. Choose the highest score if more than one condition is met.</i>		
The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds), AND		0
Flooding occurs in sub-basin that is immediately down-gradient of wetland	points = 2	
Surface flooding problems are in a sub-basin farther down-gradient	points = 1	
<input type="checkbox"/> The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood.	points = 0	
<i>Explain why</i>		
<input type="checkbox"/> There are no problems with flooding downstream of the wetland	points = 0	
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?		
	Yes = 2 No = 0	0
Total for D 6		<b>0</b>

**Rating of Value** If score is:  2 - 4 = H  1 = M  0 = L *Record the rating on the first page*

<b>These questions apply to wetlands of all HGM classes.</b>		(only 1 score per box)
<b>HABITAT FUNCTIONS</b> - Indicators that site functions to provide important habitat		
<b>H 1.0.</b> Does the wetland have the potential to provide habitat for many species?		
<b>H 1.1.</b> Structure of plant community: <i>Check the Cowardin vegetation classes present and categories of emergent plants. Size threshold for each category is &gt;= ¼ ac or &gt;= 10% of the wetland if wetland is &lt; 2.5 ac.</i> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Aquatic bed</li> <li><input type="checkbox"/> Emergent plants 0 - 12 in (0-30 cm) high are the highest layer and have &gt; 30% cover <span style="float: right;">4 or more checks: points = 3</span></li> <li><input type="checkbox"/> Emergent plants &gt; 12 - 40 in (&gt; 30-100 cm) high are the highest layer with &gt;30% cover <span style="float: right;">3 checks: points = 2</span></li> <li><input checked="" type="checkbox"/> Emergent plants &gt; 40 in (&gt; 100 cm) high are the highest layer with &gt;30% cover <span style="float: right;">2 checks: points = 1</span></li> <li><input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have &gt; 30% cover) <span style="float: right;">1 check: points = 0</span></li> <li><input checked="" type="checkbox"/> Forested (areas where trees have &gt; 30% cover)</li> </ul>		3
<b>H 1.2.</b> Is one of the vegetation types Aquatic Bed?		Yes = 1    No = 0
<b>H 1.3. <u>Surface water</u></b>		
<b>H 1.3.1.</b> Does the wetland have areas of open water (without emergent or shrub plants) over at least ¼ ac <b>OR</b> 10% of its area during the March to early June <b>OR</b> in August to the end of September? <i>Answer YES for Lake Fringe wetlands.</i> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Yes = 3 points &amp; go to H 1.4    No = go to H 1.3.2</li> </ul>		3
<b>H 1.3.2.</b> Does the wetland have an intermittent or permanent, and unvegetated stream within its boundaries, or along one side, over at least ¼ ac or 10% of its area? <i>Answer yes only if H 1.3.1 is No.</i> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes = 3    No = 0</li> </ul>		
<b>H 1.4. <u>Richness of plant species</u></b>		
Count the number of plant species in the wetland that cover at least 10 ft <sup>2</sup> . <i>Different patches of the same species can be combined to meet the size threshold. You do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Russian olive, Phragmites, Canadian thistle, yellow-flag iris, and saltcedar (Tamarisk)</i> # of species <u>5 to 6</u>		1
		Scoring: > 9 species: points = 2 4 - 9 species: points = 1 < 4 species: points = 0
<b>H 1.4. <u>Interspersion of habitats</u></b>		
Decide from the diagrams below whether interspersion among types of plant structures (described in H 1.1), and unvegetated areas (open water or mudflats) is high, moderate, low, or none. <i>Use map of Cowardin and emergent plant classes prepared for questions H 1.1 and map of open water from H 1.3. If you have four or more plant classes or three classes and open water, the rating is always high.</i>		3
<b>None = 0 points</b> <b>Low = 1 point</b> <b>Moderate = 2 points</b>		
All three diagrams in this row are <b>HIGH = 3 points</b>		
Riparian braided channels with 2 classes		



<b>H 1.6. Special habitat features:</b> Check the habitat features that are present in the wetland. The number of checks is the number of		
<input checked="" type="checkbox"/> Loose rocks larger than 4 in OR large, downed, woody debris (> 4 in diameter) within the area of surface ponding or in stream.		
<input checked="" type="checkbox"/> Cattails or bulrushes are present within the wetland.		
<input checked="" type="checkbox"/> Standing snags (diameter at the bottom > 4 in) in the wetland or within 30 m (100 ft) of the edge		5
<input checked="" type="checkbox"/> Emergent or shrub vegetation in areas that are permanently inundated/ponded.		
<input checked="" type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 45 degree slope) OR signs of recent beaver activity		
<input type="checkbox"/> Invasive species cover less than 20% in each stratum of vegetation ( <i>canopy, sub-canopy, shrubs, herbaceous, moss/ground cover</i> )		
Total for H 1 Add the points in the boxes above		<b>16</b>
<b>Rating of Site Potential</b> If Score is: <input checked="" type="checkbox"/> 15 - 18 = H <input type="checkbox"/> 7 - 14 = M <input type="checkbox"/> 0 - 6 = L <span style="float: right;">Record the rating on the first page</span>		

<b>H 2.0. Does the landscape have the potential to support habitat functions of the site?</b>		
<b>H 2.1 Accessible habitat (only area of habitat abutting wetland). If total accessible habitat is:</b> Calculate:		
32 % undisturbed habitat + _____ 5 % moderate & low intensity land uses / 2 ) = 34.5%		
> 1/3 (33.3%) of 1 km Polygon points = 3		2
20 - 33% of 1 km Polygon points = 2		
10 - 19% of 1 km Polygon points = 1		
< 10 % of 1 km Polygon points = 0		
<b>H 2.2. Undisturbed habitat in 1 km Polygon around wetland.</b> Calculate:		
60 % undisturbed habitat + _____ 5 % moderate & low intensity land uses / 2 ) = 62.5%		
Undisturbed habitat > 50% of Polygon points = 3		3
Undisturbed habitat 10 - 50% and in 1 - 3 patches points = 2		
Undisturbed habitat 10 - 50% and > 3 patches points = 1		
Undisturbed habitat < 10% of 1 km Polygon points = 0		
<b>H 2.3 Land use intensity in 1 km Polygon:</b>		
> 50% of 1 km Polygon is high intensity land use points = (-2)		0
Does not meet criterion above points = 0		
<b>H 2.4. The wetland is in an area where annual rainfall is less than 12 in, and its water regime is not influenced by irrigation practices, dams, or water control structures. Generally, this means outside boundaries of reclamation areas, irrigation districts, or reservoirs</b>		
Yes = 3 No = 0		0
Total for H 2 Add the points in the boxes above		<b>5</b>
<b>Rating of Landscape Potential</b> If Score is: <input checked="" type="checkbox"/> 4 - 9 = H <input type="checkbox"/> 1 - 3 = M <input type="checkbox"/> < 1 = L <span style="float: right;">Record the rating on the first page</span>		

<b>H 3.0. Is the habitat provided by the site valuable to society?</b>		
<b>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated.</b>		
Site meets ANY of the following criteria: points = 2		
<input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see Appendix B)		
<input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on state or federal lists)		
<input type="checkbox"/> It is mapped as a location for an individual WDFW species		2
<input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources		
<input type="checkbox"/> It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan		
Site has 1 or 2 priority habitats within 100 m (see Appendix B) points = 1		
Site does not meet any of the criteria above points = 0		
<b>Rating of Value</b> If Score is: <input checked="" type="checkbox"/> 2 = H <input type="checkbox"/> 1 = M <input type="checkbox"/> 0 = L		Record the rating on the first page

## CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

**Please determine if the wetland meets the attributes described below and circle the appropriate category.**  
**NOTE: A wetland may meet the criteria for more than one set of special characteristics. Record all those that apply. NOTE: All wetlands should also be characterized based on their functions.**

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. List the category when the appropriate criteria are met.</i>	
<p><b>SC 1.0. Vernal Pools</b></p> <p>Is the wetland <b>less than 4000 ft<sup>2</sup></b>, and does it meet at least <b>two</b> of the following criteria?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Its only source of water is rainfall or snowmelt from a small contributing basin and has no groundwater input.</li> <li><input type="checkbox"/> Wetland plants are typically present only in the spring; the summer vegetation is typically upland annuals. <i>If you find perennial, obligate, wetland plants, the wetland is probably NOT a vernal pool.</i></li> <li><input type="checkbox"/> The soil in the wetland is shallow [<math>&lt; 1</math> ft (30 cm) deep] and is underlain by an impermeable layer such as basalt or clay.</li> <li><input type="checkbox"/> Surface water is present for less than 120 days during the wet season.</li> </ul> <p style="text-align: right;"><input type="checkbox"/> Yes - Go to <b>SC 1.1</b>      <input checked="" type="checkbox"/> No = <b>Not vernal pool</b></p> <p>SC 1.1. Is the vernal pool relatively undisturbed in February and March?  <input type="checkbox"/> Yes - Go to <b>SC 1.2</b>      <input type="checkbox"/> No = <b>Not a vernal pool with special characteristics</b></p> <p>SC 1.2. Is the vernal pool in an area where there are at least 3 separate aquatic resources within 0.5 mi (other wetlands, rivers, lakes etc.)?  <input type="checkbox"/> Yes = <b>Category II</b>      <input type="checkbox"/> No = <b>Category III</b></p>	
<p><b>SC 2.0. Alkali wetlands</b></p> <p>Does the wetland meet <b>one</b> of the following criteria?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The wetland has a conductivity <math>&gt; 3.0</math> mS/cm.</li> <li><input type="checkbox"/> The wetland has a conductivity between 2.0 and 3.0 mS, and more than 50% of the plant cover in the wetland can be classified as "alkali" species (see Table 4 for list of plants found in alkali systems).</li> <li><input type="checkbox"/> If the wetland is dry at the time of your field visit, the central part of the area is covered with a layer of salt.</li> </ul> <p><b>OR</b> does the wetland unit meet two of the following three sub-criteria?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Salt encrustations around more than 75% of the edge of the wetland</li> <li><input type="checkbox"/> More than <math>\frac{3}{4}</math> of the plant cover consists of species listed on Table 4</li> <li><input type="checkbox"/> A pH above 9.0. All alkali wetlands have a high pH, but please note that some freshwater wetlands may also have a high pH. Thus, pH alone is not a good indicator of alkali wetlands.</li> </ul> <p style="text-align: right;"><input type="checkbox"/> Yes = <b>Category I</b>      <input checked="" type="checkbox"/> No = <b>Not an alkali wetland</b></p>	
<p><b>SC 3.0. Wetlands of High Conservation Value (WHCV)</b></p> <p>SC 3.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?  <input type="checkbox"/> Yes - Go to <b>SC 3.2</b>      <input checked="" type="checkbox"/> No - Go to <b>SC 3.3</b></p> <p>SC 3.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?  <input type="checkbox"/> Yes = <b>Category I</b>      <input checked="" type="checkbox"/> No = <b>Not WHCV</b></p> <p>SC 3.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?  <a href="http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf">http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</a>  <input type="checkbox"/> Yes - <b>Contact WNHP/WDNR and to SC 3.4</b>      <input type="checkbox"/> No = <b>Not WHCV</b></p> <p>SC 3.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?  <input type="checkbox"/> Yes = <b>Category I</b>      <input type="checkbox"/> No = <b>Not WHCV</b></p>	

<p><b>SC 4.0. Bogs and Calcareous Fens</b>  <i>Does the wetland (or any part of the wetland unit) meet both the criteria for soils and vegetation in bogs or calcareous fens? Use the key below to identify if the wetland is a bog or calcareous fen. If you answer yes you will still need to rate the wetland based on its functions.</i></p> <p>SC 4.1. Does an area within the wetland have organic soil horizons (i.e., layers of organic soil), either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? See Appendix C for a field key to identify organic soils.  <input type="checkbox"/> Yes - Go to <b>SC 4.3</b>                      <input checked="" type="checkbox"/> No - Go to <b>SC 4.2</b></p> <p>SC 4.2. Does an area within the wetland have organic soils, either peats or mucks, that are less than 16 in deep over bedrock or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?  <input type="checkbox"/> Yes - Go to <b>SC 4.3</b>                      <input checked="" type="checkbox"/> No = <b>Is not a bog for rating</b></p> <p>SC 4.3. Does an area within the wetland have more than 70% cover of mosses at ground level AND at least 30% of the total plant cover consists of species in Table 5?  <input type="checkbox"/> Yes = <b>Category I bog</b>                      <input type="checkbox"/> No - Go to <b>SC 4.4</b></p> <p><b>NOTE:</b> If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 5 are present, the wetland is a bog.</p> <p>SC 4.4. Is an area with peats or mucks forested (&gt; 30% cover) with subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 5 provide more than 30% of the cover under the canopy?  <input type="checkbox"/> Yes = <b>Category I bog</b>                      <input type="checkbox"/> No - Go to <b>SC 4.5</b></p> <p>SC 4.5. Do the species listed in Table 6 comprise at least 20% of the total plant cover within an area of peats and mucks?  <input type="checkbox"/> Yes = <b>Is a Calcareous Fen for purpose of rating</b>                      <input type="checkbox"/> No - Go to <b>SC 4.6</b></p> <p>SC 4.6. Do the species listed in Table 6 comprise at least 10% of the total plant cover in an area of peats and mucks, AND one of the two following conditions is met:  <input type="checkbox"/> Marl deposits [calcium carbonate (CaCO<sub>3</sub>) precipitate] occur on the soil surface or plant stems  <input type="checkbox"/> The pH of free water is ≥ 6.8 AND electrical conductivity is ≥ 200 uS/cm at multiple locations within the wetland  <input type="checkbox"/> Yes = <b>Is a Category I calcareous fen</b>                      <input type="checkbox"/> No = <b>Is not a calcareous fen</b></p>		
<p><b>SC 5.0. Forested Wetlands</b>                  Does the wetland have an area of forest rooted within its boundary that meets <b>at least one</b> of the following three criteria? (<i>Continue only if you have identified that a forested class is present in question</i>)  <input checked="" type="checkbox"/> The wetland is within the 100 year floodplain of a river or stream  <input type="checkbox"/> Aspen (<i>Populus tremuloides</i>) represents at least 20% of the total cover of woody species  <input type="checkbox"/> There is at least ¼ ac of trees (even in wetlands smaller than 2.5 ac) that are “mature” or “old-growth” according to the definitions for these priority habitats developed by WDFW (see definitions in question H3.1)  <input checked="" type="checkbox"/> Yes - Go to <b>SC 5.1</b>                      <input type="checkbox"/> No = <b>Not a forested wetland with special characteristics</b></p>		
<p>SC 5.1. Does the wetland have a forest canopy where more than 50% of the tree species (by cover) are slow growing native trees (see Table 7)?  <input type="checkbox"/> Yes = <b>Category I</b>                      <input checked="" type="checkbox"/> No - Go to <b>SC 5.2</b></p> <p>SC 5.2. Does the wetland have areas where aspen (<i>Populus tremuloides</i>) represents at least 20% of the total cover of woody species?  <input type="checkbox"/> Yes = <b>Category I</b>                      <input checked="" type="checkbox"/> No - Go to <b>SC 5.3</b></p> <p>SC 5.3. Does the wetland have at least ¼ acre with a forest canopy where more than 50% of the tree species (by cover) are fast growing species (see Table 7)?  <input checked="" type="checkbox"/> Yes = <b>Category II</b>                      <input type="checkbox"/> No - Go to <b>SC 5.4</b></p> <p>SC 5.4. Is the forested component of the wetland within the 100 year floodplain of a river or stream?  <input type="checkbox"/> Yes = <b>Category II</b>                      <input type="checkbox"/> No = <b>Not a forested wetland with special characteristics</b></p>	<p><b>Cat. II</b></p>	
<p><b>Category of wetland based on Special Characteristics</b>                  Choose the highest rating if wetland falls into several categories                  If you answered No for all types, enter “Not Applicable” on Summary Form</p>		<p><b>Cat. II</b></p>

## Appendix B: WDFW Priority Habitats in Eastern Washington

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp.

<http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here:

<http://wdfw.wa.gov/conservation/phs/list/>

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** *This question is independent of the land use between the wetland unit and the priority habitat.*

- Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Areas and Corridors:** Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- Old-growth/Mature forests:** Old-growth east of Cascade crest – Stands are highly variable in tree species composition and structural characteristics due to the influence of fire, climate, and soils. In general, stands will be >150 years of age, with 10 trees/ac (25 trees/ha) that are > 21 in (53 cm) dbh, and 1-3 snags/ac (2.5-7.5 snags/ha) that are > 12-14 in (30-35 cm) diameter. Downed logs may vary from abundant to absent. Canopies may be single or multi-layered. Evidence of human-caused alterations to the stand will be absent or so slight as to not affect the ecosystem's essential structures and functions. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west and 80-160 years old east of the Cascade crest.
- Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).
- Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.
- Shrub-steppe:** A nonforested vegetation type consisting of one or more layers of perennial bunchgrasses and a conspicuous but discontinuous layer of shrubs (see Eastside Steppe for sites with little or no shrub cover).
- Eastside Steppe:** Nonforested vegetation type dominated by broadleaf herbaceous flora (i.e., forbs), perennial bunchgrasses, or a combination of both. Bluebunch wheatgrass (*Pseudoroegneria spicata*) is often the prevailing cover component along with Idaho fescue (*Festuca idahoensis*), Sandberg bluegrass (*Poa secunda*), rough fescue (*F. campestris*), or needlegrasses (*Achnatherum* spp.).
- Juniper Savannah:** All juniper woodlands.

**Note:** All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.



## RATING SUMMARY – Eastern Washington

Name of wetland (or ID #): Wetland B Date of site visit: 3/16/2015

Rated by Jason Poulsen Trained by Ecology?  Yes  No Date of training 6/17/2015

HGM Class used for rating Depressional Wetland has multiple HGM classes?  Yes  No

**NOTE: Form is not complete with out the figures requested (figures can be combined).**

Source of base aerial photo/ma See attached Figures 5 and C-1 through C-3.

**OVERALL WETLAND CATEGORY** III (based on functions  or special characteristics  )

### 1. Category of wetland based on FUNCTIONS

- Category I** - Total score = 22 - 27
- Category II** - Total score = 19 - 21
- X**   **Category III** - Total score = 16 - 18
- Category IV** - Total score = 9 - 15

**Score for each function based on three ratings**  
(order of ratings is not important)

9 = H, H, H  
 8 = H, H, M  
 7 = H, H, L  
 7 = H, M, M  
 6 = H, M, L  
 6 = M, M, M  
 5 = H, L, L  
 5 = M, M, L  
 4 = M, L, L  
 3 = L, L, L

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>List appropriate rating (H, M, L)</i>				
Site Potential	H	M	L	
Landscape Potential	M	M	H	
Value	L	L	H	<b>Total</b>
<b>Score Based on Ratings</b>	6	5	7	<b>18</b>

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Vernal Pools	
Alkali	
Wetland of High Conservation Value	
Bog and Calcareous Fens	
Old Growth or Mature Forest - slow growing	
Aspen Forest	
Old Growth or Mature Forest - fast growing	
Floodplain forest	
None of the above	

## Maps and Figures required to answer questions correctly for Eastern Washington

### Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	D 1.3, H 1.1, H 1.5	5
Hydroperiods (including area of open water for H 1.3)	D 1.4, H 1.2, H 1.3	5
Location of outlet ( <i>can be added to map of hydroperiods</i> )	D 1.1, D 4.1	5
Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )	D 2.2, D 5.2	5
Map of the contributing basin	D 5.3	C-2
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	C-2 / C-3
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	C-1
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	D 3.3	N/A

### Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	N/A
Hydroperiods	H 1.2, H 1.3	N/A
Ponded depressions	R 1.1	N/A
Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )	R 2.4	N/A
Map of the contributing basin	R 2.2, R 2.3, R 5.2	N/A
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	N/A
Width of wetland vs. width of stream ( <i>can be added to another figure</i> )	R 4.1	N/A
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	N/A
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	N/A
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	R 3.2, R 3.3	N/A

### Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	L 1.1, L 4.1, H 1.1, H 1.5	N/A
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	N/A
Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )	L 2.2	N/A
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	N/A
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	N/A
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	L 3.3	N/A

### Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	N/A
Hydroperiods	H 1.2, H 1.3	N/A
Plant cover of <b>dense</b> trees, shrubs, and herbaceous plants	S 1.3	N/A
Plant cover of <b>dense, rigid</b> trees, shrubs, and herbaceous plants ( <i>can be added to figure above</i> )	S 4.1	N/A
Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )	S 2.1, S 5.1	N/A
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	N/A
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	N/A
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	S 3.3	N/A

## HGM Classification of Wetland in Eastern Washington

For questions 1 - 4, the criteria described must apply to the entire unit being rated.  
If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1 - 4 apply, and go to Question 5.

1. Does the entire unit **meet both** of the following criteria?

- The vegetated part of the wetland is on the water side of the Ordinary High Water Mark of a body of permanent open water (without any plants on the surface) that is at least 20 ac (8 ha) in size
- At least 30% of the open water area is deeper than 10 ft (3 m)
  
- NO - go to 2  **YES** - The wetland class is **Lake Fringe** (Lacustrine Fringe)

2. Does the entire wetland unit meet all of the following criteria?

- The wetland is on a slope (*slope can be very gradual*),
- The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks;
- The water leaves the wetland **without being impounded**.
  
- NO - go to 3  **YES** - The wetland class is **Slope**  
**NOTE:** Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 foot deep).

3. Does the entire wetland unit **meet all** of the following criteria?

- The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river;
- The overbank flooding occurs at least once every 10 years.
  
- NO - go to 4  **YES** - The wetland class is **Riverine**  
**NOTE:** The Riverine wetland can contain depressions that are filled with water when the river is not flooding.

4. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year. *This means that any outlet, if present, is higher than the interior of the wetland.*

- NO - go to 5  **YES** - The wetland class is **Depressional**

5. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1 - 4 APPLY TO DIFFERENT AREAS IN THE WETLAND UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

**NOTE:** Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM Class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine ( the riverine portion is within the boundary of depression)	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

NOTES and FIELD OBSERVATIONS:



<b>DEPRESSIONAL WETLANDS</b>		Points (only 1 score per box)
<b>Water Quality Functions</b> - Indicators that the site functions to improve water quality		
D 1.0. Does the site have the potential to improve water quality?		
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u>		
Wetland has no surface water outlet	points = 5	5
<input type="checkbox"/> Wetland has an intermittently flowing outlet	points = 3	
<input type="checkbox"/> Wetland has a highly constricted permanently flowing outlet	points = 3	
Wetland has a permanently flowing, unconstricted, surface outlet	points = 1	
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions of soils)</u>		0
Yes = 3    No = 0		
D 1.3. <u>Characteristics of persistent vegetation</u> (Emergent, Scrub-shrub, and/or Forested Cowardin class)		
Wetland has persistent, ungrazed, vegetation for $> \frac{2}{3}$ of area	points = 5	5
Wetland has persistent, ungrazed, vegetation from $\frac{1}{3}$ to $\frac{2}{3}$ of area	points = 3	
Wetland has persistent, ungrazed vegetation from $\frac{1}{10}$ to $< \frac{1}{3}$ of area	points = 1	
Wetland has persistent, ungrazed vegetation $< \frac{1}{10}$ of area	points = 0	
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u>		
<i>This is the area of ponding that fluctuates every year. Do not count the area that is permanently ponded.</i>		
Area seasonally ponded is $> \frac{1}{2}$ total area of wetland	points = 3	3
Area seasonally ponded is $\frac{1}{4}$ - $\frac{1}{2}$ total area of wetland	points = 1	
Area seasonally ponded is $< \frac{1}{4}$ total area of wetland	points = 0	
Total for D 1	Add the points in the boxes above	<b>13</b>

**Rating of Site Potential** If score is:  12 - 16 = H     6 - 11 = M     0 - 5 = L    Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?		
D 2.1. Does the wetland receive stormwater discharges?	Yes = 1    No = 0	0
D 2.2. Is $> 10\%$ of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1    No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1    No = 0	0
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3?		1
Source <u>Former post and pole manufacturing facility</u>	Yes = 1    No = 0	
Total for D 2	Add the points in the boxes above	<b>2</b>

**Rating of Landscape Potential** If score is:  3 or 4 = H     1 or 2 = M     0 = L    Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?		
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, or lake that is on the 303(d) list?	Yes = 1    No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where water quality is an issue in some aquatic resource [303(d) list, eutrophic lakes, problems with nuisance and toxic algae]?	Yes = 1    No = 0	0
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the drainage or basin in which the wetland is found)?		0
Yes = 2    No = 0		
Total for D 3	Add the points in the boxes above	<b>0</b>

**Rating of Value** If score is:  2 - 4 = H     1 = M     0 = L    Record the rating on the first page

<b>DEPRESSIONAL WETLANDS</b>		Points (only 1 score per box)
<b>Hydrologic Functions</b> - Indicators that the site functions to reduce flooding and erosion		
D 4.0. Does the site have the potential to reduce flooding and erosion?		
D 4.1. <u>Characteristics of surface water outflows from the wetland:</u>		
Wetland has no surface water outlet	points = 8	8
<input type="checkbox"/> Wetland has an intermittently flowing outlet	points = 4	
<input type="checkbox"/> Wetland has a highly constricted permanently flowing outlet	points = 4	
Wetland has a permanently flowing unconstricted surface outlet	points = 0	
<i>(If outlet is a ditch and not permanently flowing treat wetland as "intermittently flowing")</i>		
D 4.2. <u>Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or deepest part (if drv).</u>		
Seasonal ponding: > 3 ft above the lowest point in wetland or the surface of permanent ponding	points = 8	0
Seasonal ponding: 2 ft - < 3 ft above the lowest point in wetland or the surface of permanent ponding	points = 6	
<input type="checkbox"/> The wetland is a headwater wetland	points = 4	
<input type="checkbox"/> Seasonal ponding: 1 ft - < 2 ft	points = 4	
Seasonal ponding: 6 in - < 1 ft	points = 2	
Seasonal ponding: < 6 in or wetland has only saturated soils	points = 0	
Total for D 4		<b>8</b>
Add the points in the boxes above		<b>8</b>

**Rating of Site Potential** If score is:  12 - 16 = H  6 - 11 = M  0 - 5 = L *Record the rating on the first page*

D 5.0. Does the landscape have the potential to support the hydrologic functions of the site?		
D 5.1. Does the wetland receive stormwater discharges?	Yes = 1 No = 0	0
D 5.2. Is > 10% of the area within 150 ft of the wetland in land uses that generates runoff?	Yes = 1 No = 0	0
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses ?	Yes = 1 No = 0	1
Total for D 5		<b>1</b>
Add the points in the boxes above		<b>1</b>

**Rating of Landscape Potential** If score is:  3 = H  1 or 2 = M  0 = L *Record the rating on the first page*

D 6.0. Are the hydrologic functions provided by the site valuable to society?		
D 6.1. <u>The wetland is in a landscape that has flooding problems.</u>		
Choose the description that best matches conditions around the wetland being rated. <i>Do not add points. Choose the highest score if more than one condition is met.</i>		
The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds), AND		0
Flooding occurs in sub-basin that is immediately down-gradient of wetland	points = 2	
Surface flooding problems are in a sub-basin farther down-gradient	points = 1	
<input type="checkbox"/> The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood.	points = 0	
<i>Explain why</i>		
<input type="checkbox"/> There are no problems with flooding downstream of the wetland	points = 0	
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?		
	Yes = 2 No = 0	0
Total for D 6		<b>0</b>
Add the points in the boxes above		<b>0</b>

**Rating of Value** If score is:  2 - 4 = H  1 = M  0 = L *Record the rating on the first page*

<b>These questions apply to wetlands of all HGM classes.</b>		(only 1 score per box)
<b>HABITAT FUNCTIONS</b> - Indicators that site functions to provide important habitat		
<b>H 1.0. Does the wetland have the potential to provide habitat for many species?</b>		
<p><b>H 1.1. Structure of plant community:</b>  <i>Check the Cowardin vegetation classes present and categories of emergent plants. Size threshold for each category is <math>\geq \frac{1}{4}</math> ac or <math>\geq 10\%</math> of the wetland if wetland is <math>&lt; 2.5</math> ac.</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Aquatic bed</li> <li><input checked="" type="checkbox"/> Emergent plants 0 - 12 in (0-30 cm) high are the highest layer and have <math>&gt; 30\%</math> cover <span style="float: right;">4 or more checks: points = 3</span></li> <li><input type="checkbox"/> Emergent plants <math>&gt; 12 - 40</math> in (<math>&gt; 30-100</math> cm) high are the highest layer with <math>&gt;30\%</math> cover <span style="float: right;">3 checks: points = 2</span></li> <li><input type="checkbox"/> Emergent plants <math>&gt; 40</math> in (<math>&gt; 100</math> cm) high are the highest layer with <math>&gt;30\%</math> cover <span style="float: right;">2 checks: points = 1</span></li> <li><input type="checkbox"/> 1 check: points = 0</li> <li><input type="checkbox"/> Scrub-shrub (areas where shrubs have <math>&gt; 30\%</math> cover)</li> <li><input type="checkbox"/> Forested (areas where trees have <math>&gt; 30\%</math> cover)</li> </ul>		0
<p><b>H 1.2. Is one of the vegetation types Aquatic Bed?</b></p> <p style="text-align: right;">Yes = 1    No = 0</p>		0
<b>H 1.3. Surface water</b>		
<p><b>H 1.3.1.</b> Does the wetland have areas of open water (without emergent or shrub plants) over at least <math>\frac{1}{4}</math> ac <b>OR</b> 10% of its area during the March to early June <b>OR</b> in August to the end of September? <i>Answer YES for Lake Fringe wetlands.</i></p> <p style="text-align: right;"><input type="checkbox"/> Yes = 3 points &amp; go to H 1.4    No = go to H 1.3.2</p> <p><b>H 1.3.2.</b> Does the wetland have an intermittent or permanent, and unvegetated stream within its boundaries, or along one side, over at least <math>\frac{1}{4}</math> ac or 10% of its area?  <i>Answer yes only if H 1.3.1 is No.</i></p> <p style="text-align: right;"><input type="checkbox"/> Yes = 3    No = 0</p>		0
<b>H 1.4. Richness of plant species</b>		
<p>Count the number of plant species in the wetland that cover at least <math>10 \text{ ft}^2</math>. <i>Different patches of the same species can be combined to meet the size threshold. You do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Russian olive, Phragmites, Canadian thistle, yellow-flag iris, and saltcedar (Tamarisk)</i></p> <p># of species      1-Jan _____</p> <p style="text-align: right;">Scoring: <math>&gt; 9</math> species: points = 2                  4 - 9 species: points = 1  <math>&lt; 4</math> species: points = 0</p>		0
<b>H 1.4. Interspersion of habitats</b>		
<p>Decide from the diagrams below whether interspersion among types of plant structures (described in H 1.1), and unvegetated areas (open water or mudflats) is high, moderate, low, or none. <i>Use map of Cowardin and emergent plant classes prepared for questions H 1.1 and map of open water from H 1.3. If you have four or more plant classes or three classes and open water, the rating is always high.</i></p> <p style="text-align: center;"><b>None = 0 points</b>                      <b>Low = 1 point</b>                      <b>Moderate = 2 points</b></p> <p>All three diagrams in this row are <b>HIGH = 3 points</b></p> <p style="text-align: right;">Riparian braided channels with 2 classes</p>		0

<b>H 1.6. Special habitat features:</b> Check the habitat features that are present in the wetland. The number of checks is the number of			
<input type="checkbox"/> Loose rocks larger than 4 in OR large, downed, woody debris (> 4 in diameter) within the area of surface ponding or in stream. <input type="checkbox"/> Cattails or bulrushes are present within the wetland. <input type="checkbox"/> Standing snags (diameter at the bottom > 4 in) in the wetland or within 30 m (100 ft) of the edge <input type="checkbox"/> Emergent or shrub vegetation in areas that are permanently inundated/ponded. <input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 45 degree slope) OR signs of recent beaver activity <input type="checkbox"/> Invasive species cover less than 20% in each stratum of vegetation ( <i>canopy, sub-canopy, shrubs, herbaceous, moss/ground cover</i> )		0	
Total for H 1		Add the points in the boxes above	0

**Rating of Site Potential** If Score is:  15 - 18 = H  7 - 14 = M  0 - 6 = L Record the rating on the first page

<b>H 2.0. Does the landscape have the potential to support habitat functions of the site?</b>			
<b>H 2.1 Accessible habitat (only area of habitat abutting wetland). If total accessible habitat is:</b> Calculate: 32 % undisturbed habitat + _____ 5 % moderate & low intensity land uses / 2 ) = 34.5%			
> 1/3 (33.3%) of 1 km Polygon points = 3 20 - 33% of 1 km Polygon points = 2 10 - 19% of 1 km Polygon points = 1 < 10 % of 1 km Polygon points = 0		2	
<b>H 2.2. Undisturbed habitat in 1 km Polygon around wetland.</b> Calculate: 60 % undisturbed habitat + _____ 5 % moderate & low intensity land uses / 2 ) = 62.5%			
Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10 - 50% and in 1 - 3 patches points = 2 Undisturbed habitat 10 - 50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon points = 0		3	
<b>H 2.3 Land use intensity in 1 km Polygon:</b> > 50% of 1 km Polygon is high intensity land use points = (-2) Does not meet criterion above points = 0			
<b>H 2.4. The wetland is in an area where annual rainfall is less than 12 in, and its water regime is not influenced by irrigation practices, dams, or water control structures. Generally, this means outside boundaries of reclamation areas, irrigation districts, or reservoirs</b>			
Yes = 3 No = 0		0	
Total for H 2		Add the points in the boxes above	5

**Rating of Landscape Potential** If Score is:  4 - 9 = H  1 - 3 = M  < 1 = L Record the rating on the first page

<b>H 3.0. Is the habitat provided by the site valuable to society?</b>		
<b>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated.</b>		
Site meets ANY of the following criteria: points = 2 <input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see Appendix B) <input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on state or federal lists) <input type="checkbox"/> It is mapped as a location for an individual WDFW species <input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources <input type="checkbox"/> It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan		2
Site has 1 or 2 priority habitats within 100 m (see Appendix B) points = 1 Site does not meet any of the criteria above points = 0		

**Rating of Value** If Score is:  2 = H  1 = M  0 = L Record the rating on the first page



## CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

**Please determine if the wetland meets the attributes described below and circle the appropriate category.**

**NOTE: A wetland may meet the criteria for more than one set of special characteristics. Record all those that apply. NOTE: All wetlands should also be characterized based on their functions.**

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. List the category when the appropriate criteria are met.</i>	
<p><b>SC 1.0. Vernal Pools</b></p> <p>Is the wetland <b>less than 4000 ft<sup>2</sup></b>, and does it meet at least <b>two</b> of the following criteria?</p> <p><input type="checkbox"/> Its only source of water is rainfall or snowmelt from a small contributing basin and has no groundwater input.</p> <p><input type="checkbox"/> Wetland plants are typically present only in the spring; the summer vegetation is typically upland annuals. <i>If you find perennial, obligate, wetland plants, the wetland is probably NOT a vernal pool.</i></p> <p><input type="checkbox"/> The soil in the wetland is shallow [<math>&lt; 1</math> ft (30 cm) deep] and is underlain by an impermeable layer such as basalt or clay.</p> <p><input type="checkbox"/> Surface water is present for less than 120 days during the wet season.</p> <p style="text-align: right;"><input type="checkbox"/> Yes - Go to <b>SC 1.1</b>      <input checked="" type="checkbox"/> No = <b>Not vernal pool</b></p> <p>SC 1.1. Is the vernal pool relatively undisturbed in February and March?</p> <p style="text-align: right;"><input type="checkbox"/> Yes - Go to <b>SC 1.2</b>      <input type="checkbox"/> No = <b>Not a vernal pool with special characteristics</b></p> <p>SC 1.2. Is the vernal pool in an area where there are at least 3 separate aquatic resources within 0.5 mi (other wetlands, rivers, lakes etc.)?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = <b>Category II</b>      <input type="checkbox"/> No = <b>Category III</b></p>	
<p><b>SC 2.0. Alkali wetlands</b></p> <p>Does the wetland meet <b>one</b> of the following criteria?</p> <p><input type="checkbox"/> The wetland has a conductivity <math>&gt; 3.0</math> mS/cm.</p> <p><input type="checkbox"/> The wetland has a conductivity between 2.0 and 3.0 mS, and more than 50% of the plant cover in the wetland can be classified as "alkali" species (see Table 4 for list of plants found in alkali systems).</p> <p><input type="checkbox"/> If the wetland is dry at the time of your field visit, the central part of the area is covered with a layer of salt.</p> <p><b>OR</b> does the wetland unit meet two of the following three sub-criteria?</p> <p><input type="checkbox"/> Salt encrustations around more than 75% of the edge of the wetland</p> <p><input type="checkbox"/> More than <math>\frac{3}{4}</math> of the plant cover consists of species listed on Table 4</p> <p><input type="checkbox"/> A pH above 9.0. All alkali wetlands have a high pH, but please note that some freshwater wetlands may also have a high pH. Thus, pH alone is not a good indicator of alkali wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = <b>Category I</b>      <input checked="" type="checkbox"/> No = <b>Not an alkali wetland</b></p>	
<p><b>SC 3.0. Wetlands of High Conservation Value (WHCV)</b></p> <p>SC 3.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes - Go to <b>SC 3.2</b>      <input checked="" type="checkbox"/> No - Go to <b>SC 3.3</b></p> <p>SC 3.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = <b>Category I</b>      <input checked="" type="checkbox"/> No = <b>Not WHCV</b></p> <p>SC 3.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?</p> <p style="text-align: center;"><a href="http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf">http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</a></p> <p style="text-align: right;"><input type="checkbox"/> Yes - <b>Contact WNHP/WDNR and to SC 3.4</b>      <input type="checkbox"/> No = <b>Not WHCV</b></p> <p>SC 3.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = <b>Category I</b>      <input type="checkbox"/> No = <b>Not WHCV</b></p>	

<p><b>SC 4.0. Bogs and Calcareous Fens</b>  <i>Does the wetland (or any part of the wetland unit) meet both the criteria for soils and vegetation in bogs or calcareous fens? Use the key below to identify if the wetland is a bog or calcareous fen. If you answer yes you will still need to rate the wetland based on its functions.</i></p> <p>SC 4.1. Does an area within the wetland have organic soil horizons (i.e., layers of organic soil), either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? See Appendix C for a field key to identify organic soils.  <input type="checkbox"/> Yes - Go to <b>SC 4.3</b>                      <input checked="" type="checkbox"/> No - Go to <b>SC 4.2</b></p> <p>SC 4.2. Does an area within the wetland have organic soils, either peats or mucks, that are less than 16 in deep over bedrock or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?  <input type="checkbox"/> Yes - Go to <b>SC 4.3</b>                      <input checked="" type="checkbox"/> No = <b>Is not a bog for rating</b></p> <p>SC 4.3. Does an area within the wetland have more than 70% cover of mosses at ground level AND at least 30% of the total plant cover consists of species in Table 5?  <input type="checkbox"/> Yes = <b>Category I bog</b>                      <input type="checkbox"/> No - Go to <b>SC 4.4</b>  <b>NOTE:</b> If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 5 are present, the wetland is a bog.</p> <p>SC 4.4. Is an area with peats or mucks forested (&gt; 30% cover) with subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 5 provide more than 30% of the cover under the canopy?  <input type="checkbox"/> Yes = <b>Category I bog</b>                      <input type="checkbox"/> No - Go to <b>SC 4.5</b></p> <p>SC 4.5. Do the species listed in Table 6 comprise at least 20% of the total plant cover within an area of peats and mucks?  <input type="checkbox"/> Yes = <b>Is a Calcareous Fen for purpose of rating</b>                      <input type="checkbox"/> No - Go to <b>SC 4.6</b></p> <p>SC 4.6. Do the species listed in Table 6 comprise at least 10% of the total plant cover in an area of peats and mucks, AND one of the two following conditions is met:  <input type="checkbox"/> Marl deposits [calcium carbonate (CaCO<sub>3</sub>) precipitate] occur on the soil surface or plant stems  <input type="checkbox"/> The pH of free water is ≥ 6.8 AND electrical conductivity is ≥ 200 uS/cm at multiple locations within the wetland  <input type="checkbox"/> Yes = <b>Is a Category I calcareous fen</b>                      <input type="checkbox"/> No = <b>Is not a calcareous fen</b></p>		
<p><b>SC 5.0. Forested Wetlands</b>  <i>Does the wetland have an area of forest rooted within its boundary that meets at least one of the following three criteria? (Continue only if you have identified that a forested class is present in question</i>  <input type="checkbox"/> The wetland is within the 100 year floodplain of a river or stream  <input type="checkbox"/> Aspen (<i>Populus tremuloides</i>) represents at least 20% of the total cover of woody species  <input type="checkbox"/> There is at least ¼ ac of trees (even in wetlands smaller than 2.5 ac) that are “mature” or “old-growth” according to the definitions for these priority habitats developed by WDFW (see definitions in question H3.1)  <input type="checkbox"/> Yes - Go to <b>SC 5.1</b>    <input checked="" type="checkbox"/> No = <b>Not a forested wetland with special characteristics</b></p>		
<p>SC 5.1. Does the wetland have a forest canopy where more than 50% of the tree species (by cover) are slow growing native trees (see Table 7)?  <input type="checkbox"/> Yes = <b>Category I</b>                      <input checked="" type="checkbox"/> No - Go to <b>SC 5.2</b></p> <p>SC 5.2. Does the wetland have areas where aspen (<i>Populus tremuloides</i>) represents at least 20% of the total cover of woody species?  <input type="checkbox"/> Yes = <b>Category I</b>                      <input checked="" type="checkbox"/> No - Go to <b>SC 5.3</b></p> <p>SC 5.3. Does the wetland have at least ¼ acre with a forest canopy where more than 50% of the tree species (by cover) are fast growing species (see Table 7)?  <input checked="" type="checkbox"/> Yes = <b>Category II</b>                      <input checked="" type="checkbox"/> No - Go to <b>SC 5.4</b></p> <p>SC 5.4. Is the forested component of the wetland within the 100 year floodplain of a river or stream?  <input type="checkbox"/> Yes = <b>Category II</b>    <input checked="" type="checkbox"/> No = <b>Not a forested wetland with special characteristics</b></p>		
<p><b>Category of wetland based on Special Characteristics</b>  <i>Choose the highest rating if wetland falls into several categories</i>                  If you answered No for all types, enter “Not Applicable” on Summary Form</p>		<p><b>Cat. II</b></p>

## Appendix B: WDFW Priority Habitats in Eastern Washington

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp.

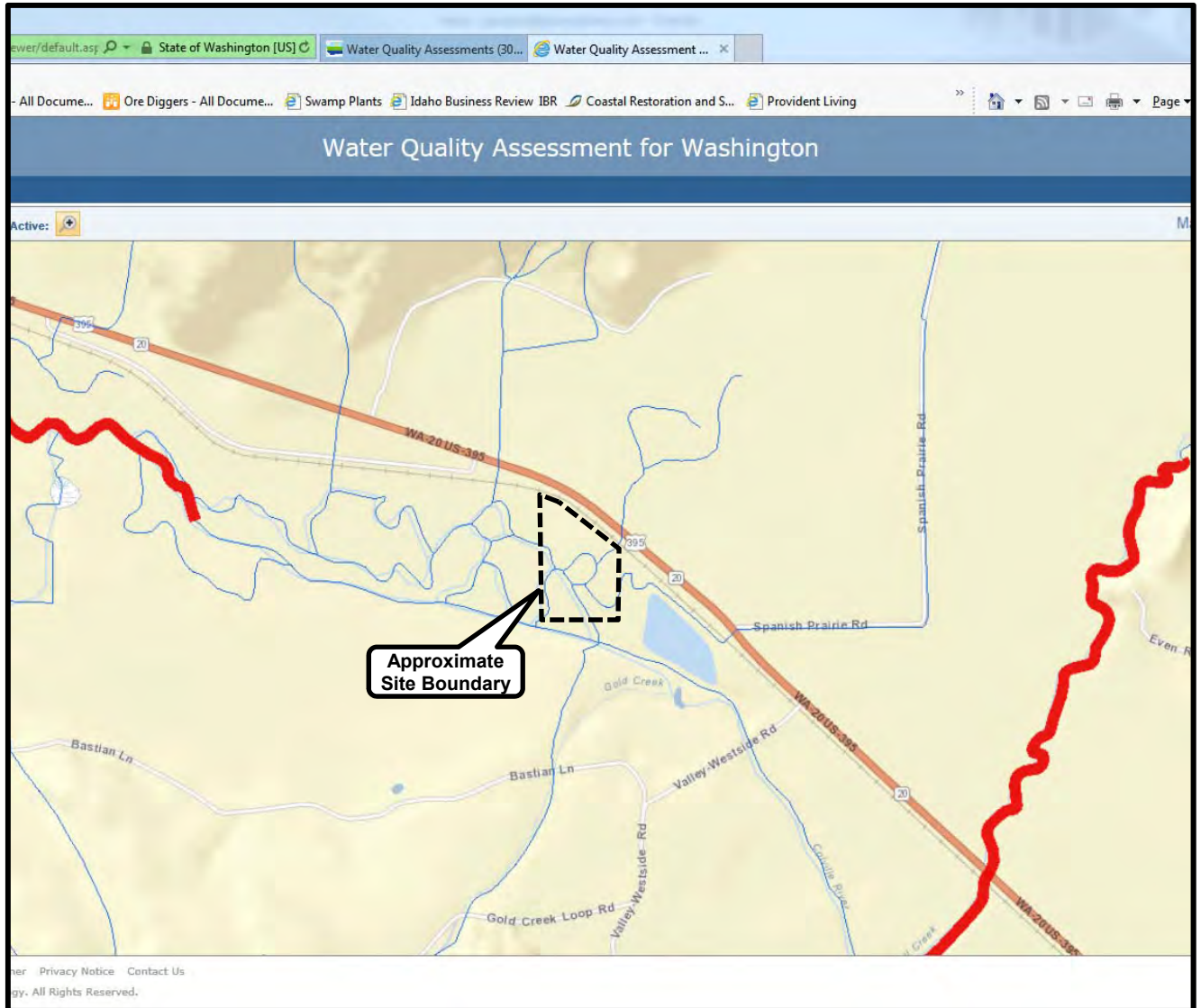
<http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here:

<http://wdfw.wa.gov/conservation/phs/list/>



Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** *This question is independent of the land use between the wetland unit and the priority habitat.*

- Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Areas and Corridors:** Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- Old-growth/Mature forests:** Old-growth east of Cascade crest – Stands are highly variable in tree species composition and structural characteristics due to the influence of fire, climate, and soils. In general, stands will be >150 years of age, with 10 trees/ac (25 trees/ha) that are > 21 in (53 cm) dbh, and 1-3 snags/ac (2.5-7.5 snags/ha) that are > 12-14 in (30-35 cm) diameter. Downed logs may vary from abundant to absent. Canopies may be single or multi-layered. Evidence of human-caused alterations to the stand will be absent or so slight as to not affect the ecosystem's essential structures and functions. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west and 80-160 years old east of the Cascade crest.
- Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).
- Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.
- Shrub-steppe:** A nonforested vegetation type consisting of one or more layers of perennial bunchgrasses and a conspicuous but discontinuous layer of shrubs (see Eastside Steppe for sites with little or no shrub cover).
- Eastside Steppe:** Nonforested vegetation type dominated by broadleaf herbaceous flora (i.e., forbs), perennial bunchgrasses, or a combination of both. Bluebunch wheatgrass (*Pseudoroegneria spicata*) is often the prevailing cover component along with Idaho fescue (*Festuca idahoensis*), Sandberg bluegrass (*Poa secunda*), rough fescue (*F. campestris*), or needlegrasses (*Achnatherum* spp.).
- Juniper Savannah:** All juniper woodlands.

**Note:** All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.



**Legend**

-  Washington State 303d Listed Streams.
-  General Waterways.




Not to Scale

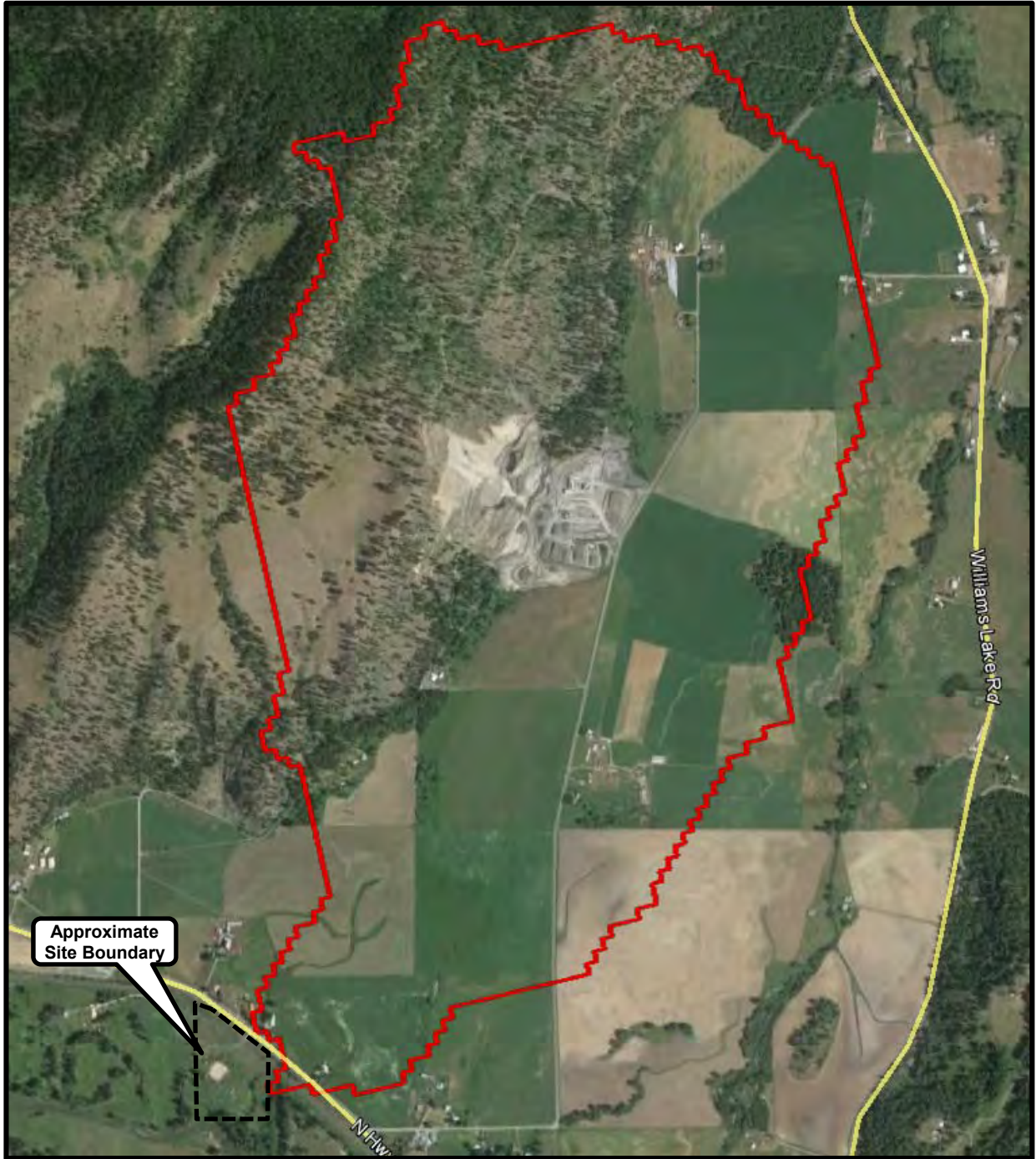
**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files..

Reference: Department of Ecology State of Washington - Water Quality Assessment for Washington <https://fortress.wa.gov/ecy/wqamapviewer/default.aspx?res=1585x99>.

<b>Washington 303d List Screen Shot</b>	
Colville Post and Pole Colville, Washington	
	<b>Figure C-1</b>





**Legend**

 Contributing Basin (USGS StreamStats).




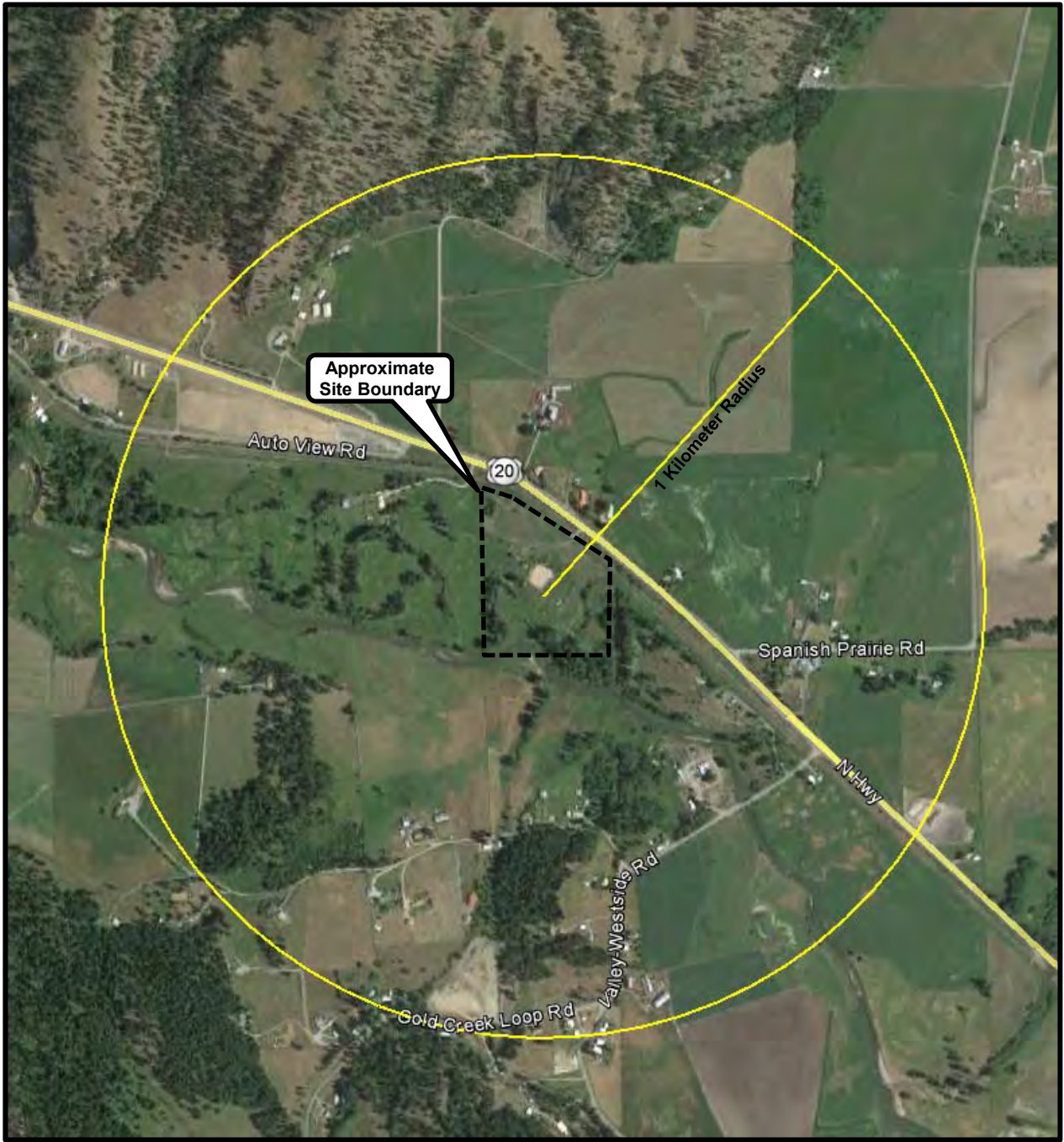
Not to Scale

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files..

Reference: U.S. Geological Society StreamStats Program - <http://water.usgs.gov/osw/streamstats/Washington.html>.

<b>Contributing Basin</b>	
Colville Post and Pole Colville, Washington	
	<b>Figure C-2</b>



**Legend**


— Approximately 1 kilometer Radius from the center of the Project site.



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files..

Reference: U.S. Geological Society StreamStats Program - <http://water.usgs.gov/osw/streamstats/Washington.html>.

<b>1 Kilometer Polygon</b>	
Colville Post and Pole Colville, Washington	
<b>GEOENGINEERS</b> 	<b>Figure C-3</b>

**APPENDIX B**  
**Field Procedures and Boring Logs**



## APPENDIX B FIELD METHODS AND BORING LOGS

### General Soil Sampling Procedures

Samples were obtained using disposable nitrile gloves, which were discarded after each use. Samples were placed in 4- or 9-ounce laboratory-supplied sample containers. Sample containers were filled to minimize headspace and labeled with a unique identification. Confirmation samples analyzed for VOCs were obtained using EPA Method 5035 sampling procedures. Samples were temporarily stored in an iced cooler before transfer to Pace Analytical Minneapolis, Minnesota laboratory for analysis. Chain-of-custody (COC) protocols were followed.

### Field Screening of Soil Samples

A GeoEngineers representative performed field screening of soil samples obtained during drilling activities. Field screening results are used as a general guideline to delineate depths with possible petroleum-related contamination. The screening methods used include: (1) visual screening; (2) water sheen screening; and (3) headspace vapor screening using a MiniRae Lite PID calibrated to isobutylene. Soil samples from each boring were field-screened for petroleum contamination by visual examination. Headspace vapor monitoring with a PID and water-sheen testing was implemented if petroleum contamination was visible.

Visual screening consists of inspecting the soil for stains indicative of petroleum-related contamination. Visual screening is generally more effective when contamination is related to heavy petroleum hydrocarbons such as motor oil, or when hydrocarbon concentrations are high. Water sheen screening is a more sensitive method that has been effective in evaluating whether contaminant concentrations are less than regulatory cleanup guidelines.

Water sheen screening involves placing soil in water and observing the water surface for signs of sheen. Sheen screening might detect both volatile and nonvolatile petroleum hydrocarbons. Sheen classifications are as follows:

No Sheen	No visible sheen on water surface.
Slight Sheen	Light, colorless, dull sheen; spread is irregular, not rapid; sheen dissipates rapidly. Natural organic matter in the soil might produce a slight sheen.
Moderate Sheen	Light to heavy sheen; might have some color/iridescence; spread is irregular to flowing, might be rapid; few remaining areas of no sheen on water surface.
Heavy Sheen	Heavy sheen with color/iridescence; spread is rapid; entire water surface might be covered with sheen.

Headspace vapor screening involved placing a soil sample in a plastic sample bag. Air was captured in the bag, and the bag was shaken to expose the soil to the air trapped in the bag. The probe of the PID was then inserted into the bag to measure VOCs in the air within the bag. In this application, the PID measured concentration of organic vapors ionizable by a 10.6 electron volt (ev) lamp in the range between 1.0 and 2,000 parts per million (ppm), with a resolution of +/- 2 ppm.

Field screening results are site specific. The effectiveness of field screening results will vary with temperature, moisture content, organic content, soil type, and type and age of contaminant. The presence



or absence of a sheen or headspace vapors does not necessarily indicate the presence or absence of petroleum hydrocarbons.

### **Groundwater Sampling**

Groundwater samples were collected from the temporary well points consistent with the EPA's low-flow groundwater sampling procedures (EPA, 2010; Puls and Barcelona, 1996). Dedicated polyethylene tubing and a portable peristaltic pump were used for groundwater purging and sampling. During purging activities, water quality parameters, including pH, temperature, conductivity, dissolved oxygen, and turbidity were measured using a multi-parameter meter equipped with a flow-through cell. Groundwater samples were collected after (1) water quality parameters stabilized; or (2) a maximum purge time of 45 minutes was achieved. During purging and sampling the purge rate did not exceed 400 milliliters per minute. Water quality parameter stabilization criteria included the following:

- Turbidity:  $\pm 10$  percent for values greater than 5 nephelometric turbidity units;
- Conductivity:  $\pm 3$  percent;
- pH:  $\pm 0.1$  unit;
- Temperature:  $\pm 3$  percent; and
- Dissolved oxygen:  $\pm 10$  percent.

Field water quality measurements and depth-to-water measurements were recorded on a Well Purging-Field Water Quality Measurement Form. The groundwater samples were transferred in the field to laboratory-prepared sample containers and kept cool during transport to the testing laboratory. COC procedures were observed from the time of sample collection to delivery to the testing laboratory consistent with the QAPP.

### **Location Control**

The locations of the borings were established in the field using a hand-held iPad with GPS software. The horizontal accuracy of the hand-held unit is within about 10 feet.

### **Decontamination Procedures**

The objective of the decontamination procedure was to minimize the potential for cross contamination between exploration locations and between individual samples within a specific exploration. A designated decontamination area was established for decontamination of drilling equipment and reusable sampling equipment. Drilling equipment was cleaned using pressure washing equipment.

Sampling or measurement equipment was decontaminated in accordance with the following procedures before each sampling attempt or measurement:

- Brush equipment with a wire brush, if necessary, to remove large particulate matter.
- Rinse with potable tap water.
- Wash with non-phosphate detergent solution (LiquiNox<sup>®</sup> and potable tap water).
- Rinse with potable tap water.
- Rinse with distilled water.

## Handling of Investigation-Derived Waste (IDW)

IDW (drill cuttings and development and purge water), was placed in U.S. Department of Transportation approved 55-gallon drums. The drums were labeled with the exploration number, general contents, and date. IDW generated on site was placed in drums and is pending pickup for disposal at an appropriate facility.

Disposable items, such as sample tubing, direct-push sampler acrylic sleeves, gloves and paper towels, etc., were placed in plastic bags after use and deposited in trash receptacles for disposal.

## Laboratory Analytical Plan

Method reporting limit (MRL) goals were based on Ecology MTCA soil or groundwater cleanup criteria. The following methods were used for the soil and groundwater samples:

### Soil

- BTEX by (EPA 8260C)
- DRPH (NWTPH-Dx)
- GRPH (NWTPH-Gx)
- PAHs (EPA 8270D-SIM)
- SVOCs (EPA SW-8270D)

### Groundwater

- BTEX by (EPA 8260C)
- DRPH (NWTPH-DX)
- PAHs (EPA 8270D-SIM)
- SVOCs (EPA SW820D)

## SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS  MORE THAN 50% RETAINED ON NO. 200 SIEVE	GRAVEL AND GRAVELLY SOILS  MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS  (LITTLE OR NO FINES)		<b>GW</b>	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		GRAVELS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>GP</b>	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		CLEAN SANDS  (LITTLE OR NO FINES)		<b>GM</b>	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		SANDS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>GC</b>	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS  MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	CLEAN SANDS  (LITTLE OR NO FINES)		<b>SW</b>	WELL-GRADED SANDS, GRAVELLY SANDS
		SANDS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>SP</b>	POORLY-GRADED SANDS, GRAVELLY SAND
		SANDS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>SM</b>	SILTY SANDS, SAND - SILT MIXTURES
		SANDS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>SC</b>	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS  MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS  LIQUID LIMIT LESS THAN 50	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY		<b>ML</b>	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS		<b>CL</b>	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY		<b>OL</b>	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS  LIQUID LIMIT GREATER THAN 50	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS		<b>MH</b>	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
		INORGANIC CLAYS OF HIGH PLASTICITY		<b>CH</b>	INORGANIC CLAYS OF HIGH PLASTICITY
		ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY		<b>OH</b>	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				<b>PT</b>	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

### Sampler Symbol Descriptions

	2.4-inch I.D. split barrel
	Standard Penetration Test (SPT)
	Shelby tube
	Piston
	Direct-Push
	Bulk or grab
	Continuous Coring

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

## ADDITIONAL MATERIAL SYMBOLS

SYMBOLS		TYPICAL DESCRIPTIONS
GRAPH	LETTER	
	<b>AC</b>	Asphalt Concrete
	<b>CC</b>	Cement Concrete
	<b>CR</b>	Crushed Rock/ Quarry Spalls
	<b>TS</b>	Topsoil/ Forest Duff/Sod

### Groundwater Contact



Measured groundwater level in exploration, well, or piezometer



Measured free product in well or piezometer

### Graphic Log Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

### Material Description Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

### Laboratory / Field Tests

%F	Percent fines
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PP	Pocket penetrometer
PPM	Parts per million
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

### Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen
NT	Not Tested

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

## KEY TO EXPLORATION LOGS

Start Drilled 5/11/2015	End 5/11/2015	Total Depth (ft) 28	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured 5/11/2015
Notes: Temporary well set and screened from approximately 5 to 20 feet below ground surface					Depth to Water (ft) 3.3 Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS		
	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing					Water Level	Graphic Log
0		25						ML	Brown silt with sand and organic matter (twigs, leaves) (medium stiff, moist)			
								SP	Gray fine to medium sand (loose, moist to wet)			
5		18							Grades to coarse sand with occasional gravel			
10		30										
15		7			DP-1 (12-13) CA			CL	Gray clay (medium stiff, moist to wet)			
20		11							(medium stiff, wet)			
25		9										
		12										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-1



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-2  
 Sheet 1 of 1



Start Drilled 5/11/2015	End 5/11/2015	Total Depth (ft) 24	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact on run 2 (4 to 8 feet below ground surface). Hole backfilled with bentonite chips.					Depth to Water (ft) Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing				
0	24							ML	Brown silt with sand and debris/organic matter (wood chips) (medium stiff, moist)	
5	24							SP	Gray fine sand with trace silt (medium dense, wet) Grades to coarse with occasional gravel	
10	10									
15	20				DP-2 (12-12.5) CA DP-2 (12.5-13.5) CA			CL	Gray clay (medium stiff, wet)	
20	48									
20	48									

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-2



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lib\template\GEOENGINEERS.GDT\GEB\_ENVIRONMENTAL\_STANDARD

Drilled	Start 3/16/2015	End 3/16/2015	Total Depth (ft)	24	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured		Depth to Water (ft)	Elevation (ft)
Notes: Groundwater contact on run 2 (4 to 8 feet below ground surface). Hole backfilled with bentonite chips.											

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	36						ML	Dark gray silt with organic matter (medium dense, moist)			
							CL	Gray clay (medium dense, moist)			
5	30										
							SW	Brown fine to coarse sand with gravel (medium dense, moist)			
10	24										
15	18										
20	24						CL	Gray clay (medium dense, moist)			
	0										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-2a



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-4  
 Sheet 1 of 1

Start Drilled 5/11/2015	End 5/11/2015	Total Depth (ft) 24	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact on run 2 (4 to 8 feet below ground surface). Hole backfilled with bentonite chips.					Depth to Water (ft)      Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS	
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					Graphic Log
0	40						ML	Brown silt with occasional sand and organic matter (wood, roots, leaves) (medium stiff, moist)			
5	28						SW	Gray fine to coarse sand with gravel and trace silt (medium dense, wet)			
10	12							Decreasing gravel and silt			
15	28			DP-3 (12-13) CA			CL	Gray clay (medium stiff, wet)			
20	48			DP-3 (13-14) CA							

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-3



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lib\template\GEOENGINEERS.GDT\GEB\_ENVIRONMENTAL\_STANDARD

Start Drilled 5/11/2015	End 5/11/2015	Total Depth (ft) 24	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured 5/11/2015
Notes: Temporary well set and screened from approximately 5 to 15 feet below ground surface. Hole backfilled with bentonite chips.					Depth to Water (ft) 5.5 Elevation (ft)

Elevation (feet)	FIELD DATA						Material Description	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0	33							ML	Brown silt with occasional sand and organic matter (wood chips, roots) (medium stiff, moist)	
								CL	Brown clay (medium stiff, moist)	
								ML	Brown silt with sand (medium stiff, moist)	
5	15							SW	Gray fine to coarse sand (medium dense, wet)	
10										
	11									
15	25							CL	Gray clay (medium stiff, wet)	
20	48									

Note: See Figure A-1 for explanation of symbols.

Spokane Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ\DBT\template\lib\template\GEOENGINEERS.GDT\GEB\_ENVIRONMENTAL\_STANDARD

**Log of Direct-Push Boring DP-4**



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-6  
 Sheet 1 of 1



Start Drilled 5/11/2015	End 5/11/2015	Total Depth (ft) 28	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact between 5 to 7 feet below ground surface. Hole backfilled with bentonite chips.			Depth to Water (ft)		Elevation (ft)

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	33						ML CL	Brown silt with occasional sand and organic matter (wood chips, leaves, roots) (medium stiff, moist) Brown clay with silt (medium stiff, moist)			
5	40							Grades to gray			
9	9						ML SW	Dark gray silt with sand and organic matter (wood chips) (medium stiff, wet) Dark gray fine to coarse sand with gravel (medium dense, wet)			
12	12			DP-5 (16-16.5) CA DP-5 (16.5-17) CA			SP CL	Brown fine to medium sand (loose, wet) Gray clay (medium stiff, wet)			
20	12							Grades to loose, wet			
25	12										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-5



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_ENVIRONMENTAL\_STANDARD

Start Drilled 5/12/2015	End 5/12/2015	Total Depth (ft) 24	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact on run 2 (4 to 8 feet below ground surface). Hole backfilled with bentonite chips.			Depth to Water (ft)		Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0		43					ML			Brown silt with sand, trace clay and organic matter (wood chips, roots, leaves) (medium stiff, moist)
5		19					SP			Brown fine to medium sand with trace silt (medium dense, moist)
10		2					SW			Brown fine to coarse sand with silt (medium dense, wet)
15		1		DP-6 (12-13) CA	DP-6 (13-14) CA		CL			Gray clay (medium stiff, wet)
20		48								
		48								

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-6



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Drilled	Start 5/12/2015	End 5/12/2015	Total Depth (ft)	24	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured	Depth to Water (ft)	Elevation (ft)	
Notes: Temporary well set and screened from approximately 5 to 15 feet. Hole backfilled with bentonite chips.							5/12/2015	2.2			

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	36						ML	Brown silt with sand and organic matter (wood chips, roots) (medium stiff, moist)			
							CL	Brown clay (medium stiff, moist)			
5	31						SW	Brown fine to coarse sand with occasional gravel (medium dense, wet)			
10	12										
15	48						CL	Gray clay (medium stiff, wet)			
20	48										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-7



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Start Drilled 5/12/2015	End 5/12/2015	Total Depth (ft) 28	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact on run 2 (4 to 8 feet below ground surface). Hole backfilled with bentonite chips.			Depth to Water (ft)		Elevation (ft)

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	36						ML	Brown silt with occasional sand and organic matter (roots, wood chips) (medium stiff, moist)			
							CL	Brown clay with fine sand (medium stiff, moist)			
5	30						SP	Brown fine to medium sand with trace clay (medium dense, wet)			
							SW	Gray fine to coarse sand with occasional gravel (medium dense, wet)			
10	3										
15											
20	48			DP-8 (20-20.5) CA			CL	Gray clay (medium stiff, wet)			
				DP-8 (20.5-21) CA							
25	46										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-8



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_ENVIRONMENTAL\_STANDARD



Start Drilled 5/14/2015	End 5/14/2015	Total Depth (ft) 20	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact at around 8 feet below ground surface. Hole backfilled with bentonite chips.			Depth to Water (ft)		Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0	38					ML	Brown silt with occasional sand, gravel and organic matter (roots, grass) (medium stiff, moist) Rock encountered			
5	24					SP	Brown fine to medium sand with trace silt (medium dense, moist)			
10	12					SW	Brown fine to coarse sand with trace silt (medium dense, moist)			
15	48			DP-9 (12.5-13.5) CA DP-9 (13.5-14.5) CA		CL	Gray clay (medium stiff, moist)			
20	48									

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-9



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Start Drilled 5/14/2015	End 5/14/2015	Total Depth (ft) 20	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact at approximately 8 feet below ground surface. Hole backfilled with bentonite chips.			Depth to Water (ft)		Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS	
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					Graphic Log
0	30						ML	Brown silt with sand, occasional gravel and organic matter (roots, grass) (medium stiff, moist)			
5	21						SW	Brown fine to coarse sand (medium dense, moist)			
10	18										
15	41			DP-10 (12-12.5) CA			CL	Gray clay (medium stiff, wet)			
20	48			DP-10 (12.5-13) CA							

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-10



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_ENVIRONMENTAL\_STANDARD

Start Drilled 5/12/2015	End 5/12/2015	Total Depth (ft) 24	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact at approximately 9 to 10 feet below ground surface. Hole backfilled with bentonite chips.			Depth to Water (ft)		Elevation (ft)

Elevation (feet)	FIELD DATA					Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing					
0	46					GP-GM	Light brown fine gravel with silt and organic matter (roots, wood chips, leaves) (loose, moist)			
						ML	Brown silt with occasional sand (medium stiff, moist)			
						CL	Brown clay with occasional sand (medium stiff, moist)			
	42					SP	Brown clay with occasional sand (medium stiff, moist)			
5						CL	Brown fine to medium sand with trace silt (medium dense, moist)			
							Brown clay (medium stiff, moist)			
	24						Grades to gray			
10						SW	Gray fine to coarse sand with trace silt (medium dense, wet)			
	31									
				DP-11 (12.5-13.5) CA						
				DP-11 (13.5-14.5) CA		CL	Gray clay (medium stiff, wet)			
15	48									
20	48									

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-11



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Start Drilled 5/14/2015	End 5/14/2015	Total Depth (ft) 28	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
					Depth to Water (ft)
					Elevation (ft)
Notes: Groundwater contact at approximately 6 feet below ground surface. Hole backfilled with bentonite chips.					

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS	
	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample Sample Name Testing	Water Level					Graphic Log
0		42					ML	Brown silt with occasional sand and organic matter (roots, grass) (medium stiff, moist)			
5		45					CL	Brown clay with occasional sand (medium stiff, wet)			
10		25					SW-SM	Gray fine to coarse sand with silt (medium dense, wet)			
15		4			DP-12 (12-12.5) CA						
20					DP-12 (16-17) CA		CL	Gray clay (medium stiff, wet)			
25		36									
28		28									

Note: See Figure A-1 for explanation of symbols.

**Log of Direct-Push Boring DP-12**



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_ENVIRONMENTAL\_STANDARD



Drilled	Start 5/12/2015	End 5/12/2015	Total Depth (ft)	24	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured	Depth to Water (ft)	Elevation (ft)	
Notes: Temporary well set and screened from approximately 5 to 15 feet below ground surface. Hole backfilled with bentonite chips.							5/12/2015	5.5			

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	31						ML SW ML	Brown silt with occasional sand and organic matter (roots, grass) (medium stiff, moist) Brown fine to coarse sand with silt and gravel (medium dense, moist) Brown silt with sand (medium stiff, moist)			
5	28						SW	Brown fine to coarse sand with occasional gravel (medium dense, wet)			
10	16										
15	30						CL	Gray clay (medium stiff, wet)			
20	48										
	48										
	48										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-13



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00


Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lib\template\GEOENGINEERS.GDT\GEB\_ENVIRONMENTAL\_STANDARD

Drilled	Start 5/12/2015	End 5/12/2015	Total Depth (ft)	3	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum				Undetermined		Hammer Data			Drilling Equipment Geoprobe 5600	
Easting (X) Northing (Y)				System Datum			Groundwater Date Measured		Depth to Water (ft) Elevation (ft)	
Notes: Hole backfilled with bentonite chips.										

Elevation (feet)	FIELD DATA							MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample Sample Name Testing	Water Level	Graphic Log	Group Classification				
0		6				o o o o o o o o o o	GP	Brown coarse gravel with sand (very dense, moist)			

Note: See Figure A-1 for explanation of symbols.

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lib\template\GEOENGINEERS.GDT\GEB\_ENVIRONMENTAL\_STANDARD

<b>Log of Direct-Push Boring DP-14</b>		
	Project:	Colville Post and Pole
	Project Location:	Colville, Washington
	Project Number:	0504-098-00
		Figure B-16 Sheet 1 of 1

Drilled	Start 5/13/2015	End 5/13/2015	Total Depth (ft)	24	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured		Depth to Water (ft)	Elevation (ft)
Notes: Temporary well set and screened from approximately 5 to 15 feet below ground surface. Hole backfilled with bentonite chips.							5/13/2015		6.2		

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	30						ML	Brown silt with occasional sand and organic matter (roots, grass) (medium stiff, moist) Grades to gray with decaying organic matter			
5	48						SP	Decreasing sand Gray fine to medium sand with silt (medium dense, moist)			
10	16						ML SW	Gray silt with clay (medium stiff, moist) Brown fine to coarse sand with occasional gravel (medium dense, wet)			
15	41			DP-15 (12-13) CA			CL	Gray clay (medium stiff, wet)			
20	48			DP-15 (13-14) CA							

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-15



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-17  
 Sheet 1 of 1

Drilled	Start 5/14/2015	End 5/14/2015	Total Depth (ft)	1	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured		Depth to Water (ft)	Elevation (ft)
Notes:											

Elevation (feet)	FIELD DATA							MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log				
0							GP	Brown coarse gravel with sand (very dense, moist)			

Note: See Figure A-1 for explanation of symbols.

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_ENVIRONMENTAL\_STANDARD

### Log of Direct-Push Boring DP-16



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00



Start Drilled 5/12/2015	End 5/12/2015	Total Depth (ft) 28	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data		Drilling Equipment Geoprobe 5600	
Easting (X) Northing (Y)		System Datum		Groundwater Date Measured 5/12/2015	
Notes: Temporary well set and screened from approximately 5 to 20 feet below ground surface. Hole backfilled with bentonite chips.				Depth to Water (ft) 5.5 Elevation (ft)	

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS	
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					Graphic Log
0	30						SW-SM	Light brown fine to coarse sand with silt, organic matter (wood, roots, grass) and occasional gravel (loose, moist)			
							ML	Brown silt with sand (medium dense, moist)			
5	19						SW	Brown fine to coarse sand with occasional gravel (medium dense, wet)			
10	12										
15	9										
20	30						CL	Gray clay (medium stiff, wet)			
25	46										
	48										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-17



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Drilled	Start 5/14/2015	End 5/14/2015	Total Depth (ft)	24	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured		Depth to Water (ft)	Elevation (ft)
Notes: Groundwater contact at approximately 5 feet below ground surface. Hole backfilled with bentonite chips.											

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	36						ML	Brown silt trace sand, gravels and organic matter (roots, grass) (medium stiff, moist)			
5	38						CL	Brown clay with sand (medium stiff, wet)			
10	12						SP	Brown fine to medium sand with trace silt (medium dense, wet)			
15	24						SW	Gray fine to coarse sand with gravel (medium dense, wet)			
20	48						CL	Gray clay (medium stiff, wet)			

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-18



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-20  
 Sheet 1 of 1

Start Drilled	5/15/2015	End	5/15/2015	Total Depth (ft)	32	Logged By	JML	Checked By	JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined					Hammer Data	Geoprobe 5600						
Easting (X) Northing (Y)						System Datum	Groundwater						
Notes: Groundwater contact at approximately 5 to 6 feet below ground surface. Hole backfilled with bentonite chips.						Date Measured	Depth to Water (ft)	Elevation (ft)					

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	32						ML	Brown silt with occasional sand and organic matter (roots, grass) (medium stiff, moist)			
5	34							Grades with clay			
10	46						SP-SM	Brown fine to medium sand with silt (medium dense, wet)			
15	30						SW	Gray fine to coarse sand (medium dense, wet)			
20	5										
25	3										
25	48						CL	Gray clay (medium stiff, wet)			
30	48										

DP-19 (24-24.5) CA  
DP-19 (24.5-25) CA

Note: See Figure A-1 for explanation of symbols.

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\ ENVIRONMENTAL\_STANDARD

**Log of Direct-Push Boring DP-19**



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Start Drilled 5/13/2015	End 5/13/2015	Total Depth (ft) 32	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data		Drilling Equipment Geoprobe 5600	
Easting (X) Northing (Y)		System Datum		Groundwater Date Measured 5/13/2015	Depth to Water (ft) 7.2 Elevation (ft)
Notes: Temporary well set and screened from approximately 5 to 25 feet below ground surface. Hole backfilled with bentonite chips.					

Elevation (feet)	FIELD DATA					Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample Sample Name Testing	Water Level					
0	12					GP	Light brown coarse gravel with sand and organic matter (roots, grass) (loose, moist)			
						ML	Brown silt with occasional sand (soft, moist)			
5	36					CL	Brown clay (medium stiff, wet)			
						SP	Brown fine to medium sand (medium dense, wet)			
10	42					CL	Brown-gray clay (medium stiff, wet)			
						SP	Gray fine to medium sand (medium dense, wet)			
						CL	Gray clay (medium stiff, wet)			
	12					SP	Gray fine to medium sand (medium dense, wet)			
15						SW	Brown fine to coarse sand (loose, wet)			
	2									
20							Grades to gray with gravel (medium dense)			
	17									
25						CL	Gray clay (medium stiff, wet)			
	48									
	48									
30										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-20



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-22  
 Sheet 1 of 1

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB8\_ENVIRONMENTAL\_STANDARD



Start Drilled 5/15/2015	End 5/15/2015	Total Depth (ft) 20	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
					Depth to Water (ft)
					Elevation (ft)
Notes: Groundwater contact at approximately 7 feet below ground surface. Hole backfilled with bentonite chips.					

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS		
	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing					Water Level	Graphic Log
0		24						ML	Brown silt with occasional sand and organic matter (roots, grass) (medium stiff, moist)			
									Decreasing organic matter			
5		33							Grades with clay			
								CL	Brown clay (medium stiff, wet)			
10		42										
								SW	Brown fine to coarse sand (medium dense, wet)			
		36			DP-21 (13-14) CA							
								CL	Gray clay (medium stiff, wet)			
15		48			DP-21 (14-15) CA							
20												

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-21



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lbt\template\GEOENGINEERS.GDT\GEB\_ENVIRONMENTAL\_STANDARD

Drilled	Start 5/15/2015	End 5/15/2015	Total Depth (ft)	28	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured		Depth to Water (ft)	Elevation (ft)
Notes: Groundwater contact at approximate 4 to 5 feet below ground surface. Hole backfilled with bentonite chips.											

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	24					ML	Brown silt with sand and organic matter (roots, grass) (medium stiff, moist)				
							Decreasing organic matter				
5	30					CL	Brown silty clay (medium stiff, wet)				
10	44										
15	24					SW	Brown fine to coarse sand with trace silt (medium dense, wet)				
							Grades to gray with gravel				
20	4			DP-22 (20-20.5) CA							
25	48			DP-22 (24-25) CA		CL	Gray clay (medium stiff, wet)				

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-22



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ\_DBT\template\lib\template\GEOENGINEERS\GDT\GEB8\_ENVIRONMENTAL\_STANDARD

Start Drilled 5/15/2015	End 5/15/2015	Total Depth (ft) 28	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact on run 2 at approximately 4 to 8 feet below ground surface. Hole backfilled with bentonite chips.			Depth to Water (ft)		Elevation (ft)

Elevation (feet)	FIELD DATA					Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample Sample Name Testing	Water Level					
0	26					ML SW-SM	Brown silt with occasional sand and organic matter (roots, grass) (medium stiff, moist) Gray fine to coarse sand with silt (medium dense, moist)			
5	27					ML	Brown silt with sand (medium stiff, moist)			
10	34					CL	Gray silty clay (medium stiff, wet)			
15	24					SW	Grades to brown with gravel Gray fine to coarse sand with gravel (medium dense, wet) Decreasing gravel			
20	24			DP-23 (16-16.5) CA						
25	0			DP-23 (20-20.5) CA						
25	48					CL	Gray clay (medium stiff, wet)			

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-23



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-25  
 Sheet 1 of 1

Drilled	Start 5/13/2015	End 5/13/2015	Total Depth (ft)	24	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured	Depth to Water (ft)	Elevation (ft)	
Notes: Temporary well set and screened from approximately 5 to 20 feet below ground surface. Hole backfilled with bentonite chips.					5/13/2015			7.9			

Elevation (feet)	FIELD DATA						Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					
0	12						SW-SM	Gray fine to coarse sand with silt and organic matter (roots, grass) (medium dense, moist)			
5	5										
10	21						SW	Grades to brown and wet Black fine to coarse sand with trace silt (medium dense, wet)	SS	5.5	
15	12							Grades to brown			
20	48						CL	Gray clay (medium stiff, wet)			
	48										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-24



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-26  
 Sheet 1 of 1



Start Drilled 5/15/2015	End 5/15/2015	Total Depth (ft) 20	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Groundwater contact at approximately 5 feet below ground surface. Hole backfilled with bentonite chips.			Depth to Water (ft)		Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS	
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					Graphic Log
0	16						ML	Brown silt with occasional sand and organic matter (roots, grass) (medium stiff, moist)			
5	36						SP-SM	Brown fine to medium sand with silt (medium dense, wet)			
10	19						SW	Gray fine to coarse sand with trace silt (medium dense, wet)			
15	48			DP-25 (12-12.5) CA			CL	Gray clay (medium stiff, wet)			
20	48			DP-25 (12.5-13.5) CA							

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-25



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lib\template\GEOENGINEERS.GDT\GEB\_ENVIRONMENTAL\_STANDARD

Start Drilled 5/13/2015	End 5/13/2015	Total Depth (ft) 28	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured 5/13/2015
Notes: Temporary well set and screened from approximately 5 to 20 feet below ground surface. Hole backfilled with bentonite chips.					Depth to Water (ft) 6.5 Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS		
	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing					Water Level	Graphic Log
0	10							WOOD	Wood chips (moist)			
5	41							ML	Gray silt with sand, trace clay (medium stiff, moist)			
10	24							SW	Gray fine to coarse sand, trace silt (medium dense, wet)			
15	24											
20	34				DP-26 (16-17) CA DP-26 (17-18) CA			CL	Gray clay (medium stiff, wet)			
25	48											
	48											

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-26



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lbt\template\GEOENGINEERS\GDT\GEB\_ENVIRONMENTAL\_STANDARD

Drilled	Start 5/13/2015	End 5/13/2015	Total Depth (ft)	26	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured		Depth to Water (ft)	Elevation (ft)
Notes: Contact with groundwater at approximately 5 feet below ground surface. Hole backfilled with bentonite chips.							5/13/2015		5.0		

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0	24						WOOD SP-SM			Wood chips Gray fine to medium sand with silt (medium dense, moist)
5	24						SW			Gray fine to coarse sand, trace silt (medium dense, wet)
10	24									
15	15									Grades with occasional gravel
15	17									Increasing gravel
20	2									
25	6									

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-27



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-29  
 Sheet 1 of 1

Start Drilled 5/14/2015	End 5/14/2015	Total Depth (ft) 28	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
					Depth to Water (ft)
					Elevation (ft)
Notes: Groundwater contact at approximately 8 feet below ground surface. Hole backfilled with bentonite chips.					

Elevation (feet)	FIELD DATA					Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing						
0	19					WOOD	Wood chips				
						SP-SM	Brown fine to medium sand with silt and organic matter (wood chips) (medium dense, moist)				
	20					SW	Brown fine to coarse sand with trace silt (medium dense, wet)				
5											
	12						Grades to gray with occasional gravel				
10											
	16										
15											
	29										
20											
	30					CL	Gray clay (medium stiff, wet)				
	48										
25											

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-28



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_ENVIRONMENTAL\_STANDARD



Drilled	Start 5/14/2015	End 5/14/2015	Total Depth (ft)	36	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured	Depth to Water (ft)	Elevation (ft)	
Notes: Groundwater contact at approximately 8 feet below ground surface. Hole backfilled with bentonite chips.							5/14/2015	8.0			

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0	26						WOOD	Wood chips		
5	24						SP-SM	Gray fine to medium sand with silt (medium dense, moist)		
10	10						SW	Gray fine to coarse sand with trace silt (medium dense, wet)		
10								Increasing gravel		
15	4									
20	0									
25	15									
25	20						CL	Gray clay (medium stiff, wet)		
30	6									
30	20									
35										

Note: See Figure A-1 for explanation of symbols.

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ\DBT\template\lbt\template\GEOENGINEERS\GDT\GEB8\_ENVIRONMENTAL\_STANDARD

### Log of Direct-Push Boring DP-29



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Figure B-31  
 Sheet 1 of 1

Start Drilled 5/14/2015	End 5/14/2015	Total Depth (ft) 24	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
					Depth to Water (ft)
					Elevation (ft)
Notes: Groundwater contact at approximately 8 feet below ground surface. Hole backfilled with bentonite chips.					

Elevation (feet)	FIELD DATA					Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing						
0	20					WOOD	Wood chips				
						ML	Gray silt with occasional sand (medium stiff, moist)				
5	32					SP	Gray fine to medium sand with trace silt (medium dense, moist)				
						SW	Gray fine to coarse sand with trace silt (medium dense, moist)				
10	4						Occasional gravel				
15	6			DP-30 (12-12.5) CA							
20	48			DP-30 (16-17) CA		CL	Gray clay (medium stiff, wet)				
	48										

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-30



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Start Drilled 5/15/2015	End 5/15/2015	Total Depth (ft) 16	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Hole backfilled with bentonite chips.					Depth to Water (ft)      Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0										No recovery
5	18						SW			Gray fine to coarse sand with trace silt (medium dense, moist)
10	20									Grades to black and decreasing silt
15	42									Grades to gray
							CL			Gray clay (medium stiff, wet)

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-31



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\0504098\GINT\050409800.GPJ.DB1\template\lib\template\GEOENGINEERS.GDT\GEB\_ENVIRONMENTAL\_STANDARD

Start Drilled 5/15/2015	End 5/15/2015	Total Depth (ft) 16	Logged By Checked By JML JRS	Driller Environmental West Explorations	Drilling Method Direct-Push
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes: Hole backfilled with bentonite chips.					Depth to Water (ft)      Elevation (ft)

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0										No recovery
5	24						SW			Gray fine to coarse sand with gravel and trace silt (medium dense, moist)
10	24									Grades to black
15	5									Grades to gray

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-32



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Spokane: Date: 12/14/15 Path: P:\00504098\GINT\050409800.GPJ DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_ENVIRONMENTAL\_STANDARD



Drilled	Start 5/15/2015	End 5/15/2015	Total Depth (ft)	12	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured		Depth to Water (ft)	Elevation (ft)
Notes: Hole backfilled with bentonite chips.											

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0										No recovery
5	16						SW			Gray fine to coarse sand with gravel and trace silt (medium dense, moist)
10	14						GW	SS	3.5	Black fine to coarse gravel with fine sand (medium dense, wet)

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-33



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Drilled	Start 5/15/2015	End 5/15/2015	Total Depth (ft)	12	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum					Undetermined			Hammer Data		Drilling Equipment Geoprobe 5600	
Easting (X) Northing (Y)					System Datum			Groundwater		Date Measured	
								Depth to Water (ft)		Elevation (ft)	
Notes: Hole backfilled with bentonite chips.											

Elevation (feet)	FIELD DATA							MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log				
0								No recovery			
5	13						SW	Gray fine to coarse sand with gravel and trace silt (medium dense, moist)			
10	30						SW-SM	Brown-black fine to coarse sand with silt (medium dense, wet)			

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-34



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Drilled	Start 5/15/2015	End 5/15/2015	Total Depth (ft)	12	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured		Depth to Water (ft)	Elevation (ft)
Notes: Hole backfilled with bentonite chips.											

Elevation (feet)	FIELD DATA							MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log				
0								No recovery			
5	16						SW	Gray fine to coarse sand with gravel (medium dense, moist)			
10	27							Grades to black			

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-35



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

Drilled	Start 5/15/2015	End 5/15/2015	Total Depth (ft)	12	Logged By Checked By	JML JRS	Driller	Environmental West Explorations	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Drilling Equipment			Geoprobe 5600
Easting (X) Northing (Y)			System Datum		Groundwater			Date Measured		Depth to Water (ft)	Elevation (ft)
Notes: Hole backfilled with bentonite chips.											

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0										No recovery
5	21						ML			Gray silt with occasional gravel and sand (medium dense, moist)
10	11						GW			Brown fine to coarse gravel with sand (medium dense, wet)

Note: See Figure A-1 for explanation of symbols.

### Log of Direct-Push Boring DP-36



Project: Colville Post and Pole  
 Project Location: Colville, Washington  
 Project Number: 0504-098-00

**APPENDIX C**  
**Data Validation and**  
**Chemical Analytical Laboratory Reports**



---

**Project:** Colville Post and Pole  
March/May 2015 Direct-Push Soil and May 2015 Groundwater Samples

**GEI File No:** 00504-098-00

**Date:** October 26, 2015

---

This report documents the results of a United States EPA-defined Stage 2A data validation (EPA Document 540-R-08-005; EPA, 2009) of analytical data from the analyses of soil and groundwater samples collected as part of the March and May 2015 sampling events, and the associated laboratory and field quality control samples. The samples were obtained from the former CPPI Site located at 396 Highway 395 North near Colville in Stevens County, Washington.

Note the May 2015 samples were validated on June 19, 2015. The March 2015 samples were validated and added to this Data Validation Report on October 26, 2015.

## OBJECTIVE AND QUALITY CONTROL ELEMENTS

GeoEngineers completed the data validation consistent with the EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA, 2008) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

In accordance with Quality Assurance Project Plan (Appendix A of the Revised Interim Action Sampling and Analysis Plan and Health and Safety Plan; GeoEngineers, 2015), the data validation included review of the following QC elements:

- Data package completeness
- Chain-of-custody documentation
- Holding times and sample preservation
- Surrogate recoveries
- Method blanks
- Matrix spikes/matrix spike duplicates
- Laboratory control samples/laboratory control sample duplicates
- Field/laboratory duplicates

## VALIDATED SAMPLE DELIVERY GROUPS

This data validation included review of the sample delivery groups (SDGs) listed below in Table C-1.

**TABLE C-1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS**

Laboratory SDG	Samples Validated
10299905	DP-2a (1-2), DP-2a (15-16), Soil Drum 1
10306723	DP-1:GW:051115, DP-4:GW:051115, DP-7:GW:051215, DP-13:GW:051215, DP-15:GW:051315, DP-17:GW:051215, DP-20:GW:051315, DP-24:GW:051315, DP-Duplicate:GW:051315, DP-26:GW:051315
10307123	DP-1 (12-13), DP-2 (12-12.5), DP-2 (12.5-13.5), DP-3 (12-13), DP-3 (13-14), DP-4 (16-16.5), DP-4 (16.5-17.5), DP-5 (16-16.5), DP-5 (16.5-17), DP-6 (12-13), DP-6 (13-14), DP-7 (12.5-13.5), DP-7 (13.5-14.5), DP-8 (20-20.5), DP-8 (20.5-21), DP-11 (12.5-13.5), DP-11 (13.5-14.5), DP-13 (12-13), DP-13 (13-14), DP-17 (16-16.5), DP-17 (16.5-17.5)
10307126	DP-12 (12-12.5), DP-12 (16-17), DP-15 (12-13), DP-15 (13-14), DP-18 (16-17), DP-18 (17-17.5), DP-20 (24-24.5), DP-20 (24.5-25.5), DP-24 (16-16.5), DP-24 (16.5-17.5), DP-26 (16-17), DP-26 (17-18), DP-27 (16-17), DP-27 (24-24.5), DP-28 (20.5-21.5), DP-28 (21.5-22.5), DP-29 (24-24.5), DP-29 (24.5-25.5), DP-30 (12-12.5), DP-30 (16-17)
10307129	DP-9 (12.5-13.5), DP-9 (13.5-14.5), DP-10 (12-12.5), DP-10 (12.5-13), DP-19 (24-24.5), DP-19 (24.5-25), DP-21 (13-14), DP-21 (14-15), DP-22 (20-20.5), DP-22 (24-25), DP-23 (16-16.5), DP-23 (20-20.5), DP-25 (12-12.5), DP-25 (12.5-13.5), DP-35 (8-9), DP-36 (8-9), CPPI Drum 1

## CHEMICAL ANALYSIS PERFORMED

Pace Analytical Services, Inc. (Pace), located in Minneapolis, Minnesota, performed laboratory analyses on the soil and groundwater samples using one or more of the following methods:

- Gas-Range Hydrocarbons (NWTPH-Gx) by Method NWTPH-Gx;
- Petroleum Hydrocarbons (NWTPH-Dx) by Method NWTPH-Dx;
- Petroleum Hydrocarbons with Silica Gel (SG) Cleanup (NWTPH-Dx/SG) by Method NWTPH-Dx/SG;
- VOCs by Method SW8260B;
- SVOCs by Method SW8270D;
- PCP by Method SW8270D-SIM; and
- PAHs by Method SW8270D-SIM.

## DATA VALIDATION SUMMARY

The results for each of the QC elements are summarized below.

## Data Package Completeness

Pace provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and the identified anomalies were discussed in the relevant laboratory case narrative.

## Chain-of-Custody Documentation

COC forms were provided with the laboratory analytical report. The COCs were accurate and complete when submitted to the laboratory.

## Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for the requested analyses, with the exceptions noted below. The sample coolers arrived at the laboratory within the appropriate temperatures of between 2 and 6 degrees Celsius, with the exceptions noted below.

**SDG 10306723:** (Pentachlorophenol) The 7-day holding time for sample extraction for pentachlorophenol analysis was exceeded by 1 day in Samples DP-7:GW:051215, DP-13:GW:051215, and DP-17:GW:051215 and 2 days in Samples DP-1:GW:051115 and DP-4:GW:051115. The positive results and reporting limits for pentachlorophenol were qualified as estimated (J/UJ) in these samples.

Five sample cooler temperatures recorded at the laboratory were 0.0, 0.0, 0.8, 1.1, and 1.2 degrees Celsius. It was determined through professional judgment that since the samples were not frozen, these temperatures should not affect the sample analytical results.

**SDG 10307123:** (NWTPH-Dx w/SG) The 14-day holding time for sample extraction for petroleum hydrocarbon analysis was exceeded by seven days in Sample DP-4 (16-16.5). The reporting limits for diesel-range and motor oil-range hydrocarbons were qualified as estimated (UJ) in this sample.

(SVOCs/PAHs) The 14-day holding time for sample extraction for SVOCs analysis was exceeded by seven days in Sample DP-4 (16-16.5). The reporting limits for the SVOC target analytes were qualified as estimated (UJ) in this sample.

Three sample cooler temperatures recorded at the laboratory were 0.5, 0.9 and 1.4 degrees Celsius. It was determined through professional judgment that since the samples were not frozen, these temperatures should not affect the sample analytical results.

**SDG 10307126:** (NWTPH-Gx) The 14-day holding time for gasoline hydrocarbon analysis was exceeded by two days in Sample DP-24 (16-16.5) and eight days in Sample DP-24 (16.5-17.5). The reporting limits for gasoline-range hydrocarbons were qualified as estimated (UJ) in these samples.

Three sample cooler temperatures recorded at the laboratory were 0.6, 0.9, and 1.4 degrees Celsius. It was determined through professional judgment that since the samples were not frozen, these temperatures should not affect the sample analytical results.

**SDG 10307129:** Three sample cooler temperatures recorded at the laboratory were 0.6, 0.9 and 1.4 degrees Celsius. It was determined through professional judgment that since the samples were not frozen, these temperatures should not affect the sample analytical results.

### Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in an environmental sample. Surrogates are used for organic analyses and are added to the samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. The surrogate percent recoveries for field samples were within the laboratory control limits, with the following exceptions:

**SDG 10307123:** (SVOCs) The percent recovery for surrogate 2-Fluorobiphenyl was less than the control limits in Samples DP-1 (12-13), DP-3 (13-14), DP-5 (16.5-17), DP-6 (12-13), and DP-7 (13.5-14.5); however, the samples were spiked with two additional base-neutral surrogates, both within their respective control limits. No action was required for these outliers.

The percent recovery for surrogate 2-Fluorophenol was less than the control limits in Sample DP-6 (12-13); however, the sample was spiked with two additional acidic surrogates, both within their respective control limits. No action was required for this outlier.

The percent recoveries for base-neutral surrogates nitrobenzene-d5 and 2-Fluorobiphenyl and acidic surrogate 2-Fluorophenol were less than the control limits in Samples DP-4 (16.5-17.5) and DP-17 (16.5-17.5). The reporting limits for the base-neutral target analytes were qualified as estimated (UJ) in these samples. No action was required for the acidic surrogate outlier, since the sample was spiked with two additional acidic surrogates, both within their respective control limits.

The percent recoveries for base-neutral surrogates nitrobenzene-d5 and 2-Fluorobiphenyl and acidic surrogates Phenol-d6 and 2-Fluorophenol were less than the control limits in Sample DP-13 (13-14). The reporting limits for the base-neutral and acidic target analytes were qualified as estimated (UJ) in this sample.

(PAHs) The percent recovery for surrogate 2-Fluorobiphenyl was less than the control limits in Samples DP-1 (12-13), DP-4 (16-16.5), DP-6 (12-13), DP-6 (13-14), DP-8 (20.5-21), DP-11 (12.5-13.5), DP-13 (13-14), DP-17 (16-16.5), and DP-17 (16.5-17.5); however, the samples were spiked with one additional surrogate, which was within the control limits. No action was required for these outliers.

**SDG 10307126:** (SVOCs) The percent recovery for surrogate 2-Fluorobiphenyl was less than the control limits in Samples DP-12 (12-12.5), DP-20 (24-24.5), DP-20 (24.5-25.5), DP-24 (16-16.5), DP-24 (16.5-17.5), DP-29 (24.5-25.5), DP-30 (12-12.5), and DP-30 (16-17); however, the samples were spiked with two additional base-neutral surrogates, both within their respective control limits. No action was required for these outliers.

The percent recovery for surrogate 2-Fluorophenol was less than the control limits in Samples DP-12 (12-12.5) and DP-30 (12-12.5); however, the samples were spiked with two additional acidic surrogates, both within their respective control limits. No action was required for these outliers.

The percent recoveries for base-neutral surrogates nitrobenzene-d5 and 2-Fluorobiphenyl and acidic surrogate 2-Fluorophenol were less than the control limits in Samples DP-12 (16-17) and DP-18 (17-17.5). The reporting limits for the base-neutral target analytes were qualified as estimated (UJ) in these samples. No action was required for the acidic surrogate outlier, since the sample was spiked with two additional acidic surrogates, both within their respective control limits.

The percent recoveries for base-neutral surrogates nitrobenzene-d5 and 2-Fluorobiphenyl and acidic surrogates Phenol-d6 and 2-Fluorophenol were less than the control limits in Samples DP-15 (13-14), DP-28 (20.5-21.5), DP-28 (21.5-22.5), and DP-29 (24-24.5). The reporting limits for the base-neutral and acidic target analytes were qualified as estimated (UJ) in these samples.

(PAHs) The percent recovery for surrogate 2-Fluorobiphenyl was less than the control limits in Samples DP-24 (16.5-17.5) and DP-29 (24.5-25.5); however, the samples were spiked with one additional surrogate, which was within the control limits. No action was required for these outliers.

**SDG 10307129:** (SVOCs) The percent recovery for surrogate 2-Fluorobiphenyl was less than the control limits in Samples DP-9 (13.5-14.5), DP-10 (12.5-13), DP-23 (20-20.5), DP-25 (12.5-13.5), and CPPI Drum 1; however, the samples were spiked with two additional base-neutral surrogates, both within their respective control limits. No action was required for these outliers.

The percent recovery for surrogate 2-Fluorophenol was less than the control limits in Samples DP-10 (12.5-13) and DP-25 (12.5-13.5); however, the samples were spiked with two additional acidic surrogates, both within their respective control limits. No action was required for these outliers.

The percent recoveries for base-neutral surrogates nitrobenzene-d5 and 2-Fluorobiphenyl and acidic surrogate 2-Fluorophenol were less than the control limits in Samples DP-10 (12-12.5) and DP-22 (24-25). The reporting limits for the base-neutral target analytes were qualified as estimated (UJ) in these samples. No action was required for the acidic surrogate outlier, since the sample was spiked with two additional acidic surrogates, both within their respective control limits.

The percent recoveries for base-neutral surrogates nitrobenzene-d5 and 2-Fluorobiphenyl and acidic surrogates Phenol-d6 and 2-Fluorophenol were less than the control limits in Samples DP-19 (24-24.5), DP-19 (24.5-25), and DP-21 (14-15). The reporting limits for the base-neutral and acidic target analytes were qualified as estimated (UJ) in these samples.

(PAHs) The percent recovery for surrogate 2-Fluorobiphenyl was less than the control limits in Samples DP-9 (13.5-14.5), DP-19 (24-24.5), and CPPI Drum 1; however, the samples were spiked with one additional surrogate, which was within the control limits. No action was required for these outliers.

### Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected above the reporting limits in the method blanks.



## Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analytical batch and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

**SDG 10307123:** (SVOCs) The laboratory performed an MS/MSD sample set extracted on 5/28/2015 with percent recovery outliers; however, the MS/MSD was not performed on the associated GeoEngineers project samples. For this reason, no action was required.

The laboratory performed an MS/MSD sample set extracted on 5/27/2015 with RPD outliers; however, the MS/MSD was not performed on the associated GeoEngineers project samples. For this reason, no action was required.

(PAHs) The laboratory performed an MS/MSD sample set extracted on 5/23/2015 with several percent recovery and RPD outliers; however, the MS/MSD was not performed on the associated GeoEngineers project samples. For this reason, no action was required.

The laboratory performed an MS/MSD sample set extracted on 5/27/2015 with several percent recovery and RPD outliers; however, the MS/MSD was not performed on the associated GeoEngineers project samples. For this reason, no action was required.

**SDG 10307126:** (SVOCs) The laboratory performed an MS/MSD sample set extracted on 5/28/2015 with percent recovery outliers; however, the MS/MSD was not performed on the associated GeoEngineers project samples. For this reason, no action was required.

(PAHs) The laboratory performed an MS/MSD sample set extracted on 5/29/2015 with several percent recovery outliers; however, the MS/MSD was not performed on the associated GeoEngineers project samples. For this reason, no action was required.

**SDG 10307129:** (SVOCs) The laboratory performed an MS/MSD sample set extracted on 6/2/2015 with percent recovery outliers; however, the MS/MSD was not performed on the associated GeoEngineers project samples. For this reason, no action was required.

(PAHs) The laboratory performed an MS/MSD sample set extracted on 5/29/2015 with several percent recovery outliers; however, the MS/MSD was not performed on the associated GeoEngineers project samples. For this reason, no action was required.

The laboratory performed an MS/MSD sample set extracted on 5/31/2015 with several percent recovery outliers; however, the MS/MSD was not performed on the associated GeoEngineers project samples. For this reason, no action was required.

### Laboratory Control Samples/Laboratory Control Sample Duplicates

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to each sample in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analytical batch and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

**SDG 10307123:** (PAHs) The percent recovery for 2-Chloronaphthalene was less than the control limits in the LCS extracted on 5/27/2015 19:23. The reporting limits for 2-chloronaphthalene were qualified as estimated (UJ) in Samples DP-6 (12-13) and DP-6 (13-14).

The percent recovery for 2-chloronaphthalene was less than the control limits in the LCS extracted on 5/27/2015 07:57. The reporting limits for 2-chloronaphthalene were qualified as estimated (UJ) in Samples DP-4 (16-16.5), DP-7 (12.5-13.5), DP-7 (13.5-14.5), DP-8 (20-20.5), DP-8 (20.5-21), DP-11 (12.5-13.5), DP-11 (13.5-14.5), DP-13 (12-13), DP-13 (13-14), DP-17 (16-16.5), and DP-17 (16.5-17.5).

**SDG 10307126:** (PAHs) The percent recovery for 2-chloronaphthalene was less than the control limits in the LCS extracted on 5/29/2015. The reporting limits for 2-chloronaphthalene were qualified as estimated (UJ) in Samples DP-12 (12-12.5), DP-12 (16-17), DP-18 (16-17), DP-18 (17-17.5), DP-28 (20.5-21.5), DP-28 (21.5-22.5), DP-29 (24-24.5), DP-29 (24.5-25.5), DP-30 (12-12.5), and DP-30 (16-17).

**SDG 10307129:** (SVOCs) The percent recoveries for 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, and hexachloroethane were less than the control limits in the LCS extracted on 6/2/2015. The reporting limits for these target analytes were qualified as estimated (UJ) in Samples DP-19 (24-24.5), DP-19 (24.5-25), DP-21 (13-14), DP-21 (14-15), DP-22 (20-20.5), DP-22 (24-25), DP-23 (16-16.5), DP-23 (20-20.5), DP-25 (12-12.5), DP-25 (12.5-13.5), DP-35 (8-9), DP-36 (8-9), and CPPI Drum 1.

(PAHs) The percent recovery for 2-chloronaphthalene was less than the control limits in the LCS extracted on 5/29/2015. The reporting limits for 2-chloronaphthalene were qualified as estimated (UJ) in Samples DP-9 (12.5-13.5), DP-9 (13.5-14.5), DP-10 (12-12.5), and DP-10 (12.5-13).

The percent recovery for 2-chloronaphthalene was less than the control limits in the LCS extracted on 5/31/2015. The reporting limits for 2-chloronaphthalene were qualified as estimated (UJ) in Samples DP-19 (24-24.5), DP-19 (24.5-25), DP-21 (13-14), DP-21 (14-15), DP-22 (20-20.5), DP-22 (24-25), DP-23 (16-16.5), DP-23 (20-20.5), DP-25 (12-12.5), DP-25 (12.5-13.5), DP-35 (8-9), and DP-36 (8-9).

## Laboratory Duplicates

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. The RPD control limits are specified in the laboratory documents. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met.

## Field Duplicates

In order to assess precision, field duplicate samples are collected and analyzed along with the reviewed sample batches. The duplicate samples are analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration greater than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control for water is 20 percent.

**SDG 10306723:** One field duplicate sample pair, DP-24:GW:051315 and DP-Duplicate:GW:051315, was submitted with this SDG. The precision criteria for the target analytes were met for this sample pair, with the exception of diesel-range hydrocarbons, acenaphthene, acenaphthylene, anthracene, fluorene, phenanthrene, and pyrene. The positive results for these target analytes were qualified as estimated (J) in this sample pair.

## OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LSCD, and MS/MSD percent recovery values, with the exceptions noted above. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and laboratory/field duplicate RPD values, with the exceptions noted above.

The data are acceptable for the intended use, with the following qualifications listed below in Table C-2.

**TABLE C-2: SUMMARY OF QUALIFIED SAMPLES**

Sample ID	Analyte	Qualifier	Reason
DP-1:GW:051115	Pentachlorophenol	UJ	Holding Time
DP-4 (16-16.5)	Diesel-range Hydrocarbons	UJ	Holding Time
	Motor oil-range Hydrocarbons	UJ	Holding Time
	SVOC target analytes	UJ	Holding Time
	PAH target analytes	UJ	Holding Time
	2-Chloronaphthalene	UJ	LCS % Recovery
DP-4 (16.5-17.5)	Base-neutral SVOC target analytes	UJ	Surrogate % Recovery
DP-4:GW:051115	Pentachlorophenol	J	Holding Time
DP-6 (12-13)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-6 (13-14)	2-Chloronaphthalene	UJ	LCS % Recovery

Sample ID	Analyte	Qualifier	Reason
DP-7 (12.5-13.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-7 (13.5-14.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-7:GW:051215	Pentachlorophenol	UJ	Holding Time
DP-8 (20-20.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-8 (20.5-21)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-9 (12.5-13.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-9 (13.5-14.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-10 (12-12.5)	Base-neutral SVOC target analytes	UJ	Surrogate % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
DP-10 (12.5-13)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-11 (12.5-13.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-11 (13.5-14.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-12 (12-12.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-12 (16-17)	Base-neutral SVOC target analytes	UJ	Surrogate % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
DP-13 (12-13)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-13 (13-14)	SVOC target analytes	UJ	Surrogate % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
DP-13:GW:051215	Pentachlorophenol	UJ	Holding Time
DP-15 (13-14)	SVOC target analytes	UJ	Surrogate % Recovery
DP-17 (16-16.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-17 (16.5-17.5)	Base-neutral SVOC target analytes	UJ	Surrogate % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
DP-17:GW:051215	Pentachlorophenol	J	Holding Time
DP-18 (16-17)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-18 (17-17.5)	Base-neutral SVOC target analytes	UJ	Surrogate % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
DP-19 (24-24.5)	SVOC target analytes	UJ	Surrogate % Recovery
	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-19 (24.5-25)	SVOC target analytes	UJ	Surrogate % Recovery
	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery

Sample ID	Analyte	Qualifier	Reason
DP-21 (13-14)	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-21 (14-15)	SVOC target analytes	UJ	Surrogate % Recovery
	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-22 (20-20.5)	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-22 (24-25)	Base-neutral SVOC target analytes	UJ	Surrogate % Recovery
	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-23 (16-16.5)	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-23 (20-20.5)	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-24 (16-16.5)	Gasoline-range Hydrocarbons	UJ	Holding Time
DP-24 (16.5-17.5)	Gasoline-range Hydrocarbons	UJ	Holding Time
DP-24:GW:051315	Diesel-range Hydrocarbons	J	Field Duplicate RPD
	Acenaphthene	J	Field Duplicate RPD
	Acenaphthylene	J	Field Duplicate RPD
	Anthracene	J	Field Duplicate RPD
	Fluorene	J	Field Duplicate RPD
	Phenanthrene	J	Field Duplicate RPD
	Pyrene	J	Field Duplicate RPD



Sample ID	Analyte	Qualifier	Reason
DP-Duplicate:GW:051315	Diesel-range Hydrocarbons	J	Field Duplicate RPD
	Acenaphthene	J	Field Duplicate RPD
	Acenaphthylene	J	Field Duplicate RPD
	Anthracene	J	Field Duplicate RPD
	Fluorene	J	Field Duplicate RPD
	Phenanthrene	J	Field Duplicate RPD
	Pyrene	J	Field Duplicate RPD
DP-25 (12-12.5)	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-25 (12.5-13.5)	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-28 (20.5-21.5)	SVOC target analytes	UJ	Surrogate % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
DP-28 (21.5-22.5)	SVOC target analytes	UJ	Surrogate % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
DP-29 (24-24.5)	SVOC target analytes	UJ	Surrogate % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
DP-29 (24.5-25.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-30 (12-12.5)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-30 (16-17)	2-Chloronaphthalene	UJ	LCS % Recovery
DP-35 (8-9)	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
DP-36 (8-9)	2,4-Dinitrophenol	UJ	LCS % Recovery
	2-Chloronaphthalene	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery
CPPI Drum 1	2,4-Dinitrophenol	UJ	LCS % Recovery
	4,6-Dinitro-2-methylphenol	UJ	LCS % Recovery
	Hexachloroethane	UJ	LCS % Recovery

## REFERENCES

GeoEngineers, Inc., 2015. "Revised Interim Action Sampling and Analysis Plan and Health and Safety Plan", prepared for Washington State Department of Ecology, GEI File No. 0504-098-00. January 16.

U.S. Environmental Protection Agency (EPA). 2008. "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," EPA-540-R-08-01. June.

U.S. Environmental Protection Agency (EPA). 2009. "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January.

August 11, 2015

John Haney  
GeoEngineers, Inc - WA  
523 East Second Ave.  
Spokane, WA 99202

RE: Project: 0504-098-00 Colville Post REV  
Pace Project No.: 10299905

Dear John Haney:

Enclosed are the analytical results for sample(s) received by the laboratory on March 18, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report was revised on 8/11/15 to change the sample IDs for samples 001-005 at the client's request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carol Davy  
carol.davy@pacelabs.com  
Project Manager

Enclosures

cc: Joshua Lee, GeoEngineers  
Chelsea Voss, GeoEngineers



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## CERTIFICATIONS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

---

### Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alaska Certification #: UST-078

Alaska Certification #MN00064

Alabama Certification #40770

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

Colorado Certification #Pace

Connecticut Certification #: PH-0256

EPA Region 8 Certification #: 8TMS-L

Florida/NELAP Certification #: E87605

Guam Certification #:14-008r

Georgia Certification #: 959

Georgia EPD #: Pace

Idaho Certification #: MN00064

Hawaii Certification #MN00064

Illinois Certification #: 200011

Indiana Certification#C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky Dept of Envi. Protection - DW #90062

Kentucky Dept of Envi. Protection - WW #:90062

Louisiana DEQ Certification #: 3086

Louisiana DHH #: LA140001

Maine Certification #: 2013011

Maryland Certification #: 322

Michigan DEPH Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT0092

Nevada Certification #: MN\_00064

Nebraska Certification #: Pace

New Jersey Certification #: MN-002

New York Certification #: 11647

North Carolina Certification #: 530

North Carolina State Public Health #: 27700

North Dakota Certification #: R-036

Ohio EPA #: 4150

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Oregon Certification #: MN300001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Saipan (CNMI) #:MP0003

South Carolina #:74003001

Texas Certification #: T104704192

Tennessee Certification #: 02818

Utah Certification #: MN000642013-4

Virginia DGS Certification #: 251

Virginia/VELAP Certification #: Pace

Washington Certification #: C486

West Virginia Certification #: 382

West Virginia DHHR #:9952C

Wisconsin Certification #: 999407970

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## SAMPLE SUMMARY

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10299905001	DP-2a (1-2)	Solid	03/16/15 15:20	03/18/15 09:30
10299905004	DP-2a (15-16)	Solid	03/16/15 16:00	03/18/15 09:30
10299905006	Soil Drum 1	Solid	03/16/15 17:00	03/18/15 09:30

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10299905001	DP-2a (1-2)	NWTPH-Dx	JRH	4	PASI-M
		ASTM D2974	AMP	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10299905004	DP-2a (15-16)	NWTPH-Dx	JRH	4	PASI-M
		ASTM D2974	AMP	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10299905006	Soil Drum 1	NWTPH-Dx	JRH	4	PASI-M
		ASTM D2974	AMP	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

---

**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS Silica Gel

**Client:** GeoEngineers

**Date:** August 11, 2015

**General Information:**

3 samples were analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** August 11, 2015

**General Information:**

3 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** August 11, 2015

**General Information:**

3 samples were analyzed for EPA 8270D by SIM. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

**Sample: DP-2a (1-2)**      **Lab ID: 10299905001**      Collected: 03/16/15 15:20      Received: 03/18/15 09:30      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS Silica Gel</b>		Analytical Method: NWTPH-Dx Preparation Method: EPA 3550							
Diesel Fuel Range SG	ND	mg/kg	20.1	2.1	1	03/25/15 08:10	03/27/15 13:32	68334-30-5	
Motor Oil Range SG	ND	mg/kg	13.4	6.7	1	03/25/15 08:10	03/27/15 13:32	64742-65-0	
<b>Surrogates</b>									
n-Triacontane (S)	92	%	50-150		1	03/25/15 08:10	03/27/15 13:32	638-68-6	
o-Terphenyl (S)	78	%	50-150		1	03/25/15 08:10	03/27/15 13:32	84-15-1	
<b>Dry Weight</b>		Analytical Method: ASTM D2974							
Percent Moisture	<b>26.2</b>	%	0.10	0.10	1		03/23/15 15:49		
<b>8270D MSSV</b>		Analytical Method: EPA 8270D Preparation Method: EPA 3550							
4-Bromophenylphenyl ether	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	101-55-3	
Butylbenzylphthalate	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	85-68-7	
Carbazole	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	59-50-7	
4-Chloroaniline	ND	ug/kg	447	114	1	03/18/15 15:33	03/19/15 21:37	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	108-60-1	
2-Chloronaphthalene	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	91-58-7	
2-Chlorophenol	ND	ug/kg	447	55.9	1	03/18/15 15:33	03/19/15 21:37	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	7005-72-3	
Dibenzofuran	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	447	52.2	1	03/18/15 15:33	03/19/15 21:37	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	447	127	1	03/18/15 15:33	03/19/15 21:37	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	120-83-2	
Diethylphthalate	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	447	78.6	1	03/18/15 15:33	03/19/15 21:37	105-67-9	
Dimethylphthalate	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	131-11-3	
Di-n-butylphthalate	ND	ug/kg	447	62.0	1	03/18/15 15:33	03/19/15 21:37	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2300	1150	1	03/18/15 15:33	03/19/15 21:37	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	447	86.5	1	03/18/15 15:33	03/19/15 21:37	606-20-2	
Di-n-octylphthalate	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	447	76.5	1	03/18/15 15:33	03/19/15 21:37	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	447	45.3	1	03/18/15 15:33	03/19/15 21:37	87-68-3	
Hexachlorobenzene	ND	ug/kg	447	58.8	1	03/18/15 15:33	03/19/15 21:37	118-74-1	
Hexachloroethane	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	67-72-1	
Isophorone	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	895	224	1	03/18/15 15:33	03/19/15 21:37		
2-Nitroaniline	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

**Sample: DP-2a (1-2)**      **Lab ID: 10299905001**      Collected: 03/16/15 15:20      Received: 03/18/15 09:30      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	447	99.3	1	03/18/15 15:33	03/19/15 21:37	99-09-2	
4-Nitroaniline	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	100-01-6	
Nitrobenzene	ND	ug/kg	447	50.4	1	03/18/15 15:33	03/19/15 21:37	98-95-3	
2-Nitrophenol	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	88-75-5	
4-Nitrophenol	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	86-30-6	
Pentachlorophenol	ND	ug/kg	908	224	1	03/18/15 15:33	03/19/15 21:37	87-86-5	
Phenol	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	447	48.9	1	03/18/15 15:33	03/19/15 21:37	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	447	49.6	1	03/18/15 15:33	03/19/15 21:37	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	447	224	1	03/18/15 15:33	03/19/15 21:37	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	83	%	34-125		1	03/18/15 15:33	03/19/15 21:37	4165-60-0	
2-Fluorobiphenyl (S)	80	%	51-125		1	03/18/15 15:33	03/19/15 21:37	321-60-8	
p-Terphenyl-d14 (S)	95	%	55-125		1	03/18/15 15:33	03/19/15 21:37	1718-51-0	
Phenol-d6 (S)	84	%	44-125		1	03/18/15 15:33	03/19/15 21:37	13127-88-3	
2-Fluorophenol (S)	83	%	45-125		1	03/18/15 15:33	03/19/15 21:37	367-12-4	
2,4,6-Tribromophenol (S)	97	%	40-125		1	03/18/15 15:33	03/19/15 21:37	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	83-32-9	
Acenaphthylene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	208-96-8	
Anthracene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	120-12-7	
Benzo(a)anthracene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	56-55-3	
Benzo(a)pyrene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	13.6	0.38	1	03/24/15 09:09	03/26/15 05:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	207-08-9	
2-Chloronaphthalene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	91-58-7	
Chrysene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	53-70-3	
Fluoranthene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	206-44-0	
Fluorene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	193-39-5	
1-Methylnaphthalene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	90-12-0	
2-Methylnaphthalene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	91-57-6	
Naphthalene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	91-20-3	
Phenanthrene	ND	ug/kg	13.6	6.8	1	03/24/15 09:09	03/26/15 05:14	85-01-8	
Pyrene	ND	ug/kg	13.6	0.31	1	03/24/15 09:09	03/26/15 05:14	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	79	%	55-125		1	03/24/15 09:09	03/26/15 05:14	321-60-8	
p-Terphenyl-d14 (S)	86	%	30-150		1	03/24/15 09:09	03/26/15 05:14	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

**Sample: DP-2a (15-16)**      **Lab ID: 10299905004**      Collected: 03/16/15 16:00      Received: 03/18/15 09:30      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS Silica Gel</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range SG	ND	mg/kg	17.9	1.9	1	03/25/15 08:10	03/27/15 15:04	68334-30-5	
Motor Oil Range SG	ND	mg/kg	11.9	6.0	1	03/25/15 08:10	03/27/15 15:04	64742-65-0	
<b>Surrogates</b>									
n-Triacontane (S)	94	%	50-150		1	03/25/15 08:10	03/27/15 15:04	638-68-6	
o-Terphenyl (S)	87	%	50-150		1	03/25/15 08:10	03/27/15 15:04	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>17.1</b>	%	0.10	0.10	1		03/23/15 15:49		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	101-55-3	
Butylbenzylphthalate	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	85-68-7	
Carbazole	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	59-50-7	
4-Chloroaniline	ND	ug/kg	394	101	1	03/18/15 15:33	03/19/15 22:08	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	108-60-1	
2-Chloronaphthalene	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	91-58-7	
2-Chlorophenol	ND	ug/kg	394	49.3	1	03/18/15 15:33	03/19/15 22:08	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	7005-72-3	
Dibenzofuran	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	394	46.0	1	03/18/15 15:33	03/19/15 22:08	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	394	112	1	03/18/15 15:33	03/19/15 22:08	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	120-83-2	
Diethylphthalate	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	394	69.3	1	03/18/15 15:33	03/19/15 22:08	105-67-9	
Dimethylphthalate	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	131-11-3	
Di-n-butylphthalate	ND	ug/kg	394	54.7	1	03/18/15 15:33	03/19/15 22:08	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2030	1020	1	03/18/15 15:33	03/19/15 22:08	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	394	76.2	1	03/18/15 15:33	03/19/15 22:08	606-20-2	
Di-n-octylphthalate	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	394	67.4	1	03/18/15 15:33	03/19/15 22:08	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	394	40.0	1	03/18/15 15:33	03/19/15 22:08	87-68-3	
Hexachlorobenzene	ND	ug/kg	394	51.8	1	03/18/15 15:33	03/19/15 22:08	118-74-1	
Hexachloroethane	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	67-72-1	
Isophorone	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	789	197	1	03/18/15 15:33	03/19/15 22:08		
2-Nitroaniline	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

**Sample: DP-2a (15-16)**      **Lab ID: 10299905004**      Collected: 03/16/15 16:00      Received: 03/18/15 09:30      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	394	87.6	1	03/18/15 15:33	03/19/15 22:08	99-09-2	
4-Nitroaniline	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	100-01-6	
Nitrobenzene	ND	ug/kg	394	44.4	1	03/18/15 15:33	03/19/15 22:08	98-95-3	
2-Nitrophenol	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	88-75-5	
4-Nitrophenol	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	86-30-6	
Pentachlorophenol	ND	ug/kg	801	197	1	03/18/15 15:33	03/19/15 22:08	87-86-5	
Phenol	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	394	43.1	1	03/18/15 15:33	03/19/15 22:08	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	394	43.7	1	03/18/15 15:33	03/19/15 22:08	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	394	197	1	03/18/15 15:33	03/19/15 22:08	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	80	%	34-125		1	03/18/15 15:33	03/19/15 22:08	4165-60-0	
2-Fluorobiphenyl (S)	79	%	51-125		1	03/18/15 15:33	03/19/15 22:08	321-60-8	
p-Terphenyl-d14 (S)	91	%	55-125		1	03/18/15 15:33	03/19/15 22:08	1718-51-0	
Phenol-d6 (S)	81	%	44-125		1	03/18/15 15:33	03/19/15 22:08	13127-88-3	
2-Fluorophenol (S)	80	%	45-125		1	03/18/15 15:33	03/19/15 22:08	367-12-4	
2,4,6-Tribromophenol (S)	96	%	40-125		1	03/18/15 15:33	03/19/15 22:08	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	83-32-9	
Acenaphthylene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	208-96-8	
Anthracene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	120-12-7	
Benzo(a)anthracene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	56-55-3	
Benzo(a)pyrene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	12.0	0.34	1	03/24/15 09:09	03/26/15 05:36	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	207-08-9	
2-Chloronaphthalene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	91-58-7	
Chrysene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	53-70-3	
Fluoranthene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	206-44-0	
Fluorene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	193-39-5	
1-Methylnaphthalene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	90-12-0	
2-Methylnaphthalene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	91-57-6	
Naphthalene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	91-20-3	
Phenanthrene	ND	ug/kg	12.0	6.0	1	03/24/15 09:09	03/26/15 05:36	85-01-8	
Pyrene	ND	ug/kg	12.0	0.28	1	03/24/15 09:09	03/26/15 05:36	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	55-125		1	03/24/15 09:09	03/26/15 05:36	321-60-8	
p-Terphenyl-d14 (S)	83	%	30-150		1	03/24/15 09:09	03/26/15 05:36	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

**Sample: Soil Drum 1**      **Lab ID: 10299905006**      Collected: 03/16/15 17:00      Received: 03/18/15 09:30      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS Silica Gel</b>		Analytical Method: NWTPH-Dx Preparation Method: EPA 3550							
Diesel Fuel Range SG	ND	mg/kg	17.6	1.9	1	03/25/15 08:10	03/27/15 14:41	68334-30-5	
Motor Oil Range SG	<b>37.1</b>	mg/kg	11.7	5.9	1	03/25/15 08:10	03/27/15 14:41	64742-65-0	
<b>Surrogates</b>									
n-Triacontane (S)	92	%	50-150		1	03/25/15 08:10	03/27/15 14:41	638-68-6	
o-Terphenyl (S)	88	%	50-150		1	03/25/15 08:10	03/27/15 14:41	84-15-1	
<b>Dry Weight</b>		Analytical Method: ASTM D2974							
Percent Moisture	<b>14.8</b>	%	0.10	0.10	1		03/23/15 15:50		
<b>8270D MSSV</b>		Analytical Method: EPA 8270D Preparation Method: EPA 3550							
4-Bromophenylphenyl ether	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	101-55-3	
Butylbenzylphthalate	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	85-68-7	
Carbazole	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	59-50-7	
4-Chloroaniline	ND	ug/kg	387	99.2	1	03/18/15 15:33	03/19/15 22:39	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	108-60-1	
2-Chloronaphthalene	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	91-58-7	
2-Chlorophenol	ND	ug/kg	387	48.4	1	03/18/15 15:33	03/19/15 22:39	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	7005-72-3	
Dibenzofuran	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	387	45.2	1	03/18/15 15:33	03/19/15 22:39	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	387	110	1	03/18/15 15:33	03/19/15 22:39	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	120-83-2	
Diethylphthalate	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	387	68.1	1	03/18/15 15:33	03/19/15 22:39	105-67-9	
Dimethylphthalate	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	131-11-3	
Di-n-butylphthalate	ND	ug/kg	387	53.7	1	03/18/15 15:33	03/19/15 22:39	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2000	998	1	03/18/15 15:33	03/19/15 22:39	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	387	74.9	1	03/18/15 15:33	03/19/15 22:39	606-20-2	
Di-n-octylphthalate	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	387	66.2	1	03/18/15 15:33	03/19/15 22:39	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	387	39.3	1	03/18/15 15:33	03/19/15 22:39	87-68-3	
Hexachlorobenzene	ND	ug/kg	387	50.9	1	03/18/15 15:33	03/19/15 22:39	118-74-1	
Hexachloroethane	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	67-72-1	
Isophorone	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	775	194	1	03/18/15 15:33	03/19/15 22:39		
2-Nitroaniline	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

**Sample: Soil Drum 1**      **Lab ID: 10299905006**      Collected: 03/16/15 17:00      Received: 03/18/15 09:30      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	387	86.0	1	03/18/15 15:33	03/19/15 22:39	99-09-2	
4-Nitroaniline	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	100-01-6	
Nitrobenzene	ND	ug/kg	387	43.7	1	03/18/15 15:33	03/19/15 22:39	98-95-3	
2-Nitrophenol	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	88-75-5	
4-Nitrophenol	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	86-30-6	
Pentachlorophenol	ND	ug/kg	786	194	1	03/18/15 15:33	03/19/15 22:39	87-86-5	
Phenol	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	387	42.3	1	03/18/15 15:33	03/19/15 22:39	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	387	43.0	1	03/18/15 15:33	03/19/15 22:39	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	387	194	1	03/18/15 15:33	03/19/15 22:39	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	69	%	34-125		1	03/18/15 15:33	03/19/15 22:39	4165-60-0	
2-Fluorobiphenyl (S)	72	%	51-125		1	03/18/15 15:33	03/19/15 22:39	321-60-8	
p-Terphenyl-d14 (S)	80	%	55-125		1	03/18/15 15:33	03/19/15 22:39	1718-51-0	
Phenol-d6 (S)	70	%	44-125		1	03/18/15 15:33	03/19/15 22:39	13127-88-3	
2-Fluorophenol (S)	69	%	45-125		1	03/18/15 15:33	03/19/15 22:39	367-12-4	
2,4,6-Tribromophenol (S)	94	%	40-125		1	03/18/15 15:33	03/19/15 22:39	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	83-32-9	
Acenaphthylene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	208-96-8	
Anthracene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.7	0.33	1	03/24/15 09:09	03/26/15 05:58	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	91-58-7	
Chrysene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	53-70-3	
Fluoranthene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	206-44-0	
Fluorene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	91-57-6	
Naphthalene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	91-20-3	
Phenanthrene	ND	ug/kg	11.7	5.9	1	03/24/15 09:09	03/26/15 05:58	85-01-8	
Pyrene	ND	ug/kg	11.7	0.27	1	03/24/15 09:09	03/26/15 05:58	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	68	%	55-125		1	03/24/15 09:09	03/26/15 05:58	321-60-8	
p-Terphenyl-d14 (S)	80	%	30-150		1	03/24/15 09:09	03/26/15 05:58	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

QC Batch: MPRP/53113

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 10299905001, 10299905004, 10299905006

SAMPLE DUPLICATE: 1923622

Parameter	Units	10299905001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	26.2	25.7	2	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

QC Batch: OEXT/28575 Analysis Method: EPA 8270D  
QC Batch Method: EPA 3550 Analysis Description: 8270D Solid MSSV  
Associated Lab Samples: 10299905001, 10299905004, 10299905006

METHOD BLANK: 1920665 Matrix: Solid

Associated Lab Samples: 10299905001, 10299905004, 10299905006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	03/19/15 18:31	
1,2-Dichlorobenzene	ug/kg	ND	330	03/19/15 18:31	
1,2-Diphenylhydrazine	ug/kg	ND	330	03/19/15 18:31	
1,3-Dichlorobenzene	ug/kg	ND	330	03/19/15 18:31	
1,4-Dichlorobenzene	ug/kg	ND	330	03/19/15 18:31	
2,4,5-Trichlorophenol	ug/kg	ND	330	03/19/15 18:31	
2,4,6-Trichlorophenol	ug/kg	ND	330	03/19/15 18:31	
2,4-Dichlorophenol	ug/kg	ND	330	03/19/15 18:31	
2,4-Dimethylphenol	ug/kg	ND	330	03/19/15 18:31	
2,4-Dinitrophenol	ug/kg	ND	330	03/19/15 18:31	
2,4-Dinitrotoluene	ug/kg	ND	330	03/19/15 18:31	
2,6-Dinitrotoluene	ug/kg	ND	330	03/19/15 18:31	
2-Chloronaphthalene	ug/kg	ND	330	03/19/15 18:31	
2-Chlorophenol	ug/kg	ND	330	03/19/15 18:31	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	03/19/15 18:31	
2-Nitroaniline	ug/kg	ND	330	03/19/15 18:31	
2-Nitrophenol	ug/kg	ND	330	03/19/15 18:31	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	660	03/19/15 18:31	
3,3'-Dichlorobenzidine	ug/kg	ND	330	03/19/15 18:31	
3-Nitroaniline	ug/kg	ND	330	03/19/15 18:31	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	03/19/15 18:31	
4-Bromophenylphenyl ether	ug/kg	ND	330	03/19/15 18:31	
4-Chloro-3-methylphenol	ug/kg	ND	330	03/19/15 18:31	
4-Chloroaniline	ug/kg	ND	330	03/19/15 18:31	
4-Chlorophenylphenyl ether	ug/kg	ND	330	03/19/15 18:31	
4-Nitroaniline	ug/kg	ND	330	03/19/15 18:31	
4-Nitrophenol	ug/kg	ND	330	03/19/15 18:31	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	03/19/15 18:31	
bis(2-Chloroethyl) ether	ug/kg	ND	330	03/19/15 18:31	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	03/19/15 18:31	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	03/19/15 18:31	
Butylbenzylphthalate	ug/kg	ND	330	03/19/15 18:31	
Carbazole	ug/kg	ND	330	03/19/15 18:31	
Di-n-butylphthalate	ug/kg	ND	330	03/19/15 18:31	
Di-n-octylphthalate	ug/kg	ND	330	03/19/15 18:31	
Dibenzofuran	ug/kg	ND	330	03/19/15 18:31	
Diethylphthalate	ug/kg	ND	330	03/19/15 18:31	
Dimethylphthalate	ug/kg	ND	330	03/19/15 18:31	
Hexachloro-1,3-butadiene	ug/kg	ND	330	03/19/15 18:31	
Hexachlorobenzene	ug/kg	ND	330	03/19/15 18:31	
Hexachloroethane	ug/kg	ND	330	03/19/15 18:31	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV  
Pace Project No.: 10299905

METHOD BLANK: 1920665 Matrix: Solid  
Associated Lab Samples: 10299905001, 10299905004, 10299905006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Isophorone	ug/kg	ND	330	03/19/15 18:31	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	03/19/15 18:31	
N-Nitrosodimethylamine	ug/kg	ND	330	03/19/15 18:31	
N-Nitrosodiphenylamine	ug/kg	ND	330	03/19/15 18:31	
Nitrobenzene	ug/kg	ND	330	03/19/15 18:31	
Pentachlorophenol	ug/kg	ND	670	03/19/15 18:31	
Phenol	ug/kg	ND	330	03/19/15 18:31	
2,4,6-Tribromophenol (S)	%	101	40-125	03/19/15 18:31	
2-Fluorobiphenyl (S)	%	88	51-125	03/19/15 18:31	
2-Fluorophenol (S)	%	86	45-125	03/19/15 18:31	
Nitrobenzene-d5 (S)	%	86	34-125	03/19/15 18:31	
p-Terphenyl-d14 (S)	%	100	55-125	03/19/15 18:31	
Phenol-d6 (S)	%	87	44-125	03/19/15 18:31	

LABORATORY CONTROL SAMPLE: 1920666

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1430	86	41-125	
1,2-Dichlorobenzene	ug/kg	1670	1430	86	38-125	
1,2-Diphenylhydrazine	ug/kg	1670	1620	97	58-125	
1,3-Dichlorobenzene	ug/kg	1670	1390	84	36-125	
1,4-Dichlorobenzene	ug/kg	1670	1430	86	36-125	
2,4,5-Trichlorophenol	ug/kg	1670	1680	101	56-125	
2,4,6-Trichlorophenol	ug/kg	1670	1670	100	57-125	
2,4-Dichlorophenol	ug/kg	1670	1500	90	51-125	
2,4-Dimethylphenol	ug/kg	1670	1480	89	48-125	
2,4-Dinitrophenol	ug/kg	1670	1170	70	30-125	
2,4-Dinitrotoluene	ug/kg	1670	1650	99	58-125	
2,6-Dinitrotoluene	ug/kg	1670	1600	96	58-125	
2-Chloronaphthalene	ug/kg	1670	1530	92	53-125	
2-Chlorophenol	ug/kg	1670	1460	88	44-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1470	88	48-125	
2-Nitroaniline	ug/kg	1670	1640	98	58-125	
2-Nitrophenol	ug/kg	1670	1460	88	43-125	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1480	89	53-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1560	94	42-125	
3-Nitroaniline	ug/kg	1670	1620	97	47-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1410J	85	38-125	
4-Bromophenylphenyl ether	ug/kg	1670	1610	96	59-125	
4-Chloro-3-methylphenol	ug/kg	1670	1540	93	58-125	
4-Chloroaniline	ug/kg	1670	1320	79	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1580	95	59-125	
4-Nitroaniline	ug/kg	1670	1640	98	54-125	
4-Nitrophenol	ug/kg	1670	1460	87	53-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

LABORATORY CONTROL SAMPLE: 1920666

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
bis(2-Chloroethoxy)methane	ug/kg	1670	1440	86	48-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1420	85	39-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1420	85	33-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1570	94	61-125	
Butylbenzylphthalate	ug/kg	1670	1580	95	60-125	
Carbazole	ug/kg	1670	1590	95	59-125	
Di-n-butylphthalate	ug/kg	1670	1660	99	61-125	
Di-n-octylphthalate	ug/kg	1670	1560	94	60-125	
Dibenzofuran	ug/kg	1670	1590	95	58-125	
Diethylphthalate	ug/kg	1670	1610	96	60-125	
Dimethylphthalate	ug/kg	1670	1620	97	60-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1430	86	38-125	
Hexachlorobenzene	ug/kg	1670	1570	94	57-125	
Hexachloroethane	ug/kg	1670	1400	84	54-125	
Isophorone	ug/kg	1670	1480	89	52-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1470	88	48-125	
N-Nitrosodimethylamine	ug/kg	1670	1400	84	31-125	
N-Nitrosodiphenylamine	ug/kg	1670	1610	96	59-125	
Nitrobenzene	ug/kg	1670	1410	85	46-125	
Pentachlorophenol	ug/kg	1670	1370	82	47-125	
Phenol	ug/kg	1670	1470	88	48-125	
2,4,6-Tribromophenol (S)	%			109	40-125	
2-Fluorobiphenyl (S)	%			90	51-125	
2-Fluorophenol (S)	%			85	45-125	
Nitrobenzene-d5 (S)	%			84	34-125	
p-Terphenyl-d14 (S)	%			96	55-125	
Phenol-d6 (S)	%			85	44-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1920667 1920668

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		10298775002	Spike Conc.	MSD Spike Conc.	MSD Result							
1,2,4-Trichlorobenzene	ug/kg	ND	2080	2080	1500	1540	72	74	43-125	3	30	
1,2-Dichlorobenzene	ug/kg	ND	2080	2080	1490	1500	72	72	36-125	0	30	
1,2-Diphenylhydrazine	ug/kg	ND	2080	2080	1800	1870	87	90	30-125	4	30	
1,3-Dichlorobenzene	ug/kg	ND	2080	2080	1470	1460	71	70	34-125	1	30	
1,4-Dichlorobenzene	ug/kg	ND	2080	2080	1460	1490	70	72	33-125	2	30	
2,4,5-Trichlorophenol	ug/kg	ND	2080	2080	1890	1950	91	94	30-141	3	30	
2,4,6-Trichlorophenol	ug/kg	ND	2080	2080	1930	2020	93	97	30-143	4	30	
2,4-Dichlorophenol	ug/kg	ND	2080	2080	1770	1790	85	86	30-139	1	30	
2,4-Dimethylphenol	ug/kg	ND	2080	2080	1690	1760	82	85	47-125	4	30	
2,4-Dinitrophenol	ug/kg	ND	2080	2080	1220	1150	59	55	30-125	6	30	
2,4-Dinitrotoluene	ug/kg	ND	2080	2080	1800	1860	87	90	50-125	3	30	
2,6-Dinitrotoluene	ug/kg	ND	2080	2080	1770	1870	85	90	48-125	5	30	
2-Chloronaphthalene	ug/kg	ND	2080	2080	1740	1770	84	85	49-125	2	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1920667 1920668											
Parameter	Units	10298775002 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	
2-Chlorophenol	ug/kg	ND	2080	2080	1580	1580	76	76	30-125	0	30
2-Methylphenol(o-Cresol)	ug/kg	ND	2080	2080	1670	1630	80	79	43-125	2	30
2-Nitroaniline	ug/kg	ND	2080	2080	1840	1910	89	92	57-125	4	30
2-Nitrophenol	ug/kg	ND	2080	2080	1590	1620	77	78	30-150	2	30
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	2080	2080	1710	1710	82	83	51-125	0	30
3,3'-Dichlorobenzidine	ug/kg	ND	2080	2080	1780	1870	86	90	30-132	5	30
3-Nitroaniline	ug/kg	ND	2080	2080	1750	1900	85	91	30-132	8	30
4,6-Dinitro-2-methylphenol	ug/kg	ND	2080	2080	1430J	1300J	69	63	30-130		30
4-Bromophenylphenyl ether	ug/kg	ND	2080	2080	1780	1800	86	87	57-125	1	30
4-Chloro-3-methylphenol	ug/kg	ND	2080	2080	1780	1840	86	89	30-139	3	30
4-Chloroaniline	ug/kg	ND	2080	2080	1340	1440	65	69	30-125	7	30
4-Chlorophenylphenyl ether	ug/kg	ND	2080	2080	1760	1810	85	87	30-130	3	30
4-Nitroaniline	ug/kg	ND	2080	2080	1760	1870	85	90	30-150	6	30
4-Nitrophenol	ug/kg	ND	2080	2080	1720	1830	83	88	30-145	6	30
bis(2-Chloroethoxy)methane	ug/kg	ND	2080	2080	1560	1590	75	77	46-125	2	30
bis(2-Chloroethyl) ether	ug/kg	ND	2080	2080	1500	1530	72	74	34-125	2	30
bis(2-Chloroisopropyl) ether	ug/kg	ND	2080	2080	1490	1530	72	74	33-125	2	30
bis(2-Ethylhexyl)phthalate	ug/kg	ND	2080	2080	1930	2040	93	98	60-125	5	30
Butylbenzylphthalate	ug/kg	ND	2080	2080	1900	1940	92	94	55-125	2	30
Carbazole	ug/kg	ND	2080	2080	1800	1840	87	89	56-125	3	30
Di-n-butylphthalate	ug/kg	ND	2080	2080	1880	1920	91	92	58-125	2	30
Di-n-octylphthalate	ug/kg	ND	2080	2080	1860	1980	90	95	59-125	6	30
Dibenzofuran	ug/kg	ND	2080	2080	1760	1810	85	87	57-125	3	30
Diethylphthalate	ug/kg	ND	2080	2080	1790	1870	86	90	58-125	4	30
Dimethylphthalate	ug/kg	ND	2080	2080	1790	1860	86	90	59-125	4	30
Hexachloro-1,3-butadiene	ug/kg	ND	2080	2080	1490	1510	72	73	39-125	1	30
Hexachlorobenzene	ug/kg	ND	2080	2080	1760	1750	85	84	55-125	1	30
Hexachloroethane	ug/kg	ND	2080	2080	1440	1390	69	67	30-125	3	30
Isophorone	ug/kg	ND	2080	2080	1640	1670	79	81	49-125	2	30
N-Nitroso-di-n-propylamine	ug/kg	ND	2080	2080	1610	1610	78	78	30-140	0	30
N-Nitrosodimethylamine	ug/kg	ND	2080	2080	1460	1480	71	71	30-125	1	30
N-Nitrosodiphenylamine	ug/kg	ND	2080	2080	1860	1880	89	91	57-125	1	30
Nitrobenzene	ug/kg	ND	2080	2080	1510	1540	73	74	30-139	2	30
Pentachlorophenol	ug/kg	ND	2080	2080	1700	1630	82	79	30-148	4	30
Phenol	ug/kg	ND	2080	2080	1630	1620	78	78	48-125	0	30
2,4,6-Tribromophenol (S)	%.						100	102	40-125		
2-Fluorobiphenyl (S)	%.						83	81	51-125		
2-Fluorophenol (S)	%.						74	72	45-125		
Nitrobenzene-d5 (S)	%.						73	74	34-125		
p-Terphenyl-d14 (S)	%.						93	91	55-125		
Phenol-d6 (S)	%.						78	76	44-125		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

QC Batch: OEXT/28631 Analysis Method: EPA 8270D by SIM  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV  
 Associated Lab Samples: 10299905001, 10299905004, 10299905006

METHOD BLANK: 1923951 Matrix: Solid

Associated Lab Samples: 10299905001, 10299905004, 10299905006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	10.0	03/25/15 21:39	
2-Chloronaphthalene	ug/kg	ND	10.0	03/25/15 21:39	
2-Methylnaphthalene	ug/kg	ND	10.0	03/25/15 21:39	
Acenaphthene	ug/kg	ND	10.0	03/25/15 21:39	
Acenaphthylene	ug/kg	ND	10.0	03/25/15 21:39	
Anthracene	ug/kg	ND	10.0	03/25/15 21:39	
Benzo(a)anthracene	ug/kg	ND	10.0	03/25/15 21:39	
Benzo(a)pyrene	ug/kg	ND	10.0	03/25/15 21:39	
Benzo(b)fluoranthene	ug/kg	ND	10.0	03/25/15 21:39	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	03/25/15 21:39	
Benzo(k)fluoranthene	ug/kg	ND	10.0	03/25/15 21:39	
Chrysene	ug/kg	ND	10.0	03/25/15 21:39	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	03/25/15 21:39	
Fluoranthene	ug/kg	ND	10.0	03/25/15 21:39	
Fluorene	ug/kg	ND	10.0	03/25/15 21:39	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	03/25/15 21:39	
Naphthalene	ug/kg	ND	10.0	03/25/15 21:39	
Phenanthrene	ug/kg	ND	10.0	03/25/15 21:39	
Pyrene	ug/kg	ND	10.0	03/25/15 21:39	
2-Fluorobiphenyl (S)	%	69	55-125	03/25/15 21:39	
p-Terphenyl-d14 (S)	%	73	30-150	03/25/15 21:39	

LABORATORY CONTROL SAMPLE: 1923952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	33.3	25.5	76	45-125	
2-Chloronaphthalene	ug/kg	33.3	25.4	76	70-130	
2-Methylnaphthalene	ug/kg	33.3	25.9	78	50-125	
Acenaphthene	ug/kg	33.3	26.6	80	53-125	
Acenaphthylene	ug/kg	33.3	27.4	82	53-125	
Anthracene	ug/kg	33.3	33.1	99	61-125	
Benzo(a)anthracene	ug/kg	33.3	29.4	88	62-125	
Benzo(a)pyrene	ug/kg	33.3	30.6	92	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	30.7	92	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	32.3	97	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	29.4	88	61-125	
Chrysene	ug/kg	33.3	29.2	88	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	32.3	97	59-125	
Fluoranthene	ug/kg	33.3	30.5	91	64-125	
Fluorene	ug/kg	33.3	27.9	84	57-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

LABORATORY CONTROL SAMPLE: 1923952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	30.9	93	58-125	
Naphthalene	ug/kg	33.3	25.4	76	52-125	
Phenanthrene	ug/kg	33.3	27.7	83	60-125	
Pyrene	ug/kg	33.3	31.2	94	63-125	
2-Fluorobiphenyl (S)	%			64	55-125	
p-Terphenyl-d14 (S)	%			73	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1923953 1923954

Parameter	Units	10299827012		MSD		MSD		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
1-Methylnaphthalene	ug/kg	ND	36.4	36.5	29.6	28.6	81	78	30-125	3	30		
2-Chloronaphthalene	ug/kg	ND	36.4	36.5	29.4	28.3	81	77	30-129	4	30		
2-Methylnaphthalene	ug/kg	ND	36.4	36.5	29.9	28.6	82	78	41-125	4	30		
Acenaphthene	ug/kg	ND	36.4	36.5	30.9	29.3	85	80	39-125	5	30		
Acenaphthylene	ug/kg	ND	36.4	36.5	30.5	29.6	84	81	30-150	3	30		
Anthracene	ug/kg	ND	36.4	36.5	35.7	34.2	98	94	30-150	4	30		
Benzo(a)anthracene	ug/kg	ND	36.4	36.5	31.7	30.1	87	82	30-150	5	30		
Benzo(a)pyrene	ug/kg	ND	36.4	36.5	33.9	31.9	91	86	30-150	6	30		
Benzo(b)fluoranthene	ug/kg	ND	36.4	36.5	32.2	31.6	86	84	30-150	2	30		
Benzo(g,h,i)perylene	ug/kg	ND	36.4	36.5	35.3	33.4	97	91	30-150	6	30		
Benzo(k)fluoranthene	ug/kg	ND	36.4	36.5	31.4	30.8	86	84	30-150	2	30		
Chrysene	ug/kg	ND	36.4	36.5	31.0	29.6	84	80	30-150	5	30		
Dibenz(a,h)anthracene	ug/kg	ND	36.4	36.5	34.8	32.8	95	90	30-150	6	30		
Fluoranthene	ug/kg	ND	36.4	36.5	32.9	33.5	88	89	30-150	2	30		
Fluorene	ug/kg	ND	36.4	36.5	32.3	30.6	88	84	30-146	5	30		
Indeno(1,2,3-cd)pyrene	ug/kg	ND	36.4	36.5	33.9	32.0	93	87	30-150	6	30		
Naphthalene	ug/kg	ND	36.4	36.5	29.4	28.1	81	77	30-131	4	30		
Phenanthrene	ug/kg	ND	36.4	36.5	30.5	30.1	84	82	30-150	1	30		
Pyrene	ug/kg	ND	36.4	36.5	35.1	34.0	94	91	30-150	3	30		
2-Fluorobiphenyl (S)	%						77	75	55-125				
p-Terphenyl-d14 (S)	%						80	78	30-150				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

QC Batch: OEXT/28647 Analysis Method: NWTPH-Dx  
 QC Batch Method: EPA 3550 Analysis Description: NWTPH-Dx GCS  
 Associated Lab Samples: 10299905001, 10299905004, 10299905006

METHOD BLANK: 1924707 Matrix: Solid

Associated Lab Samples: 10299905001, 10299905004, 10299905006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range SG	mg/kg	ND	15.0	03/27/15 12:47	
Motor Oil Range SG	mg/kg	ND	10.0	03/27/15 12:47	
n-Triacontane (S)	%.	99	50-150	03/27/15 12:47	
o-Terphenyl (S)	%.	97	50-150	03/27/15 12:47	

LABORATORY CONTROL SAMPLE: 1924708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range SG	mg/kg	50	37.3	75	50-150	
Motor Oil Range SG	mg/kg	50	43.2	86	50-150	
n-Triacontane (S)	%.			87	50-150	
o-Terphenyl (S)	%.			83	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1924713 1924714

Parameter	Units	10299905001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result						
Diesel Fuel Range SG	mg/kg	ND	67.8	67.1	50.5	48.2	75	72	50-150	5	30	
Motor Oil Range SG	mg/kg	ND	67.8	67.1	61.6	62.7	82	85	50-150	2	30	
n-Triacontane (S)	%.						84	90	50-150			
o-Terphenyl (S)	%.						69	68	50-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## QUALIFIERS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10299905

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10299905001	DP-2a (1-2)	EPA 3550	OEXT/28647	NWTPH-Dx	GCSV/15343
10299905004	DP-2a (15-16)	EPA 3550	OEXT/28647	NWTPH-Dx	GCSV/15343
10299905006	Soil Drum 1	EPA 3550	OEXT/28647	NWTPH-Dx	GCSV/15343
10299905001	DP-2a (1-2)	ASTM D2974	MPRP/53113		
10299905004	DP-2a (15-16)	ASTM D2974	MPRP/53113		
10299905006	Soil Drum 1	ASTM D2974	MPRP/53113		
10299905001	DP-2a (1-2)	EPA 3550	OEXT/28575	EPA 8270D	MSSV/12038
10299905004	DP-2a (15-16)	EPA 3550	OEXT/28575	EPA 8270D	MSSV/12038
10299905006	Soil Drum 1	EPA 3550	OEXT/28575	EPA 8270D	MSSV/12038
10299905001	DP-2a (1-2)	EPA 3550	OEXT/28631	EPA 8270D by SIM	MSSV/12076
10299905004	DP-2a (15-16)	EPA 3550	OEXT/28631	EPA 8270D by SIM	MSSV/12076
10299905006	Soil Drum 1	EPA 3550	OEXT/28631	EPA 8270D by SIM	MSSV/12076

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



10299905

Page: 1 of 1  
1456684

**Section A**

Required Client Information:  
 Company: GeoEngineers  
 Address: 523 E Second Ave  
Spokane, WA 99202  
 Email To: jhoney@geoengineers.com  
 Phone: 509-363-3125 Fax: 509-363-3126  
 Requested Due Date/TAT:

**Section B**

Required Project Information:  
 Report To: John Honey  
 Copy To: Josh Lee  
jmlee@geoengineers.com  
 Purchase Order No.:  
 Project Name: Colville Post and Pole  
 Project Number: 0504-098-00

**Section C**

Invoice Information:  
 Attention:  
 Company Name:  
 Address:  
 Pace Quote Reference:  
 Pace Project Manager:  
 Pace Profile #:

**REGULATORY AGENCY**  
 NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER \_\_\_\_\_  
 Site Location: WA  
 STATE: WA


ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-2(1-2)		S	G	3/16/15	1520			3	X											001	
2	DP-2(6-7)					1530				X											002	
3	DP-2(10-11)					1540				X											003	
4	DP-2(15-16)					1600				X											004	
5	DP-2(16-17)					1610				X											005	
6	Soil Drum 1		V	C	V	1700			V	X											006	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Hold Samples not marked for analysis	Josh Lee / Geo	3/17/15	1600	mm (Pace)	3/18/15	9:30	4-5	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE				Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <u>Josh Lee</u>							
SIGNATURE of SAMPLER: <u>[Signature]</u>			DATE Signed (MM/DD/YY): <u>03/17/2015</u>				

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Sample Condition Upon Receipt	Client Name: <u>GeoEngineers</u>	Project #: _____	WO# : 10299905  10299905
Courier: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> Speedee <input type="checkbox"/> Other: _____			
Tracking Number: <u>8065 0581 8948</u>			

Custody Seal on Cooler/Box Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Optional: Proj. Due Date: _____ Proj. Name: _____
Packing Material: <input type="checkbox"/> Bubble Wrap <input checked="" type="checkbox"/> Bubble Bags <input type="checkbox"/> None <input type="checkbox"/> Other: _____		Temp Blank? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Thermom. Used: <input checked="" type="checkbox"/> B88A9130516413 <input type="checkbox"/> B88A912167504	<input type="checkbox"/> B88A9132521491	Type of Ice: <input checked="" type="checkbox"/> Wet <input type="checkbox"/> Blue <input type="checkbox"/> None <input type="checkbox"/> Samples on ice, cooling process has begun
Cooler Temp Read (°C): <u>4.5</u>	Cooler Temp Corrected (°C): <u>4.5</u>	Biological Tissue Frozen? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Temp should be above freezing to 6°C    Correction Factor: _____		Date and Initials of Person Examining Contents: <u>3/18/15</u>

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix: <u>SL</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Initial when completed: _____ Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):			

**CLIENT NOTIFICATION/RESOLUTION** Field Data Required?  Yes     No

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/Resolution: \_\_\_\_\_

---

**Project Manager Review:** OWD Date: 3-18-15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e out of hold, incorrect preservative, out of temp, incorrect containers)

June 25, 2015

John Haney  
GeoEngineers, Inc - WA  
523 East Second Ave.  
Spokane, WA 99202

RE: Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307129

Dear John Haney:

Enclosed are the analytical results for sample(s) received by the laboratory on May 20, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report was revised on 6/25/15 to change sample IDs at the client's request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carol Davy  
carol.davy@pacelabs.com  
Project Manager

Enclosures

cc: Joshua Lee, GeoEngineers  
Chelsea Voss, GeoEngineers



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## CERTIFICATIONS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

### Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alaska Certification #: UST-078

Alaska Certification #MN00064

Alabama Certification #40770

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

Colorado Certification #Pace

Connecticut Certification #: PH-0256

EPA Region 8 Certification #: 8TMS-L

Florida/NELAP Certification #: E87605

Guam Certification #:14-008r

Georgia Certification #: 959

Georgia EPD #: Pace

Idaho Certification #: MN00064

Hawaii Certification #MN00064

Illinois Certification #: 200011

Indiana Certification#C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky Dept of Envi. Protection - DW #90062

Kentucky Dept of Envi. Protection - WW #:90062

Louisiana DEQ Certification #: 3086

Louisiana DHH #: LA140001

Maine Certification #: 2013011

Maryland Certification #: 322

Michigan DEPH Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT0092

Nevada Certification #: MN\_00064

Nebraska Certification #: Pace

New Jersey Certification #: MN-002

New York Certification #: 11647

North Carolina Certification #: 530

North Carolina State Public Health #: 27700

North Dakota Certification #: R-036

Ohio EPA #: 4150

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Oregon Certification #: MN300001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Saipan (CNMI) #:MP0003

South Carolina #:74003001

Texas Certification #: T104704192

Tennessee Certification #: 02818

Utah Certification #: MN000642013-4

Virginia DGS Certification #: 251

Virginia/VELAP Certification #: Pace

Washington Certification #: C486

West Virginia Certification #: 382

West Virginia DHHR #:9952C

Wisconsin Certification #: 999407970

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## SAMPLE SUMMARY

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10307129001	DP-10 (12-12.5)	Solid	05/14/15 15:30	05/20/15 10:00
10307129002	DP-10 (12.5-13)	Solid	05/14/15 15:30	05/20/15 10:00
10307129003	DP-9 (12.5-13.5)	Solid	05/14/15 16:05	05/20/15 10:00
10307129004	DP-9 (13.5-14.5)	Solid	05/14/15 16:10	05/20/15 10:00
10307129005	DP-19 (24-24.5)	Solid	05/15/15 08:10	05/20/15 10:00
10307129006	DP-19 (24.5-25)	Solid	05/15/15 08:10	05/20/15 10:00
10307129007	DP-21 (13-14)	Solid	05/15/15 10:00	05/20/15 10:00
10307129008	DP-21 (14-15)	Solid	05/15/15 10:10	05/20/15 10:00
10307129009	DP-25 (12-12.5)	Solid	05/15/15 11:00	05/20/15 10:00
10307129010	DP-25 (12.5-13.5)	Solid	05/15/15 11:10	05/20/15 10:00
10307129011	DP-22 (20-20.5)	Solid	05/15/15 12:30	05/20/15 10:00
10307129012	DP-22 (24-25)	Solid	05/15/15 12:40	05/20/15 10:00
10307129013	DP-23 (16-16.5)	Solid	05/15/15 14:45	05/20/15 10:00
10307129014	DP-23 (20-20.5)	Solid	05/15/15 14:50	05/20/15 10:00
10307129015	DP-35	Solid	05/15/15 17:10	05/20/15 10:00
10307129016	DP-36	Solid	05/15/15 17:40	05/20/15 10:00
10307129017	CPPI Drum 1	Solid	05/15/15 18:00	05/20/15 10:00

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10307129001	DP-10 (12-12.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129002	DP-10 (12.5-13)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129003	DP-9 (12.5-13.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129004	DP-9 (13.5-14.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129005	DP-19 (24-24.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129006	DP-19 (24.5-25)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129007	DP-21 (13-14)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129008	DP-21 (14-15)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129009	DP-25 (12-12.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129010	DP-25 (12.5-13.5)	NWTPH-Dx	MT	4	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10307129011	DP-22 (20-20.5)	ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
10307129012	DP-22 (24-25)	EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307129013	DP-23 (16-16.5)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307129014	DP-23 (20-20.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
10307129015	DP-35	NWTPH-Gx	AEJ	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
10307129016	DP-36	NWTPH-Gx	AEJ	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
10307129017	CPPI Drum 1	NWTPH-Gx	AEJ	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS

**Client:** GeoEngineers

**Date:** June 25, 2015

**General Information:**

17 samples were analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

**Method:** NWTPH-Gx

**Description:** NWTPH-Gx GCV

**Client:** GeoEngineers

**Date:** June 25, 2015

**General Information:**

3 samples were analyzed for NWTPH-Gx. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with NWTPH-Gx with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** June 25, 2015

### General Information:

17 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

- CPPI Drum 1 (Lab ID: 10307129017)
- DP-19 (24-24.5) (Lab ID: 10307129005)
- DP-19 (24.5-25) (Lab ID: 10307129006)
- DP-21 (13-14) (Lab ID: 10307129007)
- DP-21 (14-15) (Lab ID: 10307129008)
- DP-22 (20-20.5) (Lab ID: 10307129011)
- DP-22 (24-25) (Lab ID: 10307129012)
- DP-23 (16-16.5) (Lab ID: 10307129013)
- DP-23 (20-20.5) (Lab ID: 10307129014)
- DP-25 (12-12.5) (Lab ID: 10307129009)
- DP-25 (12.5-13.5) (Lab ID: 10307129010)
- DP-35 (Lab ID: 10307129015)
- DP-36 (Lab ID: 10307129016)

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/29340

S0: Surrogate recovery outside laboratory control limits.

- DP-10 (12-12.5) (Lab ID: 10307129001)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
- DP-10 (12.5-13) (Lab ID: 10307129002)
  - 2-Fluorobiphenyl (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** June 25, 2015

QC Batch: OEXT/29340

S0: Surrogate recovery outside laboratory control limits.

- 2-Fluorophenol (S)
- DP-9 (13.5-14.5) (Lab ID: 10307129004)
- 2-Fluorobiphenyl (S)

QC Batch: OEXT/29353

S0: Surrogate recovery outside laboratory control limits.

- CPPI Drum 1 (Lab ID: 10307129017)
  - 2-Fluorobiphenyl (S)
- DP-19 (24-24.5) (Lab ID: 10307129005)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
  - Phenol-d6 (S)
- DP-19 (24.5-25) (Lab ID: 10307129006)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
  - Phenol-d6 (S)
- DP-21 (14-15) (Lab ID: 10307129008)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
  - Phenol-d6 (S)
- DP-22 (24-25) (Lab ID: 10307129012)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
- DP-23 (20-20.5) (Lab ID: 10307129014)
  - 2-Fluorobiphenyl (S)
- DP-25 (12.5-13.5) (Lab ID: 10307129010)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: OEXT/29353

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1979171)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** June 25, 2015

QC Batch: OEXT/29353

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- Hexachloroethane

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/29353

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10307221002

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1979172)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol
  - Hexachloroethane
- MSD (Lab ID: 1979173)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol
  - Hexachloroethane

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1979172)
  - 2,4-Dimethylphenol
  - 3,3'-Dichlorobenzidine
  - 4-Nitrophenol

### Additional Comments:

Analyte Comments:

QC Batch: OEXT/29340

1M: The associated compound was outside of 20% for the associated continuing calibration but within 40% of the true value.

- LCS (Lab ID: 1978101)
  - 2,4-Dinitrophenol
- MS (Lab ID: 1978102)
  - 2,4-Dinitrophenol
- MSD (Lab ID: 1978103)
  - 2,4-Dinitrophenol

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-10 (12-12.5) (Lab ID: 10307129001)
  - Nitrobenzene-d5 (S)
- DP-10 (12.5-13) (Lab ID: 10307129002)
  - Nitrobenzene-d5 (S)

QC Batch: OEXT/29353

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-19 (24-24.5) (Lab ID: 10307129005)
  - Nitrobenzene-d5 (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** June 25, 2015

Analyte Comments:

QC Batch: OEXT/29353

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-19 (24.5-25) (Lab ID: 10307129006)
  - Nitrobenzene-d5 (S)
- DP-21 (14-15) (Lab ID: 10307129008)
  - Nitrobenzene-d5 (S)
- DP-22 (24-25) (Lab ID: 10307129012)
  - Nitrobenzene-d5 (S)
- DP-25 (12.5-13.5) (Lab ID: 10307129010)
  - Nitrobenzene-d5 (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307129

---

**Method:** EPA 8270D by SIM  
**Description:** 8270D MSSV PAH by SIM  
**Client:** GeoEngineers  
**Date:** June 25, 2015

### General Information:

16 samples were analyzed for EPA 8270D by SIM. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

- DP-10 (12-12.5) (Lab ID: 10307129001)
- DP-10 (12.5-13) (Lab ID: 10307129002)
- DP-19 (24-24.5) (Lab ID: 10307129005)
- DP-19 (24.5-25) (Lab ID: 10307129006)
- DP-21 (13-14) (Lab ID: 10307129007)
- DP-21 (14-15) (Lab ID: 10307129008)
- DP-22 (20-20.5) (Lab ID: 10307129011)
- DP-22 (24-25) (Lab ID: 10307129012)
- DP-23 (16-16.5) (Lab ID: 10307129013)
- DP-23 (20-20.5) (Lab ID: 10307129014)
- DP-25 (12-12.5) (Lab ID: 10307129009)
- DP-25 (12.5-13.5) (Lab ID: 10307129010)
- DP-35 (Lab ID: 10307129015)
- DP-36 (Lab ID: 10307129016)
- DP-9 (12.5-13.5) (Lab ID: 10307129003)
- DP-9 (13.5-14.5) (Lab ID: 10307129004)

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/29339

S0: Surrogate recovery outside laboratory control limits.

- DP-9 (13.5-14.5) (Lab ID: 10307129004)
  - 2-Fluorobiphenyl (S)
- MS (Lab ID: 1978098)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** June 25, 2015

QC Batch: OEXT/29339

S0: Surrogate recovery outside laboratory control limits.

- 2-Fluorobiphenyl (S)
- MSD (Lab ID: 1978099)
- 2-Fluorobiphenyl (S)

QC Batch: OEXT/29359

S0: Surrogate recovery outside laboratory control limits.

- DP-19 (24-24.5) (Lab ID: 10307129005)
- 2-Fluorobiphenyl (S)

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: OEXT/29339

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1978097)
- 2-Chloronaphthalene

QC Batch: OEXT/29359

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1979369)
- 2-Chloronaphthalene

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/29339

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10306672011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1978098)
  - 2-Methylnaphthalene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Chrysene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Phenanthrene
  - Pyrene
- MSD (Lab ID: 1978099)
  - 1-Methylnaphthalene

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307129

---

**Method:** EPA 8270D by SIM  
**Description:** 8270D MSSV PAH by SIM  
**Client:** GeoEngineers  
**Date:** June 25, 2015

QC Batch: OEXT/29339

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10306672011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- 2-Methylnaphthalene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Benzo(g,h,i)perylene
- Chrysene
- Fluoranthene
- Indeno(1,2,3-cd)pyrene
- Naphthalene
- Phenanthrene
- Pyrene

QC Batch: OEXT/29359

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10306784002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1979370)
  - Acenaphthene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(k)fluoranthene
  - Chrysene
  - Fluoranthene
  - Fluorene
  - Phenanthrene
  - Pyrene
- MSD (Lab ID: 1979371)
  - Acenaphthene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Chrysene
  - Fluoranthene
  - Fluorene
  - Indeno(1,2,3-cd)pyrene
  - Phenanthrene
  - Pyrene

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** June 25, 2015

Analyte Comments:

QC Batch: OEXT/29339

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-9 (13.5-14.5) (Lab ID: 10307129004)
- 2-Fluorobiphenyl (S)

QC Batch: OEXT/29359

D4: Sample was diluted due to the presence of high levels of target analytes.

- MS (Lab ID: 1979370)
- 2-Fluorobiphenyl (S)
- MSD (Lab ID: 1979371)
- 2-Fluorobiphenyl (S)

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-19 (24-24.5) (Lab ID: 10307129005)
- 2-Fluorobiphenyl (S)

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-10 (12-12.5)**      **Lab ID: 10307129001**      Collected: 05/14/15 15:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	20.5	1.1	1	05/28/15 18:53	06/04/15 02:26	68334-30-5	
Motor Oil Range	ND	mg/kg	13.6	2.4	1	05/28/15 18:53	06/04/15 02:26		
<b>Surrogates</b>									
n-Triacontane (S)	93	%	50-150		1	05/28/15 18:53	06/04/15 02:26	638-68-6	
o-Terphenyl (S)	88	%	50-150		1	05/28/15 18:53	06/04/15 02:26	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>27.4</b>	%	0.10	0.10	1		06/03/15 16:35		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	455	48.3	1	05/28/15 18:51	05/29/15 17:35	101-55-3	
Butylbenzylphthalate	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	85-68-7	
Carbazole	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	59-50-7	
4-Chloroaniline	ND	ug/kg	455	69.7	1	05/28/15 18:51	05/29/15 17:35	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	455	88.8	1	05/28/15 18:51	05/29/15 17:35	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	455	31.7	1	05/28/15 18:51	05/29/15 17:35	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	455	105	1	05/28/15 18:51	05/29/15 17:35	108-60-1	
2-Chloronaphthalene	ND	ug/kg	455	71.2	1	05/28/15 18:51	05/29/15 17:35	91-58-7	
2-Chlorophenol	ND	ug/kg	455	106	1	05/28/15 18:51	05/29/15 17:35	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	455	52.3	1	05/28/15 18:51	05/29/15 17:35	7005-72-3	
Dibenzofuran	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	455	29.3	1	05/28/15 18:51	05/29/15 17:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	455	28.6	1	05/28/15 18:51	05/29/15 17:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	455	30.3	1	05/28/15 18:51	05/29/15 17:35	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	455	63.4	1	05/28/15 18:51	05/29/15 17:35	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	455	85.5	1	05/28/15 18:51	05/29/15 17:35	120-83-2	
Diethylphthalate	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	455	85.1	1	05/28/15 18:51	05/29/15 17:35	105-67-9	
Dimethylphthalate	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	131-11-3	
Di-n-butylphthalate	ND	ug/kg	455	63.1	1	05/28/15 18:51	05/29/15 17:35	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2340	90.4	1	05/28/15 18:51	05/29/15 17:35	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	455	38.8	1	05/28/15 18:51	05/29/15 17:35	606-20-2	
Di-n-octylphthalate	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	455	77.7	1	05/28/15 18:51	05/29/15 17:35	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	455	38.3	1	05/28/15 18:51	05/29/15 17:35	87-68-3	
Hexachlorobenzene	ND	ug/kg	455	59.8	1	05/28/15 18:51	05/29/15 17:35	118-74-1	
Hexachloroethane	ND	ug/kg	455	28.9	1	05/28/15 18:51	05/29/15 17:35	67-72-1	
Isophorone	ND	ug/kg	455	72.6	1	05/28/15 18:51	05/29/15 17:35	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	455	98.3	1	05/28/15 18:51	05/29/15 17:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	909	90.9	1	05/28/15 18:51	05/29/15 17:35		
2-Nitroaniline	ND	ug/kg	455	49.3	1	05/28/15 18:51	05/29/15 17:35	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-10 (12-12.5)**      **Lab ID: 10307129001**      Collected: 05/14/15 15:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	455	46.4	1	05/28/15 18:51	05/29/15 17:35	99-09-2	
4-Nitroaniline	ND	ug/kg	455	39.8	1	05/28/15 18:51	05/29/15 17:35	100-01-6	
Nitrobenzene	ND	ug/kg	455	91.9	1	05/28/15 18:51	05/29/15 17:35	98-95-3	
2-Nitrophenol	ND	ug/kg	455	77.7	1	05/28/15 18:51	05/29/15 17:35	88-75-5	
4-Nitrophenol	ND	ug/kg	455	47.7	1	05/28/15 18:51	05/29/15 17:35	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	455	61.8	1	05/28/15 18:51	05/29/15 17:35	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	455	227	1	05/28/15 18:51	05/29/15 17:35	86-30-6	
Pentachlorophenol	ND	ug/kg	923	227	1	05/28/15 18:51	05/29/15 17:35	87-86-5	
Phenol	ND	ug/kg	455	99.3	1	05/28/15 18:51	05/29/15 17:35	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	455	74.9	1	05/28/15 18:51	05/29/15 17:35	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	455	54.3	1	05/28/15 18:51	05/29/15 17:35	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	455	58.5	1	05/28/15 18:51	05/29/15 17:35	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	19	%	34-125		1	05/28/15 18:51	05/29/15 17:35	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	15	%	51-125		1	05/28/15 18:51	05/29/15 17:35	321-60-8	S0
p-Terphenyl-d14 (S)	69	%	55-125		1	05/28/15 18:51	05/29/15 17:35	1718-51-0	
Phenol-d6 (S)	45	%	44-125		1	05/28/15 18:51	05/29/15 17:35	13127-88-3	
2-Fluorophenol (S)	29	%	45-125		1	05/28/15 18:51	05/29/15 17:35	367-12-4	S0
2,4,6-Tribromophenol (S)	55	%	40-125		1	05/28/15 18:51	05/29/15 17:35	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	13.8	0.50	1	05/28/15 18:49	05/30/15 16:37	83-32-9	
Acenaphthylene	ND	ug/kg	13.8	0.47	1	05/28/15 18:49	05/30/15 16:37	208-96-8	
Anthracene	ND	ug/kg	13.8	0.42	1	05/28/15 18:49	05/30/15 16:37	120-12-7	
Benzo(a)anthracene	ND	ug/kg	13.8	0.25	1	05/28/15 18:49	05/30/15 16:37	56-55-3	
Benzo(a)pyrene	ND	ug/kg	13.8	0.27	1	05/28/15 18:49	05/30/15 16:37	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	13.8	0.48	1	05/28/15 18:49	05/30/15 16:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	13.8	0.49	1	05/28/15 18:49	05/30/15 16:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	13.8	0.55	1	05/28/15 18:49	05/30/15 16:37	207-08-9	
2-Chloronaphthalene	ND	ug/kg	13.8	0.39	1	05/28/15 18:49	05/30/15 16:37	91-58-7	L2
Chrysene	ND	ug/kg	13.8	0.34	1	05/28/15 18:49	05/30/15 16:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.8	0.59	1	05/28/15 18:49	05/30/15 16:37	53-70-3	
Fluoranthene	ND	ug/kg	13.8	0.30	1	05/28/15 18:49	05/30/15 16:37	206-44-0	
Fluorene	ND	ug/kg	13.8	0.43	1	05/28/15 18:49	05/30/15 16:37	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	13.8	0.53	1	05/28/15 18:49	05/30/15 16:37	193-39-5	
1-Methylnaphthalene	ND	ug/kg	13.8	0.52	1	05/28/15 18:49	05/30/15 16:37	90-12-0	
2-Methylnaphthalene	ND	ug/kg	13.8	0.56	1	05/28/15 18:49	05/30/15 16:37	91-57-6	
Naphthalene	ND	ug/kg	13.8	0.51	1	05/28/15 18:49	05/30/15 16:37	91-20-3	
Phenanthrene	ND	ug/kg	13.8	0.34	1	05/28/15 18:49	05/30/15 16:37	85-01-8	
Pyrene	ND	ug/kg	13.8	0.33	1	05/28/15 18:49	05/30/15 16:37	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	60	%	55-125		1	05/28/15 18:49	05/30/15 16:37	321-60-8	
p-Terphenyl-d14 (S)	82	%	30-150		1	05/28/15 18:49	05/30/15 16:37	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-10 (12.5-13)**      **Lab ID: 10307129002**      Collected: 05/14/15 15:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	23.5	1.3	1	05/28/15 18:53	06/04/15 03:12	68334-30-5	
Motor Oil Range	ND	mg/kg	15.7	2.8	1	05/28/15 18:53	06/04/15 03:12		
<b>Surrogates</b>									
n-Triacontane (S)	99	%	50-150		1	05/28/15 18:53	06/04/15 03:12	638-68-6	
o-Terphenyl (S)	81	%	50-150		1	05/28/15 18:53	06/04/15 03:12	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>36.2</b>	%	0.10	0.10	1		06/03/15 16:36		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	517	55.0	1	05/28/15 18:51	05/29/15 18:05	101-55-3	
Butylbenzylphthalate	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	85-68-7	
Carbazole	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	59-50-7	
4-Chloroaniline	ND	ug/kg	517	79.3	1	05/28/15 18:51	05/29/15 18:05	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	517	101	1	05/28/15 18:51	05/29/15 18:05	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	517	36.0	1	05/28/15 18:51	05/29/15 18:05	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	517	119	1	05/28/15 18:51	05/29/15 18:05	108-60-1	
2-Chloronaphthalene	ND	ug/kg	517	81.0	1	05/28/15 18:51	05/29/15 18:05	91-58-7	
2-Chlorophenol	ND	ug/kg	517	121	1	05/28/15 18:51	05/29/15 18:05	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	517	59.6	1	05/28/15 18:51	05/29/15 18:05	7005-72-3	
Dibenzofuran	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	517	33.4	1	05/28/15 18:51	05/29/15 18:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	517	32.6	1	05/28/15 18:51	05/29/15 18:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	517	34.5	1	05/28/15 18:51	05/29/15 18:05	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	517	72.1	1	05/28/15 18:51	05/29/15 18:05	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	517	97.3	1	05/28/15 18:51	05/29/15 18:05	120-83-2	
Diethylphthalate	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	517	96.9	1	05/28/15 18:51	05/29/15 18:05	105-67-9	
Dimethylphthalate	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	131-11-3	
Di-n-butylphthalate	ND	ug/kg	517	71.8	1	05/28/15 18:51	05/29/15 18:05	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2660	103	1	05/28/15 18:51	05/29/15 18:05	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	517	44.2	1	05/28/15 18:51	05/29/15 18:05	606-20-2	
Di-n-octylphthalate	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	517	88.4	1	05/28/15 18:51	05/29/15 18:05	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	517	43.6	1	05/28/15 18:51	05/29/15 18:05	87-68-3	
Hexachlorobenzene	ND	ug/kg	517	68.0	1	05/28/15 18:51	05/29/15 18:05	118-74-1	
Hexachloroethane	ND	ug/kg	517	32.9	1	05/28/15 18:51	05/29/15 18:05	67-72-1	
Isophorone	ND	ug/kg	517	82.6	1	05/28/15 18:51	05/29/15 18:05	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	517	112	1	05/28/15 18:51	05/29/15 18:05	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	1030	103	1	05/28/15 18:51	05/29/15 18:05		
2-Nitroaniline	ND	ug/kg	517	56.1	1	05/28/15 18:51	05/29/15 18:05	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-10 (12.5-13)**      **Lab ID: 10307129002**      Collected: 05/14/15 15:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	517	52.8	1	05/28/15 18:51	05/29/15 18:05	99-09-2	
4-Nitroaniline	ND	ug/kg	517	45.3	1	05/28/15 18:51	05/29/15 18:05	100-01-6	
Nitrobenzene	ND	ug/kg	517	105	1	05/28/15 18:51	05/29/15 18:05	98-95-3	
2-Nitrophenol	ND	ug/kg	517	88.4	1	05/28/15 18:51	05/29/15 18:05	88-75-5	
4-Nitrophenol	ND	ug/kg	517	54.2	1	05/28/15 18:51	05/29/15 18:05	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	517	70.4	1	05/28/15 18:51	05/29/15 18:05	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	517	259	1	05/28/15 18:51	05/29/15 18:05	86-30-6	
Pentachlorophenol	ND	ug/kg	1050	259	1	05/28/15 18:51	05/29/15 18:05	87-86-5	
Phenol	ND	ug/kg	517	113	1	05/28/15 18:51	05/29/15 18:05	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	517	85.3	1	05/28/15 18:51	05/29/15 18:05	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	517	61.7	1	05/28/15 18:51	05/29/15 18:05	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	517	66.6	1	05/28/15 18:51	05/29/15 18:05	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	37	%	34-125		1	05/28/15 18:51	05/29/15 18:05	4165-60-0	P2
2-Fluorobiphenyl (S)	35	%	51-125		1	05/28/15 18:51	05/29/15 18:05	321-60-8	S0
p-Terphenyl-d14 (S)	72	%	55-125		1	05/28/15 18:51	05/29/15 18:05	1718-51-0	
Phenol-d6 (S)	49	%	44-125		1	05/28/15 18:51	05/29/15 18:05	13127-88-3	
2-Fluorophenol (S)	43	%	45-125		1	05/28/15 18:51	05/29/15 18:05	367-12-4	S0
2,4,6-Tribromophenol (S)	63	%	40-125		1	05/28/15 18:51	05/29/15 18:05	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	15.7	0.56	1	05/28/15 18:49	06/01/15 09:32	83-32-9	
Acenaphthylene	ND	ug/kg	15.7	0.53	1	05/28/15 18:49	06/01/15 09:32	208-96-8	
Anthracene	ND	ug/kg	15.7	0.48	1	05/28/15 18:49	06/01/15 09:32	120-12-7	
Benzo(a)anthracene	ND	ug/kg	15.7	0.29	1	05/28/15 18:49	06/01/15 09:32	56-55-3	
Benzo(a)pyrene	ND	ug/kg	15.7	0.31	1	05/28/15 18:49	06/01/15 09:32	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	15.7	0.55	1	05/28/15 18:49	06/01/15 09:32	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	15.7	0.55	1	05/28/15 18:49	06/01/15 09:32	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	15.7	0.63	1	05/28/15 18:49	06/01/15 09:32	207-08-9	
2-Chloronaphthalene	ND	ug/kg	15.7	0.44	1	05/28/15 18:49	06/01/15 09:32	91-58-7	L2
Chrysene	ND	ug/kg	15.7	0.39	1	05/28/15 18:49	06/01/15 09:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	15.7	0.67	1	05/28/15 18:49	06/01/15 09:32	53-70-3	
Fluoranthene	ND	ug/kg	15.7	0.34	1	05/28/15 18:49	06/01/15 09:32	206-44-0	
Fluorene	ND	ug/kg	15.7	0.48	1	05/28/15 18:49	06/01/15 09:32	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	15.7	0.60	1	05/28/15 18:49	06/01/15 09:32	193-39-5	
1-Methylnaphthalene	ND	ug/kg	15.7	0.59	1	05/28/15 18:49	06/01/15 09:32	90-12-0	
2-Methylnaphthalene	ND	ug/kg	15.7	0.64	1	05/28/15 18:49	06/01/15 09:32	91-57-6	
Naphthalene	ND	ug/kg	15.7	0.58	1	05/28/15 18:49	06/01/15 09:32	91-20-3	
Phenanthrene	ND	ug/kg	15.7	0.39	1	05/28/15 18:49	06/01/15 09:32	85-01-8	
Pyrene	ND	ug/kg	15.7	0.38	1	05/28/15 18:49	06/01/15 09:32	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	56	%	55-125		1	05/28/15 18:49	06/01/15 09:32	321-60-8	
p-Terphenyl-d14 (S)	85	%	30-150		1	05/28/15 18:49	06/01/15 09:32	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-9 (12.5-13.5)**      **Lab ID: 10307129003**      Collected: 05/14/15 16:05      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.0	0.87	1	05/28/15 18:53	06/04/15 03:35	68334-30-5	
Motor Oil Range	ND	mg/kg	10.7	1.9	1	05/28/15 18:53	06/04/15 03:35		
<b>Surrogates</b>									
n-Triacontane (S)	101	%	50-150		1	05/28/15 18:53	06/04/15 03:35	638-68-6	
o-Terphenyl (S)	91	%	50-150		1	05/28/15 18:53	06/04/15 03:35	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>6.4</b>	%	0.10	0.10	1		06/03/15 16:36		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	353	37.5	1	05/28/15 18:51	05/29/15 18:34	101-55-3	
Butylbenzylphthalate	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	85-68-7	
Carbazole	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	59-50-7	
4-Chloroaniline	ND	ug/kg	353	54.1	1	05/28/15 18:51	05/29/15 18:34	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	353	68.9	1	05/28/15 18:51	05/29/15 18:34	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	353	24.6	1	05/28/15 18:51	05/29/15 18:34	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	353	81.4	1	05/28/15 18:51	05/29/15 18:34	108-60-1	
2-Chloronaphthalene	ND	ug/kg	353	55.3	1	05/28/15 18:51	05/29/15 18:34	91-58-7	
2-Chlorophenol	ND	ug/kg	353	82.3	1	05/28/15 18:51	05/29/15 18:34	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	353	40.6	1	05/28/15 18:51	05/29/15 18:34	7005-72-3	
Dibenzofuran	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	353	22.8	1	05/28/15 18:51	05/29/15 18:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	353	22.2	1	05/28/15 18:51	05/29/15 18:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	353	23.5	1	05/28/15 18:51	05/29/15 18:34	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	353	49.2	1	05/28/15 18:51	05/29/15 18:34	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	353	66.4	1	05/28/15 18:51	05/29/15 18:34	120-83-2	
Diethylphthalate	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	353	66.0	1	05/28/15 18:51	05/29/15 18:34	105-67-9	
Dimethylphthalate	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	131-11-3	
Di-n-butylphthalate	ND	ug/kg	353	48.9	1	05/28/15 18:51	05/29/15 18:34	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1820	70.1	1	05/28/15 18:51	05/29/15 18:34	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	353	30.1	1	05/28/15 18:51	05/29/15 18:34	606-20-2	
Di-n-octylphthalate	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	353	60.3	1	05/28/15 18:51	05/29/15 18:34	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	353	29.7	1	05/28/15 18:51	05/29/15 18:34	87-68-3	
Hexachlorobenzene	ND	ug/kg	353	46.4	1	05/28/15 18:51	05/29/15 18:34	118-74-1	
Hexachloroethane	ND	ug/kg	353	22.4	1	05/28/15 18:51	05/29/15 18:34	67-72-1	
Isophorone	ND	ug/kg	353	56.3	1	05/28/15 18:51	05/29/15 18:34	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	353	76.3	1	05/28/15 18:51	05/29/15 18:34	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	705	70.5	1	05/28/15 18:51	05/29/15 18:34		
2-Nitroaniline	ND	ug/kg	353	38.3	1	05/28/15 18:51	05/29/15 18:34	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-9 (12.5-13.5)**      **Lab ID: 10307129003**      Collected: 05/14/15 16:05      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	353	36.0	1	05/28/15 18:51	05/29/15 18:34	99-09-2	
4-Nitroaniline	ND	ug/kg	353	30.9	1	05/28/15 18:51	05/29/15 18:34	100-01-6	
Nitrobenzene	ND	ug/kg	353	71.3	1	05/28/15 18:51	05/29/15 18:34	98-95-3	
2-Nitrophenol	ND	ug/kg	353	60.3	1	05/28/15 18:51	05/29/15 18:34	88-75-5	
4-Nitrophenol	ND	ug/kg	353	37.0	1	05/28/15 18:51	05/29/15 18:34	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	353	48.0	1	05/28/15 18:51	05/29/15 18:34	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	353	176	1	05/28/15 18:51	05/29/15 18:34	86-30-6	
Pentachlorophenol	ND	ug/kg	716	176	1	05/28/15 18:51	05/29/15 18:34	87-86-5	
Phenol	ND	ug/kg	353	77.1	1	05/28/15 18:51	05/29/15 18:34	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	353	58.1	1	05/28/15 18:51	05/29/15 18:34	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	353	42.1	1	05/28/15 18:51	05/29/15 18:34	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	353	45.4	1	05/28/15 18:51	05/29/15 18:34	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	47	%	34-125		1	05/28/15 18:51	05/29/15 18:34	4165-60-0	
2-Fluorobiphenyl (S)	61	%	51-125		1	05/28/15 18:51	05/29/15 18:34	321-60-8	
p-Terphenyl-d14 (S)	80	%	55-125		1	05/28/15 18:51	05/29/15 18:34	1718-51-0	
Phenol-d6 (S)	58	%	44-125		1	05/28/15 18:51	05/29/15 18:34	13127-88-3	
2-Fluorophenol (S)	52	%	45-125		1	05/28/15 18:51	05/29/15 18:34	367-12-4	
2,4,6-Tribromophenol (S)	70	%	40-125		1	05/28/15 18:51	05/29/15 18:34	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	10.7	0.38	1	05/28/15 18:49	05/30/15 17:20	83-32-9	
Acenaphthylene	ND	ug/kg	10.7	0.36	1	05/28/15 18:49	05/30/15 17:20	208-96-8	
Anthracene	ND	ug/kg	10.7	0.33	1	05/28/15 18:49	05/30/15 17:20	120-12-7	
Benzo(a)anthracene	ND	ug/kg	10.7	0.20	1	05/28/15 18:49	05/30/15 17:20	56-55-3	
Benzo(a)pyrene	ND	ug/kg	10.7	0.21	1	05/28/15 18:49	05/30/15 17:20	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	10.7	0.37	1	05/28/15 18:49	05/30/15 17:20	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	10.7	0.38	1	05/28/15 18:49	05/30/15 17:20	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	10.7	0.43	1	05/28/15 18:49	05/30/15 17:20	207-08-9	
2-Chloronaphthalene	ND	ug/kg	10.7	0.30	1	05/28/15 18:49	05/30/15 17:20	91-58-7	L2
Chrysene	ND	ug/kg	10.7	0.26	1	05/28/15 18:49	05/30/15 17:20	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	10.7	0.46	1	05/28/15 18:49	05/30/15 17:20	53-70-3	
Fluoranthene	ND	ug/kg	10.7	0.23	1	05/28/15 18:49	05/30/15 17:20	206-44-0	
Fluorene	ND	ug/kg	10.7	0.33	1	05/28/15 18:49	05/30/15 17:20	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	10.7	0.41	1	05/28/15 18:49	05/30/15 17:20	193-39-5	
1-Methylnaphthalene	ND	ug/kg	10.7	0.40	1	05/28/15 18:49	05/30/15 17:20	90-12-0	
2-Methylnaphthalene	ND	ug/kg	10.7	0.44	1	05/28/15 18:49	05/30/15 17:20	91-57-6	
Naphthalene	ND	ug/kg	10.7	0.40	1	05/28/15 18:49	05/30/15 17:20	91-20-3	
Phenanthrene	ND	ug/kg	10.7	0.27	1	05/28/15 18:49	05/30/15 17:20	85-01-8	
Pyrene	ND	ug/kg	10.7	0.26	1	05/28/15 18:49	05/30/15 17:20	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	63	%	55-125		1	05/28/15 18:49	05/30/15 17:20	321-60-8	
p-Terphenyl-d14 (S)	92	%	30-150		1	05/28/15 18:49	05/30/15 17:20	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-9 (13.5-14.5)**      **Lab ID: 10307129004**      Collected: 05/14/15 16:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	20.1	1.1	1	05/28/15 18:53	06/04/15 03:57	68334-30-5	
Motor Oil Range	ND	mg/kg	13.4	2.4	1	05/28/15 18:53	06/04/15 03:57		
<b>Surrogates</b>									
n-Triacontane (S)	96	%	50-150		1	05/28/15 18:53	06/04/15 03:57	638-68-6	
o-Terphenyl (S)	78	%	50-150		1	05/28/15 18:53	06/04/15 03:57	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>25.6</b>	%	0.10	0.10	1		06/03/15 16:36		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	442	47.0	1	05/28/15 18:51	05/29/15 19:03	101-55-3	
Butylbenzylphthalate	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	85-68-7	
Carbazole	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	59-50-7	
4-Chloroaniline	ND	ug/kg	442	67.7	1	05/28/15 18:51	05/29/15 19:03	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	442	86.3	1	05/28/15 18:51	05/29/15 19:03	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	442	30.8	1	05/28/15 18:51	05/29/15 19:03	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	442	102	1	05/28/15 18:51	05/29/15 19:03	108-60-1	
2-Chloronaphthalene	ND	ug/kg	442	69.2	1	05/28/15 18:51	05/29/15 19:03	91-58-7	
2-Chlorophenol	ND	ug/kg	442	103	1	05/28/15 18:51	05/29/15 19:03	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	442	50.9	1	05/28/15 18:51	05/29/15 19:03	7005-72-3	
Dibenzofuran	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	442	28.5	1	05/28/15 18:51	05/29/15 19:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	442	27.8	1	05/28/15 18:51	05/29/15 19:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	442	29.5	1	05/28/15 18:51	05/29/15 19:03	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	442	61.6	1	05/28/15 18:51	05/29/15 19:03	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	442	83.1	1	05/28/15 18:51	05/29/15 19:03	120-83-2	
Diethylphthalate	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	442	82.7	1	05/28/15 18:51	05/29/15 19:03	105-67-9	
Dimethylphthalate	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	131-11-3	
Di-n-butylphthalate	ND	ug/kg	442	61.3	1	05/28/15 18:51	05/29/15 19:03	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2280	87.8	1	05/28/15 18:51	05/29/15 19:03	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	442	37.8	1	05/28/15 18:51	05/29/15 19:03	606-20-2	
Di-n-octylphthalate	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	442	75.5	1	05/28/15 18:51	05/29/15 19:03	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	442	37.2	1	05/28/15 18:51	05/29/15 19:03	87-68-3	
Hexachlorobenzene	ND	ug/kg	442	58.1	1	05/28/15 18:51	05/29/15 19:03	118-74-1	
Hexachloroethane	ND	ug/kg	442	28.1	1	05/28/15 18:51	05/29/15 19:03	67-72-1	
Isophorone	ND	ug/kg	442	70.6	1	05/28/15 18:51	05/29/15 19:03	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	442	95.6	1	05/28/15 18:51	05/29/15 19:03	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	884	88.4	1	05/28/15 18:51	05/29/15 19:03		
2-Nitroaniline	ND	ug/kg	442	47.9	1	05/28/15 18:51	05/29/15 19:03	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-9 (13.5-14.5)**      **Lab ID: 10307129004**      Collected: 05/14/15 16:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	442	45.1	1	05/28/15 18:51	05/29/15 19:03	99-09-2	
4-Nitroaniline	ND	ug/kg	442	38.7	1	05/28/15 18:51	05/29/15 19:03	100-01-6	
Nitrobenzene	ND	ug/kg	442	89.3	1	05/28/15 18:51	05/29/15 19:03	98-95-3	
2-Nitrophenol	ND	ug/kg	442	75.5	1	05/28/15 18:51	05/29/15 19:03	88-75-5	
4-Nitrophenol	ND	ug/kg	442	46.3	1	05/28/15 18:51	05/29/15 19:03	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	442	60.1	1	05/28/15 18:51	05/29/15 19:03	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	442	221	1	05/28/15 18:51	05/29/15 19:03	86-30-6	
Pentachlorophenol	ND	ug/kg	897	221	1	05/28/15 18:51	05/29/15 19:03	87-86-5	
Phenol	ND	ug/kg	442	96.5	1	05/28/15 18:51	05/29/15 19:03	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	442	72.8	1	05/28/15 18:51	05/29/15 19:03	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	442	52.7	1	05/28/15 18:51	05/29/15 19:03	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	442	56.9	1	05/28/15 18:51	05/29/15 19:03	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	41	%	34-125		1	05/28/15 18:51	05/29/15 19:03	4165-60-0	
2-Fluorobiphenyl (S)	48	%	51-125		1	05/28/15 18:51	05/29/15 19:03	321-60-8	S0
p-Terphenyl-d14 (S)	72	%	55-125		1	05/28/15 18:51	05/29/15 19:03	1718-51-0	
Phenol-d6 (S)	56	%	44-125		1	05/28/15 18:51	05/29/15 19:03	13127-88-3	
2-Fluorophenol (S)	47	%	45-125		1	05/28/15 18:51	05/29/15 19:03	367-12-4	
2,4,6-Tribromophenol (S)	61	%	40-125		1	05/28/15 18:51	05/29/15 19:03	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	13.4	0.48	1	05/28/15 18:49	05/30/15 17:42	83-32-9	
Acenaphthylene	ND	ug/kg	13.4	0.46	1	05/28/15 18:49	05/30/15 17:42	208-96-8	
Anthracene	ND	ug/kg	13.4	0.41	1	05/28/15 18:49	05/30/15 17:42	120-12-7	
Benzo(a)anthracene	ND	ug/kg	13.4	0.25	1	05/28/15 18:49	05/30/15 17:42	56-55-3	
Benzo(a)pyrene	ND	ug/kg	13.4	0.26	1	05/28/15 18:49	05/30/15 17:42	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	13.4	0.47	1	05/28/15 18:49	05/30/15 17:42	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	13.4	0.48	1	05/28/15 18:49	05/30/15 17:42	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	13.4	0.54	1	05/28/15 18:49	05/30/15 17:42	207-08-9	
2-Chloronaphthalene	ND	ug/kg	13.4	0.38	1	05/28/15 18:49	05/30/15 17:42	91-58-7	L2
Chrysene	ND	ug/kg	13.4	0.33	1	05/28/15 18:49	05/30/15 17:42	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.4	0.58	1	05/28/15 18:49	05/30/15 17:42	53-70-3	
Fluoranthene	ND	ug/kg	13.4	0.29	1	05/28/15 18:49	05/30/15 17:42	206-44-0	
Fluorene	ND	ug/kg	13.4	0.42	1	05/28/15 18:49	05/30/15 17:42	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	13.4	0.52	1	05/28/15 18:49	05/30/15 17:42	193-39-5	
1-Methylnaphthalene	ND	ug/kg	13.4	0.50	1	05/28/15 18:49	05/30/15 17:42	90-12-0	
2-Methylnaphthalene	ND	ug/kg	13.4	0.55	1	05/28/15 18:49	05/30/15 17:42	91-57-6	
Naphthalene	ND	ug/kg	13.4	0.50	1	05/28/15 18:49	05/30/15 17:42	91-20-3	
Phenanthrene	ND	ug/kg	13.4	0.33	1	05/28/15 18:49	05/30/15 17:42	85-01-8	
Pyrene	ND	ug/kg	13.4	0.32	1	05/28/15 18:49	05/30/15 17:42	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	51	%	55-125		1	05/28/15 18:49	05/30/15 17:42	321-60-8	P2,S0
p-Terphenyl-d14 (S)	77	%	30-150		1	05/28/15 18:49	05/30/15 17:42	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-19 (24-24.5)**      **Lab ID: 10307129005**      Collected: 05/15/15 08:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.9	0.91	1	05/29/15 18:22	06/02/15 19:46	68334-30-5	
Motor Oil Range	ND	mg/kg	11.3	2.0	1	05/29/15 18:22	06/02/15 19:46		
<b>Surrogates</b>									
n-Triacontane (S)	107	%	50-150		1	05/29/15 18:22	06/02/15 19:46	638-68-6	
o-Terphenyl (S)	96	%	50-150		1	05/29/15 18:22	06/02/15 19:46	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>12.3</b>	%	0.10	0.10	1		06/03/15 16:36		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	376	40.0	1	05/29/15 16:05	06/02/15 19:04	101-55-3	
Butylbenzylphthalate	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	85-68-7	
Carbazole	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	59-50-7	
4-Chloroaniline	ND	ug/kg	376	57.7	1	05/29/15 16:05	06/02/15 19:04	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	376	73.6	1	05/29/15 16:05	06/02/15 19:04	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	376	26.2	1	05/29/15 16:05	06/02/15 19:04	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	376	86.9	1	05/29/15 16:05	06/02/15 19:04	108-60-1	
2-Chloronaphthalene	ND	ug/kg	376	59.0	1	05/29/15 16:05	06/02/15 19:04	91-58-7	
2-Chlorophenol	ND	ug/kg	376	87.8	1	05/29/15 16:05	06/02/15 19:04	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	376	43.4	1	05/29/15 16:05	06/02/15 19:04	7005-72-3	
Dibenzofuran	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	376	24.3	1	05/29/15 16:05	06/02/15 19:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	376	23.7	1	05/29/15 16:05	06/02/15 19:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	376	25.1	1	05/29/15 16:05	06/02/15 19:04	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	376	52.5	1	05/29/15 16:05	06/02/15 19:04	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	376	70.8	1	05/29/15 16:05	06/02/15 19:04	120-83-2	
Diethylphthalate	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	376	70.5	1	05/29/15 16:05	06/02/15 19:04	105-67-9	
Dimethylphthalate	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	131-11-3	
Di-n-butylphthalate	ND	ug/kg	376	52.3	1	05/29/15 16:05	06/02/15 19:04	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1940	74.8	1	05/29/15 16:05	06/02/15 19:04	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	376	32.2	1	05/29/15 16:05	06/02/15 19:04	606-20-2	
Di-n-octylphthalate	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	376	64.3	1	05/29/15 16:05	06/02/15 19:04	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	376	31.7	1	05/29/15 16:05	06/02/15 19:04	87-68-3	
Hexachlorobenzene	ND	ug/kg	376	49.5	1	05/29/15 16:05	06/02/15 19:04	118-74-1	
Hexachloroethane	ND	ug/kg	376	24.0	1	05/29/15 16:05	06/02/15 19:04	67-72-1	L2
Isophorone	ND	ug/kg	376	60.1	1	05/29/15 16:05	06/02/15 19:04	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	376	81.5	1	05/29/15 16:05	06/02/15 19:04	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	753	75.3	1	05/29/15 16:05	06/02/15 19:04		
2-Nitroaniline	ND	ug/kg	376	40.8	1	05/29/15 16:05	06/02/15 19:04	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-19 (24-24.5)**      **Lab ID: 10307129005**      Collected: 05/15/15 08:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	376	38.4	1	05/29/15 16:05	06/02/15 19:04	99-09-2	
4-Nitroaniline	ND	ug/kg	376	33.0	1	05/29/15 16:05	06/02/15 19:04	100-01-6	
Nitrobenzene	ND	ug/kg	376	76.1	1	05/29/15 16:05	06/02/15 19:04	98-95-3	
2-Nitrophenol	ND	ug/kg	376	64.3	1	05/29/15 16:05	06/02/15 19:04	88-75-5	
4-Nitrophenol	ND	ug/kg	376	39.5	1	05/29/15 16:05	06/02/15 19:04	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	376	51.2	1	05/29/15 16:05	06/02/15 19:04	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	376	188	1	05/29/15 16:05	06/02/15 19:04	86-30-6	
Pentachlorophenol	ND	ug/kg	764	188	1	05/29/15 16:05	06/02/15 19:04	87-86-5	
Phenol	ND	ug/kg	376	82.3	1	05/29/15 16:05	06/02/15 19:04	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	376	62.1	1	05/29/15 16:05	06/02/15 19:04	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	376	45.0	1	05/29/15 16:05	06/02/15 19:04	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	376	48.5	1	05/29/15 16:05	06/02/15 19:04	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	11	%	34-125		1	05/29/15 16:05	06/02/15 19:04	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	12	%	51-125		1	05/29/15 16:05	06/02/15 19:04	321-60-8	S0
p-Terphenyl-d14 (S)	66	%	55-125		1	05/29/15 16:05	06/02/15 19:04	1718-51-0	
Phenol-d6 (S)	36	%	44-125		1	05/29/15 16:05	06/02/15 19:04	13127-88-3	S0
2-Fluorophenol (S)	21	%	45-125		1	05/29/15 16:05	06/02/15 19:04	367-12-4	S0
2,4,6-Tribromophenol (S)	54	%	40-125		1	05/29/15 16:05	06/02/15 19:04	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.4	0.41	1	05/29/15 18:58	05/31/15 17:30	83-32-9	
Acenaphthylene	ND	ug/kg	11.4	0.39	1	05/29/15 18:58	05/31/15 17:30	208-96-8	
Anthracene	ND	ug/kg	11.4	0.35	1	05/29/15 18:58	05/31/15 17:30	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.4	0.21	1	05/29/15 18:58	05/31/15 17:30	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.4	0.22	1	05/29/15 18:58	05/31/15 17:30	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.4	0.40	1	05/29/15 18:58	05/31/15 17:30	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.4	0.40	1	05/29/15 18:58	05/31/15 17:30	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.4	0.46	1	05/29/15 18:58	05/31/15 17:30	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.4	0.32	1	05/29/15 18:58	05/31/15 17:30	91-58-7	L2
Chrysene	ND	ug/kg	11.4	0.28	1	05/29/15 18:58	05/31/15 17:30	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.4	0.49	1	05/29/15 18:58	05/31/15 17:30	53-70-3	
Fluoranthene	ND	ug/kg	11.4	0.25	1	05/29/15 18:58	05/31/15 17:30	206-44-0	
Fluorene	ND	ug/kg	11.4	0.35	1	05/29/15 18:58	05/31/15 17:30	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.4	0.44	1	05/29/15 18:58	05/31/15 17:30	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.4	0.43	1	05/29/15 18:58	05/31/15 17:30	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.4	0.47	1	05/29/15 18:58	05/31/15 17:30	91-57-6	
Naphthalene	ND	ug/kg	11.4	0.42	1	05/29/15 18:58	05/31/15 17:30	91-20-3	
Phenanthrene	ND	ug/kg	11.4	0.28	1	05/29/15 18:58	05/31/15 17:30	85-01-8	
Pyrene	ND	ug/kg	11.4	0.27	1	05/29/15 18:58	05/31/15 17:30	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	47	%	55-125		1	05/29/15 18:58	05/31/15 17:30	321-60-8	P2,S0
p-Terphenyl-d14 (S)	74	%	30-150		1	05/29/15 18:58	05/31/15 17:30	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-19 (24.5-25)**      **Lab ID: 10307129006**      Collected: 05/15/15 08:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.9	1.2	1	05/29/15 18:22	06/02/15 20:56	68334-30-5	
Motor Oil Range	ND	mg/kg	14.6	2.6	1	05/29/15 18:22	06/02/15 20:56		
<b>Surrogates</b>									
n-Triacontane (S)	110	%	50-150		1	05/29/15 18:22	06/02/15 20:56	638-68-6	
o-Terphenyl (S)	84	%	50-150		1	05/29/15 18:22	06/02/15 20:56	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>32.1</b>	%	0.10	0.10	1		06/03/15 16:37		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	484	51.5	1	05/29/15 16:05	06/02/15 19:34	101-55-3	
Butylbenzylphthalate	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	85-68-7	
Carbazole	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	59-50-7	
4-Chloroaniline	ND	ug/kg	484	74.3	1	05/29/15 16:05	06/02/15 19:34	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	484	94.7	1	05/29/15 16:05	06/02/15 19:34	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	484	33.8	1	05/29/15 16:05	06/02/15 19:34	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	484	112	1	05/29/15 16:05	06/02/15 19:34	108-60-1	
2-Chloronaphthalene	ND	ug/kg	484	75.9	1	05/29/15 16:05	06/02/15 19:34	91-58-7	
2-Chlorophenol	ND	ug/kg	484	113	1	05/29/15 16:05	06/02/15 19:34	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	484	55.8	1	05/29/15 16:05	06/02/15 19:34	7005-72-3	
Dibenzofuran	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	484	31.3	1	05/29/15 16:05	06/02/15 19:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	484	30.5	1	05/29/15 16:05	06/02/15 19:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	484	32.3	1	05/29/15 16:05	06/02/15 19:34	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	484	67.5	1	05/29/15 16:05	06/02/15 19:34	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	484	91.2	1	05/29/15 16:05	06/02/15 19:34	120-83-2	
Diethylphthalate	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	484	90.7	1	05/29/15 16:05	06/02/15 19:34	105-67-9	
Dimethylphthalate	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	131-11-3	
Di-n-butylphthalate	ND	ug/kg	484	67.2	1	05/29/15 16:05	06/02/15 19:34	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2500	96.3	1	05/29/15 16:05	06/02/15 19:34	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	484	41.4	1	05/29/15 16:05	06/02/15 19:34	606-20-2	
Di-n-octylphthalate	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	484	82.8	1	05/29/15 16:05	06/02/15 19:34	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	484	40.8	1	05/29/15 16:05	06/02/15 19:34	87-68-3	
Hexachlorobenzene	ND	ug/kg	484	63.7	1	05/29/15 16:05	06/02/15 19:34	118-74-1	
Hexachloroethane	ND	ug/kg	484	30.8	1	05/29/15 16:05	06/02/15 19:34	67-72-1	L2
Isophorone	ND	ug/kg	484	77.4	1	05/29/15 16:05	06/02/15 19:34	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	484	105	1	05/29/15 16:05	06/02/15 19:34	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	969	96.9	1	05/29/15 16:05	06/02/15 19:34		
2-Nitroaniline	ND	ug/kg	484	52.5	1	05/29/15 16:05	06/02/15 19:34	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-19 (24.5-25)**      **Lab ID: 10307129006**      Collected: 05/15/15 08:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	484	49.5	1	05/29/15 16:05	06/02/15 19:34	99-09-2	
4-Nitroaniline	ND	ug/kg	484	42.4	1	05/29/15 16:05	06/02/15 19:34	100-01-6	
Nitrobenzene	ND	ug/kg	484	97.9	1	05/29/15 16:05	06/02/15 19:34	98-95-3	
2-Nitrophenol	ND	ug/kg	484	82.8	1	05/29/15 16:05	06/02/15 19:34	88-75-5	
4-Nitrophenol	ND	ug/kg	484	50.8	1	05/29/15 16:05	06/02/15 19:34	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	484	65.9	1	05/29/15 16:05	06/02/15 19:34	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	484	242	1	05/29/15 16:05	06/02/15 19:34	86-30-6	
Pentachlorophenol	ND	ug/kg	983	242	1	05/29/15 16:05	06/02/15 19:34	87-86-5	
Phenol	ND	ug/kg	484	106	1	05/29/15 16:05	06/02/15 19:34	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	484	79.9	1	05/29/15 16:05	06/02/15 19:34	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	484	57.8	1	05/29/15 16:05	06/02/15 19:34	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	484	62.4	1	05/29/15 16:05	06/02/15 19:34	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	26	%	34-125		1	05/29/15 16:05	06/02/15 19:34	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	28	%	51-125		1	05/29/15 16:05	06/02/15 19:34	321-60-8	S0
p-Terphenyl-d14 (S)	69	%	55-125		1	05/29/15 16:05	06/02/15 19:34	1718-51-0	
Phenol-d6 (S)	41	%	44-125		1	05/29/15 16:05	06/02/15 19:34	13127-88-3	S0
2-Fluorophenol (S)	33	%	45-125		1	05/29/15 16:05	06/02/15 19:34	367-12-4	S0
2,4,6-Tribromophenol (S)	55	%	40-125		1	05/29/15 16:05	06/02/15 19:34	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.7	0.53	1	05/29/15 18:58	06/01/15 11:22	83-32-9	
Acenaphthylene	ND	ug/kg	14.7	0.50	1	05/29/15 18:58	06/01/15 11:22	208-96-8	
Anthracene	ND	ug/kg	14.7	0.45	1	05/29/15 18:58	06/01/15 11:22	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.7	0.27	1	05/29/15 18:58	06/01/15 11:22	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.7	0.29	1	05/29/15 18:58	06/01/15 11:22	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.7	0.51	1	05/29/15 18:58	06/01/15 11:22	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.7	0.52	1	05/29/15 18:58	06/01/15 11:22	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.7	0.59	1	05/29/15 18:58	06/01/15 11:22	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.7	0.42	1	05/29/15 18:58	06/01/15 11:22	91-58-7	L2
Chrysene	ND	ug/kg	14.7	0.36	1	05/29/15 18:58	06/01/15 11:22	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.7	0.63	1	05/29/15 18:58	06/01/15 11:22	53-70-3	
Fluoranthene	ND	ug/kg	14.7	0.32	1	05/29/15 18:58	06/01/15 11:22	206-44-0	
Fluorene	ND	ug/kg	14.7	0.45	1	05/29/15 18:58	06/01/15 11:22	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.7	0.56	1	05/29/15 18:58	06/01/15 11:22	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.7	0.55	1	05/29/15 18:58	06/01/15 11:22	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.7	0.60	1	05/29/15 18:58	06/01/15 11:22	91-57-6	
Naphthalene	ND	ug/kg	14.7	0.54	1	05/29/15 18:58	06/01/15 11:22	91-20-3	
Phenanthrene	ND	ug/kg	14.7	0.36	1	05/29/15 18:58	06/01/15 11:22	85-01-8	
Pyrene	ND	ug/kg	14.7	0.35	1	05/29/15 18:58	06/01/15 11:22	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	59	%	55-125		1	05/29/15 18:58	06/01/15 11:22	321-60-8	
p-Terphenyl-d14 (S)	73	%	30-150		1	05/29/15 18:58	06/01/15 11:22	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-21 (13-14)**      **Lab ID: 10307129007**      Collected: 05/15/15 10:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.0	0.87	1	05/29/15 18:22	06/02/15 21:19	68334-30-5	
Motor Oil Range	ND	mg/kg	10.7	1.9	1	05/29/15 18:22	06/02/15 21:19		
<b>Surrogates</b>									
n-Triacontane (S)	115	%	50-150		1	05/29/15 18:22	06/02/15 21:19	638-68-6	
o-Terphenyl (S)	99	%	50-150		1	05/29/15 18:22	06/02/15 21:19	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>6.5</b>	%	0.10	0.10	1		06/03/15 16:37		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	353	37.5	1	05/29/15 16:05	06/02/15 20:05	101-55-3	
Butylbenzylphthalate	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	85-68-7	
Carbazole	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	59-50-7	
4-Chloroaniline	ND	ug/kg	353	54.1	1	05/29/15 16:05	06/02/15 20:05	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	353	69.0	1	05/29/15 16:05	06/02/15 20:05	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	353	24.6	1	05/29/15 16:05	06/02/15 20:05	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	353	81.5	1	05/29/15 16:05	06/02/15 20:05	108-60-1	
2-Chloronaphthalene	ND	ug/kg	353	55.3	1	05/29/15 16:05	06/02/15 20:05	91-58-7	
2-Chlorophenol	ND	ug/kg	353	82.4	1	05/29/15 16:05	06/02/15 20:05	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	353	40.6	1	05/29/15 16:05	06/02/15 20:05	7005-72-3	
Dibenzofuran	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	353	22.8	1	05/29/15 16:05	06/02/15 20:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	353	22.3	1	05/29/15 16:05	06/02/15 20:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	353	23.5	1	05/29/15 16:05	06/02/15 20:05	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	353	49.2	1	05/29/15 16:05	06/02/15 20:05	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	353	66.4	1	05/29/15 16:05	06/02/15 20:05	120-83-2	
Diethylphthalate	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	353	66.1	1	05/29/15 16:05	06/02/15 20:05	105-67-9	
Dimethylphthalate	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	131-11-3	
Di-n-butylphthalate	ND	ug/kg	353	49.0	1	05/29/15 16:05	06/02/15 20:05	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1820	70.2	1	05/29/15 16:05	06/02/15 20:05	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	353	30.2	1	05/29/15 16:05	06/02/15 20:05	606-20-2	
Di-n-octylphthalate	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	353	60.3	1	05/29/15 16:05	06/02/15 20:05	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	353	29.7	1	05/29/15 16:05	06/02/15 20:05	87-68-3	
Hexachlorobenzene	ND	ug/kg	353	46.4	1	05/29/15 16:05	06/02/15 20:05	118-74-1	
Hexachloroethane	ND	ug/kg	353	22.5	1	05/29/15 16:05	06/02/15 20:05	67-72-1	L2
Isophorone	ND	ug/kg	353	56.4	1	05/29/15 16:05	06/02/15 20:05	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	353	76.4	1	05/29/15 16:05	06/02/15 20:05	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	706	70.6	1	05/29/15 16:05	06/02/15 20:05		
2-Nitroaniline	ND	ug/kg	353	38.3	1	05/29/15 16:05	06/02/15 20:05	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-21 (13-14)**      **Lab ID: 10307129007**      Collected: 05/15/15 10:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	353	36.0	1	05/29/15 16:05	06/02/15 20:05	99-09-2	
4-Nitroaniline	ND	ug/kg	353	30.9	1	05/29/15 16:05	06/02/15 20:05	100-01-6	
Nitrobenzene	ND	ug/kg	353	71.4	1	05/29/15 16:05	06/02/15 20:05	98-95-3	
2-Nitrophenol	ND	ug/kg	353	60.3	1	05/29/15 16:05	06/02/15 20:05	88-75-5	
4-Nitrophenol	ND	ug/kg	353	37.0	1	05/29/15 16:05	06/02/15 20:05	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	353	48.0	1	05/29/15 16:05	06/02/15 20:05	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 20:05	86-30-6	
Pentachlorophenol	ND	ug/kg	717	177	1	05/29/15 16:05	06/02/15 20:05	87-86-5	
Phenol	ND	ug/kg	353	77.1	1	05/29/15 16:05	06/02/15 20:05	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	353	58.2	1	05/29/15 16:05	06/02/15 20:05	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	353	42.1	1	05/29/15 16:05	06/02/15 20:05	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	353	45.5	1	05/29/15 16:05	06/02/15 20:05	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	42	%	34-125		1	05/29/15 16:05	06/02/15 20:05	4165-60-0	
2-Fluorobiphenyl (S)	54	%	51-125		1	05/29/15 16:05	06/02/15 20:05	321-60-8	
p-Terphenyl-d14 (S)	79	%	55-125		1	05/29/15 16:05	06/02/15 20:05	1718-51-0	
Phenol-d6 (S)	58	%	44-125		1	05/29/15 16:05	06/02/15 20:05	13127-88-3	
2-Fluorophenol (S)	49	%	45-125		1	05/29/15 16:05	06/02/15 20:05	367-12-4	
2,4,6-Tribromophenol (S)	67	%	40-125		1	05/29/15 16:05	06/02/15 20:05	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	10.7	0.39	1	05/29/15 18:58	05/31/15 18:14	83-32-9	
Acenaphthylene	ND	ug/kg	10.7	0.36	1	05/29/15 18:58	05/31/15 18:14	208-96-8	
Anthracene	ND	ug/kg	10.7	0.33	1	05/29/15 18:58	05/31/15 18:14	120-12-7	
Benzo(a)anthracene	ND	ug/kg	10.7	0.20	1	05/29/15 18:58	05/31/15 18:14	56-55-3	
Benzo(a)pyrene	ND	ug/kg	10.7	0.21	1	05/29/15 18:58	05/31/15 18:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	10.7	0.37	1	05/29/15 18:58	05/31/15 18:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	10.7	0.38	1	05/29/15 18:58	05/31/15 18:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	10.7	0.43	1	05/29/15 18:58	05/31/15 18:14	207-08-9	
2-Chloronaphthalene	ND	ug/kg	10.7	0.30	1	05/29/15 18:58	05/31/15 18:14	91-58-7	L2
Chrysene	ND	ug/kg	10.7	0.26	1	05/29/15 18:58	05/31/15 18:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	10.7	0.46	1	05/29/15 18:58	05/31/15 18:14	53-70-3	
Fluoranthene	ND	ug/kg	10.7	0.23	1	05/29/15 18:58	05/31/15 18:14	206-44-0	
Fluorene	ND	ug/kg	10.7	0.33	1	05/29/15 18:58	05/31/15 18:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	10.7	0.41	1	05/29/15 18:58	05/31/15 18:14	193-39-5	
1-Methylnaphthalene	ND	ug/kg	10.7	0.40	1	05/29/15 18:58	05/31/15 18:14	90-12-0	
2-Methylnaphthalene	ND	ug/kg	10.7	0.44	1	05/29/15 18:58	05/31/15 18:14	91-57-6	
Naphthalene	ND	ug/kg	10.7	0.40	1	05/29/15 18:58	05/31/15 18:14	91-20-3	
Phenanthrene	ND	ug/kg	10.7	0.27	1	05/29/15 18:58	05/31/15 18:14	85-01-8	
Pyrene	ND	ug/kg	10.7	0.26	1	05/29/15 18:58	05/31/15 18:14	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	58	%	55-125		1	05/29/15 18:58	05/31/15 18:14	321-60-8	
p-Terphenyl-d14 (S)	78	%	30-150		1	05/29/15 18:58	05/31/15 18:14	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-21 (14-15)**      **Lab ID: 10307129008**      Collected: 05/15/15 10:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	20.3	1.1	1	05/29/15 18:22	06/02/15 21:42	68334-30-5	
Motor Oil Range	ND	mg/kg	13.5	2.4	1	05/29/15 18:22	06/02/15 21:42		
<b>Surrogates</b>									
n-Triacontane (S)	113	%	50-150		1	05/29/15 18:22	06/02/15 21:42	638-68-6	
o-Terphenyl (S)	77	%	50-150		1	05/29/15 18:22	06/02/15 21:42	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>26.2</b>	%	0.10	0.10	1		06/03/15 16:37		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	447	47.5	1	05/29/15 16:05	06/02/15 20:35	101-55-3	
Butylbenzylphthalate	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	85-68-7	
Carbazole	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	59-50-7	
4-Chloroaniline	ND	ug/kg	447	68.5	1	05/29/15 16:05	06/02/15 20:35	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	447	87.4	1	05/29/15 16:05	06/02/15 20:35	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	447	31.1	1	05/29/15 16:05	06/02/15 20:35	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	447	103	1	05/29/15 16:05	06/02/15 20:35	108-60-1	
2-Chloronaphthalene	ND	ug/kg	447	70.0	1	05/29/15 16:05	06/02/15 20:35	91-58-7	
2-Chlorophenol	ND	ug/kg	447	104	1	05/29/15 16:05	06/02/15 20:35	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	447	51.5	1	05/29/15 16:05	06/02/15 20:35	7005-72-3	
Dibenzofuran	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	447	28.8	1	05/29/15 16:05	06/02/15 20:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	447	28.2	1	05/29/15 16:05	06/02/15 20:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	447	29.8	1	05/29/15 16:05	06/02/15 20:35	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	447	62.3	1	05/29/15 16:05	06/02/15 20:35	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	447	84.1	1	05/29/15 16:05	06/02/15 20:35	120-83-2	
Diethylphthalate	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	447	83.7	1	05/29/15 16:05	06/02/15 20:35	105-67-9	
Dimethylphthalate	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	131-11-3	
Di-n-butylphthalate	ND	ug/kg	447	62.0	1	05/29/15 16:05	06/02/15 20:35	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2300	88.8	1	05/29/15 16:05	06/02/15 20:35	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	447	38.2	1	05/29/15 16:05	06/02/15 20:35	606-20-2	
Di-n-octylphthalate	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	447	76.4	1	05/29/15 16:05	06/02/15 20:35	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	447	37.7	1	05/29/15 16:05	06/02/15 20:35	87-68-3	
Hexachlorobenzene	ND	ug/kg	447	58.8	1	05/29/15 16:05	06/02/15 20:35	118-74-1	
Hexachloroethane	ND	ug/kg	447	28.4	1	05/29/15 16:05	06/02/15 20:35	67-72-1	L2
Isophorone	ND	ug/kg	447	71.4	1	05/29/15 16:05	06/02/15 20:35	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	447	96.7	1	05/29/15 16:05	06/02/15 20:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	894	89.4	1	05/29/15 16:05	06/02/15 20:35		
2-Nitroaniline	ND	ug/kg	447	48.5	1	05/29/15 16:05	06/02/15 20:35	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-21 (14-15)**      **Lab ID: 10307129008**      Collected: 05/15/15 10:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	447	45.6	1	05/29/15 16:05	06/02/15 20:35	99-09-2	
4-Nitroaniline	ND	ug/kg	447	39.1	1	05/29/15 16:05	06/02/15 20:35	100-01-6	
Nitrobenzene	ND	ug/kg	447	90.3	1	05/29/15 16:05	06/02/15 20:35	98-95-3	
2-Nitrophenol	ND	ug/kg	447	76.4	1	05/29/15 16:05	06/02/15 20:35	88-75-5	
4-Nitrophenol	ND	ug/kg	447	46.9	1	05/29/15 16:05	06/02/15 20:35	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	447	60.8	1	05/29/15 16:05	06/02/15 20:35	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	447	223	1	05/29/15 16:05	06/02/15 20:35	86-30-6	
Pentachlorophenol	ND	ug/kg	907	223	1	05/29/15 16:05	06/02/15 20:35	87-86-5	
Phenol	ND	ug/kg	447	97.6	1	05/29/15 16:05	06/02/15 20:35	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	447	73.7	1	05/29/15 16:05	06/02/15 20:35	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	447	53.4	1	05/29/15 16:05	06/02/15 20:35	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	447	57.6	1	05/29/15 16:05	06/02/15 20:35	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	19	%	34-125		1	05/29/15 16:05	06/02/15 20:35	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	20	%	51-125		1	05/29/15 16:05	06/02/15 20:35	321-60-8	S0
p-Terphenyl-d14 (S)	68	%	55-125		1	05/29/15 16:05	06/02/15 20:35	1718-51-0	
Phenol-d6 (S)	32	%	44-125		1	05/29/15 16:05	06/02/15 20:35	13127-88-3	S0
2-Fluorophenol (S)	24	%	45-125		1	05/29/15 16:05	06/02/15 20:35	367-12-4	S0
2,4,6-Tribromophenol (S)	54	%	40-125		1	05/29/15 16:05	06/02/15 20:35	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	13.5	0.49	1	05/29/15 18:58	05/31/15 18:36	83-32-9	
Acenaphthylene	ND	ug/kg	13.5	0.46	1	05/29/15 18:58	05/31/15 18:36	208-96-8	
Anthracene	ND	ug/kg	13.5	0.41	1	05/29/15 18:58	05/31/15 18:36	120-12-7	
Benzo(a)anthracene	ND	ug/kg	13.5	0.25	1	05/29/15 18:58	05/31/15 18:36	56-55-3	
Benzo(a)pyrene	ND	ug/kg	13.5	0.27	1	05/29/15 18:58	05/31/15 18:36	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	13.5	0.47	1	05/29/15 18:58	05/31/15 18:36	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	13.5	0.48	1	05/29/15 18:58	05/31/15 18:36	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	13.5	0.54	1	05/29/15 18:58	05/31/15 18:36	207-08-9	
2-Chloronaphthalene	ND	ug/kg	13.5	0.38	1	05/29/15 18:58	05/31/15 18:36	91-58-7	L2
Chrysene	ND	ug/kg	13.5	0.33	1	05/29/15 18:58	05/31/15 18:36	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.5	0.58	1	05/29/15 18:58	05/31/15 18:36	53-70-3	
Fluoranthene	ND	ug/kg	13.5	0.30	1	05/29/15 18:58	05/31/15 18:36	206-44-0	
Fluorene	ND	ug/kg	13.5	0.42	1	05/29/15 18:58	05/31/15 18:36	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	13.5	0.52	1	05/29/15 18:58	05/31/15 18:36	193-39-5	
1-Methylnaphthalene	ND	ug/kg	13.5	0.50	1	05/29/15 18:58	05/31/15 18:36	90-12-0	
2-Methylnaphthalene	ND	ug/kg	13.5	0.55	1	05/29/15 18:58	05/31/15 18:36	91-57-6	
Naphthalene	ND	ug/kg	13.5	0.50	1	05/29/15 18:58	05/31/15 18:36	91-20-3	
Phenanthrene	ND	ug/kg	13.5	0.33	1	05/29/15 18:58	05/31/15 18:36	85-01-8	
Pyrene	ND	ug/kg	13.5	0.32	1	05/29/15 18:58	05/31/15 18:36	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/29/15 18:58	05/31/15 18:36	321-60-8	
p-Terphenyl-d14 (S)	77	%	30-150		1	05/29/15 18:58	05/31/15 18:36	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-25 (12-12.5)**      **Lab ID: 10307129009**      Collected: 05/15/15 11:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	15.9	0.86	1	05/29/15 18:22	06/02/15 23:37	68334-30-5	
Motor Oil Range	ND	mg/kg	10.6	1.9	1	05/29/15 18:22	06/02/15 23:37		
<b>Surrogates</b>									
n-Triacontane (S)	118	%	50-150		1	05/29/15 18:22	06/02/15 23:37	638-68-6	
o-Terphenyl (S)	107	%	50-150		1	05/29/15 18:22	06/02/15 23:37	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>6.8</b>	%	0.10	0.10	1		06/03/15 16:09		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	353	37.6	1	05/29/15 16:05	06/02/15 21:05	101-55-3	
Butylbenzylphthalate	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	85-68-7	
Carbazole	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	59-50-7	
4-Chloroaniline	ND	ug/kg	353	54.1	1	05/29/15 16:05	06/02/15 21:05	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	353	69.0	1	05/29/15 16:05	06/02/15 21:05	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	353	24.6	1	05/29/15 16:05	06/02/15 21:05	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	353	81.5	1	05/29/15 16:05	06/02/15 21:05	108-60-1	
2-Chloronaphthalene	ND	ug/kg	353	55.3	1	05/29/15 16:05	06/02/15 21:05	91-58-7	
2-Chlorophenol	ND	ug/kg	353	82.4	1	05/29/15 16:05	06/02/15 21:05	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	353	40.7	1	05/29/15 16:05	06/02/15 21:05	7005-72-3	
Dibenzofuran	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	353	22.8	1	05/29/15 16:05	06/02/15 21:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	353	22.3	1	05/29/15 16:05	06/02/15 21:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	353	23.5	1	05/29/15 16:05	06/02/15 21:05	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	353	49.2	1	05/29/15 16:05	06/02/15 21:05	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	353	66.4	1	05/29/15 16:05	06/02/15 21:05	120-83-2	
Diethylphthalate	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	353	66.1	1	05/29/15 16:05	06/02/15 21:05	105-67-9	
Dimethylphthalate	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	131-11-3	
Di-n-butylphthalate	ND	ug/kg	353	49.0	1	05/29/15 16:05	06/02/15 21:05	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1820	70.2	1	05/29/15 16:05	06/02/15 21:05	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	353	30.2	1	05/29/15 16:05	06/02/15 21:05	606-20-2	
Di-n-octylphthalate	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	353	60.3	1	05/29/15 16:05	06/02/15 21:05	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	353	29.7	1	05/29/15 16:05	06/02/15 21:05	87-68-3	
Hexachlorobenzene	ND	ug/kg	353	46.4	1	05/29/15 16:05	06/02/15 21:05	118-74-1	
Hexachloroethane	ND	ug/kg	353	22.5	1	05/29/15 16:05	06/02/15 21:05	67-72-1	L2
Isophorone	ND	ug/kg	353	56.4	1	05/29/15 16:05	06/02/15 21:05	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	353	76.4	1	05/29/15 16:05	06/02/15 21:05	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	706	70.6	1	05/29/15 16:05	06/02/15 21:05		
2-Nitroaniline	ND	ug/kg	353	38.3	1	05/29/15 16:05	06/02/15 21:05	88-74-4	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-25 (12-12.5)**      **Lab ID: 10307129009**      Collected: 05/15/15 11:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	353	36.1	1	05/29/15 16:05	06/02/15 21:05	99-09-2	
4-Nitroaniline	ND	ug/kg	353	30.9	1	05/29/15 16:05	06/02/15 21:05	100-01-6	
Nitrobenzene	ND	ug/kg	353	71.4	1	05/29/15 16:05	06/02/15 21:05	98-95-3	
2-Nitrophenol	ND	ug/kg	353	60.3	1	05/29/15 16:05	06/02/15 21:05	88-75-5	
4-Nitrophenol	ND	ug/kg	353	37.0	1	05/29/15 16:05	06/02/15 21:05	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	353	48.0	1	05/29/15 16:05	06/02/15 21:05	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	353	177	1	05/29/15 16:05	06/02/15 21:05	86-30-6	
Pentachlorophenol	ND	ug/kg	717	177	1	05/29/15 16:05	06/02/15 21:05	87-86-5	
Phenol	ND	ug/kg	353	77.1	1	05/29/15 16:05	06/02/15 21:05	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	353	58.2	1	05/29/15 16:05	06/02/15 21:05	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	353	42.2	1	05/29/15 16:05	06/02/15 21:05	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	353	45.5	1	05/29/15 16:05	06/02/15 21:05	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	48	%	34-125		1	05/29/15 16:05	06/02/15 21:05	4165-60-0	
2-Fluorobiphenyl (S)	59	%	51-125		1	05/29/15 16:05	06/02/15 21:05	321-60-8	
p-Terphenyl-d14 (S)	82	%	55-125		1	05/29/15 16:05	06/02/15 21:05	1718-51-0	
Phenol-d6 (S)	63	%	44-125		1	05/29/15 16:05	06/02/15 21:05	13127-88-3	
2-Fluorophenol (S)	56	%	45-125		1	05/29/15 16:05	06/02/15 21:05	367-12-4	
2,4,6-Tribromophenol (S)	74	%	40-125		1	05/29/15 16:05	06/02/15 21:05	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	10.7	0.39	1	05/29/15 18:58	05/31/15 18:57	83-32-9	
Acenaphthylene	ND	ug/kg	10.7	0.36	1	05/29/15 18:58	05/31/15 18:57	208-96-8	
Anthracene	ND	ug/kg	10.7	0.33	1	05/29/15 18:58	05/31/15 18:57	120-12-7	
Benzo(a)anthracene	ND	ug/kg	10.7	0.20	1	05/29/15 18:58	05/31/15 18:57	56-55-3	
Benzo(a)pyrene	ND	ug/kg	10.7	0.21	1	05/29/15 18:58	05/31/15 18:57	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	10.7	0.37	1	05/29/15 18:58	05/31/15 18:57	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	10.7	0.38	1	05/29/15 18:58	05/31/15 18:57	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	10.7	0.43	1	05/29/15 18:58	05/31/15 18:57	207-08-9	
2-Chloronaphthalene	ND	ug/kg	10.7	0.30	1	05/29/15 18:58	05/31/15 18:57	91-58-7	L2
Chrysene	ND	ug/kg	10.7	0.26	1	05/29/15 18:58	05/31/15 18:57	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	10.7	0.46	1	05/29/15 18:58	05/31/15 18:57	53-70-3	
Fluoranthene	ND	ug/kg	10.7	0.24	1	05/29/15 18:58	05/31/15 18:57	206-44-0	
Fluorene	ND	ug/kg	10.7	0.33	1	05/29/15 18:58	05/31/15 18:57	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	10.7	0.41	1	05/29/15 18:58	05/31/15 18:57	193-39-5	
1-Methylnaphthalene	ND	ug/kg	10.7	0.40	1	05/29/15 18:58	05/31/15 18:57	90-12-0	
2-Methylnaphthalene	ND	ug/kg	10.7	0.44	1	05/29/15 18:58	05/31/15 18:57	91-57-6	
Naphthalene	ND	ug/kg	10.7	0.40	1	05/29/15 18:58	05/31/15 18:57	91-20-3	
Phenanthrene	ND	ug/kg	10.7	0.27	1	05/29/15 18:58	05/31/15 18:57	85-01-8	
Pyrene	ND	ug/kg	10.7	0.26	1	05/29/15 18:58	05/31/15 18:57	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	65	%	55-125		1	05/29/15 18:58	05/31/15 18:57	321-60-8	
p-Terphenyl-d14 (S)	78	%	30-150		1	05/29/15 18:58	05/31/15 18:57	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-25 (12.5-13.5)**      **Lab ID: 10307129010**      Collected: 05/15/15 11:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	23.3	1.3	1	05/29/15 18:22	06/03/15 00:00	68334-30-5	
Motor Oil Range	ND	mg/kg	15.5	2.8	1	05/29/15 18:22	06/03/15 00:00		
<b>Surrogates</b>									
n-Triacontane (S)	110	%	50-150		1	05/29/15 18:22	06/03/15 00:00	638-68-6	
o-Terphenyl (S)	94	%	50-150		1	05/29/15 18:22	06/03/15 00:00	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>35.6</b>	%	0.10	0.10	1		06/03/15 16:09		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	510	54.3	1	05/29/15 16:05	06/02/15 21:36	101-55-3	
Butylbenzylphthalate	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	85-68-7	
Carbazole	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	59-50-7	
4-Chloroaniline	ND	ug/kg	510	78.3	1	05/29/15 16:05	06/02/15 21:36	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	510	99.8	1	05/29/15 16:05	06/02/15 21:36	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	510	35.6	1	05/29/15 16:05	06/02/15 21:36	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	510	118	1	05/29/15 16:05	06/02/15 21:36	108-60-1	
2-Chloronaphthalene	ND	ug/kg	510	80.0	1	05/29/15 16:05	06/02/15 21:36	91-58-7	
2-Chlorophenol	ND	ug/kg	510	119	1	05/29/15 16:05	06/02/15 21:36	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	510	58.8	1	05/29/15 16:05	06/02/15 21:36	7005-72-3	
Dibenzofuran	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	510	32.9	1	05/29/15 16:05	06/02/15 21:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	510	32.2	1	05/29/15 16:05	06/02/15 21:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	510	34.0	1	05/29/15 16:05	06/02/15 21:36	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	510	71.1	1	05/29/15 16:05	06/02/15 21:36	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	510	96.0	1	05/29/15 16:05	06/02/15 21:36	120-83-2	
Diethylphthalate	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	510	95.6	1	05/29/15 16:05	06/02/15 21:36	105-67-9	
Dimethylphthalate	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	131-11-3	
Di-n-butylphthalate	ND	ug/kg	510	70.8	1	05/29/15 16:05	06/02/15 21:36	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2630	101	1	05/29/15 16:05	06/02/15 21:36	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	510	43.6	1	05/29/15 16:05	06/02/15 21:36	606-20-2	
Di-n-octylphthalate	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	510	87.2	1	05/29/15 16:05	06/02/15 21:36	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	510	43.0	1	05/29/15 16:05	06/02/15 21:36	87-68-3	
Hexachlorobenzene	ND	ug/kg	510	67.1	1	05/29/15 16:05	06/02/15 21:36	118-74-1	
Hexachloroethane	ND	ug/kg	510	32.5	1	05/29/15 16:05	06/02/15 21:36	67-72-1	L2
Isophorone	ND	ug/kg	510	81.5	1	05/29/15 16:05	06/02/15 21:36	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	510	110	1	05/29/15 16:05	06/02/15 21:36	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	1020	102	1	05/29/15 16:05	06/02/15 21:36		
2-Nitroaniline	ND	ug/kg	510	55.4	1	05/29/15 16:05	06/02/15 21:36	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-25 (12.5-13.5)**      **Lab ID: 10307129010**      Collected: 05/15/15 11:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	510	52.1	1	05/29/15 16:05	06/02/15 21:36	99-09-2	
4-Nitroaniline	ND	ug/kg	510	44.7	1	05/29/15 16:05	06/02/15 21:36	100-01-6	
Nitrobenzene	ND	ug/kg	510	103	1	05/29/15 16:05	06/02/15 21:36	98-95-3	
2-Nitrophenol	ND	ug/kg	510	87.2	1	05/29/15 16:05	06/02/15 21:36	88-75-5	
4-Nitrophenol	ND	ug/kg	510	53.5	1	05/29/15 16:05	06/02/15 21:36	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	510	69.4	1	05/29/15 16:05	06/02/15 21:36	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	510	255	1	05/29/15 16:05	06/02/15 21:36	86-30-6	
Pentachlorophenol	ND	ug/kg	1040	255	1	05/29/15 16:05	06/02/15 21:36	87-86-5	
Phenol	ND	ug/kg	510	112	1	05/29/15 16:05	06/02/15 21:36	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	510	84.1	1	05/29/15 16:05	06/02/15 21:36	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	510	60.9	1	05/29/15 16:05	06/02/15 21:36	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	510	65.7	1	05/29/15 16:05	06/02/15 21:36	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	35	%	34-125		1	05/29/15 16:05	06/02/15 21:36	4165-60-0	P2
2-Fluorobiphenyl (S)	40	%	51-125		1	05/29/15 16:05	06/02/15 21:36	321-60-8	S0
p-Terphenyl-d14 (S)	77	%	55-125		1	05/29/15 16:05	06/02/15 21:36	1718-51-0	
Phenol-d6 (S)	48	%	44-125		1	05/29/15 16:05	06/02/15 21:36	13127-88-3	
2-Fluorophenol (S)	41	%	45-125		1	05/29/15 16:05	06/02/15 21:36	367-12-4	S0
2,4,6-Tribromophenol (S)	62	%	40-125		1	05/29/15 16:05	06/02/15 21:36	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	15.5	0.56	1	05/29/15 18:58	05/31/15 19:19	83-32-9	
Acenaphthylene	ND	ug/kg	15.5	0.53	1	05/29/15 18:58	05/31/15 19:19	208-96-8	
Anthracene	ND	ug/kg	15.5	0.48	1	05/29/15 18:58	05/31/15 19:19	120-12-7	
Benzo(a)anthracene	ND	ug/kg	15.5	0.29	1	05/29/15 18:58	05/31/15 19:19	56-55-3	
Benzo(a)pyrene	ND	ug/kg	15.5	0.31	1	05/29/15 18:58	05/31/15 19:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	15.5	0.54	1	05/29/15 18:58	05/31/15 19:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	15.5	0.55	1	05/29/15 18:58	05/31/15 19:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	15.5	0.62	1	05/29/15 18:58	05/31/15 19:19	207-08-9	
2-Chloronaphthalene	ND	ug/kg	15.5	0.44	1	05/29/15 18:58	05/31/15 19:19	91-58-7	L2
Chrysene	ND	ug/kg	15.5	0.38	1	05/29/15 18:58	05/31/15 19:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	15.5	0.67	1	05/29/15 18:58	05/31/15 19:19	53-70-3	
Fluoranthene	ND	ug/kg	15.5	0.34	1	05/29/15 18:58	05/31/15 19:19	206-44-0	
Fluorene	ND	ug/kg	15.5	0.48	1	05/29/15 18:58	05/31/15 19:19	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	15.5	0.60	1	05/29/15 18:58	05/31/15 19:19	193-39-5	
1-Methylnaphthalene	ND	ug/kg	15.5	0.58	1	05/29/15 18:58	05/31/15 19:19	90-12-0	
2-Methylnaphthalene	ND	ug/kg	15.5	0.63	1	05/29/15 18:58	05/31/15 19:19	91-57-6	
Naphthalene	ND	ug/kg	15.5	0.58	1	05/29/15 18:58	05/31/15 19:19	91-20-3	
Phenanthrene	ND	ug/kg	15.5	0.38	1	05/29/15 18:58	05/31/15 19:19	85-01-8	
Pyrene	ND	ug/kg	15.5	0.37	1	05/29/15 18:58	05/31/15 19:19	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	61	%	55-125		1	05/29/15 18:58	05/31/15 19:19	321-60-8	
p-Terphenyl-d14 (S)	66	%	30-150		1	05/29/15 18:58	05/31/15 19:19	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-22 (20-20.5)**      **Lab ID: 10307129011**      Collected: 05/15/15 12:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.5	0.89	1	05/29/15 18:22	06/02/15 22:05	68334-30-5	
Motor Oil Range	ND	mg/kg	11.0	2.0	1	05/29/15 18:22	06/02/15 22:05		
<b>Surrogates</b>									
n-Triacontane (S)	104	%	50-150		1	05/29/15 18:22	06/02/15 22:05	638-68-6	
o-Terphenyl (S)	103	%	50-150		1	05/29/15 18:22	06/02/15 22:05	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>9.2</b>	%	0.10	0.10	1		06/03/15 16:09		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	363	38.7	1	05/29/15 16:05	06/03/15 12:58	101-55-3	
Butylbenzylphthalate	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	85-68-7	
Carbazole	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	59-50-7	
4-Chloroaniline	ND	ug/kg	363	55.7	1	05/29/15 16:05	06/03/15 12:58	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	363	71.0	1	05/29/15 16:05	06/03/15 12:58	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	363	25.3	1	05/29/15 16:05	06/03/15 12:58	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	363	83.9	1	05/29/15 16:05	06/03/15 12:58	108-60-1	
2-Chloronaphthalene	ND	ug/kg	363	56.9	1	05/29/15 16:05	06/03/15 12:58	91-58-7	
2-Chlorophenol	ND	ug/kg	363	84.8	1	05/29/15 16:05	06/03/15 12:58	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	363	41.8	1	05/29/15 16:05	06/03/15 12:58	7005-72-3	
Dibenzofuran	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	363	23.5	1	05/29/15 16:05	06/03/15 12:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	363	22.9	1	05/29/15 16:05	06/03/15 12:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	363	24.2	1	05/29/15 16:05	06/03/15 12:58	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	363	50.7	1	05/29/15 16:05	06/03/15 12:58	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	363	68.4	1	05/29/15 16:05	06/03/15 12:58	120-83-2	
Diethylphthalate	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	363	68.1	1	05/29/15 16:05	06/03/15 12:58	105-67-9	
Dimethylphthalate	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	131-11-3	
Di-n-butylphthalate	ND	ug/kg	363	50.4	1	05/29/15 16:05	06/03/15 12:58	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1870	72.2	1	05/29/15 16:05	06/03/15 12:58	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	363	31.1	1	05/29/15 16:05	06/03/15 12:58	606-20-2	
Di-n-octylphthalate	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	363	62.1	1	05/29/15 16:05	06/03/15 12:58	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	363	30.6	1	05/29/15 16:05	06/03/15 12:58	87-68-3	
Hexachlorobenzene	ND	ug/kg	363	47.8	1	05/29/15 16:05	06/03/15 12:58	118-74-1	
Hexachloroethane	ND	ug/kg	363	23.1	1	05/29/15 16:05	06/03/15 12:58	67-72-1	L2
Isophorone	ND	ug/kg	363	58.0	1	05/29/15 16:05	06/03/15 12:58	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	363	78.6	1	05/29/15 16:05	06/03/15 12:58	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	727	72.7	1	05/29/15 16:05	06/03/15 12:58		
2-Nitroaniline	ND	ug/kg	363	39.4	1	05/29/15 16:05	06/03/15 12:58	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-22 (20-20.5)**      **Lab ID: 10307129011**      Collected: 05/15/15 12:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	363	37.1	1	05/29/15 16:05	06/03/15 12:58	99-09-2	
4-Nitroaniline	ND	ug/kg	363	31.8	1	05/29/15 16:05	06/03/15 12:58	100-01-6	
Nitrobenzene	ND	ug/kg	363	73.4	1	05/29/15 16:05	06/03/15 12:58	98-95-3	
2-Nitrophenol	ND	ug/kg	363	62.1	1	05/29/15 16:05	06/03/15 12:58	88-75-5	
4-Nitrophenol	ND	ug/kg	363	38.1	1	05/29/15 16:05	06/03/15 12:58	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	363	49.4	1	05/29/15 16:05	06/03/15 12:58	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	363	182	1	05/29/15 16:05	06/03/15 12:58	86-30-6	
Pentachlorophenol	ND	ug/kg	738	182	1	05/29/15 16:05	06/03/15 12:58	87-86-5	
Phenol	ND	ug/kg	363	79.4	1	05/29/15 16:05	06/03/15 12:58	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	363	59.9	1	05/29/15 16:05	06/03/15 12:58	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	363	43.4	1	05/29/15 16:05	06/03/15 12:58	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	363	46.8	1	05/29/15 16:05	06/03/15 12:58	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	46	%	34-125		1	05/29/15 16:05	06/03/15 12:58	4165-60-0	
2-Fluorobiphenyl (S)	57	%	51-125		1	05/29/15 16:05	06/03/15 12:58	321-60-8	
p-Terphenyl-d14 (S)	80	%	55-125		1	05/29/15 16:05	06/03/15 12:58	1718-51-0	
Phenol-d6 (S)	60	%	44-125		1	05/29/15 16:05	06/03/15 12:58	13127-88-3	
2-Fluorophenol (S)	52	%	45-125		1	05/29/15 16:05	06/03/15 12:58	367-12-4	
2,4,6-Tribromophenol (S)	71	%	40-125		1	05/29/15 16:05	06/03/15 12:58	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.0	0.40	1	05/29/15 18:58	05/31/15 19:41	83-32-9	
Acenaphthylene	ND	ug/kg	11.0	0.37	1	05/29/15 18:58	05/31/15 19:41	208-96-8	
Anthracene	ND	ug/kg	11.0	0.34	1	05/29/15 18:58	05/31/15 19:41	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.0	0.20	1	05/29/15 18:58	05/31/15 19:41	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.0	0.22	1	05/29/15 18:58	05/31/15 19:41	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.0	0.38	1	05/29/15 18:58	05/31/15 19:41	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.0	0.39	1	05/29/15 18:58	05/31/15 19:41	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.0	0.44	1	05/29/15 18:58	05/31/15 19:41	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.0	0.31	1	05/29/15 18:58	05/31/15 19:41	91-58-7	L2
Chrysene	ND	ug/kg	11.0	0.27	1	05/29/15 18:58	05/31/15 19:41	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.0	0.47	1	05/29/15 18:58	05/31/15 19:41	53-70-3	
Fluoranthene	ND	ug/kg	11.0	0.24	1	05/29/15 18:58	05/31/15 19:41	206-44-0	
Fluorene	ND	ug/kg	11.0	0.34	1	05/29/15 18:58	05/31/15 19:41	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.0	0.42	1	05/29/15 18:58	05/31/15 19:41	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.0	0.41	1	05/29/15 18:58	05/31/15 19:41	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.0	0.45	1	05/29/15 18:58	05/31/15 19:41	91-57-6	
Naphthalene	ND	ug/kg	11.0	0.41	1	05/29/15 18:58	05/31/15 19:41	91-20-3	
Phenanthrene	ND	ug/kg	11.0	0.27	1	05/29/15 18:58	05/31/15 19:41	85-01-8	
Pyrene	ND	ug/kg	11.0	0.26	1	05/29/15 18:58	05/31/15 19:41	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	69	%	55-125		1	05/29/15 18:58	05/31/15 19:41	321-60-8	
p-Terphenyl-d14 (S)	80	%	30-150		1	05/29/15 18:58	05/31/15 19:41	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-22 (24-25)**      **Lab ID: 10307129012**      Collected: 05/15/15 12:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.3	1.1	1	05/29/15 18:22	06/02/15 22:28	68334-30-5	
Motor Oil Range	ND	mg/kg	14.2	2.5	1	05/29/15 18:22	06/02/15 22:28		
<b>Surrogates</b>									
n-Triacontane (S)	111	%	50-150		1	05/29/15 18:22	06/02/15 22:28	638-68-6	
o-Terphenyl (S)	94	%	50-150		1	05/29/15 18:22	06/02/15 22:28	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>30.3</b>	%	0.10	0.10	1		06/03/15 16:10		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	473	50.3	1	05/29/15 16:05	06/02/15 18:32	101-55-3	
Butylbenzylphthalate	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	85-68-7	
Carbazole	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	59-50-7	
4-Chloroaniline	ND	ug/kg	473	72.5	1	05/29/15 16:05	06/02/15 18:32	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	473	92.5	1	05/29/15 16:05	06/02/15 18:32	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	473	33.0	1	05/29/15 16:05	06/02/15 18:32	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	473	109	1	05/29/15 16:05	06/02/15 18:32	108-60-1	
2-Chloronaphthalene	ND	ug/kg	473	74.1	1	05/29/15 16:05	06/02/15 18:32	91-58-7	
2-Chlorophenol	ND	ug/kg	473	110	1	05/29/15 16:05	06/02/15 18:32	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	473	54.5	1	05/29/15 16:05	06/02/15 18:32	7005-72-3	
Dibenzofuran	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	473	30.5	1	05/29/15 16:05	06/02/15 18:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	473	29.8	1	05/29/15 16:05	06/02/15 18:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	473	31.5	1	05/29/15 16:05	06/02/15 18:32	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	473	66.0	1	05/29/15 16:05	06/02/15 18:32	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	473	89.0	1	05/29/15 16:05	06/02/15 18:32	120-83-2	
Diethylphthalate	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	473	88.6	1	05/29/15 16:05	06/02/15 18:32	105-67-9	
Dimethylphthalate	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	131-11-3	
Di-n-butylphthalate	ND	ug/kg	473	65.7	1	05/29/15 16:05	06/02/15 18:32	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2440	94.1	1	05/29/15 16:05	06/02/15 18:32	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	473	40.4	1	05/29/15 16:05	06/02/15 18:32	606-20-2	
Di-n-octylphthalate	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	473	80.9	1	05/29/15 16:05	06/02/15 18:32	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	473	39.9	1	05/29/15 16:05	06/02/15 18:32	87-68-3	
Hexachlorobenzene	ND	ug/kg	473	62.2	1	05/29/15 16:05	06/02/15 18:32	118-74-1	
Hexachloroethane	ND	ug/kg	473	30.1	1	05/29/15 16:05	06/02/15 18:32	67-72-1	L2
Isophorone	ND	ug/kg	473	75.6	1	05/29/15 16:05	06/02/15 18:32	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	473	102	1	05/29/15 16:05	06/02/15 18:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	946	94.6	1	05/29/15 16:05	06/02/15 18:32		
2-Nitroaniline	ND	ug/kg	473	51.3	1	05/29/15 16:05	06/02/15 18:32	88-74-4	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-22 (24-25)**      **Lab ID: 10307129012**      Collected: 05/15/15 12:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	473	48.3	1	05/29/15 16:05	06/02/15 18:32	99-09-2	
4-Nitroaniline	ND	ug/kg	473	41.4	1	05/29/15 16:05	06/02/15 18:32	100-01-6	
Nitrobenzene	ND	ug/kg	473	95.6	1	05/29/15 16:05	06/02/15 18:32	98-95-3	
2-Nitrophenol	ND	ug/kg	473	80.9	1	05/29/15 16:05	06/02/15 18:32	88-75-5	
4-Nitrophenol	ND	ug/kg	473	49.6	1	05/29/15 16:05	06/02/15 18:32	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	473	64.4	1	05/29/15 16:05	06/02/15 18:32	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	473	237	1	05/29/15 16:05	06/02/15 18:32	86-30-6	
Pentachlorophenol	ND	ug/kg	961	237	1	05/29/15 16:05	06/02/15 18:32	87-86-5	
Phenol	ND	ug/kg	473	103	1	05/29/15 16:05	06/02/15 18:32	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	473	78.0	1	05/29/15 16:05	06/02/15 18:32	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	473	56.5	1	05/29/15 16:05	06/02/15 18:32	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	473	60.9	1	05/29/15 16:05	06/02/15 18:32	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	24	%	34-125		1	05/29/15 16:05	06/02/15 18:32	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	36	%	51-125		1	05/29/15 16:05	06/02/15 18:32	321-60-8	S0
p-Terphenyl-d14 (S)	75	%	55-125		1	05/29/15 16:05	06/02/15 18:32	1718-51-0	
Phenol-d6 (S)	56	%	44-125		1	05/29/15 16:05	06/02/15 18:32	13127-88-3	
2-Fluorophenol (S)	37	%	45-125		1	05/29/15 16:05	06/02/15 18:32	367-12-4	S0
2,4,6-Tribromophenol (S)	71	%	40-125		1	05/29/15 16:05	06/02/15 18:32	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.3	0.51	1	05/29/15 18:58	05/31/15 20:03	83-32-9	
Acenaphthylene	ND	ug/kg	14.3	0.48	1	05/29/15 18:58	05/31/15 20:03	208-96-8	
Anthracene	ND	ug/kg	14.3	0.44	1	05/29/15 18:58	05/31/15 20:03	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.3	0.26	1	05/29/15 18:58	05/31/15 20:03	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.3	0.28	1	05/29/15 18:58	05/31/15 20:03	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.3	0.50	1	05/29/15 18:58	05/31/15 20:03	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.3	0.51	1	05/29/15 18:58	05/31/15 20:03	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.3	0.57	1	05/29/15 18:58	05/31/15 20:03	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.3	0.40	1	05/29/15 18:58	05/31/15 20:03	91-58-7	L2
Chrysene	ND	ug/kg	14.3	0.35	1	05/29/15 18:58	05/31/15 20:03	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.3	0.61	1	05/29/15 18:58	05/31/15 20:03	53-70-3	
Fluoranthene	ND	ug/kg	14.3	0.31	1	05/29/15 18:58	05/31/15 20:03	206-44-0	
Fluorene	ND	ug/kg	14.3	0.44	1	05/29/15 18:58	05/31/15 20:03	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.3	0.55	1	05/29/15 18:58	05/31/15 20:03	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.3	0.53	1	05/29/15 18:58	05/31/15 20:03	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.3	0.58	1	05/29/15 18:58	05/31/15 20:03	91-57-6	
Naphthalene	ND	ug/kg	14.3	0.53	1	05/29/15 18:58	05/31/15 20:03	91-20-3	
Phenanthrene	ND	ug/kg	14.3	0.35	1	05/29/15 18:58	05/31/15 20:03	85-01-8	
Pyrene	ND	ug/kg	14.3	0.34	1	05/29/15 18:58	05/31/15 20:03	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/29/15 18:58	05/31/15 20:03	321-60-8	
p-Terphenyl-d14 (S)	69	%	30-150		1	05/29/15 18:58	05/31/15 20:03	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-23 (16-16.5)**      **Lab ID: 10307129013**      Collected: 05/15/15 14:45      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.9	0.91	1	05/29/15 18:22	06/02/15 22:51	68334-30-5	
Motor Oil Range	ND	mg/kg	11.3	2.0	1	05/29/15 18:22	06/02/15 22:51		
<b>Surrogates</b>									
n-Triacontane (S)	122	%	50-150		1	05/29/15 18:22	06/02/15 22:51	638-68-6	
o-Terphenyl (S)	108	%	50-150		1	05/29/15 18:22	06/02/15 22:51	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>11.4</b>	%	0.10	0.10	1		06/03/15 16:10		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	373	39.6	1	05/29/15 16:05	06/02/15 19:02	101-55-3	
Butylbenzylphthalate	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	85-68-7	
Carbazole	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	59-50-7	
4-Chloroaniline	ND	ug/kg	373	57.1	1	05/29/15 16:05	06/02/15 19:02	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	373	72.8	1	05/29/15 16:05	06/02/15 19:02	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	373	26.0	1	05/29/15 16:05	06/02/15 19:02	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	373	86.0	1	05/29/15 16:05	06/02/15 19:02	108-60-1	
2-Chloronaphthalene	ND	ug/kg	373	58.4	1	05/29/15 16:05	06/02/15 19:02	91-58-7	
2-Chlorophenol	ND	ug/kg	373	86.9	1	05/29/15 16:05	06/02/15 19:02	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	373	42.9	1	05/29/15 16:05	06/02/15 19:02	7005-72-3	
Dibenzofuran	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	373	24.0	1	05/29/15 16:05	06/02/15 19:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	373	23.5	1	05/29/15 16:05	06/02/15 19:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	373	24.8	1	05/29/15 16:05	06/02/15 19:02	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	373	51.9	1	05/29/15 16:05	06/02/15 19:02	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	373	70.1	1	05/29/15 16:05	06/02/15 19:02	120-83-2	
Diethylphthalate	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	373	69.8	1	05/29/15 16:05	06/02/15 19:02	105-67-9	
Dimethylphthalate	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	131-11-3	
Di-n-butylphthalate	ND	ug/kg	373	51.7	1	05/29/15 16:05	06/02/15 19:02	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1920	74.1	1	05/29/15 16:05	06/02/15 19:02	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	373	31.8	1	05/29/15 16:05	06/02/15 19:02	606-20-2	
Di-n-octylphthalate	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	373	63.7	1	05/29/15 16:05	06/02/15 19:02	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	373	31.4	1	05/29/15 16:05	06/02/15 19:02	87-68-3	
Hexachlorobenzene	ND	ug/kg	373	49.0	1	05/29/15 16:05	06/02/15 19:02	118-74-1	
Hexachloroethane	ND	ug/kg	373	23.7	1	05/29/15 16:05	06/02/15 19:02	67-72-1	L2
Isophorone	ND	ug/kg	373	59.5	1	05/29/15 16:05	06/02/15 19:02	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	373	80.6	1	05/29/15 16:05	06/02/15 19:02	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	745	74.5	1	05/29/15 16:05	06/02/15 19:02		
2-Nitroaniline	ND	ug/kg	373	40.4	1	05/29/15 16:05	06/02/15 19:02	88-74-4	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-23 (16-16.5)**      **Lab ID: 10307129013**      Collected: 05/15/15 14:45      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	373	38.0	1	05/29/15 16:05	06/02/15 19:02	99-09-2	
4-Nitroaniline	ND	ug/kg	373	32.6	1	05/29/15 16:05	06/02/15 19:02	100-01-6	
Nitrobenzene	ND	ug/kg	373	75.3	1	05/29/15 16:05	06/02/15 19:02	98-95-3	
2-Nitrophenol	ND	ug/kg	373	63.7	1	05/29/15 16:05	06/02/15 19:02	88-75-5	
4-Nitrophenol	ND	ug/kg	373	39.1	1	05/29/15 16:05	06/02/15 19:02	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	373	50.7	1	05/29/15 16:05	06/02/15 19:02	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	373	186	1	05/29/15 16:05	06/02/15 19:02	86-30-6	
Pentachlorophenol	ND	ug/kg	756	186	1	05/29/15 16:05	06/02/15 19:02	87-86-5	
Phenol	ND	ug/kg	373	81.4	1	05/29/15 16:05	06/02/15 19:02	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	373	61.4	1	05/29/15 16:05	06/02/15 19:02	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	373	44.5	1	05/29/15 16:05	06/02/15 19:02	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	373	48.0	1	05/29/15 16:05	06/02/15 19:02	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	46	%	34-125		1	05/29/15 16:05	06/02/15 19:02	4165-60-0	
2-Fluorobiphenyl (S)	58	%	51-125		1	05/29/15 16:05	06/02/15 19:02	321-60-8	
p-Terphenyl-d14 (S)	70	%	55-125		1	05/29/15 16:05	06/02/15 19:02	1718-51-0	
Phenol-d6 (S)	60	%	44-125		1	05/29/15 16:05	06/02/15 19:02	13127-88-3	
2-Fluorophenol (S)	56	%	45-125		1	05/29/15 16:05	06/02/15 19:02	367-12-4	
2,4,6-Tribromophenol (S)	70	%	40-125		1	05/29/15 16:05	06/02/15 19:02	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.3	0.41	1	05/29/15 18:58	05/31/15 20:25	83-32-9	
Acenaphthylene	ND	ug/kg	11.3	0.38	1	05/29/15 18:58	05/31/15 20:25	208-96-8	
Anthracene	ND	ug/kg	11.3	0.35	1	05/29/15 18:58	05/31/15 20:25	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.3	0.21	1	05/29/15 18:58	05/31/15 20:25	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.3	0.22	1	05/29/15 18:58	05/31/15 20:25	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.3	0.39	1	05/29/15 18:58	05/31/15 20:25	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.3	0.40	1	05/29/15 18:58	05/31/15 20:25	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.3	0.45	1	05/29/15 18:58	05/31/15 20:25	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.3	0.32	1	05/29/15 18:58	05/31/15 20:25	91-58-7	L2
Chrysene	ND	ug/kg	11.3	0.28	1	05/29/15 18:58	05/31/15 20:25	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.3	0.48	1	05/29/15 18:58	05/31/15 20:25	53-70-3	
Fluoranthene	ND	ug/kg	11.3	0.25	1	05/29/15 18:58	05/31/15 20:25	206-44-0	
Fluorene	ND	ug/kg	11.3	0.35	1	05/29/15 18:58	05/31/15 20:25	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.3	0.43	1	05/29/15 18:58	05/31/15 20:25	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.3	0.42	1	05/29/15 18:58	05/31/15 20:25	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.3	0.46	1	05/29/15 18:58	05/31/15 20:25	91-57-6	
Naphthalene	ND	ug/kg	11.3	0.42	1	05/29/15 18:58	05/31/15 20:25	91-20-3	
Phenanthrene	ND	ug/kg	11.3	0.28	1	05/29/15 18:58	05/31/15 20:25	85-01-8	
Pyrene	ND	ug/kg	11.3	0.27	1	05/29/15 18:58	05/31/15 20:25	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	67	%	55-125		1	05/29/15 18:58	05/31/15 20:25	321-60-8	
p-Terphenyl-d14 (S)	80	%	30-150		1	05/29/15 18:58	05/31/15 20:25	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307129

**Sample: DP-23 (20-20.5)**      **Lab ID: 10307129014**      Collected: 05/15/15 14:50      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	20.9	1.1	1	05/29/15 18:22	06/02/15 23:14	68334-30-5	
Motor Oil Range	ND	mg/kg	14.0	2.5	1	05/29/15 18:22	06/02/15 23:14		
<b>Surrogates</b>									
n-Triacontane (S)	120	%	50-150		1	05/29/15 18:22	06/02/15 23:14	638-68-6	
o-Terphenyl (S)	85	%	50-150		1	05/29/15 18:22	06/02/15 23:14	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>28.4</b>	%	0.10	0.10	1		06/03/15 16:10		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	459	48.8	1	05/29/15 16:05	06/02/15 19:33	101-55-3	
Butylbenzylphthalate	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	85-68-7	
Carbazole	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	59-50-7	
4-Chloroaniline	ND	ug/kg	459	70.4	1	05/29/15 16:05	06/02/15 19:33	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	459	89.8	1	05/29/15 16:05	06/02/15 19:33	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	459	32.0	1	05/29/15 16:05	06/02/15 19:33	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	459	106	1	05/29/15 16:05	06/02/15 19:33	108-60-1	
2-Chloronaphthalene	ND	ug/kg	459	71.9	1	05/29/15 16:05	06/02/15 19:33	91-58-7	
2-Chlorophenol	ND	ug/kg	459	107	1	05/29/15 16:05	06/02/15 19:33	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	459	52.9	1	05/29/15 16:05	06/02/15 19:33	7005-72-3	
Dibenzofuran	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	459	29.6	1	05/29/15 16:05	06/02/15 19:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	459	28.9	1	05/29/15 16:05	06/02/15 19:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	459	30.6	1	05/29/15 16:05	06/02/15 19:33	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	459	64.0	1	05/29/15 16:05	06/02/15 19:33	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	459	86.4	1	05/29/15 16:05	06/02/15 19:33	120-83-2	
Diethylphthalate	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	459	86.0	1	05/29/15 16:05	06/02/15 19:33	105-67-9	
Dimethylphthalate	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	131-11-3	
Di-n-butylphthalate	ND	ug/kg	459	63.7	1	05/29/15 16:05	06/02/15 19:33	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2370	91.3	1	05/29/15 16:05	06/02/15 19:33	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	459	39.2	1	05/29/15 16:05	06/02/15 19:33	606-20-2	
Di-n-octylphthalate	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	459	78.5	1	05/29/15 16:05	06/02/15 19:33	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	459	38.7	1	05/29/15 16:05	06/02/15 19:33	87-68-3	
Hexachlorobenzene	ND	ug/kg	459	60.4	1	05/29/15 16:05	06/02/15 19:33	118-74-1	
Hexachloroethane	ND	ug/kg	459	29.2	1	05/29/15 16:05	06/02/15 19:33	67-72-1	L2
Isophorone	ND	ug/kg	459	73.3	1	05/29/15 16:05	06/02/15 19:33	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	459	99.4	1	05/29/15 16:05	06/02/15 19:33	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	918	91.8	1	05/29/15 16:05	06/02/15 19:33		
2-Nitroaniline	ND	ug/kg	459	49.8	1	05/29/15 16:05	06/02/15 19:33	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-23 (20-20.5)**      **Lab ID: 10307129014**      Collected: 05/15/15 14:50      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	459	46.9	1	05/29/15 16:05	06/02/15 19:33	99-09-2	
4-Nitroaniline	ND	ug/kg	459	40.2	1	05/29/15 16:05	06/02/15 19:33	100-01-6	
Nitrobenzene	ND	ug/kg	459	92.8	1	05/29/15 16:05	06/02/15 19:33	98-95-3	
2-Nitrophenol	ND	ug/kg	459	78.5	1	05/29/15 16:05	06/02/15 19:33	88-75-5	
4-Nitrophenol	ND	ug/kg	459	48.1	1	05/29/15 16:05	06/02/15 19:33	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	459	62.5	1	05/29/15 16:05	06/02/15 19:33	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	459	230	1	05/29/15 16:05	06/02/15 19:33	86-30-6	
Pentachlorophenol	ND	ug/kg	932	230	1	05/29/15 16:05	06/02/15 19:33	87-86-5	
Phenol	ND	ug/kg	459	100	1	05/29/15 16:05	06/02/15 19:33	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	459	75.7	1	05/29/15 16:05	06/02/15 19:33	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	459	54.8	1	05/29/15 16:05	06/02/15 19:33	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	459	59.1	1	05/29/15 16:05	06/02/15 19:33	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	48	%	34-125		1	05/29/15 16:05	06/02/15 19:33	4165-60-0	
2-Fluorobiphenyl (S)	49	%	51-125		1	05/29/15 16:05	06/02/15 19:33	321-60-8	S0
p-Terphenyl-d14 (S)	75	%	55-125		1	05/29/15 16:05	06/02/15 19:33	1718-51-0	
Phenol-d6 (S)	63	%	44-125		1	05/29/15 16:05	06/02/15 19:33	13127-88-3	
2-Fluorophenol (S)	58	%	45-125		1	05/29/15 16:05	06/02/15 19:33	367-12-4	
2,4,6-Tribromophenol (S)	73	%	40-125		1	05/29/15 16:05	06/02/15 19:33	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.0	0.50	1	05/29/15 18:58	05/31/15 20:46	83-32-9	
Acenaphthylene	ND	ug/kg	14.0	0.47	1	05/29/15 18:58	05/31/15 20:46	208-96-8	
Anthracene	ND	ug/kg	14.0	0.43	1	05/29/15 18:58	05/31/15 20:46	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.0	0.26	1	05/29/15 18:58	05/31/15 20:46	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.0	0.28	1	05/29/15 18:58	05/31/15 20:46	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.0	0.49	1	05/29/15 18:58	05/31/15 20:46	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.0	0.49	1	05/29/15 18:58	05/31/15 20:46	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.0	0.56	1	05/29/15 18:58	05/31/15 20:46	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.0	0.40	1	05/29/15 18:58	05/31/15 20:46	91-58-7	L2
Chrysene	ND	ug/kg	14.0	0.34	1	05/29/15 18:58	05/31/15 20:46	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.0	0.60	1	05/29/15 18:58	05/31/15 20:46	53-70-3	
Fluoranthene	ND	ug/kg	14.0	0.31	1	05/29/15 18:58	05/31/15 20:46	206-44-0	
Fluorene	ND	ug/kg	14.0	0.43	1	05/29/15 18:58	05/31/15 20:46	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.0	0.54	1	05/29/15 18:58	05/31/15 20:46	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.0	0.52	1	05/29/15 18:58	05/31/15 20:46	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.0	0.57	1	05/29/15 18:58	05/31/15 20:46	91-57-6	
Naphthalene	ND	ug/kg	14.0	0.52	1	05/29/15 18:58	05/31/15 20:46	91-20-3	
Phenanthrene	ND	ug/kg	14.0	0.35	1	05/29/15 18:58	05/31/15 20:46	85-01-8	
Pyrene	ND	ug/kg	14.0	0.34	1	05/29/15 18:58	05/31/15 20:46	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	61	%	55-125		1	05/29/15 18:58	05/31/15 20:46	321-60-8	
p-Terphenyl-d14 (S)	74	%	30-150		1	05/29/15 18:58	05/31/15 20:46	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-35**      **Lab ID: 10307129015**      Collected: 05/15/15 17:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	<b>972</b>	mg/kg	85.6	4.6	5	05/29/15 18:22	06/03/15 20:22	68334-30-5	
Motor Oil Range	<b>74.9</b>	mg/kg	57.1	10.2	5	05/29/15 18:22	06/03/15 20:22		
<b>Surrogates</b>									
n-Triacontane (S)	112	%	50-150		5	05/29/15 18:22	06/03/15 20:22	638-68-6	
o-Terphenyl (S)	101	%	50-150		5	05/29/15 18:22	06/03/15 20:22	84-15-1	
<b>NWTPH-Gx GCV</b>									
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx									
TPH as Gas	<b>11.5</b>	mg/kg	5.5	2.8	1	05/27/15 14:46	05/29/15 06:58		
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	96	%	50-150		1	05/27/15 14:46	05/29/15 06:58	98-08-8	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>12.4</b>	%	0.10	0.10	1		06/03/15 16:10		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	377	40.1	1	05/29/15 16:05	06/02/15 20:03	101-55-3	
Butylbenzylphthalate	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	85-68-7	
Carbazole	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	59-50-7	
4-Chloroaniline	ND	ug/kg	377	57.8	1	05/29/15 16:05	06/02/15 20:03	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	377	73.6	1	05/29/15 16:05	06/02/15 20:03	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	377	26.3	1	05/29/15 16:05	06/02/15 20:03	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	377	87.0	1	05/29/15 16:05	06/02/15 20:03	108-60-1	
2-Chloronaphthalene	ND	ug/kg	377	59.0	1	05/29/15 16:05	06/02/15 20:03	91-58-7	
2-Chlorophenol	ND	ug/kg	377	87.9	1	05/29/15 16:05	06/02/15 20:03	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	377	43.4	1	05/29/15 16:05	06/02/15 20:03	7005-72-3	
Dibenzofuran	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	377	24.3	1	05/29/15 16:05	06/02/15 20:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	377	23.7	1	05/29/15 16:05	06/02/15 20:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	377	25.1	1	05/29/15 16:05	06/02/15 20:03	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	377	52.5	1	05/29/15 16:05	06/02/15 20:03	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	377	70.9	1	05/29/15 16:05	06/02/15 20:03	120-83-2	
Diethylphthalate	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	377	70.6	1	05/29/15 16:05	06/02/15 20:03	105-67-9	
Dimethylphthalate	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	131-11-3	
Di-n-butylphthalate	ND	ug/kg	377	52.3	1	05/29/15 16:05	06/02/15 20:03	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1940	74.9	1	05/29/15 16:05	06/02/15 20:03	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	377	32.2	1	05/29/15 16:05	06/02/15 20:03	606-20-2	
Di-n-octylphthalate	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	377	64.4	1	05/29/15 16:05	06/02/15 20:03	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	377	31.7	1	05/29/15 16:05	06/02/15 20:03	87-68-3	
Hexachlorobenzene	ND	ug/kg	377	49.6	1	05/29/15 16:05	06/02/15 20:03	118-74-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307129

**Sample: DP-35**      **Lab ID: 10307129015**      Collected: 05/15/15 17:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
Hexachloroethane	ND	ug/kg	377	24.0	1	05/29/15 16:05	06/02/15 20:03	67-72-1	L2
Isophorone	ND	ug/kg	377	60.2	1	05/29/15 16:05	06/02/15 20:03	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	377	81.5	1	05/29/15 16:05	06/02/15 20:03	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	754	75.4	1	05/29/15 16:05	06/02/15 20:03		
2-Nitroaniline	ND	ug/kg	377	40.9	1	05/29/15 16:05	06/02/15 20:03	88-74-4	
3-Nitroaniline	ND	ug/kg	377	38.5	1	05/29/15 16:05	06/02/15 20:03	99-09-2	
4-Nitroaniline	ND	ug/kg	377	33.0	1	05/29/15 16:05	06/02/15 20:03	100-01-6	
Nitrobenzene	ND	ug/kg	377	76.2	1	05/29/15 16:05	06/02/15 20:03	98-95-3	
2-Nitrophenol	ND	ug/kg	377	64.4	1	05/29/15 16:05	06/02/15 20:03	88-75-5	
4-Nitrophenol	ND	ug/kg	377	39.5	1	05/29/15 16:05	06/02/15 20:03	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	377	51.3	1	05/29/15 16:05	06/02/15 20:03	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	377	188	1	05/29/15 16:05	06/02/15 20:03	86-30-6	
Pentachlorophenol	<b>891</b>	ug/kg	765	188	1	05/29/15 16:05	06/02/15 20:03	87-86-5	
Phenol	ND	ug/kg	377	82.3	1	05/29/15 16:05	06/02/15 20:03	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	377	62.1	1	05/29/15 16:05	06/02/15 20:03	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	377	45.0	1	05/29/15 16:05	06/02/15 20:03	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	377	48.5	1	05/29/15 16:05	06/02/15 20:03	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	57	%	34-125		1	05/29/15 16:05	06/02/15 20:03	4165-60-0	
2-Fluorobiphenyl (S)	62	%	51-125		1	05/29/15 16:05	06/02/15 20:03	321-60-8	
p-Terphenyl-d14 (S)	70	%	55-125		1	05/29/15 16:05	06/02/15 20:03	1718-51-0	
Phenol-d6 (S)	63	%	44-125		1	05/29/15 16:05	06/02/15 20:03	13127-88-3	
2-Fluorophenol (S)	59	%	45-125		1	05/29/15 16:05	06/02/15 20:03	367-12-4	
2,4,6-Tribromophenol (S)	70	%	40-125		1	05/29/15 16:05	06/02/15 20:03	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	<b>310</b>	ug/kg	11.4	0.41	1	05/29/15 18:58	05/31/15 22:35	83-32-9	
Acenaphthylene	<b>78.1</b>	ug/kg	11.4	0.39	1	05/29/15 18:58	05/31/15 22:35	208-96-8	
Anthracene	<b>221</b>	ug/kg	11.4	0.35	1	05/29/15 18:58	05/31/15 22:35	120-12-7	
Benzo(a)anthracene	<b>23.5</b>	ug/kg	11.4	0.21	1	05/29/15 18:58	05/31/15 22:35	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.4	0.22	1	05/29/15 18:58	05/31/15 22:35	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.4	0.40	1	05/29/15 18:58	05/31/15 22:35	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.4	0.40	1	05/29/15 18:58	05/31/15 22:35	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.4	0.46	1	05/29/15 18:58	05/31/15 22:35	207-08-9	
2-Chloronaphthalene	<b>73.3</b>	ug/kg	11.4	0.32	1	05/29/15 18:58	05/31/15 22:35	91-58-7	L2
Chrysene	<b>78.3</b>	ug/kg	11.4	0.28	1	05/29/15 18:58	05/31/15 22:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.4	0.49	1	05/29/15 18:58	05/31/15 22:35	53-70-3	
Fluoranthene	<b>124</b>	ug/kg	11.4	0.25	1	05/29/15 18:58	05/31/15 22:35	206-44-0	
Fluorene	<b>1020</b>	ug/kg	57.1	1.8	5	05/29/15 18:58	06/01/15 13:32	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.4	0.44	1	05/29/15 18:58	05/31/15 22:35	193-39-5	
1-Methylnaphthalene	<b>1200</b>	ug/kg	228	8.5	20	05/29/15 18:58	06/01/15 14:36	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.4	0.47	1	05/29/15 18:58	05/31/15 22:35	91-57-6	
Naphthalene	<b>59.2</b>	ug/kg	11.4	0.42	1	05/29/15 18:58	05/31/15 22:35	91-20-3	
Phenanthrene	<b>2910</b>	ug/kg	228	5.7	20	05/29/15 18:58	06/01/15 14:36	85-01-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-35**      **Lab ID: 10307129015**      Collected: 05/15/15 17:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3550									
Pyrene	<b>290</b>	ug/kg	11.4	0.27	1	05/29/15 18:58	05/31/15 22:35	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	55	%.	55-125		1	05/29/15 18:58	05/31/15 22:35	321-60-8	
p-Terphenyl-d14 (S)	78	%.	30-150		1	05/29/15 18:58	05/31/15 22:35	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-36**      **Lab ID: 10307129016**      Collected: 05/15/15 17:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	26.3	mg/kg	16.3	0.88	1	05/29/15 18:22	06/02/15 19:24	68334-30-5	
Motor Oil Range	ND	mg/kg	10.8	1.9	1	05/29/15 18:22	06/02/15 19:24		
<b>Surrogates</b>									
n-Triacontane (S)	122	%	50-150		1	05/29/15 18:22	06/02/15 19:24	638-68-6	
o-Terphenyl (S)	103	%	50-150		1	05/29/15 18:22	06/02/15 19:24	84-15-1	
<b>NWTPH-Gx GCV</b>									
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx									
TPH as Gas	ND	mg/kg	5.5	2.7	1	05/27/15 14:46	05/29/15 06:38		
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	96	%	50-150		1	05/27/15 14:46	05/29/15 06:38	98-08-8	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	8.7	%	0.10	0.10	1		06/03/15 16:11		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	360	38.3	1	05/29/15 16:05	06/02/15 20:33	101-55-3	
Butylbenzylphthalate	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	85-68-7	
Carbazole	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	59-50-7	
4-Chloroaniline	ND	ug/kg	360	55.2	1	05/29/15 16:05	06/02/15 20:33	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	360	70.4	1	05/29/15 16:05	06/02/15 20:33	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	360	25.1	1	05/29/15 16:05	06/02/15 20:33	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	360	83.2	1	05/29/15 16:05	06/02/15 20:33	108-60-1	
2-Chloronaphthalene	ND	ug/kg	360	56.4	1	05/29/15 16:05	06/02/15 20:33	91-58-7	
2-Chlorophenol	ND	ug/kg	360	84.0	1	05/29/15 16:05	06/02/15 20:33	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	360	41.5	1	05/29/15 16:05	06/02/15 20:33	7005-72-3	
Dibenzofuran	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	360	23.2	1	05/29/15 16:05	06/02/15 20:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	360	22.7	1	05/29/15 16:05	06/02/15 20:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	360	24.0	1	05/29/15 16:05	06/02/15 20:33	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	360	50.2	1	05/29/15 16:05	06/02/15 20:33	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	360	67.8	1	05/29/15 16:05	06/02/15 20:33	120-83-2	
Diethylphthalate	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	360	67.4	1	05/29/15 16:05	06/02/15 20:33	105-67-9	
Dimethylphthalate	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	131-11-3	
Di-n-butylphthalate	ND	ug/kg	360	50.0	1	05/29/15 16:05	06/02/15 20:33	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1860	71.6	1	05/29/15 16:05	06/02/15 20:33	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	360	30.8	1	05/29/15 16:05	06/02/15 20:33	606-20-2	
Di-n-octylphthalate	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	360	61.5	1	05/29/15 16:05	06/02/15 20:33	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	360	30.3	1	05/29/15 16:05	06/02/15 20:33	87-68-3	
Hexachlorobenzene	ND	ug/kg	360	47.4	1	05/29/15 16:05	06/02/15 20:33	118-74-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-36**      **Lab ID: 10307129016**      Collected: 05/15/15 17:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----------------	-----	----	----------	----------	---------	------

**8270D MSSV**

Analytical Method: EPA 8270D      Preparation Method: EPA 3550

Hexachloroethane	ND	ug/kg	360	22.9	1	05/29/15 16:05	06/02/15 20:33	67-72-1	L2
Isophorone	ND	ug/kg	360	57.5	1	05/29/15 16:05	06/02/15 20:33	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	360	77.9	1	05/29/15 16:05	06/02/15 20:33	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	720	72.0	1	05/29/15 16:05	06/02/15 20:33		
2-Nitroaniline	ND	ug/kg	360	39.1	1	05/29/15 16:05	06/02/15 20:33	88-74-4	
3-Nitroaniline	ND	ug/kg	360	36.8	1	05/29/15 16:05	06/02/15 20:33	99-09-2	
4-Nitroaniline	ND	ug/kg	360	31.5	1	05/29/15 16:05	06/02/15 20:33	100-01-6	
Nitrobenzene	ND	ug/kg	360	72.8	1	05/29/15 16:05	06/02/15 20:33	98-95-3	
2-Nitrophenol	ND	ug/kg	360	61.5	1	05/29/15 16:05	06/02/15 20:33	88-75-5	
4-Nitrophenol	ND	ug/kg	360	37.8	1	05/29/15 16:05	06/02/15 20:33	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	360	49.0	1	05/29/15 16:05	06/02/15 20:33	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	360	180	1	05/29/15 16:05	06/02/15 20:33	86-30-6	
Pentachlorophenol	ND	ug/kg	731	180	1	05/29/15 16:05	06/02/15 20:33	87-86-5	
Phenol	ND	ug/kg	360	78.7	1	05/29/15 16:05	06/02/15 20:33	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	360	59.4	1	05/29/15 16:05	06/02/15 20:33	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	360	43.0	1	05/29/15 16:05	06/02/15 20:33	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	360	46.4	1	05/29/15 16:05	06/02/15 20:33	88-06-2	

**Surrogates**

Nitrobenzene-d5 (S)	56	%	34-125		1	05/29/15 16:05	06/02/15 20:33	4165-60-0	
2-Fluorobiphenyl (S)	64	%	51-125		1	05/29/15 16:05	06/02/15 20:33	321-60-8	
p-Terphenyl-d14 (S)	76	%	55-125		1	05/29/15 16:05	06/02/15 20:33	1718-51-0	
Phenol-d6 (S)	66	%	44-125		1	05/29/15 16:05	06/02/15 20:33	13127-88-3	
2-Fluorophenol (S)	62	%	45-125		1	05/29/15 16:05	06/02/15 20:33	367-12-4	
2,4,6-Tribromophenol (S)	69	%	40-125		1	05/29/15 16:05	06/02/15 20:33	118-79-6	

**8270D MSSV PAH by SIM**

Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3550

Acenaphthene	ND	ug/kg	10.9	0.39	1	05/29/15 18:58	05/31/15 21:08	83-32-9	
Acenaphthylene	ND	ug/kg	10.9	0.37	1	05/29/15 18:58	05/31/15 21:08	208-96-8	
Anthracene	ND	ug/kg	10.9	0.34	1	05/29/15 18:58	05/31/15 21:08	120-12-7	
Benzo(a)anthracene	ND	ug/kg	10.9	0.20	1	05/29/15 18:58	05/31/15 21:08	56-55-3	
Benzo(a)pyrene	ND	ug/kg	10.9	0.21	1	05/29/15 18:58	05/31/15 21:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	10.9	0.38	1	05/29/15 18:58	05/31/15 21:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	10.9	0.39	1	05/29/15 18:58	05/31/15 21:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	10.9	0.44	1	05/29/15 18:58	05/31/15 21:08	207-08-9	
2-Chloronaphthalene	ND	ug/kg	10.9	0.31	1	05/29/15 18:58	05/31/15 21:08	91-58-7	L2
Chrysene	ND	ug/kg	10.9	0.27	1	05/29/15 18:58	05/31/15 21:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	10.9	0.47	1	05/29/15 18:58	05/31/15 21:08	53-70-3	
Fluoranthene	ND	ug/kg	10.9	0.24	1	05/29/15 18:58	05/31/15 21:08	206-44-0	
Fluorene	ND	ug/kg	10.9	0.34	1	05/29/15 18:58	05/31/15 21:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	10.9	0.42	1	05/29/15 18:58	05/31/15 21:08	193-39-5	
1-Methylnaphthalene	ND	ug/kg	10.9	0.41	1	05/29/15 18:58	05/31/15 21:08	90-12-0	
2-Methylnaphthalene	ND	ug/kg	10.9	0.45	1	05/29/15 18:58	05/31/15 21:08	91-57-6	
Naphthalene	ND	ug/kg	10.9	0.40	1	05/29/15 18:58	05/31/15 21:08	91-20-3	
Phenanthrene	ND	ug/kg	10.9	0.27	1	05/29/15 18:58	05/31/15 21:08	85-01-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: DP-36**      **Lab ID: 10307129016**      Collected: 05/15/15 17:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3550									
Pyrene	ND	ug/kg	10.9	0.26	1	05/29/15 18:58	05/31/15 21:08	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	71	%.	55-125		1	05/29/15 18:58	05/31/15 21:08	321-60-8	
p-Terphenyl-d14 (S)	79	%.	30-150		1	05/29/15 18:58	05/31/15 21:08	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: CPPI Drum 1**      **Lab ID: 10307129017**      Collected: 05/15/15 18:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.0	1.1	1	05/29/15 18:22	06/03/15 00:23	68334-30-5	
Motor Oil Range	ND	mg/kg	14.0	2.5	1	05/29/15 18:22	06/03/15 00:23		
<b>Surrogates</b>									
n-Triacontane (S)	127	%	50-150		1	05/29/15 18:22	06/03/15 00:23	638-68-6	
o-Terphenyl (S)	104	%	50-150		1	05/29/15 18:22	06/03/15 00:23	84-15-1	
<b>NWTPH-Gx GCV</b>									
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx									
TPH as Gas	ND	mg/kg	6.7	3.3	1	05/27/15 14:46	05/29/15 02:57		
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	50-150		1	05/27/15 14:46	05/29/15 02:57	98-08-8	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>28.6</b>	%	0.10	0.10	1		06/03/15 16:11		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	461	49.0	1	05/29/15 16:05	06/02/15 21:03	101-55-3	
Butylbenzylphthalate	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	85-68-7	
Carbazole	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	59-50-7	
4-Chloroaniline	ND	ug/kg	461	70.6	1	05/29/15 16:05	06/02/15 21:03	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	461	90.0	1	05/29/15 16:05	06/02/15 21:03	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	461	32.1	1	05/29/15 16:05	06/02/15 21:03	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	461	106	1	05/29/15 16:05	06/02/15 21:03	108-60-1	
2-Chloronaphthalene	ND	ug/kg	461	72.2	1	05/29/15 16:05	06/02/15 21:03	91-58-7	
2-Chlorophenol	ND	ug/kg	461	107	1	05/29/15 16:05	06/02/15 21:03	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	461	53.0	1	05/29/15 16:05	06/02/15 21:03	7005-72-3	
Dibenzofuran	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	461	29.7	1	05/29/15 16:05	06/02/15 21:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	461	29.0	1	05/29/15 16:05	06/02/15 21:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	461	30.7	1	05/29/15 16:05	06/02/15 21:03	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	461	64.2	1	05/29/15 16:05	06/02/15 21:03	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	461	86.7	1	05/29/15 16:05	06/02/15 21:03	120-83-2	
Diethylphthalate	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	461	86.3	1	05/29/15 16:05	06/02/15 21:03	105-67-9	
Dimethylphthalate	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	131-11-3	
Di-n-butylphthalate	ND	ug/kg	461	63.9	1	05/29/15 16:05	06/02/15 21:03	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2370	91.6	1	05/29/15 16:05	06/02/15 21:03	534-52-1	L2
2,4-Dinitrophenol	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	51-28-5	L2
2,4-Dinitrotoluene	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	461	39.4	1	05/29/15 16:05	06/02/15 21:03	606-20-2	
Di-n-octylphthalate	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	461	78.7	1	05/29/15 16:05	06/02/15 21:03	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	461	38.8	1	05/29/15 16:05	06/02/15 21:03	87-68-3	
Hexachlorobenzene	ND	ug/kg	461	60.6	1	05/29/15 16:05	06/02/15 21:03	118-74-1	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

**Sample: CPPI Drum 1**      **Lab ID: 10307129017**      Collected: 05/15/15 18:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
Hexachloroethane	ND	ug/kg	461	29.3	1	05/29/15 16:05	06/02/15 21:03	67-72-1	L2
Isophorone	ND	ug/kg	461	73.6	1	05/29/15 16:05	06/02/15 21:03	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	461	99.7	1	05/29/15 16:05	06/02/15 21:03	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	921	92.1	1	05/29/15 16:05	06/02/15 21:03		
2-Nitroaniline	ND	ug/kg	461	50.0	1	05/29/15 16:05	06/02/15 21:03	88-74-4	
3-Nitroaniline	ND	ug/kg	461	47.0	1	05/29/15 16:05	06/02/15 21:03	99-09-2	
4-Nitroaniline	ND	ug/kg	461	40.3	1	05/29/15 16:05	06/02/15 21:03	100-01-6	
Nitrobenzene	ND	ug/kg	461	93.1	1	05/29/15 16:05	06/02/15 21:03	98-95-3	
2-Nitrophenol	ND	ug/kg	461	78.7	1	05/29/15 16:05	06/02/15 21:03	88-75-5	
4-Nitrophenol	ND	ug/kg	461	48.3	1	05/29/15 16:05	06/02/15 21:03	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	461	62.7	1	05/29/15 16:05	06/02/15 21:03	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	461	230	1	05/29/15 16:05	06/02/15 21:03	86-30-6	
Pentachlorophenol	ND	ug/kg	935	230	1	05/29/15 16:05	06/02/15 21:03	87-86-5	
Phenol	ND	ug/kg	461	101	1	05/29/15 16:05	06/02/15 21:03	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	461	75.9	1	05/29/15 16:05	06/02/15 21:03	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	461	55.0	1	05/29/15 16:05	06/02/15 21:03	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	461	59.3	1	05/29/15 16:05	06/02/15 21:03	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	35	%	34-125		1	05/29/15 16:05	06/02/15 21:03	4165-60-0	
2-Fluorobiphenyl (S)	46	%	51-125		1	05/29/15 16:05	06/02/15 21:03	321-60-8	S0
p-Terphenyl-d14 (S)	79	%	55-125		1	05/29/15 16:05	06/02/15 21:03	1718-51-0	
Phenol-d6 (S)	62	%	44-125		1	05/29/15 16:05	06/02/15 21:03	13127-88-3	
2-Fluorophenol (S)	48	%	45-125		1	05/29/15 16:05	06/02/15 21:03	367-12-4	
2,4,6-Tribromophenol (S)	73	%	40-125		1	05/29/15 16:05	06/02/15 21:03	118-79-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

QC Batch: GCV/13781 Analysis Method: NWTPH-Gx  
 QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Solid GCV  
 Associated Lab Samples: 10307129015, 10307129016, 10307129017

METHOD BLANK: 1976729 Matrix: Solid

Associated Lab Samples: 10307129015, 10307129016, 10307129017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	mg/kg	ND	5.0	05/28/15 23:37	
a,a,a-Trifluorotoluene (S)	%.	95	50-150	05/28/15 23:37	

METHOD BLANK: 1976730 Matrix: Solid

Associated Lab Samples: 10307129015, 10307129016, 10307129017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	mg/kg	ND	5.0	05/29/15 04:57	
a,a,a-Trifluorotoluene (S)	%.	99	50-150	05/29/15 04:57	

LABORATORY CONTROL SAMPLE & LCSD: 1976731 1976732

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	mg/kg	10	11.0	10.9	110	109	75-125	1	20	
a,a,a-Trifluorotoluene (S)	%.				90	88	50-150			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1976733 1976734

Parameter	Units	10307585005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH as Gas	mg/kg	ND	20.2	20.3	17.4	17.8	86	88	50-150	3	30	
a,a,a-Trifluorotoluene (S)	%.						86	86	50-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

QC Batch: MPRP/54905

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 10307129001, 10307129002, 10307129003, 10307129004, 10307129005, 10307129006, 10307129007, 10307129008

SAMPLE DUPLICATE: 1983751

Parameter	Units	10307126009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.1	18.7	21	30	

SAMPLE DUPLICATE: 1983752

Parameter	Units	10307129008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	26.2	30.4	15	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

QC Batch: MPRP/54906

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 10307129009, 10307129010, 10307129011, 10307129012, 10307129013, 10307129014, 10307129015, 10307129016, 10307129017

SAMPLE DUPLICATE: 1983935

Parameter	Units	10307129010 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	35.6	35.0	1	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

QC Batch: OEXT/29340 Analysis Method: EPA 8270D  
QC Batch Method: EPA 3550 Analysis Description: 8270D Solid MSSV  
Associated Lab Samples: 10307129001, 10307129002, 10307129003, 10307129004

METHOD BLANK: 1978100 Matrix: Solid  
Associated Lab Samples: 10307129001, 10307129002, 10307129003, 10307129004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	05/29/15 08:47	
1,2-Dichlorobenzene	ug/kg	ND	330	05/29/15 08:47	
1,2-Diphenylhydrazine	ug/kg	ND	330	05/29/15 08:47	
1,3-Dichlorobenzene	ug/kg	ND	330	05/29/15 08:47	
1,4-Dichlorobenzene	ug/kg	ND	330	05/29/15 08:47	
2,4,5-Trichlorophenol	ug/kg	ND	330	05/29/15 08:47	
2,4,6-Trichlorophenol	ug/kg	ND	330	05/29/15 08:47	
2,4-Dichlorophenol	ug/kg	ND	330	05/29/15 08:47	
2,4-Dimethylphenol	ug/kg	ND	330	05/29/15 08:47	
2,4-Dinitrophenol	ug/kg	ND	330	05/29/15 08:47	
2,4-Dinitrotoluene	ug/kg	ND	330	05/29/15 08:47	
2,6-Dinitrotoluene	ug/kg	ND	330	05/29/15 08:47	
2-Chloronaphthalene	ug/kg	ND	330	05/29/15 08:47	
2-Chlorophenol	ug/kg	ND	330	05/29/15 08:47	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	05/29/15 08:47	
2-Nitroaniline	ug/kg	ND	330	05/29/15 08:47	
2-Nitrophenol	ug/kg	ND	330	05/29/15 08:47	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	660	05/29/15 08:47	
3,3'-Dichlorobenzidine	ug/kg	ND	330	05/29/15 08:47	
3-Nitroaniline	ug/kg	ND	330	05/29/15 08:47	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	05/29/15 08:47	
4-Bromophenylphenyl ether	ug/kg	ND	330	05/29/15 08:47	
4-Chloro-3-methylphenol	ug/kg	ND	330	05/29/15 08:47	
4-Chloroaniline	ug/kg	ND	330	05/29/15 08:47	
4-Chlorophenylphenyl ether	ug/kg	ND	330	05/29/15 08:47	
4-Nitroaniline	ug/kg	ND	330	05/29/15 08:47	
4-Nitrophenol	ug/kg	ND	330	05/29/15 08:47	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	05/29/15 08:47	
bis(2-Chloroethyl) ether	ug/kg	ND	330	05/29/15 08:47	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	05/29/15 08:47	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	05/29/15 08:47	
Butylbenzylphthalate	ug/kg	ND	330	05/29/15 08:47	
Carbazole	ug/kg	ND	330	05/29/15 08:47	
Di-n-butylphthalate	ug/kg	ND	330	05/29/15 08:47	
Di-n-octylphthalate	ug/kg	ND	330	05/29/15 08:47	
Dibenzofuran	ug/kg	ND	330	05/29/15 08:47	
Diethylphthalate	ug/kg	ND	330	05/29/15 08:47	
Dimethylphthalate	ug/kg	ND	330	05/29/15 08:47	
Hexachloro-1,3-butadiene	ug/kg	ND	330	05/29/15 08:47	
Hexachlorobenzene	ug/kg	ND	330	05/29/15 08:47	
Hexachloroethane	ug/kg	ND	330	05/29/15 08:47	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

METHOD BLANK: 1978100

Matrix: Solid

Associated Lab Samples: 10307129001, 10307129002, 10307129003, 10307129004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Isophorone	ug/kg	ND	330	05/29/15 08:47	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	05/29/15 08:47	
N-Nitrosodimethylamine	ug/kg	ND	330	05/29/15 08:47	
N-Nitrosodiphenylamine	ug/kg	ND	330	05/29/15 08:47	
Nitrobenzene	ug/kg	ND	330	05/29/15 08:47	
Pentachlorophenol	ug/kg	ND	670	05/29/15 08:47	
Phenol	ug/kg	ND	330	05/29/15 08:47	
2,4,6-Tribromophenol (S)	%	68	40-125	05/29/15 08:47	
2-Fluorobiphenyl (S)	%	64	51-125	05/29/15 08:47	
2-Fluorophenol (S)	%	48	45-125	05/29/15 08:47	
Nitrobenzene-d5 (S)	%	47	34-125	05/29/15 08:47	
p-Terphenyl-d14 (S)	%	84	55-125	05/29/15 08:47	
Phenol-d6 (S)	%	59	44-125	05/29/15 08:47	

LABORATORY CONTROL SAMPLE: 1978101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1080	65	41-125	
1,2-Dichlorobenzene	ug/kg	1670	1010	61	38-125	
1,2-Diphenylhydrazine	ug/kg	1670	1260	76	58-125	
1,3-Dichlorobenzene	ug/kg	1670	1020	61	36-125	
1,4-Dichlorobenzene	ug/kg	1670	1010	60	36-125	
2,4,5-Trichlorophenol	ug/kg	1670	1270	76	56-125	
2,4,6-Trichlorophenol	ug/kg	1670	1240	74	57-125	
2,4-Dichlorophenol	ug/kg	1670	1250	75	51-125	
2,4-Dimethylphenol	ug/kg	1670	1200	72	48-125	
2,4-Dinitrophenol	ug/kg	1670	897	54	30-125	1M
2,4-Dinitrotoluene	ug/kg	1670	1290	77	58-125	
2,6-Dinitrotoluene	ug/kg	1670	1290	77	58-125	
2-Chloronaphthalene	ug/kg	1670	1210	73	53-125	
2-Chlorophenol	ug/kg	1670	1070	64	44-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1160	70	48-125	
2-Nitroaniline	ug/kg	1670	1250	75	58-125	
2-Nitrophenol	ug/kg	1670	1100	66	43-125	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1220	73	53-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1320	79	42-125	
3-Nitroaniline	ug/kg	1670	1220	73	47-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1180J	71	38-125	
4-Bromophenylphenyl ether	ug/kg	1670	1320	79	59-125	
4-Chloro-3-methylphenol	ug/kg	1670	1250	75	58-125	
4-Chloroaniline	ug/kg	1670	1150	69	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1290	77	59-125	
4-Nitroaniline	ug/kg	1670	1230	74	54-125	
4-Nitrophenol	ug/kg	1670	1170	70	53-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

LABORATORY CONTROL SAMPLE: 1978101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
bis(2-Chloroethoxy)methane	ug/kg	1670	1170	70	48-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1060	64	39-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1080	65	33-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1280	77	61-125	
Butylbenzylphthalate	ug/kg	1670	1270	76	60-125	
Carbazole	ug/kg	1670	1270	76	59-125	
Di-n-butylphthalate	ug/kg	1670	1330	80	61-125	
Di-n-octylphthalate	ug/kg	1670	1270	76	60-125	
Dibenzofuran	ug/kg	1670	1250	75	58-125	
Diethylphthalate	ug/kg	1670	1280	77	60-125	
Dimethylphthalate	ug/kg	1670	1260	76	60-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1040	63	38-125	
Hexachlorobenzene	ug/kg	1670	1310	79	57-125	
Hexachloroethane	ug/kg	1670	976	59	54-125	
Isophorone	ug/kg	1670	1220	73	52-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1110	67	48-125	
N-Nitrosodimethylamine	ug/kg	1670	1020	61	31-125	
N-Nitrosodiphenylamine	ug/kg	1670	1310	79	59-125	
Nitrobenzene	ug/kg	1670	1080	65	46-125	
Pentachlorophenol	ug/kg	1670	985	59	47-125	
Phenol	ug/kg	1670	1130	68	48-125	
2,4,6-Tribromophenol (S)	%			72	40-125	
2-Fluorobiphenyl (S)	%			69	51-125	
2-Fluorophenol (S)	%			58	45-125	
Nitrobenzene-d5 (S)	%			55	34-125	
p-Terphenyl-d14 (S)	%			76	55-125	
Phenol-d6 (S)	%			64	44-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978102 1978103

Parameter	Units	10307476001		MSD		MS		MSD		% Rec Limits	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec				
1,2,4-Trichlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	1010	1010	57	56	43-125	0	30	
1,2-Dichlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	898	912	50	51	36-125	2	30	
1,2-Diphenylhydrazine	ug/kg	<0.35 mg/kg	1780	1790	1270	1340	71	75	30-125	5	30	
1,3-Dichlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	873	864	49	48	34-125	1	30	
1,4-Dichlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	880	883	49	49	33-125	0	30	
2,4,5-Trichlorophenol	ug/kg	<0.35 mg/kg	1780	1790	1250	1350	70	75	30-141	8	30	
2,4,6-Trichlorophenol	ug/kg	<0.35 mg/kg	1780	1790	1250	1310	70	73	30-143	5	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

Parameter	Units	1978102		1978103		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
2,4-Dichlorophenol	ug/kg	<0.35 mg/kg	1780	1790	1200	1310	67	73	30-139	8	30	
2,4-Dimethylphenol	ug/kg	<0.35 mg/kg	1780	1790	1200	1250	67	70	47-125	4	30	
2,4-Dinitrophenol	ug/kg	<0.35 mg/kg	1780	1790	762	921	43	51	30-125	19	30	1M
2,4-Dinitrotoluene	ug/kg	<0.35 mg/kg	1780	1790	1280	1380	72	77	50-125	7	30	
2,6-Dinitrotoluene	ug/kg	<0.35 mg/kg	1780	1790	1280	1350	72	75	48-125	5	30	
2-Chloronaphthalene	ug/kg	<0.35 mg/kg	1780	1790	1250	1270	70	71	49-125	1	30	
2-Chlorophenol	ug/kg	<0.35 mg/kg	1780	1790	1020	1020	57	57	30-125	0	30	
2-Methylphenol(o-Cresol)	ug/kg	<0.35 mg/kg	1780	1790	1160	1190	65	66	43-125	2	30	
2-Nitroaniline	ug/kg	<0.35 mg/kg	1780	1790	1280	1370	72	76	57-125	7	30	
2-Nitrophenol	ug/kg	<0.35 mg/kg	1780	1790	1100	1130	62	63	30-150	3	30	
3&4-Methylphenol(m&p Cresol)	ug/kg	<0.71 mg/kg	1780	1790	1200	1270	67	71	51-125	6	30	
3,3'-Dichlorobenzidine	ug/kg	<0.35 mg/kg	1780	1790	1200	1300	67	72	30-132	8	30	
3-Nitroaniline	ug/kg	<0.35 mg/kg	1780	1790	1210	1270	68	71	30-132	5	30	
4,6-Dinitro-2-methylphenol	ug/kg	<1.8 mg/kg	1780	1790	1130J	1340J	63	75	30-130		30	
4-Bromophenylphenyl ether	ug/kg	<0.35 mg/kg	1780	1790	1260	1410	71	79	57-125	12	30	
4-Chloro-3-methylphenol	ug/kg	<0.35 mg/kg	1780	1790	1220	1350	68	76	30-139	10	30	
4-Chloroaniline	ug/kg	<0.35 mg/kg	1780	1790	1010	1120	57	62	30-125	10	30	
4-Chlorophenylphenyl ether	ug/kg	<0.35 mg/kg	1780	1790	1270	1330	71	74	30-130	5	30	
4-Nitroaniline	ug/kg	<0.35 mg/kg	1780	1790	1210	1320	68	74	30-150	9	30	
4-Nitrophenol	ug/kg	<0.35 mg/kg	1780	1790	1160	1290	65	72	30-145	11	30	
bis(2-Chloroethoxy)methane	ug/kg	<0.35 mg/kg	1780	1790	1150	1180	64	66	46-125	2	30	
bis(2-Chloroethyl) ether	ug/kg	<0.35 mg/kg	1780	1790	934	974	52	54	34-125	4	30	
bis(2-Chloroisopropyl) ether	ug/kg	<0.35 mg/kg	1780	1790	977	999	55	56	33-125	2	30	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.35 mg/kg	1780	1790	1260	1340	71	75	60-125	5	30	
Butylbenzylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1250	1320	70	74	55-125	6	30	
Carbazole	ug/kg	<0.35 mg/kg	1780	1790	1250	1370	70	77	56-125	10	30	
Di-n-butylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1290	1380	72	77	58-125	7	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

Parameter	Units	10307476001		1978102		1978103		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Di-n-octylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1260	1330	71	74	59-125	5	30			
Dibenzofuran	ug/kg	<0.35 mg/kg	1780	1790	1270	1340	71	75	57-125	5	30			
Diethylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1270	1360	71	76	58-125	6	30			
Dimethylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1250	1350	70	75	59-125	8	30			
Hexachloro-1,3-butadiene	ug/kg	<0.35 mg/kg	1780	1790	938	935	53	52	39-125	0	30			
Hexachlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	1280	1420	72	79	55-125	10	30			
Hexachloroethane	ug/kg	<0.35 mg/kg	1780	1790	846	844	47	47	30-125	0	30			
Isophorone	ug/kg	<0.35 mg/kg	1780	1790	1170	1260	65	70	49-125	7	30			
N-Nitroso-di-n-propylamine	ug/kg	<0.35 mg/kg	1780	1790	1090	1120	61	63	30-140	3	30			
N-Nitrosodimethylamine	ug/kg	<0.35 mg/kg	1780	1790	938	1010	53	57	30-125	8	30			
N-Nitrosodiphenylamine	ug/kg	<0.35 mg/kg	1780	1790	1260	1390	71	77	57-125	9	30			
Nitrobenzene	ug/kg	<0.35 mg/kg	1780	1790	1040	1060	58	59	30-139	1	30			
Pentachlorophenol	ug/kg	<0.72 mg/kg	1780	1790	913	1030	51	57	30-148	12	30			
Phenol	ug/kg	<0.35 mg/kg	1780	1790	1130	1140	63	64	48-125	1	30			
2,4,6-Tribromophenol (S)	%						67	73	40-125					
2-Fluorobiphenyl (S)	%						63	66	51-125					
2-Fluorophenol (S)	%						50	53	45-125					
Nitrobenzene-d5 (S)	%						50	54	34-125					
p-Terphenyl-d14 (S)	%						69	73	55-125					
Phenol-d6 (S)	%						59	60	44-125					

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

QC Batch: OEXT/29353 Analysis Method: EPA 8270D  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid MSSV  
 Associated Lab Samples: 10307129005, 10307129006, 10307129007, 10307129008, 10307129009, 10307129010, 10307129011, 10307129012, 10307129013, 10307129014, 10307129015, 10307129016, 10307129017

METHOD BLANK: 1979170 Matrix: Solid  
 Associated Lab Samples: 10307129005, 10307129006, 10307129007, 10307129008, 10307129009, 10307129010, 10307129011, 10307129012, 10307129013, 10307129014, 10307129015, 10307129016, 10307129017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	06/02/15 16:32	
1,2-Dichlorobenzene	ug/kg	ND	330	06/02/15 16:32	
1,2-Diphenylhydrazine	ug/kg	ND	330	06/02/15 16:32	
1,3-Dichlorobenzene	ug/kg	ND	330	06/02/15 16:32	
1,4-Dichlorobenzene	ug/kg	ND	330	06/02/15 16:32	
2,4,5-Trichlorophenol	ug/kg	ND	330	06/02/15 16:32	
2,4,6-Trichlorophenol	ug/kg	ND	330	06/02/15 16:32	
2,4-Dichlorophenol	ug/kg	ND	330	06/02/15 16:32	
2,4-Dimethylphenol	ug/kg	ND	330	06/02/15 16:32	
2,4-Dinitrophenol	ug/kg	ND	330	06/02/15 16:32	
2,4-Dinitrotoluene	ug/kg	ND	330	06/02/15 16:32	
2,6-Dinitrotoluene	ug/kg	ND	330	06/02/15 16:32	
2-Chloronaphthalene	ug/kg	ND	330	06/02/15 16:32	
2-Chlorophenol	ug/kg	ND	330	06/02/15 16:32	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	06/02/15 16:32	
2-Nitroaniline	ug/kg	ND	330	06/02/15 16:32	
2-Nitrophenol	ug/kg	ND	330	06/02/15 16:32	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	660	06/02/15 16:32	
3,3'-Dichlorobenzidine	ug/kg	ND	330	06/02/15 16:32	
3-Nitroaniline	ug/kg	ND	330	06/02/15 16:32	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	06/02/15 16:32	
4-Bromophenylphenyl ether	ug/kg	ND	330	06/02/15 16:32	
4-Chloro-3-methylphenol	ug/kg	ND	330	06/02/15 16:32	
4-Chloroaniline	ug/kg	ND	330	06/02/15 16:32	
4-Chlorophenylphenyl ether	ug/kg	ND	330	06/02/15 16:32	
4-Nitroaniline	ug/kg	ND	330	06/02/15 16:32	
4-Nitrophenol	ug/kg	ND	330	06/02/15 16:32	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	06/02/15 16:32	
bis(2-Chloroethyl) ether	ug/kg	ND	330	06/02/15 16:32	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	06/02/15 16:32	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	06/02/15 16:32	
Butylbenzylphthalate	ug/kg	ND	330	06/02/15 16:32	
Carbazole	ug/kg	ND	330	06/02/15 16:32	
Di-n-butylphthalate	ug/kg	ND	330	06/02/15 16:32	
Di-n-octylphthalate	ug/kg	ND	330	06/02/15 16:32	
Dibenzofuran	ug/kg	ND	330	06/02/15 16:32	
Diethylphthalate	ug/kg	ND	330	06/02/15 16:32	
Dimethylphthalate	ug/kg	ND	330	06/02/15 16:32	
Hexachloro-1,3-butadiene	ug/kg	ND	330	06/02/15 16:32	
Hexachlorobenzene	ug/kg	ND	330	06/02/15 16:32	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

METHOD BLANK: 1979170

Matrix: Solid

Associated Lab Samples: 10307129005, 10307129006, 10307129007, 10307129008, 10307129009, 10307129010, 10307129011, 10307129012, 10307129013, 10307129014, 10307129015, 10307129016, 10307129017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloroethane	ug/kg	ND	330	06/02/15 16:32	
Isophorone	ug/kg	ND	330	06/02/15 16:32	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	06/02/15 16:32	
N-Nitrosodimethylamine	ug/kg	ND	330	06/02/15 16:32	
N-Nitrosodiphenylamine	ug/kg	ND	330	06/02/15 16:32	
Nitrobenzene	ug/kg	ND	330	06/02/15 16:32	
Pentachlorophenol	ug/kg	ND	670	06/02/15 16:32	
Phenol	ug/kg	ND	330	06/02/15 16:32	
2,4,6-Tribromophenol (S)	%	81	40-125	06/02/15 16:32	
2-Fluorobiphenyl (S)	%	81	51-125	06/02/15 16:32	
2-Fluorophenol (S)	%	77	45-125	06/02/15 16:32	
Nitrobenzene-d5 (S)	%	77	34-125	06/02/15 16:32	
p-Terphenyl-d14 (S)	%	91	55-125	06/02/15 16:32	
Phenol-d6 (S)	%	77	44-125	06/02/15 16:32	

LABORATORY CONTROL SAMPLE: 1979171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1430	86	41-125	
1,2-Dichlorobenzene	ug/kg	1670	1420	85	38-125	
1,2-Diphenylhydrazine	ug/kg	1670	1520	91	58-125	
1,3-Dichlorobenzene	ug/kg	1670	1430	86	36-125	
1,4-Dichlorobenzene	ug/kg	1670	1400	84	36-125	
2,4,5-Trichlorophenol	ug/kg	1670	1540	92	56-125	
2,4,6-Trichlorophenol	ug/kg	1670	1560	94	57-125	
2,4-Dichlorophenol	ug/kg	1670	1510	90	51-125	
2,4-Dimethylphenol	ug/kg	1670	1490	89	48-125	
2,4-Dinitrophenol	ug/kg	1670	278J	17	30-125	L0
2,4-Dinitrotoluene	ug/kg	1670	1450	87	58-125	
2,6-Dinitrotoluene	ug/kg	1670	1470	88	58-125	
2-Chloronaphthalene	ug/kg	1670	1490	89	53-125	
2-Chlorophenol	ug/kg	1670	1450	87	44-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1460	88	48-125	
2-Nitroaniline	ug/kg	1670	1680	101	58-125	
2-Nitrophenol	ug/kg	1670	1280	77	43-125	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1480	89	53-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1780	107	42-125	
3-Nitroaniline	ug/kg	1670	1260	76	47-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	157J	9	38-125	L0
4-Bromophenylphenyl ether	ug/kg	1670	1580	95	59-125	
4-Chloro-3-methylphenol	ug/kg	1670	1520	91	58-125	
4-Chloroaniline	ug/kg	1670	1190	71	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1540	92	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

LABORATORY CONTROL SAMPLE: 1979171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Nitroaniline	ug/kg	1670	1430	86	54-125	
4-Nitrophenol	ug/kg	1670	1490	89	53-125	
bis(2-Chloroethoxy)methane	ug/kg	1670	1440	86	48-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1420	85	39-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1460	88	33-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1690	101	61-125	
Butylbenzylphthalate	ug/kg	1670	1630	98	60-125	
Carbazole	ug/kg	1670	1570	94	59-125	
Di-n-butylphthalate	ug/kg	1670	1610	97	61-125	
Di-n-octylphthalate	ug/kg	1670	1630	98	60-125	
Dibenzofuran	ug/kg	1670	1530	92	58-125	
Diethylphthalate	ug/kg	1670	1560	94	60-125	
Dimethylphthalate	ug/kg	1670	1540	93	60-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1490	89	38-125	
Hexachlorobenzene	ug/kg	1670	1540	93	57-125	
Hexachloroethane	ug/kg	1670	828	50	54-125 LO	
Isophorone	ug/kg	1670	1480	89	52-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1470	88	48-125	
N-Nitrosodimethylamine	ug/kg	1670	1460	87	31-125	
N-Nitrosodiphenylamine	ug/kg	1670	1560	94	59-125	
Nitrobenzene	ug/kg	1670	1440	87	46-125	
Pentachlorophenol	ug/kg	1670	1320	79	47-125	
Phenol	ug/kg	1670	1450	87	48-125	
2,4,6-Tribromophenol (S)	%			84	40-125	
2-Fluorobiphenyl (S)	%			81	51-125	
2-Fluorophenol (S)	%			77	45-125	
Nitrobenzene-d5 (S)	%			78	34-125	
p-Terphenyl-d14 (S)	%			87	55-125	
Phenol-d6 (S)	%			77	44-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1979172 1979173

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		10307221002 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
1,2,4-Trichlorobenzene	ug/kg		2430	2410	1280	1360	53	56	43-125	6	30	
1,2-Dichlorobenzene	ug/kg		2430	2410	1080	1260	44	52	36-125	16	30	
1,2-Diphenylhydrazine	ug/kg		2430	2410	1480	1500	61	62	30-125	1	30	
1,3-Dichlorobenzene	ug/kg		2430	2410	1020	1190	42	49	34-125	16	30	
1,4-Dichlorobenzene	ug/kg		2430	2410	1030	1210	43	50	33-125	16	30	
2,4,5-Trichlorophenol	ug/kg		2430	2410	1410	1460	58	60	30-141	3	30	
2,4,6-Trichlorophenol	ug/kg		2430	2410	1540	1580	64	66	30-143	3	30	
2,4-Dichlorophenol	ug/kg		2430	2410	1410	1450	58	60	30-139	3	30	
2,4-Dimethylphenol	ug/kg		2430	2410	1040	1220	43	51	47-125	16	30	M1
2,4-Dinitrophenol	ug/kg		2430	2410	ND	ND	0	0	30-125		30	M0
2,4-Dinitrotoluene	ug/kg		2430	2410	1390	1330	57	55	50-125	4	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1979172												1979173											
Parameter	Units	MS		MSD		MS		MSD		% Rec		Max		Qual									
		10307221002	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD												
2,6-Dinitrotoluene	ug/kg		2430	2410	1440	1410	59	58	48-125	2	30												
2-Chloronaphthalene	ug/kg		2430	2410	1430	1490	59	62	49-125	4	30												
2-Chlorophenol	ug/kg		2430	2410	1300	1390	54	58	30-125	7	30												
2-Methylphenol(o-Cresol)	ug/kg		2430	2410	1250	1350	51	56	43-125	8	30												
2-Nitroaniline	ug/kg		2430	2410	1630	1740	67	72	57-125	6	30												
2-Nitrophenol	ug/kg		2430	2410	1190	1130	49	47	30-150	5	30												
3&4-Methylphenol(m&p Cresol)	ug/kg		2430	2410	1370	1440	57	60	51-125	5	30												
3,3'-Dichlorobenzidine	ug/kg		2430	2410	684	866	28	36	30-132	24	30	M1											
3-Nitroaniline	ug/kg		2430	2410	1360	1480	56	61	30-132	8	30												
4,6-Dinitro-2-methylphenol	ug/kg		2430	2410	ND	ND	0	0	30-130		30	MO											
4-Bromophenylphenyl ether	ug/kg		2430	2410	1610	1660	66	69	57-125	3	30												
4-Chloro-3-methylphenol	ug/kg		2430	2410	1440	1510	60	63	30-139	5	30												
4-Chloroaniline	ug/kg		2430	2410	894	1120	37	46	30-125	22	30												
4-Chlorophenylphenyl ether	ug/kg		2430	2410	1610	1580	66	66	30-130	2	30												
4-Nitroaniline	ug/kg		2430	2410	1280	1400	53	58	30-150	9	30												
4-Nitrophenol	ug/kg		2430	2410	646	808	27	34	30-145	22	30	M1											
bis(2-Chloroethoxy)methane	ug/kg		2430	2410	1610	1620	67	67	46-125	0	30												
bis(2-Chloroethyl) ether	ug/kg		2430	2410	1370	1520	57	63	34-125	10	30												
bis(2-Chloroisopropyl) ether	ug/kg		2430	2410	1350	1480	56	61	33-125	9	30												
bis(2-Ethylhexyl)phthalate	ug/kg		2430	2410	1820	1860	75	77	60-125	3	30												
Butylbenzylphthalate	ug/kg		2430	2410	1730	1820	72	75	55-125	5	30												
Carbazole	ug/kg		2430	2410	1420	1500	59	62	56-125	6	30												
Di-n-butylphthalate	ug/kg		2430	2410	1710	1710	71	71	58-125	0	30												
Di-n-octylphthalate	ug/kg		2430	2410	1830	1890	76	78	59-125	3	30												
Dibenzofuran	ug/kg		2430	2410	1470	1480	61	61	57-125	0	30												
Diethylphthalate	ug/kg		2430	2410	1600	1610	66	67	58-125	1	30												
Dimethylphthalate	ug/kg		2430	2410	1640	1660	68	69	59-125	1	30												
Hexachloro-1,3-butadiene	ug/kg		2430	2410	1240	1350	51	56	39-125	8	30												
Hexachlorobenzene	ug/kg		2430	2410	1620	1640	67	68	55-125	1	30												
Hexachloroethane	ug/kg		2430	2410	522	569	22	24	30-125	9	30	MO											
Isophorone	ug/kg		2430	2410	1650	1630	68	68	49-125	1	30												
N-Nitroso-di-n-propylamine	ug/kg		2430	2410	1570	1580	65	65	30-140	0	30												
N-Nitrosodimethylamine	ug/kg		2430	2410	1390	1580	57	65	30-125	13	30												
N-Nitrosodiphenylamine	ug/kg		2430	2410	1520	1580	63	66	57-125	4	30												
Nitrobenzene	ug/kg		2430	2410	1410	1490	58	62	30-139	6	30												
Pentachlorophenol	ug/kg		2430	2410	804J	879J	33	36	30-148		30												
Phenol	ug/kg		2430	2410	1340	1350	55	56	48-125	1	30												
2,4,6-Tribromophenol (S)	%						59	69	40-125														
2-Fluorobiphenyl (S)	%						51	57	51-125														
2-Fluorophenol (S)	%						46	54	45-125														
Nitrobenzene-d5 (S)	%						54	61	34-125														
p-Terphenyl-d14 (S)	%						63	78	55-125														
Phenol-d6 (S)	%						51	56	44-125														

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

QC Batch: OEXT/29339 Analysis Method: EPA 8270D by SIM  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV  
 Associated Lab Samples: 10307129001, 10307129002, 10307129003, 10307129004

METHOD BLANK: 1978096 Matrix: Solid  
 Associated Lab Samples: 10307129001, 10307129002, 10307129003, 10307129004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	10.0	05/29/15 11:33	
2-Chloronaphthalene	ug/kg	ND	10.0	05/29/15 11:33	
2-Methylnaphthalene	ug/kg	ND	10.0	05/29/15 11:33	
Acenaphthene	ug/kg	ND	10.0	05/29/15 11:33	
Acenaphthylene	ug/kg	ND	10.0	05/29/15 11:33	
Anthracene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(a)anthracene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(a)pyrene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(b)fluoranthene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(k)fluoranthene	ug/kg	ND	10.0	05/29/15 11:33	
Chrysene	ug/kg	ND	10.0	05/29/15 11:33	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	05/29/15 11:33	
Fluoranthene	ug/kg	ND	10.0	05/29/15 11:33	
Fluorene	ug/kg	ND	10.0	05/29/15 11:33	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	05/29/15 11:33	
Naphthalene	ug/kg	ND	10.0	05/29/15 11:33	
Phenanthrene	ug/kg	ND	10.0	05/29/15 11:33	
Pyrene	ug/kg	ND	10.0	05/29/15 11:33	
2-Fluorobiphenyl (S)	%	57	55-125	05/29/15 11:33	
p-Terphenyl-d14 (S)	%	87	30-150	05/29/15 11:33	

LABORATORY CONTROL SAMPLE: 1978097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	33.3	22.0	66	45-125	
2-Chloronaphthalene	ug/kg	33.3	22.6	68	70-130	L0
2-Methylnaphthalene	ug/kg	33.3	22.3	67	50-125	
Acenaphthene	ug/kg	33.3	24.2	73	53-125	
Acenaphthylene	ug/kg	33.3	22.4	67	53-125	
Anthracene	ug/kg	33.3	27.0	81	61-125	
Benzo(a)anthracene	ug/kg	33.3	29.8	89	62-125	
Benzo(a)pyrene	ug/kg	33.3	31.0	93	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	32.2	97	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	22.0	66	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	30.6	92	61-125	
Chrysene	ug/kg	33.3	29.7	89	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	24.9	75	59-125	
Fluoranthene	ug/kg	33.3	30.2	91	64-125	
Fluorene	ug/kg	33.3	26.0	78	57-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

LABORATORY CONTROL SAMPLE: 1978097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	23.6	71	58-125	
Naphthalene	ug/kg	33.3	22.2	66	52-125	
Phenanthrene	ug/kg	33.3	25.1	75	60-125	
Pyrene	ug/kg	33.3	29.9	90	63-125	
2-Fluorobiphenyl (S)	%.			78	55-125	
p-Terphenyl-d14 (S)	%.			101	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978098 1978099

Parameter	Units	10306672011		MSD		MSD		MSD		% Rec Limits	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec				
1-Methylnaphthalene	ug/kg	ND	35.7	35.6	14.1	10.9	38	29	30-125	26	30	M1
2-Chloronaphthalene	ug/kg	ND	35.7	35.6	18.5	13.7	52	38	30-129	30	30	
2-Methylnaphthalene	ug/kg	ND	35.7	35.6	14.1	10.9	38	29	41-125	26	30	M1
Acenaphthene	ug/kg	ND	35.7	35.6	23.1	18.9	58	46	39-125	20	30	
Acenaphthylene	ug/kg	ND	35.7	35.6	25.6	20.7	47	34	30-150	21	30	
Anthracene	ug/kg	14.7	35.7	35.6	28.3	26.0	38	32	30-150	9	30	
Benzo(a)anthracene	ug/kg	40.8	35.7	35.6	35.5	33.3	-15	-21	30-150	7	30	M1
Benzo(a)pyrene	ug/kg	41.4	35.7	35.6	39.7	34.7	-5	-19	30-150	13	30	M1
Benzo(b)fluoranthene	ug/kg	57.5	35.7	35.6	43.7	38.6	-39	-53	30-150	12	30	M1
Benzo(g,h,i)perylene	ug/kg	29.1	35.7	35.6	35.6	31.6	18	7	30-150	12	30	M1
Benzo(k)fluoranthene	ug/kg	20.8	35.7	35.6	36.0	32.4	42	32	30-150	11	30	
Chrysene	ug/kg	44.5	35.7	35.6	38.1	33.8	-18	-30	30-150	12	30	M1
Dibenz(a,h)anthracene	ug/kg	ND	35.7	35.6	26.9	25.4	50	46	30-150	6	30	
Fluoranthene	ug/kg	108	35.7	35.6	44.9	39.0	-177	-194	30-150	14	30	M1
Fluorene	ug/kg	ND	35.7	35.6	26.2	23.7	57	50	30-146	10	30	
Indeno(1,2,3-cd)pyrene	ug/kg	24.7	35.7	35.6	33.9	30.2	26	16	30-150	11	30	M1
Naphthalene	ug/kg	ND	35.7	35.6	12.0	9.6J	32	25	30-131		30	M1
Phenanthrene	ug/kg	70.7	35.7	35.6	29.2	27.5	-116	-121	30-150	6	30	M1
Pyrene	ug/kg	83.7	35.7	35.6	43.1	37.2	-114	-130	30-150	15	30	M1
2-Fluorobiphenyl (S)	%.						53	40	55-125			S0
p-Terphenyl-d14 (S)	%.						85	81	30-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

QC Batch: OEXT/29359 Analysis Method: EPA 8270D by SIM  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV  
 Associated Lab Samples: 10307129005, 10307129006, 10307129007, 10307129008, 10307129009, 10307129010, 10307129011, 10307129012, 10307129013, 10307129014, 10307129015, 10307129016

METHOD BLANK: 1979368 Matrix: Solid  
 Associated Lab Samples: 10307129005, 10307129006, 10307129007, 10307129008, 10307129009, 10307129010, 10307129011, 10307129012, 10307129013, 10307129014, 10307129015, 10307129016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	10.0	05/31/15 16:02	
2-Chloronaphthalene	ug/kg	ND	10.0	05/31/15 16:02	
2-Methylnaphthalene	ug/kg	ND	10.0	05/31/15 16:02	
Acenaphthene	ug/kg	ND	10.0	05/31/15 16:02	
Acenaphthylene	ug/kg	ND	10.0	05/31/15 16:02	
Anthracene	ug/kg	ND	10.0	05/31/15 16:02	
Benzo(a)anthracene	ug/kg	ND	10.0	05/31/15 16:02	
Benzo(a)pyrene	ug/kg	ND	10.0	05/31/15 16:02	
Benzo(b)fluoranthene	ug/kg	ND	10.0	05/31/15 16:02	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	05/31/15 16:02	
Benzo(k)fluoranthene	ug/kg	ND	10.0	05/31/15 16:02	
Chrysene	ug/kg	ND	10.0	05/31/15 16:02	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	05/31/15 16:02	
Fluoranthene	ug/kg	ND	10.0	05/31/15 16:02	
Fluorene	ug/kg	ND	10.0	05/31/15 16:02	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	05/31/15 16:02	
Naphthalene	ug/kg	ND	10.0	05/31/15 16:02	
Phenanthrene	ug/kg	ND	10.0	05/31/15 16:02	
Pyrene	ug/kg	ND	10.0	05/31/15 16:02	
2-Fluorobiphenyl (S)	%	87	55-125	05/31/15 16:02	
p-Terphenyl-d14 (S)	%	96	30-150	05/31/15 16:02	

LABORATORY CONTROL SAMPLE: 1979369

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	33.3	17.7	53	45-125	
2-Chloronaphthalene	ug/kg	33.3	19.0	57	70-130	L0
2-Methylnaphthalene	ug/kg	33.3	17.8	53	50-125	
Acenaphthene	ug/kg	33.3	20.3	61	53-125	
Acenaphthylene	ug/kg	33.3	20.1	60	53-125	
Anthracene	ug/kg	33.3	23.1	69	61-125	
Benzo(a)anthracene	ug/kg	33.3	25.2	75	62-125	
Benzo(a)pyrene	ug/kg	33.3	25.2	76	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	24.8	74	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	26.4	79	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	27.6	83	61-125	
Chrysene	ug/kg	33.3	24.4	73	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	26.0	78	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

LABORATORY CONTROL SAMPLE: 1979369

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoranthene	ug/kg	33.3	25.0	75	64-125	
Fluorene	ug/kg	33.3	21.5	64	57-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	25.5	77	58-125	
Naphthalene	ug/kg	33.3	19.4	58	52-125	
Phenanthrene	ug/kg	33.3	22.4	67	60-125	
Pyrene	ug/kg	33.3	25.8	78	63-125	
2-Fluorobiphenyl (S)	%			78	55-125	
p-Terphenyl-d14 (S)	%			91	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1979370 1979371

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		10306784002 Result	Spike Conc.	Spike Conc.	MS Result							
1-Methylnaphthalene	ug/kg	ND	33.6	33.5	31.5J	31J	76	74	30-125		30	
2-Chloronaphthalene	ug/kg	ND	33.6	33.5	23.1J	22.8J	69	68	30-129		30	
2-Methylnaphthalene	ug/kg	ND	33.6	33.5	33.9J	33.4J	77	76	41-125		30	
Acenaphthene	ug/kg	ND	33.6	33.5	90.3	90.1	170	170	39-125	0	30 M1	
Acenaphthylene	ug/kg	ND	33.6	33.5	27.6J	31.4J	71	83	30-150		30	
Anthracene	ug/kg	95.5	33.6	33.5	203	208	318	337	30-150	3	30 M1	
Benzo(a)anthracene	ug/kg	184	33.6	33.5	351	385	495	598	30-150	9	30 M1	
Benzo(a)pyrene	ug/kg	118	33.6	33.5	213	235	284	349	30-150	10	30 M1	
Benzo(b)fluoranthene	ug/kg	165	33.6	33.5	286	329	359	490	30-150	14	30 M1	
Benzo(g,h,i)perylene	ug/kg	63.0	33.6	33.5	113	126	148	188	30-150	11	30 M1	
Benzo(k)fluoranthene	ug/kg	89.1	33.6	33.5	161	187	213	292	30-150	15	30 M1	
Chrysene	ug/kg	199	33.6	33.5	358	424	474	673	30-150	17	30 M1	
Dibenz(a,h)anthracene	ug/kg	ND	33.6	33.5	56.0	61.2	101	117	30-150	9	30	
Fluoranthene	ug/kg	461	33.6	33.5	882	943	1250	1440	30-150	7	30 M1	
Fluorene	ug/kg	ND	33.6	33.5	104	105	183	185	30-146	1	30 M1	
Indeno(1,2,3-cd)pyrene	ug/kg	61.2	33.6	33.5	110	124	146	188	30-150	12	30 M1	
Naphthalene	ug/kg	ND	33.6	33.5	29.5J	30.1J	88	90	30-131		30	
Phenanthrene	ug/kg	347	33.6	33.5	650	679	901	991	30-150	4	30 M1	
Pyrene	ug/kg	363	33.6	33.5	685	722	959	1070	30-150	5	30 M1	
2-Fluorobiphenyl (S)	%						74	75	55-125			D4
p-Terphenyl-d14 (S)	%						82	81	30-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

**QUALITY CONTROL DATA**

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

QC Batch: OEXT/29341 Analysis Method: NWTPH-Dx  
 QC Batch Method: EPA 3550 Analysis Description: NWTPH-Dx GCS  
 Associated Lab Samples: 10307129001, 10307129002, 10307129003, 10307129004

METHOD BLANK: 1978110 Matrix: Solid  
 Associated Lab Samples: 10307129001, 10307129002, 10307129003, 10307129004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	06/03/15 21:08	
Motor Oil Range	mg/kg	ND	10.0	06/03/15 21:08	
n-Triacontane (S)	%.	100	50-150	06/03/15 21:08	
o-Terphenyl (S)	%.	93	50-150	06/03/15 21:08	

LABORATORY CONTROL SAMPLE & LCSD: 1978111

Parameter	Units	1978112		LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result						
Diesel Fuel Range	mg/kg	50	43.4	44.0	87	88	50-150	1	20
Motor Oil Range	mg/kg	50	58.8	60.2	118	120	50-150	2	20
n-Triacontane (S)	%.				103	105	50-150		
o-Terphenyl (S)	%.				83	86	50-150		

SAMPLE DUPLICATE: 1978113

Parameter	Units	10307126011 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/kg	ND	2.3J		30	
Motor Oil Range	mg/kg	ND	4.6J		30	
n-Triacontane (S)	%.	100	101	2		
o-Terphenyl (S)	%.	90	93	4		

SAMPLE DUPLICATE: 1978114

Parameter	Units	10307129001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/kg	ND	2.7J		30	
Motor Oil Range	mg/kg	ND	5.1J		30	
n-Triacontane (S)	%.	93	106	13		
o-Terphenyl (S)	%.	88	82	7		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

QC Batch: OEXT/29358 Analysis Method: NWTPH-Dx  
 QC Batch Method: EPA 3550 Analysis Description: NWTPH-Dx GCS  
 Associated Lab Samples: 10307129005, 10307129006, 10307129007, 10307129008, 10307129009, 10307129010, 10307129011, 10307129012, 10307129013, 10307129014, 10307129015, 10307129016, 10307129017

METHOD BLANK: 1979300 Matrix: Solid  
 Associated Lab Samples: 10307129005, 10307129006, 10307129007, 10307129008, 10307129009, 10307129010, 10307129011, 10307129012, 10307129013, 10307129014, 10307129015, 10307129016, 10307129017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	06/02/15 18:15	
Motor Oil Range	mg/kg	ND	10.0	06/02/15 18:15	
n-Triacontane (S)	%	116	50-150	06/02/15 18:15	
o-Terphenyl (S)	%	109	50-150	06/02/15 18:15	

LABORATORY CONTROL SAMPLE: 1979301

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range	mg/kg	50	41.4	83	50-150	
Motor Oil Range	mg/kg	50	58.3	117	50-150	
n-Triacontane (S)	%			112	50-150	
o-Terphenyl (S)	%			108	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1979302 1979303

Parameter	Units	10307129005		1979303		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Diesel Fuel Range	mg/kg	ND	57	57	51.2	46.2	89	80	50-150	10	30
Motor Oil Range	mg/kg	ND	57	57	62.0	62.5	105	106	50-150	1	30
n-Triacontane (S)	%						105	104	50-150		
o-Terphenyl (S)	%						81	106	50-150		

SAMPLE DUPLICATE: 1979304

Parameter	Units	10307129017 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/kg	ND	13.8J		30	
Motor Oil Range	mg/kg	ND	11.7J		30	
n-Triacontane (S)	%	127	115	10		
o-Terphenyl (S)	%	104	101	4		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## QUALIFIERS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

### ANALYTE QUALIFIERS

1M The associated compound was outside of 20% for the associated continuing calibration but within 40% of the true value.

D4 Sample was diluted due to the presence of high levels of target analytes.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

P2 Re-extraction or re-analysis could not be performed due to insufficient sample amount.

S0 Surrogate recovery outside laboratory control limits.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307129

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10307129001	DP-10 (12-12.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307129002	DP-10 (12.5-13)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307129003	DP-9 (12.5-13.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307129004	DP-9 (13.5-14.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307129005	DP-19 (24-24.5)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129006	DP-19 (24.5-25)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129007	DP-21 (13-14)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129008	DP-21 (14-15)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129009	DP-25 (12-12.5)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129010	DP-25 (12.5-13.5)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129011	DP-22 (20-20.5)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129012	DP-22 (24-25)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129013	DP-23 (16-16.5)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129014	DP-23 (20-20.5)	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129015	DP-35	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129016	DP-36	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129017	CPPI Drum 1	EPA 3550	OEXT/29358	NWTPH-Dx	GCSV/15829
10307129015	DP-35	NWTPH-Gx	GCV/13781	NWTPH-Gx	GCV/13782
10307129016	DP-36	NWTPH-Gx	GCV/13781	NWTPH-Gx	GCV/13782
10307129017	CPPI Drum 1	NWTPH-Gx	GCV/13781	NWTPH-Gx	GCV/13782
10307129001	DP-10 (12-12.5)	ASTM D2974	MPRP/54905		
10307129002	DP-10 (12.5-13)	ASTM D2974	MPRP/54905		
10307129003	DP-9 (12.5-13.5)	ASTM D2974	MPRP/54905		
10307129004	DP-9 (13.5-14.5)	ASTM D2974	MPRP/54905		
10307129005	DP-19 (24-24.5)	ASTM D2974	MPRP/54905		
10307129006	DP-19 (24.5-25)	ASTM D2974	MPRP/54905		
10307129007	DP-21 (13-14)	ASTM D2974	MPRP/54905		
10307129008	DP-21 (14-15)	ASTM D2974	MPRP/54905		
10307129009	DP-25 (12-12.5)	ASTM D2974	MPRP/54906		
10307129010	DP-25 (12.5-13.5)	ASTM D2974	MPRP/54906		
10307129011	DP-22 (20-20.5)	ASTM D2974	MPRP/54906		
10307129012	DP-22 (24-25)	ASTM D2974	MPRP/54906		
10307129013	DP-23 (16-16.5)	ASTM D2974	MPRP/54906		
10307129014	DP-23 (20-20.5)	ASTM D2974	MPRP/54906		
10307129015	DP-35	ASTM D2974	MPRP/54906		
10307129016	DP-36	ASTM D2974	MPRP/54906		
10307129017	CPPI Drum 1	ASTM D2974	MPRP/54906		
10307129001	DP-10 (12-12.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307129002	DP-10 (12.5-13)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307129003	DP-9 (12.5-13.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307129004	DP-9 (13.5-14.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307129005	DP-19 (24-24.5)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129006	DP-19 (24.5-25)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129007	DP-21 (13-14)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129008	DP-21 (14-15)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129009	DP-25 (12-12.5)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307129

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10307129010	DP-25 (12.5-13.5)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129011	DP-22 (20-20.5)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129012	DP-22 (24-25)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129013	DP-23 (16-16.5)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129014	DP-23 (20-20.5)	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129015	DP-35	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129016	DP-36	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129017	CPPI Drum 1	EPA 3550	OEXT/29353	EPA 8270D	MSSV/12444
10307129001	DP-10 (12-12.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307129002	DP-10 (12.5-13)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307129003	DP-9 (12.5-13.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307129004	DP-9 (13.5-14.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307129005	DP-19 (24-24.5)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129006	DP-19 (24.5-25)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129007	DP-21 (13-14)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129008	DP-21 (14-15)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129009	DP-25 (12-12.5)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129010	DP-25 (12.5-13.5)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129011	DP-22 (20-20.5)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129012	DP-22 (24-25)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129013	DP-23 (16-16.5)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129014	DP-23 (20-20.5)	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129015	DP-35	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432
10307129016	DP-36	EPA 3550	OEXT/29359	EPA 8270D by SIM	MSSV/12432

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307129

Page: 48 of 18  
1580139

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <u>Greenhairs</u>		Report To: <u>janey@greenhairs.com</u>		Attention:	
Address: <u>503 E Second Ave</u>		Copy To: <u>janee@greenhairs.com</u>		Company Name:	
<u>Spokane, WA 99202</u>				Address:	
Email To: <u>Janey@greenhairs.com</u>		Purchase Order No.:		Pace Quote Reference:	
Phone: <u>509-363-3125</u> Fax: <u>509-363-3006</u>		Project Name: <u>Colville Post and Pole</u>		Pace Project Manager:	
Requested Due Date/TAT:		Project Number: <u>0504-018-00</u>		Pace Profile #:	
				REGULATORY AGENCY	
				<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
				Site Location	
				STATE: _____	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-10 (4-5)		G		5/14	1515			2	X												
2	DP-10 (2-9)					1520			2													
3	DP-10 (12-13) A					1530			1						X	X	X			001		
4	DP-10 (12-13) B					1530			1						X	X	X			002		
5	DP-10 (16-17)					1540			2													
6	DP-9 (2-3)					1550			2													
7	DP-9 (4-5)					1555			2													
8	DP-9 (8-9)					1600			2													
9	DP-9 (12.5-13.5) A					1605			1													
10	DP-9 (12.5-13.5) B					1605			1						X	X	X			003		
11	DP-9 (13.5-14.5) A					1610			1						X	X	X			004		
12	DP-9 (13.5-14.5) B					1610			1													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <u>Josh L...</u>					
SIGNATURE of SAMPLER: <u>[Signature]</u>					
DATE Signed (MM/DD/YY): <u>05/19/15</u>					

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.





# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1030 7129

Page: 15 of 18  
1456689

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <i>...</i>		Report To: <i>...</i>		Attention: <i>...</i>	
Address: <i>...</i>		Copy To: <i>...</i>		Company Name: <i>...</i>	
Email To: <i>...</i>		Purchase Order No.: <i>...</i>		Address: <i>...</i>	
Phone: <i>...</i> Fax: <i>...</i>		Project Name: <i>...</i>		Pace Quote Reference: <i>...</i>	
Requested Due Date/TAT: <i>...</i>		Project Number: <i>...</i>		Pace Project Manager: <i>...</i>	
				Pace Profile #: <i>...</i>	

**REGULATORY AGENCY**

NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER

Site Location: \_\_\_\_\_  
STATE: \_\_\_\_\_

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.		
					DATE	TIME	DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other	
1	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
2	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
3	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
4	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
5	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
6	<i>DP-19 (24-25) A</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
7	<i>DP-19 (24-25) B</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
8	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
9	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
10	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
11	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			
12	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>																			

XXXX  
XXXX

005  
006

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: *Joshua Lee*

SIGNATURE of SAMPLER: *[Signature]*

DATE Signed (MM/DD/YY): *5/19/15*

Temp in °C \_\_\_\_\_

Received on loc (Y/N) \_\_\_\_\_

Custody Sealed Cooler (Y/N) \_\_\_\_\_

Samples Intact (Y/N) \_\_\_\_\_

4

...accepting Pace's NET 30-day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

**CHAIN-OF-CUSTODY / Analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307129

Page: 16 of 18  
**1468155**

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <u>Proforma</u>	Report To: <u>Valerie B. [unclear]</u>	Attention:	Company Name:	REGULATORY AGENCY	
Address: <u>503 E Sand Ave</u>	Copy To: <u>Valerie B. [unclear]</u>	Address:	Address:	<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Email To: <u>[unclear]</u>	Purchase Order No.:	Face Quote Reference:	Face Project Manager:	Site Location	
Phone: <u>708-363-3125</u> Fax: <u>708-363-3126</u>	Project Name: <u>White Post and Pole</u>	Face Profile #:	STATE: <u>[unclear]</u>		
Requested Due Date/TAT:	Project Number: <u>0504-111-00</u>				

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	COLLECTED COMPOSITE START DATE TIME COMPOSITE END/GRAB DATE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
						Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other						
						DATE	TIME	DATE	TIME										
1	DP-21(13-14) B	SL	G 5/15 1000		1										X			007	
2	DP-21(14-15) A		1010		1										X			008	
3	DP-21(14-15) B		1020		1										X				
4	DP-21(14-15) C		105		2										X				
5	DP-25(6-8)		1030		2										X				
6	DP-25(5-6)		1040		2										X				
7	DP-25(12-12.5)		1100		1										X			009	
8	DP-25(12.5-13.5) A		1110		1										X			010	
9	DP-25(12.5-13.5) B		1115		1										X				
10	DP-25(13-13.5)		1115		2										X				
11	DP-22(6-1)		1200		2										X				
12	DP-22(4-5)		1210		2										X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<u>Josh Lee</u>				
SIGNATURE of SAMPLER:	<u>[Signature]</u>				
DATE Signed (MM/DD/YY):		<u>05/14/15</u>			



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307129

Page: 17 of 18  
1470052

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <i>Prochem</i>		Report To: <i>Sherry B. [unclear]</i>		Attention:	
Address: <i>503 E Grand Ave</i>		Copy To: <i>sherry.b@prochem.com</i>		Company Name:	
Email To: <i>sherry.b@prochem.com</i>		Purchase Order No.:		REGULATORY AGENCY	
Phone: <i>363-255</i> Fax: <i>363-326</i>		Project Name: <i>Calville Park and Lake</i>		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Requested Due Date/TAT:		Project Number: <i>0504-097-03</i>		Site Location:	
				STATE:	

ITEM #	SAMPLE ID (A-Z, 0-9, -)	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Face Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-22(8-9)			G	5/15	1215																
2	DP-22(13-11)					1220																
3	DP-22(16-17)					1230																
4	DP-22(20-205)					1230									XXX					oil		
5	DP-22(24-25)A					1240									XXX					oil		
6	DP-22(21-25)B					1240																
7	DP-23(0-1)					1300																
8	DP-23(4-5)					1300																
9	DP-23(10-1)					1320																
10	DP-23(15-3)					1330																
11	DP-23(16-13)					1340																
12	DP-23(16-16.5)					1445									XXX					oil		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<i>John Lee</i>				
SIGNATURE of SAMPLER:	<i>[Signature]</i>	DATE Signed (MM/DD/YY):	<i>07/1/15</i>		

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.





# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307129

Page: 10 of 18  
 1232727

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: <u>10307129</u>	Report To: <u>INCLE</u>	Attention: <u></u>	Company Name: <u></u>	REGULATORY AGENCY	
Address: <u>503 E Second Ave</u>	Copy To: <u>see below</u>	Address: <u></u>	<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <u></u>		
Email To: <u>may@paceahis.com</u>	Purchase Order No.:	Pace Quote Reference:	Site Location	STATE: <u></u>	
Phone: <u>363-345</u> Fax: <u>363-326</u>	Project Name: <u>Shiloh</u>	Pace Project Manager:			
Requested Due Date/TAT:	Project Number: <u>0704091-05</u>	Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9, -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.	
				COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
				DATE	TIME	DATE	TIME														
1	DP-23 (20-205)		SL G	5/15	1950			1													
2	DP-24A (8-7)				600			2													
3	DP-24B (8-7)				1630			1													
4	DP-24C (8-5-1)				1640			1												015	
5	DP-24A (8-7)				1710			1												016	
6	DP-24E (8-9)				1740			1												017	
7	DP-24F (8-9)				1800			3													
8	CPPI Drum 1		FL G																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

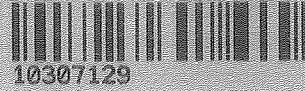
SAMPLER NAME AND SIGNATURE		Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<u>Josh Lee</u>				
SIGNATURE of SAMPLER:	<u>[Signature]</u>				
	DATE Signed (MM/DD/YY): <u>05/17/15</u>				

4

By accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Client Name: Geo Engineers

Project #: **WO# : 10307129**



10307129

Courier:  Fed Ex  UPS  USPS  Client

Commercial  Pace  SpeedDee  Other:

Tracking Number: 7806 7701 4638, 8079 6922 4189, 7806 7701 4630  
7806 7701 4629, 7806 7701 4640

Custody Seal on Cooler/Box Present?  Yes  No  
 Seals Intact?  Yes  No

Optional: Proj. Due Date: Proj. Name:

Packing Material:  Bubble Wrap  Bubble Bags  None  Other: Temp Blank?  Yes  No

Thermometer Used:  B88A9130516413  B88A912167504  B88A0143310098  
 Type of Ice:  Wet  Blue  None  Samples on ice, cooling process has begun

Cooler Temp Read (°C): 0.0, 1.7, 0.4 Cooler Temp Corrected (°C): 0.0, 1.4, 2.4  
 Temp should be above freezing to 6°C 3.6 Correction Factor: 10.5 Date and Initials of Person Examining Contents: hcs/19/05  
 Biological Tissue Frozen?  Yes  No  N/A

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, AZ, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or WA (check maps)?  Yes  No  
 Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

	COMMENTS:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. 2 extra samples that weren't on COC DP-25(8-9) DP-7(16-17)
-Includes Date/Time/ID/Analysis Matrix: <u>Soil</u>	
All containers needing acid/base preservation have been checked? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #
(HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	

**CLIENT NOTIFICATION/RESOLUTION**

Field Data Required?  Yes  No

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/Resolution: Extra samples have been logged in on hold, waiting for response from client regarding whether or not to run tests

**Project Manager Review:** \_\_\_\_\_

Date: 5/21/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

per John Haney - hold me 2 extra samples for now 5/21/15 CAD



June 25, 2015

John Haney  
GeoEngineers, Inc - WA  
523 East Second Ave.  
Spokane, WA 99202

RE: Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307123

Dear John Haney:

Enclosed are the analytical results for sample(s) received by the laboratory on May 20, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report was revised on 6/25/15 to change samples IDs at the client's request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carol Davy  
carol.davy@pacelabs.com  
Project Manager

Enclosures

cc: Joshua Lee, GeoEngineers  
Chelsea Voss, GeoEngineers



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## CERTIFICATIONS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

### Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alaska Certification #: UST-078

Alaska Certification #MN00064

Alabama Certification #40770

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

Colorado Certification #Pace

Connecticut Certification #: PH-0256

EPA Region 8 Certification #: 8TMS-L

Florida/NELAP Certification #: E87605

Guam Certification #:14-008r

Georgia Certification #: 959

Georgia EPD #: Pace

Idaho Certification #: MN00064

Hawaii Certification #MN00064

Illinois Certification #: 200011

Indiana Certification#C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky Dept of Envi. Protection - DW #90062

Kentucky Dept of Envi. Protection - WW #:90062

Louisiana DEQ Certification #: 3086

Louisiana DHH #: LA140001

Maine Certification #: 2013011

Maryland Certification #: 322

Michigan DEPH Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT0092

Nevada Certification #: MN\_00064

Nebraska Certification #: Pace

New Jersey Certification #: MN-002

New York Certification #: 11647

North Carolina Certification #: 530

North Carolina State Public Health #: 27700

North Dakota Certification #: R-036

Ohio EPA #: 4150

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Oregon Certification #: MN300001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Saipan (CNMI) #:MP0003

South Carolina #:74003001

Texas Certification #: T104704192

Tennessee Certification #: 02818

Utah Certification #: MN000642013-4

Virginia DGS Certification #: 251

Virginia/VELAP Certification #: Pace

Washington Certification #: C486

West Virginia Certification #: 382

West Virginia DHHR #:9952C

Wisconsin Certification #: 999407970

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## SAMPLE SUMMARY

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307123

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10307123001	DP-1 (12-13)	Solid	05/11/15 10:40	05/20/15 10:00
10307123002	DP-2 (12-12.5)	Solid	05/11/15 12:10	05/20/15 10:00
10307123003	DP-2 (12.5-13.5)	Solid	05/11/15 12:15	05/20/15 10:00
10307123004	DP-3 (12-13)	Solid	05/11/15 13:20	05/20/15 10:00
10307123005	DP-3 (13-14)	Solid	05/11/15 13:25	05/20/15 10:00
10307123006	DP-4 (16.5-17.5)	Solid	05/11/15 14:45	05/20/15 10:00
10307123007	DP-5 (16-16.5)	Solid	05/11/15 16:30	05/20/15 10:00
10307123008	DP-5 (16.5-17)	Solid	05/11/15 16:30	05/20/15 10:00
10307123009	DP-6 (12-13)	Solid	05/12/15 11:40	05/20/15 10:00
10307123010	DP-6 (13-14)	Solid	05/12/15 11:50	05/20/15 10:00
10307123011	DP-7 (12.5-13.5)	Solid	05/12/15 08:30	05/20/15 10:00
10307123012	DP-7 (13.5-14.5)	Solid	05/12/15 08:35	05/20/15 10:00
10307123013	DP-8 (20-20.5)	Solid	05/12/15 10:15	05/20/15 10:00
10307123014	DP-8 (20.5-21)	Solid	05/12/15 10:15	05/20/15 10:00
10307123015	DP-11 (12.5-13.5)	Solid	05/12/15 12:45	05/20/15 10:00
10307123016	DP-11 (13.5-14.5)	Solid	05/12/15 12:50	05/20/15 10:00
10307123017	DP-13 (12-13)	Solid	05/12/15 18:00	05/20/15 10:00
10307123018	DP-13 (13-14)	Solid	05/12/15 18:10	05/20/15 10:00
10307123019	DP-17 (16.5-17.5)	Solid	05/12/15 15:20	05/20/15 10:00
10307123020	DP-17 (16-16.5)	Solid	05/12/15 15:25	05/20/15 10:00
10307123021	DP-4 (16-16.5)	Solid	05/11/15 14:40	05/20/15 10:00

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10307123001	DP-1 (12-13)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123002	DP-2 (12-12.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123003	DP-2 (12.5-13.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123004	DP-3 (12-13)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123005	DP-3 (13-14)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123006	DP-4 (16.5-17.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123007	DP-5 (16-16.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123008	DP-5 (16.5-17)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123009	DP-6 (12-13)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	AS1	21	PASI-M
10307123010	DP-6 (13-14)	NWTPH-Dx	MT	4	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10307123011	DP-7 (12.5-13.5)	ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	AS1	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
10307123012	DP-7 (13.5-14.5)	EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307123013	DP-8 (20-20.5)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123014	DP-8 (20.5-21)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
10307123015	DP-11 (12.5-13.5)	ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
10307123016	DP-11 (13.5-14.5)	EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307123017	DP-13 (12-13)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307123018	DP-13 (13-14)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
10307123019	DP-17 (16.5-17.5)	ASTM D2974	JDL	1	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10307123020	DP-17 (16-16.5)	EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
10307123021	DP-4 (16-16.5)	EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS

**Client:** GeoEngineers

**Date:** June 25, 2015

**General Information:**

20 samples were analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS Silica Gel

**Client:** GeoEngineers

**Date:** June 25, 2015

**General Information:**

1 sample was analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation was conducted outside of the recognized method holding time.

- DP-4 (16-16.5) (Lab ID: 10307123021)

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** June 25, 2015

### General Information:

21 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation was conducted outside of the recognized method holding time.

- DP-4 (16-16.5) (Lab ID: 10307123021)

### Sample Preparation:

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/29267

S0: Surrogate recovery outside laboratory control limits.

- DP-1 (12-13) (Lab ID: 10307123001)
  - 2-Fluorobiphenyl (S)
- DP-3 (13-14) (Lab ID: 10307123005)
  - 2-Fluorobiphenyl (S)
- DP-4 (16.5-17.5) (Lab ID: 10307123006)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
- DP-5 (16.5-17) (Lab ID: 10307123008)
  - 2-Fluorobiphenyl (S)

QC Batch: OEXT/29287

S0: Surrogate recovery outside laboratory control limits.

- DP-13 (13-14) (Lab ID: 10307123018)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
  - Phenol-d6 (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** June 25, 2015

QC Batch: OEXT/29287

S0: Surrogate recovery outside laboratory control limits.

- DP-6 (12-13) (Lab ID: 10307123009)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
- DP-7 (13.5-14.5) (Lab ID: 10307123012)
  - 2-Fluorobiphenyl (S)

QC Batch: OEXT/29295

S0: Surrogate recovery outside laboratory control limits.

- DP-17 (16-16.5) (Lab ID: 10307123020)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/29267

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10307233001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1973566)
  - Hexachloroethane
- MSD (Lab ID: 1973567)
  - Hexachloroethane

QC Batch: OEXT/29287

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10307276001

R1: RPD value was outside control limits.

- MSD (Lab ID: 1975440)
  - 2,4-Dinitrophenol
  - Hexachloroethane

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** June 25, 2015

Analyte Comments:

QC Batch: OEXT/29267

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-4 (16.5-17.5) (Lab ID: 10307123006)
- Nitrobenzene-d5 (S)

QC Batch: OEXT/29287

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-13 (13-14) (Lab ID: 10307123018)
- Nitrobenzene-d5 (S)
- DP-6 (12-13) (Lab ID: 10307123009)
- Nitrobenzene-d5 (S)

QC Batch: OEXT/29295

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-17 (16-16.5) (Lab ID: 10307123020)
- Nitrobenzene-d5 (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** June 25, 2015

### General Information:

21 samples were analyzed for EPA 8270D by SIM. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

- DP-11 (12.5-13.5) (Lab ID: 10307123015)
- DP-11 (13.5-14.5) (Lab ID: 10307123016)
- DP-13 (12-13) (Lab ID: 10307123017)
- DP-13 (13-14) (Lab ID: 10307123018)
- DP-17 (16-16.5) (Lab ID: 10307123020)
- DP-17 (16.5-17.5) (Lab ID: 10307123019)
- DP-4 (16-16.5) (Lab ID: 10307123021)
- DP-6 (12-13) (Lab ID: 10307123009)
- DP-6 (13-14) (Lab ID: 10307123010)
- DP-7 (12.5-13.5) (Lab ID: 10307123011)
- DP-7 (13.5-14.5) (Lab ID: 10307123012)
- DP-8 (20-20.5) (Lab ID: 10307123013)
- DP-8 (20.5-21) (Lab ID: 10307123014)

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation was conducted outside of the recognized method holding time.

- DP-4 (16-16.5) (Lab ID: 10307123021)

### Sample Preparation:

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/29264

S0: Surrogate recovery outside laboratory control limits.

- DP-1 (12-13) (Lab ID: 10307123001)
- 2-Fluorobiphenyl (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** June 25, 2015

QC Batch: OEXT/29289

S0: Surrogate recovery outside laboratory control limits.

- DP-6 (12-13) (Lab ID: 10307123009)
  - 2-Fluorobiphenyl (S)
- DP-6 (13-14) (Lab ID: 10307123010)
  - 2-Fluorobiphenyl (S)

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 1975619)
  - 2-Fluorobiphenyl (S)
- MSD (Lab ID: 1975620)
  - 2-Fluorobiphenyl (S)

QC Batch: OEXT/29291

S0: Surrogate recovery outside laboratory control limits.

- DP-11 (12.5-13.5) (Lab ID: 10307123015)
  - 2-Fluorobiphenyl (S)
- DP-13 (13-14) (Lab ID: 10307123018)
  - 2-Fluorobiphenyl (S)
- DP-17 (16-16.5) (Lab ID: 10307123020)
  - 2-Fluorobiphenyl (S)
- DP-17 (16.5-17.5) (Lab ID: 10307123019)
  - 2-Fluorobiphenyl (S)
- DP-4 (16-16.5) (Lab ID: 10307123021)
  - 2-Fluorobiphenyl (S)
- DP-8 (20.5-21) (Lab ID: 10307123014)
  - 2-Fluorobiphenyl (S)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: OEXT/29289

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1975618)
  - 2-Chloronaphthalene

QC Batch: OEXT/29291

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1975817)
  - 2-Chloronaphthalene

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** June 25, 2015

QC Batch: OEXT/29264

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10306956001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1973329)
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
- MSD (Lab ID: 1973330)
  - 1-Methylnaphthalene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Pyrene

R1: RPD value was outside control limits.

- MSD (Lab ID: 1973330)
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Fluoranthene
  - Pyrene

QC Batch: OEXT/29289

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10306435001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 1975619)
  - 2-Methylnaphthalene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Phenanthrene
  - Pyrene
- MSD (Lab ID: 1975620)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307123

---

**Method:** EPA 8270D by SIM  
**Description:** 8270D MSSV PAH by SIM  
**Client:** GeoEngineers  
**Date:** June 25, 2015

QC Batch: OEXT/29289

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10306435001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- Benzo(k)fluoranthene
- Chrysene
- Fluoranthene
- Fluorene
- Indeno(1,2,3-cd)pyrene
- Phenanthrene
- Pyrene

R1: RPD value was outside control limits.

- MSD (Lab ID: 1975620)
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Phenanthrene
  - Pyrene

### Additional Comments:

Analyte Comments:

QC Batch: OEXT/29264

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MS (Lab ID: 1973329)
  - 2-Fluorobiphenyl (S)
- MSD (Lab ID: 1973330)
  - 2-Fluorobiphenyl (S)

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-1 (12-13) (Lab ID: 10307123001)
  - 2-Fluorobiphenyl (S)

QC Batch: OEXT/29289

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MS (Lab ID: 1975619)
  - 2-Fluorobiphenyl (S)
- MSD (Lab ID: 1975620)
  - 2-Fluorobiphenyl (S)

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-6 (12-13) (Lab ID: 10307123009)
  - 2-Fluorobiphenyl (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** June 25, 2015

Analyte Comments:

QC Batch: OEXT/29289

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-6 (13-14) (Lab ID: 10307123010)
- 2-Fluorobiphenyl (S)

QC Batch: OEXT/29291

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-11 (12.5-13.5) (Lab ID: 10307123015)
- 2-Fluorobiphenyl (S)
- DP-13 (13-14) (Lab ID: 10307123018)
- 2-Fluorobiphenyl (S)
- DP-17 (16-16.5) (Lab ID: 10307123020)
- 2-Fluorobiphenyl (S)
- DP-17 (16.5-17.5) (Lab ID: 10307123019)
- 2-Fluorobiphenyl (S)
- DP-4 (16-16.5) (Lab ID: 10307123021)
- 2-Fluorobiphenyl (S)
- DP-8 (20.5-21) (Lab ID: 10307123014)
- 2-Fluorobiphenyl (S)

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-1 (12-13)**      **Lab ID: 10307123001**      Collected: 05/11/15 10:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	19.0	1.0	1	05/22/15 07:57	05/26/15 10:32	68334-30-5	
Motor Oil Range	ND	mg/kg	12.7	2.3	1	05/22/15 07:57	05/26/15 10:32		
<b>Surrogates</b>									
n-Triacontane (S)	109	%	50-150		1	05/22/15 07:57	05/26/15 10:32	638-68-6	
o-Terphenyl (S)	98	%	50-150		1	05/22/15 07:57	05/26/15 10:32	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>21.7</b>	%	0.10	0.10	1		06/02/15 16:32		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	422	44.9	1	05/21/15 21:14	05/28/15 15:27	101-55-3	
Butylbenzylphthalate	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	85-68-7	
Carbazole	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	59-50-7	
4-Chloroaniline	ND	ug/kg	422	64.7	1	05/21/15 21:14	05/28/15 15:27	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	422	82.4	1	05/21/15 21:14	05/28/15 15:27	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	422	29.4	1	05/21/15 21:14	05/28/15 15:27	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	422	97.4	1	05/21/15 21:14	05/28/15 15:27	108-60-1	
2-Chloronaphthalene	ND	ug/kg	422	66.1	1	05/21/15 21:14	05/28/15 15:27	91-58-7	
2-Chlorophenol	ND	ug/kg	422	98.4	1	05/21/15 21:14	05/28/15 15:27	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	422	48.6	1	05/21/15 21:14	05/28/15 15:27	7005-72-3	
Dibenzofuran	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	422	27.2	1	05/21/15 21:14	05/28/15 15:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	422	26.6	1	05/21/15 21:14	05/28/15 15:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	422	28.1	1	05/21/15 21:14	05/28/15 15:27	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	422	58.8	1	05/21/15 21:14	05/28/15 15:27	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	422	79.4	1	05/21/15 21:14	05/28/15 15:27	120-83-2	
Diethylphthalate	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	422	79.0	1	05/21/15 21:14	05/28/15 15:27	105-67-9	
Dimethylphthalate	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	131-11-3	
Di-n-butylphthalate	ND	ug/kg	422	58.5	1	05/21/15 21:14	05/28/15 15:27	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2170	83.8	1	05/21/15 21:14	05/28/15 15:27	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	422	36.0	1	05/21/15 21:14	05/28/15 15:27	606-20-2	
Di-n-octylphthalate	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	422	72.1	1	05/21/15 21:14	05/28/15 15:27	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	422	35.5	1	05/21/15 21:14	05/28/15 15:27	87-68-3	
Hexachlorobenzene	ND	ug/kg	422	55.5	1	05/21/15 21:14	05/28/15 15:27	118-74-1	
Hexachloroethane	ND	ug/kg	422	26.8	1	05/21/15 21:14	05/28/15 15:27	67-72-1	
Isophorone	ND	ug/kg	422	67.3	1	05/21/15 21:14	05/28/15 15:27	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	422	91.2	1	05/21/15 21:14	05/28/15 15:27	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	843	84.3	1	05/21/15 21:14	05/28/15 15:27		
2-Nitroaniline	ND	ug/kg	422	45.7	1	05/21/15 21:14	05/28/15 15:27	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-1 (12-13)**      **Lab ID: 10307123001**      Collected: 05/11/15 10:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	422	43.1	1	05/21/15 21:14	05/28/15 15:27	99-09-2	
4-Nitroaniline	ND	ug/kg	422	36.9	1	05/21/15 21:14	05/28/15 15:27	100-01-6	
Nitrobenzene	ND	ug/kg	422	85.2	1	05/21/15 21:14	05/28/15 15:27	98-95-3	
2-Nitrophenol	ND	ug/kg	422	72.1	1	05/21/15 21:14	05/28/15 15:27	88-75-5	
4-Nitrophenol	ND	ug/kg	422	44.2	1	05/21/15 21:14	05/28/15 15:27	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	422	57.4	1	05/21/15 21:14	05/28/15 15:27	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	422	211	1	05/21/15 21:14	05/28/15 15:27	86-30-6	
Pentachlorophenol	ND	ug/kg	856	211	1	05/21/15 21:14	05/28/15 15:27	87-86-5	
Phenol	ND	ug/kg	422	92.1	1	05/21/15 21:14	05/28/15 15:27	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	422	69.5	1	05/21/15 21:14	05/28/15 15:27	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	422	50.3	1	05/21/15 21:14	05/28/15 15:27	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	422	54.3	1	05/21/15 21:14	05/28/15 15:27	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	37	%	34-125		1	05/21/15 21:14	05/28/15 15:27	4165-60-0	
2-Fluorobiphenyl (S)	42	%	51-125		1	05/21/15 21:14	05/28/15 15:27	321-60-8	S0
p-Terphenyl-d14 (S)	85	%	55-125		1	05/21/15 21:14	05/28/15 15:27	1718-51-0	
Phenol-d6 (S)	57	%	44-125		1	05/21/15 21:14	05/28/15 15:27	13127-88-3	
2-Fluorophenol (S)	47	%	45-125		1	05/21/15 21:14	05/28/15 15:27	367-12-4	
2,4,6-Tribromophenol (S)	74	%	40-125		1	05/21/15 21:14	05/28/15 15:27	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	12.8	0.46	1	05/21/15 23:58	05/23/15 19:26	83-32-9	
Acenaphthylene	ND	ug/kg	12.8	0.43	1	05/21/15 23:58	05/23/15 19:26	208-96-8	
Anthracene	ND	ug/kg	12.8	0.39	1	05/21/15 23:58	05/23/15 19:26	120-12-7	
Benzo(a)anthracene	ND	ug/kg	12.8	0.24	1	05/21/15 23:58	05/23/15 19:26	56-55-3	
Benzo(a)pyrene	ND	ug/kg	12.8	0.25	1	05/21/15 23:58	05/23/15 19:26	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	12.8	0.45	1	05/21/15 23:58	05/23/15 19:26	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	12.8	0.45	1	05/21/15 23:58	05/23/15 19:26	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	12.8	0.51	1	05/21/15 23:58	05/23/15 19:26	207-08-9	
2-Chloronaphthalene	ND	ug/kg	12.8	0.36	1	05/21/15 23:58	05/23/15 19:26	91-58-7	
Chrysene	ND	ug/kg	12.8	0.31	1	05/21/15 23:58	05/23/15 19:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	12.8	0.55	1	05/21/15 23:58	05/23/15 19:26	53-70-3	
Fluoranthene	ND	ug/kg	12.8	0.28	1	05/21/15 23:58	05/23/15 19:26	206-44-0	
Fluorene	ND	ug/kg	12.8	0.39	1	05/21/15 23:58	05/23/15 19:26	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	12.8	0.49	1	05/21/15 23:58	05/23/15 19:26	193-39-5	
1-Methylnaphthalene	ND	ug/kg	12.8	0.48	1	05/21/15 23:58	05/23/15 19:26	90-12-0	
2-Methylnaphthalene	ND	ug/kg	12.8	0.52	1	05/21/15 23:58	05/23/15 19:26	91-57-6	
Naphthalene	ND	ug/kg	12.8	0.47	1	05/21/15 23:58	05/23/15 19:26	91-20-3	
Phenanthrene	ND	ug/kg	12.8	0.32	1	05/21/15 23:58	05/23/15 19:26	85-01-8	
Pyrene	ND	ug/kg	12.8	0.31	1	05/21/15 23:58	05/23/15 19:26	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	50	%	55-125		1	05/21/15 23:58	05/23/15 19:26	321-60-8	P2,S0
p-Terphenyl-d14 (S)	74	%	30-150		1	05/21/15 23:58	05/23/15 19:26	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-2 (12-12.5)**      **Lab ID: 10307123002**      Collected: 05/11/15 12:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.7	0.90	1	05/22/15 07:57	05/26/15 16:41	68334-30-5	
Motor Oil Range	ND	mg/kg	11.1	2.0	1	05/22/15 07:57	05/26/15 16:41		
<b>Surrogates</b>									
n-Triacontane (S)	115	%	50-150		1	05/22/15 07:57	05/26/15 16:41	638-68-6	
o-Terphenyl (S)	112	%	50-150		1	05/22/15 07:57	05/26/15 16:41	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>11.2</b>	%	0.10	0.10	1		06/02/15 16:32		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	369	39.3	1	05/21/15 21:14	05/28/15 15:58	101-55-3	
Butylbenzylphthalate	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	85-68-7	
Carbazole	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	59-50-7	
4-Chloroaniline	ND	ug/kg	369	56.6	1	05/21/15 21:14	05/28/15 15:58	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	369	72.2	1	05/21/15 21:14	05/28/15 15:58	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	369	25.7	1	05/21/15 21:14	05/28/15 15:58	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	369	85.2	1	05/21/15 21:14	05/28/15 15:58	108-60-1	
2-Chloronaphthalene	ND	ug/kg	369	57.8	1	05/21/15 21:14	05/28/15 15:58	91-58-7	
2-Chlorophenol	ND	ug/kg	369	86.1	1	05/21/15 21:14	05/28/15 15:58	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	369	42.5	1	05/21/15 21:14	05/28/15 15:58	7005-72-3	
Dibenzofuran	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	369	23.8	1	05/21/15 21:14	05/28/15 15:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	369	23.3	1	05/21/15 21:14	05/28/15 15:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	369	24.6	1	05/21/15 21:14	05/28/15 15:58	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	369	51.5	1	05/21/15 21:14	05/28/15 15:58	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	369	69.5	1	05/21/15 21:14	05/28/15 15:58	120-83-2	
Diethylphthalate	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	369	69.1	1	05/21/15 21:14	05/28/15 15:58	105-67-9	
Dimethylphthalate	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	131-11-3	
Di-n-butylphthalate	ND	ug/kg	369	51.2	1	05/21/15 21:14	05/28/15 15:58	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1900	73.4	1	05/21/15 21:14	05/28/15 15:58	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	369	31.5	1	05/21/15 21:14	05/28/15 15:58	606-20-2	
Di-n-octylphthalate	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	369	63.1	1	05/21/15 21:14	05/28/15 15:58	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	369	31.1	1	05/21/15 21:14	05/28/15 15:58	87-68-3	
Hexachlorobenzene	ND	ug/kg	369	48.6	1	05/21/15 21:14	05/28/15 15:58	118-74-1	
Hexachloroethane	ND	ug/kg	369	23.5	1	05/21/15 21:14	05/28/15 15:58	67-72-1	
Isophorone	ND	ug/kg	369	59.0	1	05/21/15 21:14	05/28/15 15:58	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	369	79.9	1	05/21/15 21:14	05/28/15 15:58	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	738	73.8	1	05/21/15 21:14	05/28/15 15:58		
2-Nitroaniline	ND	ug/kg	369	40.0	1	05/21/15 21:14	05/28/15 15:58	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-2 (12-12.5)**      **Lab ID: 10307123002**      Collected: 05/11/15 12:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	369	37.7	1	05/21/15 21:14	05/28/15 15:58	99-09-2	
4-Nitroaniline	ND	ug/kg	369	32.3	1	05/21/15 21:14	05/28/15 15:58	100-01-6	
Nitrobenzene	ND	ug/kg	369	74.6	1	05/21/15 21:14	05/28/15 15:58	98-95-3	
2-Nitrophenol	ND	ug/kg	369	63.1	1	05/21/15 21:14	05/28/15 15:58	88-75-5	
4-Nitrophenol	ND	ug/kg	369	38.7	1	05/21/15 21:14	05/28/15 15:58	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	369	50.2	1	05/21/15 21:14	05/28/15 15:58	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	369	185	1	05/21/15 21:14	05/28/15 15:58	86-30-6	
Pentachlorophenol	ND	ug/kg	750	185	1	05/21/15 21:14	05/28/15 15:58	87-86-5	
Phenol	ND	ug/kg	369	80.7	1	05/21/15 21:14	05/28/15 15:58	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	369	60.9	1	05/21/15 21:14	05/28/15 15:58	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	369	44.1	1	05/21/15 21:14	05/28/15 15:58	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	369	47.5	1	05/21/15 21:14	05/28/15 15:58	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	50	%	34-125		1	05/21/15 21:14	05/28/15 15:58	4165-60-0	
2-Fluorobiphenyl (S)	63	%	51-125		1	05/21/15 21:14	05/28/15 15:58	321-60-8	
p-Terphenyl-d14 (S)	95	%	55-125		1	05/21/15 21:14	05/28/15 15:58	1718-51-0	
Phenol-d6 (S)	67	%	44-125		1	05/21/15 21:14	05/28/15 15:58	13127-88-3	
2-Fluorophenol (S)	57	%	45-125		1	05/21/15 21:14	05/28/15 15:58	367-12-4	
2,4,6-Tribromophenol (S)	86	%	40-125		1	05/21/15 21:14	05/28/15 15:58	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.3	0.41	1	05/21/15 23:58	05/23/15 19:47	83-32-9	
Acenaphthylene	ND	ug/kg	11.3	0.38	1	05/21/15 23:58	05/23/15 19:47	208-96-8	
Anthracene	ND	ug/kg	11.3	0.35	1	05/21/15 23:58	05/23/15 19:47	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.3	0.21	1	05/21/15 23:58	05/23/15 19:47	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.3	0.22	1	05/21/15 23:58	05/23/15 19:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.3	0.39	1	05/21/15 23:58	05/23/15 19:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.3	0.40	1	05/21/15 23:58	05/23/15 19:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.3	0.45	1	05/21/15 23:58	05/23/15 19:47	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.3	0.32	1	05/21/15 23:58	05/23/15 19:47	91-58-7	
Chrysene	ND	ug/kg	11.3	0.28	1	05/21/15 23:58	05/23/15 19:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.3	0.48	1	05/21/15 23:58	05/23/15 19:47	53-70-3	
Fluoranthene	ND	ug/kg	11.3	0.25	1	05/21/15 23:58	05/23/15 19:47	206-44-0	
Fluorene	ND	ug/kg	11.3	0.35	1	05/21/15 23:58	05/23/15 19:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.3	0.43	1	05/21/15 23:58	05/23/15 19:47	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.3	0.42	1	05/21/15 23:58	05/23/15 19:47	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.3	0.46	1	05/21/15 23:58	05/23/15 19:47	91-57-6	
Naphthalene	ND	ug/kg	11.3	0.42	1	05/21/15 23:58	05/23/15 19:47	91-20-3	
Phenanthrene	ND	ug/kg	11.3	0.28	1	05/21/15 23:58	05/23/15 19:47	85-01-8	
Pyrene	ND	ug/kg	11.3	0.27	1	05/21/15 23:58	05/23/15 19:47	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/21/15 23:58	05/23/15 19:47	321-60-8	
p-Terphenyl-d14 (S)	83	%	30-150		1	05/21/15 23:58	05/23/15 19:47	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-2 (12.5-13.5)**      **Lab ID: 10307123003**      Collected: 05/11/15 12:15      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.4	1.2	1	05/22/15 07:57	05/26/15 16:18	68334-30-5	
Motor Oil Range	ND	mg/kg	14.2	2.6	1	05/22/15 07:57	05/26/15 16:18		
<b>Surrogates</b>									
n-Triacontane (S)	101	%	50-150		1	05/22/15 07:57	05/26/15 16:18	638-68-6	
o-Terphenyl (S)	91	%	50-150		1	05/22/15 07:57	05/26/15 16:18	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>29.8</b>	%	0.10	0.10	1		06/02/15 16:32		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	470	50.0	1	05/21/15 21:14	05/28/15 16:28	101-55-3	
Butylbenzylphthalate	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	85-68-7	
Carbazole	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	59-50-7	
4-Chloroaniline	ND	ug/kg	470	72.1	1	05/21/15 21:14	05/28/15 16:28	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	470	91.9	1	05/21/15 21:14	05/28/15 16:28	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	470	32.8	1	05/21/15 21:14	05/28/15 16:28	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	470	109	1	05/21/15 21:14	05/28/15 16:28	108-60-1	
2-Chloronaphthalene	ND	ug/kg	470	73.7	1	05/21/15 21:14	05/28/15 16:28	91-58-7	
2-Chlorophenol	ND	ug/kg	470	110	1	05/21/15 21:14	05/28/15 16:28	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	470	54.1	1	05/21/15 21:14	05/28/15 16:28	7005-72-3	
Dibenzofuran	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	470	30.4	1	05/21/15 21:14	05/28/15 16:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	470	29.6	1	05/21/15 21:14	05/28/15 16:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	470	31.3	1	05/21/15 21:14	05/28/15 16:28	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	470	65.5	1	05/21/15 21:14	05/28/15 16:28	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	470	88.5	1	05/21/15 21:14	05/28/15 16:28	120-83-2	
Diethylphthalate	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	470	88.1	1	05/21/15 21:14	05/28/15 16:28	105-67-9	
Dimethylphthalate	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	131-11-3	
Di-n-butylphthalate	ND	ug/kg	470	65.3	1	05/21/15 21:14	05/28/15 16:28	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2420	93.5	1	05/21/15 21:14	05/28/15 16:28	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	470	40.2	1	05/21/15 21:14	05/28/15 16:28	606-20-2	
Di-n-octylphthalate	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	470	80.4	1	05/21/15 21:14	05/28/15 16:28	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	470	39.6	1	05/21/15 21:14	05/28/15 16:28	87-68-3	
Hexachlorobenzene	ND	ug/kg	470	61.8	1	05/21/15 21:14	05/28/15 16:28	118-74-1	
Hexachloroethane	ND	ug/kg	470	29.9	1	05/21/15 21:14	05/28/15 16:28	67-72-1	
Isophorone	ND	ug/kg	470	75.1	1	05/21/15 21:14	05/28/15 16:28	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	470	102	1	05/21/15 21:14	05/28/15 16:28	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	940	94.0	1	05/21/15 21:14	05/28/15 16:28		
2-Nitroaniline	ND	ug/kg	470	51.0	1	05/21/15 21:14	05/28/15 16:28	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-2 (12.5-13.5)**      **Lab ID: 10307123003**      Collected: 05/11/15 12:15      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	470	48.0	1	05/21/15 21:14	05/28/15 16:28	99-09-2	
4-Nitroaniline	ND	ug/kg	470	41.2	1	05/21/15 21:14	05/28/15 16:28	100-01-6	
Nitrobenzene	ND	ug/kg	470	95.0	1	05/21/15 21:14	05/28/15 16:28	98-95-3	
2-Nitrophenol	ND	ug/kg	470	80.4	1	05/21/15 21:14	05/28/15 16:28	88-75-5	
4-Nitrophenol	ND	ug/kg	470	49.3	1	05/21/15 21:14	05/28/15 16:28	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	470	64.0	1	05/21/15 21:14	05/28/15 16:28	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	470	235	1	05/21/15 21:14	05/28/15 16:28	86-30-6	
Pentachlorophenol	ND	ug/kg	955	235	1	05/21/15 21:14	05/28/15 16:28	87-86-5	
Phenol	ND	ug/kg	470	103	1	05/21/15 21:14	05/28/15 16:28	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	470	77.5	1	05/21/15 21:14	05/28/15 16:28	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	470	56.1	1	05/21/15 21:14	05/28/15 16:28	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	470	60.6	1	05/21/15 21:14	05/28/15 16:28	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	57	%	34-125		1	05/21/15 21:14	05/28/15 16:28	4165-60-0	
2-Fluorobiphenyl (S)	56	%	51-125		1	05/21/15 21:14	05/28/15 16:28	321-60-8	
p-Terphenyl-d14 (S)	93	%	55-125		1	05/21/15 21:14	05/28/15 16:28	1718-51-0	
Phenol-d6 (S)	70	%	44-125		1	05/21/15 21:14	05/28/15 16:28	13127-88-3	
2-Fluorophenol (S)	65	%	45-125		1	05/21/15 21:14	05/28/15 16:28	367-12-4	
2,4,6-Tribromophenol (S)	90	%	40-125		1	05/21/15 21:14	05/28/15 16:28	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.2	0.51	1	05/21/15 23:58	05/23/15 20:08	83-32-9	
Acenaphthylene	ND	ug/kg	14.2	0.48	1	05/21/15 23:58	05/23/15 20:08	208-96-8	
Anthracene	ND	ug/kg	14.2	0.44	1	05/21/15 23:58	05/23/15 20:08	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.2	0.26	1	05/21/15 23:58	05/23/15 20:08	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.2	0.28	1	05/21/15 23:58	05/23/15 20:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.2	0.50	1	05/21/15 23:58	05/23/15 20:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.2	0.50	1	05/21/15 23:58	05/23/15 20:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.2	0.57	1	05/21/15 23:58	05/23/15 20:08	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.2	0.40	1	05/21/15 23:58	05/23/15 20:08	91-58-7	
Chrysene	ND	ug/kg	14.2	0.35	1	05/21/15 23:58	05/23/15 20:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.2	0.61	1	05/21/15 23:58	05/23/15 20:08	53-70-3	
Fluoranthene	ND	ug/kg	14.2	0.31	1	05/21/15 23:58	05/23/15 20:08	206-44-0	
Fluorene	ND	ug/kg	14.2	0.44	1	05/21/15 23:58	05/23/15 20:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.2	0.55	1	05/21/15 23:58	05/23/15 20:08	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.2	0.53	1	05/21/15 23:58	05/23/15 20:08	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.2	0.58	1	05/21/15 23:58	05/23/15 20:08	91-57-6	
Naphthalene	ND	ug/kg	14.2	0.53	1	05/21/15 23:58	05/23/15 20:08	91-20-3	
Phenanthrene	ND	ug/kg	14.2	0.35	1	05/21/15 23:58	05/23/15 20:08	85-01-8	
Pyrene	ND	ug/kg	14.2	0.34	1	05/21/15 23:58	05/23/15 20:08	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/21/15 23:58	05/23/15 20:08	321-60-8	
p-Terphenyl-d14 (S)	76	%	30-150		1	05/21/15 23:58	05/23/15 20:08	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-3 (12-13)**      **Lab ID: 10307123004**      Collected: 05/11/15 13:20      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.5	0.89	1	05/22/15 07:57	05/26/15 18:13	68334-30-5	
Motor Oil Range	ND	mg/kg	11.0	2.0	1	05/22/15 07:57	05/26/15 18:13		
<b>Surrogates</b>									
n-Triacontane (S)	107	%	50-150		1	05/22/15 07:57	05/26/15 18:13	638-68-6	
o-Terphenyl (S)	101	%	50-150		1	05/22/15 07:57	05/26/15 18:13	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>9.2</b>	%	0.10	0.10	1		06/02/15 16:32		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	361	38.4	1	05/21/15 21:14	05/28/15 16:58	101-55-3	
Butylbenzylphthalate	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	85-68-7	
Carbazole	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	59-50-7	
4-Chloroaniline	ND	ug/kg	361	55.3	1	05/21/15 21:14	05/28/15 16:58	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	361	70.5	1	05/21/15 21:14	05/28/15 16:58	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	361	25.2	1	05/21/15 21:14	05/28/15 16:58	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	361	83.3	1	05/21/15 21:14	05/28/15 16:58	108-60-1	
2-Chloronaphthalene	ND	ug/kg	361	56.5	1	05/21/15 21:14	05/28/15 16:58	91-58-7	
2-Chlorophenol	ND	ug/kg	361	84.2	1	05/21/15 21:14	05/28/15 16:58	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	361	41.6	1	05/21/15 21:14	05/28/15 16:58	7005-72-3	
Dibenzofuran	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	361	23.3	1	05/21/15 21:14	05/28/15 16:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	361	22.8	1	05/21/15 21:14	05/28/15 16:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	361	24.1	1	05/21/15 21:14	05/28/15 16:58	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	361	50.3	1	05/21/15 21:14	05/28/15 16:58	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	361	67.9	1	05/21/15 21:14	05/28/15 16:58	120-83-2	
Diethylphthalate	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	361	67.6	1	05/21/15 21:14	05/28/15 16:58	105-67-9	
Dimethylphthalate	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	131-11-3	
Di-n-butylphthalate	ND	ug/kg	361	50.1	1	05/21/15 21:14	05/28/15 16:58	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1860	71.8	1	05/21/15 21:14	05/28/15 16:58	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	361	30.8	1	05/21/15 21:14	05/28/15 16:58	606-20-2	
Di-n-octylphthalate	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	361	61.7	1	05/21/15 21:14	05/28/15 16:58	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	361	30.4	1	05/21/15 21:14	05/28/15 16:58	87-68-3	
Hexachlorobenzene	ND	ug/kg	361	47.5	1	05/21/15 21:14	05/28/15 16:58	118-74-1	
Hexachloroethane	ND	ug/kg	361	23.0	1	05/21/15 21:14	05/28/15 16:58	67-72-1	
Isophorone	ND	ug/kg	361	57.6	1	05/21/15 21:14	05/28/15 16:58	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	361	78.1	1	05/21/15 21:14	05/28/15 16:58	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	722	72.2	1	05/21/15 21:14	05/28/15 16:58		
2-Nitroaniline	ND	ug/kg	361	39.2	1	05/21/15 21:14	05/28/15 16:58	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-3 (12-13)**      **Lab ID: 10307123004**      Collected: 05/11/15 13:20      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	361	36.9	1	05/21/15 21:14	05/28/15 16:58	99-09-2	
4-Nitroaniline	ND	ug/kg	361	31.6	1	05/21/15 21:14	05/28/15 16:58	100-01-6	
Nitrobenzene	ND	ug/kg	361	73.0	1	05/21/15 21:14	05/28/15 16:58	98-95-3	
2-Nitrophenol	ND	ug/kg	361	61.7	1	05/21/15 21:14	05/28/15 16:58	88-75-5	
4-Nitrophenol	ND	ug/kg	361	37.8	1	05/21/15 21:14	05/28/15 16:58	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	361	49.1	1	05/21/15 21:14	05/28/15 16:58	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	361	180	1	05/21/15 21:14	05/28/15 16:58	86-30-6	
Pentachlorophenol	ND	ug/kg	733	180	1	05/21/15 21:14	05/28/15 16:58	87-86-5	
Phenol	ND	ug/kg	361	78.9	1	05/21/15 21:14	05/28/15 16:58	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	361	59.5	1	05/21/15 21:14	05/28/15 16:58	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	361	43.1	1	05/21/15 21:14	05/28/15 16:58	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	361	46.5	1	05/21/15 21:14	05/28/15 16:58	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	62	%	34-125		1	05/21/15 21:14	05/28/15 16:58	4165-60-0	
2-Fluorobiphenyl (S)	69	%	51-125		1	05/21/15 21:14	05/28/15 16:58	321-60-8	
p-Terphenyl-d14 (S)	99	%	55-125		1	05/21/15 21:14	05/28/15 16:58	1718-51-0	
Phenol-d6 (S)	75	%	44-125		1	05/21/15 21:14	05/28/15 16:58	13127-88-3	
2-Fluorophenol (S)	67	%	45-125		1	05/21/15 21:14	05/28/15 16:58	367-12-4	
2,4,6-Tribromophenol (S)	76	%	40-125		1	05/21/15 21:14	05/28/15 16:58	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.0	0.40	1	05/21/15 23:58	05/23/15 20:29	83-32-9	
Acenaphthylene	ND	ug/kg	11.0	0.37	1	05/21/15 23:58	05/23/15 20:29	208-96-8	
Anthracene	ND	ug/kg	11.0	0.34	1	05/21/15 23:58	05/23/15 20:29	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.0	0.20	1	05/21/15 23:58	05/23/15 20:29	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.0	0.22	1	05/21/15 23:58	05/23/15 20:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.0	0.38	1	05/21/15 23:58	05/23/15 20:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.0	0.39	1	05/21/15 23:58	05/23/15 20:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.0	0.44	1	05/21/15 23:58	05/23/15 20:29	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.0	0.31	1	05/21/15 23:58	05/23/15 20:29	91-58-7	
Chrysene	ND	ug/kg	11.0	0.27	1	05/21/15 23:58	05/23/15 20:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.0	0.47	1	05/21/15 23:58	05/23/15 20:29	53-70-3	
Fluoranthene	ND	ug/kg	11.0	0.24	1	05/21/15 23:58	05/23/15 20:29	206-44-0	
Fluorene	ND	ug/kg	11.0	0.34	1	05/21/15 23:58	05/23/15 20:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.0	0.42	1	05/21/15 23:58	05/23/15 20:29	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.0	0.41	1	05/21/15 23:58	05/23/15 20:29	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.0	0.45	1	05/21/15 23:58	05/23/15 20:29	91-57-6	
Naphthalene	ND	ug/kg	11.0	0.41	1	05/21/15 23:58	05/23/15 20:29	91-20-3	
Phenanthrene	ND	ug/kg	11.0	0.27	1	05/21/15 23:58	05/23/15 20:29	85-01-8	
Pyrene	ND	ug/kg	11.0	0.26	1	05/21/15 23:58	05/23/15 20:29	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/21/15 23:58	05/23/15 20:29	321-60-8	
p-Terphenyl-d14 (S)	84	%	30-150		1	05/21/15 23:58	05/23/15 20:29	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-3 (13-14)**      **Lab ID: 10307123005**      Collected: 05/11/15 13:25      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.6	1.2	1	05/22/15 07:57	05/26/15 13:14	68334-30-5	
Motor Oil Range	ND	mg/kg	14.4	2.6	1	05/22/15 07:57	05/26/15 13:14		
<b>Surrogates</b>									
n-Triacontane (S)	109	%	50-150		1	05/22/15 07:57	05/26/15 13:14	638-68-6	
o-Terphenyl (S)	93	%	50-150		1	05/22/15 07:57	05/26/15 13:14	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>31.3</b>	%	0.10	0.10	1		06/02/15 16:32		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	480	51.1	1	05/21/15 21:14	05/28/15 17:28	101-55-3	
Butylbenzylphthalate	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	85-68-7	
Carbazole	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	59-50-7	
4-Chloroaniline	ND	ug/kg	480	73.7	1	05/21/15 21:14	05/28/15 17:28	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	480	93.9	1	05/21/15 21:14	05/28/15 17:28	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	480	33.5	1	05/21/15 21:14	05/28/15 17:28	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	480	111	1	05/21/15 21:14	05/28/15 17:28	108-60-1	
2-Chloronaphthalene	ND	ug/kg	480	75.3	1	05/21/15 21:14	05/28/15 17:28	91-58-7	
2-Chlorophenol	ND	ug/kg	480	112	1	05/21/15 21:14	05/28/15 17:28	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	480	55.3	1	05/21/15 21:14	05/28/15 17:28	7005-72-3	
Dibenzofuran	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	480	31.0	1	05/21/15 21:14	05/28/15 17:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	480	30.3	1	05/21/15 21:14	05/28/15 17:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	480	32.0	1	05/21/15 21:14	05/28/15 17:28	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	480	67.0	1	05/21/15 21:14	05/28/15 17:28	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	480	90.4	1	05/21/15 21:14	05/28/15 17:28	120-83-2	
Diethylphthalate	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	480	90.0	1	05/21/15 21:14	05/28/15 17:28	105-67-9	
Dimethylphthalate	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	131-11-3	
Di-n-butylphthalate	ND	ug/kg	480	66.7	1	05/21/15 21:14	05/28/15 17:28	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2470	95.5	1	05/21/15 21:14	05/28/15 17:28	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	480	41.1	1	05/21/15 21:14	05/28/15 17:28	606-20-2	
Di-n-octylphthalate	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	480	82.1	1	05/21/15 21:14	05/28/15 17:28	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	480	40.5	1	05/21/15 21:14	05/28/15 17:28	87-68-3	
Hexachlorobenzene	ND	ug/kg	480	63.2	1	05/21/15 21:14	05/28/15 17:28	118-74-1	
Hexachloroethane	ND	ug/kg	480	30.6	1	05/21/15 21:14	05/28/15 17:28	67-72-1	
Isophorone	ND	ug/kg	480	76.7	1	05/21/15 21:14	05/28/15 17:28	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	480	104	1	05/21/15 21:14	05/28/15 17:28	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	961	96.1	1	05/21/15 21:14	05/28/15 17:28		
2-Nitroaniline	ND	ug/kg	480	52.1	1	05/21/15 21:14	05/28/15 17:28	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-3 (13-14)**      **Lab ID: 10307123005**      Collected: 05/11/15 13:25      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	480	49.1	1	05/21/15 21:14	05/28/15 17:28	99-09-2	
4-Nitroaniline	ND	ug/kg	480	42.1	1	05/21/15 21:14	05/28/15 17:28	100-01-6	
Nitrobenzene	ND	ug/kg	480	97.1	1	05/21/15 21:14	05/28/15 17:28	98-95-3	
2-Nitrophenol	ND	ug/kg	480	82.1	1	05/21/15 21:14	05/28/15 17:28	88-75-5	
4-Nitrophenol	ND	ug/kg	480	50.4	1	05/21/15 21:14	05/28/15 17:28	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	480	65.4	1	05/21/15 21:14	05/28/15 17:28	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	480	240	1	05/21/15 21:14	05/28/15 17:28	86-30-6	
Pentachlorophenol	ND	ug/kg	975	240	1	05/21/15 21:14	05/28/15 17:28	87-86-5	
Phenol	ND	ug/kg	480	105	1	05/21/15 21:14	05/28/15 17:28	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	480	79.2	1	05/21/15 21:14	05/28/15 17:28	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	480	57.4	1	05/21/15 21:14	05/28/15 17:28	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	480	61.9	1	05/21/15 21:14	05/28/15 17:28	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	48	%	34-125		1	05/21/15 21:14	05/28/15 17:28	4165-60-0	
2-Fluorobiphenyl (S)	48	%	51-125		1	05/21/15 21:14	05/28/15 17:28	321-60-8	S0
p-Terphenyl-d14 (S)	89	%	55-125		1	05/21/15 21:14	05/28/15 17:28	1718-51-0	
Phenol-d6 (S)	63	%	44-125		1	05/21/15 21:14	05/28/15 17:28	13127-88-3	
2-Fluorophenol (S)	56	%	45-125		1	05/21/15 21:14	05/28/15 17:28	367-12-4	
2,4,6-Tribromophenol (S)	80	%	40-125		1	05/21/15 21:14	05/28/15 17:28	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.6	0.52	1	05/21/15 23:58	05/23/15 20:50	83-32-9	
Acenaphthylene	ND	ug/kg	14.6	0.49	1	05/21/15 23:58	05/23/15 20:50	208-96-8	
Anthracene	ND	ug/kg	14.6	0.45	1	05/21/15 23:58	05/23/15 20:50	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.6	0.27	1	05/21/15 23:58	05/23/15 20:50	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.6	0.29	1	05/21/15 23:58	05/23/15 20:50	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.6	0.51	1	05/21/15 23:58	05/23/15 20:50	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.6	0.52	1	05/21/15 23:58	05/23/15 20:50	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.6	0.58	1	05/21/15 23:58	05/23/15 20:50	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.6	0.41	1	05/21/15 23:58	05/23/15 20:50	91-58-7	
Chrysene	ND	ug/kg	14.6	0.36	1	05/21/15 23:58	05/23/15 20:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.6	0.62	1	05/21/15 23:58	05/23/15 20:50	53-70-3	
Fluoranthene	ND	ug/kg	14.6	0.32	1	05/21/15 23:58	05/23/15 20:50	206-44-0	
Fluorene	ND	ug/kg	14.6	0.45	1	05/21/15 23:58	05/23/15 20:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.6	0.56	1	05/21/15 23:58	05/23/15 20:50	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.6	0.54	1	05/21/15 23:58	05/23/15 20:50	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.6	0.60	1	05/21/15 23:58	05/23/15 20:50	91-57-6	
Naphthalene	ND	ug/kg	14.6	0.54	1	05/21/15 23:58	05/23/15 20:50	91-20-3	
Phenanthrene	ND	ug/kg	14.6	0.36	1	05/21/15 23:58	05/23/15 20:50	85-01-8	
Pyrene	ND	ug/kg	14.6	0.35	1	05/21/15 23:58	05/23/15 20:50	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	58	%	55-125		1	05/21/15 23:58	05/23/15 20:50	321-60-8	
p-Terphenyl-d14 (S)	75	%	30-150		1	05/21/15 23:58	05/23/15 20:50	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-4 (16.5-17.5)**      **Lab ID: 10307123006**      Collected: 05/11/15 14:45      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	23.5	1.3	1	05/22/15 07:57	05/26/15 17:27	68334-30-5	
Motor Oil Range	ND	mg/kg	15.7	2.8	1	05/22/15 07:57	05/26/15 17:27		
<b>Surrogates</b>									
n-Triacontane (S)	111	%	50-150		1	05/22/15 07:57	05/26/15 17:27	638-68-6	
o-Terphenyl (S)	105	%	50-150		1	05/22/15 07:57	05/26/15 17:27	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>36.3</b>	%	0.10	0.10	1		06/02/15 16:33		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	518	55.1	1	05/21/15 21:14	05/28/15 17:57	101-55-3	
Butylbenzylphthalate	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	85-68-7	
Carbazole	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	59-50-7	
4-Chloroaniline	ND	ug/kg	518	79.4	1	05/21/15 21:14	05/28/15 17:57	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	518	101	1	05/21/15 21:14	05/28/15 17:57	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	518	36.1	1	05/21/15 21:14	05/28/15 17:57	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	518	120	1	05/21/15 21:14	05/28/15 17:57	108-60-1	
2-Chloronaphthalene	ND	ug/kg	518	81.1	1	05/21/15 21:14	05/28/15 17:57	91-58-7	
2-Chlorophenol	ND	ug/kg	518	121	1	05/21/15 21:14	05/28/15 17:57	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	518	59.6	1	05/21/15 21:14	05/28/15 17:57	7005-72-3	
Dibenzofuran	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	518	33.4	1	05/21/15 21:14	05/28/15 17:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	518	32.6	1	05/21/15 21:14	05/28/15 17:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	518	34.5	1	05/21/15 21:14	05/28/15 17:57	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	518	72.2	1	05/21/15 21:14	05/28/15 17:57	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	518	97.4	1	05/21/15 21:14	05/28/15 17:57	120-83-2	
Diethylphthalate	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	518	97.0	1	05/21/15 21:14	05/28/15 17:57	105-67-9	
Dimethylphthalate	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	131-11-3	
Di-n-butylphthalate	ND	ug/kg	518	71.9	1	05/21/15 21:14	05/28/15 17:57	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2670	103	1	05/21/15 21:14	05/28/15 17:57	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	518	44.3	1	05/21/15 21:14	05/28/15 17:57	606-20-2	
Di-n-octylphthalate	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	518	88.5	1	05/21/15 21:14	05/28/15 17:57	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	518	43.6	1	05/21/15 21:14	05/28/15 17:57	87-68-3	
Hexachlorobenzene	ND	ug/kg	518	68.1	1	05/21/15 21:14	05/28/15 17:57	118-74-1	
Hexachloroethane	ND	ug/kg	518	33.0	1	05/21/15 21:14	05/28/15 17:57	67-72-1	
Isophorone	ND	ug/kg	518	82.7	1	05/21/15 21:14	05/28/15 17:57	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	518	112	1	05/21/15 21:14	05/28/15 17:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	1040	104	1	05/21/15 21:14	05/28/15 17:57		
2-Nitroaniline	ND	ug/kg	518	56.2	1	05/21/15 21:14	05/28/15 17:57	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-4 (16.5-17.5)**      **Lab ID: 10307123006**      Collected: 05/11/15 14:45      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	518	52.9	1	05/21/15 21:14	05/28/15 17:57	99-09-2	
4-Nitroaniline	ND	ug/kg	518	45.4	1	05/21/15 21:14	05/28/15 17:57	100-01-6	
Nitrobenzene	ND	ug/kg	518	105	1	05/21/15 21:14	05/28/15 17:57	98-95-3	
2-Nitrophenol	ND	ug/kg	518	88.5	1	05/21/15 21:14	05/28/15 17:57	88-75-5	
4-Nitrophenol	ND	ug/kg	518	54.3	1	05/21/15 21:14	05/28/15 17:57	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	518	70.5	1	05/21/15 21:14	05/28/15 17:57	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	518	259	1	05/21/15 21:14	05/28/15 17:57	86-30-6	
Pentachlorophenol	ND	ug/kg	1050	259	1	05/21/15 21:14	05/28/15 17:57	87-86-5	
Phenol	ND	ug/kg	518	113	1	05/21/15 21:14	05/28/15 17:57	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	518	85.4	1	05/21/15 21:14	05/28/15 17:57	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	518	61.8	1	05/21/15 21:14	05/28/15 17:57	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	518	66.7	1	05/21/15 21:14	05/28/15 17:57	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	32	%	34-125		1	05/21/15 21:14	05/28/15 17:57	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	35	%	51-125		1	05/21/15 21:14	05/28/15 17:57	321-60-8	S0
p-Terphenyl-d14 (S)	92	%	55-125		1	05/21/15 21:14	05/28/15 17:57	1718-51-0	
Phenol-d6 (S)	53	%	44-125		1	05/21/15 21:14	05/28/15 17:57	13127-88-3	
2-Fluorophenol (S)	43	%	45-125		1	05/21/15 21:14	05/28/15 17:57	367-12-4	S0
2,4,6-Tribromophenol (S)	86	%	40-125		1	05/21/15 21:14	05/28/15 17:57	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	15.6	0.56	1	05/21/15 23:58	05/23/15 21:11	83-32-9	
Acenaphthylene	ND	ug/kg	15.6	0.53	1	05/21/15 23:58	05/23/15 21:11	208-96-8	
Anthracene	ND	ug/kg	15.6	0.48	1	05/21/15 23:58	05/23/15 21:11	120-12-7	
Benzo(a)anthracene	ND	ug/kg	15.6	0.29	1	05/21/15 23:58	05/23/15 21:11	56-55-3	
Benzo(a)pyrene	ND	ug/kg	15.6	0.31	1	05/21/15 23:58	05/23/15 21:11	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	15.6	0.55	1	05/21/15 23:58	05/23/15 21:11	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	15.6	0.55	1	05/21/15 23:58	05/23/15 21:11	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	15.6	0.63	1	05/21/15 23:58	05/23/15 21:11	207-08-9	
2-Chloronaphthalene	ND	ug/kg	15.6	0.44	1	05/21/15 23:58	05/23/15 21:11	91-58-7	
Chrysene	ND	ug/kg	15.6	0.38	1	05/21/15 23:58	05/23/15 21:11	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	15.6	0.67	1	05/21/15 23:58	05/23/15 21:11	53-70-3	
Fluoranthene	ND	ug/kg	15.6	0.34	1	05/21/15 23:58	05/23/15 21:11	206-44-0	
Fluorene	ND	ug/kg	15.6	0.48	1	05/21/15 23:58	05/23/15 21:11	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	15.6	0.60	1	05/21/15 23:58	05/23/15 21:11	193-39-5	
1-Methylnaphthalene	ND	ug/kg	15.6	0.58	1	05/21/15 23:58	05/23/15 21:11	90-12-0	
2-Methylnaphthalene	ND	ug/kg	15.6	0.64	1	05/21/15 23:58	05/23/15 21:11	91-57-6	
Naphthalene	ND	ug/kg	15.6	0.58	1	05/21/15 23:58	05/23/15 21:11	91-20-3	
Phenanthrene	ND	ug/kg	15.6	0.39	1	05/21/15 23:58	05/23/15 21:11	85-01-8	
Pyrene	ND	ug/kg	15.6	0.38	1	05/21/15 23:58	05/23/15 21:11	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	68	%	55-125		1	05/21/15 23:58	05/23/15 21:11	321-60-8	
p-Terphenyl-d14 (S)	83	%	30-150		1	05/21/15 23:58	05/23/15 21:11	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-5 (16-16.5)**      **Lab ID: 10307123007**      Collected: 05/11/15 16:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.4	1.2	1	05/22/15 07:57	05/26/15 14:23	68334-30-5	
Motor Oil Range	ND	mg/kg	14.3	2.6	1	05/22/15 07:57	05/26/15 14:23		
<b>Surrogates</b>									
n-Triacontane (S)	108	%	50-150		1	05/22/15 07:57	05/26/15 14:23	638-68-6	
o-Terphenyl (S)	112	%	50-150		1	05/22/15 07:57	05/26/15 14:23	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>29.9</b>	%	0.10	0.10	1		06/02/15 16:33		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	471	50.1	1	05/21/15 21:14	05/28/15 18:27	101-55-3	
Butylbenzylphthalate	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	85-68-7	
Carbazole	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	59-50-7	
4-Chloroaniline	ND	ug/kg	471	72.2	1	05/21/15 21:14	05/28/15 18:27	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	471	92.0	1	05/21/15 21:14	05/28/15 18:27	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	471	32.8	1	05/21/15 21:14	05/28/15 18:27	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	471	109	1	05/21/15 21:14	05/28/15 18:27	108-60-1	
2-Chloronaphthalene	ND	ug/kg	471	73.8	1	05/21/15 21:14	05/28/15 18:27	91-58-7	
2-Chlorophenol	ND	ug/kg	471	110	1	05/21/15 21:14	05/28/15 18:27	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	471	54.2	1	05/21/15 21:14	05/28/15 18:27	7005-72-3	
Dibenzofuran	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	471	30.4	1	05/21/15 21:14	05/28/15 18:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	471	29.7	1	05/21/15 21:14	05/28/15 18:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	471	31.4	1	05/21/15 21:14	05/28/15 18:27	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	471	65.6	1	05/21/15 21:14	05/28/15 18:27	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	471	88.6	1	05/21/15 21:14	05/28/15 18:27	120-83-2	
Diethylphthalate	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	471	88.2	1	05/21/15 21:14	05/28/15 18:27	105-67-9	
Dimethylphthalate	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	131-11-3	
Di-n-butylphthalate	ND	ug/kg	471	65.3	1	05/21/15 21:14	05/28/15 18:27	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2430	93.6	1	05/21/15 21:14	05/28/15 18:27	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	471	40.2	1	05/21/15 21:14	05/28/15 18:27	606-20-2	
Di-n-octylphthalate	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	471	80.5	1	05/21/15 21:14	05/28/15 18:27	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	471	39.7	1	05/21/15 21:14	05/28/15 18:27	87-68-3	
Hexachlorobenzene	ND	ug/kg	471	61.9	1	05/21/15 21:14	05/28/15 18:27	118-74-1	
Hexachloroethane	ND	ug/kg	471	30.0	1	05/21/15 21:14	05/28/15 18:27	67-72-1	
Isophorone	ND	ug/kg	471	75.2	1	05/21/15 21:14	05/28/15 18:27	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	471	102	1	05/21/15 21:14	05/28/15 18:27	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	942	94.2	1	05/21/15 21:14	05/28/15 18:27		
2-Nitroaniline	ND	ug/kg	471	51.1	1	05/21/15 21:14	05/28/15 18:27	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-5 (16-16.5)**      **Lab ID: 10307123007**      Collected: 05/11/15 16:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	471	48.1	1	05/21/15 21:14	05/28/15 18:27	99-09-2	
4-Nitroaniline	ND	ug/kg	471	41.2	1	05/21/15 21:14	05/28/15 18:27	100-01-6	
Nitrobenzene	ND	ug/kg	471	95.2	1	05/21/15 21:14	05/28/15 18:27	98-95-3	
2-Nitrophenol	ND	ug/kg	471	80.5	1	05/21/15 21:14	05/28/15 18:27	88-75-5	
4-Nitrophenol	ND	ug/kg	471	49.4	1	05/21/15 21:14	05/28/15 18:27	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	471	64.1	1	05/21/15 21:14	05/28/15 18:27	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	471	235	1	05/21/15 21:14	05/28/15 18:27	86-30-6	
Pentachlorophenol	ND	ug/kg	956	235	1	05/21/15 21:14	05/28/15 18:27	87-86-5	
Phenol	ND	ug/kg	471	103	1	05/21/15 21:14	05/28/15 18:27	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	471	77.6	1	05/21/15 21:14	05/28/15 18:27	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	471	56.2	1	05/21/15 21:14	05/28/15 18:27	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	471	60.6	1	05/21/15 21:14	05/28/15 18:27	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	45	%	34-125		1	05/21/15 21:14	05/28/15 18:27	4165-60-0	
2-Fluorobiphenyl (S)	54	%	51-125		1	05/21/15 21:14	05/28/15 18:27	321-60-8	
p-Terphenyl-d14 (S)	93	%	55-125		1	05/21/15 21:14	05/28/15 18:27	1718-51-0	
Phenol-d6 (S)	72	%	44-125		1	05/21/15 21:14	05/28/15 18:27	13127-88-3	
2-Fluorophenol (S)	57	%	45-125		1	05/21/15 21:14	05/28/15 18:27	367-12-4	
2,4,6-Tribromophenol (S)	88	%	40-125		1	05/21/15 21:14	05/28/15 18:27	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.3	0.51	1	05/21/15 23:58	05/23/15 21:32	83-32-9	
Acenaphthylene	ND	ug/kg	14.3	0.48	1	05/21/15 23:58	05/23/15 21:32	208-96-8	
Anthracene	ND	ug/kg	14.3	0.44	1	05/21/15 23:58	05/23/15 21:32	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.3	0.26	1	05/21/15 23:58	05/23/15 21:32	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.3	0.28	1	05/21/15 23:58	05/23/15 21:32	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.3	0.50	1	05/21/15 23:58	05/23/15 21:32	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.3	0.51	1	05/21/15 23:58	05/23/15 21:32	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.3	0.57	1	05/21/15 23:58	05/23/15 21:32	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.3	0.40	1	05/21/15 23:58	05/23/15 21:32	91-58-7	
Chrysene	ND	ug/kg	14.3	0.35	1	05/21/15 23:58	05/23/15 21:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.3	0.61	1	05/21/15 23:58	05/23/15 21:32	53-70-3	
Fluoranthene	ND	ug/kg	14.3	0.31	1	05/21/15 23:58	05/23/15 21:32	206-44-0	
Fluorene	ND	ug/kg	14.3	0.44	1	05/21/15 23:58	05/23/15 21:32	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.3	0.55	1	05/21/15 23:58	05/23/15 21:32	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.3	0.53	1	05/21/15 23:58	05/23/15 21:32	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.3	0.58	1	05/21/15 23:58	05/23/15 21:32	91-57-6	
Naphthalene	ND	ug/kg	14.3	0.53	1	05/21/15 23:58	05/23/15 21:32	91-20-3	
Phenanthrene	ND	ug/kg	14.3	0.35	1	05/21/15 23:58	05/23/15 21:32	85-01-8	
Pyrene	ND	ug/kg	14.3	0.34	1	05/21/15 23:58	05/23/15 21:32	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/21/15 23:58	05/23/15 21:32	321-60-8	
p-Terphenyl-d14 (S)	67	%	30-150		1	05/21/15 23:58	05/23/15 21:32	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-5 (16.5-17)**      **Lab ID: 10307123008**      Collected: 05/11/15 16:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	22.5	1.2	1	05/22/15 07:57	05/26/15 15:55	68334-30-5	
Motor Oil Range	ND	mg/kg	15.0	2.7	1	05/22/15 07:57	05/26/15 15:55		
<b>Surrogates</b>									
n-Triacontane (S)	103	%	50-150		1	05/22/15 07:57	05/26/15 15:55	638-68-6	
o-Terphenyl (S)	108	%	50-150		1	05/22/15 07:57	05/26/15 15:55	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>34.1</b>	%	0.10	0.10	1		06/02/15 16:33		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	499	53.1	1	05/21/15 21:14	05/28/15 18:57	101-55-3	
Butylbenzylphthalate	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	85-68-7	
Carbazole	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	59-50-7	
4-Chloroaniline	ND	ug/kg	499	76.5	1	05/21/15 21:14	05/28/15 18:57	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	499	97.5	1	05/21/15 21:14	05/28/15 18:57	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	499	34.8	1	05/21/15 21:14	05/28/15 18:57	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	499	115	1	05/21/15 21:14	05/28/15 18:57	108-60-1	
2-Chloronaphthalene	ND	ug/kg	499	78.2	1	05/21/15 21:14	05/28/15 18:57	91-58-7	
2-Chlorophenol	ND	ug/kg	499	116	1	05/21/15 21:14	05/28/15 18:57	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	499	57.5	1	05/21/15 21:14	05/28/15 18:57	7005-72-3	
Dibenzofuran	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	499	32.2	1	05/21/15 21:14	05/28/15 18:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	499	31.5	1	05/21/15 21:14	05/28/15 18:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	499	33.3	1	05/21/15 21:14	05/28/15 18:57	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	499	69.6	1	05/21/15 21:14	05/28/15 18:57	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	499	93.9	1	05/21/15 21:14	05/28/15 18:57	120-83-2	
Diethylphthalate	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	499	93.4	1	05/21/15 21:14	05/28/15 18:57	105-67-9	
Dimethylphthalate	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	131-11-3	
Di-n-butylphthalate	ND	ug/kg	499	69.3	1	05/21/15 21:14	05/28/15 18:57	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2570	99.2	1	05/21/15 21:14	05/28/15 18:57	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	499	42.6	1	05/21/15 21:14	05/28/15 18:57	606-20-2	
Di-n-octylphthalate	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	499	85.3	1	05/21/15 21:14	05/28/15 18:57	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	499	42.0	1	05/21/15 21:14	05/28/15 18:57	87-68-3	
Hexachlorobenzene	ND	ug/kg	499	65.6	1	05/21/15 21:14	05/28/15 18:57	118-74-1	
Hexachloroethane	ND	ug/kg	499	31.8	1	05/21/15 21:14	05/28/15 18:57	67-72-1	
Isophorone	ND	ug/kg	499	79.7	1	05/21/15 21:14	05/28/15 18:57	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	499	108	1	05/21/15 21:14	05/28/15 18:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	998	99.8	1	05/21/15 21:14	05/28/15 18:57		
2-Nitroaniline	ND	ug/kg	499	54.1	1	05/21/15 21:14	05/28/15 18:57	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-5 (16.5-17)**      **Lab ID: 10307123008**      Collected: 05/11/15 16:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	499	51.0	1	05/21/15 21:14	05/28/15 18:57	99-09-2	
4-Nitroaniline	ND	ug/kg	499	43.7	1	05/21/15 21:14	05/28/15 18:57	100-01-6	
Nitrobenzene	ND	ug/kg	499	101	1	05/21/15 21:14	05/28/15 18:57	98-95-3	
2-Nitrophenol	ND	ug/kg	499	85.3	1	05/21/15 21:14	05/28/15 18:57	88-75-5	
4-Nitrophenol	ND	ug/kg	499	52.3	1	05/21/15 21:14	05/28/15 18:57	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	499	67.9	1	05/21/15 21:14	05/28/15 18:57	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	499	249	1	05/21/15 21:14	05/28/15 18:57	86-30-6	
Pentachlorophenol	ND	ug/kg	1010	249	1	05/21/15 21:14	05/28/15 18:57	87-86-5	
Phenol	ND	ug/kg	499	109	1	05/21/15 21:14	05/28/15 18:57	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	499	82.3	1	05/21/15 21:14	05/28/15 18:57	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	499	59.6	1	05/21/15 21:14	05/28/15 18:57	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	499	64.3	1	05/21/15 21:14	05/28/15 18:57	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	35	%	34-125		1	05/21/15 21:14	05/28/15 18:57	4165-60-0	
2-Fluorobiphenyl (S)	40	%	51-125		1	05/21/15 21:14	05/28/15 18:57	321-60-8	S0
p-Terphenyl-d14 (S)	86	%	55-125		1	05/21/15 21:14	05/28/15 18:57	1718-51-0	
Phenol-d6 (S)	54	%	44-125		1	05/21/15 21:14	05/28/15 18:57	13127-88-3	
2-Fluorophenol (S)	45	%	45-125		1	05/21/15 21:14	05/28/15 18:57	367-12-4	
2,4,6-Tribromophenol (S)	76	%	40-125		1	05/21/15 21:14	05/28/15 18:57	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	15.2	0.55	1	05/21/15 23:58	05/23/15 21:53	83-32-9	
Acenaphthylene	ND	ug/kg	15.2	0.51	1	05/21/15 23:58	05/23/15 21:53	208-96-8	
Anthracene	ND	ug/kg	15.2	0.47	1	05/21/15 23:58	05/23/15 21:53	120-12-7	
Benzo(a)anthracene	ND	ug/kg	15.2	0.28	1	05/21/15 23:58	05/23/15 21:53	56-55-3	
Benzo(a)pyrene	ND	ug/kg	15.2	0.30	1	05/21/15 23:58	05/23/15 21:53	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	15.2	0.53	1	05/21/15 23:58	05/23/15 21:53	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	15.2	0.54	1	05/21/15 23:58	05/23/15 21:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	15.2	0.61	1	05/21/15 23:58	05/23/15 21:53	207-08-9	
2-Chloronaphthalene	ND	ug/kg	15.2	0.43	1	05/21/15 23:58	05/23/15 21:53	91-58-7	
Chrysene	ND	ug/kg	15.2	0.37	1	05/21/15 23:58	05/23/15 21:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	15.2	0.65	1	05/21/15 23:58	05/23/15 21:53	53-70-3	
Fluoranthene	ND	ug/kg	15.2	0.33	1	05/21/15 23:58	05/23/15 21:53	206-44-0	
Fluorene	ND	ug/kg	15.2	0.47	1	05/21/15 23:58	05/23/15 21:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	15.2	0.58	1	05/21/15 23:58	05/23/15 21:53	193-39-5	
1-Methylnaphthalene	ND	ug/kg	15.2	0.57	1	05/21/15 23:58	05/23/15 21:53	90-12-0	
2-Methylnaphthalene	ND	ug/kg	15.2	0.62	1	05/21/15 23:58	05/23/15 21:53	91-57-6	
Naphthalene	ND	ug/kg	15.2	0.56	1	05/21/15 23:58	05/23/15 21:53	91-20-3	
Phenanthrene	ND	ug/kg	15.2	0.38	1	05/21/15 23:58	05/23/15 21:53	85-01-8	
Pyrene	ND	ug/kg	15.2	0.36	1	05/21/15 23:58	05/23/15 21:53	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	62	%	55-125		1	05/21/15 23:58	05/23/15 21:53	321-60-8	
p-Terphenyl-d14 (S)	73	%	30-150		1	05/21/15 23:58	05/23/15 21:53	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-6 (12-13)**      **Lab ID: 10307123009**      Collected: 05/12/15 11:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.9	1.2	1	05/26/15 14:40	06/02/15 12:05	68334-30-5	
Motor Oil Range	ND	mg/kg	14.6	2.6	1	05/26/15 14:40	06/02/15 12:05		
<b>Surrogates</b>									
n-Triacontane (S)	111	%	50-150		1	05/26/15 14:40	06/02/15 12:05	638-68-6	
o-Terphenyl (S)	95	%	50-150		1	05/26/15 14:40	06/02/15 12:05	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>31.5</b>	%	0.10	0.10	1		06/02/15 16:33		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	481	51.2	1	05/26/15 08:03	05/29/15 13:07	101-55-3	
Butylbenzylphthalate	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	85-68-7	
Carbazole	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	59-50-7	
4-Chloroaniline	ND	ug/kg	481	73.8	1	05/26/15 08:03	05/29/15 13:07	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	481	94.1	1	05/26/15 08:03	05/29/15 13:07	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	481	33.6	1	05/26/15 08:03	05/29/15 13:07	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	481	111	1	05/26/15 08:03	05/29/15 13:07	108-60-1	
2-Chloronaphthalene	ND	ug/kg	481	75.4	1	05/26/15 08:03	05/29/15 13:07	91-58-7	
2-Chlorophenol	ND	ug/kg	481	112	1	05/26/15 08:03	05/29/15 13:07	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	481	55.4	1	05/26/15 08:03	05/29/15 13:07	7005-72-3	
Dibenzofuran	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	481	31.1	1	05/26/15 08:03	05/29/15 13:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	481	30.3	1	05/26/15 08:03	05/29/15 13:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	481	32.1	1	05/26/15 08:03	05/29/15 13:07	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	481	67.1	1	05/26/15 08:03	05/29/15 13:07	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	481	90.6	1	05/26/15 08:03	05/29/15 13:07	120-83-2	
Diethylphthalate	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	481	90.2	1	05/26/15 08:03	05/29/15 13:07	105-67-9	
Dimethylphthalate	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	131-11-3	
Di-n-butylphthalate	ND	ug/kg	481	66.8	1	05/26/15 08:03	05/29/15 13:07	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2480	95.7	1	05/26/15 08:03	05/29/15 13:07	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	481	41.1	1	05/26/15 08:03	05/29/15 13:07	606-20-2	
Di-n-octylphthalate	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	481	82.3	1	05/26/15 08:03	05/29/15 13:07	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	481	40.6	1	05/26/15 08:03	05/29/15 13:07	87-68-3	
Hexachlorobenzene	ND	ug/kg	481	63.3	1	05/26/15 08:03	05/29/15 13:07	118-74-1	
Hexachloroethane	ND	ug/kg	481	30.6	1	05/26/15 08:03	05/29/15 13:07	67-72-1	
Isophorone	ND	ug/kg	481	76.9	1	05/26/15 08:03	05/29/15 13:07	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	481	104	1	05/26/15 08:03	05/29/15 13:07	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	963	96.3	1	05/26/15 08:03	05/29/15 13:07		
2-Nitroaniline	ND	ug/kg	481	52.2	1	05/26/15 08:03	05/29/15 13:07	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-6 (12-13)**      **Lab ID: 10307123009**      Collected: 05/12/15 11:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	481	49.2	1	05/26/15 08:03	05/29/15 13:07	99-09-2	
4-Nitroaniline	ND	ug/kg	481	42.2	1	05/26/15 08:03	05/29/15 13:07	100-01-6	
Nitrobenzene	ND	ug/kg	481	97.3	1	05/26/15 08:03	05/29/15 13:07	98-95-3	
2-Nitrophenol	ND	ug/kg	481	82.3	1	05/26/15 08:03	05/29/15 13:07	88-75-5	
4-Nitrophenol	ND	ug/kg	481	50.5	1	05/26/15 08:03	05/29/15 13:07	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	481	65.5	1	05/26/15 08:03	05/29/15 13:07	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	481	241	1	05/26/15 08:03	05/29/15 13:07	86-30-6	
Pentachlorophenol	ND	ug/kg	978	241	1	05/26/15 08:03	05/29/15 13:07	87-86-5	
Phenol	ND	ug/kg	481	105	1	05/26/15 08:03	05/29/15 13:07	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	481	79.4	1	05/26/15 08:03	05/29/15 13:07	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	481	57.5	1	05/26/15 08:03	05/29/15 13:07	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	481	62.0	1	05/26/15 08:03	05/29/15 13:07	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	34	%	34-125		1	05/26/15 08:03	05/29/15 13:07	4165-60-0	P2
2-Fluorobiphenyl (S)	35	%	51-125		1	05/26/15 08:03	05/29/15 13:07	321-60-8	S0
p-Terphenyl-d14 (S)	78	%	55-125		1	05/26/15 08:03	05/29/15 13:07	1718-51-0	
Phenol-d6 (S)	47	%	44-125		1	05/26/15 08:03	05/29/15 13:07	13127-88-3	
2-Fluorophenol (S)	40	%	45-125		1	05/26/15 08:03	05/29/15 13:07	367-12-4	S0
2,4,6-Tribromophenol (S)	68	%	40-125		1	05/26/15 08:03	05/29/15 13:07	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.5	0.52	1	05/26/15 10:11	05/27/15 20:06	83-32-9	
Acenaphthylene	ND	ug/kg	14.5	0.49	1	05/26/15 10:11	05/27/15 20:06	208-96-8	
Anthracene	ND	ug/kg	14.5	0.45	1	05/26/15 10:11	05/27/15 20:06	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.5	0.27	1	05/26/15 10:11	05/27/15 20:06	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.5	0.29	1	05/26/15 10:11	05/27/15 20:06	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.5	0.51	1	05/26/15 10:11	05/27/15 20:06	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.5	0.51	1	05/26/15 10:11	05/27/15 20:06	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.5	0.58	1	05/26/15 10:11	05/27/15 20:06	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.5	0.41	1	05/26/15 10:11	05/27/15 20:06	91-58-7	L2
Chrysene	ND	ug/kg	14.5	0.36	1	05/26/15 10:11	05/27/15 20:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.5	0.62	1	05/26/15 10:11	05/27/15 20:06	53-70-3	
Fluoranthene	ND	ug/kg	14.5	0.32	1	05/26/15 10:11	05/27/15 20:06	206-44-0	
Fluorene	ND	ug/kg	14.5	0.45	1	05/26/15 10:11	05/27/15 20:06	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.5	0.56	1	05/26/15 10:11	05/27/15 20:06	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.5	0.54	1	05/26/15 10:11	05/27/15 20:06	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.5	0.59	1	05/26/15 10:11	05/27/15 20:06	91-57-6	
Naphthalene	ND	ug/kg	14.5	0.54	1	05/26/15 10:11	05/27/15 20:06	91-20-3	
Phenanthrene	ND	ug/kg	14.5	0.36	1	05/26/15 10:11	05/27/15 20:06	85-01-8	
Pyrene	ND	ug/kg	14.5	0.35	1	05/26/15 10:11	05/27/15 20:06	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	50	%	55-125		1	05/26/15 10:11	05/27/15 20:06	321-60-8	P2,S0
p-Terphenyl-d14 (S)	56	%	30-150		1	05/26/15 10:11	05/27/15 20:06	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-6 (13-14)**      **Lab ID: 10307123010**      Collected: 05/12/15 11:50      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	20.9	1.1	1	05/26/15 14:40	06/02/15 13:14	68334-30-5	
Motor Oil Range	ND	mg/kg	13.9	2.5	1	05/26/15 14:40	06/02/15 13:14		
<b>Surrogates</b>									
n-Triacontane (S)	123	%	50-150		1	05/26/15 14:40	06/02/15 13:14	638-68-6	
o-Terphenyl (S)	98	%	50-150		1	05/26/15 14:40	06/02/15 13:14	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>28.1</b>	%	0.10	0.10	1		06/03/15 15:24		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	457	48.7	1	05/26/15 08:03	05/29/15 13:37	101-55-3	
Butylbenzylphthalate	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	85-68-7	
Carbazole	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	59-50-7	
4-Chloroaniline	ND	ug/kg	457	70.1	1	05/26/15 08:03	05/29/15 13:37	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	457	89.4	1	05/26/15 08:03	05/29/15 13:37	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	457	31.9	1	05/26/15 08:03	05/29/15 13:37	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	457	106	1	05/26/15 08:03	05/29/15 13:37	108-60-1	
2-Chloronaphthalene	ND	ug/kg	457	71.7	1	05/26/15 08:03	05/29/15 13:37	91-58-7	
2-Chlorophenol	ND	ug/kg	457	107	1	05/26/15 08:03	05/29/15 13:37	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	457	52.7	1	05/26/15 08:03	05/29/15 13:37	7005-72-3	
Dibenzofuran	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	457	29.5	1	05/26/15 08:03	05/29/15 13:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	457	28.8	1	05/26/15 08:03	05/29/15 13:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	457	30.5	1	05/26/15 08:03	05/29/15 13:37	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	457	63.8	1	05/26/15 08:03	05/29/15 13:37	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	457	86.1	1	05/26/15 08:03	05/29/15 13:37	120-83-2	
Diethylphthalate	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	457	85.7	1	05/26/15 08:03	05/29/15 13:37	105-67-9	
Dimethylphthalate	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	131-11-3	
Di-n-butylphthalate	ND	ug/kg	457	63.5	1	05/26/15 08:03	05/29/15 13:37	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2360	90.9	1	05/26/15 08:03	05/29/15 13:37	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	457	39.1	1	05/26/15 08:03	05/29/15 13:37	606-20-2	
Di-n-octylphthalate	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	457	78.2	1	05/26/15 08:03	05/29/15 13:37	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	457	38.5	1	05/26/15 08:03	05/29/15 13:37	87-68-3	
Hexachlorobenzene	ND	ug/kg	457	60.2	1	05/26/15 08:03	05/29/15 13:37	118-74-1	
Hexachloroethane	ND	ug/kg	457	29.1	1	05/26/15 08:03	05/29/15 13:37	67-72-1	
Isophorone	ND	ug/kg	457	73.0	1	05/26/15 08:03	05/29/15 13:37	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	457	99.0	1	05/26/15 08:03	05/29/15 13:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	915	91.5	1	05/26/15 08:03	05/29/15 13:37		
2-Nitroaniline	ND	ug/kg	457	49.6	1	05/26/15 08:03	05/29/15 13:37	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-6 (13-14)**      **Lab ID: 10307123010**      Collected: 05/12/15 11:50      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	457	46.7	1	05/26/15 08:03	05/29/15 13:37	99-09-2	
4-Nitroaniline	ND	ug/kg	457	40.1	1	05/26/15 08:03	05/29/15 13:37	100-01-6	
Nitrobenzene	ND	ug/kg	457	92.5	1	05/26/15 08:03	05/29/15 13:37	98-95-3	
2-Nitrophenol	ND	ug/kg	457	78.2	1	05/26/15 08:03	05/29/15 13:37	88-75-5	
4-Nitrophenol	ND	ug/kg	457	48.0	1	05/26/15 08:03	05/29/15 13:37	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	457	62.2	1	05/26/15 08:03	05/29/15 13:37	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	457	229	1	05/26/15 08:03	05/29/15 13:37	86-30-6	
Pentachlorophenol	ND	ug/kg	929	229	1	05/26/15 08:03	05/29/15 13:37	87-86-5	
Phenol	ND	ug/kg	457	99.9	1	05/26/15 08:03	05/29/15 13:37	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	457	75.4	1	05/26/15 08:03	05/29/15 13:37	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	457	54.6	1	05/26/15 08:03	05/29/15 13:37	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	457	58.9	1	05/26/15 08:03	05/29/15 13:37	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	56	%	34-125		1	05/26/15 08:03	05/29/15 13:37	4165-60-0	
2-Fluorobiphenyl (S)	56	%	51-125		1	05/26/15 08:03	05/29/15 13:37	321-60-8	
p-Terphenyl-d14 (S)	75	%	55-125		1	05/26/15 08:03	05/29/15 13:37	1718-51-0	
Phenol-d6 (S)	61	%	44-125		1	05/26/15 08:03	05/29/15 13:37	13127-88-3	
2-Fluorophenol (S)	57	%	45-125		1	05/26/15 08:03	05/29/15 13:37	367-12-4	
2,4,6-Tribromophenol (S)	69	%	40-125		1	05/26/15 08:03	05/29/15 13:37	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	13.9	0.50	1	05/26/15 10:11	05/27/15 20:28	83-32-9	
Acenaphthylene	ND	ug/kg	13.9	0.47	1	05/26/15 10:11	05/27/15 20:28	208-96-8	
Anthracene	ND	ug/kg	13.9	0.43	1	05/26/15 10:11	05/27/15 20:28	120-12-7	
Benzo(a)anthracene	ND	ug/kg	13.9	0.26	1	05/26/15 10:11	05/27/15 20:28	56-55-3	
Benzo(a)pyrene	ND	ug/kg	13.9	0.27	1	05/26/15 10:11	05/27/15 20:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	13.9	0.49	1	05/26/15 10:11	05/27/15 20:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	13.9	0.49	1	05/26/15 10:11	05/27/15 20:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	13.9	0.56	1	05/26/15 10:11	05/27/15 20:28	207-08-9	
2-Chloronaphthalene	ND	ug/kg	13.9	0.39	1	05/26/15 10:11	05/27/15 20:28	91-58-7	L2
Chrysene	ND	ug/kg	13.9	0.34	1	05/26/15 10:11	05/27/15 20:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.9	0.60	1	05/26/15 10:11	05/27/15 20:28	53-70-3	
Fluoranthene	ND	ug/kg	13.9	0.30	1	05/26/15 10:11	05/27/15 20:28	206-44-0	
Fluorene	ND	ug/kg	13.9	0.43	1	05/26/15 10:11	05/27/15 20:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	13.9	0.53	1	05/26/15 10:11	05/27/15 20:28	193-39-5	
1-Methylnaphthalene	ND	ug/kg	13.9	0.52	1	05/26/15 10:11	05/27/15 20:28	90-12-0	
2-Methylnaphthalene	ND	ug/kg	13.9	0.57	1	05/26/15 10:11	05/27/15 20:28	91-57-6	
Naphthalene	ND	ug/kg	13.9	0.52	1	05/26/15 10:11	05/27/15 20:28	91-20-3	
Phenanthrene	ND	ug/kg	13.9	0.34	1	05/26/15 10:11	05/27/15 20:28	85-01-8	
Pyrene	ND	ug/kg	13.9	0.33	1	05/26/15 10:11	05/27/15 20:28	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	49	%	55-125		1	05/26/15 10:11	05/27/15 20:28	321-60-8	P2,S0
p-Terphenyl-d14 (S)	57	%	30-150		1	05/26/15 10:11	05/27/15 20:28	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-7 (12.5-13.5)**      **Lab ID: 10307123011**      Collected: 05/12/15 08:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.8	0.91	1	05/26/15 14:40	06/02/15 13:37	68334-30-5	
Motor Oil Range	ND	mg/kg	11.2	2.0	1	05/26/15 14:40	06/02/15 13:37		
<b>Surrogates</b>									
n-Triacontane (S)	124	%	50-150		1	05/26/15 14:40	06/02/15 13:37	638-68-6	
o-Terphenyl (S)	113	%	50-150		1	05/26/15 14:40	06/02/15 13:37	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>10.9</b>	%	0.10	0.10	1		06/03/15 15:25		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	370	39.4	1	05/26/15 08:03	05/29/15 14:07	101-55-3	
Butylbenzylphthalate	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	85-68-7	
Carbazole	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	59-50-7	
4-Chloroaniline	ND	ug/kg	370	56.8	1	05/26/15 08:03	05/29/15 14:07	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	370	72.4	1	05/26/15 08:03	05/29/15 14:07	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	370	25.8	1	05/26/15 08:03	05/29/15 14:07	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	370	85.5	1	05/26/15 08:03	05/29/15 14:07	108-60-1	
2-Chloronaphthalene	ND	ug/kg	370	58.0	1	05/26/15 08:03	05/29/15 14:07	91-58-7	
2-Chlorophenol	ND	ug/kg	370	86.4	1	05/26/15 08:03	05/29/15 14:07	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	370	42.6	1	05/26/15 08:03	05/29/15 14:07	7005-72-3	
Dibenzofuran	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	370	23.9	1	05/26/15 08:03	05/29/15 14:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	370	23.3	1	05/26/15 08:03	05/29/15 14:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	370	24.7	1	05/26/15 08:03	05/29/15 14:07	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	370	51.6	1	05/26/15 08:03	05/29/15 14:07	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	370	69.7	1	05/26/15 08:03	05/29/15 14:07	120-83-2	
Diethylphthalate	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	370	69.3	1	05/26/15 08:03	05/29/15 14:07	105-67-9	
Dimethylphthalate	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	131-11-3	
Di-n-butylphthalate	ND	ug/kg	370	51.4	1	05/26/15 08:03	05/29/15 14:07	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1910	73.6	1	05/26/15 08:03	05/29/15 14:07	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	370	31.6	1	05/26/15 08:03	05/29/15 14:07	606-20-2	
Di-n-octylphthalate	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	370	63.3	1	05/26/15 08:03	05/29/15 14:07	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	370	31.2	1	05/26/15 08:03	05/29/15 14:07	87-68-3	
Hexachlorobenzene	ND	ug/kg	370	48.7	1	05/26/15 08:03	05/29/15 14:07	118-74-1	
Hexachloroethane	ND	ug/kg	370	23.6	1	05/26/15 08:03	05/29/15 14:07	67-72-1	
Isophorone	ND	ug/kg	370	59.1	1	05/26/15 08:03	05/29/15 14:07	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	370	80.1	1	05/26/15 08:03	05/29/15 14:07	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	741	74.1	1	05/26/15 08:03	05/29/15 14:07		
2-Nitroaniline	ND	ug/kg	370	40.2	1	05/26/15 08:03	05/29/15 14:07	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-7 (12.5-13.5)**      **Lab ID: 10307123011**      Collected: 05/12/15 08:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	370	37.8	1	05/26/15 08:03	05/29/15 14:07	99-09-2	
4-Nitroaniline	ND	ug/kg	370	32.4	1	05/26/15 08:03	05/29/15 14:07	100-01-6	
Nitrobenzene	ND	ug/kg	370	74.8	1	05/26/15 08:03	05/29/15 14:07	98-95-3	
2-Nitrophenol	ND	ug/kg	370	63.3	1	05/26/15 08:03	05/29/15 14:07	88-75-5	
4-Nitrophenol	ND	ug/kg	370	38.8	1	05/26/15 08:03	05/29/15 14:07	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	370	50.4	1	05/26/15 08:03	05/29/15 14:07	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	370	185	1	05/26/15 08:03	05/29/15 14:07	86-30-6	
Pentachlorophenol	ND	ug/kg	752	185	1	05/26/15 08:03	05/29/15 14:07	87-86-5	
Phenol	ND	ug/kg	370	80.9	1	05/26/15 08:03	05/29/15 14:07	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	370	61.0	1	05/26/15 08:03	05/29/15 14:07	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	370	44.2	1	05/26/15 08:03	05/29/15 14:07	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	370	47.7	1	05/26/15 08:03	05/29/15 14:07	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	57	%	34-125		1	05/26/15 08:03	05/29/15 14:07	4165-60-0	
2-Fluorobiphenyl (S)	63	%	51-125		1	05/26/15 08:03	05/29/15 14:07	321-60-8	
p-Terphenyl-d14 (S)	83	%	55-125		1	05/26/15 08:03	05/29/15 14:07	1718-51-0	
Phenol-d6 (S)	62	%	44-125		1	05/26/15 08:03	05/29/15 14:07	13127-88-3	
2-Fluorophenol (S)	60	%	45-125		1	05/26/15 08:03	05/29/15 14:07	367-12-4	
2,4,6-Tribromophenol (S)	76	%	40-125		1	05/26/15 08:03	05/29/15 14:07	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.2	0.40	1	05/26/15 12:27	05/28/15 01:50	83-32-9	
Acenaphthylene	ND	ug/kg	11.2	0.38	1	05/26/15 12:27	05/28/15 01:50	208-96-8	
Anthracene	ND	ug/kg	11.2	0.34	1	05/26/15 12:27	05/28/15 01:50	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.2	0.21	1	05/26/15 12:27	05/28/15 01:50	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.2	0.22	1	05/26/15 12:27	05/28/15 01:50	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.2	0.39	1	05/26/15 12:27	05/28/15 01:50	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.2	0.40	1	05/26/15 12:27	05/28/15 01:50	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.2	0.45	1	05/26/15 12:27	05/28/15 01:50	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.2	0.32	1	05/26/15 12:27	05/28/15 01:50	91-58-7	L2
Chrysene	ND	ug/kg	11.2	0.28	1	05/26/15 12:27	05/28/15 01:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.2	0.48	1	05/26/15 12:27	05/28/15 01:50	53-70-3	
Fluoranthene	ND	ug/kg	11.2	0.25	1	05/26/15 12:27	05/28/15 01:50	206-44-0	
Fluorene	ND	ug/kg	11.2	0.35	1	05/26/15 12:27	05/28/15 01:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.2	0.43	1	05/26/15 12:27	05/28/15 01:50	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.2	0.42	1	05/26/15 12:27	05/28/15 01:50	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.2	0.46	1	05/26/15 12:27	05/28/15 01:50	91-57-6	
Naphthalene	ND	ug/kg	11.2	0.42	1	05/26/15 12:27	05/28/15 01:50	91-20-3	
Phenanthrene	ND	ug/kg	11.2	0.28	1	05/26/15 12:27	05/28/15 01:50	85-01-8	
Pyrene	ND	ug/kg	11.2	0.27	1	05/26/15 12:27	05/28/15 01:50	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	65	%	55-125		1	05/26/15 12:27	05/28/15 01:50	321-60-8	
p-Terphenyl-d14 (S)	96	%	30-150		1	05/26/15 12:27	05/28/15 01:50	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-7 (13.5-14.5)**      **Lab ID: 10307123012**      Collected: 05/12/15 08:35      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	20.3	1.1	1	05/26/15 14:40	06/02/15 14:00	68334-30-5	
Motor Oil Range	ND	mg/kg	13.6	2.4	1	05/26/15 14:40	06/02/15 14:00		
<b>Surrogates</b>									
n-Triacontane (S)	102	%	50-150		1	05/26/15 14:40	06/02/15 14:00	638-68-6	
o-Terphenyl (S)	87	%	50-150		1	05/26/15 14:40	06/02/15 14:00	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>27.0</b>	%	0.10	0.10	1		06/03/15 15:25		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	452	48.1	1	05/26/15 08:03	05/29/15 14:36	101-55-3	
Butylbenzylphthalate	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	85-68-7	
Carbazole	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	59-50-7	
4-Chloroaniline	ND	ug/kg	452	69.3	1	05/26/15 08:03	05/29/15 14:36	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	452	88.3	1	05/26/15 08:03	05/29/15 14:36	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	452	31.5	1	05/26/15 08:03	05/29/15 14:36	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	452	104	1	05/26/15 08:03	05/29/15 14:36	108-60-1	
2-Chloronaphthalene	ND	ug/kg	452	70.8	1	05/26/15 08:03	05/29/15 14:36	91-58-7	
2-Chlorophenol	ND	ug/kg	452	105	1	05/26/15 08:03	05/29/15 14:36	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	452	52.0	1	05/26/15 08:03	05/29/15 14:36	7005-72-3	
Dibenzofuran	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	452	29.2	1	05/26/15 08:03	05/29/15 14:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	452	28.5	1	05/26/15 08:03	05/29/15 14:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	452	30.1	1	05/26/15 08:03	05/29/15 14:36	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	452	63.0	1	05/26/15 08:03	05/29/15 14:36	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	452	85.0	1	05/26/15 08:03	05/29/15 14:36	120-83-2	
Diethylphthalate	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	452	84.6	1	05/26/15 08:03	05/29/15 14:36	105-67-9	
Dimethylphthalate	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	131-11-3	
Di-n-butylphthalate	ND	ug/kg	452	62.7	1	05/26/15 08:03	05/29/15 14:36	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2330	89.8	1	05/26/15 08:03	05/29/15 14:36	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	452	38.6	1	05/26/15 08:03	05/29/15 14:36	606-20-2	
Di-n-octylphthalate	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	452	77.2	1	05/26/15 08:03	05/29/15 14:36	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	452	38.1	1	05/26/15 08:03	05/29/15 14:36	87-68-3	
Hexachlorobenzene	ND	ug/kg	452	59.4	1	05/26/15 08:03	05/29/15 14:36	118-74-1	
Hexachloroethane	ND	ug/kg	452	28.8	1	05/26/15 08:03	05/29/15 14:36	67-72-1	
Isophorone	ND	ug/kg	452	72.2	1	05/26/15 08:03	05/29/15 14:36	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	452	97.8	1	05/26/15 08:03	05/29/15 14:36	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	904	90.4	1	05/26/15 08:03	05/29/15 14:36		
2-Nitroaniline	ND	ug/kg	452	49.0	1	05/26/15 08:03	05/29/15 14:36	88-74-4	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-7 (13.5-14.5)**      **Lab ID: 10307123012**      Collected: 05/12/15 08:35      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	452	46.1	1	05/26/15 08:03	05/29/15 14:36	99-09-2	
4-Nitroaniline	ND	ug/kg	452	39.6	1	05/26/15 08:03	05/29/15 14:36	100-01-6	
Nitrobenzene	ND	ug/kg	452	91.3	1	05/26/15 08:03	05/29/15 14:36	98-95-3	
2-Nitrophenol	ND	ug/kg	452	77.2	1	05/26/15 08:03	05/29/15 14:36	88-75-5	
4-Nitrophenol	ND	ug/kg	452	47.4	1	05/26/15 08:03	05/29/15 14:36	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	452	61.5	1	05/26/15 08:03	05/29/15 14:36	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	452	226	1	05/26/15 08:03	05/29/15 14:36	86-30-6	
Pentachlorophenol	ND	ug/kg	917	226	1	05/26/15 08:03	05/29/15 14:36	87-86-5	
Phenol	ND	ug/kg	452	98.7	1	05/26/15 08:03	05/29/15 14:36	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	452	74.5	1	05/26/15 08:03	05/29/15 14:36	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	452	53.9	1	05/26/15 08:03	05/29/15 14:36	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	452	58.2	1	05/26/15 08:03	05/29/15 14:36	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	45	%	34-125		1	05/26/15 08:03	05/29/15 14:36	4165-60-0	
2-Fluorobiphenyl (S)	49	%	51-125		1	05/26/15 08:03	05/29/15 14:36	321-60-8	S0
p-Terphenyl-d14 (S)	70	%	55-125		1	05/26/15 08:03	05/29/15 14:36	1718-51-0	
Phenol-d6 (S)	55	%	44-125		1	05/26/15 08:03	05/29/15 14:36	13127-88-3	
2-Fluorophenol (S)	51	%	45-125		1	05/26/15 08:03	05/29/15 14:36	367-12-4	
2,4,6-Tribromophenol (S)	64	%	40-125		1	05/26/15 08:03	05/29/15 14:36	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	13.6	0.49	1	05/26/15 12:27	05/28/15 02:12	83-32-9	
Acenaphthylene	ND	ug/kg	13.6	0.46	1	05/26/15 12:27	05/28/15 02:12	208-96-8	
Anthracene	ND	ug/kg	13.6	0.42	1	05/26/15 12:27	05/28/15 02:12	120-12-7	
Benzo(a)anthracene	ND	ug/kg	13.6	0.25	1	05/26/15 12:27	05/28/15 02:12	56-55-3	
Benzo(a)pyrene	ND	ug/kg	13.6	0.27	1	05/26/15 12:27	05/28/15 02:12	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	13.6	0.48	1	05/26/15 12:27	05/28/15 02:12	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	13.6	0.48	1	05/26/15 12:27	05/28/15 02:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	13.6	0.55	1	05/26/15 12:27	05/28/15 02:12	207-08-9	
2-Chloronaphthalene	ND	ug/kg	13.6	0.39	1	05/26/15 12:27	05/28/15 02:12	91-58-7	L2
Chrysene	ND	ug/kg	13.6	0.34	1	05/26/15 12:27	05/28/15 02:12	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.6	0.59	1	05/26/15 12:27	05/28/15 02:12	53-70-3	
Fluoranthene	ND	ug/kg	13.6	0.30	1	05/26/15 12:27	05/28/15 02:12	206-44-0	
Fluorene	ND	ug/kg	13.6	0.42	1	05/26/15 12:27	05/28/15 02:12	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	13.6	0.52	1	05/26/15 12:27	05/28/15 02:12	193-39-5	
1-Methylnaphthalene	ND	ug/kg	13.6	0.51	1	05/26/15 12:27	05/28/15 02:12	90-12-0	
2-Methylnaphthalene	ND	ug/kg	13.6	0.56	1	05/26/15 12:27	05/28/15 02:12	91-57-6	
Naphthalene	ND	ug/kg	13.6	0.51	1	05/26/15 12:27	05/28/15 02:12	91-20-3	
Phenanthrene	ND	ug/kg	13.6	0.34	1	05/26/15 12:27	05/28/15 02:12	85-01-8	
Pyrene	ND	ug/kg	13.6	0.33	1	05/26/15 12:27	05/28/15 02:12	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	60	%	55-125		1	05/26/15 12:27	05/28/15 02:12	321-60-8	
p-Terphenyl-d14 (S)	83	%	30-150		1	05/26/15 12:27	05/28/15 02:12	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-8 (20-20.5)**      **Lab ID: 10307123013**      Collected: 05/12/15 10:15      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	19.0	1.0	1	05/26/15 14:40	06/02/15 14:23	68334-30-5	
Motor Oil Range	ND	mg/kg	12.7	2.3	1	05/26/15 14:40	06/02/15 14:23		
<b>Surrogates</b>									
n-Triacontane (S)	110	%	50-150		1	05/26/15 14:40	06/02/15 14:23	638-68-6	
o-Terphenyl (S)	112	%	50-150		1	05/26/15 14:40	06/02/15 14:23	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>21.2</b>	%	0.10	0.10	1		06/03/15 15:25		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	418	44.4	1	05/26/15 08:03	05/29/15 15:05	101-55-3	
Butylbenzylphthalate	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	85-68-7	
Carbazole	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	59-50-7	
4-Chloroaniline	ND	ug/kg	418	64.0	1	05/26/15 08:03	05/29/15 15:05	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	418	81.6	1	05/26/15 08:03	05/29/15 15:05	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	418	29.1	1	05/26/15 08:03	05/29/15 15:05	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	418	96.4	1	05/26/15 08:03	05/29/15 15:05	108-60-1	
2-Chloronaphthalene	ND	ug/kg	418	65.4	1	05/26/15 08:03	05/29/15 15:05	91-58-7	
2-Chlorophenol	ND	ug/kg	418	97.4	1	05/26/15 08:03	05/29/15 15:05	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	418	48.1	1	05/26/15 08:03	05/29/15 15:05	7005-72-3	
Dibenzofuran	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	418	26.9	1	05/26/15 08:03	05/29/15 15:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	418	26.3	1	05/26/15 08:03	05/29/15 15:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	418	27.8	1	05/26/15 08:03	05/29/15 15:05	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	418	58.2	1	05/26/15 08:03	05/29/15 15:05	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	418	78.6	1	05/26/15 08:03	05/29/15 15:05	120-83-2	
Diethylphthalate	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	418	78.2	1	05/26/15 08:03	05/29/15 15:05	105-67-9	
Dimethylphthalate	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	131-11-3	
Di-n-butylphthalate	ND	ug/kg	418	57.9	1	05/26/15 08:03	05/29/15 15:05	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2150	83.0	1	05/26/15 08:03	05/29/15 15:05	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	418	35.7	1	05/26/15 08:03	05/29/15 15:05	606-20-2	
Di-n-octylphthalate	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	418	71.4	1	05/26/15 08:03	05/29/15 15:05	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	418	35.2	1	05/26/15 08:03	05/29/15 15:05	87-68-3	
Hexachlorobenzene	ND	ug/kg	418	54.9	1	05/26/15 08:03	05/29/15 15:05	118-74-1	
Hexachloroethane	ND	ug/kg	418	26.6	1	05/26/15 08:03	05/29/15 15:05	67-72-1	
Isophorone	ND	ug/kg	418	66.7	1	05/26/15 08:03	05/29/15 15:05	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	418	90.3	1	05/26/15 08:03	05/29/15 15:05	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	835	83.5	1	05/26/15 08:03	05/29/15 15:05		
2-Nitroaniline	ND	ug/kg	418	45.3	1	05/26/15 08:03	05/29/15 15:05	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-8 (20-20.5)**      **Lab ID: 10307123013**      Collected: 05/12/15 10:15      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	418	42.6	1	05/26/15 08:03	05/29/15 15:05	99-09-2	
4-Nitroaniline	ND	ug/kg	418	36.6	1	05/26/15 08:03	05/29/15 15:05	100-01-6	
Nitrobenzene	ND	ug/kg	418	84.4	1	05/26/15 08:03	05/29/15 15:05	98-95-3	
2-Nitrophenol	ND	ug/kg	418	71.4	1	05/26/15 08:03	05/29/15 15:05	88-75-5	
4-Nitrophenol	ND	ug/kg	418	43.8	1	05/26/15 08:03	05/29/15 15:05	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	418	56.8	1	05/26/15 08:03	05/29/15 15:05	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	418	209	1	05/26/15 08:03	05/29/15 15:05	86-30-6	
Pentachlorophenol	ND	ug/kg	848	209	1	05/26/15 08:03	05/29/15 15:05	87-86-5	
Phenol	ND	ug/kg	418	91.2	1	05/26/15 08:03	05/29/15 15:05	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	418	68.8	1	05/26/15 08:03	05/29/15 15:05	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	418	49.8	1	05/26/15 08:03	05/29/15 15:05	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	418	53.8	1	05/26/15 08:03	05/29/15 15:05	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	62	%	34-125		1	05/26/15 08:03	05/29/15 15:05	4165-60-0	
2-Fluorobiphenyl (S)	64	%	51-125		1	05/26/15 08:03	05/29/15 15:05	321-60-8	
p-Terphenyl-d14 (S)	83	%	55-125		1	05/26/15 08:03	05/29/15 15:05	1718-51-0	
Phenol-d6 (S)	64	%	44-125		1	05/26/15 08:03	05/29/15 15:05	13127-88-3	
2-Fluorophenol (S)	64	%	45-125		1	05/26/15 08:03	05/29/15 15:05	367-12-4	
2,4,6-Tribromophenol (S)	73	%	40-125		1	05/26/15 08:03	05/29/15 15:05	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	12.7	0.46	1	05/26/15 12:27	05/28/15 02:33	83-32-9	
Acenaphthylene	ND	ug/kg	12.7	0.43	1	05/26/15 12:27	05/28/15 02:33	208-96-8	
Anthracene	ND	ug/kg	12.7	0.39	1	05/26/15 12:27	05/28/15 02:33	120-12-7	
Benzo(a)anthracene	ND	ug/kg	12.7	0.23	1	05/26/15 12:27	05/28/15 02:33	56-55-3	
Benzo(a)pyrene	ND	ug/kg	12.7	0.25	1	05/26/15 12:27	05/28/15 02:33	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	12.7	0.44	1	05/26/15 12:27	05/28/15 02:33	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	12.7	0.45	1	05/26/15 12:27	05/28/15 02:33	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	12.7	0.51	1	05/26/15 12:27	05/28/15 02:33	207-08-9	
2-Chloronaphthalene	ND	ug/kg	12.7	0.36	1	05/26/15 12:27	05/28/15 02:33	91-58-7	L2
Chrysene	ND	ug/kg	12.7	0.31	1	05/26/15 12:27	05/28/15 02:33	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	12.7	0.54	1	05/26/15 12:27	05/28/15 02:33	53-70-3	
Fluoranthene	ND	ug/kg	12.7	0.28	1	05/26/15 12:27	05/28/15 02:33	206-44-0	
Fluorene	ND	ug/kg	12.7	0.39	1	05/26/15 12:27	05/28/15 02:33	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	12.7	0.49	1	05/26/15 12:27	05/28/15 02:33	193-39-5	
1-Methylnaphthalene	ND	ug/kg	12.7	0.47	1	05/26/15 12:27	05/28/15 02:33	90-12-0	
2-Methylnaphthalene	ND	ug/kg	12.7	0.52	1	05/26/15 12:27	05/28/15 02:33	91-57-6	
Naphthalene	ND	ug/kg	12.7	0.47	1	05/26/15 12:27	05/28/15 02:33	91-20-3	
Phenanthrene	ND	ug/kg	12.7	0.31	1	05/26/15 12:27	05/28/15 02:33	85-01-8	
Pyrene	ND	ug/kg	12.7	0.30	1	05/26/15 12:27	05/28/15 02:33	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	65	%	55-125		1	05/26/15 12:27	05/28/15 02:33	321-60-8	
p-Terphenyl-d14 (S)	86	%	30-150		1	05/26/15 12:27	05/28/15 02:33	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-8 (20.5-21)**      **Lab ID: 10307123014**      Collected: 05/12/15 10:15      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>			Analytical Method: NWTPH-Dx Preparation Method: EPA 3550						
Diesel Fuel Range	ND	mg/kg	20.3	1.1	1	05/26/15 14:40	06/02/15 14:46	68334-30-5	
Motor Oil Range	ND	mg/kg	13.6	2.4	1	05/26/15 14:40	06/02/15 14:46		
<b>Surrogates</b>									
n-Triacontane (S)	99	%	50-150		1	05/26/15 14:40	06/02/15 14:46	638-68-6	
o-Terphenyl (S)	104	%	50-150		1	05/26/15 14:40	06/02/15 14:46	84-15-1	
<b>Dry Weight</b>			Analytical Method: ASTM D2974						
Percent Moisture	<b>26.2</b>	%	0.10	0.10	1		06/03/15 15:25		
<b>8270D MSSV</b>			Analytical Method: EPA 8270D Preparation Method: EPA 3550						
4-Bromophenylphenyl ether	ND	ug/kg	447	47.6	1	05/26/15 08:03	05/29/15 15:35	101-55-3	
Butylbenzylphthalate	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	85-68-7	
Carbazole	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	59-50-7	
4-Chloroaniline	ND	ug/kg	447	68.6	1	05/26/15 08:03	05/29/15 15:35	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	447	87.4	1	05/26/15 08:03	05/29/15 15:35	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	447	31.2	1	05/26/15 08:03	05/29/15 15:35	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	447	103	1	05/26/15 08:03	05/29/15 15:35	108-60-1	
2-Chloronaphthalene	ND	ug/kg	447	70.1	1	05/26/15 08:03	05/29/15 15:35	91-58-7	
2-Chlorophenol	ND	ug/kg	447	104	1	05/26/15 08:03	05/29/15 15:35	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	447	51.5	1	05/26/15 08:03	05/29/15 15:35	7005-72-3	
Dibenzofuran	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	447	28.9	1	05/26/15 08:03	05/29/15 15:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	447	28.2	1	05/26/15 08:03	05/29/15 15:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	447	29.8	1	05/26/15 08:03	05/29/15 15:35	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	447	62.4	1	05/26/15 08:03	05/29/15 15:35	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	447	84.2	1	05/26/15 08:03	05/29/15 15:35	120-83-2	
Diethylphthalate	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	447	83.8	1	05/26/15 08:03	05/29/15 15:35	105-67-9	
Dimethylphthalate	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	131-11-3	
Di-n-butylphthalate	ND	ug/kg	447	62.1	1	05/26/15 08:03	05/29/15 15:35	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2300	88.9	1	05/26/15 08:03	05/29/15 15:35	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	447	38.2	1	05/26/15 08:03	05/29/15 15:35	606-20-2	
Di-n-octylphthalate	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	447	76.4	1	05/26/15 08:03	05/29/15 15:35	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	447	37.7	1	05/26/15 08:03	05/29/15 15:35	87-68-3	
Hexachlorobenzene	ND	ug/kg	447	58.8	1	05/26/15 08:03	05/29/15 15:35	118-74-1	
Hexachloroethane	ND	ug/kg	447	28.5	1	05/26/15 08:03	05/29/15 15:35	67-72-1	
Isophorone	ND	ug/kg	447	71.4	1	05/26/15 08:03	05/29/15 15:35	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	447	96.8	1	05/26/15 08:03	05/29/15 15:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	895	89.5	1	05/26/15 08:03	05/29/15 15:35		
2-Nitroaniline	ND	ug/kg	447	48.5	1	05/26/15 08:03	05/29/15 15:35	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-8 (20.5-21)**      **Lab ID: 10307123014**      Collected: 05/12/15 10:15      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	447	45.7	1	05/26/15 08:03	05/29/15 15:35	99-09-2	
4-Nitroaniline	ND	ug/kg	447	39.2	1	05/26/15 08:03	05/29/15 15:35	100-01-6	
Nitrobenzene	ND	ug/kg	447	90.4	1	05/26/15 08:03	05/29/15 15:35	98-95-3	
2-Nitrophenol	ND	ug/kg	447	76.4	1	05/26/15 08:03	05/29/15 15:35	88-75-5	
4-Nitrophenol	ND	ug/kg	447	46.9	1	05/26/15 08:03	05/29/15 15:35	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	447	60.9	1	05/26/15 08:03	05/29/15 15:35	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	447	224	1	05/26/15 08:03	05/29/15 15:35	86-30-6	
Pentachlorophenol	ND	ug/kg	908	224	1	05/26/15 08:03	05/29/15 15:35	87-86-5	
Phenol	ND	ug/kg	447	97.7	1	05/26/15 08:03	05/29/15 15:35	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	447	73.7	1	05/26/15 08:03	05/29/15 15:35	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	447	53.4	1	05/26/15 08:03	05/29/15 15:35	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	447	57.6	1	05/26/15 08:03	05/29/15 15:35	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	74	%	34-125		1	05/26/15 08:03	05/29/15 15:35	4165-60-0	
2-Fluorobiphenyl (S)	75	%	51-125		1	05/26/15 08:03	05/29/15 15:35	321-60-8	
p-Terphenyl-d14 (S)	84	%	55-125		1	05/26/15 08:03	05/29/15 15:35	1718-51-0	
Phenol-d6 (S)	76	%	44-125		1	05/26/15 08:03	05/29/15 15:35	13127-88-3	
2-Fluorophenol (S)	75	%	45-125		1	05/26/15 08:03	05/29/15 15:35	367-12-4	
2,4,6-Tribromophenol (S)	79	%	40-125		1	05/26/15 08:03	05/29/15 15:35	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	13.6	0.49	1	05/26/15 12:27	05/28/15 02:55	83-32-9	
Acenaphthylene	ND	ug/kg	13.6	0.46	1	05/26/15 12:27	05/28/15 02:55	208-96-8	
Anthracene	ND	ug/kg	13.6	0.42	1	05/26/15 12:27	05/28/15 02:55	120-12-7	
Benzo(a)anthracene	ND	ug/kg	13.6	0.25	1	05/26/15 12:27	05/28/15 02:55	56-55-3	
Benzo(a)pyrene	ND	ug/kg	13.6	0.27	1	05/26/15 12:27	05/28/15 02:55	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	13.6	0.47	1	05/26/15 12:27	05/28/15 02:55	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	13.6	0.48	1	05/26/15 12:27	05/28/15 02:55	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	13.6	0.54	1	05/26/15 12:27	05/28/15 02:55	207-08-9	
2-Chloronaphthalene	ND	ug/kg	13.6	0.38	1	05/26/15 12:27	05/28/15 02:55	91-58-7	L2
Chrysene	ND	ug/kg	13.6	0.33	1	05/26/15 12:27	05/28/15 02:55	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.6	0.58	1	05/26/15 12:27	05/28/15 02:55	53-70-3	
Fluoranthene	ND	ug/kg	13.6	0.30	1	05/26/15 12:27	05/28/15 02:55	206-44-0	
Fluorene	ND	ug/kg	13.6	0.42	1	05/26/15 12:27	05/28/15 02:55	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	13.6	0.52	1	05/26/15 12:27	05/28/15 02:55	193-39-5	
1-Methylnaphthalene	ND	ug/kg	13.6	0.51	1	05/26/15 12:27	05/28/15 02:55	90-12-0	
2-Methylnaphthalene	ND	ug/kg	13.6	0.55	1	05/26/15 12:27	05/28/15 02:55	91-57-6	
Naphthalene	ND	ug/kg	13.6	0.50	1	05/26/15 12:27	05/28/15 02:55	91-20-3	
Phenanthrene	ND	ug/kg	13.6	0.34	1	05/26/15 12:27	05/28/15 02:55	85-01-8	
Pyrene	ND	ug/kg	13.6	0.33	1	05/26/15 12:27	05/28/15 02:55	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	37	%	55-125		1	05/26/15 12:27	05/28/15 02:55	321-60-8	P2,S0
p-Terphenyl-d14 (S)	74	%	30-150		1	05/26/15 12:27	05/28/15 02:55	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-11 (12.5-13.5)**      **Lab ID: 10307123015**      Collected: 05/12/15 12:45      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.0	0.86	1	05/26/15 14:40	06/02/15 15:10	68334-30-5	
Motor Oil Range	ND	mg/kg	10.7	1.9	1	05/26/15 14:40	06/02/15 15:10		
<b>Surrogates</b>									
n-Triacontane (S)	112	%	50-150		1	05/26/15 14:40	06/02/15 15:10	638-68-6	
o-Terphenyl (S)	110	%	50-150		1	05/26/15 14:40	06/02/15 15:10	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>7.3</b>	%	0.10	0.10	1		06/03/15 15:26		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	355	37.7	1	05/26/15 08:03	05/29/15 16:04	101-55-3	
Butylbenzylphthalate	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	85-68-7	
Carbazole	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	59-50-7	
4-Chloroaniline	ND	ug/kg	355	54.4	1	05/26/15 08:03	05/29/15 16:04	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	355	69.3	1	05/26/15 08:03	05/29/15 16:04	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	355	24.7	1	05/26/15 08:03	05/29/15 16:04	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	355	81.9	1	05/26/15 08:03	05/29/15 16:04	108-60-1	
2-Chloronaphthalene	ND	ug/kg	355	55.6	1	05/26/15 08:03	05/29/15 16:04	91-58-7	
2-Chlorophenol	ND	ug/kg	355	82.8	1	05/26/15 08:03	05/29/15 16:04	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	355	40.8	1	05/26/15 08:03	05/29/15 16:04	7005-72-3	
Dibenzofuran	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	355	22.9	1	05/26/15 08:03	05/29/15 16:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	355	22.4	1	05/26/15 08:03	05/29/15 16:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	355	23.6	1	05/26/15 08:03	05/29/15 16:04	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	355	49.4	1	05/26/15 08:03	05/29/15 16:04	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	355	66.7	1	05/26/15 08:03	05/29/15 16:04	120-83-2	
Diethylphthalate	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	355	66.4	1	05/26/15 08:03	05/29/15 16:04	105-67-9	
Dimethylphthalate	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	131-11-3	
Di-n-butylphthalate	ND	ug/kg	355	49.2	1	05/26/15 08:03	05/29/15 16:04	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1830	70.5	1	05/26/15 08:03	05/29/15 16:04	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	355	30.3	1	05/26/15 08:03	05/29/15 16:04	606-20-2	
Di-n-octylphthalate	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	355	60.6	1	05/26/15 08:03	05/29/15 16:04	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	355	29.9	1	05/26/15 08:03	05/29/15 16:04	87-68-3	
Hexachlorobenzene	ND	ug/kg	355	46.6	1	05/26/15 08:03	05/29/15 16:04	118-74-1	
Hexachloroethane	ND	ug/kg	355	22.6	1	05/26/15 08:03	05/29/15 16:04	67-72-1	
Isophorone	ND	ug/kg	355	56.6	1	05/26/15 08:03	05/29/15 16:04	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	355	76.7	1	05/26/15 08:03	05/29/15 16:04	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	709	70.9	1	05/26/15 08:03	05/29/15 16:04		
2-Nitroaniline	ND	ug/kg	355	38.5	1	05/26/15 08:03	05/29/15 16:04	88-74-4	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-11 (12.5-13.5)**      **Lab ID: 10307123015**      Collected: 05/12/15 12:45      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	355	36.2	1	05/26/15 08:03	05/29/15 16:04	99-09-2	
4-Nitroaniline	ND	ug/kg	355	31.1	1	05/26/15 08:03	05/29/15 16:04	100-01-6	
Nitrobenzene	ND	ug/kg	355	71.7	1	05/26/15 08:03	05/29/15 16:04	98-95-3	
2-Nitrophenol	ND	ug/kg	355	60.6	1	05/26/15 08:03	05/29/15 16:04	88-75-5	
4-Nitrophenol	ND	ug/kg	355	37.2	1	05/26/15 08:03	05/29/15 16:04	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	355	48.3	1	05/26/15 08:03	05/29/15 16:04	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	355	177	1	05/26/15 08:03	05/29/15 16:04	86-30-6	
Pentachlorophenol	ND	ug/kg	720	177	1	05/26/15 08:03	05/29/15 16:04	87-86-5	
Phenol	ND	ug/kg	355	77.5	1	05/26/15 08:03	05/29/15 16:04	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	355	58.5	1	05/26/15 08:03	05/29/15 16:04	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	355	42.3	1	05/26/15 08:03	05/29/15 16:04	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	355	45.7	1	05/26/15 08:03	05/29/15 16:04	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	55	%	34-125		1	05/26/15 08:03	05/29/15 16:04	4165-60-0	
2-Fluorobiphenyl (S)	59	%	51-125		1	05/26/15 08:03	05/29/15 16:04	321-60-8	
p-Terphenyl-d14 (S)	85	%	55-125		1	05/26/15 08:03	05/29/15 16:04	1718-51-0	
Phenol-d6 (S)	60	%	44-125		1	05/26/15 08:03	05/29/15 16:04	13127-88-3	
2-Fluorophenol (S)	57	%	45-125		1	05/26/15 08:03	05/29/15 16:04	367-12-4	
2,4,6-Tribromophenol (S)	77	%	40-125		1	05/26/15 08:03	05/29/15 16:04	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	10.8	0.39	1	05/26/15 12:27	05/28/15 03:17	83-32-9	
Acenaphthylene	ND	ug/kg	10.8	0.37	1	05/26/15 12:27	05/28/15 03:17	208-96-8	
Anthracene	ND	ug/kg	10.8	0.33	1	05/26/15 12:27	05/28/15 03:17	120-12-7	
Benzo(a)anthracene	ND	ug/kg	10.8	0.20	1	05/26/15 12:27	05/28/15 03:17	56-55-3	
Benzo(a)pyrene	ND	ug/kg	10.8	0.21	1	05/26/15 12:27	05/28/15 03:17	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	10.8	0.38	1	05/26/15 12:27	05/28/15 03:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	10.8	0.38	1	05/26/15 12:27	05/28/15 03:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	10.8	0.43	1	05/26/15 12:27	05/28/15 03:17	207-08-9	
2-Chloronaphthalene	ND	ug/kg	10.8	0.31	1	05/26/15 12:27	05/28/15 03:17	91-58-7	L2
Chrysene	ND	ug/kg	10.8	0.27	1	05/26/15 12:27	05/28/15 03:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	10.8	0.46	1	05/26/15 12:27	05/28/15 03:17	53-70-3	
Fluoranthene	ND	ug/kg	10.8	0.24	1	05/26/15 12:27	05/28/15 03:17	206-44-0	
Fluorene	ND	ug/kg	10.8	0.33	1	05/26/15 12:27	05/28/15 03:17	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	10.8	0.41	1	05/26/15 12:27	05/28/15 03:17	193-39-5	
1-Methylnaphthalene	ND	ug/kg	10.8	0.40	1	05/26/15 12:27	05/28/15 03:17	90-12-0	
2-Methylnaphthalene	ND	ug/kg	10.8	0.44	1	05/26/15 12:27	05/28/15 03:17	91-57-6	
Naphthalene	ND	ug/kg	10.8	0.40	1	05/26/15 12:27	05/28/15 03:17	91-20-3	
Phenanthrene	ND	ug/kg	10.8	0.27	1	05/26/15 12:27	05/28/15 03:17	85-01-8	
Pyrene	ND	ug/kg	10.8	0.26	1	05/26/15 12:27	05/28/15 03:17	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	54	%	55-125		1	05/26/15 12:27	05/28/15 03:17	321-60-8	P2,S0
p-Terphenyl-d14 (S)	86	%	30-150		1	05/26/15 12:27	05/28/15 03:17	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-11 (13.5-14.5)**      **Lab ID: 10307123016**      Collected: 05/12/15 12:50      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	24.9	1.3	1	05/26/15 14:40	06/02/15 15:33	68334-30-5	
Motor Oil Range	ND	mg/kg	16.6	3.0	1	05/26/15 14:40	06/02/15 15:33		
<b>Surrogates</b>									
n-Triacontane (S)	119	%	50-150		1	05/26/15 14:40	06/02/15 15:33	638-68-6	
o-Terphenyl (S)	117	%	50-150		1	05/26/15 14:40	06/02/15 15:33	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>39.8</b>	%	0.10	0.10	1		06/03/15 15:26		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	546	58.1	1	05/26/15 08:03	05/29/15 16:34	101-55-3	
Butylbenzylphthalate	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	85-68-7	
Carbazole	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	59-50-7	
4-Chloroaniline	ND	ug/kg	546	83.7	1	05/26/15 08:03	05/29/15 16:34	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	546	107	1	05/26/15 08:03	05/29/15 16:34	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	546	38.1	1	05/26/15 08:03	05/29/15 16:34	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	546	126	1	05/26/15 08:03	05/29/15 16:34	108-60-1	
2-Chloronaphthalene	ND	ug/kg	546	85.5	1	05/26/15 08:03	05/29/15 16:34	91-58-7	
2-Chlorophenol	ND	ug/kg	546	127	1	05/26/15 08:03	05/29/15 16:34	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	546	62.9	1	05/26/15 08:03	05/29/15 16:34	7005-72-3	
Dibenzofuran	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	546	35.2	1	05/26/15 08:03	05/29/15 16:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	546	34.4	1	05/26/15 08:03	05/29/15 16:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	546	36.4	1	05/26/15 08:03	05/29/15 16:34	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	546	76.1	1	05/26/15 08:03	05/29/15 16:34	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	546	103	1	05/26/15 08:03	05/29/15 16:34	120-83-2	
Diethylphthalate	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	546	102	1	05/26/15 08:03	05/29/15 16:34	105-67-9	
Dimethylphthalate	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	131-11-3	
Di-n-butylphthalate	ND	ug/kg	546	75.8	1	05/26/15 08:03	05/29/15 16:34	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2810	109	1	05/26/15 08:03	05/29/15 16:34	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	546	46.7	1	05/26/15 08:03	05/29/15 16:34	606-20-2	
Di-n-octylphthalate	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	546	93.3	1	05/26/15 08:03	05/29/15 16:34	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	546	46.0	1	05/26/15 08:03	05/29/15 16:34	87-68-3	
Hexachlorobenzene	ND	ug/kg	546	71.8	1	05/26/15 08:03	05/29/15 16:34	118-74-1	
Hexachloroethane	ND	ug/kg	546	34.7	1	05/26/15 08:03	05/29/15 16:34	67-72-1	
Isophorone	ND	ug/kg	546	87.2	1	05/26/15 08:03	05/29/15 16:34	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	546	118	1	05/26/15 08:03	05/29/15 16:34	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	1090	109	1	05/26/15 08:03	05/29/15 16:34		
2-Nitroaniline	ND	ug/kg	546	59.2	1	05/26/15 08:03	05/29/15 16:34	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-11 (13.5-14.5) Lab ID: 10307123016** Collected: 05/12/15 12:50 Received: 05/20/15 10:00 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	546	55.8	1	05/26/15 08:03	05/29/15 16:34	99-09-2	
4-Nitroaniline	ND	ug/kg	546	47.8	1	05/26/15 08:03	05/29/15 16:34	100-01-6	
Nitrobenzene	ND	ug/kg	546	110	1	05/26/15 08:03	05/29/15 16:34	98-95-3	
2-Nitrophenol	ND	ug/kg	546	93.3	1	05/26/15 08:03	05/29/15 16:34	88-75-5	
4-Nitrophenol	ND	ug/kg	546	57.2	1	05/26/15 08:03	05/29/15 16:34	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	546	74.3	1	05/26/15 08:03	05/29/15 16:34	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	546	273	1	05/26/15 08:03	05/29/15 16:34	86-30-6	
Pentachlorophenol	ND	ug/kg	1110	273	1	05/26/15 08:03	05/29/15 16:34	87-86-5	
Phenol	ND	ug/kg	546	119	1	05/26/15 08:03	05/29/15 16:34	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	546	90.0	1	05/26/15 08:03	05/29/15 16:34	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	546	65.2	1	05/26/15 08:03	05/29/15 16:34	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	546	70.3	1	05/26/15 08:03	05/29/15 16:34	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	57	%	34-125		1	05/26/15 08:03	05/29/15 16:34	4165-60-0	
2-Fluorobiphenyl (S)	59	%	51-125		1	05/26/15 08:03	05/29/15 16:34	321-60-8	
p-Terphenyl-d14 (S)	73	%	55-125		1	05/26/15 08:03	05/29/15 16:34	1718-51-0	
Phenol-d6 (S)	62	%	44-125		1	05/26/15 08:03	05/29/15 16:34	13127-88-3	
2-Fluorophenol (S)	60	%	45-125		1	05/26/15 08:03	05/29/15 16:34	367-12-4	
2,4,6-Tribromophenol (S)	71	%	40-125		1	05/26/15 08:03	05/29/15 16:34	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	16.5	0.60	1	05/26/15 12:27	05/28/15 03:39	83-32-9	
Acenaphthylene	ND	ug/kg	16.5	0.56	1	05/26/15 12:27	05/28/15 03:39	208-96-8	
Anthracene	ND	ug/kg	16.5	0.51	1	05/26/15 12:27	05/28/15 03:39	120-12-7	
Benzo(a)anthracene	ND	ug/kg	16.5	0.30	1	05/26/15 12:27	05/28/15 03:39	56-55-3	
Benzo(a)pyrene	ND	ug/kg	16.5	0.33	1	05/26/15 12:27	05/28/15 03:39	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	16.5	0.58	1	05/26/15 12:27	05/28/15 03:39	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	16.5	0.59	1	05/26/15 12:27	05/28/15 03:39	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	16.5	0.66	1	05/26/15 12:27	05/28/15 03:39	207-08-9	
2-Chloronaphthalene	ND	ug/kg	16.5	0.47	1	05/26/15 12:27	05/28/15 03:39	91-58-7	L2
Chrysene	ND	ug/kg	16.5	0.41	1	05/26/15 12:27	05/28/15 03:39	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	16.5	0.71	1	05/26/15 12:27	05/28/15 03:39	53-70-3	
Fluoranthene	ND	ug/kg	16.5	0.36	1	05/26/15 12:27	05/28/15 03:39	206-44-0	
Fluorene	ND	ug/kg	16.5	0.51	1	05/26/15 12:27	05/28/15 03:39	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	16.5	0.64	1	05/26/15 12:27	05/28/15 03:39	193-39-5	
1-Methylnaphthalene	ND	ug/kg	16.5	0.62	1	05/26/15 12:27	05/28/15 03:39	90-12-0	
2-Methylnaphthalene	ND	ug/kg	16.5	0.68	1	05/26/15 12:27	05/28/15 03:39	91-57-6	
Naphthalene	ND	ug/kg	16.5	0.61	1	05/26/15 12:27	05/28/15 03:39	91-20-3	
Phenanthrene	ND	ug/kg	16.5	0.41	1	05/26/15 12:27	05/28/15 03:39	85-01-8	
Pyrene	ND	ug/kg	16.5	0.40	1	05/26/15 12:27	05/28/15 03:39	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/26/15 12:27	05/28/15 03:39	321-60-8	
p-Terphenyl-d14 (S)	78	%	30-150		1	05/26/15 12:27	05/28/15 03:39	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-13 (12-13)**      **Lab ID: 10307123017**      Collected: 05/12/15 18:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.5	0.89	1	05/26/15 14:40	06/02/15 15:56	68334-30-5	
Motor Oil Range	ND	mg/kg	11.0	2.0	1	05/26/15 14:40	06/02/15 15:56		
<b>Surrogates</b>									
n-Triacontane (S)	115	%	50-150		1	05/26/15 14:40	06/02/15 15:56	638-68-6	
o-Terphenyl (S)	118	%	50-150		1	05/26/15 14:40	06/02/15 15:56	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>9.1</b>	%	0.10	0.10	1		06/03/15 15:26		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	363	38.6	1	05/26/15 08:03	05/29/15 17:03	101-55-3	
Butylbenzylphthalate	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	85-68-7	
Carbazole	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	59-50-7	
4-Chloroaniline	ND	ug/kg	363	55.7	1	05/26/15 08:03	05/29/15 17:03	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	363	70.9	1	05/26/15 08:03	05/29/15 17:03	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	363	25.3	1	05/26/15 08:03	05/29/15 17:03	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	363	83.8	1	05/26/15 08:03	05/29/15 17:03	108-60-1	
2-Chloronaphthalene	ND	ug/kg	363	56.9	1	05/26/15 08:03	05/29/15 17:03	91-58-7	
2-Chlorophenol	ND	ug/kg	363	84.7	1	05/26/15 08:03	05/29/15 17:03	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	363	41.8	1	05/26/15 08:03	05/29/15 17:03	7005-72-3	
Dibenzofuran	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	363	23.4	1	05/26/15 08:03	05/29/15 17:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	363	22.9	1	05/26/15 08:03	05/29/15 17:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	363	24.2	1	05/26/15 08:03	05/29/15 17:03	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	363	50.6	1	05/26/15 08:03	05/29/15 17:03	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	363	68.3	1	05/26/15 08:03	05/29/15 17:03	120-83-2	
Diethylphthalate	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	363	68.0	1	05/26/15 08:03	05/29/15 17:03	105-67-9	
Dimethylphthalate	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	131-11-3	
Di-n-butylphthalate	ND	ug/kg	363	50.4	1	05/26/15 08:03	05/29/15 17:03	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1870	72.2	1	05/26/15 08:03	05/29/15 17:03	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	363	31.0	1	05/26/15 08:03	05/29/15 17:03	606-20-2	
Di-n-octylphthalate	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	363	62.0	1	05/26/15 08:03	05/29/15 17:03	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	363	30.6	1	05/26/15 08:03	05/29/15 17:03	87-68-3	
Hexachlorobenzene	ND	ug/kg	363	47.7	1	05/26/15 08:03	05/29/15 17:03	118-74-1	
Hexachloroethane	ND	ug/kg	363	23.1	1	05/26/15 08:03	05/29/15 17:03	67-72-1	
Isophorone	ND	ug/kg	363	58.0	1	05/26/15 08:03	05/29/15 17:03	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	363	78.5	1	05/26/15 08:03	05/29/15 17:03	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	726	72.6	1	05/26/15 08:03	05/29/15 17:03		
2-Nitroaniline	ND	ug/kg	363	39.4	1	05/26/15 08:03	05/29/15 17:03	88-74-4	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-13 (12-13)**      **Lab ID: 10307123017**      Collected: 05/12/15 18:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	363	37.1	1	05/26/15 08:03	05/29/15 17:03	99-09-2	
4-Nitroaniline	ND	ug/kg	363	31.8	1	05/26/15 08:03	05/29/15 17:03	100-01-6	
Nitrobenzene	ND	ug/kg	363	73.4	1	05/26/15 08:03	05/29/15 17:03	98-95-3	
2-Nitrophenol	ND	ug/kg	363	62.0	1	05/26/15 08:03	05/29/15 17:03	88-75-5	
4-Nitrophenol	ND	ug/kg	363	38.1	1	05/26/15 08:03	05/29/15 17:03	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	363	49.4	1	05/26/15 08:03	05/29/15 17:03	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	363	181	1	05/26/15 08:03	05/29/15 17:03	86-30-6	
Pentachlorophenol	ND	ug/kg	737	181	1	05/26/15 08:03	05/29/15 17:03	87-86-5	
Phenol	ND	ug/kg	363	79.3	1	05/26/15 08:03	05/29/15 17:03	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	363	59.8	1	05/26/15 08:03	05/29/15 17:03	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	363	43.3	1	05/26/15 08:03	05/29/15 17:03	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	363	46.7	1	05/26/15 08:03	05/29/15 17:03	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	66	%	34-125		1	05/26/15 08:03	05/29/15 17:03	4165-60-0	
2-Fluorobiphenyl (S)	68	%	51-125		1	05/26/15 08:03	05/29/15 17:03	321-60-8	
p-Terphenyl-d14 (S)	88	%	55-125		1	05/26/15 08:03	05/29/15 17:03	1718-51-0	
Phenol-d6 (S)	67	%	44-125		1	05/26/15 08:03	05/29/15 17:03	13127-88-3	
2-Fluorophenol (S)	64	%	45-125		1	05/26/15 08:03	05/29/15 17:03	367-12-4	
2,4,6-Tribromophenol (S)	77	%	40-125		1	05/26/15 08:03	05/29/15 17:03	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.0	0.40	1	05/26/15 12:27	05/28/15 04:01	83-32-9	
Acenaphthylene	ND	ug/kg	11.0	0.37	1	05/26/15 12:27	05/28/15 04:01	208-96-8	
Anthracene	ND	ug/kg	11.0	0.34	1	05/26/15 12:27	05/28/15 04:01	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.0	0.20	1	05/26/15 12:27	05/28/15 04:01	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.0	0.22	1	05/26/15 12:27	05/28/15 04:01	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.0	0.38	1	05/26/15 12:27	05/28/15 04:01	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.0	0.39	1	05/26/15 12:27	05/28/15 04:01	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.0	0.44	1	05/26/15 12:27	05/28/15 04:01	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.0	0.31	1	05/26/15 12:27	05/28/15 04:01	91-58-7	L2
Chrysene	ND	ug/kg	11.0	0.27	1	05/26/15 12:27	05/28/15 04:01	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.0	0.47	1	05/26/15 12:27	05/28/15 04:01	53-70-3	
Fluoranthene	ND	ug/kg	11.0	0.24	1	05/26/15 12:27	05/28/15 04:01	206-44-0	
Fluorene	ND	ug/kg	11.0	0.34	1	05/26/15 12:27	05/28/15 04:01	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.0	0.42	1	05/26/15 12:27	05/28/15 04:01	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.0	0.41	1	05/26/15 12:27	05/28/15 04:01	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.0	0.45	1	05/26/15 12:27	05/28/15 04:01	91-57-6	
Naphthalene	ND	ug/kg	11.0	0.41	1	05/26/15 12:27	05/28/15 04:01	91-20-3	
Phenanthrene	ND	ug/kg	11.0	0.27	1	05/26/15 12:27	05/28/15 04:01	85-01-8	
Pyrene	ND	ug/kg	11.0	0.26	1	05/26/15 12:27	05/28/15 04:01	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	58	%	55-125		1	05/26/15 12:27	05/28/15 04:01	321-60-8	
p-Terphenyl-d14 (S)	94	%	30-150		1	05/26/15 12:27	05/28/15 04:01	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-13 (13-14)**      **Lab ID: 10307123018**      Collected: 05/12/15 18:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	22.0	1.2	1	05/26/15 14:40	06/02/15 16:19	68334-30-5	
Motor Oil Range	ND	mg/kg	14.7	2.6	1	05/26/15 14:40	06/02/15 16:19		
<b>Surrogates</b>									
n-Triacontane (S)	110	%	50-150		1	05/26/15 14:40	06/02/15 16:19	638-68-6	
o-Terphenyl (S)	111	%	50-150		1	05/26/15 14:40	06/02/15 16:19	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>32.6</b>	%	0.10	0.10	1		06/03/15 15:26		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	490	52.1	1	05/26/15 08:03	05/29/15 17:32	101-55-3	
Butylbenzylphthalate	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	85-68-7	
Carbazole	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	59-50-7	
4-Chloroaniline	ND	ug/kg	490	75.1	1	05/26/15 08:03	05/29/15 17:32	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	490	95.7	1	05/26/15 08:03	05/29/15 17:32	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	490	34.1	1	05/26/15 08:03	05/29/15 17:32	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	490	113	1	05/26/15 08:03	05/29/15 17:32	108-60-1	
2-Chloronaphthalene	ND	ug/kg	490	76.7	1	05/26/15 08:03	05/29/15 17:32	91-58-7	
2-Chlorophenol	ND	ug/kg	490	114	1	05/26/15 08:03	05/29/15 17:32	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	490	56.4	1	05/26/15 08:03	05/29/15 17:32	7005-72-3	
Dibenzofuran	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	490	31.6	1	05/26/15 08:03	05/29/15 17:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	490	30.9	1	05/26/15 08:03	05/29/15 17:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	490	32.7	1	05/26/15 08:03	05/29/15 17:32	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	490	68.3	1	05/26/15 08:03	05/29/15 17:32	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	490	92.2	1	05/26/15 08:03	05/29/15 17:32	120-83-2	
Diethylphthalate	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	490	91.7	1	05/26/15 08:03	05/29/15 17:32	105-67-9	
Dimethylphthalate	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	131-11-3	
Di-n-butylphthalate	ND	ug/kg	490	68.0	1	05/26/15 08:03	05/29/15 17:32	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2520	97.4	1	05/26/15 08:03	05/29/15 17:32	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	490	41.9	1	05/26/15 08:03	05/29/15 17:32	606-20-2	
Di-n-octylphthalate	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	490	83.7	1	05/26/15 08:03	05/29/15 17:32	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	490	41.3	1	05/26/15 08:03	05/29/15 17:32	87-68-3	
Hexachlorobenzene	ND	ug/kg	490	64.4	1	05/26/15 08:03	05/29/15 17:32	118-74-1	
Hexachloroethane	ND	ug/kg	490	31.2	1	05/26/15 08:03	05/29/15 17:32	67-72-1	
Isophorone	ND	ug/kg	490	78.2	1	05/26/15 08:03	05/29/15 17:32	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	490	106	1	05/26/15 08:03	05/29/15 17:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	980	98.0	1	05/26/15 08:03	05/29/15 17:32		
2-Nitroaniline	ND	ug/kg	490	53.1	1	05/26/15 08:03	05/29/15 17:32	88-74-4	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-13 (13-14)**      **Lab ID: 10307123018**      Collected: 05/12/15 18:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	490	50.0	1	05/26/15 08:03	05/29/15 17:32	99-09-2	
4-Nitroaniline	ND	ug/kg	490	42.9	1	05/26/15 08:03	05/29/15 17:32	100-01-6	
Nitrobenzene	ND	ug/kg	490	99.0	1	05/26/15 08:03	05/29/15 17:32	98-95-3	
2-Nitrophenol	ND	ug/kg	490	83.7	1	05/26/15 08:03	05/29/15 17:32	88-75-5	
4-Nitrophenol	ND	ug/kg	490	51.4	1	05/26/15 08:03	05/29/15 17:32	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	490	66.6	1	05/26/15 08:03	05/29/15 17:32	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	490	245	1	05/26/15 08:03	05/29/15 17:32	86-30-6	
Pentachlorophenol	ND	ug/kg	994	245	1	05/26/15 08:03	05/29/15 17:32	87-86-5	
Phenol	ND	ug/kg	490	107	1	05/26/15 08:03	05/29/15 17:32	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	490	80.7	1	05/26/15 08:03	05/29/15 17:32	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	490	58.5	1	05/26/15 08:03	05/29/15 17:32	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	490	63.1	1	05/26/15 08:03	05/29/15 17:32	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	31	%	34-125		1	05/26/15 08:03	05/29/15 17:32	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	30	%	51-125		1	05/26/15 08:03	05/29/15 17:32	321-60-8	S0
p-Terphenyl-d14 (S)	78	%	55-125		1	05/26/15 08:03	05/29/15 17:32	1718-51-0	
Phenol-d6 (S)	41	%	44-125		1	05/26/15 08:03	05/29/15 17:32	13127-88-3	S0
2-Fluorophenol (S)	36	%	45-125		1	05/26/15 08:03	05/29/15 17:32	367-12-4	S0
2,4,6-Tribromophenol (S)	67	%	40-125		1	05/26/15 08:03	05/29/15 17:32	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.8	0.53	1	05/26/15 12:27	05/28/15 04:22	83-32-9	
Acenaphthylene	ND	ug/kg	14.8	0.50	1	05/26/15 12:27	05/28/15 04:22	208-96-8	
Anthracene	ND	ug/kg	14.8	0.46	1	05/26/15 12:27	05/28/15 04:22	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.8	0.27	1	05/26/15 12:27	05/28/15 04:22	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.8	0.29	1	05/26/15 12:27	05/28/15 04:22	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.8	0.52	1	05/26/15 12:27	05/28/15 04:22	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.8	0.53	1	05/26/15 12:27	05/28/15 04:22	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.8	0.60	1	05/26/15 12:27	05/28/15 04:22	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.8	0.42	1	05/26/15 12:27	05/28/15 04:22	91-58-7	L2
Chrysene	ND	ug/kg	14.8	0.37	1	05/26/15 12:27	05/28/15 04:22	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.8	0.64	1	05/26/15 12:27	05/28/15 04:22	53-70-3	
Fluoranthene	ND	ug/kg	14.8	0.33	1	05/26/15 12:27	05/28/15 04:22	206-44-0	
Fluorene	ND	ug/kg	14.8	0.46	1	05/26/15 12:27	05/28/15 04:22	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.8	0.57	1	05/26/15 12:27	05/28/15 04:22	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.8	0.56	1	05/26/15 12:27	05/28/15 04:22	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.8	0.61	1	05/26/15 12:27	05/28/15 04:22	91-57-6	
Naphthalene	ND	ug/kg	14.8	0.55	1	05/26/15 12:27	05/28/15 04:22	91-20-3	
Phenanthrene	ND	ug/kg	14.8	0.37	1	05/26/15 12:27	05/28/15 04:22	85-01-8	
Pyrene	ND	ug/kg	14.8	0.36	1	05/26/15 12:27	05/28/15 04:22	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	42	%	55-125		1	05/26/15 12:27	05/28/15 04:22	321-60-8	P2,S0
p-Terphenyl-d14 (S)	78	%	30-150		1	05/26/15 12:27	05/28/15 04:22	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-17 (16.5-17.5)**      **Lab ID: 10307123019**      Collected: 05/12/15 15:20      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	18.2	0.99	1	05/26/15 14:40	06/02/15 16:42	68334-30-5	
Motor Oil Range	ND	mg/kg	12.2	2.2	1	05/26/15 14:40	06/02/15 16:42		
<b>Surrogates</b>									
n-Triacontane (S)	114	%	50-150		1	05/26/15 14:40	06/02/15 16:42	638-68-6	
o-Terphenyl (S)	118	%	50-150		1	05/26/15 14:40	06/02/15 16:42	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>17.8</b>	%	0.10	0.10	1		06/03/15 15:27		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	399	42.4	1	05/26/15 22:21	05/27/15 23:12	101-55-3	
Butylbenzylphthalate	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	85-68-7	
Carbazole	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	59-50-7	
4-Chloroaniline	ND	ug/kg	399	61.2	1	05/26/15 22:21	05/27/15 23:12	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	399	78.0	1	05/26/15 22:21	05/27/15 23:12	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	399	27.8	1	05/26/15 22:21	05/27/15 23:12	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	399	92.1	1	05/26/15 22:21	05/27/15 23:12	108-60-1	
2-Chloronaphthalene	ND	ug/kg	399	62.5	1	05/26/15 22:21	05/27/15 23:12	91-58-7	
2-Chlorophenol	ND	ug/kg	399	93.1	1	05/26/15 22:21	05/27/15 23:12	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	399	45.9	1	05/26/15 22:21	05/27/15 23:12	7005-72-3	
Dibenzofuran	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	399	25.7	1	05/26/15 22:21	05/27/15 23:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	399	25.1	1	05/26/15 22:21	05/27/15 23:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	399	26.6	1	05/26/15 22:21	05/27/15 23:12	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	399	55.6	1	05/26/15 22:21	05/27/15 23:12	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	399	75.1	1	05/26/15 22:21	05/27/15 23:12	120-83-2	
Diethylphthalate	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	399	74.7	1	05/26/15 22:21	05/27/15 23:12	105-67-9	
Dimethylphthalate	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	131-11-3	
Di-n-butylphthalate	ND	ug/kg	399	55.4	1	05/26/15 22:21	05/27/15 23:12	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2050	79.3	1	05/26/15 22:21	05/27/15 23:12	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	399	34.1	1	05/26/15 22:21	05/27/15 23:12	606-20-2	
Di-n-octylphthalate	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	399	68.2	1	05/26/15 22:21	05/27/15 23:12	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	399	33.6	1	05/26/15 22:21	05/27/15 23:12	87-68-3	
Hexachlorobenzene	ND	ug/kg	399	52.5	1	05/26/15 22:21	05/27/15 23:12	118-74-1	
Hexachloroethane	ND	ug/kg	399	25.4	1	05/26/15 22:21	05/27/15 23:12	67-72-1	
Isophorone	ND	ug/kg	399	63.7	1	05/26/15 22:21	05/27/15 23:12	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	399	86.3	1	05/26/15 22:21	05/27/15 23:12	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	798	79.8	1	05/26/15 22:21	05/27/15 23:12		
2-Nitroaniline	ND	ug/kg	399	43.3	1	05/26/15 22:21	05/27/15 23:12	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-17 (16.5-17.5)**      **Lab ID: 10307123019**      Collected: 05/12/15 15:20      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	399	40.7	1	05/26/15 22:21	05/27/15 23:12	99-09-2	
4-Nitroaniline	ND	ug/kg	399	34.9	1	05/26/15 22:21	05/27/15 23:12	100-01-6	
Nitrobenzene	ND	ug/kg	399	80.6	1	05/26/15 22:21	05/27/15 23:12	98-95-3	
2-Nitrophenol	ND	ug/kg	399	68.2	1	05/26/15 22:21	05/27/15 23:12	88-75-5	
4-Nitrophenol	ND	ug/kg	399	41.8	1	05/26/15 22:21	05/27/15 23:12	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	399	54.3	1	05/26/15 22:21	05/27/15 23:12	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	399	199	1	05/26/15 22:21	05/27/15 23:12	86-30-6	
Pentachlorophenol	ND	ug/kg	810	199	1	05/26/15 22:21	05/27/15 23:12	87-86-5	
Phenol	ND	ug/kg	399	87.1	1	05/26/15 22:21	05/27/15 23:12	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	399	65.7	1	05/26/15 22:21	05/27/15 23:12	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	399	47.6	1	05/26/15 22:21	05/27/15 23:12	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	399	51.4	1	05/26/15 22:21	05/27/15 23:12	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	45	%	34-125		1	05/26/15 22:21	05/27/15 23:12	4165-60-0	
2-Fluorobiphenyl (S)	64	%	51-125		1	05/26/15 22:21	05/27/15 23:12	321-60-8	
p-Terphenyl-d14 (S)	87	%	55-125		1	05/26/15 22:21	05/27/15 23:12	1718-51-0	
Phenol-d6 (S)	65	%	44-125		1	05/26/15 22:21	05/27/15 23:12	13127-88-3	
2-Fluorophenol (S)	54	%	45-125		1	05/26/15 22:21	05/27/15 23:12	367-12-4	
2,4,6-Tribromophenol (S)	78	%	40-125		1	05/26/15 22:21	05/27/15 23:12	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	12.1	0.44	1	05/26/15 12:27	05/28/15 00:45	83-32-9	
Acenaphthylene	ND	ug/kg	12.1	0.41	1	05/26/15 12:27	05/28/15 00:45	208-96-8	
Anthracene	ND	ug/kg	12.1	0.37	1	05/26/15 12:27	05/28/15 00:45	120-12-7	
Benzo(a)anthracene	ND	ug/kg	12.1	0.22	1	05/26/15 12:27	05/28/15 00:45	56-55-3	
Benzo(a)pyrene	ND	ug/kg	12.1	0.24	1	05/26/15 12:27	05/28/15 00:45	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	12.1	0.42	1	05/26/15 12:27	05/28/15 00:45	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	12.1	0.43	1	05/26/15 12:27	05/28/15 00:45	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	12.1	0.49	1	05/26/15 12:27	05/28/15 00:45	207-08-9	
2-Chloronaphthalene	ND	ug/kg	12.1	0.34	1	05/26/15 12:27	05/28/15 00:45	91-58-7	L2
Chrysene	ND	ug/kg	12.1	0.30	1	05/26/15 12:27	05/28/15 00:45	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	12.1	0.52	1	05/26/15 12:27	05/28/15 00:45	53-70-3	
Fluoranthene	ND	ug/kg	12.1	0.27	1	05/26/15 12:27	05/28/15 00:45	206-44-0	
Fluorene	ND	ug/kg	12.1	0.37	1	05/26/15 12:27	05/28/15 00:45	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	12.1	0.47	1	05/26/15 12:27	05/28/15 00:45	193-39-5	
1-Methylnaphthalene	ND	ug/kg	12.1	0.45	1	05/26/15 12:27	05/28/15 00:45	90-12-0	
2-Methylnaphthalene	ND	ug/kg	12.1	0.50	1	05/26/15 12:27	05/28/15 00:45	91-57-6	
Naphthalene	ND	ug/kg	12.1	0.45	1	05/26/15 12:27	05/28/15 00:45	91-20-3	
Phenanthrene	ND	ug/kg	12.1	0.30	1	05/26/15 12:27	05/28/15 00:45	85-01-8	
Pyrene	ND	ug/kg	12.1	0.29	1	05/26/15 12:27	05/28/15 00:45	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	49	%	55-125		1	05/26/15 12:27	05/28/15 00:45	321-60-8	P2,S0
p-Terphenyl-d14 (S)	77	%	30-150		1	05/26/15 12:27	05/28/15 00:45	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-17 (16-16.5)**      **Lab ID: 10307123020**      Collected: 05/12/15 15:25      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	22.4	1.2	1	05/26/15 14:40	06/02/15 17:05	68334-30-5	
Motor Oil Range	ND	mg/kg	15.0	2.7	1	05/26/15 14:40	06/02/15 17:05		
<b>Surrogates</b>									
n-Triacontane (S)	122	%	50-150		1	05/26/15 14:40	06/02/15 17:05	638-68-6	
o-Terphenyl (S)	122	%	50-150		1	05/26/15 14:40	06/02/15 17:05	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>33.8</b>	%	0.10	0.10	1		06/03/15 15:27		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	499	53.0	1	05/26/15 22:21	05/28/15 11:56	101-55-3	
Butylbenzylphthalate	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	85-68-7	
Carbazole	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	59-50-7	
4-Chloroaniline	ND	ug/kg	499	76.5	1	05/26/15 22:21	05/28/15 11:56	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	499	97.5	1	05/26/15 22:21	05/28/15 11:56	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	499	34.8	1	05/26/15 22:21	05/28/15 11:56	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	499	115	1	05/26/15 22:21	05/28/15 11:56	108-60-1	
2-Chloronaphthalene	ND	ug/kg	499	78.1	1	05/26/15 22:21	05/28/15 11:56	91-58-7	
2-Chlorophenol	ND	ug/kg	499	116	1	05/26/15 22:21	05/28/15 11:56	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	499	57.4	1	05/26/15 22:21	05/28/15 11:56	7005-72-3	
Dibenzofuran	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	499	32.2	1	05/26/15 22:21	05/28/15 11:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	499	31.4	1	05/26/15 22:21	05/28/15 11:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	499	33.2	1	05/26/15 22:21	05/28/15 11:56	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	499	69.5	1	05/26/15 22:21	05/28/15 11:56	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	499	93.8	1	05/26/15 22:21	05/28/15 11:56	120-83-2	
Diethylphthalate	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	499	93.4	1	05/26/15 22:21	05/28/15 11:56	105-67-9	
Dimethylphthalate	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	131-11-3	
Di-n-butylphthalate	ND	ug/kg	499	69.2	1	05/26/15 22:21	05/28/15 11:56	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2570	99.1	1	05/26/15 22:21	05/28/15 11:56	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	499	42.6	1	05/26/15 22:21	05/28/15 11:56	606-20-2	
Di-n-octylphthalate	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	499	85.2	1	05/26/15 22:21	05/28/15 11:56	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	499	42.0	1	05/26/15 22:21	05/28/15 11:56	87-68-3	
Hexachlorobenzene	ND	ug/kg	499	65.6	1	05/26/15 22:21	05/28/15 11:56	118-74-1	
Hexachloroethane	ND	ug/kg	499	31.7	1	05/26/15 22:21	05/28/15 11:56	67-72-1	
Isophorone	ND	ug/kg	499	79.6	1	05/26/15 22:21	05/28/15 11:56	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	499	108	1	05/26/15 22:21	05/28/15 11:56	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	997	99.7	1	05/26/15 22:21	05/28/15 11:56		
2-Nitroaniline	ND	ug/kg	499	54.1	1	05/26/15 22:21	05/28/15 11:56	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-17 (16-16.5)**      **Lab ID: 10307123020**      Collected: 05/12/15 15:25      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	499	50.9	1	05/26/15 22:21	05/28/15 11:56	99-09-2	
4-Nitroaniline	ND	ug/kg	499	43.7	1	05/26/15 22:21	05/28/15 11:56	100-01-6	
Nitrobenzene	ND	ug/kg	499	101	1	05/26/15 22:21	05/28/15 11:56	98-95-3	
2-Nitrophenol	ND	ug/kg	499	85.2	1	05/26/15 22:21	05/28/15 11:56	88-75-5	
4-Nitrophenol	ND	ug/kg	499	52.3	1	05/26/15 22:21	05/28/15 11:56	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	499	67.9	1	05/26/15 22:21	05/28/15 11:56	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	499	249	1	05/26/15 22:21	05/28/15 11:56	86-30-6	
Pentachlorophenol	ND	ug/kg	1010	249	1	05/26/15 22:21	05/28/15 11:56	87-86-5	
Phenol	ND	ug/kg	499	109	1	05/26/15 22:21	05/28/15 11:56	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	499	82.2	1	05/26/15 22:21	05/28/15 11:56	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	499	59.5	1	05/26/15 22:21	05/28/15 11:56	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	499	64.2	1	05/26/15 22:21	05/28/15 11:56	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	18	%	34-125		1	05/26/15 22:21	05/28/15 11:56	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	21	%	51-125		1	05/26/15 22:21	05/28/15 11:56	321-60-8	S0
p-Terphenyl-d14 (S)	70	%	55-125		1	05/26/15 22:21	05/28/15 11:56	1718-51-0	
Phenol-d6 (S)	46	%	44-125		1	05/26/15 22:21	05/28/15 11:56	13127-88-3	
2-Fluorophenol (S)	29	%	45-125		1	05/26/15 22:21	05/28/15 11:56	367-12-4	S0
2,4,6-Tribromophenol (S)	64	%	40-125		1	05/26/15 22:21	05/28/15 11:56	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	15.1	0.54	1	05/26/15 12:27	05/28/15 01:06	83-32-9	
Acenaphthylene	ND	ug/kg	15.1	0.51	1	05/26/15 12:27	05/28/15 01:06	208-96-8	
Anthracene	ND	ug/kg	15.1	0.46	1	05/26/15 12:27	05/28/15 01:06	120-12-7	
Benzo(a)anthracene	ND	ug/kg	15.1	0.28	1	05/26/15 12:27	05/28/15 01:06	56-55-3	
Benzo(a)pyrene	ND	ug/kg	15.1	0.30	1	05/26/15 12:27	05/28/15 01:06	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	15.1	0.53	1	05/26/15 12:27	05/28/15 01:06	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	15.1	0.53	1	05/26/15 12:27	05/28/15 01:06	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	15.1	0.60	1	05/26/15 12:27	05/28/15 01:06	207-08-9	
2-Chloronaphthalene	ND	ug/kg	15.1	0.43	1	05/26/15 12:27	05/28/15 01:06	91-58-7	L2
Chrysene	ND	ug/kg	15.1	0.37	1	05/26/15 12:27	05/28/15 01:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	15.1	0.65	1	05/26/15 12:27	05/28/15 01:06	53-70-3	
Fluoranthene	ND	ug/kg	15.1	0.33	1	05/26/15 12:27	05/28/15 01:06	206-44-0	
Fluorene	ND	ug/kg	15.1	0.47	1	05/26/15 12:27	05/28/15 01:06	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	15.1	0.58	1	05/26/15 12:27	05/28/15 01:06	193-39-5	
1-Methylnaphthalene	ND	ug/kg	15.1	0.56	1	05/26/15 12:27	05/28/15 01:06	90-12-0	
2-Methylnaphthalene	ND	ug/kg	15.1	0.62	1	05/26/15 12:27	05/28/15 01:06	91-57-6	
Naphthalene	ND	ug/kg	15.1	0.56	1	05/26/15 12:27	05/28/15 01:06	91-20-3	
Phenanthrene	ND	ug/kg	15.1	0.37	1	05/26/15 12:27	05/28/15 01:06	85-01-8	
Pyrene	ND	ug/kg	15.1	0.36	1	05/26/15 12:27	05/28/15 01:06	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	42	%	55-125		1	05/26/15 12:27	05/28/15 01:06	321-60-8	P2,S0
p-Terphenyl-d14 (S)	69	%	30-150		1	05/26/15 12:27	05/28/15 01:06	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307123

**Sample: DP-4 (16-16.5)**      **Lab ID: 10307123021**      Collected: 05/11/15 14:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS Silica Gel</b>		Analytical Method: NWTPH-Dx Preparation Method: EPA 3550							
Diesel Fuel Range SG	ND	mg/kg	16.5	0.89	1	06/01/15 22:28	06/04/15 12:21	68334-30-5	H2
Motor Oil Range SG	ND	mg/kg	11.0	2.0	1	06/01/15 22:28	06/04/15 12:21	64742-65-0	H2
<b>Surrogates</b>									
n-Triacontane (S)	99	%	50-150		1	06/01/15 22:28	06/04/15 12:21	638-68-6	
o-Terphenyl (S)	86	%	50-150		1	06/01/15 22:28	06/04/15 12:21	84-15-1	
<b>Dry Weight</b>		Analytical Method: ASTM D2974							
Percent Moisture	<b>11.0</b>	%	0.10	0.10	1		06/03/15 15:29		
<b>8270D MSSV</b>		Analytical Method: EPA 8270D Preparation Method: EPA 3550							
4-Bromophenylphenyl ether	ND	ug/kg	371	39.4	1	05/26/15 22:21	05/27/15 22:41	101-55-3	H2
Butylbenzylphthalate	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	85-68-7	H2
Carbazole	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	86-74-8	H2
4-Chloro-3-methylphenol	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	59-50-7	H2
4-Chloroaniline	ND	ug/kg	371	56.9	1	05/26/15 22:21	05/27/15 22:41	106-47-8	H2
bis(2-Chloroethoxy)methane	ND	ug/kg	371	72.5	1	05/26/15 22:21	05/27/15 22:41	111-91-1	H2
bis(2-Chloroethyl) ether	ND	ug/kg	371	25.8	1	05/26/15 22:21	05/27/15 22:41	111-44-4	H2
bis(2-Chloroisopropyl) ether	ND	ug/kg	371	85.6	1	05/26/15 22:21	05/27/15 22:41	108-60-1	H2
2-Chloronaphthalene	ND	ug/kg	371	58.1	1	05/26/15 22:21	05/27/15 22:41	91-58-7	H2
2-Chlorophenol	ND	ug/kg	371	86.5	1	05/26/15 22:21	05/27/15 22:41	95-57-8	H2
4-Chlorophenylphenyl ether	ND	ug/kg	371	42.7	1	05/26/15 22:21	05/27/15 22:41	7005-72-3	H2
Dibenzofuran	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	132-64-9	H2
1,2-Dichlorobenzene	ND	ug/kg	371	23.9	1	05/26/15 22:21	05/27/15 22:41	95-50-1	H2
1,3-Dichlorobenzene	ND	ug/kg	371	23.4	1	05/26/15 22:21	05/27/15 22:41	541-73-1	H2
1,4-Dichlorobenzene	ND	ug/kg	371	24.7	1	05/26/15 22:21	05/27/15 22:41	106-46-7	H2
3,3'-Dichlorobenzidine	ND	ug/kg	371	51.7	1	05/26/15 22:21	05/27/15 22:41	91-94-1	H2
2,4-Dichlorophenol	ND	ug/kg	371	69.8	1	05/26/15 22:21	05/27/15 22:41	120-83-2	H2
Diethylphthalate	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	84-66-2	H2
2,4-Dimethylphenol	ND	ug/kg	371	69.4	1	05/26/15 22:21	05/27/15 22:41	105-67-9	H2
Dimethylphthalate	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	131-11-3	H2
Di-n-butylphthalate	ND	ug/kg	371	51.5	1	05/26/15 22:21	05/27/15 22:41	84-74-2	H2
4,6-Dinitro-2-methylphenol	ND	ug/kg	1910	73.7	1	05/26/15 22:21	05/27/15 22:41	534-52-1	H2
2,4-Dinitrophenol	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	51-28-5	H2
2,4-Dinitrotoluene	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	121-14-2	H2
2,6-Dinitrotoluene	ND	ug/kg	371	31.7	1	05/26/15 22:21	05/27/15 22:41	606-20-2	H2
Di-n-octylphthalate	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	117-84-0	H2
1,2-Diphenylhydrazine	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	122-66-7	H2
bis(2-Ethylhexyl)phthalate	ND	ug/kg	371	63.4	1	05/26/15 22:21	05/27/15 22:41	117-81-7	H2
Hexachloro-1,3-butadiene	ND	ug/kg	371	31.2	1	05/26/15 22:21	05/27/15 22:41	87-68-3	H2
Hexachlorobenzene	ND	ug/kg	371	48.8	1	05/26/15 22:21	05/27/15 22:41	118-74-1	H2
Hexachloroethane	ND	ug/kg	371	23.6	1	05/26/15 22:21	05/27/15 22:41	67-72-1	H2
Isophorone	ND	ug/kg	371	59.2	1	05/26/15 22:21	05/27/15 22:41	78-59-1	H2
2-Methylphenol(o-Cresol)	ND	ug/kg	371	80.2	1	05/26/15 22:21	05/27/15 22:41	95-48-7	H2
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	742	74.2	1	05/26/15 22:21	05/27/15 22:41		H2
2-Nitroaniline	ND	ug/kg	371	40.2	1	05/26/15 22:21	05/27/15 22:41	88-74-4	H2

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

**Sample: DP-4 (16-16.5)**      **Lab ID: 10307123021**      Collected: 05/11/15 14:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	371	37.9	1	05/26/15 22:21	05/27/15 22:41	99-09-2	H2
4-Nitroaniline	ND	ug/kg	371	32.5	1	05/26/15 22:21	05/27/15 22:41	100-01-6	H2
Nitrobenzene	ND	ug/kg	371	75.0	1	05/26/15 22:21	05/27/15 22:41	98-95-3	H2
2-Nitrophenol	ND	ug/kg	371	63.4	1	05/26/15 22:21	05/27/15 22:41	88-75-5	H2
4-Nitrophenol	ND	ug/kg	371	38.9	1	05/26/15 22:21	05/27/15 22:41	100-02-7	H2
N-Nitrosodimethylamine	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	62-75-9	H2
N-Nitroso-di-n-propylamine	ND	ug/kg	371	50.5	1	05/26/15 22:21	05/27/15 22:41	621-64-7	H2
N-Nitrosodiphenylamine	ND	ug/kg	371	185	1	05/26/15 22:21	05/27/15 22:41	86-30-6	H2
Pentachlorophenol	ND	ug/kg	753	185	1	05/26/15 22:21	05/27/15 22:41	87-86-5	H2
Phenol	ND	ug/kg	371	81.0	1	05/26/15 22:21	05/27/15 22:41	108-95-2	H2
1,2,4-Trichlorobenzene	ND	ug/kg	371	61.1	1	05/26/15 22:21	05/27/15 22:41	120-82-1	H2
2,4,5-Trichlorophenol	ND	ug/kg	371	44.3	1	05/26/15 22:21	05/27/15 22:41	95-95-4	H2
2,4,6-Trichlorophenol	ND	ug/kg	371	47.8	1	05/26/15 22:21	05/27/15 22:41	88-06-2	H2
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	41	%	34-125		1	05/26/15 22:21	05/27/15 22:41	4165-60-0	
2-Fluorobiphenyl (S)	55	%	51-125		1	05/26/15 22:21	05/27/15 22:41	321-60-8	
p-Terphenyl-d14 (S)	84	%	55-125		1	05/26/15 22:21	05/27/15 22:41	1718-51-0	
Phenol-d6 (S)	60	%	44-125		1	05/26/15 22:21	05/27/15 22:41	13127-88-3	
2-Fluorophenol (S)	48	%	45-125		1	05/26/15 22:21	05/27/15 22:41	367-12-4	
2,4,6-Tribromophenol (S)	72	%	40-125		1	05/26/15 22:21	05/27/15 22:41	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.2	0.40	1	05/26/15 12:27	05/28/15 01:28	83-32-9	H2
Acenaphthylene	ND	ug/kg	11.2	0.38	1	05/26/15 12:27	05/28/15 01:28	208-96-8	H2
Anthracene	ND	ug/kg	11.2	0.34	1	05/26/15 12:27	05/28/15 01:28	120-12-7	H2
Benzo(a)anthracene	ND	ug/kg	11.2	0.21	1	05/26/15 12:27	05/28/15 01:28	56-55-3	H2
Benzo(a)pyrene	ND	ug/kg	11.2	0.22	1	05/26/15 12:27	05/28/15 01:28	50-32-8	H2
Benzo(b)fluoranthene	ND	ug/kg	11.2	0.39	1	05/26/15 12:27	05/28/15 01:28	205-99-2	H2
Benzo(g,h,i)perylene	ND	ug/kg	11.2	0.40	1	05/26/15 12:27	05/28/15 01:28	191-24-2	H2
Benzo(k)fluoranthene	ND	ug/kg	11.2	0.45	1	05/26/15 12:27	05/28/15 01:28	207-08-9	H2
2-Chloronaphthalene	ND	ug/kg	11.2	0.32	1	05/26/15 12:27	05/28/15 01:28	91-58-7	H2,L2
Chrysene	ND	ug/kg	11.2	0.28	1	05/26/15 12:27	05/28/15 01:28	218-01-9	H2
Dibenz(a,h)anthracene	ND	ug/kg	11.2	0.48	1	05/26/15 12:27	05/28/15 01:28	53-70-3	H2
Fluoranthene	ND	ug/kg	11.2	0.25	1	05/26/15 12:27	05/28/15 01:28	206-44-0	H2
Fluorene	ND	ug/kg	11.2	0.35	1	05/26/15 12:27	05/28/15 01:28	86-73-7	H2
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.2	0.43	1	05/26/15 12:27	05/28/15 01:28	193-39-5	H2
1-Methylnaphthalene	ND	ug/kg	11.2	0.42	1	05/26/15 12:27	05/28/15 01:28	90-12-0	H2
2-Methylnaphthalene	ND	ug/kg	11.2	0.46	1	05/26/15 12:27	05/28/15 01:28	91-57-6	H2
Naphthalene	ND	ug/kg	11.2	0.42	1	05/26/15 12:27	05/28/15 01:28	91-20-3	H2
Phenanthrene	ND	ug/kg	11.2	0.28	1	05/26/15 12:27	05/28/15 01:28	85-01-8	H2
Pyrene	ND	ug/kg	11.2	0.27	1	05/26/15 12:27	05/28/15 01:28	129-00-0	H2
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	53	%	55-125		1	05/26/15 12:27	05/28/15 01:28	321-60-8	P2,S0
p-Terphenyl-d14 (S)	85	%	30-150		1	05/26/15 12:27	05/28/15 01:28	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

QC Batch: MPRP/54876 Analysis Method: ASTM D2974  
 QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture  
 Associated Lab Samples: 10307123001, 10307123002, 10307123003, 10307123004, 10307123005, 10307123006, 10307123007,  
 10307123008, 10307123009

---

SAMPLE DUPLICATE: 1982799

Parameter	Units	10307179004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.2	15.4	1	30	

---

SAMPLE DUPLICATE: 1982800

Parameter	Units	10307179014 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.2	15.4	5	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

QC Batch:	MPRP/54904	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	10307123010, 10307123011, 10307123012, 10307123013, 10307123014, 10307123015, 10307123016, 10307123017, 10307123018, 10307123019, 10307123020, 10307123021		

---

SAMPLE DUPLICATE: 1983745

Parameter	Units	10307123010 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	28.1	26.7	5	30	

---

SAMPLE DUPLICATE: 1983817

Parameter	Units	10307126008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	34.3	32.4	6	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307123

QC Batch: OEXT/29267 Analysis Method: EPA 8270D  
QC Batch Method: EPA 3550 Analysis Description: 8270D Solid MSSV  
Associated Lab Samples: 10307123001, 10307123002, 10307123003, 10307123004, 10307123005, 10307123006, 10307123007, 10307123008

METHOD BLANK: 1973564 Matrix: Solid  
Associated Lab Samples: 10307123001, 10307123002, 10307123003, 10307123004, 10307123005, 10307123006, 10307123007, 10307123008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	05/28/15 12:24	
1,2-Dichlorobenzene	ug/kg	ND	330	05/28/15 12:24	
1,2-Diphenylhydrazine	ug/kg	ND	330	05/28/15 12:24	
1,3-Dichlorobenzene	ug/kg	ND	330	05/28/15 12:24	
1,4-Dichlorobenzene	ug/kg	ND	330	05/28/15 12:24	
2,4,5-Trichlorophenol	ug/kg	ND	330	05/28/15 12:24	
2,4,6-Trichlorophenol	ug/kg	ND	330	05/28/15 12:24	
2,4-Dichlorophenol	ug/kg	ND	330	05/28/15 12:24	
2,4-Dimethylphenol	ug/kg	ND	330	05/28/15 12:24	
2,4-Dinitrophenol	ug/kg	ND	330	05/28/15 12:24	
2,4-Dinitrotoluene	ug/kg	ND	330	05/28/15 12:24	
2,6-Dinitrotoluene	ug/kg	ND	330	05/28/15 12:24	
2-Chloronaphthalene	ug/kg	ND	330	05/28/15 12:24	
2-Chlorophenol	ug/kg	ND	330	05/28/15 12:24	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	05/28/15 12:24	
2-Nitroaniline	ug/kg	ND	330	05/28/15 12:24	
2-Nitrophenol	ug/kg	ND	330	05/28/15 12:24	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	660	05/28/15 12:24	
3,3'-Dichlorobenzidine	ug/kg	ND	330	05/28/15 12:24	
3-Nitroaniline	ug/kg	ND	330	05/28/15 12:24	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	05/28/15 12:24	
4-Bromophenylphenyl ether	ug/kg	ND	330	05/28/15 12:24	
4-Chloro-3-methylphenol	ug/kg	ND	330	05/28/15 12:24	
4-Chloroaniline	ug/kg	ND	330	05/28/15 12:24	
4-Chlorophenylphenyl ether	ug/kg	ND	330	05/28/15 12:24	
4-Nitroaniline	ug/kg	ND	330	05/28/15 12:24	
4-Nitrophenol	ug/kg	ND	330	05/28/15 12:24	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	05/28/15 12:24	
bis(2-Chloroethyl) ether	ug/kg	ND	330	05/28/15 12:24	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	05/28/15 12:24	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	05/28/15 12:24	
Butylbenzylphthalate	ug/kg	ND	330	05/28/15 12:24	
Carbazole	ug/kg	ND	330	05/28/15 12:24	
Di-n-butylphthalate	ug/kg	ND	330	05/28/15 12:24	
Di-n-octylphthalate	ug/kg	ND	330	05/28/15 12:24	
Dibenzofuran	ug/kg	ND	330	05/28/15 12:24	
Diethylphthalate	ug/kg	ND	330	05/28/15 12:24	
Dimethylphthalate	ug/kg	ND	330	05/28/15 12:24	
Hexachloro-1,3-butadiene	ug/kg	ND	330	05/28/15 12:24	
Hexachlorobenzene	ug/kg	ND	330	05/28/15 12:24	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

METHOD BLANK: 1973564

Matrix: Solid

Associated Lab Samples: 10307123001, 10307123002, 10307123003, 10307123004, 10307123005, 10307123006, 10307123007, 10307123008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloroethane	ug/kg	ND	330	05/28/15 12:24	
Isophorone	ug/kg	ND	330	05/28/15 12:24	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	05/28/15 12:24	
N-Nitrosodimethylamine	ug/kg	ND	330	05/28/15 12:24	
N-Nitrosodiphenylamine	ug/kg	ND	330	05/28/15 12:24	
Nitrobenzene	ug/kg	ND	330	05/28/15 12:24	
Pentachlorophenol	ug/kg	ND	670	05/28/15 12:24	
Phenol	ug/kg	ND	330	05/28/15 12:24	
2,4,6-Tribromophenol (S)	%	85	40-125	05/28/15 12:24	
2-Fluorobiphenyl (S)	%	91	51-125	05/28/15 12:24	
2-Fluorophenol (S)	%	78	45-125	05/28/15 12:24	
Nitrobenzene-d5 (S)	%	79	34-125	05/28/15 12:24	
p-Terphenyl-d14 (S)	%	105	55-125	05/28/15 12:24	
Phenol-d6 (S)	%	84	44-125	05/28/15 12:24	

LABORATORY CONTROL SAMPLE: 1973565

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1240	74	41-125	
1,2-Dichlorobenzene	ug/kg	1670	1200	72	38-125	
1,2-Diphenylhydrazine	ug/kg	1670	1430	86	58-125	
1,3-Dichlorobenzene	ug/kg	1670	1170	70	36-125	
1,4-Dichlorobenzene	ug/kg	1670	1170	70	36-125	
2,4,5-Trichlorophenol	ug/kg	1670	1420	85	56-125	
2,4,6-Trichlorophenol	ug/kg	1670	1410	84	57-125	
2,4-Dichlorophenol	ug/kg	1670	1360	82	51-125	
2,4-Dimethylphenol	ug/kg	1670	1300	78	48-125	
2,4-Dinitrophenol	ug/kg	1670	1250	75	30-125	
2,4-Dinitrotoluene	ug/kg	1670	1450	87	58-125	
2,6-Dinitrotoluene	ug/kg	1670	1410	85	58-125	
2-Chloronaphthalene	ug/kg	1670	1370	82	53-125	
2-Chlorophenol	ug/kg	1670	1240	74	44-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1260	76	48-125	
2-Nitroaniline	ug/kg	1670	1420	85	58-125	
2-Nitrophenol	ug/kg	1670	1300	78	43-125	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1320	79	53-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1410	85	42-125	
3-Nitroaniline	ug/kg	1670	1310	79	47-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1600J	96	38-125	
4-Bromophenylphenyl ether	ug/kg	1670	1480	89	59-125	
4-Chloro-3-methylphenol	ug/kg	1670	1370	82	58-125	
4-Chloroaniline	ug/kg	1670	1160	69	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1430	86	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

LABORATORY CONTROL SAMPLE: 1973565

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Nitroaniline	ug/kg	1670	1330	80	54-125	
4-Nitrophenol	ug/kg	1670	1380	83	53-125	
bis(2-Chloroethoxy)methane	ug/kg	1670	1310	79	48-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1230	74	39-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1270	76	33-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1450	87	61-125	
Butylbenzylphthalate	ug/kg	1670	1420	85	60-125	
Carbazole	ug/kg	1670	1440	87	59-125	
Di-n-butylphthalate	ug/kg	1670	1490	89	61-125	
Di-n-octylphthalate	ug/kg	1670	1390	83	60-125	
Dibenzofuran	ug/kg	1670	1420	85	58-125	
Diethylphthalate	ug/kg	1670	1450	87	60-125	
Dimethylphthalate	ug/kg	1670	1440	86	60-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1260	76	38-125	
Hexachlorobenzene	ug/kg	1670	1480	89	57-125	
Hexachloroethane	ug/kg	1670	1160	69	54-125	
Isophorone	ug/kg	1670	1330	80	52-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1220	73	48-125	
N-Nitrosodimethylamine	ug/kg	1670	1170	70	31-125	
N-Nitrosodiphenylamine	ug/kg	1670	1480	89	59-125	
Nitrobenzene	ug/kg	1670	1250	75	46-125	
Pentachlorophenol	ug/kg	1670	1110	67	47-125	
Phenol	ug/kg	1670	1270	76	48-125	
2,4,6-Tribromophenol (S)	%			95	40-125	
2-Fluorobiphenyl (S)	%			89	51-125	
2-Fluorophenol (S)	%			67	45-125	
Nitrobenzene-d5 (S)	%			68	34-125	
p-Terphenyl-d14 (S)	%			100	55-125	
Phenol-d6 (S)	%			76	44-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1973566 1973567

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10307233001 Result	Spike Conc.	Spike Conc.	Conc.								
1,2,4-Trichlorobenzene	ug/kg	ND	1940	1940	1390	1440	72	74	43-125	3	30		
1,2-Dichlorobenzene	ug/kg	ND	1940	1940	1230	1230	64	63	36-125	0	30		
1,2-Diphenylhydrazine	ug/kg	ND	1940	1940	1630	1630	84	84	30-125	0	30		
1,3-Dichlorobenzene	ug/kg	ND	1940	1940	1150	1140	59	59	34-125	1	30		
1,4-Dichlorobenzene	ug/kg	ND	1940	1940	1180	1160	61	60	33-125	2	30		
2,4,5-Trichlorophenol	ug/kg	ND	1940	1940	1690	1730	87	90	30-141	3	30		
2,4,6-Trichlorophenol	ug/kg	ND	1940	1940	1690	1730	87	89	30-143	3	30		
2,4-Dichlorophenol	ug/kg	ND	1940	1940	1690	1670	88	87	30-139	1	30		
2,4-Dimethylphenol	ug/kg	ND	1940	1940	1600	1610	83	83	47-125	1	30		
2,4-Dinitrophenol	ug/kg	ND	1940	1940	980	764	51	39	30-125	25	30		
2,4-Dinitrotoluene	ug/kg	ND	1940	1940	1680	1700	87	88	50-125	2	30		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1973566												1973567											
Parameter	Units	MS		MSD		MS		MSD		% Rec		Max		Qual									
		10307233001	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD												
2,6-Dinitrotoluene	ug/kg	ND	1940	1940	1680	1690	87	87	48-125	0	30												
2-Chloronaphthalene	ug/kg	ND	1940	1940	1620	1650	84	85	49-125	2	30												
2-Chlorophenol	ug/kg	ND	1940	1940	1440	1480	74	77	30-125	3	30												
2-Methylphenol(o-Cresol)	ug/kg	ND	1940	1940	1560	1560	81	81	43-125	0	30												
2-Nitroaniline	ug/kg	ND	1940	1940	1690	1720	87	89	57-125	2	30												
2-Nitrophenol	ug/kg	ND	1940	1940	1480	1550	76	80	30-150	5	30												
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	1940	1940	1630	1600	84	83	51-125	2	30												
3,3'-Dichlorobenzidine	ug/kg	ND	1940	1940	1590	1560	82	81	30-132	2	30												
3-Nitroaniline	ug/kg	ND	1940	1940	1210	1030	62	53	30-132	16	30												
4,6-Dinitro-2-methylphenol	ug/kg	ND	1940	1940	1360J	1080J	70	56	30-130		30												
4-Bromophenylphenyl ether	ug/kg	ND	1940	1940	1800	1790	93	92	57-125	1	30												
4-Chloro-3-methylphenol	ug/kg	ND	1940	1940	1660	1650	86	85	30-139	1	30												
4-Chloroaniline	ug/kg	ND	1940	1940	1030	905	53	47	30-125	13	30												
4-Chlorophenylphenyl ether	ug/kg	ND	1940	1940	1700	1700	88	88	30-130	0	30												
4-Nitroaniline	ug/kg	ND	1940	1940	1570	1610	81	83	30-150	2	30												
4-Nitrophenol	ug/kg	ND	1940	1940	1670	1660	86	86	30-145	0	30												
bis(2-Chloroethoxy)methane	ug/kg	ND	1940	1940	1520	1560	78	81	46-125	3	30												
bis(2-Chloroethyl) ether	ug/kg	ND	1940	1940	1340	1390	69	72	34-125	3	30												
bis(2-Chloroisopropyl) ether	ug/kg	ND	1940	1940	1380	1410	71	73	33-125	2	30												
bis(2-Ethylhexyl)phthalate	ug/kg	ND	1940	1940	1660	1620	86	84	60-125	2	30												
Butylbenzylphthalate	ug/kg	ND	1940	1940	1640	1610	85	83	55-125	2	30												
Carbazole	ug/kg	ND	1940	1940	1830	1800	92	90	56-125	2	30												
Di-n-butylphthalate	ug/kg	ND	1940	1940	1770	1770	92	92	58-125	0	30												
Di-n-octylphthalate	ug/kg	ND	1940	1940	1650	1620	86	84	59-125	2	30												
Dibenzofuran	ug/kg	ND	1940	1940	1860	2020	90	99	57-125	9	30												
Diethylphthalate	ug/kg	ND	1940	1940	1680	1700	87	88	58-125	1	30												
Dimethylphthalate	ug/kg	ND	1940	1940	1660	1680	86	87	59-125	1	30												
Hexachloro-1,3-butadiene	ug/kg	ND	1940	1940	1320	1340	68	69	39-125	1	30												
Hexachlorobenzene	ug/kg	ND	1940	1940	1730	1740	90	90	55-125	0	30												
Hexachloroethane	ug/kg	ND	1940	1940	557	468	29	24	30-125	17	30 M1												
Isophorone	ug/kg	ND	1940	1940	1540	1570	79	81	49-125	2	30												
N-Nitroso-di-n-propylamine	ug/kg	ND	1940	1940	1400	1440	72	75	30-140	3	30												
N-Nitrosodimethylamine	ug/kg	ND	1940	1940	1280	1360	66	70	30-125	5	30												
N-Nitrosodiphenylamine	ug/kg	ND	1940	1940	1760	1760	91	91	57-125	0	30												
Nitrobenzene	ug/kg	ND	1940	1940	1390	1450	72	75	30-139	4	30												
Pentachlorophenol	ug/kg	ND	1940	1940	1380	1410	71	73	30-148	2	30												
Phenol	ug/kg	ND	1940	1940	1520	1560	79	80	48-125	2	30												
2,4,6-Tribromophenol (S)	%						93	102	40-125														
2-Fluorobiphenyl (S)	%						73	91	51-125														
2-Fluorophenol (S)	%						65	78	45-125														
Nitrobenzene-d5 (S)	%						60	79	34-125														
p-Terphenyl-d14 (S)	%						91	97	55-125														
Phenol-d6 (S)	%						75	84	44-125														

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

QC Batch: OEXT/29287 Analysis Method: EPA 8270D  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid MSSV  
 Associated Lab Samples: 10307123009, 10307123010, 10307123011, 10307123012, 10307123013, 10307123014, 10307123015, 10307123016, 10307123017, 10307123018

METHOD BLANK: 1975437 Matrix: Solid  
 Associated Lab Samples: 10307123009, 10307123010, 10307123011, 10307123012, 10307123013, 10307123014, 10307123015, 10307123016, 10307123017, 10307123018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	05/27/15 15:00	
1,2-Dichlorobenzene	ug/kg	ND	330	05/27/15 15:00	
1,2-Diphenylhydrazine	ug/kg	ND	330	05/27/15 15:00	
1,3-Dichlorobenzene	ug/kg	ND	330	05/27/15 15:00	
1,4-Dichlorobenzene	ug/kg	ND	330	05/27/15 15:00	
2,4,5-Trichlorophenol	ug/kg	ND	330	05/27/15 15:00	
2,4,6-Trichlorophenol	ug/kg	ND	330	05/27/15 15:00	
2,4-Dichlorophenol	ug/kg	ND	330	05/27/15 15:00	
2,4-Dimethylphenol	ug/kg	ND	330	05/27/15 15:00	
2,4-Dinitrophenol	ug/kg	ND	330	05/27/15 15:00	
2,4-Dinitrotoluene	ug/kg	ND	330	05/27/15 15:00	
2,6-Dinitrotoluene	ug/kg	ND	330	05/27/15 15:00	
2-Chloronaphthalene	ug/kg	ND	330	05/27/15 15:00	
2-Chlorophenol	ug/kg	ND	330	05/27/15 15:00	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	05/27/15 15:00	
2-Nitroaniline	ug/kg	ND	330	05/27/15 15:00	
2-Nitrophenol	ug/kg	ND	330	05/27/15 15:00	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	660	05/27/15 15:00	
3,3'-Dichlorobenzidine	ug/kg	ND	330	05/27/15 15:00	
3-Nitroaniline	ug/kg	ND	330	05/27/15 15:00	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	05/27/15 15:00	
4-Bromophenylphenyl ether	ug/kg	ND	330	05/27/15 15:00	
4-Chloro-3-methylphenol	ug/kg	ND	330	05/27/15 15:00	
4-Chloroaniline	ug/kg	ND	330	05/27/15 15:00	
4-Chlorophenylphenyl ether	ug/kg	ND	330	05/27/15 15:00	
4-Nitroaniline	ug/kg	ND	330	05/27/15 15:00	
4-Nitrophenol	ug/kg	ND	330	05/27/15 15:00	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	05/27/15 15:00	
bis(2-Chloroethyl) ether	ug/kg	ND	330	05/27/15 15:00	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	05/27/15 15:00	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	05/27/15 15:00	
Butylbenzylphthalate	ug/kg	ND	330	05/27/15 15:00	
Carbazole	ug/kg	ND	330	05/27/15 15:00	
Di-n-butylphthalate	ug/kg	ND	330	05/27/15 15:00	
Di-n-octylphthalate	ug/kg	ND	330	05/27/15 15:00	
Dibenzofuran	ug/kg	ND	330	05/27/15 15:00	
Diethylphthalate	ug/kg	ND	330	05/27/15 15:00	
Dimethylphthalate	ug/kg	ND	330	05/27/15 15:00	
Hexachloro-1,3-butadiene	ug/kg	ND	330	05/27/15 15:00	
Hexachlorobenzene	ug/kg	ND	330	05/27/15 15:00	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

METHOD BLANK: 1975437

Matrix: Solid

Associated Lab Samples: 10307123009, 10307123010, 10307123011, 10307123012, 10307123013, 10307123014, 10307123015, 10307123016, 10307123017, 10307123018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloroethane	ug/kg	ND	330	05/27/15 15:00	
Isophorone	ug/kg	ND	330	05/27/15 15:00	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	05/27/15 15:00	
N-Nitrosodimethylamine	ug/kg	ND	330	05/27/15 15:00	
N-Nitrosodiphenylamine	ug/kg	ND	330	05/27/15 15:00	
Nitrobenzene	ug/kg	ND	330	05/27/15 15:00	
Pentachlorophenol	ug/kg	ND	670	05/27/15 15:00	
Phenol	ug/kg	ND	330	05/27/15 15:00	
2,4,6-Tribromophenol (S)	%	76	40-125	05/27/15 15:00	
2-Fluorobiphenyl (S)	%	65	51-125	05/27/15 15:00	
2-Fluorophenol (S)	%	65	45-125	05/27/15 15:00	
Nitrobenzene-d5 (S)	%	62	34-125	05/27/15 15:00	
p-Terphenyl-d14 (S)	%	83	55-125	05/27/15 15:00	
Phenol-d6 (S)	%	62	44-125	05/27/15 15:00	

LABORATORY CONTROL SAMPLE: 1975438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1290	77	41-125	
1,2-Dichlorobenzene	ug/kg	1670	1180	71	38-125	
1,2-Diphenylhydrazine	ug/kg	1670	1460	88	58-125	
1,3-Dichlorobenzene	ug/kg	1670	1160	70	36-125	
1,4-Dichlorobenzene	ug/kg	1670	1180	71	36-125	
2,4,5-Trichlorophenol	ug/kg	1670	1570	94	56-125	
2,4,6-Trichlorophenol	ug/kg	1670	1470	88	57-125	
2,4-Dichlorophenol	ug/kg	1670	1370	82	51-125	
2,4-Dimethylphenol	ug/kg	1670	1330	80	48-125	
2,4-Dinitrophenol	ug/kg	1670	633	38	30-125	
2,4-Dinitrotoluene	ug/kg	1670	1500	90	58-125	
2,6-Dinitrotoluene	ug/kg	1670	1520	91	58-125	
2-Chloronaphthalene	ug/kg	1670	1400	84	53-125	
2-Chlorophenol	ug/kg	1670	1260	76	44-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1310	78	48-125	
2-Nitroaniline	ug/kg	1670	1500	90	58-125	
2-Nitrophenol	ug/kg	1670	1280	77	43-125	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1380	83	53-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1570	94	42-125	
3-Nitroaniline	ug/kg	1670	1520	91	47-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	747J	45	38-125	
4-Bromophenylphenyl ether	ug/kg	1670	1560	94	59-125	
4-Chloro-3-methylphenol	ug/kg	1670	1490	89	58-125	
4-Chloroaniline	ug/kg	1670	1180	71	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1500	90	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

LABORATORY CONTROL SAMPLE: 1975438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Nitroaniline	ug/kg	1670	1430	86	54-125	
4-Nitrophenol	ug/kg	1670	1440	86	53-125	
bis(2-Chloroethoxy)methane	ug/kg	1670	1330	80	48-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1220	73	39-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1180	71	33-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1600	96	61-125	
Butylbenzylphthalate	ug/kg	1670	1580	95	60-125	
Carbazole	ug/kg	1670	1520	91	59-125	
Di-n-butylphthalate	ug/kg	1670	1540	93	61-125	
Di-n-octylphthalate	ug/kg	1670	1570	94	60-125	
Dibenzofuran	ug/kg	1670	1470	88	58-125	
Diethylphthalate	ug/kg	1670	1540	92	60-125	
Dimethylphthalate	ug/kg	1670	1510	91	60-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1270	76	38-125	
Hexachlorobenzene	ug/kg	1670	1530	92	57-125	
Hexachloroethane	ug/kg	1670	1020	61	54-125	
Isophorone	ug/kg	1670	1350	81	52-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1300	78	48-125	
N-Nitrosodimethylamine	ug/kg	1670	1160	70	31-125	
N-Nitrosodiphenylamine	ug/kg	1670	1550	93	59-125	
Nitrobenzene	ug/kg	1670	1310	79	46-125	
Pentachlorophenol	ug/kg	1670	1410	84	47-125	
Phenol	ug/kg	1670	1290	77	48-125	
2,4,6-Tribromophenol (S)	%			83	40-125	
2-Fluorobiphenyl (S)	%			76	51-125	
2-Fluorophenol (S)	%			72	45-125	
Nitrobenzene-d5 (S)	%			71	34-125	
p-Terphenyl-d14 (S)	%			86	55-125	
Phenol-d6 (S)	%			71	44-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1975439 1975440

Parameter	Units	10307276001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec					
1,2,4-Trichlorobenzene	ug/kg	ND	1780	1780	1180	996	66	56	43-125	17	30		
1,2-Dichlorobenzene	ug/kg	ND	1780	1780	1020	787	57	44	36-125	26	30		
1,2-Diphenylhydrazine	ug/kg	ND	1780	1780	1510	1430	85	80	30-125	5	30		
1,3-Dichlorobenzene	ug/kg	ND	1780	1780	951	701	53	39	34-125	30	30		
1,4-Dichlorobenzene	ug/kg	ND	1780	1780	1000	743	56	42	33-125	30	30		
2,4,5-Trichlorophenol	ug/kg	ND	1780	1780	1590	1540	89	86	30-141	4	30		
2,4,6-Trichlorophenol	ug/kg	ND	1780	1780	1530	1500	86	84	30-143	2	30		
2,4-Dichlorophenol	ug/kg	ND	1780	1780	1380	1340	77	75	30-139	3	30		
2,4-Dimethylphenol	ug/kg	ND	1780	1780	1340	1290	75	73	47-125	4	30		
2,4-Dinitrophenol	ug/kg	ND	1780	1780	544	766	31	43	30-125	34	30	R1	
2,4-Dinitrotoluene	ug/kg	ND	1780	1780	1550	1530	87	86	50-125	2	30		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1975439 1975440											
Parameter	Units	10307276001 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	
2,6-Dinitrotoluene	ug/kg	ND	1780	1780	1550	1500	87	84	48-125	4	30
2-Chloronaphthalene	ug/kg	ND	1780	1780	1400	1330	79	75	49-125	5	30
2-Chlorophenol	ug/kg	ND	1780	1780	1290	1210	72	68	30-125	7	30
2-Methylphenol(o-Cresol)	ug/kg	ND	1780	1780	1330	1300	75	73	43-125	2	30
2-Nitroaniline	ug/kg	ND	1780	1780	1560	1530	88	86	57-125	2	30
2-Nitrophenol	ug/kg	ND	1780	1780	1340	1240	75	70	30-150	8	30
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	1780	1780	1380	1370	77	77	51-125	1	30
3,3'-Dichlorobenzidine	ug/kg	ND	1780	1780	1700	1570	95	88	30-132	8	30
3-Nitroaniline	ug/kg	ND	1780	1780	1600	1560	90	88	30-132	2	30
4,6-Dinitro-2-methylphenol	ug/kg	ND	1780	1780	738J	870J	41	49	30-130		30
4-Bromophenylphenyl ether	ug/kg	ND	1780	1780	1610	1550	91	87	57-125	4	30
4-Chloro-3-methylphenol	ug/kg	ND	1780	1780	1510	1450	85	81	30-139	4	30
4-Chloroaniline	ug/kg	ND	1780	1780	1340	1220	75	69	30-125	9	30
4-Chlorophenylphenyl ether	ug/kg	ND	1780	1780	1550	1440	87	81	30-130	7	30
4-Nitroaniline	ug/kg	ND	1780	1780	1490	1440	83	81	30-150	3	30
4-Nitrophenol	ug/kg	ND	1780	1780	1450	1440	81	81	30-145	1	30
bis(2-Chloroethoxy)methane	ug/kg	ND	1780	1780	1370	1270	77	71	46-125	8	30
bis(2-Chloroethyl) ether	ug/kg	ND	1780	1780	1250	1100	70	62	34-125	13	30
bis(2-Chloroisopropyl) ether	ug/kg	ND	1780	1780	1160	978	65	55	33-125	17	30
bis(2-Ethylhexyl)phthalate	ug/kg	ND	1780	1780	1670	1620	92	89	60-125	3	30
Butylbenzylphthalate	ug/kg	ND	1780	1780	1640	1560	92	88	55-125	5	30
Carbazole	ug/kg	ND	1780	1780	1630	1450	91	82	56-125	11	30
Di-n-butylphthalate	ug/kg	ND	1780	1780	1620	1530	91	86	58-125	6	30
Di-n-octylphthalate	ug/kg	ND	1780	1780	1630	1580	92	88	59-125	4	30
Dibenzofuran	ug/kg	ND	1780	1780	1460	1390	82	78	57-125	5	30
Diethylphthalate	ug/kg	ND	1780	1780	1540	1450	86	81	58-125	6	30
Dimethylphthalate	ug/kg	ND	1780	1780	1550	1490	87	84	59-125	3	30
Hexachloro-1,3-butadiene	ug/kg	ND	1780	1780	1110	879	62	49	39-125	23	30
Hexachlorobenzene	ug/kg	ND	1780	1780	1640	1530	92	86	55-125	7	30
Hexachloroethane	ug/kg	ND	1780	1780	870	634	49	36	30-125	31	30 R1
Isophorone	ug/kg	ND	1780	1780	1370	1330	77	74	49-125	3	30
N-Nitroso-di-n-propylamine	ug/kg	ND	1780	1780	1270	1220	72	68	30-140	4	30
N-Nitrosodimethylamine	ug/kg	ND	1780	1780	1290	1310	72	73	30-125	1	30
N-Nitrosodiphenylamine	ug/kg	ND	1780	1780	1570	1510	88	85	57-125	4	30
Nitrobenzene	ug/kg	ND	1780	1780	1250	1160	70	65	30-139	7	30
Pentachlorophenol	ug/kg	ND	1780	1780	1540	1520	86	85	30-148	1	30
Phenol	ug/kg	ND	1780	1780	1330	1320	74	74	48-125	0	30
2,4,6-Tribromophenol (S)	%						91	96	40-125		
2-Fluorobiphenyl (S)	%						75	82	51-125		
2-Fluorophenol (S)	%						74	81	45-125		
Nitrobenzene-d5 (S)	%						70	78	34-125		
p-Terphenyl-d14 (S)	%						88	94	55-125		
Phenol-d6 (S)	%						73	80	44-125		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

QC Batch: OEXT/29295 Analysis Method: EPA 8270D  
QC Batch Method: EPA 3550 Analysis Description: 8270D Solid MSSV  
Associated Lab Samples: 10307123019, 10307123020, 10307123021

METHOD BLANK: 1976011 Matrix: Solid

Associated Lab Samples: 10307123019, 10307123020, 10307123021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	05/27/15 08:13	
1,2-Dichlorobenzene	ug/kg	ND	330	05/27/15 08:13	
1,2-Diphenylhydrazine	ug/kg	ND	330	05/27/15 08:13	
1,3-Dichlorobenzene	ug/kg	ND	330	05/27/15 08:13	
1,4-Dichlorobenzene	ug/kg	ND	330	05/27/15 08:13	
2,4,5-Trichlorophenol	ug/kg	ND	330	05/27/15 08:13	
2,4,6-Trichlorophenol	ug/kg	ND	330	05/27/15 08:13	
2,4-Dichlorophenol	ug/kg	ND	330	05/27/15 08:13	
2,4-Dimethylphenol	ug/kg	ND	330	05/27/15 08:13	
2,4-Dinitrophenol	ug/kg	ND	330	05/27/15 08:13	
2,4-Dinitrotoluene	ug/kg	ND	330	05/27/15 08:13	
2,6-Dinitrotoluene	ug/kg	ND	330	05/27/15 08:13	
2-Chloronaphthalene	ug/kg	ND	330	05/27/15 08:13	
2-Chlorophenol	ug/kg	ND	330	05/27/15 08:13	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	05/27/15 08:13	
2-Nitroaniline	ug/kg	ND	330	05/27/15 08:13	
2-Nitrophenol	ug/kg	ND	330	05/27/15 08:13	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	660	05/27/15 08:13	
3,3'-Dichlorobenzidine	ug/kg	ND	330	05/27/15 08:13	
3-Nitroaniline	ug/kg	ND	330	05/27/15 08:13	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	05/27/15 08:13	
4-Bromophenylphenyl ether	ug/kg	ND	330	05/27/15 08:13	
4-Chloro-3-methylphenol	ug/kg	ND	330	05/27/15 08:13	
4-Chloroaniline	ug/kg	ND	330	05/27/15 08:13	
4-Chlorophenylphenyl ether	ug/kg	ND	330	05/27/15 08:13	
4-Nitroaniline	ug/kg	ND	330	05/27/15 08:13	
4-Nitrophenol	ug/kg	ND	330	05/27/15 08:13	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	05/27/15 08:13	
bis(2-Chloroethyl) ether	ug/kg	ND	330	05/27/15 08:13	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	05/27/15 08:13	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	05/27/15 08:13	
Butylbenzylphthalate	ug/kg	ND	330	05/27/15 08:13	
Carbazole	ug/kg	ND	330	05/27/15 08:13	
Di-n-butylphthalate	ug/kg	ND	330	05/27/15 08:13	
Di-n-octylphthalate	ug/kg	ND	330	05/27/15 08:13	
Dibenzofuran	ug/kg	ND	330	05/27/15 08:13	
Diethylphthalate	ug/kg	ND	330	05/27/15 08:13	
Dimethylphthalate	ug/kg	ND	330	05/27/15 08:13	
Hexachloro-1,3-butadiene	ug/kg	ND	330	05/27/15 08:13	
Hexachlorobenzene	ug/kg	ND	330	05/27/15 08:13	
Hexachloroethane	ug/kg	ND	330	05/27/15 08:13	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

METHOD BLANK: 1976011

Matrix: Solid

Associated Lab Samples: 10307123019, 10307123020, 10307123021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Isophorone	ug/kg	ND	330	05/27/15 08:13	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	05/27/15 08:13	
N-Nitrosodimethylamine	ug/kg	ND	330	05/27/15 08:13	
N-Nitrosodiphenylamine	ug/kg	ND	330	05/27/15 08:13	
Nitrobenzene	ug/kg	ND	330	05/27/15 08:13	
Pentachlorophenol	ug/kg	ND	670	05/27/15 08:13	
Phenol	ug/kg	ND	330	05/27/15 08:13	
2,4,6-Tribromophenol (S)	%	72	40-125	05/27/15 08:13	
2-Fluorobiphenyl (S)	%	60	51-125	05/27/15 08:13	
2-Fluorophenol (S)	%	51	45-125	05/27/15 08:13	
Nitrobenzene-d5 (S)	%	50	34-125	05/27/15 08:13	
p-Terphenyl-d14 (S)	%	78	55-125	05/27/15 08:13	
Phenol-d6 (S)	%	58	44-125	05/27/15 08:13	

LABORATORY CONTROL SAMPLE: 1976012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1280	77	41-125	
1,2-Dichlorobenzene	ug/kg	1670	1230	74	38-125	
1,2-Diphenylhydrazine	ug/kg	1670	1340	81	58-125	
1,3-Dichlorobenzene	ug/kg	1670	1230	74	36-125	
1,4-Dichlorobenzene	ug/kg	1670	1250	75	36-125	
2,4,5-Trichlorophenol	ug/kg	1670	1440	86	56-125	
2,4,6-Trichlorophenol	ug/kg	1670	1400	84	57-125	
2,4-Dichlorophenol	ug/kg	1670	1340	81	51-125	
2,4-Dimethylphenol	ug/kg	1670	1320	79	48-125	
2,4-Dinitrophenol	ug/kg	1670	1020	61	30-125	
2,4-Dinitrotoluene	ug/kg	1670	1350	81	58-125	
2,6-Dinitrotoluene	ug/kg	1670	1400	84	58-125	
2-Chloronaphthalene	ug/kg	1670	1350	81	53-125	
2-Chlorophenol	ug/kg	1670	1280	77	44-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1350	81	48-125	
2-Nitroaniline	ug/kg	1670	1380	83	58-125	
2-Nitrophenol	ug/kg	1670	1310	78	43-125	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1350	81	53-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1120	67	42-125	
3-Nitroaniline	ug/kg	1670	1260	75	47-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1200J	72	38-125	
4-Bromophenylphenyl ether	ug/kg	1670	1460	88	59-125	
4-Chloro-3-methylphenol	ug/kg	1670	1400	84	58-125	
4-Chloroaniline	ug/kg	1670	1080	65	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1410	85	59-125	
4-Nitroaniline	ug/kg	1670	1330	80	54-125	
4-Nitrophenol	ug/kg	1670	1290	77	53-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

LABORATORY CONTROL SAMPLE: 1976012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
bis(2-Chloroethoxy)methane	ug/kg	1670	1330	80	48-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1270	76	39-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1260	75	33-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1450	87	61-125	
Butylbenzylphthalate	ug/kg	1670	1390	84	60-125	
Carbazole	ug/kg	1670	1430	86	59-125	
Di-n-butylphthalate	ug/kg	1670	1410	85	61-125	
Di-n-octylphthalate	ug/kg	1670	1400	84	60-125	
Dibenzofuran	ug/kg	1670	1370	82	58-125	
Diethylphthalate	ug/kg	1670	1360	81	60-125	
Dimethylphthalate	ug/kg	1670	1410	85	60-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1320	79	38-125	
Hexachlorobenzene	ug/kg	1670	1460	87	57-125	
Hexachloroethane	ug/kg	1670	1230	74	54-125	
Isophorone	ug/kg	1670	1320	79	52-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1300	78	48-125	
N-Nitrosodimethylamine	ug/kg	1670	1250	75	31-125	
N-Nitrosodiphenylamine	ug/kg	1670	1420	85	59-125	
Nitrobenzene	ug/kg	1670	1300	78	46-125	
Pentachlorophenol	ug/kg	1670	1380	83	47-125	
Phenol	ug/kg	1670	1320	79	48-125	
2,4,6-Tribromophenol (S)	%			82	40-125	
2-Fluorobiphenyl (S)	%			73	51-125	
2-Fluorophenol (S)	%			59	45-125	
Nitrobenzene-d5 (S)	%			58	34-125	
p-Terphenyl-d14 (S)	%			84	55-125	
Phenol-d6 (S)	%			67	44-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1976013 1976014

Parameter	Units	10307164001		MSD		MS		MSD		% Rec Limits	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
1,2,4-Trichlorobenzene	ug/kg	<0.34 mg/kg	1710	1710	1240	1250	72	73	43-125	1	30	
1,2-Dichlorobenzene	ug/kg	<0.34 mg/kg	1710	1710	1130	1150	66	67	36-125	2	30	
1,2-Diphenylhydrazine	ug/kg	<0.34 mg/kg	1710	1710	1330	1400	78	81	30-125	4	30	
1,3-Dichlorobenzene	ug/kg	<0.34 mg/kg	1710	1710	1100	1160	64	68	34-125	6	30	
1,4-Dichlorobenzene	ug/kg	<0.34 mg/kg	1710	1710	1120	1150	65	67	33-125	3	30	
2,4,5-Trichlorophenol	ug/kg	<0.34 mg/kg	1710	1710	1360	1350	79	79	30-141	1	30	
2,4,6-Trichlorophenol	ug/kg	<0.34 mg/kg	1710	1710	1350	1380	79	80	30-143	2	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

Parameter	Units	1976013		1976014		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		10307164001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
2,4-Dichlorophenol	ug/kg	<0.34 mg/kg	1710	1710	1390	1370	81	80	30-139	2	30		
2,4-Dimethylphenol	ug/kg	<0.34 mg/kg	1710	1710	1240	1210	72	71	47-125	2	30		
2,4-Dinitrophenol	ug/kg	<0.34 mg/kg	1710	1710	645	610	38	36	30-125	6	30		
2,4-Dinitrotoluene	ug/kg	<0.34 mg/kg	1710	1710	1380	1460	81	85	50-125	6	30		
2,6-Dinitrotoluene	ug/kg	<0.34 mg/kg	1710	1710	1350	1430	79	83	48-125	6	30		
2-Chloronaphthalene	ug/kg	<0.34 mg/kg	1710	1710	1380	1360	81	79	49-125	2	30		
2-Chlorophenol	ug/kg	<0.34 mg/kg	1710	1710	1230	1240	72	72	30-125	0	30		
2-Methylphenol(o-Cresol)	ug/kg	<0.34 mg/kg	1710	1710	1270	1270	74	74	43-125	0	30		
2-Nitroaniline	ug/kg	<0.34 mg/kg	1710	1710	1380	1430	80	84	57-125	4	30		
2-Nitrophenol	ug/kg	<0.34 mg/kg	1710	1710	1290	1240	75	72	30-150	4	30		
3&4-Methylphenol(m&p Cresol)	ug/kg	<0.68 mg/kg	1710	1710	1310	1320	77	77	51-125	1	30		
3,3'-Dichlorobenzidine	ug/kg	<0.34 mg/kg	1710	1710	1470	1560	86	91	30-132	5	30		
3-Nitroaniline	ug/kg	<0.34 mg/kg	1710	1710	1020	1080	60	63	30-132	5	30		
4,6-Dinitro-2-methylphenol	ug/kg	<1.8 mg/kg	1710	1710	934J	961J	55	56	30-130		30		
4-Bromophenylphenyl ether	ug/kg	<0.34 mg/kg	1710	1710	1450	1490	85	87	57-125	3	30		
4-Chloro-3-methylphenol	ug/kg	<0.34 mg/kg	1710	1710	1330	1340	78	78	30-139	1	30		
4-Chloroaniline	ug/kg	<0.34 mg/kg	1710	1710	1060	1080	62	63	30-125	2	30		
4-Chlorophenylphenyl ether	ug/kg	<0.34 mg/kg	1710	1710	1390	1430	81	83	30-130	2	30		
4-Nitroaniline	ug/kg	<0.34 mg/kg	1710	1710	1210	1240	71	72	30-150	3	30		
4-Nitrophenol	ug/kg	<0.34 mg/kg	1710	1710	1250	1300	73	76	30-145	4	30		
bis(2-Chloroethoxy)methane	ug/kg	<0.34 mg/kg	1710	1710	1330	1280	78	75	46-125	4	30		
bis(2-Chloroethyl) ether	ug/kg	<0.34 mg/kg	1710	1710	1200	1190	70	70	34-125	1	30		
bis(2-Chloroisopropyl) ether	ug/kg	<0.34 mg/kg	1710	1710	1230	1260	72	74	33-125	3	30		
bis(2-Ethylhexyl)phthalate	ug/kg	<0.34 mg/kg	1710	1710	1420	1510	83	88	60-125	6	30		
Butylbenzylphthalate	ug/kg	<0.34 mg/kg	1710	1710	1400	1440	81	84	55-125	3	30		
Carbazole	ug/kg	<0.34 mg/kg	1710	1710	1360	1390	79	81	56-125	2	30		
Di-n-butylphthalate	ug/kg	<0.34 mg/kg	1710	1710	1450	1490	84	87	58-125	3	30		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

Parameter	Units	1976013		1976014		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		10307164001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Di-n-octylphthalate	ug/kg	<0.34 mg/kg	1710	1710	1410	1460	82	85	59-125	3	30	
Dibenzofuran	ug/kg	<0.34 mg/kg	1710	1710	1390	1420	81	83	57-125	2	30	
Diethylphthalate	ug/kg	<0.34 mg/kg	1710	1710	1390	1450	81	85	58-125	4	30	
Dimethylphthalate	ug/kg	<0.34 mg/kg	1710	1710	1380	1450	80	84	59-125	5	30	
Hexachloro-1,3-butadiene	ug/kg	<0.34 mg/kg	1710	1710	1220	1250	71	73	39-125	3	30	
Hexachlorobenzene	ug/kg	<0.34 mg/kg	1710	1710	1440	1530	84	89	55-125	5	30	
Hexachloroethane	ug/kg	<0.34 mg/kg	1710	1710	909	968	53	56	30-125	6	30	
Isophorone	ug/kg	<0.34 mg/kg	1710	1710	1350	1340	79	78	49-125	1	30	
N-Nitroso-di-n-propylamine	ug/kg	<0.34 mg/kg	1710	1710	1250	1270	73	74	30-140	1	30	
N-Nitrosodimethylamine	ug/kg	<0.34 mg/kg	1710	1710	1120	1100	66	64	30-125	2	30	
N-Nitrosodiphenylamine	ug/kg	<0.34 mg/kg	1710	1710	1420	1430	83	84	57-125	1	30	
Nitrobenzene	ug/kg	<0.34 mg/kg	1710	1710	1240	1220	73	71	30-139	2	30	
Pentachlorophenol	ug/kg	<0.69 mg/kg	1710	1710	955	956	56	56	30-148	0	30	
Phenol	ug/kg	<0.34 mg/kg	1710	1710	1280	1230	75	72	48-125	4	30	
2,4,6-Tribromophenol (S)	%.						77	80	40-125			
2-Fluorobiphenyl (S)	%.						71	70	51-125			
2-Fluorophenol (S)	%.						55	50	45-125			
Nitrobenzene-d5 (S)	%.						51	47	34-125			
p-Terphenyl-d14 (S)	%.						82	85	55-125			
Phenol-d6 (S)	%.						66	60	44-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

QC Batch: OEXT/29264 Analysis Method: EPA 8270D by SIM  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV  
 Associated Lab Samples: 10307123001, 10307123002, 10307123003, 10307123004, 10307123005, 10307123006, 10307123007, 10307123008

METHOD BLANK: 1973327 Matrix: Solid  
 Associated Lab Samples: 10307123001, 10307123002, 10307123003, 10307123004, 10307123005, 10307123006, 10307123007, 10307123008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	10.0	05/23/15 16:18	
2-Chloronaphthalene	ug/kg	ND	10.0	05/23/15 16:18	
2-Methylnaphthalene	ug/kg	ND	10.0	05/23/15 16:18	
Acenaphthene	ug/kg	ND	10.0	05/23/15 16:18	
Acenaphthylene	ug/kg	ND	10.0	05/23/15 16:18	
Anthracene	ug/kg	ND	10.0	05/23/15 16:18	
Benzo(a)anthracene	ug/kg	ND	10.0	05/23/15 16:18	
Benzo(a)pyrene	ug/kg	ND	10.0	05/23/15 16:18	
Benzo(b)fluoranthene	ug/kg	ND	10.0	05/23/15 16:18	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	05/23/15 16:18	
Benzo(k)fluoranthene	ug/kg	ND	10.0	05/23/15 16:18	
Chrysene	ug/kg	ND	10.0	05/23/15 16:18	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	05/23/15 16:18	
Fluoranthene	ug/kg	ND	10.0	05/23/15 16:18	
Fluorene	ug/kg	ND	10.0	05/23/15 16:18	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	05/23/15 16:18	
Naphthalene	ug/kg	ND	10.0	05/23/15 16:18	
Phenanthrene	ug/kg	ND	10.0	05/23/15 16:18	
Pyrene	ug/kg	ND	10.0	05/23/15 16:18	
2-Fluorobiphenyl (S)	%	63	55-125	05/23/15 16:18	
p-Terphenyl-d14 (S)	%	90	30-150	05/23/15 16:18	

LABORATORY CONTROL SAMPLE: 1973328

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	33.3	25.1	75	45-125	
2-Chloronaphthalene	ug/kg	33.3	23.6	71	70-130	
2-Methylnaphthalene	ug/kg	33.3	25.0	75	50-125	
Acenaphthene	ug/kg	33.3	24.9	75	53-125	
Acenaphthylene	ug/kg	33.3	25.1	75	53-125	
Anthracene	ug/kg	33.3	28.0	84	61-125	
Benzo(a)anthracene	ug/kg	33.3	27.2	82	62-125	
Benzo(a)pyrene	ug/kg	33.3	32.1	96	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	28.5	85	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	29.0	87	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	33.1	99	61-125	
Chrysene	ug/kg	33.3	28.3	85	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	29.5	88	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307123

LABORATORY CONTROL SAMPLE: 1973328

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoranthene	ug/kg	33.3	26.6	80	64-125	
Fluorene	ug/kg	33.3	26.0	78	57-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	28.5	86	58-125	
Naphthalene	ug/kg	33.3	24.2	72	52-125	
Phenanthrene	ug/kg	33.3	24.1	72	60-125	
Pyrene	ug/kg	33.3	29.0	87	63-125	
2-Fluorobiphenyl (S)	%.			69	55-125	
p-Terphenyl-d14 (S)	%.			88	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1973329 1973330

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10306956001 Result	Spike Conc.	Spike Conc.	MS Result						
1-Methylnaphthalene	ug/kg	ND	36	36	51J	78.3	76	152	30-125	30	M1
2-Chloronaphthalene	ug/kg	ND	36	36	26.3J	26.1J	73	73	30-129	30	
2-Methylnaphthalene	ug/kg	ND	36	36	32.2J	34.8J	90	97	41-125	30	
Acenaphthene	ug/kg	ND	36	36	30.2J	32.7J	84	91	39-125	30	
Acenaphthylene	ug/kg	ND	36	36	31.8J	33.3J	82	86	30-150	30	
Anthracene	ug/kg	ND	36	36	32.9J	32.8J	91	91	30-150	30	
Benzo(a)anthracene	ug/kg	ND	36	36	45.2J	52.9J	126	147	30-150	30	
Benzo(a)pyrene	ug/kg	ND	36	36	52.7J	78.2	146	217	30-150	30	M1
Benzo(b)fluoranthene	ug/kg	ND	36	36	54.8	86.5	152	240	30-150	45	30 M1,R1
Benzo(g,h,i)perylene	ug/kg	ND	36	36	54.6	82.3	152	229	30-150	41	30 M1,R1
Benzo(k)fluoranthene	ug/kg	ND	36	36	46.9J	53.6J	130	149	30-150	30	
Chrysene	ug/kg	ND	36	36	46.6J	66.2	67	121	30-150	30	
Dibenz(a,h)anthracene	ug/kg	ND	36	36	33.2J	35.3J	92	98	30-150	30	
Fluoranthene	ug/kg	ND	36	36	55.5	85.0	81	163	30-150	42	30 M1,R1
Fluorene	ug/kg	ND	36	36	30.5J	31.3J	79	81	30-146	30	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	36	36	42J	56.1	117	156	30-150	30	M1
Naphthalene	ug/kg	ND	36	36	33.6J	38.9J	93	108	30-131	30	
Phenanthrene	ug/kg	ND	36	36	33.5J	44J	71	100	30-150	30	
Pyrene	ug/kg	54.5	36	36	79.9	124	70	192	30-150	43	30 M1,R1
2-Fluorobiphenyl (S)	%.						77	72	55-125		D3
p-Terphenyl-d14 (S)	%.						75	65	30-150		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

QC Batch: OEXT/29289

Analysis Method: EPA 8270D by SIM

QC Batch Method: EPA 3550

Analysis Description: 8270D Solid PAH by SIM MSSV

Associated Lab Samples: 10307123009, 10307123010

METHOD BLANK: 1975617

Matrix: Solid

Associated Lab Samples: 10307123009, 10307123010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	10.0	05/27/15 19:23	
2-Chloronaphthalene	ug/kg	ND	10.0	05/27/15 19:23	
2-Methylnaphthalene	ug/kg	ND	10.0	05/27/15 19:23	
Acenaphthene	ug/kg	ND	10.0	05/27/15 19:23	
Acenaphthylene	ug/kg	ND	10.0	05/27/15 19:23	
Anthracene	ug/kg	ND	10.0	05/27/15 19:23	
Benzo(a)anthracene	ug/kg	ND	10.0	05/27/15 19:23	
Benzo(a)pyrene	ug/kg	ND	10.0	05/27/15 19:23	
Benzo(b)fluoranthene	ug/kg	ND	10.0	05/27/15 19:23	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	05/27/15 19:23	
Benzo(k)fluoranthene	ug/kg	ND	10.0	05/27/15 19:23	
Chrysene	ug/kg	ND	10.0	05/27/15 19:23	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	05/27/15 19:23	
Fluoranthene	ug/kg	ND	10.0	05/27/15 19:23	
Fluorene	ug/kg	ND	10.0	05/27/15 19:23	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	05/27/15 19:23	
Naphthalene	ug/kg	ND	10.0	05/27/15 19:23	
Phenanthrene	ug/kg	ND	10.0	05/27/15 19:23	
Pyrene	ug/kg	ND	10.0	05/27/15 19:23	
2-Fluorobiphenyl (S)	%	63	55-125	05/27/15 19:23	
p-Terphenyl-d14 (S)	%	73	30-150	05/27/15 19:23	

LABORATORY CONTROL SAMPLE: 1975618

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	33.3	23.1	69	45-125	
2-Chloronaphthalene	ug/kg	33.3	20.7	62	70-130	L0
2-Methylnaphthalene	ug/kg	33.3	21.2	64	50-125	
Acenaphthene	ug/kg	33.3	22.5	68	53-125	
Acenaphthylene	ug/kg	33.3	24.7	74	53-125	
Anthracene	ug/kg	33.3	27.4	82	61-125	
Benzo(a)anthracene	ug/kg	33.3	29.6	89	62-125	
Benzo(a)pyrene	ug/kg	33.3	33.7	101	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	32.1	96	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	34.0	102	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	32.7	98	61-125	
Chrysene	ug/kg	33.3	28.2	85	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	33.8	101	59-125	
Fluoranthene	ug/kg	33.3	33.2	100	64-125	
Fluorene	ug/kg	33.3	27.2	82	57-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

LABORATORY CONTROL SAMPLE: 1975618

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	33.0	99	58-125	
Naphthalene	ug/kg	33.3	19.9	60	52-125	
Phenanthrene	ug/kg	33.3	21.4	64	60-125	
Pyrene	ug/kg	33.3	27.5	83	63-125	
2-Fluorobiphenyl (S)	%			68	55-125	
p-Terphenyl-d14 (S)	%			72	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1975619 1975620

Parameter	Units	10306435001		MS		MSD		MS		MSD		% Rec Limits	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
2-Chloronaphthalene	ug/kg	ND	39.3	39.5	12.5J	19J	32	48	30-129		30			
2-Methylnaphthalene	ug/kg	ND	39.3	39.5	15.2J	23.4J	39	59	41-125		30 M6			
Acenaphthene	ug/kg	ND	39.3	39.5	33.2J	50.8J	84	129	39-125		30 M6			
Acenaphthylene	ug/kg	ND	39.3	39.5	49.5J	75.6J	126	191	30-150		30 M6			
Anthracene	ug/kg	ND	39.3	39.5	164J	240	-163	29	30-150		30 M6			
Benzo(a)anthracene	ug/kg	2210	39.3	39.5	1430	2060	-1980	-371	30-150	36	30 M6, R1			
Benzo(a)pyrene	ug/kg	3410	39.3	39.5	2290	3320	-2860	-220	30-150	37	30 M6, R1			
Benzo(b)fluoranthene	ug/kg	5490	39.3	39.5	3610	5450	-4790	-104	30-150	41	30 M6, R1			
Benzo(g,h,i)perylene	ug/kg	3840	39.3	39.5	2570	3690	-3220	-366	30-150	36	30 M6, R1			
Benzo(k)fluoranthene	ug/kg	1920	39.3	39.5	1520	1730	-1000	-466	30-150	13	30 M6			
Chrysene	ug/kg	3530	39.3	39.5	2340	3470	-3030	-141	30-150	39	30 M6, R1			
Dibenz(a,h)anthracene	ug/kg	807	39.3	39.5	544	836	-666	75	30-150	42	30 M6, R1			
Fluoranthene	ug/kg	4460	39.3	39.5	3090	4350	-3480	-266	30-150	34	30 M6, R1			
Fluorene	ug/kg	ND	39.3	39.5	48J	72.5J	122	184	30-146		30 M6			
Indeno(1,2,3-cd)pyrene	ug/kg	3090	39.3	39.5	2080	2990	-2560	-236	30-150	36	30 M6, R1			
Naphthalene	ug/kg	ND	39.3	39.5	20.1J	31.5J	51	80	30-131		30			
Phenanthrene	ug/kg	1050	39.3	39.5	651	965	-1020	-223	30-150	39	30 M6, R1			
Pyrene	ug/kg	3500	39.3	39.5	2400	3440	-2790	-145	30-150	36	30 M6, R1			
2-Fluorobiphenyl (S)	%						35	52	55-125		D3, S4			
p-Terphenyl-d14 (S)	%						36	55	30-150					

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

QC Batch: OEXT/29291 Analysis Method: EPA 8270D by SIM  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV  
 Associated Lab Samples: 10307123011, 10307123012, 10307123013, 10307123014, 10307123015, 10307123016, 10307123017,  
 10307123018, 10307123019, 10307123020, 10307123021

METHOD BLANK: 1975816 Matrix: Solid  
 Associated Lab Samples: 10307123011, 10307123012, 10307123013, 10307123014, 10307123015, 10307123016, 10307123017,  
 10307123018, 10307123019, 10307123020, 10307123021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	10.0	05/27/15 07:57	
2-Chloronaphthalene	ug/kg	ND	10.0	05/27/15 07:57	
2-Methylnaphthalene	ug/kg	ND	10.0	05/27/15 07:57	
Acenaphthene	ug/kg	ND	10.0	05/27/15 07:57	
Acenaphthylene	ug/kg	ND	10.0	05/27/15 07:57	
Anthracene	ug/kg	ND	10.0	05/27/15 07:57	
Benzo(a)anthracene	ug/kg	ND	10.0	05/27/15 07:57	
Benzo(a)pyrene	ug/kg	ND	10.0	05/27/15 07:57	
Benzo(b)fluoranthene	ug/kg	ND	10.0	05/27/15 07:57	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	05/27/15 07:57	
Benzo(k)fluoranthene	ug/kg	ND	10.0	05/27/15 07:57	
Chrysene	ug/kg	ND	10.0	05/27/15 07:57	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	05/27/15 07:57	
Fluoranthene	ug/kg	ND	10.0	05/27/15 07:57	
Fluorene	ug/kg	ND	10.0	05/27/15 07:57	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	05/27/15 07:57	
Naphthalene	ug/kg	ND	10.0	05/27/15 07:57	
Phenanthrene	ug/kg	ND	10.0	05/27/15 07:57	
Pyrene	ug/kg	ND	10.0	05/27/15 07:57	
2-Fluorobiphenyl (S)	%	60	55-125	05/27/15 07:57	
p-Terphenyl-d14 (S)	%	100	30-150	05/27/15 07:57	

LABORATORY CONTROL SAMPLE: 1975817

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	33.3	20.4	61	45-125	
2-Chloronaphthalene	ug/kg	33.3	21.6	65	70-130	L0
2-Methylnaphthalene	ug/kg	33.3	21.4	64	50-125	
Acenaphthene	ug/kg	33.3	22.8	68	53-125	
Acenaphthylene	ug/kg	33.3	22.3	67	53-125	
Anthracene	ug/kg	33.3	26.7	80	61-125	
Benzo(a)anthracene	ug/kg	33.3	30.0	90	62-125	
Benzo(a)pyrene	ug/kg	33.3	29.6	89	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	31.3	94	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	27.7	83	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	32.3	97	61-125	
Chrysene	ug/kg	33.3	28.7	86	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	26.5	80	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

LABORATORY CONTROL SAMPLE: 1975817

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoranthene	ug/kg	33.3	29.8	89	64-125	
Fluorene	ug/kg	33.3	24.5	73	57-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	27.0	81	58-125	
Naphthalene	ug/kg	33.3	20.5	62	52-125	
Phenanthrene	ug/kg	33.3	25.8	77	60-125	
Pyrene	ug/kg	33.3	30.6	92	63-125	
2-Fluorobiphenyl (S)	%			77	55-125	
p-Terphenyl-d14 (S)	%			102	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1975818 1975819

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		1246999001 Result	Spike Conc.	Spike Conc.	MSD Result							
1-Methylnaphthalene	ug/kg	ND	34.2	34.3	17.8	17.9	52	52	30-125	1	30	
2-Chloronaphthalene	ug/kg	ND	34.2	34.3	18.6	18.2	54	53	30-129	2	30	
2-Methylnaphthalene	ug/kg	ND	34.2	34.3	18.9	18.8	55	55	41-125	0	30	
Acenaphthene	ug/kg	ND	34.2	34.3	20.9	20.6	61	60	39-125	1	30	
Acenaphthylene	ug/kg	ND	34.2	34.3	20.0	19.7	58	57	30-150	2	30	
Anthracene	ug/kg	ND	34.2	34.3	26.4	24.8	77	72	30-150	6	30	
Benzo(a)anthracene	ug/kg	ND	34.2	34.3	28.4	26.0	83	76	30-150	9	30	
Benzo(a)pyrene	ug/kg	ND	34.2	34.3	26.6	24.6	78	72	30-150	8	30	
Benzo(b)fluoranthene	ug/kg	ND	34.2	34.3	29.8	27.0	87	79	30-150	10	30	
Benzo(g,h,i)perylene	ug/kg	ND	34.2	34.3	23.3	22.0	67	63	30-150	5	30	
Benzo(k)fluoranthene	ug/kg	ND	34.2	34.3	29.2	27.4	85	80	30-150	7	30	
Chrysene	ug/kg	ND	34.2	34.3	27.2	25.3	80	74	30-150	7	30	
Dibenz(a,h)anthracene	ug/kg	ND	34.2	34.3	22.7	22.2	65	63	30-150	3	30	
Fluoranthene	ug/kg	ND	34.2	34.3	28.2	27.3	82	80	30-150	3	30	
Fluorene	ug/kg	ND	34.2	34.3	23.7	23.2	69	68	30-146	2	30	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	34.2	34.3	22.7	21.2	65	60	30-150	7	30	
Naphthalene	ug/kg	ND	34.2	34.3	18.8	18.8	55	55	30-131	0	30	
Phenanthrene	ug/kg	ND	34.2	34.3	25.6	24.4	75	71	30-150	5	30	
Pyrene	ug/kg	ND	34.2	34.3	29.8	27.8	87	81	30-150	7	30	
2-Fluorobiphenyl (S)	%						65	58	55-125			
p-Terphenyl-d14 (S)	%						98	87	30-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

QC Batch: OEXT/29270 Analysis Method: NWTPH-Dx  
 QC Batch Method: EPA 3550 Analysis Description: NWTPH-Dx GCS  
 Associated Lab Samples: 10307123001, 10307123002, 10307123003, 10307123004, 10307123005, 10307123006, 10307123007, 10307123008

METHOD BLANK: 1973966 Matrix: Solid  
 Associated Lab Samples: 10307123001, 10307123002, 10307123003, 10307123004, 10307123005, 10307123006, 10307123007, 10307123008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	05/26/15 09:46	
Motor Oil Range	mg/kg	ND	10.0	05/26/15 09:46	
n-Triacontane (S)	%.	104	50-150	05/26/15 09:46	
o-Terphenyl (S)	%.	104	50-150	05/26/15 09:46	

LABORATORY CONTROL SAMPLE: 1973967

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range	mg/kg	50	39.0	78	50-150	
Motor Oil Range	mg/kg	50	61.5	123	50-150	
n-Triacontane (S)	%.			102	50-150	
o-Terphenyl (S)	%.			96	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1973968 1973969

Parameter	Units	10307123001		1973969		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Diesel Fuel Range	mg/kg	ND	63.9	63.3	53.0	50.2	83	79	50-150	5	30
Motor Oil Range	mg/kg	ND	63.9	63.3	77.5	78.5	117	119	50-150	1	30
n-Triacontane (S)	%.						107	105	50-150		
o-Terphenyl (S)	%.						80	103	50-150		

SAMPLE DUPLICATE: 1974237

Parameter	Units	10306457010 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/kg	<0.98	ND		30	
Motor Oil Range	mg/kg	3.4J	2.4J		30	
n-Triacontane (S)	%.	113	112	0		
o-Terphenyl (S)	%.	115	101	12		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



**QUALITY CONTROL DATA**

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

QC Batch: OEXT/29299 Analysis Method: NWTPH-Dx  
 QC Batch Method: EPA 3550 Analysis Description: NWTPH-Dx GCS  
 Associated Lab Samples: 10307123009, 10307123010, 10307123011, 10307123012, 10307123013, 10307123014, 10307123015, 10307123016, 10307123017, 10307123018, 10307123019, 10307123020

METHOD BLANK: 1976024 Matrix: Solid  
 Associated Lab Samples: 10307123009, 10307123010, 10307123011, 10307123012, 10307123013, 10307123014, 10307123015, 10307123016, 10307123017, 10307123018, 10307123019, 10307123020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	06/02/15 11:19	
Motor Oil Range	mg/kg	ND	10.0	06/02/15 11:19	
n-Triacontane (S)	%	104	50-150	06/02/15 11:19	
o-Terphenyl (S)	%	115	50-150	06/02/15 11:19	

LABORATORY CONTROL SAMPLE: 1976025

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range	mg/kg	50	46.0	92	50-150	
Motor Oil Range	mg/kg	50	56.7	113	50-150	
n-Triacontane (S)	%			98	50-150	
o-Terphenyl (S)	%			113	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1976026 1976027

Parameter	Units	10307123009		1976027		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Diesel Fuel Range	mg/kg	ND	72.2	72.2	56.3	58.8	77	81	50-150	4	30
Motor Oil Range	mg/kg	ND	72.2	72.2	80.2	77.7	109	106	50-150	3	30
n-Triacontane (S)	%						111	106	50-150		
o-Terphenyl (S)	%						108	98	50-150		

SAMPLE DUPLICATE: 1976028

Parameter	Units	10307123020 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/kg	ND	ND		30	
Motor Oil Range	mg/kg	ND	ND		30	
n-Triacontane (S)	%	122	114	6		
o-Terphenyl (S)	%	122	94	26		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

QC Batch:	OEXT/29390	Analysis Method:	NWTPH-Dx
QC Batch Method:	EPA 3550	Analysis Description:	NWTPH-Dx GCS
Associated Lab Samples:	10307123021		

METHOD BLANK: 1981735 Matrix: Solid

Associated Lab Samples: 10307123021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range SG	mg/kg	ND	15.0	06/04/15 10:26	
Motor Oil Range SG	mg/kg	ND	10.0	06/04/15 10:26	
n-Triacontane (S)	%.	96	50-150	06/04/15 10:26	
o-Terphenyl (S)	%.	81	50-150	06/04/15 10:26	

LABORATORY CONTROL SAMPLE: 1981736

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range SG	mg/kg	50	48.8	98	50-150	
Motor Oil Range SG	mg/kg	50	51.7	103	50-150	
n-Triacontane (S)	%.			92	50-150	
o-Terphenyl (S)	%.			76	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981737 1981738

Parameter	Units	10307585005 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result						
Diesel Fuel Range SG	mg/kg	ND	60.1	59.5	58.4	58.0	92	92	50-150	1	30	
Motor Oil Range SG	mg/kg	ND	60.1	59.5	66.4	66.8	99	101	50-150	1	30	
n-Triacontane (S)	%.						95	94	50-150			
o-Terphenyl (S)	%.						81	78	50-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## QUALIFIERS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

### ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

H2 Extraction or preparation was conducted outside of the recognized method holding time.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

P2 Re-extraction or re-analysis could not be performed due to insufficient sample amount.

R1 RPD value was outside control limits.

S0 Surrogate recovery outside laboratory control limits.

S4 Surrogate recovery not evaluated against control limits due to sample dilution.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307123

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10307123001	DP-1 (12-13)	EPA 3550	OEXT/29270	NWTPH-Dx	GCSV/15764
10307123002	DP-2 (12-12.5)	EPA 3550	OEXT/29270	NWTPH-Dx	GCSV/15764
10307123003	DP-2 (12.5-13.5)	EPA 3550	OEXT/29270	NWTPH-Dx	GCSV/15764
10307123004	DP-3 (12-13)	EPA 3550	OEXT/29270	NWTPH-Dx	GCSV/15764
10307123005	DP-3 (13-14)	EPA 3550	OEXT/29270	NWTPH-Dx	GCSV/15764
10307123006	DP-4 (16.5-17.5)	EPA 3550	OEXT/29270	NWTPH-Dx	GCSV/15764
10307123007	DP-5 (16-16.5)	EPA 3550	OEXT/29270	NWTPH-Dx	GCSV/15764
10307123008	DP-5 (16.5-17)	EPA 3550	OEXT/29270	NWTPH-Dx	GCSV/15764
10307123009	DP-6 (12-13)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123010	DP-6 (13-14)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123011	DP-7 (12.5-13.5)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123012	DP-7 (13.5-14.5)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123013	DP-8 (20-20.5)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123014	DP-8 (20.5-21)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123015	DP-11 (12.5-13.5)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123016	DP-11 (13.5-14.5)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123017	DP-13 (12-13)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123018	DP-13 (13-14)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123019	DP-17 (16.5-17.5)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123020	DP-17 (16-16.5)	EPA 3550	OEXT/29299	NWTPH-Dx	GCSV/15828
10307123021	DP-4 (16-16.5)	EPA 3550	OEXT/29390	NWTPH-Dx	GCSV/15842
10307123001	DP-1 (12-13)	ASTM D2974	MPRP/54876		
10307123002	DP-2 (12-12.5)	ASTM D2974	MPRP/54876		
10307123003	DP-2 (12.5-13.5)	ASTM D2974	MPRP/54876		
10307123004	DP-3 (12-13)	ASTM D2974	MPRP/54876		
10307123005	DP-3 (13-14)	ASTM D2974	MPRP/54876		
10307123006	DP-4 (16.5-17.5)	ASTM D2974	MPRP/54876		
10307123007	DP-5 (16-16.5)	ASTM D2974	MPRP/54876		
10307123008	DP-5 (16.5-17)	ASTM D2974	MPRP/54876		
10307123009	DP-6 (12-13)	ASTM D2974	MPRP/54876		
10307123010	DP-6 (13-14)	ASTM D2974	MPRP/54904		
10307123011	DP-7 (12.5-13.5)	ASTM D2974	MPRP/54904		
10307123012	DP-7 (13.5-14.5)	ASTM D2974	MPRP/54904		
10307123013	DP-8 (20-20.5)	ASTM D2974	MPRP/54904		
10307123014	DP-8 (20.5-21)	ASTM D2974	MPRP/54904		
10307123015	DP-11 (12.5-13.5)	ASTM D2974	MPRP/54904		
10307123016	DP-11 (13.5-14.5)	ASTM D2974	MPRP/54904		
10307123017	DP-13 (12-13)	ASTM D2974	MPRP/54904		
10307123018	DP-13 (13-14)	ASTM D2974	MPRP/54904		
10307123019	DP-17 (16.5-17.5)	ASTM D2974	MPRP/54904		
10307123020	DP-17 (16-16.5)	ASTM D2974	MPRP/54904		
10307123021	DP-4 (16-16.5)	ASTM D2974	MPRP/54904		
10307123001	DP-1 (12-13)	EPA 3550	OEXT/29267	EPA 8270D	MSSV/12410
10307123002	DP-2 (12-12.5)	EPA 3550	OEXT/29267	EPA 8270D	MSSV/12410
10307123003	DP-2 (12.5-13.5)	EPA 3550	OEXT/29267	EPA 8270D	MSSV/12410
10307123004	DP-3 (12-13)	EPA 3550	OEXT/29267	EPA 8270D	MSSV/12410

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307123

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10307123005	DP-3 (13-14)	EPA 3550	OEXT/29267	EPA 8270D	MSSV/12410
10307123006	DP-4 (16.5-17.5)	EPA 3550	OEXT/29267	EPA 8270D	MSSV/12410
10307123007	DP-5 (16-16.5)	EPA 3550	OEXT/29267	EPA 8270D	MSSV/12410
10307123008	DP-5 (16.5-17)	EPA 3550	OEXT/29267	EPA 8270D	MSSV/12410
10307123009	DP-6 (12-13)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123010	DP-6 (13-14)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123011	DP-7 (12.5-13.5)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123012	DP-7 (13.5-14.5)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123013	DP-8 (20-20.5)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123014	DP-8 (20.5-21)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123015	DP-11 (12.5-13.5)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123016	DP-11 (13.5-14.5)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123017	DP-13 (12-13)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123018	DP-13 (13-14)	EPA 3550	OEXT/29287	EPA 8270D	MSSV/12401
10307123019	DP-17 (16.5-17.5)	EPA 3550	OEXT/29295	EPA 8270D	MSSV/12397
10307123020	DP-17 (16-16.5)	EPA 3550	OEXT/29295	EPA 8270D	MSSV/12397
10307123021	DP-4 (16-16.5)	EPA 3550	OEXT/29295	EPA 8270D	MSSV/12397
10307123001	DP-1 (12-13)	EPA 3550	OEXT/29264	EPA 8270D by SIM	MSSV/12380
10307123002	DP-2 (12-12.5)	EPA 3550	OEXT/29264	EPA 8270D by SIM	MSSV/12380
10307123003	DP-2 (12.5-13.5)	EPA 3550	OEXT/29264	EPA 8270D by SIM	MSSV/12380
10307123004	DP-3 (12-13)	EPA 3550	OEXT/29264	EPA 8270D by SIM	MSSV/12380
10307123005	DP-3 (13-14)	EPA 3550	OEXT/29264	EPA 8270D by SIM	MSSV/12380
10307123006	DP-4 (16.5-17.5)	EPA 3550	OEXT/29264	EPA 8270D by SIM	MSSV/12380
10307123007	DP-5 (16-16.5)	EPA 3550	OEXT/29264	EPA 8270D by SIM	MSSV/12380
10307123008	DP-5 (16.5-17)	EPA 3550	OEXT/29264	EPA 8270D by SIM	MSSV/12380
10307123009	DP-6 (12-13)	EPA 3550	OEXT/29289	EPA 8270D by SIM	MSSV/12404
10307123010	DP-6 (13-14)	EPA 3550	OEXT/29289	EPA 8270D by SIM	MSSV/12404
10307123011	DP-7 (12.5-13.5)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123012	DP-7 (13.5-14.5)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123013	DP-8 (20-20.5)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123014	DP-8 (20.5-21)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123015	DP-11 (12.5-13.5)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123016	DP-11 (13.5-14.5)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123017	DP-13 (12-13)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123018	DP-13 (13-14)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123019	DP-17 (16.5-17.5)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123020	DP-17 (16-16.5)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395
10307123021	DP-4 (16-16.5)	EPA 3550	OEXT/29291	EPA 8270D by SIM	MSSV/12395

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..





# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307123

Page: 1 of 18  
1456688

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		REGULATORY AGENCY	
Company:		Report To:		Attention:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Address:		Copy To:		Company Name:		Site Location	
Email To:		Purchase Order No.:		Address:		STATE:	
Phone:	Fax:	Project Name:		Pace Quote Reference:		Pace Project Manager:	
Requested Due Date/TAT:		Project Number:		Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Residual Chlorine (Y/N)	Face Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol				Other
					DATE	TIME	DATE	TIME													
1	DP-1 (1-2)																				
2	DP-1 (4.5-5.1)																				
3	DP-1 (9-10)																				
4	DP-1 (12-13)																		001		
5	DP-1 (16-17)																				
6	DP-2 (1-2)																				
7	DP-2 (4-5)																				
8	DP-2 (8-9)																				
9	DP-2 (12-15)																		002		
10	DP-2 (13.5-13.5)A																		003		
11	DP-2 (13.5-13.5)B																				
12	DP-2 (16-17)																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	SIGNATURE of SAMPLER:				

Page 86 of 101

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307123

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: 2 of 18	
Company: <i>PROBACORP</i>		Report To: <i>...</i>		Attention: <i>...</i>		1456687	
Address: <i>573 E. 2nd Ave</i>		Copy To: <i>...</i>		Company Name:		REGULATORY AGENCY	
Email To: <i>...</i>		Purchase Order No.:		Address:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Phone: <i>510-267-2025</i> Fax: <i>510-267-2026</i>		Project Name: <i>Colville Post and Site</i>		Pace Quota Reference:		Site Location	
Requested Due Date/TAT: <i>SPJ</i>		Project Number: <i>0504-050-00</i>		Pace Project Manager:		STATE: <i>...</i>	
				Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol				Other
					DATE	TIME	DATE	TIME													
1	DP-3 (2-3)		SL	G	5/11	1200			2	X											
2	DP-3 (8-9)					1215			2												
3	DP-3 (5.5-6.5)					1218			2												
4	DP-3 (12-13) A					1220			1												
5	DP-3 (12-13) B					1320			1											004	
6	DP-3 (13-14) A					1325			1											005	
7	DP-3 (13-14) B					1325			1												
8	DP-3 (16-17)					1230			2												
9	DP-4 (1-2)					1415			2												
10	DP-4 (4-5)					1430			2												
11	DP-4 (12-13)					1430			2												
12	DP-4 (16-16.5)					1440			1						X	X	X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<i>Josh Loc</i>				
SIGNATURE of SAMPLER:	<i>[Signature]</i>				
DATE Signed (MM/DD/YY):		<i>5/17/15</i>			

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307123

Page: 3 of 18  
**1456691**

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		<b>REGULATORY AGENCY</b>	
Company: <i>Face Analytical</i>		Report To: <i>James D. ...</i>		Attention:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER	
Address: <i>533 E. ...</i>		Copy To: <i>...</i>		Company Name:		<input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Email To:		Purchase Order No.:		Address:		Site Location	
Phone: <i>...</i>	Fax: <i>...</i>	Project Name: <i>...</i>		Pace Quote Reference:		STATE: _____	
Requested Due Date/TAT: <i>...</i>		Project Number: <i>...</i>		Pace Project Manager:			
				Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -)	Matrix Codes MATRIX / CODE	MATERIAL CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓ Y/N ↓	Residual Chlorine (Y/N)	Face Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol				Other
					DATE	TIME	DATE	TIME													
1	DP-4 (16.5-17.5) A				5/11	1445			1												
2	DP-4 (16.5-17.5) B					1450			1												
3	DP-4 (21-21)					1450			2												
4	DP-5 (11-21)					1610			2												
5	DP-5 (15-6)					1610			2												
6	DP-5 (18-9)					1615			1												
7	DP-5 (12-13)					1620			1												
8	DP-5 (16-17) A					1620			1						X	X				007	
9	DP-5 (16-17) B					1620			1						X	X				008	
10	DP-5 (20-20)					1840			2												
11	DP-6 (2-3)				5/2	1050			2												
12	DP-6 (4-5)					1100			2												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

<b>SAMPLER NAME AND SIGNATURE</b>			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>John Lee</i>						
SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed (MM/DD/YY): <i>05/17/2005</i>				



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307123

Page: 4 of 18  
1456692

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		REGULATORY AGENCY	
Company:		Report To:		Attention:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Address:		Copy To:		Company Name:		Site Location	
Email To:		Purchase Order No.:		Address:		STATE:	
Phone:	Fax:	Project Name:		Pace Quote Reference:		Pace Project Manager:	
Requested Due Date/TAT:		Project Number:		Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB, C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Face Project No./ Lab I.D.		
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>					Methanol	Other
					DATE	TIME	DATE	TIME														
1	DP-6 (12-13) A		SL	G	5/13	1140			1	X												
2	DP-6 (12-13) B					1140													009			
3	DP-6 (13-14) A					1150													010			
4	DP-6 (13-14) B					1150																
5	DP-6 (16-17)					1210			2													
6	DP-7 (1-2)					0810			2													
7	DP-7 (5-6)					0815			2													
8	DP-7 (8-9)					0820			2													
9	DP-7 (12.5-13.5) A					0830			1													
10	DP-7 (13.5-14.5) B					0830			1					X	X	X			011			
11	DP-7 (13.5-14.5) A					0835			1					X	X	X			012			
12	DP-7 (13.5-14.5) B					0835			1													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>John Lee</i>						
SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed (MM/DD/YY): <i>05/19/15</i>				

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307123

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: 5 of 18	
Company:		Report To:		Attention:		1456686	
Address:		Copy To:		Company Name:		REGULATORY AGENCY	
Email To:		Purchase Order No.:		Address:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Phone:	Fax:	Project Name:		Pace Quote Reference:		Site Location	
Requested Due Date/TAT:		Project Number:		Pace Project Manager:		STATE:	
				Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -)	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.								
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other							
					DATE	TIME	DATE	TIME																					
1	DP-0 (1-2)		SL	G	5/12	09:05			2	X																			
2	DP-8 (5-6)					09:50			2																				
3	DP-8 (16-16.5)					10:10			2																				
4	DP-8 (50-50) A					10:15			2																				
5	DP-8 (50-51) B					10:15			2																				
6	DP-8 (24-25)					10:35			2																				
7	DP-11 (12-3)					12:30			2																				
8	DP-11 (14-5) A					12:30			1																				
9	DP-11 (14-5) B					12:30			1																				
10	DP-11 (9-10)					12:35			2																				
11	DP-11 (12.5-13.5) A					12:45			1																				
12	DP-11 (12.5-13.5) B					12:45			1																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:					
SIGNATURE of SAMPLER:					
DATE Signed (MM/DD/YY):					

Page 90 of 101



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307123

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 6 of 18 <b>1456695</b>	
Company:		Report To:		Attention:		REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Address:		Copy To:		Company Name:			
Email To:		Purchase Order No.:		Address:		Site Location	
Phone: Fax:		Project Name:		Pace Quote Reference:		STATE:	
Requested Due Date/TAT:		Project Number:		Pace Project Manager:			
				Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↑	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-11 (13.5-14.5) A					5/13	1250		1	X									016			
2	DP-11 (12.5-14.5) B						1250		1													
3	DP-11 (14-20)						1300		2													
4	DP-13 (11-21)						1740		2													
5	DP-13 (5-6)						1750		2													
6	DP-13 (8-9)						1755		2													
7	DP-13 (12-13) A						1800		1										017			
8	DP-13 (13-13) B						1800		1										018			
9	DP-13 (13-14) A						1810		1													
10	DP-13 (13-14) B						1810		1													
11	DP-13 (16-17)						1815		2													
12	DP-13 (1-2)						1405		2													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Josh Lee</i>						
SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed (MM/DD/YY): <i>05/14/15</i>				

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307123

Page: 2 of 13  
1456694

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		REGULATORY AGENCY	
Company:		Report To:		Attention:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
Address:		Copy To:		Company Name:		Site Location	
Email To:		Purchase Order No.:		Pace Quote Reference:		STATE:	
Phone:	Fax:	Project Name:		Pace Project Manager:			
Requested Due Date/TAT:		Project Number:		Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-17 (4-5)		SL	G	5/13	4:10			2	X												
2	DP-17 (8-9)					15:10			2													
3	DP-17 (12-12.5)					15:15			1													
4	DP-17 (16-16.5)					15:20			2											019		
5	DP-17 (16.5-17.5)A					15:25			2											020		
6	DP-17 (16.5-17.5)B					15:35			1													
7	DP-17 (20-21)					15:30			2													
8	DP-17 (20-21)					5/13 07:50			2													
9	DP-17 (4-5)					08:10			2													
10	DP-20 (8.5-9.5)					08:10			2													
11	DP-20 (12-13)					08:15			2													
12	DP-20 (20-21)					08:20			2													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	DATE Signed (MM/DD/YY):				
SIGNATURE of SAMPLER:	05/19/15				

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Page 92 of 101

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <u>Geoengineers</u>		Report To: <u>haney @ geoengineers.com</u>		Attention:	
Address: <u>523 E. 2nd Ave</u>		Copy To: <u>jmlee @ geoengineers.com</u>		Company Name: <b>REGULATORY AGENCY</b>	
City: <u>Spartanburg SC 29202</u>		Purchase Order No.:		Address:	
Email To: <u>haney @ geoengineers.com</u>		Project Name: <u>Colville Post and Pole</u>		Pace Quote Reference:	
Phone: <u>804-362-3625</u> Fax: <u>804-362-3626</u>		Project Number: <u>0504-098-00</u>		Pace Project Manager:	
Requested Due Date/TAT: <u>Std</u>				Pace Profile #:	
				Site Location	
				STATE: _____	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓ Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
			COMPOSITE START		COMPOSITE END/GRAB														
			DATE	TIME	DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol				
1	DP-1(1-2)	DW	5/11	0930			2	X										001	
2	DP-1(4.5-5.5)	WT		0946			2											002	
3	DP-1(9-10)	WW		1005			2											003	
4	DP-1(12-13)	P		1040			1							X	X	X		004	
5	DP-1(16-17)	SL		1050			1											005	
6	DP-2(1-2)	OL		1155			2											006	
7	DP-2(4-5)	Oil		1200			2											007	
8	DP-2(8-9)	Wipe		1205			2												
9	DP-2(12-12.5)	Air		1210			1							X	X	X		008	
10	DP-2(12.5-13.5)A	Tissue		1215			1							X	X	X		009	
11	DP-2(12.5-13.5)B	Other		1215			1												
12	DP-2(16-17)			1226			2												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				<u>Bob White / Pace</u>	<u>5/20/15</u>	<u>15:00</u>	<u>22</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>

ORIGINAL	SAMPLER NAME AND SIGNATURE				Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	PRINT Name of SAMPLER: <u>Josh Lee</u>							
	SIGNATURE of SAMPLER: <u>[Signature]</u>		DATE Signed (MM/DD/YY): <u>05/18/15</u>					



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

**Section A**  
Required Client Information:

**Section B**  
Required Project Information:

**Section C**  
Invoice Information:

Page: **2** of **18**

Company: **Geoengineers**  
Address: **523 E. 2nd Ave  
Spokane WA 99202**  
Email To: **jhaney@geoengineers.com**  
Phone: **509-363-3125** Fax: **509-363-3126**  
Requested Due Date/TAT: **Std**

Report To: **jhaney@geoengineers.com**  
Copy To: **jlee@geoengineers.com**  
Purchase Order No.:  
Project Name: **Colville Post and Pole**  
Project Number: **0504-098-00**

Attention: [Redacted]  
Company Name:  
Address:  
Pace Quote Reference:  
Pace Project Manager:  
Pace Profile #:

**1456687**  
**REGULATORY AGENCY**  
 NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER  
Site Location: \_\_\_\_\_  
STATE: \_\_\_\_\_

**Section D**  
Required Client Information

**SAMPLE ID**  
(A-Z, 0-9 / . -)  
Sample IDs MUST BE UNIQUE

**Matrix Codes**  
MATRIX / CODE  
Drinking Water DW  
Water WT  
Waste Water WW  
Product P  
Soil/Solid SL  
Oil OL  
Wipe WP  
Air AR  
Tissue TS  
Other OT

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓	Y/N	Requested Analysis Filtered (Y/N)			
			COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other						
			DATE	TIME	DATE	TIME																
1	SL G		5/11	1200			2	X														
2				1315			2															
3				1310			2															
4				1320			1															
5				1320			1							X	X	X						
6				1325			1							X	X	X						
7				1325			1															
8				1330			2															
9				1415			2															
10				1420			2															
11				1430			2															
12				1440			1							X	X	X						

Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
	010
	011
	012
	013
	014
	015
	016
	017
	018

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				<i>Bob Maly Pace</i>	5/20/15	10:00	22	Y	Y	Y

Page 94 of 101

ORIGINAL

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: *Josh Lee*

SIGNATURE of SAMPLER: *[Signature]*

DATE Signed (MM/DD/YY): *05/19/15*

Temp. in °C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

<b>Section A</b> Required Client Information:	<b>Section B</b> Required Project Information:	<b>Section C</b> Invoice Information:	<b>REGULATORY AGENCY</b>
Company: <b>Geoengineers</b>	Report To: <b>jhoney@geoengineers.com</b>	Attention:	<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____
Address: <b>522 E. 2nd Ave. Spokane WA 99202</b>	Copy To: <b>junior@geoengineers.com</b>	Company Name:	
Email To: <b>jhoney@geoengineers.com</b>	Purchase Order No.:	Address:	<b>Site Location</b>
Phone: <b>509-362-3125</b> Fax: <b>509-363-3126</b>	Project Name: <b>Colville Post and Pole</b>	Pace Quote Reference:	<b>STATE:</b>
Requested Due Date/TAT: <b>Std</b>	Project Number: <b>0504-098-00</b>	Pace Project Manager:	
		Pace Profile #:	

ITEM #	Section D Required Client Information  <b>SAMPLE ID</b> (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE Drinking Water DW Water WT Waste Water WW Product P Soil/Solid SL Oil OL Wipe WP Air AR Tissue TS Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓ Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Face Project No./ Lab I.D.
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other				
					DATE	TIME	DATE	TIME														
1	DP-4 (16.5-17.5) A		SL	G	5/11	1445			1	X												
2	DP-4 (16.5-17.5) B					1455			1													019
3	DP-4 (20-21)					1450			2													020
4	DP-5 (1-2)					1600			2													021
5	DP-5 (5-6)					1610			2													022
6	DP-5 (8-9)					1615			1													023
7	DP-5 (12-13)					1620			1													024
8	DP-5 (16-17) A					1630			1													
9	DP-5 (16-17) B					1630			1						X	X	X					
10	DP-5 (20-21)					1640			2						X	X	X					
11	DP-6 (2-3)				5/12	1050			2													025
12	DP-6 (4-5)					1100			2													026
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS								
								Pat. Wick		Pace		5/20/15 10:00		22		Y Y Y						

ORIGINAL

<b>SAMPLER NAME AND SIGNATURE</b>			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <b>Josh Lee</b>						
SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed (MM/DD/YY): <b>05/19/2015</b>				

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



<b>Section A</b> Required Client Information:	<b>Section B</b> Required Project Information:	<b>Section C</b> Invoice Information:	
Company: <u>Geoengineers</u>	Report To: <u>jhaney@geoengineers.com</u>	Attention:	
Address: <u>523 E. 2nd Ave Spokane WA 99202</u>	Copy To: <u>jlee@geoengineers.com</u>	Company Name:	<b>REGULATORY AGENCY</b> <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____
Email To: <u>jhaney@geoengineers.com</u>	Purchase Order No.:	Address:	
Phone: <u>509-363-3125</u> Fax: <u>509-363-3126</u>	Project Name: <u>Colville Port and Pole</u>	Pace Quote Reference:	
Requested Due Date/TAT: <u>STA</u>	Project Number: <u>0504-098-00</u>	Pace Project Manager:	Site Location:
		Pace Profile #:	STATE: _____

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-6 (12-13) A		SL	G	5/12	1140			1	X											028	
2	DP-6 (12-13) B					1140			1													
3	DP-6 (13-14) A					1150			1													
4	DP-6 (13-14) B					1150			1													029
5	DP-6 (16-17)					1210			2													030
6	DP-7 (1-2)					0810			2													031
7	DP-7 (5-6)					0815			2													032
8	DP-7 (8-9)					0820			2													033
9	DP-7 (12.5-13.5) A					0830			1													034
10	DP-7 (12.5-13.5) B					0830			1						X	X	X					
11	DP-7 (13.5-14.5) A					0835			1						X	X	X					
12	DP-7 (13.5-14.5) B					0835			1													035

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				<i>Bar Walter Pace</i>	5/20/15	6:00	22	Y	Y	Y

Page 96 of 101

ORIGINAL

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Josh Lee

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 05/19/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Page: **5** of **18**  
**1456686**

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <b>Geoengineers</b>		Report To: <b>harry @ geoengineers.com</b>		Attention:	
Address: <b>533 E. 2nd</b>		Copy To: <b>jwlee @ geoengineers.com</b>		Company Name:	
City: <b>Spokane WA 99202</b>		Purchase Order No.:		Address:	
Email To: <b>harry @ geoengineers.com</b>		Project Name: <b>Colville Post and Pole</b>		Face Quote Reference:	
Phone: <b>509-363-3125</b>		Project Number: <b>0504-098-00</b>		Face Project Manager:	
Fax: <b>509-363-3126</b>		Requested Due Date/TAT: <b>Std</b>		Face Profile #:	

**REGULATORY AGENCY**

NPDES  GROUND WATER  DRINKING WATER

UST  RCRA  OTHER \_\_\_\_\_

Site Location \_\_\_\_\_

STATE: \_\_\_\_\_

ITEM #	SAMPLE ID (A-Z, 0-9 /, -)	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.						
					DATE	TIME	DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other					
1	DP-8 (1-3)		SL	G	5/12	0905			2	X																	
2	DP-8 (5-6)					0950			2																		036
3	DP-8 (16-16.5)					1010			1																		037
4	DP-8 (20-21) A					1015			1							X	X	X									038
5	DP-8 (20-21) B					1015			1							X	X	X									
6	DP-8 (24-25)					1025			2																		039
7	DP-11 (2-3)					1220			2																		040
8	DP-11 (4-5) A					1230			1																		041
9	DP-11 (4-5) B					1230			1																		042
10	DP-11 (9-10)					1235			2																		043
11	DP-11 (12.5-13.5) A					1245			1																		044
12	DP-11 (12.5-13.5) B					1245			1							X	X	X									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				<i>Eric Math</i>	5/20/15	6:00	2.2	Y	Y	Y

Page 97 of 101

ORIGINAL

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<i>Josh Lee</i>				
SIGNATURE of SAMPLER:	<i>[Signature]</i>	DATE Signed (MM/DD/YY):	<i>05/18/15</i>		

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: **6** of **18**  
**1456695**

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <b>Geoengineers</b>		Report To: <b>jhaney@geoengineers.com</b>		Attention:	
Address: <b>323 E. 2nd Ave</b>		Copy To: <b>julee@geoengineers.com</b>		Company Name:	
<b>Spokane WA 99202</b>		Purchase Order No.:		Address:	
Email To: <b>jhaney@geoengineers.com</b>		Project Name: <b>Colville Post and Pole</b>		Pace Quote Reference:	
Phone: <b>509-363-3125</b> Fax: <b>509-363-3126</b>		Project Number: <b>0504-098-00</b>		Pace Project Manager:	
Requested Due Date/TAT: <b>Std</b>				Pace Profile #:	
				<b>REGULATORY AGENCY</b>	
				<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER	
				<input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
				Site Location	
				STATE: _____	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.								
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other												
					DATE	TIME	DATE	TIME																						
1	DP-11 (13.5-14.5) A		SL	G	5/12	1250			1	X																				
2	DP-11 (13.5-14.5) B					1250			1																				045	
3	DP-11 (16-20)					1300			2																				046	
4	DP-13 (1-2)					1740			2																				047	
5	DP-13 (5-6)					1750			2																				048	
6	DP-13 (8-9)					1755			2																				049	
7	DP-13 (12-13) A					1800			1																				050	
8	DP-13 (12-13) B					1800			1																					
9	DP-13 (13-14) A					1810			1																					
10	DP-13 (13-14) B					1810			1																					051
11	DP-13 (16-17)					1815			2																					052
12	DP-17 (1-2)					1405			2																				053	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				<i>Bob Mathen</i>	5/20/15	10:00	22	X	Y	Y

ORIGINAL	SAMPLER NAME AND SIGNATURE				Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	PRINT Name of SAMPLER: <i>Josh Lee</i>							
	SIGNATURE of SAMPLER: <i>[Signature]</i> DATE Signed (MM/DD/YY): <i>05/13/15</i>							

Page 98 of 101

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

**Section A**  
Required Client Information:

Company: Geoengineers  
Address: 523 E. 2nd Ave  
Spokane WA 99202  
Email To: ihaney@geoengineers.com  
Phone: 509-363-3126 Fax: 509-363-3126  
Requested Due Date/TAT: Std

**Section B**  
Required Project Information:

Report To: ihaney@geoengineers.com  
Copy To: jules@geoengineers.com  
Purchase Order No.:  
Project Name: Colville Post and Pole  
Project Number: 0504-098-00

**Section C**  
Invoice Information:

Attention:  
Company Name:  
Address:  
Pace Quote Reference:  
Pace Project Manager:  
Pace Profile #:

**REGULATORY AGENCY**

NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER \_\_\_\_\_

Site Location  
STATE: \_\_\_\_\_

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-17 (4-5)		SL	G	5/12	1410			2	X										054		
2	DP-17 (8-9)					1510			2											055		
3	DP-17 (12-12.5)					1515			1											056		
4	DP-17 (16-16.5)					1520			1						X	X	X					
5	DP-17 (16.5-17.5)A					1525			1						X	X	X					
6	DP-17 (16.5-17.5)B					1525			1											057		
7	DP-17 (20-21)					1530			2											058		
8	DP-20 (0-1)				5/13	0750			2											059		
9	DP-20 (4-5)					0800			2											060		
10	DP-20 (8.5-9.5)					0810			2											061		
11	DP-20 (12-13)					0815			2											062		
12	DP-20 (20-21)					0820			2											063		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				<u>B.L. Thoh Pace</u>	<u>5/20/15</u>	<u>10:00</u>	<u>212</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Josh Lee

SIGNATURE of SAMPLER: [Signature]

DATE Signed (MM/DD/YY): 05/18/15

Temp in °C: \_\_\_\_\_

Received on Ice (Y/N): \_\_\_\_\_

Custody Sealed Cooler (Y/N): \_\_\_\_\_

Samples Intact (Y/N): \_\_\_\_\_

Page 99 of 101

ORIGINAL

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Sample ID:  
 Label:

Client Name: **Geo Engineers** Project #: **WO# : 10307123**

**WO# : 10307123**



10307123

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Speedee  Other:  
 Tracking Number: **7806 7701 4618 81796922189**  
**800 2044629 7806 7701 4618**  
 Custody Seal on Cooler/Box Present?  Yes  No Seals Intact?  Yes  No  
 Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Optional: Proj. Due Date: Proj. Name:

Thermometer Used:  B88A9130516413  B88A912167504  B88A0143310098 Type of Ice:  Wet  Blue  None  Samples on ice, cooling process has begun  
 Cooler Temp Read (°C): **0.0** Cooler Temp Corrected (°C): **0.5** Biological Tissue Frozen?  Yes  No  N/A  
 Temp should be above freezing to 6°C Correction Factor: **0.5** Date and Initials of Person Examining Contents: **05/19/15**

USDA Regulated Soil (  N/A, water sample)  
 Did samples originate in a quarantine zone within the United States: AL, AR, AZ, CA, FL, GA, ID, IA, MS, NC, NM, NY, OK, OR, SC, TN, TX or WA (check maps)?  Yes  No  
 Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No  
 If Yes to either question, fill out a Regulated Soil Checklist (F-MN-C-338) and include with SCUP/COC paperwork.

		COMMENTS:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix: <b>Soil</b>		
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH >9 Sulfide, NaOH >12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

**CLIENT NOTIFICATION/RESOLUTION**

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Field Data Required?  Yes  No  
 Comments/Resolution: \_\_\_\_\_

**Project Manager Review:**

**CPD**

Date: **5-21-15**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers).





Document Name:  
**Sample Condition Upon Receipt Form**  
 Document No.:  
**F-MN-L-213-rev.13**

Document Revised: 23Feb2015  
 Page 1 of 1  
 Issuing Authority:  
 Pace Minnesota Quality Office

Client Name:

Project #:

Geo Engineers



Courier:  Fed Ex  UPS  USPS  Client

Commercial  Pace  SpeedDee  Other:

Tracking Number: 780677014618, 807969224189, 780677014630  
780677014629, 780677014640

Custody Seal on Cooler/Box Present?  Yes  No

Seals Intact?  Yes  No

Optional: Proj. Due Date: Proj. Name:

Packing Material:  Bubble Wrap  Bubble Bags  None  Other:

Temp Blank?  Yes  No

Thermometer Used:  B88A9130516413  B88A912167504  B88A0143310098

Type of Ice:  Wet  Blue  None  Samples on ice, cooling process has begun

Cooler Temp Read (°C) 0.9, 1.7, 0.4 Cooler Temp Corrected (°C) 0.9, 1.4, 2.4

Biological Tissue Frozen?  Yes  No  N/A

Temp should be above freezing to 6°C 3.6 Correction Factor: 10.5

Date and Initials of Person Examining Contents: 5/21/15

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, AZ, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or WA (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

		COMMENTS:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix:		
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Initial when completed: Lot # of added preservative:
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Pace Trip Blank Lot # (if purchased):		

CLIENT NOTIFICATION/RESOLUTION

Field Data Required?  Yes  No

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/Resolution: \_\_\_\_\_

Project Manager Review:

Date: 5/21/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e out of hold, incorrect preservative, out of temp, incorrect containers).

July 06, 2015

John Haney  
GeoEngineers, Inc - WA  
523 East Second Ave.  
Spokane, WA 99202

RE: Project: 0504-098-00 Colville Post REV  
Pace Project No.: 10306723

Dear John Haney:

Enclosed are the analytical results for sample(s) received by the laboratory on May 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

PCP by 8270SIM analysis was requested by the client after the extraction holding time had expired.

This report was revised on 6/17/15 to report PAH compounds by the 8270 SIM method only at the client's request.

This report was revised on 7/6/15 to report PCP by the 8270 SIM method only at the client's request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carol Davy  
carol.davy@pacelabs.com  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

July 06, 2015  
Page 2

cc: Joshua Lee, GeoEngineers  
Chelsea Voss, GeoEngineers



## **REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## CERTIFICATIONS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

---

### Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alaska Certification #: UST-078

Alaska Certification #MN00064

Alabama Certification #40770

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

Colorado Certification #Pace

Connecticut Certification #: PH-0256

EPA Region 8 Certification #: 8TMS-L

Florida/NELAP Certification #: E87605

Guam Certification #:14-008r

Georgia Certification #: 959

Georgia EPD #: Pace

Idaho Certification #: MN00064

Hawaii Certification #MN00064

Illinois Certification #: 200011

Indiana Certification#C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky Dept of Envi. Protection - DW #90062

Kentucky Dept of Envi. Protection - WW #:90062

Louisiana DEQ Certification #: 3086

Louisiana DHH #: LA140001

Maine Certification #: 2013011

Maryland Certification #: 322

Michigan DEPH Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT0092

Nevada Certification #: MN\_00064

Nebraska Certification #: Pace

New Jersey Certification #: MN-002

New York Certification #: 11647

North Carolina Certification #: 530

North Carolina State Public Health #: 27700

North Dakota Certification #: R-036

Ohio EPA #: 4150

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Oregon Certification #: MN300001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Saipan (CNMI) #:MP0003

South Carolina #:74003001

Texas Certification #: T104704192

Tennessee Certification #: 02818

Utah Certification #: MN000642013-4

Virginia DGS Certification #: 251

Virginia/VELAP Certification #: Pace

Washington Certification #: C486

West Virginia Certification #: 382

West Virginia DHHR #:9952C

Wisconsin Certification #: 999407970

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## SAMPLE SUMMARY

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10306723001	DP-4:GW:051115	Water	05/11/15 18:05	05/15/15 09:30
10306723002	DP-1:GW:051115	Water	05/11/15 16:25	05/15/15 09:30
10306723003	DP-7:GW:051215	Water	05/12/15 10:32	05/15/15 09:30
10306723004	DP-17:GW:051215	Water	05/12/15 16:59	05/15/15 09:30
10306723005	DP-13:GW:051215	Water	05/12/15 19:13	05/15/15 09:30
10306723006	DP-15:GW:051315	Water	05/13/15 13:55	05/15/15 09:30
10306723007	DP-20:GW:051315	Water	05/13/15 12:02	05/15/15 09:30
10306723008	DP-26:GW:051315	Water	05/13/15 16:00	05/15/15 09:30
10306723009	DP-24:GW:051315	Water	05/13/15 17:50	05/15/15 09:30
10306723010	DP-Duplicate:GW:051315	Water	05/13/15 08:00	05/15/15 09:30

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville Post REV  
Pace Project No.: 10306723

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10306723001	DP-4:GW:051115	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	AS1	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M
10306723002	DP-1:GW:051115	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	AS1	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M
10306723003	DP-7:GW:051215	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	LT	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M
10306723004	DP-17:GW:051215	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	LT	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M
10306723005	DP-13:GW:051215	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	LT	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M
10306723006	DP-15:GW:051315	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	LT	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M
10306723007	DP-20:GW:051315	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	LT	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M
10306723008	DP-26:GW:051315	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	AS1	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M
10306723009	DP-24:GW:051315	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	AS1	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M
		EPA 8260B	DJB	7	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10306723010	DP-Duplicate:GW:051315	NWTPH-Dx	JRH	4	PASI-M
		EPA 8270D	JLR	55	PASI-M
		EPA 8270D by SIM	AS1	18	PASI-M
		EPA 8270D by SIM	JLR	2	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

---

**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS LV

**Client:** GeoEngineers

**Date:** July 06, 2015

**General Information:**

10 samples were analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/29230

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** July 06, 2015

**General Information:**

10 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3520 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/29209

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** July 06, 2015

### General Information:

10 samples were analyzed for EPA 8270D by SIM. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/29242

S0: Surrogate recovery outside laboratory control limits.

- BLANK (Lab ID: 1971524)
  - 2-Fluorobiphenyl (S)
  - p-Terphenyl-d14 (S)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Additional Comments:

Batch Comments:

Due to laboratory error, there are no surrogate spike recoveries in the method blank.

- QC Batch: MSSV / 12376

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## PROJECT NARRATIVE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** July 06, 2015

Analyte Comments:

QC Batch: OEXT/29242

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-24:GW:051315 (Lab ID: 10306723009)
  - 2-Fluorobiphenyl (S)
- DP-26:GW:051315 (Lab ID: 10306723008)
  - 2-Fluorobiphenyl (S)
- DP-Duplicate:GW:051315 (Lab ID: 10306723010)
  - 2-Fluorobiphenyl (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PCP by SIM

**Client:** GeoEngineers

**Date:** July 06, 2015

### General Information:

10 samples were analyzed for EPA 8270D by SIM. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation was conducted outside of the recognized method holding time.

- DP-13:GW:051215 (Lab ID: 10306723005)
- DP-17:GW:051215 (Lab ID: 10306723004)
- DP-1:GW:051115 (Lab ID: 10306723002)
- DP-4:GW:051115 (Lab ID: 10306723001)
- DP-7:GW:051215 (Lab ID: 10306723003)

### Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

---

**Method:** EPA 8260B

**Description:** 8260B MSV UST

**Client:** GeoEngineers

**Date:** July 06, 2015

**General Information:**

1 sample was analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-4:GW:051115**      **Lab ID: 10306723001**      Collected: 05/11/15 18:05      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3510									
Diesel Fuel Range	0.17	mg/L	0.11	0.0033	1	05/19/15 17:55	05/22/15 23:35	68334-30-5	
Motor Oil Range	ND	mg/L	0.11	0.0037	1	05/19/15 17:55	05/22/15 23:35		
<b>Surrogates</b>									
o-Terphenyl (S)	84	%	50-150		1	05/19/15 17:55	05/22/15 23:35	84-15-1	
n-Triacontane (S)	91	%	50-150		1	05/19/15 17:55	05/22/15 23:35	638-68-6	
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3520									
4-Bromophenylphenyl ether	ND	ug/L	10.6	2.5	1	05/18/15 14:11	05/23/15 18:00	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 18:00	85-68-7	
Carbazole	ND	ug/L	10.6	2.8	1	05/18/15 14:11	05/23/15 18:00	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.6	1.7	1	05/18/15 14:11	05/23/15 18:00	59-50-7	
4-Chloroaniline	ND	ug/L	53.2	3.8	1	05/18/15 14:11	05/23/15 18:00	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.6	1.6	1	05/18/15 14:11	05/23/15 18:00	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	91-58-7	
2-Chlorophenol	ND	ug/L	10.6	2.3	1	05/18/15 14:11	05/23/15 18:00	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.6	1.5	1	05/18/15 14:11	05/23/15 18:00	7005-72-3	
Dibenzofuran	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 18:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.6	1.7	1	05/18/15 14:11	05/23/15 18:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 18:00	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	53.2	5.2	1	05/18/15 14:11	05/23/15 18:00	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	120-83-2	
Diethylphthalate	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 18:00	84-66-2	
2,4-Dimethylphenol	ND	ug/L	53.2	7.2	1	05/18/15 14:11	05/23/15 18:00	105-67-9	
Dimethylphthalate	ND	ug/L	10.6	2.5	1	05/18/15 14:11	05/23/15 18:00	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 18:00	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	10.6	3.7	1	05/18/15 14:11	05/23/15 18:00	534-52-1	
2,4-Dinitrophenol	ND	ug/L	10.6	2.9	1	05/18/15 14:11	05/23/15 18:00	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.6	2.2	1	05/18/15 14:11	05/23/15 18:00	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.6	1.8	1	05/18/15 14:11	05/23/15 18:00	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 18:00	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.6	2.5	1	05/18/15 14:11	05/23/15 18:00	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.6	1.8	1	05/18/15 14:11	05/23/15 18:00	87-68-3	
Hexachlorobenzene	ND	ug/L	10.6	2.8	1	05/18/15 14:11	05/23/15 18:00	118-74-1	
Hexachloroethane	ND	ug/L	10.6	1.8	1	05/18/15 14:11	05/23/15 18:00	67-72-1	
Isophorone	ND	ug/L	10.6	1.7	1	05/18/15 14:11	05/23/15 18:00	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.6	2.2	1	05/18/15 14:11	05/23/15 18:00	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.6	2.2	1	05/18/15 14:11	05/23/15 18:00	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.6	2.1	1	05/18/15 14:11	05/23/15 18:00	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	21.3	2.4	1	05/18/15 14:11	05/23/15 18:00		
2-Nitroaniline	ND	ug/L	10.6	2.9	1	05/18/15 14:11	05/23/15 18:00	88-74-4	
3-Nitroaniline	ND	ug/L	10.6	5.3	1	05/18/15 14:11	05/23/15 18:00	99-09-2	
4-Nitroaniline	ND	ug/L	10.6	4.6	1	05/18/15 14:11	05/23/15 18:00	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-4:GW:051115**      **Lab ID: 10306723001**      Collected: 05/11/15 18:05      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b> Analytical Method: EPA 8270D      Preparation Method: EPA 3520									
Nitrobenzene	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 18:00	98-95-3	
2-Nitrophenol	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	88-75-5	
4-Nitrophenol	ND	ug/L	10.6	3.6	1	05/18/15 14:11	05/23/15 18:00	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.6	4.2	1	05/18/15 14:11	05/23/15 18:00	86-30-6	
Phenol	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 18:00	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 18:00	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.6	2.3	1	05/18/15 14:11	05/23/15 18:00	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.6	2.3	1	05/18/15 14:11	05/23/15 18:00	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	74	%	54-125		1	05/18/15 14:11	05/23/15 18:00	4165-60-0	
2-Fluorobiphenyl (S)	79	%	35-125		1	05/18/15 14:11	05/23/15 18:00	321-60-8	
p-Terphenyl-d14 (S)	95	%	65-125		1	05/18/15 14:11	05/23/15 18:00	1718-51-0	
Phenol-d6 (S)	75	%	55-125		1	05/18/15 14:11	05/23/15 18:00	13127-88-3	
2-Fluorophenol (S)	70	%	51-125		1	05/18/15 14:11	05/23/15 18:00	367-12-4	
2,4,6-Tribromophenol (S)	93	%	61-125		1	05/18/15 14:11	05/23/15 18:00	118-79-6	
<b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Acenaphthene	ND	ug/L	0.042	0.0034	1	05/18/15 14:17	05/23/15 17:58	83-32-9	
Acenaphthylene	ND	ug/L	0.042	0.0041	1	05/18/15 14:17	05/23/15 17:58	208-96-8	
Anthracene	ND	ug/L	0.042	0.0046	1	05/18/15 14:17	05/23/15 17:58	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.042	0.0031	1	05/18/15 14:17	05/23/15 17:58	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	0.0031	1	05/18/15 14:17	05/23/15 17:58	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	0.0080	1	05/18/15 14:17	05/23/15 17:58	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0056	1	05/18/15 14:17	05/23/15 17:58	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0039	1	05/18/15 14:17	05/23/15 17:58	207-08-9	
Chrysene	ND	ug/L	0.042	0.0055	1	05/18/15 14:17	05/23/15 17:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.010	1	05/18/15 14:17	05/23/15 17:58	53-70-3	
Fluoranthene	ND	ug/L	0.042	0.0059	1	05/18/15 14:17	05/23/15 17:58	206-44-0	
Fluorene	ND	ug/L	0.042	0.0059	1	05/18/15 14:17	05/23/15 17:58	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0058	1	05/18/15 14:17	05/23/15 17:58	193-39-5	
Naphthalene	ND	ug/L	0.042	0.0095	1	05/18/15 14:17	05/23/15 17:58	91-20-3	
Phenanthrene	ND	ug/L	0.042	0.013	1	05/18/15 14:17	05/23/15 17:58	85-01-8	
Pyrene	ND	ug/L	0.042	0.0067	1	05/18/15 14:17	05/23/15 17:58	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	68	%	52-125		1	05/18/15 14:17	05/23/15 17:58	321-60-8	
p-Terphenyl-d14 (S)	93	%	62-125		1	05/18/15 14:17	05/23/15 17:58	1718-51-0	
<b>8270D MSSV PCP by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Pentachlorophenol	<b>17.6</b>	ug/L	1.6	0.66	5	05/20/15 22:05	05/27/15 09:19	87-86-5	H2
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	97	%	46-125		5	05/20/15 22:05	05/27/15 09:19	118-79-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Sample: DP-1:GW:051115 Lab ID: 10306723002 Collected: 05/11/15 16:25 Received: 05/15/15 09:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>			Analytical Method: NWTPH-Dx Preparation Method: EPA 3510						
Diesel Fuel Range	ND	mg/L	0.11	0.0033	1	05/19/15 17:55	05/23/15 12:08	68334-30-5	
Motor Oil Range	ND	mg/L	0.11	0.0037	1	05/19/15 17:55	05/23/15 12:08		
<b>Surrogates</b>									
o-Terphenyl (S)	87	%	50-150		1	05/19/15 17:55	05/23/15 12:08	84-15-1	
n-Triacontane (S)	95	%	50-150		1	05/19/15 17:55	05/23/15 12:08	638-68-6	
<b>8270D MSSV</b>			Analytical Method: EPA 8270D Preparation Method: EPA 3520						
4-Bromophenylphenyl ether	ND	ug/L	10.4	2.5	1	05/18/15 14:11	05/23/15 18:30	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.4	2.0	1	05/18/15 14:11	05/23/15 18:30	85-68-7	
Carbazole	ND	ug/L	10.4	2.7	1	05/18/15 14:11	05/23/15 18:30	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.4	1.6	1	05/18/15 14:11	05/23/15 18:30	59-50-7	
4-Chloroaniline	ND	ug/L	52.1	3.7	1	05/18/15 14:11	05/23/15 18:30	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.4	1.6	1	05/18/15 14:11	05/23/15 18:30	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 18:30	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 18:30	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 18:30	91-58-7	
2-Chlorophenol	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 18:30	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.4	1.5	1	05/18/15 14:11	05/23/15 18:30	7005-72-3	
Dibenzofuran	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 18:30	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.4	2.0	1	05/18/15 14:11	05/23/15 18:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.4	1.7	1	05/18/15 14:11	05/23/15 18:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.4	1.9	1	05/18/15 14:11	05/23/15 18:30	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	52.1	5.1	1	05/18/15 14:11	05/23/15 18:30	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 18:30	120-83-2	
Diethylphthalate	ND	ug/L	10.4	2.5	1	05/18/15 14:11	05/23/15 18:30	84-66-2	
2,4-Dimethylphenol	ND	ug/L	52.1	7.0	1	05/18/15 14:11	05/23/15 18:30	105-67-9	
Dimethylphthalate	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 18:30	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.4	2.5	1	05/18/15 14:11	05/23/15 18:30	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	10.4	3.7	1	05/18/15 14:11	05/23/15 18:30	534-52-1	
2,4-Dinitrophenol	ND	ug/L	10.4	2.8	1	05/18/15 14:11	05/23/15 18:30	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.4	2.2	1	05/18/15 14:11	05/23/15 18:30	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 18:30	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.4	1.8	1	05/18/15 14:11	05/23/15 18:30	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.4	2.5	1	05/18/15 14:11	05/23/15 18:30	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 18:30	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.4	1.7	1	05/18/15 14:11	05/23/15 18:30	87-68-3	
Hexachlorobenzene	ND	ug/L	10.4	2.7	1	05/18/15 14:11	05/23/15 18:30	118-74-1	
Hexachloroethane	ND	ug/L	10.4	1.7	1	05/18/15 14:11	05/23/15 18:30	67-72-1	
Isophorone	ND	ug/L	10.4	1.6	1	05/18/15 14:11	05/23/15 18:30	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.4	2.2	1	05/18/15 14:11	05/23/15 18:30	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.4	2.2	1	05/18/15 14:11	05/23/15 18:30	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.4	2.1	1	05/18/15 14:11	05/23/15 18:30	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	20.8	2.3	1	05/18/15 14:11	05/23/15 18:30		
2-Nitroaniline	ND	ug/L	10.4	2.9	1	05/18/15 14:11	05/23/15 18:30	88-74-4	
3-Nitroaniline	ND	ug/L	10.4	5.2	1	05/18/15 14:11	05/23/15 18:30	99-09-2	
4-Nitroaniline	ND	ug/L	10.4	4.5	1	05/18/15 14:11	05/23/15 18:30	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample:** DP-1:GW:051115      **Lab ID:** 10306723002      Collected: 05/11/15 16:25      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b> Analytical Method: EPA 8270D      Preparation Method: EPA 3520									
Nitrobenzene	ND	ug/L	10.4	2.6	1	05/18/15 14:11	05/23/15 18:30	98-95-3	
2-Nitrophenol	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 18:30	88-75-5	
4-Nitrophenol	ND	ug/L	10.4	3.5	1	05/18/15 14:11	05/23/15 18:30	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 18:30	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 18:30	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.4	4.1	1	05/18/15 14:11	05/23/15 18:30	86-30-6	
Phenol	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 18:30	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	10.4	2.0	1	05/18/15 14:11	05/23/15 18:30	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.4	2.2	1	05/18/15 14:11	05/23/15 18:30	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 18:30	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	77	%	54-125		1	05/18/15 14:11	05/23/15 18:30	4165-60-0	
2-Fluorobiphenyl (S)	82	%	35-125		1	05/18/15 14:11	05/23/15 18:30	321-60-8	
p-Terphenyl-d14 (S)	105	%	65-125		1	05/18/15 14:11	05/23/15 18:30	1718-51-0	
Phenol-d6 (S)	76	%	55-125		1	05/18/15 14:11	05/23/15 18:30	13127-88-3	
2-Fluorophenol (S)	72	%	51-125		1	05/18/15 14:11	05/23/15 18:30	367-12-4	
2,4,6-Tribromophenol (S)	96	%	61-125		1	05/18/15 14:11	05/23/15 18:30	118-79-6	
<b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Acenaphthene	ND	ug/L	0.041	0.0033	1	05/18/15 14:17	05/23/15 18:20	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.0041	1	05/18/15 14:17	05/23/15 18:20	208-96-8	
Anthracene	ND	ug/L	0.041	0.0045	1	05/18/15 14:17	05/23/15 18:20	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.0031	1	05/18/15 14:17	05/23/15 18:20	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.0031	1	05/18/15 14:17	05/23/15 18:20	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0079	1	05/18/15 14:17	05/23/15 18:20	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0056	1	05/18/15 14:17	05/23/15 18:20	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0039	1	05/18/15 14:17	05/23/15 18:20	207-08-9	
Chrysene	ND	ug/L	0.041	0.0054	1	05/18/15 14:17	05/23/15 18:20	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.0099	1	05/18/15 14:17	05/23/15 18:20	53-70-3	
Fluoranthene	ND	ug/L	0.041	0.0058	1	05/18/15 14:17	05/23/15 18:20	206-44-0	
Fluorene	ND	ug/L	0.041	0.0058	1	05/18/15 14:17	05/23/15 18:20	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0057	1	05/18/15 14:17	05/23/15 18:20	193-39-5	
Naphthalene	ND	ug/L	0.041	0.0094	1	05/18/15 14:17	05/23/15 18:20	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.013	1	05/18/15 14:17	05/23/15 18:20	85-01-8	
Pyrene	ND	ug/L	0.041	0.0066	1	05/18/15 14:17	05/23/15 18:20	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	52-125		1	05/18/15 14:17	05/23/15 18:20	321-60-8	
p-Terphenyl-d14 (S)	97	%	62-125		1	05/18/15 14:17	05/23/15 18:20	1718-51-0	
<b>8270D MSSV PCP by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Pentachlorophenol	ND	ug/L	0.33	0.14	1	05/20/15 22:05	05/26/15 23:17	87-86-5	H2
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	79	%	46-125		1	05/20/15 22:05	05/26/15 23:17	118-79-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-7:GW:051215**      **Lab ID: 10306723003**      Collected: 05/12/15 10:32      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3510									
Diesel Fuel Range	ND	mg/L	0.11	0.0033	1	05/19/15 17:55	05/23/15 13:13	68334-30-5	
Motor Oil Range	ND	mg/L	0.11	0.0038	1	05/19/15 17:55	05/23/15 13:13		
<b>Surrogates</b>									
o-Terphenyl (S)	81	%	50-150		1	05/19/15 17:55	05/23/15 13:13	84-15-1	
n-Triacontane (S)	88	%	50-150		1	05/19/15 17:55	05/23/15 13:13	638-68-6	
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3520									
4-Bromophenylphenyl ether	ND	ug/L	10.4	2.5	1	05/18/15 14:11	05/23/15 19:00	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.4	2.0	1	05/18/15 14:11	05/23/15 19:00	85-68-7	
Carbazole	ND	ug/L	10.4	2.7	1	05/18/15 14:11	05/23/15 19:00	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.4	1.6	1	05/18/15 14:11	05/23/15 19:00	59-50-7	
4-Chloroaniline	ND	ug/L	51.8	3.7	1	05/18/15 14:11	05/23/15 19:00	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.4	1.6	1	05/18/15 14:11	05/23/15 19:00	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 19:00	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 19:00	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 19:00	91-58-7	
2-Chlorophenol	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 19:00	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.4	1.5	1	05/18/15 14:11	05/23/15 19:00	7005-72-3	
Dibenzofuran	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 19:00	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.4	2.0	1	05/18/15 14:11	05/23/15 19:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.4	1.7	1	05/18/15 14:11	05/23/15 19:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.4	1.9	1	05/18/15 14:11	05/23/15 19:00	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	51.8	5.1	1	05/18/15 14:11	05/23/15 19:00	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 19:00	120-83-2	
Diethylphthalate	ND	ug/L	10.4	2.5	1	05/18/15 14:11	05/23/15 19:00	84-66-2	
2,4-Dimethylphenol	ND	ug/L	51.8	7.0	1	05/18/15 14:11	05/23/15 19:00	105-67-9	
Dimethylphthalate	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 19:00	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.4	2.5	1	05/18/15 14:11	05/23/15 19:00	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	10.4	3.6	1	05/18/15 14:11	05/23/15 19:00	534-52-1	
2,4-Dinitrophenol	ND	ug/L	10.4	2.8	1	05/18/15 14:11	05/23/15 19:00	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.4	2.2	1	05/18/15 14:11	05/23/15 19:00	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 19:00	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.4	1.8	1	05/18/15 14:11	05/23/15 19:00	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.4	2.5	1	05/18/15 14:11	05/23/15 19:00	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 19:00	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.4	1.7	1	05/18/15 14:11	05/23/15 19:00	87-68-3	
Hexachlorobenzene	ND	ug/L	10.4	2.7	1	05/18/15 14:11	05/23/15 19:00	118-74-1	
Hexachloroethane	ND	ug/L	10.4	1.7	1	05/18/15 14:11	05/23/15 19:00	67-72-1	
Isophorone	ND	ug/L	10.4	1.6	1	05/18/15 14:11	05/23/15 19:00	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.4	2.1	1	05/18/15 14:11	05/23/15 19:00	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.4	2.2	1	05/18/15 14:11	05/23/15 19:00	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.4	2.1	1	05/18/15 14:11	05/23/15 19:00	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	20.7	2.3	1	05/18/15 14:11	05/23/15 19:00		
2-Nitroaniline	ND	ug/L	10.4	2.8	1	05/18/15 14:11	05/23/15 19:00	88-74-4	
3-Nitroaniline	ND	ug/L	10.4	5.2	1	05/18/15 14:11	05/23/15 19:00	99-09-2	
4-Nitroaniline	ND	ug/L	10.4	4.5	1	05/18/15 14:11	05/23/15 19:00	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-7:GW:051215**      **Lab ID: 10306723003**      Collected: 05/12/15 10:32      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b> Analytical Method: EPA 8270D      Preparation Method: EPA 3520									
Nitrobenzene	ND	ug/L	10.4	2.6	1	05/18/15 14:11	05/23/15 19:00	98-95-3	
2-Nitrophenol	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 19:00	88-75-5	
4-Nitrophenol	ND	ug/L	10.4	3.5	1	05/18/15 14:11	05/23/15 19:00	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 19:00	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.4	2.4	1	05/18/15 14:11	05/23/15 19:00	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.4	4.1	1	05/18/15 14:11	05/23/15 19:00	86-30-6	
Phenol	ND	ug/L	10.4	2.3	1	05/18/15 14:11	05/23/15 19:00	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	10.4	2.0	1	05/18/15 14:11	05/23/15 19:00	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.4	2.2	1	05/18/15 14:11	05/23/15 19:00	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.4	2.2	1	05/18/15 14:11	05/23/15 19:00	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	73	%	54-125		1	05/18/15 14:11	05/23/15 19:00	4165-60-0	
2-Fluorobiphenyl (S)	78	%	35-125		1	05/18/15 14:11	05/23/15 19:00	321-60-8	
p-Terphenyl-d14 (S)	99	%	65-125		1	05/18/15 14:11	05/23/15 19:00	1718-51-0	
Phenol-d6 (S)	73	%	55-125		1	05/18/15 14:11	05/23/15 19:00	13127-88-3	
2-Fluorophenol (S)	69	%	51-125		1	05/18/15 14:11	05/23/15 19:00	367-12-4	
2,4,6-Tribromophenol (S)	90	%	61-125		1	05/18/15 14:11	05/23/15 19:00	118-79-6	
<b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Acenaphthene	ND	ug/L	0.043	0.0034	1	05/19/15 08:06	05/26/15 19:33	83-32-9	
Acenaphthylene	ND	ug/L	0.043	0.0042	1	05/19/15 08:06	05/26/15 19:33	208-96-8	
Anthracene	ND	ug/L	0.043	0.0047	1	05/19/15 08:06	05/26/15 19:33	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.043	0.0031	1	05/19/15 08:06	05/26/15 19:33	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.043	0.0032	1	05/19/15 08:06	05/26/15 19:33	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.043	0.0081	1	05/19/15 08:06	05/26/15 19:33	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.043	0.0057	1	05/19/15 08:06	05/26/15 19:33	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.043	0.0040	1	05/19/15 08:06	05/26/15 19:33	207-08-9	
Chrysene	ND	ug/L	0.043	0.0056	1	05/19/15 08:06	05/26/15 19:33	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.043	0.010	1	05/19/15 08:06	05/26/15 19:33	53-70-3	
Fluoranthene	ND	ug/L	0.043	0.0060	1	05/19/15 08:06	05/26/15 19:33	206-44-0	
Fluorene	ND	ug/L	0.043	0.0060	1	05/19/15 08:06	05/26/15 19:33	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.043	0.0059	1	05/19/15 08:06	05/26/15 19:33	193-39-5	
Naphthalene	ND	ug/L	0.043	0.0097	1	05/19/15 08:06	05/26/15 19:33	91-20-3	
Phenanthrene	ND	ug/L	0.043	0.013	1	05/19/15 08:06	05/26/15 19:33	85-01-8	
Pyrene	ND	ug/L	0.043	0.0068	1	05/19/15 08:06	05/26/15 19:33	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	52-125		1	05/19/15 08:06	05/26/15 19:33	321-60-8	
p-Terphenyl-d14 (S)	75	%	62-125		1	05/19/15 08:06	05/26/15 19:33	1718-51-0	
<b>8270D MSSV PCP by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Pentachlorophenol	ND	ug/L	0.34	0.14	1	05/20/15 22:05	05/26/15 23:37	87-86-5	H2
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	80	%	46-125		1	05/20/15 22:05	05/26/15 23:37	118-79-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Sample: DP-17:GW:051215 Lab ID: 10306723004 Collected: 05/12/15 16:59 Received: 05/15/15 09:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3510									
Diesel Fuel Range	0.14	mg/L	0.10	0.0031	1	05/19/15 17:55	05/23/15 12:29	68334-30-5	
Motor Oil Range	ND	mg/L	0.10	0.0036	1	05/19/15 17:55	05/23/15 12:29		
<b>Surrogates</b>									
o-Terphenyl (S)	82	%	50-150		1	05/19/15 17:55	05/23/15 12:29	84-15-1	
n-Triacontane (S)	86	%	50-150		1	05/19/15 17:55	05/23/15 12:29	638-68-6	
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3520									
4-Bromophenylphenyl ether	ND	ug/L	10.6	2.5	1	05/18/15 14:11	05/23/15 19:30	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 19:30	85-68-7	
Carbazole	ND	ug/L	10.6	2.8	1	05/18/15 14:11	05/23/15 19:30	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.6	1.7	1	05/18/15 14:11	05/23/15 19:30	59-50-7	
4-Chloroaniline	ND	ug/L	53.2	3.8	1	05/18/15 14:11	05/23/15 19:30	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.6	1.6	1	05/18/15 14:11	05/23/15 19:30	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	91-58-7	
2-Chlorophenol	ND	ug/L	10.6	2.3	1	05/18/15 14:11	05/23/15 19:30	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.6	1.5	1	05/18/15 14:11	05/23/15 19:30	7005-72-3	
Dibenzofuran	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 19:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.6	1.7	1	05/18/15 14:11	05/23/15 19:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 19:30	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	53.2	5.2	1	05/18/15 14:11	05/23/15 19:30	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	120-83-2	
Diethylphthalate	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 19:30	84-66-2	
2,4-Dimethylphenol	ND	ug/L	53.2	7.2	1	05/18/15 14:11	05/23/15 19:30	105-67-9	
Dimethylphthalate	ND	ug/L	10.6	2.5	1	05/18/15 14:11	05/23/15 19:30	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 19:30	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	10.6	3.7	1	05/18/15 14:11	05/23/15 19:30	534-52-1	
2,4-Dinitrophenol	ND	ug/L	10.6	2.9	1	05/18/15 14:11	05/23/15 19:30	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.6	2.2	1	05/18/15 14:11	05/23/15 19:30	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.6	1.8	1	05/18/15 14:11	05/23/15 19:30	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 19:30	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.6	2.5	1	05/18/15 14:11	05/23/15 19:30	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.6	1.8	1	05/18/15 14:11	05/23/15 19:30	87-68-3	
Hexachlorobenzene	ND	ug/L	10.6	2.8	1	05/18/15 14:11	05/23/15 19:30	118-74-1	
Hexachloroethane	ND	ug/L	10.6	1.8	1	05/18/15 14:11	05/23/15 19:30	67-72-1	
Isophorone	ND	ug/L	10.6	1.7	1	05/18/15 14:11	05/23/15 19:30	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.6	2.2	1	05/18/15 14:11	05/23/15 19:30	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.6	2.2	1	05/18/15 14:11	05/23/15 19:30	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.6	2.1	1	05/18/15 14:11	05/23/15 19:30	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	21.3	2.4	1	05/18/15 14:11	05/23/15 19:30		
2-Nitroaniline	ND	ug/L	10.6	2.9	1	05/18/15 14:11	05/23/15 19:30	88-74-4	
3-Nitroaniline	ND	ug/L	10.6	5.3	1	05/18/15 14:11	05/23/15 19:30	99-09-2	
4-Nitroaniline	ND	ug/L	10.6	4.6	1	05/18/15 14:11	05/23/15 19:30	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-17:GW:051215**      **Lab ID: 10306723004**      Collected: 05/12/15 16:59      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b> Analytical Method: EPA 8270D      Preparation Method: EPA 3520									
Nitrobenzene	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 19:30	98-95-3	
2-Nitrophenol	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	88-75-5	
4-Nitrophenol	ND	ug/L	10.6	3.6	1	05/18/15 14:11	05/23/15 19:30	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.6	4.2	1	05/18/15 14:11	05/23/15 19:30	86-30-6	
Phenol	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 19:30	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 19:30	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.6	2.3	1	05/18/15 14:11	05/23/15 19:30	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.6	2.3	1	05/18/15 14:11	05/23/15 19:30	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	73	%	54-125		1	05/18/15 14:11	05/23/15 19:30	4165-60-0	
2-Fluorobiphenyl (S)	82	%	35-125		1	05/18/15 14:11	05/23/15 19:30	321-60-8	
p-Terphenyl-d14 (S)	99	%	65-125		1	05/18/15 14:11	05/23/15 19:30	1718-51-0	
Phenol-d6 (S)	75	%	55-125		1	05/18/15 14:11	05/23/15 19:30	13127-88-3	
2-Fluorophenol (S)	71	%	51-125		1	05/18/15 14:11	05/23/15 19:30	367-12-4	
2,4,6-Tribromophenol (S)	93	%	61-125		1	05/18/15 14:11	05/23/15 19:30	118-79-6	
<b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Acenaphthene	ND	ug/L	0.042	0.0034	1	05/19/15 08:06	05/26/15 19:54	83-32-9	
Acenaphthylene	ND	ug/L	0.042	0.0042	1	05/19/15 08:06	05/26/15 19:54	208-96-8	
Anthracene	ND	ug/L	0.042	0.0046	1	05/19/15 08:06	05/26/15 19:54	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.042	0.0031	1	05/19/15 08:06	05/26/15 19:54	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	0.0032	1	05/19/15 08:06	05/26/15 19:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	0.0080	1	05/19/15 08:06	05/26/15 19:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0057	1	05/19/15 08:06	05/26/15 19:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0040	1	05/19/15 08:06	05/26/15 19:54	207-08-9	
Chrysene	ND	ug/L	0.042	0.0055	1	05/19/15 08:06	05/26/15 19:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.010	1	05/19/15 08:06	05/26/15 19:54	53-70-3	
Fluoranthene	ND	ug/L	0.042	0.0060	1	05/19/15 08:06	05/26/15 19:54	206-44-0	
Fluorene	ND	ug/L	0.042	0.0059	1	05/19/15 08:06	05/26/15 19:54	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0058	1	05/19/15 08:06	05/26/15 19:54	193-39-5	
Naphthalene	ND	ug/L	0.042	0.0096	1	05/19/15 08:06	05/26/15 19:54	91-20-3	
Phenanthrene	ND	ug/L	0.042	0.013	1	05/19/15 08:06	05/26/15 19:54	85-01-8	
Pyrene	ND	ug/L	0.042	0.0067	1	05/19/15 08:06	05/26/15 19:54	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	73	%	52-125		1	05/19/15 08:06	05/26/15 19:54	321-60-8	
p-Terphenyl-d14 (S)	76	%	62-125		1	05/19/15 08:06	05/26/15 19:54	1718-51-0	
<b>8270D MSSV PCP by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Pentachlorophenol	<b>1.3</b>	ug/L	0.32	0.13	1	05/20/15 22:05	05/26/15 23:57	87-86-5	H2
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	99	%	46-125		1	05/20/15 22:05	05/26/15 23:57	118-79-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample:** DP-13:GW:051215      **Lab ID:** 10306723005      Collected: 05/12/15 19:13      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>									
			Analytical Method: NWTPH-Dx    Preparation Method: EPA 3510						
Diesel Fuel Range	ND	mg/L	0.11	0.0033	1	05/19/15 17:55	05/23/15 12:51	68334-30-5	
Motor Oil Range	ND	mg/L	0.11	0.0037	1	05/19/15 17:55	05/23/15 12:51		
<b>Surrogates</b>									
o-Terphenyl (S)	87	%	50-150		1	05/19/15 17:55	05/23/15 12:51	84-15-1	
n-Triacontane (S)	91	%	50-150		1	05/19/15 17:55	05/23/15 12:51	638-68-6	
<b>8270D MSSV</b>									
			Analytical Method: EPA 8270D    Preparation Method: EPA 3520						
4-Bromophenylphenyl ether	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 20:01	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.9	2.1	1	05/18/15 14:11	05/23/15 20:01	85-68-7	
Carbazole	ND	ug/L	10.9	2.9	1	05/18/15 14:11	05/23/15 20:01	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.9	1.7	1	05/18/15 14:11	05/23/15 20:01	59-50-7	
4-Chloroaniline	ND	ug/L	54.3	3.9	1	05/18/15 14:11	05/23/15 20:01	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.9	1.7	1	05/18/15 14:11	05/23/15 20:01	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:01	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:01	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:01	91-58-7	
2-Chlorophenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:01	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.9	1.5	1	05/18/15 14:11	05/23/15 20:01	7005-72-3	
Dibenzofuran	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:01	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.9	2.1	1	05/18/15 14:11	05/23/15 20:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 20:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.9	2.0	1	05/18/15 14:11	05/23/15 20:01	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	54.3	5.3	1	05/18/15 14:11	05/23/15 20:01	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:01	120-83-2	
Diethylphthalate	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 20:01	84-66-2	
2,4-Dimethylphenol	ND	ug/L	54.3	7.3	1	05/18/15 14:11	05/23/15 20:01	105-67-9	
Dimethylphthalate	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:01	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 20:01	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	10.9	3.8	1	05/18/15 14:11	05/23/15 20:01	534-52-1	
2,4-Dinitrophenol	ND	ug/L	10.9	3.0	1	05/18/15 14:11	05/23/15 20:01	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.9	2.3	1	05/18/15 14:11	05/23/15 20:01	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:01	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 20:01	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 20:01	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:01	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 20:01	87-68-3	
Hexachlorobenzene	ND	ug/L	10.9	2.8	1	05/18/15 14:11	05/23/15 20:01	118-74-1	
Hexachloroethane	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 20:01	67-72-1	
Isophorone	ND	ug/L	10.9	1.7	1	05/18/15 14:11	05/23/15 20:01	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.9	2.2	1	05/18/15 14:11	05/23/15 20:01	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.9	2.3	1	05/18/15 14:11	05/23/15 20:01	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.9	2.2	1	05/18/15 14:11	05/23/15 20:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	21.7	2.4	1	05/18/15 14:11	05/23/15 20:01		
2-Nitroaniline	ND	ug/L	10.9	3.0	1	05/18/15 14:11	05/23/15 20:01	88-74-4	
3-Nitroaniline	ND	ug/L	10.9	5.4	1	05/18/15 14:11	05/23/15 20:01	99-09-2	
4-Nitroaniline	ND	ug/L	10.9	4.7	1	05/18/15 14:11	05/23/15 20:01	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-13:GW:051215**      **Lab ID: 10306723005**      Collected: 05/12/15 19:13      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b> Analytical Method: EPA 8270D      Preparation Method: EPA 3520									
Nitrobenzene	ND	ug/L	10.9	2.7	1	05/18/15 14:11	05/23/15 20:01	98-95-3	
2-Nitrophenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:01	88-75-5	
4-Nitrophenol	ND	ug/L	10.9	3.7	1	05/18/15 14:11	05/23/15 20:01	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:01	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:01	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.9	4.2	1	05/18/15 14:11	05/23/15 20:01	86-30-6	
Phenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:01	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	10.9	2.1	1	05/18/15 14:11	05/23/15 20:01	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.9	2.3	1	05/18/15 14:11	05/23/15 20:01	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:01	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	75	%	54-125		1	05/18/15 14:11	05/23/15 20:01	4165-60-0	
2-Fluorobiphenyl (S)	78	%	35-125		1	05/18/15 14:11	05/23/15 20:01	321-60-8	
p-Terphenyl-d14 (S)	99	%	65-125		1	05/18/15 14:11	05/23/15 20:01	1718-51-0	
Phenol-d6 (S)	73	%	55-125		1	05/18/15 14:11	05/23/15 20:01	13127-88-3	
2-Fluorophenol (S)	70	%	51-125		1	05/18/15 14:11	05/23/15 20:01	367-12-4	
2,4,6-Tribromophenol (S)	87	%	61-125		1	05/18/15 14:11	05/23/15 20:01	118-79-6	
<b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Acenaphthene	ND	ug/L	0.043	0.0035	1	05/19/15 08:06	05/26/15 20:16	83-32-9	
Acenaphthylene	ND	ug/L	0.043	0.0043	1	05/19/15 08:06	05/26/15 20:16	208-96-8	
Anthracene	ND	ug/L	0.043	0.0048	1	05/19/15 08:06	05/26/15 20:16	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.043	0.0032	1	05/19/15 08:06	05/26/15 20:16	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.043	0.0033	1	05/19/15 08:06	05/26/15 20:16	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.043	0.0083	1	05/19/15 08:06	05/26/15 20:16	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.043	0.0059	1	05/19/15 08:06	05/26/15 20:16	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.043	0.0041	1	05/19/15 08:06	05/26/15 20:16	207-08-9	
Chrysene	ND	ug/L	0.043	0.0057	1	05/19/15 08:06	05/26/15 20:16	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.043	0.010	1	05/19/15 08:06	05/26/15 20:16	53-70-3	
Fluoranthene	ND	ug/L	0.043	0.0062	1	05/19/15 08:06	05/26/15 20:16	206-44-0	
Fluorene	ND	ug/L	0.043	0.0061	1	05/19/15 08:06	05/26/15 20:16	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.043	0.0060	1	05/19/15 08:06	05/26/15 20:16	193-39-5	
Naphthalene	ND	ug/L	0.043	0.0099	1	05/19/15 08:06	05/26/15 20:16	91-20-3	
Phenanthrene	ND	ug/L	0.043	0.013	1	05/19/15 08:06	05/26/15 20:16	85-01-8	
Pyrene	ND	ug/L	0.043	0.0069	1	05/19/15 08:06	05/26/15 20:16	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	71	%	52-125		1	05/19/15 08:06	05/26/15 20:16	321-60-8	
p-Terphenyl-d14 (S)	80	%	62-125		1	05/19/15 08:06	05/26/15 20:16	1718-51-0	
<b>8270D MSSV PCP by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Pentachlorophenol	ND	ug/L	0.33	0.14	1	05/20/15 22:05	05/27/15 00:17	87-86-5	H2
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	85	%	46-125		1	05/20/15 22:05	05/27/15 00:17	118-79-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample:** DP-15:GW:051315      **Lab ID:** 10306723006      Collected: 05/13/15 13:55      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>			Analytical Method: NWTPH-Dx Preparation Method: EPA 3510						
Diesel Fuel Range	0.62	mg/L	0.11	0.0033	1	05/19/15 17:55	05/23/15 11:03	68334-30-5	
Motor Oil Range	0.13	mg/L	0.11	0.0037	1	05/19/15 17:55	05/23/15 11:03		
<b>Surrogates</b>									
o-Terphenyl (S)	88	%	50-150		1	05/19/15 17:55	05/23/15 11:03	84-15-1	
n-Triacontane (S)	91	%	50-150		1	05/19/15 17:55	05/23/15 11:03	638-68-6	
<b>8270D MSSV</b>			Analytical Method: EPA 8270D Preparation Method: EPA 3520						
4-Bromophenylphenyl ether	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 20:31	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.9	2.1	1	05/18/15 14:11	05/23/15 20:31	85-68-7	
Carbazole	ND	ug/L	10.9	2.9	1	05/18/15 14:11	05/23/15 20:31	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.9	1.7	1	05/18/15 14:11	05/23/15 20:31	59-50-7	
4-Chloroaniline	ND	ug/L	54.3	3.9	1	05/18/15 14:11	05/23/15 20:31	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.9	1.7	1	05/18/15 14:11	05/23/15 20:31	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:31	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:31	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:31	91-58-7	
2-Chlorophenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:31	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.9	1.5	1	05/18/15 14:11	05/23/15 20:31	7005-72-3	
Dibenzofuran	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:31	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.9	2.1	1	05/18/15 14:11	05/23/15 20:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 20:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.9	2.0	1	05/18/15 14:11	05/23/15 20:31	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	54.3	5.3	1	05/18/15 14:11	05/23/15 20:31	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:31	120-83-2	
Diethylphthalate	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 20:31	84-66-2	
2,4-Dimethylphenol	ND	ug/L	54.3	7.3	1	05/18/15 14:11	05/23/15 20:31	105-67-9	
Dimethylphthalate	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:31	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 20:31	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	10.9	3.8	1	05/18/15 14:11	05/23/15 20:31	534-52-1	
2,4-Dinitrophenol	ND	ug/L	10.9	3.0	1	05/18/15 14:11	05/23/15 20:31	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.9	2.3	1	05/18/15 14:11	05/23/15 20:31	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:31	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 20:31	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 20:31	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:31	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 20:31	87-68-3	
Hexachlorobenzene	ND	ug/L	10.9	2.8	1	05/18/15 14:11	05/23/15 20:31	118-74-1	
Hexachloroethane	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 20:31	67-72-1	
Isophorone	ND	ug/L	10.9	1.7	1	05/18/15 14:11	05/23/15 20:31	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.9	2.2	1	05/18/15 14:11	05/23/15 20:31	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.9	2.3	1	05/18/15 14:11	05/23/15 20:31	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.9	2.2	1	05/18/15 14:11	05/23/15 20:31	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	21.7	2.4	1	05/18/15 14:11	05/23/15 20:31		
2-Nitroaniline	ND	ug/L	10.9	3.0	1	05/18/15 14:11	05/23/15 20:31	88-74-4	
3-Nitroaniline	ND	ug/L	10.9	5.4	1	05/18/15 14:11	05/23/15 20:31	99-09-2	
4-Nitroaniline	ND	ug/L	10.9	4.7	1	05/18/15 14:11	05/23/15 20:31	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-15:GW:051315**      **Lab ID: 10306723006**      Collected: 05/13/15 13:55      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b> Analytical Method: EPA 8270D      Preparation Method: EPA 3520									
Nitrobenzene	ND	ug/L	10.9	2.7	1	05/18/15 14:11	05/23/15 20:31	98-95-3	
2-Nitrophenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:31	88-75-5	
4-Nitrophenol	ND	ug/L	10.9	3.7	1	05/18/15 14:11	05/23/15 20:31	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:31	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 20:31	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.9	4.2	1	05/18/15 14:11	05/23/15 20:31	86-30-6	
Phenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:31	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	10.9	2.1	1	05/18/15 14:11	05/23/15 20:31	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.9	2.3	1	05/18/15 14:11	05/23/15 20:31	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 20:31	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	79	%	54-125		1	05/18/15 14:11	05/23/15 20:31	4165-60-0	
2-Fluorobiphenyl (S)	87	%	35-125		1	05/18/15 14:11	05/23/15 20:31	321-60-8	
p-Terphenyl-d14 (S)	102	%	65-125		1	05/18/15 14:11	05/23/15 20:31	1718-51-0	
Phenol-d6 (S)	77	%	55-125		1	05/18/15 14:11	05/23/15 20:31	13127-88-3	
2-Fluorophenol (S)	72	%	51-125		1	05/18/15 14:11	05/23/15 20:31	367-12-4	
2,4,6-Tribromophenol (S)	96	%	61-125		1	05/18/15 14:11	05/23/15 20:31	118-79-6	
<b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Acenaphthene	ND	ug/L	0.042	0.0034	1	05/19/15 08:06	05/26/15 23:32	83-32-9	
Acenaphthylene	ND	ug/L	0.042	0.0042	1	05/19/15 08:06	05/26/15 23:32	208-96-8	
Anthracene	ND	ug/L	0.042	0.0046	1	05/19/15 08:06	05/26/15 23:32	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.042	0.0031	1	05/19/15 08:06	05/26/15 23:32	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	0.0032	1	05/19/15 08:06	05/26/15 23:32	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	0.0080	1	05/19/15 08:06	05/26/15 23:32	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0057	1	05/19/15 08:06	05/26/15 23:32	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0040	1	05/19/15 08:06	05/26/15 23:32	207-08-9	
Chrysene	ND	ug/L	0.042	0.0055	1	05/19/15 08:06	05/26/15 23:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.010	1	05/19/15 08:06	05/26/15 23:32	53-70-3	
Fluoranthene	ND	ug/L	0.042	0.0060	1	05/19/15 08:06	05/26/15 23:32	206-44-0	
Fluorene	ND	ug/L	0.042	0.0059	1	05/19/15 08:06	05/26/15 23:32	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0058	1	05/19/15 08:06	05/26/15 23:32	193-39-5	
Naphthalene	<b>0.10</b>	ug/L	0.042	0.0096	1	05/19/15 08:06	05/26/15 23:32	91-20-3	
Phenanthrene	ND	ug/L	0.042	0.013	1	05/19/15 08:06	05/26/15 23:32	85-01-8	
Pyrene	ND	ug/L	0.042	0.0067	1	05/19/15 08:06	05/26/15 23:32	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	52-125		1	05/19/15 08:06	05/26/15 23:32	321-60-8	
p-Terphenyl-d14 (S)	74	%	62-125		1	05/19/15 08:06	05/26/15 23:32	1718-51-0	
<b>8270D MSSV PCP by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Pentachlorophenol	<b>123</b>	ug/L	6.5	2.7	20	05/20/15 22:05	05/27/15 09:39	87-86-5	
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	92	%	46-125		20	05/20/15 22:05	05/27/15 09:39	118-79-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Sample: DP-20:GW:051315 Lab ID: 10306723007 Collected: 05/13/15 12:02 Received: 05/15/15 09:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3510									
Diesel Fuel Range	0.51	mg/L	0.11	0.0034	1	05/19/15 17:55	05/23/15 11:24	68334-30-5	
Motor Oil Range	ND	mg/L	0.11	0.0039	1	05/19/15 17:55	05/23/15 11:24		
<b>Surrogates</b>									
o-Terphenyl (S)	84	%	50-150		1	05/19/15 17:55	05/23/15 11:24	84-15-1	
n-Triacontane (S)	89	%	50-150		1	05/19/15 17:55	05/23/15 11:24	638-68-6	
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3520									
4-Bromophenylphenyl ether	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 21:01	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.9	2.1	1	05/18/15 14:11	05/23/15 21:01	85-68-7	
Carbazole	ND	ug/L	10.9	2.9	1	05/18/15 14:11	05/23/15 21:01	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.9	1.7	1	05/18/15 14:11	05/23/15 21:01	59-50-7	
4-Chloroaniline	ND	ug/L	54.3	3.9	1	05/18/15 14:11	05/23/15 21:01	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.9	1.7	1	05/18/15 14:11	05/23/15 21:01	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 21:01	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 21:01	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 21:01	91-58-7	
2-Chlorophenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 21:01	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.9	1.5	1	05/18/15 14:11	05/23/15 21:01	7005-72-3	
Dibenzofuran	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 21:01	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.9	2.1	1	05/18/15 14:11	05/23/15 21:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 21:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.9	2.0	1	05/18/15 14:11	05/23/15 21:01	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	54.3	5.3	1	05/18/15 14:11	05/23/15 21:01	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 21:01	120-83-2	
Diethylphthalate	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 21:01	84-66-2	
2,4-Dimethylphenol	ND	ug/L	54.3	7.3	1	05/18/15 14:11	05/23/15 21:01	105-67-9	
Dimethylphthalate	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 21:01	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 21:01	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	10.9	3.8	1	05/18/15 14:11	05/23/15 21:01	534-52-1	
2,4-Dinitrophenol	ND	ug/L	10.9	3.0	1	05/18/15 14:11	05/23/15 21:01	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.9	2.3	1	05/18/15 14:11	05/23/15 21:01	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 21:01	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 21:01	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.9	2.6	1	05/18/15 14:11	05/23/15 21:01	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 21:01	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 21:01	87-68-3	
Hexachlorobenzene	ND	ug/L	10.9	2.8	1	05/18/15 14:11	05/23/15 21:01	118-74-1	
Hexachloroethane	ND	ug/L	10.9	1.8	1	05/18/15 14:11	05/23/15 21:01	67-72-1	
Isophorone	ND	ug/L	10.9	1.7	1	05/18/15 14:11	05/23/15 21:01	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.9	2.2	1	05/18/15 14:11	05/23/15 21:01	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.9	2.3	1	05/18/15 14:11	05/23/15 21:01	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.9	2.2	1	05/18/15 14:11	05/23/15 21:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	21.7	2.4	1	05/18/15 14:11	05/23/15 21:01		
2-Nitroaniline	ND	ug/L	10.9	3.0	1	05/18/15 14:11	05/23/15 21:01	88-74-4	
3-Nitroaniline	ND	ug/L	10.9	5.4	1	05/18/15 14:11	05/23/15 21:01	99-09-2	
4-Nitroaniline	ND	ug/L	10.9	4.7	1	05/18/15 14:11	05/23/15 21:01	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-20:GW:051315**      **Lab ID: 10306723007**      Collected: 05/13/15 12:02      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b> Analytical Method: EPA 8270D      Preparation Method: EPA 3520									
Nitrobenzene	ND	ug/L	10.9	2.7	1	05/18/15 14:11	05/23/15 21:01	98-95-3	
2-Nitrophenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 21:01	88-75-5	
4-Nitrophenol	ND	ug/L	10.9	3.7	1	05/18/15 14:11	05/23/15 21:01	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 21:01	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.9	2.5	1	05/18/15 14:11	05/23/15 21:01	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.9	4.2	1	05/18/15 14:11	05/23/15 21:01	86-30-6	
Phenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 21:01	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	10.9	2.1	1	05/18/15 14:11	05/23/15 21:01	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.9	2.3	1	05/18/15 14:11	05/23/15 21:01	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.9	2.4	1	05/18/15 14:11	05/23/15 21:01	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	79	%	54-125		1	05/18/15 14:11	05/23/15 21:01	4165-60-0	
2-Fluorobiphenyl (S)	84	%	35-125		1	05/18/15 14:11	05/23/15 21:01	321-60-8	
p-Terphenyl-d14 (S)	101	%	65-125		1	05/18/15 14:11	05/23/15 21:01	1718-51-0	
Phenol-d6 (S)	77	%	55-125		1	05/18/15 14:11	05/23/15 21:01	13127-88-3	
2-Fluorophenol (S)	74	%	51-125		1	05/18/15 14:11	05/23/15 21:01	367-12-4	
2,4,6-Tribromophenol (S)	98	%	61-125		1	05/18/15 14:11	05/23/15 21:01	118-79-6	
<b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Acenaphthene	ND	ug/L	0.044	0.0036	1	05/19/15 08:06	05/26/15 23:54	83-32-9	
Acenaphthylene	ND	ug/L	0.044	0.0044	1	05/19/15 08:06	05/26/15 23:54	208-96-8	
Anthracene	<b>0.40</b>	ug/L	0.044	0.0049	1	05/19/15 08:06	05/26/15 23:54	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.044	0.0033	1	05/19/15 08:06	05/26/15 23:54	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.044	0.0033	1	05/19/15 08:06	05/26/15 23:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.044	0.0085	1	05/19/15 08:06	05/26/15 23:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.044	0.0060	1	05/19/15 08:06	05/26/15 23:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.044	0.0042	1	05/19/15 08:06	05/26/15 23:54	207-08-9	
Chrysene	ND	ug/L	0.044	0.0058	1	05/19/15 08:06	05/26/15 23:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.044	0.011	1	05/19/15 08:06	05/26/15 23:54	53-70-3	
Fluoranthene	ND	ug/L	0.044	0.0063	1	05/19/15 08:06	05/26/15 23:54	206-44-0	
Fluorene	ND	ug/L	0.044	0.0063	1	05/19/15 08:06	05/26/15 23:54	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.044	0.0062	1	05/19/15 08:06	05/26/15 23:54	193-39-5	
Naphthalene	<b>0.092</b>	ug/L	0.044	0.010	1	05/19/15 08:06	05/26/15 23:54	91-20-3	
Phenanthrene	<b>0.087</b>	ug/L	0.044	0.014	1	05/19/15 08:06	05/26/15 23:54	85-01-8	
Pyrene	ND	ug/L	0.044	0.0071	1	05/19/15 08:06	05/26/15 23:54	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	78	%	52-125		1	05/19/15 08:06	05/26/15 23:54	321-60-8	
p-Terphenyl-d14 (S)	75	%	62-125		1	05/19/15 08:06	05/26/15 23:54	1718-51-0	
<b>8270D MSSV PCP by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Pentachlorophenol	<b>107</b>	ug/L	6.5	2.7	20	05/20/15 22:05	05/27/15 09:59	87-86-5	
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	84	%	46-125		20	05/20/15 22:05	05/27/15 09:59	118-79-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-26:GW:051315**      **Lab ID: 10306723008**      Collected: 05/13/15 16:00      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>									
			Analytical Method: NWTPH-Dx    Preparation Method: EPA 3510						
Diesel Fuel Range	ND	mg/L	0.11	0.0032	1	05/19/15 17:55	05/23/15 11:46	68334-30-5	
Motor Oil Range	ND	mg/L	0.11	0.0036	1	05/19/15 17:55	05/23/15 11:46		
<b>Surrogates</b>									
o-Terphenyl (S)	87	%	50-150		1	05/19/15 17:55	05/23/15 11:46	84-15-1	
n-Triacontane (S)	89	%	50-150		1	05/19/15 17:55	05/23/15 11:46	638-68-6	
<b>8270D MSSV</b>									
			Analytical Method: EPA 8270D    Preparation Method: EPA 3520						
4-Bromophenylphenyl ether	ND	ug/L	10.6	2.5	1	05/18/15 14:11	05/23/15 21:31	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 21:31	85-68-7	
Carbazole	ND	ug/L	10.6	2.8	1	05/18/15 14:11	05/23/15 21:31	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.6	1.7	1	05/18/15 14:11	05/23/15 21:31	59-50-7	
4-Chloroaniline	ND	ug/L	53.2	3.8	1	05/18/15 14:11	05/23/15 21:31	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.6	1.6	1	05/18/15 14:11	05/23/15 21:31	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	91-58-7	
2-Chlorophenol	ND	ug/L	10.6	2.3	1	05/18/15 14:11	05/23/15 21:31	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.6	1.5	1	05/18/15 14:11	05/23/15 21:31	7005-72-3	
Dibenzofuran	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 21:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.6	1.7	1	05/18/15 14:11	05/23/15 21:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 21:31	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	53.2	5.2	1	05/18/15 14:11	05/23/15 21:31	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	120-83-2	
Diethylphthalate	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 21:31	84-66-2	
2,4-Dimethylphenol	ND	ug/L	53.2	7.2	1	05/18/15 14:11	05/23/15 21:31	105-67-9	
Dimethylphthalate	ND	ug/L	10.6	2.5	1	05/18/15 14:11	05/23/15 21:31	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 21:31	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	10.6	3.7	1	05/18/15 14:11	05/23/15 21:31	534-52-1	
2,4-Dinitrophenol	ND	ug/L	10.6	2.9	1	05/18/15 14:11	05/23/15 21:31	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.6	2.2	1	05/18/15 14:11	05/23/15 21:31	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.6	1.8	1	05/18/15 14:11	05/23/15 21:31	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 21:31	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.6	2.5	1	05/18/15 14:11	05/23/15 21:31	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.6	1.8	1	05/18/15 14:11	05/23/15 21:31	87-68-3	
Hexachlorobenzene	ND	ug/L	10.6	2.8	1	05/18/15 14:11	05/23/15 21:31	118-74-1	
Hexachloroethane	ND	ug/L	10.6	1.8	1	05/18/15 14:11	05/23/15 21:31	67-72-1	
Isophorone	ND	ug/L	10.6	1.7	1	05/18/15 14:11	05/23/15 21:31	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.6	2.2	1	05/18/15 14:11	05/23/15 21:31	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.6	2.2	1	05/18/15 14:11	05/23/15 21:31	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.6	2.1	1	05/18/15 14:11	05/23/15 21:31	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	21.3	2.4	1	05/18/15 14:11	05/23/15 21:31		
2-Nitroaniline	ND	ug/L	10.6	2.9	1	05/18/15 14:11	05/23/15 21:31	88-74-4	
3-Nitroaniline	ND	ug/L	10.6	5.3	1	05/18/15 14:11	05/23/15 21:31	99-09-2	
4-Nitroaniline	ND	ug/L	10.6	4.6	1	05/18/15 14:11	05/23/15 21:31	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-26:GW:051315**      **Lab ID: 10306723008**      Collected: 05/13/15 16:00      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b> Analytical Method: EPA 8270D      Preparation Method: EPA 3520									
Nitrobenzene	ND	ug/L	10.6	2.6	1	05/18/15 14:11	05/23/15 21:31	98-95-3	
2-Nitrophenol	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	88-75-5	
4-Nitrophenol	ND	ug/L	10.6	3.6	1	05/18/15 14:11	05/23/15 21:31	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.6	4.2	1	05/18/15 14:11	05/23/15 21:31	86-30-6	
Phenol	ND	ug/L	10.6	2.4	1	05/18/15 14:11	05/23/15 21:31	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	10.6	2.0	1	05/18/15 14:11	05/23/15 21:31	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.6	2.3	1	05/18/15 14:11	05/23/15 21:31	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.6	2.3	1	05/18/15 14:11	05/23/15 21:31	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	77	%	54-125		1	05/18/15 14:11	05/23/15 21:31	4165-60-0	
2-Fluorobiphenyl (S)	83	%	35-125		1	05/18/15 14:11	05/23/15 21:31	321-60-8	
p-Terphenyl-d14 (S)	97	%	65-125		1	05/18/15 14:11	05/23/15 21:31	1718-51-0	
Phenol-d6 (S)	75	%	55-125		1	05/18/15 14:11	05/23/15 21:31	13127-88-3	
2-Fluorophenol (S)	70	%	51-125		1	05/18/15 14:11	05/23/15 21:31	367-12-4	
2,4,6-Tribromophenol (S)	94	%	61-125		1	05/18/15 14:11	05/23/15 21:31	118-79-6	
<b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Acenaphthene	ND	ug/L	0.043	0.0034	1	05/20/15 23:20	05/22/15 22:44	83-32-9	
Acenaphthylene	ND	ug/L	0.043	0.0042	1	05/20/15 23:20	05/22/15 22:44	208-96-8	
Anthracene	ND	ug/L	0.043	0.0047	1	05/20/15 23:20	05/22/15 22:44	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.043	0.0031	1	05/20/15 23:20	05/22/15 22:44	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.043	0.0032	1	05/20/15 23:20	05/22/15 22:44	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.043	0.0081	1	05/20/15 23:20	05/22/15 22:44	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.043	0.0057	1	05/20/15 23:20	05/22/15 22:44	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.043	0.0040	1	05/20/15 23:20	05/22/15 22:44	207-08-9	
Chrysene	ND	ug/L	0.043	0.0056	1	05/20/15 23:20	05/22/15 22:44	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.043	0.010	1	05/20/15 23:20	05/22/15 22:44	53-70-3	
Fluoranthene	ND	ug/L	0.043	0.0060	1	05/20/15 23:20	05/22/15 22:44	206-44-0	
Fluorene	ND	ug/L	0.043	0.0060	1	05/20/15 23:20	05/22/15 22:44	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.043	0.0059	1	05/20/15 23:20	05/22/15 22:44	193-39-5	
Naphthalene	ND	ug/L	0.043	0.0097	1	05/20/15 23:20	05/22/15 22:44	91-20-3	
Phenanthrene	ND	ug/L	0.043	0.013	1	05/20/15 23:20	05/22/15 22:44	85-01-8	
Pyrene	ND	ug/L	0.043	0.0068	1	05/20/15 23:20	05/22/15 22:44	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	78	%	52-125		1	05/20/15 23:20	05/22/15 22:44	321-60-8	P2
p-Terphenyl-d14 (S)	89	%	62-125		1	05/20/15 23:20	05/22/15 22:44	1718-51-0	
<b>8270D MSSV PCP by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Pentachlorophenol	ND	ug/L	0.32	0.13	1	05/20/15 22:05	05/27/15 01:18	87-86-5	
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	108	%	46-125		1	05/20/15 22:05	05/27/15 01:18	118-79-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Sample: DP-24:GW:051315 Lab ID: 10306723009 Collected: 05/13/15 17:50 Received: 05/15/15 09:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3510									
Diesel Fuel Range	0.65	mg/L	0.11	0.0034	1	05/19/15 17:55	05/23/15 10:20	68334-30-5	
Motor Oil Range	ND	mg/L	0.11	0.0039	1	05/19/15 17:55	05/23/15 10:20		
<b>Surrogates</b>									
o-Terphenyl (S)	85	%	50-150		1	05/19/15 17:55	05/23/15 10:20	84-15-1	
n-Triacontane (S)	89	%	50-150		1	05/19/15 17:55	05/23/15 10:20	638-68-6	
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3520									
4-Bromophenylphenyl ether	ND	ug/L	11.1	2.6	1	05/18/15 14:11	05/23/15 22:01	101-55-3	
Butylbenzylphthalate	ND	ug/L	11.1	2.1	1	05/18/15 14:11	05/23/15 22:01	85-68-7	
Carbazole	ND	ug/L	11.1	2.9	1	05/18/15 14:11	05/23/15 22:01	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	11.1	1.7	1	05/18/15 14:11	05/23/15 22:01	59-50-7	
4-Chloroaniline	ND	ug/L	55.6	4.0	1	05/18/15 14:11	05/23/15 22:01	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	11.1	1.7	1	05/18/15 14:11	05/23/15 22:01	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	11.1	2.6	1	05/18/15 14:11	05/23/15 22:01	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	11.1	2.5	1	05/18/15 14:11	05/23/15 22:01	108-60-1	
2-Chloronaphthalene	ND	ug/L	11.1	2.5	1	05/18/15 14:11	05/23/15 22:01	91-58-7	
2-Chlorophenol	ND	ug/L	11.1	2.4	1	05/18/15 14:11	05/23/15 22:01	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	11.1	1.6	1	05/18/15 14:11	05/23/15 22:01	7005-72-3	
Dibenzofuran	ND	ug/L	11.1	2.6	1	05/18/15 14:11	05/23/15 22:01	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	11.1	2.1	1	05/18/15 14:11	05/23/15 22:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	11.1	1.8	1	05/18/15 14:11	05/23/15 22:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	11.1	2.1	1	05/18/15 14:11	05/23/15 22:01	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	55.6	5.4	1	05/18/15 14:11	05/23/15 22:01	91-94-1	
2,4-Dichlorophenol	ND	ug/L	11.1	2.5	1	05/18/15 14:11	05/23/15 22:01	120-83-2	
Diethylphthalate	ND	ug/L	11.1	2.7	1	05/18/15 14:11	05/23/15 22:01	84-66-2	
2,4-Dimethylphenol	ND	ug/L	55.6	7.5	1	05/18/15 14:11	05/23/15 22:01	105-67-9	
Dimethylphthalate	ND	ug/L	11.1	2.6	1	05/18/15 14:11	05/23/15 22:01	131-11-3	
Di-n-butylphthalate	ND	ug/L	11.1	2.7	1	05/18/15 14:11	05/23/15 22:01	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	11.1	3.9	1	05/18/15 14:11	05/23/15 22:01	534-52-1	
2,4-Dinitrophenol	ND	ug/L	11.1	3.0	1	05/18/15 14:11	05/23/15 22:01	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	11.1	2.3	1	05/18/15 14:11	05/23/15 22:01	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	11.1	2.5	1	05/18/15 14:11	05/23/15 22:01	606-20-2	
Di-n-octylphthalate	ND	ug/L	11.1	1.9	1	05/18/15 14:11	05/23/15 22:01	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	11.1	2.7	1	05/18/15 14:11	05/23/15 22:01	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	11.1	2.6	1	05/18/15 14:11	05/23/15 22:01	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	11.1	1.9	1	05/18/15 14:11	05/23/15 22:01	87-68-3	
Hexachlorobenzene	ND	ug/L	11.1	2.9	1	05/18/15 14:11	05/23/15 22:01	118-74-1	
Hexachloroethane	ND	ug/L	11.1	1.8	1	05/18/15 14:11	05/23/15 22:01	67-72-1	
Isophorone	ND	ug/L	11.1	1.7	1	05/18/15 14:11	05/23/15 22:01	78-59-1	
1-Methylnaphthalene	ND	ug/L	11.1	2.3	1	05/18/15 14:11	05/23/15 22:01	90-12-0	
2-Methylnaphthalene	ND	ug/L	11.1	2.3	1	05/18/15 14:11	05/23/15 22:01	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	11.1	2.2	1	05/18/15 14:11	05/23/15 22:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	22.2	2.5	1	05/18/15 14:11	05/23/15 22:01		
2-Nitroaniline	ND	ug/L	11.1	3.1	1	05/18/15 14:11	05/23/15 22:01	88-74-4	
3-Nitroaniline	ND	ug/L	11.1	5.5	1	05/18/15 14:11	05/23/15 22:01	99-09-2	
4-Nitroaniline	ND	ug/L	11.1	4.8	1	05/18/15 14:11	05/23/15 22:01	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-24:GW:051315**      **Lab ID: 10306723009**      Collected: 05/13/15 17:50      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b> Analytical Method: EPA 8270D      Preparation Method: EPA 3520									
Nitrobenzene	ND	ug/L	11.1	2.7	1	05/18/15 14:11	05/23/15 22:01	98-95-3	
2-Nitrophenol	ND	ug/L	11.1	2.5	1	05/18/15 14:11	05/23/15 22:01	88-75-5	
4-Nitrophenol	ND	ug/L	11.1	3.7	1	05/18/15 14:11	05/23/15 22:01	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	11.1	2.5	1	05/18/15 14:11	05/23/15 22:01	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	11.1	2.6	1	05/18/15 14:11	05/23/15 22:01	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	11.1	4.3	1	05/18/15 14:11	05/23/15 22:01	86-30-6	
Phenol	ND	ug/L	11.1	2.5	1	05/18/15 14:11	05/23/15 22:01	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	11.1	2.1	1	05/18/15 14:11	05/23/15 22:01	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	11.1	2.4	1	05/18/15 14:11	05/23/15 22:01	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	11.1	2.4	1	05/18/15 14:11	05/23/15 22:01	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	77	%	54-125		1	05/18/15 14:11	05/23/15 22:01	4165-60-0	
2-Fluorobiphenyl (S)	82	%	35-125		1	05/18/15 14:11	05/23/15 22:01	321-60-8	
p-Terphenyl-d14 (S)	96	%	65-125		1	05/18/15 14:11	05/23/15 22:01	1718-51-0	
Phenol-d6 (S)	76	%	55-125		1	05/18/15 14:11	05/23/15 22:01	13127-88-3	
2-Fluorophenol (S)	72	%	51-125		1	05/18/15 14:11	05/23/15 22:01	367-12-4	
2,4,6-Tribromophenol (S)	91	%	61-125		1	05/18/15 14:11	05/23/15 22:01	118-79-6	
<b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Acenaphthene	<b>0.36</b>	ug/L	0.043	0.0035	1	05/20/15 23:20	05/22/15 23:05	83-32-9	
Acenaphthylene	<b>0.15</b>	ug/L	0.043	0.0043	1	05/20/15 23:20	05/22/15 23:05	208-96-8	
Anthracene	<b>0.25</b>	ug/L	0.043	0.0048	1	05/20/15 23:20	05/22/15 23:05	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.043	0.0032	1	05/20/15 23:20	05/22/15 23:05	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.043	0.0033	1	05/20/15 23:20	05/22/15 23:05	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.043	0.0083	1	05/20/15 23:20	05/22/15 23:05	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.043	0.0059	1	05/20/15 23:20	05/22/15 23:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.043	0.0041	1	05/20/15 23:20	05/22/15 23:05	207-08-9	
Chrysene	ND	ug/L	0.043	0.0057	1	05/20/15 23:20	05/22/15 23:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.043	0.010	1	05/20/15 23:20	05/22/15 23:05	53-70-3	
Fluoranthene	<b>0.054</b>	ug/L	0.043	0.0062	1	05/20/15 23:20	05/22/15 23:05	206-44-0	
Fluorene	<b>0.79</b>	ug/L	0.043	0.0061	1	05/20/15 23:20	05/22/15 23:05	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.043	0.0060	1	05/20/15 23:20	05/22/15 23:05	193-39-5	
Naphthalene	<b>0.055</b>	ug/L	0.043	0.0099	1	05/20/15 23:20	05/22/15 23:05	91-20-3	
Phenanthrene	<b>1.7</b>	ug/L	0.043	0.013	1	05/20/15 23:20	05/22/15 23:05	85-01-8	
Pyrene	<b>0.17</b>	ug/L	0.043	0.0069	1	05/20/15 23:20	05/22/15 23:05	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	69	%	52-125		1	05/20/15 23:20	05/22/15 23:05	321-60-8	P2
p-Terphenyl-d14 (S)	86	%	62-125		1	05/20/15 23:20	05/22/15 23:05	1718-51-0	
<b>8270D MSSV PCP by SIM</b> Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3510									
Pentachlorophenol	<b>38.0</b>	ug/L	3.3	1.4	10	05/20/15 22:05	05/27/15 10:19	87-86-5	
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	95	%	46-125		10	05/20/15 22:05	05/27/15 10:19	118-79-6	
<b>8260B MSV UST</b> Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.15	1		05/18/15 19:14	71-43-2	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample: DP-24:GW:051315**      **Lab ID: 10306723009**      Collected: 05/13/15 17:50      Received: 05/15/15 09:30      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260B MSV UST</b>									
Analytical Method: EPA 8260B									
Ethylbenzene	ND	ug/L	1.0	0.16	1		05/18/15 19:14	100-41-4	
Toluene	ND	ug/L	1.0	0.11	1		05/18/15 19:14	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.40	1		05/18/15 19:14	1330-20-7	
<b>Surrogates</b>									
1,2-Dichloroethane-d4 (S)	94	%	75-125		1		05/18/15 19:14	17060-07-0	
Toluene-d8 (S)	100	%	75-125		1		05/18/15 19:14	2037-26-5	
4-Bromofluorobenzene (S)	101	%	75-125		1		05/18/15 19:14	460-00-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV  
Pace Project No.: 10306723

Sample: DP-Duplicate:GW:051315 Lab ID: 10306723010 Collected: 05/13/15 08:00 Received: 05/15/15 09:30 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>NWTPH-Dx GCS LV</b>			Analytical Method: NWTPH-Dx Preparation Method: EPA 3510						
Diesel Fuel Range	0.41	mg/L	0.11	0.0033	1	05/19/15 17:55	05/23/15 10:41	68334-30-5	
Motor Oil Range	ND	mg/L	0.11	0.0038	1	05/19/15 17:55	05/23/15 10:41		
<b>Surrogates</b>									
o-Terphenyl (S)	86	%	50-150		1	05/19/15 17:55	05/23/15 10:41	84-15-1	
n-Triacontane (S)	88	%	50-150		1	05/19/15 17:55	05/23/15 10:41	638-68-6	
<b>8270D MSSV</b>			Analytical Method: EPA 8270D Preparation Method: EPA 3520						
4-Bromophenylphenyl ether	ND	ug/L	10.8	2.6	1	05/18/15 14:11	05/23/15 22:31	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.8	2.0	1	05/18/15 14:11	05/23/15 22:31	85-68-7	
Carbazole	ND	ug/L	10.8	2.8	1	05/18/15 14:11	05/23/15 22:31	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.8	1.7	1	05/18/15 14:11	05/23/15 22:31	59-50-7	
4-Chloroaniline	ND	ug/L	53.8	3.9	1	05/18/15 14:11	05/23/15 22:31	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.8	1.6	1	05/18/15 14:11	05/23/15 22:31	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.8	2.5	1	05/18/15 14:11	05/23/15 22:31	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.8	2.4	1	05/18/15 14:11	05/23/15 22:31	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.8	2.4	1	05/18/15 14:11	05/23/15 22:31	91-58-7	
2-Chlorophenol	ND	ug/L	10.8	2.3	1	05/18/15 14:11	05/23/15 22:31	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.8	1.5	1	05/18/15 14:11	05/23/15 22:31	7005-72-3	
Dibenzofuran	ND	ug/L	10.8	2.5	1	05/18/15 14:11	05/23/15 22:31	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.8	2.1	1	05/18/15 14:11	05/23/15 22:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.8	1.8	1	05/18/15 14:11	05/23/15 22:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.8	2.0	1	05/18/15 14:11	05/23/15 22:31	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	53.8	5.3	1	05/18/15 14:11	05/23/15 22:31	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.8	2.4	1	05/18/15 14:11	05/23/15 22:31	120-83-2	
Diethylphthalate	ND	ug/L	10.8	2.6	1	05/18/15 14:11	05/23/15 22:31	84-66-2	
2,4-Dimethylphenol	ND	ug/L	53.8	7.2	1	05/18/15 14:11	05/23/15 22:31	105-67-9	
Dimethylphthalate	ND	ug/L	10.8	2.5	1	05/18/15 14:11	05/23/15 22:31	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.8	2.6	1	05/18/15 14:11	05/23/15 22:31	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	10.8	3.8	1	05/18/15 14:11	05/23/15 22:31	534-52-1	
2,4-Dinitrophenol	ND	ug/L	10.8	2.9	1	05/18/15 14:11	05/23/15 22:31	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.8	2.3	1	05/18/15 14:11	05/23/15 22:31	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.8	2.5	1	05/18/15 14:11	05/23/15 22:31	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.8	1.8	1	05/18/15 14:11	05/23/15 22:31	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.8	2.6	1	05/18/15 14:11	05/23/15 22:31	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.8	2.5	1	05/18/15 14:11	05/23/15 22:31	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.8	1.8	1	05/18/15 14:11	05/23/15 22:31	87-68-3	
Hexachlorobenzene	ND	ug/L	10.8	2.8	1	05/18/15 14:11	05/23/15 22:31	118-74-1	
Hexachloroethane	ND	ug/L	10.8	1.8	1	05/18/15 14:11	05/23/15 22:31	67-72-1	
Isophorone	ND	ug/L	10.8	1.7	1	05/18/15 14:11	05/23/15 22:31	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.8	2.2	1	05/18/15 14:11	05/23/15 22:31	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.8	2.2	1	05/18/15 14:11	05/23/15 22:31	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.8	2.1	1	05/18/15 14:11	05/23/15 22:31	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	21.5	2.4	1	05/18/15 14:11	05/23/15 22:31		
2-Nitroaniline	ND	ug/L	10.8	3.0	1	05/18/15 14:11	05/23/15 22:31	88-74-4	
3-Nitroaniline	ND	ug/L	10.8	5.4	1	05/18/15 14:11	05/23/15 22:31	99-09-2	
4-Nitroaniline	ND	ug/L	10.8	4.7	1	05/18/15 14:11	05/23/15 22:31	100-01-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

**Sample:** DP-Duplicate:GW:051315    **Lab ID:** 10306723010    Collected: 05/13/15 08:00    Received: 05/15/15 09:30    Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b>			Analytical Method: EPA 8270D    Preparation Method: EPA 3520						
Nitrobenzene	ND	ug/L	10.8	2.7	1	05/18/15 14:11	05/23/15 22:31	98-95-3	
2-Nitrophenol	ND	ug/L	10.8	2.4	1	05/18/15 14:11	05/23/15 22:31	88-75-5	
4-Nitrophenol	ND	ug/L	10.8	3.6	1	05/18/15 14:11	05/23/15 22:31	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.8	2.5	1	05/18/15 14:11	05/23/15 22:31	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.8	2.5	1	05/18/15 14:11	05/23/15 22:31	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.8	4.2	1	05/18/15 14:11	05/23/15 22:31	86-30-6	
Phenol	ND	ug/L	10.8	2.4	1	05/18/15 14:11	05/23/15 22:31	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/L	10.8	2.0	1	05/18/15 14:11	05/23/15 22:31	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.8	2.3	1	05/18/15 14:11	05/23/15 22:31	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.8	2.3	1	05/18/15 14:11	05/23/15 22:31	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	75	%	54-125		1	05/18/15 14:11	05/23/15 22:31	4165-60-0	
2-Fluorobiphenyl (S)	83	%	35-125		1	05/18/15 14:11	05/23/15 22:31	321-60-8	
p-Terphenyl-d14 (S)	99	%	65-125		1	05/18/15 14:11	05/23/15 22:31	1718-51-0	
Phenol-d6 (S)	75	%	55-125		1	05/18/15 14:11	05/23/15 22:31	13127-88-3	
2-Fluorophenol (S)	70	%	51-125		1	05/18/15 14:11	05/23/15 22:31	367-12-4	
2,4,6-Tribromophenol (S)	93	%	61-125		1	05/18/15 14:11	05/23/15 22:31	118-79-6	
<b>8270D MSSV PAH by SIM</b>			Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3510						
Acenaphthene	<b>0.26</b>	ug/L	0.044	0.0035	1	05/20/15 23:20	05/22/15 23:26	83-32-9	
Acenaphthylene	<b>0.081</b>	ug/L	0.044	0.0044	1	05/20/15 23:20	05/22/15 23:26	208-96-8	
Anthracene	<b>0.11</b>	ug/L	0.044	0.0048	1	05/20/15 23:20	05/22/15 23:26	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.044	0.0033	1	05/20/15 23:20	05/22/15 23:26	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.044	0.0033	1	05/20/15 23:20	05/22/15 23:26	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.044	0.0084	1	05/20/15 23:20	05/22/15 23:26	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.044	0.0059	1	05/20/15 23:20	05/22/15 23:26	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.044	0.0042	1	05/20/15 23:20	05/22/15 23:26	207-08-9	
Chrysene	ND	ug/L	0.044	0.0058	1	05/20/15 23:20	05/22/15 23:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.044	0.011	1	05/20/15 23:20	05/22/15 23:26	53-70-3	
Fluoranthene	ND	ug/L	0.044	0.0062	1	05/20/15 23:20	05/22/15 23:26	206-44-0	
Fluorene	<b>0.43</b>	ug/L	0.044	0.0062	1	05/20/15 23:20	05/22/15 23:26	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.044	0.0061	1	05/20/15 23:20	05/22/15 23:26	193-39-5	
Naphthalene	<b>0.054</b>	ug/L	0.044	0.010	1	05/20/15 23:20	05/22/15 23:26	91-20-3	
Phenanthrene	<b>0.62</b>	ug/L	0.044	0.014	1	05/20/15 23:20	05/22/15 23:26	85-01-8	
Pyrene	<b>0.070</b>	ug/L	0.044	0.0070	1	05/20/15 23:20	05/22/15 23:26	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	71	%	52-125		1	05/20/15 23:20	05/22/15 23:26	321-60-8	P2
p-Terphenyl-d14 (S)	90	%	62-125		1	05/20/15 23:20	05/22/15 23:26	1718-51-0	
<b>8270D MSSV PCP by SIM</b>			Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3510						
Pentachlorophenol	<b>40.5</b>	ug/L	3.2	1.3	10	05/20/15 22:05	05/27/15 10:39	87-86-5	
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	98	%	46-125		10	05/20/15 22:05	05/27/15 10:39	118-79-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV  
Pace Project No.: 10306723

QC Batch: MSV/31464 Analysis Method: EPA 8260B  
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER  
Associated Lab Samples: 10306723009

METHOD BLANK: 1968726 Matrix: Water  
Associated Lab Samples: 10306723009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	05/18/15 11:25	
Ethylbenzene	ug/L	ND	1.0	05/18/15 11:25	
Toluene	ug/L	ND	1.0	05/18/15 11:25	
Xylene (Total)	ug/L	ND	3.0	05/18/15 11:25	
1,2-Dichloroethane-d4 (S)	%	98	75-125	05/18/15 11:25	
4-Bromofluorobenzene (S)	%	101	75-125	05/18/15 11:25	
Toluene-d8 (S)	%	97	75-125	05/18/15 11:25	

LABORATORY CONTROL SAMPLE: 1968727

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.5	103	71-125	
Ethylbenzene	ug/L	20	20.8	104	75-125	
Toluene	ug/L	20	20.8	104	74-125	
Xylene (Total)	ug/L	60	64.5	108	75-125	
1,2-Dichloroethane-d4 (S)	%			99	75-125	
4-Bromofluorobenzene (S)	%			99	75-125	
Toluene-d8 (S)	%			98	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1968728 1968729

Parameter	Units	10306155001		1968729		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Benzene	ug/L	5600	1000	6740	6270	115	68	53-139	7	30	
Ethylbenzene	ug/L	1770	1000	2910	2730	114	96	55-139	6	30	
Toluene	ug/L	3410	1000	4460	4140	106	74	52-148	7	30	
Xylene (Total)	ug/L	9930	3000	13500	12700	118	91	54-144	6	30	
1,2-Dichloroethane-d4 (S)	%					104	103	75-125			
4-Bromofluorobenzene (S)	%					99	101	75-125			
Toluene-d8 (S)	%					97	98	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV  
Pace Project No.: 10306723

QC Batch: OEXT/29209 Analysis Method: EPA 8270D  
QC Batch Method: EPA 3520 Analysis Description: 8270D Water MSSV  
Associated Lab Samples: 10306723001, 10306723002, 10306723003, 10306723004, 10306723005, 10306723006, 10306723007, 10306723008, 10306723009, 10306723010

METHOD BLANK: 1968992 Matrix: Water  
Associated Lab Samples: 10306723001, 10306723002, 10306723003, 10306723004, 10306723005, 10306723006, 10306723007, 10306723008, 10306723009, 10306723010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	05/23/15 16:29	
1,2-Dichlorobenzene	ug/L	ND	10.0	05/23/15 16:29	
1,2-Diphenylhydrazine	ug/L	ND	10.0	05/23/15 16:29	
1,3-Dichlorobenzene	ug/L	ND	10.0	05/23/15 16:29	
1,4-Dichlorobenzene	ug/L	ND	10.0	05/23/15 16:29	
1-Methylnaphthalene	ug/L	ND	10.0	05/23/15 16:29	
2,4,5-Trichlorophenol	ug/L	ND	10.0	05/23/15 16:29	
2,4,6-Trichlorophenol	ug/L	ND	10.0	05/23/15 16:29	
2,4-Dichlorophenol	ug/L	ND	10.0	05/23/15 16:29	
2,4-Dimethylphenol	ug/L	ND	50.0	05/23/15 16:29	
2,4-Dinitrophenol	ug/L	ND	10.0	05/23/15 16:29	
2,4-Dinitrotoluene	ug/L	ND	10.0	05/23/15 16:29	
2,6-Dinitrotoluene	ug/L	ND	10.0	05/23/15 16:29	
2-Chloronaphthalene	ug/L	ND	10.0	05/23/15 16:29	
2-Chlorophenol	ug/L	ND	10.0	05/23/15 16:29	
2-Methylnaphthalene	ug/L	ND	10.0	05/23/15 16:29	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	05/23/15 16:29	
2-Nitroaniline	ug/L	ND	10.0	05/23/15 16:29	
2-Nitrophenol	ug/L	ND	10.0	05/23/15 16:29	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	20.0	05/23/15 16:29	
3,3'-Dichlorobenzidine	ug/L	ND	50.0	05/23/15 16:29	
3-Nitroaniline	ug/L	ND	10.0	05/23/15 16:29	
4,6-Dinitro-2-methylphenol	ug/L	ND	10.0	05/23/15 16:29	
4-Bromophenylphenyl ether	ug/L	ND	10.0	05/23/15 16:29	
4-Chloro-3-methylphenol	ug/L	ND	10.0	05/23/15 16:29	
4-Chloroaniline	ug/L	ND	50.0	05/23/15 16:29	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	05/23/15 16:29	
4-Nitroaniline	ug/L	ND	10.0	05/23/15 16:29	
4-Nitrophenol	ug/L	ND	10.0	05/23/15 16:29	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	05/23/15 16:29	
bis(2-Chloroethyl) ether	ug/L	ND	10.0	05/23/15 16:29	
bis(2-Chloroisopropyl) ether	ug/L	ND	10.0	05/23/15 16:29	
bis(2-Ethylhexyl)phthalate	ug/L	ND	10.0	05/23/15 16:29	
Butylbenzylphthalate	ug/L	ND	10.0	05/23/15 16:29	
Carbazole	ug/L	ND	10.0	05/23/15 16:29	
Di-n-butylphthalate	ug/L	ND	10.0	05/23/15 16:29	
Di-n-octylphthalate	ug/L	ND	10.0	05/23/15 16:29	
Dibenzofuran	ug/L	ND	10.0	05/23/15 16:29	
Diethylphthalate	ug/L	ND	10.0	05/23/15 16:29	
Dimethylphthalate	ug/L	ND	10.0	05/23/15 16:29	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

METHOD BLANK: 1968992

Matrix: Water

Associated Lab Samples: 10306723001, 10306723002, 10306723003, 10306723004, 10306723005, 10306723006, 10306723007, 10306723008, 10306723009, 10306723010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	ND	10.0	05/23/15 16:29	
Hexachlorobenzene	ug/L	ND	10.0	05/23/15 16:29	
Hexachloroethane	ug/L	ND	10.0	05/23/15 16:29	
Isophorone	ug/L	ND	10.0	05/23/15 16:29	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	05/23/15 16:29	
N-Nitrosodimethylamine	ug/L	ND	10.0	05/23/15 16:29	
N-Nitrosodiphenylamine	ug/L	ND	10.0	05/23/15 16:29	
Nitrobenzene	ug/L	ND	10.0	05/23/15 16:29	
Phenol	ug/L	ND	10.0	05/23/15 16:29	
2,4,6-Tribromophenol (S)	%	86	61-125	05/23/15 16:29	
2-Fluorobiphenyl (S)	%	81	35-125	05/23/15 16:29	
2-Fluorophenol (S)	%	77	51-125	05/23/15 16:29	
Nitrobenzene-d5 (S)	%	80	54-125	05/23/15 16:29	
p-Terphenyl-d14 (S)	%	101	65-125	05/23/15 16:29	
Phenol-d6 (S)	%	78	55-125	05/23/15 16:29	

LABORATORY CONTROL SAMPLE & LCSD: 1968993

1968994

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	38.4	39.6	77	79	58-125	3	20	
1,2-Dichlorobenzene	ug/L	50	36.7	36.7	73	73	51-125	0	20	
1,2-Diphenylhydrazine	ug/L	50	45.3	45.9	91	92	68-125	1	20	
1,3-Dichlorobenzene	ug/L	50	36.3	35.8	73	72	48-125	1	20	
1,4-Dichlorobenzene	ug/L	50	36.3	36.9	73	74	49-125	2	20	
1-Methylnaphthalene	ug/L	50	41.5	40.9	83	82	68-125	2	20	
2,4,5-Trichlorophenol	ug/L	50	43.8	44.4	88	89	69-125	1	20	
2,4,6-Trichlorophenol	ug/L	50	44.3	44.8	89	90	70-125	1	20	
2,4-Dichlorophenol	ug/L	50	41.6	41.5	83	83	67-125	0	20	
2,4-Dimethylphenol	ug/L	50	34.1J	29.7J	68	59	40-125		20	
2,4-Dinitrophenol	ug/L	50	46.9	52.5	94	105	30-125	11	20	
2,4-Dinitrotoluene	ug/L	50	46.5	46.4	93	93	70-125	0	20	
2,6-Dinitrotoluene	ug/L	50	45.3	46.8	91	94	70-125	3	20	
2-Chloronaphthalene	ug/L	50	43.3	43.5	87	87	68-125	0	20	
2-Chlorophenol	ug/L	50	38.6	37.5	77	75	52-125	3	20	
2-Methylnaphthalene	ug/L	50	42.4	42.1	85	84	66-125	1	20	
2-Methylphenol(o-Cresol)	ug/L	50	39.8	38.2	80	76	62-125	4	20	
2-Nitroaniline	ug/L	50	45.0	46.4	90	93	69-125	3	20	
2-Nitrophenol	ug/L	50	40.8	40.8	82	82	57-125	0	20	
3&4-Methylphenol(m&p Cresol)	ug/L	50	41.2	39.4	82	79	62-125	4	20	
3,3'-Dichlorobenzidine	ug/L	50	46.5J	45.6J	93	91	59-125		20	
3-Nitroaniline	ug/L	50	47.0	45.9	94	92	65-125	2	20	
4,6-Dinitro-2-methylphenol	ug/L	50	54.3	56.4	109	113	37-125	4	20	
4-Bromophenylphenyl ether	ug/L	50	47.0	47.3	94	95	71-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

LABORATORY CONTROL SAMPLE & LCSD:		1968993		1968994							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
4-Chloro-3-methylphenol	ug/L	50	43.1	43.8	86	88	70-125	1	20		
4-Chloroaniline	ug/L	50	31.9J	39.4J	64	79	45-125		20		
4-Chlorophenylphenyl ether	ug/L	50	45.3	46.5	91	93	71-125	3	20		
4-Nitroaniline	ug/L	50	43.2	43.4	86	87	67-125	1	20		
4-Nitrophenol	ug/L	50	43.9	47.7	88	95	57-125	8	20		
bis(2-Chloroethoxy)methane	ug/L	50	42.0	41.7	84	83	59-125	1	20		
bis(2-Chloroethyl) ether	ug/L	50	38.9	38.5	78	77	68-125	1	20		
bis(2-Chloroisopropyl) ether	ug/L	50	39.5	39.1	79	78	44-125	1	20		
bis(2-Ethylhexyl)phthalate	ug/L	50	46.3	46.3	93	93	44-125	0	20		
Butylbenzylphthalate	ug/L	50	46.0	46.4	92	93	69-125	1	20		
Carbazole	ug/L	50	44.9	44.6	90	89	71-125	1	20		
Di-n-butylphthalate	ug/L	50	46.4	46.0	93	92	72-125	1	20		
Di-n-octylphthalate	ug/L	50	44.4	45.3	89	91	70-125	2	20		
Dibenzofuran	ug/L	50	44.4	45.4	89	91	71-125	2	20		
Diethylphthalate	ug/L	50	45.0	46.5	90	93	70-125	3	20		
Dimethylphthalate	ug/L	50	46.1	45.6	92	91	71-125	1	20		
Hexachloro-1,3-butadiene	ug/L	50	37.1	38.5	74	77	53-125	4	20		
Hexachlorobenzene	ug/L	50	47.1	47.7	94	95	69-125	1	20		
Hexachloroethane	ug/L	50	35.0	35.3	70	71	30-125	1	20		
Isophorone	ug/L	50	44.0	43.5	88	87	66-125	1	20		
N-Nitroso-di-n-propylamine	ug/L	50	41.4	39.8	83	80	59-125	4	20		
N-Nitrosodimethylamine	ug/L	50	35.4	36.1	71	72	37-125	2	20		
N-Nitrosodiphenylamine	ug/L	50	45.2	45.0	90	90	70-125	0	20		
Nitrobenzene	ug/L	50	39.9	40.1	80	80	52-125	1	20		
Phenol	ug/L	50	38.7	39.0	77	78	55-125	1	20		
2,4,6-Tribromophenol (S)	%				98	98	61-125				
2-Fluorobiphenyl (S)	%				89	88	35-125				
2-Fluorophenol (S)	%				75	74	51-125				
Nitrobenzene-d5 (S)	%				82	83	54-125				
p-Terphenyl-d14 (S)	%				100	101	65-125				
Phenol-d6 (S)	%				79	78	55-125				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

QC Batch: OEXT/29211

Analysis Method: EPA 8270D by SIM

QC Batch Method: EPA 3510

Analysis Description: 8270D PAH by SIM MSSV

Associated Lab Samples: 10306723001, 10306723002

METHOD BLANK: 1969002

Matrix: Water

Associated Lab Samples: 10306723001, 10306723002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	05/23/15 15:04	
Acenaphthylene	ug/L	ND	0.040	05/23/15 15:04	
Anthracene	ug/L	ND	0.040	05/23/15 15:04	
Benzo(a)anthracene	ug/L	ND	0.040	05/23/15 15:04	
Benzo(a)pyrene	ug/L	ND	0.040	05/23/15 15:04	
Benzo(b)fluoranthene	ug/L	ND	0.040	05/23/15 15:04	
Benzo(g,h,i)perylene	ug/L	ND	0.040	05/23/15 15:04	
Benzo(k)fluoranthene	ug/L	ND	0.040	05/23/15 15:04	
Chrysene	ug/L	ND	0.040	05/23/15 15:04	
Dibenz(a,h)anthracene	ug/L	ND	0.040	05/23/15 15:04	
Fluoranthene	ug/L	ND	0.040	05/23/15 15:04	
Fluorene	ug/L	ND	0.040	05/23/15 15:04	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	05/23/15 15:04	
Naphthalene	ug/L	ND	0.040	05/23/15 15:04	
Phenanthrene	ug/L	ND	0.040	05/23/15 15:04	
Pyrene	ug/L	ND	0.040	05/23/15 15:04	
2-Fluorobiphenyl (S)	%	75	52-125	05/23/15 15:04	
p-Terphenyl-d14 (S)	%	96	62-125	05/23/15 15:04	

LABORATORY CONTROL SAMPLE: 1969003

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	1	0.70	70	44-125	
Acenaphthylene	ug/L	1	0.72	72	44-125	
Anthracene	ug/L	1	0.89	89	55-125	
Benzo(a)anthracene	ug/L	1	0.93	93	56-125	
Benzo(a)pyrene	ug/L	1	0.94	94	61-125	
Benzo(b)fluoranthene	ug/L	1	0.96	96	60-125	
Benzo(g,h,i)perylene	ug/L	1	0.74	74	53-125	
Benzo(k)fluoranthene	ug/L	1	0.91	91	59-125	
Chrysene	ug/L	1	0.91	91	61-125	
Dibenz(a,h)anthracene	ug/L	1	0.66	66	51-125	
Fluoranthene	ug/L	1	0.95	95	64-125	
Fluorene	ug/L	1	0.80	80	52-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.84	84	54-125	
Naphthalene	ug/L	1	0.63	63	35-125	
Phenanthrene	ug/L	1	0.84	84	55-125	
Pyrene	ug/L	1	0.94	94	59-125	
2-Fluorobiphenyl (S)	%			68	52-125	
p-Terphenyl-d14 (S)	%			100	62-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Parameter	Units	1969004		1969005		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Acenaphthene	ug/L	2.3	1.1	1.1	3.1	3.0	74	71	44-125	1	30	
Acenaphthylene	ug/L	0.29	1.1	1.1	1.1	1.1	73	72	52-125	2	30	
Anthracene	ug/L	0.31	1.1	1.1	1.3	1.3	89	95	56-125	4	30	
Benzo(a)anthracene	ug/L	ND	1.1	1.1	1.0	0.96	91	89	51-125	4	30	
Benzo(a)pyrene	ug/L	ND	1.1	1.1	1.0	0.98	93	90	64-125	4	30	
Benzo(b)fluoranthene	ug/L	ND	1.1	1.1	1.0	0.99	93	91	61-125	3	30	
Benzo(g,h,i)perylene	ug/L	ND	1.1	1.1	0.99	0.95	90	88	53-125	4	30	
Benzo(k)fluoranthene	ug/L	ND	1.1	1.1	0.98	0.93	89	85	59-125	5	30	
Chrysene	ug/L	ND	1.1	1.1	1.0	0.94	91	86	56-125	6	30	
Dibenz(a,h)anthracene	ug/L	ND	1.1	1.1	0.98	0.94	89	87	42-125	4	30	
Fluoranthene	ug/L	ND	1.1	1.1	1.1	1.0	94	90	54-125	5	30	
Fluorene	ug/L	2.0	1.1	1.1	2.8	2.8	75	74	45-125	1	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	1.1	1.1	0.96	0.93	87	85	44-125	4	30	
Naphthalene	ug/L	0.11	1.1	1.1	0.84	0.83	67	67	51-125	1	30	
Phenanthrene	ug/L	0.67	1.1	1.1	1.7	1.6	89	88	61-125	1	30	
Pyrene	ug/L	0.22	1.1	1.1	1.2	1.2	89	87	63-125	3	30	
2-Fluorobiphenyl (S)	%.						82	81	52-125			
p-Terphenyl-d14 (S)	%.						95	97	62-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV  
Pace Project No.: 10306723

QC Batch: OEXT/29218 Analysis Method: EPA 8270D by SIM  
QC Batch Method: EPA 3510 Analysis Description: 8270D PAH by SIM MSSV  
Associated Lab Samples: 10306723003, 10306723004, 10306723005, 10306723006, 10306723007

METHOD BLANK: 1969501 Matrix: Water  
Associated Lab Samples: 10306723003, 10306723004, 10306723005, 10306723006, 10306723007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	05/26/15 15:34	
Acenaphthylene	ug/L	ND	0.040	05/26/15 15:34	
Anthracene	ug/L	ND	0.040	05/26/15 15:34	
Benzo(a)anthracene	ug/L	ND	0.040	05/26/15 15:34	
Benzo(a)pyrene	ug/L	ND	0.040	05/26/15 15:34	
Benzo(b)fluoranthene	ug/L	ND	0.040	05/26/15 15:34	
Benzo(g,h,i)perylene	ug/L	ND	0.040	05/26/15 15:34	
Benzo(k)fluoranthene	ug/L	ND	0.040	05/26/15 15:34	
Chrysene	ug/L	ND	0.040	05/26/15 15:34	
Dibenz(a,h)anthracene	ug/L	ND	0.040	05/26/15 15:34	
Fluoranthene	ug/L	ND	0.040	05/26/15 15:34	
Fluorene	ug/L	ND	0.040	05/26/15 15:34	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	05/26/15 15:34	
Naphthalene	ug/L	ND	0.040	05/26/15 15:34	
Phenanthrene	ug/L	ND	0.040	05/26/15 15:34	
Pyrene	ug/L	ND	0.040	05/26/15 15:34	
2-Fluorobiphenyl (S)	%	69	52-125	05/26/15 15:34	
p-Terphenyl-d14 (S)	%	79	62-125	05/26/15 15:34	

LABORATORY CONTROL SAMPLE: 1969502

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	1	0.83	83	44-125	
Acenaphthylene	ug/L	1	0.88	88	44-125	
Anthracene	ug/L	1	1.0	102	55-125	
Benzo(a)anthracene	ug/L	1	0.99	99	56-125	
Benzo(a)pyrene	ug/L	1	1.1	114	61-125	
Benzo(b)fluoranthene	ug/L	1	1.1	108	60-125	
Benzo(g,h,i)perylene	ug/L	1	1.0	100	53-125	
Benzo(k)fluoranthene	ug/L	1	1.1	110	59-125	
Chrysene	ug/L	1	0.94	94	61-125	
Dibenz(a,h)anthracene	ug/L	1	0.86	86	51-125	
Fluoranthene	ug/L	1	1.1	115	64-125	
Fluorene	ug/L	1	0.98	98	52-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	1.0	104	54-125	
Naphthalene	ug/L	1	0.74	74	35-125	
Phenanthrene	ug/L	1	0.80	80	55-125	
Pyrene	ug/L	1	0.96	96	59-125	
2-Fluorobiphenyl (S)	%			75	52-125	
p-Terphenyl-d14 (S)	%			81	62-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Parameter	Units	10306456008		1969503		1969504		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
Acenaphthene	ug/L	ND	1.1	1	0.94	0.80	89	78	44-125	16	30		
Acenaphthylene	ug/L	ND	1.1	1	1.0	0.86	95	84	52-125	16	30		
Anthracene	ug/L	ND	1.1	1	1.1	1.0	102	98	56-125	7	30		
Benzo(a)anthracene	ug/L	ND	1.1	1	1.0	1.0	96	98	51-125	2	30		
Benzo(a)pyrene	ug/L	ND	1.1	1	1.2	1.1	110	110	64-125	4	30		
Benzo(b)fluoranthene	ug/L	ND	1.1	1	1.2	1.1	108	105	61-125	7	30		
Benzo(g,h,i)perylene	ug/L	ND	1.1	1	1.2	1.1	109	108	53-125	5	30		
Benzo(k)fluoranthene	ug/L	ND	1.1	1	1.3	1.1	124	105	59-125	20	30		
Chrysene	ug/L	ND	1.1	1	1.0	0.96	94	93	56-125	4	30		
Dibenz(a,h)anthracene	ug/L	ND	1.1	1	1.2	1.1	109	104	42-125	8	30		
Fluoranthene	ug/L	ND	1.1	1	1.2	1.1	111	109	54-125	6	30		
Fluorene	ug/L	ND	1.1	1	1.0	0.97	98	94	45-125	8	30		
Indeno(1,2,3-cd)pyrene	ug/L	ND	1.1	1	1.1	1.1	108	105	44-125	7	30		
Naphthalene	ug/L	ND	1.1	1	0.87	0.74	82	72	51-125	17	30		
Phenanthrene	ug/L	ND	1.1	1	0.85	0.79	80	77	61-125	8	30		
Pyrene	ug/L	ND	1.1	1	1.0	0.97	95	94	63-125	4	30		
2-Fluorobiphenyl (S)	%.						83	73	52-125				
p-Terphenyl-d14 (S)	%.						79	78	62-125				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

QC Batch: OEXT/29242 Analysis Method: EPA 8270D by SIM  
 QC Batch Method: EPA 3510 Analysis Description: 8270D PAH by SIM MSSV  
 Associated Lab Samples: 10306723008, 10306723009, 10306723010

METHOD BLANK: 1971524 Matrix: Water

Associated Lab Samples: 10306723008, 10306723009, 10306723010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	05/22/15 21:00	
Acenaphthylene	ug/L	ND	0.040	05/22/15 21:00	
Anthracene	ug/L	ND	0.040	05/22/15 21:00	
Benzo(a)anthracene	ug/L	ND	0.040	05/22/15 21:00	
Benzo(a)pyrene	ug/L	ND	0.040	05/22/15 21:00	
Benzo(b)fluoranthene	ug/L	ND	0.040	05/22/15 21:00	
Benzo(g,h,i)perylene	ug/L	ND	0.040	05/22/15 21:00	
Benzo(k)fluoranthene	ug/L	ND	0.040	05/22/15 21:00	
Chrysene	ug/L	ND	0.040	05/22/15 21:00	
Dibenz(a,h)anthracene	ug/L	ND	0.040	05/22/15 21:00	
Fluoranthene	ug/L	ND	0.040	05/22/15 21:00	
Fluorene	ug/L	ND	0.040	05/22/15 21:00	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	05/22/15 21:00	
Naphthalene	ug/L	ND	0.040	05/22/15 21:00	
Phenanthrene	ug/L	ND	0.040	05/22/15 21:00	
Pyrene	ug/L	ND	0.040	05/22/15 21:00	
2-Fluorobiphenyl (S)	%	0	52-125	05/22/15 21:00	S0
p-Terphenyl-d14 (S)	%	0	62-125	05/22/15 21:00	S0

LABORATORY CONTROL SAMPLE: 1971525

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	1	0.76	76	44-125	
Acenaphthylene	ug/L	1	0.79	79	44-125	
Anthracene	ug/L	1	0.83	83	55-125	
Benzo(a)anthracene	ug/L	1	0.83	83	56-125	
Benzo(a)pyrene	ug/L	1	0.94	94	61-125	
Benzo(b)fluoranthene	ug/L	1	0.89	89	60-125	
Benzo(g,h,i)perylene	ug/L	1	0.89	89	53-125	
Benzo(k)fluoranthene	ug/L	1	1.0	101	59-125	
Chrysene	ug/L	1	0.81	81	61-125	
Dibenz(a,h)anthracene	ug/L	1	0.91	91	51-125	
Fluoranthene	ug/L	1	0.83	83	64-125	
Fluorene	ug/L	1	0.80	80	52-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.89	89	54-125	
Naphthalene	ug/L	1	0.73	73	35-125	
Phenanthrene	ug/L	1	0.70	70	55-125	
Pyrene	ug/L	1	0.89	89	59-125	
2-Fluorobiphenyl (S)	%			79	52-125	
p-Terphenyl-d14 (S)	%			89	62-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Parameter	Units	10306438008		1971526		1971527		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
Acenaphthene	ug/L	ND	1	1	0.66	0.74	63	72	44-125	12	30		
Acenaphthylene	ug/L	ND	1	1	0.67	0.76	64	74	52-125	12	30		
Anthracene	ug/L	ND	1	1	0.84	0.85	81	83	56-125	1	30		
Benzo(a)anthracene	ug/L	ND	1	1	0.84	0.84	80	82	51-125	0	30		
Benzo(a)pyrene	ug/L	ND	1	1	0.97	0.94	93	91	64-125	3	30		
Benzo(b)fluoranthene	ug/L	ND	1	1	0.91	0.88	87	85	61-125	3	30		
Benzo(g,h,i)perylene	ug/L	ND	1	1	0.83	0.82	80	80	53-125	2	30		
Benzo(k)fluoranthene	ug/L	ND	1	1	1.0	1.0	98	98	59-125	2	30		
Chrysene	ug/L	ND	1	1	0.83	0.83	79	81	56-125	0	30		
Dibenz(a,h)anthracene	ug/L	ND	1	1	0.84	0.83	80	81	42-125	1	30		
Fluoranthene	ug/L	ND	1	1	0.87	0.86	83	84	54-125	0	30		
Fluorene	ug/L	ND	1	1	0.74	0.77	71	75	45-125	4	30		
Indeno(1,2,3-cd)pyrene	ug/L	ND	1	1	0.88	0.85	85	83	44-125	3	30		
Naphthalene	ug/L	ND	1	1	0.64	0.72	61	70	51-125	12	30		
Phenanthrene	ug/L	ND	1	1	0.72	0.73	69	72	61-125	2	30		
Pyrene	ug/L	ND	1	1	0.90	0.91	87	89	63-125	1	30		
2-Fluorobiphenyl (S)	%.						63	75	52-125				
p-Terphenyl-d14 (S)	%.						87	87	62-125				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

QC Batch: OEXT/29240

Analysis Method: EPA 8270D by SIM

QC Batch Method: EPA 3510

Analysis Description: 8270D PCP MSSV

Associated Lab Samples: 10306723001, 10306723002, 10306723003, 10306723004, 10306723005, 10306723006, 10306723007, 10306723008, 10306723009, 10306723010

METHOD BLANK: 1971507

Matrix: Water

Associated Lab Samples: 10306723001, 10306723002, 10306723003, 10306723004, 10306723005, 10306723006, 10306723007, 10306723008, 10306723009, 10306723010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Pentachlorophenol	ug/L	ND	0.30	05/26/15 21:56	
2,4,6-Tribromophenol (S)	%.	100	46-125	05/26/15 21:56	

LABORATORY CONTROL SAMPLE & LCSD: 1971508

1971509

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Pentachlorophenol	ug/L	1	0.77	0.84	77	84	30-125	8	20	
2,4,6-Tribromophenol (S)	%.				96	95	46-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**QUALITY CONTROL DATA**

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

QC Batch:	OEXT/29230	Analysis Method:	NWTPH-Dx
QC Batch Method:	EPA 3510	Analysis Description:	NWTPH-Dx GCS LV
Associated Lab Samples:	10306723001, 10306723002, 10306723003, 10306723004, 10306723005, 10306723006, 10306723007, 10306723008, 10306723009, 10306723010		

METHOD BLANK:	1970495	Matrix:	Water
Associated Lab Samples:	10306723001, 10306723002, 10306723003, 10306723004, 10306723005, 10306723006, 10306723007, 10306723008, 10306723009, 10306723010		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range	mg/L	ND	0.40	05/22/15 21:47	
Motor Oil Range	mg/L	ND	0.40	05/22/15 21:47	
n-Triacontane (S)	%	88	50-150	05/22/15 21:47	
o-Terphenyl (S)	%	84	50-150	05/22/15 21:47	

LABORATORY CONTROL SAMPLE & LCSD:		1970496		1970497							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
Diesel Fuel Range	mg/L	2	1.5	1.6	77	81	50-150	5	20		
Motor Oil Range	mg/L	2	1.5	1.6	75	80	50-150	6	20		
n-Triacontane (S)	%				86	86	50-150				
o-Terphenyl (S)	%				88	89	50-150				

SAMPLE DUPLICATE:		1970498							
Parameter	Units	10306723001 Result	Dup Result	RPD	Max RPD	Qualifiers			
Diesel Fuel Range	mg/L	0.17	0.17	2	30				
Motor Oil Range	mg/L	ND	.047J		30				
n-Triacontane (S)	%	91	89	4					
o-Terphenyl (S)	%	84	85	0					

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..

## QUALIFIERS

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

### BATCH QUALIFIERS

Batch: GCSV/15756

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSSV/12376

[1] Due to laboratory error, there are no surrogate spike recoveries in the method blank.

Batch: MSSV/12378

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

H2 Extraction or preparation was conducted outside of the recognized method holding time.

P2 Re-extraction or re-analysis could not be performed due to insufficient sample amount.

S0 Surrogate recovery outside laboratory control limits.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0504-098-00 Colville Post REV

Pace Project No.: 10306723

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10306723001	DP-4:GW:051115	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723002	DP-1:GW:051115	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723003	DP-7:GW:051215	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723004	DP-17:GW:051215	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723005	DP-13:GW:051215	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723006	DP-15:GW:051315	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723007	DP-20:GW:051315	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723008	DP-26:GW:051315	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723009	DP-24:GW:051315	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723010	DP-Duplicate:GW:051315	EPA 3510	OEXT/29230	NWTPH-Dx	GCSV/15756
10306723001	DP-4:GW:051115	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723002	DP-1:GW:051115	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723003	DP-7:GW:051215	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723004	DP-17:GW:051215	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723005	DP-13:GW:051215	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723006	DP-15:GW:051315	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723007	DP-20:GW:051315	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723008	DP-26:GW:051315	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723009	DP-24:GW:051315	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723010	DP-Duplicate:GW:051315	EPA 3520	OEXT/29209	EPA 8270D	MSSV/12378
10306723001	DP-4:GW:051115	EPA 3510	OEXT/29211	EPA 8270D by SIM	MSSV/12379
10306723002	DP-1:GW:051115	EPA 3510	OEXT/29211	EPA 8270D by SIM	MSSV/12379
10306723003	DP-7:GW:051215	EPA 3510	OEXT/29218	EPA 8270D by SIM	MSSV/12385
10306723004	DP-17:GW:051215	EPA 3510	OEXT/29218	EPA 8270D by SIM	MSSV/12385
10306723005	DP-13:GW:051215	EPA 3510	OEXT/29218	EPA 8270D by SIM	MSSV/12385
10306723006	DP-15:GW:051315	EPA 3510	OEXT/29218	EPA 8270D by SIM	MSSV/12385
10306723007	DP-20:GW:051315	EPA 3510	OEXT/29218	EPA 8270D by SIM	MSSV/12385
10306723008	DP-26:GW:051315	EPA 3510	OEXT/29242	EPA 8270D by SIM	MSSV/12376
10306723009	DP-24:GW:051315	EPA 3510	OEXT/29242	EPA 8270D by SIM	MSSV/12376
10306723010	DP-Duplicate:GW:051315	EPA 3510	OEXT/29242	EPA 8270D by SIM	MSSV/12376
10306723001	DP-4:GW:051115	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723002	DP-1:GW:051115	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723003	DP-7:GW:051215	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723004	DP-17:GW:051215	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723005	DP-13:GW:051215	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723006	DP-15:GW:051315	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723007	DP-20:GW:051315	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723008	DP-26:GW:051315	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723009	DP-24:GW:051315	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723010	DP-Duplicate:GW:051315	EPA 3510	OEXT/29240	EPA 8270D by SIM	MSSV/12390
10306723009	DP-24:GW:051315	EPA 8260B	MSV/31464		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

**CHAIN-OF-CUSTODY / Analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10306723

**Section A**  
Required Client Information:

**Section B**  
Required Project Information:

**Section C**  
Invoice Information:

Page: \_\_\_\_\_ of \_\_\_\_\_  
**1456685**

Company: <i>GeoEngineers</i>	Report To: <i>jhony @ geoengineers.com</i>	Attention:
Address: <i>523 E Second Ave</i>	Copy To: <i>janice @ geoengineers.com</i>	Company Name:
<i>Spokane, WA 99202</i>	Purchase Order No.:	Address:
Email To: <i>jhony @ geoengineers.com</i>	Project Name: <i>Columbia Post and Pole</i>	Pace Quote Reference:
Phone: <i>509-363-3125</i> Fax: <i>509-363-3126</i>	Project Number: <i>0504-098-00</i>	Pace Project Manager:
Requested Due Date/TAT: <i>Std.</i>		Pace Profile #:

**REGULATORY AGENCY**

NPDES     GROUND WATER     DRINKING WATER

UST     RCRA     OTHER \_\_\_\_\_

Site Location: \_\_\_\_\_  
STATE: \_\_\_\_\_

ITEM #	SAMPLE ID (A-Z, 0-9 / . -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓	Y/N ↓	Residual Chlorine (Y/N)	Face Project No./ Lab I.D.
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other				
					DATE	TIME	DATE	TIME														
1	DP-4:GW:051115		WT	G	5/11/15	1805			5	5											001	
2	DP-1:GW:051115				5/11/15	1625																002
3	DP-7:GW:051215				5/12/15	1032																003
4	DP-17:GW:051215				5/12/15	1659																004
5	<del>DP-19:GW:051215</del>																					
6	DP-13:GW:051215				5/12/15	1913																005
7	DP-15:GW:051315				5/13/15	1355																006
8	DP-20:GW:051315					1202																007
9	DP-21:GW:051315					1600																008
10	DP-24:GW:051315					1750			11	5		6										009
11	DP-Pipeline:GW:051315					0800			5	5												010
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS							
	<i>Douglas A. Hehr</i>	<i>5/14/15</i>	<i>17:00</i>	<i>[Signature]</i> <i>PACE</i>	<i>5/15/15</i>	<i>930</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Page 48 of 49

ORIGINAL


**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: *Douglas A. Hehr*

SIGNATURE of SAMPLER: *[Signature]*

DATE Signed (MM/DD/YY): *5-14-15*

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

	Document Name: <b>Sample Condition Upon Receipt Form</b>	Document Revised: 23Feb2015 Page 1 of 1
	Document No.: <b>F-MN-L-213-rev.13</b>	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name:

Project #:

WO#: 10306723



Courier:  Fed Ex  UPS  USPS  Client

Commercial  Pace  Speedee  Other:

Tracking Number: 780660571358/1352/1347/1336/1359, 80796022351

Custody Seal on Cooler/Box Present?  Yes  No Seals intact?  Yes  No

Optional: Proj. Due Date: Proj. Name:

Packing Material:  Bubble Wrap  Bubble Bags  None  Other:

Temp Blank?  Yes  No

Thermometer Used:  B88A9130516413  B88A912167504  B88A0143310098

Type of Ice:  Wet  Blue  None  Samples on ice, cooling process has begun

Cooler Temp Read (°C): 4.3, 0.3, 0.1 Cooler Temp Corrected (°C): 8.8, 0.8, 11.4, 6.0, 8.2 Biological Tissue Frozen?  Yes  No  N/A

Temp should be above freezing to 6°C Correction Factor: 4.0 Date and Initials of Person Examining Contents: 5/15/15 BS

USDA Regulated Soil  N/A, water sample

Did samples originate in a quarantine zone within the United States: AL, AR, AZ, CA, FL, GA, ID, IA, MS, NC, NM, NY, OK, OR, SC, TN, TX or WA (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

	COMMENTS:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix: <i>W</i>	
All containers needing acid/base preservation have been checked? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide) <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): 012715-01	

CLIENT NOTIFICATION/RESOLUTION

Field Data Required?  Yes  No

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/Resolution: \_\_\_\_\_

Project Manager Review:

*CRW*

Date: 5-18-15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).



July 06, 2015

John Haney  
GeoEngineers, Inc - WA  
523 East Second Ave.  
Spokane, WA 99202

RE: Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307126

Dear John Haney:

Enclosed are the analytical results for sample(s) received by the laboratory on May 20, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report was revised on 7/6/15 to change sample IDs at the client's request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carol Davy  
carol.davy@pacelabs.com  
Project Manager

Enclosures

cc: Joshua Lee, GeoEngineers  
Chelsea Voss, GeoEngineers



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## CERTIFICATIONS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

### Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alaska Certification #: UST-078

Alaska Certification #MN00064

Alabama Certification #40770

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

Colorado Certification #Pace

Connecticut Certification #: PH-0256

EPA Region 8 Certification #: 8TMS-L

Florida/NELAP Certification #: E87605

Guam Certification #:14-008r

Georgia Certification #: 959

Georgia EPD #: Pace

Idaho Certification #: MN00064

Hawaii Certification #MN00064

Illinois Certification #: 200011

Indiana Certification#C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky Dept of Envi. Protection - DW #90062

Kentucky Dept of Envi. Protection - WW #:90062

Louisiana DEQ Certification #: 3086

Louisiana DHH #: LA140001

Maine Certification #: 2013011

Maryland Certification #: 322

Michigan DEPH Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT0092

Nevada Certification #: MN\_00064

Nebraska Certification #: Pace

New Jersey Certification #: MN-002

New York Certification #: 11647

North Carolina Certification #: 530

North Carolina State Public Health #: 27700

North Dakota Certification #: R-036

Ohio EPA #: 4150

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Oregon Certification #: MN300001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Saipan (CNMI) #:MP0003

South Carolina #:74003001

Texas Certification #: T104704192

Tennessee Certification #: 02818

Utah Certification #: MN000642013-4

Virginia DGS Certification #: 251

Virginia/VELAP Certification #: Pace

Washington Certification #: C486

West Virginia Certification #: 382

West Virginia DHHR #:9952C

Wisconsin Certification #: 999407970

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## SAMPLE SUMMARY

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10307126001	DP-20 (24-24.5)	Solid	05/13/15 09:40	05/20/15 10:00
10307126002	DP-20 (24.5-25.5)	Solid	05/13/15 08:50	05/20/15 10:00
10307126003	DP-15 (12-13)	Solid	05/13/15 10:05	05/20/15 10:00
10307126004	DP-15 (13-14)	Solid	05/13/15 10:10	05/20/15 10:00
10307126005	DP-24 (16-16.5)	Solid	05/13/15 13:00	05/20/15 10:00
10307126006	DP-24 (16.5-17.5)	Solid	05/13/15 13:05	05/20/15 10:00
10307126007	DP-26 (16-17)	Solid	05/13/15 14:20	05/20/15 10:00
10307126008	DP-26 (17-18)	Solid	05/13/15 14:25	05/20/15 10:00
10307126009	DP-27 (16-17)	Solid	05/13/15 17:00	05/20/15 10:00
10307126010	DP-27 (24-24.5)	Solid	05/13/15 17:40	05/20/15 10:00
10307126011	DP-29 (24-24.5)	Solid	05/14/15 08:20	05/20/15 10:00
10307126012	DP-29 (24.5-25.5)	Solid	05/14/15 08:30	05/20/15 10:00
10307126013	DP-30 (12-12.5)	Solid	05/14/15 09:30	05/20/15 10:00
10307126014	DP-30 (16-17)	Solid	05/14/15 09:45	05/20/15 10:00
10307126015	DP-28 (20.5-21.5)	Solid	05/14/15 12:00	05/20/15 10:00
10307126016	DP-28 (21.5-22.5)	Solid	05/14/15 12:10	05/20/15 10:00
10307126017	DP-12 (12-12.5)	Solid	05/14/15 14:05	05/20/15 10:00
10307126018	DP-12 (16-17)	Solid	05/14/15 14:10	05/20/15 10:00
10307126019	DP-18 (16-17)	Solid	05/14/15 14:50	05/20/15 10:00
10307126020	DP-18 (17-17.5)	Solid	05/14/15 14:55	05/20/15 10:00

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10307126001	DP-20 (24-24.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	AS1	21	PASI-M
10307126002	DP-20 (24.5-25.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	AS1	21	PASI-M
10307126003	DP-15 (12-13)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	AS1	21	PASI-M
10307126004	DP-15 (13-14)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	AS1	21	PASI-M
10307126005	DP-24 (16-16.5)	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx	AEJ	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307126006	DP-24 (16.5-17.5)	EPA 8270D by SIM	AS1	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx	AEJ	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
10307126007	DP-26 (16-17)	EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	AS1	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
10307126008	DP-26 (17-18)	EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	AS1	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
10307126009	DP-27 (16-17)	EPA 8270D	JLR	54	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10307126010	DP-27 (24-24.5)	EPA 8270D by SIM	AS1	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307126011	DP-29 (24-24.5)	EPA 8270D by SIM	AS1	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307126012	DP-29 (24.5-25.5)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307126013	DP-30 (12-12.5)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307126014	DP-30 (16-17)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307126015	DP-28 (20.5-21.5)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307126016	DP-28 (21.5-22.5)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307126017	DP-12 (12-12.5)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
10307126018	DP-12 (16-17)	EPA 8270D by SIM	LT	21	PASI-M
		NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### SAMPLE ANALYTE COUNT

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10307126019	DP-18 (16-17)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M
10307126020	DP-18 (17-17.5)	NWTPH-Dx	MT	4	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D	JLR	54	PASI-M
		EPA 8270D by SIM	LT	21	PASI-M

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS

**Client:** GeoEngineers

**Date:** July 06, 2015

**General Information:**

20 samples were analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

**Method:** NWTPH-Gx

**Description:** NWTPH-Gx GCV

**Client:** GeoEngineers

**Date:** July 06, 2015

**General Information:**

2 samples were analyzed for NWTPH-Gx. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with NWTPH-Gx with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

Analyte Comments:

QC Batch: GCV/13781

1M: Analysis conducted outside the recognized method holding time due to instrument malfunction.

- DP-24 (16-16.5) (Lab ID: 10307126005)
  - TPH as Gas
- DP-24 (16.5-17.5) (Lab ID: 10307126006)
  - TPH as Gas

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307126

---

**Method:** EPA 8270D  
**Description:** 8270D MSSV  
**Client:** GeoEngineers  
**Date:** July 06, 2015

### General Information:

20 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/29317

S0: Surrogate recovery outside laboratory control limits.

- DP-15 (13-14) (Lab ID: 10307126004)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
  - Phenol-d6 (S)
- DP-20 (24-24.5) (Lab ID: 10307126001)
  - 2-Fluorobiphenyl (S)
- DP-20 (24.5-25.5) (Lab ID: 10307126002)
  - 2-Fluorobiphenyl (S)
- DP-24 (16-16.5) (Lab ID: 10307126005)
  - 2-Fluorobiphenyl (S)
- DP-24 (16.5-17.5) (Lab ID: 10307126006)
  - 2-Fluorobiphenyl (S)
- MS (Lab ID: 1976838)
  - 2-Fluorophenol (S)

QC Batch: OEXT/29340

S0: Surrogate recovery outside laboratory control limits.

- DP-12 (12-12.5) (Lab ID: 10307126017)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307126

---

**Method:** EPA 8270D  
**Description:** 8270D MSSV  
**Client:** GeoEngineers  
**Date:** July 06, 2015

QC Batch: OEXT/29340

S0: Surrogate recovery outside laboratory control limits.

- DP-12 (16-17) (Lab ID: 10307126018)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
- DP-18 (17-17.5) (Lab ID: 10307126020)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
- DP-28 (20.5-21.5) (Lab ID: 10307126015)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
  - Phenol-d6 (S)
- DP-28 (21.5-22.5) (Lab ID: 10307126016)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
  - Phenol-d6 (S)
- DP-29 (24-24.5) (Lab ID: 10307126011)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
  - Nitrobenzene-d5 (S)
  - Phenol-d6 (S)
- DP-29 (24.5-25.5) (Lab ID: 10307126012)
  - 2-Fluorobiphenyl (S)
- DP-30 (12-12.5) (Lab ID: 10307126013)
  - 2-Fluorobiphenyl (S)
  - 2-Fluorophenol (S)
- DP-30 (16-17) (Lab ID: 10307126014)
  - 2-Fluorobiphenyl (S)

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** July 06, 2015

QC Batch: OEXT/29317

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10307168002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1976838)
  - 2,4-Dinitrophenol
  - 2,4-Dinitrotoluene
  - 3-Nitroaniline
  - 4,6-Dinitro-2-methylphenol
  - 4-Chloro-3-methylphenol
  - 4-Nitroaniline
  - 4-Nitrophenol
  - Di-n-octylphthalate
  - Dibenzofuran
  - Pentachlorophenol
- MSD (Lab ID: 1976839)
  - 2,4-Dinitrophenol
  - 3-Nitroaniline
  - 4,6-Dinitro-2-methylphenol
  - 4-Nitrophenol
  - Carbazole
  - Di-n-octylphthalate
  - Dibenzofuran
  - Pentachlorophenol

### Additional Comments:

Analyte Comments:

QC Batch: OEXT/29317

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MS (Lab ID: 1976838)
  - Nitrobenzene-d5 (S)
- MSD (Lab ID: 1976839)
  - Nitrobenzene-d5 (S)

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-15 (13-14) (Lab ID: 10307126004)
  - Nitrobenzene-d5 (S)

QC Batch: OEXT/29340

3M: The associated compound was outside of 20% for the associated continuing calibration but within 40% of the true value.

- LCS (Lab ID: 1978101)
  - 2,4-Dinitrophenol
- MS (Lab ID: 1978102)
  - 2,4-Dinitrophenol
- MSD (Lab ID: 1978103)
  - 2,4-Dinitrophenol

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

**Method:** EPA 8270D

**Description:** 8270D MSSV

**Client:** GeoEngineers

**Date:** July 06, 2015

Analyte Comments:

QC Batch: OEXT/29340

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-12 (12-12.5) (Lab ID: 10307126017)
  - Nitrobenzene-d5 (S)
- DP-12 (16-17) (Lab ID: 10307126018)
  - Nitrobenzene-d5 (S)
- DP-18 (17-17.5) (Lab ID: 10307126020)
  - Nitrobenzene-d5 (S)
- DP-28 (20.5-21.5) (Lab ID: 10307126015)
  - Nitrobenzene-d5 (S)
- DP-28 (21.5-22.5) (Lab ID: 10307126016)
  - Nitrobenzene-d5 (S)
- DP-29 (24-24.5) (Lab ID: 10307126011)
  - Nitrobenzene-d5 (S)
- DP-30 (12-12.5) (Lab ID: 10307126013)
  - Nitrobenzene-d5 (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307126

---

**Method:** EPA 8270D by SIM  
**Description:** 8270D MSSV PAH by SIM  
**Client:** GeoEngineers  
**Date:** July 06, 2015

### General Information:

20 samples were analyzed for EPA 8270D by SIM. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

- DP-12 (12-12.5) (Lab ID: 10307126017)
- DP-12 (16-17) (Lab ID: 10307126018)
- DP-18 (16-17) (Lab ID: 10307126019)
- DP-18 (17-17.5) (Lab ID: 10307126020)
- DP-28 (20.5-21.5) (Lab ID: 10307126015)
- DP-28 (21.5-22.5) (Lab ID: 10307126016)
- DP-29 (24-24.5) (Lab ID: 10307126011)
- DP-29 (24.5-25.5) (Lab ID: 10307126012)
- DP-30 (12-12.5) (Lab ID: 10307126013)
- DP-30 (16-17) (Lab ID: 10307126014)

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/29309

S0: Surrogate recovery outside laboratory control limits.

- DP-24 (16.5-17.5) (Lab ID: 10307126006)
- 2-Fluorobiphenyl (S)

QC Batch: OEXT/29339

S0: Surrogate recovery outside laboratory control limits.

- DP-29 (24.5-25.5) (Lab ID: 10307126012)
- 2-Fluorobiphenyl (S)
- MS (Lab ID: 1978098)
- 2-Fluorobiphenyl (S)

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** July 06, 2015

QC Batch: OEXT/29339

S0: Surrogate recovery outside laboratory control limits.

- MSD (Lab ID: 1978099)
- 2-Fluorobiphenyl (S)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: OEXT/29339

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1978097)
- 2-Chloronaphthalene

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/29339

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10306672011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1978098)
  - 2-Methylnaphthalene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Chrysene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Phenanthrene
  - Pyrene
- MSD (Lab ID: 1978099)
  - 1-Methylnaphthalene
  - 2-Methylnaphthalene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Chrysene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** GeoEngineers

**Date:** July 06, 2015

### Additional Comments:

Analyte Comments:

QC Batch: OEXT/29309

2M: Sample was re-extracted out of hold to confirm data, data was confirmed.

- DP-24 (16.5-17.5) (Lab ID: 10307126006)
- 2-Fluorobiphenyl (S)

QC Batch: OEXT/29339

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- DP-29 (24.5-25.5) (Lab ID: 10307126012)
- 2-Fluorobiphenyl (S)

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-20 (24-24.5)**      **Lab ID: 10307126001**      Collected: 05/13/15 09:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	22.0	1.2	1	05/27/15 20:03	06/02/15 01:26	68334-30-5	
Motor Oil Range	ND	mg/kg	14.6	2.6	1	05/27/15 20:03	06/02/15 01:26		
<b>Surrogates</b>									
n-Triacontane (S)	121	%	50-150		1	05/27/15 20:03	06/02/15 01:26	638-68-6	
o-Terphenyl (S)	104	%	50-150		1	05/27/15 20:03	06/02/15 01:26	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>31.7</b>	%	0.10	0.10	1		06/03/15 15:27		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	483	51.4	1	05/27/15 19:42	05/29/15 14:13	101-55-3	
Butylbenzylphthalate	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	85-68-7	
Carbazole	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	59-50-7	
4-Chloroaniline	ND	ug/kg	483	74.1	1	05/27/15 19:42	05/29/15 14:13	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	483	94.4	1	05/27/15 19:42	05/29/15 14:13	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	483	33.7	1	05/27/15 19:42	05/29/15 14:13	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	483	112	1	05/27/15 19:42	05/29/15 14:13	108-60-1	
2-Chloronaphthalene	ND	ug/kg	483	75.7	1	05/27/15 19:42	05/29/15 14:13	91-58-7	
2-Chlorophenol	ND	ug/kg	483	113	1	05/27/15 19:42	05/29/15 14:13	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	483	55.6	1	05/27/15 19:42	05/29/15 14:13	7005-72-3	
Dibenzofuran	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	483	31.2	1	05/27/15 19:42	05/29/15 14:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	483	30.5	1	05/27/15 19:42	05/29/15 14:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	483	32.2	1	05/27/15 19:42	05/29/15 14:13	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	483	67.3	1	05/27/15 19:42	05/29/15 14:13	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	483	90.9	1	05/27/15 19:42	05/29/15 14:13	120-83-2	
Diethylphthalate	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	483	90.5	1	05/27/15 19:42	05/29/15 14:13	105-67-9	
Dimethylphthalate	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	131-11-3	
Di-n-butylphthalate	ND	ug/kg	483	67.1	1	05/27/15 19:42	05/29/15 14:13	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2490	96.0	1	05/27/15 19:42	05/29/15 14:13	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	483	41.3	1	05/27/15 19:42	05/29/15 14:13	606-20-2	
Di-n-octylphthalate	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	483	82.6	1	05/27/15 19:42	05/29/15 14:13	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	483	40.7	1	05/27/15 19:42	05/29/15 14:13	87-68-3	
Hexachlorobenzene	ND	ug/kg	483	63.5	1	05/27/15 19:42	05/29/15 14:13	118-74-1	
Hexachloroethane	ND	ug/kg	483	30.7	1	05/27/15 19:42	05/29/15 14:13	67-72-1	
Isophorone	ND	ug/kg	483	77.2	1	05/27/15 19:42	05/29/15 14:13	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	483	105	1	05/27/15 19:42	05/29/15 14:13	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	966	96.6	1	05/27/15 19:42	05/29/15 14:13		
2-Nitroaniline	ND	ug/kg	483	52.4	1	05/27/15 19:42	05/29/15 14:13	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-20 (24-24.5)**      **Lab ID: 10307126001**      Collected: 05/13/15 09:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	483	49.3	1	05/27/15 19:42	05/29/15 14:13	99-09-2	
4-Nitroaniline	ND	ug/kg	483	42.3	1	05/27/15 19:42	05/29/15 14:13	100-01-6	
Nitrobenzene	ND	ug/kg	483	97.6	1	05/27/15 19:42	05/29/15 14:13	98-95-3	
2-Nitrophenol	ND	ug/kg	483	82.6	1	05/27/15 19:42	05/29/15 14:13	88-75-5	
4-Nitrophenol	ND	ug/kg	483	50.7	1	05/27/15 19:42	05/29/15 14:13	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	483	65.7	1	05/27/15 19:42	05/29/15 14:13	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	483	242	1	05/27/15 19:42	05/29/15 14:13	86-30-6	
Pentachlorophenol	ND	ug/kg	981	242	1	05/27/15 19:42	05/29/15 14:13	87-86-5	
Phenol	ND	ug/kg	483	106	1	05/27/15 19:42	05/29/15 14:13	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	483	79.6	1	05/27/15 19:42	05/29/15 14:13	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	483	57.7	1	05/27/15 19:42	05/29/15 14:13	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	483	62.2	1	05/27/15 19:42	05/29/15 14:13	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	37	%	34-125		1	05/27/15 19:42	05/29/15 14:13	4165-60-0	
2-Fluorobiphenyl (S)	43	%	51-125		1	05/27/15 19:42	05/29/15 14:13	321-60-8	S0
p-Terphenyl-d14 (S)	67	%	55-125		1	05/27/15 19:42	05/29/15 14:13	1718-51-0	
Phenol-d6 (S)	54	%	44-125		1	05/27/15 19:42	05/29/15 14:13	13127-88-3	
2-Fluorophenol (S)	47	%	45-125		1	05/27/15 19:42	05/29/15 14:13	367-12-4	
2,4,6-Tribromophenol (S)	62	%	40-125		1	05/27/15 19:42	05/29/15 14:13	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.6	0.53	1	05/27/15 17:54	05/29/15 23:11	83-32-9	
Acenaphthylene	ND	ug/kg	14.6	0.50	1	05/27/15 17:54	05/29/15 23:11	208-96-8	
Anthracene	ND	ug/kg	14.6	0.45	1	05/27/15 17:54	05/29/15 23:11	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.6	0.27	1	05/27/15 17:54	05/29/15 23:11	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.6	0.29	1	05/27/15 17:54	05/29/15 23:11	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.6	0.51	1	05/27/15 17:54	05/29/15 23:11	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.6	0.52	1	05/27/15 17:54	05/29/15 23:11	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.6	0.59	1	05/27/15 17:54	05/29/15 23:11	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.6	0.41	1	05/27/15 17:54	05/29/15 23:11	91-58-7	
Chrysene	ND	ug/kg	14.6	0.36	1	05/27/15 17:54	05/29/15 23:11	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.6	0.63	1	05/27/15 17:54	05/29/15 23:11	53-70-3	
Fluoranthene	ND	ug/kg	14.6	0.32	1	05/27/15 17:54	05/29/15 23:11	206-44-0	
Fluorene	ND	ug/kg	14.6	0.45	1	05/27/15 17:54	05/29/15 23:11	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.6	0.56	1	05/27/15 17:54	05/29/15 23:11	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.6	0.55	1	05/27/15 17:54	05/29/15 23:11	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.6	0.60	1	05/27/15 17:54	05/29/15 23:11	91-57-6	
Naphthalene	ND	ug/kg	14.6	0.54	1	05/27/15 17:54	05/29/15 23:11	91-20-3	
Phenanthrene	ND	ug/kg	14.6	0.36	1	05/27/15 17:54	05/29/15 23:11	85-01-8	
Pyrene	ND	ug/kg	14.6	0.35	1	05/27/15 17:54	05/29/15 23:11	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	64	%	55-125		1	05/27/15 17:54	05/29/15 23:11	321-60-8	
p-Terphenyl-d14 (S)	80	%	30-150		1	05/27/15 17:54	05/29/15 23:11	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-20 (24.5-25.5)**      **Lab ID: 10307126002**      Collected: 05/13/15 08:50      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	22.2	1.2	1	05/27/15 20:03	06/02/15 02:34	68334-30-5	
Motor Oil Range	ND	mg/kg	14.8	2.7	1	05/27/15 20:03	06/02/15 02:34		
<b>Surrogates</b>									
n-Triacontane (S)	116	%	50-150		1	05/27/15 20:03	06/02/15 02:34	638-68-6	
o-Terphenyl (S)	112	%	50-150		1	05/27/15 20:03	06/02/15 02:34	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>33.2</b>	%	0.10	0.10	1		06/03/15 15:27		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	492	52.4	1	05/27/15 19:42	05/29/15 14:42	101-55-3	
Butylbenzylphthalate	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	85-68-7	
Carbazole	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	59-50-7	
4-Chloroaniline	ND	ug/kg	492	75.5	1	05/27/15 19:42	05/29/15 14:42	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	492	96.2	1	05/27/15 19:42	05/29/15 14:42	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	492	34.3	1	05/27/15 19:42	05/29/15 14:42	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	492	114	1	05/27/15 19:42	05/29/15 14:42	108-60-1	
2-Chloronaphthalene	ND	ug/kg	492	77.1	1	05/27/15 19:42	05/29/15 14:42	91-58-7	
2-Chlorophenol	ND	ug/kg	492	115	1	05/27/15 19:42	05/29/15 14:42	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	492	56.7	1	05/27/15 19:42	05/29/15 14:42	7005-72-3	
Dibenzofuran	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	492	31.8	1	05/27/15 19:42	05/29/15 14:42	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	492	31.0	1	05/27/15 19:42	05/29/15 14:42	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	492	32.8	1	05/27/15 19:42	05/29/15 14:42	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	492	68.6	1	05/27/15 19:42	05/29/15 14:42	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	492	92.6	1	05/27/15 19:42	05/29/15 14:42	120-83-2	
Diethylphthalate	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	492	92.2	1	05/27/15 19:42	05/29/15 14:42	105-67-9	
Dimethylphthalate	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	131-11-3	
Di-n-butylphthalate	ND	ug/kg	492	68.3	1	05/27/15 19:42	05/29/15 14:42	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2540	97.9	1	05/27/15 19:42	05/29/15 14:42	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	492	42.1	1	05/27/15 19:42	05/29/15 14:42	606-20-2	
Di-n-octylphthalate	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	492	84.1	1	05/27/15 19:42	05/29/15 14:42	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	492	41.5	1	05/27/15 19:42	05/29/15 14:42	87-68-3	
Hexachlorobenzene	ND	ug/kg	492	64.7	1	05/27/15 19:42	05/29/15 14:42	118-74-1	
Hexachloroethane	ND	ug/kg	492	31.3	1	05/27/15 19:42	05/29/15 14:42	67-72-1	
Isophorone	ND	ug/kg	492	78.6	1	05/27/15 19:42	05/29/15 14:42	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	492	107	1	05/27/15 19:42	05/29/15 14:42	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	984	98.4	1	05/27/15 19:42	05/29/15 14:42		
2-Nitroaniline	ND	ug/kg	492	53.4	1	05/27/15 19:42	05/29/15 14:42	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-20 (24.5-25.5)**      **Lab ID: 10307126002**      Collected: 05/13/15 08:50      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	492	50.3	1	05/27/15 19:42	05/29/15 14:42	99-09-2	
4-Nitroaniline	ND	ug/kg	492	43.1	1	05/27/15 19:42	05/29/15 14:42	100-01-6	
Nitrobenzene	ND	ug/kg	492	99.5	1	05/27/15 19:42	05/29/15 14:42	98-95-3	
2-Nitrophenol	ND	ug/kg	492	84.1	1	05/27/15 19:42	05/29/15 14:42	88-75-5	
4-Nitrophenol	ND	ug/kg	492	51.6	1	05/27/15 19:42	05/29/15 14:42	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	492	67.0	1	05/27/15 19:42	05/29/15 14:42	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	492	246	1	05/27/15 19:42	05/29/15 14:42	86-30-6	
Pentachlorophenol	ND	ug/kg	999	246	1	05/27/15 19:42	05/29/15 14:42	87-86-5	
Phenol	ND	ug/kg	492	108	1	05/27/15 19:42	05/29/15 14:42	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	492	81.1	1	05/27/15 19:42	05/29/15 14:42	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	492	58.8	1	05/27/15 19:42	05/29/15 14:42	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	492	63.4	1	05/27/15 19:42	05/29/15 14:42	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	41	%	34-125		1	05/27/15 19:42	05/29/15 14:42	4165-60-0	
2-Fluorobiphenyl (S)	41	%	51-125		1	05/27/15 19:42	05/29/15 14:42	321-60-8	S0
p-Terphenyl-d14 (S)	71	%	55-125		1	05/27/15 19:42	05/29/15 14:42	1718-51-0	
Phenol-d6 (S)	65	%	44-125		1	05/27/15 19:42	05/29/15 14:42	13127-88-3	
2-Fluorophenol (S)	58	%	45-125		1	05/27/15 19:42	05/29/15 14:42	367-12-4	
2,4,6-Tribromophenol (S)	67	%	40-125		1	05/27/15 19:42	05/29/15 14:42	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.9	0.54	1	05/27/15 17:54	05/29/15 23:31	83-32-9	
Acenaphthylene	ND	ug/kg	14.9	0.51	1	05/27/15 17:54	05/29/15 23:31	208-96-8	
Anthracene	ND	ug/kg	14.9	0.46	1	05/27/15 17:54	05/29/15 23:31	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.9	0.27	1	05/27/15 17:54	05/29/15 23:31	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.9	0.29	1	05/27/15 17:54	05/29/15 23:31	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.9	0.52	1	05/27/15 17:54	05/29/15 23:31	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.9	0.53	1	05/27/15 17:54	05/29/15 23:31	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.9	0.60	1	05/27/15 17:54	05/29/15 23:31	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.9	0.42	1	05/27/15 17:54	05/29/15 23:31	91-58-7	
Chrysene	ND	ug/kg	14.9	0.37	1	05/27/15 17:54	05/29/15 23:31	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.9	0.64	1	05/27/15 17:54	05/29/15 23:31	53-70-3	
Fluoranthene	ND	ug/kg	14.9	0.33	1	05/27/15 17:54	05/29/15 23:31	206-44-0	
Fluorene	ND	ug/kg	14.9	0.46	1	05/27/15 17:54	05/29/15 23:31	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.9	0.57	1	05/27/15 17:54	05/29/15 23:31	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.9	0.56	1	05/27/15 17:54	05/29/15 23:31	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.9	0.61	1	05/27/15 17:54	05/29/15 23:31	91-57-6	
Naphthalene	ND	ug/kg	14.9	0.55	1	05/27/15 17:54	05/29/15 23:31	91-20-3	
Phenanthrene	ND	ug/kg	14.9	0.37	1	05/27/15 17:54	05/29/15 23:31	85-01-8	
Pyrene	ND	ug/kg	14.9	0.36	1	05/27/15 17:54	05/29/15 23:31	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	59	%	55-125		1	05/27/15 17:54	05/29/15 23:31	321-60-8	
p-Terphenyl-d14 (S)	88	%	30-150		1	05/27/15 17:54	05/29/15 23:31	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-15 (12-13)**      **Lab ID: 10307126003**      Collected: 05/13/15 10:05      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.6	0.90	1	05/27/15 20:03	06/02/15 05:13	68334-30-5	
Motor Oil Range	ND	mg/kg	11.1	2.0	1	05/27/15 20:03	06/02/15 05:13		
<b>Surrogates</b>									
n-Triacontane (S)	122	%	50-150		1	05/27/15 20:03	06/02/15 05:13	638-68-6	
o-Terphenyl (S)	121	%	50-150		1	05/27/15 20:03	06/02/15 05:13	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>9.7</b>	%	0.10	0.10	1		06/03/15 15:27		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	364	38.7	1	05/27/15 19:42	05/29/15 15:11	101-55-3	
Butylbenzylphthalate	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	85-68-7	
Carbazole	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	59-50-7	
4-Chloroaniline	ND	ug/kg	364	55.8	1	05/27/15 19:42	05/29/15 15:11	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	364	71.2	1	05/27/15 19:42	05/29/15 15:11	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	364	25.4	1	05/27/15 19:42	05/29/15 15:11	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	364	84.1	1	05/27/15 19:42	05/29/15 15:11	108-60-1	
2-Chloronaphthalene	ND	ug/kg	364	57.1	1	05/27/15 19:42	05/29/15 15:11	91-58-7	
2-Chlorophenol	ND	ug/kg	364	85.0	1	05/27/15 19:42	05/29/15 15:11	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	364	41.9	1	05/27/15 19:42	05/29/15 15:11	7005-72-3	
Dibenzofuran	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	364	23.5	1	05/27/15 19:42	05/29/15 15:11	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	364	23.0	1	05/27/15 19:42	05/29/15 15:11	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	364	24.3	1	05/27/15 19:42	05/29/15 15:11	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	364	50.8	1	05/27/15 19:42	05/29/15 15:11	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	364	68.5	1	05/27/15 19:42	05/29/15 15:11	120-83-2	
Diethylphthalate	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	364	68.2	1	05/27/15 19:42	05/29/15 15:11	105-67-9	
Dimethylphthalate	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	131-11-3	
Di-n-butylphthalate	ND	ug/kg	364	50.5	1	05/27/15 19:42	05/29/15 15:11	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1880	72.4	1	05/27/15 19:42	05/29/15 15:11	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	364	31.1	1	05/27/15 19:42	05/29/15 15:11	606-20-2	
Di-n-octylphthalate	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	364	62.2	1	05/27/15 19:42	05/29/15 15:11	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	364	30.7	1	05/27/15 19:42	05/29/15 15:11	87-68-3	
Hexachlorobenzene	ND	ug/kg	364	47.9	1	05/27/15 19:42	05/29/15 15:11	118-74-1	
Hexachloroethane	ND	ug/kg	364	23.2	1	05/27/15 19:42	05/29/15 15:11	67-72-1	
Isophorone	ND	ug/kg	364	58.2	1	05/27/15 19:42	05/29/15 15:11	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	364	78.8	1	05/27/15 19:42	05/29/15 15:11	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	728	72.8	1	05/27/15 19:42	05/29/15 15:11		
2-Nitroaniline	ND	ug/kg	364	39.5	1	05/27/15 19:42	05/29/15 15:11	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-15 (12-13)**      **Lab ID: 10307126003**      Collected: 05/13/15 10:05      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	364	37.2	1	05/27/15 19:42	05/29/15 15:11	99-09-2	
4-Nitroaniline	ND	ug/kg	364	31.9	1	05/27/15 19:42	05/29/15 15:11	100-01-6	
Nitrobenzene	ND	ug/kg	364	73.6	1	05/27/15 19:42	05/29/15 15:11	98-95-3	
2-Nitrophenol	ND	ug/kg	364	62.2	1	05/27/15 19:42	05/29/15 15:11	88-75-5	
4-Nitrophenol	ND	ug/kg	364	38.2	1	05/27/15 19:42	05/29/15 15:11	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	364	49.6	1	05/27/15 19:42	05/29/15 15:11	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	364	182	1	05/27/15 19:42	05/29/15 15:11	86-30-6	
Pentachlorophenol	ND	ug/kg	739	182	1	05/27/15 19:42	05/29/15 15:11	87-86-5	
Phenol	ND	ug/kg	364	79.6	1	05/27/15 19:42	05/29/15 15:11	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	364	60.0	1	05/27/15 19:42	05/29/15 15:11	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	364	43.5	1	05/27/15 19:42	05/29/15 15:11	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	364	46.9	1	05/27/15 19:42	05/29/15 15:11	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	56	%	34-125		1	05/27/15 19:42	05/29/15 15:11	4165-60-0	
2-Fluorobiphenyl (S)	65	%	51-125		1	05/27/15 19:42	05/29/15 15:11	321-60-8	
p-Terphenyl-d14 (S)	85	%	55-125		1	05/27/15 19:42	05/29/15 15:11	1718-51-0	
Phenol-d6 (S)	67	%	44-125		1	05/27/15 19:42	05/29/15 15:11	13127-88-3	
2-Fluorophenol (S)	63	%	45-125		1	05/27/15 19:42	05/29/15 15:11	367-12-4	
2,4,6-Tribromophenol (S)	72	%	40-125		1	05/27/15 19:42	05/29/15 15:11	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.1	0.40	1	05/27/15 17:54	05/29/15 23:52	83-32-9	
Acenaphthylene	ND	ug/kg	11.1	0.38	1	05/27/15 17:54	05/29/15 23:52	208-96-8	
Anthracene	ND	ug/kg	11.1	0.34	1	05/27/15 17:54	05/29/15 23:52	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.1	0.20	1	05/27/15 17:54	05/29/15 23:52	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.1	0.22	1	05/27/15 17:54	05/29/15 23:52	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.1	0.39	1	05/27/15 17:54	05/29/15 23:52	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.1	0.39	1	05/27/15 17:54	05/29/15 23:52	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.1	0.44	1	05/27/15 17:54	05/29/15 23:52	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.1	0.31	1	05/27/15 17:54	05/29/15 23:52	91-58-7	
Chrysene	ND	ug/kg	11.1	0.27	1	05/27/15 17:54	05/29/15 23:52	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.1	0.48	1	05/27/15 17:54	05/29/15 23:52	53-70-3	
Fluoranthene	ND	ug/kg	11.1	0.24	1	05/27/15 17:54	05/29/15 23:52	206-44-0	
Fluorene	ND	ug/kg	11.1	0.34	1	05/27/15 17:54	05/29/15 23:52	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.1	0.43	1	05/27/15 17:54	05/29/15 23:52	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.1	0.41	1	05/27/15 17:54	05/29/15 23:52	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.1	0.45	1	05/27/15 17:54	05/29/15 23:52	91-57-6	
Naphthalene	ND	ug/kg	11.1	0.41	1	05/27/15 17:54	05/29/15 23:52	91-20-3	
Phenanthrene	ND	ug/kg	11.1	0.27	1	05/27/15 17:54	05/29/15 23:52	85-01-8	
Pyrene	ND	ug/kg	11.1	0.27	1	05/27/15 17:54	05/29/15 23:52	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	77	%	55-125		1	05/27/15 17:54	05/29/15 23:52	321-60-8	
p-Terphenyl-d14 (S)	88	%	30-150		1	05/27/15 17:54	05/29/15 23:52	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-15 (13-14)**      **Lab ID: 10307126004**      Collected: 05/13/15 10:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	22.0	1.2	1	05/27/15 20:03	06/02/15 05:36	68334-30-5	
Motor Oil Range	ND	mg/kg	14.7	2.6	1	05/27/15 20:03	06/02/15 05:36		
<b>Surrogates</b>									
n-Triacontane (S)	117	%	50-150		1	05/27/15 20:03	06/02/15 05:36	638-68-6	
o-Terphenyl (S)	102	%	50-150		1	05/27/15 20:03	06/02/15 05:36	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>32.5</b>	%	0.10	0.10	1		06/03/15 15:28		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	486	51.7	1	05/27/15 19:42	05/29/15 15:40	101-55-3	
Butylbenzylphthalate	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	85-68-7	
Carbazole	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	59-50-7	
4-Chloroaniline	ND	ug/kg	486	74.5	1	05/27/15 19:42	05/29/15 15:40	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	486	95.0	1	05/27/15 19:42	05/29/15 15:40	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	486	33.9	1	05/27/15 19:42	05/29/15 15:40	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	486	112	1	05/27/15 19:42	05/29/15 15:40	108-60-1	
2-Chloronaphthalene	ND	ug/kg	486	76.1	1	05/27/15 19:42	05/29/15 15:40	91-58-7	
2-Chlorophenol	ND	ug/kg	486	113	1	05/27/15 19:42	05/29/15 15:40	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	486	56.0	1	05/27/15 19:42	05/29/15 15:40	7005-72-3	
Dibenzofuran	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	486	31.4	1	05/27/15 19:42	05/29/15 15:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	486	30.6	1	05/27/15 19:42	05/29/15 15:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	486	32.4	1	05/27/15 19:42	05/29/15 15:40	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	486	67.7	1	05/27/15 19:42	05/29/15 15:40	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	486	91.4	1	05/27/15 19:42	05/29/15 15:40	120-83-2	
Diethylphthalate	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	486	91.0	1	05/27/15 19:42	05/29/15 15:40	105-67-9	
Dimethylphthalate	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	131-11-3	
Di-n-butylphthalate	ND	ug/kg	486	67.4	1	05/27/15 19:42	05/29/15 15:40	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2500	96.6	1	05/27/15 19:42	05/29/15 15:40	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	486	41.5	1	05/27/15 19:42	05/29/15 15:40	606-20-2	
Di-n-octylphthalate	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	486	83.1	1	05/27/15 19:42	05/29/15 15:40	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	486	40.9	1	05/27/15 19:42	05/29/15 15:40	87-68-3	
Hexachlorobenzene	ND	ug/kg	486	63.9	1	05/27/15 19:42	05/29/15 15:40	118-74-1	
Hexachloroethane	ND	ug/kg	486	30.9	1	05/27/15 19:42	05/29/15 15:40	67-72-1	
Isophorone	ND	ug/kg	486	77.6	1	05/27/15 19:42	05/29/15 15:40	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	486	105	1	05/27/15 19:42	05/29/15 15:40	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	972	97.2	1	05/27/15 19:42	05/29/15 15:40		
2-Nitroaniline	ND	ug/kg	486	52.7	1	05/27/15 19:42	05/29/15 15:40	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-15 (13-14)**      **Lab ID: 10307126004**      Collected: 05/13/15 10:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	486	49.6	1	05/27/15 19:42	05/29/15 15:40	99-09-2	
4-Nitroaniline	ND	ug/kg	486	42.6	1	05/27/15 19:42	05/29/15 15:40	100-01-6	
Nitrobenzene	ND	ug/kg	486	98.2	1	05/27/15 19:42	05/29/15 15:40	98-95-3	
2-Nitrophenol	ND	ug/kg	486	83.1	1	05/27/15 19:42	05/29/15 15:40	88-75-5	
4-Nitrophenol	ND	ug/kg	486	51.0	1	05/27/15 19:42	05/29/15 15:40	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	486	66.1	1	05/27/15 19:42	05/29/15 15:40	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	486	243	1	05/27/15 19:42	05/29/15 15:40	86-30-6	
Pentachlorophenol	ND	ug/kg	987	243	1	05/27/15 19:42	05/29/15 15:40	87-86-5	
Phenol	ND	ug/kg	486	106	1	05/27/15 19:42	05/29/15 15:40	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	486	80.1	1	05/27/15 19:42	05/29/15 15:40	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	486	58.0	1	05/27/15 19:42	05/29/15 15:40	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	486	62.6	1	05/27/15 19:42	05/29/15 15:40	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	25	%	34-125		1	05/27/15 19:42	05/29/15 15:40	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	22	%	51-125		1	05/27/15 19:42	05/29/15 15:40	321-60-8	S0
p-Terphenyl-d14 (S)	65	%	55-125		1	05/27/15 19:42	05/29/15 15:40	1718-51-0	
Phenol-d6 (S)	43	%	44-125		1	05/27/15 19:42	05/29/15 15:40	13127-88-3	S0
2-Fluorophenol (S)	33	%	45-125		1	05/27/15 19:42	05/29/15 15:40	367-12-4	S0
2,4,6-Tribromophenol (S)	62	%	40-125		1	05/27/15 19:42	05/29/15 15:40	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.8	0.53	1	05/27/15 17:54	05/30/15 00:12	83-32-9	
Acenaphthylene	ND	ug/kg	14.8	0.50	1	05/27/15 17:54	05/30/15 00:12	208-96-8	
Anthracene	ND	ug/kg	14.8	0.46	1	05/27/15 17:54	05/30/15 00:12	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.8	0.27	1	05/27/15 17:54	05/30/15 00:12	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.8	0.29	1	05/27/15 17:54	05/30/15 00:12	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.8	0.52	1	05/27/15 17:54	05/30/15 00:12	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.8	0.52	1	05/27/15 17:54	05/30/15 00:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.8	0.59	1	05/27/15 17:54	05/30/15 00:12	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.8	0.42	1	05/27/15 17:54	05/30/15 00:12	91-58-7	
Chrysene	ND	ug/kg	14.8	0.36	1	05/27/15 17:54	05/30/15 00:12	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.8	0.64	1	05/27/15 17:54	05/30/15 00:12	53-70-3	
Fluoranthene	ND	ug/kg	14.8	0.32	1	05/27/15 17:54	05/30/15 00:12	206-44-0	
Fluorene	ND	ug/kg	14.8	0.46	1	05/27/15 17:54	05/30/15 00:12	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.8	0.57	1	05/27/15 17:54	05/30/15 00:12	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.8	0.55	1	05/27/15 17:54	05/30/15 00:12	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.8	0.61	1	05/27/15 17:54	05/30/15 00:12	91-57-6	
Naphthalene	ND	ug/kg	14.8	0.55	1	05/27/15 17:54	05/30/15 00:12	91-20-3	
Phenanthrene	ND	ug/kg	14.8	0.37	1	05/27/15 17:54	05/30/15 00:12	85-01-8	
Pyrene	ND	ug/kg	14.8	0.36	1	05/27/15 17:54	05/30/15 00:12	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/27/15 17:54	05/30/15 00:12	321-60-8	
p-Terphenyl-d14 (S)	67	%	30-150		1	05/27/15 17:54	05/30/15 00:12	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-24 (16-16.5)**      **Lab ID: 10307126005**      Collected: 05/13/15 13:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.8	1.2	1	05/27/15 20:03	06/02/15 02:57	68334-30-5	
Motor Oil Range	ND	mg/kg	14.5	2.6	1	05/27/15 20:03	06/02/15 02:57		
<b>Surrogates</b>									
n-Triacontane (S)	114	%	50-150		1	05/27/15 20:03	06/02/15 02:57	638-68-6	
o-Terphenyl (S)	106	%	50-150		1	05/27/15 20:03	06/02/15 02:57	84-15-1	
<b>NWTPH-Gx GCV</b>									
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx									
TPH as Gas	ND	mg/kg	7.2	3.6	1	05/27/15 14:46	05/29/15 01:57		1M
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	92	%	50-150		1	05/27/15 14:46	05/29/15 01:57	98-08-8	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>31.2</b>	%	0.10	0.10	1		06/03/15 15:28		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	479	51.0	1	05/27/15 19:42	05/29/15 16:09	101-55-3	
Butylbenzylphthalate	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	85-68-7	
Carbazole	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	59-50-7	
4-Chloroaniline	ND	ug/kg	479	73.5	1	05/27/15 19:42	05/29/15 16:09	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	479	93.7	1	05/27/15 19:42	05/29/15 16:09	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	479	33.4	1	05/27/15 19:42	05/29/15 16:09	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	479	111	1	05/27/15 19:42	05/29/15 16:09	108-60-1	
2-Chloronaphthalene	ND	ug/kg	479	75.1	1	05/27/15 19:42	05/29/15 16:09	91-58-7	
2-Chlorophenol	ND	ug/kg	479	112	1	05/27/15 19:42	05/29/15 16:09	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	479	55.2	1	05/27/15 19:42	05/29/15 16:09	7005-72-3	
Dibenzofuran	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	479	30.9	1	05/27/15 19:42	05/29/15 16:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	479	30.2	1	05/27/15 19:42	05/29/15 16:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	479	32.0	1	05/27/15 19:42	05/29/15 16:09	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	479	66.8	1	05/27/15 19:42	05/29/15 16:09	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	479	90.2	1	05/27/15 19:42	05/29/15 16:09	120-83-2	
Diethylphthalate	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	479	89.8	1	05/27/15 19:42	05/29/15 16:09	105-67-9	
Dimethylphthalate	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	131-11-3	
Di-n-butylphthalate	ND	ug/kg	479	66.5	1	05/27/15 19:42	05/29/15 16:09	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2470	95.3	1	05/27/15 19:42	05/29/15 16:09	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	479	41.0	1	05/27/15 19:42	05/29/15 16:09	606-20-2	
Di-n-octylphthalate	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	479	81.9	1	05/27/15 19:42	05/29/15 16:09	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	479	40.4	1	05/27/15 19:42	05/29/15 16:09	87-68-3	
Hexachlorobenzene	ND	ug/kg	479	63.1	1	05/27/15 19:42	05/29/15 16:09	118-74-1	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-24 (16-16.5)**      **Lab ID: 10307126005**      Collected: 05/13/15 13:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
Hexachloroethane	ND	ug/kg	479	30.5	1	05/27/15 19:42	05/29/15 16:09	67-72-1	
Isophorone	ND	ug/kg	479	76.6	1	05/27/15 19:42	05/29/15 16:09	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	479	104	1	05/27/15 19:42	05/29/15 16:09	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	959	95.9	1	05/27/15 19:42	05/29/15 16:09		
2-Nitroaniline	ND	ug/kg	479	52.0	1	05/27/15 19:42	05/29/15 16:09	88-74-4	
3-Nitroaniline	ND	ug/kg	479	49.0	1	05/27/15 19:42	05/29/15 16:09	99-09-2	
4-Nitroaniline	ND	ug/kg	479	42.0	1	05/27/15 19:42	05/29/15 16:09	100-01-6	
Nitrobenzene	ND	ug/kg	479	96.9	1	05/27/15 19:42	05/29/15 16:09	98-95-3	
2-Nitrophenol	ND	ug/kg	479	81.9	1	05/27/15 19:42	05/29/15 16:09	88-75-5	
4-Nitrophenol	ND	ug/kg	479	50.3	1	05/27/15 19:42	05/29/15 16:09	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	479	65.2	1	05/27/15 19:42	05/29/15 16:09	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	479	240	1	05/27/15 19:42	05/29/15 16:09	86-30-6	
Pentachlorophenol	ND	ug/kg	974	240	1	05/27/15 19:42	05/29/15 16:09	87-86-5	
Phenol	ND	ug/kg	479	105	1	05/27/15 19:42	05/29/15 16:09	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	479	79.0	1	05/27/15 19:42	05/29/15 16:09	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	479	57.2	1	05/27/15 19:42	05/29/15 16:09	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	479	61.8	1	05/27/15 19:42	05/29/15 16:09	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	42	%	34-125		1	05/27/15 19:42	05/29/15 16:09	4165-60-0	
2-Fluorobiphenyl (S)	36	%	51-125		1	05/27/15 19:42	05/29/15 16:09	321-60-8	S0
p-Terphenyl-d14 (S)	68	%	55-125		1	05/27/15 19:42	05/29/15 16:09	1718-51-0	
Phenol-d6 (S)	53	%	44-125		1	05/27/15 19:42	05/29/15 16:09	13127-88-3	
2-Fluorophenol (S)	49	%	45-125		1	05/27/15 19:42	05/29/15 16:09	367-12-4	
2,4,6-Tribromophenol (S)	63	%	40-125		1	05/27/15 19:42	05/29/15 16:09	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.5	0.52	1	05/27/15 17:54	05/30/15 00:33	83-32-9	
Acenaphthylene	ND	ug/kg	14.5	0.49	1	05/27/15 17:54	05/30/15 00:33	208-96-8	
Anthracene	ND	ug/kg	14.5	0.45	1	05/27/15 17:54	05/30/15 00:33	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.5	0.27	1	05/27/15 17:54	05/30/15 00:33	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.5	0.29	1	05/27/15 17:54	05/30/15 00:33	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.5	0.51	1	05/27/15 17:54	05/30/15 00:33	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.5	0.51	1	05/27/15 17:54	05/30/15 00:33	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.5	0.58	1	05/27/15 17:54	05/30/15 00:33	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.5	0.41	1	05/27/15 17:54	05/30/15 00:33	91-58-7	
Chrysene	ND	ug/kg	14.5	0.36	1	05/27/15 17:54	05/30/15 00:33	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.5	0.62	1	05/27/15 17:54	05/30/15 00:33	53-70-3	
Fluoranthene	ND	ug/kg	14.5	0.32	1	05/27/15 17:54	05/30/15 00:33	206-44-0	
Fluorene	ND	ug/kg	14.5	0.45	1	05/27/15 17:54	05/30/15 00:33	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.5	0.56	1	05/27/15 17:54	05/30/15 00:33	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.5	0.54	1	05/27/15 17:54	05/30/15 00:33	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.5	0.59	1	05/27/15 17:54	05/30/15 00:33	91-57-6	
Naphthalene	ND	ug/kg	14.5	0.54	1	05/27/15 17:54	05/30/15 00:33	91-20-3	
Phenanthrene	ND	ug/kg	14.5	0.36	1	05/27/15 17:54	05/30/15 00:33	85-01-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-24 (16-16.5)**      **Lab ID: 10307126005**      Collected: 05/13/15 13:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3550									
Pyrene	ND	ug/kg	14.5	0.35	1	05/27/15 17:54	05/30/15 00:33	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	67	%	55-125		1	05/27/15 17:54	05/30/15 00:33	321-60-8	
p-Terphenyl-d14 (S)	85	%	30-150		1	05/27/15 17:54	05/30/15 00:33	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-24 (16.5-17.5)**      **Lab ID: 10307126006**      Collected: 05/13/15 13:05      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	23.4	1.3	1	05/27/15 20:03	06/02/15 03:42	68334-30-5	
Motor Oil Range	ND	mg/kg	15.6	2.8	1	05/27/15 20:03	06/02/15 03:42		
<b>Surrogates</b>									
n-Triacontane (S)	121	%	50-150		1	05/27/15 20:03	06/02/15 03:42	638-68-6	
o-Terphenyl (S)	117	%	50-150		1	05/27/15 20:03	06/02/15 03:42	84-15-1	
<b>NWTPH-Gx GCV</b>									
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx									
TPH as Gas	ND	mg/kg	7.5	3.7	1	05/27/15 14:46	06/04/15 12:07		1M
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	91	%	50-150		1	05/27/15 14:46	06/04/15 12:07	98-08-8	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>35.9</b>	%	0.10	0.10	1		06/03/15 15:28		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	515	54.8	1	05/27/15 19:42	05/29/15 16:37	101-55-3	
Butylbenzylphthalate	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	85-68-7	
Carbazole	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	59-50-7	
4-Chloroaniline	ND	ug/kg	515	79.0	1	05/27/15 19:42	05/29/15 16:37	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	515	101	1	05/27/15 19:42	05/29/15 16:37	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	515	35.9	1	05/27/15 19:42	05/29/15 16:37	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	515	119	1	05/27/15 19:42	05/29/15 16:37	108-60-1	
2-Chloronaphthalene	ND	ug/kg	515	80.7	1	05/27/15 19:42	05/29/15 16:37	91-58-7	
2-Chlorophenol	ND	ug/kg	515	120	1	05/27/15 19:42	05/29/15 16:37	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	515	59.3	1	05/27/15 19:42	05/29/15 16:37	7005-72-3	
Dibenzofuran	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	515	33.2	1	05/27/15 19:42	05/29/15 16:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	515	32.5	1	05/27/15 19:42	05/29/15 16:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	515	34.3	1	05/27/15 19:42	05/29/15 16:37	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	515	71.8	1	05/27/15 19:42	05/29/15 16:37	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	515	96.9	1	05/27/15 19:42	05/29/15 16:37	120-83-2	
Diethylphthalate	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	515	96.4	1	05/27/15 19:42	05/29/15 16:37	105-67-9	
Dimethylphthalate	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	131-11-3	
Di-n-butylphthalate	ND	ug/kg	515	71.5	1	05/27/15 19:42	05/29/15 16:37	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2650	102	1	05/27/15 19:42	05/29/15 16:37	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	515	44.0	1	05/27/15 19:42	05/29/15 16:37	606-20-2	
Di-n-octylphthalate	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	515	88.0	1	05/27/15 19:42	05/29/15 16:37	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	515	43.4	1	05/27/15 19:42	05/29/15 16:37	87-68-3	
Hexachlorobenzene	ND	ug/kg	515	67.7	1	05/27/15 19:42	05/29/15 16:37	118-74-1	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-24 (16.5-17.5)**      **Lab ID: 10307126006**      Collected: 05/13/15 13:05      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
Hexachloroethane	ND	ug/kg	515	32.8	1	05/27/15 19:42	05/29/15 16:37	67-72-1	
Isophorone	ND	ug/kg	515	82.2	1	05/27/15 19:42	05/29/15 16:37	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	515	111	1	05/27/15 19:42	05/29/15 16:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	1030	103	1	05/27/15 19:42	05/29/15 16:37		
2-Nitroaniline	ND	ug/kg	515	55.9	1	05/27/15 19:42	05/29/15 16:37	88-74-4	
3-Nitroaniline	ND	ug/kg	515	52.6	1	05/27/15 19:42	05/29/15 16:37	99-09-2	
4-Nitroaniline	ND	ug/kg	515	45.1	1	05/27/15 19:42	05/29/15 16:37	100-01-6	
Nitrobenzene	ND	ug/kg	515	104	1	05/27/15 19:42	05/29/15 16:37	98-95-3	
2-Nitrophenol	ND	ug/kg	515	88.0	1	05/27/15 19:42	05/29/15 16:37	88-75-5	
4-Nitrophenol	ND	ug/kg	515	54.0	1	05/27/15 19:42	05/29/15 16:37	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	515	70.1	1	05/27/15 19:42	05/29/15 16:37	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	515	258	1	05/27/15 19:42	05/29/15 16:37	86-30-6	
Pentachlorophenol	ND	ug/kg	1050	258	1	05/27/15 19:42	05/29/15 16:37	87-86-5	
Phenol	ND	ug/kg	515	113	1	05/27/15 19:42	05/29/15 16:37	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	515	84.9	1	05/27/15 19:42	05/29/15 16:37	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	515	61.5	1	05/27/15 19:42	05/29/15 16:37	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	515	66.3	1	05/27/15 19:42	05/29/15 16:37	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	44	%	34-125		1	05/27/15 19:42	05/29/15 16:37	4165-60-0	
2-Fluorobiphenyl (S)	43	%	51-125		1	05/27/15 19:42	05/29/15 16:37	321-60-8	S0
p-Terphenyl-d14 (S)	69	%	55-125		1	05/27/15 19:42	05/29/15 16:37	1718-51-0	
Phenol-d6 (S)	52	%	44-125		1	05/27/15 19:42	05/29/15 16:37	13127-88-3	
2-Fluorophenol (S)	50	%	45-125		1	05/27/15 19:42	05/29/15 16:37	367-12-4	
2,4,6-Tribromophenol (S)	64	%	40-125		1	05/27/15 19:42	05/29/15 16:37	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	15.6	0.56	1	05/27/15 17:54	05/30/15 00:54	83-32-9	
Acenaphthylene	ND	ug/kg	15.6	0.53	1	05/27/15 17:54	05/30/15 00:54	208-96-8	
Anthracene	ND	ug/kg	15.6	0.48	1	05/27/15 17:54	05/30/15 00:54	120-12-7	
Benzo(a)anthracene	ND	ug/kg	15.6	0.29	1	05/27/15 17:54	05/30/15 00:54	56-55-3	
Benzo(a)pyrene	ND	ug/kg	15.6	0.31	1	05/27/15 17:54	05/30/15 00:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	15.6	0.54	1	05/27/15 17:54	05/30/15 00:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	15.6	0.55	1	05/27/15 17:54	05/30/15 00:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	15.6	0.62	1	05/27/15 17:54	05/30/15 00:54	207-08-9	
2-Chloronaphthalene	ND	ug/kg	15.6	0.44	1	05/27/15 17:54	05/30/15 00:54	91-58-7	
Chrysene	ND	ug/kg	15.6	0.38	1	05/27/15 17:54	05/30/15 00:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	15.6	0.67	1	05/27/15 17:54	05/30/15 00:54	53-70-3	
Fluoranthene	ND	ug/kg	15.6	0.34	1	05/27/15 17:54	05/30/15 00:54	206-44-0	
Fluorene	ND	ug/kg	15.6	0.48	1	05/27/15 17:54	05/30/15 00:54	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	15.6	0.60	1	05/27/15 17:54	05/30/15 00:54	193-39-5	
1-Methylnaphthalene	ND	ug/kg	15.6	0.58	1	05/27/15 17:54	05/30/15 00:54	90-12-0	
2-Methylnaphthalene	ND	ug/kg	15.6	0.64	1	05/27/15 17:54	05/30/15 00:54	91-57-6	
Naphthalene	ND	ug/kg	15.6	0.58	1	05/27/15 17:54	05/30/15 00:54	91-20-3	
Phenanthrene	ND	ug/kg	15.6	0.39	1	05/27/15 17:54	05/30/15 00:54	85-01-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-24 (16.5-17.5)**      **Lab ID: 10307126006**      Collected: 05/13/15 13:05      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA 3550									
Pyrene	ND	ug/kg	15.6	0.37	1	05/27/15 17:54	05/30/15 00:54	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	52	%	55-125		1	05/27/15 17:54	05/30/15 00:54	321-60-8	2M, S0
p-Terphenyl-d14 (S)	75	%	30-150		1	05/27/15 17:54	05/30/15 00:54	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-26 (16-17)**      **Lab ID: 10307126007**      Collected: 05/13/15 14:20      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	17.6	0.95	1	05/27/15 20:03	06/02/15 04:28	68334-30-5	
Motor Oil Range	ND	mg/kg	11.8	2.1	1	05/27/15 20:03	06/02/15 04:28		
<b>Surrogates</b>									
n-Triacontane (S)	120	%	50-150		1	05/27/15 20:03	06/02/15 04:28	638-68-6	
o-Terphenyl (S)	118	%	50-150		1	05/27/15 20:03	06/02/15 04:28	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>15.8</b>	%	0.10	0.10	1		06/03/15 15:28		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	392	41.7	1	05/27/15 19:42	05/29/15 17:06	101-55-3	
Butylbenzylphthalate	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	85-68-7	
Carbazole	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	59-50-7	
4-Chloroaniline	ND	ug/kg	392	60.1	1	05/27/15 19:42	05/29/15 17:06	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	392	76.6	1	05/27/15 19:42	05/29/15 17:06	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	392	27.3	1	05/27/15 19:42	05/29/15 17:06	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	392	90.5	1	05/27/15 19:42	05/29/15 17:06	108-60-1	
2-Chloronaphthalene	ND	ug/kg	392	61.4	1	05/27/15 19:42	05/29/15 17:06	91-58-7	
2-Chlorophenol	ND	ug/kg	392	91.5	1	05/27/15 19:42	05/29/15 17:06	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	392	45.1	1	05/27/15 19:42	05/29/15 17:06	7005-72-3	
Dibenzofuran	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	392	25.3	1	05/27/15 19:42	05/29/15 17:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	392	24.7	1	05/27/15 19:42	05/29/15 17:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	392	26.1	1	05/27/15 19:42	05/29/15 17:06	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	392	54.6	1	05/27/15 19:42	05/29/15 17:06	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	392	73.8	1	05/27/15 19:42	05/29/15 17:06	120-83-2	
Diethylphthalate	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	392	73.4	1	05/27/15 19:42	05/29/15 17:06	105-67-9	
Dimethylphthalate	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	131-11-3	
Di-n-butylphthalate	ND	ug/kg	392	54.4	1	05/27/15 19:42	05/29/15 17:06	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2020	77.9	1	05/27/15 19:42	05/29/15 17:06	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	392	33.5	1	05/27/15 19:42	05/29/15 17:06	606-20-2	
Di-n-octylphthalate	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	392	67.0	1	05/27/15 19:42	05/29/15 17:06	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	392	33.0	1	05/27/15 19:42	05/29/15 17:06	87-68-3	
Hexachlorobenzene	ND	ug/kg	392	51.6	1	05/27/15 19:42	05/29/15 17:06	118-74-1	
Hexachloroethane	ND	ug/kg	392	24.9	1	05/27/15 19:42	05/29/15 17:06	67-72-1	
Isophorone	ND	ug/kg	392	62.6	1	05/27/15 19:42	05/29/15 17:06	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	392	84.8	1	05/27/15 19:42	05/29/15 17:06	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	784	78.4	1	05/27/15 19:42	05/29/15 17:06		
2-Nitroaniline	ND	ug/kg	392	42.5	1	05/27/15 19:42	05/29/15 17:06	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-26 (16-17)**      **Lab ID: 10307126007**      Collected: 05/13/15 14:20      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	392	40.0	1	05/27/15 19:42	05/29/15 17:06	99-09-2	
4-Nitroaniline	ND	ug/kg	392	34.3	1	05/27/15 19:42	05/29/15 17:06	100-01-6	
Nitrobenzene	ND	ug/kg	392	79.2	1	05/27/15 19:42	05/29/15 17:06	98-95-3	
2-Nitrophenol	ND	ug/kg	392	67.0	1	05/27/15 19:42	05/29/15 17:06	88-75-5	
4-Nitrophenol	ND	ug/kg	392	41.1	1	05/27/15 19:42	05/29/15 17:06	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	392	53.3	1	05/27/15 19:42	05/29/15 17:06	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	392	196	1	05/27/15 19:42	05/29/15 17:06	86-30-6	
Pentachlorophenol	ND	ug/kg	796	196	1	05/27/15 19:42	05/29/15 17:06	87-86-5	
Phenol	ND	ug/kg	392	85.6	1	05/27/15 19:42	05/29/15 17:06	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	392	64.6	1	05/27/15 19:42	05/29/15 17:06	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	392	46.8	1	05/27/15 19:42	05/29/15 17:06	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	392	50.5	1	05/27/15 19:42	05/29/15 17:06	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	45	%	34-125		1	05/27/15 19:42	05/29/15 17:06	4165-60-0	
2-Fluorobiphenyl (S)	51	%	51-125		1	05/27/15 19:42	05/29/15 17:06	321-60-8	
p-Terphenyl-d14 (S)	76	%	55-125		1	05/27/15 19:42	05/29/15 17:06	1718-51-0	
Phenol-d6 (S)	54	%	44-125		1	05/27/15 19:42	05/29/15 17:06	13127-88-3	
2-Fluorophenol (S)	50	%	45-125		1	05/27/15 19:42	05/29/15 17:06	367-12-4	
2,4,6-Tribromophenol (S)	67	%	40-125		1	05/27/15 19:42	05/29/15 17:06	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.9	0.43	1	05/27/15 17:54	05/30/15 01:14	83-32-9	
Acenaphthylene	ND	ug/kg	11.9	0.40	1	05/27/15 17:54	05/30/15 01:14	208-96-8	
Anthracene	ND	ug/kg	11.9	0.36	1	05/27/15 17:54	05/30/15 01:14	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.9	0.22	1	05/27/15 17:54	05/30/15 01:14	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.9	0.23	1	05/27/15 17:54	05/30/15 01:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.9	0.41	1	05/27/15 17:54	05/30/15 01:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.9	0.42	1	05/27/15 17:54	05/30/15 01:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.9	0.48	1	05/27/15 17:54	05/30/15 01:14	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.9	0.34	1	05/27/15 17:54	05/30/15 01:14	91-58-7	
Chrysene	ND	ug/kg	11.9	0.29	1	05/27/15 17:54	05/30/15 01:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.9	0.51	1	05/27/15 17:54	05/30/15 01:14	53-70-3	
Fluoranthene	ND	ug/kg	11.9	0.26	1	05/27/15 17:54	05/30/15 01:14	206-44-0	
Fluorene	ND	ug/kg	11.9	0.37	1	05/27/15 17:54	05/30/15 01:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.9	0.46	1	05/27/15 17:54	05/30/15 01:14	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.9	0.44	1	05/27/15 17:54	05/30/15 01:14	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.9	0.49	1	05/27/15 17:54	05/30/15 01:14	91-57-6	
Naphthalene	ND	ug/kg	11.9	0.44	1	05/27/15 17:54	05/30/15 01:14	91-20-3	
Phenanthrene	ND	ug/kg	11.9	0.29	1	05/27/15 17:54	05/30/15 01:14	85-01-8	
Pyrene	ND	ug/kg	11.9	0.29	1	05/27/15 17:54	05/30/15 01:14	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	64	%	55-125		1	05/27/15 17:54	05/30/15 01:14	321-60-8	
p-Terphenyl-d14 (S)	78	%	30-150		1	05/27/15 17:54	05/30/15 01:14	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-26 (17-18)**      **Lab ID: 10307126008**      Collected: 05/13/15 14:25      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	22.8	1.2	1	05/27/15 20:03	06/02/15 04:50	68334-30-5	
Motor Oil Range	ND	mg/kg	15.2	2.7	1	05/27/15 20:03	06/02/15 04:50		
<b>Surrogates</b>									
n-Triacontane (S)	118	%	50-150		1	05/27/15 20:03	06/02/15 04:50	638-68-6	
o-Terphenyl (S)	112	%	50-150		1	05/27/15 20:03	06/02/15 04:50	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>34.3</b>	%	0.10	0.10	1		06/03/15 15:29		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	503	53.5	1	05/27/15 19:42	05/29/15 17:35	101-55-3	
Butylbenzylphthalate	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	85-68-7	
Carbazole	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	59-50-7	
4-Chloroaniline	ND	ug/kg	503	77.1	1	05/27/15 19:42	05/29/15 17:35	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	503	98.2	1	05/27/15 19:42	05/29/15 17:35	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	503	35.0	1	05/27/15 19:42	05/29/15 17:35	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	503	116	1	05/27/15 19:42	05/29/15 17:35	108-60-1	
2-Chloronaphthalene	ND	ug/kg	503	78.7	1	05/27/15 19:42	05/29/15 17:35	91-58-7	
2-Chlorophenol	ND	ug/kg	503	117	1	05/27/15 19:42	05/29/15 17:35	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	503	57.9	1	05/27/15 19:42	05/29/15 17:35	7005-72-3	
Dibenzofuran	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	503	32.4	1	05/27/15 19:42	05/29/15 17:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	503	31.7	1	05/27/15 19:42	05/29/15 17:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	503	33.5	1	05/27/15 19:42	05/29/15 17:35	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	503	70.1	1	05/27/15 19:42	05/29/15 17:35	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	503	94.6	1	05/27/15 19:42	05/29/15 17:35	120-83-2	
Diethylphthalate	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	503	94.1	1	05/27/15 19:42	05/29/15 17:35	105-67-9	
Dimethylphthalate	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	131-11-3	
Di-n-butylphthalate	ND	ug/kg	503	69.7	1	05/27/15 19:42	05/29/15 17:35	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2590	99.9	1	05/27/15 19:42	05/29/15 17:35	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	503	42.9	1	05/27/15 19:42	05/29/15 17:35	606-20-2	
Di-n-octylphthalate	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	503	85.9	1	05/27/15 19:42	05/29/15 17:35	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	503	42.3	1	05/27/15 19:42	05/29/15 17:35	87-68-3	
Hexachlorobenzene	ND	ug/kg	503	66.1	1	05/27/15 19:42	05/29/15 17:35	118-74-1	
Hexachloroethane	ND	ug/kg	503	32.0	1	05/27/15 19:42	05/29/15 17:35	67-72-1	
Isophorone	ND	ug/kg	503	80.3	1	05/27/15 19:42	05/29/15 17:35	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	503	109	1	05/27/15 19:42	05/29/15 17:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	1010	101	1	05/27/15 19:42	05/29/15 17:35		
2-Nitroaniline	ND	ug/kg	503	54.5	1	05/27/15 19:42	05/29/15 17:35	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-26 (17-18)**      **Lab ID: 10307126008**      Collected: 05/13/15 14:25      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	503	51.3	1	05/27/15 19:42	05/29/15 17:35	99-09-2	
4-Nitroaniline	ND	ug/kg	503	44.0	1	05/27/15 19:42	05/29/15 17:35	100-01-6	
Nitrobenzene	ND	ug/kg	503	102	1	05/27/15 19:42	05/29/15 17:35	98-95-3	
2-Nitrophenol	ND	ug/kg	503	85.9	1	05/27/15 19:42	05/29/15 17:35	88-75-5	
4-Nitrophenol	ND	ug/kg	503	52.7	1	05/27/15 19:42	05/29/15 17:35	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	503	68.4	1	05/27/15 19:42	05/29/15 17:35	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	503	251	1	05/27/15 19:42	05/29/15 17:35	86-30-6	
Pentachlorophenol	ND	ug/kg	1020	251	1	05/27/15 19:42	05/29/15 17:35	87-86-5	
Phenol	ND	ug/kg	503	110	1	05/27/15 19:42	05/29/15 17:35	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	503	82.8	1	05/27/15 19:42	05/29/15 17:35	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	503	60.0	1	05/27/15 19:42	05/29/15 17:35	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	503	64.7	1	05/27/15 19:42	05/29/15 17:35	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	51	%	34-125		1	05/27/15 19:42	05/29/15 17:35	4165-60-0	
2-Fluorobiphenyl (S)	52	%	51-125		1	05/27/15 19:42	05/29/15 17:35	321-60-8	
p-Terphenyl-d14 (S)	70	%	55-125		1	05/27/15 19:42	05/29/15 17:35	1718-51-0	
Phenol-d6 (S)	58	%	44-125		1	05/27/15 19:42	05/29/15 17:35	13127-88-3	
2-Fluorophenol (S)	55	%	45-125		1	05/27/15 19:42	05/29/15 17:35	367-12-4	
2,4,6-Tribromophenol (S)	63	%	40-125		1	05/27/15 19:42	05/29/15 17:35	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	15.2	0.55	1	05/27/15 17:54	05/30/15 01:35	83-32-9	
Acenaphthylene	ND	ug/kg	15.2	0.51	1	05/27/15 17:54	05/30/15 01:35	208-96-8	
Anthracene	ND	ug/kg	15.2	0.47	1	05/27/15 17:54	05/30/15 01:35	120-12-7	
Benzo(a)anthracene	ND	ug/kg	15.2	0.28	1	05/27/15 17:54	05/30/15 01:35	56-55-3	
Benzo(a)pyrene	ND	ug/kg	15.2	0.30	1	05/27/15 17:54	05/30/15 01:35	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	15.2	0.53	1	05/27/15 17:54	05/30/15 01:35	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	15.2	0.54	1	05/27/15 17:54	05/30/15 01:35	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	15.2	0.61	1	05/27/15 17:54	05/30/15 01:35	207-08-9	
2-Chloronaphthalene	ND	ug/kg	15.2	0.43	1	05/27/15 17:54	05/30/15 01:35	91-58-7	
Chrysene	ND	ug/kg	15.2	0.37	1	05/27/15 17:54	05/30/15 01:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	15.2	0.65	1	05/27/15 17:54	05/30/15 01:35	53-70-3	
Fluoranthene	ND	ug/kg	15.2	0.33	1	05/27/15 17:54	05/30/15 01:35	206-44-0	
Fluorene	ND	ug/kg	15.2	0.47	1	05/27/15 17:54	05/30/15 01:35	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	15.2	0.58	1	05/27/15 17:54	05/30/15 01:35	193-39-5	
1-Methylnaphthalene	ND	ug/kg	15.2	0.57	1	05/27/15 17:54	05/30/15 01:35	90-12-0	
2-Methylnaphthalene	ND	ug/kg	15.2	0.62	1	05/27/15 17:54	05/30/15 01:35	91-57-6	
Naphthalene	ND	ug/kg	15.2	0.56	1	05/27/15 17:54	05/30/15 01:35	91-20-3	
Phenanthrene	ND	ug/kg	15.2	0.38	1	05/27/15 17:54	05/30/15 01:35	85-01-8	
Pyrene	ND	ug/kg	15.2	0.36	1	05/27/15 17:54	05/30/15 01:35	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/27/15 17:54	05/30/15 01:35	321-60-8	
p-Terphenyl-d14 (S)	74	%	30-150		1	05/27/15 17:54	05/30/15 01:35	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-27 (16-17)**      **Lab ID: 10307126009**      Collected: 05/13/15 17:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	17.5	0.94	1	05/27/15 20:03	06/02/15 04:05	68334-30-5	
Motor Oil Range	ND	mg/kg	11.7	2.1	1	05/27/15 20:03	06/02/15 04:05		
<b>Surrogates</b>									
n-Triacontane (S)	107	%	50-150		1	05/27/15 20:03	06/02/15 04:05	638-68-6	
o-Terphenyl (S)	110	%	50-150		1	05/27/15 20:03	06/02/15 04:05	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>15.1</b>	%	0.10	0.10	1		06/03/15 16:32		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	387	41.2	1	05/27/15 19:42	05/29/15 18:04	101-55-3	
Butylbenzylphthalate	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	85-68-7	
Carbazole	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	59-50-7	
4-Chloroaniline	ND	ug/kg	387	59.4	1	05/27/15 19:42	05/29/15 18:04	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	387	75.7	1	05/27/15 19:42	05/29/15 18:04	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	387	27.0	1	05/27/15 19:42	05/29/15 18:04	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	387	89.4	1	05/27/15 19:42	05/29/15 18:04	108-60-1	
2-Chloronaphthalene	ND	ug/kg	387	60.7	1	05/27/15 19:42	05/29/15 18:04	91-58-7	
2-Chlorophenol	ND	ug/kg	387	90.4	1	05/27/15 19:42	05/29/15 18:04	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	387	44.6	1	05/27/15 19:42	05/29/15 18:04	7005-72-3	
Dibenzofuran	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	387	25.0	1	05/27/15 19:42	05/29/15 18:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	387	24.4	1	05/27/15 19:42	05/29/15 18:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	387	25.8	1	05/27/15 19:42	05/29/15 18:04	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	387	54.0	1	05/27/15 19:42	05/29/15 18:04	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	387	72.9	1	05/27/15 19:42	05/29/15 18:04	120-83-2	
Diethylphthalate	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	387	72.5	1	05/27/15 19:42	05/29/15 18:04	105-67-9	
Dimethylphthalate	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	131-11-3	
Di-n-butylphthalate	ND	ug/kg	387	53.8	1	05/27/15 19:42	05/29/15 18:04	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2000	77.0	1	05/27/15 19:42	05/29/15 18:04	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	387	33.1	1	05/27/15 19:42	05/29/15 18:04	606-20-2	
Di-n-octylphthalate	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	387	66.2	1	05/27/15 19:42	05/29/15 18:04	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	387	32.6	1	05/27/15 19:42	05/29/15 18:04	87-68-3	
Hexachlorobenzene	ND	ug/kg	387	50.9	1	05/27/15 19:42	05/29/15 18:04	118-74-1	
Hexachloroethane	ND	ug/kg	387	24.6	1	05/27/15 19:42	05/29/15 18:04	67-72-1	
Isophorone	ND	ug/kg	387	61.9	1	05/27/15 19:42	05/29/15 18:04	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	387	83.8	1	05/27/15 19:42	05/29/15 18:04	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	775	77.5	1	05/27/15 19:42	05/29/15 18:04		
2-Nitroaniline	ND	ug/kg	387	42.0	1	05/27/15 19:42	05/29/15 18:04	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-27 (16-17)**      **Lab ID: 10307126009**      Collected: 05/13/15 17:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	387	39.6	1	05/27/15 19:42	05/29/15 18:04	99-09-2	
4-Nitroaniline	ND	ug/kg	387	33.9	1	05/27/15 19:42	05/29/15 18:04	100-01-6	
Nitrobenzene	ND	ug/kg	387	78.3	1	05/27/15 19:42	05/29/15 18:04	98-95-3	
2-Nitrophenol	ND	ug/kg	387	66.2	1	05/27/15 19:42	05/29/15 18:04	88-75-5	
4-Nitrophenol	ND	ug/kg	387	40.6	1	05/27/15 19:42	05/29/15 18:04	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	387	52.7	1	05/27/15 19:42	05/29/15 18:04	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	387	194	1	05/27/15 19:42	05/29/15 18:04	86-30-6	
Pentachlorophenol	ND	ug/kg	786	194	1	05/27/15 19:42	05/29/15 18:04	87-86-5	
Phenol	ND	ug/kg	387	84.6	1	05/27/15 19:42	05/29/15 18:04	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	387	63.8	1	05/27/15 19:42	05/29/15 18:04	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	387	46.2	1	05/27/15 19:42	05/29/15 18:04	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	387	49.9	1	05/27/15 19:42	05/29/15 18:04	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	56	%	34-125		1	05/27/15 19:42	05/29/15 18:04	4165-60-0	
2-Fluorobiphenyl (S)	58	%	51-125		1	05/27/15 19:42	05/29/15 18:04	321-60-8	
p-Terphenyl-d14 (S)	82	%	55-125		1	05/27/15 19:42	05/29/15 18:04	1718-51-0	
Phenol-d6 (S)	58	%	44-125		1	05/27/15 19:42	05/29/15 18:04	13127-88-3	
2-Fluorophenol (S)	59	%	45-125		1	05/27/15 19:42	05/29/15 18:04	367-12-4	
2,4,6-Tribromophenol (S)	73	%	40-125		1	05/27/15 19:42	05/29/15 18:04	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.7	0.42	1	05/27/15 17:54	05/30/15 01:55	83-32-9	
Acenaphthylene	ND	ug/kg	11.7	0.40	1	05/27/15 17:54	05/30/15 01:55	208-96-8	
Anthracene	ND	ug/kg	11.7	0.36	1	05/27/15 17:54	05/30/15 01:55	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.7	0.22	1	05/27/15 17:54	05/30/15 01:55	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.7	0.23	1	05/27/15 17:54	05/30/15 01:55	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.7	0.41	1	05/27/15 17:54	05/30/15 01:55	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.7	0.42	1	05/27/15 17:54	05/30/15 01:55	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.7	0.47	1	05/27/15 17:54	05/30/15 01:55	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.7	0.33	1	05/27/15 17:54	05/30/15 01:55	91-58-7	
Chrysene	ND	ug/kg	11.7	0.29	1	05/27/15 17:54	05/30/15 01:55	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.7	0.50	1	05/27/15 17:54	05/30/15 01:55	53-70-3	
Fluoranthene	ND	ug/kg	11.7	0.26	1	05/27/15 17:54	05/30/15 01:55	206-44-0	
Fluorene	ND	ug/kg	11.7	0.36	1	05/27/15 17:54	05/30/15 01:55	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.7	0.45	1	05/27/15 17:54	05/30/15 01:55	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.7	0.44	1	05/27/15 17:54	05/30/15 01:55	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.7	0.48	1	05/27/15 17:54	05/30/15 01:55	91-57-6	
Naphthalene	ND	ug/kg	11.7	0.44	1	05/27/15 17:54	05/30/15 01:55	91-20-3	
Phenanthrene	ND	ug/kg	11.7	0.29	1	05/27/15 17:54	05/30/15 01:55	85-01-8	
Pyrene	ND	ug/kg	11.7	0.28	1	05/27/15 17:54	05/30/15 01:55	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	55-125		1	05/27/15 17:54	05/30/15 01:55	321-60-8	
p-Terphenyl-d14 (S)	90	%	30-150		1	05/27/15 17:54	05/30/15 01:55	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-27 (24-24.5)**      **Lab ID: 10307126010**      Collected: 05/13/15 17:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	17.2	0.93	1	05/27/15 20:03	06/02/15 03:20	68334-30-5	
Motor Oil Range	<b>61.6</b>	mg/kg	11.5	2.1	1	05/27/15 20:03	06/02/15 03:20		
<b>Surrogates</b>									
n-Triacontane (S)	115	%	50-150		1	05/27/15 20:03	06/02/15 03:20	638-68-6	
o-Terphenyl (S)	110	%	50-150		1	05/27/15 20:03	06/02/15 03:20	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>12.7</b>	%	0.10	0.10	1		06/03/15 16:33		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	378	40.2	1	05/27/15 19:42	05/29/15 18:33	101-55-3	
Butylbenzylphthalate	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	85-68-7	
Carbazole	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	59-50-7	
4-Chloroaniline	ND	ug/kg	378	58.0	1	05/27/15 19:42	05/29/15 18:33	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	378	73.9	1	05/27/15 19:42	05/29/15 18:33	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	378	26.4	1	05/27/15 19:42	05/29/15 18:33	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	378	87.3	1	05/27/15 19:42	05/29/15 18:33	108-60-1	
2-Chloronaphthalene	ND	ug/kg	378	59.2	1	05/27/15 19:42	05/29/15 18:33	91-58-7	
2-Chlorophenol	ND	ug/kg	378	88.2	1	05/27/15 19:42	05/29/15 18:33	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	378	43.5	1	05/27/15 19:42	05/29/15 18:33	7005-72-3	
Dibenzofuran	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	378	24.4	1	05/27/15 19:42	05/29/15 18:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	378	23.8	1	05/27/15 19:42	05/29/15 18:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	378	25.2	1	05/27/15 19:42	05/29/15 18:33	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	378	52.7	1	05/27/15 19:42	05/29/15 18:33	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	378	71.2	1	05/27/15 19:42	05/29/15 18:33	120-83-2	
Diethylphthalate	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	378	70.8	1	05/27/15 19:42	05/29/15 18:33	105-67-9	
Dimethylphthalate	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	131-11-3	
Di-n-butylphthalate	ND	ug/kg	378	52.5	1	05/27/15 19:42	05/29/15 18:33	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1950	75.2	1	05/27/15 19:42	05/29/15 18:33	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	378	32.3	1	05/27/15 19:42	05/29/15 18:33	606-20-2	
Di-n-octylphthalate	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	378	64.6	1	05/27/15 19:42	05/29/15 18:33	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	378	31.9	1	05/27/15 19:42	05/29/15 18:33	87-68-3	
Hexachlorobenzene	ND	ug/kg	378	49.7	1	05/27/15 19:42	05/29/15 18:33	118-74-1	
Hexachloroethane	ND	ug/kg	378	24.1	1	05/27/15 19:42	05/29/15 18:33	67-72-1	
Isophorone	ND	ug/kg	378	60.4	1	05/27/15 19:42	05/29/15 18:33	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	378	81.8	1	05/27/15 19:42	05/29/15 18:33	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	756	75.6	1	05/27/15 19:42	05/29/15 18:33		
2-Nitroaniline	ND	ug/kg	378	41.0	1	05/27/15 19:42	05/29/15 18:33	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-27 (24-24.5)**      **Lab ID: 10307126010**      Collected: 05/13/15 17:40      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	378	38.6	1	05/27/15 19:42	05/29/15 18:33	99-09-2	
4-Nitroaniline	ND	ug/kg	378	33.1	1	05/27/15 19:42	05/29/15 18:33	100-01-6	
Nitrobenzene	ND	ug/kg	378	76.4	1	05/27/15 19:42	05/29/15 18:33	98-95-3	
2-Nitrophenol	ND	ug/kg	378	64.6	1	05/27/15 19:42	05/29/15 18:33	88-75-5	
4-Nitrophenol	ND	ug/kg	378	39.7	1	05/27/15 19:42	05/29/15 18:33	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	378	51.5	1	05/27/15 19:42	05/29/15 18:33	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	378	189	1	05/27/15 19:42	05/29/15 18:33	86-30-6	
Pentachlorophenol	ND	ug/kg	768	189	1	05/27/15 19:42	05/29/15 18:33	87-86-5	
Phenol	ND	ug/kg	378	82.6	1	05/27/15 19:42	05/29/15 18:33	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	378	62.3	1	05/27/15 19:42	05/29/15 18:33	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	378	45.2	1	05/27/15 19:42	05/29/15 18:33	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	378	48.7	1	05/27/15 19:42	05/29/15 18:33	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	63	%	34-125		1	05/27/15 19:42	05/29/15 18:33	4165-60-0	
2-Fluorobiphenyl (S)	67	%	51-125		1	05/27/15 19:42	05/29/15 18:33	321-60-8	
p-Terphenyl-d14 (S)	80	%	55-125		1	05/27/15 19:42	05/29/15 18:33	1718-51-0	
Phenol-d6 (S)	67	%	44-125		1	05/27/15 19:42	05/29/15 18:33	13127-88-3	
2-Fluorophenol (S)	67	%	45-125		1	05/27/15 19:42	05/29/15 18:33	367-12-4	
2,4,6-Tribromophenol (S)	71	%	40-125		1	05/27/15 19:42	05/29/15 18:33	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.5	0.41	1	05/27/15 17:54	05/30/15 02:16	83-32-9	
Acenaphthylene	ND	ug/kg	11.5	0.39	1	05/27/15 17:54	05/30/15 02:16	208-96-8	
Anthracene	ND	ug/kg	11.5	0.35	1	05/27/15 17:54	05/30/15 02:16	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.5	0.21	1	05/27/15 17:54	05/30/15 02:16	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.5	0.23	1	05/27/15 17:54	05/30/15 02:16	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.5	0.40	1	05/27/15 17:54	05/30/15 02:16	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.5	0.41	1	05/27/15 17:54	05/30/15 02:16	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.5	0.46	1	05/27/15 17:54	05/30/15 02:16	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.5	0.32	1	05/27/15 17:54	05/30/15 02:16	91-58-7	
Chrysene	ND	ug/kg	11.5	0.28	1	05/27/15 17:54	05/30/15 02:16	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.5	0.49	1	05/27/15 17:54	05/30/15 02:16	53-70-3	
Fluoranthene	ND	ug/kg	11.5	0.25	1	05/27/15 17:54	05/30/15 02:16	206-44-0	
Fluorene	ND	ug/kg	11.5	0.35	1	05/27/15 17:54	05/30/15 02:16	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.5	0.44	1	05/27/15 17:54	05/30/15 02:16	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.5	0.43	1	05/27/15 17:54	05/30/15 02:16	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.5	0.47	1	05/27/15 17:54	05/30/15 02:16	91-57-6	
Naphthalene	ND	ug/kg	11.5	0.43	1	05/27/15 17:54	05/30/15 02:16	91-20-3	
Phenanthrene	ND	ug/kg	11.5	0.28	1	05/27/15 17:54	05/30/15 02:16	85-01-8	
Pyrene	ND	ug/kg	11.5	0.28	1	05/27/15 17:54	05/30/15 02:16	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	79	%	55-125		1	05/27/15 17:54	05/30/15 02:16	321-60-8	
p-Terphenyl-d14 (S)	90	%	30-150		1	05/27/15 17:54	05/30/15 02:16	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307126

**Sample: DP-29 (24-24.5)**      **Lab ID: 10307126011**      Collected: 05/14/15 08:20      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	17.5	0.94	1	05/28/15 18:53	06/03/15 22:16	68334-30-5	
Motor Oil Range	ND	mg/kg	11.7	2.1	1	05/28/15 18:53	06/03/15 22:16		
<b>Surrogates</b>									
n-Triacontane (S)	100	%	50-150		1	05/28/15 18:53	06/03/15 22:16	638-68-6	
o-Terphenyl (S)	90	%	50-150		1	05/28/15 18:53	06/03/15 22:16	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>15.1</b>	%	0.10	0.10	1		06/03/15 16:33		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	387	41.2	1	05/28/15 18:51	05/29/15 12:42	101-55-3	
Butylbenzylphthalate	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	85-68-7	
Carbazole	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	59-50-7	
4-Chloroaniline	ND	ug/kg	387	59.4	1	05/28/15 18:51	05/29/15 12:42	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	387	75.7	1	05/28/15 18:51	05/29/15 12:42	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	387	27.0	1	05/28/15 18:51	05/29/15 12:42	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	387	89.5	1	05/28/15 18:51	05/29/15 12:42	108-60-1	
2-Chloronaphthalene	ND	ug/kg	387	60.7	1	05/28/15 18:51	05/29/15 12:42	91-58-7	
2-Chlorophenol	ND	ug/kg	387	90.4	1	05/28/15 18:51	05/29/15 12:42	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	387	44.6	1	05/28/15 18:51	05/29/15 12:42	7005-72-3	
Dibenzofuran	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	387	25.0	1	05/28/15 18:51	05/29/15 12:42	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	387	24.4	1	05/28/15 18:51	05/29/15 12:42	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	387	25.8	1	05/28/15 18:51	05/29/15 12:42	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	387	54.0	1	05/28/15 18:51	05/29/15 12:42	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	387	72.9	1	05/28/15 18:51	05/29/15 12:42	120-83-2	
Diethylphthalate	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	387	72.6	1	05/28/15 18:51	05/29/15 12:42	105-67-9	
Dimethylphthalate	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	131-11-3	
Di-n-butylphthalate	ND	ug/kg	387	53.8	1	05/28/15 18:51	05/29/15 12:42	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2000	77.0	1	05/28/15 18:51	05/29/15 12:42	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	387	33.1	1	05/28/15 18:51	05/29/15 12:42	606-20-2	
Di-n-octylphthalate	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	387	66.2	1	05/28/15 18:51	05/29/15 12:42	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	387	32.6	1	05/28/15 18:51	05/29/15 12:42	87-68-3	
Hexachlorobenzene	ND	ug/kg	387	51.0	1	05/28/15 18:51	05/29/15 12:42	118-74-1	
Hexachloroethane	ND	ug/kg	387	24.7	1	05/28/15 18:51	05/29/15 12:42	67-72-1	
Isophorone	ND	ug/kg	387	61.9	1	05/28/15 18:51	05/29/15 12:42	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	387	83.8	1	05/28/15 18:51	05/29/15 12:42	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	775	77.5	1	05/28/15 18:51	05/29/15 12:42		
2-Nitroaniline	ND	ug/kg	387	42.0	1	05/28/15 18:51	05/29/15 12:42	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-29 (24-24.5)**      **Lab ID: 10307126011**      Collected: 05/14/15 08:20      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	387	39.6	1	05/28/15 18:51	05/29/15 12:42	99-09-2	
4-Nitroaniline	ND	ug/kg	387	33.9	1	05/28/15 18:51	05/29/15 12:42	100-01-6	
Nitrobenzene	ND	ug/kg	387	78.3	1	05/28/15 18:51	05/29/15 12:42	98-95-3	
2-Nitrophenol	ND	ug/kg	387	66.2	1	05/28/15 18:51	05/29/15 12:42	88-75-5	
4-Nitrophenol	ND	ug/kg	387	40.6	1	05/28/15 18:51	05/29/15 12:42	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	387	52.7	1	05/28/15 18:51	05/29/15 12:42	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	387	194	1	05/28/15 18:51	05/29/15 12:42	86-30-6	
Pentachlorophenol	ND	ug/kg	787	194	1	05/28/15 18:51	05/29/15 12:42	87-86-5	
Phenol	ND	ug/kg	387	84.7	1	05/28/15 18:51	05/29/15 12:42	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	387	63.9	1	05/28/15 18:51	05/29/15 12:42	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	387	46.3	1	05/28/15 18:51	05/29/15 12:42	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	387	49.9	1	05/28/15 18:51	05/29/15 12:42	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	24	%	34-125		1	05/28/15 18:51	05/29/15 12:42	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	29	%	51-125		1	05/28/15 18:51	05/29/15 12:42	321-60-8	S0
p-Terphenyl-d14 (S)	74	%	55-125		1	05/28/15 18:51	05/29/15 12:42	1718-51-0	
Phenol-d6 (S)	40	%	44-125		1	05/28/15 18:51	05/29/15 12:42	13127-88-3	S0
2-Fluorophenol (S)	30	%	45-125		1	05/28/15 18:51	05/29/15 12:42	367-12-4	S0
2,4,6-Tribromophenol (S)	63	%	40-125		1	05/28/15 18:51	05/29/15 12:42	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.8	0.42	1	05/28/15 18:49	05/29/15 15:53	83-32-9	
Acenaphthylene	ND	ug/kg	11.8	0.40	1	05/28/15 18:49	05/29/15 15:53	208-96-8	
Anthracene	ND	ug/kg	11.8	0.36	1	05/28/15 18:49	05/29/15 15:53	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.8	0.22	1	05/28/15 18:49	05/29/15 15:53	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.8	0.23	1	05/28/15 18:49	05/29/15 15:53	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.8	0.41	1	05/28/15 18:49	05/29/15 15:53	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.8	0.42	1	05/28/15 18:49	05/29/15 15:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.8	0.47	1	05/28/15 18:49	05/29/15 15:53	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.8	0.33	1	05/28/15 18:49	05/29/15 15:53	91-58-7	L2
Chrysene	ND	ug/kg	11.8	0.29	1	05/28/15 18:49	05/29/15 15:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.8	0.51	1	05/28/15 18:49	05/29/15 15:53	53-70-3	
Fluoranthene	ND	ug/kg	11.8	0.26	1	05/28/15 18:49	05/29/15 15:53	206-44-0	
Fluorene	ND	ug/kg	11.8	0.36	1	05/28/15 18:49	05/29/15 15:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.8	0.45	1	05/28/15 18:49	05/29/15 15:53	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.8	0.44	1	05/28/15 18:49	05/29/15 15:53	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.8	0.48	1	05/28/15 18:49	05/29/15 15:53	91-57-6	
Naphthalene	ND	ug/kg	11.8	0.44	1	05/28/15 18:49	05/29/15 15:53	91-20-3	
Phenanthrene	ND	ug/kg	11.8	0.29	1	05/28/15 18:49	05/29/15 15:53	85-01-8	
Pyrene	ND	ug/kg	11.8	0.28	1	05/28/15 18:49	05/29/15 15:53	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	70	%	55-125		1	05/28/15 18:49	05/29/15 15:53	321-60-8	
p-Terphenyl-d14 (S)	94	%	30-150		1	05/28/15 18:49	05/29/15 15:53	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-29 (24.5-25.5)**      **Lab ID: 10307126012**      Collected: 05/14/15 08:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	24.0	1.3	1	05/28/15 18:53	06/03/15 23:01	68334-30-5	
Motor Oil Range	ND	mg/kg	16.0	2.9	1	05/28/15 18:53	06/03/15 23:01		
<b>Surrogates</b>									
n-Triacontane (S)	114	%	50-150		1	05/28/15 18:53	06/03/15 23:01	638-68-6	
o-Terphenyl (S)	88	%	50-150		1	05/28/15 18:53	06/03/15 23:01	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>37.6</b>	%	0.10	0.10	1		06/03/15 16:33		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	528	56.2	1	05/28/15 18:51	05/29/15 13:11	101-55-3	
Butylbenzylphthalate	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	85-68-7	
Carbazole	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	59-50-7	
4-Chloroaniline	ND	ug/kg	528	81.0	1	05/28/15 18:51	05/29/15 13:11	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	528	103	1	05/28/15 18:51	05/29/15 13:11	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	528	36.8	1	05/28/15 18:51	05/29/15 13:11	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	528	122	1	05/28/15 18:51	05/29/15 13:11	108-60-1	
2-Chloronaphthalene	ND	ug/kg	528	82.8	1	05/28/15 18:51	05/29/15 13:11	91-58-7	
2-Chlorophenol	ND	ug/kg	528	123	1	05/28/15 18:51	05/29/15 13:11	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	528	60.9	1	05/28/15 18:51	05/29/15 13:11	7005-72-3	
Dibenzofuran	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	528	34.1	1	05/28/15 18:51	05/29/15 13:11	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	528	33.3	1	05/28/15 18:51	05/29/15 13:11	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	528	35.2	1	05/28/15 18:51	05/29/15 13:11	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	528	73.7	1	05/28/15 18:51	05/29/15 13:11	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	528	99.5	1	05/28/15 18:51	05/29/15 13:11	120-83-2	
Diethylphthalate	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	528	99.0	1	05/28/15 18:51	05/29/15 13:11	105-67-9	
Dimethylphthalate	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	131-11-3	
Di-n-butylphthalate	ND	ug/kg	528	73.3	1	05/28/15 18:51	05/29/15 13:11	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2720	105	1	05/28/15 18:51	05/29/15 13:11	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	528	45.2	1	05/28/15 18:51	05/29/15 13:11	606-20-2	
Di-n-octylphthalate	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	528	90.3	1	05/28/15 18:51	05/29/15 13:11	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	528	44.5	1	05/28/15 18:51	05/29/15 13:11	87-68-3	
Hexachlorobenzene	ND	ug/kg	528	69.5	1	05/28/15 18:51	05/29/15 13:11	118-74-1	
Hexachloroethane	ND	ug/kg	528	33.6	1	05/28/15 18:51	05/29/15 13:11	67-72-1	
Isophorone	ND	ug/kg	528	84.4	1	05/28/15 18:51	05/29/15 13:11	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	528	114	1	05/28/15 18:51	05/29/15 13:11	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	1060	106	1	05/28/15 18:51	05/29/15 13:11		
2-Nitroaniline	ND	ug/kg	528	57.3	1	05/28/15 18:51	05/29/15 13:11	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-29 (24.5-25.5)**      **Lab ID: 10307126012**      Collected: 05/14/15 08:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	528	54.0	1	05/28/15 18:51	05/29/15 13:11	99-09-2	
4-Nitroaniline	ND	ug/kg	528	46.3	1	05/28/15 18:51	05/29/15 13:11	100-01-6	
Nitrobenzene	ND	ug/kg	528	107	1	05/28/15 18:51	05/29/15 13:11	98-95-3	
2-Nitrophenol	ND	ug/kg	528	90.3	1	05/28/15 18:51	05/29/15 13:11	88-75-5	
4-Nitrophenol	ND	ug/kg	528	55.4	1	05/28/15 18:51	05/29/15 13:11	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	528	71.9	1	05/28/15 18:51	05/29/15 13:11	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	528	264	1	05/28/15 18:51	05/29/15 13:11	86-30-6	
Pentachlorophenol	ND	ug/kg	1070	264	1	05/28/15 18:51	05/29/15 13:11	87-86-5	
Phenol	ND	ug/kg	528	115	1	05/28/15 18:51	05/29/15 13:11	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	528	87.1	1	05/28/15 18:51	05/29/15 13:11	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	528	63.1	1	05/28/15 18:51	05/29/15 13:11	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	528	68.1	1	05/28/15 18:51	05/29/15 13:11	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	44	%	34-125		1	05/28/15 18:51	05/29/15 13:11	4165-60-0	
2-Fluorobiphenyl (S)	45	%	51-125		1	05/28/15 18:51	05/29/15 13:11	321-60-8	S0
p-Terphenyl-d14 (S)	77	%	55-125		1	05/28/15 18:51	05/29/15 13:11	1718-51-0	
Phenol-d6 (S)	59	%	44-125		1	05/28/15 18:51	05/29/15 13:11	13127-88-3	
2-Fluorophenol (S)	53	%	45-125		1	05/28/15 18:51	05/29/15 13:11	367-12-4	
2,4,6-Tribromophenol (S)	67	%	40-125		1	05/28/15 18:51	05/29/15 13:11	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	16.0	0.58	1	05/28/15 18:49	05/29/15 16:14	83-32-9	
Acenaphthylene	ND	ug/kg	16.0	0.54	1	05/28/15 18:49	05/29/15 16:14	208-96-8	
Anthracene	ND	ug/kg	16.0	0.49	1	05/28/15 18:49	05/29/15 16:14	120-12-7	
Benzo(a)anthracene	ND	ug/kg	16.0	0.29	1	05/28/15 18:49	05/29/15 16:14	56-55-3	
Benzo(a)pyrene	ND	ug/kg	16.0	0.32	1	05/28/15 18:49	05/29/15 16:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	16.0	0.56	1	05/28/15 18:49	05/29/15 16:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	16.0	0.57	1	05/28/15 18:49	05/29/15 16:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	16.0	0.64	1	05/28/15 18:49	05/29/15 16:14	207-08-9	
2-Chloronaphthalene	ND	ug/kg	16.0	0.45	1	05/28/15 18:49	05/29/15 16:14	91-58-7	L2
Chrysene	ND	ug/kg	16.0	0.39	1	05/28/15 18:49	05/29/15 16:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	16.0	0.69	1	05/28/15 18:49	05/29/15 16:14	53-70-3	
Fluoranthene	ND	ug/kg	16.0	0.35	1	05/28/15 18:49	05/29/15 16:14	206-44-0	
Fluorene	ND	ug/kg	16.0	0.49	1	05/28/15 18:49	05/29/15 16:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	16.0	0.61	1	05/28/15 18:49	05/29/15 16:14	193-39-5	
1-Methylnaphthalene	ND	ug/kg	16.0	0.60	1	05/28/15 18:49	05/29/15 16:14	90-12-0	
2-Methylnaphthalene	ND	ug/kg	16.0	0.66	1	05/28/15 18:49	05/29/15 16:14	91-57-6	
Naphthalene	ND	ug/kg	16.0	0.59	1	05/28/15 18:49	05/29/15 16:14	91-20-3	
Phenanthrene	ND	ug/kg	16.0	0.40	1	05/28/15 18:49	05/29/15 16:14	85-01-8	
Pyrene	ND	ug/kg	16.0	0.38	1	05/28/15 18:49	05/29/15 16:14	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	38	%	55-125		1	05/28/15 18:49	05/29/15 16:14	321-60-8	P2,S0
p-Terphenyl-d14 (S)	76	%	30-150		1	05/28/15 18:49	05/29/15 16:14	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-30 (12-12.5)**      **Lab ID: 10307126013**      Collected: 05/14/15 09:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	17.4	0.94	1	05/28/15 18:53	06/03/15 23:24	68334-30-5	
Motor Oil Range	ND	mg/kg	11.6	2.1	1	05/28/15 18:53	06/03/15 23:24		
<b>Surrogates</b>									
n-Triacontane (S)	108	%	50-150		1	05/28/15 18:53	06/03/15 23:24	638-68-6	
o-Terphenyl (S)	92	%	50-150		1	05/28/15 18:53	06/03/15 23:24	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>14.5</b>	%	0.10	0.10	1		06/03/15 16:34		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	385	40.9	1	05/28/15 18:51	05/29/15 13:40	101-55-3	
Butylbenzylphthalate	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	85-68-7	
Carbazole	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	59-50-7	
4-Chloroaniline	ND	ug/kg	385	59.0	1	05/28/15 18:51	05/29/15 13:40	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	385	75.2	1	05/28/15 18:51	05/29/15 13:40	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	385	26.8	1	05/28/15 18:51	05/29/15 13:40	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	385	88.8	1	05/28/15 18:51	05/29/15 13:40	108-60-1	
2-Chloronaphthalene	ND	ug/kg	385	60.3	1	05/28/15 18:51	05/29/15 13:40	91-58-7	
2-Chlorophenol	ND	ug/kg	385	89.8	1	05/28/15 18:51	05/29/15 13:40	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	385	44.3	1	05/28/15 18:51	05/29/15 13:40	7005-72-3	
Dibenzofuran	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	385	24.8	1	05/28/15 18:51	05/29/15 13:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	385	24.3	1	05/28/15 18:51	05/29/15 13:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	385	25.7	1	05/28/15 18:51	05/29/15 13:40	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	385	53.6	1	05/28/15 18:51	05/29/15 13:40	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	385	72.4	1	05/28/15 18:51	05/29/15 13:40	120-83-2	
Diethylphthalate	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	385	72.1	1	05/28/15 18:51	05/29/15 13:40	105-67-9	
Dimethylphthalate	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	131-11-3	
Di-n-butylphthalate	ND	ug/kg	385	53.4	1	05/28/15 18:51	05/29/15 13:40	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1980	76.5	1	05/28/15 18:51	05/29/15 13:40	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	385	32.9	1	05/28/15 18:51	05/29/15 13:40	606-20-2	
Di-n-octylphthalate	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	385	65.8	1	05/28/15 18:51	05/29/15 13:40	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	385	32.4	1	05/28/15 18:51	05/29/15 13:40	87-68-3	
Hexachlorobenzene	ND	ug/kg	385	50.6	1	05/28/15 18:51	05/29/15 13:40	118-74-1	
Hexachloroethane	ND	ug/kg	385	24.5	1	05/28/15 18:51	05/29/15 13:40	67-72-1	
Isophorone	ND	ug/kg	385	61.4	1	05/28/15 18:51	05/29/15 13:40	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	385	83.2	1	05/28/15 18:51	05/29/15 13:40	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	770	77.0	1	05/28/15 18:51	05/29/15 13:40		
2-Nitroaniline	ND	ug/kg	385	41.7	1	05/28/15 18:51	05/29/15 13:40	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-30 (12-12.5)**      **Lab ID: 10307126013**      Collected: 05/14/15 09:30      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	385	39.3	1	05/28/15 18:51	05/29/15 13:40	99-09-2	
4-Nitroaniline	ND	ug/kg	385	33.7	1	05/28/15 18:51	05/29/15 13:40	100-01-6	
Nitrobenzene	ND	ug/kg	385	77.8	1	05/28/15 18:51	05/29/15 13:40	98-95-3	
2-Nitrophenol	ND	ug/kg	385	65.8	1	05/28/15 18:51	05/29/15 13:40	88-75-5	
4-Nitrophenol	ND	ug/kg	385	40.3	1	05/28/15 18:51	05/29/15 13:40	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	385	52.4	1	05/28/15 18:51	05/29/15 13:40	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	385	192	1	05/28/15 18:51	05/29/15 13:40	86-30-6	
Pentachlorophenol	ND	ug/kg	781	192	1	05/28/15 18:51	05/29/15 13:40	87-86-5	
Phenol	ND	ug/kg	385	84.1	1	05/28/15 18:51	05/29/15 13:40	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	385	63.4	1	05/28/15 18:51	05/29/15 13:40	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	385	45.9	1	05/28/15 18:51	05/29/15 13:40	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	385	49.6	1	05/28/15 18:51	05/29/15 13:40	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	36	%	34-125		1	05/28/15 18:51	05/29/15 13:40	4165-60-0	P2
2-Fluorobiphenyl (S)	48	%	51-125		1	05/28/15 18:51	05/29/15 13:40	321-60-8	S0
p-Terphenyl-d14 (S)	77	%	55-125		1	05/28/15 18:51	05/29/15 13:40	1718-51-0	
Phenol-d6 (S)	51	%	44-125		1	05/28/15 18:51	05/29/15 13:40	13127-88-3	
2-Fluorophenol (S)	42	%	45-125		1	05/28/15 18:51	05/29/15 13:40	367-12-4	S0
2,4,6-Tribromophenol (S)	62	%	40-125		1	05/28/15 18:51	05/29/15 13:40	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.6	0.42	1	05/28/15 18:49	05/29/15 17:50	83-32-9	
Acenaphthylene	ND	ug/kg	11.6	0.39	1	05/28/15 18:49	05/29/15 17:50	208-96-8	
Anthracene	ND	ug/kg	11.6	0.36	1	05/28/15 18:49	05/29/15 17:50	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.6	0.21	1	05/28/15 18:49	05/29/15 17:50	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.6	0.23	1	05/28/15 18:49	05/29/15 17:50	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.6	0.41	1	05/28/15 18:49	05/29/15 17:50	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.6	0.41	1	05/28/15 18:49	05/29/15 17:50	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.6	0.47	1	05/28/15 18:49	05/29/15 17:50	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.6	0.33	1	05/28/15 18:49	05/29/15 17:50	91-58-7	L2
Chrysene	ND	ug/kg	11.6	0.29	1	05/28/15 18:49	05/29/15 17:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.6	0.50	1	05/28/15 18:49	05/29/15 17:50	53-70-3	
Fluoranthene	ND	ug/kg	11.6	0.25	1	05/28/15 18:49	05/29/15 17:50	206-44-0	
Fluorene	ND	ug/kg	11.6	0.36	1	05/28/15 18:49	05/29/15 17:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.6	0.45	1	05/28/15 18:49	05/29/15 17:50	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.6	0.43	1	05/28/15 18:49	05/29/15 17:50	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.6	0.48	1	05/28/15 18:49	05/29/15 17:50	91-57-6	
Naphthalene	ND	ug/kg	11.6	0.43	1	05/28/15 18:49	05/29/15 17:50	91-20-3	
Phenanthrene	ND	ug/kg	11.6	0.29	1	05/28/15 18:49	05/29/15 17:50	85-01-8	
Pyrene	ND	ug/kg	11.6	0.28	1	05/28/15 18:49	05/29/15 17:50	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	60	%	55-125		1	05/28/15 18:49	05/29/15 17:50	321-60-8	
p-Terphenyl-d14 (S)	94	%	30-150		1	05/28/15 18:49	05/29/15 17:50	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-30 (16-17)**      **Lab ID: 10307126014**      Collected: 05/14/15 09:45      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>			Analytical Method: NWTPH-Dx Preparation Method: EPA 3550						
Diesel Fuel Range	ND	mg/kg	22.5	1.2	1	05/28/15 18:53	06/03/15 23:47	68334-30-5	
Motor Oil Range	ND	mg/kg	15.0	2.7	1	05/28/15 18:53	06/03/15 23:47		
<b>Surrogates</b>									
n-Triacontane (S)	99	%	50-150		1	05/28/15 18:53	06/03/15 23:47	638-68-6	
o-Terphenyl (S)	77	%	50-150		1	05/28/15 18:53	06/03/15 23:47	84-15-1	
<b>Dry Weight</b>			Analytical Method: ASTM D2974						
Percent Moisture	<b>33.9</b>	%	0.10	0.10	1		06/03/15 16:34		
<b>8270D MSSV</b>			Analytical Method: EPA 8270D Preparation Method: EPA 3550						
4-Bromophenylphenyl ether	ND	ug/kg	499	53.1	1	05/28/15 18:51	05/29/15 14:10	101-55-3	
Butylbenzylphthalate	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	85-68-7	
Carbazole	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	59-50-7	
4-Chloroaniline	ND	ug/kg	499	76.6	1	05/28/15 18:51	05/29/15 14:10	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	499	97.6	1	05/28/15 18:51	05/29/15 14:10	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	499	34.8	1	05/28/15 18:51	05/29/15 14:10	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	499	115	1	05/28/15 18:51	05/29/15 14:10	108-60-1	
2-Chloronaphthalene	ND	ug/kg	499	78.2	1	05/28/15 18:51	05/29/15 14:10	91-58-7	
2-Chlorophenol	ND	ug/kg	499	116	1	05/28/15 18:51	05/29/15 14:10	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	499	57.5	1	05/28/15 18:51	05/29/15 14:10	7005-72-3	
Dibenzofuran	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	499	32.2	1	05/28/15 18:51	05/29/15 14:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	499	31.5	1	05/28/15 18:51	05/29/15 14:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	499	33.3	1	05/28/15 18:51	05/29/15 14:10	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	499	69.6	1	05/28/15 18:51	05/29/15 14:10	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	499	93.9	1	05/28/15 18:51	05/29/15 14:10	120-83-2	
Diethylphthalate	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	499	93.5	1	05/28/15 18:51	05/29/15 14:10	105-67-9	
Dimethylphthalate	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	131-11-3	
Di-n-butylphthalate	ND	ug/kg	499	69.3	1	05/28/15 18:51	05/29/15 14:10	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2570	99.2	1	05/28/15 18:51	05/29/15 14:10	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	499	42.7	1	05/28/15 18:51	05/29/15 14:10	606-20-2	
Di-n-octylphthalate	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	499	85.3	1	05/28/15 18:51	05/29/15 14:10	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	499	42.1	1	05/28/15 18:51	05/29/15 14:10	87-68-3	
Hexachlorobenzene	ND	ug/kg	499	65.7	1	05/28/15 18:51	05/29/15 14:10	118-74-1	
Hexachloroethane	ND	ug/kg	499	31.8	1	05/28/15 18:51	05/29/15 14:10	67-72-1	
Isophorone	ND	ug/kg	499	79.7	1	05/28/15 18:51	05/29/15 14:10	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	499	108	1	05/28/15 18:51	05/29/15 14:10	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	998	99.8	1	05/28/15 18:51	05/29/15 14:10		
2-Nitroaniline	ND	ug/kg	499	54.2	1	05/28/15 18:51	05/29/15 14:10	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-30 (16-17)**      **Lab ID: 10307126014**      Collected: 05/14/15 09:45      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	499	51.0	1	05/28/15 18:51	05/29/15 14:10	99-09-2	
4-Nitroaniline	ND	ug/kg	499	43.7	1	05/28/15 18:51	05/29/15 14:10	100-01-6	
Nitrobenzene	ND	ug/kg	499	101	1	05/28/15 18:51	05/29/15 14:10	98-95-3	
2-Nitrophenol	ND	ug/kg	499	85.3	1	05/28/15 18:51	05/29/15 14:10	88-75-5	
4-Nitrophenol	ND	ug/kg	499	52.3	1	05/28/15 18:51	05/29/15 14:10	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	499	67.9	1	05/28/15 18:51	05/29/15 14:10	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	499	250	1	05/28/15 18:51	05/29/15 14:10	86-30-6	
Pentachlorophenol	ND	ug/kg	1010	250	1	05/28/15 18:51	05/29/15 14:10	87-86-5	
Phenol	ND	ug/kg	499	109	1	05/28/15 18:51	05/29/15 14:10	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	499	82.3	1	05/28/15 18:51	05/29/15 14:10	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	499	59.6	1	05/28/15 18:51	05/29/15 14:10	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	499	64.3	1	05/28/15 18:51	05/29/15 14:10	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	39	%	34-125		1	05/28/15 18:51	05/29/15 14:10	4165-60-0	
2-Fluorobiphenyl (S)	45	%	51-125		1	05/28/15 18:51	05/29/15 14:10	321-60-8	S0
p-Terphenyl-d14 (S)	70	%	55-125		1	05/28/15 18:51	05/29/15 14:10	1718-51-0	
Phenol-d6 (S)	58	%	44-125		1	05/28/15 18:51	05/29/15 14:10	13127-88-3	
2-Fluorophenol (S)	49	%	45-125		1	05/28/15 18:51	05/29/15 14:10	367-12-4	
2,4,6-Tribromophenol (S)	59	%	40-125		1	05/28/15 18:51	05/29/15 14:10	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	15.1	0.54	1	05/28/15 18:49	05/29/15 18:12	83-32-9	
Acenaphthylene	ND	ug/kg	15.1	0.51	1	05/28/15 18:49	05/29/15 18:12	208-96-8	
Anthracene	ND	ug/kg	15.1	0.46	1	05/28/15 18:49	05/29/15 18:12	120-12-7	
Benzo(a)anthracene	ND	ug/kg	15.1	0.28	1	05/28/15 18:49	05/29/15 18:12	56-55-3	
Benzo(a)pyrene	ND	ug/kg	15.1	0.30	1	05/28/15 18:49	05/29/15 18:12	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	15.1	0.53	1	05/28/15 18:49	05/29/15 18:12	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	15.1	0.54	1	05/28/15 18:49	05/29/15 18:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	15.1	0.61	1	05/28/15 18:49	05/29/15 18:12	207-08-9	
2-Chloronaphthalene	ND	ug/kg	15.1	0.43	1	05/28/15 18:49	05/29/15 18:12	91-58-7	L2
Chrysene	ND	ug/kg	15.1	0.37	1	05/28/15 18:49	05/29/15 18:12	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	15.1	0.65	1	05/28/15 18:49	05/29/15 18:12	53-70-3	
Fluoranthene	ND	ug/kg	15.1	0.33	1	05/28/15 18:49	05/29/15 18:12	206-44-0	
Fluorene	ND	ug/kg	15.1	0.47	1	05/28/15 18:49	05/29/15 18:12	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	15.1	0.58	1	05/28/15 18:49	05/29/15 18:12	193-39-5	
1-Methylnaphthalene	ND	ug/kg	15.1	0.57	1	05/28/15 18:49	05/29/15 18:12	90-12-0	
2-Methylnaphthalene	ND	ug/kg	15.1	0.62	1	05/28/15 18:49	05/29/15 18:12	91-57-6	
Naphthalene	ND	ug/kg	15.1	0.56	1	05/28/15 18:49	05/29/15 18:12	91-20-3	
Phenanthrene	ND	ug/kg	15.1	0.38	1	05/28/15 18:49	05/29/15 18:12	85-01-8	
Pyrene	ND	ug/kg	15.1	0.36	1	05/28/15 18:49	05/29/15 18:12	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	62	%	55-125		1	05/28/15 18:49	05/29/15 18:12	321-60-8	
p-Terphenyl-d14 (S)	79	%	30-150		1	05/28/15 18:49	05/29/15 18:12	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-28 (20.5-21.5)**      **Lab ID: 10307126015**      Collected: 05/14/15 12:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.3	1.2	1	05/28/15 18:53	06/04/15 00:10	68334-30-5	
Motor Oil Range	ND	mg/kg	14.2	2.6	1	05/28/15 18:53	06/04/15 00:10		
<b>Surrogates</b>									
n-Triacontane (S)	107	%	50-150		1	05/28/15 18:53	06/04/15 00:10	638-68-6	
o-Terphenyl (S)	83	%	50-150		1	05/28/15 18:53	06/04/15 00:10	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>31.0</b>	%	0.10	0.10	1		06/03/15 16:34		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	478	50.9	1	05/28/15 18:51	05/29/15 14:39	101-55-3	
Butylbenzylphthalate	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	85-68-7	
Carbazole	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	59-50-7	
4-Chloroaniline	ND	ug/kg	478	73.4	1	05/28/15 18:51	05/29/15 14:39	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	478	93.5	1	05/28/15 18:51	05/29/15 14:39	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	478	33.3	1	05/28/15 18:51	05/29/15 14:39	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	478	110	1	05/28/15 18:51	05/29/15 14:39	108-60-1	
2-Chloronaphthalene	ND	ug/kg	478	75.0	1	05/28/15 18:51	05/29/15 14:39	91-58-7	
2-Chlorophenol	ND	ug/kg	478	112	1	05/28/15 18:51	05/29/15 14:39	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	478	55.1	1	05/28/15 18:51	05/29/15 14:39	7005-72-3	
Dibenzofuran	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	478	30.9	1	05/28/15 18:51	05/29/15 14:39	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	478	30.2	1	05/28/15 18:51	05/29/15 14:39	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	478	31.9	1	05/28/15 18:51	05/29/15 14:39	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	478	66.7	1	05/28/15 18:51	05/29/15 14:39	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	478	90.0	1	05/28/15 18:51	05/29/15 14:39	120-83-2	
Diethylphthalate	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	478	89.6	1	05/28/15 18:51	05/29/15 14:39	105-67-9	
Dimethylphthalate	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	131-11-3	
Di-n-butylphthalate	ND	ug/kg	478	66.4	1	05/28/15 18:51	05/29/15 14:39	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2460	95.1	1	05/28/15 18:51	05/29/15 14:39	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	478	40.9	1	05/28/15 18:51	05/29/15 14:39	606-20-2	
Di-n-octylphthalate	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	478	81.8	1	05/28/15 18:51	05/29/15 14:39	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	478	40.3	1	05/28/15 18:51	05/29/15 14:39	87-68-3	
Hexachlorobenzene	ND	ug/kg	478	62.9	1	05/28/15 18:51	05/29/15 14:39	118-74-1	
Hexachloroethane	ND	ug/kg	478	30.4	1	05/28/15 18:51	05/29/15 14:39	67-72-1	
Isophorone	ND	ug/kg	478	76.4	1	05/28/15 18:51	05/29/15 14:39	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	478	104	1	05/28/15 18:51	05/29/15 14:39	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	957	95.7	1	05/28/15 18:51	05/29/15 14:39		
2-Nitroaniline	ND	ug/kg	478	51.9	1	05/28/15 18:51	05/29/15 14:39	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-28 (20.5-21.5)**      **Lab ID: 10307126015**      Collected: 05/14/15 12:00      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	478	48.9	1	05/28/15 18:51	05/29/15 14:39	99-09-2	
4-Nitroaniline	ND	ug/kg	478	41.9	1	05/28/15 18:51	05/29/15 14:39	100-01-6	
Nitrobenzene	ND	ug/kg	478	96.7	1	05/28/15 18:51	05/29/15 14:39	98-95-3	
2-Nitrophenol	ND	ug/kg	478	81.8	1	05/28/15 18:51	05/29/15 14:39	88-75-5	
4-Nitrophenol	ND	ug/kg	478	50.2	1	05/28/15 18:51	05/29/15 14:39	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	478	65.1	1	05/28/15 18:51	05/29/15 14:39	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	478	239	1	05/28/15 18:51	05/29/15 14:39	86-30-6	
Pentachlorophenol	ND	ug/kg	971	239	1	05/28/15 18:51	05/29/15 14:39	87-86-5	
Phenol	ND	ug/kg	478	105	1	05/28/15 18:51	05/29/15 14:39	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	478	78.9	1	05/28/15 18:51	05/29/15 14:39	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	478	57.1	1	05/28/15 18:51	05/29/15 14:39	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	478	61.6	1	05/28/15 18:51	05/29/15 14:39	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	21	%	34-125		1	05/28/15 18:51	05/29/15 14:39	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	23	%	51-125		1	05/28/15 18:51	05/29/15 14:39	321-60-8	S0
p-Terphenyl-d14 (S)	72	%	55-125		1	05/28/15 18:51	05/29/15 14:39	1718-51-0	
Phenol-d6 (S)	40	%	44-125		1	05/28/15 18:51	05/29/15 14:39	13127-88-3	S0
2-Fluorophenol (S)	29	%	45-125		1	05/28/15 18:51	05/29/15 14:39	367-12-4	S0
2,4,6-Tribromophenol (S)	58	%	40-125		1	05/28/15 18:51	05/29/15 14:39	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.5	0.52	1	05/28/15 18:49	05/29/15 18:33	83-32-9	
Acenaphthylene	ND	ug/kg	14.5	0.49	1	05/28/15 18:49	05/29/15 18:33	208-96-8	
Anthracene	ND	ug/kg	14.5	0.45	1	05/28/15 18:49	05/29/15 18:33	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.5	0.27	1	05/28/15 18:49	05/29/15 18:33	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.5	0.29	1	05/28/15 18:49	05/29/15 18:33	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.5	0.51	1	05/28/15 18:49	05/29/15 18:33	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.5	0.51	1	05/28/15 18:49	05/29/15 18:33	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.5	0.58	1	05/28/15 18:49	05/29/15 18:33	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.5	0.41	1	05/28/15 18:49	05/29/15 18:33	91-58-7	L2
Chrysene	ND	ug/kg	14.5	0.36	1	05/28/15 18:49	05/29/15 18:33	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.5	0.62	1	05/28/15 18:49	05/29/15 18:33	53-70-3	
Fluoranthene	ND	ug/kg	14.5	0.32	1	05/28/15 18:49	05/29/15 18:33	206-44-0	
Fluorene	ND	ug/kg	14.5	0.45	1	05/28/15 18:49	05/29/15 18:33	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.5	0.56	1	05/28/15 18:49	05/29/15 18:33	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.5	0.54	1	05/28/15 18:49	05/29/15 18:33	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.5	0.59	1	05/28/15 18:49	05/29/15 18:33	91-57-6	
Naphthalene	ND	ug/kg	14.5	0.54	1	05/28/15 18:49	05/29/15 18:33	91-20-3	
Phenanthrene	ND	ug/kg	14.5	0.36	1	05/28/15 18:49	05/29/15 18:33	85-01-8	
Pyrene	ND	ug/kg	14.5	0.35	1	05/28/15 18:49	05/29/15 18:33	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	59	%	55-125		1	05/28/15 18:49	05/29/15 18:33	321-60-8	
p-Terphenyl-d14 (S)	79	%	30-150		1	05/28/15 18:49	05/29/15 18:33	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-28 (21.5-22.5)**      **Lab ID: 10307126016**      Collected: 05/14/15 12:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.8	1.2	1	05/28/15 18:53	06/04/15 00:32	68334-30-5	
Motor Oil Range	ND	mg/kg	14.6	2.6	1	05/28/15 18:53	06/04/15 00:32		
<b>Surrogates</b>									
n-Triacontane (S)	101	%	50-150		1	05/28/15 18:53	06/04/15 00:32	638-68-6	
o-Terphenyl (S)	73	%	50-150		1	05/28/15 18:53	06/04/15 00:32	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>31.3</b>	%	0.10	0.10	1		06/03/15 16:34		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	481	51.1	1	05/28/15 18:51	05/29/15 15:09	101-55-3	
Butylbenzylphthalate	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	85-68-7	
Carbazole	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	59-50-7	
4-Chloroaniline	ND	ug/kg	481	73.7	1	05/28/15 18:51	05/29/15 15:09	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	481	93.9	1	05/28/15 18:51	05/29/15 15:09	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	481	33.5	1	05/28/15 18:51	05/29/15 15:09	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	481	111	1	05/28/15 18:51	05/29/15 15:09	108-60-1	
2-Chloronaphthalene	ND	ug/kg	481	75.3	1	05/28/15 18:51	05/29/15 15:09	91-58-7	
2-Chlorophenol	ND	ug/kg	481	112	1	05/28/15 18:51	05/29/15 15:09	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	481	55.3	1	05/28/15 18:51	05/29/15 15:09	7005-72-3	
Dibenzofuran	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	481	31.0	1	05/28/15 18:51	05/29/15 15:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	481	30.3	1	05/28/15 18:51	05/29/15 15:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	481	32.0	1	05/28/15 18:51	05/29/15 15:09	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	481	67.0	1	05/28/15 18:51	05/29/15 15:09	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	481	90.4	1	05/28/15 18:51	05/29/15 15:09	120-83-2	
Diethylphthalate	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	481	90.0	1	05/28/15 18:51	05/29/15 15:09	105-67-9	
Dimethylphthalate	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	131-11-3	
Di-n-butylphthalate	ND	ug/kg	481	66.7	1	05/28/15 18:51	05/29/15 15:09	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2480	95.5	1	05/28/15 18:51	05/29/15 15:09	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	481	41.1	1	05/28/15 18:51	05/29/15 15:09	606-20-2	
Di-n-octylphthalate	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	481	82.1	1	05/28/15 18:51	05/29/15 15:09	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	481	40.5	1	05/28/15 18:51	05/29/15 15:09	87-68-3	
Hexachlorobenzene	ND	ug/kg	481	63.2	1	05/28/15 18:51	05/29/15 15:09	118-74-1	
Hexachloroethane	ND	ug/kg	481	30.6	1	05/28/15 18:51	05/29/15 15:09	67-72-1	
Isophorone	ND	ug/kg	481	76.7	1	05/28/15 18:51	05/29/15 15:09	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	481	104	1	05/28/15 18:51	05/29/15 15:09	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	961	96.1	1	05/28/15 18:51	05/29/15 15:09		
2-Nitroaniline	ND	ug/kg	481	52.1	1	05/28/15 18:51	05/29/15 15:09	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-28 (21.5-22.5)**      **Lab ID: 10307126016**      Collected: 05/14/15 12:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	481	49.1	1	05/28/15 18:51	05/29/15 15:09	99-09-2	
4-Nitroaniline	ND	ug/kg	481	42.1	1	05/28/15 18:51	05/29/15 15:09	100-01-6	
Nitrobenzene	ND	ug/kg	481	97.1	1	05/28/15 18:51	05/29/15 15:09	98-95-3	
2-Nitrophenol	ND	ug/kg	481	82.1	1	05/28/15 18:51	05/29/15 15:09	88-75-5	
4-Nitrophenol	ND	ug/kg	481	50.4	1	05/28/15 18:51	05/29/15 15:09	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	481	65.4	1	05/28/15 18:51	05/29/15 15:09	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	481	240	1	05/28/15 18:51	05/29/15 15:09	86-30-6	
Pentachlorophenol	ND	ug/kg	976	240	1	05/28/15 18:51	05/29/15 15:09	87-86-5	
Phenol	ND	ug/kg	481	105	1	05/28/15 18:51	05/29/15 15:09	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	481	79.2	1	05/28/15 18:51	05/29/15 15:09	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	481	57.4	1	05/28/15 18:51	05/29/15 15:09	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	481	61.9	1	05/28/15 18:51	05/29/15 15:09	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	25	%	34-125		1	05/28/15 18:51	05/29/15 15:09	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	24	%	51-125		1	05/28/15 18:51	05/29/15 15:09	321-60-8	S0
p-Terphenyl-d14 (S)	65	%	55-125		1	05/28/15 18:51	05/29/15 15:09	1718-51-0	
Phenol-d6 (S)	42	%	44-125		1	05/28/15 18:51	05/29/15 15:09	13127-88-3	S0
2-Fluorophenol (S)	33	%	45-125		1	05/28/15 18:51	05/29/15 15:09	367-12-4	S0
2,4,6-Tribromophenol (S)	57	%	40-125		1	05/28/15 18:51	05/29/15 15:09	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.5	0.52	1	05/28/15 18:49	05/29/15 18:55	83-32-9	
Acenaphthylene	ND	ug/kg	14.5	0.49	1	05/28/15 18:49	05/29/15 18:55	208-96-8	
Anthracene	ND	ug/kg	14.5	0.44	1	05/28/15 18:49	05/29/15 18:55	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.5	0.27	1	05/28/15 18:49	05/29/15 18:55	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.5	0.28	1	05/28/15 18:49	05/29/15 18:55	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.5	0.50	1	05/28/15 18:49	05/29/15 18:55	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.5	0.51	1	05/28/15 18:49	05/29/15 18:55	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.5	0.58	1	05/28/15 18:49	05/29/15 18:55	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.5	0.41	1	05/28/15 18:49	05/29/15 18:55	91-58-7	L2
Chrysene	ND	ug/kg	14.5	0.36	1	05/28/15 18:49	05/29/15 18:55	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.5	0.62	1	05/28/15 18:49	05/29/15 18:55	53-70-3	
Fluoranthene	ND	ug/kg	14.5	0.32	1	05/28/15 18:49	05/29/15 18:55	206-44-0	
Fluorene	ND	ug/kg	14.5	0.45	1	05/28/15 18:49	05/29/15 18:55	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.5	0.56	1	05/28/15 18:49	05/29/15 18:55	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.5	0.54	1	05/28/15 18:49	05/29/15 18:55	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.5	0.59	1	05/28/15 18:49	05/29/15 18:55	91-57-6	
Naphthalene	ND	ug/kg	14.5	0.54	1	05/28/15 18:49	05/29/15 18:55	91-20-3	
Phenanthrene	ND	ug/kg	14.5	0.36	1	05/28/15 18:49	05/29/15 18:55	85-01-8	
Pyrene	ND	ug/kg	14.5	0.35	1	05/28/15 18:49	05/29/15 18:55	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	73	%	55-125		1	05/28/15 18:49	05/29/15 18:55	321-60-8	
p-Terphenyl-d14 (S)	91	%	30-150		1	05/28/15 18:49	05/29/15 18:55	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-12 (12-12.5)**      **Lab ID: 10307126017**      Collected: 05/14/15 14:05      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	17.0	0.92	1	05/28/15 18:53	06/04/15 00:55	68334-30-5	
Motor Oil Range	ND	mg/kg	11.3	2.0	1	05/28/15 18:53	06/04/15 00:55		
<b>Surrogates</b>									
n-Triacontane (S)	103	%	50-150		1	05/28/15 18:53	06/04/15 00:55	638-68-6	
o-Terphenyl (S)	91	%	50-150		1	05/28/15 18:53	06/04/15 00:55	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>11.7</b>	%	0.10	0.10	1		06/03/15 16:35		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	373	39.6	1	05/28/15 18:51	05/29/15 15:38	101-55-3	
Butylbenzylphthalate	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	85-68-7	
Carbazole	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	59-50-7	
4-Chloroaniline	ND	ug/kg	373	57.1	1	05/28/15 18:51	05/29/15 15:38	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	373	72.8	1	05/28/15 18:51	05/29/15 15:38	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	373	26.0	1	05/28/15 18:51	05/29/15 15:38	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	373	86.0	1	05/28/15 18:51	05/29/15 15:38	108-60-1	
2-Chloronaphthalene	ND	ug/kg	373	58.4	1	05/28/15 18:51	05/29/15 15:38	91-58-7	
2-Chlorophenol	ND	ug/kg	373	87.0	1	05/28/15 18:51	05/29/15 15:38	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	373	42.9	1	05/28/15 18:51	05/29/15 15:38	7005-72-3	
Dibenzofuran	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	373	24.1	1	05/28/15 18:51	05/29/15 15:38	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	373	23.5	1	05/28/15 18:51	05/29/15 15:38	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	373	24.8	1	05/28/15 18:51	05/29/15 15:38	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	373	51.9	1	05/28/15 18:51	05/29/15 15:38	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	373	70.1	1	05/28/15 18:51	05/29/15 15:38	120-83-2	
Diethylphthalate	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	373	69.8	1	05/28/15 18:51	05/29/15 15:38	105-67-9	
Dimethylphthalate	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	131-11-3	
Di-n-butylphthalate	ND	ug/kg	373	51.7	1	05/28/15 18:51	05/29/15 15:38	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1920	74.1	1	05/28/15 18:51	05/29/15 15:38	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	373	31.8	1	05/28/15 18:51	05/29/15 15:38	606-20-2	
Di-n-octylphthalate	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	373	63.7	1	05/28/15 18:51	05/29/15 15:38	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	373	31.4	1	05/28/15 18:51	05/29/15 15:38	87-68-3	
Hexachlorobenzene	ND	ug/kg	373	49.0	1	05/28/15 18:51	05/29/15 15:38	118-74-1	
Hexachloroethane	ND	ug/kg	373	23.7	1	05/28/15 18:51	05/29/15 15:38	67-72-1	
Isophorone	ND	ug/kg	373	59.5	1	05/28/15 18:51	05/29/15 15:38	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	373	80.6	1	05/28/15 18:51	05/29/15 15:38	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	745	74.5	1	05/28/15 18:51	05/29/15 15:38		
2-Nitroaniline	ND	ug/kg	373	40.4	1	05/28/15 18:51	05/29/15 15:38	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-12 (12-12.5)**      **Lab ID: 10307126017**      Collected: 05/14/15 14:05      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	373	38.1	1	05/28/15 18:51	05/29/15 15:38	99-09-2	
4-Nitroaniline	ND	ug/kg	373	32.6	1	05/28/15 18:51	05/29/15 15:38	100-01-6	
Nitrobenzene	ND	ug/kg	373	75.3	1	05/28/15 18:51	05/29/15 15:38	98-95-3	
2-Nitrophenol	ND	ug/kg	373	63.7	1	05/28/15 18:51	05/29/15 15:38	88-75-5	
4-Nitrophenol	ND	ug/kg	373	39.1	1	05/28/15 18:51	05/29/15 15:38	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	373	50.7	1	05/28/15 18:51	05/29/15 15:38	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	373	186	1	05/28/15 18:51	05/29/15 15:38	86-30-6	
Pentachlorophenol	ND	ug/kg	757	186	1	05/28/15 18:51	05/29/15 15:38	87-86-5	
Phenol	ND	ug/kg	373	81.4	1	05/28/15 18:51	05/29/15 15:38	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	373	61.4	1	05/28/15 18:51	05/29/15 15:38	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	373	44.5	1	05/28/15 18:51	05/29/15 15:38	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	373	48.0	1	05/28/15 18:51	05/29/15 15:38	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	34	%	34-125		1	05/28/15 18:51	05/29/15 15:38	4165-60-0	P2
2-Fluorobiphenyl (S)	45	%	51-125		1	05/28/15 18:51	05/29/15 15:38	321-60-8	S0
p-Terphenyl-d14 (S)	78	%	55-125		1	05/28/15 18:51	05/29/15 15:38	1718-51-0	
Phenol-d6 (S)	54	%	44-125		1	05/28/15 18:51	05/29/15 15:38	13127-88-3	
2-Fluorophenol (S)	43	%	45-125		1	05/28/15 18:51	05/29/15 15:38	367-12-4	S0
2,4,6-Tribromophenol (S)	63	%	40-125		1	05/28/15 18:51	05/29/15 15:38	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	11.3	0.41	1	05/28/15 18:49	05/30/15 14:49	83-32-9	
Acenaphthylene	ND	ug/kg	11.3	0.38	1	05/28/15 18:49	05/30/15 14:49	208-96-8	
Anthracene	ND	ug/kg	11.3	0.35	1	05/28/15 18:49	05/30/15 14:49	120-12-7	
Benzo(a)anthracene	ND	ug/kg	11.3	0.21	1	05/28/15 18:49	05/30/15 14:49	56-55-3	
Benzo(a)pyrene	ND	ug/kg	11.3	0.22	1	05/28/15 18:49	05/30/15 14:49	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	11.3	0.39	1	05/28/15 18:49	05/30/15 14:49	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	11.3	0.40	1	05/28/15 18:49	05/30/15 14:49	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	11.3	0.45	1	05/28/15 18:49	05/30/15 14:49	207-08-9	
2-Chloronaphthalene	ND	ug/kg	11.3	0.32	1	05/28/15 18:49	05/30/15 14:49	91-58-7	L2
Chrysene	ND	ug/kg	11.3	0.28	1	05/28/15 18:49	05/30/15 14:49	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	11.3	0.48	1	05/28/15 18:49	05/30/15 14:49	53-70-3	
Fluoranthene	ND	ug/kg	11.3	0.25	1	05/28/15 18:49	05/30/15 14:49	206-44-0	
Fluorene	ND	ug/kg	11.3	0.35	1	05/28/15 18:49	05/30/15 14:49	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	11.3	0.43	1	05/28/15 18:49	05/30/15 14:49	193-39-5	
1-Methylnaphthalene	ND	ug/kg	11.3	0.42	1	05/28/15 18:49	05/30/15 14:49	90-12-0	
2-Methylnaphthalene	ND	ug/kg	11.3	0.46	1	05/28/15 18:49	05/30/15 14:49	91-57-6	
Naphthalene	ND	ug/kg	11.3	0.42	1	05/28/15 18:49	05/30/15 14:49	91-20-3	
Phenanthrene	ND	ug/kg	11.3	0.28	1	05/28/15 18:49	05/30/15 14:49	85-01-8	
Pyrene	ND	ug/kg	11.3	0.27	1	05/28/15 18:49	05/30/15 14:49	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	65	%	55-125		1	05/28/15 18:49	05/30/15 14:49	321-60-8	
p-Terphenyl-d14 (S)	88	%	30-150		1	05/28/15 18:49	05/30/15 14:49	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-12 (16-17)**      **Lab ID: 10307126018**      Collected: 05/14/15 14:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	20.6	1.1	1	05/28/15 18:53	06/04/15 01:18	68334-30-5	
Motor Oil Range	ND	mg/kg	13.8	2.5	1	05/28/15 18:53	06/04/15 01:18		
<b>Surrogates</b>									
n-Triacontane (S)	110	%	50-150		1	05/28/15 18:53	06/04/15 01:18	638-68-6	
o-Terphenyl (S)	85	%	50-150		1	05/28/15 18:53	06/04/15 01:18	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>27.3</b>	%	0.10	0.10	1		06/03/15 16:35		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	453	48.1	1	05/28/15 18:51	05/29/15 16:07	101-55-3	
Butylbenzylphthalate	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	85-68-7	
Carbazole	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	59-50-7	
4-Chloroaniline	ND	ug/kg	453	69.4	1	05/28/15 18:51	05/29/15 16:07	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	453	88.5	1	05/28/15 18:51	05/29/15 16:07	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	453	31.5	1	05/28/15 18:51	05/29/15 16:07	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	453	105	1	05/28/15 18:51	05/29/15 16:07	108-60-1	
2-Chloronaphthalene	ND	ug/kg	453	70.9	1	05/28/15 18:51	05/29/15 16:07	91-58-7	
2-Chlorophenol	ND	ug/kg	453	106	1	05/28/15 18:51	05/29/15 16:07	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	453	52.1	1	05/28/15 18:51	05/29/15 16:07	7005-72-3	
Dibenzofuran	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	453	29.2	1	05/28/15 18:51	05/29/15 16:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	453	28.5	1	05/28/15 18:51	05/29/15 16:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	453	30.2	1	05/28/15 18:51	05/29/15 16:07	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	453	63.1	1	05/28/15 18:51	05/29/15 16:07	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	453	85.2	1	05/28/15 18:51	05/29/15 16:07	120-83-2	
Diethylphthalate	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	453	84.8	1	05/28/15 18:51	05/29/15 16:07	105-67-9	
Dimethylphthalate	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	131-11-3	
Di-n-butylphthalate	ND	ug/kg	453	62.8	1	05/28/15 18:51	05/29/15 16:07	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2330	90.0	1	05/28/15 18:51	05/29/15 16:07	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	453	38.7	1	05/28/15 18:51	05/29/15 16:07	606-20-2	
Di-n-octylphthalate	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	453	77.4	1	05/28/15 18:51	05/29/15 16:07	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	453	38.1	1	05/28/15 18:51	05/29/15 16:07	87-68-3	
Hexachlorobenzene	ND	ug/kg	453	59.5	1	05/28/15 18:51	05/29/15 16:07	118-74-1	
Hexachloroethane	ND	ug/kg	453	28.8	1	05/28/15 18:51	05/29/15 16:07	67-72-1	
Isophorone	ND	ug/kg	453	72.3	1	05/28/15 18:51	05/29/15 16:07	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	453	97.9	1	05/28/15 18:51	05/29/15 16:07	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	905	90.5	1	05/28/15 18:51	05/29/15 16:07		
2-Nitroaniline	ND	ug/kg	453	49.1	1	05/28/15 18:51	05/29/15 16:07	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-12 (16-17)**      **Lab ID: 10307126018**      Collected: 05/14/15 14:10      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	453	46.2	1	05/28/15 18:51	05/29/15 16:07	99-09-2	
4-Nitroaniline	ND	ug/kg	453	39.6	1	05/28/15 18:51	05/29/15 16:07	100-01-6	
Nitrobenzene	ND	ug/kg	453	91.5	1	05/28/15 18:51	05/29/15 16:07	98-95-3	
2-Nitrophenol	ND	ug/kg	453	77.4	1	05/28/15 18:51	05/29/15 16:07	88-75-5	
4-Nitrophenol	ND	ug/kg	453	47.5	1	05/28/15 18:51	05/29/15 16:07	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	453	61.6	1	05/28/15 18:51	05/29/15 16:07	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	453	226	1	05/28/15 18:51	05/29/15 16:07	86-30-6	
Pentachlorophenol	ND	ug/kg	919	226	1	05/28/15 18:51	05/29/15 16:07	87-86-5	
Phenol	ND	ug/kg	453	98.9	1	05/28/15 18:51	05/29/15 16:07	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	453	74.6	1	05/28/15 18:51	05/29/15 16:07	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	453	54.0	1	05/28/15 18:51	05/29/15 16:07	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	453	58.3	1	05/28/15 18:51	05/29/15 16:07	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	26	%	34-125		1	05/28/15 18:51	05/29/15 16:07	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	32	%	51-125		1	05/28/15 18:51	05/29/15 16:07	321-60-8	S0
p-Terphenyl-d14 (S)	72	%	55-125		1	05/28/15 18:51	05/29/15 16:07	1718-51-0	
Phenol-d6 (S)	44	%	44-125		1	05/28/15 18:51	05/29/15 16:07	13127-88-3	
2-Fluorophenol (S)	34	%	45-125		1	05/28/15 18:51	05/29/15 16:07	367-12-4	S0
2,4,6-Tribromophenol (S)	55	%	40-125		1	05/28/15 18:51	05/29/15 16:07	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	13.8	0.50	1	05/28/15 18:49	05/30/15 15:10	83-32-9	
Acenaphthylene	ND	ug/kg	13.8	0.47	1	05/28/15 18:49	05/30/15 15:10	208-96-8	
Anthracene	ND	ug/kg	13.8	0.42	1	05/28/15 18:49	05/30/15 15:10	120-12-7	
Benzo(a)anthracene	ND	ug/kg	13.8	0.25	1	05/28/15 18:49	05/30/15 15:10	56-55-3	
Benzo(a)pyrene	ND	ug/kg	13.8	0.27	1	05/28/15 18:49	05/30/15 15:10	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	13.8	0.48	1	05/28/15 18:49	05/30/15 15:10	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	13.8	0.49	1	05/28/15 18:49	05/30/15 15:10	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	13.8	0.55	1	05/28/15 18:49	05/30/15 15:10	207-08-9	
2-Chloronaphthalene	ND	ug/kg	13.8	0.39	1	05/28/15 18:49	05/30/15 15:10	91-58-7	L2
Chrysene	ND	ug/kg	13.8	0.34	1	05/28/15 18:49	05/30/15 15:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	13.8	0.59	1	05/28/15 18:49	05/30/15 15:10	53-70-3	
Fluoranthene	ND	ug/kg	13.8	0.30	1	05/28/15 18:49	05/30/15 15:10	206-44-0	
Fluorene	ND	ug/kg	13.8	0.43	1	05/28/15 18:49	05/30/15 15:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	13.8	0.53	1	05/28/15 18:49	05/30/15 15:10	193-39-5	
1-Methylnaphthalene	ND	ug/kg	13.8	0.51	1	05/28/15 18:49	05/30/15 15:10	90-12-0	
2-Methylnaphthalene	ND	ug/kg	13.8	0.56	1	05/28/15 18:49	05/30/15 15:10	91-57-6	
Naphthalene	ND	ug/kg	13.8	0.51	1	05/28/15 18:49	05/30/15 15:10	91-20-3	
Phenanthrene	ND	ug/kg	13.8	0.34	1	05/28/15 18:49	05/30/15 15:10	85-01-8	
Pyrene	ND	ug/kg	13.8	0.33	1	05/28/15 18:49	05/30/15 15:10	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	55	%	55-125		1	05/28/15 18:49	05/30/15 15:10	321-60-8	
p-Terphenyl-d14 (S)	76	%	30-150		1	05/28/15 18:49	05/30/15 15:10	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-18 (16-17)**      **Lab ID: 10307126019**      Collected: 05/14/15 14:50      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	16.1	0.87	1	05/28/15 18:53	06/04/15 01:41	68334-30-5	
Motor Oil Range	ND	mg/kg	10.8	1.9	1	05/28/15 18:53	06/04/15 01:41		
<b>Surrogates</b>									
n-Triacontane (S)	106	%	50-150		1	05/28/15 18:53	06/04/15 01:41	638-68-6	
o-Terphenyl (S)	92	%	50-150		1	05/28/15 18:53	06/04/15 01:41	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>7.1</b>	%	0.10	0.10	1		06/03/15 16:35		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	355	37.8	1	05/28/15 18:51	05/29/15 16:37	101-55-3	
Butylbenzylphthalate	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	85-68-7	
Carbazole	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	59-50-7	
4-Chloroaniline	ND	ug/kg	355	54.4	1	05/28/15 18:51	05/29/15 16:37	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	355	69.4	1	05/28/15 18:51	05/29/15 16:37	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	355	24.7	1	05/28/15 18:51	05/29/15 16:37	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	355	82.0	1	05/28/15 18:51	05/29/15 16:37	108-60-1	
2-Chloronaphthalene	ND	ug/kg	355	55.6	1	05/28/15 18:51	05/29/15 16:37	91-58-7	
2-Chlorophenol	ND	ug/kg	355	82.9	1	05/28/15 18:51	05/29/15 16:37	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	355	40.9	1	05/28/15 18:51	05/29/15 16:37	7005-72-3	
Dibenzofuran	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	355	22.9	1	05/28/15 18:51	05/29/15 16:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	355	22.4	1	05/28/15 18:51	05/29/15 16:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	355	23.7	1	05/28/15 18:51	05/29/15 16:37	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	355	49.5	1	05/28/15 18:51	05/29/15 16:37	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	355	66.8	1	05/28/15 18:51	05/29/15 16:37	120-83-2	
Diethylphthalate	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	355	66.5	1	05/28/15 18:51	05/29/15 16:37	105-67-9	
Dimethylphthalate	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	131-11-3	
Di-n-butylphthalate	ND	ug/kg	355	49.3	1	05/28/15 18:51	05/29/15 16:37	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1830	70.6	1	05/28/15 18:51	05/29/15 16:37	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	355	30.3	1	05/28/15 18:51	05/29/15 16:37	606-20-2	
Di-n-octylphthalate	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	355	60.7	1	05/28/15 18:51	05/29/15 16:37	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	355	29.9	1	05/28/15 18:51	05/29/15 16:37	87-68-3	
Hexachlorobenzene	ND	ug/kg	355	46.7	1	05/28/15 18:51	05/29/15 16:37	118-74-1	
Hexachloroethane	ND	ug/kg	355	22.6	1	05/28/15 18:51	05/29/15 16:37	67-72-1	
Isophorone	ND	ug/kg	355	56.7	1	05/28/15 18:51	05/29/15 16:37	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	355	76.8	1	05/28/15 18:51	05/29/15 16:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	710	71.0	1	05/28/15 18:51	05/29/15 16:37		
2-Nitroaniline	ND	ug/kg	355	38.5	1	05/28/15 18:51	05/29/15 16:37	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-18 (16-17)**      **Lab ID: 10307126019**      Collected: 05/14/15 14:50      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	355	36.3	1	05/28/15 18:51	05/29/15 16:37	99-09-2	
4-Nitroaniline	ND	ug/kg	355	31.1	1	05/28/15 18:51	05/29/15 16:37	100-01-6	
Nitrobenzene	ND	ug/kg	355	71.8	1	05/28/15 18:51	05/29/15 16:37	98-95-3	
2-Nitrophenol	ND	ug/kg	355	60.7	1	05/28/15 18:51	05/29/15 16:37	88-75-5	
4-Nitrophenol	ND	ug/kg	355	37.2	1	05/28/15 18:51	05/29/15 16:37	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	355	48.3	1	05/28/15 18:51	05/29/15 16:37	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	355	178	1	05/28/15 18:51	05/29/15 16:37	86-30-6	
Pentachlorophenol	ND	ug/kg	721	178	1	05/28/15 18:51	05/29/15 16:37	87-86-5	
Phenol	ND	ug/kg	355	77.6	1	05/28/15 18:51	05/29/15 16:37	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	355	58.5	1	05/28/15 18:51	05/29/15 16:37	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	355	42.4	1	05/28/15 18:51	05/29/15 16:37	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	355	45.7	1	05/28/15 18:51	05/29/15 16:37	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	51	%	34-125		1	05/28/15 18:51	05/29/15 16:37	4165-60-0	
2-Fluorobiphenyl (S)	59	%	51-125		1	05/28/15 18:51	05/29/15 16:37	321-60-8	
p-Terphenyl-d14 (S)	82	%	55-125		1	05/28/15 18:51	05/29/15 16:37	1718-51-0	
Phenol-d6 (S)	63	%	44-125		1	05/28/15 18:51	05/29/15 16:37	13127-88-3	
2-Fluorophenol (S)	56	%	45-125		1	05/28/15 18:51	05/29/15 16:37	367-12-4	
2,4,6-Tribromophenol (S)	67	%	40-125		1	05/28/15 18:51	05/29/15 16:37	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	10.8	0.39	1	05/28/15 18:49	05/30/15 15:32	83-32-9	
Acenaphthylene	ND	ug/kg	10.8	0.36	1	05/28/15 18:49	05/30/15 15:32	208-96-8	
Anthracene	ND	ug/kg	10.8	0.33	1	05/28/15 18:49	05/30/15 15:32	120-12-7	
Benzo(a)anthracene	ND	ug/kg	10.8	0.20	1	05/28/15 18:49	05/30/15 15:32	56-55-3	
Benzo(a)pyrene	ND	ug/kg	10.8	0.21	1	05/28/15 18:49	05/30/15 15:32	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	10.8	0.38	1	05/28/15 18:49	05/30/15 15:32	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	10.8	0.38	1	05/28/15 18:49	05/30/15 15:32	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	10.8	0.43	1	05/28/15 18:49	05/30/15 15:32	207-08-9	
2-Chloronaphthalene	ND	ug/kg	10.8	0.30	1	05/28/15 18:49	05/30/15 15:32	91-58-7	L2
Chrysene	ND	ug/kg	10.8	0.26	1	05/28/15 18:49	05/30/15 15:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	10.8	0.46	1	05/28/15 18:49	05/30/15 15:32	53-70-3	
Fluoranthene	ND	ug/kg	10.8	0.24	1	05/28/15 18:49	05/30/15 15:32	206-44-0	
Fluorene	ND	ug/kg	10.8	0.33	1	05/28/15 18:49	05/30/15 15:32	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	10.8	0.41	1	05/28/15 18:49	05/30/15 15:32	193-39-5	
1-Methylnaphthalene	ND	ug/kg	10.8	0.40	1	05/28/15 18:49	05/30/15 15:32	90-12-0	
2-Methylnaphthalene	ND	ug/kg	10.8	0.44	1	05/28/15 18:49	05/30/15 15:32	91-57-6	
Naphthalene	ND	ug/kg	10.8	0.40	1	05/28/15 18:49	05/30/15 15:32	91-20-3	
Phenanthrene	ND	ug/kg	10.8	0.27	1	05/28/15 18:49	05/30/15 15:32	85-01-8	
Pyrene	ND	ug/kg	10.8	0.26	1	05/28/15 18:49	05/30/15 15:32	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	57	%	55-125		1	05/28/15 18:49	05/30/15 15:32	321-60-8	
p-Terphenyl-d14 (S)	88	%	30-150		1	05/28/15 18:49	05/30/15 15:32	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-18 (17-17.5)**      **Lab ID: 10307126020**      Collected: 05/14/15 14:55      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Diesel Fuel Range	ND	mg/kg	21.9	1.2	1	05/28/15 18:53	06/04/15 02:03	68334-30-5	
Motor Oil Range	ND	mg/kg	14.6	2.6	1	05/28/15 18:53	06/04/15 02:03		
<b>Surrogates</b>									
n-Triacontane (S)	105	%	50-150		1	05/28/15 18:53	06/04/15 02:03	638-68-6	
o-Terphenyl (S)	77	%	50-150		1	05/28/15 18:53	06/04/15 02:03	84-15-1	
<b>Dry Weight</b>									
Analytical Method: ASTM D2974									
Percent Moisture	<b>31.6</b>	%	0.10	0.10	1		06/03/15 16:35		
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D    Preparation Method: EPA 3550									
4-Bromophenylphenyl ether	ND	ug/kg	481	51.2	1	05/28/15 18:51	05/29/15 17:06	101-55-3	
Butylbenzylphthalate	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	85-68-7	
Carbazole	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	59-50-7	
4-Chloroaniline	ND	ug/kg	481	73.8	1	05/28/15 18:51	05/29/15 17:06	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	481	94.0	1	05/28/15 18:51	05/29/15 17:06	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	481	33.5	1	05/28/15 18:51	05/29/15 17:06	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	481	111	1	05/28/15 18:51	05/29/15 17:06	108-60-1	
2-Chloronaphthalene	ND	ug/kg	481	75.4	1	05/28/15 18:51	05/29/15 17:06	91-58-7	
2-Chlorophenol	ND	ug/kg	481	112	1	05/28/15 18:51	05/29/15 17:06	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	481	55.4	1	05/28/15 18:51	05/29/15 17:06	7005-72-3	
Dibenzofuran	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	481	31.1	1	05/28/15 18:51	05/29/15 17:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	481	30.3	1	05/28/15 18:51	05/29/15 17:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	481	32.1	1	05/28/15 18:51	05/29/15 17:06	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	481	67.1	1	05/28/15 18:51	05/29/15 17:06	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	481	90.5	1	05/28/15 18:51	05/29/15 17:06	120-83-2	
Diethylphthalate	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	481	90.1	1	05/28/15 18:51	05/29/15 17:06	105-67-9	
Dimethylphthalate	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	131-11-3	
Di-n-butylphthalate	ND	ug/kg	481	66.8	1	05/28/15 18:51	05/29/15 17:06	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2480	95.6	1	05/28/15 18:51	05/29/15 17:06	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	481	41.1	1	05/28/15 18:51	05/29/15 17:06	606-20-2	
Di-n-octylphthalate	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	481	82.2	1	05/28/15 18:51	05/29/15 17:06	117-81-7	
Hexachloro-1,3-butadiene	ND	ug/kg	481	40.5	1	05/28/15 18:51	05/29/15 17:06	87-68-3	
Hexachlorobenzene	ND	ug/kg	481	63.3	1	05/28/15 18:51	05/29/15 17:06	118-74-1	
Hexachloroethane	ND	ug/kg	481	30.6	1	05/28/15 18:51	05/29/15 17:06	67-72-1	
Isophorone	ND	ug/kg	481	76.8	1	05/28/15 18:51	05/29/15 17:06	78-59-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	481	104	1	05/28/15 18:51	05/29/15 17:06	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	962	96.2	1	05/28/15 18:51	05/29/15 17:06		
2-Nitroaniline	ND	ug/kg	481	52.2	1	05/28/15 18:51	05/29/15 17:06	88-74-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### ANALYTICAL RESULTS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

**Sample: DP-18 (17-17.5)**      **Lab ID: 10307126020**      Collected: 05/14/15 14:55      Received: 05/20/15 10:00      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV</b>									
Analytical Method: EPA 8270D Preparation Method: EPA 3550									
3-Nitroaniline	ND	ug/kg	481	49.1	1	05/28/15 18:51	05/29/15 17:06	99-09-2	
4-Nitroaniline	ND	ug/kg	481	42.1	1	05/28/15 18:51	05/29/15 17:06	100-01-6	
Nitrobenzene	ND	ug/kg	481	97.2	1	05/28/15 18:51	05/29/15 17:06	98-95-3	
2-Nitrophenol	ND	ug/kg	481	82.2	1	05/28/15 18:51	05/29/15 17:06	88-75-5	
4-Nitrophenol	ND	ug/kg	481	50.4	1	05/28/15 18:51	05/29/15 17:06	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	481	65.5	1	05/28/15 18:51	05/29/15 17:06	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	481	241	1	05/28/15 18:51	05/29/15 17:06	86-30-6	
Pentachlorophenol	ND	ug/kg	977	241	1	05/28/15 18:51	05/29/15 17:06	87-86-5	
Phenol	ND	ug/kg	481	105	1	05/28/15 18:51	05/29/15 17:06	108-95-2	
1,2,4-Trichlorobenzene	ND	ug/kg	481	79.3	1	05/28/15 18:51	05/29/15 17:06	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	481	57.4	1	05/28/15 18:51	05/29/15 17:06	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	481	62.0	1	05/28/15 18:51	05/29/15 17:06	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	25	%	34-125		1	05/28/15 18:51	05/29/15 17:06	4165-60-0	P2,S0
2-Fluorobiphenyl (S)	18	%	51-125		1	05/28/15 18:51	05/29/15 17:06	321-60-8	S0
p-Terphenyl-d14 (S)	63	%	55-125		1	05/28/15 18:51	05/29/15 17:06	1718-51-0	
Phenol-d6 (S)	52	%	44-125		1	05/28/15 18:51	05/29/15 17:06	13127-88-3	
2-Fluorophenol (S)	39	%	45-125		1	05/28/15 18:51	05/29/15 17:06	367-12-4	S0
2,4,6-Tribromophenol (S)	58	%	40-125		1	05/28/15 18:51	05/29/15 17:06	118-79-6	
<b>8270D MSSV PAH by SIM</b>									
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3550									
Acenaphthene	ND	ug/kg	14.6	0.52	1	05/28/15 18:49	06/01/15 09:10	83-32-9	
Acenaphthylene	ND	ug/kg	14.6	0.49	1	05/28/15 18:49	06/01/15 09:10	208-96-8	
Anthracene	ND	ug/kg	14.6	0.45	1	05/28/15 18:49	06/01/15 09:10	120-12-7	
Benzo(a)anthracene	ND	ug/kg	14.6	0.27	1	05/28/15 18:49	06/01/15 09:10	56-55-3	
Benzo(a)pyrene	ND	ug/kg	14.6	0.29	1	05/28/15 18:49	06/01/15 09:10	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	14.6	0.51	1	05/28/15 18:49	06/01/15 09:10	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	14.6	0.52	1	05/28/15 18:49	06/01/15 09:10	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	14.6	0.58	1	05/28/15 18:49	06/01/15 09:10	207-08-9	
2-Chloronaphthalene	ND	ug/kg	14.6	0.41	1	05/28/15 18:49	06/01/15 09:10	91-58-7	L2
Chrysene	ND	ug/kg	14.6	0.36	1	05/28/15 18:49	06/01/15 09:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	14.6	0.63	1	05/28/15 18:49	06/01/15 09:10	53-70-3	
Fluoranthene	ND	ug/kg	14.6	0.32	1	05/28/15 18:49	06/01/15 09:10	206-44-0	
Fluorene	ND	ug/kg	14.6	0.45	1	05/28/15 18:49	06/01/15 09:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	14.6	0.56	1	05/28/15 18:49	06/01/15 09:10	193-39-5	
1-Methylnaphthalene	ND	ug/kg	14.6	0.55	1	05/28/15 18:49	06/01/15 09:10	90-12-0	
2-Methylnaphthalene	ND	ug/kg	14.6	0.60	1	05/28/15 18:49	06/01/15 09:10	91-57-6	
Naphthalene	ND	ug/kg	14.6	0.54	1	05/28/15 18:49	06/01/15 09:10	91-20-3	
Phenanthrene	ND	ug/kg	14.6	0.36	1	05/28/15 18:49	06/01/15 09:10	85-01-8	
Pyrene	ND	ug/kg	14.6	0.35	1	05/28/15 18:49	06/01/15 09:10	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	56	%	55-125		1	05/28/15 18:49	06/01/15 09:10	321-60-8	
p-Terphenyl-d14 (S)	76	%	30-150		1	05/28/15 18:49	06/01/15 09:10	1718-51-0	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

QC Batch: GCV/13781 Analysis Method: NWTPH-Gx  
 QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Solid GCV  
 Associated Lab Samples: 10307126005, 10307126006

METHOD BLANK: 1976729 Matrix: Solid

Associated Lab Samples: 10307126005, 10307126006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	mg/kg	ND	5.0	05/28/15 23:37	
a,a,a-Trifluorotoluene (S)	%.	95	50-150	05/28/15 23:37	

METHOD BLANK: 1976730 Matrix: Solid

Associated Lab Samples: 10307126005, 10307126006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	mg/kg	ND	5.0	05/29/15 04:57	
a,a,a-Trifluorotoluene (S)	%.	99	50-150	05/29/15 04:57	

LABORATORY CONTROL SAMPLE & LCSD: 1976731 1976732

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	mg/kg	10	11.0	10.9	110	109	75-125	1	20	
a,a,a-Trifluorotoluene (S)	%.				90	88	50-150			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1976733 1976734

Parameter	Units	10307585005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH as Gas	mg/kg	ND	20.2	20.3	17.4	17.8	86	88	50-150	3	30	
a,a,a-Trifluorotoluene (S)	%.						86	86	50-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

QC Batch: MPRP/54904

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 10307126001, 10307126002, 10307126003, 10307126004, 10307126005, 10307126006, 10307126007, 10307126008

SAMPLE DUPLICATE: 1983745

Parameter	Units	10307123010 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	28.1	26.7	5	30	

SAMPLE DUPLICATE: 1983817

Parameter	Units	10307126008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	34.3	32.4	6	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

QC Batch:	MPRP/54905	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	10307126009, 10307126010, 10307126011, 10307126012, 10307126013, 10307126014, 10307126015, 10307126016, 10307126017, 10307126018, 10307126019, 10307126020		

---

SAMPLE DUPLICATE: 1983751

Parameter	Units	10307126009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.1	18.7	21	30	

---

SAMPLE DUPLICATE: 1983752

Parameter	Units	10307129008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	26.2	30.4	15	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

QC Batch: OEXT/29317 Analysis Method: EPA 8270D  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid MSSV  
 Associated Lab Samples: 10307126001, 10307126002, 10307126003, 10307126004, 10307126005, 10307126006, 10307126007, 10307126008, 10307126009, 10307126010

METHOD BLANK: 1976836 Matrix: Solid  
 Associated Lab Samples: 10307126001, 10307126002, 10307126003, 10307126004, 10307126005, 10307126006, 10307126007, 10307126008, 10307126009, 10307126010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	05/28/15 09:28	
1,2-Dichlorobenzene	ug/kg	ND	330	05/28/15 09:28	
1,2-Diphenylhydrazine	ug/kg	ND	330	05/28/15 09:28	
1,3-Dichlorobenzene	ug/kg	ND	330	05/28/15 09:28	
1,4-Dichlorobenzene	ug/kg	ND	330	05/28/15 09:28	
2,4,5-Trichlorophenol	ug/kg	ND	330	05/28/15 09:28	
2,4,6-Trichlorophenol	ug/kg	ND	330	05/28/15 09:28	
2,4-Dichlorophenol	ug/kg	ND	330	05/28/15 09:28	
2,4-Dimethylphenol	ug/kg	ND	330	05/28/15 09:28	
2,4-Dinitrophenol	ug/kg	ND	330	05/28/15 09:28	
2,4-Dinitrotoluene	ug/kg	ND	330	05/28/15 09:28	
2,6-Dinitrotoluene	ug/kg	ND	330	05/28/15 09:28	
2-Chloronaphthalene	ug/kg	ND	330	05/28/15 09:28	
2-Chlorophenol	ug/kg	ND	330	05/28/15 09:28	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	05/28/15 09:28	
2-Nitroaniline	ug/kg	ND	330	05/28/15 09:28	
2-Nitrophenol	ug/kg	ND	330	05/28/15 09:28	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	660	05/28/15 09:28	
3,3'-Dichlorobenzidine	ug/kg	ND	330	05/28/15 09:28	
3-Nitroaniline	ug/kg	ND	330	05/28/15 09:28	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	05/28/15 09:28	
4-Bromophenylphenyl ether	ug/kg	ND	330	05/28/15 09:28	
4-Chloro-3-methylphenol	ug/kg	ND	330	05/28/15 09:28	
4-Chloroaniline	ug/kg	ND	330	05/28/15 09:28	
4-Chlorophenylphenyl ether	ug/kg	ND	330	05/28/15 09:28	
4-Nitroaniline	ug/kg	ND	330	05/28/15 09:28	
4-Nitrophenol	ug/kg	ND	330	05/28/15 09:28	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	05/28/15 09:28	
bis(2-Chloroethyl) ether	ug/kg	ND	330	05/28/15 09:28	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	05/28/15 09:28	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	05/28/15 09:28	
Butylbenzylphthalate	ug/kg	ND	330	05/28/15 09:28	
Carbazole	ug/kg	ND	330	05/28/15 09:28	
Di-n-butylphthalate	ug/kg	ND	330	05/28/15 09:28	
Di-n-octylphthalate	ug/kg	ND	330	05/28/15 09:28	
Dibenzofuran	ug/kg	ND	330	05/28/15 09:28	
Diethylphthalate	ug/kg	ND	330	05/28/15 09:28	
Dimethylphthalate	ug/kg	ND	330	05/28/15 09:28	
Hexachloro-1,3-butadiene	ug/kg	ND	330	05/28/15 09:28	
Hexachlorobenzene	ug/kg	ND	330	05/28/15 09:28	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

METHOD BLANK: 1976836

Matrix: Solid

Associated Lab Samples: 10307126001, 10307126002, 10307126003, 10307126004, 10307126005, 10307126006, 10307126007, 10307126008, 10307126009, 10307126010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloroethane	ug/kg	ND	330	05/28/15 09:28	
Isophorone	ug/kg	ND	330	05/28/15 09:28	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	05/28/15 09:28	
N-Nitrosodimethylamine	ug/kg	ND	330	05/28/15 09:28	
N-Nitrosodiphenylamine	ug/kg	ND	330	05/28/15 09:28	
Nitrobenzene	ug/kg	ND	330	05/28/15 09:28	
Pentachlorophenol	ug/kg	ND	670	05/28/15 09:28	
Phenol	ug/kg	ND	330	05/28/15 09:28	
2,4,6-Tribromophenol (S)	%	73	40-125	05/28/15 09:28	
2-Fluorobiphenyl (S)	%	61	51-125	05/28/15 09:28	
2-Fluorophenol (S)	%	61	45-125	05/28/15 09:28	
Nitrobenzene-d5 (S)	%	56	34-125	05/28/15 09:28	
p-Terphenyl-d14 (S)	%	71	55-125	05/28/15 09:28	
Phenol-d6 (S)	%	62	44-125	05/28/15 09:28	

LABORATORY CONTROL SAMPLE: 1976837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1060	64	41-125	
1,2-Dichlorobenzene	ug/kg	1670	984	59	38-125	
1,2-Diphenylhydrazine	ug/kg	1670	1380	83	58-125	
1,3-Dichlorobenzene	ug/kg	1670	920	55	36-125	
1,4-Dichlorobenzene	ug/kg	1670	937	56	36-125	
2,4,5-Trichlorophenol	ug/kg	1670	1390	83	56-125	
2,4,6-Trichlorophenol	ug/kg	1670	1340	81	57-125	
2,4-Dichlorophenol	ug/kg	1670	1240	75	51-125	
2,4-Dimethylphenol	ug/kg	1670	1230	74	48-125	
2,4-Dinitrophenol	ug/kg	1670	965	58	30-125	
2,4-Dinitrotoluene	ug/kg	1670	1370	82	58-125	
2,6-Dinitrotoluene	ug/kg	1670	1360	82	58-125	
2-Chloronaphthalene	ug/kg	1670	1270	76	53-125	
2-Chlorophenol	ug/kg	1670	1110	67	44-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1240	74	48-125	
2-Nitroaniline	ug/kg	1670	1280	77	58-125	
2-Nitrophenol	ug/kg	1670	1110	67	43-125	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1270	76	53-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1350	81	42-125	
3-Nitroaniline	ug/kg	1670	1450	87	47-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1150J	69	38-125	
4-Bromophenylphenyl ether	ug/kg	1670	1370	82	59-125	
4-Chloro-3-methylphenol	ug/kg	1670	1300	78	58-125	
4-Chloroaniline	ug/kg	1670	1230	74	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1360	81	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

LABORATORY CONTROL SAMPLE: 1976837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Nitroaniline	ug/kg	1670	1380	83	54-125	
4-Nitrophenol	ug/kg	1670	1300	78	53-125	
bis(2-Chloroethoxy)methane	ug/kg	1670	1210	73	48-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1020	61	39-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1070	64	33-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1410	85	61-125	
Butylbenzylphthalate	ug/kg	1670	1390	83	60-125	
Carbazole	ug/kg	1670	1330	80	59-125	
Di-n-butylphthalate	ug/kg	1670	1390	83	61-125	
Di-n-octylphthalate	ug/kg	1670	1380	83	60-125	
Dibenzofuran	ug/kg	1670	1310	79	58-125	
Diethylphthalate	ug/kg	1670	1390	83	60-125	
Dimethylphthalate	ug/kg	1670	1380	83	60-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1030	62	38-125	
Hexachlorobenzene	ug/kg	1670	1390	83	57-125	
Hexachloroethane	ug/kg	1670	944	57	54-125	
Isophorone	ug/kg	1670	1250	75	52-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1190	71	48-125	
N-Nitrosodimethylamine	ug/kg	1670	990	59	31-125	
N-Nitrosodiphenylamine	ug/kg	1670	1370	82	59-125	
Nitrobenzene	ug/kg	1670	1120	67	46-125	
Pentachlorophenol	ug/kg	1670	1210	72	47-125	
Phenol	ug/kg	1670	1180	71	48-125	
2,4,6-Tribromophenol (S)	%			80	40-125	
2-Fluorobiphenyl (S)	%			74	51-125	
2-Fluorophenol (S)	%			68	45-125	
Nitrobenzene-d5 (S)	%			65	34-125	
p-Terphenyl-d14 (S)	%			78	55-125	
Phenol-d6 (S)	%			70	44-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1976838 1976839

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10307168002	Result	Spike Conc.	Spike Conc.								
1,2,4-Trichlorobenzene	ug/kg	ND	1790	1780	ND	ND	62	56	43-125		30		
1,2-Dichlorobenzene	ug/kg	ND	1790	1780	1040J	921J	58	52	36-125		30		
1,2-Diphenylhydrazine	ug/kg	ND	1790	1780	ND	ND	72	70	30-125		30		
1,3-Dichlorobenzene	ug/kg	ND	1790	1780	908J	868J	51	49	34-125		30		
1,4-Dichlorobenzene	ug/kg	ND	1790	1780	1020J	953J	57	53	33-125		30		
2,4,5-Trichlorophenol	ug/kg	ND	1790	1780	1110J	ND	62	56	30-141		30		
2,4,6-Trichlorophenol	ug/kg	ND	1790	1780	1170J	ND	65	63	30-143		30		
2,4-Dichlorophenol	ug/kg	ND	1790	1780	ND	ND	52	52	30-139		30		
2,4-Dimethylphenol	ug/kg	ND	1790	1780	ND	ND	64	65	47-125		30		
2,4-Dinitrophenol	ug/kg	ND	1790	1780	ND	ND	0	0	30-125		30	M1	
2,4-Dinitrotoluene	ug/kg	ND	1790	1780	ND	ND	0	52	50-125		30	M1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1976838												1976839			
Parameter	Units	10307168002 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual				
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD		RPD			
2,6-Dinitrotoluene	ug/kg	ND	1790	1780	1440J	1240J	80	70	48-125	30					
2-Chloronaphthalene	ug/kg	ND	1790	1780	ND	ND	68	62	49-125	30					
2-Chlorophenol	ug/kg	ND	1790	1780	ND	ND	65	54	30-125	30					
2-Methylphenol(o-Cresol)	ug/kg	ND	1790	1780	ND	ND	66	68	43-125	30					
2-Nitroaniline	ug/kg	ND	1790	1780	1310J	1100J	73	62	57-125	30					
2-Nitrophenol	ug/kg	ND	1790	1780	ND	ND	46	46	30-150	30					
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	1790	1780	ND	ND	59	55	51-125	30					
3,3'-Dichlorobenzidine	ug/kg	ND	1790	1780	1420J	ND	79	62	30-132	30					
3-Nitroaniline	ug/kg	ND	1790	1780	ND	ND	0	0	30-132	30	M1				
4,6-Dinitro-2-methylphenol	ug/kg	ND	1790	1780	ND	ND	0	0	30-130	30	M1				
4-Bromophenylphenyl ether	ug/kg	ND	1790	1780	1380J	1150J	77	65	57-125	30					
4-Chloro-3-methylphenol	ug/kg	ND	1790	1780	ND	ND	0	40	30-139	30	M1				
4-Chloroaniline	ug/kg	ND	1790	1780	ND	ND	48	49	30-125	30					
4-Chlorophenylphenyl ether	ug/kg	ND	1790	1780	1230J	1260J	69	71	30-130	30					
4-Nitroaniline	ug/kg	ND	1790	1780	ND	1060J	0	59	30-150	30	M1				
4-Nitrophenol	ug/kg	ND	1790	1780	ND	ND	0	0	30-145	30	M1				
bis(2-Chloroethoxy)methane	ug/kg	ND	1790	1780	ND	ND	57	60	46-125	30					
bis(2-Chloroethyl) ether	ug/kg	ND	1790	1780	827J	939J	46	53	34-125	30					
bis(2-Chloroisopropyl) ether	ug/kg	ND	1790	1780	ND	ND	64	59	33-125	30					
bis(2-Ethylhexyl)phthalate	ug/kg	ND	1790	1780	ND	ND	74	83	60-125	30					
Butylbenzylphthalate	ug/kg	ND	1790	1780	ND	ND	73	68	55-125	30					
Carbazole	ug/kg	ND	1790	1780	ND	ND	61	53	56-125	30	M1				
Di-n-butylphthalate	ug/kg	ND	1790	1780	1330J	ND	74	63	58-125	30					
Di-n-octylphthalate	ug/kg	ND	1790	1780	ND	ND	0	0	59-125	30	M1				
Dibenzofuran	ug/kg	ND	1790	1780	ND	ND	47	49	57-125	30	M1				
Diethylphthalate	ug/kg	ND	1790	1780	ND	ND	72	72	58-125	30					
Dimethylphthalate	ug/kg	ND	1790	1780	ND	ND	75	69	59-125	30					
Hexachloro-1,3-butadiene	ug/kg	ND	1790	1780	1230J	1070J	69	60	39-125	30					
Hexachlorobenzene	ug/kg	ND	1790	1780	1250J	1280J	70	72	55-125	30					
Hexachloroethane	ug/kg	ND	1790	1780	771J	785J	43	44	30-125	30					
Isophorone	ug/kg	ND	1790	1780	ND	ND	64	62	49-125	30					
N-Nitroso-di-n-propylamine	ug/kg	ND	1790	1780	1260J	ND	70	56	30-140	30					
N-Nitrosodimethylamine	ug/kg	ND	1790	1780	ND	ND	35	41	30-125	30					
N-Nitrosodiphenylamine	ug/kg	ND	1790	1780	ND	ND	80	74	57-125	30					
Nitrobenzene	ug/kg	ND	1790	1780	ND	ND	61	59	30-139	30					
Pentachlorophenol	ug/kg	ND	1790	1780	ND	ND	19	0	30-148	30	M1				
Phenol	ug/kg	ND	1790	1780	ND	ND	63	63	48-125	30					
2,4,6-Tribromophenol (S)	%						71	64	40-125						
2-Fluorobiphenyl (S)	%						69	65	51-125						
2-Fluorophenol (S)	%						44	46	45-125		S0				
Nitrobenzene-d5 (S)	%						57	57	34-125		D3,P3				
p-Terphenyl-d14 (S)	%						72	70	55-125						
Phenol-d6 (S)	%						54	56	44-125						

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

QC Batch: OEXT/29340 Analysis Method: EPA 8270D  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid MSSV  
 Associated Lab Samples: 10307126011, 10307126012, 10307126013, 10307126014, 10307126015, 10307126016, 10307126017, 10307126018, 10307126019, 10307126020

METHOD BLANK: 1978100 Matrix: Solid  
 Associated Lab Samples: 10307126011, 10307126012, 10307126013, 10307126014, 10307126015, 10307126016, 10307126017, 10307126018, 10307126019, 10307126020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	05/29/15 08:47	
1,2-Dichlorobenzene	ug/kg	ND	330	05/29/15 08:47	
1,2-Diphenylhydrazine	ug/kg	ND	330	05/29/15 08:47	
1,3-Dichlorobenzene	ug/kg	ND	330	05/29/15 08:47	
1,4-Dichlorobenzene	ug/kg	ND	330	05/29/15 08:47	
2,4,5-Trichlorophenol	ug/kg	ND	330	05/29/15 08:47	
2,4,6-Trichlorophenol	ug/kg	ND	330	05/29/15 08:47	
2,4-Dichlorophenol	ug/kg	ND	330	05/29/15 08:47	
2,4-Dimethylphenol	ug/kg	ND	330	05/29/15 08:47	
2,4-Dinitrophenol	ug/kg	ND	330	05/29/15 08:47	
2,4-Dinitrotoluene	ug/kg	ND	330	05/29/15 08:47	
2,6-Dinitrotoluene	ug/kg	ND	330	05/29/15 08:47	
2-Chloronaphthalene	ug/kg	ND	330	05/29/15 08:47	
2-Chlorophenol	ug/kg	ND	330	05/29/15 08:47	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	05/29/15 08:47	
2-Nitroaniline	ug/kg	ND	330	05/29/15 08:47	
2-Nitrophenol	ug/kg	ND	330	05/29/15 08:47	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	660	05/29/15 08:47	
3,3'-Dichlorobenzidine	ug/kg	ND	330	05/29/15 08:47	
3-Nitroaniline	ug/kg	ND	330	05/29/15 08:47	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	05/29/15 08:47	
4-Bromophenylphenyl ether	ug/kg	ND	330	05/29/15 08:47	
4-Chloro-3-methylphenol	ug/kg	ND	330	05/29/15 08:47	
4-Chloroaniline	ug/kg	ND	330	05/29/15 08:47	
4-Chlorophenylphenyl ether	ug/kg	ND	330	05/29/15 08:47	
4-Nitroaniline	ug/kg	ND	330	05/29/15 08:47	
4-Nitrophenol	ug/kg	ND	330	05/29/15 08:47	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	05/29/15 08:47	
bis(2-Chloroethyl) ether	ug/kg	ND	330	05/29/15 08:47	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	05/29/15 08:47	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	05/29/15 08:47	
Butylbenzylphthalate	ug/kg	ND	330	05/29/15 08:47	
Carbazole	ug/kg	ND	330	05/29/15 08:47	
Di-n-butylphthalate	ug/kg	ND	330	05/29/15 08:47	
Di-n-octylphthalate	ug/kg	ND	330	05/29/15 08:47	
Dibenzofuran	ug/kg	ND	330	05/29/15 08:47	
Diethylphthalate	ug/kg	ND	330	05/29/15 08:47	
Dimethylphthalate	ug/kg	ND	330	05/29/15 08:47	
Hexachloro-1,3-butadiene	ug/kg	ND	330	05/29/15 08:47	
Hexachlorobenzene	ug/kg	ND	330	05/29/15 08:47	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

METHOD BLANK: 1978100

Matrix: Solid

Associated Lab Samples: 10307126011, 10307126012, 10307126013, 10307126014, 10307126015, 10307126016, 10307126017, 10307126018, 10307126019, 10307126020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloroethane	ug/kg	ND	330	05/29/15 08:47	
Isophorone	ug/kg	ND	330	05/29/15 08:47	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	05/29/15 08:47	
N-Nitrosodimethylamine	ug/kg	ND	330	05/29/15 08:47	
N-Nitrosodiphenylamine	ug/kg	ND	330	05/29/15 08:47	
Nitrobenzene	ug/kg	ND	330	05/29/15 08:47	
Pentachlorophenol	ug/kg	ND	670	05/29/15 08:47	
Phenol	ug/kg	ND	330	05/29/15 08:47	
2,4,6-Tribromophenol (S)	%	68	40-125	05/29/15 08:47	
2-Fluorobiphenyl (S)	%	64	51-125	05/29/15 08:47	
2-Fluorophenol (S)	%	48	45-125	05/29/15 08:47	
Nitrobenzene-d5 (S)	%	47	34-125	05/29/15 08:47	
p-Terphenyl-d14 (S)	%	84	55-125	05/29/15 08:47	
Phenol-d6 (S)	%	59	44-125	05/29/15 08:47	

LABORATORY CONTROL SAMPLE: 1978101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1080	65	41-125	
1,2-Dichlorobenzene	ug/kg	1670	1010	61	38-125	
1,2-Diphenylhydrazine	ug/kg	1670	1260	76	58-125	
1,3-Dichlorobenzene	ug/kg	1670	1020	61	36-125	
1,4-Dichlorobenzene	ug/kg	1670	1010	60	36-125	
2,4,5-Trichlorophenol	ug/kg	1670	1270	76	56-125	
2,4,6-Trichlorophenol	ug/kg	1670	1240	74	57-125	
2,4-Dichlorophenol	ug/kg	1670	1250	75	51-125	
2,4-Dimethylphenol	ug/kg	1670	1200	72	48-125	
2,4-Dinitrophenol	ug/kg	1670	897	54	30-125	3M
2,4-Dinitrotoluene	ug/kg	1670	1290	77	58-125	
2,6-Dinitrotoluene	ug/kg	1670	1290	77	58-125	
2-Chloronaphthalene	ug/kg	1670	1210	73	53-125	
2-Chlorophenol	ug/kg	1670	1070	64	44-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1160	70	48-125	
2-Nitroaniline	ug/kg	1670	1250	75	58-125	
2-Nitrophenol	ug/kg	1670	1100	66	43-125	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1220	73	53-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1320	79	42-125	
3-Nitroaniline	ug/kg	1670	1220	73	47-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1180J	71	38-125	
4-Bromophenylphenyl ether	ug/kg	1670	1320	79	59-125	
4-Chloro-3-methylphenol	ug/kg	1670	1250	75	58-125	
4-Chloroaniline	ug/kg	1670	1150	69	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1290	77	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

LABORATORY CONTROL SAMPLE: 1978101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Nitroaniline	ug/kg	1670	1230	74	54-125	
4-Nitrophenol	ug/kg	1670	1170	70	53-125	
bis(2-Chloroethoxy)methane	ug/kg	1670	1170	70	48-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1060	64	39-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1080	65	33-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1280	77	61-125	
Butylbenzylphthalate	ug/kg	1670	1270	76	60-125	
Carbazole	ug/kg	1670	1270	76	59-125	
Di-n-butylphthalate	ug/kg	1670	1330	80	61-125	
Di-n-octylphthalate	ug/kg	1670	1270	76	60-125	
Dibenzofuran	ug/kg	1670	1250	75	58-125	
Diethylphthalate	ug/kg	1670	1280	77	60-125	
Dimethylphthalate	ug/kg	1670	1260	76	60-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1040	63	38-125	
Hexachlorobenzene	ug/kg	1670	1310	79	57-125	
Hexachloroethane	ug/kg	1670	976	59	54-125	
Isophorone	ug/kg	1670	1220	73	52-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1110	67	48-125	
N-Nitrosodimethylamine	ug/kg	1670	1020	61	31-125	
N-Nitrosodiphenylamine	ug/kg	1670	1310	79	59-125	
Nitrobenzene	ug/kg	1670	1080	65	46-125	
Pentachlorophenol	ug/kg	1670	985	59	47-125	
Phenol	ug/kg	1670	1130	68	48-125	
2,4,6-Tribromophenol (S)	%			72	40-125	
2-Fluorobiphenyl (S)	%			69	51-125	
2-Fluorophenol (S)	%			58	45-125	
Nitrobenzene-d5 (S)	%			55	34-125	
p-Terphenyl-d14 (S)	%			76	55-125	
Phenol-d6 (S)	%			64	44-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978102 1978103

Parameter	Units	10307476001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	% Rec	% Rec					
1,2,4-Trichlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	1010	1010	57	56	43-125	0	30		
1,2-Dichlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	898	912	50	51	36-125	2	30		
1,2-Diphenylhydrazine	ug/kg	<0.35 mg/kg	1780	1790	1270	1340	71	75	30-125	5	30		
1,3-Dichlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	873	864	49	48	34-125	1	30		
1,4-Dichlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	880	883	49	49	33-125	0	30		
2,4,5-Trichlorophenol	ug/kg	<0.35 mg/kg	1780	1790	1250	1350	70	75	30-141	8	30		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

Parameter	Units	1978102		1978103		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
2,4,6-Trichlorophenol	ug/kg	<0.35 mg/kg	1780	1790	1250	1310	70	73	30-143	5	30	
2,4-Dichlorophenol	ug/kg	<0.35 mg/kg	1780	1790	1200	1310	67	73	30-139	8	30	
2,4-Dimethylphenol	ug/kg	<0.35 mg/kg	1780	1790	1200	1250	67	70	47-125	4	30	
2,4-Dinitrophenol	ug/kg	<0.35 mg/kg	1780	1790	762	921	43	51	30-125	19	30	3M
2,4-Dinitrotoluene	ug/kg	<0.35 mg/kg	1780	1790	1280	1380	72	77	50-125	7	30	
2,6-Dinitrotoluene	ug/kg	<0.35 mg/kg	1780	1790	1280	1350	72	75	48-125	5	30	
2-Chloronaphthalene	ug/kg	<0.35 mg/kg	1780	1790	1250	1270	70	71	49-125	1	30	
2-Chlorophenol	ug/kg	<0.35 mg/kg	1780	1790	1020	1020	57	57	30-125	0	30	
2-Methylphenol(o-Cresol)	ug/kg	<0.35 mg/kg	1780	1790	1160	1190	65	66	43-125	2	30	
2-Nitroaniline	ug/kg	<0.35 mg/kg	1780	1790	1280	1370	72	76	57-125	7	30	
2-Nitrophenol	ug/kg	<0.35 mg/kg	1780	1790	1100	1130	62	63	30-150	3	30	
3&4-Methylphenol(m&p Cresol)	ug/kg	<0.71 mg/kg	1780	1790	1200	1270	67	71	51-125	6	30	
3,3'-Dichlorobenzidine	ug/kg	<0.35 mg/kg	1780	1790	1200	1300	67	72	30-132	8	30	
3-Nitroaniline	ug/kg	<0.35 mg/kg	1780	1790	1210	1270	68	71	30-132	5	30	
4,6-Dinitro-2-methylphenol	ug/kg	<1.8 mg/kg	1780	1790	1130J	1340J	63	75	30-130		30	
4-Bromophenylphenyl ether	ug/kg	<0.35 mg/kg	1780	1790	1260	1410	71	79	57-125	12	30	
4-Chloro-3-methylphenol	ug/kg	<0.35 mg/kg	1780	1790	1220	1350	68	76	30-139	10	30	
4-Chloroaniline	ug/kg	<0.35 mg/kg	1780	1790	1010	1120	57	62	30-125	10	30	
4-Chlorophenylphenyl ether	ug/kg	<0.35 mg/kg	1780	1790	1270	1330	71	74	30-130	5	30	
4-Nitroaniline	ug/kg	<0.35 mg/kg	1780	1790	1210	1320	68	74	30-150	9	30	
4-Nitrophenol	ug/kg	<0.35 mg/kg	1780	1790	1160	1290	65	72	30-145	11	30	
bis(2-Chloroethoxy)methane	ug/kg	<0.35 mg/kg	1780	1790	1150	1180	64	66	46-125	2	30	
bis(2-Chloroethyl) ether	ug/kg	<0.35 mg/kg	1780	1790	934	974	52	54	34-125	4	30	
bis(2-Chloroisopropyl) ether	ug/kg	<0.35 mg/kg	1780	1790	977	999	55	56	33-125	2	30	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.35 mg/kg	1780	1790	1260	1340	71	75	60-125	5	30	
Butylbenzylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1250	1320	70	74	55-125	6	30	
Carbazole	ug/kg	<0.35 mg/kg	1780	1790	1250	1370	70	77	56-125	10	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

Parameter	Units	10307476001		1978102		1978103		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
Di-n-butylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1290	1380	72	77	58-125	7	30		
Di-n-octylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1260	1330	71	74	59-125	5	30		
Dibenzofuran	ug/kg	<0.35 mg/kg	1780	1790	1270	1340	71	75	57-125	5	30		
Diethylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1270	1360	71	76	58-125	6	30		
Dimethylphthalate	ug/kg	<0.35 mg/kg	1780	1790	1250	1350	70	75	59-125	8	30		
Hexachloro-1,3-butadiene	ug/kg	<0.35 mg/kg	1780	1790	938	935	53	52	39-125	0	30		
Hexachlorobenzene	ug/kg	<0.35 mg/kg	1780	1790	1280	1420	72	79	55-125	10	30		
Hexachloroethane	ug/kg	<0.35 mg/kg	1780	1790	846	844	47	47	30-125	0	30		
Isophorone	ug/kg	<0.35 mg/kg	1780	1790	1170	1260	65	70	49-125	7	30		
N-Nitroso-di-n-propylamine	ug/kg	<0.35 mg/kg	1780	1790	1090	1120	61	63	30-140	3	30		
N-Nitrosodimethylamine	ug/kg	<0.35 mg/kg	1780	1790	938	1010	53	57	30-125	8	30		
N-Nitrosodiphenylamine	ug/kg	<0.35 mg/kg	1780	1790	1260	1390	71	77	57-125	9	30		
Nitrobenzene	ug/kg	<0.35 mg/kg	1780	1790	1040	1060	58	59	30-139	1	30		
Pentachlorophenol	ug/kg	<0.72 mg/kg	1780	1790	913	1030	51	57	30-148	12	30		
Phenol	ug/kg	<0.35 mg/kg	1780	1790	1130	1140	63	64	48-125	1	30		
2,4,6-Tribromophenol (S)	%						67	73	40-125				
2-Fluorobiphenyl (S)	%						63	66	51-125				
2-Fluorophenol (S)	%						50	53	45-125				
Nitrobenzene-d5 (S)	%						50	54	34-125				
p-Terphenyl-d14 (S)	%						69	73	55-125				
Phenol-d6 (S)	%						59	60	44-125				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307126

QC Batch: OEXT/29309 Analysis Method: EPA 8270D by SIM  
QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV  
Associated Lab Samples: 10307126001, 10307126002, 10307126003, 10307126004, 10307126005, 10307126006, 10307126007, 10307126008, 10307126009, 10307126010

METHOD BLANK: 1976616 Matrix: Solid  
Associated Lab Samples: 10307126001, 10307126002, 10307126003, 10307126004, 10307126005, 10307126006, 10307126007, 10307126008, 10307126009, 10307126010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	10.0	05/29/15 20:47	
2-Chloronaphthalene	ug/kg	ND	10.0	05/29/15 20:47	
2-Methylnaphthalene	ug/kg	ND	10.0	05/29/15 20:47	
Acenaphthene	ug/kg	ND	10.0	05/29/15 20:47	
Acenaphthylene	ug/kg	ND	10.0	05/29/15 20:47	
Anthracene	ug/kg	ND	10.0	05/29/15 20:47	
Benzo(a)anthracene	ug/kg	ND	10.0	05/29/15 20:47	
Benzo(a)pyrene	ug/kg	ND	10.0	05/29/15 20:47	
Benzo(b)fluoranthene	ug/kg	ND	10.0	05/29/15 20:47	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	05/29/15 20:47	
Benzo(k)fluoranthene	ug/kg	ND	10.0	05/29/15 20:47	
Chrysene	ug/kg	ND	10.0	05/29/15 20:47	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	05/29/15 20:47	
Fluoranthene	ug/kg	ND	10.0	05/29/15 20:47	
Fluorene	ug/kg	ND	10.0	05/29/15 20:47	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	05/29/15 20:47	
Naphthalene	ug/kg	ND	10.0	05/29/15 20:47	
Phenanthrene	ug/kg	ND	10.0	05/29/15 20:47	
Pyrene	ug/kg	ND	10.0	05/29/15 20:47	
2-Fluorobiphenyl (S)	%	68	55-125	05/29/15 20:47	
p-Terphenyl-d14 (S)	%	93	30-150	05/29/15 20:47	

LABORATORY CONTROL SAMPLE: 1976617

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	33.3	23.5	71	45-125	
2-Chloronaphthalene	ug/kg	33.3	24.7	74	70-130	
2-Methylnaphthalene	ug/kg	33.3	24.0	72	50-125	
Acenaphthene	ug/kg	33.3	23.9	72	53-125	
Acenaphthylene	ug/kg	33.3	26.1	78	53-125	
Anthracene	ug/kg	33.3	30.7	92	61-125	
Benzo(a)anthracene	ug/kg	33.3	30.3	91	62-125	
Benzo(a)pyrene	ug/kg	33.3	31.4	94	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	34.0	102	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	28.8	86	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	28.9	87	61-125	
Chrysene	ug/kg	33.3	29.3	88	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	29.2	88	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

LABORATORY CONTROL SAMPLE: 1976617

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoranthene	ug/kg	33.3	31.2	94	64-125	
Fluorene	ug/kg	33.3	25.3	76	57-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	28.5	85	58-125	
Naphthalene	ug/kg	33.3	22.6	68	52-125	
Phenanthrene	ug/kg	33.3	24.9	75	60-125	
Pyrene	ug/kg	33.3	31.8	95	63-125	
2-Fluorobiphenyl (S)	%			76	55-125	
p-Terphenyl-d14 (S)	%			93	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1976618 1976619

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		10306721002 Result	Spike Conc.	Spike Conc.	MSD Result							
1-Methylnaphthalene	ug/kg	<0.42	37.6	37.8	22.1	19.5	59	52	30-125	12	30	
2-Chloronaphthalene	ug/kg	<0.32	37.6	37.8	23.5	22.5	63	60	30-129	5	30	
2-Methylnaphthalene	ug/kg	<0.46	37.6	37.8	23.1	20.1	61	53	41-125	14	30	
Acenaphthene	ug/kg	<0.41	37.6	37.8	23.0	23.6	61	62	39-125	2	30	
Acenaphthylene	ug/kg	<0.38	37.6	37.8	25.6	26.4	68	70	30-150	3	30	
Anthracene	ug/kg	<0.35	37.6	37.8	28.4	30.9	75	82	30-150	8	30	
Benzo(a)anthracene	ug/kg	<0.21	37.6	37.8	27.9	30.9	74	82	30-150	10	30	
Benzo(a)pyrene	ug/kg	<0.22	37.6	37.8	28.9	33.0	77	87	30-150	13	30	
Benzo(b)fluoranthene	ug/kg	<0.39	37.6	37.8	27.9	30.9	74	82	30-150	10	30	
Benzo(g,h,i)perylene	ug/kg	<0.40	37.6	37.8	25.4	29.9	68	79	30-150	16	30	
Benzo(k)fluoranthene	ug/kg	<0.45	37.6	37.8	29.2	31.8	77	84	30-150	9	30	
Chrysene	ug/kg	<0.28	37.6	37.8	27.3	29.8	72	79	30-150	9	30	
Dibenz(a,h)anthracene	ug/kg	<0.48	37.6	37.8	25.8	28.8	68	76	30-150	11	30	
Fluoranthene	ug/kg	<0.25	37.6	37.8	29.2	31.5	78	83	30-150	8	30	
Fluorene	ug/kg	<0.35	37.6	37.8	24.8	26.3	66	70	30-146	6	30	
Indeno(1,2,3-cd)pyrene	ug/kg	<0.43	37.6	37.8	25.4	29.0	67	77	30-150	13	30	
Naphthalene	ug/kg	<0.42	37.6	37.8	21.8	18.3	58	48	30-131	18	30	
Phenanthrene	ug/kg	<0.28	37.6	37.8	23.6	25.8	63	68	30-150	9	30	
Pyrene	ug/kg	<0.27	37.6	37.8	30.0	33.6	80	89	30-150	11	30	
2-Fluorobiphenyl (S)	%						66	57	55-125			
p-Terphenyl-d14 (S)	%						75	77	30-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

QC Batch: OEXT/29339 Analysis Method: EPA 8270D by SIM  
 QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV  
 Associated Lab Samples: 10307126011, 10307126012, 10307126013, 10307126014, 10307126015, 10307126016, 10307126017, 10307126018, 10307126019, 10307126020

---

METHOD BLANK: 1978096 Matrix: Solid  
 Associated Lab Samples: 10307126011, 10307126012, 10307126013, 10307126014, 10307126015, 10307126016, 10307126017, 10307126018, 10307126019, 10307126020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	10.0	05/29/15 11:33	
2-Chloronaphthalene	ug/kg	ND	10.0	05/29/15 11:33	
2-Methylnaphthalene	ug/kg	ND	10.0	05/29/15 11:33	
Acenaphthene	ug/kg	ND	10.0	05/29/15 11:33	
Acenaphthylene	ug/kg	ND	10.0	05/29/15 11:33	
Anthracene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(a)anthracene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(a)pyrene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(b)fluoranthene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	05/29/15 11:33	
Benzo(k)fluoranthene	ug/kg	ND	10.0	05/29/15 11:33	
Chrysene	ug/kg	ND	10.0	05/29/15 11:33	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	05/29/15 11:33	
Fluoranthene	ug/kg	ND	10.0	05/29/15 11:33	
Fluorene	ug/kg	ND	10.0	05/29/15 11:33	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	05/29/15 11:33	
Naphthalene	ug/kg	ND	10.0	05/29/15 11:33	
Phenanthrene	ug/kg	ND	10.0	05/29/15 11:33	
Pyrene	ug/kg	ND	10.0	05/29/15 11:33	
2-Fluorobiphenyl (S)	%	57	55-125	05/29/15 11:33	
p-Terphenyl-d14 (S)	%	87	30-150	05/29/15 11:33	

LABORATORY CONTROL SAMPLE: 1978097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	33.3	22.0	66	45-125	
2-Chloronaphthalene	ug/kg	33.3	22.6	68	70-130	L0
2-Methylnaphthalene	ug/kg	33.3	22.3	67	50-125	
Acenaphthene	ug/kg	33.3	24.2	73	53-125	
Acenaphthylene	ug/kg	33.3	22.4	67	53-125	
Anthracene	ug/kg	33.3	27.0	81	61-125	
Benzo(a)anthracene	ug/kg	33.3	29.8	89	62-125	
Benzo(a)pyrene	ug/kg	33.3	31.0	93	64-125	
Benzo(b)fluoranthene	ug/kg	33.3	32.2	97	66-125	
Benzo(g,h,i)perylene	ug/kg	33.3	22.0	66	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	30.6	92	61-125	
Chrysene	ug/kg	33.3	29.7	89	63-125	
Dibenz(a,h)anthracene	ug/kg	33.3	24.9	75	59-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

LABORATORY CONTROL SAMPLE: 1978097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoranthene	ug/kg	33.3	30.2	91	64-125	
Fluorene	ug/kg	33.3	26.0	78	57-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	23.6	71	58-125	
Naphthalene	ug/kg	33.3	22.2	66	52-125	
Phenanthrene	ug/kg	33.3	25.1	75	60-125	
Pyrene	ug/kg	33.3	29.9	90	63-125	
2-Fluorobiphenyl (S)	%			78	55-125	
p-Terphenyl-d14 (S)	%			101	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978098 1978099

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		10306672011 Result	Spike Conc.	Spike Conc.	MSD Result							
1-Methylnaphthalene	ug/kg	ND	35.7	35.6	14.1	10.9	38	29	30-125	26	30	M1
2-Chloronaphthalene	ug/kg	ND	35.7	35.6	18.5	13.7	52	38	30-129	30	30	
2-Methylnaphthalene	ug/kg	ND	35.7	35.6	14.1	10.9	38	29	41-125	26	30	M1
Acenaphthene	ug/kg	ND	35.7	35.6	23.1	18.9	58	46	39-125	20	30	
Acenaphthylene	ug/kg	ND	35.7	35.6	25.6	20.7	47	34	30-150	21	30	
Anthracene	ug/kg	14.7	35.7	35.6	28.3	26.0	38	32	30-150	9	30	
Benzo(a)anthracene	ug/kg	40.8	35.7	35.6	35.5	33.3	-15	-21	30-150	7	30	M1
Benzo(a)pyrene	ug/kg	41.4	35.7	35.6	39.7	34.7	-5	-19	30-150	13	30	M1
Benzo(b)fluoranthene	ug/kg	57.5	35.7	35.6	43.7	38.6	-39	-53	30-150	12	30	M1
Benzo(g,h,i)perylene	ug/kg	29.1	35.7	35.6	35.6	31.6	18	7	30-150	12	30	M1
Benzo(k)fluoranthene	ug/kg	20.8	35.7	35.6	36.0	32.4	42	32	30-150	11	30	
Chrysene	ug/kg	44.5	35.7	35.6	38.1	33.8	-18	-30	30-150	12	30	M1
Dibenz(a,h)anthracene	ug/kg	ND	35.7	35.6	26.9	25.4	50	46	30-150	6	30	
Fluoranthene	ug/kg	108	35.7	35.6	44.9	39.0	-177	-194	30-150	14	30	M1
Fluorene	ug/kg	ND	35.7	35.6	26.2	23.7	57	50	30-146	10	30	
Indeno(1,2,3-cd)pyrene	ug/kg	24.7	35.7	35.6	33.9	30.2	26	16	30-150	11	30	M1
Naphthalene	ug/kg	ND	35.7	35.6	12.0	9.6J	32	25	30-131		30	M1
Phenanthrene	ug/kg	70.7	35.7	35.6	29.2	27.5	-116	-121	30-150	6	30	M1
Pyrene	ug/kg	83.7	35.7	35.6	43.1	37.2	-114	-130	30-150	15	30	M1
2-Fluorobiphenyl (S)	%						53	40	55-125			SO
p-Terphenyl-d14 (S)	%						85	81	30-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

QC Batch: OEXT/29319 Analysis Method: NWTPH-Dx  
 QC Batch Method: EPA 3550 Analysis Description: NWTPH-Dx GCS  
 Associated Lab Samples: 10307126001, 10307126002, 10307126003, 10307126004, 10307126005, 10307126006, 10307126007, 10307126008, 10307126009, 10307126010

METHOD BLANK: 1976876 Matrix: Solid  
 Associated Lab Samples: 10307126001, 10307126002, 10307126003, 10307126004, 10307126005, 10307126006, 10307126007, 10307126008, 10307126009, 10307126010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	06/02/15 00:40	
Motor Oil Range	mg/kg	ND	10.0	06/02/15 00:40	
n-Triacontane (S)	%	111	50-150	06/02/15 00:40	
o-Terphenyl (S)	%	110	50-150	06/02/15 00:40	

LABORATORY CONTROL SAMPLE: 1976877

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range	mg/kg	50	48.4	97	50-150	
Motor Oil Range	mg/kg	50	62.5	125	50-150	
n-Triacontane (S)	%			120	50-150	
o-Terphenyl (S)	%			120	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1976878 1976879

Parameter	Units	10307126001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Spike Conc.	MSD Result						
Diesel Fuel Range	mg/kg	ND	73.2	73.2	68.9	66.1	93	89	50-150	4	30	
Motor Oil Range	mg/kg	ND	73.2	73.2	93.4	89.0	119	113	50-150	5	30	
n-Triacontane (S)	%						118	115	50-150			
o-Terphenyl (S)	%						120	117	50-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

QC Batch: OEXT/29341 Analysis Method: NWTPH-Dx  
 QC Batch Method: EPA 3550 Analysis Description: NWTPH-Dx GCS  
 Associated Lab Samples: 10307126011, 10307126012, 10307126013, 10307126014, 10307126015, 10307126016, 10307126017, 10307126018, 10307126019, 10307126020

METHOD BLANK: 1978110 Matrix: Solid  
 Associated Lab Samples: 10307126011, 10307126012, 10307126013, 10307126014, 10307126015, 10307126016, 10307126017, 10307126018, 10307126019, 10307126020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	06/03/15 21:08	
Motor Oil Range	mg/kg	ND	10.0	06/03/15 21:08	
n-Triacontane (S)	%	100	50-150	06/03/15 21:08	
o-Terphenyl (S)	%	93	50-150	06/03/15 21:08	

LABORATORY CONTROL SAMPLE & LCSD: 1978111 1978112

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/kg	50	43.4	44.0	87	88	50-150	1	20	
Motor Oil Range	mg/kg	50	58.8	60.2	118	120	50-150	2	20	
n-Triacontane (S)	%				103	105	50-150			
o-Terphenyl (S)	%				83	86	50-150			

SAMPLE DUPLICATE: 1978113

Parameter	Units	10307126011 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/kg	ND	2.3J		30	
Motor Oil Range	mg/kg	ND	4.6J		30	
n-Triacontane (S)	%	100	101	2		
o-Terphenyl (S)	%	90	93	4		

SAMPLE DUPLICATE: 1978114

Parameter	Units	10307129001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/kg	ND	2.7J		30	
Motor Oil Range	mg/kg	ND	5.1J		30	
n-Triacontane (S)	%	93	106	13		
o-Terphenyl (S)	%	88	82	7		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## QUALIFIERS

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

### ANALYTE QUALIFIERS

1M Analysis conducted outside the recognized method holding time due to instrument malfunction.

2M Sample was re-extracted out of hold to confirm data, data was confirmed.

3M The associated compound was outside of 20% for the associated continuing calibration but within 40% of the true value.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

P2 Re-extraction or re-analysis could not be performed due to insufficient sample amount.

P3 Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

S0 Surrogate recovery outside laboratory control limits.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0504-098-00 Colville P&P REV  
Pace Project No.: 10307126

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10307126001	DP-20 (24-24.5)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126002	DP-20 (24.5-25.5)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126003	DP-15 (12-13)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126004	DP-15 (13-14)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126005	DP-24 (16-16.5)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126006	DP-24 (16.5-17.5)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126007	DP-26 (16-17)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126008	DP-26 (17-18)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126009	DP-27 (16-17)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126010	DP-27 (24-24.5)	EPA 3550	OEXT/29319	NWTPH-Dx	GCSV/15818
10307126011	DP-29 (24-24.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126012	DP-29 (24.5-25.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126013	DP-30 (12-12.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126014	DP-30 (16-17)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126015	DP-28 (20.5-21.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126016	DP-28 (21.5-22.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126017	DP-12 (12-12.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126018	DP-12 (16-17)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126019	DP-18 (16-17)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126020	DP-18 (17-17.5)	EPA 3550	OEXT/29341	NWTPH-Dx	GCSV/15838
10307126005	DP-24 (16-16.5)	NWTPH-Gx	GCV/13781	NWTPH-Gx	GCV/13782
10307126006	DP-24 (16.5-17.5)	NWTPH-Gx	GCV/13781	NWTPH-Gx	GCV/13782
10307126001	DP-20 (24-24.5)	ASTM D2974	MPRP/54904		
10307126002	DP-20 (24.5-25.5)	ASTM D2974	MPRP/54904		
10307126003	DP-15 (12-13)	ASTM D2974	MPRP/54904		
10307126004	DP-15 (13-14)	ASTM D2974	MPRP/54904		
10307126005	DP-24 (16-16.5)	ASTM D2974	MPRP/54904		
10307126006	DP-24 (16.5-17.5)	ASTM D2974	MPRP/54904		
10307126007	DP-26 (16-17)	ASTM D2974	MPRP/54904		
10307126008	DP-26 (17-18)	ASTM D2974	MPRP/54904		
10307126009	DP-27 (16-17)	ASTM D2974	MPRP/54905		
10307126010	DP-27 (24-24.5)	ASTM D2974	MPRP/54905		
10307126011	DP-29 (24-24.5)	ASTM D2974	MPRP/54905		
10307126012	DP-29 (24.5-25.5)	ASTM D2974	MPRP/54905		
10307126013	DP-30 (12-12.5)	ASTM D2974	MPRP/54905		
10307126014	DP-30 (16-17)	ASTM D2974	MPRP/54905		
10307126015	DP-28 (20.5-21.5)	ASTM D2974	MPRP/54905		
10307126016	DP-28 (21.5-22.5)	ASTM D2974	MPRP/54905		
10307126017	DP-12 (12-12.5)	ASTM D2974	MPRP/54905		
10307126018	DP-12 (16-17)	ASTM D2974	MPRP/54905		
10307126019	DP-18 (16-17)	ASTM D2974	MPRP/54905		
10307126020	DP-18 (17-17.5)	ASTM D2974	MPRP/54905		
10307126001	DP-20 (24-24.5)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411
10307126002	DP-20 (24.5-25.5)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411
10307126003	DP-15 (12-13)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411
10307126004	DP-15 (13-14)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0504-098-00 Colville P&P REV

Pace Project No.: 10307126

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10307126005	DP-24 (16-16.5)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411
10307126006	DP-24 (16.5-17.5)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411
10307126007	DP-26 (16-17)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411
10307126008	DP-26 (17-18)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411
10307126009	DP-27 (16-17)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411
10307126010	DP-27 (24-24.5)	EPA 3550	OEXT/29317	EPA 8270D	MSSV/12411
10307126011	DP-29 (24-24.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126012	DP-29 (24.5-25.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126013	DP-30 (12-12.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126014	DP-30 (16-17)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126015	DP-28 (20.5-21.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126016	DP-28 (21.5-22.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126017	DP-12 (12-12.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126018	DP-12 (16-17)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126019	DP-18 (16-17)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126020	DP-18 (17-17.5)	EPA 3550	OEXT/29340	EPA 8270D	MSSV/12424
10307126001	DP-20 (24-24.5)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126002	DP-20 (24.5-25.5)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126003	DP-15 (12-13)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126004	DP-15 (13-14)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126005	DP-24 (16-16.5)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126006	DP-24 (16.5-17.5)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126007	DP-26 (16-17)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126008	DP-26 (17-18)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126009	DP-27 (16-17)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126010	DP-27 (24-24.5)	EPA 3550	OEXT/29309	EPA 8270D by SIM	MSSV/12427
10307126011	DP-29 (24-24.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307126012	DP-29 (24.5-25.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307126013	DP-30 (12-12.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307126014	DP-30 (16-17)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307126015	DP-28 (20.5-21.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307126016	DP-28 (21.5-22.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307126017	DP-12 (12-12.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307126018	DP-12 (16-17)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307126019	DP-18 (16-17)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425
10307126020	DP-18 (17-17.5)	EPA 3550	OEXT/29339	EPA 8270D by SIM	MSSV/12425

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307126

Page: 8 of 18  
1456693

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		REGULATORY AGENCY	
Company: <i>Face Analytical</i>		Report To: <i>John J. ...</i>		Attention: <i>John J. ...</i>		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
Address: <i>533 E 2nd Ave</i>		Copy To: <i>...</i>		Company Name: <i>Face Analytical</i>		Site Location	
Email To: <i>...</i>		Purchase Order No.:		Face Quote Reference:		STATE: _____	
Phone: <i>...</i> Fax: <i>...</i>		Project Name: <i>Calville Direct and Pole</i>		Face Project Manager:			
Requested Due Date/TAT: <i>...</i>		Project Number: <i>...</i>		Face Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMPOSITE)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test Y/N	Residual Chlorine (Y/N)	Face Project No./ Lab I.D.		
				COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>				Methanol	Other
				DATE	TIME	DATE	TIME													
1	DP-20 (24-24.5)	SLG	G	5/13	0940			1	X								001			
2	DP-20 (24.5-25.5) A				0850			1									002			
3	DP-20 (24.5-25.5) B				0850			1												
4	DP-20 (24.5-25.5) C				0850			1												
5	DP-15 (11-13) A				0950			2												
6	DP-15 (14-15) A				0950			2												
7	DP-15 (16-17) A				1010			2												
8	DP-15 (12-13) B				1005			1									003			
9	DP-15 (13-14) B				1010			1									004			
10	DP-15 (13-14) B				1010			1												
11	DP-15 (13-14) B				1010			1												
12	DP-15 (16-17) B				1015			2												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE				Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>John J. ...</i>							
SIGNATURE of SAMPLER: <i>[Signature]</i>			DATE Signed (MM/DD/YY): <i>05/14/15</i>				





# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307126

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 9 of 18 <b>1456696</b>	
Company:		Report To:		Attention:		REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Address:		Copy To:		Company Name:			
Email To:		Purchase Order No.:		Address:		Site Location	
Phone:   Fax:		Project Name:		Pace Quote Reference:		STATE: _____	
Requested Due Date/TAT:		Project Number:		Pace Project Manager:			
				Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test Y/N	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol				Other
					DATE	TIME	DATE	TIME													
1	DP-24 (0-1)		SLG		5/13	1110			2	X											
2	DP-24 (4-4.5)					1115			1												
3	DP-24 (9.5-10)					1140			1												
4	DP-24 (16-16.5)					1300			1										005		
5	DP-24 (16.5-17.5) A					1305			1										006		
6	DP-24 (16.5-17.5) B					1305			1												
7	DP-24 (17-18)					1315			2												
8	DP-24 (20-21)					1310			2												
9	DP-26 (4-5)					1400			2												
10	DP-26 (8-9)					1410			2												
11	DP-26 (12-13)					1415			2												
12	DP-26 (16-17) A					1420			1												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE				Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:							
SIGNATURE of SAMPLER: <i>Josh Lee</i>							
DATE Signed (MM/DD/YY): <i>05/13/15</i>							

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307126

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: 10 of 13 <b>1456697</b>	
Company:		Report To:		Attention:		<b>REGULATORY AGENCY</b>	
Address:		Copy To:		Company Name:			
Email To:		Purchase Order No.:		Address:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Phone:    Fax:		Project Name:		Pace Quote Reference:		Site Location	
Requested Due Date/TAT:		Project Number:		Pace Project Manager:		STATE:	
				Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB, C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Face Project No. / Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-26 (16-17) B					5/15	1420		1	X												
2	DP-26 (17-18) B						1425		1												007	
3	DP-26 (17-18) R								1												008	
4	DP-27 (19-20)								2													
5	DP-27 (21-22)								2													
6	DP-27 (4.5-5.5)								2													
7	DP-27 (8-9)								2													
8	DP-27 (12-13)								2													
9	DP-27 (16-17)								2													
10	DP-27 (24-24.5)								1												029	
11	DP-29 (4-5)					5/14	0730		2												010	
12	DP-29 (8-9)						0740		1													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:					
SIGNATURE of SAMPLER:					
DATE Signed (MM/DD/YY):					

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1030 7126

Page: 11 of 18  
1456698

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		REGULATORY AGENCY	
Company: <i>General Services</i>		Report To: <i>Henry@general-services.com</i>		Attention:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
Address: <i>235 E. 2nd Ave</i>		Copy To: <i>Henry@general-services.com</i>		Company Name:		Site Location	
Email To: <i>Henry@general-services.com</i>		Purchase Order No.:		Address:		STATE: _____	
Phone: <i>514-235-2327</i>	Fax: <i>514-235-2326</i>	Project Name: <i>Colville East and Dale</i>		Pace Quote Reference:			
Requested Due Date/TAT: <i>5/14</i>		Project Number: <i>1511-092-00</i>		Pace Project Manager:			
				Pace Profile #:			

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.	
				COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
				DATE	TIME	DATE	TIME														
1	DP-29 (24-24.5)		G	5/14	0820													011			
2	DP-29 (24.5-25.5) A				0830													012			
3	DP-29 (24.5-25.5) B				0830																
4	DP-30 (24.5-25.5) A				0830																
5	DP-30 (24.5-25.5) B				0830																
6	DP-30 (12-12.5)				0930													013			
7	DP-30 (16-17) A				0945													014			
8	DP-30 (16-17) B				0945																
9	DP-30 (2-2.5)				0950																
10	DP-30 (10.5-11.5) A				1050																
11	DP-30 (10.5-11.5) B				1050																
12	DP-30 (4-5)				1100																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>John Doe</i>						
SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed (MM/DD/YY): <i>05/19/12</i>				

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days. F-ALL-Q-020rev.07, 15-May-2007





# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10307126

Page: 18 of 18  
1456690

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company:		Report To:		Attention:	
Address:		Copy To:		Company Name:	
Email To:		Purchase Order No.:		Address:	
Phone:		Project Name:		Pace Quote Reference:	
Requested Due Date/TAT:		Project Number:		Pace Project Manager:	
				Pace Profile #:	
				REGULATORY AGENCY	
				<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
				Site Location	
				STATE:	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-28 (8-9)		G		5/10	1110			2	X												
2	DP-28 (12-13)								2													
3	DP-28 (17-18)								2													
4	DP-28 (20.5-21.5) A								1													
5	DP-28 (20.5-21.5) B					1200			1												015	
6	DP-28 (21.5-22.5) A					1200			1												016	
7	DP-28 (22.5-23.5) B					1200			1													
8	DP-28 (23.5-24.5) A					1220			2													
9	DP-28 (24.5-25.5) B					1240			2													
10	DP-28 (25.5-26.5) A					1250			2													
11	DP-28 (26.5-27.5) B					1400			2													
12	DP-12 (12-12.5)					1405			1												017	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:						
SIGNATURE of SAMPLER:			DATE Signed (MM/DD/YY):			

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.















<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <u>Geoengineers</u>		Report To: <u>John Haney @ geoengineers.com</u>		Attention:	
Address: <u>523 E 2nd Ave</u> <u>Sooke BC V9A 9R2</u>		Copy To: <u>John @ geoengineers.com</u>		Company Name:	
Email To: <u>John Haney @ geoengineers.com</u>		Purchase Order No.:		Address:	
Phone: <u>504-363-3135</u> Fax: <u>504-363-3126</u>		Project Name: <u>Colville Post and Pole</u>		Pace Quote Reference:	
Requested Due Date/TAT:		Project Number: <u>0504-090-00</u>		Pace Project Manager:	
				Pace Profile #:	
<b>REGULATORY AGENCY</b>					
<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____					
Site Location				STATE: _____	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other
					DATE	TIME	DATE	TIME														
1	DP-28 (8-9)		SL	G	5/14	1110			2	X										097		
2	DP-28 (12-13)					1130			2											098		
3	DP-28 (17-18)					1140			2											099		
4	DP-28 (20.5-21.5) A					1200			1											100		
5	DP-28 (20.5-21.5) B					1200			1						X	X	X					
6	DP-28 (21.5-22.5) A					1210			1						X	X	X					
7	DP-28 (21.5-22.5) B					1210			1											101		
8	DP-28 (24-25)					1220			2											102		
9	DP-12 (1-2)					1340			2											103		
10	DP-12 (5-6)					1350			2											104		
11	DP-12 (9-10)					1400			2											105		
12	DP-12 (12-12.5)					1405			1						X	X	X					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				<u>Pat - Michael</u> <u>Pace</u>	<u>5/20/15</u>	<u>10:00</u>	<u>22</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>

ORIGINAL	<b>SAMPLER NAME AND SIGNATURE</b>				Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	PRINT Name of SAMPLER: <u>Josh Lee</u>							
	SIGNATURE of SAMPLER: <u>[Signature]</u>							
				DATE Signed (MM/DD/YY): <u>05/18/15</u>				

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <u>GeoEngineers</u>		Report To: <u>jimmy@geoengineers.com</u>		Attention:	
Address: <u>523 E Second Ave</u>		Copy To: <u>jimlee@geoengineers.com</u>		Company Name:	
<u>Spokane, WA 99202</u>				Address:	
Email To: <u>jimmy@geoengineers.com</u>		Purchase Order No.:		REGULATORY AGENCY	
Phone: <u>509-363-3125</u> Fax: <u>509-363-3126</u>		Project Name: <u>Colville Post and Pole</u>		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
Requested Due Date/TAT:		Project Number: <u>0504-098-06</u>		Site Location	
				STATE: _____	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.				
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other								
					DATE	TIME	DATE	TIME																		
1	DP-12 (16-17) A		SL	G	5/19	1410			2	X																
2	DP-12 (16-17) B					1410			1																	106
3	DP-12 (26-21)					1425			2																	107
4	DP-18 (1-2)					1430			2																	108
5	DP-18 (6-7)					1435			2																	109
6	DP-18 (8-9)					1440			2																	110
7	DP-18 (12-13)					1445			2																	111
8	DP-18 (16-17) A					1450			1																	112
9	DP-18 (16-17) B					1450			1							X	X	X								
10	DP-18 (17-17.5)					1455			1							X	X	X								
11	DP-18 (20-21)					1500			2																	113
12	DP-18 (1.5-2.5)					1510			2																	114

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
				<u>Paul Thibault</u>	<u>Pace</u>	<u>5/20/15</u>	<u>10:00</u>	<u>12</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>

SAMPLER NAME AND SIGNATURE				Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:							
SIGNATURE of SAMPLER:			DATE Signed (MM/DD/YY):				
			<u>Josh Lee</u>				
			<u>[Signature]</u>	<u>05/18/15</u>			

ORIGINAL

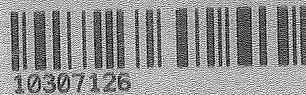
\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



Document Name:  
**Sample Condition Upon Receipt Form**  
 Document No.:  
**F-MN-L-213-rev.13**

Document Revised: 23Feb2015  
 Page 1 of 1  
 Issuing Authority:  
 Pace Minnesota Quality Office

**WO#: 10307126**



Client Name:

Project #:

Geo Engineers

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Speedee  Other:

Tracking Number: 7806 7701 4618, 8079 6922 4189, 7806 7701 4630  
7806 7701 4629, 7806 7701 4640

Custody Seal on Cooler/Box Present?  Yes  No  
 Seals Intact?  Yes  No  
 Optional: Proj. Due Date: Proj. Name:

Packing Material:  Bubble Wrap  Bubble Bags  None  Other: \_\_\_\_\_  
 Temp Blank?  Yes  No

Thermometer  B88A9130516413  B88A912167504  B88A0143310098  
 Used: 0.0 Type of Ice:  Wet  Blue  None  Samples on ice, cooling process has begun

Cooler Temp Read (°C) 0.9, 1.7, 0.4 Cooler Temp Corrected (°C) 0.9, 1.4, 2.4  
 Temp should be above freezing to 6°C 3.6 Correction Factor: 10.5 Date and Initials of Person Examining Contents: AGS/19/15

USDA Regulated Soil (  N/A, water sample)  
 Did samples originate in a quarantine zone within the United States: AL, AR, AZ, CA, FL, GA, ID, IA, MS, NC, NM, NY, OK, OR, SC, TN, TX or WA (check maps)?  Yes  No  
 Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No  
 If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

		COMMENTS:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix: <u>Soil</u>		
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH >9 Sulfide, NaOH >12 Cyanide) Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample # Initial when completed: _____ Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

**CLIENT NOTIFICATION/RESOLUTION**

Field Data Required?  Yes  No

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/Resolution: \_\_\_\_\_

**Project Manager Review:**

AD

Date: 5-21-15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e out of hold, incorrect preservative, out of temp, incorrect containers).

**APPENDIX D**  
**Permit Correspondence**



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

April 24, 2015

Jeremy Schmidt  
WA State Department of Ecology  
4601 N. Monroe St.  
Spokane, WA 99205

Re: Colville Post and Pole Wetland Cleanup Action

Dear Mr. Schmidt:

This letter confirms that the Colville Post and Pole site cleanup action does not require a state Section 401 Water Quality Certification permit. After conferring with staff from the Ecology Toxics Cleanup Program, the US Army Corps of Engineers, and GeoEngineers, we can avoid impacts to wetlands, even if temporary in nature. The result would show a net gain in environmental improvement following the cleanup action.

Contracted cleanup staff should take care to avoid impacting wetlands through best management practices during the cleanup activity. These may include (but are not limited to):

- Marking wetland boundaries clearly, with high visibility tape or fencing
- Using "mud mats" and the minimal number of tracks necessary (one set preferred) across the wetland area
- Using a bucket to reach from the upland or hand tools to remove debris from the wetland area
- Restoring any rutted tracks through the wetland area following the cleanup action

Please contact me at (509) 329-3474 or by email at [david.moore@ecy.wa.gov](mailto:david.moore@ecy.wa.gov) if you have any questions.

Thank you,

David Moore  
Wetlands Specialist

cc: Jason Poulson, GeoEngineers, Inc.  
Tim Erkel, US Army Corps of Engineers







REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
SEATTLE DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 3755  
SEATTLE, WASHINGTON 98124-3755

FEB 23 2015

Regulatory Branch

RECEIVED

FEB 25 2015

Department of Ecology  
Eastern Regional Office

Mr. Jeremy T. Schmidt  
Washington State Department of Ecology  
4601 North Monroe Street  
Spokane, Washington 99205

Reference: NWS-2015-0077  
WA State Dept. of Ecology  
(Colville Post and Poles)

Dear Mr. Schmidt:

We have received your application for a Department of the Army (DA) permit to use a long-arm track hoe with a thumb attachment to remove treated and untreated lumber and other refuse from grassy wetland areas at Colville, Washington. The wetlands are located in an old river channel that no longer has a surface hydrological connection with the Colville River. We have reviewed the information you provided to us pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. We have determined that a DA permit is not required for your proposed work as described in your application.

Under Section 10 of the Rivers and Harbors Act of 1899, a Section 10 DA permit is normally required for work or structures in or affecting navigable waters of the U.S. Because the Colville River and adjacent wetlands are not navigable waters, a Section 10 DA permit is not required.

Under Section 404 of the Clean Water Act, a DA permit is normally required for the discharge of dredged or fill material (e.g., fill, excavation, or mechanized land clearing) into waters of the U.S., including wetlands and navigable waters of the U.S. For more information, see the enclosed *Clean Water Act Extracts and Definitions*. The wetlands on the property are waters of the U.S. However, because the removal of the lumber and refuse does not involve a discharge of dredged or fill material, a Section 404 DA permit is not required.

While a DA permit is not required, local, State, and other Federal requirements may still apply. For assistance in determining other permit requirements for the proposed project, we recommend you contact the Washington State Office of Regulatory Assistance via the internet at [www.ora.wa.gov](http://www.ora.wa.gov).



If you have any questions, please contact Mr. Brian Hooper, Project Manager, at [brian.d.hooper@usace.army.mil](mailto:brian.d.hooper@usace.army.mil) or by phone at (206) 316-3975.

Sincerely,

A handwritten signature in black ink, appearing to read "David J. Martin". The signature is fluid and cursive, with a prominent initial "D" and "M".

*for* David J. Martin, Section Chief  
Regulatory Branch

Enclosure



US Army Corps  
of Engineers ©  
Seattle District

# CLEAN WATER ACT

## Extracts and Definitions



---

EXTRACTS from the Clean Water Act:

1. SECTION 404

(a) The Secretary of the Army, acting through the Chief of Engineers, may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites.

(b) Subject to subsection (c) of this section, each such disposal site shall be specified for each such permit by the Secretary of the Army (1) through the application of guidelines developed by the Administrator of the Environmental Protection Agency (Administrator), in conjunction with the Secretary of the Army, which guidelines shall be based upon criteria comparable to the criteria applicable to the territorial seas, the contiguous zone, and the ocean under section 403(c), and (2) in any case where such guidelines under clause (1) alone would prohibit the specification of a site, through the application additionally of the economic impacts of the site on navigation and anchorage.

(c) The Administrator is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. Before making such determination, the Administrator shall set forth in writing and make public his findings and his reasons for making any determination under this subsection.

2. SECTION 301

This section prohibits the discharge of any pollutant including fill or dredged material except as in compliance with various sections of the Clean Water Act, including Section 404.

3. SECTION 307

The Administrator shall publish a list of toxic pollutants. Each toxic pollutant shall be subject to effluent standards (which may include a prohibition). Under this section it is unlawful to violate any such effluent standards or prohibition.

4. SECTION 309

This section provides that any person who willfully or negligently violates the provisions of this Act may be punished by a fine of not less than \$2,500 or more than \$37,500 per day of violation or by imprisonment for not more than one year or by both. In addition, any person violating this Act may be subject to a civil penalty of not more than \$37,500 per day of violation.

DEFINITIONS regarding the Clean Water Act:

The term “**wetlands**” means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The Corps of Engineers has the responsibility for determining whether a specific wetland area is within Section 404 jurisdiction.

The term “**adjacent**” means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by manmade dikes or barriers, natural river berms, beach dunes, and the like are "adjacent wetlands."

The term “**discharge of dredged material**” means the addition, including redeposition, of dredged material, runoff from a contained land or water disposal area, and any addition, including redeposition, of excavated material. These activities include mechanized landclearing, grading, filling in low areas, sidecasting of excavated material from new ditching work, and other placement of excavated material into waters of the United States, including wetlands.

The term “**discharge of fill material**” means the addition of fill material used for the primary effect of replacing any portion of a water of the U.S. with dry land or of changing the bottom elevation of a water of the U.S., including wetlands. The placement of pilings constitutes a discharge of fill material when such placement has or would have the effect of a discharge of fill material.

The term “**ordinary high water mark**” means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.

**APPENDIX E**  
**Disposal Documentation**

Stevens County Landfill

L23087

LANDFILL INVOICE

XX  
Date:09/29/2015 Time: 13:33:32 Batch:0929 1509 KG

Transaction Code: 06 Charge  
Account: SUNS04 TORRE REFUSE & REC. LLC  
Vehicle ID: SS NRC 2145 TR Cell: 69 Area:2  
Vehicle Desc: NRC FROM P&P FOR SS  
Notes: 0004  
Comm: TSP&PS NRC FROM POST & POLE  
Group: 0400 FRANCHISE SUNSHINE D

XX

Summary of Weight

Summary of Charges

	Pounds	Tons	Charge:	350.88
Gross:	23,720	11.86	Tax:	0.00
Tare:	13,400	6.70	Total:	350.88
Net:	10,320	5.16	Tended:	0.00
Qty:	0	Ea/Yds	Cash/Ck Ch	

XX

Driver: 

Address: \_\_\_\_\_

Tues-Sat 8:30AM to 5:00 PM

The pit closes at 3PM PHONE # 738-6937





L23902 Stevens County Landfill  
 LANDFILL INVOICE  
 XXX  
 Date: 09/29/2015 Time: 14:28:22 Batch: 0929 1509 KG  
 Transaction Code: CG Charge  
 Account: SUNS04 TORRE REFUSE & REC. LLC  
 Vehicle ID: SS NRC 2100 Cell: 69 Area: 2  
 Vehicle Desc: NRC FROM P & P FOR S  
 Notes:

Comm: TSP&PS NRC FROM POST & POLE  
 Group: 0400 FRANCHISE SUNSHINE D

XX

Summary of Weight			Summary of Charges	
	Pounds	Tons	Charge:	
Gross:	43,260	21.63	Tax:	557.60
Tare:	26,860	13.43	Total:	0.00
Net:	16,400	8.20	Tended:	557.60
Qty:	0	Ea/Yds	Cash/Ck Ch	0.00

XX

Driver:  Address: \_\_\_\_\_  
 Tues-Sat 8:30AM to 5:00 PM

The pit closes at 3PM PHONE # 738-6937

Stevens County Landfill

L23903

LANDFILL INVOICE

XX  
Date: 09/29/2015 Time: 14:29:23 Batch: 0929 1509 KG

Transaction Code: CG Charge

Account: SUNS04 TORRE REFUSE & REC. LLC

Vehicle ID: SS NRC 2108 TR Cell: 69 Area: 2

Vehicle Desc: NRC FROM P & P FOR S

Notes: 0005

Comm: TSP&PS NRC FROM POST & POLE

Group: 0400 FRANCHISE SUNSHINE D

XX

Summary of Weight

Summary of Charges

	Pounds	Tons
Gross:	24,520	12.26
Tare:	13,400	6.70
Net:	11,120	5.56
Qty:	0	Ea/Yds

Charge:	378.08
Tax:	0.00
Total:	378.08
Tended:	0.00
Cash/Ck Ch	

XX

Driver:  Address: \_\_\_\_\_

Tues-Sat 8:30AM to 5:00 PM

The pit closes at 3PM PHONE # 738-6937

Stevens County Landfill

L23920 LANDFILL INVOICE

XX  
Date:09/29/2015 Time: 15:23:18 Batch:0929 1509 KG

Transaction Code: CG Charge  
Account: SUNS04 TORRE REFUSE & REC. LLC  
Vehicle ID: SS NRC 4548 Cell: 69 Area:2  
Vehicle Desc: NRC FROM P&P FOR SS  
Notes: 0006  
Comm: TSP&PS NRC FROM POST & POLE  
Group: 0400 FRANCHISE SUNSHINE D

XX

Summary of Weight

Summary of Charges

	Pounds	Tons	Charge:	543.32
Gross:	31,800	15.90	Tax:	0.00
Tare:	15,820	7.91	Total:	543.32
Net:	15,980	7.99	Tended:	0.00
Qty:	0	Ea/Yds	Cash/Ck Ch	

XX

Driver:  Address: \_\_\_\_\_

Tues-Sat 8:30AM to 5:00 PM

The pit closes at 3PM PHONE # 738-6937

Stevens County Landfill

L23840 LANDFILL INVOICE

XX

Date: 09/29/2015 Time: 11:39:45 Batch: 0929 1509 KB

Transaction Code: CG Charge  
Account: SUNS04 TORRE REFUSE & REC. LLC

Vehicle ID: 66 NRC 2145 Cell: 69 Area: 2

Vehicle Desc: NRC FROM P&P FOR 66

Notes: 0002

Comm: TSP&PS NRC FROM POST & POLE

Group: 0400 FRANCHISE SUNSHINE D

XX

	Summary of Weight		Summary of Charges	
	Pounds	Tons	Charges	
Gross:	34,200	17.10	Tax:	299.20
Tare:	25,400	12.70	Total:	299.20
Net:	8,800	4.40	Tended:	0.00
Qty:	0	Ea/Yds	Cash/Ck Ch	

XX

Driver:  Address: \_\_\_\_\_

Tues-Sat 8:30AM to 5:00 PM

The pit closes at 3PM PHONE # 738-6937

Stevens County Landfill

L23041 LANDFILL INVOICE

XX

Date: 05/29/2015 Time: 11:41:26 Batch: 0529 1509 KG

Transaction Code: CB Charge

Account: SUN504 TORRE REFUSE & REC. LLC

Vehicle ID: SS NRC 2145 TR Call: 69 Area: 2

Vehicle Desc: NRC FROM P&P FOR SS

Notes: 0002

Comm: TSP&P NRC FROM POST & POLE

Group: 0400 FRANCHISE SUNSHINE D

XX

Summary of Weight

Summary of Charges

	Pounds	Tons	Charge:	258.40
Gross:	21,000	10.50	Tax:	0.00
Tare:	13,400	6.70	Total:	258.40
Net:	7,600	3.80	Tended:	0.00
Qty:	0	Sa/Yds	Cash/Ck Ch	

XX

Driver:  Address: \_\_\_\_\_

Tues-Sat 8:30AM to 5:00 PM

The pit closes at 3PM PHONE # 738-6937





Stevens County Landfill

L23827 LANDFILL INVOICE

XX

Date:09/29/2015 Time: 11:05:21 Batch:0929 1509 KG

Transaction Code: CG Charge

Account: SUNS04 TORRE REFUSE & REC. LLC

Vehicle ID: SS NRC 2100 TR Cell: 69 Area:2

Vehicle Desc: NRC FROM P & P FOR S

Notes: 0001

Comm: TSP&PS NRC FROM POST & POLE

Group: 0400 FRANCHISE SUNSHINE D

XX

Summary of Weight

Summary of Charges

	Pounds	Tons	Charge:	267.92
Gross:	21,280	10.64	Tax:	0.00
Tare:	13,400	6.70	Total:	267.92
Net:	7,880	3.94	Tended:	0.00
Qty:	0	Ea/Yds	Cash/Ck Ch	

XX

Driver:  Address: \_\_\_\_\_

Tues-Sat 8:30AM to 5:00 PM

The pit closes at 3PM PHONE # 738-6937

**APPENDIX F**  
**Report Limitations and Guidelines for Use**

## **APPENDIX F REPORT LIMITATIONS AND GUIDELINES FOR USE<sup>1</sup>**

This appendix provides information to help you manage your risks with respect to the use of this report.

### **Environmental Services Are Performed for Specific Purposes, Persons and Projects**

GeoEngineers has performed this assessment of the Colville Post and Pole site in Colville, Washington in general accordance with the Work Plan dated January 16, 2015. This report has been prepared for the exclusive use of the Washington Department of Ecology. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

GeoEngineers structures our services to meet the specific needs of our clients. For example, an Environmental Site Assessment (ESA) study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and property. No one except the Washington Department of Ecology should rely on this environmental report without first conferring with GeoEngineers. Use of this report is not recommended for any purpose or project except the one originally contemplated.

### **This Environmental Report is Based on a Unique Set of Project-Specific Factors**

This report has been prepared for the Colville Post and Pole site in Colville, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, it is important not to rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

If important changes are made to the project or property after the date of this report, we recommend that GeoEngineers be given the opportunity to review our interpretations and recommendations. Based on that review, we can provide written modifications or confirmation, as appropriate.

### **Reliance Conditions for Third Parties**

Our report was prepared for the exclusive use of our Client. No other party may rely on the product of our services unless we agree to such reliance in advance and in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services

---

<sup>1</sup> Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; [www.asfe.org](http://www.asfe.org).

have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

### **Environmental Regulations Are Always Evolving**

Some substances may be present in the vicinity of the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substances, change or if more stringent environmental standards are developed in the future.

### **Uncertainty May Remain Even After This Phase II ESA is Completed**

Performance of a Phase II ESA is intended to reduce uncertainty regarding the potential for contamination in connection with a property, but no ESA can wholly eliminate that uncertainty. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

### **Subsurface Conditions Can Change**

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by man-made events such as construction on or adjacent to the subject property, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Please contact GeoEngineers before applying this report for its intended purpose so that GeoEngineers may evaluate whether changed conditions affect the continued applicability of the report.

### **Soil and Groundwater End Use**

The cleanup levels referenced in this report are site- and situation-specific. The cleanup levels may not be applicable for other properties or for other on-site uses of the affected soil and/or groundwater. Note that hazardous substances may be present in some of the on-site soil and/or groundwater at detectable concentrations that are less than the referenced cleanup levels. GeoEngineers should be contacted prior to the export of soil or groundwater from the subject property or reuse of the affected soil or groundwater on-site to evaluate the potential for associated environmental liabilities. We are unable to assume responsibility for potential environmental liability arising out of the transfer of soil and/or groundwater from the subject property to another location or its reuse on-site in instances that we did not know or could not control.

### **Most Environmental Findings Are Professional Opinions**

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the subject property. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an informed opinion about subsurface conditions throughout the property. Actual subsurface conditions may differ,

sometimes significantly, from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

### **Do Not Redraw the Exploration Logs**

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design drawings. Only photographic or electronic reproduction is acceptable, but separating logs from the report can create a risk of misinterpretation.

### **Read These Provisions Closely**

It is important to recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are less exact than other engineering and natural science disciplines. Without this understanding, there may be expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory “limitations” provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you need to know more about how these “Report Limitations and Guidelines for Use” apply to your project or property.

### **Biological Pollutants**

GeoEngineers’ Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants, and no conclusions or inferences should be drawn regarding Biological Pollutants as they may relate to this project. The term “Biological Pollutants” includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.