FINAL REPORT

2009 PETROLEUM RELEASE RESPONSE

RELEASE INVESTIGATION

RED DEVIL MINE

Red Devil, Alaska

November 2010

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2009 Petroleum Release Response
Release Investigation
Red Devil Mine

Red Devil, Alaska

Prepared for:

United States Department of the Interior
Bureau of Land Management

By:

Weston Solutions, Inc.

With

Marsh Creek, LLC

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LIST OF ACRONYMS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
ANCSA	Alaska Native Claims Settlement Act
AST	aboveground storage tank
bgs	below ground surface
BLM	Bureau of Land Management
BTEX	benzene, toluene, ethylbenzene, xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	contaminant of concern
CSWMP	Conceptual Solid Waste Management Plan
DRO	diesel-range organics
EPA	United States Environmental Protection Agency
°F	degrees Fahrenheit
GPS	global positioning system
GRO	gasoline-range organics
IDW	investigation-derived waste
msl	mean sea level
ND	non-detect
NOAA	National Oceanic and Atmospheric Administration
ORP	oxidation reduction potential
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl

LIST OF ACRONYMS *(continued)*

PID	photoionization detector
PPE	personal protective equipment
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
RDM	Red Devil Mine
REF	EPA Region V Ecological Screening Levels
RRO	residual-range organics
SQuiRT	Screening Quick Reference Table
TAH	total aromatic hydrocarbon
TAqH	total aqueous hydrocarbon
USFWS	U.S. Fish and Wildlife Service
VOCs	volatile organic compounds

1.0 INTRODUCTION

Pursuant to United States Department of the Interior, Bureau of Land Management (BLM) Contract No. 18902816, this Release Investigation Final Report has been prepared in accordance with the Statement of Work titled *Red Devil Mine – Alaska, 2009 Petroleum Release Response* and released in August 2009, and Alaska Department of Environmental Conservation (ADEC) *Site Characterization Work Plan and Reporting Guidance for Investigation of Contaminated Sites* (ADEC, 2009a). Under this project, a release investigation was accomplished at the former 52,000-gallon aboveground storage tank (AST) #5 at the Red Devil Mine (RDM), Alaska site (Figures 1 and 2). Weston Solutions, Inc., under contract with Marsh Creek, LLC, prepared the associated work plan (WESTON, 2010) and this report in support of the 2009 Petroleum Release Response.

Potential contaminant sources and target areas previously identified during past studies were further investigated to characterize their impacts to local soil, sediment, surface water, and groundwater. This release investigation was conducted in July 2010 to assess the current site conditions at the RDM AST #5 site. The release investigation report summarizes past work and describes the investigative field work, findings, conclusions, and recommendations developed following the July 2010 investigation.

The RDM is currently administered by the BLM in accordance with the Alaska Native Claims Settlement Act (ANCSA). The surface estate will be conveyed to The Kuskokwim Corporation as part of the Sleetmute Village Townsite and subsurface estate will be conveyed to Calista Corporation once cleanup is complete.

1.1 Project Purpose

Excavation of contaminated and suspected clean material at the RDM AST #5 site occurred during 2006. Excavation activities were halted due to safety concerns and confirmation samples were collected. The excavation area was backfilled with the suspected clean material (based on visual observations and photoionization detector [PID] readings). Confirmation sample results indicated three locations that exceeded site cleanup criteria and the full extent of remaining contaminated soil was determined to be unknown (Wilder, 2007). Additionally, a hydrocarbon sheen was observed on pooled water near the bottom of the backfilled excavation area during a site visit on September 18, 2008.

The purpose of this project was to delineate the nature and extent of soil, groundwater, surface water, and sediment contamination, and to assess the potential risks to human health and the environment posed by the AST #5 site. Contaminants of concern (COCs) have previously been identified during past investigations and include gasoline range organics (GRO); benzene, toluene, ethylbenzene, and total xylenes (BTEX); diesel range organics (DRO); residual range organics (RRO); and polynuclear aromatic hydrocarbons (PAHs). This release investigation followed the procedures prescribed by Title 18 Alaska Administrative Code (AAC) Chapter 75 *Oil and Other Hazardous Substances Pollution Control* (ADEC, 2008).

1.2 Project Objectives

The ultimate goal for AST #5 is to obtain site closure approval by applicable state and governmental agencies. The July 2010 release investigation was conducted to determine recommendations for corrective actions or remedial alternatives that will lead to site cleanup and/or final closure. Specifically, the objectives of the release investigation were to determine the vertical and horizontal extent of fuel contamination in soil and any resulting impacts to groundwater, surface water, and sediment associated with AST #5. To meet this goal, several specific field investigation objectives were established during the work plan phase and are included in Table 1. In this table, each objective is linked to specific data needs and the tasks that were conducted to address each need. Finally, the rationale for addressing each need is presented by depicting how the data collected will be used to meet the program goals upon completion of each task.

1.3 Site Background and History

The RDM is located at the coordinates 61.761162 latitude and -157.312565 longitude and was first established in 1933 to mine cinnabar deposits and produce mercury from extracted ore. The mine was the largest of several mercury producing mines in Alaska and for a short period of time one of the largest producers of mercury in the United States. The RDM was operated on and off until it was shut down permanently in 1971 due to poor economic conditions. A detailed history of the mine is included in the *Red Devil Mine Historic Source Area Investigation* (MACTEC, 2005). A historic timeline of the mines history is displayed on Figure 3. Historical aerial photographs are located in Appendix D.

The United States Environmental Protection Agency (EPA) conducted an inspection of the mine in 1971. Since that inspection, numerous waste removal actions, site investigations, and sampling activities have been performed. The mine was registered in 1987 under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (EPA identification AKD980495618).

Previous investigations have identified several target compounds of concern including: antimony, mercury, arsenic, and lead in various media. Chemicals used in the mining operations and historically stored at the site included copper sulfate, sodium hydroxide, and potassium carbonate. Hazardous materials including asbestos and lead-based paints were used during the construction of the mine buildings. Electrical transformers and capacitors containing polychlorinated biphenyls (PCBs) were also formerly used at the mine (Harding ESE, 2002).

Several major removal actions have occurred at the RDM since 1999 to deal with its environmental condition. In 1999 and 2000, wastes including batteries, PCB-contaminated transformers, used oil, solvents, grease, mercury-contaminated ash and concrete, and mineral processing chemicals were removed from the mine for off-site disposal at approved disposal facilities, and building materials containing asbestos and lead were removed from the site. In 2002, the contaminated building and retort debris were disposed in two onsite monofills. Monofill 1 contained non-hazardous building debris and had a final debris volume of 4,400 yd^3.

Monofill 2 was a 938 yd^3 lined monofill that contained contaminated debris from the former retort building area. Contaminated retort bricks placed in Monofill 2 were chemically encapsulated prior to disposal in the monofill, as documented in the *Red Devil Mine 2002 Debris Consolidation and Disposal Project Report* (Wilder, 2003).

Major actions accomplished at the RDM fuel supply system included the collection and analysis of surface soil samples from along the fuel supply system in 2000, the demolition and investigation of five ASTs and the fuel supply piping in 2003, and the excavation and stockpiling of contaminated soils in 2005 and 2006. As reported in the *Red Devil Mine Aboveground Storage Tanks/Ore Hopper Demolition and Petroleum Release Investigation Report*, five fuel ASTs and delivery system were demolished and disposed in Monofill 3 (AST Metal Disposal Area) in 2003 (MACTEC, 2004). Monofill 3 is an unlined, non-hazardous waste debris monofill similar in design to Monofill 1. Surface soil sampling conducted in 2000 indicated the presence of GRO and DRO contamination in surface soils along the pipeline and in the vicinity of the ASTs.

The 2003 release investigation included the installation of twelve soil borings and completion of three excavations to characterize petroleum contaminated soil associated with the entire fuel supply system. Three soil borings were completed at AST #5 including an in-source, an up-gradient, and a cross/down-gradient location. Two samples were collected from each boring and submitted for laboratory analysis for DRO, RRO, and BTEX, and select samples were analyzed for GRO and PAHs (MACTEC, 2004).

At the in-source soil boring, a petroleum odor was noted throughout its vertical extent, and samples were collected from six feet and 18 feet below ground surface (bgs). The sample from 6 feet bgs contained GRO (120 mg/kg) and DRO (3,400 mg/kg) exceeding the ADEC Method Three site-specific cleanup values (1,380 mg/kg and 1,190 mg/kg, respectively). The sample from 18 feet bgs contained no analytes exceeding cleanup values. At the up-gradient soil boring, no odor was noted, and samples were collected from 18 feet and 20 feet bgs. No analytes were detected exceeding cleanup levels. At the cross-gradient soil boring, an odor was noted at 20 feet bgs, and samples were collected from 18 feet and 22 feet bgs. Despite the odor noted during drilling, no analytes were detected exceeding cleanup levels. Based on the results of the 2003 investigation, excavation of approximately 2,200 cubic yards of contaminated soils was recommended along the pipeline and in the vicinities of the ASTs. 502 cubic yards of contaminated material was estimated to exist at AST #5 (MACTEC, 2004).

As documented in the *Red Devil Mine 2005/2006 Contaminated Soil Stockpiling and Debris Removal Report* (Wilder, 2007), a total of 4,470 yd^3 of contaminated material was excavated from five excavations areas (including the AST #5 site) in 2005 and 2006 at the RDM. A total of 3,306 yd^3 of the 4,470 yd^3 was placed in stockpiles following screening of rock two inches or greater in size (Wilder, 2007).

During 2006 at AST #5, excavated material consisted of gravely sands from ground surface to 5 feet bgs and fractured shale bedrock with gravely sands below 5 feet bgs. A total of 2,067 yd^3 of contaminated material was removed from a circular area of about 7,000 ft^2 to a depth of 25 to 35

feet bgs. The excavation reached a maximum depth of 35 feet bgs located along the southern wall and no groundwater was encountered. The excavation met refusal at bedrock along the southern, southeastern, and southwestern walls and was halted due to safety concerns. Impacted soils were encountered at 25 feet bgs and generally trended to the north and at greater depth as the excavation was extended. Free product was observed in surface water that seeped into the excavation – this water was thought to be surface water that drained into the excavation (not groundwater). The contaminated excavated material was screened to filter out rock two inches or greater in size resulting in a total of 1,706 yd^3 of contaminated material that was placed into onsite stockpiles. Additionally, approximately 2,700 yd^3 of suspected clean, non-hydrocarbon impacted material was excavated from AST #5 while chasing and removing the contaminated material. The suspected clean material was segregated from the contaminated material and placed back into the excavation area following the collection of confirmation samples (Wilder, 2007).

Twenty-one confirmation samples were collected from the base of the AST #5 excavation, including three samples collected near the center of the excavation from areas where PID screening indicated petroleum contamination was present at 25 feet bgs. A single sample contained benzene (0.555 mg/kg) exceeding the ADEC Method Three site-specific cleanup level (0.087 mg/kg). Two other samples contained DRO (2,370 mg/kg and 2,350 mg/kg) exceeding the ADEC Method Three site-specific cleanup value (1,190 mg/kg). Figure 4 shows the AST #5 excavation and the contamination that remains including sample results (Wilder, 2007).

1.4 Environmental Setting

A summary of the environmental setting of RDM is described below. A more detailed description of the environmental setting can be found in the Conceptual Solid Waste Management Plan (CSWMP) and other historical site documents.

The AST #5 site consists of a circular depression approximately 75 feet across and a maximum of 20 feet deep. The site lies on the side of a steep side-slope which drains to the north. A ditch that runs north-south drains the depression downhill. A small surface puddle was present near the bottom of the depression during site work in July 2010. A road leading to the site from the main RDM is present.

1.4.1 Geology

The RDM lies within a Zone 1 seismic zone and along the Red Devil Fault Zone. The regional geology is dominated by a thick sequence of folded sedimentary rocks of Cretaceous age known as the Kuskokwim group (interbedded greywacke and argillaceous rocks), which is in places overlain by Tertiary volcanic rocks and locally is cut by plutonic and hypabyssal rocks. The Kuskokwim group rocks are cut by a few altered dikes and are locally overlain by surficial deposits of loess, alluvium, and mine tailings (USGS, 1963).

The RDM is located on the southwest limb of the Sleetmute anticline, a northwestward-trending fold that has been traced for about 7 miles. The bedding in the Kuskokwim group at the mine

strikes N10W to N60W, but its dominant strikes are N30W to N45W. The prevalent dips of these beds are 40-60° SW (USGS, 1963).

Mineralization in the area consists of mercuric and antimony sulfides, cinnabar, and stibnite that were deposited within epithermal vein deposits within the Kuskokwim group host rock. The RDM mineralized zone covers an area of about 500 feet wide, 900 feet long, and 620 feet deep. Tailing piles from mine operations are found adjacent to Red Devil Creek. Abundant placer cinnabar is visible in Red Devil Creek (Wilder, 2007).

Permafrost is generally absent in the mine area; however, frozen subsurface soil was encountered during drilling in 2000, and was thought to be permafrost. Below the mine area, unconsolidated floodplain deposits overlie fractured bedrock. Unconsolidated deposits consist of silt, sand, and gravel to depths up to 40 feet thick (Wilder, 2007).

Soil boring B05, completed near the shop building and general mine area during 2005, showed soils consisting of sandy gravel to silty sandy gravel, to depths of 30 feet bgs (elevation 470.2 feet) where refusal was reached. Soil borings completed near the retort building found highly fractured shale at 3 to 6 feet bgs. Mine tailings used as fill consist of silty sandy gravels and gravelly sandy silt that were found above the fractured shale. Refusal (shale bedrock) was encountered at approximately 40 feet bgs (elevation 491.25 feet) at soil boring B02, approximately 60 feet northwest of the retort building foundation (Wilder, 2007).

1.4.2 Hydrology

The Kuskokwim River is approximately 1,000 feet north of the mine. Red Devil Creek bisects the mine and flows to the northeast through the mine area. McCally Creek is located approximately ¾ mile west of the mine. The Red Devil drainage basin covers approximately 687 acres. Red Devil Creek flows northeast approximately 500 feet from the mine site to its confluence with the Kuskokwim River. No surface water uses of the creek are known. The lowest elevation of the mine site is at approximately 279 feet elevation and is approximately 66 feet above the highest recorded flood stage of the Kuskokwim River (Wilder, 2007).

The groundwater elevation at monitoring well MW7, completed 300 feet southwest of the former retort building, was approximately 523 feet (16 feet bgs). The groundwater elevation on the other side of the mine site, near the former shop building, was 474.72 feet (25 feet bgs). Groundwater in the area of the storage pad is at 497.54 feet (17.8 feet bgs). Note that groundwater and boring elevations were recorded relative to an arbitrary 500.00-foot assumed control monument (RDM-0302000) and not to mean sea level (msl). Groundwater flow in the area of the mine site is generally to the north-northeast, following surface topography leading downgradient toward the Kuskokwim River, which flows to the northwest (Wilder, 2007).

There is one drinking water well within a 1-mile radius of the mine. In 2005, the Denali Commission Project provided a drinking water well at Lenore Baird's home at McCally Creek, approximately 0.75 miles from RDM. There are also drinking water wells at Joe Morgan's home and the Red Devil Lodge, 1.15 to 1.25 miles northwest of the mine (Harding ESE, 2002).

Virtually all of the surface water runoff from the mine area and surrounding slopes flows into Red Devil Creek. Based on the U.S. Fish and Wildlife Service (USFWS) maps, less than 5 percent of the land within 4 miles of the mine site is classified as wetlands. There are no classified wetlands within the mine site (Wilder, 2007).

1.4.3 Ecology

The RDM is located in the Interior ecoregion, and more specifically, the Interior forested lowlands and uplands ecological subregion. Following is a basic description of the Interior forested lowlands and uplands ecological subregion taken from the *Ecoregions/Assessment Endpoint Project, Technical Background Document for Selection and Application of Default Assessment Endpoints and Indicator Species in Alaskan Ecoregions* (ADEC, 1999).

This subregion extends from Norton Sound through the Northwest ecoregion, across the interior of Alaska to the U.S.-Canada border. Within the Northwest ecoregion, the forested lowlands/uplands are limited to the lower elevations of the Kobuk and Tagagawik River watersheds and inland from Norton Sound. The subregion contains a highly variable set of habitats dominated by spruce and hardwood forests. Fires are common in this subregion.

The terrain consists of rolling lowlands, plateaus, and rounded hills up to 2,300 feet in elevation. The subregion is underlain by Mesozoic and Paleozoic sedimentary and volcanic rock mantled by alluvium and colluvial deposits. Dominant soils are Histic Pergelic Cryaquepts, Pergelic Cryaquepts, Aquic Cryochrepts, Pergelic Cryochrepts, Typic Cryochrepts, Typic Cryorthents, and Pergelic Cryumbrepts. These soils are derived from shallow, silty alluvium and loess in lowlands and silty loess and colluvial materials in uplands (ADEC, 1999).

Open forests of white and black spruce, paper birch, and balsam poplar occur across much of the lowland areas. Tall willows are found along streams throughout the area. Fire from lightning strikes creates disturbed uplands that may be re-colonized by bluejoint grass before successional change leads to fireweed, shrubs, and eventually back to forests. The tall and low scrub-shrub communities are dominated by willow, birch, or alder species. Shrub species such as Labrador tea, blueberry, cranberry, crowberry, and rosemary may be found in bog areas, and wet meadow/tundra communities are dominated by sedges. Aquatic freshwater plants found in the region include yellow marsh-marigold, swamp horsetail, marestail, duckweed, buckbean, pond lilies, pondweed, marsh cinquefoil, and bur reed (ADEC, 1999).

Little information was found regarding the invertebrates of the region. It is assumed that species surviving in the Arctic ecoregion would be present. These species include diptera, trichoptera, coleoptera, hemiptera, and arachnids. Aquatic invertebrates might include copepods, rotifers, or cladocerans. It is likely that mayflies, stoneflies, and caddis flies are also present. The primary benthic invertebrates are likely to be chironomids. However, dipterans, oligochaetes, steroptera, coleoptera and gastropoda may also occur (ADEC, 1999).

Birds found in the Interior Forested Lowlands and Uplands include herbivores, omnivores, and carnivores. Upland species such as grouse, ptarmigan and passerines are the most numerous

species. Many of the passerine species are migratory and use the subregion for nesting, or as resting and staging grounds during their migration. These species include gray jay, robins, warblers, redpolls, tree swallows, and sparrows. Nesting and rearing occur in June and July, and the migratory birds depart for warmer climates by mid- to late September. Birds of prey such as bald eagles, harlan hawks, rough-legged hawks, great grey owls, great horned owls, short-eared owls, and ravens also are common. The threatened Peale's peregrine falcon may be found in this subregion.

Mammals inhabiting the forested areas include brown and black bears, moose, caribou, wolves, foxes, martins, hares, squirrels, weasels, voles, shrews, and the little brown bats. Most of these species are residents but may hibernate or migrate locally to optimum winter foraging grounds. The small mammals are very important to the ecosystem as prey items. River otters, muskrat, beaver, and mink may be found along some of the rivers, streams, and lakes of the subregion.

Freshwater fishes such as inconnu (sheefish), cisco, whitefish, salmon (chinook, chum, coho, pink and sockeye), grayling, char, pike, smelt, eulachon, blackfish, stickleback, and sculpin may be found in rivers and/or lakes of the subregion. Most of these species are anadromous to some extent and have some tolerance to salt or brackish waters. Their migration is usually dependent on the freeze/thaw cycles of the rivers and bays of the subregion. Smaller lakes frequently have poor water quality with low nitrogen and oxygen content, freeze solid in winter, and so do not support fish populations.

Wood frogs are the only amphibian that may inhabit the subregion. No reptiles are found in the subregion.

The Red Devil area lies in an area of mixed bottomland spruce-poplar forest and upland spruce-hardwood forest. White spruce, birch, black spruce, and aspen are typically located throughout the area. While the Red Devil Creek is officially classified as non-anadromous, fish are known to live in the creek at least part of the year. However; the Kuskokwim River, located approximately 1,000 feet north of the general mine area, is a major anadromous fish stream which supports important subsistence, commercial, and sport fisheries. Neither the BLM, nor other agencies of the federal government have designated lands in or near the mine site for special environmental protection. In addition, no plant or animal species, which are currently listed as threatened, endangered, or proposed under the Endangered Species Act, occur near the project site (Harding ESE, 2002).

1.4.4 Climate

The Red Devil area lies in a subarctic transition climactic zone. Climate data recorded at the Aniak Airport, located 75 miles west of the mine site, from 1949 through 1990 indicate average monthly temperatures ranging from -7.3 degrees Fahrenheit (°F) to 65.2 °F. Extreme temperatures can range from -70 °F in January to 90 °F in July. Average snowfall is 56 inches, with total mean annual precipitation of 18.84 inches (WRCC, 2009).

Mean annual evapotranspiration in nearby Aniak is 17 inches, leaving net precipitation of about 1 inch. The probable maximum 2-year, 24-hour rainfall for the vicinity of Red Devil is approximately 1.5 inches (Harding ESE, 2002).

2.0 FIELD ACTIVITIES

The overall goal of the 2010 release investigation at AST #5 was to delineate the current nature and extent of contamination, as well as provide adequate data to support remediation of contaminated media that pose an unacceptable risk to human health and the environment. The following subsections describe the investigation methods employed for the various media sampled at AST #5.

This section discusses protocol only. Many of the methods employed are described in detail in the Work Plan/Sampling and Analysis Plan (WESTON, 2010) which is cited frequently. As such, this document is here-in-after referred to as "the WP/SAP."

2.1 Soil Investigation

Field work was conducted from July 6 – 15, 2010. Field notes and field forms documenting project activities and data collection were recorded as mentioned in Section 4.1 of the WP/SAP. As required by 18 AAC 75.355, the individual(s) who supervised field work and collected samples for this project were "Qualified Person(s)." Four total media were sampled: soil, sediment, groundwater, and surface water. Sample results are presented in Section 5.0. Photographs were collected during the investigation and are presented in Appendix A. Field notes are located in Appendix B. Sample locations are displayed in Figure 5.

2.1.1 Site Reconnaissance

Site reconnaissance was conducted at the AST #5 site prior to the start of drilling on July 6, 2010. The approximate location of the potential source area, identified during the 2006 confirmation sampling event, was establishing using rag tapes, site features, and an aerial photograph (no survey data was collected during 2006). Larry Beck with the BLM, present during the 2006 work, also aided in determining the approximate location where the elevated confirmation samples were collected. Based on this information, five initial boring locations were determined as depicted in Figure 4 of the WP/SAP. No utilities are present at the AST #5 site.

2.1.2 Drilling

Drilling activities were performed by the subcontractor GeoTek Alaska. A Geoprobe® 8040DT direct-push drill rig, complete with the Geoprobe® Dual Tube sampling system, was used to collect continuous 5-foot soil cores 2-inches in diameter from a total of 16 boring locations until refusal. Five of 16 boring locations were advanced past the initial refusal using a down hole hammer air rotary system to determine if hydrocarbon impacted soil or groundwater existed at a greater depth. Samples were collected from the polyvinyl chloride (PVC) liner (for direct-push) and from the soil cuttings (for down hole hammer air rotary) containing the soil samples. The remaining soil from the soil cores was placed back down hole from which the sample was derived. Monitoring wells were installed at three locations using the Geoprobe® rig. Boreholes

not completed with monitoring wells were back-filled using hydrated bentonite chips from the bottom of the boring to the ground surface.

Decontamination of the drill rig and tooling, record keeping, and soil core logging was conducted as described in the project WP/SAP. For additional drilling related information, please refer to the project WP/SAP.

2.1.3 Soil Screening

Field screening was conducted in order to delineate contamination in the field and to determine the most appropriate location (sample interval) to collect a sample from each soil sample core to complete project objectives. Each core was handled and screened the same to maximize efficiency, accuracy, and comparability. Both qualitative and quantitative information was recorded during the field screening and sample core logging process on appropriate boring logs located in Appendix C.

First, the 5-foot soil core was opened and exposed to the air for inspection. A PID (calibrated daily or as necessary) and a clean stainless steel spoon was then used to agitate and screen the core "in-situ" for volatile organic compounds (VOCs). PID readings were recorded on the boring log. Concurrently, the soil core was inspected for visual and olfactory indication of hydrocarbon contamination, which was also noted on the boring logs. Based on this information, a sample was collected from the interval which exhibited the greatest in-situ PID reading and/or visual and olfactory indication of hydrocarbon contamination. This sample was placed immediately into a Ziploc® bag using a stainless steel spoon and new nitrile gloves, placed on a table in the sun, and screened for headspace VOCs following the protocol in Section 4.3 of the WP/SAP. Screen samples collected using the down hole hammer air rotary system were collected in a 5-gallon bucket, logged, placed into Ziploc® bags, and handled similarly to the direct-push screen samples thereafter. Analytical samples were collected based on the field screening results for each borehole. In general, two analytical samples were collected from each borehole: one from the interval that exhibited the highest screening results and one from directly above the water table or at the bottom of the boring.

Analytical samples collected from each borehole were also field screened for petroleum hydrocarbons using the PetroFLAG® analyzer system and soil test kits. These kits use an ion-specific electrode to quantify the concentration of hydrocarbons within a specific sample. The analyzer was calibrated according to manufacture specifications prior to screening each sample batch. PetroFLAG® samples were analyzed where analytical samples were collected from each boring. Results were used to aid in the delineation of site contamination in the field and to develop a correlation between PetroFLAG® results and analytical results for potential future remediation work.

Additional soil screening specifics are located in Section 4 of Appendix A-1 in the WP/SAP.

2.1.4 Soil Sampling

As stated in Sections 2.1.2 and 2.1.3, samples for each boring were collected from either the soil core (direct-push) or drill cuttings (down hole hammer air rotary) depending upon screening results and field observations. Originally, only two samples for each boring were allocated – one at the highest screening interval and one at the water table or bottom of the borehole. Additional sampling was deemed necessary for the five boreholes that were extended using the down hole hammer air rotary system to fully characterize the vertical and lateral extent of contamination at the AST #5 site. Therefore, two to four samples were collected for analytical testing from each borehole. Samples collected from the direct-push sample cores were analyzed for GRO/BTEX, DRO/RRO, and PAHs. GRO/BTEX samples were collected immediately. Samples collected from the down hole hammer air rotary system were analyzed for DRO/RRO and PAHs; these samples were not analyzed for GRO/BTEX due to the likely loss of volatiles once the cuttings were blown up from down hole and collected using a 5-gallon bucket.

2.2 Water Investigation

Surface water and groundwater were sampled for laboratory analysis at or downgradient of the AST #5 site. Groundwater monitoring wells were installed in boreholes that encountered groundwater and that exhibited the desired hydrogeologic characteristics to complete project objectives. Surface water samples were collected from one surface seep and at three separate locations along Red Devil Creek (Figure 5).

2.2.1 Monitoring Well Installation and Development

A total of three monitoring wells were installed during the July 2010 release investigation. Two aquifer systems (shallow and deep) were identified at the AST #5 site. One well was installed in the shallow aquifer and two wells were installed in the deeper aquifer. Details regarding the geology and hydrogeology of the site and investigation results are located in Section 3.0.

All three wells were installed, completed, and developed as described in the Section 3.1.3 of the project WP/SAP. Well completion and development logs are located in Appendix C. Each well was constructed with Geoprobe® pre-packed 2-inch diameter schedule 40 PVC with 10-foot well screens with 0.010-inch slots and 20/40 factory silica sand filter pack. The annular space around the pre-pack was completed with 10/20 silica sand to at least 2 feet above the well screen, then hydrated bentonite chips were added to two feet bgs. A two foot concrete seal and locking monument was added to finish off each well. Total well depths vary from approximately 18 – 62.5 feet bgs.

Monitoring well development was conducted 24 hours following well installation. The overall goal of well development is to remove the “mudwall” created during drilling around the well annulus and develop a direct connection to the aquifer so that a representative groundwater sample may be collected. For the shallow monitoring well, a Grundfos® Redi-Flo4 submersible pump was used to develop the well by surging and varying pumping speed. For the deep wells, the Grundfos® Redi-Flo4 was only able to pump water for a short period of time due to high

sediment content from fines (clays and silts) that naturally exist within the local geology coupled with the extended well depth. A Proactive® Hurricane pump was also attempted to be used but was unsuccessful. Finally, the two deep wells were developed as best possible by using dedicated polyethylene bailers. Large volumes of water were removed from each well during the development process and prior to sampling, however, turbidity within the well water remained high. These wells were also sampled using the dedicated bailers.

Purge water and decontamination water from sampling activities was consolidated into a 55-gallon drum for transportation back to Anchorage, AK. The drum was then delivered to and properly disposed of at Emerald Services, Inc. waste and recycling facility.

2.2.2 Water Level Survey

The depth to groundwater and total depth of each well was measured from the top of the PVC casing prior to development and sampling. The elevation of the potentiometric surface within each well was calculated relative to the GPS and laser level surveyed reference point. Details regarding the surveying of monitoring wells can be found in Section 2.4.

Table 2 displays the date, total well depth, distance to top of screen, distance to bottom of screen, depth to water, stick-up height, and static water level elevation for each well. The depth-to-water measurements in Table 2 were measured prior to sampling following well development.

Figure 5 displays the locations of the newly installed monitoring wells. RDMW01 was installed within a shallow aquifer that appears to exist in a limited area based on surrounding boring information; no other borings contained indication of a shallow aquifer. RDMW02 and RDMW03 were installed into a relatively deeper aquifer. Hydrogeologic conditions are discussed further in Section 5.2.

2.2.3 Water Sampling

Four surface water samples and three groundwater samples were collected during the July 2010 release investigation. By assessing the presence or absence of hydrocarbon compounds in the surface water and groundwater collectively with the soil data, investigations at the Red Devil Mine AST #5 site were able to determine the extent of contamination and predict the potential migration of contamination at the site.

2.2.4 Surface Water Sampling

Site reconnaissance was conducted of the area immediately downgradient from the AST #5 site in order to identify the locations of seeps. Only one seep was located in this area and a surface water sample was collected. Three surface water samples were collected from Red Devil Creek: one upstream, one midstream, and one downstream relative to AST #5. Samples were collected as described in Section 3.1.6 of the WP/SAP (WESTON, 2010).

2.2.5 Groundwater Sampling

Three groundwater samples were collected using a submersible pump (shallow aquifer) and hand bailer (deep aquifer) directly from the newly installed temporary monitoring wells following well development. Two types of submersible pumps were attempted to be used for sample collection from the deep wells but high sediment content coupled with an extended distance to groundwater (approximately 35-41 feet bgs) prevented the pump from functioning properly. Samples were collected as described in the WP/SAP Appendix A-1, Section 3.1.4 except that a polyethylene bailer was used.

2.3 Sediment Sampling

A total of four sediment samples were collocated with the four surface water sample locations. Sediment samples were collected following the collection of surface water samples to decrease turbidity in the water samples. Sediment samples were generally collected by directly filling clean, approved sample containers. Section 3.1.5 in Appendix A-1 of the WP/SAP describes how sediment samples were collected.

2.4 Site Survey

A survey was conducted using a high-quality Trimble® base station and rover global positioning system (GPS) setup by WESTON field personnel. The site survey collected location information (x, y, and z-directional data) from all soil, soil boring, sediment, surface water, and monitoring well sample locations. Top of casing and ground surface elevations were surveyed at the monitoring well locations using a laser level referenced to the base station datum located near the site. All survey data is provided in Appendix G.

2.5 Waste Management

Wastes included both general refuse and investigation-derived waste (IDW). IDW accumulated during sampling and drilling activities included the following:

- general refuse (e.g., paper towels, plastic bags, plastic water containers);
- expended personal protective equipment (PPE);
- contaminated drill cuttings from soil boring installation; and
- wastewater from decontamination activities and well purging.

All general project drilling refuse and expended personal protective equipment were placed into large black garbage bags and taken to the Marsh Creek barge landing area for transport to an approved landfill facility for appropriate disposal. A minimal amount of soil core cuttings were produced during the drilling process – these cuttings were placed back into the hole in which the soil core originated. Purge water and decontamination water from sampling activities was consolidated into a 55-gallon drum for transportation back to Anchorage, AK where it was delivered to and properly disposed of at Emerald Services, Inc. waste and recycling facility.

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3.0 REGULATORY SCREENING CRITERIA

3.1 Soils

For this project, soil sample analytical results are compared to the ADEC Method Three site-specific cleanup levels which were approved in a letter from ADEC to the BLM dated 23 January 2009 (ADEC, 2009c). The approved ADEC Method Three site-specific cleanup values are as follows: GRO – 1,380 mg/kg, DRO – 1,190 mg/kg, RRO – 10,000 mg/kg, benzene – 0.087 mg/kg, ethylbenzene – 25.7 mg/kg, toluene – 25.2 mg/kg, xylenes – 362 mg/kg, naphthalene – 21 mg/kg, and phenanthrene – 4,300 mg/kg. Cleanup levels for all other PAH compounds were calculated using the ADEC Method Three calculator for all remaining PAH constituents using the default site parameters (http://www.dec.state.ak.us/spar/csp/webcalc/dsp_scenSelect.asp). Results are displayed in Appendix E. The generated values were directly comparable to the ADEC Method Two Migration to Groundwater cleanup levels located in Table B1 of 18 AAC 75.341. Table 3 displays the primary (ADEC Method Three) and secondary (ADEC Method Two Migration to Groundwater) screening criteria.

3.2 Groundwater, Surface Water, and Sediment

Groundwater sample analytical results were compared to the ADEC Groundwater Cleanup Levels found in 18 AAC 75, Table C (ADEC, 2008). Surface water sample analytical results were compared first to water quality standards identified in 18 AAC 70 (ADEC, 2009b). Certain parameters are not addressed in 18 AAC 70 (e.g., GRO, DRO, and RRO); therefore, total aromatic hydrocarbons (TAH) and total aqueous hydrocarbons (TAqH) are used to assess surface water quality. Constituents were identified in surface water and no water quality standards exist in 18 AAC 70, thus these values were compared to the groundwater cleanup levels in 18 AAC 75, Table C. Sediment sample analytical results for GRO, DRO, and RRO were compared to 18 AAC 75, Table B2 soil cleanup levels (ADEC, 2008). All other sediment sample analytical results were compared to the EPA Region V Ecological Screening Levels (REF) because no sediment criteria exists in the National Oceanic and Atmospheric Administration (NOAA) Screening Quick Reference Tables (SQuiRTs) for some of the analyzed constituents. Tables 4, 5, and 6 display the screening criteria for groundwater, surface water, and sediment, respectively.

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4.0 DATA EVALUATION

Data collected in 2010 as part of the AST #5 Release Investigation was evaluated to meet specified program objectives discussed in Section 1.2 of this report. Data evaluation was conducted in conjunction with four primary tasks. First, the data was evaluated against the quality criteria specified in the WP/SAP (WESTON, 2010) to assess the validity of the data collected. Second, AST #5 Release Investigation data was assessed to determine if there were significant occurrences of contaminants at the site above background levels, and to establish the overall magnitude and extent of the contaminants present. Finally, a comprehensive analysis of the nature and extent of soil and groundwater contamination at the former AST #5 location was made using the validated and statistically significant data.

4.1 Assessment of Data Quality

After completion of all field and analytical work, an assessment on the quality of the data obtained was conducted. The findings from this data quality assessment are included in the quality assurance/quality control (QA/QC) Report, which is presented in Appendix F. The data quality assessment includes a review of field records for completeness, sample data quality review, correlation of field test data, identification of anomalous data, and an assessment of the accuracy and precision of data consistent with the Quality Assurance Project Plan (QAPP) (WESTON, 2010).

A review of laboratory data that was performed focused on the following:

- Chain of custody forms.
- Holding times.
- Instrument tuning.
- Method calibration.
- Method blanks.
- Surrogates, internal standards, laboratory control samples, and matrix spikes.
- Verification of quantitation limits.
- Preparatory batch records.
- Corrective actions.
- Verification of quantitation.
- Completeness of data.

This review was conducted according to the specific protocol presented in the QAPP portion of the WP/SAP (WESTON, 2010).

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5.0 RESULTS

During the 2010 Release Investigation of AST #5, the nature and extent of contamination in soil, groundwater, surface water, and sediment was evaluated adjacent to and downgradient of the source area where the former AST was located.

The following sections describe the field and sampling activities for each media. Figures displaying sample and boring locations are also included within this section.

Photographs taken during the site investigation are included in Appendix A. Figure 5 displays all sample locations at the AST #5 site. Field notes are located in Appendix B and Soil Boring Logs, Well Installation Logs, Well Development Logs, and Groundwater Sample Logs are located in Appendix C. Appendix G includes all survey data and Appendix H contains all laboratory analytical data from Test America, Inc.

5.1 Soil

Borings were started in the approximate location of where the elevated confirmation sample results were identified in 2006 (Wilder, 2007) and placed thereafter to delineate hydrocarbon contamination both horizontally and vertically and to cover the area thought to have been impacted by the historic hydrocarbon release. Sixteen borings were advanced at the AST #5 site using a Geoprobe® with both direct-push and air rotary down hole hammer methods. Figure 5 displays the boring locations. All boring locations were advanced to refusal using direct-push and five locations were selected to be extended using the air rotary down hole hammer. Boring depths ranged from 15.5 – 63 feet bgs. Field screening results using a PID (in-situ and headspace) and Dexsil® PetroFLAG Analyzer System, coupled with visual and olfactory observations, aided in determining the intervals within each boring that contained relatively high levels of hydrocarbon contamination. This information was collected and assessed in the field in order to delineate the vertical and horizontal extent of hydrocarbon impacted soil and to determine where to collect samples for laboratory analysis. No stressed vegetation or surface staining was observed at the site.

The geology at the site was found to consist generally of about one foot to several feet of unconsolidated silty/sandy gravel, light brown to dark gray, moist, and assigned a USCS soil classification symbol of GM. Underlying the unconsolidated fill material, weathered/fractured silty/sandy layered shale bedrock was found across the entire site. The bedrock shale contained alternating layers dense, solid shale interbedded by less dense finely layered, highly weathered silty shale.

From each 5-foot core, a “most impacted” interval was selected based on PID readings and visual/olfactory observations. Once the boring was complete (encountered water table, refusal, or bottom of hole), the samples were analyzed for heated headspace using a PID. Two analytical samples per boring were selected for laboratory analysis: one from the most hydrocarbon impacted interval and one from immediately above the saturated zone or bottom of hole.

Additional samples were collected from the surface cuttings at the boreholes that were advanced using the air rotary down hole hammer system.

A total of 42 soil samples were collected (including 4 duplicates) for laboratory analysis: 36 samples for DRO/RRO, GRO/BTEX, and PAHs and 6 samples for DRO/RRO and PAHs. GRO/BTEX was decided not to be analyzed from the 6 samples collected during the air rotary down hole hammer drilling due to potential loss of volatile hydrocarbons as the cuttings traveled from the bottom of the boring to the ground surface.

Table 3 displays all soil sample analytical results. The sample name contains the boring location and sample interval as measured from the ground surface of the boring. Sample results do not indicate any exceedances above the primary ADEC Method Three screening levels for DRO/RRO, GRO/BTEX, or PAHs. GRO concentrations ranged from non-detect (ND) to 64.3 mg/kg, which was identified in the duplicate sample RDBH06-921.5-22.5. DRO concentrations ranged from ND to 772 mg/kg at RDBH10-6-7.5. All RRO sample results were reported as ND. Only RDBH08-0-1.5 contained traces of benzene, with a concentration of 0.0342 mg/kg. Toluene concentrations ranged from ND to 0.304 mg/kg, ethylbenzene concentrations ranged from ND to 1.51 mg/kg, and total xylene concentrations ranged from ND to 0.937 mg/kg. PAH concentrations were either ND or well below screening criteria.

5.2 Groundwater

Groundwater wells were installed in borings that exhibited a saturated zone thought sufficient enough to produce groundwater and in locations that would address the project objective of determining the extent of hydrocarbon impact on the local groundwater. Figure 5 displays the monitoring well locations. Two aquifers were identified at the AST #5 site: one limited shallow aquifer and one deep aquifer. One well, RDMW01 (boring RDBH02), was installed with a screened interval within the shallow aquifer; this was the only location where the shallow aquifer was identified, thus indicating its small extent and possible seasonal nature. Two wells, RDMW02 (boring RDBH07/RDBH07D) and RDMW03 (boring RDBH10/RDBH10D), were installed with screened intervals open to the deep, likely more regional, aquifer. Borings RDBH09/RDBH09D and RDBH15 both encountered the sites deep aquifer, but monitoring wells were not installed because additional wells were not necessary to establish impact of dissolved phase hydrocarbons.

All monitoring wells were installed with 2-inch PVC casing with pre-packed well screens and completed with a concrete top seal, monument, and locking lid. Sand was also added around the annular space to at least two feet above the screen interval, then sealed with hydrated bentonite chips to two feet bgs. The monitoring wells and their associated screening intervals are as follows: RDMW01 from 7.7 to 17.7 feet bgs, RDMW02 from 40.9 to 50.9 feet bgs, and RDMW03 from 52 to 62 feet bgs.

The groundwater parameters temperature, conductivity, dissolved oxygen, pH, oxidization reduction potential (ORP), and turbidity were monitored prior to sample collection. Parameters stabilized reasonably well given the collection method with a polyethylene bailer. Parameters

were recorded on field sampling logs located in Appendix C. Turbidity levels remained high for all three wells and did not stabilize despite extended purging. Thus, groundwater samples were collected that contained suspended sediment.

Groundwater sample results are displayed in Table 4. No samples contain concentrations that exceed ADEC Groundwater Cleanup Levels as determined in 18 AAC 75.345, Table C. The only sample that contained a detection of any analyte was RDBH-MW-001 for DRO with 0.601 mg/L. All other analytes were reported as ND for all three wells.

The hydrogeology and surface topography of the site has prevented extensive subsurface migration of contaminants. Based on the analytical results, the hydrocarbon release has had a minimal impact on the local shallow aquifer. This aquifer was proven at the time the borings were drilled to exist in a small area (maximum of 20 feet across with an area of approximately 315 ft^2) and potentially exists only seasonally. The deep aquifer is likely the more regional aquifer and did not contain any indication of hydrocarbon impact. This is due to the dense shale layers with low permeability that lie overtop the deep aquifer and has prevented substantial vertical migration of contaminants from near the ground surface. The shallow and deep aquifers do not appear to be connected in any manner and contaminants do not appear to be migrating offsite. Groundwater flow direction was unable to be determined because the three wells installed were not screened to the same aquifer. Groundwater flow in the shallow aquifer is concluded to be minimal due to its location within the depression of the site and small size. Additionally, the shallow aquifer may vary seasonally and be greatly affected by precipitation events. The groundwater flow direction of the deeper aquifer is thought to generally follow land surface topography and flow generally toward the north.

5.3 Surface Water

Surface water samples were collected at a total of four locations adjacent to the AST #5 site (Figure 5). Three samples were collected from Red Devil Creek: one upgradient from the site (RDM –SW-004), one down gradient of the site (RDM-SW-002), and one between upgradient and downgradient locations (RDM-SW-003/RDM-SW-003-DUP). Additionally, one surface seep sample was collected from the wooded area down slope from the AST #5 site (RDM-SW-001).

Surface water sample results are displayed in Table 5, along with associated screening levels. No surface water samples exceeded the ADEC Water Quality Standards (18 AAC 70.020) or ADEC Groundwater Cleanup Levels (18 AAC 75.345). Samples reported ND results for DRO/RRO, BTEX, and PAHs; GRO was the only analyte with detectable results. Concentrations of GRO ranged from 0.0502 to 0.122 mg/L.

The seep sample RDM-SW-001 had the greatest GRO concentration of 0.122 mg/L. Detectable concentrations of GRO were found at all three locations (upstream, middle, and downstream) along Red Devil Creek that contained very minimal concentration variations (maximum of 0.025 mg/L, between the duplicate and upstream sample). These results indicate that: 1) GRO is present in small concentrations in the seep water originating from AST #5 and within Red Devil

Creek, 2) the seep sample (RDM-SW-001) has a greater concentration (about double) than those collected from Red Devil Creek, and 3) GRO concentrations from samples collected upstream and downstream from AST #5 are similar, thus AST #5 is not contributing significant quantities of GRO to Red Devil Creek.

5.4 Sediment

A total of four sediment samples were collected and collocated with the surface water samples described above in Section 5.3. Sediment sample locations are displayed in Figure 5. Sediment samples consisted primarily of sand and small gravel and did not contain hydrocarbon sheen or odor.

Sediment sample results are displayed in Table 6. Sample results for the analytes tested indicated that no hydrocarbon related compounds were detected in any of the sediment samples – all sample results were reported as ND. This information indicates that soil and sediment are not being transported offsite, and that it is unlikely that substantial hydrocarbon sources from other areas are contributing impacted sediment to Red Devil Creek.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The project objective was to delineate the nature and extent of petroleum hydrocarbon contamination within the soil, groundwater, surface water, and sediment at the RDM AST #5 site. Samples were collected and field work was conducted to address this objective. Hydrocarbon impacted soil was identified at AST #5, however no soil sample concentrations were above the approved ADEC Method Three cleanup levels. Groundwater sample results indicated low concentrations of DRO (well below ADEC Groundwater Cleanup Levels) in the shallow aquifer and no hydrocarbon presence in the deeper aquifer. In surface water, GRO was detected below screening criteria in all samples collected and the remaining analyte results were ND. All sediment sample results were ND for all analytes.

Minimal offsite migration of petroleum hydrocarbon contamination appears to be occurring through one transport pathway – groundwater in the dissolved phase. This conclusion is based solely on the low level GRO concentrations discovered at the surface seep downgradient from the AST #5 site. No other contaminant transport mechanisms appear to be involved at the site.

In conclusion, no media demonstrated concentrations above site screening levels. The low level hydrocarbon concentrations detected do not appear to present any risk to human health and the environment. After a thorough investigation the results conclude that no further action should be required at the AST #5 site.

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7.0 REFERENCES

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TABLES

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Table 1 - Project Data Quality Objectives

Data Quality Objectives	Data Collected	Contaminants of Concern	Data Use	Decision Criteria
Delineate the extent of petroleum contamination in soils associated with AST #5	• Soil screening data using a PID and petroleum hydrocarbon screening kit • Installed 16 soil borings • Collected 42 (including duplicates) soil analytical samples	GRO, BTEX, DRO, RRO, and PAHs	Soil screening data was used to guide sample selection such that the interval exhibiting the highest screening result and the interval from directly above the groundwater interface or bottom of boring was sampled. Soil analytical data from borings was used to delineate the vertical and horizontal extents of contaminated soils.	18 AAC 75 Oil and Other Hazardous Substances Pollution, • Method Two, Table B2 default risk-based soil cleanup levels • Method Three site-specific cleanup levels
Delineate the extent of petroleum contamination in groundwater associated with AST #5	• Converted 3 soil borings into monitoring wells to facilitate groundwater sampling • Developed and collected field parameters characterizing groundwater conditions • Collected 3 groundwater analytical samples from newly installed monitoring wells	GRO, BTEX, DRO, RRO, and PAHs	Groundwater field parameters were used to refine known groundwater characteristics (elevation, flow, ORP, DO, pH, turbidity). Groundwater analytical data were used to delineate the nature and extent of groundwater contamination.	18 AAC 75 Oil and Other Hazardous Substances Pollution, • Table C Groundwater Cleanup Levels
Delineate the nature and extent of petroleum contamination in surface water and sediments associated with AST #5	• Conducted field survey to identify and locate seeps/surface water downgradient between the site and the Red Devil Creek • Collected 4 collocated surface water and sediment samples from seep and surface water locations between the site and the Red Devil Creek	GRO, BTEX, DRO, RRO, and PAHs TAH and TAqH (surface water)	Downgradient seep/surface water and sediment analytical samples were used to delineate the extent of contaminate migration	18 AAC 70 Water Quality Standards NOAA SQuiRTs (sediments) 18 AAC 75 Oil and Other Hazardous Substances Pollution, • Method Two, Table B2 default risk-based soil cleanup levels will be used for GRO, DRO, and RRO sediment cleanup levels. All other parameters will be compared to NOAA SQuiRTs PELs/TELs

AAC – Alaska Administrative Code
BTEX – benzene, toluene, ethylbenzene, xylenes
DRO – diesel-range organics
GRO – gasoline-range organics
NOAA – National Oceanic and Atmospheric Administration
PAHs – polycyclic aromatic hydrocarbons
PID – photoionization detector
RRO – residual-range organics
SQuiRT – Screening Quick Reference Tables
TAH – total aromatic hydrocarbon
TAqH – total aqueous hydrocarbon

Table 2 - AST 5 Monitoring Well Water Level Data
Red Devil Mine AST 5 Release Investigation

Well ID	Date	Well Depth (feet)[1]	Distance to Top of Screen (feet)[1]	Distance to Bottom of Screen (feet)[1]	DTW (feet)[1]	Distance between TOC and Ground Surface (feet)	Static Water Level Elevation (feet)
RDMW01	7/10/2010	21.90	11.40	21.40	15.11	3.69	275.25
RDMW02	7/12/2010	54.90	44.40	54.40	43.50	3.50	246.12
RDMW03	7/12/2010	65.90	55.40	65.40	38.75	3.37	255.91

Notes:
1 – Measurements were made from the top of casing (TOC).
TOC – Top of Casing
DTW – Depth to Water

Table 3 - Soil Sample Analytical Results
Red Devil Mine AST #5 Release Investigation

Sample ID[1]	Date Collected	QA/QC (duplicates and MS/MSD) Samples	Head space PID Results (ppm)	Petro FLAG Results (ppm)	Soil Type (USCS Symbol or general rock type)[4]	Analytical Data																				
						Fuels (mg/kg)			BTEX (mg/kg)				PAHs (mg/kg)[5]													
						Gasoline Range Organics	Diesel Range Organics	Residual Range Organics	Benzene (MRL)	Toluene (MRL)	Ethylbenzene (MRL)	Xylenes (total)	1-Methylnaphthalene	2-Methylnaphthalene	Acenapthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[b] flouranthene	Benzo[g,h,i]perylene	Chrysene	Flouranthene	Fluorene	Napthalene	Phenanthrene	Pyrene
ADEC Method Two Soil Cleanup Level (Under 40-inch Zone, Migration to Groundwater) [2]						300	250	11,000	0.025	6.5	6.9	63	6.2	6.1	180	180	3,000	3.6	12	38,700	360	1,400	220	20	3,000	1,000
ADEC Method Three Site Specific Soil Cleanup Level [3]						1,380	1,190	10,000	0.087	25.2	25.7	362	6.2	6.1	180	180	3,000	3.6	12	38,700	360	1,400	220	21	4,300	1,000
RDBH01-6.5-8.5	7/7/2010		4.1	261	GM	ND (4.62)	34	ND (56.2)	ND (0.0231)	ND (0.0462)	ND (0.0462)	0.213	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)
RDBH01-12.5-13.5	7/7/2010		9.5	56	Shale	ND (4.1)	ND (21.2)	ND (53.0)	ND (0.0205)	ND (0.0410)	ND (0.0410)	ND (0.115)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)
RDBH02-5-7	7/7/2010		1.7	303	OL	ND (4.69)	23.7	ND (57.2)	ND (0.0235)	ND (0.0469)	ND (0.0469)	0.173	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)
RDBH02-11.5-13	7/7/2010		3.2	142	Shale	ND (3.19)	ND (21.4)	ND (53.6)	ND (0.0160)	ND (0.0319)	ND (0.0319)	ND (0.0894)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)
RDBH03-4-5	7/7/2010		10.4	49	Shale	ND (3.83)	ND (22.0)	ND (54.9)	ND (0.0191)	ND (0.0383)	ND (0.0383)	ND (0.107)	ND (0.0053)	0.0056	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)
RDBH03-12-13	7/7/2010		8.1	38	Shale	ND (3.59)	ND (21.0)	ND (52.6)	ND (0.0180)	ND (0.0359)	ND (0.0359)	ND (0.101)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)
RDBH04-0.5-2	7/7/2010		4.7	203	Shale	ND (3.79)	ND (21.8)	ND (54.5)	ND (0.0189)	ND (0.0379)	ND (0.0379)	ND (0.106)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)
RDBH04-15-15.5	7/7/2010		2	63	Shale	ND (3.31)	ND (21.6)	ND (53.9)	ND (0.0166)	ND (0.0331)	ND (0.0331)	ND (0.0927)	ND (0.0052)	0.0096	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)
RDBH05-22-23	7/7/2010		112	691	OH	33.4	245	ND (54.5)	ND (0.0185)	0.205	0.773	1.07	0.1	0.028	0.03	ND (0.0056)	0.03	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	0.05	0.047	0.071	ND (0.0056)
RDBH05-34-35	7/7/2010		2.1	31	GM	ND (4.79)	ND (21.6)	ND (54.0)	ND (0.0239)	ND (0.0479)	ND (0.134)	ND	0.0058	0.016	0.0058	0.016	ND (0.0053)	ND (0.0053)	0.018	0.0068	0.038	0.061	ND (0.0053)	0.046	0.096	0.014
RDBH06-11-13	7/8/2010		5.4	159	GM	24.2	ND (22.1)	ND (55.4)	ND (0.0166)	1.68	0.535	0.937	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)
RDBH06-21.5-22.5	7/8/2010		71.6	667	Shale	52.4	399	ND (57.1)	ND (0.0196)	0.264	1.08	1.03	0.26	0.15	0.058	0.022	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	ND (0.0057)	0.094	0.22	0.094	ND (0.0057)
RDBH06-921.5-22.5	7/8/2010	DUP	71.6	1,539	Shale	64.3	275	ND (51.1)	ND (0.0189)	0.304	1.51	1.61	0.21	0.11	0.06	0.02	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	0.079	0.17	0.082	ND (0.0058)
RDBH07-8-9	7/8/2010		60.5	548	Shale	4.08	531	ND (53.4)	ND (0.0417)	0.0364	ND (0.0293)	0.144	0.055	0.048	0.012	ND (0.0054)	ND (0.0054)	ND (0.0054)	ND (0.0054)	ND (0.0054)	ND (0.0054)	ND (0.0054)	ND (0.0054)	0.018	0.0093	ND (0.0054)
RDBH07-22.5-23.5	7/8/2010		13.9	56	Shale	ND (3.36)	67.3	ND (53.4)	ND (0.0168)	ND (0.0336)	ND (0.0336)	ND (0.0940)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.013	ND (0.005)	ND (0.005)	0.013	0.032	ND (0.005)
RDBH08-0-1.5	7/8/2010		47.9	339	GM	11.9	211	ND (57.9)	0.0342	0.153	0.437	0.613	0.018	0.0066	0.011	ND (0.0056)	0.0096	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (0.0056)	ND (.0056)	0.014	0.047	0.0092	ND (0.0056)
RDBH08-18-19	7/8/2010	MS/MSD	7.1	23	Shale	ND (4.75)	ND (21.0)	ND (52.5)	ND (0.0237)	ND (0.0475)	ND (0.0475)	ND (0.133)	ND (0.0049)	ND (0.0049)	ND (0.0049)	ND (0.0049)	ND (0.0049)	0.0092	ND (0.0049)	ND (0.0049)	ND (0.0049)	ND (0.0049)	ND (0.0049)	ND (0.0049)	0.015	ND (0.0049)
RDBH09-10-11.5	7/8/2010		3.3	27	Shale	ND (3.09)	ND (21.4)	ND (53.6)	ND (0.0155)	ND (0.0309)	ND (0.0309)	ND (.0866)	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	ND (0.0051)	0.0054	ND (0.0051)
RDBH09-15-16	7/8/2010		1.5	42	Shale	ND (3.54)	ND (20.9)	ND (52.1)	ND (0.0177)	ND (0.0354)	ND (0.0354)	ND (0.0991)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	0.02	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	0.012	0.036	ND (0.0052)
RDBH10-2-4	7/8/2010		53.4	99	GM	ND (2.48)	26.9	ND (51.7)	ND (0.0124)	ND (0.0248)	ND (0.0248)	ND (0.0696)	0.011	0.019	ND (0.0053)	ND (0.0053)	ND (0.0053)	0.0056	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	0.012	0.0061	ND (0.0053)
RDBH10-6-7.5	7/8/2010		161	930	Shale	19.8	772	ND (52.0)	ND (0.0162)	0.0494	0.418	0.481	0.18	0.095	0.033	ND (0.0053)	0.0065	ND (0.0053)	ND (0.0053)	ND (0.0053)	0.0055	ND (0.0053)	0.046	0.065	0.037	ND (0.0053)
RDBH11-0-2	7/8/2010		33.6	157	GM	ND (3.42)	113	ND (55.0)	ND (0.0171)	ND (0.0342)	ND (0.0342)	ND (0.0958)	0.011	0.021	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	ND (0.0052)	0.0082	ND (0.0052)
RDBH11-30-31.5	7/8/2010		84.6	317	Shale	ND (3.54)	206	ND (52.7)	ND (0.0177)	0.0381	ND (0.0354)	ND (0.0992	0.21	0.21	0.016	0.064	ND (0.0053)	ND (0.0053)	ND (0.0053)	ND (0.0053)	0.0083	ND (0.0053)	0.02	0.16	0.034	ND (0.0053)
RDBH11-930-31.5	7/8/2010	DUP	84.6	-	Shale	8.76	296	ND (52.2)	ND (0.0203)	0.0661	0.56	0.289	0.25	0.25	0.016	0.0073	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.0076	ND (0.005)	0.022	0.18	0.042	ND (0.005)
RDBH12-1.0-3.0	7/8/2010		6.7	129	GM	ND (3.75)	31.1	ND (56.2)	ND (0.0188)	ND (0.0375)	ND (0.0375)	ND (0.105)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)
RDBH12-21-22.5	7/8/2010		12.4	72	GM	4.73	ND (22.7)	ND (56.8)	ND (0.0158)	0.036	0.165	0.15	0.0069	0.0074	ND (0.0069)	ND (0.0069)	ND (0.0069)	ND (0.0069)	ND (0.0069)	ND (0.0069)	ND (0.0069)	ND (0.0069)	ND (0.0069)	ND (0.0069)	ND (0.0069)	ND (0.0069)
RDBH7D-51.5-52.5	7/10/2010		0	81	Shale		ND (20.3)	ND (50.8)							ND (0.0141)	ND (0.0141)	ND (0.0141)	ND (0.0141)	0.0379	ND (0.0141)	0.0775	ND (0.0141)	ND (0.0141)	0.0715	0.141	ND (0.0141)
RDBH09D-20-21.5	7/11/2010		37.2	121	Shale	-	62.2	ND (52.1)	-	-	-	-	-	-	ND (0.0139)	ND (0.0139)	ND (0.0139)	ND (0.0139)	ND (0.0139)	ND (0.0139)	0.0276	ND (0.0139)	ND (0.0139)	0.0437	0.046	ND (0.0139)
RDBH09D-42-43	7/11/2010		0.4	71	Shale	-	ND (21.1)	ND (52.7)	-	-	-	-	-	-	ND (0.0144)	ND (0.0144)	ND (0.0144)	ND (0.0144)	0.0199	ND (0.0144)	0.0352	ND	ND (0.0144)	ND (0.0144)	0.0399	ND (0.0144)
RDBH10D-32-33	7/10/2010		83.1	124	Shale	-	75.3	ND (48.2)	-	-	-	-	-	-	ND (0.0137)	ND (0.0137)	ND (0.0137)	ND (0.0137)	ND (0.0137)	ND (0.0137)	0.022	ND (0.0137)	ND (0.0137)	0.0234	ND (0.0137)	ND (0.0137)
RDBH10D-61-63	7/10/2010		0	67	Shale	-	ND (21.0)	ND (52.4)	-	-	-	-	-	-	ND (0.0145)	ND (0.0145)	ND (0.0145)	ND (0.0145)	0.053	ND (0.0145)	0.0965	ND (0.0145)	ND (0.0145)	0.0917	0.176	0.0236
RDBH11D-52-53	7/10/2010		3.7	100	Shale	-	ND (20.0)	ND (49.9)	-	-	-	-	-	-	ND (0.0139)	ND (0.0139)	ND (0.0139)	ND (0.0139)	0.0269	ND (0.0139)	0.0596	ND (0.0139)	ND (0.0139)	0.0726	0.115	ND (0.0139)
RDBH13-29-	7/11/2010		230	322	Shale	5.85	354	ND (53.7)	ND (0.0195)	ND (0.0973)	ND (0.0973)	ND (0.0973)	-	-	ND (0.0144)	ND (0.0144)	ND (0.0144)	ND (0.0144)	0.0247	ND (0.0144)	0.0434	ND (0.0144)	0.0743	0.177	0.114	ND (0.0144)
RDBH13-929-30	7/11/2010	DUP	230	-	Shale	15.7	470	ND (64.6)	ND (0.0235)	ND (0.118)	ND (0.118)	0.191	-	-	ND (0.0143)	ND (0.0143)	ND (0.0143)	ND (0.0143)	0.02	ND (0.0143)	0.0365	ND (0.0143)	0.0562	0.116	0.0813	ND (0.0143)
RDBH13-36.5-37.5	7/11/2010		2.9	32	Shale	ND (4.87)	ND (21.5)	ND (53.7)	ND (0.0243)	ND (0.122)	ND (0.122)	ND (0.122)	-	-	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)	0.029	ND (0.0146)	0.0557	ND (0.0146)	ND (0.0146)	ND (0.0146)	0.0426	ND (0.0146)
RDBH14-8.5-9.5	7/11/2010		50.3	103	Shale	ND (2.70)	ND (21.5)	ND (53.6)	ND (0.0235)	ND (0.118)	ND (0.118)	ND (0.118)	-	-	ND (0.0142)	ND (0.0142)	ND (0.0142)	ND (0.0142)	0.0262	ND (0.0142)	0.0648	ND (0.0142)	ND (0.0142)	0.0213	0.0889	ND (0.0142)
RDBH14-98.5-9.5	7/11/2010	DUP	50.3	-	Shale	ND (4.68)	31.4	ND (53.4)	ND (0.0234)	ND (0.117)	ND (0.117)	ND (0.117)	-	-	ND (0.0144)	ND (0.0144)	ND (0.0144)	ND (0.0144)	0.0269	ND (0.0144)	0.0663	ND (0.0144)	ND (0.0144)	0.0218	0.0892	ND (0.0144)
RDBH14-14-15	7/11/2010	MS/MSD	4.9	36	Shale	ND (3.47)	ND (21.5)	ND (53.7)	ND (0.0173)	ND (0.0867)	ND (0.0867)	ND (0.0867)	-	-	ND (0.0143)	ND (0.0143)	ND (0.0143)	ND (0.0143)	0.0237	ND (0.0143)	0.0421	ND (0.0143)	ND (0.0143)	ND (0.0143)	0.0398	ND (0.0143)
RDBH15-22.5-23.5	7/12/2010		611	556	Shale	35.1	319	ND (56.0)	ND (0.0217)	ND (0.109)	0.124	0.489	-	-	ND (0.0147)	ND (0.0147)	ND (0.0147)	ND (0.0147)	ND (0.0147)	ND (0.0147)	0.025	ND (0.0147)	ND (0.0147)	ND (0.0147)	0.0626	ND (0.0147)
RDBH15-29-30	7/12/2010		330	394	Shale	9.88	243	ND (53.7)	ND (0.0213)	ND (0.107)	ND (0.107)	0.146	-	-	ND (0.0151)	ND (0.0151)	ND (0.0151)	ND (0.0151)	0.0163	ND (0.0151)	0.035	ND (0.0151)	ND (0.0227)	ND (0.0151)	0.0499	ND (0.0151)
RDBH16-10-11	7/12/2010		2.7	81	Shale	ND (4.11)	ND (21.7)	ND (54.3)	ND (0.0206)	ND (0.103)	ND (0.103)	ND (0.103)	-	-	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)	ND (0.0146)
RDBH16-20-25	7/12/2010		0.7	75	Shale	ND (2.84)	ND (21.2)	ND (53.1)	ND (0.0142)	ND (0.0710)	ND (0.0710)	ND (0.0710)	-	-	ND (0.0143)	ND (0.0143)	ND (0.0143)	ND (0.0143)	ND (0.0143)	ND (0.0143)	ND (0.0143)	ND (0.0143)	ND (.0143)	ND (0.0143)	ND (0.0143)	ND (0.0143)
Trip Blank			-	-	-	ND (3.33)	-	-	ND (0.0166)	ND (0.0333)	ND (0.0333)	ND (0.0932)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1 - The sample ID for each sample contains the borehole location from which the sample was collected and the sample interval in feet below ground surface

2 - The cleanup level corresponds to the ADEC Method Two Migration to Groundwater Cleanup Level as listed in 18 AAC 75.341, Tables B1 and B2, dated October 9, 2008.

3 - ADEC Method Three site-specific approved cleanup values for GRO, DRO, RRO, benzene, ethylbenzene, toluene, xylenes, napthalene and phenanthrene are listed (ADEC, 2009).

Other Method Three site-specific parameters were calculated with the Method Three Cumulative Risk Calculator using default parameters (see Appendix H in report).

4 - Soil classification; GM= silty gravels, gravel-sand-silt mixture; OL= Organic silts and organic silty clays of low plasitcity; OH= Organic clays of medium to high plasticity.

5 - Only PAHs that were detected are listed in this table. A complete list of PAH results are listed in Appendix H of the report.

Abbreviations:

"-" Not analyzed

ADEC – Alaska Department of Environmental Conservation

DUP – duplicate sample, collected from sample listed above

mg/kg – milligrams per kilogram

MRL – Method Reporting Limit

MS/MSD – matrix spike/matrix spike duplicate

ND – Analyte not detected at or above the reporting limit (laboratory reporting limit in parenthesis)

QA/QC – Quality Assurance/Quality Control

USCS – Unified Soil Classification System

Table 4 - Groundwater Sample Analytical Results
Red Devil Mine AST 5 Release Investigation

Sample ID	Sample Location (Boring ID/Location)	Date Collected	Analytical Data[2]						
			Fuels (mg/L)			BTEX (mg/L)			
			Gasoline Range Organics	Diesel Range Organics	Residual Range Organics	Benzene	Toluene	Ethylbenzene	Xylenes (total)
	ADEC Groundwater Cleanup Levels[1]		2.2	1.5	1.1	0.005	1.0	0.7	10
RDBH-MW-001	RDBH02	7/10/2010	ND (0.08)	0.601	ND (0.4)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
RDBH-MW-002	RDBH07/RDBH07D	7/12/2010	ND (0.08)	ND (0.4)	ND (0.4)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
RDBH-MW-003	RDBH10/RDBH10D	7/12/2010	ND (0.08)	ND (0.455)	ND (0.455)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)
Trip Blank	-		ND (0.08)	-	-	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.001)

Notes:

1 - Derived from 18 AAC 75.345, Table C, Groundwater Cleanup Levels, dated October 9, 2008.
2 - All groundwater samples were analyzed for PAHs. The PAH results for all groundwater samples were non-detect for all analytes and are not included in this table. Complete PAH results are included in Appendix H of this report.

Abbreviations:

"-" Not analyzed
ADEC – Alaska Department of Environmental Conservation
mg/L – milligrams per liter
MRL – Method Reporting Limit
ND – Analyte not detected at or above the reporting limit (laboratory reporting limit in parenthesis)
QA/QC – Quality Assurance/Quality Control

Table 5 - Surface Water Sample Analytical Results
Red Devil Mine AST 5 Release Investigation

Sample ID	Sample Location	Date Collected	QA/QC (duplicates and MS/MSD) Samples	Analytical Data								
				Fuels (mg/L)			BTEX (mg/L)				Total (mg/L)	
				Gasoline Range Organics	Diesel Range Organics	Residual Range Organics	Benzene (MRL)	Toluene	Ethylbenzene	Xylenes (total)	TAH[3]	TAqH[4,5]
	ADEC Water Quality Standards[1]			-	-	-	-	-	-	-	0.010	0.015
	ADEC Groundwater Cleanup Levels[2]			2.2	1.5	1.1	0.005	1.0	0.7	10	-	-
RDM-SW-001	Seep	7/7/2010		0.122	ND (0.532)	ND (0.532)	ND (.0005)	ND (.0005)	ND (.0005)	ND (.0015)	ND	ND
RDM-SW-002	Downstream	7/7/2010	MS/MSD	0.075	ND (0.442)	ND (0.442)	ND (.0005)	ND (.0005)	ND (.0005)	ND (.0015)	ND	ND
RDM-SW-003	Middle stream	7/8/2010		0.0741	ND (0.439)	ND (0.439)	ND (.0005)	ND (.0005)	ND (.0005)	ND (.0015)	ND	ND
RDM-SW-003-DUP	Middle stream	7/8/2010	DUP	0.0502	ND (0.417)	ND (0.417)	ND (.0005)	ND (.0005)	ND (.0005)	ND (.0015)	ND	ND
RDM-SW-004	Upstream	7/8/2010		0.0761	ND (0.431)	ND (0.431)	ND (.0005)	ND (.0005)	ND (.0005)	ND (.0015)	ND	ND
Trip Blank				ND (.050)	ND (0.431)	ND (0.431)	ND (.0005)	ND (.0005)	ND (.0005)	ND (.0015)	ND	ND

Notes:
1 - Alaska State Regulations do not establish cleanup levels for individual chemicals, GRO, DRO or RRO in surface water. The water quality standards established by Alaska regulation 18 AAC 70 specifies that "Total Aqueous Hydrocarbons (TAqH) in the water column may not exceed 15 µg/L and Total Aromatic Hydrocarbons (TAH) in the water column may not exceed 10 µg/L" (18 AAC 70.020(b)(5)(A)(iii)], dated July 1, 2008.
2 – Derived from 18 AAC 75.345, Table C, Groundwater Cleanup Levels, dated October 9, 2008.
3 – TAH is equal to the sum of all BTEX analyte results.
4 – TaqH is the sum of Total PAH and TAH analyte results. All Total PAH results were Non-Detect.
5 – All surface water samples were analyzed for PAHs. The PAH results for all surface water samples were non-detect for all analytes and are not included in this table. Complete PAH results are included in Appendix H of this report.

Abbreviations:
"-" Not analyzed
ADEC – Alaska Department of Environmental Conservation
DUP – duplicate sample, collected from sample listed above
mg/L – milligrams per liter
MRL – Method Reporting Limit
MS/MSD – matrix spike/matrix spike duplicate
ND – Analyte not detected at or above the reporting limit (laboratory reporting limit in parenthesis)
PAH – polyaromatic hydrocarbon = Total BTEX
QA/QC – Quality Assurance/Quality Control
TAH – total aromatic hydrocarbon = Total BTEX
TAqH – total aqueous hydrocarbon = TAH + Total PAH

Table 6 - Sediment Sample Analytical Results
Red Devil Mine AST 5 Release Investigation

Sample ID	Sample Location (Boring ID/Location)	Date Collected	QA/QC (duplicates and MS/MSD) Samples	Analytical Data						
				Fuels (mg/Kg)			BTEX (mg/Kg)			
				Gasoline Range Organics	Diesel Range Organics	Residual Range Organics	Benzene	Toluene	Ethylbenzene	Xylenes (total)
	ADEC Method Two Soil Cleanup Level (Under 40-inch Zone, Migration to Groundwater)[1]			300	250	11,000	-	-	-	-
	EPA Region 5 Ecological Screening Levels[2]			-	-	-	0.142	1.22	0.175	0.433
RDM-SED-001	Seep	7/7/2010		ND (2.4)	ND (32.0)	ND (79.9)	ND (0.0102)	ND (0.0204)	ND (0.0204)	ND (0.0570)
RDM-SED-002	Downstream	7/7/2010	MS/MSD	ND (1.6)	ND (23.7)	ND (59.4)	ND (0.008)	ND (0.0162)	ND (0.0162)	ND (0.0452)
RDM-SED-003	Middle stream	7/8/2010		ND (2.03)	ND (21.4)	ND (53.4)	ND (0.0102)	ND (0.0203)	ND (0.0203)	ND (0.0570)
RDM-SED-003-DUP	Middle stream	7/8/2010	DUP	ND(1.42)	ND (21.7)	ND (54.4)	ND (0.0071)	ND (0.0142)	ND (0.0142)	ND (0.0398)
RDM-SED-004	Upstream	7/8/2010		ND(1.92)	ND (22.2)	ND (55.5)	ND (0.0096)	ND (0.0192)	ND (0.0192)	ND (0.0538)

Notes:
1 - The cleanup level corresponds to the ADEC Method Two Migration to Groundwater Cleanup Level as listed in 18 AAC 75.341, Tables B1 and B2, dated October
2 - Values were derived from EPA Region 5 Ecological Screening Levels dated August 22, 2003.
3 - All sediment samples were analyzed for PAHs. The PAH results for all sediment samples were non-detect for all analytes and are not included in this table. Complete PAH results are included in Appendix H of this report.

Abbreviations:
"-" Not analyzed
ADEC – Alaska Department of Environmental Conservation
DUP – duplicate sample, collected from sample listed above
EPA – Environmental Protection Agency
mg/Kg – milligrams per kilogram
MRL – Method Reporting Limit
MS/MSD – matrix spike/matrix spike duplicate
ND – Analyte not detected at or above the reporting limit (laboratory reporting limit in parenthesis)
QA/QC – Quality Assurance/Quality Control

The ESL reference database consists of Region 5 media-specific (soil, water, sediment, and air) Ecological Screening Levels (ESLs) for RCRA Appendix IX hazardous constituents. The ESLs are initial screening levels with which the site contaminant concentrations can be compared. The ESLs help to focus the investigation on those areas and chemicals that are most likely to pose an unacceptable risk to the environment. ESLs also impact the data requirements for the planning and implementation of field investigations. ESLs alone are not intended to serve as cleanup levels. See the August 2003 revision of the ESLs (formerly EDQLs) at http://www.epa.gov/reg5rcra/ca/ESL.pdf

FIGURES

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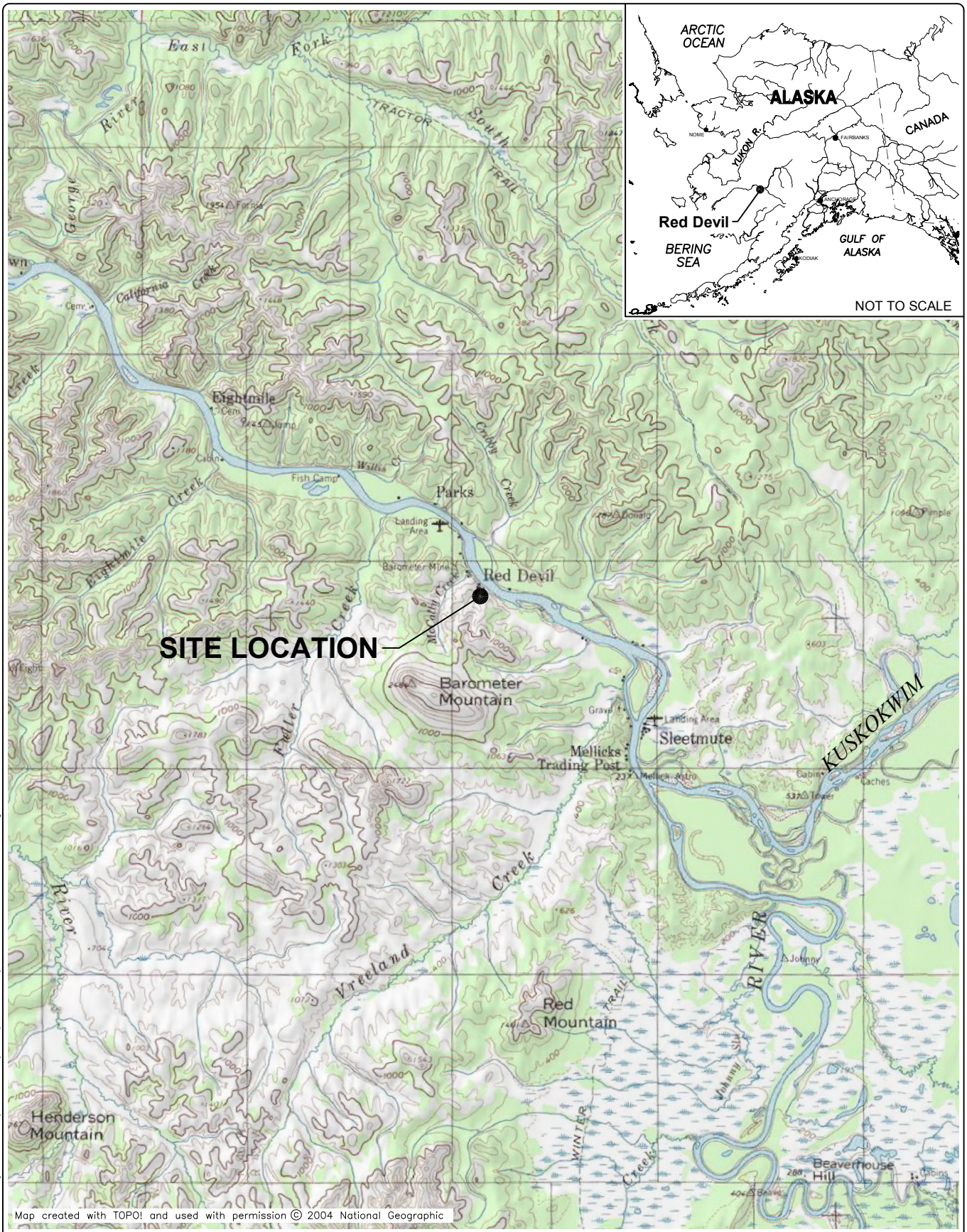


Drawn By: SJ K:\PROJECTS\Govt\Red_Devil\2009_Red_Devil_Mine-01.dwg

4-Nov-09 9:20 AM

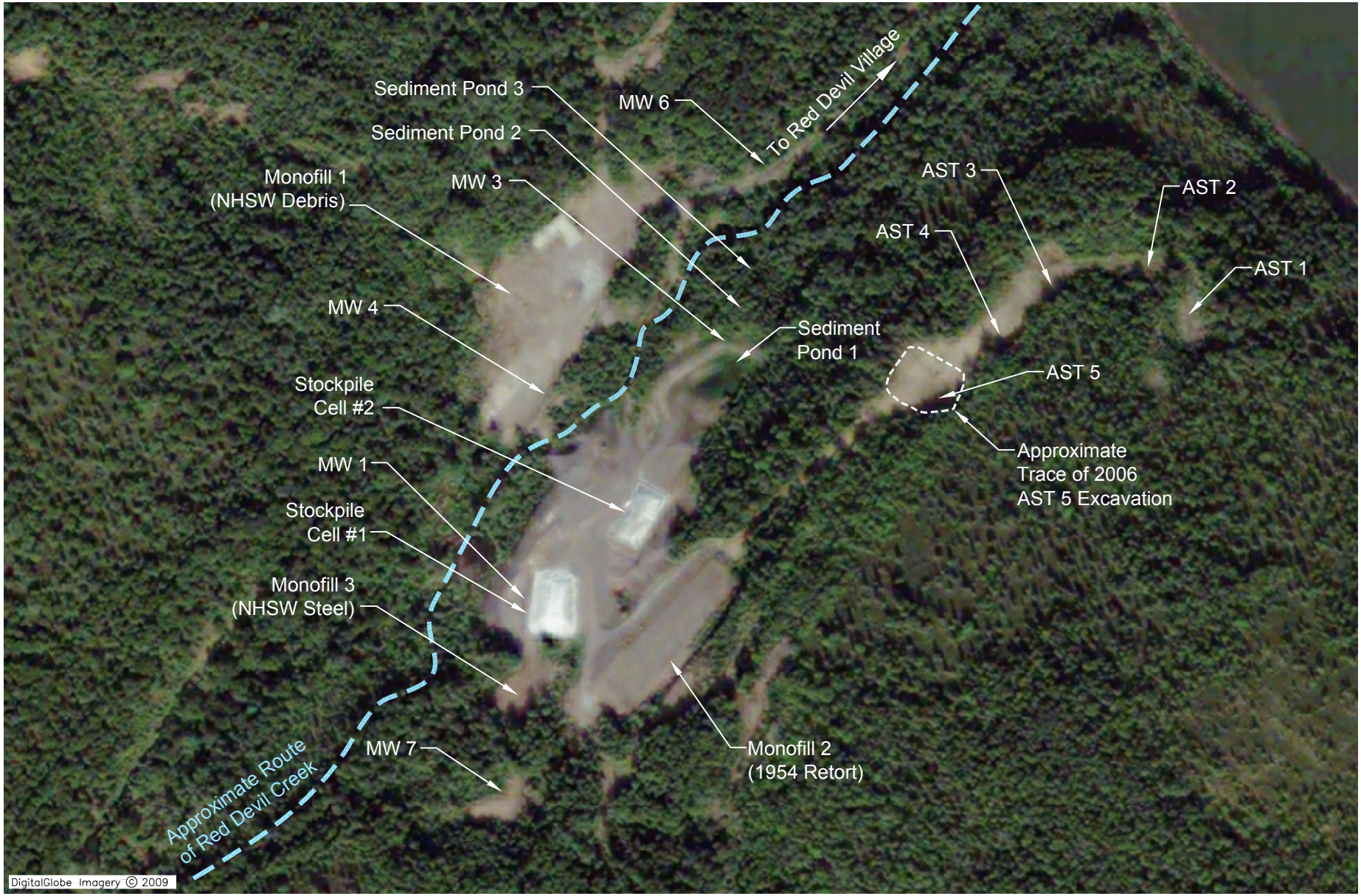
N W E S

0 4
SCALE (miles)

RED DEVIL MINE
SITE LOCATION MAP
Red Devil Mine, Alaska

Figure
1

12-Jan-10 9:09 AM Drawn By: SJ K:\PROJECTS\Govt\Red_Devil\2009_Red_Devil_Mine-01.dwg



N
W E
S

0 200
SCALE (feet)

Imagery Data:
Quickbird-2 Satellite Image, pan sharpened
Resolution - 0.6 meters
Coordinate System: UTM Zone 4, WGS84, meters

SITE LAYOUT MAP

Red Devil Mine, Alaska

Figure

2

References

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(15) Wright, W.S., and F.A. Rutledge. 1947. *Red Devil mercury-antimony mine, Sleetmute.* Bureau of Mines Supplemental Report, 31 pp.

Production Summary (10)

Year	Flasks of Mercury
1933-1940	11
1940	158
1941	135
1942	117
1943-1944	1,096
1945	962
1946	491
1953-1954	1,084
1956-1960	19,800
1961	3,200 (approximate)
1962-1963	4,800
1969-1971	3,146 (approximate)
Total	**35,000**

HISTORIC

1930

- 1933 Hans Halverson discovered and staked Red Devil Mine (11); Nick Mellick acquires half interest a few years later and additional claims are staked, Red Devil Nos. 1-4, Kusko Nos. 1 and 2, and Eurica Nos. 1, 2, and 3 (15)
- 1939 Retort from the Parks property moved and rebuilt at Red Devil Mine Site (11)
- pre-1940 production was 11 flasks retorted from creek float and overburden using several Johnson McKay Tubes (15)
- 1940 Installed 2 "D" type retorts (1 ton per day capacity); 3 months production 158 flasks (15)
- 1941 U.S. Bureau of Mines performed extensive surface work and mapping (4), second adit and drift driven, deepened Red Devil main shaft (15)
- Fall of 1941 Harold Schmidt and LJ Stampe of Fairbanks lease property (15)
- Late 1941 New Idria Mining Company of California subleased property and formed New Idria-Alaska Quicksilver Mining Company (New Idria-AK) - Mining and furnace equipment installed including a 40 ton rotary kiln and condensing system (15).
- 1941 Production was 135 flasks (15)
- 1942 Another adit was driven; production was 117 flasks (15)

1940

- Winter 1942-1943 U.S. Bureau of Mines continued surface exploration program (15)
- 1943-mid 1945 Mine produced more than 2,000 flasks (9)
- 1943 Approximately 500 feet of drift and crosscuts were worked; more furnace and retort equipment was installed (including a reduction plant, a 50-ton fine ore bin, a 12-ton burned ore bin, a 36-inch by 40-foot rotary kiln, Sirocco dust collectors, fan condensers, and a redwood tank (14)
- 1943 Reserve estimates 7 leases had 11,360 tons of ore containing 45.3 pounds of mercury per ton plus 15,900 tons containing 36.7 lbs of mercury per ton (3)
- 1944 Ore mined in 1943 and 1944 was treated; production was 1,096 flasks (10, 15)
- 1945 February New Idria-AK contracted Kuskokwim Mining Company (Harold Schmidt, Glen Franklin, Earl Ellingen, and L J Stampe) to extend Red Devil shaft; later in the year Kuskokwim Mining Company subleased the mine and reduction plant (15)
- 1945-46 extensive exploration and development; mine operated for two 4-month seasons (15)
- 1945 Produced 962 flasks in 127 days of mining but operations were suspended because of dropping market price (14)

1950

- 1946 Robert Lyman held the lease on the property and produced 491 flasks (6) mine shut down at end of 1946 season because of declining prices (9)
- 1947-1951 Work at the mine was limited to Annual Assessment requirements (6)
- 1949 New Idria-AK sold all mining and furnacing equipment to Robert Lyman (9)
- 1949-1951 Mine inactive (9)
- 1952-1956 Production was 15,486 flasks (9)
- 1952 Claims located and staked by Halverson and Mellick of Alaska Research Company (BLM); Decoursey Mountain Mining Company acquired lease (6); loan from Defense Minerals Exploration Administration for additional exploration and production (8)
- 1953 Decoursey Mountain Mining Company dewatered the mine and operations were restarted (6)
- 1953-1954 Production was 1,084 flasks from 2,500 tons of ore in the Gould rotary kiln (6)
- 1954 October Plant fire destroyed most of the mine site and mill equipment and some of the camp buildings; controlling interest was sold to Brewis and White (a Canadian mining company) and renamed DeCoursey Brewis (7)

1960

- 1955 DeCoursey Brewis rebuilds Red Devil Mine (6)
- 1956-1963 produced 27,800 flasks (9)
- 1956 Claims staked by Hans Halverson (BLM)
- 1956 DeCoursey Brewis resumes production and operations (10)
- 1956 Herreshoff furnace installed (10)
- 1957 Dolly shaft sunk (8); mine was producing more than 5,000 flasks (10, 12)
- 1958 Condenser tubes replaced and a dryer added increasing capacity 50% (9)
- 1959 DeCoursey Mountain Mining changed its name to Alaska Mines and Minerals, Inc. (8) and DeCoursey Brewis name changed to Consolidated Brewis (7)
- 1959 Klebs Cyclone and agitator installed to treat condenser mud (9)
- 1961 Mine is nine unpatented claims Kusko 1-5 held by Alaska Mines and Minerals Inc (AK Mines); Red Devil Nos. 1-4 owned by Halverson and Mellick and leased to the mining company (9)
- 1961 Production 3,200 flasks (9)

1970

- 1963 September 1 property shut down, all equipment removed and workings allowed to flood; September 19 water at 300-foot level, shaft was sealed and all portals closed; October Don Holloway and Mariano Juancorena obtained 1-year lease. Jack Neubauer joined them and hired miners. Drove 100-foot adit in Red Devil Gulch and stockpiled 40 tons of high grade ore (6)
- 1964 Known ore bodies exhausted; further exploration financed by Office of Mineral Exploration; failed to identify economic/minable ore; so production limited to small lease holders (7)
- 1964-1969 Mine inactive (7)
- 1966 Price of mercury rises and company seeks financing to start operations; they own over 50 claims and have worked only 4 (7)
- 1968 Plans for a flotation plant for $300,000 with Matanuska Valley Bank. Nissho-Iwai Company Limited and Nomura Mining Company Limited agreed to add $225,000 for opening mine and exploration with cinnabar concentrate to be shipped to Japan (7)
- 1969 AK Mines defined additional economic ores and started open pit mining, mine has retort plant with 40 tons per day capacity, two light plants, several fuel storage tanks, machine shops, offices, dormitories, apartments, and a flotation plant that can process 100 tons of ore per day (7)

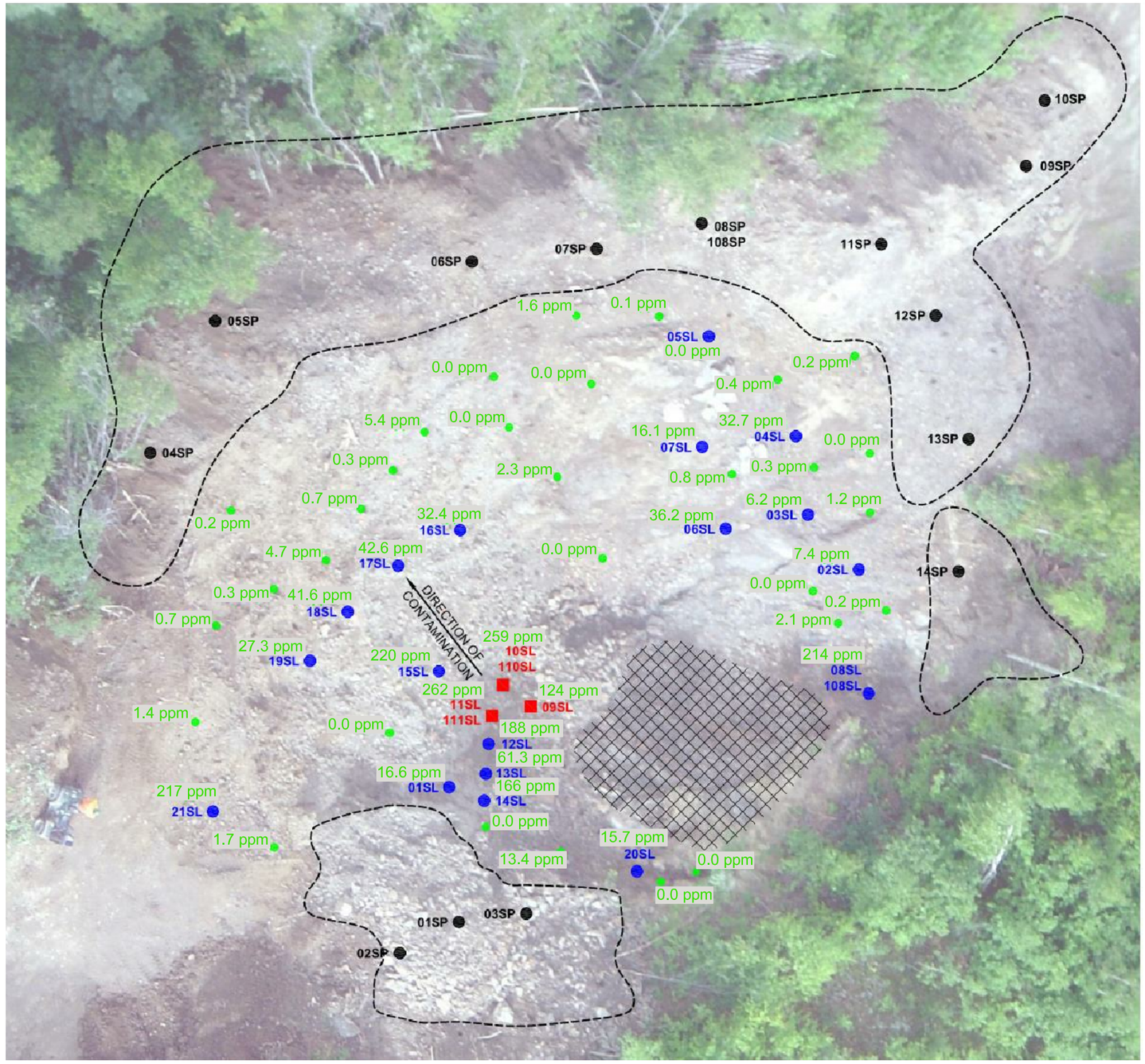
1980

- 1970 Red Devil Mine is the largest mercury producer in Alaska with a crew of 34 (1)
- 1971 Mine shut down because of market price drop (1)
- 1981 Mine is closed and allowed to flood (2)
- 1982 Approximately 35,000 flasks of mercury produced from 1940-1972 (5)

MODERN

RED DEVIL MINE
HISTORIC TIMELINE
Red Devil Mine, Alaska

Figure 3



Backgound Drawing Source: URS Corp. drawing dated June 2007, Project No. 26219741

LEGEND

- 26RDEXXSP — SUSPECT CLEAN SOIL STOCKPILE CONFIRMATION SAMPLE
- 26RDEXXSL — CONFIRMATION SAMPLE BELOW ADEC CLEANUP STANDARDS
- 26RDEXXSL — SAMPLE EXCEEDING ADEC CLEANUP STANDARDS
- 0.0ppm — PID READING
- CLEAN SOIL STOCKPILE
- UNSTABLE VERTICAL ROCK FACE (NO SAMPLES IN THIS AREA)

N W E S

0 10
APPROXIAMTE SCALE (feet)

AST 5 2006 SAMPLE LOCATION MAP
(WILDER, 2007)
Bureau of Land Management
Red Devil Mine, Alaska

Figure
4

Oct 15, 2010 – 9:52am Drawn By: SJ K:\PROJECTS\Govt\Red_Devil\2010_Red_Devil_Mine-01.dwg

N
W
E
S

0 60
SCALE

DATE: Oct 14, 2010

LEGEND

- Sediment & Surface Water Sample Location
- Borehole Location
- Borehole/Monitoring Well Location

AST 5 2010 SAMPLE LOCATIONS MAP

Bureau of Land Management
Red Devil Mine, Alaska

Figure
5

Oct 14, 2010 – 4:06pm Drawn By: SJ K:\PROJECTS\Govt\Red_Devil\2010_Red_Devil_Mine-01.dwg

APPENDIX A
PHOTOGRAPHIC LOG

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RED DEVIL MINE
AST 5 Release Investigation
July 2010

Photo 1: Geoprobe® direct-push drill rig at BH01. Facing NE.

Photo 2: Geoprobe® with air rotary down-hole hammer at BH08. Facing N.

Photo 3: Typical geology of bedrock shale. Core from BH03

Photo 4: Typical geology of saturated zone. Core from BH02.

Photo 5: Collecting samples from air rotary down hammer drilling at BH10/10A. Facing E.

Photo 6: Typical samples collected from air rotary down-hole hammer drilling.

Photo 7: Monitoring wells and borehole locations. Facing W.

Photo 8: Monitoring wells and borehole locations. Facing W.

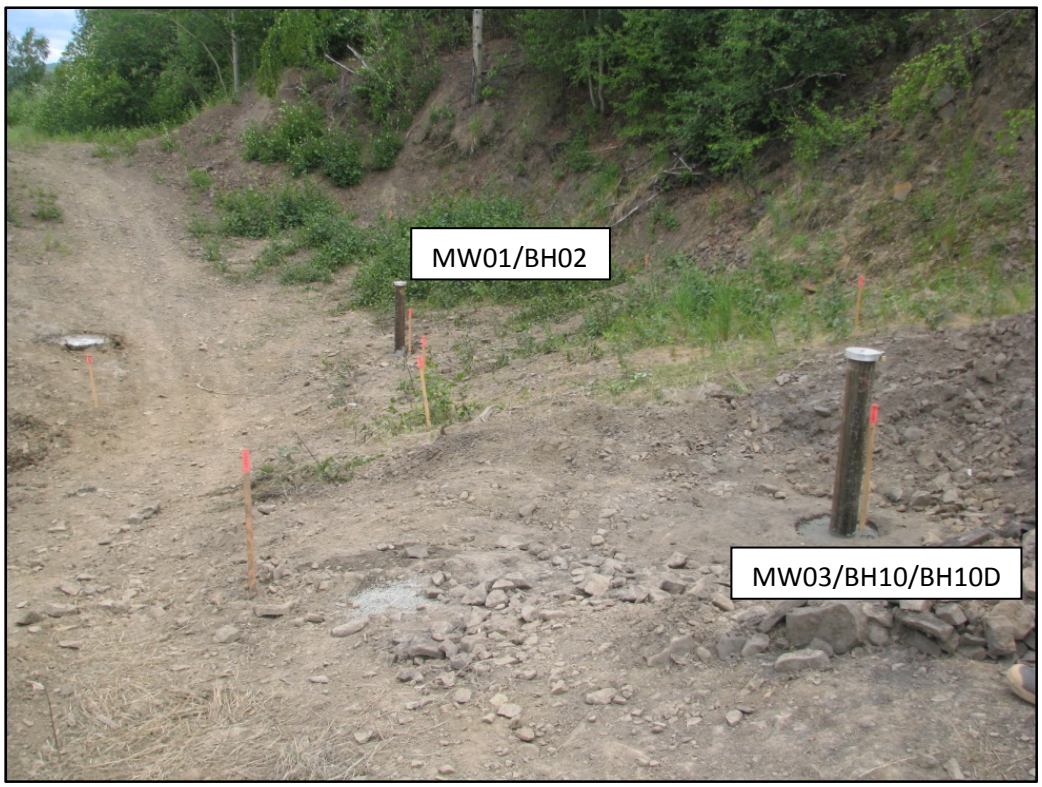

Photo 9: Monitoring wells and borehole locations. Facing E.

Photo 10: Monitoring wells and borehole locations. Facing W.

Photo 11: Borehole locations BH08 (foreground), BH11/BH11D, and BH13 (background). Facing NE.

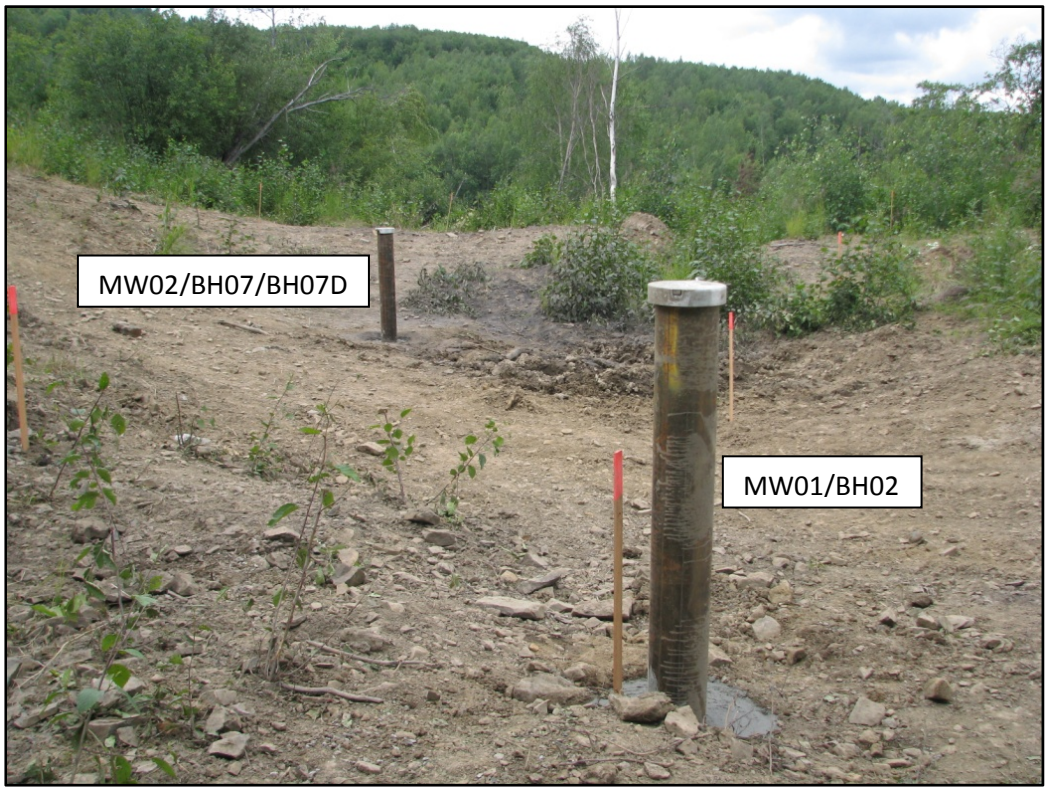

Photo 12: Monitoring wells and borehole locations. Facing N.

APPENDIX B
FIELD NOTES

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chemicals consi
potential for eco

3.6 SUMMA

The potential r
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more details on
context of the u
information. T
literature-based

Table 3-23 sum
COCs associat

3.6.1

A qualitative co
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from the literat
significant.

3.6.2

Potential risks
literature with
Although the
qualitative dis
potential for r
organisms at

TABLE 3-23

S			
Diesel Fuel			
Garage (SS02)	PCBs (Aroclor 1254)	[illegible]	[illegible] level because of bioaccumulation
Air Terminal Area (SS03)	None	not significant	not significant

RED DEVIL MINE

AST #5 INVESTIGATION

"Rite in the Rain"®
ALL-WEATHER
ENVIRONMENTAL
No. 550F

BLM / MARSH CREEK

2010

CONTENTS

PAGE	REFERENCE	DATE

Location RED DEVIL MINE Date 7-6-10

Project / Client AST #5 Investigation / Marsh Creek

~~0900 JC~~ J. Craner, K. Willingham, B. Blount, J. Dillon

weather: partly sunny / rain

0900: Depart Anchorage via AK Air Taxi to Red Devil Mine.

1100: Arrive at Red Devil, shuttle gear to lodge and conduct H+S meeting w/ Marsh Creek.

1200: Lunch.

1300: Check in w/ Lynden Air Cargo to determine when cargo plane will arrive. Won't arrive till 1600.

1600: Lynden Air Cargo plane arrives w/ WESTON + GEOTEK supplies. Unload plane shuffle gear to lodge + site.

2000: Head up to site to stake out first borehole location @ AST #5.

2230: Done for day.

Jerry Craner

Location RED DEVIL MINE Date 7-7-10

Project / Client AST #5 Investigation / Marsh Creek

p. cloudy 70°F. J. Craner ; B. Blount

7:00 - Prep gear and get ready to drill
8:30 - Head up to AST #5 site.
9:30 - Begin drilling RDBH01
11:15 - Complete drilling RDBH01.
11:20 - Begin drilling RDBH02
14:30 - Complete drilling RDBH02.
15:15 - Begin drilling RDBH03.
16:00 - Complete drilling RDBH03.
16:10 - Begin drilling RDBH04.
17:40 - Complete drilling RDBH04.
17:40 - Begin drilling RDBH05.
18:30 - Complete drilling RDBH05.
19:30 - DINNER Head back out to site to complete core logging and well installation at RDBH02.
- Conduct Petro Flag sampling and final sampling.
23:00 - Done for day.

7-7-10

Location RED DEVIL MINE Date 7-8-10

Project / Client AST #5 Investigation / Marsh Creek

Sunny, 70-80°F

800: Pack gear + leave for site.
800: Calibrated PID #1812
Fresh air cal: 0.0 ppm
100 ppm isobutylene: 100 ppm
Bump check: 100 ppm
820: Begin drilling RDBH06.
920: Complete drilling RDBH06.
925: Begin drilling RDBH07
1050: Complete drilling RDBH07.
1120: Begin drilling RDBH08.
1200-1230 → LUNCH.
1330: Complete drilling RDBH08.
1335: Begin drilling RDBH09.
1410: Complete drilling RDBH09.
1430: Begin RDBH10.
1530: Complete RDBH10.
1535: Begin RDBH11.
1700: Complete RDBH11.
1720: Begin RDBH12.
1820: Complete RDBH12.
1900-1930: Lunch
1930-2200: Construct x-sections for review. Done for day

7-8-10

Location RED DEVIL MINE Date 7-9-10

Project / Client AST #5 Investigation / Marsh Creek
J. Craner, B. Blount

7:00 - Gather gear and Load ATV for trip to site
7:15 - Arrive at site.
Calibrate PID # 1812
Fresh air cal. : 0.0 ppm
100 ppm isobutylene : 100 ppm
Bump check : 101 ppm
750 - Start drilling RDBH03D. Had refusal @ 18 ft with narrow diameter MC (2.25") system. Jammed Liner in barrel. REFUSAL
820 : Done with RDBH03D.
830 : With narrow 2.25" MC, begin drilling RDBH11D. Jam up core liner in barrel
930 : at 38.5' REFUSAL. Decide to get tooled up to begin downhole hammer / Air rotary system.
- Drillers get prepped for air rotary.
12:00 - 1230 LUNCH
1230 - Drillers prep for air rotary
1430 - Begin drilling ~2 feet from original RDBH11. Gets very dusty during
1500 air rotary work. Decide to stop work to find dust masks.

Jerry Craner 7-9-10

Location RED DEVIL MINE Date 7-9-10

Project / Client AST #5 Investigation / Marsh Creek
J. Craner, B. Blount

1800 : Complete drilling of RDBH11 #1
1830 : Set up on borehole RDBH07D
1900 : Head back to lodge for dinner.
2030 : Head up to site w/ Jody to go over progress of drilling
2100 : Back at lodge, done for day.

+ 1.5

7-9-10

Jerry Craner

Location RED DEVIL MINE Date 7-10-10

Project / Client AST #5 Investigation / Marsh Creek
J. Craner, B. Blount

WEATHER: Overcast / Light rain, 60°F

700 : Mob gear and head up to site.

730 : Conduct safety meeting.
Calibrate PID # 1812
Fresh air cal : 0.0 ppm
100 ppm isobutylene : 100 ppm
Bump check : 100 ppm

745 : Start drilling RDBH07D

1020 : Complete drilling RDBH07D x1 DRO/RRO PAHs

1400 : Set monitoring well RD ~~BH07D~~ MW 02

1430 : Start drilling RDBH10D.

1630 : Complete drilling RDBH10D. x2 DRO/RRO PAHs

2000 : Set monitoring well RDMW03.

FISHING.

7-10-10

Jerry Craner

Location RED DEVIL MINE Date 7-10-10

Project / Client AST #5 Investigation / Marsh Creek
J. Craner, B. Blount

1517 Petroflag analysis

Sample ID	Weight	Reading	Time / Date
RD-DC-1	10g	330 ppm	1517 - 07/10/10
RD-DC-2	10g	597 ppm	1517 - 07/10/10
RD-DC-3	10g	167 ppm	1518 - 07/10/10
RD-DC-4	10g	469 ppm	1519 - 07/10/10
RD-DC-5	10g	369 ppm	1521 - 07/10/10
RD-DC-6	10g	216 ppm	1521 - 07/10/10
RDBH11D	10g	111 ppm	1521 - 07/10/10
RDBH11DD	10g	100 ppm	1522 - 07/10/10
RDBH07D	10g	81 ppm	1522 - 07/10/10

7-10-10

Jerry Craner

Location RED DEVIL MINE Date 7-11-10

Project / Client AST #5 Investigation / Marsh Creek
J. Craner, B. Blount

WEATHER: Overcast, 60°F

700 : Gather gear + head to site
730 : Safety meeting
Calibrate PID # 1812
Fresh air cal.: 0 ppm
100 ppm isobutylene: 100 ppm
Bump check: 99.7 ppm
800 - Help Katura GW sample
930 - Begin RDBH09D
1145 - Complete RDBH09D <x1 samples
1200 - Lunch @ Lodge.
1300 - Back at site
1420 - Begin ~~1420~~ 5C RDBH13
1630 - Complete RDBH13 <x2 samples
1635 - Begin RDBH14.
1800 - Complete RDBH14. <x2 samples
1900 - Dinner
2000 - Notes, etc

7-11-10
Jerry Cram

Location RED DEVIL MINE Date 7-12-10

Project / Client AST #5 Investigation / Marsh Creek
J. Craner

WEATHER: SUNNY, 65-70°F.

700 : Gather gear and head to site
730 : Safety meeting.
800 : Begin RDBH15
Calibrate PID # 1812
- Begin RDBH15
950 : Complete RDBH15
1030 : Begin RDBH16
1145 : Complete RDBH16.
Drill rig broke down, small ~~fuel~~ oil leak has gotten progressively worse. Will be done and head to airstrip.
1200-1300 - LUNCH
1300 - Back at site. Collect final samples and help Katura GW sample.
1500 - Start Petro FLAG analysis

Jerry Cram 7-12-10

Location RED DEVIL MINE Date 7-12-10

Project / Client AST #5 Investigation/Marsh Creek

J. Craner

1500: PETROFLAG

SAMPLE ID ~~+ TIME~~ JC	RESULTS (ppm)
1 RDBH9D-20-21.5	121
2 RDBH9D-42-43	71
3 RDBH13-29-30	322
4 RDBH13-36.5-37.5	32
5 RDBH14-8.5-9.5	103
6 RDBH14-14-15	36
7 RDBH15-22.5-23.5	556
8 RDBH15-29-30	394
9 RDBH16-10-11	81
10 RDBH16-24-25	75
11 RDBH10D-32-33	124
12 RDBH10D-61-63	67

3.91
~~4.03~~
0.34
3.69

3.90
0.40

1900 - ~~2000~~ 1930 - Dinner

~~2000~~ 1930 - ~~2200~~ JC 24 - Petro Flag + MI Sampling

COMPLETED AST #5 INVESTIGATION

16.5 hours

7-12-10

[signature]

Location RED DEVIL MINE Date 7-13-10

Project / Client AST #5 Investigation/Marsh Creek

J. Craner

Weather: P. cloudy/sunny, 60-70° F

700: Gather gear and head up to site.

730: Survey points at Landfarm and remaining pts. #12-16 at AST #5.

930: Back at lodge. Conduct sample management (labels, ice, etc.) and clean gear.

1200: LUNCH

LASER LEVEL:

→ 1.90 ft from control pt. to Laser Level

3.87'
.50
3.37

~~3.87'~~ 7.1
~~3.87~~

BH10/MW03: LL-3.4 ft @ TOC ~~LL~~ asr ed
3.37' stickup, concrete to TOC MP

BH02/MW01: LL-7.7 ft @ TOC MP.
Measurement - 3.69' stickup
concrete ~~to~~ JC to TOC MP.

BH07/MW02: LL - 8.44 ft @ TOC MP.
Measurement - 3.50' stickup
→ concrete to TOC MP.

[signature] 7-13-10

19 FEBRUARY 1996
3-66

Location RED DEVIL MINE Date 7-13-10

Project / Client AST #5 Investigation / Marsh Creek
J. Craner

1900 - Done for day.

12 hours

Jerry Craner 7-13-10

Location RED DEVIL MINE Date 7-14-10

Project / Client AST #5 Investigation / Marsh Creek
J. Craner

0700 - Sunny / partly cloudy 65°F.
Pack up gear and get ready for flight back to Anchorage.
- Pack coolers and fill out COCs / labels.
- Pack gear and transport to airstrip.

1400 - Leave for Anchorage via Alaska Air Taxi. Otter.

1600 - Arrive in Anchorage. Jody delivers coolers to Lab.
- Take Taxi to Providence
- Done for day.

Jerry Craner
7-14-10

APPENDIX C
SOIL BORING, WELL DEVELOPMENT, AND SAMPLE LOGS

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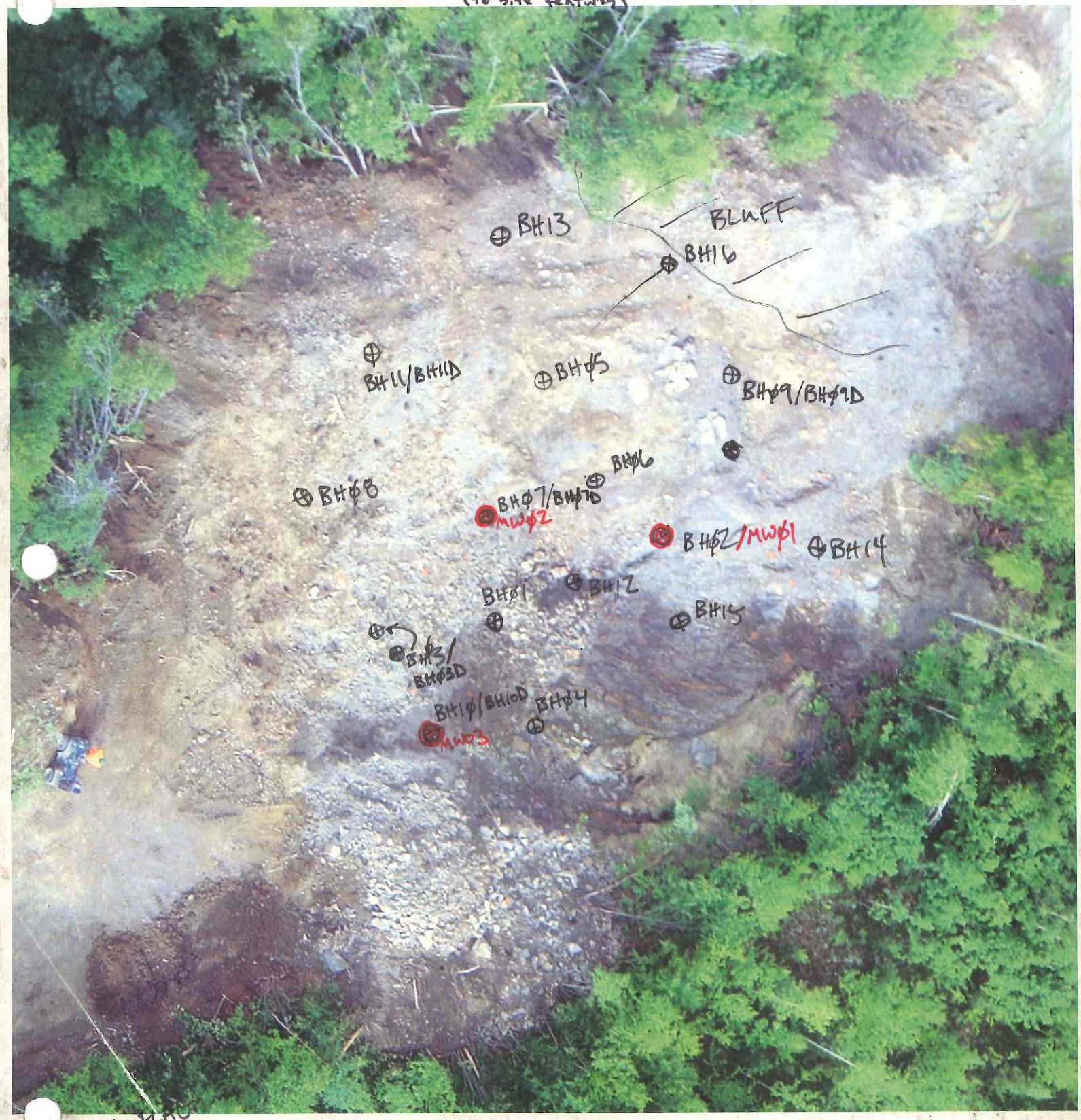
N

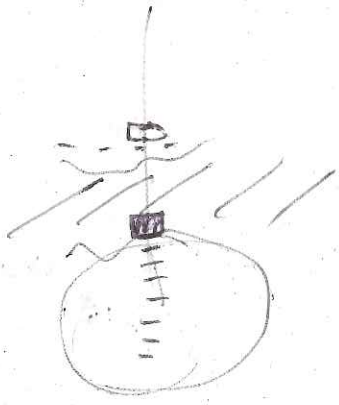
ACCURATE RELATIVE FIELD MAP
(to site features)



Retro FLAG
~~BH03D~~
BH09D
BH10D
BH13
BH14

BH15
BH16

check on 3D



WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBHØ1 Page 1 of 1
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-7-1Ø / 7-7-10
Start/End Time: 1ØØØ / 1115
Initial W. Level: —— Longitude:
Borehole Dia.: 3.25-inch/2-inch core Latitude:

Driller's Name: Elliot Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 17.5feet
Cutting Disposal: Back in hole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBHØ1-12.5-13.5 GRO/BTEX, DRO/RRO, PAHs
RDBHØ1-6.5-8.5 " " "

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
2.5	2/5	Ø, Ø, Ø.4, 2.5, 1.5 JC, Ø, Ø, Ø.2, Ø.1	2.2			1012		OL		Gravelly sandy organic silt, dark brown, moist/wet, very loose, minor/no HC odor/staining → "Gravel" is shale	1Ø	1Ø	8Ø
5													
7.5	1.75/5	Ø.5, Ø.6, 1.7, Ø.4, Ø	4.7	261	RDBHØ1-6.5-8.5 JC	1045		GM		Silty gravel w/minor sand, dark brown, moist, no HC odor/staining Med. dense. → "Gravel" is shale.	75	5	2Ø
10													
12.5	3.3/5	16, 3, 3.4, 2.Ø, 2.8, 0.5, 0.3	9.5	RDBHØ1-12.5-13.5 56		1100		GM		Silty gravel w/minor sand, dark brown, moist, Med. density. Gravel chunks are shale. Minor odor/no stain	75	5	20
15								Shale		Weathered fractured shale, rusty oxidization at 12-12.5 ft. Light brown to dark gray, Dense. JC			
17.5	2.5/2.5	0, 0, 0, 0	4.3			1110		Shale		Weathered fractured shale, Light brown to dark gray, DENSE. No HC ODOR or sheen.			

→ 17.5' hit very dense bedrock (shale). REFUSAL.

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: _____ Page __ of __
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Page __ of __

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines

Gray Clay

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH02 / MW01 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-7-10 / 7-7-10
Start/End Time: 1120 / 1430
Initial W. Level: 12.5 ft Longitude:
Borehole Dia.: 3.25-inch / 2-inch core Latitude:

Driller's Name: Elliot Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 31 feet
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH02-5-7 GRO/BTEX, DRO/RRO, PAHs
RDBH02-11.5-13 GRO/BTEX, DRO/RRO, PAHs

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
		0.4								Sandy gravelly silt. Dark brown loose, moist/wet. No HC odor/staining "Gravel" is angular clasts of fractured shale.	45	10	45
		1.1	1.2			1135							
2.5	1.4/5	0.8						OL					
		0.2											
		0.2											
		0.6											
5		0.4											
		0.3								Same as above.	45	10	45
		5	1.7	303	5-7	1150		OL					
7.5	2.5/5	0.5								7.25-8.0': Weathered/oxidized, fractured shale, rust coloration			
		0											
		0						Shale		7.25-10': Weathered/fractured shale, light brown to dark gray, med. dense, NO HC odor/staining			
		0											
		0											
10										10'-15': Weathered, loose fractured shale. Several small intervals of rust/oxidization. Light gray to brown. - Saturated at 13 feet. WATER TABLE			
		0											
		0.7											
		0				1315		Fract.					
12.5	2.4/5	0	3.2	142	11.5-13			shale					
		0.1											
		0								14.5-15': Strong HC odor and elevated PID reading no HC staining			
		52											
15		0											
		25								15-17': 'clean', fractured shale, saturated, HC odor. Light brown dense	few fines		
		51											
		61								17-19': Dirty, fractured shale w/ silts + clays, light brown. HC odor, saturated, dense			
17.5	3/5	14											
		19								19-20': Weathered/fractured layered shale, saturated, HC odor. Gray w/ orange oxidization, dense			
		10											
20		81											

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Switch Columns

Boring Location ID: RDBH02
Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Page 1 of 1

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20	150	1324								20-25' - Fractured/weathered shale, light to dark brown, loose → dense. Saturated			
	135	4.5/								- HC odor to 24.5' bgs.			
22.5	85	5								- Dry zone at 24.5-25' bgs			
	6												
	0												
	5												
25								shale		25-30' - Fractured/weathered shale, light brown to gray, DENSE, Saturated. No HC odor or staining.			
	0												
	0												
	0	5/											
	0	5											
	0												
	0												
30	0												
31	0	4/1								- Same as above			

Drilled to 31 ft bgs, refusal at 31 ft.

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: ~~B~~ JC RDBH03 Page 1 of 1
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-7-10 / 7-7-10
Start/End Time: 1515 1600
Initial W. Level: —— Longitude:
Borehole Dia.: 3.25-inch / 2-inch core Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 13 feet
Cutting Disposal: Down hole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH03-4-5 GRO/BTEX, DRO/RRO, PAHs
RDBH03-12-13 GRO/BTEX, DRO/RRO, PAHs

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
		2								0-4/5' JC: Fractured/ weathered silty and sandy gravel (shale) Light brown to dark gray, no HC odor or staining, loose, moist.	75	10	15
		0	8.2			1530							
2.5	2/5	0						GM					
		0											
		0											
JC 4		0.1											
		0								4-9': Fractured/weathered shale with silt. Dense, dry. Light brown to dark gray. No HC odor or staining.			
		0	10.4	49	4-5	1545							
	3.8/5	0											
6.5		0						Shale					
	JC	0											
		0											
JC 10		0											
		0								9'-13': Same as above.			
	3.8/4	0											
		0				1550							
13		0	8.1	38	12-13								
										REFUSAL @ 13 feet bgs			

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: _____ Page __ of __
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Page __ of __

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines

Original

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBHØ3D Page 1 of 1
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-8-10 / 7-8-10
Start/End Time: 750 / 820
Initial W. Level: 2.25 Longitude:
Borehole Dia.: ~~3.25~~-inch / 1.5-inch Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 14-18 feet
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
NO SAMPLES COLLECTED.

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
	- Attached narrower diameter Macro-Core barrel to rig in hopes of being able to go deeper and extend this boring into shale bedrock. RDBHØ3 was drilled to 13' bgs. to refusal.												
14													
16	Bag of rock	—	Ø.8	NS	NS	—		SHALE		Sample Macro-core liner melted in barrel, only able to recover about 1/2 gallon of material. Silty/sandy shale, light gray, dry, no HC odor or staining			
18										Refusal w/ Macro-Core Sampler @ 18' bgs.			

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: _____ Page __ of __
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Collected Sample IDs/Analysis: Lithologic Description (color, moisture, density, odor, other)	Page __ of __ Grain Size Distribution (%) Gravel	Sand	Fines

Dry Well

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH04 Page 1 of 1
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-7-10 / 7-7-10
Start/End Time: 1610 / 1740
Initial W. Level: — Longitude:
Borehole Dia.: 3.25-inch / 2-inch core Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 15.5 ft
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH04-0.5-2 GRO/BTEX, DRO/RRO, PAHs
RDBH04-15-15.5 GRO/BTEX, DRO/RRO, PAHs

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
		0						GM		0.5-1.0': Loose silty gravel	75	5	20
		0	4.7	203	0.5-2.0	1610				1.0-5': weathered/fractured shale, dry, light brown to orange/brown (oxidization). No HC odor/staining. Dense.	silty		
2.5	2.5/5	0						shale	shale				
5		0											
		0								JC 5'-7': Weathered/fractured shale light brown to dark gray. Dense, moist, no HC odor or staining.			
	3.9/5	0	1.7			1630		shale		9-10': Weathered clayey silt/ JC Dark gray. No HC odor, no staining, dense, moist. Orange oxidization present.			
7.5		0											
10		0								10-15': Liner stuck in core. Collected remaining sample interval in 1 Ziploc bag. (5-9') Same shale as above, but "loose" in bag.			
12.5			6.1			1610		shale					
15													
	0.5/0.5	0	2	62	15-15.5	1725				15.5 ft REFUSAL. Same as above, weathered shale, dry.			
17.5													
20													

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: _____ Page __ of __
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Page __ of __

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines

Dry Gravel

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RD BH05 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-7-10 / 7-7-10
Start/End Time: 1735 1830
Initial W. Level: Longitude:
Borehole Dia.: 3.25-inch / 2-inch core Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 35 feet
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RD BH05-22-23 GRO/BTEX, DRO/RRO, PAHs
RD BH05-34-35 GRO/BTEX, DRO/RRO, PAHs

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
		0								~~0-5'~~ JC			
		0								0-3.5': Silt w/ minor gravel (shale), loose, moist, light brown NO HC ODOR/STAINING.	20	5	75
		0						OL					
2.5	2.5/5	0								2.0-3.5': Dark brown coloration/stain?			
		0	1.8			1745	X			3.5-5.0': Highly weathered shale w/ silt and minor gravel, dense ~~[illegible]~~ JC NO HC odor/stain	35	5	60
		0											
		0						OL					
5		0											
		0								5-10': Silty gravel (shale) Brown → gray. Minor Sand. Made up of weathered shale material No HC odor/staining, dense + moist.	60		40
		0											
	3.3/5	0											
7.5		0						GM					
		0	1.9			1800	X						
		0											
10		0											
		0								10-13': Gravelly (shale) silt. Brown. Moist, dense, NO HC odor/stain			
		0						OL					
	3.75/5	0											
12.5		0											
		0	3.5			1815	X			13-14.5: Dense gray ~~silt~~ JC clay, moist			
		0						OH		14.5-15' - Fractured/weathered shale NO HC odor/stain, moist			
		0											
15		0						GM					
		0								15-20': Weathered/fractured shale, light → dark brown, dense, moist, NO HC ODOR/STAINING.			
		0											
	4/5	0											
17.25		0											
		0						shale					
		0	3.8				X						
		0											
20		0											

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH05 Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Page 1 of 1

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20		0											
		0						OH		20'-22': Dense clay, brown to orange oxidization, moist, very dense, NO HC odor/ No staining			
	4.4	0	112	691	22-23	1835							
22.5	5/5	7.7								22'-25': Weathered shale (gravel) silt. Light to dark brown, dense, HC ODOR, no staining			
		1.5						GM					
		0											
25		0											
		0								25-30': Weathered/fractured Shale (gravel) with clay + silt. Light to dark brown. HC Odor/staining, dense moist → wet.	60	10	30
		0											
	4.8/5	0											
27.5		0				2012		GM					
		0	1.3	3450									
		0											
30		0											
		0								30-34': Dense brown → black clay. Moist, no HC odor or staining	15	5	80
		0											
32.5	5/5	0						OH					
		0											
		0											
35		0	2.1	31	34-35	2025	34-35	GM		34-35': Gravelly sandy silt, dark brown to black, moist, no HC odor/staining	20	20	60

Refusal at 35!

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RD BHØ6 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 8-8-10 / 8-8-10
Start/End Time: 0820 0920
Initial W. Level: — Longitude:
Borehole Dia.: 3.25-inch/ 2-inch pore Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 34 feet
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBHØ6-11-13 GRO/BTEX, DRO/RRO, PAHs
RDBHØ6-21.5-22.5 GRO/BTEX, DRO/RRO, PAHs
RDBHØ6-921.5-22.5 GRO/BTEX, DRO/RRO, PAHs → DUP

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
0		0					0.5			0-5': Silty/sandy gravel, light brown, moist, loose, NO HC odor or staining. → Fill material.	60	5	35
	1.6/5	0	3.8			0830							
2.5		0					2.5	GM					
		0											
5		0					5			5-10': same as above.	60	5	35
		0											
		0	2.4			0840							
7.5	1.3/5	0					7	GM					
		0											
		0											
10		0					11			10-15': Silty gravel, light brown, moist → saturated, loose, NO HC odor/staining till 14' bgs.			
		2.4			11-13								
		0.5	5.4	159		0845		GM		13': Water Table?; saturated below. → Likely fill material.	75		25
12.5	1.7/5						13						
		0.4											
		0.4								14-15': HC odor			
15		15								15-16' - Saturated, weathered/fractured silty shale, light brown → dark gray, dense, HC odor.			
		47											
		50								16-19': Moist, weathered/fractured shale, dense, light → dark brown, HC odor.			
		47											
17.5		9											
	5/5	9						Shale					
		49								19-20': Saturated, weathered/fractured shale, dense, dark gray, HC odor.			
		2					19						
20		10	20.5			0900							

20

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH06 Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20		1.4								20-21.5': Saturated. Fractured/weathered silty shale, Light → dark brown, HC odor, dense.			
	4.3	18.6			DUP		21.5						
	~~3.5~~ JC				21.5-22.5	0915							
22.5	5	13.1	71.6	667 / 1539			22.5	shale		21.5-25': Moist. Fractured/weathered silty shale, Light brown → dark gray, HC odor, dense NO HC staining			
		64.2											
		14.2											
		5.5											
25													
		14.8								25-30': Saturated. Fractured/weathered sandy/silty shale. Light brown → dark gray, HC odor, no staining.			
		41											
		224											
27.5		36.2						shale					
	5/5	1.5											
		16.8											
30													
		2								30-34': same as above, except minor HC odor,			
		1.7											
	4/4	3.2											
32.5		1											
		1.5	10.2			930		shale		Refusal @ 3 4/3' JC			
35													

JC

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH07 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-8-10 / 7-8-10
Start/End Time: 0925 / 1050
Initial W. Level: —
Borehole Dia.: 3.25-inch / 2-inch core
Longitude:
Latitude:

Driller's Name: Elliott Wilson
Logged By: J. Craner
Drilling Contractor: GeoTek Alaska
PM: J. Grund
Drilling Method: Direct-Push MC
Total Depth: 23.5 ft
Cutting Disposal: Downhole
Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH07-8-9: DRO/RRO, PAHs, GRO/BTEX
RDBH07-22.5-23.5: DRO/RRO, PAHs, GRO/BTEX

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
0		44					0.5						
		22.4								0-5': Saturated, silty gravel, loose, HC odor, no staining, light brown. -> Fill material, gravel angular shale.	60		40
						1005							
		10.5	17.6					GM					
2.5	1.25/5	16.4					2.5						
		4.8											
		5.2											
5		10.2											
		6.4								5-8': Saturated, loose fill, silty/gravel, HC odor sandy, light brown	75	5	20
		47											
	3.3/5	29.2											
7.5		102						GM		8-10': Moist, dense silty/sandy gravel (shale)		weathered/dense	
		75								Strong HC odor, no staining, light brown -> dark gray. Hard, bedrock.	75	5	20
		254	68.5	548	8-9	1015	8	shale					
		16.3					9						
10													
		108								10-12': Wet, weathered/fractured silty shale, light brown -> dark gray HC odor, no visible staining			
		129											
		72											
12.5		275					12						
	4.3/5	390	91.2			1025		shale		12-15': Moist, weathered/fractured silty shale, light brown -> dark gray strong HC odor, no visible staining.			
		150					13						
		127											
15		31											
		4								15'-20': Moist weathered/fractured, silty/sandy shale, light brown -> dark brown, very dense. HC odor, no visible staining.			
		10.0											
		2											
		1.2											
17.5	4.4/5	12.5											
		3.2											
		13.2					19	shale					
20		77.7	46.5			1035	20						

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDB407 Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20		1.3								20-23.5': Moist, dense fractured/ weathered silty shale. Light brown to dark gray, Minor HC odor, no HC staining.			
	4.25/3.5	0.9											
		0.5											
22.5		0.6						22.5	shale				
		0	B.9	22.5-23.5	56	1048							
		3.2						23.5					
25										Refusal @ 23.5' bgs.			

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH07D / MW02 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-10-10 / 7-10-10
Start/End Time: 0745 / 1020
Initial W. Level: — Longitude:
Borehole Dia.: ~~3.25 inch~~ 4.5 inch Latitude:

Driller's Name: Elliott Wilson
Drilling Contractor: GeoTek Alaska
Drilling Method: ~~Direct Push MC~~ AIR ROTARY
Cutting Disposal: Downhole
Logged By: J. Craner
PM: J. Grund
Total Depth: 53 feet
Backfilled: Bentonite

Collected Sample IDs/Analysis: RDBH07D - 31.5-52.5: DRO/RRO; PAHs

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
	Extended drill hole RDBH07D which hit refusal @ 23.5' bgs using dual tube MC sampling. Extended with AIR ROTARY/DOWNHOLE HAMMER SYSTEM to see if any contamination has migrated deeper than what was originally found, and to see if GW exists.												
22.5													
								SHALE		No HC odor/stain from 23.5 to 28 feet. Light brown/gray silty sand, dusty and dry.			
25													
27.5													
							28			28-29': Light brown/gray, dry, silty sand. NO HC odor or visible stain in cuttings.		55	45
30	—	—	0.0			0850	29	SHALE					
							32			32-33': Same as above. NO HC odor/stain.		55	45
32.5	—	—	0.0			0905	33						
35							35			35-37': Same as above. NO HC odor/stain		55	45
	—	—	0.0			0920	37						
37.5													
40													

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDB407D
Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Page ~~1~~ of ~~1~~

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
40							40						
	—	—	Ø			0930		SHALE		40-42': Light brown to light gray, silty sand, No HC odor/staining. DRY.		55	45
42.5							42						
										43-45': Hard, dense layer shale or "rock".			
45							45						
	—	—	Ø			0950				45-46': Light brown to light gray, silty sand. No HC odor/staining / DRY.		55	45
							46						
47.5										47.5-51.5': Hard, dense layer shale bedrock.			
50													
	—	—	Ø	81	51.5-52.5	1010	51.5			51.5-52.5': Light brown-light gray silty sand. No HC odor/staining. DRY		55	45
52.5							52.5						
53													
55										Bottom of hole 53 ft bgs.			
						1030				→ Measured ground water in casing at 50' bgs. Slow recharge.			
						1040				→ Measured groundwater @ 49.2 ft bgs			
						1055				→ 48.1 ft bgs.			

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH Ø8 Page 1 of 1
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-8-10 / 7-8-10
Start/End Time: 1120 / 1330
Initial W. Level: —— Longitude:
Borehole Dia.: 3.25-inch / 2-inch core Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 19 feet
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBHØ8-Ø-1.5: GRO/BTEX, DRO/RRO, PAHs + MS/MSD
RDBHØ8-18-19: GRO/BTEX. "

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
		20	47.9	339	0-1.5	1130	0			0-5': Loose, moist silty/sandy gravel (fill material). Light to dark brown, HC odor from 0-0.5' bgs. Possible staining 0-0.5' bgs as well.	75	5	20
		6.2											
		5.2					1.5						
2.5	3.2/5	2.7						GM					
		2.7											
		3.8											
5		2.6					5						
		0	5.8							5-10': Weathered/fractured, silty/sandy shale, light brown to dark gray, DENSE bedrock, moist near top, dry 6-10'. Minor HC odor @ 5', no HC odor below 5'. No staining.			
		0				1135							
	3.25/5	2					6.5						
7.5								Shale					
		0.6											
		0.1											
		0.6											
10		0.1					10						
		2.3	4.1							10-15': Weathered/fractured, silty/sandy shale, light brown-dark gray, mostly dry w/ dampness from 13-14'. DENSE. No HC odor or staining.			
		1.5				1310							
12.5	4.2/5	0					12						
		0											
		0											
15		0											
		0.7								15-19': Weathered silty shale. Reddish brown → dark gray, moist to dry, dense, Dry, NO HC odor/staining			
		4.8											
	4/4	1.0											
17.5		1.8											
		Ø.4		MS/MSD			18						
		Ø.3		18-19	23	1320							
		0.2	7.1										
19							19			REFUSAL @ 19 feet bgs.			
20													

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: _____ Page __ of __
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

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Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines

Spring Cave

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH09 Page 1 of 1
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-8-10 / 7-8-10
Start/End Time: 1335 1400
Initial W. Level: — Longitude:
Borehole Dia.: 3.25-inch/2-inch core Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 16 ft
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH09-10-11.5: GRO/BTEX, DRO/RRO, PAHs
RDBH09-15-16: GRO/BTEX, DRO/RRO, PAHs

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
0		0.3					0.5			0-5': Silty, sandy gravel, moist, Light brown → dark grey, loose, NO HC odor or staining.	60	5	35
		0.1	3.2			1340							
	2.5/5	0.1						GM					
2.5		0.1					2.5						
		0											
5		0											
		0								5-7': Moist, same as above			
		0	1.4			1350		GM					
	3.9/5	0.1											
7.5		0								7-10': Weathered/fractured shale, Light brown to dark, moist, dense, No HC odor or staining.			
		0						Shale					
		0											
10		0					10						
		0	3.3	27	10-11.5	1400				10-15': Same as above.			
		0					11.5						
12.5	4.2/5	0											
		0						Shale					
		0											
		0											
15		0					15						
	1.7/1	0	1.5	42	15-16	1410				15-16': Same as above.			
							16			→ 16 feet bgs Refusal			
17.5													
20													

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: _____ Page __ of __
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Collected Sample IDs/Analysis: Lithologic Description (color, moisture, density, odor, other)	Page __ of __ Grain Size Distribution (%) Gravel	Sand	Fines

Spring Cave

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH#09D
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Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-11-10 / 7-11-10
Start/End Time: 0930 / 1145
Initial W. Level: 44 feet
Longitude:
Borehole Dia.: ~~3.25-inch~~ 4.5-inch
Latitude:

Driller's Name: Elliott Wilson
Logged By: J. Craner
Drilling Contractor: GeoTek Alaska
PM: J. Grund
Drilling Method: ~~Direct-Push MC~~ Downhole Hammer / AIR ROTARY
Total Depth: 51.5 ft
Cutting Disposal: Downhole
Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH#09D @ 20-21.5 : DRO/RRO, PAHs
RDBH#09D - 42-43 : DRO/RRO, PAHs

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
										- Had refusal @ 16 feet bgs w/ original tube MACRO-CORE Sampler. Extend using AIR ROTARY/ DOWNHOLE HAMMER			
15													
16										Dense layer shale			
			1.0			1020	16.5	SHALE		16.5-17.5': Light brown silty sand, dry, no HC odor/staining		60	40
17.5							17.5			18.5-19.5': same as above		60	40
			0.7			1025	19.5						
20							19.5			19.5-20 : Dense shale layer			
			37.2	121	20-21.5	1029	20			20-21.5': Light brown silty sand, dry, NO HC odor/staining		60	40
22.5							21.5	SHALE		21.5-23': DENSE layer shale.			
			1.3			1040	23			23-25': Light brown silty sand, dry, no HC odor/staining		55	45
25			1.6			1042	25			25-26': Moist @ 26'. Light brown/reddish brown silty sand, damp, no HC odor/staining		60	40
						1045	26			26.5-28': Moist Light brown/reddish brown silty sand, no HC odor/staining			
27.5			0.6										
			1.2			1050	28			28-31': Dry, Light brown silty sand, no HC odor/staining		60	40
30							31			DENSE SHALE LAYER			
32.5													

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

44
7
53

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: ~~RDBH90 JC~~ RDBH02 Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis: [redacted]

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
32.5													
	—	—	ø.5			1110		SHALE		33-35': Light brown silty sand, dry, no HC odor/staining		70	30
35	—	—	ø.7			1012	35			35-36.5': same as above.		70	30
							36.5			37-38': same as above.		70	30
37.5	—	—	ø.5			1113							
							38	SHALE		DENSE SHALE			
40	—	—	ø.3			1118	40			40-42': Same as above		70	30
42.5	—	—	ø.4	71	42-43	1120	42			42-43': Same as above		70	30
							43			44': HIT SATURATED zone, mucky silty sand, no HC odor/no stain			
44								▽					
45										- Decide not to set well because 1) already set 2 wells in deep aquifer and 2) no HC impact in 20+ feet.			
47.5										- SATURATER FROM 44' → 51.5'			
50										51.5 ft bgs bottom of hole.			

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH1Ø JC
Page 1 of 1
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-8-10 / 7-8-10
Start/End Time: 1430 1530
Initial W. Level: —
Longitude:
Borehole Dia.: 3.25-inch / 2 inch core
Latitude:

Driller's Name: Elliott Wilson
Logged By: J. Craner
Drilling Contractor: GeoTek Alaska
PM: J. Grund
Drilling Method: Direct-Push MC
Total Depth: 10 feet
Cutting Disposal: Downhole
Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH1Ø-2-4: GRO/BTEX, DRO/RRO, PAHs
RDBH1Ø-6-7.5: " "

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
		0											
		3											
		1.5											
2.5	3/5	2.0					2	GM		0-5': Silty/sandy gravel, dry, Light brown to dark gray, loose, HC odor from 2-4 ft bgs. Fill material.	70	5	25
	3	48	53.4	99	2-4	1450							
		15											
5		3					4						
		1											
		93					6			5-10': Weathered/fractured silty/sandy shale, Light brown to dark gray, dry → moist, DENSE (bedrock) HC odor 5-10', no visible staining.			
		277	161	930	6-7.5	1515							
7.5	5/5	150					7.5	Shale					
		60											
		166					9						
		26	10.4										
10		11					10						

REFUSAL @ 10 feet.

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: _____ Page __ of __
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Page __ of __

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines

Jerry Carr

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH10D/MW63 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-10-10 / 7-10-10
Start/End Time: 1430 / 1830
Initial W. Level: 63 feet Longitude:
Borehole Dia.: ~~3.25 inch~~ 4.5 inch Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: ~~Direct Push MC~~ AIR ROTARY Total Depth:
Cutting Disposal: Down hole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH10D-32-33: DRO/RRO, PAHs
RDBH10D-61-63: DRO/RRO, PAHs

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
	~~10~~ JC									"Extended RDBH10, refusal w/ dual tube MC @ 10' bgs. Down hole hammer tech. ↓			
			45.5			1505				8-9' - Light brown silty sand, HC odor, DRY			
10			184		~~9-10'~~ JC	1506		S		9-10' " " "			
11			87.6			1507		h		10-11' " " "			
12			2.4			1508		a		11-12' " " " NO HC odor			
13			2.3			1510		l		12-13' " " " NO HC odor			
14			26.7					e		13-14' Light gray silty sand/chips / HC odor/DRY			
15	~~10~~ JC		2.3							14-15' " " "			
			11.8			1520				15-16' " " " / NO HC odor/DRY			
			1.2			1521				16-17' " " "			
						1522				17-18' " " "			
			0.2							18-19' " " "			
20	~~10~~ JC		0.3			1525				19-19.5' " " "			
21			2.3			1545				~~NO ODOR for 4+ feet, decide to go down a few feet before sampling~~ JC			
22			1.2			1549				VERY DUSTY.			
23								S		20-22': Light gray/brow silty sand, NO HC odor, DRY			
24								H		22-23': Dark brown/red. silty sand NO HC odor,			
25	~~10~~ JC							A					
								L					
								E		THICK LAYER of dense shale.			
30							30			30-31.5': Light brown silty sand, no HC odor DRY			
			0			1648							
			83.6	124	32-33	1650	31.5			32-33': Light brown silty sand, HC odor, DRY			
							34			34-35.5': same as above.			
35			44.9			1658							
			0.8			1700	35.5	S		36-37': Light brown/ light gray silty sand, dry, NO HC odor			
								H		DENSE LAYER SHALE			
							38.5	A					
			0.3			1710		L		38.5-39.5': Reddish brown silty sand, DRY, NO HC odor			
40			0.4			1712	39.5	E		40-41': same as above.			
			0.1			1713				41.5-42.5': Light gray silty sand, DRY, NO HC odor			
			0.3			1718				43-44': same as above.			
			0.2			1720				44-46': same as above			
45													

46-47
47-48

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH10D
Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:
Page 2 of 2

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
45	—	—	0.1			1725	X			46-47': Light gray silty sand, dry. no HC odor.			
			0.4			1727	X			47-48': Same as above.			
50	—	—	0.2			1730	X			48-51': Light brown silty sand, dry. no HC odor			
	—	—	0.1			1733	X			52-53': Same as above.			
	—	—	0.1			1739	X			53-54': Saturated @ 53' bgs, cuttings observation. Moist silty sand, no HC odor.			
55			0.1			1741	X			54-55': Same as above.			
	—	—	0			1743	X			55.5-57.5': Same as above.			
										→ Check for water by blasting air in hole, no visible water at surface.			
60			0.2			1800	X			59.5-60.5': Moist, light brown-gray silty sand, no HC odor.			
			0	67	61-63	1805	X			61-63': Same as above.			
			0.3			1813	X			@63', water out top of casing. Hit confined aquifer.			
65										~~63-64': Saturated gray silty sand, no HC odor JC~~			
										~~64-68 → DRY silty sand, light gray, no HC odor JC~~			
70										~~68~~ 63 feet bgs bottom of hole.			
										~~W~~ Plan to set well. Confined aquifer conditions.			

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH11 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-8-10 / 7-8-10
Start/End Time: 1535 1700
Initial W. Level: — Longitude:
Borehole Dia.: 3.25-inch / 2-inch Core Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 31.5 ft.
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH11 - 0-2: DRO/RRO, PAH, GRO/BTEX
RDBH11 - 30-31.5: " " " " DUP
RDBH11 - 930-31.5: " " " "

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
		66.3					0						
		5	33.6	157	0-2	1540				0-5': Silty/sandy gravel, Loose (f/lt), Light brown, moist, HC odor 0-0.5'. No odor 0.5-5'. No staining.	60	10	30
2.5	1.5/5	2.5					2	GM					
		1.9											
5		1.5					5						
		0	4.3							5-10': Silty/sandy gravel, mod. dense, Light-dark brown, No HC odor or staining. moist. Likely fill from 1950's, according to BLM Larry.	60	10	30
	3.3/5	0.8				1550							
7.5		0					7						
		0.1											
		0											
		0											
		0											
10		0					10	GM					
		0	3.4							10-15': ~~Silt~~ SC SAME AS ABOVE			
	3.7/5	0				1600							
		0					11.5				60	10	30
12.5		0											
		0											
		0											
15		0					15						
		0	2.8			1610		GM		15-18': SAME AS ABOVE	60	10	30
	4/5	0					16.5						
17.5		0											
		0								18-20': Weathered/fractured shale, (BEDROCK) dark gray, moist, Orange oxidization, dense, NO HC odor or staining			
		0											
20		0											

6

31.5

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH11 Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20		1.2								20-25': weathered/fractured silty/sandy shale. Light brown to dark gray, moist, DENSE (bedrock) Slight HC odor/no staining.			
		6.5											
		4.5											
22.5		6.5					23	shale					
	4/5	1.0											
		40.5	15.6			1630							
25		1.0											
		6					25			25-30': Same as above, except strong HC odor 28-29 ft bgs. No visible staining.			
		1.3											
27.5		4.6						shale					
	4.6/5	41.9					28						
		15.6	83.5			1645							
		95											
30		17					30			30-31.5: same as above, strong HC odor			
	1.5/1.5	85.1	84.6	317	30-31.5	1658							
31.5		40.1					31.5						
32.5										REFUSAL @ 31.5.			

Collected Sample IDs/Analysis:

Page 2 of 2

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH11D
Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-8-10 / 7-8-10
Start/End Time: 8830 / 1745
Initial W. Level: —
Longitude:
Borehole Dia.: ~~3.25~~ 2.25-inch/1.5-inch
Latitude:

Driller's Name: Elliott Wilson
Logged By: J. Craner
Drilling Contractor: GeoTek Alaska
PM: J. Grund
Drilling Method: Direct-Push MC/AIR ROTARY
Total Depth: 30-53 ft
Cutting Disposal: Downhole
Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH11D-52-53: DRO/RRO; PAHs

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
	- Attached 2.25" Macro-core to rig to see if able to drill deeper to extend boring. RDBH11 had refusal @ 31.5'.												
30													
		0						SHALE		30-32': Dense silty/sandy weathered shale, light brown → white, Rock dry, HC odor at 32', no staining.			
		0											
32.5	5/5	41											
		0					33.5			32-35': Loose, silty/sandy weathered shale, dark gray, HC odor at 34', no HC staining, moist/dry.			
		57	17.5			904							
		0					34.5						
35										- Rock stuck in sample barrel, core liner stuck, collect bag sample, only 1/8 of quart bag.			
	~~3.5~~ JC		87.5			926		OH		35-38.5': Silty clay, light brown, dense + stiff, slight HC odor.			
37.5													
38.5									?	REFUSAL w/ Macro-Core @ 38.5' TIME: 930 DECIDE TO QUIT MACRO-CORE, NOT WORKING			
40									SHALE	- JC SWITCH TO DOWN HOLE HAMMER/AIR ROTARY SYSTEM. START AT 1430. ~2 feet from original BH11 boring. Will collect grab samples as we go.			
										-1530: Stop work to find dust masks.			
										38.5-43': Light brown silty sand			
42.5							43			43-44': Light brown/dry silt/clay/light gray, sand, NO HC odor/stain			
	—	—	5.9			1650	44			44-45': "			"
			5.9							46-47': "			"
45			1.2				45						
							46						
	—	—					47						
47.5													

Grab samples from quart bags

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH 11 D
Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
47.5									Shale				
50													
52.5	—	—	3.7	111/ LDO	52-53	1710	52 X 53	-	—	52-53': Light gray ~~silt~~ TC clay/silt/sand no HC odor, dry.		10	90
55										- Bottom of hole is 53' bgs. - No HC impact, no water, thus terminated drilling at borehole.			
57.5													
60													

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

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WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH12 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-8-10 / 7-8-10
Start/End Time: 1720 1820
Initial W. Level: Longitude:
Borehole Dia.: 3.25-inch / 2-inch core Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 26.5 ft
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH12-1-3: GRO/BTEX, DRO/RRO, PAHs
RDBH12-21-22.5: " " "

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
0		0								0-5': Silty/sandy gravel, loose, moist, NO HC odor or staining → Fill material.	75	5	20
		0					1						
2.5	1.5/5	1.1	6.7	129	1-3	1730	2	GM					
		0.2					3						
		0											
5		0											
		0								5-10': Silty/sandy gravel, wet, no HC odor or staining, loose, light brown. → Fill material.	65	5	30
	2.2/5	0											
7.5		0					7	GM					
		0	2.0			1742							
		0											
10		0					9						
		0								10-14': SAME AS ABOVE.	65	5	30
		0											
12.5	2/5	0					12	GM					
		0	6.9			1748				14-15': Water Table, saturated below 14! Same geology as above			
		0					14						
15		2.2								15-17.5': Saturated silty/sandy gravel, loose, light brown, strong HC odor.			
		305											
		316											
17.5	3.75/5	90						GM		17.5'-20': Saturated silty/sandy gravel, DENSE (bedrock), light brown, strong HC odor			
		425											
		305											
20		136											

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RD BH 12 Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Collected Sample IDs/Analysis:

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20		26					21			20-22.5': silty/sandy gravel, wet, dense, light brown to dark gray, HC odor, no visible stain	75	5	20
	5/5	29.3	12.4	72	21-22.5	1805		GM	0				
		17							0				
22.5		10					22.5		0	22.5-25': silty clay, moist, DENSE, dark gray, HC odor, no visible stain			
		14.7						OL					
		8.6											
25		40.9	—	—	—	—	—	—	—		—	—	—
	2/1.5	2								25-26': silty clay, saturated, dark gray, slight HC odor, loose, NO stain ?			
		2.5						OL					
26.5	—	1.6	—	—	—	—	—	—	—	—	—	—	—
27.5													

Refusal @ 26.5 ft

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH13 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-11-10 / 7-11-10
Start/End Time: 1420 / 1630
Initial W. Level: — DRY Longitude:
Borehole Dia.: 3.25-inch/2.5-inch core Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 37.5 ft
Cutting Disposal: DUAL TUBE DOWNHOLE Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH13-36.5-37.5: DRO/RRO, PAHs, GRO/BTEX
RDBH13-29-30 : " " "
RDBH13-929-30 : " " " (DUP)

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
0		0								0-5': Silty/sandy gravel, moist, Light brown, loose, NO HC odor or staining → FILL MATERIAL	55	10	35
		0					1						
	1.5/5		0.7			1430		GM					
2.5		0					3						
		0											
		0											
5		0											
		0								5-10': same as above, except more dense. FILL.	55	10	35
	3.2/5						7	GM					
7.5		0											
			0.4			1445							
		0					8						
10		0											
		0						SHALE?		10-13': Dense shale interbedded by thin silty/sand layers. Light brown to dark gray, moist, no HC odor/staining			
		0											
12.5	3.75/5	0								FILL?			
		0								13-15': Loose silty/sandy gravel, Light brownish red, no HC odor/staining, moist. FILL.	60	10	30
		0					14	GM					
			0.3			1455							
15		0					15						
		0								15-20': Dense silty/sandy gravel, Light brown to light gray, moist, No HC odor/staining	60	10	30
		0											
	3.75/5							GM					
17.5		0											
		0					18						
		0											
			0.6			1505							
20		0					20						

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH 13 Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20	2	0								20-23': Loose silty/sandy gravel, moist, NO HC odor/stain -FILL	75	5	20
	3.75	0											
22.5	5	0				1520		GM		23-25': Dense silty sand w/ occasional gravel, NO HC odor/stain - BEDROCK	5	10	85
		0					23.5						
		0	0.5					OL					
25		0					25			25-27.5': Light brown to light gray weathered/fractured shale, orange oxidization, HC odor no visible staining, DENSE			
		23.2											
		36.2											
27.5		2.6						SHALE		27.5-28.5': Saturated fractured/weathered shale, light brown, HC odor, no visible stain.			
	4.3	6.0											
		1.5											
	5	12.2					29						
30		128	230	322	29-30	1540				28.5-30': MOIST fractured/weathered shale, light brown to dark gray, HC odor (strong). Stain?			
		22.2					30	30.5					
		57.6	176			1600							
		41.2						31.5		30-35': weathered/fractured shale, moist, DENSE, HC odor from 30-32 ft. No staining.			
32.5		3.2						SHALE					
	4.5	0.7											
		0.4											
	5	0											
35		0.5											
		2.3								35-37.5': weathered/fractured shale, moist, DENSE, slight HC odor at 35.5'. Light brown to dark gray.			
	3	14.5											
	25	0.4		32	36.5	1620	36.5						
		0.1	2.9	37.5	37.5								
37.5		0.1					37.5			REFUSAL @ 37.5' bgs.			

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH14 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-11-10 / 7-11-10
Start/End Time: 1635 / 1800
Initial W. Level: 15 feet Longitude:
Borehole Dia.: ~~3.25-inch~~ / 2.5-inch Latitude:

Driller's Name: Elliott Wilson Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC / Dual tube DownHole Total Depth: 30 ft
Cutting Disposal: Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH14-8.5-9.5: DRO/RRO, PAHs, GRO/BTEX
RDBH14-98.5-9.5: " " " " (DUP)
RDBH14-14-15: " " " " (MS/MSD)

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
0		0					0.5			0-4': Silty/sandy gravel, moist, loose, light brown → dark gray, No HC odor, no staining - FILL	60	10	30
		1.0	7.1			1705							
		0					1.5						
2.5	3.3/5	0						GM		4-5': Fractured/weathered shale, light to dark gray, No HC odor/staining, DENSE - BEDROCK.			
		0											
		0											
		0											
5		0								5-10': same as above. HC odor @ 9 feet bgs.			
		0						SHALE					
		0											
		0											
7.5	4.2/5	0											
8		2.9					8.5						
		1.7											
9		26.7	5.3	103	8.5-9.5	1720							
		1.2					9.5						
10		0.2								10-15': Same as above. Strong HC odor at 14.5 ft bgs; saturated at 15 ft bgs.			
		0.4											
11		4.9											
	4.2/5	2.3											
12.5		2.5						SHALE					
		13.6											
		0.5					14						
14		67.5	4.9	36	14-15	1730							
15							15			15-20': Saturated, same as above. No HC odor or HC staining			
		4.2											
		5.2											
17.5	5/5	6.0											
		3.1											
		3.8											
20		2.9											

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDB14 Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Collected Sample IDs/Analysis: Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20		0.1								Same as above			
	5/5	0						SHALE		20-25': ↓			
22.5		0											
		0											
		0.2											
25		0											
		0.2								25-30': Same as above.			
	5/5	0.4						SHALE					
27.5		0											
		0											
		0.1											
30		0								BOTTOM OF HOLE @ 30 feet bgs			
										~~Plan to set MW here. JC~~			

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH15 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-12-10 / 7-12-10
Start/End Time: 800 950
Initial W. Level: ~~25 ft~~ 25 ft Longitude:
Borehole Dia.: 3.25-inch/2-inch core Latitude:

Driller's Name: Jeff Rezin Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC/DUAL TUBE Total Depth: 30 feet
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH15-22.5-23.5: DRO/RRO, PAHs, GRO/BTEX
RD BH15-29-30: " " "

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
0		0								0-3': Saturated silty/sandy gravel, Light brown, Loose no HC odor/staining - FILL	55	5	40
		0						GM					
	2.5/5												
2.5		0.1					3			3'-5': Moist weathered shale, silty, Light brown/reddish, DENSE, NO HC ODOR/STAIN - BEDROCK			
		0	4.9			830		SHALE					
		0					4.5						
5		0								5-10': Moist to dry, weathered/fractured shale, silty, Light to dark brown, HC odor at 7 and 9 feet, DENSE.			
		0											
		1.3											
	4.2/5												
7.5		3.3											
		7.6											
		13.1	217			840	9	SHALE					
10							10			10-15': Moist weathered/fractured shale, light to dark brown, Dense, HC odor, no visible staining			
		5.5											
		1.2											
	4.2/5												
12.5		6.7											
		50.2					13.5						
		59.6	207			855							
		14.2					14.5						
15										15-20': Moist weathered/fractured shale, Light to dark brown, DENSE, HC odor, HC staining 15-16'.			
		60.2											
16		10.1											
16.5		73.8						SHALE					
		17.0					17.5						
17.5	4.2/5												
18		290	464			910							
		8.9					18.5						
		10.5											
		7.6											
20													

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

J:\Forms & Templates\Field Forms\Borehole & MW forms_logs\SOIL BORING LOG JC (7-1-10)

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RD BH15
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Collected Sample IDs/Analysis: Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20		10.2											
		9.0								20-25': Moist w/ thin saturated zones, weathered/fractured shale, HC odor, DENSE, no visible HC staining.			
		30.2						SHALE					
	4/5	12.2											
22.5		110	611	556	22.5-23.5	923	22.5-23.5						
		71											
		35.6											
25		10.8								25-30': Saturated/moist fractured/ weathered shale, light brown to dark gray, DENSE, HC odor 25-27' and 29-30. No visible staining			
		11.2											
		3.3											
27.5	5/5	5.9											
		8.3											
28.5		57.9											
29		116	330	394	29-30	938	29-30						
30										REFUSAL at 30' bgs. Water in borehole, 0.5 ft thick at bottom of hole.			
32.5													
35													
37.5													
40													

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RDBH16 Page 1 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Start/End Date: 7-12-10 / 7-12-10
Start/End Time: 1030 / 1145
Initial W. Level: Longitude:
Borehole Dia.: 3.25-inch / 2-inch core Latitude:

Driller's Name: Jeff Rezin Logged By: J. Craner
Drilling Contractor: GeoTek Alaska PM: J. Grund
Drilling Method: Direct-Push MC Total Depth: 25 ft.
Cutting Disposal: Downhole Backfilled: Bentonite

Collected Sample IDs/Analysis:
RDBH16-10-11: DRO/RRO, PAHs, GRO/BTEX
RDBH16-24-25: DRO/RRO, PAHs, GRO/BTEX

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
0		1.6					0.5						
		1.8	0.3			1055		GM		0-5': Silty/sandy gravel, Light to dark brown, moist, loose, No HC odor or staining - FILL	55	10	35
	3/5	0.5					2						
2.5		0.4											
		0.4											
		0.2					5						
5		0	0.2			1100				5-9': Loose; same as above - FILL	55	10	35
		0					6	GM					
	4.2/5	0								9-10': Dense, ~~same as above~~ JC fractured/weathered shale.			
7.5		0											
		0					10						
10		1.0	2.7	81	10-11	1110		SHALE		10-15': Fractured/weathered shale, Light to dark brown, moist, dense, No HC odor/No HC ~~contamination~~ JC staining			
		0.5					11						
	3.5/5	0.3											
12.5		0.3											
		0.2											
		0.4					15						
15		0.1	1.6			1121				15-20': Same as above.			
		0.2					16						
	3.75/5	0.1						SHALE					
17.5		0.3											
		0.3											
20		0.3											

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

WESTON SOLUTIONS
Restoring Resource Efficiency

Boring Location ID: RD BH 16 Page 2 of 2
Project Name: Pet. Release Investigation, AST #5
Site Location: Red Devil Mine
Project Number: 13874.005.001.0002

Depth (ft)	Recovered/ Driven (ft)	In-situ PID (ppm)	Headspace PID (ppm)	PetroFLAG (ppm)	Analytical Sample ID	Time	Sample Interval	USCS Code	Graphic Log	Lithologic Description (color, moisture, density, odor, other)	Grain Size Distribution (%) Gravel	Sand	Fines
20		0.1								20-25': Weathered/fractured dense shale, light to dark brown, DENSE, MOIST, No HC odor/stain.			
	3.5/5	0.2						SHALE					
22.5		0.1											
		0.3					24						
25		0.1	0.7	75	24-25	1138	25						

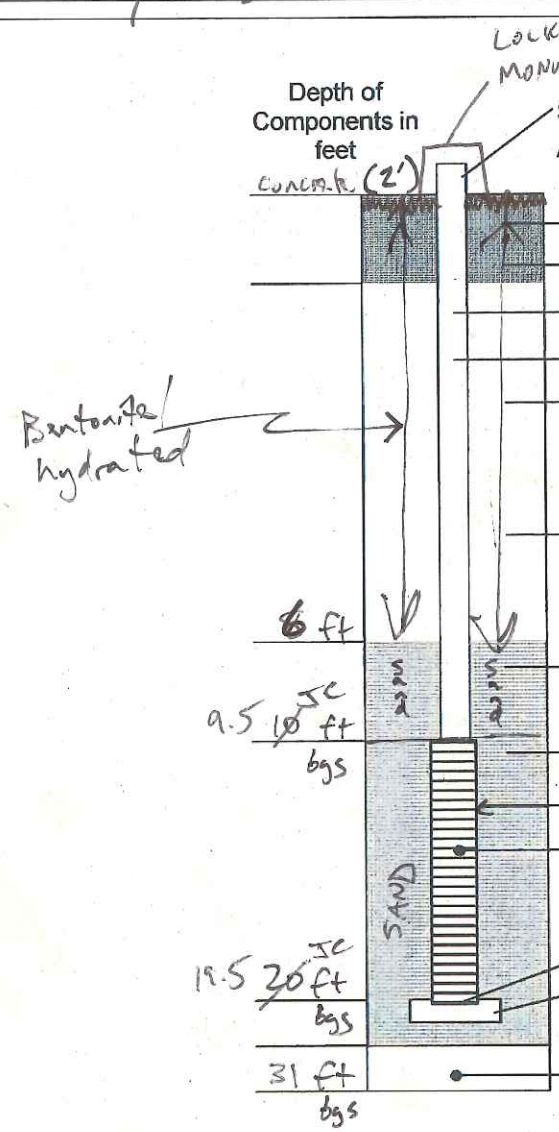
Bottom of hole at 25' bgs. Drill rig broke down - hydraulic fluid leak that started small and is now of concern - still need to get rig back to airstrip. DRILLERS SAY DONE.

ASTM D1586: SS- Split Spoon D-Dennison ST-Shelby Tube
MC-Macro Core CS-Contiuous Sampler OT-Other CT-Cuttings

MONITORING WELL INSTALLATION REPORT

Project Name: RED DEVIL MINE AST #5
Well No.: RDMW01 / RDBH02
Project No.: 13874.005.001.0002
Observer: J. Craner
Date/Time: 7-7-10 / 1445
Drilling Method: Direct-Push

Soil Log



Stick up (feet) ~~2.9~~ 3.69 feet. JC
Approximate ground surface elevation (feet) ?

Diameter of borehole (inches) 4.5"
Type of surface seal CONCRETE MONUMENT
I.D. of riser pipe (inches) 2.0-inch
Type of riser pipe Schedule 40 PVC
Type of backfill around riser Bentonite
Type of well seal Bentonite
Type of sand 20/40 inside pre-pack 10/20 outside pre-pack
Length of top screen blank 10' bgs
Screen size and type 10 slot PVC
Water level 14.9' below TOC
Length of bottom screen blank 20' bgs
Length of end cap 6" silt trap
Type of backfill material 10/20 sand from 20 ft - 31 ft

Remarks: Installed using Geoprobe & pre-packed monitoring wells. Water Level 12.5" below ground surface and 14.9' below MP (TOC). Stickup is 2.9' tall. After installion of monuments, stickup is 3.69'.

Amount of Materials:

Sand	1 1/3 bags	Monument	x1
Cement		Riser	x1
Bentonite pellets	1 1/2 bags	Screen	x1
Bentonite/Volclay		Other	

CLIENT: Marsh Creek		MEASURED BY: K. Willingham / J. Dillon	
PROJECT: Red Devil Mine		DEVELOPMENT METHOD: Grundfos	
SITE: AST 5			
WELL ID: RDM-MW-001			
DATE: 08 July 2010		COMMENTS: Start time = 1400 stop = 1609	

WESTON SOLUTIONS

Well Development Log

ONE WELL VOLUME: 1.112 gallons	WELL TD: ____ ft TOC	Well Volume (gallons/foot)	2-inch = 0.16	6-inch = 1.47
			4-inch = 0.65	8-inch = 2.51

TIME	WELL DEV. CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS temp (C)	conductivity MS/CM	Dissolved oxygen mg/L	PH/ORP	TURBIDITY	COMMENTS ~~ORP~~
1405	DOB	14.95		1	5.00	0.123	6.32	6.63/89.9	>1000	controller running at 85.90 Hz
1410	DFM	—		2	5.03	0.119	5.18	6.59/73.7	>1000	
1416	DFM	—		3	5.78	0.118	3.89	6.57/45.0	1000	
1421	DFM	—		4	6.12	0.116	3.22	6.57/47.7	798	
1425	DFM	—		5	6.10	0.115	3.05	6.58/43.9	615	
1430	DFM	—		6	6.38	0.114	2.78	6.83/22.6	346	
1436	DFM	—		7	6.74	0.113	2.56	6.80/27.3	254	
1442	DFM	—		8	6.88	0.110	2.50	6.77/27.9	244	Flow rate slowing somewhat
1450	DFM	19'		9	6.82	0.215	2.46	6.85/36.3	>1000	Grundfos lowered into water.
1457	DFM	—		10	4.03	0.116	2.77	6.77/71.8	>1000	controller sped up turbidity goes up.
1504	DFM	—		11	3.89	0.119	1.97	6.81/105.1	464	
1508	DFM	—		12	4.06	0.116	2.03	6.90/73.2	273	No odor or sheen noted. clearing up.
1512	DFM	—		13	4.31	0.117	1.93	7.02/51.9	205	controller turned up - flow decreasing.
1515	DFM	—		14	4.84	0.109	1.90	7.01/44.7	189	
1520	DFM	—		15	5.19	0.110	1.82	6.88/42.8	172	
1530	DFM	—		16	4.98	0.113	1.76	7.08/84.3	154	
1535	DFM	—		17	5.02	0.117	1.74	7.19/108.4	144	
1540	DFM	—		18	4.88	0.110	1.77	7.14/110.4	134	turbidity slowly decreasing
1544	DFM	—		19	4.87	0.113	1.72	7.16/108.6	132	still murky
1547	DFM ~~FINAL~~	—		20	4.90	0.115	1.69	7.12/108.6	128	cont. on sheet 2.

WELL DEVELOPMENT CODES		FIELD MEASUREMENT CODES	TURBIDITY
DOB – Begin Overpumping	DAB – Begin Air Surging	MTP – Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOE – End Overpumping	DAE – End Air Surging	MSC – Specific Conductance	OR
DRB – Begin Rawhiding	DCB – Begin Recirculation	MPD – Photoionizer (eg., HNu)	Enter Qualitative Observations
DRE – End Rawhiding	DCE – End Recirculation	MFD – Flame Ionizer (eg., OVA)	
DSB – Begin Surge Blocking	DBB – Begin Bailing	MDO – Dissolved Oxygen	
DSE – End Surge Blocking	DBE – End Bailing	MPH – pH	H – High: Muddy/Silty
DJB – Begin Hydraulic Jetting	DXB – Begin Other	MEH – eH	M – Medium: Cloudy/Translucent
DJE – End Hydraulic Jetting	DXE – End Other	MOT – Other: ____	L – Low: Transparent
DFM – Field Measurements	Other: ____		N – None: Clear/No Sediment

MONITORING WELL INSTALLATION REPORT

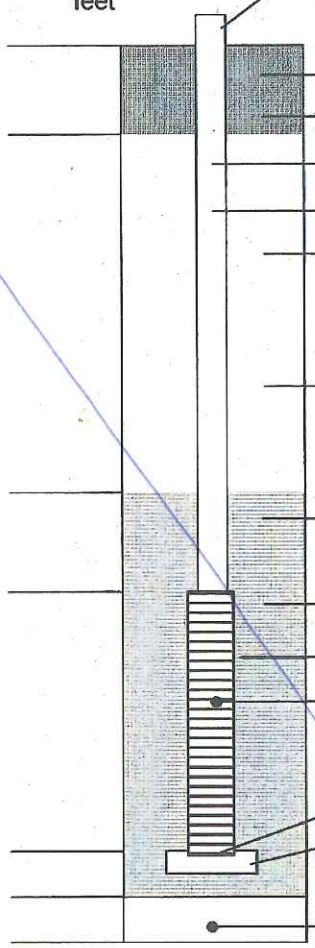
Project Name: _____ Well No.: _____

Project No.: _____ Observer: _____

Date/Time: _____ Drilling Method: _____

Soil Log

Depth of Components in feet



Stick up (feet) _____

Approximate ground surface elevation (feet) _____

Diameter of borehole (inches) _____

Type of surface seal _____

I.D. of riser pipe (inches) _____

Type of riser pipe _____

Type of backfill around riser _____

Type of well seal _____

Type of sand _____

Length of top screen blank _____

Screen size and type _____

Water level _____

Length of bottom screen blank _____

Length of end cap _____

Type of backfill material _____

Remarks: _____

Amount of Materials:

Sand _____

Cement _____

Bentonite pellets _____

Bentonite/Volclay _____

Monument _____

Riser _____

Screen _____

Other _____

CLIENT:	Marsh Creek	MEASURED BY:	K. Willingham / J. Dillon
PROJECT:	Red Devil Mine	DEVELOPMENT METHOD:	Grundfos
SITE:	AST 5		
WELL ID:	RDM-MW-001		
DATE:	08 July 10	COMMENTS:	start time = 1400 stop = 1609

WESTON SOLUTIONS

Well Development Log

ONE WELL VOLUME: _____ gallons	WELL TD: _____ ft TOC	Well Volume (gallons/foot)	2-inch = 0.16	4-inch = 0.65	6-inch = 1.47	8-inch = 2.51

TIME	WELL DEV. CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS temp (C°)	Conductivity ms/cm	Dissolved oxygen mg/L	pH	ORP	TURBIDITY	COMMENTS
1552	DFM	—		21	4.75	0.109	1.64	7.26	43.1	120	
1556	DFM	—		22	4.76	0.114	1.63	7.27	39.0	121	
1600	DFM	—		23	4.74	0.117	1.62	7.28	30.5	119	steady stream of water. still murky.
1605	DFM	—		24	4.75	0.117	1.60	7.24	40.8	114	
1609	DFM	—		25	4.76	0.118	1.60	7.23	41.2	114	End well development
	FINAL										

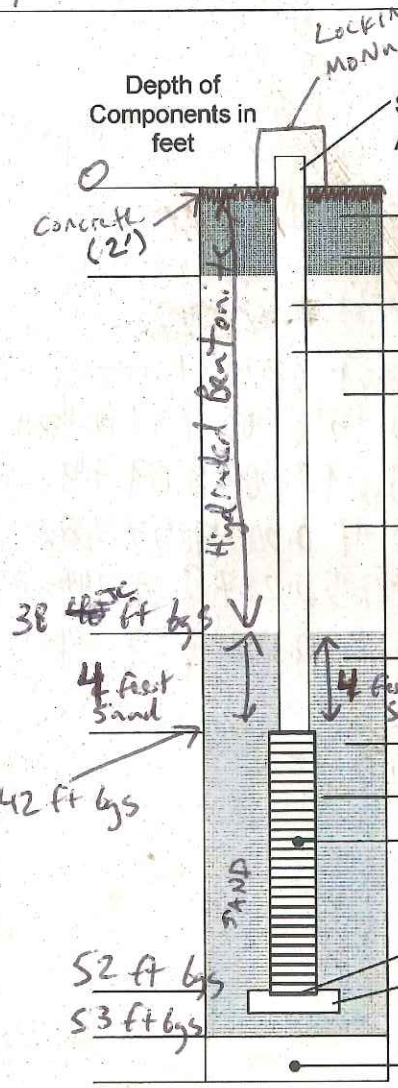
WELL DEVELOPMENT CODES		FIELD MEASUREMENT CODES	TURBIDITY
DOB – Begin Overpumping	DAB – Begin Air Surging	MTP – Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOE – End Overpumping	DAE – End Air Surging	MSC – Specific Conductance	OR
DRB – Begin Rawhiding	DCB – Begin Recirculation	MPD – Photoionizer (eg., HNu)	Enter Qualitative Observations
DRE – End Rawhiding	DCE – End Recirculation	MFD – Flame Ionizer (eg., OVA)	
DSB – Begin Surge Blocking	DBB – Begin Bailing	MDO – Dissolved Oxygen	
DSE – End Surge Blocking	DBE – End Bailing	MPH – pH	H – High: Muddy/Silty
DJB – Begin Hydraulic Jetting	DXB – Begin Other	MEH – eH	M – Medium: Cloudy/Translucent
DJE – End Hydraulic Jetting	DXE – End Other	MOT – Other: _____	L – Low: Transparent
DFM – Field Measurements	Other: _____		N – None: Clear/No Sediment

MONITORING WELL INSTALLATION REPORT

Project Name: RED DEVIL MINE, AST #5
Well No.: RDMW02/RDBH07D
Project No.: 13874-005-001-0002
Observer: J. Craner
Date/Time: 7-10-10 / 1100
Drilling Method: Down hole hammer/ AIR ROTARY

Soil Log

Depth of Components in feet



Stick up (feet) 3.50 ~~2.50~~ ~~3.7~~ feet
Approximate ground surface elevation (feet) ?
Diameter of borehole (inches) 4.5-inch
Type of surface seal ~~Bentonite~~ Concrete
I.D. of riser pipe (inches) 2"
Type of riser pipe Schedule 40 PVC
Type of backfill around riser Bentonite
Type of well seal Bentonite
Type of sand 20/40 inside prepack; 10/40 outside prepack
Length of top screen blank 42' bgs
Screen size and type 10 slot PVC
Water level 42.45' below TOC
Length of bottom screen blank 52' bgs
Length of end cap 6" silt trap
Type of backfill material —

Remarks: Installed Geoprobe pre-pack well, 10 ft well screen. Stick-up ~~3.7~~ 3.5 ft. WL ~~42.45~~ 41.75 ft below TOC. ~9.5' water.

After installation of monuments, stickup is now 3.50'.

42.45
1.70
40.75

Amount of Materials:

Sand	2 bags	Monument	X |
Cement		Riser	X |
Bentonite pellets	|||| 4.25 bags	Screen	X |
Bentonite/Volclay		Other	

CLIENT:	Marsh Creek	MEASURED BY:	K. Willingham
PROJECT:	Red Devil Mine ASTS RI DEVELOPMENT		
SITE:	AST 5-RI RDMW02	METHOD:	Grundfos / Bailer
WELL ID:	RD-MW-02		
DATE:	11 July 2010	COMMENTS:	start=0930 stop=1635

WESTON SOLUTIONS

Well Development Log

ONE WELL VOLUME: _____ gallons	WELL TD: _____ ft TOC	Well Volume (gallons/foot)	2-inch = 0.16	6-inch = 1.47
			4-inch = 0.65	8-inch = 2.51

TIME	WELL DEV. CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS temp (C°)	conductivity	dissolved oxygen	pH	ORP	TURBIDITY	COMMENTS
0930	DOB	—									Grundfos clogged with sediment
1040	DFM	—		2	5.94	0.330	5.75	7.44	-11.8	>1000	used bailer for initial purges
1105	DFM	—		4	6.03	0.327	6.25	7.40	6.2	>1000	
1125	DFM	—		6	6.07	0.324	7.11	7.38	8.1	>1000	
1350	DFM	43.15		8	5.45	0.305	7.39	7.34	39.4	>1000	stopped purging and continued @ 1330.
1520	DFM	44.5		10	5.09	0.304	8.09	7.43	22.8		Hurricane pump did not work.
1540	DFM	—		12	5.41	0.300	7.57	7.38	28.9	>1000	bailing
1600	DFM	—		14	4.75	0.287	9.18	7.44	51.0	>1000	
1635	DFM	—		16	6.58	0.282	7.85	7.54	47.7	867	end of development
	FINAL										

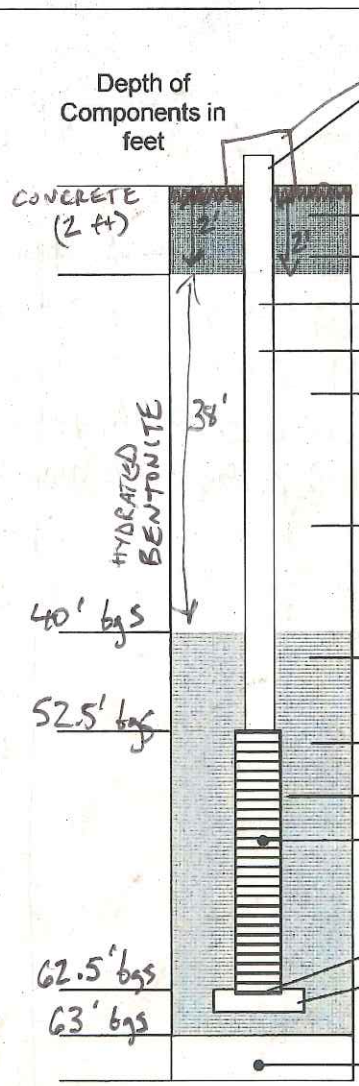
WELL DEVELOPMENT CODES		FIELD MEASUREMENT CODES	TURBIDITY
DOB – Begin Overpumping	DAB – Begin Air Surging	MTP – Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOE – End Overpumping	DAE – End Air Surging	MSC – Specific Conductance	OR
DRB – Begin Rawhiding	DCB – Begin Recirculation	MPD – Photoionizer (eg., HNu)	Enter Qualitative Observations
DRE – End Rawhiding	DCE – End Recirculation	MFD – Flame Ionizer (eg., OVA)	
DSB – Begin Surge Blocking	DBB – Begin Bailing	MDO – Dissolved Oxygen	H – High: Muddy/Silty
DSE – End Surge Blocking	DBE – End Bailing	MPH – pH	M – Medium: Cloudy/Translucent
DJB – Begin Hydraulic Jetting	DXB – Begin Other	MEH – eH	L – Low: Transparent
DJE – End Hydraulic Jetting	DXE – End Other	MOT – Other: _____	N – None: Clear/No Sediment
DFM – Field Measurements	Other: _____		

MONITORING WELL INSTALLATION REPORT

Project Name: Red Devil Mine / AST #5
Project No.: 13874-005-001-0002
Date/Time: 7-10-10 2000 (completed time)
Well No.: RDMW03 / RDBH10D
Observer: J. Cramer
Drilling Method: AIR ROTARY, DRIVEHOLE HAMMER

Soil Log

Depth of Components in feet



Stick up (feet) 3.37 feet
Approximate ground surface elevation (feet) ?
Diameter of borehole (inches) 4.5"
Type of surface seal Concrete
I.D. of riser pipe (inches) 2"
Type of riser pipe Schedule 40 PVC
Type of backfill around riser Bentonite
Type of well seal Bentonite
Type of sand 20/40 inside pre-pack, 10/20 outside pre-pack
Length of top screen blank 52.5' bgs ~~10' bgs~~ TOC
Screen size and type 10 slot PVC
Water level 39.16 feet
Length of bottom screen blank 62.5 ft bgs
Length of end cap 6" silt trap
Type of backfill material —

Remarks: Set well with pre-pack Geoprobe monitoring well.
Water Level 39.16 feet below TOC @ 0820; 7-11-10.
Stickup is 3.0' above ground surface.
After ~~stick~~ installation of stickup monuments, now 3.37 feet.

Amount of Materials:
Sand 2 ~~bags~~ bags
Cement
Bentonite pellets 5 bags
Bentonite/Volclay

Monument X
Riser X
Screen X
Other

CLIENT:	Marsh Creek	MEASURED BY:	K. Willingham
PROJECT:	Red Devil Mine-ASTS-RI	DEVELOPMENT METHOD:	bailer/hurricane submersible
SITE:	ASTS-RI		
WELL ID:	RD-MW-03		
DATE:	11 July 10	COMMENTS:	

WESTON SOLUTIONS

Well Development Log

ONE WELL VOLUME: _____ gallons	WELL TD: _____ ft TOC	Well Volume (gallons/foot)	2-inch = 0.16	6-inch = 1.47
			4-inch = 0.65	8-inch = 2.51

	TIME	WELL DEV. CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS Temp	conductivity	Dissolved oxygen	pH / ORP	TURBIDITY	COMMENTS
start:	1700	DBB	39.53		2 (KW)						begin bailing/ purging
	1715	DFM	—		2	4.48	0.275	5.42	7.73/33.7	337	
	1735	DFM	—		4	5.87	0.277	6.04	7.67/20.1	>1000	sediment stirred up
	1800	DFM	—		6	5.19	0.260	7.39	7.58/-31.7	>1000	
	1815	DFM	—		8	5.60	0.258	7.49	7.55/-34.0	>1000	
	1835	DFM	—		10	4.80	0.253	8.72	7.53/-54.6	>1000	end of development
		FINAL									

WELL DEVELOPMENT CODES		FIELD MEASUREMENT CODES	TURBIDITY
DOB – Begin Overpumping	DAB – Begin Air Surging	MTP – Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOE – End Overpumping	DAE – End Air Surging	MSC – Specific Conductance	OR
DRB – Begin Rawhiding	DCB – Begin Recirculation	MPD – Photoionizer (eg., HNu)	Enter Qualitative Observations
DRE – End Rawhiding	DCE – End Recirculation	MFD – Flame Ionizer (eg., OVA)	
DSB – Begin Surge Blocking	DBB – Begin Bailing	MDO – Dissolved Oxygen	
DSE – End Surge Blocking	DBE – End Bailing	MPH – pH	H – High: Muddy/Silty
DJB – Begin Hydraulic Jetting	DXB – Begin Other	MEH – eH	M – Medium: Cloudy/Translucent
DJE – End Hydraulic Jetting	DXE – End Other	MOT – Other: _____	L – Low: Transparent
DFM – Field Measurements	Other: _____		N – None: Clear/No Sediment

WESTON SOLUTIONS

Groundwater Sampling Record

Project Name: Red Devil Mine - AST5-RI
Well ID: RDM-MW-001 (RDBH02)
Project Location: Red Devil Mine
Sample No.:
Project Number:
Sampler(s): K Willingham / J. Blount
Date/Time: 16 July 10 / 1128 = sample time
Weather: Rainy ~ 53°F 0-5 mph wind

Water Level Measurements and Purge Data

Time	Depth of Well (TOC)	Depth to Water (TOC)	Feet of Water in Well	Gallons per Well Volume (2" dia. = 0.163 gal/ft, 4" dia.=0.653 gal/ft)
0820	21.90 ☐ Meas. ☐ Hist.	15.11 Initial	6.79	1.106

Water Level Measurement Method: ☑ Electric Tape ☐ Other:

Well Evacuation Method: ☐ Peristaltic Pump ☑ Submersible Pump ☐ Bailer ☐ Other:

Purge Rate:

Begin Purge: Time: 0900
Total Volume Purged: 28.0

End Purge: Time: 1125
Well Volumes Purged: 25.5

Purge Water Disposed: ☑ 55-gal Drum ☐ Storage Tank ☐ Ground ☐ Liquabin ☐ Other:

Sample Collection Method & Analysis

Sample Type: ☑ Groundwater ☐ Surface Water ☐ Other:

Sample Time: 1128

Sample Collection Method: ☐ Pump Type: Dedicated ☐ Y ☐ N ☐ Bailer ☐ Other:

Decon Procedure: ☐ N/A ☑ Alconox Wash ☐ Tap Rinse ☐ DI Water ☐ Other:

Sample Description (color, turbidity, odor, sheen, etc.): somewhat cloudy, no sheen, slight HC odor.

Sample Containers

Quantity	Size	Bottle Type		Laboratory Analysis
2	1 L	☑ Glass	☐ Plastic	PAHs
3	40 ml	☑ Glass	☐ Plastic	GRO/BTEX
2	100 ml.	☑ Glass	☐ Plastic	DRO/RRO
		☐ Glass	☐ Plastic	
		☐ Glass	☐ Plastic	
		☐ Glass	☐ Plastic	

Notes:

Sampler Signature: Katherine Willingham

Date: 10 July 10 Well ID: RDM-MW-001

Well Evacuation / Field Parameters

Time	Depth to Water (TOC)	Volume (gallons)	Temp (°C)	Cond (µS/cm)	DO (mg/L)	pH	ORP (mV)	Color/ Turbidity
0905	—	1.0	3.65	0.100	2.66	-9.99	1276.7	561
0909	—	2.0	3.71	0.101	2.30	-9.99	1236.5	387
0914	—	3.0	4.05	0.104	1.98	-9.99	1199.3	266
0918	—	4.0	4.07	0.100	1.94	-9.99	1180.1	298
0921	—	5.0	4.07	0.104	1.86	-5.07	503.4	544
0928	—	6.0	6.20	0.104	1.82	6.20	101.2	287
0935	—	7.0	7.38	0.106	1.65	6.22	87.9	221
*0945	—	8.0	3.44	0.107	1.61	5.61	61.0	>1000
0950	—	9.0	3.41	0.105	1.51	5.81	48.6	1000
0957	—	10.0	3.67	0.109	1.31	6.12	30.3	436
1009	—	11.0	3.88	0.109	1.39	6.15	30.6	227
1014	—	12.0	3.81	0.105	1.45	6.15	32.9	171
1020	—	13.0	3.87	0.106	1.45	6.17	31.5	158
1026	—	14.0	3.87	0.105	1.33	6.17	30.2	114
1030	—	15.0	3.82	0.108	1.32	6.17	29.4	96.9
1035	—	16.0	3.54	1.08	1.28	6.16	30.3	91.2
1040	—	17.0	3.61	0.105	1.17	6.17	30.3	88.8
1045		18.0	3.60	0.105	1.17	6.17	30.2	~~97~~ 89.8 ~~80.5~~

Notes :

*lost water and had to lower pump and tubing into the water table. As a result, turbidity increased.

*GPM rate slowing significantly due to low water flow.

Groundwater Sampling Record

Project Name: _____ Well ID: _____

Project Location: _____ Sample No.: _____

Project Number: _____ Sampler(s): _____

Date/Time: _____ Weather: _____

Water Level Measurements and Purge Data

Time	Depth of Well (TOC)	Depth to Water (TOC)	Feet of Water in Well	Gallons per Well Volume (2" dia. = 0.163 gal/ft, 4" dia.=0.653 gal/ft)
	☐ Meas. ☐ Hist.	Initial		

Water Level Measurement Method: ☐ Electric Tape ☐ Other: _____

Well Evacuation Method: ☐ Peristaltic Pump ☐ Submersible Pump ☐ Bailer ☐ Other: _____

Purge Rate: _____

Begin Purge: Time: _____ Total Volume Purged: _____

End Purge: Time: _____ Well Volumes Purged: _____

Purge Water Disposed: ☐ 55-gal Drum ☐ Storage Tank ☐ Ground ☐ Liquabin ☐ Other: _____

Sample Collection Method & Analysis

Sample Type: ☐ Groundwater ☐ Surface Water ☐ Other: _____

Sample Time: _____

Sample Collection Method: ☐ Pump Type: _____ Dedicated ☐ Y ☐ N ☐ Bailer ☐ Other: _____

Decon Procedure: ☐ N/A ☐ Alconox Wash ☐ Tap Rinse ☐ DI Water ☐ Other:

Sample Description (color, turbidity, odor, sheen, etc.): _____

Sample Containers

Quantity	Size	Bottle Type	Laboratory Analysis
		☐ Glass ☐ Plastic	
		☐ Glass ☐ Plastic	
		☐ Glass ☐ Plastic	
		☐ Glass ☐ Plastic	
		☐ Glass ☐ Plastic	
		☐ Glass ☐ Plastic	

Notes:

Sampler Signature: _____

Date: 10 July 10 Well ID: RDM-MW-001 (RDBH02)

Well Evacuation / Field Parameters

Time	Depth to Water (TOC)	Volume (gallons)	Temp (°C)	Cond (µS/cm)	DO (mg/L)	pH	ORP (mV)	Color/ Turbidity
1049	—	19.0	3.53	0.105	1.13	6.17	30.9	80.5
1053	—	20.0	3.52	0.104	1.14	6.17	30.6	78.0
1056	—	21.0	3.61	0.107	1.11	6.17	28.4	79.8
1100	—	22.0	3.72	0.105	1.10	6.17	27.0	78.8
1104	—	23.0	3.60	0.110	1.12	6.18	22.6	76.0
1108	—	24.0	3.61	0.111	1.08	6.18	18.0	82.5
1112	—	25.0	3.65	0.105	1.04	6.18	14.9	76.3
1116	—	26.0	3.68	0.108	1.05	6.18	9.9	71.2
1120	—	27.0	3.66	0.109	1.04	6.18	6.9	71.1
1125	—	28.0	3.69	0.106	1.02	6.18	3.9	71.3

Notes :
Steady flow and good recharge.

WESTON SOLUTIONS

Groundwater Sampling Record

Project Name: Red Devil Mine - AST5RI
Well ID: RD-MW-002
Project Location: Red Devil Mine
Sample No.: RD-MW-002
Project Number:
Sampler(s): K. Willingham
Date/Time: 12 July 10 / 1815 = sample time
Weather: Sunny ~56°F, wind = 0-10mph.

Water Level Measurements and Purge Data

Time	Depth of Well (TOC)	Depth to Water (TOC)	Feet of Water in Well	Gallons per Well Volume (2" dia. = 0.163 gal/ft, 4" dia.=0.653 gal/ft)
0800	54.90 ☒ Meas. ☐ Hist.	43.50 Initial	11.4	1.85

Water Level Measurement Method: ☑ Electric Tape ☐ Other:

Well Evacuation Method: ☐ Peristaltic Pump ☑ Submersible Pump ☑ Bailer ☐ Other: S.S. Hurricane

Purge Rate:

Begin Purge: Time: 0840 / 1524
Total Volume Purged: 8.0

End Purge: Time: 1815
Well Volumes Purged: 4.3

Purge Water Disposed: ☑ 55-gal Drum ☐ Storage Tank ☐ Ground ☐ Liquabin ☐ Other:

Sample Collection Method & Analysis

Sample Type: ☑ Groundwater ☐ Surface Water ☐ Other:

Sample Time: 1815

Sample Collection Method: ☐ Pump Type: Dedicated ☐ Y ☐ N ☑ Bailer ☐ Other:

Decon Procedure: ☐ N/A ☑ Alconox Wash ☐ Tap Rinse ☐ DI Water ☐ Other:

Sample Description (color, turbidity, odor, sheen, etc.):

Sample Containers

Quantity	Size	Bottle Type		Laboratory Analysis
2	1L	☑ Glass	☐ Plastic	PAHs
3	40 ml	☑ Glass	☐ Plastic	GRO/BTEX
2	100 ml	☑ Glass	☐ Plastic	DRO/RRO
		☐ Glass	☐ Plastic	
		☐ Glass	☐ Plastic	
		☐ Glass	☐ Plastic	

Notes:
Numerous attempts at using a submersible pump for sampling effort, however only a bailer would work due to high sediment content and well depth.

Sampler Signature: Kathryn Willingham

Date: 12 July 10 Well ID: RD-MW-002

Well Evacuation / Field Parameters

	Time	Depth to Water (TOC)	Volume (gallons)	Temp (°C)	Cond (µS/cm)	DO (mg/L)	pH	ORP (mV)	Color/ Turbidity
**	0843		2.0	5.42	0.800	3.47	7.23	22.9	>1000
*	0852		4.0	4.97	0.288	3.18	7.15	18.1	>1000
☆	1000		6.0	6.06	0.197	~~10.10~~ 9.66	7.26	29.8	>1000
	1020		8.0	5.05	0.287	6.66	7.23	24.5	>1000

Notes :

** used Grundfos, but pump stopped working due to high sediment content.
* used G.S. Hurricane, but pump only purged one well casing due to ~~lack of~~ the 55 ft. well depth.
☆ Bailing well.

Allowing well to settle.

Groundwater Sampling Record

Project Name: Red Devil Mine
Project Location: Red Devil Mine
Project Number:
Date/Time: 11 July / 1830

Well ID: RD-MW-003
Sample No.: RD-MW-003
Sampler(s): K. Willingham
Weather: Sunny ~63°F no wind.

Water Level Measurements and Purge Data

Time	Depth of Well (TOC)	Depth to Water (TOC)	Feet of Water in Well	Gallons per Well Volume (2" dia. = 0.163 gal/ft, 4" dia.=0.653 gal/ft)
1042	65.90 ☒ Meas. ☐ Hist.	38.75 Initial	27.4	4.38

Water Level Measurement Method: ☑ Electric Tape ☐ Other:

Well Evacuation Method: ☐ Peristaltic Pump ☐ Submersible Pump ☑ Bailer ☐ Other:

Purge Rate:

Begin Purge: Time: 1040

End Purge: Time: 1340

Total Volume Purged: 12.0

Well Volumes Purged: 2.74

Purge Water Disposed: ☑ 55-gal Drum ☐ Storage Tank ☐ Ground ☐ Liquabin ☐ Other:

Sample Collection Method & Analysis

Sample Type: ☑ Groundwater ☐ Surface Water ☐ Other:

Sample Time: 1830

Sample Collection Method: ☐ Pump Type: Dedicated ☐ Y ☐ N ☑ Bailer ☐ Other:

Decon Procedure: ☐ N/A ☑ Alconox Wash ☐ Tap Rinse ☐ DI Water ☐ Other:

Sample Description (color, turbidity, odor, sheen, etc.):

Sample Containers

Quantity	Size	Bottle Type		Laboratory Analysis
2	1L	☒ Glass	☐ Plastic	PAHs
3	40 ml	☒ Glass	☐ Plastic	GRO/BTEX
2	100 ml	☒ Glass	☐ Plastic	DRO/RRO
		☐ Glass	☐ Plastic	
		☐ Glass	☐ Plastic	
		☐ Glass	☐ Plastic	

Notes:

Sampler Signature:

Date: 12 July 2010 Well ID: RD-MW-003

Well Evacuation / Field Parameters

Time	Depth to Water (TOC)	Volume (gallons)	Temp (°C)	Cond (µS/cm)	DO (mg/L)	pH	ORP (mV)	Color/ Turbidity
Start: ~~1120~~ 1040	38.75	—	—	—	—	—	—	—
1120	—	4.0	4.46	0.259	43.6	7.51	-15.2	>1000
1150	—	8.0	4.11	0.262	45.5	~~5.94~~ 7.39	-12.8	>1000
1340	—	12.0	6.11	0.264	44.6	7.32	-8.1	>1000

Notes :

1200- Stopped bailing and returned at 1315.

Bailing well due to high sediment content and depth of well. Grundfos and S.S. Hurricane cannot pump through dirty water and deep water table.

APPENDIX D
HISTORICAL AERIAL PHOTOGRAPHS

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AST 5
Red Devil Mine, 1955

Red Devil Mine, June 27, 1974
AST 5

AST 5
Red Devil Mine, May 29, 2001

APPENDIX E
ADEC METHOD THREE
CLEANUP LEVEL CALCULATIONS

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Method Three & Cumulative Risk Calculator

Site zone and exposure scenario: Under 40-inch Zone - Commercial/Industrial Exposures

Cleanup Level Calculations 7/28/2010

Chemical	CAS	Type	Calculations		
Acenaphthene	83-32-9	Organic Non-Carcinogenic Solid	Direct Contact Indoor Worker:	18800	mg/kg
			Direct Contact Outdoor Worker:	16300	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	2.2	mg/L
			Migration to Groundwater:	180	mg/kg
Acenaphthylene	208-96-8	Organic Non-Carcinogenic Solid	Direct Contact Indoor Worker:	18800	mg/kg
			Direct Contact Outdoor Worker:	16300	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	2.2	mg/L
			Migration to Groundwater:	180	mg/kg
Anthracene	120-12-7	Organic Non-Carcinogenic Solid	Direct Contact Indoor Worker:	188000	mg/kg
			Direct Contact Outdoor Worker:	144000	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	11	mg/L
			Migration to Groundwater:	3000	mg/kg
Benzo(a)anthracene	56-55-3	Organic Carcinogenic Solid	Direct Contact Indoor Worker:	27	mg/kg
			Direct Contact Outdoor Worker:	20	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	0.0012	mg/L
			Migration to Groundwater:	3.6	mg/kg
Benzo(b)fluoranthene	205-99-2	Organic Carcinogenic Solid	Direct Contact Indoor Worker:	27	mg/kg
			Direct Contact Outdoor Worker:	20	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	0.0012	mg/L
			Migration to Groundwater:	12	mg/kg
Benzo(g,h,i)perylene	191-24-2	Organic Non-Carcinogenic Solid	Direct Contact Indoor Worker:	9400	mg/kg
			Direct Contact Outdoor Worker:	8100	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	1.1	mg/L
			Migration to Groundwater:	38700	mg/kg
Chrysene	218-01-9	Organic Carcinogenic Solid	Direct Contact Indoor Worker:	2700	mg/kg
			Direct Contact Outdoor Worker:	2000	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	0.12	mg/L
			Migration to Groundwater:	360	mg/kg
			Direct Contact Indoor Worker:	12500	mg/kg

Fluoranthene	206-44-0	Organic Non-Carcinogenic Solid	Direct Contact Outdoor Worker:	10900	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	1.5	mg/L
			Migration to Groundwater:	1400	mg/kg
Fluorene	86-73-7	Organic Non-Carcinogenic Solid	Direct Contact Indoor Worker:	18400	mg/kg
			Direct Contact Outdoor Worker:	15100	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	1.5	mg/L
			Migration to Groundwater:	220	mg/kg
1-Methylnaphthalene	90-12-0	Organic Non-Carcinogenic	Direct Contact Indoor Worker:	2600	mg/kg
			Direct Contact Outdoor Worker:	2000	mg/kg
			Inhalation Cleanup Level:	820	mg/kg
			Groundwater Cleanup Level:	0.15	mg/L
			Migration to Groundwater:	6.2	mg/kg
2-Methylnaphthalene	91-57-6	Organic Non-Carcinogenic	Direct Contact Indoor Worker:	2600	mg/kg
			Direct Contact Outdoor Worker:	2000	mg/kg
			Inhalation Cleanup Level:	800	mg/kg
			Groundwater Cleanup Level:	0.15	mg/L
			Migration to Groundwater:	6.1	mg/kg
Naphthalene	91-20-3	Organic Non-Carcinogenic	Direct Contact Indoor Worker:	13000	mg/kg
			Direct Contact Outdoor Worker:	9900	mg/kg
			Inhalation Cleanup Level:	37	mg/kg
			Groundwater Cleanup Level:	0.73	mg/L
			Migration to Groundwater:	20	mg/kg
Pyrene	129-00-0	Organic Non-Carcinogenic Solid	Direct Contact Indoor Worker:	9400	mg/kg
			Direct Contact Outdoor Worker:	8100	mg/kg
			Inhalation Cleanup Level:		
			Groundwater Cleanup Level:	1.1	mg/L
			Migration to Groundwater:	1000	mg/kg

The parameters used to calculate the above cleanup levels and the parameters' default values are as follows:

Volatilization Pathway Parameters

Symbol	Description	Value	Default	Units
ρ_b	Dry soil bulk density	1.5	1.5	g/cm^3
n	Total soil porosity	0.434	0.434	L_{pore}/L_{soil}
Θ_w	Water-filled soil porosity	0.15	0.15	L_{water}/L_{soil}
Θ_a	Air-filled soil porosity	0.284	0.284	L_{air}/L_{soil}
w	Average soil moisture content	0.1	0.1	g_{water}/g_{soil}
f_{oc}	Organic carbon content of soil	0.001	0.001	g/g

Groundwater Pathway Parameters

Symbol	Description	Value	Default	Units
Θ_w	Water-filled soil porosity	0.3	0.3	L_{water}/L_{soil}
Θ_a	Air-filled soil porosity	0.13	0.13	L_{air}/L_{soil}
w	Average soil moisture content	0.1	0.1	g_{water}/g_{soil}
K	Aquifer hydraulic conductivity	876	876	m/yr
i	Hydraulic gradient	0.002	0.002	m/m
L	Source length parallel to groundwater flow	32	32	m
I	Infiltration rate	0.13	0.13	m/yr
d_a	Aquifer thickness	10	10	m

Please note that you must demonstrate that the calculated cleanup levels will not produce unacceptable cumulative risks before they will be accepted. If cumulative risks are above the benchmarks, the cleanup levels should be modified downwards. See the Cleanup Level Guidance for details.

APPENDIX F
LABORATORY DATA QA/QC REPORT

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MEMORANDUM

DATE:	5 October 2010
TO:	Jody Dillon, Weston Solutions, Inc., Anchorage, AK
FROM:	Linda Korobka, Weston Solutions, Inc., Okemos, MI
SUBJECT:	Review of 2009 Petroleum Release Response Investigation Data - Exception Memo *Laboratory Groups*: ATG0029 and ATG0050 *Site*: Red Devil Mine (RDM), Red Devil, Alaska *Project*: 2009 Petroleum Release Response Release Investigation at Red Devil Mine, Red Devil, Alaska
WORK ORDER:	**13874.005.001.0002**
cc:	Weston Solutions, Inc. project file

The quality assurance (QA) review of 28 soils, 5 surface waters, and 5 sediment samples from laboratory groups **ATG0029 and ATG0050** collected from the United States Department of the Interior, Bureau of Land Management (BLM) 2009 Petroleum Release Response Release Investigation at Red Devil Mine, Red Devil, Alaska has been completed.

Test America Laboratories of Anchorage, Alaska performed chemical analyses for all parameters. The laboratory group identifier listed above was assigned to the project.

The samples were numbered:

RDBH01-6.5-8.5	RDBH10-6-7.5	RDBH11D-52-53
RDBH01-12.5-13.5	RDBH11-0-2	RDBH13-29-30
RDBH02-5-7	RDBH12-1-3	RDBH13-929-30
RDBH02-11.5-13	RDBH12-21-22.5	RDBH13-36.5-37.5
RDBH03-4-5	RDM-SW-001	RDBH14-8.5-9.5
RDBH03-12-13	RDM-SW-002	RDBH14-98.5-9.5
RDBH04-0.5-2	RDM-SW-003	RDBH14-14-15
RDBH04-15-15.5	RDM-SW-004	RDBH15-22.5-23.5
RDBH05-22-23	RDM-SW-003-DUP	RDBH15-29-30
RDBH05-34-35	RDM-SED-001	RDBH16-10-11
RDBH06-11-13	RDM-SED-002	RDBH16-20-25
RDBH06-21.5-22.5	RDM-SED-003	RD-MW-002
RDBH06-921.5-22.5	RDM-SED-004	RD-MW-003
RDBH07-8-9	RDM-SED-003-DUP	RD-MW-001
RDBH07-22.5-23.5	TRIP BLANK 1	TRIP BLANK 1 7/13
RDBH08-0-1.5	TRIP BLANK 2	TRIP BLANK 2 7/13
RDBH08-18-19	TRIP BLANK 3	
RDBH09-10-11.5	RDBH07D-51.5-52.5	
RDBH09-15-16	RDBH09D-20-21.5	
RDBH10-2-4	RDBH09D-42-43	
RDBH11-30-31.5	RDBH10D-32-33	
RDBH11-930-31.5	RDBH10D-61-63	

The samples were analyzed for the following constituents, as required to determine whether contaminant concentrations in groundwater, surface water, soil and sediment at the RDM met the corrective action requirements of the Alaska Department of Environmental Conservation (ADEC) under Title 18 of the Alaska Administrative Code (AAC) Chapter 60 and 18 AAC 75. Any potential bias resulting from the quality issue identified by the data flag is discussed in this QA/QC summary report.

Organic Parameters

- Volatile organic compounds (VOC) as benzene, ethylbenzene, toluene, and total xylene (BTEX) by USEPA Office of Solid Waste and Emergency Response (OSWER) SW-846 (SW) Method 5035 (preparation)- methanol preservation/purge and trap, followed by USEPA Method SW 8021B (analysis) – gas chromatography using photo-ionization and electrolytic conductivity detectors (GC).

- Volatile organic compounds (VOC) as BTEX by USEPA OSWER SW Method 5035 (preparation) - methanol preservation/purge and trap, followed by USEPA Method SW 8260B (analysis) – gas chromatography/mass spectrometry detection (GC/MS).

- Diesel–range organic compounds (DRO) by ADEC Method AK 102 – ultrasonic extraction followed by GC/ flame-ionization detection (GC/FID).

- Residual Range organics (RRO) by ADEC Method AK 102 – ultrasonic extraction followed by GC/ flame-ionization detection (GC-FID).

- Gasoline Range organics (GRO) by ADEC Method AK 101 – ultrasonic extraction followed by GC/ photo-ionization detection (GC-PID).

- Semivolatile aromatic compounds (SVOC) as polycylic aromatic hydrocarbons (PAH) by USEPA OSWER SW Method 3550B (preparation) – ultrasonic extraction, followed by USEPA Method SW 8270C Modified (analysis) – GC/MS with selective ion monitoring (SIM).

- Semivolatile aromatic compounds (SVOC) by USEPA OSWER SW Method 3550B (preparation) – ultrasonic extraction, followed by USEPA Method SW 8270C – GC/MS with selective ion monitoring (SIM).

Data Qualifications

The following comments refer to the laboratory performance in meeting the quality control criteria described in the Work Plan (WP) for the Scope of Work (SOW) for Site Characterization and Cleanup Actions at Red Devil Mine, Red Devil, Alaska. The review follows the format described in the WP, *National Functional Guidelines for Organic Data Review* (USEPA 2005), *National Functional Guidelines for Inorganic Review* (USEPA 2004), United States Department of the Interior BLM Quality Assurance Project Plan (April 2010) and specific procedural details provided in the individual analytical methods.

This is an exception memo. All required quality control criteria were met, with the following exceptions.

Method SW 8021B-BTEX

Method SW 8260B-BTEX

Trip Blank samples collected on 7/13/10 (2), and 7/7/10 (3) were not listed on the chain of custody forms with the samples received by the laboratory. All BTEX results for these samples were qualified as rejected (R).

The reporting limits specified in the BLM QAPP were not met for BTEX for samples that required dilution. The following samples were analyzed at 33.3-fold, 50-fold, 100-fold and 200-fold dilutions. No action was taken.

RDBH01-6.5-8.5	33.3X Dilution	RDBH10-6-7.5	33.3X Dilution
RDBH01-12.5-13.5	33.3X Dilution	RDBH11-0-2	33.3X Dilution
RDBH02-5-7	33.3X Dilution	RDBH12-1-3	33.3X Dilution
RDBH02-11.5-13	33.3X Dilution	RDBH12-21-22.5	33.3X Dilution
RDBH03-4-5	33.3X Dilution	RDM-SED-001	33.3X Dilution
RDBH03-12-13	33.3X Dilution	RDM-SED-002	33.3X Dilution
RDBH04-0.5-2	33.3X Dilution	RDM-SED-003	33.3X Dilution
RDBH04-15-15.5	33.3X Dilution	RDM-SED-004	33.3X Dilution
RDBH05-22-23	33.3X Dilution	RDM-SED-003-DUP	33.3X Dilution
RDBH05-34-35	33.3X Dilution	RDBH15-22.5-23.5	50X Dilution
RDBH06-11-13	33.3X Dilution	RDBH15-29-30	50X Dilution
RDBH06-21.5-22.5	33.3X Dilution	RDBH16-10-11	50X Dilution
RDBH06-921.5-22.5	33.3X Dilution	RDBH16-20-25	50X Dilution
RDBH07-8-9	33.3X Dilution		
RDBH07-22.5-23.5	33.3X Dilution		
RDBH08-0-1.5	33.3X Dilution		
RDBH08-18-19	33.3X Dilution		
RDBH09-10-11.5	33.3X Dilution		
RDBH09-15-16	33.3X Dilution		
RDBH10-2-4	33.3X Dilution		
RDBH11-30-31.5	33.3X Dilution		
RDBH11-930-31.5	33.3X Dilution		
RDBH13-29-30	50X Dilution		
RDBH13-929-30	50X Dilution		
RDBH13-36.5-37.5	50X Dilution		
RDBH14-8.5-9.5	50X Dilution		
RDBH14-98.5-9.5	50X Dilution		
RDBH14-14-15	50X Dilution		

BTEX surrogates, 4-bromofluorobenzene and/or a,a,a-trifluorotoluene, were recovered above the method control for the following samples:

RDBH06-11-13	RDBH08-0-1.5

RDBH06-21.5-22.5	RDBH11-930-31.5
RDBH06-21.5-22.5-RE	RDBH10-6-7.5
RDBH06-921.5-22.5	RDBH12-21-22.5
RDBH06-921.5-22.5-RE	RDM-SED-001

As a result, the ethylbenzene, toluene, and xylenes results in samples RDBH06-11-13, RDBH06-21.5-22.5, RDBH06-921.5-22.5, RDBH11-930-31.5, and RDBH10-6-7.5, RDBH12-21-22.5 were qualified as an estimated concentration (J), possible high bias. Toluene and xylenes in samples RDBH06-21.5-22.5-RE and RDBH06-921.5-22.5-RE were qualified as an estimated concentration (J), possible high bias. Benzene, toluene, ethylbenzene, and xylenes in sample RDBH08-0-1.5 were qualified as an estimated concentration (J), possible high bias.

BTEX surrogate, 4-bromofluorobenzene was recovered below the method control for the sample RDM-SW-004. BTEX results for samples RDM-SW-004 were qualified as not detected at an estimated quantitation limit (UJ), possible low bias.

The laboratory control sample for benzene, toluene, ethylbenzene and xylenes for analytical batch T00317 was recovered below the method control limit. The laboratory control sample/laboratory control sample duplicate relative percent difference (RPD) values for benzene, toluene, ethylbenzene and xylenes were greater than the method control limit. As a result, the benzene, ethylbenzene, toluene and xylenes results for samples RDM-SW-001, RDM-SW-002, RDM-SW-003, RDM-SW-004, and RDM-SW-003-DUP were qualified as an estimated concentration or not detected at an estimated quantitation limit (J or UJ).

The matrix spike for benzene, toluene, ethylbenzene and xylenes for parent sample RDBH08-18-19 was recovered above the method control limit. The matrix spike/matrix spike duplicate RPD values were greater than the method control limit. As a result, the benzene, toluene, ethylbenzene and xylenes results for parent sample RDBH08-18-19 were qualified as not detected at an estimated quantitation limit (UJ).

The matrix spike for ethylbenzene for parent sample RDH01-6.5-8.5 was recovered above the method control limit. Since ethylbenzene was not detected in sample RDH01-6.5-8.5, no action was taken.

The matrix spike/matrix spike duplicate RPD value for xylene for parent sample RDM-SW-002 was greater than the method control limit. As a result, the xylenes result for RDM-SW-002 was qualified as not detected at an estimated quantitation limit (UJ).

Samples RDM-SW-001, RDM-SW-002, RDM-SW-003, RDM-SW-004, and RDM-SW-003-DUP were analyzed for BTEX five days past holding time. The Reanalysis results

for samples RDM-SW-001, RDM-SW-002, RDM-SW-003, RDM-SW-004, and RDM-SW-03-DUP were qualified as rejected (R).

The laboratory stated that the relative percent difference between the primary and confirmatory analysis for toluene in sample RDBH11-30-31.5 exceeded 40%. As a result, the toluene result in sample RDBH11-30-31.5 was qualified as an estimated concentration (J), unknown bias.

The laboratory stated that the relative percent difference between the primary and confirmatory analysis for xylenes in samples RDBH01-6.5-8.5-RE, RDBH02-5-7-RE and RDBH08-0-1.5 exceeded 40%. As a result, the xylenes results in samples RDBH01-6.5-8.5-RE, RDBH02-5-7-RE and RDBH08-0-1.5 were qualified as an estimated concentration (J), unknown bias.

The laboratory stated that the relative percent difference between the primary and confirmatory analysis for ethylbenzene in sample RDBH12-21-22.5-RE exceeded 40%. As a result, the ethylbenzene result in sample RDBH12-21-22.5-RE was qualified as an estimated concentration (J), unknown bias.

The laboratory stated that the relative percent difference between the primary and confirmatory analysis for benzene and ethylbenzene in sample RDBH08-0-1.5 exceeded 40%. As a result, the benzene and ethylbenzene results in sample RDBH08-0-1.5 were qualified as an estimated concentration (J), unknown bias.

The laboratory stated that the relative percent difference between the primary and confirmatory analysis for toluene and xylenes in samples RDBH06-11-13-RE, RDBH06-21.5-22.5-RE, and RDBH06-921.5-22.5-RE exceeded 40%. As a result, the toluene and xylenes results in samples RDBH06-11-13-RE, RDBH06-21.5-22.5-RE, and RDBH06-921.5-22.5-RE were qualified as an estimated concentration (J), unknown bias.

The laboratory stated that the relative percent difference between the primary and confirmatory analysis for toluene, ethylbenzene and xylenes in samples RDBH05-22-23, RDBH06-11-13, RDBH06-21.5-22.5, RDBH06-921.5-22.5 and RDBH12-21-22.5 exceeded 40%. As a result, the toluene, ethylbenzene and xylenes in samples RDBH05-22-23, RDBH06-11-13, RDBH06-21.5-22.5, RDBH06-921.5-22.5 and RDBH12-21-22.5 were qualified as an estimated concentration (J), unknown bias

The laboratory stated that the calibration verification recovery for ethylbenzene was above the method control limit in the following samples:

- RDBH06-921-22.5-RE, RDBH06-921.5-22.5, RDBH11-30-31.5, RDBH11-930-31.5, RDBH10-6-7.5, RDBH06-6-7RE, RDBH11-0-2, RDBH12-1-3, RDBH12-

21-22.5, RDM-SED-001, RDM-SED-002, RDM-SED-003, RDM-SED-004, and RDM-SED-003-DUP.

As a result, the ethylbenzene results in these samples were qualified as estimated concentrations (J), unknown bias or as not detected at an estimated quantitation limit (UJ).

The laboratory stated that the calibration verification recovery for benzene was above the method control limit in the following samples:

- RDBH02-11.5-13-RE, RDBH03-4-5-RE, RDBH04-0.5-2-RE, RDBH04-15-15.5-RE, RDBH05-22-23-RE, RDBH05-34-35-RE, and RDBH06-921.5-22.5-RE.

As a result, the benzene results in these samples were qualified as estimated concentrations (J), unknown bias or as not detected at an estimated quantitation limit (UJ).

The laboratory stated that the calibration verification recovery for benzene, toluene, ethylbenzene, and xylenes were above the method control limit in the following samples:

- RDBH01-6.5-8.5, RDBH01-12.5-13.5, RDBH02-5-7 and RDBH08-18-19.

As a result, the benzene, toluene, ethylbenzene and xylenes results in these samples were qualified as estimated concentrations (J), unknown bias or as not detected at an estimated quantitation limit (UJ).

The laboratory stated that the calibration verification recovery for toluene, ethylbenzene, and xylenes were below the method control limit in the following samples:

- RDM-SW-001, RDM-SW-002, RDM-SW-003, RDM-SW-004 and RDM-SW-003-DUP.

As a result, the toluene, ethylbenzene and xylenes results in these samples were qualified as estimated concentrations (J), unknown bias or as not detected at an estimated quantitation limit (UJ).

The laboratory stated that the calibration verification recovery for benzene, toluene, and xylenes were below the method control limit in the following samples:

- RDBH02-11.5-13, RDBH03-4-5, RDBH03-12-13, RDBH04-0.5-2, RDBH04-15-15.5, RDBH05-22-23, RDBH05-34-35, RDBH06-11-13, RDBH06-11-13-RE, RDBH06-21.5-22.5, and RDBH06-921.5-22.5.

As a result, the benzene, toluene and xylenes results in these samples were qualified as estimated concentrations (J), unknown bias or as not detected at an estimated quantitation limit (UJ).

The laboratory stated that the weight of sample relative to the volume of methanol exceeded the method maximum of 1:1 ratio for the following BTEX samples:

- RDBH13-29-30, RDBH14-14-15, RDBH15-29-30 and RDBH16-20-15.

As a result, the BTEX results for samples RDBH13-29-30, RDBH14-14-15, RDBH15-29-30 and RDBH16-20-15 were qualified as not detected at an estimated quantitation limit (UJ).

No data were qualified for any other BTEX analyses.

Method AK 101 - GRO

GRO surrogates, 4-bromofluorobenzene and/or a,a,a-trifluorotoluene, were recovered above the method control for the following samples:

RDBH06-11-13	RDBH10-6-7.5
RDBH06-21.5-22.5	RDBH12-21-22.5
RDBH06-921.5-22.5	RDM-SED-001
RDBH08-0-1.5	
RDBH11-930-31.5	

As a result, the GRO results in samples RDBH06-11-13, RDBH06-21.5-22.5, RDBH06-921.5-22.5, RDBH08-0-1.5, RDBH11-930-31.5, RDBH10-6-7.5, and RDBH12-21-22.5 were qualified as estimated concentrations (J), possible high bias.

The laboratory stated that the weight of sample relative to the volume of methanol exceeded the method maximum of 1:1 ratio for the following GRO samples:

- RDBH13-29-30, RDBH14-14-15, RDBH15-29-30 and RDBH16-20-15.

As a result, the GRO results for samples RDBH13-29-30, RDBH14-14-15, and RDBH16-20-15 were qualified as an estimated concentration (J). The GRO result for sample RDBH15-29-30 was qualified as not detected at an estimated quantitation limit (UJ).

The laboratory stated that the GC pattern for the following samples did not match the typical GRO pattern:

- RDBH13-29-30, RDBH13-929-30, RDBH15-22.5-23.5, and RDBH15-29-30.

Therefore, the GRO results for samples RDBH13-29-30, RDBH13-929-30, RDBH15-22.5-23.5, and RDBH15-29-30 were qualified as an estimated concentration (J), unknown bias.

Trip Blank samples collected on 7/13/10 (2), and 7/7/10 (3) were not listed on the chain of custody forms with the samples received by the laboratory. All GRO results for these samples were qualified as rejected (R).

The reporting limits specified in the BLM QAPP were not met for GRO for samples that required dilution. The following samples were analyzed at 33.3-fold, 50-fold, and 100-fold dilutions. No action was taken.

RDBH01-6.5-8.5	33.3X Dilution	RDBH13-36.5-37.5	50X Dilution
RDBH01-12.5-13.5	33.3X Dilution	RDBH14-8.5-9.5	50X Dilution
RDBH02-5-7	33.3X Dilution	RDBH14-98.5-9.5	50X Dilution
RDBH02-11.5-13	33.3X Dilution	RDBH14-14-15	50X Dilution
RDBH03-4-5	33.3X Dilution	RDBH10-6-7.5	33.3X Dilution
RDBH03-12-13	33.3X Dilution	RDBH11-0-2	33.3X Dilution
RDBH04-0.5-2	33.3X Dilution	RDBH12-1-3	33.3X Dilution
RDBH04-15-15.5	33.3X Dilution	RDBH12-21-22.5	33.3X Dilution
RDBH05-22-23	33.3X Dilution	RDM-SED-001	33.3X Dilution
RDBH05-34-35	33.3X Dilution	RDM-SED-002	33.3X Dilution
RDBH06-11-13	33.3X Dilution	RDM-SED-003	33.3X Dilution
RDBH06-21.5-22.5	33.3X Dilution	RDM-SED-004	33.3X Dilution
RDBH06-921.5-22.5	33.3X Dilution	RDM-SED-003-DUP	33.3X Dilution
RDBH07-8-9	33.3X Dilution	RDBH15-22.5-23.5	50X Dilution
RDBH07-22.5-23.5	33.3X Dilution	RDBH15-29-30	50X Dilution
RDBH08-0-1.5	33.3X Dilution	RDBH16-10-11	50X Dilution
RDBH08-18-19	33.3X Dilution	RDBH16-20-25	50X Dilution
RDBH09-10-11.5	33.3X Dilution		
RDBH09-15-16	33.3X Dilution		
RDBH10-2-4	33.3X Dilution		
RDBH11-30-31.5	33.3X Dilution		
RDBH11-930-31.5	33.3X Dilution		
RDBH13-29-30	50X Dilution		
RDBH13-929-30	50X Dilution		

Samples RDM-SW-001, RDM-SW-002, RDM-SW-003, RDM-SW-004, RDM-SW-003-DUP and TRIP BLANK 1 were analyzed for GRO five days past holding time. The Reanalysis results for samples RDM-SW-001, RDM-SW-002, RDM-SW-003, RDM-SW-004, RDM-SW-03-DUP and TRIP BLANK 1 were qualified as rejected (R).

GRO was detected in the method blank associated with Analysis Batch T000317 at a concentration greater than the RL. Since GRO was detected in the associated samples at concentrations less than ten times the method blank concentration, GRO results in samples RDM-SW-001, RDM-SW-002, RDM-SW-003, RDM-SW-004, and RDM-SW-003-DUP were qualified as not detected (U).

No data were qualified for any other GRO analyses

Method AK 102 – DRO and RRO

No data were qualified for any other DRO/RRO analyses.

Method SW 8270C Modified - PAHs

Method 8270C – Semivolatile Organic Compounds

The laboratory stated that the Reporting Limits for fluorene and naphthalene for sample RDBH15-29-30 were elevated due to matrix affects.

The matrix spike recoveries for parent RDBH08-18-19 for the following compounds were recovered above the control limit:

- 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.

The matrix spike duplicate recoveries for parent RDBH08-18-19 for the following compounds were recovered above the control limit:

- 2-methylnaphthalene, acenaphthene, anthracene, benzo(a)anthracene and fluoranthene.

As a result, the benzo(a)anthracene and phenanthrene results in sample RDBH08-18-19 were qualified as an estimated concentration (J), possible high bias.

No data were qualified for any other PAH/SVOC analyses

Chromatographic Interpretation

The laboratory did not provide chromatograms for the reviewer's evaluation, and DRO chromatographic response was not attributed to specific types of petroleum hydrocarbons (e.g., diesel fuel, weathered diesel, mineral oil) for the purpose of this review. Similarly, the reviewer was not able to evaluate matrix interferences assigned to GC chromatographic responses.

Other Issues Regarding Data Quality

No other issues were identified by the reviewer that impacted data quality or usability.

Data Assessment and Reconciliation with Project Data Quality Objectives

Upon consideration of the data qualifications noted above, the data are ACCEPTABLE for use except where flagged with data qualifiers that modify the usefulness of the individual values. Results for TRIP BLANK samples not listed on COC forms and results for samples reanalyzed past holding time were rejected. Other than those exceptions, the data met project quality objectives for their intended purpose.

Data Qualifiers

ND - The compound was analyzed for, but was not detected.

J - The compound was positively identified but the associated numerical value is an estimated quantity because QC criteria were not met or because reported concentrations are less than the quantitation limit or the lowest calibration standard.

UJ - The compound was analyzed for but not detected; the associated quantitation limit is an estimate because QC criteria were not met.

R - The compound was analyzed for but the result is rejected for use due to a serious QC issue.

Certification

The data review was performed by an experienced quality assurance chemist independent of the analytical laboratory and not directly involved with the project.

This is to certify that I have examined the analytical data and, based upon the information provided to me by the laboratory, in my professional judgment, the data are acceptable for use except where indicated with data qualifiers or comments that may modify the usefulness of those individual values.

Linda Korobka

Linda Korobka
Technical Manager

Date: 5 October 2010

Client Sample ID: RDBH07D-51.5-52.5

Lab Sample ID: ATG0050-01
Date Collected: 07/10/10 10:10
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 95.5

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.3		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:24	1
Residual Range Organics	ND		50.8		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*89.8*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:24*	*1*
Triacontane	*90.0*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	95.5		1.00		%		07/15/10 21:25	07/16/10 08:05	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	95.1		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Acenaphthylene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Anthracene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (a) anthracene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (a) pyrene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (b) fluoranthene	37.9		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (ghi) perylene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (k) fluoranthene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Chrysene	77.5		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Dibenzo (a,h) anthracene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Fluoranthene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Fluorene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Indeno (1,2,3-cd) pyrene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Naphthalene	71.5		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Phenanthrene	141		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Pyrene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*77.1*		*24 - 125*	*07/16/10 10:10*	*07/16/10 16:04*	*1.*
Pyrene-d10	*80.8*		*41 - 141*	*07/16/10 10:10*	*07/16/10 16:04*	*1.*
Benzo (a) pyrene-d12	*90.8*		*38 - 143*	*07/16/10 10:10*	*07/16/10 16:04*	*1.*

Client Sample ID: RDBH09D-20-21.5

Lab Sample ID: ATG0050-02
Date Collected: 07/11/10 10:29
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 95.9

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	62.2		20.9		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:57	1
Residual Range Organics	ND		52.1		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*95.5*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:57*	*1*
Triacontane	*94.3*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:57*	*1*

Client Sample ID: RDBH09D-20-21.5

Date Collected: 07/11/10 10:29
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-02
Matrix: Soil
Percent Solids: 95.9

5

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	95.9		1.00		%		07/15/10 21:25	07/16/10 08:05	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	96.1		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Acenaphthylene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (a) anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (a) pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (b) fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (ghi) perylene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (k) fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Chrysene	27.6		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Dibenzo (a,h) anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Fluorene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Indeno (1,2,3-cd) pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Naphthalene	43.7		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Phenanthrene	46.2		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*81.9*		*24 - 125*	*07/16/10 10:10*	*07/16/10 16:36*	*1.*
Pyrene-d10	*83.5*		*41 - 141*	*07/16/10 10:10*	*07/16/10 16:36*	*1.*
Benzo (a) pyrene-d12	*79.7*		*38 - 143*	*07/16/10 10:10*	*07/16/10 16:36*	*1.*

Client Sample ID: RDBH09D-42-43

Date Collected: 07/11/10 11:20
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-03
Matrix: Soil
Percent Solids: 93.2

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.1		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:57	1
Residual Range Organics	ND		52.7		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*89.0*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:57*	*1*
Triacontane	*90.2*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:57*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	93.2		1.00		%		07/15/10 21:25	07/16/10 08:05	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	92.5		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

JAK 10/15/10

Client Sample ID: RDBH09D-42-43

Date Collected: 07/11/10 11:20
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-03
Matrix: Soil
Percent Solids: 92.5

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Acenaphthylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (a) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (a) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (b) fluoranthene	**19.9**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (ghi) perylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (k) fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Chrysene	**35.2**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Dibenzo (a,h) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Fluorene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Indeno (1,2,3-cd) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Naphthalene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Phenanthrene	**39.9**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*81.8*		*24 - 125*	*07/16/10 10:10*	*07/16/10 17:08*	*1.*
Pyrene-d10	*81.2*		*41 - 141*	*07/16/10 10:10*	*07/16/10 17:08*	*1.*
Benzo (a) pyrene-d12	*86.3*		*38 - 143*	*07/16/10 10:10*	*07/16/10 17:08*	*1.*

Client Sample ID: RDBH10D-32-33

Date Collected: 07/10/10 16:50
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-04
Matrix: Soil
Percent Solids: 97

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**75.3**		19.3		mg/kg dry	☼	07/15/10 17:16	07/16/10 19:31	1
Residual Range Organics	ND		48.2		mg/kg dry	☼	07/15/10 17:16	07/16/10 19:31	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*98.0*		*50 - 150*	*07/15/10 17:16*	*07/16/10 19:31*	*1*
Triacontane	*94.9*		*50 - 150*	*07/15/10 17:16*	*07/16/10 19:31*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**97.0**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**97.2**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Acenaphthylene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Anthracene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Benzo (a) anthracene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Benzo (a) pyrene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Benzo (b) fluoranthene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Benzo (ghi) perylene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.

Client Sample ID: RDBH10D-32-33

Date Collected: 07/10/10 16:50
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-04
Matrix: Soil
Percent Solids: 97.2

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo (k) fluoranthene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Chrysene	**22.0**		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Dibenzo (a,h) anthracene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Fluoranthene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Fluorene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Indeno (1,2,3-cd) pyrene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Naphthalene	**23.4**		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Phenanthrene	**40.3**		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Pyrene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*77.9*		*24 - 125*	*07/16/10 10:10*	*07/16/10 17:39*	*1.*
Pyrene-d10	*76.5*		*41 - 141*	*07/16/10 10:10*	*07/16/10 17:39*	*1.*
Benzo (a) pyrene-d12	*78.5*		*38 - 143*	*07/16/10 10:10*	*07/16/10 17:39*	*1.*

Client Sample ID: RDBH10D-61-63

Date Collected: 07/10/10 18:05
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-05
Matrix: Soil
Percent Solids: 92.2

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.0		mg/kg dry	☼	07/15/10 17:16	07/16/10 19:31	1
Residual Range Organics	ND		52.4		mg/kg dry	☼	07/15/10 17:16	07/16/10 19:31	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*84.2*		*50 - 150*	*07/15/10 17:16*	*07/16/10 19:31*	*1*
Triacontane	*86.0*		*50 - 150*	*07/15/10 17:16*	*07/16/10 19:31*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	92.2		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	91.5		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Acenaphthylene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Anthracene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (a) anthracene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (a) pyrene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (b) fluoranthene	**53.0**		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (ghi) perylene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (k) fluoranthene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Chrysene	**96.5**		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Dibenzo (a,h) anthracene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Fluoranthene	ND	RL1	21.8		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Fluorene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Indeno (1,2,3-cd) pyrene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Naphthalene	**91.7**		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.

LAK 10/15/10

Client Sample ID: RDBH10D-61-63

Lab Sample ID: ATG0050-05
Date Collected: 07/10/10 18:05
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 91.5

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Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	176		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Pyrene	23.6		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*82.0*		*24 - 125*	*07/16/10 10:10*	*07/16/10 18:11*	*1.*
Pyrene-d10	*81.0*		*41 - 141*	*07/16/10 10:10*	*07/16/10 18:11*	*1.*
Benzo (a) pyrene-d12	*89.5*		*38 - 143*	*07/16/10 10:10*	*07/16/10 18:11*	*1.*

Client Sample ID: RDBH11D-52-53

Lab Sample ID: ATG0050-06
Date Collected: 07/10/10 17:10
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 97.1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.0		mg/kg dry	☼	07/15/10 17:16	07/16/10 20:04	1
Residual Range Organics	ND		49.9		mg/kg dry	☼	07/15/10 17:16	07/16/10 20:04	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90.5*		*50 - 150*	*07/15/10 17:16*	*07/16/10 20:04*	*1*
Triacontane	*87.6*		*50 - 150*	*07/15/10 17:16*	*07/16/10 20:04*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	97.1		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	96.3		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Acenaphthylene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (a) anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (a) pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (b) fluoranthene	**26.9**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (ghi) perylene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (k) fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Chrysene	**59.6**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Dibenzo (a,h) anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Fluorene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Indeno (1,2,3-cd) pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Naphthalene	**72.6**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Phenanthrene	**115**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*86.7*		*24 - 125*	*07/16/10 10:10*	*07/16/10 18:42*	*1.*
Pyrene-d10	*86.5*		*41 - 141*	*07/16/10 10:10*	*07/16/10 18:42*	*1.*
Benzo (a) pyrene-d12	*89.4*		*38 - 143*	*07/16/10 10:10*	*07/16/10 18:42*	*1.*

YAK 10/15/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH13-29-30
Date Collected: 07/11/10 15:40
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-07
Matrix: Soil
Percent Solids: 90.9

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Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**354**	**Q2**	21.5		mg/kg dry	☼	07/15/10 17:16	07/19/10 16:24	1
Residual Range Organics	ND		53.7		mg/kg dry	☼	07/15/10 17:16	07/19/10 16:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*89.9*		*50 - 150*	*07/15/10 17:16*	*07/19/10 16:24*	*1*
Triacontane	*91.6*		*50 - 150*	*07/15/10 17:16*	*07/19/10 16:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**90.9**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**5.85**	**S14 Q1**	3.89		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.
Benzene	ND	S14	0.0195		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.
Toluene	ND	S14	0.0973		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.
Ethylbenzene	ND	S14	0.0973		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.
Xylenes (total)	ND	S14	0.0973		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*103*	*S14*	*50 - 150*	*07/11/10 15:40*	*07/17/10 11:06*	*50.*
a,a,a-TFT (PID)	*97.6*	*S14*	*50 - 150*	*07/11/10 15:40*	*07/17/10 11:06*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**91.6**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Acenaphthylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (a) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (a) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (b) fluoranthene	**24.7**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (ghi) perylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (k) fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Chrysene	**43.4**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Dibenzo (a,h) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Fluorene	**74.3**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Indeno (1,2,3-cd) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Naphthalene	**177**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Phenanthrene	**114**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*81.4*		*24 - 125*	*07/16/10 10:10*	*07/16/10 19:14*	*1.*
Pyrene-d10	*87.1*		*41 - 141*	*07/16/10 10:10*	*07/16/10 19:14*	*1.*
Benzo (a) pyrene-d12	*96.2*		*38 - 143*	*07/16/10 10:10*	*07/16/10 19:14*	*1.*

LAK 10/5/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH13-929-30
Date Collected: 07/11/10 15:40
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-08
Matrix: Soil
Percent Solids: 90.8

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	470	Q2	21.9		mg/kg dry	☼	07/16/10 15:37	07/16/10 20:04	1
Residual Range Organics	ND		54.6		mg/kg dry	☼	07/16/10 15:37	07/16/10 20:04	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*85.0*		*50 - 150*	*07/16/10 15:37*	*07/16/10 20:04*	*1*
Triacontane	*82.6*		*50 - 150*	*07/16/10 15:37*	*07/16/10 20:04*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	90.8		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	15.7	Q1 J	4.71		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.
Benzene	ND		0.0235		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.
Toluene	ND		0.118		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.
Ethylbenzene	ND		0.118		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.
Xylenes (total)	**0.191**		0.118		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*105*		*50 - 150*	*07/11/10 15:40*	*07/16/10 21:11*	*50.*
a,a,a-TFT (PID)	*101*		*50 - 150*	*07/11/10 15:40*	*07/16/10 21:11*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	92.7		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Acenaphthylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (a) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (a) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (b) fluoranthene	**20.0**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (ghi) perylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (k) fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Chrysene	**36.5**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Dibenzo (a,h) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Fluorene	**56.2**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Indeno (1,2,3-cd) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Naphthalene	**116**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Phenanthrene	**81.3**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*80.8*		*24 - 125*	*07/16/10 10:10*	*07/16/10 19:46*	*1.*
Pyrene-d10	*88.9*		*41 - 141*	*07/16/10 10:10*	*07/16/10 19:46*	*1.*
Benzo (a) pyrene-d12	*97.9*		*38 - 143*	*07/16/10 10:10*	*07/16/10 19:46*	*1.*

ZPL 10/5/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH13-36.5-37.5
Date Collected: 07/11/10 16:20
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-09
Matrix: Soil
Percent Solids: 89.3

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.5		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:24	1
Residual Range Organics	ND		53.7		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*82.4*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:24*	*1*
Triacontane	*83.9*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	89.3		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.87		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.
Benzene	ND		0.0243		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.
Toluene	ND		0.122		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.
Ethylbenzene	ND		0.122		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.
Xylenes (total)	ND		0.122		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*104*		*50 - 150*	*07/11/10 16:20*	*07/16/10 22:09*	*50.*
a,a,a-TFT (PID)	*100*		*50 - 150*	*07/11/10 16:20*	*07/16/10 22:09*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	90.6		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Acenaphthylene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (a) anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (a) pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (b) fluoranthene	**29.0**		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (ghi) perylene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (k) fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Chrysene	**55.7**		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Dibenzo (a,h) anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Fluorene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Indeno (1,2,3-cd) pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Naphthalene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Phenanthrene	**42.6**		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*87.6*		*24 - 125*	*07/16/10 10:10*	*07/16/10 20:17*	*1.*
Pyrene-d10	*88.3*		*41 - 141*	*07/16/10 10:10*	*07/16/10 20:17*	*1.*
Benzo (a) pyrene-d12	*94.0*		*38 - 143*	*07/16/10 10:10*	*07/16/10 20:17*	*1.*

LPK 10/15/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH14-98.5-9.5
Date Collected: 07/11/10 17:20
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-11
Matrix: Soil
Percent Solids: 93.2

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	31.4		21.4		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:57	1
Residual Range Organics	ND		53.4		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*84.7*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:57*	*1*
Triacontane	*86.8*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:57*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	93.2		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.68		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.
Benzene	ND		0.0234		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.
Toluene	ND		0.117		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.
Ethylbenzene	ND		0.117		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.
Xylenes (total)	ND		0.117		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*108*		*50 - 150*	*07/11/10 17:20*	*07/16/10 18:18*	*50.*
a,a,a-TFT (PID)	*102*		*50 - 150*	*07/11/10 17:20*	*07/16/10 18:18*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	93.0		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Acenaphthylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (a) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (a) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (b) fluoranthene	**26.9**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (ghi) perylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (k) fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Chrysene	**66.3**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Dibenzo (a,h) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Fluorene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Indeno (1,2,3-cd) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Naphthalene	**21.8**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Phenanthrene	**89.2**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*89.6*		*24 - 125*	*07/16/10 10:10*	*07/16/10 21:20*	*1.*
Pyrene-d10	*91.0*		*41 - 141*	*07/16/10 10:10*	*07/16/10 21:20*	*1.*
Benzo (a) pyrene-d12	*97.6*		*38 - 143*	*07/16/10 10:10*	*07/16/10 21:20*	*1.*

LAK
10/15/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH14-8.5-9.5
Date Collected: 07/11/10 17:20
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-10
Matrix: Soil
Percent Solids: 92.6

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.5		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:57	1
Residual Range Organics	ND		53.6		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*65.4*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:57*	*1*
Triacontane	*73.3*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:57*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	92.6		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.70		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.
Benzene	ND		0.0235		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.
Toluene	ND		0.118		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.
Ethylbenzene	ND		0.118		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.
Xylenes (total)	ND		0.118		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*107*		*50 - 150*	*07/11/10 17:20*	*07/17/10 00:04*	*50.*
a,a,a-TFT (PID)	*102*		*50 - 150*	*07/11/10 17:20*	*07/17/10 00:04*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	93.3		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Acenaphthylene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Anthracene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (a) anthracene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (a) pyrene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (b) fluoranthene	**26.2**		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (ghi) perylene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (k) fluoranthene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Chrysene	**64.8**		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Dibenzo (a,h) anthracene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Fluoranthene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Fluorene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Indeno (1,2,3-cd) pyrene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Naphthalene	**21.3**		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Phenanthrene	**88.9**		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Pyrene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*88.5*		*24 - 125*	*07/16/10 10:10*	*07/16/10 20:48*	*1.*
Pyrene-d10	*87.5*		*41 - 141*	*07/16/10 10:10*	*07/16/10 20:48*	*1.*
Benzo (a) pyrene-d12	*92.8*		*38 - 143*	*07/16/10 10:10*	*07/16/10 20:48*	*1.*

LGK 10/5/10

Client Sample ID: RDBH14-14-15

Date Collected: 07/11/10 17:30
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-12

Matrix: Soil
Percent Solids: 92.6

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.5		mg/kg dry	☼	07/16/10 15:37	07/19/10 14:45	1
Residual Range Organics	ND		53.7		mg/kg dry	☼	07/16/10 15:37	07/19/10 14:45	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*85.2*		*50 - 150*	*07/16/10 15:37*	*07/19/10 14:45*	*1*
Triacontane	*84.0*		*50 - 150*	*07/16/10 15:37*	*07/19/10 14:45*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	92.6		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	S14 J	3.47		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.
Benzene	ND	S14	0.0173		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.
Toluene	ND	S14	0.0867		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.
Ethylbenzene	ND	S14	0.0867		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.
Xylenes (total)	ND	S14	0.0867		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*105*	*S14*	*50 - 150*	*07/11/10 17:30*	*07/16/10 15:25*	*50.*
a,a,a-TFT (PID)	*104*	*S14*	*50 - 150*	*07/11/10 17:30*	*07/16/10 15:25*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	93.2		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Acenaphthylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (a) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (a) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (b) fluoranthene	**23.7**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (ghi) perylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (k) fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Chrysene	**42.1**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Dibenzo (a,h) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Fluorene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Indeno (1,2,3-cd) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Naphthalene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Phenanthrene	**39.8**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*83.5*		*24 - 125*	*07/16/10 10:10*	*07/16/10 12:43*	*1.*
Pyrene-d10	*88.2*		*41 - 141*	*07/16/10 10:10*	*07/16/10 12:43*	*1.*
Benzo (a) pyrene-d12	*97.5*		*38 - 143*	*07/16/10 10:10*	*07/16/10 12:43*	*1.*

LAK 10/15/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH15-22.5-23.5
Date Collected: 07/12/10 09:23
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-13
Matrix: Soil
Percent Solids: 88.1

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**319**	Q2	22.4		mg/kg dry	☼	07/16/10 15:37	07/19/10 17:30	1
Residual Range Organics	ND		56.0		mg/kg dry	☼	07/16/10 15:37	07/19/10 17:30	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*83.5*		*50 - 150*	*07/16/10 15:37*	*07/19/10 17:30*	*1*
Triacontane	*88.3*		*50 - 150*	*07/16/10 15:37*	*07/19/10 17:30*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**88.1**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**35.1**	Q1 J	4.34		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.
Benzene	ND		0.0217		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.
Toluene	ND		0.109		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.
Ethylbenzene	**0.124**		0.109		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.
Xylenes (total)	**0.489**		0.109		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*102*		*50 - 150*	*07/12/10 09:23*	*07/17/10 11:35*	*50.*
a,a,a-TFT (PID)	*95.7*		*50 - 150*	*07/12/10 09:23*	*07/17/10 11:35*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**90.9**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Acenaphthylene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Anthracene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (a) anthracene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (a) pyrene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (b) fluoranthene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (ghi) perylene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (k) fluoranthene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Chrysene	**25.0**		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Dibenzo (a,h) anthracene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Fluoranthene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Fluorene	ND	RL1	36.8		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Indeno (1,2,3-cd) pyrene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Naphthalene	ND	RL1	58.8		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Phenanthrene	**62.6**		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Pyrene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*86.8*		*24 - 125*	*07/16/10 10:10*	*07/16/10 21:51*	*1.*
Pyrene-d10	*96.3*		*41 - 141*	*07/16/10 10:10*	*07/16/10 21:51*	*1.*
Benzo (a) pyrene-d12	*108*		*38 - 143*	*07/16/10 10:10*	*07/16/10 21:51*	*1.*

ZAK 10/15/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

5

Client Sample ID: RDBH15-29-30

Date Collected: 07/12/10 09:38
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-14

Matrix: Soil
Percent Solids: 88.9

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**243**	**Q2**	21.5		mg/kg dry	☼	07/16/10 15:37	07/19/10 17:30	1
Residual Range Organics	ND		53.7		mg/kg dry	☼	07/16/10 15:37	07/19/10 17:30	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*85.5*		*50 - 150*	*07/16/10 15:37*	*07/19/10 17:30*	*1*
Triacontane	*86.5*		*50 - 150*	*07/16/10 15:37*	*07/19/10 17:30*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**88.9**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**9.88**	**S14 Q1** J	4.26		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.
Benzene	ND	S14	0.0213		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.
Toluene	ND	S14	0.107		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.
Ethylbenzene	ND	S14	0.107		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.
Xylenes (total)	**0.146**	**S14**	0.107		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*111*	*S14*	*50 - 150*	*07/12/10 09:38*	*07/16/10 18:47*	*50.*
a,a,a-TFT (PID)	*108*	*S14*	*50 - 150*	*07/12/10 09:38*	*07/16/10 18:47*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**87.5**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Acenaphthylene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Anthracene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (a) anthracene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (a) pyrene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (b) fluoranthene	**16.3**		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (ghi) perylene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (k) fluoranthene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Chrysene	**35.0**		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Dibenzo (a,h) anthracene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Fluoranthene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Fluorene	ND	RL1	22.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Indeno (1,2,3-cd) pyrene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Naphthalene	ND	RL1	68.0		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Phenanthrene	**49.9**		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Pyrene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*80.8*		*24 - 125*	*07/16/10 10:10*	*07/16/10 22:22*	*1.*
Pyrene-d10	*88.7*		*41 - 141*	*07/16/10 10:10*	*07/16/10 22:22*	*1.*
Benzo (a) pyrene-d12	*96.5*		*38 - 143*	*07/16/10 10:10*	*07/16/10 22:22*	*1.*

ZAK
10/15/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH16-10-11
Date Collected: 07/12/10 11:10
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-15
Matrix: Soil
Percent Solids: 89.3

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.7		mg/kg dry	☼	07/16/10 15:37	07/19/10 18:02	1
Residual Range Organics	ND		54.3		mg/kg dry	☼	07/16/10 15:37	07/19/10 18:02	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*80.8*		*50 - 150*	*07/16/10 15:37*	*07/19/10 18:02*	*1*
Triacontane	*86.8*		*50 - 150*	*07/16/10 15:37*	*07/19/10 18:02*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	89.3		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.11		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.
Benzene	ND		0.0206		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.
Toluene	ND		0.103		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.
Ethylbenzene	ND		0.103		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.
Xylenes (total)	ND		0.103		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*108*		*50 - 150*	*07/12/10 11:10*	*07/16/10 19:16*	*50.*
a,a,a-TFT (PID)	*101*		*50 - 150*	*07/12/10 11:10*	*07/16/10 19:16*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	91.4		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Acenaphthylene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (a) anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (a) pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (b) fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (ghi) perylene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (k) fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Chrysene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Dibenzo (a,h) anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Fluorene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Indeno (1,2,3-cd) pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Naphthalene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Phenanthrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*83.7*		*24 - 125*	*07/16/10 10:10*	*07/16/10 22:54*	*1.*
Pyrene-d10	*85.7*		*41 - 141*	*07/16/10 10:10*	*07/16/10 22:54*	*1.*
Benzo (a) pyrene-d12	*95.3*		*38 - 143*	*07/16/10 10:10*	*07/16/10 22:54*	*1.*

ZAK 10/5/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH16-20-25
Date Collected: 07/12/10 11:38
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-16
Matrix: Soil
Percent Solids: 91

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.2		mg/kg dry	☼	07/16/10 15:37	07/19/10 18:02	1
Residual Range Organics	ND		53.1		mg/kg dry	☼	07/16/10 15:37	07/19/10 18:02	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*79.4*		*50 - 150*	*07/16/10 15:37*	*07/19/10 18:02*	*1*
Triacontane	*81.2*		*50 - 150*	*07/16/10 15:37*	*07/19/10 18:02*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	91.0		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	S14	2.84		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.
Benzene	ND	S14	0.0142		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.
Toluene	ND	S14	0.0710		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.
Ethylbenzene	ND	S14	0.0710		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.
Xylenes (total)	ND	S14	0.0710		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*106*	*S14*	*50 - 150*	*07/12/10 11:38*	*07/16/10 19:44*	*50.*
a,a,a-TFT (PID)	*103*	*S14*	*50 - 150*	*07/12/10 11:38*	*07/16/10 19:44*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	93.0		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Acenaphthylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (a) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (a) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (b) fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (ghi) perylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (k) fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Chrysene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Dibenzo (a,h) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Fluorene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Indeno (1,2,3-cd) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Naphthalene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Phenanthrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*90.0*		*24 - 125*	*07/16/10 10:10*	*07/16/10 23:25*	*1.*
Pyrene-d10	*90.1*		*41 - 141*	*07/16/10 10:10*	*07/16/10 23:25*	*1.*
Benzo (a) pyrene-d12	*100*		*38 - 143*	*07/16/10 10:10*	*07/16/10 23:25*	*1.*

LAC 10/5/10

Client Sample ID: RDBH-MW-002

Lab Sample ID: ATG0050-17
Matrix: Water

Date Collected: 07/12/10 18:15
Date Received: 07/14/10 16:20

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.400		mg/l		07/15/10 14:21	07/17/10 03:46	1
Residual Range Organics	ND		0.400		mg/l		07/15/10 14:21	07/17/10 03:46	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90.2*		*50 - 150*	*07/15/10 14:21*	*07/17/10 03:46*	*1*
Triacontane	*92.3*		*50 - 150*	*07/15/10 14:21*	*07/17/10 03:46*	*1*

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		80.0		ug/l		07/19/10 08:59	07/19/10 15:59	1.
Benzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:59	1.
Toluene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:59	1.
Ethylbenzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:59	1.
Xylenes (total)	ND		1.00		ug/l		07/19/10 08:59	07/19/10 15:59	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*103*		*60 - 120*	*07/19/10 08:59*	*07/19/10 15:59*	*1.*
4-BFB (PID)	*101*		*60 - 120*	*07/19/10 08:59*	*07/19/10 15:59*	*1.*

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Acenaphthylene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Anthracene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (a) anthracene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (a) pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (b) fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (ghi) perylene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (k) fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Chrysene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Dibenzo (a,h) anthracene	ND		0.198		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Fluorene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Indeno (1,2,3-cd) pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Naphthalene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Phenanthrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*72.2*		*25 - 125*	*07/15/10 15:30*	*07/19/10 12:49*	*1.*
Pyrene-d10	*62.4*		*23 - 150*	*07/15/10 15:30*	*07/19/10 12:49*	*1.*
Benzo (a) pyrene-d12	*49.1*		*10 - 125*	*07/15/10 15:30*	*07/19/10 12:49*	*1.*

Client Sample ID: RDBH-MW-003

Lab Sample ID: ATG0050-18
Matrix: Water

Date Collected: 07/12/10 18:30
Date Received: 07/14/10 16:20

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.455		mg/l		07/15/10 14:21	07/17/10 04:19	1
Residual Range Organics	ND		0.455		mg/l		07/15/10 14:21	07/17/10 04:19	1

ZAC 10/15/10

Client Sample ID: RDBH-MW-003

Lab Sample ID: ATG0050-18

Date Collected: 07/12/10 18:30
Date Received: 07/14/10 16:20

Matrix: Water

5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	102		50 - 150	07/15/10 14:21	07/17/10 04:19	1
Triacontane	89.8		50 - 150	07/15/10 14:21	07/17/10 04:19	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		80.0		ug/l		07/19/10 08:59	07/19/10 16:34	1.
Benzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 16:34	1.
Toluene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 16:34	1.
Ethylbenzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 16:34	1.
Xylenes (total)	ND		1.00		ug/l		07/19/10 08:59	07/19/10 16:34	1.

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	104		60 - 120	07/19/10 08:59	07/19/10 16:34	1.
4-BFB (PID)	101		60 - 120	07/19/10 08:59	07/19/10 16:34	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Acenaphthylene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Anthracene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (a) anthracene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (a) pyrene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (b) fluoranthene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (ghi) perylene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (k) fluoranthene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Chrysene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Dibenzo (a,h) anthracene	ND		0.196		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Fluoranthene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Fluorene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Indeno (1,2,3-cd) pyrene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Naphthalene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Phenanthrene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Pyrene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorene-d10	50.9		25 - 125	07/15/10 15:30	07/19/10 13:20	1.
Pyrene-d10	40.3		23 - 150	07/15/10 15:30	07/19/10 13:20	1.
Benzo (a) pyrene-d12	27.0		10 - 125	07/15/10 15:30	07/19/10 13:20	1.

Client Sample ID: RDBH-MW-001

Lab Sample ID: ATG0050-19

Date Collected: 07/11/10 11:28
Date Received: 07/14/10 16:20

Matrix: Water

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	0.601		0.400		mg/l		07/15/10 14:21	07/17/10 04:19	1
Residual Range Organics	ND		0.400		mg/l		07/15/10 14:21	07/17/10 04:19	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	91.2		50 - 150	07/15/10 14:21	07/17/10 04:19	1
Triacontane	93.0		50 - 150	07/15/10 14:21	07/17/10 04:19	1

LQC 10/5/10

Client Sample ID: RDBH-MW-001

Lab Sample ID: ATG0050-19

Date Collected: 07/11/10 11:28
Matrix: Water
Date Received: 07/14/10 16:20

5

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		80.0		ug/l		07/19/10 08:59	07/19/10 17:10	1.
Benzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 17:10	1.
Toluene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 17:10	1.
Ethylbenzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 17:10	1.
Xylenes (total)	ND		1.00		ug/l		07/19/10 08:59	07/19/10 17:10	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*103*		*60 - 120*	*07/19/10 08:59*	*07/19/10 17:10*	*1.*
4-BFB (PID)	*100*		*60 - 120*	*07/19/10 08:59*	*07/19/10 17:10*	*1.*

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Acenaphthylene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Anthracene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (a) anthracene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (a) pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (b) fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (ghi) perylene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (k) fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Chrysene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Dibenzo (a,h) anthracene	ND		0.198		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Fluorene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Indeno (1,2,3-cd) pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Naphthalene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Phenanthrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*49.5*		*25 - 125*	*07/15/10 15:30*	*07/19/10 13:51*	*1.*
Pyrene-d10	*58.2*		*23 - 150*	*07/15/10 15:30*	*07/19/10 13:51*	*1.*
Benzo (a) pyrene-d12	*73.3*		*10 - 125*	*07/15/10 15:30*	*07/19/10 13:51*	*1.*

Client Sample ID: Trip Blank

Lab Sample ID: ATG0050-20

Date Collected: 07/13/10 00:00
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 100

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	100		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	R	4.00		mg/kg wet	*	07/13/10 00:00	07/16/10 14:24	50.
Benzene	ND		0.0200		mg/kg wet	*	07/13/10 00:00	07/16/10 14:24	50.
Toluene	ND		0.100		mg/kg wet	*	07/13/10 00:00	07/16/10 14:24	50.
Ethylbenzene	ND		0.100		mg/kg wet	*	07/13/10 00:00	07/16/10 14:24	50.
Xylenes (total)	ND		0.100		mg/kg wet	*	07/13/10 00:00	07/16/10 14:24	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*107*		*50 - 150*	*07/13/10 00:00*	*07/16/10 14:24*	*50.*

LAK 10/5/10

Client Sample ID: Trip Blank — **Lab Sample ID: ATG0050-20**
Date Collected: 07/13/10 00:00 — Matrix: Soil
Date Received: 07/14/10 16:20

5

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B (Continued)

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (PID)	*105*		*50 - 150*	*07/13/10 00:00*	*07/16/10 14:24*	*50.*

Client Sample ID: Trip Blank — **Lab Sample ID: ATG0050-21**
Date Collected: 07/13/10 00:00 — Matrix: Water
Date Received: 07/14/10 16:20

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	R	80.0		ug/l		07/19/10 08:59	07/19/10 15:23	1.
Benzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:23	1.
Toluene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:23	1.
Ethylbenzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:23	1.
Xylenes (total)	ND		1.00		ug/l		07/19/10 08:59	07/19/10 15:23	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*103*		*60 - 120*	*07/19/10 08:59*	*07/19/10 15:23*	*1.*
4-BFB (PID)	*101*		*60 - 120*	*07/19/10 08:59*	*07/19/10 15:23*	*1.*

LAK 10/5/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH01-6.5-8.5
Date Collected: 07/07/10 10:45
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-01
Matrix: Soil
Percent Solids: 85.9

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	34.0		22.5		mg/kg dry	☼	07/10/10 12:27	07/11/10 17:38	1
Residual Range Organics	ND		56.2		mg/kg dry	☼	07/10/10 12:27	07/11/10 17:38	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*99.8*		*50 - 150*	*07/10/10 12:27*	*07/11/10 17:38*	*1*
Triacontane	*103*		*50 - 150*	*07/10/10 12:27*	*07/11/10 17:38*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	85.9		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.62		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3
Benzene	ND	C8 J	0.0231		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3
Toluene	ND	C8	0.0462		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3
Ethylbenzene	ND	C8	0.0462		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3
Xylenes (total)	0.174	C8, R1	0.129		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*126*		*50 - 150*	*07/10/10 12:09*	*07/10/10 17:19*	*33.3*
a,a,a-TFT (FID)	*96.2*		*50 - 150*	*07/10/10 12:09*	*07/10/10 17:19*	*33.3*
4-BFB (PID)	*133*		*50 - 150*	*07/10/10 12:09*	*07/10/10 17:19*	*33.3*
a,a,a-TFT (PID)	*110*	*C8*	*50 - 150*	*07/10/10 12:09*	*07/10/10 17:19*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	0.213	R1 J	0.129		mg/kg dry	☼	07/10/10 12:09	07/14/10 06:18	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*72.4*		*50 - 150*	*07/10/10 12:09*	*07/14/10 06:18*	*33.3*
a,a,a-TFT (PID)	*107*		*50 - 150*	*07/10/10 12:09*	*07/14/10 06:18*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
2-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Acenaphthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Acenaphthylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Fluorene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Naphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Phenanthrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1

LJK 10/4/10

Client Sample ID: RDBH01-6.5-8.5

Lab Sample ID: ATG0029-01
Date Collected: 07/07/10 10:45
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 80.3

5

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*42 - 140*	*07/13/10 11:02*	*07/20/10 18:36*	*1*
Nitrobenzene-d5	*82*		*38 - 141*	*07/13/10 11:02*	*07/20/10 18:36*	*1*
Terphenyl-d14	*56*		*42 - 151*	*07/13/10 11:02*	*07/20/10 18:36*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**80**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH01-12.5-13.5

Lab Sample ID: ATG0029-02
Date Collected: 07/07/10 11:00
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.7

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.2		mg/kg dry	☼	07/10/10 12:27	07/11/10 17:38	1
Residual Range Organics	ND		53.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 17:38	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*100*		*50 - 150*	*07/10/10 12:27*	*07/11/10 17:38*	*1*
Triacontane	*96.7*		*50 - 150*	*07/10/10 12:27*	*07/11/10 17:38*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	91.7		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.10		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3
Benzene	ND	C8 J	0.0205		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3
Toluene	ND	C8	0.0410		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3
Ethylbenzene	ND	C8	0.0410		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3
Xylenes (total)	ND	C8	0.115		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*86.4*		*50 - 150*	*07/10/10 12:09*	*07/10/10 19:33*	*33.3*
a,a,a-TFT (FID)	*100*		*50 - 150*	*07/10/10 12:09*	*07/10/10 19:33*	*33.3*
4-BFB (PID)	*92.6*		*50 - 150*	*07/10/10 12:09*	*07/10/10 19:33*	*33.3*
a,a,a-TFT (PID)	*113*	*C8*	*50 - 150*	*07/10/10 12:09*	*07/10/10 19:33*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
2-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1

Client Sample ID: RDBH01-12.5-13.5

Date Collected: 07/07/10 11:00
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-02
Matrix: Soil
Percent Solids: 91.3

5

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Chrysene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Naphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Phenanthrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*105*		*42 - 140*	*07/13/10 11:02*	*07/20/10 18:55*	*1*
Nitrobenzene-d5	*106*		*38 - 141*	*07/13/10 11:02*	*07/20/10 18:55*	*1*
Terphenyl-d14	*77*		*42 - 151*	*07/13/10 11:02*	*07/20/10 18:55*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.7		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	91		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH02-5-7

Date Collected: 07/07/10 11:50
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-03
Matrix: Soil
Percent Solids: 85.9

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	23.7		22.9		mg/kg dry	☼	07/10/10 12:27	07/11/10 18:45	1
Residual Range Organics	ND		57.2		mg/kg dry	☼	07/10/10 12:27	07/11/10 18:45	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*98.9*		*50 - 150*	*07/10/10 12:27*	*07/11/10 18:45*	*1*
Triacontane	*103*		*50 - 150*	*07/10/10 12:27*	*07/11/10 18:45*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	85.9		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.69		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3
Benzene	ND	C8	0.0235		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3
Toluene	ND	C8	0.0469		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3
Ethylbenzene	ND	C8	0.0469		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3
Xylenes (total)	0.139	C8, R1	0.131		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*106*		*50 - 150*	*07/10/10 12:09*	*07/10/10 20:00*	*33.3*
a,a,a-TFT (FID)	*94.7*		*50 - 150*	*07/10/10 12:09*	*07/10/10 20:00*	*33.3*
4-BFB (PID)	*114*		*50 - 150*	*07/10/10 12:09*	*07/10/10 20:00*	*33.3*
a,a,a-TFT (PID)	*107*	*C8*	*50 - 150*	*07/10/10 12:09*	*07/10/10 20:00*	*33.3*

LAK 10/4/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

5

Client Sample ID: RDBH02-5-7

Lab Sample ID: ATG0029-03
Matrix: Soil
Percent Solids: 85.9

Date Collected: 07/07/10 11:50
Date Received: 07/09/10 17:58

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	0.173	R1 J	0.131		mg/kg dry	☼	07/10/10 12:09	07/14/10 08:06	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*110*		*50 - 150*	*07/10/10 12:09*	*07/14/10 08:06*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/14/10 08:06*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
2-Methylnaphthalene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Acenaphthene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Acenaphthylene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Anthracene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[a]anthracene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[a]pyrene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[b]fluoranthene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[g,h,i]perylene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[k]fluoranthene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Chrysene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Dibenz(a,h)anthracene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Fluoranthene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Fluorene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Indeno[1,2,3-cd]pyrene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Naphthalene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Phenanthrene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Pyrene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*42 - 140*	*07/13/10 11:02*	*07/20/10 19:15*	*1*
Nitrobenzene-d5	*97*		*38 - 141*	*07/13/10 11:02*	*07/20/10 19:15*	*1*
Terphenyl-d14	*71*		*42 - 151*	*07/13/10 11:02*	*07/20/10 19:15*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	84		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH02-11.5-13

Lab Sample ID: ATG0029-04
Matrix: Soil
Percent Solids: 88.1

Date Collected: 07/07/10 13:15
Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 18:45	1
Residual Range Organics	ND		53.6		mg/kg dry	☼	07/10/10 12:27	07/11/10 18:45	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*100*		*50 - 150*	*07/10/10 12:27*	*07/11/10 18:45*	*1*
Triacontane	*95.3*		*50 - 150*	*07/10/10 12:27*	*07/11/10 18:45*	*1*

LAK 10/14/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH02-11.5-13

Date Collected: 07/07/10 13:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-04

Matrix: Soil
Percent Solids: 88.1

5

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	88.1		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.19		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3
Benzene	ND	C4 J	0.0160		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3
Toluene	ND	C4 J	0.0319		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3
Ethylbenzene	ND		0.0319		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3
Xylenes (total)	ND	C4 J	0.0894		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*65.9*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:21*	*33.3*
a,a,a-TFT (FID)	*98.1*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:21*	*33.3*
4-BFB (PID)	*74.3*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 21:21*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:21*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8 J	0.0160		mg/kg dry	☼	07/10/10 12:09	07/14/10 08:33	33.3
Toluene	ND		0.0319		mg/kg dry	☼	07/10/10 12:09	07/14/10 08:33	33.3
Xylenes (total)	ND		0.0894		mg/kg dry	☼	07/10/10 12:09	07/14/10 08:33	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*83.7*		*50 - 150*	*07/10/10 12:09*	*07/14/10 08:33*	*33.3*
a,a,a-TFT (PID)	*115*		*50 - 150*	*07/10/10 12:09*	*07/14/10 08:33*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
2-Methylnaphthalene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Acenaphthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Acenaphthylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[a]anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[a]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[b]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[g,h,i]perylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[k]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Chrysene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Dibenz(a,h)anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Fluorene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Indeno[1,2,3-cd]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Naphthalene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Phenanthrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*42 - 140*	*07/13/10 11:02*	*07/20/10 19:34*	*1*
Nitrobenzene-d5	*101*		*38 - 141*	*07/13/10 11:02*	*07/20/10 19:34*	*1*
Terphenyl-d14	*71*		*42 - 151*	*07/13/10 11:02*	*07/20/10 19:34*	*1*

LAC 10/4/16

5

Client Sample ID: RDBH02-11.5-13

Lab Sample ID: ATG0029-04
Date Collected: 07/07/10 13:15
Matrix: Soil
Date Received: 07/09/10 17:58

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	86		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH03-4-5

Lab Sample ID: ATG0029-05
Date Collected: 07/07/10 15:45
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 89.7

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		22.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:18	1
Residual Range Organics	ND		54.9		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*96.0*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:18*	*1*
Triacontane	*98.7*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:18*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	89.7		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.83		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3
Benzene	ND	C4 J	0.0191		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3
Toluene	ND	C4 J	0.0383		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3
Ethylbenzene	ND		0.0383		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3
Xylenes (total)	ND	C4 J	0.107		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*71.5*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:49*	*33.3*
a,a,a-TFT (FID)	*96.7*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:49*	*33.3*
4-BFB (PID)	*80.1*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 21:49*	*33.3*
a,a,a-TFT (PID)	*109*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:49*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8 J	0.0191		mg/kg dry	☼	07/10/10 12:09	07/14/10 09:00	33.3
Toluene	ND		0.0383		mg/kg dry	☼	07/10/10 12:09	07/14/10 09:00	33.3
Xylenes (total)	ND		0.107		mg/kg dry	☼	07/10/10 12:09	07/14/10 09:00	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*74.3*		*50 - 150*	*07/10/10 12:09*	*07/14/10 09:00*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/14/10 09:00*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
2-Methylnaphthalene	**5.6**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1

LPC 10/4/10

Client Sample ID: RDBH03-4-5

Date Collected: 07/07/10 15:45
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-05
Matrix: Soil
Percent Solids: 90.6

5

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Chrysene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Naphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Phenanthrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*42 - 140*	*07/13/10 11:02*	*07/20/10 19:54*	*1*
Nitrobenzene-d5	*101*		*38 - 141*	*07/13/10 11:02*	*07/20/10 19:54*	*1*
Terphenyl-d14	*78*		*42 - 151*	*07/13/10 11:02*	*07/20/10 19:54*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.4		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	91		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH03-12-13

Date Collected: 07/07/10 15:50
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-06
Matrix: Soil
Percent Solids: 92.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:18	1
Residual Range Organics	ND		52.6		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*97.3*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:18*	*1*
Triacontane	*92.0*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:18*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	92.4		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.59		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3
Benzene	ND	C4 J	0.0180		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3
Toluene	ND	C4 J	0.0359		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3
Ethylbenzene	ND		0.0359		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3
Xylenes (total)	ND	C4 J	0.101		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*101*		*50 - 150*	*07/10/10 12:09*	*07/10/10 22:16*	*33.3*
a,a,a-TFT (FID)	*99.1*		*50 - 150*	*07/10/10 12:09*	*07/10/10 22:16*	*33.3*
4-BFB (PID)	*110*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 22:16*	*33.3*

ZK 10/4/10

Client Sample ID: RDBH03-12-13

Lab Sample ID: ATG0029-06

Date Collected: 07/07/10 15:50
Date Received: 07/09/10 17:58

Matrix: Soil
Percent Solids: 92.4

5

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/10/10 22:16*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0180		mg/kg dry	☼	07/10/10 12:09	07/14/10 19:24	33.3
Toluene	ND		0.0359		mg/kg dry	☼	07/10/10 12:09	07/14/10 19:24	33.3
Xylenes (total)	ND		0.101		mg/kg dry	☼	07/10/10 12:09	07/14/10 19:24	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*75.1*		*50 - 150*	*07/10/10 12:09*	*07/14/10 19:24*	*33.3*
a,a,a-TFT (PID)	*105*		*50 - 150*	*07/10/10 12:09*	*07/14/10 19:24*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
2-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Chrysene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Naphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Phenanthrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*119*		*42 - 140*	*07/13/10 11:02*	*07/20/10 20:13*	*1*
Nitrobenzene-d5	*110*		*38 - 141*	*07/13/10 11:02*	*07/20/10 20:13*	*1*
Terphenyl-d14	*83*		*42 - 151*	*07/13/10 11:02*	*07/20/10 20:13*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.7**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**91**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH04-0.5-2

Lab Sample ID: ATG0029-07

Date Collected: 07/07/10 16:10
Date Received: 07/09/10 17:58

Matrix: Soil
Percent Solids: 85.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.8		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:51	1
Residual Range Organics	ND		54.5		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:51	1

Client Sample ID: RDBH04-0.5-2

Date Collected: 07/07/10 16:10
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-07

Matrix: Soil
Percent Solids: 85.8

5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	102		50 - 150	07/10/10 12:27	07/11/10 19:51	1
Triacontane	105		50 - 150	07/10/10 12:27	07/11/10 19:51	1

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	85.8		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.79		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3
Benzene	ND	C4 J	0.0189		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3
Toluene	ND	C4 J	0.0379		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3
Ethylbenzene	ND		0.0379		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3
Xylenes (total)	ND	C4 J	0.106		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	88.3		50 - 150	07/10/10 12:09	07/10/10 22:43	33.3
a,a,a-TFT (FID)	99.3		50 - 150	07/10/10 12:09	07/10/10 22:43	33.3
4-BFB (PID)	98.5	C4	50 - 150	07/10/10 12:09	07/10/10 22:43	33.3
a,a,a-TFT (PID)	113		50 - 150	07/10/10 12:09	07/10/10 22:43	33.3

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8 J	0.0189		mg/kg dry	☼	07/10/10 12:09	07/14/10 10:49	33.3
Toluene	ND		0.0379		mg/kg dry	☼	07/10/10 12:09	07/14/10 10:49	33.3
Xylenes (total)	ND		0.106		mg/kg dry	☼	07/10/10 12:09	07/14/10 10:49	33.3

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (PID)	105		50 - 150	07/10/10 12:09	07/14/10 10:49	33.3
a,a,a-TFT (PID)	113		50 - 150	07/10/10 12:09	07/14/10 10:49	33.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
2-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Acenaphthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Acenaphthylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Fluorene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Naphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Phenanthrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1

LR 10/14/10

Client Sample ID: RDBH04-0.5-2

Lab Sample ID: ATG0029-07
Date Collected: 07/07/10 16:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 85.2

5

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*42 - 140*	*07/13/10 11:02*	*07/20/10 20:33*	*1*
Nitrobenzene-d5	*101*		*38 - 141*	*07/13/10 11:02*	*07/20/10 20:33*	*1*
Terphenyl-d14	*74*		*42 - 151*	*07/13/10 11:02*	*07/20/10 20:33*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**85**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH04-15-15.5

Lab Sample ID: ATG0029-08
Date Collected: 07/07/10 17:25
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 92.5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.6		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:51	1
Residual Range Organics	ND		53.9		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:51	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*99.9*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:51*	*1*
Triacontane	*93.8*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:51*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**92.5**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.31		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3
Benzene	ND	C4 J	0.0166		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3
Toluene	ND	C4 J	0.0331		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3
Ethylbenzene	ND		0.0331		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3
Xylenes (total)	ND	C4 J	0.0927		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*50.7*		*50 - 150*	*07/10/10 12:09*	*07/10/10 23:11*	*33.3*
a,a,a-TFT (FID)	*89.1*		*50 - 150*	*07/10/10 12:09*	*07/10/10 23:11*	*33.3*
4-BFB (PID)	*56.1*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 23:11*	*33.3*
a,a,a-TFT (PID)	*103*		*50 - 150*	*07/10/10 12:09*	*07/10/10 23:11*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8 J	0.0166		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:17	33.3
Toluene	ND		0.0331		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:17	33.3
Xylenes (total)	ND		0.0927		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:17	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*63.6*		*50 - 150*	*07/10/10 12:09*	*07/14/10 11:17*	*33.3*
a,a,a-TFT (PID)	*107*		*50 - 150*	*07/10/10 12:09*	*07/14/10 11:17*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1

ZQC 10/4/10

5

Client Sample ID: RDBH04-15-15.5

Date Collected: 07/07/10 17:25
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-08
Matrix: Soil
Percent Solids: 91.8

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**9.6**		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Acenaphthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Acenaphthylene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[a]anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[a]pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[b]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[g,h,i]perylene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[k]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Chrysene	**5.8**		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Dibenz(a,h)anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Fluorene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Indeno[1,2,3-cd]pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Naphthalene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Phenanthrene	**7.8**		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*129*		*42 - 140*	*07/13/10 11:02*	*07/20/10 20:52*	*1*
Nitrobenzene-d5	*117*		*38 - 141*	*07/13/10 11:02*	*07/20/10 20:52*	*1*
Terphenyl-d14	*90*		*42 - 151*	*07/13/10 11:02*	*07/20/10 20:52*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.2**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**92**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH05-22-23

Date Collected: 07/07/10 18:35
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-09
Matrix: Soil
Percent Solids: 86.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**245**		21.8		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:24	1
Residual Range Organics	ND		54.5		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*96.6*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:24*	*1*
Triacontane	*97.1*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**86.8**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**33.4**		3.69		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3
Benzene	ND	C4 J	0.0185		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3
Toluene	**0.171**	R1, C4 J	0.0369		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3
Ethylbenzene	**0.773**	R1	0.0369		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3
Xylenes (total)	**1.02**	C4, R1	0.103		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3

10/4/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH05-22-23
Date Collected: 07/07/10 18:35
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-09
Matrix: Soil
Percent Solids: 86.8

5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	140		50 - 150	07/10/10 12:09	07/10/10 23:38	33.3
a,a,a-TFT (FID)	93.1		50 - 150	07/10/10 12:09	07/10/10 23:38	33.3
4-BFB (PID)	87.8	C4	50 - 150	07/10/10 12:09	07/10/10 23:38	33.3
a,a,a-TFT (PID)	105		50 - 150	07/10/10 12:09	07/10/10 23:38	33.3

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8 J	0.0185		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:45	33.3
Toluene	**0.205**	R1	0.0369		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:45	33.3
Xylenes (total)	**1.07**	R1	0.103		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:45	33.3

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (PID)	128		50 - 150	07/10/10 12:09	07/14/10 11:45	33.3
a,a,a-TFT (PID)	117		50 - 150	07/10/10 12:09	07/14/10 11:45	33.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**100**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
2-Methylnaphthalene	**28**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Acenaphthene	**30**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Acenaphthylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Anthracene	**30**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[a]anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[a]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[b]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[g,h,i]perylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[k]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Chrysene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Dibenz(a,h)anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Fluorene	**50**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Indeno[1,2,3-cd]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Naphthalene	**47**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Phenanthrene	**71**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		42 - 140	07/13/10 11:02	07/20/10 21:12	1
Nitrobenzene-d5	101		38 - 141	07/13/10 11:02	07/20/10 21:12	1
Terphenyl-d14	78		42 - 151	07/13/10 11:02	07/20/10 21:12	1

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**85**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

LJK 10/14/10

Client Sample ID: RDBH05-34-35

Date Collected: 07/07/10 20:25
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-10

Matrix: Soil
Percent Solids: 90.7

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.6		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:24	1
Residual Range Organics	ND		54.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*101*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:24*	*1*
Triacontane	*94.2*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**90.7**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.79		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3
Benzene	ND	C4 J	0.0239		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3
Toluene	ND	C4 J	0.0479		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3
Ethylbenzene	ND		0.0479		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3
Xylenes (total)	ND	C4 J	0.134		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*75.8*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:06*	*33.3*
a,a,a-TFT (FID)	*89.2*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:06*	*33.3*
4-BFB (PID)	*83.1*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/11/10 00:06*	*33.3*
a,a,a-TFT (PID)	*101*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:06*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8 J	0.0239		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:13	33.3
Toluene	ND		0.0479		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:13	33.3
Xylenes (total)	ND		0.134		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:13	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*74.6*		*50 - 150*	*07/10/10 12:09*	*07/14/10 12:13*	*33.3*
a,a,a-TFT (PID)	*103*		*50 - 150*	*07/10/10 12:09*	*07/14/10 12:13*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**5.8**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
2-Methylnaphthalene	**16**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[b]fluoranthene	**18**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[g,h,i]perylene	**6.8**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Chrysene	**38**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Fluoranthene	**6.1**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1

Client Sample ID: RDBH05-34-35

Lab Sample ID: ATG0029-10
Date Collected: 07/07/10 20:25
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.6

5

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	46		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Phenanthrene	96		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Pyrene	14		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*114*		*42 - 140*	*07/13/10 11:02*	*07/20/10 21:32*	*1*
Nitrobenzene-d5	*101*		*38 - 141*	*07/13/10 11:02*	*07/20/10 21:32*	*1*
Terphenyl-d14	*76*		*42 - 151*	*07/13/10 11:02*	*07/20/10 21:32*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.4		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	92		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH06-11-13

Lab Sample ID: ATG0029-11
Date Collected: 07/08/10 08:45
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 83.6

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		22.1		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:57	1
Residual Range Organics	ND		55.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*97.7*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:57*	*1*
Triacontane	*100*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:57*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	83.6		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	24.2	J	3.32		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3
Benzene	ND	C4 J	0.0166		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3
Toluene	0.143	C4, R10 J	0.0332		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3
Ethylbenzene	0.535	R10	0.0332		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3
Xylenes (total)	0.465	C4, R10	0.0931		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*151*	*Z1*	*50 - 150*	*07/10/10 12:09*	*07/11/10 00:33*	*33.3*
a,a,a-TFT (FID)	*111*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:33*	*33.3*
4-BFB (PID)	*123*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/11/10 00:33*	*33.3*
a,a,a-TFT (PID)	*120*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:33*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	J	0.0166		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:41	33.3
Toluene	0.168	R1 J	0.0332		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:41	33.3
Xylenes (total)	0.937	R1 J	0.0931		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:41	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*98.6*		*50 - 150*	*07/10/10 12:09*	*07/14/10 12:41*	*33.3*

10/14/10

5

Client Sample ID: RDBH06-11-13

Lab Sample ID: ATG0029-11
Date Collected: 07/08/10 08:45
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 83.6

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE (Continued)

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (PID)	*113*		*50 - 150*	*07/10/10 12:09*	*07/14/10 12:41*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
2-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Acenaphthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Acenaphthylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Fluorene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Naphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Phenanthrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*136*		*42 - 140*	*07/13/10 11:02*	*07/20/10 21:52*	*1*
Nitrobenzene-d5	*126*		*38 - 141*	*07/13/10 11:02*	*07/20/10 21:52*	*1*
Terphenyl-d14	*92*		*42 - 151*	*07/13/10 11:02*	*07/20/10 21:52*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	85		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH06-21.5-22.5

Lab Sample ID: ATG0029-12
Date Collected: 07/08/10 09:15
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 87.5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	399		22.8		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:57	1
Residual Range Organics	ND		57.1		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*104*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:57*	*1*
Triacontane	*92.8*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:57*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	87.5		1.00		%		07/11/10 12:49	07/12/10 13:00	1

LOK 10/14/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH06-21.5-22.5
Date Collected: 07/08/10 09:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-12
Matrix: Soil
Percent Solids: 87.5

5

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	52.4	J	3.92		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3
Benzene	ND	C4 J	0.0196		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3
Toluene	0.254	C4, R1 J	0.0392		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3
Ethylbenzene	1.08	R1	0.0392		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3
Xylenes (total)	1.39	C4, R1	0.110		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*206*	*Z1*	*50 - 150*	*07/10/10 12:09*	*07/11/10 01:00*	*33.3*
a,a,a-TFT (FID)	*106*		*50 - 150*	*07/10/10 12:09*	*07/11/10 01:00*	*33.3*
4-BFB (PID)	*132*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/11/10 01:00*	*33.3*
a,a,a-TFT (PID)	*115*		*50 - 150*	*07/10/10 12:09*	*07/11/10 01:00*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8	0.0196		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:17	33.3
Toluene	0.264	R1 J	0.0392		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:17	33.3
Xylenes (total)	1.03	R1	0.110		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:17	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*174*	*ZX*	*50 - 150*	*07/10/10 12:09*	*07/14/10 14:17*	*33.3*
a,a,a-TFT (PID)	*128*		*50 - 150*	*07/10/10 12:09*	*07/14/10 14:17*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	260		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
2-Methylnaphthalene	150		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Acenaphthene	58		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Acenaphthylene	22		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Fluorene	94		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Naphthalene	220		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Phenanthrene	94		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*42 - 140*	*07/13/10 11:02*	*07/20/10 22:11*	*1*
Nitrobenzene-d5	*87*		*38 - 141*	*07/13/10 11:02*	*07/20/10 22:11*	*1*
Terphenyl-d14	*68*		*42 - 151*	*07/13/10 11:02*	*07/20/10 22:11*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	87		0.10		%		07/14/10 13:21	07/14/10 13:21	1

ZHL 10/4/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH06-921.5-22.5
Date Collected: 07/08/10 09:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-13
Matrix: Soil
Percent Solids: 89.2

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	275		20.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 21:30	1
Residual Range Organics	ND		51.1		mg/kg dry	☼	07/10/10 12:27	07/11/10 21:30	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*101*		*50 - 150*	*07/10/10 12:27*	*07/11/10 21:30*	*1*
Triacontane	*101*		*50 - 150*	*07/10/10 12:27*	*07/11/10 21:30*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	89.2		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	64.3	J	3.78		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3
Benzene	ND	C4 J	0.0189		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3
Toluene	0.318	C4, R1 J	0.0378		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3
Ethylbenzene	1.33	R1	0.0378		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3
Xylenes (total)	1.61	C4, R1	0.106		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*235*	*Z1*	*50 - 150*	*07/10/10 12:09*	*07/11/10 01:26*	*33.3*
a,a,a-TFT (FID)	*107*		*50 - 150*	*07/10/10 12:09*	*07/11/10 01:26*	*33.3*
4-BFB (PID)	*146*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/11/10 01:26*	*33.3*
a,a,a-TFT (PID)	*116*		*50 - 150*	*07/10/10 12:09*	*07/11/10 01:26*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8 J	0.0189		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:44	33.3
Toluene	0.304	R1 J	0.0378		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:44	33.3
Xylenes (total)	1.51	R1	0.106		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:44	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*220*	*ZX*	*50 - 150*	*07/10/10 12:09*	*07/14/10 14:44*	*33.3*
a,a,a-TFT (FID)	*101*		*50 - 150*	*07/10/10 12:09*	*07/14/10 14:44*	*33.3*
4-BFB (PID)	*138*		*50 - 150*	*07/10/10 12:09*	*07/14/10 14:44*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/14/10 14:44*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	210		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
2-Methylnaphthalene	110		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Acenaphthene	60		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Acenaphthylene	20		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Anthracene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[a]anthracene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[a]pyrene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[b]fluoranthene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[g,h,i]perylene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[k]fluoranthene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Chrysene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Dibenz(a,h)anthracene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Fluoranthene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1

ZAC 10/4/10

Client Sample ID: RDBH06-921.5-22.5

Date Collected: 07/08/10 09:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-13
Matrix: Soil
Percent Solids: 85.6

5

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	79		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Indeno[1,2,3-cd]pyrene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Naphthalene	170		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Phehanthrene	82		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Pyrene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*42 - 140*	*07/13/10 11:02*	*07/20/10 22:31*	*1*
Nitrobenzene-d5	*85*		*38 - 141*	*07/13/10 11:02*	*07/20/10 22:31*	*1*
Terphenyl-d14	*72*		*42 - 151*	*07/13/10 11:02*	*07/20/10 22:31*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	86		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH07-8-9

Date Collected: 07/08/10 10:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-14
Matrix: Soil
Percent Solids: 91.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	531		21.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 21:30	1
Residual Range Organics	ND		53.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 21:30	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*104*		*50 - 150*	*07/10/10 12:27*	*07/11/10 21:30*	*1*
Triacontane	*91.2*		*50 - 150*	*07/10/10 12:27*	*07/11/10 21:30*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	91.8		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	4.08		2.93		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3
Benzene	ND		0.0147		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3
Toluene	0.0364		0.0293		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3
Ethylbenzene	ND		0.0293		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3
Xylenes (total)	0.144		0.0820		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*142*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:14*	*33.3*
a,a,a-TFT (FID)	*98.6*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:14*	*33.3*
4-BFB (PID)	*117*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:14*	*33.3*
a,a,a-TFT (PID)	*113*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:14*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	55		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
2-Methylnaphthalene	48		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Acenaphthene	12		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1

Client Sample ID: RDBH07-8-9

Date Collected: 07/08/10 10:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-14
Matrix: Soil
Percent Solids: 91.9

5

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Anthracene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[a]anthracene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[a]pyrene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[b]fluoranthene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[g,h,i]perylene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[k]fluoranthene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Chrysene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Dibenz(a,h)anthracene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Fluoranthene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Fluorene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Indeno[1,2,3-cd]pyrene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Naphthalene	**18**		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Phenanthrene	**9.3**		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Pyrene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*42 - 140*	*07/13/10 11:02*	*07/20/10 22:50*	*1*
Nitrobenzene-d5	*119*		*38 - 141*	*07/13/10 11:02*	*07/20/10 22:50*	*1*
Terphenyl-d14	*74*		*42 - 151*	*07/13/10 11:02*	*07/20/10 22:50*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.1**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	92		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH07-22.5-23.5

Date Collected: 07/08/10 10:48
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-15
Matrix: Soil
Percent Solids: 93.3

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**67.3**		21.4		mg/kg dry	☼	07/10/10 12:27	07/12/10 06:41	1
Residual Range Organics	ND		53.4		mg/kg dry	☼	07/10/10 12:27	07/12/10 06:41	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*07/10/10 12:27*	*07/12/10 06:41*	*1*
Triacontane	*106*		*50 - 150*	*07/10/10 12:27*	*07/12/10 06:41*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**93.3**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.36		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3
Benzene	ND		0.0168		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3
Toluene	ND		0.0336		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3
Ethylbenzene	ND		0.0336		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3
Xylenes (total)	ND		0.0940		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3

LHK 10/4/10

Client Sample ID: RDBH07-22.5-23.5

Date Collected: 07/08/10 10:48
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-15
Matrix: Soil
Percent Solids: 93.3

5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	121		50 - 150	07/10/10 12:09	07/11/10 03:41	33.3
a,a,a-TFT (FID)	96.7		50 - 150	07/10/10 12:09	07/11/10 03:41	33.3
4-BFB (PID)	125		50 - 150	07/10/10 12:09	07/11/10 03:41	33.3
a,a,a-TFT (PID)	111		50 - 150	07/10/10 12:09	07/11/10 03:41	33.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
2-Methylnaphthalene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Acenaphthene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Acenaphthylene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Anthracene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[a]anthracene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[a]pyrene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[b]fluoranthene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[g,h,i]perylene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[k]fluoranthene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Chrysene	**13**		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Dibenz(a,h)anthracene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Fluoranthene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Fluorene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Naphthalene	**13**		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Phenanthrene	**32**		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Pyrene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	110		42 - 140	07/13/10 11:02	07/20/10 23:10	1
Nitrobenzene-d5	108		38 - 141	07/13/10 11:02	07/20/10 23:10	1
Terphenyl-d14	83		42 - 151	07/13/10 11:02	07/20/10 23:10	1

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.3**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**93**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH08-0-1.5

Date Collected: 07/08/10 11:30
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-16
Matrix: Soil
Percent Solids: 85.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**211**		23.2		mg/kg dry	☼	07/10/10 12:27	07/12/10 06:41	1
Residual Range Organics	ND		57.9		mg/kg dry	☼	07/10/10 12:27	07/12/10 06:41	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	107		50 - 150	07/10/10 12:27	07/12/10 06:41	1
Triacontane	98.1		50 - 150	07/10/10 12:27	07/12/10 06:41	1

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**85.4**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

ZAK 10/4/10

Client Sample ID: RDBH08-0-1.5

Lab Sample ID: ATG0029-16

Date Collected: 07/08/10 11:30
Date Received: 07/09/10 17:58

Matrix: Soil
Percent Solids: 85.4

5

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	11.9		5.11		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3
Benzene	0.0342	R10	0.0256		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3
Toluene	0.153		0.0511		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3
Ethylbenzene	0.437	R10	0.0511		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3
Xylenes (total)	0.613	R1	0.143		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*164*	*Z1*	*50 - 150*	*07/10/10 12:09*	*07/11/10 04:08*	*33.3*
a,a,a-TFT (FID)	*99.2*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:08*	*33.3*
4-BFB (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:08*	*33.3*
a,a,a-TFT (PID)	*114*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:08*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	18		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
2-Methylnaphthalene	6.6		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Acenaphthene	11		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Acenaphthylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Anthracene	9.6		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[a]anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[a]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[b]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[g,h,i]perylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[k]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Chrysene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Dibenz(a,h)anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Fluorene	14		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Indeno[1,2,3-cd]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Naphthalene	47		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Phenanthrene	9.2		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*42 - 140*	*07/13/10 11:02*	*07/23/10 15:44*	*1*
Nitrobenzene-d5	*92*		*38 - 141*	*07/13/10 11:02*	*07/23/10 15:44*	*1*
Terphenyl-d14	*76*		*42 - 151*	*07/13/10 11:02*	*07/23/10 15:44*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	88		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH08-18-19

Lab Sample ID: ATG0029-17

Date Collected: 07/08/10 13:20
Date Received: 07/09/10 17:58

Matrix: Soil
Percent Solids: 93

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 14:21	1
Residual Range Organics	ND		52.5		mg/kg dry	☼	07/10/10 12:27	07/11/10 14:21	1

ZAK 10/4/10

Client Sample ID: RDBH08-18-19

Date Collected: 07/08/10 13:20
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-17

Matrix: Soil
Percent Solids: 93

5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	93.8		50 - 150	07/10/10 12:27	07/11/10 14:21	1
Triacontane	97.0		50 - 150	07/10/10 12:27	07/11/10 14:21	1

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	93.0		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.75		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3
Benzene	ND	C8 J	0.0237		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3
Toluene	ND	C8	0.0475		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3
Ethylbenzene	ND	C8	0.0475		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3
Xylenes (total)	ND	C8	0.133		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	82.1		50 - 150	07/10/10 12:09	07/10/10 18:13	33.3
a,a,a-TFT (FID)	92.4		50 - 150	07/10/10 12:09	07/10/10 18:13	33.3
4-BFB (PID)	89.4		50 - 150	07/10/10 12:09	07/10/10 18:13	33.3
a,a,a-TFT (PID)	105	C8	50 - 150	07/10/10 12:09	07/10/10 18:13	33.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
2-Methylnaphthalene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Acenaphthene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Acenaphthylene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Anthracene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[a]anthracene	**9.2**	J	4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[a]pyrene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[b]fluoranthene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[g,h,i]perylene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[k]fluoranthene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Chrysene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Dibenz(a,h)anthracene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Fluoranthene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Fluorene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Indeno[1,2,3-cd]pyrene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Naphthalene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Phenanthrene	**15**	J	4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Pyrene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	104		42 - 140	07/13/10 11:02	07/23/10 16:03	1
Nitrobenzene-d5	107		38 - 141	07/13/10 11:02	07/23/10 16:03	1
Terphenyl-d14	84		42 - 151	07/13/10 11:02	07/23/10 16:03	1

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.8**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**92**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

LAL 10/14/10

Client Sample ID: RDBH09-10-11.5
Date Collected: 07/08/10 14:00
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-18
Matrix: Soil
Percent Solids: 91.6

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Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.4		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:14	1
Residual Range Organics	ND		53.6		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:14	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*103*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:14*	*1*
Triacontane	*104*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:14*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**91.6**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.09		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3
Benzene	ND		0.0155		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3
Toluene	ND		0.0309		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3
Ethylbenzene	ND		0.0309		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3
Xylenes (total)	ND		0.0866		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*87.0*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:35*	*33.3*
a,a,a-TFT (FID)	*95.9*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:35*	*33.3*
4-BFB (PID)	*93.6*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:35*	*33.3*
a,a,a-TFT (PID)	*110*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:35*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
2-Methylnaphthalene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Acenaphthene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Acenaphthylene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Anthracene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[a]anthracene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[a]pyrene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[b]fluoranthene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[g,h,i]perylene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[k]fluoranthene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Chrysene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Dibenz(a,h)anthracene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Fluoranthene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Fluorene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Indeno[1,2,3-cd]pyrene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Naphthalene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Phenanthrene	**5.4**		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Pyrene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*113*		*42 - 140*	*07/13/10 11:02*	*07/23/10 16:43*	*1*
Nitrobenzene-d5	*124*		*38 - 141*	*07/13/10 11:02*	*07/23/10 16:43*	*1*
Terphenyl-d14	*86*		*42 - 151*	*07/13/10 11:02*	*07/23/10 16:43*	*1*

YAK 10/4/10

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Client Sample ID: RDBH09-10-11.5

Lab Sample ID: ATG0029-18
Date Collected: 07/08/10 14:00
Matrix: Soil
Date Received: 07/09/10 17:58

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.3		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	92		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH09-15-16

Lab Sample ID: ATG0029-19
Date Collected: 07/08/10 14:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 93.5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.9		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:14	1
Residual Range Organics	ND		52.1		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:14	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*101*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:14*	*1*
Triacontane	*92.0*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:14*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	93.5		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.54		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3
Benzene	ND		0.0177		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3
Toluene	ND		0.0354		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3
Ethylbenzene	ND		0.0354		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3
Xylenes (total)	ND		0.0991		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*86.0*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:01*	*33.3*
a,a,a-TFT (FID)	*94.9*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:01*	*33.3*
4-BFB (PID)	*93.3*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:01*	*33.3*
a,a,a-TFT (PID)	*109*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:01*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
2-Methylnaphthalene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Acenaphthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Acenaphthylene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[a]anthracene	20		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[a]pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[b]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[g,h,i]perylene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[k]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Chrysene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Dibenz(a,h)anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Fluorene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Indeno[1,2,3-cd]pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Naphthalene	12		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1

JAK 10/14/10

5

Client Sample ID: RDBH09-15-16

Lab Sample ID: ATG0029-19
Date Collected: 07/08/10 14:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 93.6

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	36		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*123*		*42 - 140*	*07/13/10 11:02*	*07/23/10 17:22*	*1*
Nitrobenzene-d5	*134*		*38 - 141*	*07/13/10 11:02*	*07/23/10 17:22*	*1*
Terphenyl-d14	*106*		*42 - 151*	*07/13/10 11:02*	*07/23/10 17:22*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.4		0.10		%		07/14/10 13:26	07/14/10 13:26	1
Percent Solids	94		0.10		%		07/14/10 13:26	07/14/10 13:26	1

Client Sample ID: RDBH10-2-4

Lab Sample ID: ATG0029-20
Date Collected: 07/08/10 14:50
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	26.9		20.7		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:46	1
Residual Range Organics	ND		51.7		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:46	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*95.0*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:46*	*1*
Triacontane	*96.2*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:46*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	91.4		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		2.48		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3
Benzene	ND		0.0124		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3
Toluene	ND		0.0248		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3
Ethylbenzene	ND		0.0248		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3
Xylenes (total)	ND		0.0696		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*86.7*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:28*	*33.3*
a,a,a-TFT (FID)	*95.6*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:28*	*33.3*
4-BFB (PID)	*95.5*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:28*	*33.3*
a,a,a-TFT (PID)	*109*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:28*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	11		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
2-Methylnaphthalene	19		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Benzo[a]anthracene	5.6		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1

LAK 10/14/10

Client Sample ID: RDBH10-2-4

Date Collected: 07/08/10 14:50
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-20
Matrix: Soil
Percent Solids: 92.5

5

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Chrysene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Naphthalene	**12**		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Phenanthrene	**6.1**		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*114*		*42 - 140*	*07/13/10 11:02*	*07/23/10 17:41*	*1*
Nitrobenzene-d5	*114*		*38 - 141*	*07/13/10 11:02*	*07/23/10 17:41*	*1*
Terphenyl-d14	*95*		*42 - 151*	*07/13/10 11:02*	*07/23/10 17:41*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.5**		0.10		%		07/14/10 13:26	07/14/10 13:26	1
Percent Solids	**92**		0.10		%		07/14/10 13:26	07/14/10 13:26	1

Client Sample ID: RDBH11-30-31.5

Date Collected: 07/08/10 16:58
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-21
Matrix: Soil
Percent Solids: 92.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**206**		21.1		mg/kg dry	☼	07/10/10 12:30	07/12/10 07:46	1
Residual Range Organics	ND		52.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 07:46	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*106*		*50 - 150*	*07/10/10 12:30*	*07/12/10 07:46*	*1*
Triacontane	*92.9*		*50 - 150*	*07/10/10 12:30*	*07/12/10 07:46*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**92.4**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.54		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3
Benzene	ND		0.0177		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3
Toluene	**0.0381**	R1 J	0.0354		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3
Ethylbenzene	ND	C8 J	0.0354		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3
Xylenes (total)	ND		0.0992		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*124*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:06*	*33.3*
a,a,a-TFT (FID)	*96.9*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:06*	*33.3*
4-BFB (PID)	*124*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:06*	*33.3*

Client Sample ID: RDBH11-30-31.5

Lab Sample ID: ATG0029-21
Date Collected: 07/08/10 16:58
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 92.4

5

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (PID)	*110*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:06*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**210**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
2-Methylnaphthalene	**210**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Acenaphthene	**16**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Acenaphthylene	**6.4**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Chrysene	**8.3**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Fluorene	**20**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Naphthalene	**160**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Phenanthrene	**34**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*42 - 140*	*07/13/10 12:44*	*07/21/10 13:48*	*1*
Nitrobenzene-d5	*84*		*38 - 141*	*07/13/10 12:44*	*07/21/10 13:48*	*1*
Terphenyl-d14	*66*		*42 - 151*	*07/13/10 12:44*	*07/21/10 13:48*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.6**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**91**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDBH11-930-31.5

Lab Sample ID: ATG0029-22
Date Collected: 07/08/10 16:58
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 92.1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**296**		20.9		mg/kg dry	☼	07/10/10 12:30	07/12/10 08:19	1
Residual Range Organics	ND		52.2		mg/kg dry	☼	07/10/10 12:30	07/12/10 08:19	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*105*		*50 - 150*	*07/10/10 12:30*	*07/12/10 08:19*	*1*
Triacontane	*105*		*50 - 150*	*07/10/10 12:30*	*07/12/10 08:19*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**92.1**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

YJK 10/14/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH11-930-31.5
Date Collected: 07/08/10 16:58
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-22
Matrix: Soil
Percent Solids: 92.1

5

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	8.76	J	4.07		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3
Benzene	ND		0.0203		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3
Toluene	0.0661	J	0.0407		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3
Ethylbenzene	0.0547	C8	0.0407		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3
Xylenes (total)	0.289		0.114		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*155*	*Z1*	*50 - 150*	*07/10/10 12:11*	*07/12/10 02:33*	*33.3*
a,a,a-TFT (FID)	*100*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:33*	*33.3*
4-BFB (PID)	*146*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:33*	*33.3*
a,a,a-TFT (PID)	*116*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:33*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.0560	C8 J	0.0407		mg/kg dry	☼	07/13/10 11:03	07/14/10 17:31	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*94.1*		*50 - 150*	*07/13/10 11:03*	*07/14/10 17:31*	*33.3*
a,a,a-TFT (PID)	*111*		*50 - 150*	*07/13/10 11:03*	*07/14/10 17:31*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	250		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
2-Methylnaphthalene	250		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Acenaphthene	16		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Acenaphthylene	7.3		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Anthracene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[a]anthracene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[a]pyrene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[b]fluoranthene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[g,h,i]perylene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[k]fluoranthene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Chrysene	7.6		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Dibenz(a,h)anthracene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Fluoranthene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Fluorene	22		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Naphthalene	180		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Phenanthrene	42		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Pyrene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*42 - 140*	*07/13/10 12:44*	*07/21/10 14:07*	*1*
Nitrobenzene-d5	*91*		*38 - 141*	*07/13/10 12:44*	*07/21/10 14:07*	*1*
Terphenyl-d14	*74*		*42 - 151*	*07/13/10 12:44*	*07/21/10 14:07*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.6		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	92		0.10		%		07/14/10 14:32	07/14/10 14:32	1

LWC 10/14/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH10-6-7.5
Date Collected: 07/08/10 15:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-23
Matrix: Soil
Percent Solids: 91.7

5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	772		20.8		mg/kg dry	☼	07/10/10 12:30	07/12/10 08:19	1
Residual Range Organics	ND		52.0		mg/kg dry	☼	07/10/10 12:30	07/12/10 08:19	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*109*		*50 - 150*	*07/10/10 12:30*	*07/12/10 08:19*	*1*
Triacontane	*93.4*		*50 - 150*	*07/10/10 12:30*	*07/12/10 08:19*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	91.7		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	19.8	J	3.24		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3
Benzene	ND		0.0162		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3
Toluene	0.0494	J	0.0324		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3
Ethylbenzene	0.418	C8	0.0324		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3
Xylenes (total)	0.481		0.0907		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*239*	*ZX*	*50 - 150*	*07/10/10 12:11*	*07/12/10 03:00*	*33.3*
a,a,a-TFT (FID)	*97.1*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:00*	*33.3*
4-BFB (PID)	*182*	*ZX*	*50 - 150*	*07/10/10 12:11*	*07/12/10 03:00*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:00*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND	C8 J	0.0324		mg/kg dry	☼	07/13/10 11:03	07/14/10 17:59	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*123*		*50 - 150*	*07/13/10 11:03*	*07/14/10 17:59*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/13/10 11:03*	*07/14/10 17:59*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	180		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
2-Methylnaphthalene	95		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Acenaphthene	33		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Anthracene	6.5		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Chrysene	5.5		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Fluorene	46		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Naphthalene	65		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Phenanthrene	37		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1

LAK 10/4/10

5

Client Sample ID: RDBH10-6-7.5

Date Collected: 07/08/10 15:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-23
Matrix: Soil
Percent Solids: 92.1

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*42 - 140*	*07/13/10 12:44*	*07/21/10 14:27*	*1*
Nitrobenzene-d5	*82*		*38 - 141*	*07/13/10 12:44*	*07/21/10 14:27*	*1*
Terphenyl-d14	*79*		*42 - 151*	*07/13/10 12:44*	*07/21/10 14:27*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.9**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**92**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDBH11-0-2

Date Collected: 07/08/10 15:40
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-24
Matrix: Soil
Percent Solids: 90

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**113**		22.0		mg/kg dry	☼	07/10/10 12:30	07/12/10 10:32	1
Residual Range Organics	ND		55.0		mg/kg dry	☼	07/10/10 12:30	07/12/10 10:32	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*100*		*50 - 150*	*07/10/10 12:30*	*07/12/10 10:32*	*1*
Triacontane	*102*		*50 - 150*	*07/10/10 12:30*	*07/12/10 10:32*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	90.0		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.42		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3
Benzene	ND		0.0171		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3
Toluene	ND		0.0342		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3
Ethylbenzene	ND	C8 J	0.0342		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3
Xylenes (total)	ND		0.0958		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*98.5*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:27*	*33.3*
a,a,a-TFT (FID)	*93.1*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:27*	*33.3*
4-BFB (PID)	*111*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:27*	*33.3*
a,a,a-TFT (PID)	*107*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:27*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**11**		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
2-Methylnaphthalene	**21**		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Acenaphthene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Acenaphthylene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Anthracene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Benzo[a]anthracene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Benzo[a]pyrene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1

5

Client Sample ID: RDBH11-0-2

Lab Sample ID: ATG0029-24
Date Collected: 07/08/10 15:40
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 89

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Benzo[g,h,i]perylene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Benzo[k]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Chrysene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Dibenz(a,h)anthracene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Fluoranthene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Fluorene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Indeno[1,2,3-cd]pyrene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Naphthalene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Phenanthrene	**8.2**		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Pyrene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*42 - 140*	*07/13/10 12:44*	*07/21/10 14:47*	*1*
Nitrobenzene-d5	*106*		*38 - 141*	*07/13/10 12:44*	*07/21/10 14:47*	*1*
Terphenyl-d14	*78*		*42 - 151*	*07/13/10 12:44*	*07/21/10 14:47*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**89**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDBH12-1-3

Lab Sample ID: ATG0029-25
Date Collected: 07/08/10 17:30
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 85.7

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**31.1**		22.5		mg/kg dry	☼	07/10/10 12:30	07/12/10 10:32	1
Residual Range Organics	ND		56.2		mg/kg dry	☼	07/10/10 12:30	07/12/10 10:32	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*103*		*50 - 150*	*07/10/10 12:30*	*07/12/10 10:32*	*1*
Triacontane	*91.2*		*50 - 150*	*07/10/10 12:30*	*07/12/10 10:32*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**85.7**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.75		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3
Benzene	ND		0.0188		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3
Toluene	ND		0.0375		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3
Ethylbenzene	ND	C8 J	0.0375		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3
Xylenes (total)	ND		0.105		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*126*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:54*	*33.3*
a,a,a-TFT (FID)	*99.0*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:54*	*33.3*
4-BFB (PID)	*142*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:54*	*33.3*
a,a,a-TFT (PID)	*114*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:54*	*33.3*

RJC 10/4/10

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Client Sample ID: RDBH12-1-3

Lab Sample ID: ATG0029-25
Date Collected: 07/08/10 17:30
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 85.7

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
2-Methylnaphthalene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Acenaphthene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Acenaphthylene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Anthracene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[a]anthracene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[a]pyrene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[b]fluoranthene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[g,h,i]perylene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[k]fluoranthene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Chrysene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Dibenz(a,h)anthracene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Fluoranthene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Fluorene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Indeno[1,2,3-cd]pyrene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Naphthalene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Phenanthrene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Pyrene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*42 - 140*	*07/13/10 12:44*	*07/21/10 15:11*	*1*
Nitrobenzene-d5	*102*		*38 - 141*	*07/13/10 12:44*	*07/21/10 15:11*	*1*
Terphenyl-d14	*71*		*42 - 151*	*07/13/10 12:44*	*07/21/10 15:11*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**86**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDBH12-21-22.5

Lab Sample ID: ATG0029-26
Date Collected: 07/08/10 18:05
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.6

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		22.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:05	1
Residual Range Organics	ND		56.8		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:05	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*103*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:05*	*1*
Triacontane	*104*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:05*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**86.6**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**4.73**	J	3.16		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3
Benzene	ND		0.0158		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3
Toluene	**0.0360**	R1 J	0.0316		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3
Ethylbenzene	**0.165**	C8, R1 ↓	0.0316		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3

LJK 10/14/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH12-21-22.5
Date Collected: 07/08/10 18:05
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-26
Matrix: Soil
Percent Solids: 86.6

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Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	0.106	R1 J	0.0886		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*154*	*Z1*	*50 - 150*	*07/10/10 12:11*	*07/12/10 04:22*	*33.3*
a,a,a-TFT (FID)	*101*		*50 - 150*	*07/10/10 12:11*	*07/12/10 04:22*	*33.3*
4-BFB (PID)	*155*	*Z1*	*50 - 150*	*07/10/10 12:11*	*07/12/10 04:22*	*33.3*
a,a,a-TFT (PID)	*115*		*50 - 150*	*07/10/10 12:11*	*07/12/10 04:22*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.150	C8, R1 J	0.0316		mg/kg dry	☼	07/13/10 11:03	07/14/10 18:27	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*107*		*50 - 150*	*07/13/10 11:03*	*07/14/10 18:27*	*33.3*
a,a,a-TFT (PID)	*110*		*50 - 150*	*07/13/10 11:03*	*07/14/10 18:27*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	6.9		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
2-Methylnaphthalene	7.4		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Acenaphthene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Acenaphthylene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Fluorene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Naphthalene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Phenanthrene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Pyrene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*105*		*42 - 140*	*07/13/10 12:44*	*07/21/10 15:31*	*1*
Nitrobenzene-d5	*99*		*38 - 141*	*07/13/10 12:44*	*07/21/10 15:31*	*1*
Terphenyl-d14	*75*		*42 - 151*	*07/13/10 12:44*	*07/21/10 15:31*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	85		0.10		%		07/14/10 14:32	07/14/10 14:32	1

LKC
10/4/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDM-SED-001
Date Collected: 07/07/10 17:55
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-27
Matrix: Soil
Percent Solids: 77.8

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Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		32.0		mg/kg dry	☼	07/10/10 12:30	07/11/10 15:26	1
Residual Range Organics	ND		79.9		mg/kg dry	☼	07/10/10 12:30	07/11/10 15:26	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90.9*		*50 - 150*	*07/10/10 12:30*	*07/11/10 15:26*	*1*
Triacontane	*93.2*		*50 - 150*	*07/10/10 12:30*	*07/11/10 15:26*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	77.8		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		2.04		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3
Benzene	ND		0.0102		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3
Toluene	ND		0.0204		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3
Ethylbenzene	ND	C8 J	0.0204		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3
Xylenes (total)	ND		0.0570		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*128*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:10*	*33.3*
a,a,a-TFT (FID)	*142*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:10*	*33.3*
4-BFB (PID)	*142*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 06:10*	*33.3*
a,a,a-TFT (PID)	*166*	*Z1*	*50 - 150*	*07/10/10 12:11*	*07/12/10 06:10*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
2-Methylnaphthalene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Acenaphthene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Acenaphthylene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Anthracene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[a]anthracene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[a]pyrene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[b]fluoranthene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[g,h,i]perylene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[k]fluoranthene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Chrysene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Dibenz(a,h)anthracene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Fluoranthene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Fluorene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Indeno[1,2,3-cd]pyrene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Naphthalene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Phenanthrene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Pyrene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*42 - 140*	*07/13/10 12:44*	*07/21/10 15:50*	*1*
Nitrobenzene-d5	*96*		*38 - 141*	*07/13/10 12:44*	*07/21/10 15:50*	*1*
Terphenyl-d14	*72*		*42 - 151*	*07/13/10 12:44*	*07/21/10 15:50*	*1*

LDK 10/14/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

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Client Sample ID: RDM-SED-001

Lab Sample ID: ATG0029-27
Matrix: Soil

Date Collected: 07/07/10 17:55
Date Received: 07/09/10 17:58

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	81		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SED-002

Lab Sample ID: ATG0029-28
Matrix: Soil
Percent Solids: 84.1

Date Collected: 07/07/10 18:30
Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		23.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:05	1
Residual Range Organics	ND		59.4		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:05	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*99.9*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:05*	*1*
Triacontane	*87.4*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:05*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	84.1		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.62		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3
Benzene	ND		0.00808		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3
Toluene	ND		0.0162		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3
Ethylbenzene	ND	C8 J	0.0162		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3
Xylenes (total)	ND		0.0452		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*118*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:36*	*33.3*
a,a,a-TFT (FID)	*68.3*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:36*	*33.3*
4-BFB (PID)	*130*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 06:36*	*33.3*
a,a,a-TFT (PID)	*80.1*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:36*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
2-Methylnaphthalene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Acenaphthene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Acenaphthylene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Anthracene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[a]anthracene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[a]pyrene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[b]fluoranthene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[g,h,i]perylene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[k]fluoranthene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Chrysene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Dibenz(a,h)anthracene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Fluoranthene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Fluorene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Indeno[1,2,3-cd]pyrene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Naphthalene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1

ZAK 10/4/10

Client Sample ID: RDM-SED-002

Date Collected: 07/07/10 18:30
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-28
Matrix: Soil
Percent Solids: 76.4

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Pyrene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*42 - 140*	*07/13/10 12:44*	*07/21/10 16:10*	*1*
Nitrobenzene-d5	*97*		*38 - 141*	*07/13/10 12:44*	*07/21/10 16:10*	*1*
Terphenyl-d14	*75*		*42 - 151*	*07/13/10 12:44*	*07/21/10 16:10*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	76		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SED-003

Date Collected: 07/08/10 10:10
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-29
Matrix: Soil
Percent Solids: 86.3

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.4		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:39	1
Residual Range Organics	ND		53.4		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:39	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:39*	*1*
Triacontane	*104*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:39*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	86.3		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		2.03		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3
Benzene	ND		0.0102		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3
Toluene	ND		0.0203		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3
Ethylbenzene	ND	C8 J	0.0203		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3
Xylenes (total)	ND		0.0570		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*90.6*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:03*	*33.3*
a,a,a-TFT (FID)	*87.8*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:03*	*33.3*
4-BFB (PID)	*99.4*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 07:03*	*33.3*
a,a,a-TFT (PID)	*102*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:03*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
2-Methylnaphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Acenaphthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Acenaphthylene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Benzo[a]anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1

LAK 10/14/10

Client Sample ID: RDM-SED-003

Lab Sample ID: ATG0029-29
Date Collected: 07/08/10 10:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 84.5

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Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Benzo[b]fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Benzo[g,h,i]perylene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Benzo[k]fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Chrysene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Dibenz(a,h)anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Fluorene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Indeno[1,2,3-cd]pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Naphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Phenanthrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*42 - 140*	*07/13/10 12:44*	*07/21/10 17:09*	*1*
Nitrobenzene-d5	*99*		*38 - 141*	*07/13/10 12:44*	*07/21/10 17:09*	*1*
Terphenyl-d14	*75*		*42 - 151*	*07/13/10 12:44*	*07/21/10 17:09*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**85**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SED-004

Lab Sample ID: ATG0029-30
Date Collected: 07/08/10 10:40
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		22.2		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:39	1
Residual Range Organics	ND		55.5		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:39	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*98.5*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:39*	*1*
Triacontane	*83.2*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:39*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**86.8**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.92		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3
Benzene	ND		0.00960		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3
Toluene	ND		0.0192		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3
Ethylbenzene	ND	C8 J	0.0192		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3
Xylenes (total)	ND		0.0538		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*81.0*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:30*	*33.3*
a,a,a-TFT (FID)	*76.1*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:30*	*33.3*
4-BFB (PID)	*89.7*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 07:30*	*33.3*

5

Client Sample ID: RDM-SED-004

Lab Sample ID: ATG0029-30
Date Collected: 07/08/10 10:40
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.8

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (PID)	*89.3*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:30*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
2-Methylnaphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Acenaphthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Acenaphthylene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[a]anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[a]pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[b]fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[g,h,i]perylene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[k]fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Chrysene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Dibenz(a,h)anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Fluorene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Indeno[1,2,3-cd]pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Naphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Phenanthrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*42 - 140*	*07/13/10 12:44*	*07/21/10 17:28*	*1*
Nitrobenzene-d5	*96*		*38 - 141*	*07/13/10 12:44*	*07/21/10 17:28*	*1*
Terphenyl-d14	*75*		*42 - 151*	*07/13/10 12:44*	*07/21/10 17:28*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**81**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SED-003-DUP

Lab Sample ID: ATG0029-31
Date Collected: 07/08/10 10:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 12:12	1
Residual Range Organics	ND		54.4		mg/kg dry	☼	07/10/10 12:30	07/12/10 12:12	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*07/10/10 12:30*	*07/12/10 12:12*	*1*
Triacontane	*103*		*50 - 150*	*07/10/10 12:30*	*07/12/10 12:12*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**91.4**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

LAC 10/4/10

Client Sample ID: RDM-SED-003-DUP

Lab Sample ID: ATG0029-31
Date Collected: 07/08/10 10:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.4

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Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.42		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3
Benzene	ND		0.00711		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3
Toluene	ND		0.0142		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3
Ethylbenzene	ND	C8 J	0.0142		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3
Xylenes (total)	ND		0.0398		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*126*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:57*	*33.3*
a,a,a-TFT (FID)	*75.4*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:57*	*33.3*
4-BFB (PID)	*134*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 07:57*	*33.3*
a,a,a-TFT (PID)	*86.6*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:57*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
2-Methylnaphthalene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Acenaphthene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Acenaphthylene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Anthracene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[a]anthracene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[a]pyrene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[b]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[g,h,i]perylene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[k]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Chrysene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Dibenz(a,h)anthracene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Fluoranthene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Fluorene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Indeno[1,2,3-cd]pyrene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Naphthalene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Phenanthrene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Pyrene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*104*		*42 - 140*	*07/13/10 12:44*	*07/21/10 17:48*	*1*
Nitrobenzene-d5	*94*		*38 - 141*	*07/13/10 12:44*	*07/21/10 17:48*	*1*
Terphenyl-d14	*75*		*42 - 151*	*07/13/10 12:44*	*07/21/10 17:48*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	85		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-DC-001

Lab Sample ID: ATG0029-32
Date Collected: 07/09/10 13:30
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 78.6

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	83.5		24.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 12:12	1
Residual Range Organics	ND		61.8		mg/kg dry	☼	07/10/10 12:30	07/12/10 12:12	1

LGK 10/14/10

Client Sample ID: RDM-DC-001

Date Collected: 07/09/10 13:30
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-32

Matrix: Soil
Percent Solids: 78.6

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Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	105		50 - 150	07/10/10 12:30	07/12/10 12:12	1
Triacontane	94.7		50 - 150	07/10/10 12:30	07/12/10 12:12	1

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	78.6		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		2.63		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3
Benzene	ND		0.0131		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3
Toluene	ND		0.0263		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3
Ethylbenzene	ND	C8 J	0.0263		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3
Xylenes (total)	ND		0.0736		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	131		50 - 150	07/10/10 12:11	07/12/10 08:24	33.3
a,a,a-TFT (FID)	94.6		50 - 150	07/10/10 12:11	07/12/10 08:24	33.3
4-BFB (PID)	142	C4	50 - 150	07/10/10 12:11	07/12/10 08:24	33.3
a,a,a-TFT (PID)	109		50 - 150	07/10/10 12:11	07/12/10 08:24	33.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
2-Methylnaphthalene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Acenaphthene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Acenaphthylene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Anthracene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[a]anthracene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[a]pyrene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[b]fluoranthene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[g,h,i]perylene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[k]fluoranthene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Chrysene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Dibenz(a,h)anthracene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Fluoranthene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Fluorene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Indeno[1,2,3-cd]pyrene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Naphthalene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Phenanthrene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Pyrene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	101		42 - 140	07/13/10 12:44	07/21/10 18:08	1
Nitrobenzene-d5	93		38 - 141	07/13/10 12:44	07/21/10 18:08	1
Terphenyl-d14	77		42 - 151	07/13/10 12:44	07/21/10 18:08	1

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**25**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**75**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

LJK 10/14/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDM-SMDM-001
Date Collected: 07/09/10 13:45
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-33
Matrix: Soil
Percent Solids: 65.1

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Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	381000	RL7	49600		mg/kg dry	☼	07/10/10 12:30	07/11/10 15:59	100
Residual Range Organics	245000	RL7	124000		mg/kg dry	☼	07/10/10 12:30	07/11/10 15:59	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane		*Z3*	*50 - 150*	*07/10/10 12:30*	*07/11/10 15:59*	*100*
Triacontane		*Z3*	*50 - 150*	*07/10/10 12:30*	*07/11/10 15:59*	*100*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	65.1		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.504	RL7 J	0.0500		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:52	50

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*147*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 08:52*	*50*
a,a,a-TFT (PID)	*181*	*Z1, RL7*	*50 - 150*	*07/10/10 12:11*	*07/12/10 08:52*	*50*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	724	RL7 J	20.0		mg/kg dry	☼	07/10/10 12:11	07/12/10 09:20	100
Toluene	12.3	RL7 J	0.200		mg/kg dry	☼	07/10/10 12:11	07/12/10 09:20	100
Ethylbenzene	12.8	RL7, C8	0.200		mg/kg dry	☼	07/10/10 12:11	07/12/10 09:20	100
Ethylbenzene	15.9	C8, RL7	0.200		mg/kg dry	☼	07/13/10 11:03	07/14/10 18:55	100
Xylenes (total)	80.8	RL7	1.12		mg/kg dry	☼	07/10/10 12:11	07/12/10 10:41	200

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*217*	*ZX*	*50 - 150*	*07/10/10 12:11*	*07/12/10 09:20*	*100*
a,a,a-TFT (FID)	*221*	*Z1, RL7*	*50 - 150*	*07/10/10 12:11*	*07/12/10 09:20*	*100*
4-BFB (PID)	*132*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 09:20*	*100*
4-BFB (PID)	*115*		*50 - 150*	*07/10/10 12:11*	*07/12/10 10:41*	*200*
4-BFB (PID)	*139*		*50 - 150*	*07/13/10 11:03*	*07/14/10 18:55*	*100*
a,a,a-TFT (PID)	*172*	*Z1, RL7*	*50 - 150*	*07/10/10 12:11*	*07/12/10 09:20*	*100*
a,a,a-TFT (PID)	*191*	*RL7*	*50 - 150*	*07/10/10 12:11*	*07/12/10 10:41*	*200*
a,a,a-TFT (PID)	*157*	*Z1, RL7*	*50 - 150*	*07/13/10 11:03*	*07/14/10 18:55*	*100*

Method: 1020A - Ignitability, Setaflash Closed-Cup Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>212				Degrees F		07/12/10 16:15	07/12/10 16:15	1

Method: 6010B TMP - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.2		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Barium	0.99		0.53		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Cadmium	ND		0.53		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Chromium	ND		1.4		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Lead	5.3		1.6		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Selenium	ND		5.3		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Silver	ND		1.1		mg/Kg		07/13/10 14:14	07/13/10 18:15	1

ZQC
10/4/10

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDM-SMDM-001
Date Collected: 07/09/10 13:45
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-33
Matrix: Soil

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Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.33		0.016		mg/Kg		07/13/10 14:22	07/15/10 14:39	1

Method: 8082 STD - Polychlorinated Biphenyls (PCBs) by Gas Chromatogr

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1221	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1232	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1242	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1248	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1254	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1260	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*60 - 125*	*07/13/10 08:03*	*07/14/10 10:36*	*1*
Tetrachloro-m-xylene	*69*		*45 - 155*	*07/13/10 08:03*	*07/14/10 10:36*	*1*

Method: 8260B TCLP - Volatile Organic Compounds (GC/MS) TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
1,2-Dichloroethane	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
2-Butanone	ND		1000		ug/L		07/26/10 11:20	07/26/10 11:20	100
Benzene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Carbon tetrachloride	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Chlorobenzene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Chloroform	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Tetrachloroethene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Trichloroethene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Vinyl chloride	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*
Ethylbenzene-d10	*85*		*80 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*
Fluorobenzene (Surr)	*99*		*80 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*
Toluene-d8 (Surr)	*90*		*85 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*
Trifluorotoluene (Surr)	*108*		*80 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*

Method: 8270C PAH - Semivolatile Compounds by Gas Chromatography/Mass

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**760000**		15000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
2,4-Dimethylphenol	ND		49000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
2-Methylnaphthalene	**1200000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
2-Methylphenol	ND		49000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
3 & 4 Methylphenol	ND		98000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Acenaphthene	**52000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Acenaphthylene	ND		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Anthracene	**39000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[a]anthracene	**25000**		12000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[a]pyrene	**17000**		15000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[b]fluoranthene	**11000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[g,h,i]perylene	ND		12000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[k]fluoranthene	ND		12000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Chrysene	**55000**		12000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10

LAC 10/4/10

Client Sample ID: RDM-SMDM-001

Lab Sample ID: ATG0029-33
Date Collected: 07/09/10 13:45
Matrix: Soil
Date Received: 07/09/10 17:58

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Method: 8270C PAH - Semivolatile Compounds by Gas Chromatography/Mass (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		20000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Fluoranthene	**23000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Fluorene	**98000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Indeno[1,2,3-cd]pyrene	ND		20000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Naphthalene	**410000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Phenanthrene	**230000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Pyrene	**84000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*28 - 143*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
2-Fluorobiphenyl	*80*		*42 - 140*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
2-Fluorophenol	*80*		*36 - 145*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
Nitrobenzene-d5	*94*		*38 - 141*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
Phenol-d5	*75*		*38 - 149*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
Terphenyl-d14	*74*		*42 - 151*	*07/13/10 08:07*	*07/14/10 14:02*	*10*

Method: 8270C TCLP - Semivolatile Compounds by Gas Chromatography/Mass

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
2,4,5-Trichlorophenol	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
2,4,6-Trichlorophenol	ND		15		ug/L		07/24/10 14:25	07/27/10 16:52	1
2,4-Dinitrotoluene	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
2-Methylphenol	**37**		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
3 & 4 Methylphenol	**59**		20		ug/L		07/24/10 14:25	07/27/10 16:52	1
Hexachlorobenzene	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
Hexachlorobutadiene	ND		15		ug/L		07/24/10 14:25	07/27/10 16:52	1
Hexachloroethane	ND		15		ug/L		07/24/10 14:25	07/27/10 16:52	1
Nitrobenzene	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
Pentachlorophenol	ND		18		ug/L		07/24/10 14:25	07/27/10 16:52	1
Pyridine	ND		50		ug/L		07/24/10 14:25	07/27/10 16:52	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*92*		*47 - 158*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
2-Fluorobiphenyl	*86*		*44 - 157*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
2-Fluorophenol	*93*		*44 - 148*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
Nitrobenzene-d5	*93*		*49 - 154*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
Phenol-d5	*95*		*33 - 147*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
Terphenyl-d14	*74*		*27 - 177*	*07/24/10 14:25*	*07/27/10 16:52*	*1*

Method: 9045C - pH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.96**				SU		07/12/10 16:47	07/12/10 16:47	1

Client Sample ID: RDMSW-001

Lab Sample ID: ATG0029-34
Date Collected: 07/07/10 17:55
Matrix: Water
Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.532		mg/l		07/15/10 14:21	07/17/10 02:39	1
Residual Range Organics	ND		0.532		mg/l		07/15/10 14:21	07/17/10 02:39	1

LJK 10/14/10

Client Sample ID: RDMSW-001

Lab Sample ID: ATG0029-34
Matrix: Water

Date Collected: 07/07/10 17:55
Date Received: 07/09/10 17:58

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Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	83.8		50 - 150	07/15/10 14:21	07/17/10 02:39	1
Triacontane	85.3		50 - 150	07/15/10 14:21	07/17/10 02:39	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	122	B4 U	50.0		ug/l		07/20/10 14:44	07/20/10 20:38	1
Benzene	ND	J	0.500		ug/l		07/20/10 14:44	07/20/10 20:38	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 20:38	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 20:38	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 20:38	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	67.5	C4	50 - 150	07/20/10 14:44	07/20/10 20:38	1
4-BFB (PID)	75.2	C4	50 - 150	07/20/10 14:44	07/20/10 20:38	1
a,a,a-TFT (FID)	115		50 - 150	07/20/10 14:44	07/20/10 20:38	1
a,a,a-TFT (PID)	105		50 - 150	07/20/10 14:44	07/20/10 20:38	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 14:51	1
Acenaphthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Acenaphthylene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[a]anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[b]fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[g,h,i]perylene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[k]fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Chrysene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Dibenz(a,h)anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Fluorene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Indeno[1,2,3-cd]pyrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Naphthalene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Phenanthrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Pyrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	107		60 - 140	07/14/10 11:21	07/26/10 14:51	1
Nitrobenzene-d5	111		60 - 140	07/14/10 11:21	07/26/10 14:51	1
Terphenyl-d14	87		60 - 140	07/14/10 11:21	07/26/10 14:51	1

Client Sample ID: RDM-SW-002

Lab Sample ID: ATG0029-35
Matrix: Water

Date Collected: 07/07/10 18:15
Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.442		mg/l		07/15/10 14:21	07/15/10 19:47	1
Residual Range Organics	ND		0.442		mg/l		07/15/10 14:21	07/15/10 19:47	1

Client Sample ID: RDM-SW-002

Lab Sample ID: ATG0029-35

Date Collected: 07/07/10 18:15
Date Received: 07/09/10 17:58

Matrix: Water

5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	96.4		50 - 150	07/15/10 14:21	07/15/10 19:47	1
Triacontane	94.0		50 - 150	07/15/10 14:21	07/15/10 19:47	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	75.0	B4 U	50.0		ug/l		07/20/10 14:44	07/20/10 21:05	1
Benzene	ND	J	0.500		ug/l		07/20/10 14:44	07/20/10 21:05	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 21:05	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 21:05	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 21:05	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	58.1	C4	50 - 150	07/20/10 14:44	07/20/10 21:05	1
4-BFB (PID)	65.5	C4	50 - 150	07/20/10 14:44	07/20/10 21:05	1
a,a,a-TFT (FID)	105		50 - 150	07/20/10 14:44	07/20/10 21:05	1
a,a,a-TFT (PID)	102		50 - 150	07/20/10 14:44	07/20/10 21:05	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 15:11	1
Acenaphthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Acenaphthylene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[a]anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[b]fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[g,h,i]perylene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[k]fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Chrysene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Dibenz(a,h)anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Fluorene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Indeno[1,2,3-cd]pyrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Naphthalene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Phenanthrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Pyrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	105		60 - 140	07/14/10 11:21	07/26/10 15:11	1
Nitrobenzene-d5	114		60 - 140	07/14/10 11:21	07/26/10 15:11	1
Terphenyl-d14	89		60 - 140	07/14/10 11:21	07/26/10 15:11	1

Client Sample ID: RDM-SW-003

Lab Sample ID: ATG0029-36

Date Collected: 07/07/10 10:10
Date Received: 07/09/10 17:58

Matrix: Water

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.439		mg/l		07/15/10 14:21	07/17/10 03:12	1
Residual Range Organics	ND		0.439		mg/l		07/15/10 14:21	07/17/10 03:12	1

Client Sample ID: RDM-SW-003

Lab Sample ID: ATG0029-36

Date Collected: 07/07/10 10:10
Date Received: 07/09/10 17:58

Matrix: Water

5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	94.7		50 - 150	07/15/10 14:21	07/17/10 03:12	1
Triacontane	84.6		50 - 150	07/15/10 14:21	07/17/10 03:12	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	74.1	B4 U	50.0		ug/l		07/20/10 14:44	07/20/10 19:15	1
Benzene	ND	J	0.500		ug/l		07/20/10 14:44	07/20/10 19:15	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 19:15	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 19:15	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 19:15	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	54.8	C4	50 - 150	07/20/10 14:44	07/20/10 19:15	1
4-BFB (PID)	62.7	C4	50 - 150	07/20/10 14:44	07/20/10 19:15	1
a,a,a-TFT (FID)	114		50 - 150	07/20/10 14:44	07/20/10 19:15	1
a,a,a-TFT (PID)	109		50 - 150	07/20/10 14:44	07/20/10 19:15	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 16:15	1
Acenaphthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Acenaphthylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[a]anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[b]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[g,h,i]perylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[k]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Chrysene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Dibenz(a,h)anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Fluorene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Indeno[1,2,3-cd]pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Naphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Phenanthrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	111		60 - 140	07/14/10 11:21	07/26/10 16:15	1
Nitrobenzene-d5	115		60 - 140	07/14/10 11:21	07/26/10 16:15	1
Terphenyl-d14	93		60 - 140	07/14/10 11:21	07/26/10 16:15	1

Client Sample ID: RDM-SW-004

Lab Sample ID: ATG0029-37

Date Collected: 07/07/10 10:40
Date Received: 07/09/10 17:58

Matrix: Water

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.431		mg/l		07/15/10 14:21	07/17/10 03:12	1
Residual Range Organics	ND		0.431		mg/l		07/15/10 14:21	07/17/10 03:12	1

LAC 10/14/10

Client Sample ID: RDM-SW-004

Lab Sample ID: ATG0029-37
Matrix: Water

Date Collected: 07/07/10 10:40
Date Received: 07/09/10 17:58

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	84.3		50 - 150	07/15/10 14:21	07/17/10 03:12	1
Triacontane	86.5		50 - 150	07/15/10 14:21	07/17/10 03:12	1

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Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	76.1	B4 U	50.0		ug/l		07/20/10 14:44	07/20/10 19:43	1
Benzene	ND	J	0.500		ug/l		07/20/10 14:44	07/20/10 19:43	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 19:43	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 19:43	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 19:43	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	45.4	C4, Z6	50 - 150	07/20/10 14:44	07/20/10 19:43	1
4-BFB (PID)	51.7	C4	50 - 150	07/20/10 14:44	07/20/10 19:43	1
a,a,a-TFT (FID)	97.7		50 - 150	07/20/10 14:44	07/20/10 19:43	1
a,a,a-TFT (PID)	95.1		50 - 150	07/20/10 14:44	07/20/10 19:43	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 16:34	1
Acenaphthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Acenaphthylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[a]anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[b]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[g,h,i]perylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[k]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Chrysene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Dibenz(a,h)anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Fluorene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Indeno[1,2,3-cd]pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Naphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Phenanthrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	107		60 - 140	07/14/10 11:21	07/26/10 16:34	1
Nitrobenzene-d5	117		60 - 140	07/14/10 11:21	07/26/10 16:34	1
Terphenyl-d14	94		60 - 140	07/14/10 11:21	07/26/10 16:34	1

Client Sample ID: RDM-SW-003-DUP

Lab Sample ID: ATG0029-38
Matrix: Water

Date Collected: 07/07/10 10:10
Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.417		mg/l		07/15/10 14:21	07/17/10 03:46	1
Residual Range Organics	ND		0.417		mg/l		07/15/10 14:21	07/17/10 03:46	1

LAK 10/4/10

Client Sample ID: RDM-SW-003-DUP

Date Collected: 07/07/10 10:10
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-38
Matrix: Water

5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	95.4		50 - 150	07/15/10 14:21	07/17/10 03:46	1
Triacontane	84.0		50 - 150	07/15/10 14:21	07/17/10 03:46	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	50.2	B4 U	50.0		ug/l		07/20/10 14:44	07/20/10 20:11	1
Benzene	ND	J	0.500		ug/l		07/20/10 14:44	07/20/10 20:11	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 20:11	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 20:11	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 20:11	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	84.2	C4	50 - 150	07/20/10 14:44	07/20/10 20:11	1
4-BFB (PID)	94.0	C4	50 - 150	07/20/10 14:44	07/20/10 20:11	1
a,a,a-TFT (FID)	103		50 - 150	07/20/10 14:44	07/20/10 20:11	1
a,a,a-TFT (PID)	97.4		50 - 150	07/20/10 14:44	07/20/10 20:11	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 16:54	1
Acenaphthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Acenaphthylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[a]anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[b]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[g,h,i]perylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[k]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Chrysene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Dibenz(a,h)anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Fluorene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Indeno[1,2,3-cd]pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Naphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Phenanthrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	110		60 - 140	07/14/10 11:21	07/26/10 16:54	1
Nitrobenzene-d5	114		60 - 140	07/14/10 11:21	07/26/10 16:54	1
Terphenyl-d14	92		60 - 140	07/14/10 11:21	07/26/10 16:54	1

Client Sample ID: Trip Blank - 1

Date Collected: 07/07/10 10:45
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-39
Matrix: Soil

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	R	3.33		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3
Benzene	ND		0.0166		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3
Toluene	ND		0.0333		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3

ZHC 10/14/10

5

Client Sample ID: Trip Blank - 1

Lab Sample ID: ATG0029-39
Matrix: Soil

Date Collected: 07/07/10 10:45
Date Received: 07/09/10 17:58

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND	C8	0.0333		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3
Xylenes (total)	ND		0.0932		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*128*		*50 - 150*	*07/10/10 12:11*	*07/12/10 01:38*	*33.3*
a,a,a-TFT (FID)	*91.0*		*50 - 150*	*07/10/10 12:11*	*07/12/10 01:38*	*33.3*
4-BFB (PID)	*139*		*50 - 150*	*07/10/10 12:11*	*07/12/10 01:38*	*33.3*
a,a,a-TFT (PID)	*104*		*50 - 150*	*07/10/10 12:11*	*07/12/10 01:38*	*33.3*

Client Sample ID: Trip Blank

Lab Sample ID: ATG0029-40
Matrix: Water

Date Collected: 07/07/10 00:00
Date Received: 07/09/10 17:58

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	B4	50.0		ug/l		07/20/10 14:44	07/20/10 18:20	1
Benzene	ND		0.500		ug/l		07/20/10 14:44	07/20/10 18:20	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 18:20	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 18:20	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 18:20	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*68.9*	*C4*	*50 - 150*	*07/20/10 14:44*	*07/20/10 18:20*	*1*
4-BFB (PID)	*76.6*	*C4*	*50 - 150*	*07/20/10 14:44*	*07/20/10 18:20*	*1*
a,a,a-TFT (FID)	*121*		*50 - 150*	*07/20/10 14:44*	*07/20/10 18:20*	*1*
a,a,a-TFT (PID)	*118*		*50 - 150*	*07/20/10 14:44*	*07/20/10 18:20*	*1*

Client Sample ID: RDMSW-001

Lab Sample ID: ATG0029-41
Matrix: Water

Date Collected: 07/07/10 17:55
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1	100		ug/l		07/26/10 10:47	07/26/10 14:55	1
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 14:55	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 14:55	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 14:55	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 14:55	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*111*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 14:55*	*1*
Dibromofluoromethane	*103*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 14:55*	*1*
Toluene-d8	*106*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 14:55*	*1*

Client Sample ID: RDM-SW-002

Lab Sample ID: ATG0029-42
Matrix: Water

Date Collected: 07/07/10 18:15
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1	100		ug/l		07/26/10 10:47	07/26/10 12:49	1

5

Client Sample ID: RDM-SW-002

Lab Sample ID: ATG0029-42
Matrix: Water

Date Collected: 07/07/10 18:15
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	H1 R	0.500		ug/l		07/26/10 10:47	07/26/10 12:49	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 12:49	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 12:49	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 12:49	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*111*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 12:49*	*1*
Dibromofluoromethane	*99.1*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 12:49*	*1*
Toluene-d8	*105*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 12:49*	*1*

Client Sample ID: RDM-SW-003

Lab Sample ID: ATG0029-43
Matrix: Water

Date Collected: 07/07/10 10:10
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1 R	100		ug/l		07/26/10 10:47	07/26/10 15:26	1
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 15:26	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 15:26	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 15:26	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 15:26	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*112*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 15:26*	*1*
Dibromofluoromethane	*103*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 15:26*	*1*
Toluene-d8	*104*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 15:26*	*1*

Client Sample ID: RDM-SW-004

Lab Sample ID: ATG0029-44
Matrix: Water

Date Collected: 07/07/10 10:40
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1 R	100		ug/l		07/26/10 10:47	07/26/10 15:57	1
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 15:57	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 15:57	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 15:57	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 15:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*110*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 15:57*	*1*
Dibromofluoromethane	*103*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 15:57*	*1*
Toluene-d8	*105*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 15:57*	*1*

Client Sample ID: RDM-SW-003-DUP

Lab Sample ID: ATG0029-45
Matrix: Water

Date Collected: 07/07/10 10:10
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1 R	100		ug/l		07/26/10 10:47	07/26/10 16:28	1

YAC 10/14/10

5

Client Sample ID: RDM-SW-003-DUP

Lab Sample ID: ATG0029-45
Matrix: Water

Date Collected: 07/07/10 10:10
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	H1 R	0.500		ug/l		07/26/10 10:47	07/26/10 16:28	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 16:28	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 16:28	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 16:28	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*111*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 16:28*	*1*
Dibromofluoromethane	*105*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 16:28*	*1*
Toluene-d8	*104*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 16:28*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: ATG0029-46
Matrix: Water

Date Collected: 07/07/10 00:00
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1 R	100		ug/l		07/26/10 10:47	07/26/10 17:00	1
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 17:00	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 17:00	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 17:00	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 17:00	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*110*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 17:00*	*1*
Dibromofluoromethane	*104*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 17:00*	*1*
Toluene-d8	*105*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 17:00*	*1*

ZRK
10/14/10

ATG 0029

Laboratory Data Review Checklist

Completed by:	Linda Kokobka
Title:	Technical Manager
Date:	October 4, 2010
CS Report Name:	Site Characterization and Clean up Actions at Red Devil Mine, Red Devil, Alaska
Report Date:	August 31, 2010
Consultant Firm:	Weston Solutions, Inc.
Laboratory Name:	Test America Laboratories, Inc, Anchorage, Alaska
Laboratory Report Number:	Job ID: ATG 0029
ADEC File Number:	
ADEC RecKey Number:	

1. Laboratory

   a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

   ✓ Yes ○ No Comments:

   All work performed by Test America Laboratories in Anchorage, Alaska

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

   ○ Yes ○ No Comments:

   N/A

2. Chain of Custody (COC)

   a. COC information completed, signed, and dated (including released/received by)?

   ✓ Yes ○ No Comments:

   b. Correct analyses requested?

   ✓ Yes ○ No Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?

✓ Yes o No Comments:

Cooler temperatures were within the acceptable range.

b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

✓ Yes o No Comments:

Samples properly preserved and on ice.

c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

✓ Yes o No Comments:

Samples received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

✓ Yes o No Comments:

Three TRIP BLANK samples were not listed on the COC forms.

e. Data quality or usability affected? Explain.

Yes. Comments: VOC and GRO results for TRIP BLANK

Samples were qualified as Rejected (R).

4. Case Narrative

a. Present and understandable?

✓ Yes o No Comments:

b. Discrepancies, errors or QC failures identified by the lab?

✓ Yes o No Comments:

c. Were all corrective actions documented?

✓ Yes o No Comments:

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d. What is the effect on data quality/usability according to the case narrative?

Comments:

NA

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

☑ Yes ○ No Comments:

b. All applicable holding times met?

○ Yes ☑ No Comments: Samples RDM-SW-001, RDW-SW-002, RDM-SW-003, RDM-SW-004 and RDM-SW-03-DUP were reanalyzed for BTEX past holding time. Samples RDM-SW-001, RDM-SW-002, RDM-SW-003, RDM-SW-004, RDM-SW-003-DUP and TRIP BLANK 1 were reanalyzed for GRO past holding time.

c. All soils reported on a dry weight basis?

☑ Yes ○ No Comments:

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

○ Yes ☑ No Comments: Elevated RLs for 33 BTEX results due to dilutions. Elevated RLs for 33 GRO results due to dilutions. Elevated RL for 1 PAH result due to a dilution

e. Data quality or usability affected?

Comments:

No affect.

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

☑ Yes ○ No Comments:

ii. All method blank results less than PQL?

○ Yes ☑ No Comments:

GRO detected in MB associated with ABT000317

iii. If above PQL, what samples are affected?

Comments: Therefore, GRO results in samples RDM-SMDM-001, RDM-SW-002, RDM-SW-003, RDM-SW-004, and RDM-SW-003-DUP qualified as not detected (U).

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iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☑ Yes ○ No Comments:

v. Data quality or usability affected? Explain.

Comments:

GRO results for 5 samples qualified as not detected (U).

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

☑ Yes ○ No Comments:

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

☑ Yes ○ No Comments:

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

○ Yes ☑ No Comments: BTEX LCS recovery outside limits (low) affecting 5 samples. BTEX compounds recovered outside limits (high) in MS. MS recovered high for ethylbenzene. PAH MS recoveries for 14 compounds out high. PAH MSD recoveries for 5 compounds out high.

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/MSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

○ Yes ☑ No Comments: LCS/LCSD RPD for BTEX outside limits affecting 5 samples. BTEX MS/MSD RPD outside limits. Xylene MS/MSD RPD outside limits.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments: LCS - BTEX in RDM-SW-001, RDM-SW-002, RDM-SW-003, RDM-SW-004 and RDM-SW-003-DUP. MS + MS/MSD RPD - BTEX - sample RPBH08-18-9. Xylene MS/MSD RPD for RDM-SW-002. PAH MS and MSD for 1 sample.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☑ Yes ○ No Comments:

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vii. Data quality or usability affected? (Use comment box to explain)

yes Comments: LCS-BTEX for 5 samples - J or UJ.

BTEX- MS for 1 sample = UJ BTEX MS/MSD RPD for 1 sample = UJ. Xylene MS/MSD RPD for 1 sample = UJ PAH hits for 1 sample (2 compounds) = J due to MS + MSD outliers.

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – field, QC and laboratory samples?

✓ Yes ○ No Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

○ Yes ✓ No Comments: 4-BFB and a,a,a-TFT recovered high for 12 samples for BTEX. 4-BFB recovered low for 1 BTEX sample. 4-BFB or TFT recovered high for 9 GRO samples.

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

✓ Yes ○ No Comments:

iv. Data quality or usability affected? (Use the comment box to explain.)

Comments: ETX in 7 samples qualified as J. T and X in 2 samples qualified as J. BTEX in 1 sample qualified as J. BTEX in 1 sample qualified as UJ. B in 1 sample qualified as J. GRO in 8 samples qualified as J.

d. Trip blank – Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (if not, enter explanation below.)

✓ Yes ○ No Comments:

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

○ Yes ✓ No Comments: Trip BLANK samples (3) for this sample set not marked on COC

iii. All results less than PQL?

○ Yes ○ No Comments:

NA - all TB results qualified as R (rejected)

iv. If above PQL, what samples are affected?

Comments:

All trip blank results with this sample set were rejected.

v. Data quality or usability affected? Explain.

Comments:

See above

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

✓ Yes ○ No Comments:

ii. Submitted blind to lab?

✓ Yes ○ No Comments:

iii. Precision – All relative percent differences (RPD) less than specified DQOs? (Recommended: 30% water, 50% soil)

$$\text{RPD (\%)} = \text{Absolute value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

✓ Yes ○ No Comments:

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Comments:

NA

ATG 0029

f. Decontamination or Equipment Blank (If not applicable, a comment stating why must be entered below.)

O Yes ✓ No Not Applicable

i. All results less than PQL?

O Yes O No Comments:

NA

ii. If above PQL, what samples are affected?

Comments:

NA

iii. Data quality or usability affected? Explain.

Comments:

NA

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

✓ Yes O No Comments:

% difference but columns > 40% for toluene = 1J

% difference but columns > 40% for xylenes = 3 Js

% difference but columns > 40% for ethylbenzene = 1J

% difference between columns > 40% for benzene and ethylbenzene = 1J - 1 sample

% difference between columns > 40% for toluene and xylenes = Js (3) = 3 samples

% difference but columns > 40% for toluene, ethylbenzene and xylenes = 5 Js = 5 samples

CCV out for EB in 13 samples = ~~UJ~~ J/UJ

CCV out for B in 7 samples = J or UJ

CCV out for B, T, E, X for 4 samples = J or UJ

CCV out for T, E, X for 5 samples = J or UJ

CCV out for B, T, X for 11 samples = J or UJ

L Kroebel 10/4/10

ATG 0050

Laboratory Data Review Checklist

Completed by: Linda J. Korobka

Title: Technical Manager

Date: October 5, 2010

CS Report Name: Site characterization and cleanup Actions at Red Devil Mine, Red Devil, Alaska

Report Date: July 28, 2010

Consultant Firm: Weston Solutions, Inc.

Laboratory Name: Test America Laboratories, Inc., Anchorage, Alaska

Laboratory Report Number: Job ID # ATG0050

ADEC File Number:

ADEC RecKey Number:

1. Laboratory

   a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?
   ✓ Yes ○ No Comments:

   All work performed by Test America Laboratories in Anchorage, Alaska

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?
   ○ Yes ○ No Comments:

   NA

2. Chain of Custody (COC)

   a. COC information completed, signed, and dated (including released/received by)?
   ✓ Yes ○ No Comments:

   b. Correct analyses requested?
   ✓ Yes ○ No Comments:

ATG 0050

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?

☑ Yes ○ No Comments:

Cooler temperatures were within the acceptable range.

b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

☑ Yes ○ No Comments:

Samples properly preserved and on ice.

c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

☑ Yes ○ No Comments:

Samples received in good Condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

☑ Yes ○ No Comments: TRIP BLANK 1 7/13 and TRIP BLANK 2 7/13 samples not listed on COC form.

e. Data quality or usability affected? Explain. Comments: Yes- GRO and BTEX results for Trip Blank 1 7/13 and TRIP BLANK 2 7/13 samples qualified as rejected (R).

4. Case Narrative

a. Present and understandable?

☑ Yes ○ No Comments:

b. Discrepancies, errors or QC failures identified by the lab?

☑ Yes ○ No Comments:

c. Were all corrective actions documented?

☑ Yes ○ No Comments:

ATG 0050

d. What is the effect on data quality/usability according to the case narrative?

Comments:

NA.

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

✓ Yes o No Comments:

b. All applicable holding times met?

✓ Yes o No Comments:

c. All soils reported on a dry weight basis?

✓ Yes o No Comments:

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

o Yes ✓ No Comments: 10 BTEX + GRO samples were diluted 50-fold and results had elevated RLs. Fluorene and naphthalene results in 1 sample had elevated RLs due to matrix effects.

e. Data quality or usability affected?

Comments: No

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

✓ Yes o No Comments:

ii. All method blank results less than PQL?

✓ Yes o No Comments:

iii. If above PQL, what samples are affected?

Comments:

NA.

A16 0050

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

0 Yes 0 No Comments:

NA

v. Data quality or usability affected? Explain.

Comments:

NA

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

✓ Yes 0 No Comments:

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

0 Yes 0 No Comments:

NA

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

✓ Yes 0 No Comments:

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/MSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

✓ Yes 0 No Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

NA

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

0 Yes 0 No Comments:

NA

ATG 0050

vii. Data quality or usability affected? (Use comment box to explain)

Comments:

NA

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – field, QC and laboratory samples?

✓ Yes o No Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

✓ Yes o No Comments:

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

o Yes o No Comments:

NA

iv. Data quality or usability affected? (Use the comment box to explain.)

Comments:

NA

d. Trip blank – Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

✓ Yes o No Comments:

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

o Yes ✓ No Comments:

TRIP BLANK 1 7/13 and TRIP BLANK 2 7/13 samples not listed on COC. TRIP BLANK 1 7/13, KSU/15 and TRIP BLANK 2 7/13 were rejected for BTEX and GRO.

iii. All results less than PQL?

o Yes o No Comments:

NA

ATG 0050

iv. If above PQL, what samples are affected?

Comments:

NA

v. Data quality or usability affected? Explain.

Comments:

NA

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

☑ Yes ○ No Comments:

ii. Submitted blind to lab?

☑ Yes ○ No Comments:

iii. Precision – All relative percent differences (RPD) less than specified DQOs? (Recommended: 30% water, 50% soil)

$$\text{RPD (\%)} = \text{Absolute value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

☑ Yes ○ No Comments:

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Comments:

NA

ATG 0050

f. Decontamination or Equipment Blank (If not applicable, a comment stating why must be entered below.)

0 Yes ✓ No Not Applicable

i. All results less than PQL?

0 Yes 0 No Comments:

NA

ii. If above PQL, what samples are affected?

Comments:

NA

iii. Data quality or usability affected? Explain.

Comments:

NA

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

✓ Yes 0 No Comments:

4 GRO results were qualified as J because the lab stated that the chromatogram for these samples did not match the typical GRO pattern.

4 GRO and 4 BTEX samples were qualified as J or UJ because the lab stated that the weight of the sample relative to the volume of methanol exceeded the method maximum 1:1 ratio.

L Kovell
10/5/10

APPENDIX G
SURVEY DATA

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Appendix G

NAME	COMMENTS	Easting (UTM, WGS84, Zone 4)	Northing (UTM, WGS84, Zone 4)
RDBH01		589076.79	6848562.15
RDBH02/MW01		589082.94	6848564.27
RDBH03		589071.41	6848561.56
RDBH04		589079.59	6848557.61
RDBH05		589075.75	6848572.13
RDBH06		589079.28	6848567.51
RDBH07/MW02		589074.43	6848566.94
RDBH08		589067.65	6848567.43
RDBH09		589082.95	6848572.78
RDBH11/MW03		589072.52	6848558.22
RDBH11		589065.89	6848571.51
RDBH12		589079.72	6848562.97
RDBH13		589071.96	6848577.03
RDBH14		589089.84	6848566.93
RDBH15		589084.82	6848560.60
RDBH16		589078.93	6848576.40
RDM-SW-SED-001		589055.03	6848607.84
RDM-SW-SED-003		589039.65	6848666.51
RDM-SW-SED-002		589024.73	6848649.85
RDM-SW-SED-004		589006.73	6848639.39
Topo 1	road	589097.55	6848577.39
Topo 2	ROAD EDGE	589082.40	6848581.87
Topo 3	ROAD EDGE	589089.07	6848578.82
Topo 4		589089.20	6848573.72
Topo 5		589084.63	6848568.36
Topo 6		589070.88	6848554.83
Topo 7	ROAD EDGE	589065.71	6848558.03
Topo 8		589061.13	6848563.71
Topo 9		589061.96	6848574.56
Topo 10		589069.15	6848580.56
Topo 11	UPPER END DITCH	589073.62	6848571.52
Topo 12	MIDDLE DITCH	589070.67	6848574.04
Topo 13	LOWER DITCH	589067.84	6848579.44

APPENDIX H
LABORATORY ANALYTICAL DATA REPORTS
(provided in CD format)

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories Inc.
TestAmerica Anchorage
2000 West International Airport Road Suite A10
Anchorage, AK 99502-1119
Tel: (907) 563-9200

TestAmerica Job ID: ATG0050
TestAmerica Sample Delivery Group: ATG0050
Client Project/Site: Red Devil Mine
Client Project Description: Red Devil Mine, AST5-RI

For:
Weston Solutions, Inc.
425 G Street
Anchorage, AK/USA 99501

Attn: Jody Dillon

Johanna Dreher

Authorized for release by:
7/28/2010 6:31 PM

Johanna L Dreher
Client Services Manager
johanna.dreher@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Qualifier Definition/Glossary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Qualifiers

Fuels

Qualifier	Qualifier Description
Q2	Typical pattern for diesel
R4	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.

GC Volatiles

Qualifier	Qualifier Description
Q1	Does not match typical pattern
S14	The weight of the sample relative to the volume of methanol exceeds the method maximum 1:1 ratio.

Semivolatiles

Qualifier	Qualifier Description
RL1	Reporting limit raised due to sample matrix effects.

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH07D-51.5-52.5 — Lab Sample ID: ATG0050-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	95.5		1.00		%	1		TA-SOP	total
% Solids	95.1		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	37.9		14.1		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	77.5		14.1		ug/kg dry	1.	☼	EPA 8270m	total
Naphthalene	71.5		14.1		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	141		14.1		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH09D-20-21.5 — Lab Sample ID: ATG0050-02

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	62.2		20.9		mg/kg dry	1	☼	AK102/103	total
Dry Weight	95.9		1.00		%	1		TA-SOP	total
% Solids	96.1		0.0100		% by Weight	1.		ASTM D2216-80	total
Chrysene	27.6		13.9		ug/kg dry	1.	☼	EPA 8270m	total
Naphthalene	43.7		13.9		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	46.2		13.9		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH09D-42-43 — Lab Sample ID: ATG0050-03

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	93.2		1.00		%	1		TA-SOP	total
% Solids	92.5		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	19.9		14.4		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	35.2		14.4		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	39.9		14.4		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH10D-32-33 — Lab Sample ID: ATG0050-04

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	75.3		19.3		mg/kg dry	1	☼	AK102/103	total
Dry Weight	97.0		1.00		%	1		TA-SOP	total
% Solids	97.2		0.0100		% by Weight	1.		ASTM D2216-80	total
Chrysene	22.0		13.7		ug/kg dry	1.	☼	EPA 8270m	total
Naphthalene	23.4		13.7		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	40.3		13.7		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH10D-61-63 — Lab Sample ID: ATG0050-05

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	92.2		1.00		%	1		TA-SOP	total
% Solids	91.5		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	53.0		14.5		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	96.5		14.5		ug/kg dry	1.	☼	EPA 8270m	total
Naphthalene	91.7		14.5		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	176		14.5		ug/kg dry	1.	☼	EPA 8270m	total
Pyrene	23.6		14.5		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH11D-52-53 — Lab Sample ID: ATG0050-06

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	97.1		1.00		%	1		TA-SOP	total
% Solids	96.3		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	26.9		13.9		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	59.6		13.9		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH11D-52-53 (Continued) — Lab Sample ID: ATG0050-06

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	72.6		13.9		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	115		13.9		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH13-29-30 — Lab Sample ID: ATG0050-07

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	354	Q2	21.5		mg/kg dry	1	☼	AK102/103	total
Dry Weight	90.9		1.00		%	1		TA-SOP	total
Gasoline Range Organics - RE	5.85	S14 Q1	3.89		mg/kg dry	50.	☼	AK101/8021B	total
% Solids	91.6		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	24.7		14.4		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	43.4		14.4		ug/kg dry	1.	☼	EPA 8270m	total
Fluorene	74.3		14.4		ug/kg dry	1.	☼	EPA 8270m	total
Naphthalene	177		14.4		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	114		14.4		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH13-929-30 — Lab Sample ID: ATG0050-08

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	470	Q2	21.9		mg/kg dry	1	☼	AK102/103	total
Dry Weight	90.8		1.00		%	1		TA-SOP	total
Gasoline Range Organics	15.7	Q1	4.71		mg/kg dry	50.	☼	AK101/8021B	total
Xylenes (total)	0.191		0.118		mg/kg dry	50.	☼	AK101/8021B	total
% Solids	92.7		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	20.0		14.3		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	36.5		14.3		ug/kg dry	1.	☼	EPA 8270m	total
Fluorene	56.2		14.3		ug/kg dry	1.	☼	EPA 8270m	total
Naphthalene	116		14.3		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	81.3		14.3		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH13-36.5-37.5 — Lab Sample ID: ATG0050-09

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	89.3		1.00		%	1		TA-SOP	total
% Solids	90.6		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	29.0		14.6		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	55.7		14.6		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	42.6		14.6		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH14-8.5-9.5 — Lab Sample ID: ATG0050-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	92.6		1.00		%	1		TA-SOP	total
% Solids	93.3		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	26.2		14.2		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	64.8		14.2		ug/kg dry	1.	☼	EPA 8270m	total
Naphthalene	21.3		14.2		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	88.9		14.2		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH14-98.5-9.5 — Lab Sample ID: ATG0050-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	31.4		21.4		mg/kg dry	1	☼	AK102/103	total
Dry Weight	93.2		1.00		%	1		TA-SOP	total

Client Sample ID: RDBH14-98.5-9.5 (Continued) — Lab Sample ID: ATG0050-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
% Solids	93.0		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	26.9		14.4		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	66.3		14.4		ug/kg dry	1.	☼	EPA 8270m	total
Naphthalene	21.8		14.4		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	89.2		14.4		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH14-14-15 — Lab Sample ID: ATG0050-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	92.6		1.00		%	1		TA-SOP	total
% Solids	93.2		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	23.7		14.3		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	42.1		14.3		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	39.8		14.3		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH15-22.5-23.5 — Lab Sample ID: ATG0050-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	319	Q2	22.4		mg/kg dry	1	☼	AK102/103	total
Dry Weight	88.1		1.00		%	1		TA-SOP	total
Gasoline Range Organics - RE	35.1	Q1	4.34		mg/kg dry	50.	☼	AK101/8021B	total
Ethylbenzene - RE	0.124		0.109		mg/kg dry	50.	☼	AK101/8021B	total
Xylenes (total) - RE	0.489		0.109		mg/kg dry	50.	☼	AK101/8021B	total
% Solids	90.9		0.0100		% by Weight	1.		ASTM D2216-80	total
Chrysene	25.0		14.7		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	62.6		14.7		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH15-29-30 — Lab Sample ID: ATG0050-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	243	Q2	21.5		mg/kg dry	1	☼	AK102/103	total
Dry Weight	88.9		1.00		%	1		TA-SOP	total
Gasoline Range Organics	9.88	S14 Q1	4.26		mg/kg dry	50.	☼	AK101/8021B	total
Xylenes (total)	0.146	S14	0.107		mg/kg dry	50.	☼	AK101/8021B	total
% Solids	87.5		0.0100		% by Weight	1.		ASTM D2216-80	total
Benzo (b) fluoranthene	16.3		15.1		ug/kg dry	1.	☼	EPA 8270m	total
Chrysene	35.0		15.1		ug/kg dry	1.	☼	EPA 8270m	total
Phenanthrene	49.9		15.1		ug/kg dry	1.	☼	EPA 8270m	total

Client Sample ID: RDBH16-10-11 — Lab Sample ID: ATG0050-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	89.3		1.00		%	1		TA-SOP	total
% Solids	91.4		0.0100		% by Weight	1.		ASTM D2216-80	total

Client Sample ID: RDBH16-20-25 — Lab Sample ID: ATG0050-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	91.0		1.00		%	1		TA-SOP	total
% Solids	93.0		0.0100		% by Weight	1.		ASTM D2216-80	total

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Client Sample ID: RDBH-MW-002 — Lab Sample ID: ATG0050-17

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: RDBH-MW-003 — Lab Sample ID: ATG0050-18

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: RDBH-MW-001 — Lab Sample ID: ATG0050-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	0.601		0.400		mg/l	1		AK102/103	total

Client Sample ID: Trip Blank — Lab Sample ID: ATG0050-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	100		1.00		%	1		TA-SOP	total

Client Sample ID: Trip Blank — Lab Sample ID: ATG0050-21

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: RDBH07D-51.5-52.5

Lab Sample ID: ATG0050-01
Date Collected: 07/10/10 10:10
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 95.5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.3		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:24	1
Residual Range Organics	ND		50.8		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*89.8*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:24*	*1*
Triacontane	*90.0*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**95.5**		1.00		%		07/15/10 21:25	07/16/10 08:05	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**95.1**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Acenaphthylene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Anthracene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (a) anthracene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (a) pyrene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (b) fluoranthene	**37.9**		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (ghi) perylene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Benzo (k) fluoranthene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Chrysene	**77.5**		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Dibenzo (a,h) anthracene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Fluoranthene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Fluorene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Indeno (1,2,3-cd) pyrene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Naphthalene	**71.5**		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Phenanthrene	**141**		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.
Pyrene	ND		14.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:04	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*77.1*		*24 - 125*	*07/16/10 10:10*	*07/16/10 16:04*	*1.*
Pyrene-d10	*80.8*		*41 - 141*	*07/16/10 10:10*	*07/16/10 16:04*	*1.*
Benzo (a) pyrene-d12	*90.8*		*38 - 143*	*07/16/10 10:10*	*07/16/10 16:04*	*1.*

Client Sample ID: RDBH09D-20-21.5

Lab Sample ID: ATG0050-02
Date Collected: 07/11/10 10:29
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 95.9

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**62.2**		20.9		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:57	1
Residual Range Organics	ND		52.1		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*95.5*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:57*	*1*
Triacontane	*94.3*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:57*	*1*

Client Sample ID: RDBH09D-20-21.5

Lab Sample ID: ATG0050-02
Date Collected: 07/11/10 10:29
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 95.9

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**95.9**		1.00		%		07/15/10 21:25	07/16/10 08:05	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**96.1**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Acenaphthylene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (a) anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (a) pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (b) fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (ghi) perylene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Benzo (k) fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Chrysene	**27.6**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Dibenzo (a,h) anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Fluorene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Indeno (1,2,3-cd) pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Naphthalene	**43.7**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Phenanthrene	**46.2**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.
Pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 16:36	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*81.9*		*24 - 125*	*07/16/10 10:10*	*07/16/10 16:36*	*1.*
Pyrene-d10	*83.5*		*41 - 141*	*07/16/10 10:10*	*07/16/10 16:36*	*1.*
Benzo (a) pyrene-d12	*79.7*		*38 - 143*	*07/16/10 10:10*	*07/16/10 16:36*	*1.*

Client Sample ID: RDBH09D-42-43

Lab Sample ID: ATG0050-03
Date Collected: 07/11/10 11:20
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 93.2

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.1		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:57	1
Residual Range Organics	ND		52.7		mg/kg dry	☼	07/15/10 17:16	07/16/10 18:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*89.0*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:57*	*1*
Triacontane	*90.2*		*50 - 150*	*07/15/10 17:16*	*07/16/10 18:57*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**93.2**		1.00		%		07/15/10 21:25	07/16/10 08:05	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**92.5**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Client Sample ID: RDBH09D-42-43

Lab Sample ID: ATG0050-03
Date Collected: 07/11/10 11:20
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 92.5

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Acenaphthylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (a) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (a) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (b) fluoranthene	**19.9**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (ghi) perylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Benzo (k) fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Chrysene	**35.2**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Dibenzo (a,h) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Fluorene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Indeno (1,2,3-cd) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Naphthalene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Phenanthrene	**39.9**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.
Pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:08	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*81.8*		*24 - 125*	*07/16/10 10:10*	*07/16/10 17:08*	*1.*
Pyrene-d10	*81.2*		*41 - 141*	*07/16/10 10:10*	*07/16/10 17:08*	*1.*
Benzo (a) pyrene-d12	*86.3*		*38 - 143*	*07/16/10 10:10*	*07/16/10 17:08*	*1.*

Client Sample ID: RDBH10D-32-33

Lab Sample ID: ATG0050-04
Date Collected: 07/10/10 16:50
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 97

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**75.3**		19.3		mg/kg dry	☼	07/15/10 17:16	07/16/10 19:31	1
Residual Range Organics	ND		48.2		mg/kg dry	☼	07/15/10 17:16	07/16/10 19:31	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*98.0*		*50 - 150*	*07/15/10 17:16*	*07/16/10 19:31*	*1*
Triacontane	*94.9*		*50 - 150*	*07/15/10 17:16*	*07/16/10 19:31*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**97.0**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**97.2**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Acenaphthylene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Anthracene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Benzo (a) anthracene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Benzo (a) pyrene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Benzo (b) fluoranthene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Benzo (ghi) perylene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.

Client Sample ID: RDBH10D-32-33

Lab Sample ID: ATG0050-04
Date Collected: 07/10/10 16:50
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 97.2

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo (k) fluoranthene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Chrysene	**22.0**		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Dibenzo (a,h) anthracene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Fluoranthene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Fluorene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Indeno (1,2,3-cd) pyrene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Naphthalene	**23.4**		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Phenanthrene	**40.3**		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.
Pyrene	ND		13.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 17:39	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*77.9*		*24 - 125*	*07/16/10 10:10*	*07/16/10 17:39*	*1.*
Pyrene-d10	*76.5*		*41 - 141*	*07/16/10 10:10*	*07/16/10 17:39*	*1.*
Benzo (a) pyrene-d12	*78.5*		*38 - 143*	*07/16/10 10:10*	*07/16/10 17:39*	*1.*

Client Sample ID: RDBH10D-61-63

Lab Sample ID: ATG0050-05
Date Collected: 07/10/10 18:05
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 92.2

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.0		mg/kg dry	☼	07/15/10 17:16	07/16/10 19:31	1
Residual Range Organics	ND		52.4		mg/kg dry	☼	07/15/10 17:16	07/16/10 19:31	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*84.2*		*50 - 150*	*07/15/10 17:16*	*07/16/10 19:31*	*1*
Triacontane	*86.0*		*50 - 150*	*07/15/10 17:16*	*07/16/10 19:31*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**92.2**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**91.5**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Acenaphthylene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Anthracene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (a) anthracene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (a) pyrene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (b) fluoranthene	**53.0**		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (ghi) perylene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Benzo (k) fluoranthene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Chrysene	**96.5**		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Dibenzo (a,h) anthracene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Fluoranthene	ND	RL1	21.8		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Fluorene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Indeno (1,2,3-cd) pyrene	ND		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Naphthalene	**91.7**		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.

Client Sample ID: RDBH10D-61-63

Lab Sample ID: ATG0050-05
Date Collected: 07/10/10 18:05
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 91.5

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	**176**		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.
Pyrene	**23.6**		14.5		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:11	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*82.0*		*24 - 125*	*07/16/10 10:10*	*07/16/10 18:11*	*1.*
Pyrene-d10	*81.0*		*41 - 141*	*07/16/10 10:10*	*07/16/10 18:11*	*1.*
Benzo (a) pyrene-d12	*89.5*		*38 - 143*	*07/16/10 10:10*	*07/16/10 18:11*	*1.*

Client Sample ID: RDBH11D-52-53

Lab Sample ID: ATG0050-06
Date Collected: 07/10/10 17:10
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 97.1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.0		mg/kg dry	☼	07/15/10 17:16	07/16/10 20:04	1
Residual Range Organics	ND		49.9		mg/kg dry	☼	07/15/10 17:16	07/16/10 20:04	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90.5*		*50 - 150*	*07/15/10 17:16*	*07/16/10 20:04*	*1*
Triacontane	*87.6*		*50 - 150*	*07/15/10 17:16*	*07/16/10 20:04*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**97.1**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**96.3**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Acenaphthylene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (a) anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (a) pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (b) fluoranthene	**26.9**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (ghi) perylene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Benzo (k) fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Chrysene	**59.6**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Dibenzo (a,h) anthracene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Fluoranthene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Fluorene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Indeno (1,2,3-cd) pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Naphthalene	**72.6**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Phenanthrene	**115**		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.
Pyrene	ND		13.9		ug/kg dry	☼	07/16/10 10:10	07/16/10 18:42	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*86.7*		*24 - 125*	*07/16/10 10:10*	*07/16/10 18:42*	*1.*
Pyrene-d10	*86.5*		*41 - 141*	*07/16/10 10:10*	*07/16/10 18:42*	*1.*
Benzo (a) pyrene-d12	*89.4*		*38 - 143*	*07/16/10 10:10*	*07/16/10 18:42*	*1.*

Client Sample ID: RDBH13-29-30

Date Collected: 07/11/10 15:40
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-07

Matrix: Soil
Percent Solids: 90.9

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**354**	**Q2**	21.5		mg/kg dry	☼	07/15/10 17:16	07/19/10 16:24	1
Residual Range Organics	ND		53.7		mg/kg dry	☼	07/15/10 17:16	07/19/10 16:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*89.9*		*50 - 150*	*07/15/10 17:16*	*07/19/10 16:24*	*1*
Triacontane	*91.6*		*50 - 150*	*07/15/10 17:16*	*07/19/10 16:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**90.9**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**5.85**	**S14 Q1**	3.89		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.
Benzene	ND	S14	0.0195		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.
Toluene	ND	S14	0.0973		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.
Ethylbenzene	ND	S14	0.0973		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.
Xylenes (total)	ND	S14	0.0973		mg/kg dry	☼	07/11/10 15:40	07/17/10 11:06	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*103*	*S14*	*50 - 150*	*07/11/10 15:40*	*07/17/10 11:06*	*50.*
a,a,a-TFT (PID)	*97.6*	*S14*	*50 - 150*	*07/11/10 15:40*	*07/17/10 11:06*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**91.6**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Acenaphthylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (a) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (a) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (b) fluoranthene	**24.7**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (ghi) perylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Benzo (k) fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Chrysene	**43.4**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Dibenzo (a,h) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Fluorene	**74.3**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Indeno (1,2,3-cd) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Naphthalene	**177**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Phenanthrene	**114**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.
Pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:14	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*81.4*		*24 - 125*	*07/16/10 10:10*	*07/16/10 19:14*	*1.*
Pyrene-d10	*87.1*		*41 - 141*	*07/16/10 10:10*	*07/16/10 19:14*	*1.*
Benzo (a) pyrene-d12	*96.2*		*38 - 143*	*07/16/10 10:10*	*07/16/10 19:14*	*1.*

Client Sample ID: RDBH13-929-30

Date Collected: 07/11/10 15:40
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-08

Matrix: Soil
Percent Solids: 90.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**470**	**Q2**	21.9		mg/kg dry	☼	07/16/10 15:37	07/16/10 20:04	1
Residual Range Organics	ND		54.6		mg/kg dry	☼	07/16/10 15:37	07/16/10 20:04	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*85.0*		*50 - 150*	*07/16/10 15:37*	*07/16/10 20:04*	*1*
Triacontane	*82.6*		*50 - 150*	*07/16/10 15:37*	*07/16/10 20:04*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**90.8**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**15.7**	**Q1**	4.71		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.
Benzene	ND		0.0235		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.
Toluene	ND		0.118		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.
Ethylbenzene	ND		0.118		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.
Xylenes (total)	**0.191**		0.118		mg/kg dry	☼	07/11/10 15:40	07/16/10 21:11	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*105*		*50 - 150*	*07/11/10 15:40*	*07/16/10 21:11*	*50.*
a,a,a-TFT (PID)	*101*		*50 - 150*	*07/11/10 15:40*	*07/16/10 21:11*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**92.7**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Acenaphthylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (a) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (a) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (b) fluoranthene	**20.0**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (ghi) perylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Benzo (k) fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Chrysene	**36.5**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Dibenzo (a,h) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Fluorene	**56.2**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Indeno (1,2,3-cd) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Naphthalene	**116**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Phenanthrene	**81.3**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.
Pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 19:46	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*80.8*		*24 - 125*	*07/16/10 10:10*	*07/16/10 19:46*	*1.*
Pyrene-d10	*88.9*		*41 - 141*	*07/16/10 10:10*	*07/16/10 19:46*	*1.*
Benzo (a) pyrene-d12	*97.9*		*38 - 143*	*07/16/10 10:10*	*07/16/10 19:46*	*1.*

Client Sample ID: RDBH13-36.5-37.5

Date Collected: 07/11/10 16:20
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-09

Matrix: Soil
Percent Solids: 89.3

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.5		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:24	1
Residual Range Organics	ND		53.7		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*82.4*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:24*	*1*
Triacontane	*83.9*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**89.3**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.87		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.
Benzene	ND		0.0243		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.
Toluene	ND		0.122		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.
Ethylbenzene	ND		0.122		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.
Xylenes (total)	ND		0.122		mg/kg dry	☼	07/11/10 16:20	07/16/10 22:09	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*104*		*50 - 150*	*07/11/10 16:20*	*07/16/10 22:09*	*50.*
a,a,a-TFT (PID)	*100*		*50 - 150*	*07/11/10 16:20*	*07/16/10 22:09*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**90.6**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Acenaphthylene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (a) anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (a) pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (b) fluoranthene	**29.0**		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (ghi) perylene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Benzo (k) fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Chrysene	**55.7**		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Dibenzo (a,h) anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Fluorene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Indeno (1,2,3-cd) pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Naphthalene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Phenanthrene	**42.6**		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.
Pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:17	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*87.6*		*24 - 125*	*07/16/10 10:10*	*07/16/10 20:17*	*1.*
Pyrene-d10	*88.3*		*41 - 141*	*07/16/10 10:10*	*07/16/10 20:17*	*1.*
Benzo (a) pyrene-d12	*94.0*		*38 - 143*	*07/16/10 10:10*	*07/16/10 20:17*	*1.*

Client Sample ID: RDBH14-8.5-9.5

Date Collected: 07/11/10 17:20
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-10

Matrix: Soil
Percent Solids: 92.6

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.5		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:57	1
Residual Range Organics	ND		53.6		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*65.4*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:57*	*1*
Triacontane	*73.3*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:57*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**92.6**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.70		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.
Benzene	ND		0.0235		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.
Toluene	ND		0.118		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.
Ethylbenzene	ND		0.118		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.
Xylenes (total)	ND		0.118		mg/kg dry	☼	07/11/10 17:20	07/17/10 00:04	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*107*		*50 - 150*	*07/11/10 17:20*	*07/17/10 00:04*	*50.*
a,a,a-TFT (PID)	*102*		*50 - 150*	*07/11/10 17:20*	*07/17/10 00:04*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**93.3**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Acenaphthylene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Anthracene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (a) anthracene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (a) pyrene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (b) fluoranthene	**26.2**		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (ghi) perylene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Benzo (k) fluoranthene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Chrysene	**64.8**		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Dibenzo (a,h) anthracene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Fluoranthene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Fluorene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Indeno (1,2,3-cd) pyrene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Naphthalene	**21.3**		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Phenanthrene	**88.9**		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.
Pyrene	ND		14.2		ug/kg dry	☼	07/16/10 10:10	07/16/10 20:48	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*88.5*		*24 - 125*	*07/16/10 10:10*	*07/16/10 20:48*	*1.*
Pyrene-d10	*87.5*		*41 - 141*	*07/16/10 10:10*	*07/16/10 20:48*	*1.*
Benzo (a) pyrene-d12	*92.8*		*38 - 143*	*07/16/10 10:10*	*07/16/10 20:48*	*1.*

Client Sample ID: RDBH14-98.5-9.5

Date Collected: 07/11/10 17:20
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-11

Matrix: Soil
Percent Solids: 93.2

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**31.4**		21.4		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:57	1
Residual Range Organics	ND		53.4		mg/kg dry	☼	07/16/10 15:37	07/19/10 16:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*84.7*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:57*	*1*
Triacontane	*86.8*		*50 - 150*	*07/16/10 15:37*	*07/19/10 16:57*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**93.2**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.68		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.
Benzene	ND		0.0234		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.
Toluene	ND		0.117		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.
Ethylbenzene	ND		0.117		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.
Xylenes (total)	ND		0.117		mg/kg dry	☼	07/11/10 17:20	07/16/10 18:18	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*108*		*50 - 150*	*07/11/10 17:20*	*07/16/10 18:18*	*50.*
a,a,a-TFT (PID)	*102*		*50 - 150*	*07/11/10 17:20*	*07/16/10 18:18*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**93.0**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Acenaphthylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (a) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (a) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (b) fluoranthene	**26.9**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (ghi) perylene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Benzo (k) fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Chrysene	**66.3**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Dibenzo (a,h) anthracene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Fluoranthene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Fluorene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Indeno (1,2,3-cd) pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Naphthalene	**21.8**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Phenanthrene	**89.2**		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.
Pyrene	ND		14.4		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:20	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*89.6*		*24 - 125*	*07/16/10 10:10*	*07/16/10 21:20*	*1.*
Pyrene-d10	*91.0*		*41 - 141*	*07/16/10 10:10*	*07/16/10 21:20*	*1.*
Benzo (a) pyrene-d12	*97.6*		*38 - 143*	*07/16/10 10:10*	*07/16/10 21:20*	*1.*

Client Sample ID: RDBH14-14-15

Date Collected: 07/11/10 17:30
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-12

Matrix: Soil
Percent Solids: 92.6

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.5		mg/kg dry	☼	07/16/10 15:37	07/19/10 14:45	1
Residual Range Organics	ND		53.7		mg/kg dry	☼	07/16/10 15:37	07/19/10 14:45	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*85.2*		*50 - 150*	*07/16/10 15:37*	*07/19/10 14:45*	*1*
Triacontane	*84.0*		*50 - 150*	*07/16/10 15:37*	*07/19/10 14:45*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**92.6**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	S14	3.47		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.
Benzene	ND	S14	0.0173		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.
Toluene	ND	S14	0.0867		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.
Ethylbenzene	ND	S14	0.0867		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.
Xylenes (total)	ND	S14	0.0867		mg/kg dry	☼	07/11/10 17:30	07/16/10 15:25	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*105*	*S14*	*50 - 150*	*07/11/10 17:30*	*07/16/10 15:25*	*50.*
a,a,a-TFT (PID)	*104*	*S14*	*50 - 150*	*07/11/10 17:30*	*07/16/10 15:25*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**93.2**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Acenaphthylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (a) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (a) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (b) fluoranthene	**23.7**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (ghi) perylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Benzo (k) fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Chrysene	**42.1**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Dibenzo (a,h) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Fluorene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Indeno (1,2,3-cd) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Naphthalene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Phenanthrene	**39.8**		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.
Pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 12:43	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*83.5*		*24 - 125*	*07/16/10 10:10*	*07/16/10 12:43*	*1.*
Pyrene-d10	*88.2*		*41 - 141*	*07/16/10 10:10*	*07/16/10 12:43*	*1.*
Benzo (a) pyrene-d12	*97.5*		*38 - 143*	*07/16/10 10:10*	*07/16/10 12:43*	*1.*

Client Sample ID: RDBH15-22.5-23.5

Date Collected: 07/12/10 09:23
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-13

Matrix: Soil
Percent Solids: 88.1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**319**	**Q2**	22.4		mg/kg dry	☼	07/16/10 15:37	07/19/10 17:30	1
Residual Range Organics	ND		56.0		mg/kg dry	☼	07/16/10 15:37	07/19/10 17:30	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*83.5*		*50 - 150*	*07/16/10 15:37*	*07/19/10 17:30*	*1*
Triacontane	*88.3*		*50 - 150*	*07/16/10 15:37*	*07/19/10 17:30*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**88.1**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**35.1**	**Q1**	4.34		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.
Benzene	ND		0.0217		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.
Toluene	ND		0.109		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.
Ethylbenzene	**0.124**		0.109		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.
Xylenes (total)	**0.489**		0.109		mg/kg dry	☼	07/12/10 09:23	07/17/10 11:35	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*102*		*50 - 150*	*07/12/10 09:23*	*07/17/10 11:35*	*50.*
a,a,a-TFT (PID)	*95.7*		*50 - 150*	*07/12/10 09:23*	*07/17/10 11:35*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**90.9**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Acenaphthylene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Anthracene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (a) anthracene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (a) pyrene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (b) fluoranthene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (ghi) perylene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Benzo (k) fluoranthene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Chrysene	**25.0**		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Dibenzo (a,h) anthracene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Fluoranthene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Fluorene	ND	RL1	36.8		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Indeno (1,2,3-cd) pyrene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Naphthalene	ND	RL1	58.8		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Phenanthrene	**62.6**		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.
Pyrene	ND		14.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 21:51	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*86.8*		*24 - 125*	*07/16/10 10:10*	*07/16/10 21:51*	*1.*
Pyrene-d10	*96.3*		*41 - 141*	*07/16/10 10:10*	*07/16/10 21:51*	*1.*
Benzo (a) pyrene-d12	*108*		*38 - 143*	*07/16/10 10:10*	*07/16/10 21:51*	*1.*

Client Sample ID: RDBH15-29-30

Date Collected: 07/12/10 09:38
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-14

Matrix: Soil
Percent Solids: 88.9

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**243**	**Q2**	21.5		mg/kg dry	☼	07/16/10 15:37	07/19/10 17:30	1
Residual Range Organics	ND		53.7		mg/kg dry	☼	07/16/10 15:37	07/19/10 17:30	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*85.5*		*50 - 150*	*07/16/10 15:37*	*07/19/10 17:30*	*1*
Triacontane	*86.5*		*50 - 150*	*07/16/10 15:37*	*07/19/10 17:30*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**88.9**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**9.88**	**S14 Q1**	4.26		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.
Benzene	ND	S14	0.0213		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.
Toluene	ND	S14	0.107		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.
Ethylbenzene	ND	S14	0.107		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.
Xylenes (total)	**0.146**	**S14**	0.107		mg/kg dry	☼	07/12/10 09:38	07/16/10 18:47	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*111*	*S14*	*50 - 150*	*07/12/10 09:38*	*07/16/10 18:47*	*50.*
a,a,a-TFT (PID)	*108*	*S14*	*50 - 150*	*07/12/10 09:38*	*07/16/10 18:47*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**87.5**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Acenaphthylene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Anthracene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (a) anthracene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (a) pyrene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (b) fluoranthene	**16.3**		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (ghi) perylene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Benzo (k) fluoranthene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Chrysene	**35.0**		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Dibenzo (a,h) anthracene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Fluoranthene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Fluorene	ND	RL1	22.7		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Indeno (1,2,3-cd) pyrene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Naphthalene	ND	RL1	68.0		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Phenanthrene	**49.9**		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.
Pyrene	ND		15.1		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:22	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*80.8*		*24 - 125*	*07/16/10 10:10*	*07/16/10 22:22*	*1.*
Pyrene-d10	*88.7*		*41 - 141*	*07/16/10 10:10*	*07/16/10 22:22*	*1.*
Benzo (a) pyrene-d12	*96.5*		*38 - 143*	*07/16/10 10:10*	*07/16/10 22:22*	*1.*

Client Sample ID: RDBH16-10-11

Date Collected: 07/12/10 11:10
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-15

Matrix: Soil
Percent Solids: 89.3

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.7		mg/kg dry	☼	07/16/10 15:37	07/19/10 18:02	1
Residual Range Organics	ND		54.3		mg/kg dry	☼	07/16/10 15:37	07/19/10 18:02	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*80.8*		*50 - 150*	*07/16/10 15:37*	*07/19/10 18:02*	*1*
Triacontane	*86.8*		*50 - 150*	*07/16/10 15:37*	*07/19/10 18:02*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**89.3**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.11		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.
Benzene	ND		0.0206		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.
Toluene	ND		0.103		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.
Ethylbenzene	ND		0.103		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.
Xylenes (total)	ND		0.103		mg/kg dry	☼	07/12/10 11:10	07/16/10 19:16	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*108*		*50 - 150*	*07/12/10 11:10*	*07/16/10 19:16*	*50.*
a,a,a-TFT (PID)	*101*		*50 - 150*	*07/12/10 11:10*	*07/16/10 19:16*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**91.4**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Acenaphthylene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (a) anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (a) pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (b) fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (ghi) perylene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Benzo (k) fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Chrysene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Dibenzo (a,h) anthracene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Fluoranthene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Fluorene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Indeno (1,2,3-cd) pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Naphthalene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Phenanthrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.
Pyrene	ND		14.6		ug/kg dry	☼	07/16/10 10:10	07/16/10 22:54	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*83.7*		*24 - 125*	*07/16/10 10:10*	*07/16/10 22:54*	*1.*
Pyrene-d10	*85.7*		*41 - 141*	*07/16/10 10:10*	*07/16/10 22:54*	*1.*
Benzo (a) pyrene-d12	*95.3*		*38 - 143*	*07/16/10 10:10*	*07/16/10 22:54*	*1.*

Client Sample ID: RDBH16-20-25

Date Collected: 07/12/10 11:38
Date Received: 07/14/10 16:20

Lab Sample ID: ATG0050-16

Matrix: Soil
Percent Solids: 91

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.2		mg/kg dry	☼	07/16/10 15:37	07/19/10 18:02	1
Residual Range Organics	ND		53.1		mg/kg dry	☼	07/16/10 15:37	07/19/10 18:02	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*79.4*		*50 - 150*	*07/16/10 15:37*	*07/19/10 18:02*	*1*
Triacontane	*81.2*		*50 - 150*	*07/16/10 15:37*	*07/19/10 18:02*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**91.0**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	S14	2.84		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.
Benzene	ND	S14	0.0142		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.
Toluene	ND	S14	0.0710		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.
Ethylbenzene	ND	S14	0.0710		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.
Xylenes (total)	ND	S14	0.0710		mg/kg dry	☼	07/12/10 11:38	07/16/10 19:44	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*106*	*S14*	*50 - 150*	*07/12/10 11:38*	*07/16/10 19:44*	*50.*
a,a,a-TFT (PID)	*103*	*S14*	*50 - 150*	*07/12/10 11:38*	*07/16/10 19:44*	*50.*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Solids	**93.0**		0.0100		% by Weight		07/15/10 14:50	07/15/10 14:50	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Acenaphthylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (a) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (a) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (b) fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (ghi) perylene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Benzo (k) fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Chrysene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Dibenzo (a,h) anthracene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Fluoranthene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Fluorene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Indeno (1,2,3-cd) pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Naphthalene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Phenanthrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.
Pyrene	ND		14.3		ug/kg dry	☼	07/16/10 10:10	07/16/10 23:25	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*90.0*		*24 - 125*	*07/16/10 10:10*	*07/16/10 23:25*	*1.*
Pyrene-d10	*90.1*		*41 - 141*	*07/16/10 10:10*	*07/16/10 23:25*	*1.*
Benzo (a) pyrene-d12	*100*		*38 - 143*	*07/16/10 10:10*	*07/16/10 23:25*	*1.*

Client Sample ID: RDBH-MW-002

Lab Sample ID: ATG0050-17
Date Collected: 07/12/10 18:15
Matrix: Water
Date Received: 07/14/10 16:20

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.400		mg/l		07/15/10 14:21	07/17/10 03:46	1
Residual Range Organics	ND		0.400		mg/l		07/15/10 14:21	07/17/10 03:46	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90.2*		*50 - 150*	*07/15/10 14:21*	*07/17/10 03:46*	*1*
Triacontane	*92.3*		*50 - 150*	*07/15/10 14:21*	*07/17/10 03:46*	*1*

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		80.0		ug/l		07/19/10 08:59	07/19/10 15:59	1.
Benzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:59	1.
Toluene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:59	1.
Ethylbenzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:59	1.
Xylenes (total)	ND		1.00		ug/l		07/19/10 08:59	07/19/10 15:59	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*103*		*60 - 120*	*07/19/10 08:59*	*07/19/10 15:59*	*1.*
4-BFB (PID)	*101*		*60 - 120*	*07/19/10 08:59*	*07/19/10 15:59*	*1.*

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Acenaphthylene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Anthracene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (a) anthracene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (a) pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (b) fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (ghi) perylene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Benzo (k) fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Chrysene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Dibenzo (a,h) anthracene	ND		0.198		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Fluorene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Indeno (1,2,3-cd) pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Naphthalene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Phenanthrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.
Pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 12:49	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*72.2*		*25 - 125*	*07/15/10 15:30*	*07/19/10 12:49*	*1.*
Pyrene-d10	*62.4*		*23 - 150*	*07/15/10 15:30*	*07/19/10 12:49*	*1.*
Benzo (a) pyrene-d12	*49.1*		*10 - 125*	*07/15/10 15:30*	*07/19/10 12:49*	*1.*

Client Sample ID: RDBH-MW-003

Lab Sample ID: ATG0050-18
Date Collected: 07/12/10 18:30
Matrix: Water
Date Received: 07/14/10 16:20

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.455		mg/l		07/15/10 14:21	07/17/10 04:19	1
Residual Range Organics	ND		0.455		mg/l		07/15/10 14:21	07/17/10 04:19	1

Client Sample ID: RDBH-MW-003

Lab Sample ID: ATG0050-18

Date Collected: 07/12/10 18:30

Matrix: Water

Date Received: 07/14/10 16:20

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	102		50 - 150	07/15/10 14:21	07/17/10 04:19	1
Triacontane	89.8		50 - 150	07/15/10 14:21	07/17/10 04:19	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		80.0		ug/l		07/19/10 08:59	07/19/10 16:34	1.
Benzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 16:34	1.
Toluene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 16:34	1.
Ethylbenzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 16:34	1.
Xylenes (total)	ND		1.00		ug/l		07/19/10 08:59	07/19/10 16:34	1.

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	104		60 - 120	07/19/10 08:59	07/19/10 16:34	1.
4-BFB (PID)	101		60 - 120	07/19/10 08:59	07/19/10 16:34	1.

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Acenaphthylene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Anthracene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (a) anthracene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (a) pyrene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (b) fluoranthene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (ghi) perylene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Benzo (k) fluoranthene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Chrysene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Dibenzo (a,h) anthracene	ND		0.196		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Fluoranthene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Fluorene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Indeno (1,2,3-cd) pyrene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Naphthalene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Phenanthrene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.
Pyrene	ND		0.0980		ug/l		07/15/10 15:30	07/19/10 13:20	1.

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorene-d10	50.9		25 - 125	07/15/10 15:30	07/19/10 13:20	1.
Pyrene-d10	40.3		23 - 150	07/15/10 15:30	07/19/10 13:20	1.
Benzo (a) pyrene-d12	27.0		10 - 125	07/15/10 15:30	07/19/10 13:20	1.

Client Sample ID: RDBH-MW-001

Lab Sample ID: ATG0050-19

Date Collected: 07/11/10 11:28

Matrix: Water

Date Received: 07/14/10 16:20

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**0.601**		0.400		mg/l		07/15/10 14:21	07/17/10 04:19	1
Residual Range Organics	ND		0.400		mg/l		07/15/10 14:21	07/17/10 04:19	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	91.2		50 - 150	07/15/10 14:21	07/17/10 04:19	1
Triacontane	93.0		50 - 150	07/15/10 14:21	07/17/10 04:19	1

Client Sample ID: RDBH-MW-001

Lab Sample ID: ATG0050-19

Date Collected: 07/11/10 11:28
Matrix: Water
Date Received: 07/14/10 16:20

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		80.0		ug/l		07/19/10 08:59	07/19/10 17:10	1.
Benzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 17:10	1.
Toluene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 17:10	1.
Ethylbenzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 17:10	1.
Xylenes (total)	ND		1.00		ug/l		07/19/10 08:59	07/19/10 17:10	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*103*		*60 - 120*	*07/19/10 08:59*	*07/19/10 17:10*	*1.*
4-BFB (PID)	*100*		*60 - 120*	*07/19/10 08:59*	*07/19/10 17:10*	*1.*

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Acenaphthylene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Anthracene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (a) anthracene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (a) pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (b) fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (ghi) perylene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Benzo (k) fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Chrysene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Dibenzo (a,h) anthracene	ND		0.198		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Fluoranthene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Fluorene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Indeno (1,2,3-cd) pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Naphthalene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Phenanthrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.
Pyrene	ND		0.0990		ug/l		07/15/10 15:30	07/19/10 13:51	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*49.5*		*25 - 125*	*07/15/10 15:30*	*07/19/10 13:51*	*1.*
Pyrene-d10	*58.2*		*23 - 150*	*07/15/10 15:30*	*07/19/10 13:51*	*1.*
Benzo (a) pyrene-d12	*73.3*		*10 - 125*	*07/15/10 15:30*	*07/19/10 13:51*	*1.*

Client Sample ID: Trip Blank

Lab Sample ID: ATG0050-20

Date Collected: 07/13/10 00:00
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 100

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**100**		1.00		%		07/20/10 09:30	07/20/10 15:45	1

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.00		mg/kg wet	☼	07/13/10 00:00	07/16/10 14:24	50.
Benzene	ND		0.0200		mg/kg wet	☼	07/13/10 00:00	07/16/10 14:24	50.
Toluene	ND		0.100		mg/kg wet	☼	07/13/10 00:00	07/16/10 14:24	50.
Ethylbenzene	ND		0.100		mg/kg wet	☼	07/13/10 00:00	07/16/10 14:24	50.
Xylenes (total)	ND		0.100		mg/kg wet	☼	07/13/10 00:00	07/16/10 14:24	50.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*107*		*50 - 150*	*07/13/10 00:00*	*07/16/10 14:24*	*50.*

Client Sample ID: Trip Blank — Lab Sample ID: ATG0050-20

Date Collected: 07/13/10 00:00 — **Matrix: Soil**
Date Received: 07/14/10 16:20

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B (Continued)

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (PID)	*105*		*50 - 150*	*07/13/10 00:00*	*07/16/10 14:24*	*50.*

Client Sample ID: Trip Blank — Lab Sample ID: ATG0050-21

Date Collected: 07/13/10 00:00 — **Matrix: Water**
Date Received: 07/14/10 16:20

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		80.0		ug/l		07/19/10 08:59	07/19/10 15:23	1.
Benzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:23	1.
Toluene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:23	1.
Ethylbenzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 15:23	1.
Xylenes (total)	ND		1.00		ug/l		07/19/10 08:59	07/19/10 15:23	1.

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*103*		*60 - 120*	*07/19/10 08:59*	*07/19/10 15:23*	*1.*
4-BFB (PID)	*101*		*60 - 120*	*07/19/10 08:59*	*07/19/10 15:23*	*1.*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Soil **Prep Type: total**

Lab Sample ID	Client Sample ID	1COD (50-150)	TC (50-150)	Percent Surrogate Recovery (Acceptance Limits)					
10G0058-BLK1	10G0058-BLK1	89.1	93.8						
10G0058-DUP1	ATG0053-01	98.2	94.4						
10G0058-MS1	ATG0053-01	104	96.2						
10G0058-MSD1	ATG0053-01	105	95.1						
10G0064-BLK1	10G0064-BLK1	92.9	99.7						
10G0064-DUP1	RDBH14-14-15	85.8	85.6						
10G0064-MS1	RDBH14-14-15	88.7	82.6						
10G0064-MSD1	RDBH14-14-15	90.0	84.5						
ATG0050-01	RDBH07D-51.5-52.5	89.8	90.0						
ATG0050-02	RDBH09D-20-21.5	95.5	94.3						
ATG0050-03	RDBH09D-42-43	89.0	90.2						
ATG0050-04	RDBH10D-32-33	98.0	94.9						
ATG0050-05	RDBH10D-61-63	84.2	86.0						
ATG0050-06	RDBH11D-52-53	90.5	87.6						
ATG0050-07	RDBH13-29-30	89.9	91.6						
ATG0050-08	RDBH13-929-30	85.0	82.6						
ATG0050-09	RDBH13-36.5-37.5	82.4	83.9						
ATG0050-10	RDBH14-8.5-9.5	65.4	73.3						
ATG0050-11	RDBH14-98.5-9.5	84.7	86.8						
ATG0050-12	RDBH14-14-15	85.2	84.0						
ATG0050-13	RDBH15-22.5-23.5	83.5	88.3						
ATG0050-14	RDBH15-29-30	85.5	86.5						
ATG0050-15	RDBH16-10-11	80.8	86.8						
ATG0050-16	RDBH16-20-25	79.4	81.2						

Surrogate Legend

1COD = 1-Chlorooctadecane

TC = Triacontane

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Soil **Prep Type: total**

Lab Sample ID	Client Sample ID	1COD (60-120)	TC (60-120)	Percent Surrogate Recovery (Acceptance Limits)					
10G0058-BS1	10G0058-BS1	95.4	92.0						
10G0058-BSD1	10G0058-BSD1	103	98.5						
10G0064-BS1	10G0064-BS1	103	103						
10G0064-BSD1	10G0064-BSD1	92.9	93.8						

Surrogate Legend

1COD = 1-Chlorooctadecane

TC = Triacontane

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	1COD (50-150)	TC (50-150)						
10G0057-BLK1	10G0057-BLK1	88.6	91.8						
10G0057-DUP1	ATG0029-35	96.7	94.4						
10G0057-MS1	ATG0029-35	106	98.0						
10G0057-MSD1	ATG0029-35	103	96.0						
ATG0050-17	RDBH-MW-002	90.2	92.3						
ATG0050-18	RDBH-MW-003	102	89.8						
ATG0050-19	RDBH-MW-001	91.2	93.0						

Surrogate Legend

1COD = 1-Chlorooctadecane

TC = Triacontane

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	1COD (60-120)	TC (60-120)						
10G0057-BS1	10G0057-BS1	96.0	91.8						
10G0057-BS2	10G0057-BS2	105	99.9						
10G0057-BS3	10G0057-BS3	101	94.1						
10G0057-BSD1	10G0057-BSD1	102	93.7						

Surrogate Legend

1COD = 1-Chlorooctadecane

TC = Triacontane

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TFT(FID) (50-150)	a,a-TFT (PII (50-150)						
10G0478-BLK1	10G0478-BLK1	113	110						
10G0478-BS1	10G0478-BS1		116						
10G0478-BS2	10G0478-BS2	113							
10G0478-BSD1	10G0478-BSD1		115						
10G0478-BSD2	10G0478-BSD2	115							
10G0478-DUP1	RDBH13-929-30	103							
10G0478-DUP2	RDBH13-36.5-37.5	106							
10G0478-MS1	RDBH14-14-15		115 S14						
10G0478-MSD1	RDBH14-14-15		112 S14						
ATG0050-07 - RE	RDBH13-29-30	103 S14	97.6 S14						
ATG0050-08	RDBH13-929-30	105	101						
ATG0050-09	RDBH13-36.5-37.5	104	100						
ATG0050-10	RDBH14-8.5-9.5	107	102						
ATG0050-11	RDBH14-98.5-9.5	108	102						
ATG0050-12	RDBH14-14-15	105 S14	104 S14						
ATG0050-13 - RE	RDBH15-22.5-23.5	102	95.7						

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B (Continued)

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		TFT(FID)	a,a-TFT (PII						
Lab Sample ID	Client Sample ID	(50-150)	(50-150)						
ATG0050-14	RDBH15-29-30	111 S14	108 S14						
ATG0050-15	RDBH16-10-11	108	101						
ATG0050-16	RDBH16-20-25	106 S14	103 S14						
ATG0050-20	Trip Blank	107	105						

Surrogate Legend

TFT(FID) = a,a,a-TFT (FID)

a,a,a-TFT (PID) = a,a,a-TFT (PID)

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		4-BFB (FID)	4-BFB (PID)						
Lab Sample ID	Client Sample ID	(60-120)	(60-120)						
10G0538-BLK1	10G0538-BLK1	103	100						
10G0538-BS1	10G0538-BS1		104						
10G0538-BS2	10G0538-BS2	107							
10G0538-BSD1	10G0538-BSD1		103						
10G0538-BSD2	10G0538-BSD2	107							
10G0538-DUP1	PTG0463-04RE1	103							
10G0538-DUP2	PTG0463-05RE1	103							
10G0538-MS1	PTG0403-02		100						
10G0538-MSD1	PTG0403-02		100						
ATG0050-17	RDBH-MW-002	103	101						
ATG0050-18	RDBH-MW-003	104	101						
ATG0050-19	RDBH-MW-001	103	100						
ATG0050-21	Trip Blank	103	101						

Surrogate Legend

4-BFB (FID) = 4-BFB (FID)

4-BFB (PID) = 4-BFB (PID)

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		FD10	PD10	o (a) pyren					
Lab Sample ID	Client Sample ID	(24-125)	(41-141)	(38-143)					
10G0470-BLK1	10G0470-BLK1	110	111	131					
10G0470-BS1	10G0470-BS1	94.0	99.6	122					
10G0470-MS1	RDBH14-14-15	89.6	89.3	106					
10G0470-MSD1	RDBH14-14-15	92.6	89.7	104					
ATG0050-01	RDBH07D-51.5-52.5	77.1	80.8	90.8					
ATG0050-02	RDBH09D-20-21.5	81.9	83.5	79.7					
ATG0050-03	RDBH09D-42-43	81.8	81.2	86.3					
ATG0050-04	RDBH10D-32-33	77.9	76.5	78.5					
ATG0050-05	RDBH10D-61-63	82.0	81.0	89.5					
ATG0050-06	RDBH11D-52-53	86.7	86.5	89.4					
ATG0050-07	RDBH13-29-30	81.4	87.1	96.2					

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM (Continued)

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		FD10	PD10	o (a) pyren
Lab Sample ID	Client Sample ID	(24-125)	(41-141)	(38-143)
ATG0050-08	RDBH13-929-30	80.8	88.9	97.9
ATG0050-09	RDBH13-36.5-37.5	87.6	88.3	94.0
ATG0050-10	RDBH14-8.5-9.5	88.5	87.5	92.8
ATG0050-11	RDBH14-98.5-9.5	89.6	91.0	97.6
ATG0050-12	RDBH14-14-15	83.5	88.2	97.5
ATG0050-13	RDBH15-22.5-23.5	86.8	96.3	108
ATG0050-14	RDBH15-29-30	80.8	88.7	96.5
ATG0050-15	RDBH16-10-11	83.7	85.7	95.3
ATG0050-16	RDBH16-20-25	90.0	90.1	100

Surrogate Legend

FD10 = Fluorene-d10

PD10 = Pyrene-d10

Benzo (a) pyrene-d12 = Benzo (a) pyrene-d12

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		FD10	PD10	o (a) pyren
Lab Sample ID	Client Sample ID	(25-125)	(23-150)	(10-125)
10G0457-BLK1	10G0457-BLK1	79.7	65.1	81.2
10G0457-BS1	10G0457-BS1	81.8	67.2	83.3
10G0457-BSD1	10G0457-BSD1	76.5	64.6	83.3
ATG0050-17	RDBH-MW-002	72.2	62.4	49.1
ATG0050-18	RDBH-MW-003	50.9	40.3	27.0
ATG0050-19	RDBH-MW-001	49.5	58.2	73.3

Surrogate Legend

FD10 = Fluorene-d10

PD10 = Pyrene-d10

Benzo (a) pyrene-d12 = Benzo (a) pyrene-d12

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Lab Sample ID: 10G0057-BLK1 — **Client Sample ID: 10G0057-BLK1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.500		mg/l		07/15/10 14:21	07/15/10 17:10	1
Residual Range Organics	ND		0.500		mg/l		07/15/10 14:21	07/15/10 17:10	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*88.6*		*50 - 150*	*07/15/10 14:21*	*07/15/10 17:10*	*1*
Triacontane	*91.8*		*50 - 150*	*07/15/10 14:21*	*07/15/10 17:10*	*1*

Lab Sample ID: 10G0057-BS1 — **Client Sample ID: 10G0057-BS1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	10.3	10.1		mg/l		97.9	75 - 125
Residual Range Organics	10.4	9.58		mg/l		92.2	60 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*96.0*		*60 - 120*
Triacontane	*91.8*		*60 - 120*

Lab Sample ID: 10G0057-BS2 — **Client Sample ID: 10G0057-BS2**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0057_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	10.3	9.71		mg/l		94.3	75 - 125
Residual Range Organics	10.4	8.56		mg/l		82.3	60 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*105*		*60 - 120*
Triacontane	*99.9*		*60 - 120*

Lab Sample ID: 10G0057-BS3 — **Client Sample ID: 10G0057-BS3**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	10.3	10.1		mg/l		97.7	75 - 125
Residual Range Organics	10.4	9.62		mg/l		92.5	60 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*101*		*60 - 120*
Triacontane	*94.1*		*60 - 120*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10G0057-BSD1 — **Client Sample ID: 10G0057-BSD1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics			10.3	10.1		mg/l		97.8	75 - 125	0.02 82	20
Residual Range Organics			10.4	9.76		mg/l		93.9	60 - 120	1.86	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
1-Chlorooctadecane	*102*		*60 - 120*
Triacontane	*93.7*		*60 - 120*

Lab Sample ID: 10G0057-MS1 — **Client Sample ID: ATG0029-35**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0057_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Diesel Range Organics	ND		9.81	9.03		mg/l		92.0	75 - 125		
Residual Range Organics	ND		9.90	8.06		mg/l		81.4	60 - 120		

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
1-Chlorooctadecane	*106*		*50 - 150*
Triacontane	*98.0*		*50 - 150*

Lab Sample ID: 10G0057-MSD1 — **Client Sample ID: ATG0029-35**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0057_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics	ND		10.2	9.15		mg/l		89.7	75 - 125	1.39	25
Residual Range Organics	ND		10.3	8.27		mg/l		80.3	60 - 120	2.59	25

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1-Chlorooctadecane	*103*		*50 - 150*
Triacontane	*96.0*		*50 - 150*

Lab Sample ID: 10G0057-DUP1 — **Client Sample ID: ATG0029-35**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0057_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics	ND			ND		mg/l					20
Residual Range Organics	ND			ND		mg/l					50

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
1-Chlorooctadecane	*96.7*		*50 - 150*
Triacontane	*94.4*		*50 - 150*

Lab Sample ID: 10G0058-BLK1 — **Client Sample ID: 10G0058-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0058_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.0		mg/kg wet		07/15/10 17:16	07/15/10 22:00	1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10G0058-BLK1 — **Client Sample ID: 10G0058-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0058_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Residual Range Organics	ND		50.0		mg/kg wet	☼	07/15/10 17:16	07/15/10 22:00	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*89.1*		*50 - 150*	*07/15/10 17:16*	*07/15/10 22:00*	*1*
Triacontane	*93.8*		*50 - 150*	*07/15/10 17:16*	*07/15/10 22:00*	*1*

Lab Sample ID: 10G0058-BS1 — **Client Sample ID: 10G0058-BS1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0058_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Diesel Range Organics			129	122		mg/kg wet	☼	94.9	75 - 125		
Residual Range Organics			130	114		mg/kg wet		87.9	60 - 120		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*95.4*		*60 - 120*
Triacontane	*92.0*		*60 - 120*

Lab Sample ID: 10G0058-BSD1 — **Client Sample ID: 10G0058-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0058_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics			129	133		mg/kg wet	☼	103	75 - 125	8.24	20
Residual Range Organics			130	127		mg/kg wet		97.3	60 - 120	10.2	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
1-Chlorooctadecane	*103*		*60 - 120*
Triacontane	*98.5*		*60 - 120*

Lab Sample ID: 10G0058-MS1 — **Client Sample ID: ATG0053-01**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0058_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Diesel Range Organics	63.2		156	208		mg/kg dry	☼	92.7	75 - 125		
Residual Range Organics	4.38		158	128		mg/kg dry		78.4	60 - 120		

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
1-Chlorooctadecane	*104*		*50 - 150*
Triacontane	*96.2*		*50 - 150*

Lab Sample ID: 10G0058-MSD1 — **Client Sample ID: ATG0053-01**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0058_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics	63.2		157	204		mg/kg dry	☼	89.6	75 - 125	1.91	25
Residual Range Organics	4.38		159	126		mg/kg dry		76.8	60 - 120	1.31	25

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10G0058-MSD1 — **Client Sample ID: ATG0053-01**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0058_P**

Surrogate	Matrix Spike Dup % Recovery	Matrix Spike Dup Qualifier	Limits
1-Chlorooctadecane	105		50 - 150
Triacontane	95.1		50 - 150

Lab Sample ID: 10G0058-DUP1 — **Client Sample ID: ATG0053-01**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0058_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics	63.2			56.8		mg/kg dry	☼			10.7	20
Residual Range Organics	4.38			ND		mg/kg dry					50

Surrogate	Duplicate % Recovery	Duplicate Qualifier	Limits
1-Chlorooctadecane	98.2		50 - 150
Triacontane	94.4		50 - 150

Lab Sample ID: 10G0064-BLK1 — **Client Sample ID: 10G0064-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000312 — **Prep Batch: 10G0064_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.0		mg/kg wet	☼	07/16/10 15:37	07/19/10 14:13	1
Residual Range Organics	ND		50.0		mg/kg wet	☼	07/16/10 15:37	07/19/10 14:13	1

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	92.9		50 - 150	07/16/10 15:37	07/19/10 14:13	1
Triacontane	99.7		50 - 150	07/16/10 15:37	07/19/10 14:13	1

Lab Sample ID: 10G0064-BS1 — **Client Sample ID: 10G0064-BS1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000312 — **Prep Batch: 10G0064_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Diesel Range Organics			129	120		mg/kg wet	☼	92.8	75 - 125		
Residual Range Organics			130	109		mg/kg wet		83.8	60 - 120		

Surrogate	LCS % Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	103		60 - 120
Triacontane	103		60 - 120

Lab Sample ID: 10G0064-BSD1 — **Client Sample ID: 10G0064-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000312 — **Prep Batch: 10G0064_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics			129	111		mg/kg wet	☼	86.0	75 - 125	7.65	20
Residual Range Organics			130	101		mg/kg wet		77.5	60 - 120	7.80	20

Surrogate	LCS Dup % Recovery	LCS Dup Qualifier	Limits
1-Chlorooctadecane	92.9		60 - 120

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10G0064-BSD1 — **Client Sample ID: 10G0064-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000312 — **Prep Batch: 10G0064_P**

Surrogate	LCS Dup % Recovery	LCS Dup Qualifier	Limits
Triacontane	93.8		60 - 120

Lab Sample ID: 10G0064-MS1 — **Client Sample ID: RDBH14-14-15**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000313 — **Prep Batch: 10G0064_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	ND		138	119		mg/kg dry	☼	82.6	75 - 125
Residual Range Organics	ND		139	114		mg/kg dry		81.9	60 - 120

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
1-Chlorooctadecane	88.7		50 - 150
Triacontane	82.6		50 - 150

Lab Sample ID: 10G0064-MSD1 — **Client Sample ID: RDBH14-14-15**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000313 — **Prep Batch: 10G0064_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics	ND		138	122		mg/kg dry	☼	85.3	75 - 125	2.77	25
Residual Range Organics	ND		139	116		mg/kg dry		83.3	60 - 120	1.33	25

Surrogate	Matrix Spike Dup % Recovery	Matrix Spike Dup Qualifier	Limits
1-Chlorooctadecane	90.0		50 - 150
Triacontane	84.5		50 - 150

Lab Sample ID: 10G0064-DUP1 — **Client Sample ID: RDBH14-14-15**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000313 — **Prep Batch: 10G0064_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics	ND		8.04	R4	mg/kg dry	☼	46.1	20
Residual Range Organics	ND		5.99		mg/kg dry			50

Surrogate	Duplicate % Recovery	Duplicate Qualifier	Limits
1-Chlorooctadecane	85.8		50 - 150
Triacontane	85.6		50 - 150

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Lab Sample ID: 10G0061-DUP1 — **Client Sample ID: ATG0053-01**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0061 — **Prep Batch: 10G0061_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Dry Weight	80.4		79.6		%		0.950	25

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods (Continued)

Lab Sample ID: 10G0072-DUP1 — **Client Sample ID: RDBH14-14-15**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0072 — **Prep Batch: 10G0072_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Dry Weight	92.6			93.0		%				0.363	25

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B

Lab Sample ID: 10G0478-BLK1 — **Client Sample ID: 10G0478-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.92		mg/kg wet	☼	07/16/10 08:00	07/16/10 13:14	50
Benzene	ND		0.0196		mg/kg wet	☼	07/16/10 08:00	07/16/10 13:14	50
Toluene	ND		0.0980		mg/kg wet	☼	07/16/10 08:00	07/16/10 13:14	50
Ethylbenzene	ND		0.0980		mg/kg wet	☼	07/16/10 08:00	07/16/10 13:14	50
Xylenes (total)	ND		0.0980		mg/kg wet	☼	07/16/10 08:00	07/16/10 13:14	50

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (FID)	*113*		*50 - 150*	*07/16/10 08:00*	*07/16/10 13:14*	*50*
a,a,a-TFT (PID)	*110*		*50 - 150*	*07/16/10 08:00*	*07/16/10 13:14*	*50*

Lab Sample ID: 10G0478-BS1 — **Client Sample ID: 10G0478-BS1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	0.966	1.05		mg/kg wet	☼	109	70 - 130
Toluene	0.966	1.03		mg/kg wet		106	70 - 130
Ethylbenzene	0.966	1.05		mg/kg wet		108	70 - 130
Xylenes (total)	2.90	3.19		mg/kg wet		110	70 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
a,a,a-TFT (PID)	*116*		*50 - 150*

Lab Sample ID: 10G0478-BS2 — **Client Sample ID: 10G0478-BS2**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Organics	24.7	26.0		mg/kg wet	☼	105	60 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
a,a,a-TFT (FID)	*113*		*50 - 150*

Lab Sample ID: 10G0478-BSD1 — **Client Sample ID: 10G0478-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	0.995	1.11		mg/kg wet	☼	111	70 - 130	4.81	20
Toluene	0.995	1.06		mg/kg wet		107	70 - 130	3.61	20

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B (Continued)

Lab Sample ID: 10G0478-BSD1 — **Client Sample ID: 10G0478-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Ethylbenzene			0.995	1.08		mg/kg wet	☼	109	70 - 130	3.55	20
Xylenes (total)			2.98	3.30		mg/kg wet		111	70 - 130	3.57	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
a,a,a-TFT (PID)	*115*		*50 - 150*

Lab Sample ID: 10G0478-BSD2 — **Client Sample ID: 10G0478-BSD2**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics			24.9	26.6		mg/kg wet	☼	107	60 - 120	2.21	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
a,a,a-TFT (FID)	*115*		*50 - 150*

Lab Sample ID: 10G0478-MS1 — **Client Sample ID: RDBH14-14-15**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Benzene	ND	S14	0.891	1.05	S14	mg/kg dry	☼	117	50 - 150		
Toluene	ND	S14	0.891	0.997	S14	mg/kg dry		111	50 - 150		
Ethylbenzene	ND	S14	0.891	1.01	S14	mg/kg dry		114	50 - 150		
Xylenes (total)	ND	S14	2.67	3.07	S14	mg/kg dry		115	50 - 150		

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
a,a,a-TFT (PID)	*115*	*S14*	*50 - 150*

Lab Sample ID: 10G0478-MSD1 — **Client Sample ID: RDBH14-14-15**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	ND	S14	0.891	0.978	S14	mg/kg dry	☼	110	50 - 150	6.72	20
Toluene	ND	S14	0.891	0.933	S14	mg/kg dry		104	50 - 150	6.63	20
Ethylbenzene	ND	S14	0.891	0.949	S14	mg/kg dry		106	50 - 150	6.61	20
Xylenes (total)	ND	S14	2.67	2.88	S14	mg/kg dry		108	50 - 150	6.37	20

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
a,a,a-TFT (PID)	*112*	*S14*	*50 - 150*

Lab Sample ID: 10G0478-DUP1 — **Client Sample ID: RDBH13-929-30**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	15.7	Q1		15.2	Q1	mg/kg dry	☼			3.04	50

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B (Continued)

Lab Sample ID: 10G0478-DUP1 — **Client Sample ID: RDBH13-929-30**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Surrogate	Duplicate % Recovery	Duplicate Qualifier	Limits
a,a,a-TFT (FID)	*103*		*50 - 150*

Lab Sample ID: 10G0478-DUP2 — **Client Sample ID: RDBH13-36.5-37.5**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0478 — **Prep Batch: 10G0478_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	ND			ND		mg/kg dry	☼				50

Surrogate	Duplicate % Recovery	Duplicate Qualifier	Limits
a,a,a-TFT (FID)	*106*		*50 - 150*

Lab Sample ID: 10G0538-BLK1 — **Client Sample ID: 10G0538-BLK1**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0538 — **Prep Batch: 10G0538_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		80.0		ug/l		07/19/10 08:59	07/19/10 14:28	1
Benzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 14:28	1
Toluene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 14:28	1
Ethylbenzene	ND		0.500		ug/l		07/19/10 08:59	07/19/10 14:28	1
Xylenes (total)	ND		1.00		ug/l		07/19/10 08:59	07/19/10 14:28	1

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	*103*		*60 - 120*	*07/19/10 08:59*	*07/19/10 14:28*	*1*
4-BFB (PID)	*100*		*60 - 120*	*07/19/10 08:59*	*07/19/10 14:28*	*1*

Lab Sample ID: 10G0538-BS1 — **Client Sample ID: 10G0538-BS1**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0538 — **Prep Batch: 10G0538_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	20.0	17.4		ug/l		86.8	75 - 125
Toluene	20.0	17.7		ug/l		88.6	75 - 120
Ethylbenzene	20.0	18.6		ug/l		92.9	75 - 130
Xylenes (total)	60.0	58.3		ug/l		97.1	80 - 130

Surrogate	LCS % Recovery	LCS Qualifier	Limits
4-BFB (PID)	*104*		*60 - 120*

Lab Sample ID: 10G0538-BS2 — **Client Sample ID: 10G0538-BS2**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0538 — **Prep Batch: 10G0538_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Organics	500	534		ug/l		107	60 - 120

Surrogate	LCS % Recovery	LCS Qualifier	Limits
4-BFB (FID)	*107*		*60 - 120*

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B (Continued)

Lab Sample ID: 10G0538-BSD1 — **Client Sample ID: 10G0538-BSD1**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0538 — **Prep Batch: 10G0538_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene			20.0	19.4		ug/l		96.9	75 - 125	11.0	20
Toluene			20.0	19.8		ug/l		98.8	75 - 120	10.9	20
Ethylbenzene			20.0	20.6		ug/l		103	75 - 130	10.4	20
Xylenes (total)			60.0	64.2		ug/l		107	80 - 130	9.67	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-BFB (PID)	*103*		*60 - 120*

Lab Sample ID: 10G0538-BSD2 — **Client Sample ID: 10G0538-BSD2**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0538 — **Prep Batch: 10G0538_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics			500	569		ug/l		114	60 - 120	6.27	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-BFB (FID)	*107*		*60 - 120*

Lab Sample ID: 10G0538-MS1 — **Client Sample ID: PTG0403-02**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0538 — **Prep Batch: 10G0538_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Benzene			1000	2790		ug/l		83.2	65 - 144		
Toluene			1000	3850		ug/l		77.4	70 - 135		
Ethylbenzene			1000	2220		ug/l		87.2	65 - 145		
Xylenes (total)			3000	8910		ug/l		83.2	60 - 145		

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
4-BFB (PID)	*100*		*60 - 120*

Lab Sample ID: 10G0538-MSD1 — **Client Sample ID: PTG0403-02**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0538 — **Prep Batch: 10G0538_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene			1000	2770		ug/l		81.2	65 - 144	0.706	20
Toluene			1000	3830		ug/l		75.3	70 - 135	0.553	20
Ethylbenzene			1000	2260		ug/l		90.9	65 - 145	1.64	20
Xylenes (total)			3000	9010		ug/l		86.4	60 - 145	1.10	20

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
4-BFB (PID)	*100*		*60 - 120*

Method: AK101/8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B (Continued)

Lab Sample ID: 10G0538-DUP1 — **Client Sample ID: PTG0463-04RE1**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0538 — **Prep Batch: 10G0538_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics				15400		ug/l				6.47	50

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
4-BFB (FID)	*103*		*60 - 120*

Lab Sample ID: 10G0538-DUP2 — **Client Sample ID: PTG0463-05RE1**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0538 — **Prep Batch: 10G0538_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics				12700		ug/l				2.32	50

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
4-BFB (FID)	*103*		*60 - 120*

Method: ASTM D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Lab Sample ID: 10G0468-DUP1 — **Client Sample ID: RDBH07D-51.5-52.5**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0468 — **Prep Batch: 10G0468_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
% Solids	95.1			95.1		% by Weight				0.00 221	20

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM

Lab Sample ID: 10G0457-BLK1 — **Client Sample ID: 10G0457-BLK1**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0457 — **Prep Batch: 10G0457_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Acenaphthylene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Anthracene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Benzo (a) anthracene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Benzo (a) pyrene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Benzo (b) fluoranthene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Benzo (ghi) perylene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Benzo (k) fluoranthene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Chrysene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Dibenzo (a,h) anthracene	ND		0.200		ug/l		07/15/10 15:30	07/19/10 15:25	1
Fluoranthene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Fluorene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Indeno (1,2,3-cd) pyrene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Naphthalene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Phenanthrene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1
Pyrene	ND		0.100		ug/l		07/15/10 15:30	07/19/10 15:25	1

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM (Continued)

Lab Sample ID: 10G0457-BLK1 — **Client Sample ID: 10G0457-BLK1**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0457 — **Prep Batch: 10G0457_P**

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorene-d10	79.7		25 - 125	07/15/10 15:30	07/19/10 15:25	1
Pyrene-d10	65.1		23 - 150	07/15/10 15:30	07/19/10 15:25	1
Benzo (a) pyrene-d12	81.2		10 - 125	07/15/10 15:30	07/19/10 15:25	1

Lab Sample ID: 10G0457-BS1 — **Client Sample ID: 10G0457-BS1**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0457 — **Prep Batch: 10G0457_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Acenaphthene			2.50	1.95		ug/l		78.0	26 - 135		
Benzo (a) pyrene			2.50	1.89		ug/l		75.6	38 - 137		
Pyrene			2.50	1.54		ug/l		61.7	33 - 133		

Surrogate	LCS % Recovery	LCS Qualifier	Limits
Fluorene-d10	81.8		25 - 125
Pyrene-d10	67.2		23 - 150
Benzo (a) pyrene-d12	83.3		10 - 125

Lab Sample ID: 10G0457-BSD1 — **Client Sample ID: 10G0457-BSD1**
Matrix: Water — **Prep Type: total**
Analysis Batch: 10G0457 — **Prep Batch: 10G0457_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Acenaphthene			2.50	1.87		ug/l		74.6	26 - 135	4.50	35
Benzo (a) pyrene			2.50	1.92		ug/l		76.7	38 - 137	1.41	35
Pyrene			2.50	1.52		ug/l		60.9	33 - 133	1.33	35

Surrogate	LCS Dup % Recovery	LCS Dup Qualifier	Limits
Fluorene-d10	76.5		25 - 125
Pyrene-d10	64.6		23 - 150
Benzo (a) pyrene-d12	83.3		10 - 125

Lab Sample ID: 10G0470-BLK1 — **Client Sample ID: 10G0470-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0470 — **Prep Batch: 10G0470_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
2-Methylnaphthalene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Acenaphthene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Acenaphthylene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Anthracene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Benzo (a) anthracene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Benzo (a) pyrene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Benzo (b) fluoranthene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Benzo (ghi) perylene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Benzo (k) fluoranthene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Chrysene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Dibenzo (a,h) anthracene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Fluoranthene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM (Continued)

Lab Sample ID: 10G0470-BLK1 — **Client Sample ID: 10G0470-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0470 — **Prep Batch: 10G0470_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Indeno (1,2,3-cd) pyrene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Naphthalene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Phenanthrene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1
Pyrene	ND		13.4		ug/kg wet	☼	07/16/10 10:10	07/16/10 13:46	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10	*110*		*24 - 125*	*07/16/10 10:10*	*07/16/10 13:46*	*1*
Pyrene-d10	*111*		*41 - 141*	*07/16/10 10:10*	*07/16/10 13:46*	*1*
Benzo (a) pyrene-d12	*131*		*38 - 143*	*07/16/10 10:10*	*07/16/10 13:46*	*1*

Lab Sample ID: 10G0470-BS1 — **Client Sample ID: 10G0470-BS1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0470 — **Prep Batch: 10G0470_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthene	167	173		ug/kg wet	☼	104	33 - 139
Benzo (a) pyrene	167	194		ug/kg wet		117	45 - 149
Pyrene	167	158		ug/kg wet		95.0	39 - 138

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10	*94.0*		*24 - 125*
Pyrene-d10	*99.6*		*41 - 141*
Benzo (a) pyrene-d12	*122*		*38 - 143*

Lab Sample ID: 10G0470-MS1 — **Client Sample ID: RDBH14-14-15**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0470 — **Prep Batch: 10G0470_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthene	ND		177	165		ug/kg dry	☼	93.1	33 - 139
Benzo (a) pyrene	ND		177	186		ug/kg dry		105	45 - 149
Pyrene	ND		177	155		ug/kg dry		87.3	39 - 138

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
Fluorene-d10	*89.6*		*24 - 125*
Pyrene-d10	*89.3*		*41 - 141*
Benzo (a) pyrene-d12	*106*		*38 - 143*

Lab Sample ID: 10G0470-MSD1 — **Client Sample ID: RDBH14-14-15**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0470 — **Prep Batch: 10G0470_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		177	163		ug/kg dry	☼	92.0	33 - 139	1.21	40
Benzo (a) pyrene	ND		177	181		ug/kg dry		102	45 - 149	2.62	40
Pyrene	ND		177	154		ug/kg dry		87.0	39 - 138	0.42	40

1

Method: EPA 8270m - Polynuclear Aromatic Compounds per EPA 8270M-SIM (Continued)

Lab Sample ID: 10G0470-MSD1
Matrix: Soil
Analysis Batch: 10G0470

Client Sample ID: RDBH14-14-15
Prep Type: total
Prep Batch: 10G0470_P

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Fluorene-d10	*92.6*		*24 - 125*
Pyrene-d10	*89.7*		*41 - 141*
Benzo (a) pyrene-d12	*104*		*38 - 143*

Fuels

Prep Batch: 10G0057_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-17	RDBH-MW-002	total	Water	EPA 3510	
ATG0050-18	RDBH-MW-003	total	Water	EPA 3510	
ATG0050-19	RDBH-MW-001	total	Water	EPA 3510	
10G0057-BLK1	10G0057-BLK1	total	Water	EPA 3510	
10G0057-BS2	10G0057-BS2	total	Water	EPA 3510	
10G0057-BS1	10G0057-BS1	total	Water	EPA 3510	
10G0057-DUP1	ATG0029-35	total	Water	EPA 3510	
10G0057-BSD1	10G0057-BSD1	total	Water	EPA 3510	
10G0057-MS1	ATG0029-35	total	Water	EPA 3510	
10G0057-BS3	10G0057-BS3	total	Water	EPA 3510	
10G0057-MSD1	ATG0029-35	total	Water	EPA 3510	

Prep Batch: 10G0058_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-01	RDBH07D-51.5-52.5	total	Soil	EPA 3545	
ATG0050-02	RDBH09D-20-21.5	total	Soil	EPA 3545	
ATG0050-03	RDBH09D-42-43	total	Soil	EPA 3545	
ATG0050-04	RDBH10D-32-33	total	Soil	EPA 3545	
ATG0050-05	RDBH10D-61-63	total	Soil	EPA 3545	
ATG0050-06	RDBH11D-52-53	total	Soil	EPA 3545	
ATG0050-07	RDBH13-29-30	total	Soil	EPA 3545	
10G0058-BLK1	10G0058-BLK1	total	Soil	EPA 3545	
10G0058-DUP1	ATG0053-01	total	Soil	EPA 3545	
10G0058-BS1	10G0058-BS1	total	Soil	EPA 3545	
10G0058-MS1	ATG0053-01	total	Soil	EPA 3545	
10G0058-BSD1	10G0058-BSD1	total	Soil	EPA 3545	
10G0058-MSD1	ATG0053-01	total	Soil	EPA 3545	

Analysis Batch: 10G0061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0061-DUP1	ATG0053-01	total	Soil	TA-SOP	10G0061_P
ATG0050-01	RDBH07D-51.5-52.5	total	Soil	TA-SOP	10G0061_P
ATG0050-02	RDBH09D-20-21.5	total	Soil	TA-SOP	10G0061_P
ATG0050-03	RDBH09D-42-43	total	Soil	TA-SOP	10G0061_P

Prep Batch: 10G0061_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0061-DUP1	ATG0053-01	total	Soil	*** DEFAULT PREP ***	
ATG0050-01	RDBH07D-51.5-52.5	total	Soil	*** DEFAULT PREP ***	
ATG0050-02	RDBH09D-20-21.5	total	Soil	*** DEFAULT PREP ***	
ATG0050-03	RDBH09D-42-43	total	Soil	*** DEFAULT PREP ***	

Prep Batch: 10G0064_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-08	RDBH13-929-30	total	Soil	EPA 3545	
ATG0050-09	RDBH13-36.5-37.5	total	Soil	EPA 3545	
ATG0050-10	RDBH14-8.5-9.5	total	Soil	EPA 3545	
ATG0050-11	RDBH14-98.5-9.5	total	Soil	EPA 3545	
ATG0050-12	RDBH14-14-15	total	Soil	EPA 3545	
ATG0050-13	RDBH15-22.5-23.5	total	Soil	EPA 3545	

Fuels (Continued)

Prep Batch: 10G0064_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-14	RDBH15-29-30	total	Soil	EPA 3545	
ATG0050-15	RDBH16-10-11	total	Soil	EPA 3545	
ATG0050-16	RDBH16-20-25	total	Soil	EPA 3545	
10G0064-BLK1	10G0064-BLK1	total	Soil	EPA 3545	
10G0064-DUP1	RDBH14-14-15	total	Soil	EPA 3545	
10G0064-BS1	10G0064-BS1	total	Soil	EPA 3545	
10G0064-BSD1	10G0064-BSD1	total	Soil	EPA 3545	
10G0064-MS1	RDBH14-14-15	total	Soil	EPA 3545	
10G0064-MSD1	RDBH14-14-15	total	Soil	EPA 3545	

Analysis Batch: 10G0072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0072-DUP1	RDBH14-14-15	total	Soil	TA-SOP	10G0072_P
ATG0050-04	RDBH10D-32-33	total	Soil	TA-SOP	10G0072_P
ATG0050-05	RDBH10D-61-63	total	Soil	TA-SOP	10G0072_P
ATG0050-06	RDBH11D-52-53	total	Soil	TA-SOP	10G0072_P
ATG0050-07	RDBH13-29-30	total	Soil	TA-SOP	10G0072_P
ATG0050-08	RDBH13-929-30	total	Soil	TA-SOP	10G0072_P
ATG0050-09	RDBH13-36.5-37.5	total	Soil	TA-SOP	10G0072_P
ATG0050-10	RDBH14-8.5-9.5	total	Soil	TA-SOP	10G0072_P
ATG0050-11	RDBH14-98.5-9.5	total	Soil	TA-SOP	10G0072_P
ATG0050-12	RDBH14-14-15	total	Soil	TA-SOP	10G0072_P
ATG0050-13	RDBH15-22.5-23.5	total	Soil	TA-SOP	10G0072_P
ATG0050-14	RDBH15-29-30	total	Soil	TA-SOP	10G0072_P
ATG0050-15	RDBH16-10-11	total	Soil	TA-SOP	10G0072_P
ATG0050-16	RDBH16-20-25	total	Soil	TA-SOP	10G0072_P
ATG0050-20	Trip Blank	total	Soil	TA-SOP	10G0072_P

Prep Batch: 10G0072_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0072-DUP1	RDBH14-14-15	total	Soil	*** DEFAULT PREP ***	
ATG0050-04	RDBH10D-32-33	total	Soil	*** DEFAULT PREP ***	
ATG0050-05	RDBH10D-61-63	total	Soil	*** DEFAULT PREP ***	
ATG0050-06	RDBH11D-52-53	total	Soil	*** DEFAULT PREP ***	
ATG0050-07	RDBH13-29-30	total	Soil	*** DEFAULT PREP ***	
ATG0050-08	RDBH13-929-30	total	Soil	*** DEFAULT PREP ***	
ATG0050-09	RDBH13-36.5-37.5	total	Soil	*** DEFAULT PREP ***	
ATG0050-10	RDBH14-8.5-9.5	total	Soil	*** DEFAULT PREP ***	
ATG0050-11	RDBH14-98.5-9.5	total	Soil	*** DEFAULT PREP ***	
ATG0050-12	RDBH14-14-15	total	Soil	*** DEFAULT PREP ***	
ATG0050-13	RDBH15-22.5-23.5	total	Soil	*** DEFAULT PREP ***	
ATG0050-14	RDBH15-29-30	total	Soil	*** DEFAULT PREP ***	
ATG0050-15	RDBH16-10-11	total	Soil	*** DEFAULT PREP ***	
ATG0050-16	RDBH16-20-25	total	Soil	*** DEFAULT PREP ***	

Fuels (Continued)

Prep Batch: 10G0072_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-20	Trip Blank	total	Soil	*** DEFAULT PREP ***	

Analysis Batch: T000301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0057-BS2	10G0057-BS2	total	Water	AK102/103	10G0057_P
10G0057-DUP1	ATG0029-35	total	Water	AK102/103	10G0057_P
10G0057-MS1	ATG0029-35	total	Water	AK102/103	10G0057_P
10G0057-MSD1	ATG0029-35	total	Water	AK102/103	10G0057_P
10G0058-DUP1	ATG0053-01	total	Soil	AK102/103	10G0058_P
10G0058-MS1	ATG0053-01	total	Soil	AK102/103	10G0058_P
10G0058-MSD1	ATG0053-01	total	Soil	AK102/103	10G0058_P

Analysis Batch: T000302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0057-BLK1	10G0057-BLK1	total	Water	AK102/103	10G0057_P
10G0057-BS1	10G0057-BS1	total	Water	AK102/103	10G0057_P
10G0057-BSD1	10G0057-BSD1	total	Water	AK102/103	10G0057_P
10G0057-BS3	10G0057-BS3	total	Water	AK102/103	10G0057_P
10G0058-BLK1	10G0058-BLK1	total	Soil	AK102/103	10G0058_P
10G0058-BS1	10G0058-BS1	total	Soil	AK102/103	10G0058_P
10G0058-BSD1	10G0058-BSD1	total	Soil	AK102/103	10G0058_P

Analysis Batch: T000306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-02	RDBH09D-20-21.5	total	Soil	AK102/103	10G0058_P
ATG0050-04	RDBH10D-32-33	total	Soil	AK102/103	10G0058_P
ATG0050-06	RDBH11D-52-53	total	Soil	AK102/103	10G0058_P
ATG0050-18	RDBH-MW-003	total	Water	AK102/103	10G0057_P

Analysis Batch: T000307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-01	RDBH07D-51.5-52.5	total	Soil	AK102/103	10G0058_P
ATG0050-03	RDBH09D-42-43	total	Soil	AK102/103	10G0058_P
ATG0050-05	RDBH10D-61-63	total	Soil	AK102/103	10G0058_P
ATG0050-08	RDBH13-929-30	total	Soil	AK102/103	10G0064_P
ATG0050-17	RDBH-MW-002	total	Water	AK102/103	10G0057_P
ATG0050-19	RDBH-MW-001	total	Water	AK102/103	10G0057_P

Analysis Batch: T000312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0064-BLK1	10G0064-BLK1	total	Soil	AK102/103	10G0064_P
10G0064-BS1	10G0064-BS1	total	Soil	AK102/103	10G0064_P
10G0064-BSD1	10G0064-BSD1	total	Soil	AK102/103	10G0064_P
ATG0050-07	RDBH13-29-30	total	Soil	AK102/103	10G0058_P
ATG0050-10	RDBH14-8.5-9.5	total	Soil	AK102/103	10G0064_P
ATG0050-13	RDBH15-22.5-23.5	total	Soil	AK102/103	10G0064_P
ATG0050-15	RDBH16-10-11	total	Soil	AK102/103	10G0064_P

Analysis Batch: T000313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0064-DUP1	RDBH14-14-15	total	Soil	AK102/103	10G0064_P
ATG0050-12	RDBH14-14-15	total	Soil	AK102/103	10G0064_P

Fuels (Continued)

Analysis Batch: T000313 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0064-MS1	RDBH14-14-15	total	Soil	AK102/103	10G0064_P
10G0064-MSD1	RDBH14-14-15	total	Soil	AK102/103	10G0064_P
ATG0050-09	RDBH13-36.5-37.5	total	Soil	AK102/103	10G0064_P
ATG0050-11	RDBH14-98.5-9.5	total	Soil	AK102/103	10G0064_P
ATG0050-14	RDBH15-29-30	total	Soil	AK102/103	10G0064_P
ATG0050-16	RDBH16-20-25	total	Soil	AK102/103	10G0064_P

GC Volatiles

Analysis Batch: 10G0478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-07	RDBH13-29-30	total	Soil	AK101/8021B	10G0478_P
ATG0050-08	RDBH13-929-30	total	Soil	AK101/8021B	10G0478_P
ATG0050-09	RDBH13-36.5-37.5	total	Soil	AK101/8021B	10G0478_P
ATG0050-10	RDBH14-8.5-9.5	total	Soil	AK101/8021B	10G0478_P
ATG0050-11	RDBH14-98.5-9.5	total	Soil	AK101/8021B	10G0478_P
ATG0050-12	RDBH14-14-15	total	Soil	AK101/8021B	10G0478_P
ATG0050-13	RDBH15-22.5-23.5	total	Soil	AK101/8021B	10G0478_P
ATG0050-14	RDBH15-29-30	total	Soil	AK101/8021B	10G0478_P
ATG0050-15	RDBH16-10-11	total	Soil	AK101/8021B	10G0478_P
ATG0050-16	RDBH16-20-25	total	Soil	AK101/8021B	10G0478_P
ATG0050-20	Trip Blank	total	Soil	AK101/8021B	10G0478_P
10G0478-BLK1	10G0478-BLK1	total	Soil	AK101/8021B	
10G0478-BS1	10G0478-BS1	total	Soil	AK101/8021B	
10G0478-BS2	10G0478-BS2	total	Soil	AK101/8021B	
10G0478-BSD1	10G0478-BSD1	total	Soil	AK101/8021B	
10G0478-BSD2	10G0478-BSD2	total	Soil	AK101/8021B	
10G0478-DUP1	RDBH13-929-30	total	Soil	AK101/8021B	
10G0478-DUP2	RDBH13-36.5-37.5	total	Soil	AK101/8021B	
10G0478-MS1	RDBH14-14-15	total	Soil	AK101/8021B	
10G0478-MSD1	RDBH14-14-15	total	Soil	AK101/8021B	

Prep Batch: 10G0478_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-07	RDBH13-29-30	total	Soil	EPA 5035 Modified	
ATG0050-08	RDBH13-929-30	total	Soil	EPA 5035 Modified	
ATG0050-09	RDBH13-36.5-37.5	total	Soil	EPA 5035 Modified	
ATG0050-10	RDBH14-8.5-9.5	total	Soil	EPA 5035 Modified	
ATG0050-11	RDBH14-98.5-9.5	total	Soil	EPA 5035 Modified	
ATG0050-12	RDBH14-14-15	total	Soil	EPA 5035 Modified	
ATG0050-13	RDBH15-22.5-23.5	total	Soil	EPA 5035 Modified	
ATG0050-14	RDBH15-29-30	total	Soil	EPA 5035 Modified	
ATG0050-15	RDBH16-10-11	total	Soil	EPA 5035 Modified	
ATG0050-16	RDBH16-20-25	total	Soil	EPA 5035 Modified	
ATG0050-20	Trip Blank	total	Soil	EPA 5035 Modified	
10G0478-BLK1	10G0478-BLK1	total	Soil	EPA 5035 Modified	

GC Volatiles (Continued)

Prep Batch: 10G0478_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0478-BS1	10G0478-BS1	total	Soil	EPA 5035 Modified	
10G0478-BS2	10G0478-BS2	total	Soil	EPA 5035 Modified	
10G0478-BSD1	10G0478-BSD1	total	Soil	EPA 5035 Modified	
10G0478-BSD2	10G0478-BSD2	total	Soil	EPA 5035 Modified	
10G0478-DUP1	RDBH13-929-30	total	Soil	EPA 5035 Modified	
10G0478-DUP2	RDBH13-36.5-37.5	total	Soil	EPA 5035 Modified	
10G0478-MS1	RDBH14-14-15	total	Soil	EPA 5035 Modified	
10G0478-MSD1	RDBH14-14-15	total	Soil	EPA 5035 Modified	

Analysis Batch: 10G0538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-17	RDBH-MW-002	total	Water	AK101/8021B	10G0538_P
ATG0050-18	RDBH-MW-003	total	Water	AK101/8021B	10G0538_P
ATG0050-19	RDBH-MW-001	total	Water	AK101/8021B	10G0538_P
ATG0050-21	Trip Blank	total	Water	AK101/8021B	10G0538_P
10G0538-BLK1	10G0538-BLK1	total	Water	AK101/8021B	
10G0538-BS1	10G0538-BS1	total	Water	AK101/8021B	
10G0538-BS2	10G0538-BS2	total	Water	AK101/8021B	
10G0538-BSD1	10G0538-BSD1	total	Water	AK101/8021B	
10G0538-BSD2	10G0538-BSD2	total	Water	AK101/8021B	
10G0538-DUP1	PTG0463-04RE1	total	Water	AK101/8021B	
10G0538-DUP2	PTG0463-05RE1	total	Water	AK101/8021B	
10G0538-MS1	PTG0403-02	total	Water	AK101/8021B	
10G0538-MSD1	PTG0403-02	total	Water	AK101/8021B	

Prep Batch: 10G0538_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-17	RDBH-MW-002	total	Water	EPA 5030B	
ATG0050-18	RDBH-MW-003	total	Water	EPA 5030B	
ATG0050-19	RDBH-MW-001	total	Water	EPA 5030B	
ATG0050-21	Trip Blank	total	Water	EPA 5030B	
10G0538-BLK1	10G0538-BLK1	total	Water	EPA 5030B	
10G0538-BS1	10G0538-BS1	total	Water	EPA 5030B	
10G0538-BS2	10G0538-BS2	total	Water	EPA 5030B	
10G0538-BSD1	10G0538-BSD1	total	Water	EPA 5030B	
10G0538-BSD2	10G0538-BSD2	total	Water	EPA 5030B	
10G0538-DUP1	PTG0463-04RE1	total	Water	EPA 5030B	
10G0538-DUP2	PTG0463-05RE1	total	Water	EPA 5030B	
10G0538-MS1	PTG0403-02	total	Water	EPA 5030B	
10G0538-MSD1	PTG0403-02	total	Water	EPA 5030B	

Sample Control

Analysis Batch: 10G0468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-01	RDBH07D-51.5-52.5	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-02	RDBH09D-20-21.5	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-03	RDBH09D-42-43	total	Soil	ASTM D2216-80	10G0468_P

Sample Control (Continued)

Analysis Batch: 10G0468 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-04	RDBH10D-32-33	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-05	RDBH10D-61-63	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-06	RDBH11D-52-53	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-07	RDBH13-29-30	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-08	RDBH13-929-30	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-09	RDBH13-36.5-37.5	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-10	RDBH14-8.5-9.5	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-11	RDBH14-98.5-9.5	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-12	RDBH14-14-15	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-13	RDBH15-22.5-23.5	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-14	RDBH15-29-30	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-15	RDBH16-10-11	total	Soil	ASTM D2216-80	10G0468_P
ATG0050-16	RDBH16-20-25	total	Soil	ASTM D2216-80	10G0468_P
10G0468-DUP1	RDBH07D-51.5-52.5	total	Soil	ASTM D2216-80	

Prep Batch: 10G0468_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-01	RDBH07D-51.5-52.5	total	Soil	Dry Weight	
ATG0050-02	RDBH09D-20-21.5	total	Soil	Dry Weight	
ATG0050-03	RDBH09D-42-43	total	Soil	Dry Weight	
ATG0050-04	RDBH10D-32-33	total	Soil	Dry Weight	
ATG0050-05	RDBH10D-61-63	total	Soil	Dry Weight	
ATG0050-06	RDBH11D-52-53	total	Soil	Dry Weight	
ATG0050-07	RDBH13-29-30	total	Soil	Dry Weight	
ATG0050-08	RDBH13-929-30	total	Soil	Dry Weight	
ATG0050-09	RDBH13-36.5-37.5	total	Soil	Dry Weight	
ATG0050-10	RDBH14-8.5-9.5	total	Soil	Dry Weight	
ATG0050-11	RDBH14-98.5-9.5	total	Soil	Dry Weight	
ATG0050-12	RDBH14-14-15	total	Soil	Dry Weight	
ATG0050-13	RDBH15-22.5-23.5	total	Soil	Dry Weight	
ATG0050-14	RDBH15-29-30	total	Soil	Dry Weight	
ATG0050-15	RDBH16-10-11	total	Soil	Dry Weight	
ATG0050-16	RDBH16-20-25	total	Soil	Dry Weight	
10G0468-DUP1	RDBH07D-51.5-52.5	total	Soil	Dry Weight	

Semivolatiles

Analysis Batch: 10G0457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-17	RDBH-MW-002	total	Water	EPA 8270m	10G0457_P
ATG0050-18	RDBH-MW-003	total	Water	EPA 8270m	10G0457_P
ATG0050-19	RDBH-MW-001	total	Water	EPA 8270m	10G0457_P
10G0457-BLK1	10G0457-BLK1	total	Water	EPA 8270m	
10G0457-BS1	10G0457-BS1	total	Water	EPA 8270m	
10G0457-BSD1	10G0457-BSD1	total	Water	EPA 8270m	

Prep Batch: 10G0457_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-17	RDBH-MW-002	total	Water	3520B Liq-Liq	
ATG0050-18	RDBH-MW-003	total	Water	3520B Liq-Liq	
ATG0050-19	RDBH-MW-001	total	Water	3520B Liq-Liq	
10G0457-BLK1	10G0457-BLK1	total	Water	3520B Liq-Liq	

Semivolatiles (Continued)

Prep Batch: 10G0457_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0457-BS1	10G0457-BS1	total	Water	3520B Liq-Liq	
10G0457-BSD1	10G0457-BSD1	total	Water	3520B Liq-Liq	

Analysis Batch: 10G0470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-01	RDBH07D-51.5-52.5	total	Soil	EPA 8270m	10G0470_P
ATG0050-02	RDBH09D-20-21.5	total	Soil	EPA 8270m	10G0470_P
ATG0050-03	RDBH09D-42-43	total	Soil	EPA 8270m	10G0470_P
ATG0050-04	RDBH10D-32-33	total	Soil	EPA 8270m	10G0470_P
ATG0050-05	RDBH10D-61-63	total	Soil	EPA 8270m	10G0470_P
ATG0050-06	RDBH11D-52-53	total	Soil	EPA 8270m	10G0470_P
ATG0050-07	RDBH13-29-30	total	Soil	EPA 8270m	10G0470_P
ATG0050-08	RDBH13-929-30	total	Soil	EPA 8270m	10G0470_P
ATG0050-09	RDBH13-36.5-37.5	total	Soil	EPA 8270m	10G0470_P
ATG0050-10	RDBH14-8.5-9.5	total	Soil	EPA 8270m	10G0470_P
ATG0050-11	RDBH14-98.5-9.5	total	Soil	EPA 8270m	10G0470_P
ATG0050-12	RDBH14-14-15	total	Soil	EPA 8270m	10G0470_P
ATG0050-13	RDBH15-22.5-23.5	total	Soil	EPA 8270m	10G0470_P
ATG0050-14	RDBH15-29-30	total	Soil	EPA 8270m	10G0470_P
ATG0050-15	RDBH16-10-11	total	Soil	EPA 8270m	10G0470_P
ATG0050-16	RDBH16-20-25	total	Soil	EPA 8270m	10G0470_P
10G0470-BLK1	10G0470-BLK1	total	Soil	EPA 8270m	
10G0470-BS1	10G0470-BS1	total	Soil	EPA 8270m	
10G0470-MS1	RDBH14-14-15	total	Soil	EPA 8270m	
10G0470-MSD1	RDBH14-14-15	total	Soil	EPA 8270m	

Prep Batch: 10G0470_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0050-01	RDBH07D-51.5-52.5	total	Soil	EPA 3550	
ATG0050-02	RDBH09D-20-21.5	total	Soil	EPA 3550	
ATG0050-03	RDBH09D-42-43	total	Soil	EPA 3550	
ATG0050-04	RDBH10D-32-33	total	Soil	EPA 3550	
ATG0050-05	RDBH10D-61-63	total	Soil	EPA 3550	
ATG0050-06	RDBH11D-52-53	total	Soil	EPA 3550	
ATG0050-07	RDBH13-29-30	total	Soil	EPA 3550	
ATG0050-08	RDBH13-929-30	total	Soil	EPA 3550	
ATG0050-09	RDBH13-36.5-37.5	total	Soil	EPA 3550	
ATG0050-10	RDBH14-8.5-9.5	total	Soil	EPA 3550	
ATG0050-11	RDBH14-98.5-9.5	total	Soil	EPA 3550	
ATG0050-12	RDBH14-14-15	total	Soil	EPA 3550	
ATG0050-13	RDBH15-22.5-23.5	total	Soil	EPA 3550	
ATG0050-14	RDBH15-29-30	total	Soil	EPA 3550	
ATG0050-15	RDBH16-10-11	total	Soil	EPA 3550	
ATG0050-16	RDBH16-20-25	total	Soil	EPA 3550	
10G0470-BLK1	10G0470-BLK1	total	Soil	EPA 3550	
10G0470-BS1	10G0470-BS1	total	Soil	EPA 3550	
10G0470-MS1	RDBH14-14-15	total	Soil	EPA 3550	
10G0470-MSD1	RDBH14-14-15	total	Soil	EPA 3550	

Client Sample ID: RDBH07D-51.5-52.5 — Lab Sample ID: ATG0050-01

Date Collected: 07/10/10 10:10 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 95.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9699	10G0058_P	07/15/10 17:16	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000307	07/16/10 18:24	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0061_P	07/15/10 21:25	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0061	07/16/10 08:05	JN	TestAmerica Anchorage
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9983	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 16:04	NAF	TestAmerica Portland

Client Sample ID: RDBH09D-20-21.5 — Lab Sample ID: ATG0050-02

Date Collected: 07/11/10 10:29 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 95.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		1	10G0058_P	07/15/10 17:16	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000306	07/16/10 18:57	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0061_P	07/15/10 21:25	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0061	07/16/10 08:05	JN	TestAmerica Anchorage
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9947	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 16:36	NAF	TestAmerica Portland

Client Sample ID: RDBH09D-42-43 — Lab Sample ID: ATG0050-03

Date Collected: 07/11/10 11:20 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 93.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9818	10G0058_P	07/15/10 17:16	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000307	07/16/10 18:57	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0061_P	07/15/10 21:25	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0061	07/16/10 08:05	JN	TestAmerica Anchorage
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9944	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 17:08	NAF	TestAmerica Portland

Client Sample ID: RDBH10D-32-33 — Lab Sample ID: ATG0050-04

Date Collected: 07/10/10 16:50 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 97**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.935	10G0058_P	07/15/10 17:16	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000306	07/16/10 19:31	JN	TestAmerica Anchorage

Client Sample ID: RDBH10D-32-33 — Lab Sample ID: ATG0050-04

Date Collected: 07/10/10 16:50 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 97**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9917	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 17:39	NAF	TestAmerica Portland

Client Sample ID: RDBH10D-61-63 — Lab Sample ID: ATG0050-05

Date Collected: 07/10/10 18:05 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 92.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9667	10G0058_P	07/15/10 17:16	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000307	07/16/10 19:31	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.993	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 18:11	NAF	TestAmerica Portland

Client Sample ID: RDBH11D-52-53 — Lab Sample ID: ATG0050-06

Date Collected: 07/10/10 17:10 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 97.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.969	10G0058_P	07/15/10 17:16	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000306	07/16/10 20:04	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9997	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 18:42	NAF	TestAmerica Portland

Client Sample ID: RDBH13-29-30 — Lab Sample ID: ATG0050-07

Date Collected: 07/11/10 15:40 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 90.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9766	10G0058_P	07/15/10 17:16	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000312	07/19/10 16:24	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage

Client Sample ID: RDBH13-29-30 — Lab Sample ID: ATG0050-07

Date Collected: 07/11/10 15:40 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 90.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified	RE	0.8077	10G0478_P	07/11/10 15:40	SYB	TestAmerica Portland
total	Analysis	AK101/8021B	RE	50.	10G0478	07/17/10 11:06	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9839	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 19:14	NAF	TestAmerica Portland

Client Sample ID: RDBH13-929-30 — Lab Sample ID: ATG0050-08

Date Collected: 07/11/10 15:40 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 90.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9921	10G0064_P	07/16/10 15:37	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000307	07/16/10 20:04	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified		1.019	10G0478_P	07/11/10 15:40	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		50.	10G0478	07/16/10 21:11	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9924	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 19:46	NAF	TestAmerica Portland

Client Sample ID: RDBH13-36.5-37.5 — Lab Sample ID: ATG0050-09

Date Collected: 07/11/10 16:20 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 89.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9602	10G0064_P	07/16/10 15:37	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000313	07/19/10 16:24	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified		1.008	10G0478_P	07/11/10 16:20	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		50.	10G0478	07/16/10 22:09	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9843	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 20:17	NAF	TestAmerica Portland

Client Sample ID: RDBH14-8.5-9.5 — Lab Sample ID: ATG0050-10

Date Collected: 07/11/10 17:20 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 92.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9935	10G0064_P	07/16/10 15:37	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000312	07/19/10 16:57	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified		1.03	10G0478_P	07/11/10 17:20	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		50.	10G0478	07/17/10 00:04	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9891	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 20:48	NAF	TestAmerica Portland

Client Sample ID: RDBH14-98.5-9.5 — Lab Sample ID: ATG0050-11

Date Collected: 07/11/10 17:20 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 93.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.996	10G0064_P	07/16/10 15:37	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000313	07/19/10 16:57	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified		1.017	10G0478_P	07/11/10 17:20	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		50.	10G0478	07/16/10 18:18	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		1	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 21:20	NAF	TestAmerica Portland

Client Sample ID: RDBH14-14-15 — Lab Sample ID: ATG0050-12

Date Collected: 07/11/10 17:30 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 92.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.995	10G0064_P	07/16/10 15:37	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000313	07/19/10 14:45	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified		0.7407	10G0478_P	07/11/10 17:30	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		50.	10G0478	07/16/10 15:25	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9937	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 12:43	NAF	TestAmerica Portland

Client Sample ID: RDBH15-22.5-23.5

Lab Sample ID: ATG0050-13
Date Collected: 07/12/10 09:23
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9867	10G0064_P	07/16/10 15:37	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000312	07/19/10 17:30	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified	RE	0.8963	10G0478_P	07/12/10 09:23	SYB	TestAmerica Portland
total	Analysis	AK101/8021B	RE	50.	10G0478	07/17/10 11:35	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9973	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 21:51	NAF	TestAmerica Portland

Client Sample ID: RDBH15-29-30

Lab Sample ID: ATG0050-14
Date Collected: 07/12/10 09:38
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9551	10G0064_P	07/16/10 15:37	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000313	07/19/10 17:30	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified		0.807	10G0478_P	07/12/10 09:38	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		50.	10G0478	07/16/10 18:47	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9865	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 22:22	NAF	TestAmerica Portland

Client Sample ID: RDBH16-10-11

Lab Sample ID: ATG0050-15
Date Collected: 07/12/10 11:10
Matrix: Soil
Date Received: 07/14/10 16:20
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.969	10G0064_P	07/16/10 15:37	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000312	07/19/10 18:02	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified		0.8543	10G0478_P	07/12/10 11:10	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		50.	10G0478	07/16/10 19:16	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9947	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 22:54	NAF	TestAmerica Portland

Client Sample ID: RDBH16-20-25 — Lab Sample ID: ATG0050-16

Date Collected: 07/12/10 11:38 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 91**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9662	10G0064_P	07/16/10 15:37	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000313	07/19/10 18:02	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified		0.5908	10G0478_P	07/12/10 11:38	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		50.	10G0478	07/16/10 19:44	SYB	TestAmerica Portland
total	Analysis	ASTM D2216-80		1.	10G0468	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	Dry Weight		1	10G0468_P	07/15/10 14:50	JJM	TestAmerica Portland
total	Prep	EPA 3550		0.9947	10G0470_P	07/16/10 10:10	ncb	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0470	07/16/10 23:25	NAF	TestAmerica Portland

Client Sample ID: RDBH-MW-002 — Lab Sample ID: ATG0050-17

Date Collected: 07/12/10 18:15 — **Matrix: Water**
Date Received: 07/14/10 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3510		0.8	10G0057_P	07/15/10 14:21	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000307	07/17/10 03:46	JN	TestAmerica Anchorage
total	Prep	EPA 5030B		1	10G0538_P	07/19/10 08:59	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		1.	10G0538	07/19/10 15:59	SYB	TestAmerica Portland
total	Prep	3520B Liq-Liq		0.9901	10G0457_P	07/15/10 15:30	JW2	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0457	07/19/10 12:49	NAF	TestAmerica Portland

Client Sample ID: RDBH-MW-003 — Lab Sample ID: ATG0050-18

Date Collected: 07/12/10 18:30 — **Matrix: Water**
Date Received: 07/14/10 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3510		0.9091	10G0057_P	07/15/10 14:21	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000306	07/17/10 04:19	JN	TestAmerica Anchorage
total	Prep	EPA 5030B		1	10G0538_P	07/19/10 08:59	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		1.	10G0538	07/19/10 16:34	SYB	TestAmerica Portland
total	Prep	3520B Liq-Liq		0.9804	10G0457_P	07/15/10 15:30	JW2	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0457	07/19/10 13:20	NAF	TestAmerica Portland

Client Sample ID: RDBH-MW-001 — Lab Sample ID: ATG0050-19

Date Collected: 07/11/10 11:28 — **Matrix: Water**
Date Received: 07/14/10 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3510		0.8	10G0057_P	07/15/10 14:21	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000307	07/17/10 04:19	JN	TestAmerica Anchorage
total	Prep	EPA 5030B		1	10G0538_P	07/19/10 08:59	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		1.	10G0538	07/19/10 17:10	SYB	TestAmerica Portland

Client Sample ID: RDBH-MW-001 — Lab Sample ID: ATG0050-19

Date Collected: 07/11/10 11:28 — **Matrix: Water**
Date Received: 07/14/10 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	3520B Liq-Liq		0.9901	10G0457_P	07/15/10 15:30	JW2	TestAmerica Portland
total	Analysis	EPA 8270m		1.	10G0457	07/19/10 13:51	NAF	TestAmerica Portland

Client Sample ID: Trip Blank — Lab Sample ID: ATG0050-20

Date Collected: 07/13/10 00:00 — **Matrix: Soil**
Date Received: 07/14/10 16:20 — **Percent Solids: 100**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	*** DEFAULT PREP ***		1	10G0072_P	07/20/10 09:30	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0072	07/20/10 15:45	JN	TestAmerica Anchorage
total	Prep	EPA 5035 Modified		1	10G0478_P	07/13/10 00:00	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		50.	10G0478	07/16/10 14:24	SYB	TestAmerica Portland

Client Sample ID: Trip Blank — Lab Sample ID: ATG0050-21

Date Collected: 07/13/10 00:00 — **Matrix: Water**
Date Received: 07/14/10 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10G0538_P	07/19/10 08:59	SYB	TestAmerica Portland
total	Analysis	AK101/8021B		1.	10G0538	07/19/10 15:23	SYB	TestAmerica Portland

Certification Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: _ANC_ATG0050
SDG: ATG0050

Laboratory	Authority	Program	EPA Region	Certification ID	Expiration Date
TestAmerica Anchorage	Alaska	State Program	10	UST-067	06/16/10
TestAmerica Anchorage	Alaska	State Program	10	AK00975	06/30/11
TestAmerica Portland		USDA		P330-07-XXXXXX	11/13/10
TestAmerica Portland	Alaska	State Program	10	OR00040	04/21/11
TestAmerica Portland	Alaska	State Program	10	UST-012	12/26/10
TestAmerica Portland	California	ELAP	9	2597	09/30/11
TestAmerica Portland	Oregon	NELAC Primary AB	10	OR100021	01/09/10
TestAmerica Portland	Washington	State Program	10	C1291	06/23/10

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Method	Method Description	Protocol	Laboratory
AK102/103	Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO		TAL ANC
TA-SOP	Physical Parameters by APHA/ASTM/EPA Methods		TAL ANC
AK101/8021B	Gasoline Range Organics (C6-C10) and BTEX per AK101/8021B		TAL PTL
ASTM D2216-80	Percent Dry Weight (Solids) per ASTM D2216-80		TAL PTL
EPA 8270m	Polynuclear Aromatic Compounds per EPA 8270M-SIM		TAL PTL

Protocol References:

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Laboratory References:

TAL ANC = TestAmerica Anchorage, 2000 West International Airport Road Suite A10, Anchorage, AK 99502-1119, TEL (907) 563-9200

TAL PTL = TestAmerica Portland, 9405 SW Nimbus Avenue, Beaverton, OR/USA 97008, TEL (503) 906-9200

Sample Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0050
SDG: ATG0050

Lab Sample ID	Client Sample ID	Matrix	Sampled	Received
ATG0050-01	RDBH07D-51.5-52.5	Soil	07/10/10 10:10	07/14/10 16:20
ATG0050-02	RDBH09D-20-21.5	Soil	07/11/10 10:29	07/14/10 16:20
ATG0050-03	RDBH09D-42-43	Soil	07/11/10 11:20	07/14/10 16:20
ATG0050-04	RDBH10D-32-33	Soil	07/10/10 16:50	07/14/10 16:20
ATG0050-05	RDBH10D-61-63	Soil	07/10/10 18:05	07/14/10 16:20
ATG0050-06	RDBH11D-52-53	Soil	07/10/10 17:10	07/14/10 16:20
ATG0050-07	RDBH13-29-30	Soil	07/11/10 15:40	07/14/10 16:20
ATG0050-08	RDBH13-929-30	Soil	07/11/10 15:40	07/14/10 16:20
ATG0050-09	RDBH13-36.5-37.5	Soil	07/11/10 16:20	07/14/10 16:20
ATG0050-10	RDBH14-8.5-9.5	Soil	07/11/10 17:20	07/14/10 16:20
ATG0050-11	RDBH14-98.5-9.5	Soil	07/11/10 17:20	07/14/10 16:20
ATG0050-12	RDBH14-14-15	Soil	07/11/10 17:30	07/14/10 16:20
ATG0050-13	RDBH15-22.5-23.5	Soil	07/12/10 09:23	07/14/10 16:20
ATG0050-14	RDBH15-29-30	Soil	07/12/10 09:38	07/14/10 16:20
ATG0050-15	RDBH16-10-11	Soil	07/12/10 11:10	07/14/10 16:20
ATG0050-16	RDBH16-20-25	Soil	07/12/10 11:38	07/14/10 16:20
ATG0050-17	RDBH-MW-002	Water	07/12/10 18:15	07/14/10 16:20
ATG0050-18	RDBH-MW-003	Water	07/12/10 18:30	07/14/10 16:20
ATG0050-19	RDBH-MW-001	Water	07/11/10 11:28	07/14/10 16:20
ATG0050-20	Trip Blank	Soil	07/13/10 00:00	07/14/10 16:20
ATG0050-21	Trip Blank	Water	07/13/10 00:00	07/14/10 16:20

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210 ✓

CHAIN OF CUSTODY REPORT

Work Order #: ATL40050

CLIENT: Weston Solutions

REPORT TO: Weston Solutions Jody.Dillon@westonsolutions.com
ADDRESS: 425 G St. Ste 300
Anchorage, AK 99501
PHONE: 907-276-6610 FAX: 907-276-6694

INVOICE TO: same

P.O. NUMBER:

PROJECT NAME: Red Devil Mine AST5-RI
PROJECT NUMBER:
SAMPLED BY: J. Craner

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | ~~3~~ | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | ~~3~~ | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE: MeOH

REQUESTED ANALYSES: DRO/RRO AK102/103; GRO/BTEX AK101 8021B/8260B; PAHs 8270SIM

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	DRO/RRO AK102/103	GRO/BTEX AK101 8021B/8260B	PAHs 8270SIM	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	RDBH07D-51.5-52.5	10 July 10 / 1010	X		X	S	3		01
2	RDBH09D-20-21.5	11 July 10 / 1029	X		X	↓	↓		02
3	RDBH09D-42-43	11 July 10 / 1120	X		X	↓	↓		03
4	RDBH10D-32-33	10 July 10 / 1650	X		X	↓	↓		04
5	RDBH10D-61-63	10 July 10 / 1805	X		X	↓	↓		05
6	RDBH11D-52-53	10 July 10 / 1710	X		X	↓	↓		06
7	RDBH13-29-30	11 July 10 / 1540	X	X	X	↓	↓		07
8	RDBH13-9.29-30	11 July 10 / 1540	X	X	X	↓	↓		08
9	RDBH13-36.5-37.5	11 July 10 / 1620	X	X	X	↓	↓		09
10	RDBH14-8.5-9.5	11 July 10 / 1720	X	X	X	↓	↓		10

RELEASED BY: Katura Willingham	DATE: 14 July 2010	RECEIVED BY:	DATE:
PRINT NAME: Katura M. Willingham	FIRM: Weston Solutions	TIME: 1100	PRINT NAME:	FIRM:	TIME:
RELEASED BY:	DATE: 7/14/10	RECEIVED BY:	DATE: 7/14/10
PRINT NAME: Jody Dillon	FIRM: Weston Solutions	TIME: 1620	PRINT NAME: Stephen Lann	FIRM:	TIME: 1620

ADDITIONAL REMARKS:

TEMP: 5.0 - MI

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TAL-1000(0408)

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9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210 ✓

CHAIN OF CUSTODY REPORT

Work Order #: AT40050

CLIENT: Weston Solutions

REPORT TO: Weston Solutions / Jody.Dillon@westonsolutions.com

ADDRESS: 425 G St. Ste 300
Anchorage, AK 99501

PHONE: 907-276-6610 FAX: 907-276-6694

PROJECT NAME: Red Devil Mine - AST5-RI

PROJECT NUMBER:

SAMPLED BY: J. Craner / K. Willingham

INVOICE TO: same

P.O. NUMBER:

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: ~~10~~ STD. 7 5 4 ~~3~~ 2 1 <1

Petroleum Hydrocarbon Analyses: ~~5~~ STD. 4 ~~3~~ 2 1 <1

OTHER Specify: 3-day Soil Samples STD-Water

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE: MeOH, HCL, HCL

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	DRO/RRO AK102/103	GRO/BTEX AK101 8021B/8260B	PAHs 8270SIM	DRO/RRO AK102/103	GRO/BTEX AK101 8021B/8260B	PAHs 8270SIM	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	RDBH14-98.5-9.5	11 July 10 / 1720	X	X	X				S	3	3-Day TAT	11
2	RDBH14-14-15	11 July 10 / 1730	X	X	X				S	6	MS/MSD	12
3	RDBH15-22.5-23.5	12 July 10 / 0923	X	X	X				S	3		13
4	RDBH15-29-30	12 July 10 / 0938	X	X	X				S	3		14
5	RDBH16-10-11	12 July 10 / 1110	X	X	X				S	3		15
6	RDBH16-20-25	12 July 10 / 1138	X	X	X				S	3		16
7	RD-MW-002	12 July 10 / 1815				X	X	X	W	7	STD-TAT	17
8	RD-MW-003	12 July 10 / 1830				X	X	X	W	7		18
9	RD-MW-001	10 July 10 / 1128				X	X	X	W	7		19
10												

RELEASED BY: Katura M. Willingham
PRINT NAME: Katura M. Willingham FIRM: Weston Solutions DATE: 14 July 2010 TIME: 1100

RECEIVED BY: DATE: 7/14/10
PRINT NAME: FIRM: TIME: 1120

RELEASED BY: Jody Dillon
PRINT NAME: Jody Dillon FIRM: Weston Solutions DATE: 7/14/10 TIME: 1620

RECEIVED BY: Stephen Lamm DATE: 7/14/10
PRINT NAME: FIRM: TIME: 1620

ADDITIONAL REMARKS:

TEMP: 5.0 PAGE OF

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TAL-1000(0408)

Test America Anchorage Cooler Receipt Form

(Army Corps. Compliant)

WORK ORDER # ATG0050 **CLIENT:** Weston **PROJECT:** Red Bull Mine

Date /Time Cooler Arrived 7 / 14 / 10 16 : 20 Cooler signed for by: Stephen Lam DSTS-PI
(Print name)

Preliminary Examination Phase:

Date cooler opened: ☒ same as date received *or* ___/___/___

Cooler opened by (print) Stephen Lam (sign) [signature]

1. Delivered by ☐ ALASKA AIRLINES ☐ Fed-Ex ☐ UPS ☐ NAC ☐ LYNDEN ☒ CLIENT ☐ Other: ____

   Shipment Tracking # if applicable N/A (include copy of shipping papers in file)

2. Number of Custody Seals 0 Signed by N/A Date ___/___/___

   Were custody seals unbroken and intact on arrival? ☐ Yes ☐ No

3. Were custody papers sealed in a plastic bag? ☒ Yes ☐ No

4. Were custody papers filled out properly (ink, signed, etc.)? ☒ Yes ☐ No

5. Did you sign the custody papers in the appropriate place? ☒ Yes ☐ No

6. Was ice used? ☐ Yes ☐ No Type of ice: ☐ blue ice ☒ gel ice ☐ real ice ☐ dry ice Condition of Ice: Solid

   Temperature by Digi-Thermo Probe 4.3 °C Thermometer # Pu #5
   Acceptance Criteria: 0 - 6°C

7. Packing in Cooler: ☒ bubble wrap ☐ styrofoam ☐ cardboard ☐ Other: ____

8. Did samples arrive in plastic bags? ☒ Yes ☐ No

9. Did all bottles arrive unbroken, and with labels in good condition? ☒ Yes ☐ No

10. Are all bottle labels complete (ID, date, time, etc.) ☒ Yes ☐ No

11. Do bottle labels and Chain of Custody agree? ☒ Yes ☐ No

12. Are the containers and preservatives correct for the tests indicated? ☒ Yes ☐ No

13. Conoco Phillips, Alyeska, BP H2O samples only: pH < 2? ☐ Yes ☐ No ☒ N/A

14. Is there adequate volume for the tests requested? ☒ Yes ☐ No

15. Were VOA vials free of bubbles? ☒ N/A ☐ Yes ☐ No

    If "NO" which containers contained "head space" or bubbles? ____

Log-in Phase:

Date of sample log-in 7 / 14 / 10

Samples logged in by (print) Stephen Lam (sign) [signature]

1. Was project identifiable from custody papers? ☒ Yes ☐ No
2. Do Turn Around Times and Due Dates agree? ☒ Yes ☐ No
3. Was the Project Manager notified of status? ☒ Yes ☐ No
4. Was the Lab notified of status? ☒ Yes ☐ No
5. Was the COC scanned and copied? ☒ Yes ☐ No

Test America Anchorage Cooler Receipt Form

(Army Corps. Compliant)

WORK ORDER # ATG 6050 **CLIENT:** Weston **PROJECT:** Red Devil Mine D STS-RI

Date /Time Cooler Arrived 7 / 14 / 10 16:20 Cooler signed for by: Stephen Lum (Print name)

Preliminary Examination Phase:

Date cooler opened: ☒ same as date received *or* ___/___/___

Cooler opened by (print) Stephen Lum (sign) [signature]

1. Delivered by ☐ ALASKA AIRLINES ☐ Fed-Ex ☐ UPS ☐ NAC ☐ LYNDEN ☒ CLIENT ☐ Other: ____

   Shipment Tracking # if applicable N/a (include copy of shipping papers in file)

2. Number of Custody Seals 0 Signed by N/a Date ___/___/___

   Were custody seals unbroken and intact on arrival? ☐ Yes ☐ No

3. Were custody papers sealed in a plastic bag? ☒ Yes ☐ No

4. Were custody papers filled out properly (ink, signed, etc.)? ☒ Yes ☐ No

5. Did you sign the custody papers in the appropriate place? ☒ Yes ☐ No

6. Was ice used? ☒ Yes ☐ No Type of ice: ☐ blue ice ☐ gel ice ☐ real ice ☐ dry ice Condition of Ice: Solid

   Temperature by Digi-Thermo Probe 4.3 °C Thermometer # Rec # 5

   Acceptance Criteria: 0 - 6°C

7. Packing in Cooler: ☒ bubble wrap ☐ styrofoam ☐ cardboard ☐ Other: ____

8. Did samples arrive in plastic bags? ☒ Yes ☐ No

9. Did all bottles arrive unbroken, and with labels in good condition? ☒ Yes ☐ No

10. Are all bottle labels complete (ID, date, time, etc.) ☒ Yes ☐ No

11. Do bottle labels and Chain of Custody agree? ☒ Yes ☐ No

12. Are the containers and preservatives correct for the tests indicated? ☒ Yes ☐ No

13. Conoco Phillips, Alyeska, BP H2O samples only: pH < 2? ☐ Yes ☐ No ☒ N/A

14. Is there adequate volume for the tests requested? ☒ Yes ☐ No

15. Were VOA vials free of bubbles? ☒ N/A ☐ Yes ☐ No

    If "NO" which containers contained "head space" or bubbles? ____

Log-in Phase:

Date of sample log-in 7 / 14 / 10

Samples logged in by (print) Stephen Lum (sign) [signature]

1. Was project identifiable from custody papers? ☒ Yes ☐ No
2. Do Turn Around Times and Due Dates agree? ☒ Yes ☐ No
3. Was the Project Manager notified of status? ☒ Yes ☐ No
4. Was the Lab notified of status? ☒ Yes ☐ No
5. Was the COC scanned and copied? ☒ Yes ☐ No

Test America Anchorage Cooler Receipt Form

(Army Corps. Compliant)

WORK ORDER # A7G0050 **CLIENT:** Weston **PROJECT:** Red Devil Mine

Date /Time Cooler Arrived 7/14/10 16:22 Cooler signed for by: Stephen Lam ASTS-RI
(Print name)

Preliminary Examination Phase:

Date cooler opened: ☒ same as date received *or* ___/___/___

Cooler opened by (print) Stephen Lam (sign) [signature]

1. Delivered by ☐ ALASKA AIRLINES ☐ Fed-Ex ☐ UPS ☐ NAC ☐ LYNDEN ☒ CLIENT ☐ Other: ____

   Shipment Tracking # if applicable N/A (include copy of shipping papers in file)

2. Number of Custody Seals 1 Signed by N/A Date ___/___/___

   Were custody seals unbroken and intact on arrival? ☑ Yes ☐ No

3. Were custody papers sealed in a plastic bag? ☒ Yes ☐ No

4. Were custody papers filled out properly (ink, signed, etc.)? ☒ Yes ☐ No

5. Did you sign the custody papers in the appropriate place? ☒ Yes ☐ No

6. Was ice used? ☐ Yes ☐ No Type of ice: ☐ blue ice ☒ gel ice ☐ real ice ☐ dry ice Condition of Ice: half thawed

   Temperature by Digi-Thermo Probe 6.5 °C Thermometer # Rest 5
   Acceptance Criteria: 0 - 6°C

7. Packing in Cooler: ☒ bubble wrap ☐ styrofoam ☐ cardboard ☐ Other: ____

8. Did samples arrive in plastic bags? ☒ Yes ☐ No

9. Did all bottles arrive unbroken, and with labels in good condition? ☒ Yes ☐ No

10. Are all bottle labels complete (ID, date, time, etc.) ☒ Yes ☐ No

11. Do bottle labels and Chain of Custody agree? ☒ Yes ☐ No

12. Are the containers and preservatives correct for the tests indicated? ☒ Yes ☐ No

13. Conoco Phillips, Alyeska, BP H2O samples only: pH < 2? ☐ Yes ☐ No ☒ N/A

14. Is there adequate volume for the tests requested? ☒ Yes ☐ No

15. Were VOA vials free of bubbles? ☐ N/A ☐ Yes ☒ No

    If "NO" which containers contained "head space" or bubbles? 1 VOA vial of ~~water~~ TB, and sample SO-18 (RDB14-MW-003) had head space.

Log-in Phase:

Date of sample log-in 7/14/10

Samples logged in by (print) Stephen Lam (sign) [signature]

1. Was project identifiable from custody papers? ☒ Yes ☐ No
2. Do Turn Around Times and Due Dates agree? ☒ Yes ☐ No
3. Was the Project Manager notified of status? ☒ Yes ☐ No
4. Was the Lab notified of status? ☒ Yes ☐ No
5. Was the COC scanned and copied? ☒ Yes ☐ No

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Anchorage
2000 West International Airport Road Suite A10
Anchorage, AK 99502-1119
Tel: (907) 563-9200

TestAmerica Job ID: ATG0029
TestAmerica Sample Delivery Group: ATG0029
Client Project/Site: Red Devil Mine
Client Project Description: Red Devil Mine, AST5-RI

For:
Weston Solutions, Inc.
425 G Street
Anchorage, AK/USA 99501

Attn: Jody Dillon

Johanna Dreher

Authorized for release by:
8/31/2010 9:24 PM
Johanna L Dreher
Client Services Manager
johanna.dreher@testamericainc.com

Designee for

Troy J. Engstrom
Lab Director
troy.engstrom@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

LINKS

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Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
H1	Sample analysis performed past method-specified holding time per client's approval.

Fuels

Qualifier	Qualifier Description
RL7	Sample required dilution due to high concentrations of target analyte.
Z3	The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

GC Volatiles

Qualifier	Qualifier Description
B4	Target analyte detected in blank at/above method acceptance criteria.
C4	Calibration Verification recovery was below the method control limit for this analyte.
C8	Calibration Verification recovery was above the method control limit for this analyte.
L2	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was below acceptance limits.
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
R1	The RPD between the primary and confirmatory analysis exceeded 40%. Per method 8000B, the higher value was reported.
R10	The RPD between the primary and confirmatory analysis exceeded 40%. Per method 8000B, the lower value was reported due to apparent chromatographic problems.
R11	RPD exceeded the laboratory control limit. See case narrative.
R2	The RPD exceeded the acceptance limit.
RL7	Sample required dilution due to high concentrations of target analyte.
Z1	Surrogate recovery was above acceptance limits.
Z6	Surrogate recovery was below acceptance limits.
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

TSEA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH01-6.5-8.5 — Lab Sample ID: ATG0029-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes (total)	0.174	C8, R1	0.129		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	34.0		22.5		mg/kg dry	1	☼	AK102/103	total
Dry Weight	85.9		1.00		%	1		TA-SOP	total
Xylenes (total) - RE	0.213	R1	0.129		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Percent Moisture	20		0.10		%	1		Moisture	total
Percent Solids	80		0.10		%	1		Moisture	total

Client Sample ID: RDBH01-12.5-13.5 — Lab Sample ID: ATG0029-02

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	91.7		1.00		%	1		TA-SOP	total
Percent Moisture	8.7		0.10		%	1		Moisture	total
Percent Solids	91		0.10		%	1		Moisture	total

Client Sample ID: RDBH02-5-7 — Lab Sample ID: ATG0029-03

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes (total)	0.139	C8, R1	0.131		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	23.7		22.9		mg/kg dry	1	☼	AK102/103	total
Dry Weight	85.9		1.00		%	1		TA-SOP	total
Xylenes (total) - RE	0.173	R1	0.131		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Percent Moisture	16		0.10		%	1		Moisture	total
Percent Solids	84		0.10		%	1		Moisture	total

Client Sample ID: RDBH02-11.5-13 — Lab Sample ID: ATG0029-04

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	88.1		1.00		%	1		TA-SOP	total
Percent Moisture	14		0.10		%	1		Moisture	total
Percent Solids	86		0.10		%	1		Moisture	total

Client Sample ID: RDBH03-4-5 — Lab Sample ID: ATG0029-05

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	89.7		1.00		%	1		TA-SOP	total
2-Methylnaphthalene	5.6		5.3		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	9.4		0.10		%	1		Moisture	total
Percent Solids	91		0.10		%	1		Moisture	total

Client Sample ID: RDBH03-12-13 — Lab Sample ID: ATG0029-06

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	92.4		1.00		%	1		TA-SOP	total
Percent Moisture	8.7		0.10		%	1		Moisture	total
Percent Solids	91		0.10		%	1		Moisture	total

Client Sample ID: RDBH04-0.5-2 — Lab Sample ID: ATG0029-07

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	85.8		1.00		%	1		TA-SOP	total
Percent Moisture	15		0.10		%	1		Moisture	total
Percent Solids	85		0.10		%	1		Moisture	total

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH04-15-15.5 — Lab Sample ID: ATG0029-08

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	92.5		1.00		%	1		TA-SOP	total
2-Methylnaphthalene	9.6		5.2		ug/Kg dry	1		8270C STD Dry	total
Chrysene	5.8		5.2		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	7.8		5.2		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	8.2		0.10		%	1		Moisture	total
Percent Solids	92		0.10		%	1		Moisture	total

Client Sample ID: RDBH05-22-23 — Lab Sample ID: ATG0029-09

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.773	R1	0.0369		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Gasoline Range Organics	33.4		3.69		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Toluene	0.171	R1, C4	0.0369		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total)	1.02	C4, R1	0.103		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	245		21.8		mg/kg dry	1	☼	AK102/103	total
Dry Weight	86.8		1.00		%	1		TA-SOP	total
Toluene - RE	0.205	R1	0.0369		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total) - RE	1.07	R1	0.103		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
1-Methylnaphthalene	100		5.6		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	28		5.6		ug/Kg dry	1		8270C STD Dry	total
Acenaphthene	30		5.6		ug/Kg dry	1		8270C STD Dry	total
Anthracene	30		5.6		ug/Kg dry	1		8270C STD Dry	total
Fluorene	50		5.6		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	47		5.6		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	71		5.6		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	15		0.10		%	1		Moisture	total
Percent Solids	85		0.10		%	1		Moisture	total

Client Sample ID: RDBH05-34-35 — Lab Sample ID: ATG0029-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	90.7		1.00		%	1		TA-SOP	total
1-Methylnaphthalene	5.8		5.3		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	16		5.3		ug/Kg dry	1		8270C STD Dry	total
Benzo[b]fluoranthene	18		5.3		ug/Kg dry	1		8270C STD Dry	total
Benzo[g,h,i]perylene	6.8		5.3		ug/Kg dry	1		8270C STD Dry	total
Chrysene	38		5.3		ug/Kg dry	1		8270C STD Dry	total
Fluoranthene	6.1		5.3		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	46		5.3		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	96		5.3		ug/Kg dry	1		8270C STD Dry	total
Pyrene	14		5.3		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	8.4		0.10		%	1		Moisture	total
Percent Solids	92		0.10		%	1		Moisture	total

Client Sample ID: RDBH06-11-13 — Lab Sample ID: ATG0029-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.535	R10	0.0332		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Gasoline Range Organics	24.2		3.32		mg/kg dry	33.3	☼	AK101/EPA 8021B	total

Client Sample ID: RDBH06-11-13 (Continued) — Lab Sample ID: ATG0029-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.143	C4, R10	0.0332		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total)	0.465	C4, R10	0.0931		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Dry Weight	83.6		1.00		%	1		TA-SOP	total
Toluene - RE	0.168	R1	0.0332		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total) - RE	0.937	R1	0.0931		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Percent Moisture	15		0.10		%	1		Moisture	total
Percent Solids	85		0.10		%	1		Moisture	total

Client Sample ID: RDBH06-21.5-22.5 — Lab Sample ID: ATG0029-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.08	R1	0.0392		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Gasoline Range Organics	52.4		3.92		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Toluene	0.254	C4, R1	0.0392		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total)	1.39	C4, R1	0.110		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	399		22.8		mg/kg dry	1	☼	AK102/103	total
Dry Weight	87.5		1.00		%	1		TA-SOP	total
Toluene - RE	0.264	R1	0.0392		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total) - RE	1.03	R1	0.110		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
1-Methylnaphthalene	260		5.7		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	150		5.7		ug/Kg dry	1		8270C STD Dry	total
Acenaphthene	58		5.7		ug/Kg dry	1		8270C STD Dry	total
Acenaphthylene	22		5.7		ug/Kg dry	1		8270C STD Dry	total
Fluorene	94		5.7		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	220		5.7		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	94		5.7		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	13		0.10		%	1		Moisture	total
Percent Solids	87		0.10		%	1		Moisture	total

Client Sample ID: RDBH06-921.5-22.5 — Lab Sample ID: ATG0029-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.33	R1	0.0378		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Gasoline Range Organics	64.3		3.78		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Toluene	0.318	C4, R1	0.0378		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total)	1.61	C4, R1	0.106		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	275		20.4		mg/kg dry	1	☼	AK102/103	total
Dry Weight	89.2		1.00		%	1		TA-SOP	total
Toluene - RE	0.304	R1	0.0378		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total) - RE	1.51	R1	0.106		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
1-Methylnaphthalene	210		5.8		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	110		5.8		ug/Kg dry	1		8270C STD Dry	total
Acenaphthene	60		5.8		ug/Kg dry	1		8270C STD Dry	total
Acenaphthylene	20		5.8		ug/Kg dry	1		8270C STD Dry	total
Fluorene	79		5.8		ug/Kg dry	1		8270C STD Dry	total

Client Sample ID: RDBH06-921.5-22.5 (Continued) — Lab Sample ID: ATG0029-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	170		5.8		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	82		5.8		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	14		0.10		%	1		Moisture	total
Percent Solids	86		0.10		%	1		Moisture	total

Client Sample ID: RDBH07-8-9 — Lab Sample ID: ATG0029-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	4.08		2.93		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Toluene	0.0364		0.0293		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total)	0.144		0.0820		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	531		21.4		mg/kg dry	1	☼	AK102/103	total
Dry Weight	91.8		1.00		%	1		TA-SOP	total
1-Methylnaphthalene	55		5.4		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	48		5.4		ug/Kg dry	1		8270C STD Dry	total
Acenaphthene	12		5.4		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	18		5.4		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	9.3		5.4		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	8.1		0.10		%	1		Moisture	total
Percent Solids	92		0.10		%	1		Moisture	total

Client Sample ID: RDBH07-22.5-23.5 — Lab Sample ID: ATG0029-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	67.3		21.4		mg/kg dry	1	☼	AK102/103	total
Dry Weight	93.3		1.00		%	1		TA-SOP	total
Chrysene	13		5.0		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	13		5.0		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	32		5.0		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	7.3		0.10		%	1		Moisture	total
Percent Solids	93		0.10		%	1		Moisture	total

Client Sample ID: RDBH08-0-1.5 — Lab Sample ID: ATG0029-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0342	R10	0.0256		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Ethylbenzene	0.437	R10	0.0511		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Gasoline Range Organics	11.9		5.11		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Toluene	0.153		0.0511		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total)	0.613	R1	0.143		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	211		23.2		mg/kg dry	1	☼	AK102/103	total
Dry Weight	85.4		1.00		%	1		TA-SOP	total
1-Methylnaphthalene	18		5.6		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	6.6		5.6		ug/Kg dry	1		8270C STD Dry	total
Acenaphthene	11		5.6		ug/Kg dry	1		8270C STD Dry	total
Anthracene	9.6		5.6		ug/Kg dry	1		8270C STD Dry	total
Fluorene	14		5.6		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	47		5.6		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	9.2		5.6		ug/Kg dry	1		8270C STD Dry	total

Client Sample ID: RDBH08-0-1.5 (Continued) — Lab Sample ID: ATG0029-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Moisture	12		0.10		%	1		Moisture	total
Percent Solids	88		0.10		%	1		Moisture	total

Client Sample ID: RDBH08-18-19 — Lab Sample ID: ATG0029-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	93.0		1.00		%	1		TA-SOP	total
Benzo[a]anthracene	9.2		4.9		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	15		4.9		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	7.8		0.10		%	1		Moisture	total
Percent Solids	92		0.10		%	1		Moisture	total

Client Sample ID: RDBH09-10-11.5 — Lab Sample ID: ATG0029-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	91.6		1.00		%	1		TA-SOP	total
Phenanthrene	5.4		5.1		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	8.3		0.10		%	1		Moisture	total
Percent Solids	92		0.10		%	1		Moisture	total

Client Sample ID: RDBH09-15-16 — Lab Sample ID: ATG0029-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	93.5		1.00		%	1		TA-SOP	total
Benzo[a]anthracene	20		5.2		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	12		5.2		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	36		5.2		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	6.4		0.10		%	1		Moisture	total
Percent Solids	94		0.10		%	1		Moisture	total

Client Sample ID: RDBH10-2-4 — Lab Sample ID: ATG0029-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	26.9		20.7		mg/kg dry	1	☼	AK102/103	total
Dry Weight	91.4		1.00		%	1		TA-SOP	total
1-Methylnaphthalene	11		5.3		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	19		5.3		ug/Kg dry	1		8270C STD Dry	total
Benzo[a]anthracene	5.6		5.3		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	12		5.3		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	6.1		5.3		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	7.5		0.10		%	1		Moisture	total
Percent Solids	92		0.10		%	1		Moisture	total

Client Sample ID: RDBH11-30-31.5 — Lab Sample ID: ATG0029-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.0381	R1	0.0354		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	206		21.1		mg/kg dry	1	☼	AK102/103	total
Dry Weight	92.4		1.00		%	1		TA-SOP	total
1-Methylnaphthalene	210		5.3		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	210		5.3		ug/Kg dry	1		8270C STD Dry	total
Acenaphthene	16		5.3		ug/Kg dry	1		8270C STD Dry	total
Acenaphthylene	6.4		5.3		ug/Kg dry	1		8270C STD Dry	total

Client Sample ID: RDBH11-30-31.5 (Continued) — Lab Sample ID: ATG0029-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	8.3		5.3		ug/Kg dry	1		8270C STD Dry	total
Fluorene	20		5.3		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	160		5.3		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	34		5.3		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	8.6		0.10		%	1		Moisture	total
Percent Solids	91		0.10		%	1		Moisture	total

Client Sample ID: RDBH11-930-31.5 — Lab Sample ID: ATG0029-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.0547	C8	0.0407		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Gasoline Range Organics	8.76		4.07		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Toluene	0.0661		0.0407		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total)	0.289		0.114		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	296		20.9		mg/kg dry	1	☼	AK102/103	total
Dry Weight	92.1		1.00		%	1		TA-SOP	total
Ethylbenzene - RE	0.0560	C8	0.0407		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
1-Methylnaphthalene	250		5.0		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	250		5.0		ug/Kg dry	1		8270C STD Dry	total
Acenaphthene	16		5.0		ug/Kg dry	1		8270C STD Dry	total
Acenaphthylene	7.3		5.0		ug/Kg dry	1		8270C STD Dry	total
Chrysene	7.6		5.0		ug/Kg dry	1		8270C STD Dry	total
Fluorene	22		5.0		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	180		5.0		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	42		5.0		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	7.6		0.10		%	1		Moisture	total
Percent Solids	92		0.10		%	1		Moisture	total

Client Sample ID: RDBH10-6-7.5 — Lab Sample ID: ATG0029-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.418	C8	0.0324		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Gasoline Range Organics	19.8		3.24		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Toluene	0.0494		0.0324		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total)	0.481		0.0907		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Diesel Range Organics	772		20.8		mg/kg dry	1	☼	AK102/103	total
Dry Weight	91.7		1.00		%	1		TA-SOP	total
1-Methylnaphthalene	180		5.3		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	95		5.3		ug/Kg dry	1		8270C STD Dry	total
Acenaphthene	33		5.3		ug/Kg dry	1		8270C STD Dry	total
Anthracene	6.5		5.3		ug/Kg dry	1		8270C STD Dry	total
Chrysene	5.5		5.3		ug/Kg dry	1		8270C STD Dry	total
Fluorene	46		5.3		ug/Kg dry	1		8270C STD Dry	total
Naphthalene	65		5.3		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	37		5.3		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	7.9		0.10		%	1		Moisture	total
Percent Solids	92		0.10		%	1		Moisture	total

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDBH11-0-2 — Lab Sample ID: ATG0029-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	113		22.0		mg/kg dry	1	☼	AK102/103	total
Dry Weight	90.0		1.00		%	1		TA-SOP	total
1-Methylnaphthalene	11		5.2		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	21		5.2		ug/Kg dry	1		8270C STD Dry	total
Phenanthrene	8.2		5.2		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	11		0.10		%	1		Moisture	total
Percent Solids	89		0.10		%	1		Moisture	total

Client Sample ID: RDBH12-1-3 — Lab Sample ID: ATG0029-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	31.1		22.5		mg/kg dry	1	☼	AK102/103	total
Dry Weight	85.7		1.00		%	1		TA-SOP	total
Percent Moisture	14		0.10		%	1		Moisture	total
Percent Solids	86		0.10		%	1		Moisture	total

Client Sample ID: RDBH12-21-22.5 — Lab Sample ID: ATG0029-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.165	C8, R1	0.0316		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Gasoline Range Organics	4.73		3.16		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Toluene	0.0360	R1	0.0316		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Xylenes (total)	0.106	R1	0.0886		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
Dry Weight	86.6		1.00		%	1		TA-SOP	total
Ethylbenzene - RE	0.150	C8, R1	0.0316		mg/kg dry	33.3	☼	AK101/EPA 8021B	total
1-Methylnaphthalene	6.9		5.7		ug/Kg dry	1		8270C STD Dry	total
2-Methylnaphthalene	7.4		5.7		ug/Kg dry	1		8270C STD Dry	total
Percent Moisture	15		0.10		%	1		Moisture	total
Percent Solids	85		0.10		%	1		Moisture	total

Client Sample ID: RDM-SED-001 — Lab Sample ID: ATG0029-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	77.8		1.00		%	1		TA-SOP	total
Percent Moisture	19		0.10		%	1		Moisture	total
Percent Solids	81		0.10		%	1		Moisture	total

Client Sample ID: RDM-SED-002 — Lab Sample ID: ATG0029-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	84.1		1.00		%	1		TA-SOP	total
Percent Moisture	24		0.10		%	1		Moisture	total
Percent Solids	76		0.10		%	1		Moisture	total

Client Sample ID: RDM-SED-003 — Lab Sample ID: ATG0029-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	86.3		1.00		%	1		TA-SOP	total
Percent Moisture	15		0.10		%	1		Moisture	total
Percent Solids	85		0.10		%	1		Moisture	total

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDM-SED-004 — Lab Sample ID: ATG0029-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	86.8		1.00		%	1		TA-SOP	total
Percent Moisture	19		0.10		%	1		Moisture	total
Percent Solids	81		0.10		%	1		Moisture	total

Client Sample ID: RDM-SED-003-DUP — Lab Sample ID: ATG0029-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dry Weight	91.4		1.00		%	1		TA-SOP	total
Percent Moisture	15		0.10		%	1		Moisture	total
Percent Solids	85		0.10		%	1		Moisture	total

Client Sample ID: RDM-DC-001 — Lab Sample ID: ATG0029-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	83.5		24.7		mg/kg dry	1	☼	AK102/103	total
Dry Weight	78.6		1.00		%	1		TA-SOP	total
Percent Moisture	25		0.10		%	1		Moisture	total
Percent Solids	75		0.10		%	1		Moisture	total

Client Sample ID: RDM-SMDM-001 — Lab Sample ID: ATG0029-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.504	RL7	0.0500		mg/kg dry	50	☼	AK101/EPA 8021B	total
Diesel Range Organics	381000	RL7	49600		mg/kg dry	100	☼	AK102/103	total
Residual Range Organics	245000	RL7	124000		mg/kg dry	100	☼	AK102/103	total
Dry Weight	65.1		1.00		%	1		TA-SOP	total
Ethylbenzene - RE	12.8	RL7, C8	0.200		mg/kg dry	100	☼	AK101/EPA 8021B	total
Gasoline Range Organics - RE	724	RL7	20.0		mg/kg dry	100	☼	AK101/EPA 8021B	total
Toluene - RE	12.3	RL7	0.200		mg/kg dry	100	☼	AK101/EPA 8021B	total
Xylenes (total) - RE	80.8	RL7	1.12		mg/kg dry	200	☼	AK101/EPA 8021B	total
Ethylbenzene - RE	15.9	C8, RL7	0.200		mg/kg dry	100	☼	AK101/EPA 8021B	total
Flashpoint	>212				Degrees F	1		1020A	total
Barium	0.99		0.53		mg/Kg	1		6010B TMP	total
Lead	5.3		1.6		mg/Kg	1		6010B TMP	total
Mercury	0.33		0.016		mg/Kg	1		7471A	total
1-Methylnaphthalene	760000		15000		ug/Kg	10		8270C PAH	total
2-Methylnaphthalene	1200000		9800		ug/Kg	10		8270C PAH	total
Acenaphthene	52000		9800		ug/Kg	10		8270C PAH	total
Anthracene	39000		9800		ug/Kg	10		8270C PAH	total
Benzo[a]anthracene	25000		12000		ug/Kg	10		8270C PAH	total
Benzo[a]pyrene	17000		15000		ug/Kg	10		8270C PAH	total
Benzo[b]fluoranthene	11000		9800		ug/Kg	10		8270C PAH	total
Chrysene	55000		12000		ug/Kg	10		8270C PAH	total
Fluoranthene	23000		9800		ug/Kg	10		8270C PAH	total
Fluorene	98000		9800		ug/Kg	10		8270C PAH	total
Naphthalene	410000		9800		ug/Kg	10		8270C PAH	total
Phenanthrene	230000		9800		ug/Kg	10		8270C PAH	total
Pyrene	84000		9800		ug/Kg	10		8270C PAH	total
2-Methylphenol	37		10		ug/L	1		8270C TCLP	total
3 & 4 Methylphenol	59		20		ug/L	1		8270C TCLP	total

Client Sample ID: RDM-SMDM-001 (Continued) — Lab Sample ID: ATG0029-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	5.96				SU	1		9045C	total

Client Sample ID: RDMSW-001 — Lab Sample ID: ATG0029-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	122	B4	50.0		ug/l	1		AK101/EPA 8021B	total

Client Sample ID: RDM-SW-002 — Lab Sample ID: ATG0029-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	75.0	B4	50.0		ug/l	1		AK101/EPA 8021B	total

Client Sample ID: RDM-SW-003 — Lab Sample ID: ATG0029-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	74.1	B4	50.0		ug/l	1		AK101/EPA 8021B	total

Client Sample ID: RDM-SW-004 — Lab Sample ID: ATG0029-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	76.1	B4	50.0		ug/l	1		AK101/EPA 8021B	total

Client Sample ID: RDM-SW-003-DUP — Lab Sample ID: ATG0029-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	50.2	B4	50.0		ug/l	1		AK101/EPA 8021B	total

Client Sample ID: Trip Blank - 1 — Lab Sample ID: ATG0029-39

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: Trip Blank — Lab Sample ID: ATG0029-40

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: RDMSW-001 — Lab Sample ID: ATG0029-41

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: RDM-SW-002 — Lab Sample ID: ATG0029-42

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: RDM-SW-003 — Lab Sample ID: ATG0029-43

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDM-SW-004 — Lab Sample ID: ATG0029-44

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: RDM-SW-003-DUP — Lab Sample ID: ATG0029-45

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: Trip Blank — Lab Sample ID: ATG0029-46

Analyte	Result	Qualifier			Unit	Dil Fac	D	Method	Prep Type
No Detections.									

Client Sample ID: RDBH01-6.5-8.5

Date Collected: 07/07/10 10:45
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-01

Matrix: Soil
Percent Solids: 85.9

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**34.0**		22.5		mg/kg dry	☼	07/10/10 12:27	07/11/10 17:38	1
Residual Range Organics	ND		56.2		mg/kg dry	☼	07/10/10 12:27	07/11/10 17:38	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*99.8*		*50 - 150*	*07/10/10 12:27*	*07/11/10 17:38*	*1*
Triacontane	*103*		*50 - 150*	*07/10/10 12:27*	*07/11/10 17:38*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**85.9**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.62		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3
Benzene	ND	C8	0.0231		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3
Toluene	ND	C8	0.0462		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3
Ethylbenzene	ND	C8	0.0462		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3
Xylenes (total)	**0.174**	**C8, R1**	0.129		mg/kg dry	☼	07/10/10 12:09	07/10/10 17:19	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*126*		*50 - 150*	*07/10/10 12:09*	*07/10/10 17:19*	*33.3*
a,a,a-TFT (FID)	*96.2*		*50 - 150*	*07/10/10 12:09*	*07/10/10 17:19*	*33.3*
4-BFB (PID)	*133*		*50 - 150*	*07/10/10 12:09*	*07/10/10 17:19*	*33.3*
a,a,a-TFT (PID)	*110*	*C8*	*50 - 150*	*07/10/10 12:09*	*07/10/10 17:19*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	**0.213**	**R1**	0.129		mg/kg dry	☼	07/10/10 12:09	07/14/10 06:18	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*72.4*		*50 - 150*	*07/10/10 12:09*	*07/14/10 06:18*	*33.3*
a,a,a-TFT (PID)	*107*		*50 - 150*	*07/10/10 12:09*	*07/14/10 06:18*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
2-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Acenaphthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Acenaphthylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Fluorene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Naphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1
Phenanthrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1

Client Sample ID: RDBH01-6.5-8.5

Lab Sample ID: ATG0029-01
Date Collected: 07/07/10 10:45
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 80.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 18:36	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*42 - 140*	*07/13/10 11:02*	*07/20/10 18:36*	*1*
Nitrobenzene-d5	*82*		*38 - 141*	*07/13/10 11:02*	*07/20/10 18:36*	*1*
Terphenyl-d14	*56*		*42 - 151*	*07/13/10 11:02*	*07/20/10 18:36*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**80**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH01-12.5-13.5

Lab Sample ID: ATG0029-02
Date Collected: 07/07/10 11:00
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.7

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.2		mg/kg dry	☼	07/10/10 12:27	07/11/10 17:38	1
Residual Range Organics	ND		53.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 17:38	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*100*		*50 - 150*	*07/10/10 12:27*	*07/11/10 17:38*	*1*
Triacontane	*96.7*		*50 - 150*	*07/10/10 12:27*	*07/11/10 17:38*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**91.7**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.10		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3
Benzene	ND	C8	0.0205		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3
Toluene	ND	C8	0.0410		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3
Ethylbenzene	ND	C8	0.0410		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3
Xylenes (total)	ND	C8	0.115		mg/kg dry	☼	07/10/10 12:09	07/10/10 19:33	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*86.4*		*50 - 150*	*07/10/10 12:09*	*07/10/10 19:33*	*33.3*
a,a,a-TFT (FID)	*100*		*50 - 150*	*07/10/10 12:09*	*07/10/10 19:33*	*33.3*
4-BFB (PID)	*92.6*		*50 - 150*	*07/10/10 12:09*	*07/10/10 19:33*	*33.3*
a,a,a-TFT (PID)	*113*	*C8*	*50 - 150*	*07/10/10 12:09*	*07/10/10 19:33*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
2-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1

Client Sample ID: RDBH01-12.5-13.5

Lab Sample ID: ATG0029-02
Date Collected: 07/07/10 11:00
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Chrysene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Naphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Phenanthrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 18:55	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*105*		*42 - 140*	*07/13/10 11:02*	*07/20/10 18:55*	*1*
Nitrobenzene-d5	*106*		*38 - 141*	*07/13/10 11:02*	*07/20/10 18:55*	*1*
Terphenyl-d14	*77*		*42 - 151*	*07/13/10 11:02*	*07/20/10 18:55*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.7**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**91**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH02-5-7

Lab Sample ID: ATG0029-03
Date Collected: 07/07/10 11:50
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 85.9

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**23.7**		22.9		mg/kg dry	☼	07/10/10 12:27	07/11/10 18:45	1
Residual Range Organics	ND		57.2		mg/kg dry	☼	07/10/10 12:27	07/11/10 18:45	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*98.9*		*50 - 150*	*07/10/10 12:27*	*07/11/10 18:45*	*1*
Triacontane	*103*		*50 - 150*	*07/10/10 12:27*	*07/11/10 18:45*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**85.9**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.69		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3
Benzene	ND	C8	0.0235		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3
Toluene	ND	C8	0.0469		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3
Ethylbenzene	ND	C8	0.0469		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3
Xylenes (total)	**0.139**	**C8, R1**	0.131		mg/kg dry	☼	07/10/10 12:09	07/10/10 20:00	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*106*		*50 - 150*	*07/10/10 12:09*	*07/10/10 20:00*	*33.3*
a,a,a-TFT (FID)	*94.7*		*50 - 150*	*07/10/10 12:09*	*07/10/10 20:00*	*33.3*
4-BFB (PID)	*114*		*50 - 150*	*07/10/10 12:09*	*07/10/10 20:00*	*33.3*
a,a,a-TFT (PID)	*107*	*C8*	*50 - 150*	*07/10/10 12:09*	*07/10/10 20:00*	*33.3*

Client Sample ID: RDBH02-5-7

Date Collected: 07/07/10 11:50
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-03

Matrix: Soil
Percent Solids: 85.9

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	**0.173**	**R1**	0.131		mg/kg dry	☼	07/10/10 12:09	07/14/10 08:06	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*110*		*50 - 150*	*07/10/10 12:09*	*07/14/10 08:06*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/14/10 08:06*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
2-Methylnaphthalene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Acenaphthene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Acenaphthylene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Anthracene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[a]anthracene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[a]pyrene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[b]fluoranthene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[g,h,i]perylene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Benzo[k]fluoranthene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Chrysene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Dibenz(a,h)anthracene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Fluoranthene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Fluorene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Indeno[1,2,3-cd]pyrene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Naphthalene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Phenanthrene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1
Pyrene	ND		5.5		ug/Kg dry		07/13/10 11:02	07/20/10 19:15	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*42 - 140*	*07/13/10 11:02*	*07/20/10 19:15*	*1*
Nitrobenzene-d5	*97*		*38 - 141*	*07/13/10 11:02*	*07/20/10 19:15*	*1*
Terphenyl-d14	*71*		*42 - 151*	*07/13/10 11:02*	*07/20/10 19:15*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**84**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH02-11.5-13

Date Collected: 07/07/10 13:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-04

Matrix: Soil
Percent Solids: 88.1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 18:45	1
Residual Range Organics	ND		53.6		mg/kg dry	☼	07/10/10 12:27	07/11/10 18:45	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*100*		*50 - 150*	*07/10/10 12:27*	*07/11/10 18:45*	*1*
Triacontane	*95.3*		*50 - 150*	*07/10/10 12:27*	*07/11/10 18:45*	*1*

Client Sample ID: RDBH02-11.5-13

Date Collected: 07/07/10 13:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-04

Matrix: Soil
Percent Solids: 88.1

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	88.1		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.19		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3
Benzene	ND	C4	0.0160		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3
Toluene	ND	C4	0.0319		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3
Ethylbenzene	ND		0.0319		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3
Xylenes (total)	ND	C4	0.0894		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:21	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*65.9*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:21*	*33.3*
a,a,a-TFT (FID)	*98.1*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:21*	*33.3*
4-BFB (PID)	*74.3*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 21:21*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:21*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8	0.0160		mg/kg dry	☼	07/10/10 12:09	07/14/10 08:33	33.3
Toluene	ND		0.0319		mg/kg dry	☼	07/10/10 12:09	07/14/10 08:33	33.3
Xylenes (total)	ND		0.0894		mg/kg dry	☼	07/10/10 12:09	07/14/10 08:33	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*83.7*		*50 - 150*	*07/10/10 12:09*	*07/14/10 08:33*	*33.3*
a,a,a-TFT (PID)	*115*		*50 - 150*	*07/10/10 12:09*	*07/14/10 08:33*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
2-Methylnaphthalene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Acenaphthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Acenaphthylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[a]anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[a]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[b]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[g,h,i]perylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Benzo[k]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Chrysene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Dibenz(a,h)anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Fluorene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Indeno[1,2,3-cd]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Naphthalene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Phenanthrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1
Pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 19:34	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*42 - 140*	*07/13/10 11:02*	*07/20/10 19:34*	*1*
Nitrobenzene-d5	*101*		*38 - 141*	*07/13/10 11:02*	*07/20/10 19:34*	*1*
Terphenyl-d14	*71*		*42 - 151*	*07/13/10 11:02*	*07/20/10 19:34*	*1*

Client Sample ID: RDBH02-11.5-13

Lab Sample ID: ATG0029-04
Date Collected: 07/07/10 13:15
Matrix: Soil
Date Received: 07/09/10 17:58

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**86**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH03-4-5

Lab Sample ID: ATG0029-05
Date Collected: 07/07/10 15:45
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 89.7

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		22.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:18	1
Residual Range Organics	ND		54.9		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*96.0*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:18*	*1*
Triacontane	*98.7*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:18*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**89.7**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.83		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3
Benzene	ND	C4	0.0191		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3
Toluene	ND	C4	0.0383		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3
Ethylbenzene	ND		0.0383		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3
Xylenes (total)	ND	C4	0.107		mg/kg dry	☼	07/10/10 12:09	07/10/10 21:49	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*71.5*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:49*	*33.3*
a,a,a-TFT (FID)	*96.7*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:49*	*33.3*
4-BFB (PID)	*80.1*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 21:49*	*33.3*
a,a,a-TFT (PID)	*109*		*50 - 150*	*07/10/10 12:09*	*07/10/10 21:49*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8	0.0191		mg/kg dry	☼	07/10/10 12:09	07/14/10 09:00	33.3
Toluene	ND		0.0383		mg/kg dry	☼	07/10/10 12:09	07/14/10 09:00	33.3
Xylenes (total)	ND		0.107		mg/kg dry	☼	07/10/10 12:09	07/14/10 09:00	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*74.3*		*50 - 150*	*07/10/10 12:09*	*07/14/10 09:00*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/14/10 09:00*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
2-Methylnaphthalene	**5.6**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1

Client Sample ID: RDBH03-4-5

Date Collected: 07/07/10 15:45
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-05

Matrix: Soil
Percent Solids: 90.6

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Chrysene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Naphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Phenanthrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 19:54	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*42 - 140*	*07/13/10 11:02*	*07/20/10 19:54*	*1*
Nitrobenzene-d5	*101*		*38 - 141*	*07/13/10 11:02*	*07/20/10 19:54*	*1*
Terphenyl-d14	*78*		*42 - 151*	*07/13/10 11:02*	*07/20/10 19:54*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.4**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**91**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH03-12-13

Date Collected: 07/07/10 15:50
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-06

Matrix: Soil
Percent Solids: 92.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:18	1
Residual Range Organics	ND		52.6		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*97.3*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:18*	*1*
Triacontane	*92.0*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:18*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**92.4**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.59		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3
Benzene	ND	C4	0.0180		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3
Toluene	ND	C4	0.0359		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3
Ethylbenzene	ND		0.0359		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3
Xylenes (total)	ND	C4	0.101		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:16	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*101*		*50 - 150*	*07/10/10 12:09*	*07/10/10 22:16*	*33.3*
a,a,a-TFT (FID)	*99.1*		*50 - 150*	*07/10/10 12:09*	*07/10/10 22:16*	*33.3*
4-BFB (PID)	*110*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 22:16*	*33.3*

Client Sample ID: RDBH03-12-13

Date Collected: 07/07/10 15:50
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-06

Matrix: Soil
Percent Solids: 92.4

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/10/10 22:16*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0180		mg/kg dry	☼	07/10/10 12:09	07/14/10 19:24	33.3
Toluene	ND		0.0359		mg/kg dry	☼	07/10/10 12:09	07/14/10 19:24	33.3
Xylenes (total)	ND		0.101		mg/kg dry	☼	07/10/10 12:09	07/14/10 19:24	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*75.1*		*50 - 150*	*07/10/10 12:09*	*07/14/10 19:24*	*33.3*
a,a,a-TFT (PID)	*105*		*50 - 150*	*07/10/10 12:09*	*07/14/10 19:24*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
2-Methylnaphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Chrysene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Naphthalene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Phenanthrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 20:13	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*119*		*42 - 140*	*07/13/10 11:02*	*07/20/10 20:13*	*1*
Nitrobenzene-d5	*110*		*38 - 141*	*07/13/10 11:02*	*07/20/10 20:13*	*1*
Terphenyl-d14	*83*		*42 - 151*	*07/13/10 11:02*	*07/20/10 20:13*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.7**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**91**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH04-0.5-2

Date Collected: 07/07/10 16:10
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-07

Matrix: Soil
Percent Solids: 85.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.8		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:51	1
Residual Range Organics	ND		54.5		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:51	1

Client Sample ID: RDBH04-0.5-2

Date Collected: 07/07/10 16:10
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-07

Matrix: Soil
Percent Solids: 85.8

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:51*	*1*
Triacontane	*105*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:51*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**85.8**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.79		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3
Benzene	ND	C4	0.0189		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3
Toluene	ND	C4	0.0379		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3
Ethylbenzene	ND		0.0379		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3
Xylenes (total)	ND	C4	0.106		mg/kg dry	☼	07/10/10 12:09	07/10/10 22:43	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*88.3*		*50 - 150*	*07/10/10 12:09*	*07/10/10 22:43*	*33.3*
a,a,a-TFT (FID)	*99.3*		*50 - 150*	*07/10/10 12:09*	*07/10/10 22:43*	*33.3*
4-BFB (PID)	*98.5*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 22:43*	*33.3*
a,a,a-TFT (PID)	*113*		*50 - 150*	*07/10/10 12:09*	*07/10/10 22:43*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8	0.0189		mg/kg dry	☼	07/10/10 12:09	07/14/10 10:49	33.3
Toluene	ND		0.0379		mg/kg dry	☼	07/10/10 12:09	07/14/10 10:49	33.3
Xylenes (total)	ND		0.106		mg/kg dry	☼	07/10/10 12:09	07/14/10 10:49	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*105*		*50 - 150*	*07/10/10 12:09*	*07/14/10 10:49*	*33.3*
a,a,a-TFT (PID)	*113*		*50 - 150*	*07/10/10 12:09*	*07/14/10 10:49*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
2-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Acenaphthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Acenaphthylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Fluorene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Naphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Phenanthrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1
Pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 20:33	1

Client Sample ID: RDBH04-0.5-2

Lab Sample ID: ATG0029-07
Date Collected: 07/07/10 16:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 85.2

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*42 - 140*	*07/13/10 11:02*	*07/20/10 20:33*	*1*
Nitrobenzene-d5	*101*		*38 - 141*	*07/13/10 11:02*	*07/20/10 20:33*	*1*
Terphenyl-d14	*74*		*42 - 151*	*07/13/10 11:02*	*07/20/10 20:33*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**85**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH04-15-15.5

Lab Sample ID: ATG0029-08
Date Collected: 07/07/10 17:25
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 92.5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.6		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:51	1
Residual Range Organics	ND		53.9		mg/kg dry	☼	07/10/10 12:27	07/11/10 19:51	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*99.9*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:51*	*1*
Triacontane	*93.8*		*50 - 150*	*07/10/10 12:27*	*07/11/10 19:51*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**92.5**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.31		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3
Benzene	ND	C4	0.0166		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3
Toluene	ND	C4	0.0331		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3
Ethylbenzene	ND		0.0331		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3
Xylenes (total)	ND	C4	0.0927		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:11	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*50.7*		*50 - 150*	*07/10/10 12:09*	*07/10/10 23:11*	*33.3*
a,a,a-TFT (FID)	*89.1*		*50 - 150*	*07/10/10 12:09*	*07/10/10 23:11*	*33.3*
4-BFB (PID)	*56.1*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 23:11*	*33.3*
a,a,a-TFT (PID)	*103*		*50 - 150*	*07/10/10 12:09*	*07/10/10 23:11*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8	0.0166		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:17	33.3
Toluene	ND		0.0331		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:17	33.3
Xylenes (total)	ND		0.0927		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:17	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*63.6*		*50 - 150*	*07/10/10 12:09*	*07/14/10 11:17*	*33.3*
a,a,a-TFT (PID)	*107*		*50 - 150*	*07/10/10 12:09*	*07/14/10 11:17*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1

Client Sample ID: RDBH04-15-15.5

Lab Sample ID: ATG0029-08
Date Collected: 07/07/10 17:25
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.8

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**9.6**		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Acenaphthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Acenaphthylene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[a]anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[a]pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[b]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[g,h,i]perylene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Benzo[k]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Chrysene	**5.8**		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Dibenz(a,h)anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Fluorene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Indeno[1,2,3-cd]pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Naphthalene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Phenanthrene	**7.8**		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1
Pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/20/10 20:52	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*129*		*42 - 140*	*07/13/10 11:02*	*07/20/10 20:52*	*1*
Nitrobenzene-d5	*117*		*38 - 141*	*07/13/10 11:02*	*07/20/10 20:52*	*1*
Terphenyl-d14	*90*		*42 - 151*	*07/13/10 11:02*	*07/20/10 20:52*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.2**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**92**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH05-22-23

Lab Sample ID: ATG0029-09
Date Collected: 07/07/10 18:35
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**245**		21.8		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:24	1
Residual Range Organics	ND		54.5		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*96.6*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:24*	*1*
Triacontane	*97.1*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**86.8**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**33.4**		3.69		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3
Benzene	ND	C4	0.0185		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3
Toluene	**0.171**	**R1, C4**	0.0369		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3
Ethylbenzene	**0.773**	**R1**	0.0369		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3
Xylenes (total)	**1.02**	**C4, R1**	0.103		mg/kg dry	☼	07/10/10 12:09	07/10/10 23:38	33.3

Client Sample ID: RDBH05-22-23

Date Collected: 07/07/10 18:35
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-09

Matrix: Soil
Percent Solids: 86.8

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*140*		*50 - 150*	*07/10/10 12:09*	*07/10/10 23:38*	*33.3*
a,a,a-TFT (FID)	*93.1*		*50 - 150*	*07/10/10 12:09*	*07/10/10 23:38*	*33.3*
4-BFB (PID)	*87.8*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/10/10 23:38*	*33.3*
a,a,a-TFT (PID)	*105*		*50 - 150*	*07/10/10 12:09*	*07/10/10 23:38*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8	0.0185		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:45	33.3
Toluene	**0.205**	**R1**	0.0369		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:45	33.3
Xylenes (total)	**1.07**	**R1**	0.103		mg/kg dry	☼	07/10/10 12:09	07/14/10 11:45	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*128*		*50 - 150*	*07/10/10 12:09*	*07/14/10 11:45*	*33.3*
a,a,a-TFT (PID)	*117*		*50 - 150*	*07/10/10 12:09*	*07/14/10 11:45*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**100**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
2-Methylnaphthalene	**28**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Acenaphthene	**30**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Acenaphthylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Anthracene	**30**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[a]anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[a]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[b]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[g,h,i]perylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Benzo[k]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Chrysene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Dibenz(a,h)anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Fluorene	**50**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Indeno[1,2,3-cd]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Naphthalene	**47**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Phenanthrene	**71**		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1
Pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/20/10 21:12	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*42 - 140*	*07/13/10 11:02*	*07/20/10 21:12*	*1*
Nitrobenzene-d5	*101*		*38 - 141*	*07/13/10 11:02*	*07/20/10 21:12*	*1*
Terphenyl-d14	*78*		*42 - 151*	*07/13/10 11:02*	*07/20/10 21:12*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**85**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH05-34-35

Date Collected: 07/07/10 20:25
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-10

Matrix: Soil
Percent Solids: 90.7

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.6		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:24	1
Residual Range Organics	ND		54.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*101*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:24*	*1*
Triacontane	*94.2*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:24*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**90.7**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.79		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3
Benzene	ND	C4	0.0239		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3
Toluene	ND	C4	0.0479		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3
Ethylbenzene	ND		0.0479		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3
Xylenes (total)	ND	C4	0.134		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:06	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*75.8*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:06*	*33.3*
a,a,a-TFT (FID)	*89.2*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:06*	*33.3*
4-BFB (PID)	*83.1*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/11/10 00:06*	*33.3*
a,a,a-TFT (PID)	*101*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:06*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8	0.0239		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:13	33.3
Toluene	ND		0.0479		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:13	33.3
Xylenes (total)	ND		0.134		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:13	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*74.6*		*50 - 150*	*07/10/10 12:09*	*07/14/10 12:13*	*33.3*
a,a,a-TFT (PID)	*103*		*50 - 150*	*07/10/10 12:09*	*07/14/10 12:13*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**5.8**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
2-Methylnaphthalene	**16**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[b]fluoranthene	**18**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[g,h,i]perylene	**6.8**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Chrysene	**38**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Fluoranthene	**6.1**		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1

Client Sample ID: RDBH05-34-35

Lab Sample ID: ATG0029-10
Date Collected: 07/07/10 20:25
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.6

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	46		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Phenanthrene	96		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1
Pyrene	14		5.3		ug/Kg dry		07/13/10 11:02	07/20/10 21:32	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*114*		*42 - 140*	*07/13/10 11:02*	*07/20/10 21:32*	*1*
Nitrobenzene-d5	*101*		*38 - 141*	*07/13/10 11:02*	*07/20/10 21:32*	*1*
Terphenyl-d14	*76*		*42 - 151*	*07/13/10 11:02*	*07/20/10 21:32*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.4		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	92		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH06-11-13

Lab Sample ID: ATG0029-11
Date Collected: 07/08/10 08:45
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 83.6

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		22.1		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:57	1
Residual Range Organics	ND		55.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*97.7*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:57*	*1*
Triacontane	*100*		*50 - 150*	*07/10/10 12:27*	*07/11/10 20:57*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	83.6		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	24.2		3.32		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3
Benzene	ND	C4	0.0166		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3
Toluene	0.143	C4, R10	0.0332		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3
Ethylbenzene	0.535	R10	0.0332		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3
Xylenes (total)	0.465	C4, R10	0.0931		mg/kg dry	☼	07/10/10 12:09	07/11/10 00:33	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*151*	*Z1*	*50 - 150*	*07/10/10 12:09*	*07/11/10 00:33*	*33.3*
a,a,a-TFT (FID)	*111*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:33*	*33.3*
4-BFB (PID)	*123*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/11/10 00:33*	*33.3*
a,a,a-TFT (PID)	*120*		*50 - 150*	*07/10/10 12:09*	*07/11/10 00:33*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0166		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:41	33.3
Toluene	0.168	R1	0.0332		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:41	33.3
Xylenes (total)	0.937	R1	0.0931		mg/kg dry	☼	07/10/10 12:09	07/14/10 12:41	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*98.6*		*50 - 150*	*07/10/10 12:09*	*07/14/10 12:41*	*33.3*

Client Sample ID: RDBH06-11-13

Lab Sample ID: ATG0029-11
Date Collected: 07/08/10 08:45
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 83.6

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE (Continued)

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-TFT (PID)	113		50 - 150	07/10/10 12:09	07/14/10 12:41	33.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
2-Methylnaphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Acenaphthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Acenaphthylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Fluorene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Naphthalene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Phenanthrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1
Pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 21:52	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	136		42 - 140	07/13/10 11:02	07/20/10 21:52	1
Nitrobenzene-d5	126		38 - 141	07/13/10 11:02	07/20/10 21:52	1
Terphenyl-d14	92		42 - 151	07/13/10 11:02	07/20/10 21:52	1

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**85**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH06-21.5-22.5

Lab Sample ID: ATG0029-12
Date Collected: 07/08/10 09:15
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 87.5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**399**		22.8		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:57	1
Residual Range Organics	ND		57.1		mg/kg dry	☼	07/10/10 12:27	07/11/10 20:57	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	104		50 - 150	07/10/10 12:27	07/11/10 20:57	1
Triacontane	92.8		50 - 150	07/10/10 12:27	07/11/10 20:57	1

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**87.5**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Client Sample ID: RDBH06-21.5-22.5

Date Collected: 07/08/10 09:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-12

Matrix: Soil
Percent Solids: 87.5

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**52.4**		3.92		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3
Benzene	ND	C4	0.0196		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3
Toluene	**0.254**	**C4, R1**	0.0392		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3
Ethylbenzene	**1.08**	**R1**	0.0392		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3
Xylenes (total)	**1.39**	**C4, R1**	0.110		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:00	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*206*	*Z1*	*50 - 150*	*07/10/10 12:09*	*07/11/10 01:00*	*33.3*
a,a,a-TFT (FID)	*106*		*50 - 150*	*07/10/10 12:09*	*07/11/10 01:00*	*33.3*
4-BFB (PID)	*132*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/11/10 01:00*	*33.3*
a,a,a-TFT (PID)	*115*		*50 - 150*	*07/10/10 12:09*	*07/11/10 01:00*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8	0.0196		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:17	33.3
Toluene	**0.264**	**R1**	0.0392		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:17	33.3
Xylenes (total)	**1.03**	**R1**	0.110		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:17	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*174*	*ZX*	*50 - 150*	*07/10/10 12:09*	*07/14/10 14:17*	*33.3*
a,a,a-TFT (PID)	*128*		*50 - 150*	*07/10/10 12:09*	*07/14/10 14:17*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**260**		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
2-Methylnaphthalene	**150**		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Acenaphthene	**58**		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Acenaphthylene	**22**		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Fluorene	**94**		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Naphthalene	**220**		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Phenanthrene	**94**		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1
Pyrene	ND		5.7		ug/Kg dry		07/13/10 11:02	07/20/10 22:11	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*42 - 140*	*07/13/10 11:02*	*07/20/10 22:11*	*1*
Nitrobenzene-d5	*87*		*38 - 141*	*07/13/10 11:02*	*07/20/10 22:11*	*1*
Terphenyl-d14	*68*		*42 - 151*	*07/13/10 11:02*	*07/20/10 22:11*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**87**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH06-921.5-22.5

Date Collected: 07/08/10 09:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-13

Matrix: Soil
Percent Solids: 89.2

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**275**		20.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 21:30	1
Residual Range Organics	ND		51.1		mg/kg dry	☼	07/10/10 12:27	07/11/10 21:30	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*101*		*50 - 150*	*07/10/10 12:27*	*07/11/10 21:30*	*1*
Triacontane	*101*		*50 - 150*	*07/10/10 12:27*	*07/11/10 21:30*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**89.2**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**64.3**		3.78		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3
Benzene	ND	C4	0.0189		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3
Toluene	**0.318**	**C4, R1**	0.0378		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3
Ethylbenzene	**1.33**	**R1**	0.0378		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3
Xylenes (total)	**1.61**	**C4, R1**	0.106		mg/kg dry	☼	07/10/10 12:09	07/11/10 01:26	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*235*	*Z1*	*50 - 150*	*07/10/10 12:09*	*07/11/10 01:26*	*33.3*
a,a,a-TFT (FID)	*107*		*50 - 150*	*07/10/10 12:09*	*07/11/10 01:26*	*33.3*
4-BFB (PID)	*146*	*C4*	*50 - 150*	*07/10/10 12:09*	*07/11/10 01:26*	*33.3*
a,a,a-TFT (PID)	*116*		*50 - 150*	*07/10/10 12:09*	*07/11/10 01:26*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	C8	0.0189		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:44	33.3
Toluene	**0.304**	**R1**	0.0378		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:44	33.3
Xylenes (total)	**1.51**	**R1**	0.106		mg/kg dry	☼	07/10/10 12:09	07/14/10 14:44	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*220*	*ZX*	*50 - 150*	*07/10/10 12:09*	*07/14/10 14:44*	*33.3*
a,a,a-TFT (FID)	*101*		*50 - 150*	*07/10/10 12:09*	*07/14/10 14:44*	*33.3*
4-BFB (PID)	*138*		*50 - 150*	*07/10/10 12:09*	*07/14/10 14:44*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/14/10 14:44*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**210**		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
2-Methylnaphthalene	**110**		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Acenaphthene	**60**		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Acenaphthylene	**20**		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Anthracene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[a]anthracene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[a]pyrene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[b]fluoranthene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[g,h,i]perylene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Benzo[k]fluoranthene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Chrysene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Dibenz(a,h)anthracene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Fluoranthene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1

Client Sample ID: RDBH06-921.5-22.5

Lab Sample ID: ATG0029-13
Date Collected: 07/08/10 09:15
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 85.6

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**79**		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Indeno[1,2,3-cd]pyrene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Naphthalene	**170**		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Phenanthrene	**82**		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1
Pyrene	ND		5.8		ug/Kg dry		07/13/10 11:02	07/20/10 22:31	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*42 - 140*	*07/13/10 11:02*	*07/20/10 22:31*	*1*
Nitrobenzene-d5	*85*		*38 - 141*	*07/13/10 11:02*	*07/20/10 22:31*	*1*
Terphenyl-d14	*72*		*42 - 151*	*07/13/10 11:02*	*07/20/10 22:31*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**86**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH07-8-9

Lab Sample ID: ATG0029-14
Date Collected: 07/08/10 10:15
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**531**		21.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 21:30	1
Residual Range Organics	ND		53.4		mg/kg dry	☼	07/10/10 12:27	07/11/10 21:30	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*104*		*50 - 150*	*07/10/10 12:27*	*07/11/10 21:30*	*1*
Triacontane	*91.2*		*50 - 150*	*07/10/10 12:27*	*07/11/10 21:30*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**91.8**		1.00		%		07/11/10 12:49	07/12/10 13:00	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**4.08**		2.93		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3
Benzene	ND		0.0147		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3
Toluene	**0.0364**		0.0293		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3
Ethylbenzene	ND		0.0293		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3
Xylenes (total)	**0.144**		0.0820		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:14	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*142*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:14*	*33.3*
a,a,a-TFT (FID)	*98.6*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:14*	*33.3*
4-BFB (PID)	*117*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:14*	*33.3*
a,a,a-TFT (PID)	*113*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:14*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**55**		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
2-Methylnaphthalene	**48**		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Acenaphthene	**12**		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1

Client Sample ID: RDBH07-8-9

Date Collected: 07/08/10 10:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-14

Matrix: Soil
Percent Solids: 91.9

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Anthracene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[a]anthracene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[a]pyrene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[b]fluoranthene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[g,h,i]perylene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Benzo[k]fluoranthene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Chrysene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Dibenz(a,h)anthracene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Fluoranthene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Fluorene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Indeno[1,2,3-cd]pyrene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Naphthalene	**18**		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Phenanthrene	**9.3**		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1
Pyrene	ND		5.4		ug/Kg dry		07/13/10 11:02	07/20/10 22:50	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*42 - 140*	*07/13/10 11:02*	*07/20/10 22:50*	*1*
Nitrobenzene-d5	*119*		*38 - 141*	*07/13/10 11:02*	*07/20/10 22:50*	*1*
Terphenyl-d14	*74*		*42 - 151*	*07/13/10 11:02*	*07/20/10 22:50*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.1**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**92**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH07-22.5-23.5

Date Collected: 07/08/10 10:48
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-15

Matrix: Soil
Percent Solids: 93.3

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**67.3**		21.4		mg/kg dry	☼	07/10/10 12:27	07/12/10 06:41	1
Residual Range Organics	ND		53.4		mg/kg dry	☼	07/10/10 12:27	07/12/10 06:41	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*07/10/10 12:27*	*07/12/10 06:41*	*1*
Triacontane	*106*		*50 - 150*	*07/10/10 12:27*	*07/12/10 06:41*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**93.3**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.36		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3
Benzene	ND		0.0168		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3
Toluene	ND		0.0336		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3
Ethylbenzene	ND		0.0336		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3
Xylenes (total)	ND		0.0940		mg/kg dry	☼	07/10/10 12:09	07/11/10 03:41	33.3

Client Sample ID: RDBH07-22.5-23.5

Lab Sample ID: ATG0029-15

Date Collected: 07/08/10 10:48
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 93.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*121*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:41*	*33.3*
a,a,a-TFT (FID)	*96.7*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:41*	*33.3*
4-BFB (PID)	*125*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:41*	*33.3*
a,a,a-TFT (PID)	*111*		*50 - 150*	*07/10/10 12:09*	*07/11/10 03:41*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
2-Methylnaphthalene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Acenaphthene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Acenaphthylene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Anthracene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[a]anthracene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[a]pyrene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[b]fluoranthene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[g,h,i]perylene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Benzo[k]fluoranthene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Chrysene	**13**		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Dibenz(a,h)anthracene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Fluoranthene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Fluorene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Naphthalene	**13**		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Phenanthrene	**32**		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1
Pyrene	ND		5.0		ug/Kg dry		07/13/10 11:02	07/20/10 23:10	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*110*		*42 - 140*	*07/13/10 11:02*	*07/20/10 23:10*	*1*
Nitrobenzene-d5	*108*		*38 - 141*	*07/13/10 11:02*	*07/20/10 23:10*	*1*
Terphenyl-d14	*83*		*42 - 151*	*07/13/10 11:02*	*07/20/10 23:10*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.3**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**93**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH08-0-1.5

Lab Sample ID: ATG0029-16

Date Collected: 07/08/10 11:30
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 85.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**211**		23.2		mg/kg dry	☼	07/10/10 12:27	07/12/10 06:41	1
Residual Range Organics	ND		57.9		mg/kg dry	☼	07/10/10 12:27	07/12/10 06:41	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*107*		*50 - 150*	*07/10/10 12:27*	*07/12/10 06:41*	*1*
Triacontane	*98.1*		*50 - 150*	*07/10/10 12:27*	*07/12/10 06:41*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**85.4**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Client Sample ID: RDBH08-0-1.5

Date Collected: 07/08/10 11:30
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-16

Matrix: Soil
Percent Solids: 85.4

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	11.9		5.11		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3
Benzene	0.0342	R10	0.0256		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3
Toluene	0.153		0.0511		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3
Ethylbenzene	0.437	R10	0.0511		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3
Xylenes (total)	0.613	R1	0.143		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:08	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*164*	*Z1*	*50 - 150*	*07/10/10 12:09*	*07/11/10 04:08*	*33.3*
a,a,a-TFT (FID)	*99.2*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:08*	*33.3*
4-BFB (PID)	*112*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:08*	*33.3*
a,a,a-TFT (PID)	*114*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:08*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	18		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
2-Methylnaphthalene	6.6		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Acenaphthene	11		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Acenaphthylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Anthracene	9.6		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[a]anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[a]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[b]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[g,h,i]perylene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Benzo[k]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Chrysene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Dibenz(a,h)anthracene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Fluoranthene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Fluorene	14		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Indeno[1,2,3-cd]pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Naphthalene	47		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Phenanthrene	9.2		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1
Pyrene	ND		5.6		ug/Kg dry		07/13/10 11:02	07/23/10 15:44	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*42 - 140*	*07/13/10 11:02*	*07/23/10 15:44*	*1*
Nitrobenzene-d5	*92*		*38 - 141*	*07/13/10 11:02*	*07/23/10 15:44*	*1*
Terphenyl-d14	*76*		*42 - 151*	*07/13/10 11:02*	*07/23/10 15:44*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	88		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH08-18-19

Date Collected: 07/08/10 13:20
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-17

Matrix: Soil
Percent Solids: 93

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.0		mg/kg dry	☼	07/10/10 12:27	07/11/10 14:21	1
Residual Range Organics	ND		52.5		mg/kg dry	☼	07/10/10 12:27	07/11/10 14:21	1

Client Sample ID: RDBH08-18-19

Date Collected: 07/08/10 13:20
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-17

Matrix: Soil
Percent Solids: 93

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	93.8		50 - 150	07/10/10 12:27	07/11/10 14:21	1
Triacontane	97.0		50 - 150	07/10/10 12:27	07/11/10 14:21	1

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**93.0**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.75		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3
Benzene	ND	C8	0.0237		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3
Toluene	ND	C8	0.0475		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3
Ethylbenzene	ND	C8	0.0475		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3
Xylenes (total)	ND	C8	0.133		mg/kg dry	☼	07/10/10 12:09	07/10/10 18:13	33.3

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	82.1		50 - 150	07/10/10 12:09	07/10/10 18:13	33.3
a,a,a-TFT (FID)	92.4		50 - 150	07/10/10 12:09	07/10/10 18:13	33.3
4-BFB (PID)	89.4		50 - 150	07/10/10 12:09	07/10/10 18:13	33.3
a,a,a-TFT (PID)	105	C8	50 - 150	07/10/10 12:09	07/10/10 18:13	33.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
2-Methylnaphthalene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Acenaphthene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Acenaphthylene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Anthracene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[a]anthracene	**9.2**		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[a]pyrene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[b]fluoranthene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[g,h,i]perylene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Benzo[k]fluoranthene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Chrysene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Dibenz(a,h)anthracene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Fluoranthene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Fluorene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Indeno[1,2,3-cd]pyrene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Naphthalene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Phenanthrene	**15**		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1
Pyrene	ND		4.9		ug/Kg dry		07/13/10 11:02	07/23/10 16:03	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	104		42 - 140	07/13/10 11:02	07/23/10 16:03	1
Nitrobenzene-d5	107		38 - 141	07/13/10 11:02	07/23/10 16:03	1
Terphenyl-d14	84		42 - 151	07/13/10 11:02	07/23/10 16:03	1

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.8**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**92**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH09-10-11.5

Date Collected: 07/08/10 14:00
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-18

Matrix: Soil
Percent Solids: 91.6

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.4		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:14	1
Residual Range Organics	ND		53.6		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:14	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*103*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:14*	*1*
Triacontane	*104*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:14*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**91.6**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.09		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3
Benzene	ND		0.0155		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3
Toluene	ND		0.0309		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3
Ethylbenzene	ND		0.0309		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3
Xylenes (total)	ND		0.0866		mg/kg dry	☼	07/10/10 12:09	07/11/10 04:35	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*87.0*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:35*	*33.3*
a,a,a-TFT (FID)	*95.9*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:35*	*33.3*
4-BFB (PID)	*93.6*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:35*	*33.3*
a,a,a-TFT (PID)	*110*		*50 - 150*	*07/10/10 12:09*	*07/11/10 04:35*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
2-Methylnaphthalene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Acenaphthene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Acenaphthylene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Anthracene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[a]anthracene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[a]pyrene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[b]fluoranthene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[g,h,i]perylene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Benzo[k]fluoranthene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Chrysene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Dibenz(a,h)anthracene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Fluoranthene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Fluorene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Indeno[1,2,3-cd]pyrene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Naphthalene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Phenanthrene	**5.4**		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1
Pyrene	ND		5.1		ug/Kg dry		07/13/10 11:02	07/23/10 16:43	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*113*		*42 - 140*	*07/13/10 11:02*	*07/23/10 16:43*	*1*
Nitrobenzene-d5	*124*		*38 - 141*	*07/13/10 11:02*	*07/23/10 16:43*	*1*
Terphenyl-d14	*86*		*42 - 151*	*07/13/10 11:02*	*07/23/10 16:43*	*1*

Client Sample ID: RDBH09-10-11.5

Lab Sample ID: ATG0029-18

Date Collected: 07/08/10 14:00
Matrix: Soil
Date Received: 07/09/10 17:58

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.3**		0.10		%		07/14/10 13:21	07/14/10 13:21	1
Percent Solids	**92**		0.10		%		07/14/10 13:21	07/14/10 13:21	1

Client Sample ID: RDBH09-15-16

Lab Sample ID: ATG0029-19

Date Collected: 07/08/10 14:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 93.5

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.9		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:14	1
Residual Range Organics	ND		52.1		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:14	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*101*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:14*	*1*
Triacontane	*92.0*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:14*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**93.5**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.54		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3
Benzene	ND		0.0177		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3
Toluene	ND		0.0354		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3
Ethylbenzene	ND		0.0354		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3
Xylenes (total)	ND		0.0991		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:01	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*86.0*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:01*	*33.3*
a,a,a-TFT (FID)	*94.9*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:01*	*33.3*
4-BFB (PID)	*93.3*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:01*	*33.3*
a,a,a-TFT (PID)	*109*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:01*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
2-Methylnaphthalene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Acenaphthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Acenaphthylene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[a]anthracene	**20**		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[a]pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[b]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[g,h,i]perylene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Benzo[k]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Chrysene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Dibenz(a,h)anthracene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Fluoranthene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Fluorene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Indeno[1,2,3-cd]pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Naphthalene	**12**		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1

Client Sample ID: RDBH09-15-16

Lab Sample ID: ATG0029-19
Date Collected: 07/08/10 14:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 93.6

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	**36**		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1
Pyrene	ND		5.2		ug/Kg dry		07/13/10 11:02	07/23/10 17:22	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*123*		*42 - 140*	*07/13/10 11:02*	*07/23/10 17:22*	*1*
Nitrobenzene-d5	*134*		*38 - 141*	*07/13/10 11:02*	*07/23/10 17:22*	*1*
Terphenyl-d14	*106*		*42 - 151*	*07/13/10 11:02*	*07/23/10 17:22*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.4**		0.10		%		07/14/10 13:26	07/14/10 13:26	1
Percent Solids	**94**		0.10		%		07/14/10 13:26	07/14/10 13:26	1

Client Sample ID: RDBH10-2-4

Lab Sample ID: ATG0029-20
Date Collected: 07/08/10 14:50
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**26.9**		20.7		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:46	1
Residual Range Organics	ND		51.7		mg/kg dry	☼	07/10/10 12:27	07/12/10 07:46	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*95.0*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:46*	*1*
Triacontane	*96.2*		*50 - 150*	*07/10/10 12:27*	*07/12/10 07:46*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**91.4**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		2.48		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3
Benzene	ND		0.0124		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3
Toluene	ND		0.0248		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3
Ethylbenzene	ND		0.0248		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3
Xylenes (total)	ND		0.0696		mg/kg dry	☼	07/10/10 12:09	07/11/10 05:28	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*86.7*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:28*	*33.3*
a,a,a-TFT (FID)	*95.6*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:28*	*33.3*
4-BFB (PID)	*95.5*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:28*	*33.3*
a,a,a-TFT (PID)	*109*		*50 - 150*	*07/10/10 12:09*	*07/11/10 05:28*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**11**		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
2-Methylnaphthalene	**19**		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Acenaphthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Benzo[a]anthracene	**5.6**		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1

Client Sample ID: RDBH10-2-4

Date Collected: 07/08/10 14:50
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-20

Matrix: Soil
Percent Solids: 92.5

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Chrysene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Fluorene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Naphthalene	**12**		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Phenanthrene	**6.1**		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 11:02	07/23/10 17:41	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*114*		*42 - 140*	*07/13/10 11:02*	*07/23/10 17:41*	*1*
Nitrobenzene-d5	*114*		*38 - 141*	*07/13/10 11:02*	*07/23/10 17:41*	*1*
Terphenyl-d14	*95*		*42 - 151*	*07/13/10 11:02*	*07/23/10 17:41*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.5**		0.10		%		07/14/10 13:26	07/14/10 13:26	1
Percent Solids	**92**		0.10		%		07/14/10 13:26	07/14/10 13:26	1

Client Sample ID: RDBH11-30-31.5

Date Collected: 07/08/10 16:58
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-21

Matrix: Soil
Percent Solids: 92.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**206**		21.1		mg/kg dry	☼	07/10/10 12:30	07/12/10 07:46	1
Residual Range Organics	ND		52.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 07:46	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*106*		*50 - 150*	*07/10/10 12:30*	*07/12/10 07:46*	*1*
Triacontane	*92.9*		*50 - 150*	*07/10/10 12:30*	*07/12/10 07:46*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**92.4**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.54		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3
Benzene	ND		0.0177		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3
Toluene	**0.0381**	**R1**	0.0354		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3
Ethylbenzene	ND	C8	0.0354		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3
Xylenes (total)	ND		0.0992		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:06	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*124*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:06*	*33.3*
a,a,a-TFT (FID)	*96.9*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:06*	*33.3*
4-BFB (PID)	*124*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:06*	*33.3*

Client Sample ID: RDBH11-30-31.5

Lab Sample ID: ATG0029-21
Date Collected: 07/08/10 16:58
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 92.4

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-TFT (PID)	110		50 - 150	07/10/10 12:11	07/12/10 02:06	33.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	210		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
2-Methylnaphthalene	210		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Acenaphthene	16		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Acenaphthylene	6.4		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Chrysene	8.3		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Fluorene	20		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Naphthalene	160		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Phenanthrene	34		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1
Pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 13:48	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	88		42 - 140	07/13/10 12:44	07/21/10 13:48	1
Nitrobenzene-d5	84		38 - 141	07/13/10 12:44	07/21/10 13:48	1
Terphenyl-d14	66		42 - 151	07/13/10 12:44	07/21/10 13:48	1

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.6		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	91		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDBH11-930-31.5

Lab Sample ID: ATG0029-22
Date Collected: 07/08/10 16:58
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 92.1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	296		20.9		mg/kg dry	☼	07/10/10 12:30	07/12/10 08:19	1
Residual Range Organics	ND		52.2		mg/kg dry	☼	07/10/10 12:30	07/12/10 08:19	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	105		50 - 150	07/10/10 12:30	07/12/10 08:19	1
Triacontane	105		50 - 150	07/10/10 12:30	07/12/10 08:19	1

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	92.1		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Client Sample ID: RDBH11-930-31.5

Date Collected: 07/08/10 16:58
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-22

Matrix: Soil
Percent Solids: 92.1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**8.76**		4.07		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3
Benzene	ND		0.0203		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3
Toluene	**0.0661**		0.0407		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3
Ethylbenzene	**0.0547**	**C8**	0.0407		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3
Xylenes (total)	**0.289**		0.114		mg/kg dry	☼	07/10/10 12:11	07/12/10 02:33	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*155*	*Z1*	*50 - 150*	*07/10/10 12:11*	*07/12/10 02:33*	*33.3*
a,a,a-TFT (FID)	*100*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:33*	*33.3*
4-BFB (PID)	*146*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:33*	*33.3*
a,a,a-TFT (PID)	*116*		*50 - 150*	*07/10/10 12:11*	*07/12/10 02:33*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.0560**	**C8**	0.0407		mg/kg dry	☼	07/13/10 11:03	07/14/10 17:31	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*94.1*		*50 - 150*	*07/13/10 11:03*	*07/14/10 17:31*	*33.3*
a,a,a-TFT (PID)	*111*		*50 - 150*	*07/13/10 11:03*	*07/14/10 17:31*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**250**		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
2-Methylnaphthalene	**250**		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Acenaphthene	**16**		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Acenaphthylene	**7.3**		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Anthracene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[a]anthracene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[a]pyrene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[b]fluoranthene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[g,h,i]perylene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Benzo[k]fluoranthene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Chrysene	**7.6**		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Dibenz(a,h)anthracene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Fluoranthene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Fluorene	**22**		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Naphthalene	**180**		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Phenanthrene	**42**		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1
Pyrene	ND		5.0		ug/Kg dry		07/13/10 12:44	07/21/10 14:07	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*42 - 140*	*07/13/10 12:44*	*07/21/10 14:07*	*1*
Nitrobenzene-d5	*91*		*38 - 141*	*07/13/10 12:44*	*07/21/10 14:07*	*1*
Terphenyl-d14	*74*		*42 - 151*	*07/13/10 12:44*	*07/21/10 14:07*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.6**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**92**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDBH10-6-7.5

Date Collected: 07/08/10 15:15
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-23

Matrix: Soil
Percent Solids: 91.7

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**772**		20.8		mg/kg dry	☼	07/10/10 12:30	07/12/10 08:19	1
Residual Range Organics	ND		52.0		mg/kg dry	☼	07/10/10 12:30	07/12/10 08:19	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*109*		*50 - 150*	*07/10/10 12:30*	*07/12/10 08:19*	*1*
Triacontane	*93.4*		*50 - 150*	*07/10/10 12:30*	*07/12/10 08:19*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**91.7**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**19.8**		3.24		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3
Benzene	ND		0.0162		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3
Toluene	**0.0494**		0.0324		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3
Ethylbenzene	**0.418**	**C8**	0.0324		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3
Xylenes (total)	**0.481**		0.0907		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:00	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*239*	*ZX*	*50 - 150*	*07/10/10 12:11*	*07/12/10 03:00*	*33.3*
a,a,a-TFT (FID)	*97.1*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:00*	*33.3*
4-BFB (PID)	*182*	*ZX*	*50 - 150*	*07/10/10 12:11*	*07/12/10 03:00*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:00*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND	C8	0.0324		mg/kg dry	☼	07/13/10 11:03	07/14/10 17:59	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*123*		*50 - 150*	*07/13/10 11:03*	*07/14/10 17:59*	*33.3*
a,a,a-TFT (PID)	*112*		*50 - 150*	*07/13/10 11:03*	*07/14/10 17:59*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**180**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
2-Methylnaphthalene	**95**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Acenaphthene	**33**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Acenaphthylene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Anthracene	**6.5**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[a]anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[a]pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[b]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[g,h,i]perylene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Benzo[k]fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Chrysene	**5.5**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Dibenz(a,h)anthracene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Fluoranthene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Fluorene	**46**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Indeno[1,2,3-cd]pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Naphthalene	**65**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1
Phenanthrene	**37**		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1

Client Sample ID: RDBH10-6-7.5

Lab Sample ID: ATG0029-23
Date Collected: 07/08/10 15:15
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 92.1

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.3		ug/Kg dry		07/13/10 12:44	07/21/10 14:27	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*42 - 140*	*07/13/10 12:44*	*07/21/10 14:27*	*1*
Nitrobenzene-d5	*82*		*38 - 141*	*07/13/10 12:44*	*07/21/10 14:27*	*1*
Terphenyl-d14	*79*		*42 - 151*	*07/13/10 12:44*	*07/21/10 14:27*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.9**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**92**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDBH11-0-2

Lab Sample ID: ATG0029-24
Date Collected: 07/08/10 15:40
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 90

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**113**		22.0		mg/kg dry	☼	07/10/10 12:30	07/12/10 10:32	1
Residual Range Organics	ND		55.0		mg/kg dry	☼	07/10/10 12:30	07/12/10 10:32	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*100*		*50 - 150*	*07/10/10 12:30*	*07/12/10 10:32*	*1*
Triacontane	*102*		*50 - 150*	*07/10/10 12:30*	*07/12/10 10:32*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**90.0**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.42		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3
Benzene	ND		0.0171		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3
Toluene	ND		0.0342		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3
Ethylbenzene	ND	C8	0.0342		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3
Xylenes (total)	ND		0.0958		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:27	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*98.5*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:27*	*33.3*
a,a,a-TFT (FID)	*93.1*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:27*	*33.3*
4-BFB (PID)	*111*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:27*	*33.3*
a,a,a-TFT (PID)	*107*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:27*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**11**		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
2-Methylnaphthalene	**21**		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Acenaphthene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Acenaphthylene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Anthracene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Benzo[a]anthracene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Benzo[a]pyrene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1

Client Sample ID: RDBH11-0-2

Date Collected: 07/08/10 15:40
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-24

Matrix: Soil
Percent Solids: 89

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Benzo[g,h,i]perylene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Benzo[k]fluoranthene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Chrysene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Dibenz(a,h)anthracene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Fluoranthene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Fluorene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Indeno[1,2,3-cd]pyrene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Naphthalene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Phenanthrene	**8.2**		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1
Pyrene	ND		5.2		ug/Kg dry		07/13/10 12:44	07/21/10 14:47	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*42 - 140*	*07/13/10 12:44*	*07/21/10 14:47*	*1*
Nitrobenzene-d5	*106*		*38 - 141*	*07/13/10 12:44*	*07/21/10 14:47*	*1*
Terphenyl-d14	*78*		*42 - 151*	*07/13/10 12:44*	*07/21/10 14:47*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**89**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDBH12-1-3

Date Collected: 07/08/10 17:30
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-25

Matrix: Soil
Percent Solids: 85.7

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**31.1**		22.5		mg/kg dry	☼	07/10/10 12:30	07/12/10 10:32	1
Residual Range Organics	ND		56.2		mg/kg dry	☼	07/10/10 12:30	07/12/10 10:32	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*103*		*50 - 150*	*07/10/10 12:30*	*07/12/10 10:32*	*1*
Triacontane	*91.2*		*50 - 150*	*07/10/10 12:30*	*07/12/10 10:32*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**85.7**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.75		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3
Benzene	ND		0.0188		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3
Toluene	ND		0.0375		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3
Ethylbenzene	ND	C8	0.0375		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3
Xylenes (total)	ND		0.105		mg/kg dry	☼	07/10/10 12:11	07/12/10 03:54	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*126*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:54*	*33.3*
a,a,a-TFT (FID)	*99.0*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:54*	*33.3*
4-BFB (PID)	*142*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:54*	*33.3*
a,a,a-TFT (PID)	*114*		*50 - 150*	*07/10/10 12:11*	*07/12/10 03:54*	*33.3*

Client Sample ID: RDBH12-1-3

Date Collected: 07/08/10 17:30
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-25

Matrix: Soil
Percent Solids: 85.7

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
2-Methylnaphthalene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Acenaphthene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Acenaphthylene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Anthracene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[a]anthracene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[a]pyrene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[b]fluoranthene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[g,h,i]perylene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Benzo[k]fluoranthene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Chrysene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Dibenz(a,h)anthracene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Fluoranthene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Fluorene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Indeno[1,2,3-cd]pyrene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Naphthalene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Phenanthrene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1
Pyrene	ND		5.8		ug/Kg dry		07/13/10 12:44	07/21/10 15:11	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*42 - 140*	*07/13/10 12:44*	*07/21/10 15:11*	*1*
Nitrobenzene-d5	*102*		*38 - 141*	*07/13/10 12:44*	*07/21/10 15:11*	*1*
Terphenyl-d14	*71*		*42 - 151*	*07/13/10 12:44*	*07/21/10 15:11*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**86**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDBH12-21-22.5

Date Collected: 07/08/10 18:05
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-26

Matrix: Soil
Percent Solids: 86.6

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		22.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:05	1
Residual Range Organics	ND		56.8		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:05	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*103*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:05*	*1*
Triacontane	*104*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:05*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**86.6**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**4.73**		3.16		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3
Benzene	ND		0.0158		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3
Toluene	**0.0360**	**R1**	0.0316		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3
Ethylbenzene	**0.165**	**C8, R1**	0.0316		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3

Client Sample ID: RDBH12-21-22.5

Date Collected: 07/08/10 18:05
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-26

Matrix: Soil
Percent Solids: 86.6

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	0.106	R1	0.0886		mg/kg dry	☼	07/10/10 12:11	07/12/10 04:22	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*154*	*Z1*	*50 - 150*	*07/10/10 12:11*	*07/12/10 04:22*	*33.3*
a,a,a-TFT (FID)	*101*		*50 - 150*	*07/10/10 12:11*	*07/12/10 04:22*	*33.3*
4-BFB (PID)	*155*	*Z1*	*50 - 150*	*07/10/10 12:11*	*07/12/10 04:22*	*33.3*
a,a,a-TFT (PID)	*115*		*50 - 150*	*07/10/10 12:11*	*07/12/10 04:22*	*33.3*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.150	C8, R1	0.0316		mg/kg dry	☼	07/13/10 11:03	07/14/10 18:27	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*107*		*50 - 150*	*07/13/10 11:03*	*07/14/10 18:27*	*33.3*
a,a,a-TFT (PID)	*110*		*50 - 150*	*07/13/10 11:03*	*07/14/10 18:27*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	6.9		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
2-Methylnaphthalene	7.4		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Acenaphthene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Acenaphthylene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Anthracene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[a]anthracene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[a]pyrene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[b]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[g,h,i]perylene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Benzo[k]fluoranthene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Chrysene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Dibenz(a,h)anthracene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Fluoranthene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Fluorene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Indeno[1,2,3-cd]pyrene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Naphthalene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Phenanthrene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1
Pyrene	ND		5.7		ug/Kg dry		07/13/10 12:44	07/21/10 15:31	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*105*		*42 - 140*	*07/13/10 12:44*	*07/21/10 15:31*	*1*
Nitrobenzene-d5	*99*		*38 - 141*	*07/13/10 12:44*	*07/21/10 15:31*	*1*
Terphenyl-d14	*75*		*42 - 151*	*07/13/10 12:44*	*07/21/10 15:31*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	85		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SED-001

Date Collected: 07/07/10 17:55
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-27

Matrix: Soil
Percent Solids: 77.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		32.0		mg/kg dry	☼	07/10/10 12:30	07/11/10 15:26	1
Residual Range Organics	ND		79.9		mg/kg dry	☼	07/10/10 12:30	07/11/10 15:26	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90.9*		*50 - 150*	*07/10/10 12:30*	*07/11/10 15:26*	*1*
Triacontane	*93.2*		*50 - 150*	*07/10/10 12:30*	*07/11/10 15:26*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**77.8**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		2.04		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3
Benzene	ND		0.0102		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3
Toluene	ND		0.0204		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3
Ethylbenzene	ND	C8	0.0204		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3
Xylenes (total)	ND		0.0570		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:10	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*128*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:10*	*33.3*
a,a,a-TFT (FID)	*142*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:10*	*33.3*
4-BFB (PID)	*142*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 06:10*	*33.3*
a,a,a-TFT (PID)	*166*	*Z1*	*50 - 150*	*07/10/10 12:11*	*07/12/10 06:10*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
2-Methylnaphthalene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Acenaphthene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Acenaphthylene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Anthracene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[a]anthracene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[a]pyrene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[b]fluoranthene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[g,h,i]perylene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Benzo[k]fluoranthene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Chrysene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Dibenz(a,h)anthracene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Fluoranthene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Fluorene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Indeno[1,2,3-cd]pyrene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Naphthalene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Phenanthrene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1
Pyrene	ND		6.1		ug/Kg dry		07/13/10 12:44	07/21/10 15:50	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*42 - 140*	*07/13/10 12:44*	*07/21/10 15:50*	*1*
Nitrobenzene-d5	*96*		*38 - 141*	*07/13/10 12:44*	*07/21/10 15:50*	*1*
Terphenyl-d14	*72*		*42 - 151*	*07/13/10 12:44*	*07/21/10 15:50*	*1*

Client Sample ID: RDM-SED-001

Lab Sample ID: ATG0029-27

Date Collected: 07/07/10 17:55
Matrix: Soil
Date Received: 07/09/10 17:58

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	81		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SED-002

Lab Sample ID: ATG0029-28

Date Collected: 07/07/10 18:30
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 84.1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		23.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:05	1
Residual Range Organics	ND		59.4		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:05	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*99.9*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:05*	*1*
Triacontane	*87.4*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:05*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	84.1		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.62		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3
Benzene	ND		0.00808		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3
Toluene	ND		0.0162		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3
Ethylbenzene	ND	C8	0.0162		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3
Xylenes (total)	ND		0.0452		mg/kg dry	☼	07/10/10 12:11	07/12/10 06:36	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*118*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:36*	*33.3*
a,a,a-TFT (FID)	*68.3*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:36*	*33.3*
4-BFB (PID)	*130*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 06:36*	*33.3*
a,a,a-TFT (PID)	*80.1*		*50 - 150*	*07/10/10 12:11*	*07/12/10 06:36*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
2-Methylnaphthalene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Acenaphthene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Acenaphthylene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Anthracene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[a]anthracene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[a]pyrene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[b]fluoranthene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[g,h,i]perylene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Benzo[k]fluoranthene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Chrysene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Dibenz(a,h)anthracene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Fluoranthene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Fluorene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Indeno[1,2,3-cd]pyrene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Naphthalene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1

Client Sample ID: RDM-SED-002

Lab Sample ID: ATG0029-28
Date Collected: 07/07/10 18:30
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 76.4

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1
Pyrene	ND		6.4		ug/Kg dry		07/13/10 12:44	07/21/10 16:10	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*42 - 140*	*07/13/10 12:44*	*07/21/10 16:10*	*1*
Nitrobenzene-d5	*97*		*38 - 141*	*07/13/10 12:44*	*07/21/10 16:10*	*1*
Terphenyl-d14	*75*		*42 - 151*	*07/13/10 12:44*	*07/21/10 16:10*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**24**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**76**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SED-003

Lab Sample ID: ATG0029-29
Date Collected: 07/08/10 10:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.3

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.4		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:39	1
Residual Range Organics	ND		53.4		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:39	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:39*	*1*
Triacontane	*104*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:39*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**86.3**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		2.03		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3
Benzene	ND		0.0102		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3
Toluene	ND		0.0203		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3
Ethylbenzene	ND	C8	0.0203		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3
Xylenes (total)	ND		0.0570		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:03	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*90.6*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:03*	*33.3*
a,a,a-TFT (FID)	*87.8*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:03*	*33.3*
4-BFB (PID)	*99.4*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 07:03*	*33.3*
a,a,a-TFT (PID)	*102*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:03*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
2-Methylnaphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Acenaphthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Acenaphthylene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Benzo[a]anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1

Client Sample ID: RDM-SED-003

Lab Sample ID: ATG0029-29
Date Collected: 07/08/10 10:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 84.5

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Benzo[b]fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Benzo[g,h,i]perylene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Benzo[k]fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Chrysene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Dibenz(a,h)anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Fluorene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Indeno[1,2,3-cd]pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Naphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Phenanthrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1
Pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:09	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*42 - 140*	*07/13/10 12:44*	*07/21/10 17:09*	*1*
Nitrobenzene-d5	*99*		*38 - 141*	*07/13/10 12:44*	*07/21/10 17:09*	*1*
Terphenyl-d14	*75*		*42 - 151*	*07/13/10 12:44*	*07/21/10 17:09*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**85**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SED-004

Lab Sample ID: ATG0029-30
Date Collected: 07/08/10 10:40
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		22.2		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:39	1
Residual Range Organics	ND		55.5		mg/kg dry	☼	07/10/10 12:30	07/12/10 11:39	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*98.5*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:39*	*1*
Triacontane	*83.2*		*50 - 150*	*07/10/10 12:30*	*07/12/10 11:39*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**86.8**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.92		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3
Benzene	ND		0.00960		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3
Toluene	ND		0.0192		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3
Ethylbenzene	ND	C8	0.0192		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3
Xylenes (total)	ND		0.0538		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:30	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*81.0*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:30*	*33.3*
a,a,a-TFT (FID)	*76.1*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:30*	*33.3*
4-BFB (PID)	*89.7*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 07:30*	*33.3*

Client Sample ID: RDM-SED-004

Lab Sample ID: ATG0029-30
Date Collected: 07/08/10 10:40
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.8

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-TFT (PID)	89.3		50 - 150	07/10/10 12:11	07/12/10 07:30	33.3

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
2-Methylnaphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Acenaphthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Acenaphthylene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[a]anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[a]pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[b]fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[g,h,i]perylene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Benzo[k]fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Chrysene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Dibenz(a,h)anthracene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Fluoranthene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Fluorene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Indeno[1,2,3-cd]pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Naphthalene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Phenanthrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1
Pyrene	ND		5.9		ug/Kg dry		07/13/10 12:44	07/21/10 17:28	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	107		42 - 140	07/13/10 12:44	07/21/10 17:28	1
Nitrobenzene-d5	96		38 - 141	07/13/10 12:44	07/21/10 17:28	1
Terphenyl-d14	75		42 - 151	07/13/10 12:44	07/21/10 17:28	1

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**81**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SED-003-DUP

Lab Sample ID: ATG0029-31
Date Collected: 07/08/10 10:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.4

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 12:12	1
Residual Range Organics	ND		54.4		mg/kg dry	☼	07/10/10 12:30	07/12/10 12:12	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	102		50 - 150	07/10/10 12:30	07/12/10 12:12	1
Triacontane	103		50 - 150	07/10/10 12:30	07/12/10 12:12	1

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**91.4**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Client Sample ID: RDM-SED-003-DUP

Lab Sample ID: ATG0029-31
Date Collected: 07/08/10 10:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.4

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.42		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3
Benzene	ND		0.00711		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3
Toluene	ND		0.0142		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3
Ethylbenzene	ND	C8	0.0142		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3
Xylenes (total)	ND		0.0398		mg/kg dry	☼	07/10/10 12:11	07/12/10 07:57	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*126*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:57*	*33.3*
a,a,a-TFT (FID)	*75.4*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:57*	*33.3*
4-BFB (PID)	*134*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 07:57*	*33.3*
a,a,a-TFT (PID)	*86.6*		*50 - 150*	*07/10/10 12:11*	*07/12/10 07:57*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
2-Methylnaphthalene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Acenaphthene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Acenaphthylene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Anthracene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[a]anthracene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[a]pyrene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[b]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[g,h,i]perylene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Benzo[k]fluoranthene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Chrysene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Dibenz(a,h)anthracene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Fluoranthene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Fluorene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Indeno[1,2,3-cd]pyrene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Naphthalene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Phenanthrene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1
Pyrene	ND		5.6		ug/Kg dry		07/13/10 12:44	07/21/10 17:48	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*104*		*42 - 140*	*07/13/10 12:44*	*07/21/10 17:48*	*1*
Nitrobenzene-d5	*94*		*38 - 141*	*07/13/10 12:44*	*07/21/10 17:48*	*1*
Terphenyl-d14	*75*		*42 - 151*	*07/13/10 12:44*	*07/21/10 17:48*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**85**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-DC-001

Lab Sample ID: ATG0029-32
Date Collected: 07/09/10 13:30
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 78.6

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**83.5**		24.7		mg/kg dry	☼	07/10/10 12:30	07/12/10 12:12	1
Residual Range Organics	ND		61.8		mg/kg dry	☼	07/10/10 12:30	07/12/10 12:12	1

Client Sample ID: RDM-DC-001

Date Collected: 07/09/10 13:30
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-32

Matrix: Soil
Percent Solids: 78.6

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*105*		*50 - 150*	*07/10/10 12:30*	*07/12/10 12:12*	*1*
Triacontane	*94.7*		*50 - 150*	*07/10/10 12:30*	*07/12/10 12:12*	*1*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**78.6**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		2.63		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3
Benzene	ND		0.0131		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3
Toluene	ND		0.0263		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3
Ethylbenzene	ND	C8	0.0263		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3
Xylenes (total)	ND		0.0736		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:24	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*131*		*50 - 150*	*07/10/10 12:11*	*07/12/10 08:24*	*33.3*
a,a,a-TFT (FID)	*94.6*		*50 - 150*	*07/10/10 12:11*	*07/12/10 08:24*	*33.3*
4-BFB (PID)	*142*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 08:24*	*33.3*
a,a,a-TFT (PID)	*109*		*50 - 150*	*07/10/10 12:11*	*07/12/10 08:24*	*33.3*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
2-Methylnaphthalene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Acenaphthene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Acenaphthylene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Anthracene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[a]anthracene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[a]pyrene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[b]fluoranthene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[g,h,i]perylene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Benzo[k]fluoranthene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Chrysene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Dibenz(a,h)anthracene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Fluoranthene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Fluorene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Indeno[1,2,3-cd]pyrene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Naphthalene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Phenanthrene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1
Pyrene	ND		6.7		ug/Kg dry		07/13/10 12:44	07/21/10 18:08	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*42 - 140*	*07/13/10 12:44*	*07/21/10 18:08*	*1*
Nitrobenzene-d5	*93*		*38 - 141*	*07/13/10 12:44*	*07/21/10 18:08*	*1*
Terphenyl-d14	*77*		*42 - 151*	*07/13/10 12:44*	*07/21/10 18:08*	*1*

Method: Moisture - Percent Moisture

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**25**		0.10		%		07/14/10 14:32	07/14/10 14:32	1
Percent Solids	**75**		0.10		%		07/14/10 14:32	07/14/10 14:32	1

Client Sample ID: RDM-SMDM-001

Date Collected: 07/09/10 13:45
Date Received: 07/09/10 17:58

Lab Sample ID: ATG0029-33

Matrix: Soil
Percent Solids: 65.1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**381000**	**RL7**	49600		mg/kg dry	☼	07/10/10 12:30	07/11/10 15:59	100
Residual Range Organics	**245000**	**RL7**	124000		mg/kg dry	☼	07/10/10 12:30	07/11/10 15:59	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane		*Z3*	*50 - 150*	*07/10/10 12:30*	*07/11/10 15:59*	*100*
Triacontane		*Z3*	*50 - 150*	*07/10/10 12:30*	*07/11/10 15:59*	*100*

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dry Weight	**65.1**		1.00		%		07/10/10 17:06	07/11/10 12:01	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.504**	**RL7**	0.0500		mg/kg dry	☼	07/10/10 12:11	07/12/10 08:52	50

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (PID)	*147*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 08:52*	*50*
a,a,a-TFT (PID)	*181*	*Z1, RL7*	*50 - 150*	*07/10/10 12:11*	*07/12/10 08:52*	*50*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**724**	**RL7**	20.0		mg/kg dry	☼	07/10/10 12:11	07/12/10 09:20	100
Toluene	**12.3**	**RL7**	0.200		mg/kg dry	☼	07/10/10 12:11	07/12/10 09:20	100
Ethylbenzene	**12.8**	**RL7, C8**	0.200		mg/kg dry	☼	07/10/10 12:11	07/12/10 09:20	100
Ethylbenzene	**15.9**	**C8, RL7**	0.200		mg/kg dry	☼	07/13/10 11:03	07/14/10 18:55	100
Xylenes (total)	**80.8**	**RL7**	1.12		mg/kg dry	☼	07/10/10 12:11	07/12/10 10:41	200

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*217*	*ZX*	*50 - 150*	*07/10/10 12:11*	*07/12/10 09:20*	*100*
a,a,a-TFT (FID)	*221*	*Z1, RL7*	*50 - 150*	*07/10/10 12:11*	*07/12/10 09:20*	*100*
4-BFB (PID)	*132*	*C4*	*50 - 150*	*07/10/10 12:11*	*07/12/10 09:20*	*100*
4-BFB (PID)	*115*		*50 - 150*	*07/10/10 12:11*	*07/12/10 10:41*	*200*
4-BFB (PID)	*139*		*50 - 150*	*07/13/10 11:03*	*07/14/10 18:55*	*100*
a,a,a-TFT (PID)	*172*	*Z1, RL7*	*50 - 150*	*07/10/10 12:11*	*07/12/10 09:20*	*100*
a,a,a-TFT (PID)	*191*	*RL7*	*50 - 150*	*07/10/10 12:11*	*07/12/10 10:41*	*200*
a,a,a-TFT (PID)	*157*	*Z1, RL7*	*50 - 150*	*07/13/10 11:03*	*07/14/10 18:55*	*100*

Method: 1020A - Ignitability, Setaflash Closed-Cup Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	**>212**				Degrees F		07/12/10 16:15	07/12/10 16:15	1

Method: 6010B TMP - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.2		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Barium	**0.99**		0.53		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Cadmium	ND		0.53		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Chromium	ND		1.4		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Lead	**5.3**		1.6		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Selenium	ND		5.3		mg/Kg		07/13/10 14:14	07/13/10 18:15	1
Silver	ND		1.1		mg/Kg		07/13/10 14:14	07/13/10 18:15	1

Client Sample ID: RDM-SMDM-001

Lab Sample ID: ATG0029-33

Date Collected: 07/09/10 13:45

Matrix: Soil

Date Received: 07/09/10 17:58

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.33**		0.016		mg/Kg		07/13/10 14:22	07/15/10 14:39	1

Method: 8082 STD - Polychlorinated Biphenyls (PCBs) by Gas Chromatogr

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1221	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1232	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1242	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1248	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1254	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1
PCB-1260	ND		0.36		mg/Kg		07/13/10 08:03	07/14/10 10:36	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*60 - 125*	*07/13/10 08:03*	*07/14/10 10:36*	*1*
Tetrachloro-m-xylene	*69*		*45 - 155*	*07/13/10 08:03*	*07/14/10 10:36*	*1*

Method: 8260B TCLP - Volatile Organic Compounds (GC/MS) TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
1,2-Dichloroethane	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
2-Butanone	ND		1000		ug/L		07/26/10 11:20	07/26/10 11:20	100
Benzene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Carbon tetrachloride	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Chlorobenzene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Chloroform	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Tetrachloroethene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Trichloroethene	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100
Vinyl chloride	ND		100		ug/L		07/26/10 11:20	07/26/10 11:20	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*
Ethylbenzene-d10	*85*		*80 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*
Fluorobenzene (Surr)	*99*		*80 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*
Toluene-d8 (Surr)	*90*		*85 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*
Trifluorotoluene (Surr)	*108*		*80 - 120*	*07/26/10 11:20*	*07/26/10 11:20*	*100*

Method: 8270C PAH - Semivolatile Compounds by Gas Chromatography/Mass

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**760000**		15000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
2,4-Dimethylphenol	ND		49000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
2-Methylnaphthalene	**1200000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
2-Methylphenol	ND		49000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
3 & 4 Methylphenol	ND		98000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Acenaphthene	**52000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Acenaphthylene	ND		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Anthracene	**39000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[a]anthracene	**25000**		12000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[a]pyrene	**17000**		15000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[b]fluoranthene	**11000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[g,h,i]perylene	ND		12000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Benzo[k]fluoranthene	ND		12000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Chrysene	**55000**		12000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10

Client Sample ID: RDM-SMDM-001

Lab Sample ID: ATG0029-33

Date Collected: 07/09/10 13:45

Matrix: Soil

Date Received: 07/09/10 17:58

Method: 8270C PAH - Semivolatile Compounds by Gas Chromatography/Mass (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		20000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Fluoranthene	**23000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Fluorene	**98000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Indeno[1,2,3-cd]pyrene	ND		20000		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Naphthalene	**410000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Phenanthrene	**230000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10
Pyrene	**84000**		9800		ug/Kg		07/13/10 08:07	07/14/10 14:02	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*28 - 143*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
2-Fluorobiphenyl	*80*		*42 - 140*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
2-Fluorophenol	*80*		*36 - 145*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
Nitrobenzene-d5	*94*		*38 - 141*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
Phenol-d5	*75*		*38 - 149*	*07/13/10 08:07*	*07/14/10 14:02*	*10*
Terphenyl-d14	*74*		*42 - 151*	*07/13/10 08:07*	*07/14/10 14:02*	*10*

Method: 8270C TCLP - Semivolatile Compounds by Gas Chromatography/Mass

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
2,4,5-Trichlorophenol	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
2,4,6-Trichlorophenol	ND		15		ug/L		07/24/10 14:25	07/27/10 16:52	1
2,4-Dinitrotoluene	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
2-Methylphenol	**37**		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
3 & 4 Methylphenol	**59**		20		ug/L		07/24/10 14:25	07/27/10 16:52	1
Hexachlorobenzene	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
Hexachlorobutadiene	ND		15		ug/L		07/24/10 14:25	07/27/10 16:52	1
Hexachloroethane	ND		15		ug/L		07/24/10 14:25	07/27/10 16:52	1
Nitrobenzene	ND		10		ug/L		07/24/10 14:25	07/27/10 16:52	1
Pentachlorophenol	ND		18		ug/L		07/24/10 14:25	07/27/10 16:52	1
Pyridine	ND		50		ug/L		07/24/10 14:25	07/27/10 16:52	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*92*		*47 - 158*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
2-Fluorobiphenyl	*86*		*44 - 157*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
2-Fluorophenol	*93*		*44 - 148*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
Nitrobenzene-d5	*93*		*49 - 154*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
Phenol-d5	*95*		*33 - 147*	*07/24/10 14:25*	*07/27/10 16:52*	*1*
Terphenyl-d14	*74*		*27 - 177*	*07/24/10 14:25*	*07/27/10 16:52*	*1*

Method: 9045C - pH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.96**				SU		07/12/10 16:47	07/12/10 16:47	1

Client Sample ID: RDMSW-001

Lab Sample ID: ATG0029-34

Date Collected: 07/07/10 17:55

Matrix: Water

Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.532		mg/l		07/15/10 14:21	07/17/10 02:39	1
Residual Range Organics	ND		0.532		mg/l		07/15/10 14:21	07/17/10 02:39	1

Client Sample ID: RDMSW-001

Lab Sample ID: ATG0029-34

Date Collected: 07/07/10 17:55

Matrix: Water

Date Received: 07/09/10 17:58

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	83.8		50 - 150	07/15/10 14:21	07/17/10 02:39	1
Triacontane	85.3		50 - 150	07/15/10 14:21	07/17/10 02:39	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	122	B4	50.0		ug/l		07/20/10 14:44	07/20/10 20:38	1
Benzene	ND		0.500		ug/l		07/20/10 14:44	07/20/10 20:38	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 20:38	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 20:38	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 20:38	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	67.5	C4	50 - 150	07/20/10 14:44	07/20/10 20:38	1
4-BFB (PID)	75.2	C4	50 - 150	07/20/10 14:44	07/20/10 20:38	1
a,a,a-TFT (FID)	115		50 - 150	07/20/10 14:44	07/20/10 20:38	1
a,a,a-TFT (PID)	105		50 - 150	07/20/10 14:44	07/20/10 20:38	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 14:51	1
Acenaphthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Acenaphthylene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[a]anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[b]fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[g,h,i]perylene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Benzo[k]fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Chrysene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Dibenz(a,h)anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Fluorene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Indeno[1,2,3-cd]pyrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Naphthalene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Phenanthrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1
Pyrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 14:51	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	107		60 - 140	07/14/10 11:21	07/26/10 14:51	1
Nitrobenzene-d5	111		60 - 140	07/14/10 11:21	07/26/10 14:51	1
Terphenyl-d14	87		60 - 140	07/14/10 11:21	07/26/10 14:51	1

Client Sample ID: RDM-SW-002

Lab Sample ID: ATG0029-35

Date Collected: 07/07/10 18:15

Matrix: Water

Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.442		mg/l		07/15/10 14:21	07/15/10 19:47	1
Residual Range Organics	ND		0.442		mg/l		07/15/10 14:21	07/15/10 19:47	1

Client Sample ID: RDM-SW-002

Lab Sample ID: ATG0029-35

Date Collected: 07/07/10 18:15

Matrix: Water

Date Received: 07/09/10 17:58

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	96.4		50 - 150	07/15/10 14:21	07/15/10 19:47	1
Triacontane	94.0		50 - 150	07/15/10 14:21	07/15/10 19:47	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**75.0**	**B4**	50.0		ug/l		07/20/10 14:44	07/20/10 21:05	1
Benzene	ND		0.500		ug/l		07/20/10 14:44	07/20/10 21:05	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 21:05	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 21:05	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 21:05	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	58.1	C4	50 - 150	07/20/10 14:44	07/20/10 21:05	1
4-BFB (PID)	65.5	C4	50 - 150	07/20/10 14:44	07/20/10 21:05	1
a,a,a-TFT (FID)	105		50 - 150	07/20/10 14:44	07/20/10 21:05	1
a,a,a-TFT (PID)	102		50 - 150	07/20/10 14:44	07/20/10 21:05	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 15:11	1
Acenaphthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Acenaphthylene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[a]anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[b]fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[g,h,i]perylene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Benzo[k]fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Chrysene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Dibenz(a,h)anthracene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Fluoranthene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Fluorene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Indeno[1,2,3-cd]pyrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Naphthalene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Phenanthrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1
Pyrene	ND		0.099		ug/L		07/14/10 11:21	07/26/10 15:11	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	105		60 - 140	07/14/10 11:21	07/26/10 15:11	1
Nitrobenzene-d5	114		60 - 140	07/14/10 11:21	07/26/10 15:11	1
Terphenyl-d14	89		60 - 140	07/14/10 11:21	07/26/10 15:11	1

Client Sample ID: RDM-SW-003

Lab Sample ID: ATG0029-36

Date Collected: 07/07/10 10:10

Matrix: Water

Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.439		mg/l		07/15/10 14:21	07/17/10 03:12	1
Residual Range Organics	ND		0.439		mg/l		07/15/10 14:21	07/17/10 03:12	1

Client Sample ID: RDM-SW-003

Lab Sample ID: ATG0029-36

Date Collected: 07/07/10 10:10

Matrix: Water

Date Received: 07/09/10 17:58

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	94.7		50 - 150	07/15/10 14:21	07/17/10 03:12	1
Triacontane	84.6		50 - 150	07/15/10 14:21	07/17/10 03:12	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**74.1**	**B4**	50.0		ug/l		07/20/10 14:44	07/20/10 19:15	1
Benzene	ND		0.500		ug/l		07/20/10 14:44	07/20/10 19:15	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 19:15	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 19:15	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 19:15	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	54.8	C4	50 - 150	07/20/10 14:44	07/20/10 19:15	1
4-BFB (PID)	62.7	C4	50 - 150	07/20/10 14:44	07/20/10 19:15	1
a,a,a-TFT (FID)	114		50 - 150	07/20/10 14:44	07/20/10 19:15	1
a,a,a-TFT (PID)	109		50 - 150	07/20/10 14:44	07/20/10 19:15	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 16:15	1
Acenaphthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Acenaphthylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[a]anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[b]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[g,h,i]perylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Benzo[k]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Chrysene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Dibenz(a,h)anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Fluorene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Indeno[1,2,3-cd]pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Naphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Phenanthrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1
Pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:15	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	111		60 - 140	07/14/10 11:21	07/26/10 16:15	1
Nitrobenzene-d5	115		60 - 140	07/14/10 11:21	07/26/10 16:15	1
Terphenyl-d14	93		60 - 140	07/14/10 11:21	07/26/10 16:15	1

Client Sample ID: RDM-SW-004

Lab Sample ID: ATG0029-37

Date Collected: 07/07/10 10:40

Matrix: Water

Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.431		mg/l		07/15/10 14:21	07/17/10 03:12	1
Residual Range Organics	ND		0.431		mg/l		07/15/10 14:21	07/17/10 03:12	1

Client Sample ID: RDM-SW-004

Lab Sample ID: ATG0029-37

Date Collected: 07/07/10 10:40

Matrix: Water

Date Received: 07/09/10 17:58

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	84.3		50 - 150	07/15/10 14:21	07/17/10 03:12	1
Triacontane	86.5		50 - 150	07/15/10 14:21	07/17/10 03:12	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**76.1**	**B4**	50.0		ug/l		07/20/10 14:44	07/20/10 19:43	1
Benzene	ND		0.500		ug/l		07/20/10 14:44	07/20/10 19:43	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 19:43	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 19:43	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 19:43	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	45.4	C4, Z6	50 - 150	07/20/10 14:44	07/20/10 19:43	1
4-BFB (PID)	51.7	C4	50 - 150	07/20/10 14:44	07/20/10 19:43	1
a,a,a-TFT (FID)	97.7		50 - 150	07/20/10 14:44	07/20/10 19:43	1
a,a,a-TFT (PID)	95.1		50 - 150	07/20/10 14:44	07/20/10 19:43	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 16:34	1
Acenaphthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Acenaphthylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[a]anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[b]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[g,h,i]perylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Benzo[k]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Chrysene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Dibenz(a,h)anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Fluorene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Indeno[1,2,3-cd]pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Naphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Phenanthrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1
Pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:34	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	107		60 - 140	07/14/10 11:21	07/26/10 16:34	1
Nitrobenzene-d5	117		60 - 140	07/14/10 11:21	07/26/10 16:34	1
Terphenyl-d14	94		60 - 140	07/14/10 11:21	07/26/10 16:34	1

Client Sample ID: RDM-SW-003-DUP

Lab Sample ID: ATG0029-38

Date Collected: 07/07/10 10:10

Matrix: Water

Date Received: 07/09/10 17:58

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.417		mg/l		07/15/10 14:21	07/17/10 03:46	1
Residual Range Organics	ND		0.417		mg/l		07/15/10 14:21	07/17/10 03:46	1

Client Sample ID: RDM-SW-003-DUP

Lab Sample ID: ATG0029-38

Date Collected: 07/07/10 10:10

Matrix: Water

Date Received: 07/09/10 17:58

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	95.4		50 - 150	07/15/10 14:21	07/17/10 03:46	1
Triacontane	84.0		50 - 150	07/15/10 14:21	07/17/10 03:46	1

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**50.2**	**B4**	50.0		ug/l		07/20/10 14:44	07/20/10 20:11	1
Benzene	ND		0.500		ug/l		07/20/10 14:44	07/20/10 20:11	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 20:11	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 20:11	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 20:11	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB (FID)	84.2	C4	50 - 150	07/20/10 14:44	07/20/10 20:11	1
4-BFB (PID)	94.0	C4	50 - 150	07/20/10 14:44	07/20/10 20:11	1
a,a,a-TFT (FID)	103		50 - 150	07/20/10 14:44	07/20/10 20:11	1
a,a,a-TFT (PID)	97.4		50 - 150	07/20/10 14:44	07/20/10 20:11	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
2-Methylnaphthalene	ND		0.13		ug/L		07/14/10 11:21	07/26/10 16:54	1
Acenaphthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Acenaphthylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[a]anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[a]pyrene	ND		0.20		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[b]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[g,h,i]perylene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Benzo[k]fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Chrysene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Dibenz(a,h)anthracene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Fluoranthene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Fluorene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Indeno[1,2,3-cd]pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Naphthalene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Phenanthrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1
Pyrene	ND		0.098		ug/L		07/14/10 11:21	07/26/10 16:54	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	110		60 - 140	07/14/10 11:21	07/26/10 16:54	1
Nitrobenzene-d5	114		60 - 140	07/14/10 11:21	07/26/10 16:54	1
Terphenyl-d14	92		60 - 140	07/14/10 11:21	07/26/10 16:54	1

Client Sample ID: Trip Blank - 1

Lab Sample ID: ATG0029-39

Date Collected: 07/07/10 10:45

Matrix: Soil

Date Received: 07/09/10 17:58

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.33		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3
Benzene	ND		0.0166		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3
Toluene	ND		0.0333		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3

Client Sample ID: Trip Blank - 1

Lab Sample ID: ATG0029-39
Matrix: Soil
Date Collected: 07/07/10 10:45
Date Received: 07/09/10 17:58

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND	C8	0.0333		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3
Xylenes (total)	ND		0.0932		mg/kg wet		07/10/10 12:11	07/12/10 01:38	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*128*		*50 - 150*	*07/10/10 12:11*	*07/12/10 01:38*	*33.3*
a,a,a-TFT (FID)	*91.0*		*50 - 150*	*07/10/10 12:11*	*07/12/10 01:38*	*33.3*
4-BFB (PID)	*139*		*50 - 150*	*07/10/10 12:11*	*07/12/10 01:38*	*33.3*
a,a,a-TFT (PID)	*104*		*50 - 150*	*07/10/10 12:11*	*07/12/10 01:38*	*33.3*

Client Sample ID: Trip Blank

Lab Sample ID: ATG0029-40
Matrix: Water
Date Collected: 07/07/10 00:00
Date Received: 07/09/10 17:58

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	B4	50.0		ug/l		07/20/10 14:44	07/20/10 18:20	1
Benzene	ND		0.500		ug/l		07/20/10 14:44	07/20/10 18:20	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 18:20	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/20/10 18:20	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/20/10 18:20	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*68.9*	*C4*	*50 - 150*	*07/20/10 14:44*	*07/20/10 18:20*	*1*
4-BFB (PID)	*76.6*	*C4*	*50 - 150*	*07/20/10 14:44*	*07/20/10 18:20*	*1*
a,a,a-TFT (FID)	*121*		*50 - 150*	*07/20/10 14:44*	*07/20/10 18:20*	*1*
a,a,a-TFT (PID)	*118*		*50 - 150*	*07/20/10 14:44*	*07/20/10 18:20*	*1*

Client Sample ID: RDMSW-001

Lab Sample ID: ATG0029-41
Matrix: Water
Date Collected: 07/07/10 17:55
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1	100		ug/l		07/26/10 10:47	07/26/10 14:55	1
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 14:55	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 14:55	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 14:55	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 14:55	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*111*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 14:55*	*1*
Dibromofluoromethane	*103*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 14:55*	*1*
Toluene-d8	*106*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 14:55*	*1*

Client Sample ID: RDM-SW-002

Lab Sample ID: ATG0029-42
Matrix: Water
Date Collected: 07/07/10 18:15
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1	100		ug/l		07/26/10 10:47	07/26/10 12:49	1

Client Sample ID: RDM-SW-002

Lab Sample ID: ATG0029-42
Date Collected: 07/07/10 18:15
Matrix: Water
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 12:49	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 12:49	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 12:49	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 12:49	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*111*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 12:49*	*1*
Dibromofluoromethane	*99.1*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 12:49*	*1*
Toluene-d8	*105*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 12:49*	*1*

Client Sample ID: RDM-SW-003

Lab Sample ID: ATG0029-43
Date Collected: 07/07/10 10:10
Matrix: Water
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1	100		ug/l		07/26/10 10:47	07/26/10 15:26	1
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 15:26	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 15:26	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 15:26	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 15:26	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*112*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 15:26*	*1*
Dibromofluoromethane	*103*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 15:26*	*1*
Toluene-d8	*104*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 15:26*	*1*

Client Sample ID: RDM-SW-004

Lab Sample ID: ATG0029-44
Date Collected: 07/07/10 10:40
Matrix: Water
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1	100		ug/l		07/26/10 10:47	07/26/10 15:57	1
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 15:57	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 15:57	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 15:57	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 15:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*110*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 15:57*	*1*
Dibromofluoromethane	*103*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 15:57*	*1*
Toluene-d8	*105*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 15:57*	*1*

Client Sample ID: RDM-SW-003-DUP

Lab Sample ID: ATG0029-45
Date Collected: 07/07/10 10:10
Matrix: Water
Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1	100		ug/l		07/26/10 10:47	07/26/10 16:28	1

Client Sample ID: RDM-SW-003-DUP

Lab Sample ID: ATG0029-45

Date Collected: 07/07/10 10:10

Matrix: Water

Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 16:28	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 16:28	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 16:28	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 16:28	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*111*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 16:28*	*1*
Dibromofluoromethane	*105*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 16:28*	*1*
Toluene-d8	*104*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 16:28*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: ATG0029-46

Date Collected: 07/07/10 00:00

Matrix: Water

Date Received: 07/09/10 17:58

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	H1	100		ug/l		07/26/10 10:47	07/26/10 17:00	1
Benzene	ND	H1	0.500		ug/l		07/26/10 10:47	07/26/10 17:00	1
Toluene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 17:00	1
Ethylbenzene	ND	H1	1.00		ug/l		07/26/10 10:47	07/26/10 17:00	1
Xylenes (total)	ND	H1	3.00		ug/l		07/26/10 10:47	07/26/10 17:00	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*110*	*H1*	*85 - 115*	*07/26/10 10:47*	*07/26/10 17:00*	*1*
Dibromofluoromethane	*104*	*H1*	*65 - 125*	*07/26/10 10:47*	*07/26/10 17:00*	*1*
Toluene-d8	*105*	*H1*	*78 - 115*	*07/26/10 10:47*	*07/26/10 17:00*	*1*

Surrogate Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		4-BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(85-115)	(65-125)	(78-115)
10G0085-BLK1	10G0085-BLK1	111	94.5	105
10G0085-BS1	10G0085-BS1	109	93.7	106
10G0085-BSD1	10G0085-BSD1	109	96.7	105
10G0085-DUP1	RDM-SW-002	109	98.7	106
10G0085-MS1	RDM-SW-002	109	101	106
10G0085-MSD1	RDM-SW-002	110	102	105
ATG0029-41	RDMSW-001	111 H1	103 H1	106 H1
ATG0029-42	RDM-SW-002	111 H1	99.1 H1	105 H1
ATG0029-43	RDM-SW-003	112 H1	103 H1	104 H1
ATG0029-44	RDM-SW-004	110 H1	103 H1	105 H1
ATG0029-45	RDM-SW-003-DUP	111 H1	105 H1	104 H1
ATG0029-46	Trip Blank	110 H1	104 H1	105 H1

Surrogate Legend

4-BFB = 4-BFB

DBFM = Dibromofluoromethane

TOL = Toluene-d8

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	TC
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
10G0037-BLK1	10G0037-BLK1	108	82.0
10G0037-DUP1	RDBH08-18-19	101	104
10G0037-MS1	RDBH08-18-19	103	98.4
10G0037-MSD1	RDBH08-18-19	101	96.5
10G0038-BLK1	10G0038-BLK1	92.4	68.7
10G0038-DUP1	RDM-SED-001	98.8	101
10G0038-MS1	RDM-SED-001	103	98.4
10G0038-MSD1	RDM-SED-001	106	102
ATG0029-01	RDBH01-6.5-8.5	99.8	103
ATG0029-02	RDBH01-12.5-13.5	100	96.7
ATG0029-03	RDBH02-5-7	98.9	103
ATG0029-04	RDBH02-11.5-13	100	95.3
ATG0029-05	RDBH03-4-5	96.0	98.7
ATG0029-06	RDBH03-12-13	97.3	92.0
ATG0029-07	RDBH04-0.5-2	102	105
ATG0029-08	RDBH04-15-15.5	99.9	93.8
ATG0029-09	RDBH05-22-23	96.6	97.1
ATG0029-10	RDBH05-34-35	101	94.2
ATG0029-11	RDBH06-11-13	97.7	100
ATG0029-12	RDBH06-21.5-22.5	104	92.8
ATG0029-13	RDBH06-921.5-22.5	101	101
ATG0029-14	RDBH07-8-9	104	91.2
ATG0029-15	RDBH07-22.5-23.5	102	106
ATG0029-16	RDBH08-0-1.5	107	98.1
ATG0029-17	RDBH08-18-19	93.8	97.0

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Matrix: Soil **Prep Type: total**

Lab Sample ID	Client Sample ID	1COD (50-150)	TC (50-150)
ATG0029-18	RDBH09-10-11.5	103	104
ATG0029-19	RDBH09-15-16	101	92.0
ATG0029-20	RDBH10-2-4	95.0	96.2
ATG0029-21	RDBH11-30-31.5	106	92.9
ATG0029-22	RDBH11-930-31.5	105	105
ATG0029-23	RDBH10-6-7.5	109	93.4
ATG0029-24	RDBH11-0-2	100	102
ATG0029-25	RDBH12-1-3	103	91.2
ATG0029-26	RDBH12-21-22.5	103	104
ATG0029-27	RDM-SED-001	90.9	93.2
ATG0029-28	RDM-SED-002	99.9	87.4
ATG0029-29	RDM-SED-003	102	104
ATG0029-30	RDM-SED-004	98.5	83.2
ATG0029-31	RDM-SED-003-DUP	102	103
ATG0029-32	RDM-DC-001	105	94.7
ATG0029-33	RDM-SMDM-001	Z3	Z3

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

1COD = 1-Chlorooctadecane

TC = Triacontane

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Soil **Prep Type: total**

Lab Sample ID	Client Sample ID	1COD (60-120)	TC (60-120)
10G0037-BS1	10G0037-BS1	110	95.7
10G0037-BSD1	10G0037-BSD1	113	98.7
10G0038-BS1	10G0038-BS1	95.7	82.7
10G0038-BSD1	10G0038-BSD1	105	91.1

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

1COD = 1-Chlorooctadecane

TC = Triacontane

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Water **Prep Type: total**

Lab Sample ID	Client Sample ID	1COD (50-150)	TC (50-150)
10G0057-BLK1	10G0057-BLK1	88.6	91.8
10G0057-DUP1	RDM-SW-002	96.7	94.4
10G0057-MS1	RDM-SW-002	106	98.0
10G0057-MSD1	RDM-SW-002	103	96.0
ATG0029-34	RDMSW-001	83.8	85.3
ATG0029-35	RDM-SW-002	96.4	94.0

Percent Surrogate Recovery (Acceptance Limits)

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	1COD (50-150)	TC (50-150)						
ATG0029-36	RDM-SW-003	94.7	84.6						
ATG0029-37	RDM-SW-004	84.3	86.5						
ATG0029-38	RDM-SW-003-DUP	95.4	84.0						

Surrogate Legend

1COD = 1-Chlorooctadecane

TC = Triacontane

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	1COD (60-120)	TC (60-120)						
10G0057-BS1	10G0057-BS1	96.0	91.8						
10G0057-BS2	10G0057-BS2	105	99.9						
10G0057-BS3	10G0057-BS3	101	94.1						
10G0057-BSD1	10G0057-BSD1	102	93.7						

Surrogate Legend

1COD = 1-Chlorooctadecane

TC = Triacontane

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	4-BFB (FID) (50-150)	TFT(FID) (50-150)	4-BFB (PID) (50-150)	a,a-TFT (PI (50-150)	TFT(FID) (50-150)	TFT(FID) (60-120)	4-BFB (PID) (50-150)	4-BFB (PID) (60-120)
10G0034-BLK1	10G0034-BLK1	101	101	111	113	101		111	
10G0034-DUP1	RDBH01-6.5-8.5	113	99.6			99.6			
10G0034-MS1	RDBH08-18-19			103	113			103	
10G0034-MSD1	RDBH08-18-19			87.7	105			87.7	
10G0035-BLK1	10G0035-BLK1	97.2	96.4	106	111	96.4		106	
10G0035-DUP1	ATF0070-01	99.4	96.3			96.3			
10G0035-MS1	ATF0070-01			102	113			102	
10G0035-MSD1	ATF0070-01			117	112			117	
10G0048-BLK1	10G0048-BLK1	91.5 C4	96.0	101	111	96.0		101	
10G0048-DUP1	RDBH01-6.5-8.5	89.6 C4	90.0			90.0			
10G0048-MS1	RDBH01-6.5-8.5			77.5	105			77.5	
10G0048-MSD1	RDBH01-6.5-8.5			98.2	108			98.2	
ATG0029-01	RDBH01-6.5-8.5	126	96.2	133	110 C8	96.2		133	
ATG0029-02	RDBH01-12.5-13.5	86.4	100	92.6	113 C8	100		92.6	
ATG0029-03	RDBH02-5-7	106	94.7	114	107 C8	94.7		114	
ATG0029-03 - RE	RDBH02-5-7			110	112			110	
ATG0029-04	RDBH02-11.5-13	65.9	98.1	74.3 C4	112	98.1		74.3 C4	
ATG0029-04 - RE	RDBH02-11.5-13			83.7	115			83.7	
ATG0029-05	RDBH03-4-5	71.5	96.7	80.1 C4	109	96.7		80.1 C4	
ATG0029-05 - RE	RDBH03-4-5			74.3	112			74.3	

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		4-BFB (FID)	TFT(FID)	4-BFB (PID)	a,a-TFT (PI	TFT(FID)	TFT(FID)	4-BFB (PID)	4-BFB (PID)
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(60-120)	(50-150)	(60-120)
ATG0029-06	RDBH03-12-13	101	99.1	110 C4	112	99.1		110 C4	
ATG0029-06 - RE	RDBH03-12-13			75.1	105			75.1	
ATG0029-07	RDBH04-0.5-2	88.3	99.3	98.5 C4	113	99.3		98.5 C4	
ATG0029-07 - RE	RDBH04-0.5-2			105	113			105	
ATG0029-08	RDBH04-15-15.5	50.7	89.1	56.1 C4	103	89.1		56.1 C4	
ATG0029-08 - RE	RDBH04-15-15.5			63.6	107			63.6	
ATG0029-09	RDBH05-22-23	140	93.1	87.8 C4	105	93.1		87.8 C4	
ATG0029-09 - RE	RDBH05-22-23			128	117			128	
ATG0029-10	RDBH05-34-35	75.8	89.2	83.1 C4	101	89.2		83.1 C4	
ATG0029-10 - RE	RDBH05-34-35			74.6	103			74.6	
ATG0029-11	RDBH06-11-13	151 Z1	111	123 C4	120	111		123 C4	
ATG0029-11 - RE	RDBH06-11-13			98.6	113			98.6	
ATG0029-12	RDBH06-21.5-22.5	206 Z1	106	132 C4	115	106		132 C4	
ATG0029-12 - RE	RDBH06-21.5-22.5			174 ZX	128			174 ZX	
ATG0029-13	RDBH06-921.5-22.5	235 Z1	107	146 C4	116	107		146 C4	
ATG0029-13 - RE	RDBH06-921.5-22.5	220 ZX	101	138	112	101		138	
ATG0029-14	RDBH07-8-9	142	98.6	117	113	98.6		117	
ATG0029-15	RDBH07-22.5-23.5	121	96.7	125	111	96.7		125	
ATG0029-16	RDBH08-0-1.5	164 Z1	99.2	112	114	99.2		112	
ATG0029-17	RDBH08-18-19	82.1	92.4	89.4	105 C8	92.4		89.4	
ATG0029-18	RDBH09-10-11.5	87.0	95.9	93.6	110	95.9		93.6	
ATG0029-19	RDBH09-15-16	86.0	94.9	93.3	109	94.9		93.3	
ATG0029-20	RDBH10-2-4	86.7	95.6	95.5	109	95.6		95.5	
ATG0029-21	RDBH11-30-31.5	124	96.9	124	110	96.9		124	
ATG0029-22	RDBH11-930-31.5	155 Z1	100	146	116	100		146	
ATG0029-22 - RE	RDBH11-930-31.5			94.1	111			94.1	
ATG0029-23	RDBH10-6-7.5	239 ZX	97.1	182 ZX	112	97.1		182 ZX	
ATG0029-23 - RE	RDBH10-6-7.5			123	112			123	
ATG0029-24	RDBH11-0-2	98.5	93.1	111	107	93.1		111	
ATG0029-25	RDBH12-1-3	126	99.0	142	114	99.0		142	
ATG0029-26	RDBH12-21-22.5	154 Z1	101	155 Z1	115	101		155 Z1	
ATG0029-26 - RE	RDBH12-21-22.5			107	110			107	
ATG0029-27	RDM-SED-001	128	142	142 C4	166 Z1	142		142 C4	
ATG0029-28	RDM-SED-002	118	68.3	130 C4	80.1	68.3		130 C4	
ATG0029-29	RDM-SED-003	90.6	87.8	99.4 C4	102	87.8		99.4 C4	
ATG0029-30	RDM-SED-004	81.0	76.1	89.7 C4	89.3	76.1		89.7 C4	
ATG0029-31	RDM-SED-003-DUP	126	75.4	134 C4	86.6	75.4		134 C4	
ATG0029-32	RDM-DC-001	131	94.6	142 C4	109	94.6		142 C4	
ATG0029-33	RDM-SMDM-001			147 C4	181 Z1, RL7			147 C4	
ATG0029-33 - RE	RDM-SMDM-001	217 ZX	221 Z1, RL7	132 C4	172 Z1, RL7	221 Z1, RL7		132 C4	
ATG0029-33 - RE	RDM-SMDM-001			115	191 RL7			115	
ATG0029-33 - RE	RDM-SMDM-001			139	157 Z1, RL7			139	
ATG0029-39	Trip Blank - 1	128	91.0	139	104	91.0		139	

		Percent Surrogate Recovery (Acceptance Limits)	
		a,a-TFT (PI	a,a-TFT (PI
Lab Sample ID	Client Sample ID	(50-150)	(60-120)
10G0034-BLK1	10G0034-BLK1	113	
10G0034-DUP1	RDBH01-6.5-8.5		
10G0034-MS1	RDBH08-18-19	113	

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	a,a-TFT (PII (50-150)	a,a-TFT (PII (60-120)						
10G0034-MSD1	RDBH08-18-19	105							
10G0035-BLK1	10G0035-BLK1	111							
10G0035-DUP1	ATF0070-01								
10G0035-MS1	ATF0070-01	113							
10G0035-MSD1	ATF0070-01	112							
10G0048-BLK1	10G0048-BLK1	111							
10G0048-DUP1	RDBH01-6.5-8.5								
10G0048-MS1	RDBH01-6.5-8.5	105							
10G0048-MSD1	RDBH01-6.5-8.5	108							
ATG0029-01	RDBH01-6.5-8.5	110 C8							
ATG0029-02	RDBH01-12.5-13.5	113 C8							
ATG0029-03	RDBH02-5-7	107 C8							
ATG0029-03 - RE	RDBH02-5-7	112							
ATG0029-04	RDBH02-11.5-13	112							
ATG0029-04 - RE	RDBH02-11.5-13	115							
ATG0029-05	RDBH03-4-5	109							
ATG0029-05 - RE	RDBH03-4-5	112							
ATG0029-06	RDBH03-12-13	112							
ATG0029-06 - RE	RDBH03-12-13	105							
ATG0029-07	RDBH04-0.5-2	113							
ATG0029-07 - RE	RDBH04-0.5-2	113							
ATG0029-08	RDBH04-15-15.5	103							
ATG0029-08 - RE	RDBH04-15-15.5	107							
ATG0029-09	RDBH05-22-23	105							
ATG0029-09 - RE	RDBH05-22-23	117							
ATG0029-10	RDBH05-34-35	101							
ATG0029-10 - RE	RDBH05-34-35	103							
ATG0029-11	RDBH06-11-13	120							
ATG0029-11 - RE	RDBH06-11-13	113							
ATG0029-12	RDBH06-21.5-22.5	115							
ATG0029-12 - RE	RDBH06-21.5-22.5	128							
ATG0029-13	RDBH06-921.5-22.5	116							
ATG0029-13 - RE	RDBH06-921.5-22.5	112							
ATG0029-14	RDBH07-8-9	113							
ATG0029-15	RDBH07-22.5-23.5	111							
ATG0029-16	RDBH08-0-1.5	114							
ATG0029-17	RDBH08-18-19	105 C8							
ATG0029-18	RDBH09-10-11.5	110							
ATG0029-19	RDBH09-15-16	109							
ATG0029-20	RDBH10-2-4	109							
ATG0029-21	RDBH11-30-31.5	110							
ATG0029-22	RDBH11-930-31.5	116							
ATG0029-22 - RE	RDBH11-930-31.5	111							
ATG0029-23	RDBH10-6-7.5	112							
ATG0029-23 - RE	RDBH10-6-7.5	112							
ATG0029-24	RDBH11-0-2	107							
ATG0029-25	RDBH12-1-3	114							
ATG0029-26	RDBH12-21-22.5	115							
ATG0029-26 - RE	RDBH12-21-22.5	110							
ATG0029-27	RDM-SED-001	166 Z1							
ATG0029-28	RDM-SED-002	80.1							

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		a,a-TFT (PII	a,a-TFT (PII						
Lab Sample ID	Client Sample ID	(50-150)	(60-120)						
ATG0029-29	RDM-SED-003	102							
ATG0029-30	RDM-SED-004	89.3							
ATG0029-31	RDM-SED-003-DUP	86.6							
ATG0029-32	RDM-DC-001	109							
ATG0029-33	RDM-SMDM-001	181 Z1, RL7							
ATG0029-33 - RE	RDM-SMDM-001	172 Z1, RL7							
ATG0029-33 - RE	RDM-SMDM-001	191 RL7							
ATG0029-33 - RE	RDM-SMDM-001	157 Z1, RL7							
ATG0029-39	Trip Blank - 1	104							

Surrogate Legend

4-BFB (FID) = 4-BFB (FID)
TFT(FID) = a,a,a-TFT (FID)
4-BFB (PID) = 4-BFB (PID)
a,a,a-TFT (PID) = a,a,a-TFT (PID)

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		4-BFB (FID)	TFT(FID)	4-BFB (PID)	a,a-TFT (PII				
Lab Sample ID	Client Sample ID	(60-120)	(60-120)	(60-120)	(60-120)				
10G0034-BS1	10G0034-BS1	113	123 Z1	122 Z1	128 Z1				
10G0034-BSD1	10G0034-BSD1	128 Z1	118	138 Z1	125 Z1				
10G0035-BS1	10G0035-BS1	101	121 Z1	110	129 Z1				
10G0035-BSD1	10G0035-BSD1	86.6	114	95.1	121 Z1				
10G0048-BS1	10G0048-BS1	83.9 C4	113	94.1	123 Z1				
10G0048-BSD1	10G0048-BSD1	95.6 C4	121 Z1	107	124 Z1				

Surrogate Legend

4-BFB (FID) = 4-BFB (FID)
TFT(FID) = a,a,a-TFT (FID)
4-BFB (PID) = 4-BFB (PID)
a,a,a-TFT (PID) = a,a,a-TFT (PID)

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		4-BFB (FID)	TFT(FID)	4-BFB (PID)	a,a-TFT (PII				
Lab Sample ID	Client Sample ID			(50-150)	(50-150)				
ATG0029-01 - RE	RDBH01-6.5-8.5			72.4	107				

Surrogate Legend

4-BFB (FID) = 4-BFB (FID)
TFT(FID) = a,a,a-TFT (FID)
4-BFB (PID) = 4-BFB (PID)
a,a,a-TFT (PID) = a,a,a-TFT (PID)

Surrogate Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		4-BFB (FID)	4-BFB (PID)	TFT(FID)	a,a-TFT (PI	TFT(FID)	TFT(FID)	a,a-TFT (PI	a,a-TFT (PI
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(60-120)	(50-150)	(60-120)
10G0075-BLK1	10G0075-BLK1	26.9 Z6, C4	30.3 Z6, C4	70.5	68.3	70.5		68.3	
10G0075-DUP1	RDM-SW-002	62.0 C4		105		105			
10G0075-MS1	RDM-SW-002		106 C4		114			114	
10G0075-MSD1	RDM-SW-002		70.7 C4		104			104	
ATG0029-34	RDMSW-001	67.5 C4	75.2 C4	115	105	115		105	
ATG0029-35	RDM-SW-002	58.1 C4	65.5 C4	105	102	105		102	
ATG0029-36	RDM-SW-003	54.8 C4	62.7 C4	114	109	114		109	
ATG0029-37	RDM-SW-004	45.4 C4, Z6	51.7 C4	97.7	95.1	97.7		95.1	
ATG0029-38	RDM-SW-003-DUP	84.2 C4	94.0 C4	103	97.4	103		97.4	
ATG0029-40	Trip Blank	68.9 C4	76.6 C4	121	118	121		118	

Surrogate Legend

4-BFB (FID) = 4-BFB (FID)
4-BFB (PID) = 4-BFB (PID)
TFT(FID) = a,a,a-TFT (FID)
a,a,a-TFT (PID) = a,a,a-TFT (PID)

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)			
		4-BFB (FID)	4-BFB (PID)	TFT(FID)	a,a-TFT (PI
Lab Sample ID	Client Sample ID	(60-120)	(60-120)	(60-120)	(60-120)
10G0075-BS1	10G0075-BS1	25.6 Z6, C4	26.5 Z6, C4	67.3	60.1
10G0075-BSD1	10G0075-BSD1	55.8 Z6, C4	61.6 C4	122 Z1	109

Surrogate Legend

4-BFB (FID) = 4-BFB (FID)
4-BFB (PID) = 4-BFB (PID)
TFT(FID) = a,a,a-TFT (FID)
a,a,a-TFT (PID) = a,a,a-TFT (PID)

Method: 8082 STD - Polychlorinated Biphenyls (PCBs) by Gas Chromatogr

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB	TCX
Lab Sample ID	Client Sample ID	(60-125)	(45-155)
ATG0029-33	RDM-SMDM-001	72	69

Surrogate Legend

DCB = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Method: 8082 STD - Polychlorinated Biphenyls (PCBs) by Gas Chromatogr

Matrix: Waste **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		DCB	TCX						
Lab Sample ID	Client Sample ID	(60-125)	(45-155)						
580-67734-35	580-67734-35	96	94						
580-67734-36	580-67734-36	98	93						

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8260B TCLP - Volatile Organic Compounds (GC/MS) TCLP

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		BFB	EBD10	FB	TOL	TFT			
Lab Sample ID	Client Sample ID	(75-120)	(80-120)	(80-120)	(85-120)	(80-120)			
ATG0029-33	RDM-SMDM-001	101	85	99	90	108			

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

EBD10 = Ethylbenzene-d10

FB = Fluorobenzene (Surr)

TFT = Trifluorotoluene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260B TCLP - Volatile Organic Compounds (GC/MS) TCLP

Matrix: Waste **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		BFB	EBD10	FB	TOL	TFT			
Lab Sample ID	Client Sample ID	(75-120)	(80-120)	(80-120)	(85-120)	(80-120)			
580-68375-6	580-68375-6	99	90	98	91	104			

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

EBD10 = Ethylbenzene-d10

FB = Fluorobenzene (Surr)

TFT = Trifluorotoluene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8270C PAH - Semivolatile Compounds by Gas Chromatography/Mass

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	PHL	TPH		
Lab Sample ID	Client Sample ID	(28-143)	(42-140)	(36-145)	(38-141)	(38-149)	(42-151)		
ATG0029-33	RDM-SMDM-001	75	80	80	94	75	74		

Surrogate Legend

2FP = 2-Fluorophenol

FBP = 2-Fluorobiphenyl

NBZ = Nitrobenzene-d5

PHL = Phenol-d5

TBP = 2,4,6-Tribromophenol

TPH = Terphenyl-d14

Surrogate Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Method: 8270C PAH - Semivolatile Compounds by Gas Chromatography/Mass

Matrix: Waste **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(28-143)	(42-140)	(36-145)	(38-141)	(38-149)	(42-151)
580-67750-4	580-67750-4	74	87	92	85	90	72
580-67750-5	580-67750-5	82	83	91	86	89	78

Surrogate Legend

2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TBP = 2,4,6-Tribromophenol
TPH = Terphenyl-d14

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(60-140)	(60-140)	(60-140)
2040735D	RDM-SW-002	99	109	85
2040735S	RDM-SW-002	101	107	87
580-68389-8	580-68389-8	90	109	75
580-68389-9	580-68389-9	97	105	81
ATG0029-34	RDMSW-001	107	111	87
ATG0029-35	RDM-SW-002	105	114	89
ATG0029-36	RDM-SW-003	111	115	93
ATG0029-37	RDM-SW-004	107	117	94
ATG0029-38	RDM-SW-003-DUP	110	114	92

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPH = Terphenyl-d14

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(42-140)	(38-141)	(42-151)
2040717D	RDBH08-18-19	128	137	108
2040717S	RDBH08-18-19	107	115	92
2040728D	RDM-SED-002	104	101	71
2040728S	RDM-SED-002	105	95	73
580-68111-9	580-68111-9	96	95	63
580-68111-10	580-68111-10	92	91	65
580-68158-5	580-68158-5	103	102	73
580-68158-6	580-68158-6	100	94	73
ATG0029-01	RDBH01-6.5-8.5	76	82	56
ATG0029-02	RDBH01-12.5-13.5	105	106	77
ATG0029-03	RDBH02-5-7	94	97	71
ATG0029-04	RDBH02-11.5-13	100	101	71
ATG0029-05	RDBH03-4-5	106	101	78
ATG0029-06	RDBH03-12-13	119	110	83

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(42-140)	(38-141)	(42-151)
ATG0029-07	RDBH04-0.5-2	107	101	74
ATG0029-08	RDBH04-15-15.5	129	117	90
ATG0029-09	RDBH05-22-23	69	101	78
ATG0029-10	RDBH05-34-35	114	101	76
ATG0029-11	RDBH06-11-13	136	126	92
ATG0029-12	RDBH06-21.5-22.5	80	87	68
ATG0029-13	RDBH06-921.5-22.5	81	85	72
ATG0029-14	RDBH07-8-9	78	119	74
ATG0029-15	RDBH07-22.5-23.5	110	108	83
ATG0029-16	RDBH08-0-1.5	93	92	76
ATG0029-17	RDBH08-18-19	104	107	84
ATG0029-18	RDBH09-10-11.5	113	124	86
ATG0029-19	RDBH09-15-16	123	134	106
ATG0029-20	RDBH10-2-4	114	114	95
ATG0029-21	RDBH11-30-31.5	88	84	66
ATG0029-22	RDBH11-930-31.5	85	91	74
ATG0029-23	RDBH10-6-7.5	83	82	79
ATG0029-24	RDBH11-0-2	95	106	78
ATG0029-25	RDBH12-1-3	98	102	71
ATG0029-26	RDBH12-21-22.5	105	99	75
ATG0029-27	RDM-SED-001	108	96	72
ATG0029-28	RDM-SED-002	108	97	75
ATG0029-29	RDM-SED-003	107	99	75
ATG0029-30	RDM-SED-004	107	96	75
ATG0029-31	RDM-SED-003-DUP	104	94	75
ATG0029-32	RDM-DC-001	101	93	77

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPH = Terphenyl-d14

Method: 8270C TCLP - Semivolatile Compounds by Gas Chromatography/Mass

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(47-158)	(44-157)	(44-148)	(49-154)	(33-147)	(27-177)
ATG0029-33	RDM-SMDM-001	92	86	93	93	95	74

Surrogate Legend

2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TBP = 2,4,6-Tribromophenol
TPH = Terphenyl-d14

Surrogate Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Method: 8270C TCLP - Semivolatile Compounds by Gas Chromatography/Mass

Matrix: Waste **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	PHL	TPH		
Lab Sample ID	**Client Sample ID**	**(47-158)**	**(44-157)**	**(44-148)**	**(49-154)**	**(33-147)**	**(27-177)**		
2040733S	RDM-SMDM-001	93	85	94	92	94	77		

Surrogate Legend

2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TBP = 2,4,6-Tribromophenol
TPH = Terphenyl-d14

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Lab Sample ID: 10G0085-BLK1 — **Client Sample ID: 10G0085-BLK1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000333 — **Prep Batch: 10G0085_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		100		ug/l		07/26/10 10:47	07/26/10 11:13	1
Benzene	ND		0.500		ug/l		07/26/10 10:47	07/26/10 11:13	1
Toluene	ND		1.00		ug/l		07/26/10 10:47	07/26/10 11:13	1
Ethylbenzene	ND		1.00		ug/l		07/26/10 10:47	07/26/10 11:13	1
Xylenes (total)	ND		3.00		ug/l		07/26/10 10:47	07/26/10 11:13	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*111*		*85 - 115*	*07/26/10 10:47*	*07/26/10 11:13*	*1*
Dibromofluoromethane	*94.5*		*65 - 125*	*07/26/10 10:47*	*07/26/10 11:13*	*1*
Toluene-d8	*105*		*78 - 115*	*07/26/10 10:47*	*07/26/10 11:13*	*1*

Lab Sample ID: 10G0085-BS1 — **Client Sample ID: 10G0085-BS1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000333 — **Prep Batch: 10G0085_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Organics	550	554		ug/l		101	60 - 120
Benzene	6.80	5.81		ug/l		85.4	67 - 125
Toluene	51.6	45.5		ug/l		88.1	80 - 120
Ethylbenzene	11.5	10.6		ug/l		92.0	80 - 120
Xylenes (total)	58.0	53.6		ug/l		92.4	80 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-BFB	*109*		*85 - 115*
Dibromofluoromethane	*93.7*		*65 - 125*
Toluene-d8	*106*		*78 - 115*

Lab Sample ID: 10G0085-BSD1 — **Client Sample ID: 10G0085-BSD1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000333 — **Prep Batch: 10G0085_P**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics	550	571		ug/l		104	60 - 120	3.05	20
Benzene	6.80	5.81		ug/l		85.4	67 - 125	0.00	20
Toluene	51.6	44.3		ug/l		85.9	80 - 120	2.58	20
Ethylbenzene	11.5	10.4		ug/l		90.9	80 - 120	1.24	20
Xylenes (total)	58.0	52.6		ug/l		90.8	80 - 120	1.84	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-BFB	*109*		*85 - 115*
Dibromofluoromethane	*96.7*		*65 - 125*
Toluene-d8	*105*		*78 - 115*

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Lab Sample ID: 10G0085-MS1 — **Client Sample ID: RDM-SW-002**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000333 — **Prep Batch: 10G0085_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	ND	H1	20.0	18.0		ug/l		90.0	65 - 138
Toluene	ND	H1	20.0	19.3		ug/l		96.4	80 - 120
Ethylbenzene	ND	H1	20.0	19.5		ug/l		97.4	76 - 130
Xylenes (total)	ND	H1	60.0	59.5		ug/l		98.6	65 - 140

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
4-BFB	*109*		*85 - 115*
Dibromofluoromethane	*101*		*65 - 125*
Toluene-d8	*106*		*78 - 115*

Lab Sample ID: 10G0085-MSD1 — **Client Sample ID: RDM-SW-002**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000333 — **Prep Batch: 10G0085_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	ND	H1	20.0	18.8		ug/l		94.2	65 - 138	4.67	20
Toluene	ND	H1	20.0	20.0		ug/l		100	80 - 120	3.92	20
Ethylbenzene	ND	H1	20.0	20.5		ug/l		103	76 - 130	5.25	20
Xylenes (total)	ND	H1	60.0	62.2		ug/l		103	65 - 140	4.42	20

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
4-BFB	*110*		*85 - 115*
Dibromofluoromethane	*102*		*65 - 125*
Toluene-d8	*105*		*78 - 115*

Lab Sample ID: 10G0085-DUP1 — **Client Sample ID: RDM-SW-002**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000333 — **Prep Batch: 10G0085_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	ND	H1		51.0		ug/l				6.32	12
Benzene	ND	H1		ND		ug/l					25
Toluene	ND	H1		ND		ug/l					25
Ethylbenzene	ND	H1		ND		ug/l					25
Xylenes (total)	ND	H1		ND		ug/l					25

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
4-BFB	*109*		*85 - 115*
Dibromofluoromethane	*98.7*		*65 - 125*
Toluene-d8	*106*		*78 - 115*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Lab Sample ID: 10G0037-BLK1 — **Client Sample ID: 10G0037-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000280 — **Prep Batch: 10G0037_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.0		mg/kg wet		07/10/10 12:27	07/11/10 12:42	1
Residual Range Organics	ND		50.0		mg/kg wet		07/10/10 12:27	07/11/10 12:42	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*108*		*50 - 150*	*07/10/10 12:27*	*07/11/10 12:42*	*1*
Triacontane	*82.0*		*50 - 150*	*07/10/10 12:27*	*07/11/10 12:42*	*1*

Lab Sample ID: 10G0037-BS1 — **Client Sample ID: 10G0037-BS1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000280 — **Prep Batch: 10G0037_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	129	129		mg/kg wet		99.8	75 - 125
Residual Range Organics	130	119		mg/kg wet		91.6	60 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*110*		*60 - 120*
Triacontane	*95.7*		*60 - 120*

Lab Sample ID: 10G0037-BSD1 — **Client Sample ID: 10G0037-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000280 — **Prep Batch: 10G0037_P**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics	129	133		mg/kg wet		103	75 - 125	3.22	20
Residual Range Organics	130	123		mg/kg wet		94.5	60 - 120	3.11	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
1-Chlorooctadecane	*113*		*60 - 120*
Triacontane	*98.7*		*60 - 120*

Lab Sample ID: 10G0037-MS1 — **Client Sample ID: RDBH08-18-19**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000279 — **Prep Batch: 10G0037_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	ND		136	123		mg/kg dry	☼	86.2	75 - 125
Residual Range Organics	ND		137	104		mg/kg dry	☼	72.7	60 - 120

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
1-Chlorooctadecane	*103*		*50 - 150*
Triacontane	*98.4*		*50 - 150*

Lab Sample ID: 10G0037-MSD1 — **Client Sample ID: RDBH08-18-19**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000279 — **Prep Batch: 10G0037_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics	ND		131	115		mg/kg dry	☼	83.1	75 - 125	6.83	25

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10G0037-MSD1 — **Client Sample ID: RDBH08-18-19**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000279 — **Prep Batch: 10G0037_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Residual Range Organics	ND		132	98.0		mg/kg dry	☼	70.9	60 - 120	5.69	25

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1-Chlorooctadecane	*101*		*50 - 150*
Triacontane	*96.5*		*50 - 150*

Lab Sample ID: 10G0037-DUP1 — **Client Sample ID: RDBH08-18-19**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000279 — **Prep Batch: 10G0037_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics	ND			5.36		mg/kg dry	☼			7.49	20
Residual Range Organics	ND			4.68		mg/kg dry	☼			11.9	50

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
1-Chlorooctadecane	*101*		*50 - 150*
Triacontane	*104*		*50 - 150*

Lab Sample ID: 10G0038-BLK1 — **Client Sample ID: 10G0038-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000280 — **Prep Batch: 10G0038_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.0		mg/kg wet		07/10/10 12:30	07/11/10 14:21	1
Residual Range Organics	ND		50.0		mg/kg wet		07/10/10 12:30	07/11/10 14:21	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*92.4*		*50 - 150*	*07/10/10 12:30*	*07/11/10 14:21*	*1*
Triacontane	*68.7*		*50 - 150*	*07/10/10 12:30*	*07/11/10 14:21*	*1*

Lab Sample ID: 10G0038-BS1 — **Client Sample ID: 10G0038-BS1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000280 — **Prep Batch: 10G0038_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Diesel Range Organics			129	115		mg/kg wet		89.3	75 - 125		
Residual Range Organics			130	107		mg/kg wet		82.7	60 - 120		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*95.7*		*60 - 120*
Triacontane	*82.7*		*60 - 120*

Lab Sample ID: 10G0038-BSD1 — **Client Sample ID: 10G0038-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000280 — **Prep Batch: 10G0038_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics			129	125		mg/kg wet		97.2	75 - 125	8.39	20
Residual Range Organics			130	116		mg/kg wet		89.3	60 - 120	7.65	20

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10G0038-BSD1 — **Client Sample ID: 10G0038-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000280 — **Prep Batch: 10G0038_P**

Surrogate	LCS Dup % Recovery	LCS Dup Qualifier	Limits
1-Chlorooctadecane	105		60 - 120
Triacontane	91.1		60 - 120

Lab Sample ID: 10G0038-MS1 — **Client Sample ID: RDM-SED-001**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000279 — **Prep Batch: 10G0038_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	ND		210	183		mg/kg dry	☼	87.2	75 - 125
Residual Range Organics	ND		212	167		mg/kg dry	☼	74.5	60 - 120

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
1-Chlorooctadecane	103		50 - 150
Triacontane	98.4		50 - 150

Lab Sample ID: 10G0038-MSD1 — **Client Sample ID: RDM-SED-001**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000279 — **Prep Batch: 10G0038_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics	ND		191	176		mg/kg dry	☼	92.1	75 - 125	3.84	25
Residual Range Organics	ND		193	156		mg/kg dry	☼	75.8	60 - 120	7.03	25

Surrogate	Matrix Spike Dup % Recovery	Matrix Spike Dup Qualifier	Limits
1-Chlorooctadecane	106		50 - 150
Triacontane	102		50 - 150

Lab Sample ID: 10G0038-DUP1 — **Client Sample ID: RDM-SED-001**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000279 — **Prep Batch: 10G0038_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics	ND			ND		mg/kg dry	☼				20
Residual Range Organics	ND			11.6		mg/kg dry	☼			22.8	50

Surrogate	Duplicate % Recovery	Duplicate Qualifier	Limits
1-Chlorooctadecane	98.8		50 - 150
Triacontane	101		50 - 150

Lab Sample ID: 10G0057-BLK1 — **Client Sample ID: 10G0057-BLK1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.500		mg/l		07/15/10 14:21	07/15/10 17:10	1
Residual Range Organics	ND		0.500		mg/l		07/15/10 14:21	07/15/10 17:10	1

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	88.6		50 - 150	07/15/10 14:21	07/15/10 17:10	1

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10G0057-BLK1 — **Client Sample ID: 10G0057-BLK1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triacontane	91.8		50 - 150	07/15/10 14:21	07/15/10 17:10	1

Lab Sample ID: 10G0057-BS1 — **Client Sample ID: 10G0057-BS1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	10.3	10.1		mg/l		97.9	75 - 125
Residual Range Organics	10.4	9.58		mg/l		92.2	60 - 120

Surrogate	LCS % Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	96.0		60 - 120
Triacontane	91.8		60 - 120

Lab Sample ID: 10G0057-BS2 — **Client Sample ID: 10G0057-BS2**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0057_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	10.3	9.71		mg/l		94.3	75 - 125
Residual Range Organics	10.4	8.56		mg/l		82.3	60 - 120

Surrogate	LCS % Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	105		60 - 120
Triacontane	99.9		60 - 120

Lab Sample ID: 10G0057-BS3 — **Client Sample ID: 10G0057-BS3**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	10.3	10.1		mg/l		97.7	75 - 125
Residual Range Organics	10.4	9.62		mg/l		92.5	60 - 120

Surrogate	LCS % Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	101		60 - 120
Triacontane	94.1		60 - 120

Lab Sample ID: 10G0057-BSD1 — **Client Sample ID: 10G0057-BSD1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics	10.3	10.1		mg/l		97.8	75 - 125	0.02	20
Residual Range Organics	10.4	9.76		mg/l		93.9	60 - 120	82 1.86	20

Surrogate	LCS Dup % Recovery	LCS Dup Qualifier	Limits
1-Chlorooctadecane	102		60 - 120

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10G0057-BSD1 — **Client Sample ID: 10G0057-BSD1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000302 — **Prep Batch: 10G0057_P**

Surrogate	LCS Dup % Recovery	LCS Dup Qualifier	Limits
Triacontane	93.7		60 - 120

Lab Sample ID: 10G0057-MS1 — **Client Sample ID: RDM-SW-002**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0057_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	ND		9.81	9.03		mg/l		92.0	75 - 125
Residual Range Organics	ND		9.90	8.06		mg/l		81.4	60 - 120

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
1-Chlorooctadecane	106		50 - 150
Triacontane	98.0		50 - 150

Lab Sample ID: 10G0057-MSD1 — **Client Sample ID: RDM-SW-002**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0057_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics	ND		10.2	9.15		mg/l		89.7	75 - 125	1.39	25
Residual Range Organics	ND		10.3	8.27		mg/l		80.3	60 - 120	2.59	25

Surrogate	Matrix Spike Dup % Recovery	Matrix Spike Dup Qualifier	Limits
1-Chlorooctadecane	103		50 - 150
Triacontane	96.0		50 - 150

Lab Sample ID: 10G0057-DUP1 — **Client Sample ID: RDM-SW-002**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000301 — **Prep Batch: 10G0057_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics	ND		ND		mg/l			20
Residual Range Organics	ND		ND		mg/l			50

Surrogate	Duplicate % Recovery	Duplicate Qualifier	Limits
1-Chlorooctadecane	96.7		50 - 150
Triacontane	94.4		50 - 150

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods

Lab Sample ID: 10G0039-DUP1 — **Client Sample ID: RDBH08-18-19**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0039 — **Prep Batch: 10G0039_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Dry Weight	93.0		93.2		%		0.25 1	25

Method: TA-SOP - Physical Parameters by APHA/ASTM/EPA Methods (Continued)

Lab Sample ID: 10G0040-DUP1 — **Client Sample ID: ATG0015-01**
Matrix: Soil — **Prep Type: total**
Analysis Batch: 10G0040 — **Prep Batch: 10G0040_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Dry Weight	96.6			96.3		%				0.222	25

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101

Lab Sample ID: 10G0034-BLK1 — **Client Sample ID: 10G0034-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000278 — **Prep Batch: 10G0034_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.33		mg/kg wet		07/10/10 12:09	07/10/10 15:57	33.3
Benzene	ND		0.0166		mg/kg wet		07/10/10 12:09	07/10/10 15:57	33.3
Toluene	ND		0.0333		mg/kg wet		07/10/10 12:09	07/10/10 15:57	33.3
Ethylbenzene	ND		0.0333		mg/kg wet		07/10/10 12:09	07/10/10 15:57	33.3
Xylenes (total)	ND		0.0932		mg/kg wet		07/10/10 12:09	07/10/10 15:57	33.3

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*101*		*50 - 150*	*07/10/10 12:09*	*07/10/10 15:57*	*33.3*
a,a,a-TFT (FID)	*101*		*50 - 150*	*07/10/10 12:09*	*07/10/10 15:57*	*33.3*
4-BFB (PID)	*111*		*50 - 150*	*07/10/10 12:09*	*07/10/10 15:57*	*33.3*
a,a,a-TFT (PID)	*113*		*50 - 150*	*07/10/10 12:09*	*07/10/10 15:57*	*33.3*

Lab Sample ID: 10G0034-BS1 — **Client Sample ID: 10G0034-BS1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000278 — **Prep Batch: 10G0034_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Gasoline Range Organics			22.0	18.9		mg/kg wet		85.9	60 - 120		
Benzene			0.272	0.293		mg/kg wet		108	70 - 130		
Toluene			2.06	2.04		mg/kg wet		98.6	70 - 130		
Ethylbenzene			0.460	0.518		mg/kg wet		113	70 - 130		
Xylenes (total)			2.32	2.27		mg/kg wet		97.8	70 - 130		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-BFB (FID)	*113*		*60 - 120*
a,a,a-TFT (FID)	*123*	*Z1*	*60 - 120*
4-BFB (PID)	*122*	*Z1*	*60 - 120*
a,a,a-TFT (PID)	*128*	*Z1*	*60 - 120*

Lab Sample ID: 10G0034-BSD1 — **Client Sample ID: 10G0034-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000278 — **Prep Batch: 10G0034_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics			22.0	17.8		mg/kg wet		81.0	60 - 120	5.78	20
Benzene			0.272	0.293		mg/kg wet		108	70 - 130	0.0227	20
Toluene			2.06	2.04		mg/kg wet		98.9	70 - 130	0.212	20
Ethylbenzene			0.460	0.516		mg/kg wet		112	70 - 130	0.399	20

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Lab Sample ID: 10G0034-BSD1 — **Client Sample ID: 10G0034-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000278 — **Prep Batch: 10G0034_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Xylenes (total)			2.32	2.27		mg/kg wet		97.8	70 - 130	0.00	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-BFB (FID)	*128*	*Z1*	*60 - 120*
a,a,a-TFT (FID)	*118*		*60 - 120*
4-BFB (PID)	*138*	*Z1*	*60 - 120*
a,a,a-TFT (PID)	*125*	*Z1*	*60 - 120*

Lab Sample ID: 10G0034-MS1 — **Client Sample ID: RDBH08-18-19**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000278 — **Prep Batch: 10G0034_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Benzene	ND	C8	0.897	1.38	M7, R11	mg/kg dry	☼	153	60 - 140		
Toluene	ND	C8	0.897	1.40	M7, R11	mg/kg dry	☼	153	60 - 140		
Ethylbenzene	ND	C8	0.897	1.54	M7, R11	mg/kg dry	☼	172	60 - 140		
Xylenes (total)	ND	C8	2.69	3.94	M7, R11	mg/kg dry	☼	146	60 - 140		

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
4-BFB (PID)	*103*		*50 - 150*
a,a,a-TFT (PID)	*113*		*50 - 150*

Lab Sample ID: 10G0034-MSD1 — **Client Sample ID: RDBH08-18-19**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000278 — **Prep Batch: 10G0034_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	ND	C8	0.897	0.832	M7, R11	mg/kg dry	☼	92.1	60 - 140	49.6	30
Toluene	ND	C8	0.897	0.851	M7, R11	mg/kg dry	☼	91.8	60 - 140	48.6	30
Ethylbenzene	ND	C8	0.897	0.935	M7, R11	mg/kg dry	☼	104	60 - 140	49.0	30
Xylenes (total)	ND	C8	2.69	2.38	M7, R11	mg/kg dry	☼	88.3	60 - 140	49.4	30

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
4-BFB (PID)	*87.7*		*50 - 150*
a,a,a-TFT (PID)	*105*		*50 - 150*

Lab Sample ID: 10G0034-DUP1 — **Client Sample ID: RDBH01-6.5-8.5**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000278 — **Prep Batch: 10G0034_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	ND			ND		mg/kg dry	☼				35

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
4-BFB (FID)	*113*		*50 - 150*
a,a,a-TFT (FID)	*99.6*		*50 - 150*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Lab Sample ID: 10G0035-BLK1 — **Client Sample ID: 10G0035-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000282 — **Prep Batch: 10G0035_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.33		mg/kg wet		07/10/10 12:11	07/11/10 20:14	33.3
Benzene	ND	C8	0.0166		mg/kg wet		07/10/10 12:11	07/11/10 20:14	33.3
Toluene	ND	C8	0.0333		mg/kg wet		07/10/10 12:11	07/11/10 20:14	33.3
Ethylbenzene	ND	C8	0.0333		mg/kg wet		07/10/10 12:11	07/11/10 20:14	33.3
Xylenes (total)	ND		0.0932		mg/kg wet		07/10/10 12:11	07/11/10 20:14	33.3

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*97.2*		*50 - 150*	*07/10/10 12:11*	*07/11/10 20:14*	*33.3*
a,a,a-TFT (FID)	*96.4*		*50 - 150*	*07/10/10 12:11*	*07/11/10 20:14*	*33.3*
4-BFB (PID)	*106*		*50 - 150*	*07/10/10 12:11*	*07/11/10 20:14*	*33.3*
a,a,a-TFT (PID)	*111*		*50 - 150*	*07/10/10 12:11*	*07/11/10 20:14*	*33.3*

Lab Sample ID: 10G0035-BS1 — **Client Sample ID: 10G0035-BS1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000282 — **Prep Batch: 10G0035_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Organics	22.0	19.5		mg/kg wet		88.8	60 - 120
Benzene	0.272	0.296	C8	mg/kg wet		109	70 - 130
Toluene	2.06	2.05	C8	mg/kg wet		99.4	70 - 130
Ethylbenzene	0.460	0.520	C8	mg/kg wet		113	70 - 130
Xylenes (total)	2.32	2.29		mg/kg wet		98.7	70 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-BFB (FID)	*101*		*60 - 120*
a,a,a-TFT (FID)	*121*	*Z1*	*60 - 120*
4-BFB (PID)	*110*		*60 - 120*
a,a,a-TFT (PID)	*129*	*Z1*	*60 - 120*

Lab Sample ID: 10G0035-BSD1 — **Client Sample ID: 10G0035-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000282 — **Prep Batch: 10G0035_P**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics	22.0	16.8		mg/kg wet		76.3	60 - 120	15.2	20
Benzene	0.272	0.274	C8	mg/kg wet		101	70 - 130	7.49	20
Toluene	2.06	1.91	C8	mg/kg wet		92.8	70 - 130	6.87	20
Ethylbenzene	0.460	0.492	C8	mg/kg wet		107	70 - 130	5.57	20
Xylenes (total)	2.32	2.13		mg/kg wet		92.0	70 - 130	6.96	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-BFB (FID)	*86.6*		*60 - 120*
a,a,a-TFT (FID)	*114*		*60 - 120*
4-BFB (PID)	*95.1*		*60 - 120*
a,a,a-TFT (PID)	*121*	*Z1*	*60 - 120*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Lab Sample ID: 10G0035-MS1 — **Client Sample ID: ATF0070-01**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000282 — **Prep Batch: 10G0035_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	0.0132		1.03	1.75	M7	mg/kg dry	☼	169	60 - 140
Toluene	0.0196		1.03	1.70	M7	mg/kg dry	☼	164	60 - 140
Ethylbenzene	0.00879		1.03	1.82	M7, C8	mg/kg dry	☼	176	60 - 140
Xylenes (total)	ND		3.08	4.64	M7	mg/kg dry	☼	150	60 - 140

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
4-BFB (PID)	*102*		*50 - 150*
a,a,a-TFT (PID)	*113*		*50 - 150*

Lab Sample ID: 10G0035-MSD1 — **Client Sample ID: ATF0070-01**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000282 — **Prep Batch: 10G0035_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	0.0132		1.03	1.97	M7	mg/kg dry	☼	191	60 - 140	11.8	30
Toluene	0.0196		1.03	1.87	M7	mg/kg dry	☼	181	60 - 140	9.70	30
Ethylbenzene	0.00879		1.03	1.94	M7, C8	mg/kg dry	☼	188	60 - 140	6.47	30
Xylenes (total)	ND		3.08	5.10	M7	mg/kg dry	☼	166	60 - 140	9.54	30

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
4-BFB (PID)	*117*		*50 - 150*
a,a,a-TFT (PID)	*112*		*50 - 150*

Lab Sample ID: 10G0035-DUP1 — **Client Sample ID: ATF0070-01**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000282 — **Prep Batch: 10G0035_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	ND			ND		mg/kg dry	☼				35

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
4-BFB (FID)	*99.4*		*50 - 150*
a,a,a-TFT (FID)	*96.3*		*50 - 150*

Lab Sample ID: 10G0048-BLK1 — **Client Sample ID: 10G0048-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000294 — **Prep Batch: 10G0048_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.33		mg/kg wet		07/13/10 11:03	07/14/10 04:57	33.3
Benzene	ND	C8	0.0166		mg/kg wet		07/13/10 11:03	07/14/10 04:57	33.3
Toluene	ND		0.0333		mg/kg wet		07/13/10 11:03	07/14/10 04:57	33.3
Ethylbenzene	ND	C8	0.0333		mg/kg wet		07/13/10 11:03	07/14/10 04:57	33.3
Xylenes (total)	ND		0.0932		mg/kg wet		07/13/10 11:03	07/14/10 04:57	33.3

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*91.5*	*C4*	*50 - 150*	*07/13/10 11:03*	*07/14/10 04:57*	*33.3*
a,a,a-TFT (FID)	*96.0*		*50 - 150*	*07/13/10 11:03*	*07/14/10 04:57*	*33.3*
4-BFB (PID)	*101*		*50 - 150*	*07/13/10 11:03*	*07/14/10 04:57*	*33.3*
a,a,a-TFT (PID)	*111*		*50 - 150*	*07/13/10 11:03*	*07/14/10 04:57*	*33.3*

Lab Sample ID: 10G0048-BS1 | **Client Sample ID: 10G0048-BS1**
Matrix: Soil | **Prep Type: total**
Analysis Batch: T000294 | **Prep Batch: 10G0048_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Gasoline Range Organics			22.0	17.6		mg/kg wet		80.2	60 - 120		
Benzene			0.272	0.281	C8	mg/kg wet		103	70 - 130		
Toluene			2.06	1.98		mg/kg wet		95.8	70 - 130		
Ethylbenzene			0.460	0.503	C8	mg/kg wet		109	70 - 130		
Xylenes (total)			2.32	2.19		mg/kg wet		94.4	70 - 130		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-BFB (FID)	*83.9*	*C4*	*60 - 120*
a,a,a-TFT (FID)	*113*		*60 - 120*
4-BFB (PID)	*94.1*		*60 - 120*
a,a,a-TFT (PID)	*123*	*Z1*	*60 - 120*

Lab Sample ID: 10G0048-BSD1 | **Client Sample ID: 10G0048-BSD1**
Matrix: Soil | **Prep Type: total**
Analysis Batch: T000294 | **Prep Batch: 10G0048_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics			22.0	19.3		mg/kg wet		87.6	60 - 120	8.88	20
Benzene			0.272	0.307	C8	mg/kg wet		113	70 - 130	8.90	20
Toluene			2.06	2.04		mg/kg wet		98.7	70 - 130	2.97	20
Ethylbenzene			0.460	0.512	C8	mg/kg wet		111	70 - 130	1.74	20
Xylenes (total)			2.32	2.17		mg/kg wet		93.6	70 - 130	0.902	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-BFB (FID)	*95.6*	*C4*	*60 - 120*
a,a,a-TFT (FID)	*121*	*Z1*	*60 - 120*
4-BFB (PID)	*107*		*60 - 120*
a,a,a-TFT (PID)	*124*	*Z1*	*60 - 120*

Lab Sample ID: 10G0048-MS1 | **Client Sample ID: RDBH01-6.5-8.5**
Matrix: Soil | **Prep Type: total**
Analysis Batch: T000294 | **Prep Batch: 10G0048_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Benzene	0.00905		0.813	0.942	C8	mg/kg dry	☼	115	60 - 140		
Toluene	0.0313		0.813	0.943		mg/kg dry	☼	112	60 - 140		
Ethylbenzene	0.0106		0.813	1.05	C8	mg/kg dry	☼	128	60 - 140		
Xylenes (total)	0.213	R1	2.44	2.93		mg/kg dry	☼	112	60 - 140		

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
4-BFB (PID)	*77.5*		*50 - 150*
a,a,a-TFT (PID)	*105*		*50 - 150*

Lab Sample ID: 10G0048-MSD1 | **Client Sample ID: RDBH01-6.5-8.5**
Matrix: Soil | **Prep Type: total**
Analysis Batch: T000294 | **Prep Batch: 10G0048_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	0.00905		0.813	1.09	C8	mg/kg dry	☼	133	60 - 140	14.6	30
Toluene	0.0313		0.813	1.08		mg/kg dry	☼	130	60 - 140	13.9	30
Ethylbenzene	0.0106		0.813	1.20	M7, C8	mg/kg dry	☼	147	60 - 140	13.4	30
Xylenes (total)	0.213	R1	2.44	3.37		mg/kg dry	☼	129	60 - 140	13.7	30

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Lab Sample ID: 10G0048-MSD1 — **Client Sample ID: RDBH01-6.5-8.5**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000294 — **Prep Batch: 10G0048_P**

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
4-BFB (PID)	*98.2*		*50 - 150*
a,a,a-TFT (PID)	*108*		*50 - 150*

Lab Sample ID: 10G0048-DUP1 — **Client Sample ID: RDBH01-6.5-8.5**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000294 — **Prep Batch: 10G0048_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	ND			1.07	R2	mg/kg dry	☼				35

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
4-BFB (FID)	*89.6*	*C4*	*50 - 150*
a,a,a-TFT (FID)	*90.0*		*50 - 150*

Lab Sample ID: 10G0075-BLK1 — **Client Sample ID: 10G0075-BLK1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000317 — **Prep Batch: 10G0075_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	91.5	B4, C4	50.0		ug/l		07/20/10 14:44	07/21/10 01:09	1
Benzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/21/10 01:09	1
Toluene	ND	C4	0.500		ug/l		07/20/10 14:44	07/21/10 01:09	1
Ethylbenzene	ND	C4	0.500		ug/l		07/20/10 14:44	07/21/10 01:09	1
Xylenes (total)	ND	C4	1.50		ug/l		07/20/10 14:44	07/21/10 01:09	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB (FID)	*26.9*	*Z6, C4*	*50 - 150*	*07/20/10 14:44*	*07/21/10 01:09*	*1*
4-BFB (PID)	*30.3*	*Z6, C4*	*50 - 150*	*07/20/10 14:44*	*07/21/10 01:09*	*1*
a,a,a-TFT (FID)	*70.5*		*50 - 150*	*07/20/10 14:44*	*07/21/10 01:09*	*1*
a,a,a-TFT (PID)	*68.3*		*50 - 150*	*07/20/10 14:44*	*07/21/10 01:09*	*1*

Lab Sample ID: 10G0075-BS1 — **Client Sample ID: 10G0075-BS1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000317 — **Prep Batch: 10G0075_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Organics	550	355	C4	ug/l		64.6	60 - 120
Benzene	6.80	3.41	L2, C4	ug/l		50.1	70 - 130
Toluene	51.6	21.8	L2, C4	ug/l		42.3	70 - 130
Ethylbenzene	11.5	4.87	L2, C4	ug/l		42.3	70 - 130
Xylenes (total)	58.0	23.1	L2, C4	ug/l		39.9	70 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-BFB (FID)	*25.6*	*Z6, C4*	*60 - 120*
4-BFB (PID)	*26.5*	*Z6, C4*	*60 - 120*
a,a,a-TFT (FID)	*67.3*		*60 - 120*
a,a,a-TFT (PID)	*60.1*		*60 - 120*

Method: AK101/EPA 8021B - Gasoline Range Organics (C6-C10) and BTEX per AK101 (Continued)

Lab Sample ID: 10G0075-BSD1 — **Client Sample ID: 10G0075-BSD1**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000317 — **Prep Batch: 10G0075_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics			550	610	R2, C4	ug/l		111	60 - 120	52.8	20
Benzene			6.80	6.38	R2, C4	ug/l		93.8	70 - 130	60.8	20
Toluene			51.6	45.1	R2, C4	ug/l		87.3	70 - 130	69.5	20
Ethylbenzene			11.5	9.76	R2, C4	ug/l		84.9	70 - 130	66.9	20
Xylenes (total)			58.0	47.4	R2, C4	ug/l		81.7	70 - 130	68.8	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-BFB (FID)	*55.8*	*Z6, C4*	*60 - 120*
4-BFB (PID)	*61.6*	*C4*	*60 - 120*
a,a,a-TFT (FID)	*122*	*Z1*	*60 - 120*
a,a,a-TFT (PID)	*109*		*60 - 120*

Lab Sample ID: 10G0075-MS1 — **Client Sample ID: RDM-SW-002**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000317 — **Prep Batch: 10G0075_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Benzene	ND		20.0	25.8	C4	ug/l		129	60 - 140		
Toluene	ND	C4	20.0	26.2	C4	ug/l		131	60 - 140		
Ethylbenzene	ND	C4	20.0	25.3	C4	ug/l		126	60 - 140		
Xylenes (total)	ND	C4	60.0	78.2	C4	ug/l		130	60 - 140		

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
4-BFB (PID)	*106*	*C4*	*50 - 150*
a,a,a-TFT (PID)	*114*		*50 - 150*

Lab Sample ID: 10G0075-MSD1 — **Client Sample ID: RDM-SW-002**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000317 — **Prep Batch: 10G0075_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	ND		20.0	21.2	C4	ug/l		106	60 - 140	19.8	25
Toluene	ND	C4	20.0	20.9	C4	ug/l		105	60 - 140	22.4	25
Ethylbenzene	ND	C4	20.0	20.4	C4	ug/l		102	60 - 140	21.4	25
Xylenes (total)	ND	C4	60.0	60.6	R2, C4	ug/l		101	60 - 140	25.3	25

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
4-BFB (PID)	*70.7*	*C4*	*50 - 150*
a,a,a-TFT (PID)	*104*		*50 - 150*

Lab Sample ID: 10G0075-DUP1 — **Client Sample ID: RDM-SW-002**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000317 — **Prep Batch: 10G0075_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	75.0	B4		155	R2	ug/l				69.8	35

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
4-BFB (FID)	*62.0*	*C4*	*50 - 150*
a,a,a-TFT (FID)	*105*		*50 - 150*

Method: 6010B TMP - Metals (ICP)

Lab Sample ID: 580-67719-1 **Client Sample ID: 580-67719-1**
Matrix: Waste **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.9		mg/Kg			07/13/10 17:32	1
Barium	ND		0.49		mg/Kg			07/13/10 17:32	1
Cadmium	ND		0.49		mg/Kg			07/13/10 17:32	1
Chromium	ND		1.3		mg/Kg			07/13/10 17:32	1
Lead	ND		1.5		mg/Kg			07/13/10 17:32	1
Selenium	ND		4.9		mg/Kg			07/13/10 17:32	1
Silver	ND		0.97		mg/Kg			07/13/10 17:32	1

Lab Sample ID: 580-67719-2 **Client Sample ID: 580-67719-2**
Matrix: Waste **Prep Type: total**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Arsenic	186	164		mg/Kg		88	80 - 120
Barium	186	198		mg/Kg		107	80 - 120
Cadmium	4.65	4.89		mg/Kg		105	80 - 120
Chromium	18.6	19.3		mg/Kg		104	80 - 120
Lead	46.5	48.4		mg/Kg		104	80 - 120
Selenium	186	159		mg/Kg		85	80 - 120
Silver	27.9	28.3		mg/Kg		101	80 - 120

Lab Sample ID: 580-67719-3 **Client Sample ID: 580-67719-3**
Matrix: Waste **Prep Type: total**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Arsenic	187	162		mg/Kg		87	80 - 120	1	35
Barium	187	194		mg/Kg		103	80 - 120	2	35
Cadmium	4.68	4.88		mg/Kg		104	80 - 120	0	35
Chromium	18.7	18.8		mg/Kg		100	80 - 120	3	35
Lead	46.8	48.2		mg/Kg		103	80 - 120	0	35
Selenium	187	157		mg/Kg		84	80 - 120	1	35
Silver	28.1	28.3		mg/Kg		101	80 - 120	0	35

Lab Sample ID: 580-67719-6 **Client Sample ID: 580-67719-4**
Matrix: Waste **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Arsenic			192	157		mg/Kg		82	75 - 125
Barium			192	354		mg/Kg		93	75 - 125
Cadmium			4.79	5.88		mg/Kg		91	75 - 125
Chromium			19.2	38.1		mg/Kg		92	75 - 125
Lead			47.9	61.6		mg/Kg		80	75 - 125
Selenium			192	150		mg/Kg		78	75 - 125
Silver			28.7	28.5		mg/Kg		99	75 - 125

Method: 6010B TMP - Metals (ICP) (Continued)

Lab Sample ID: 580-67719-7 — **Client Sample ID: 580-67719-4**
Matrix: Waste — **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Arsenic			163	135		mg/Kg		82	75 - 125	15	35
Barium			163	305		mg/Kg		80	75 - 125	15	35
Cadmium			4.07	5.15		mg/Kg		90	75 - 125	13	35
Chromium			16.3	34.1		mg/Kg		83	75 - 125	11	35
Lead			40.7	54.9		mg/Kg		78	75 - 125	11	35
Selenium			163	128		mg/Kg		79	75 - 125	16	35
Silver			24.4	23.9		mg/Kg		98	75 - 125	18	35

Lab Sample ID: 580-67719-5 — **Client Sample ID: 580-67719-4**
Matrix: Waste — **Prep Type: total**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Arsenic				ND		mg/Kg				12	35
Barium				144		mg/Kg				20	35
Cadmium				1.54		mg/Kg				2	35
Chromium				19.2		mg/Kg				7	35
Lead				22.4		mg/Kg				3	35
Selenium				ND		mg/Kg				NC	35
Silver				ND		mg/Kg				NC	35

Method: 7471A - Mercury (CVAA)

Lab Sample ID: 580-67858-1 — **Client Sample ID: 580-67858-1**
Matrix: Waste — **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0000017		mg/Kg			07/15/10 14:07	1

Lab Sample ID: 580-67858-2 — **Client Sample ID: 580-67858-2**
Matrix: Waste — **Prep Type: total**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Mercury			0.164	0.187		mg/Kg		114	75 - 125		

Lab Sample ID: 580-67858-3 — **Client Sample ID: 580-67858-3**
Matrix: Waste — **Prep Type: total**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Mercury			0.166	0.183		mg/Kg		110	75 - 125	2	25

Lab Sample ID: 580-67858-6 — **Client Sample ID: 580-67858-4**
Matrix: Waste — **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Mercury			0.167	0.187		mg/Kg		98	75 - 125		

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 580-67858-7 — **Client Sample ID: 580-67858-4**
Matrix: Waste — **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Mercury			0.149	0.182		mg/Kg		106	75 - 125	3	35

Lab Sample ID: 580-67858-5 — **Client Sample ID: 580-67858-4**
Matrix: Waste — **Prep Type: total**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Mercury				0.0235		mg/Kg				0	35

Method: 8082 STD - Polychlorinated Biphenyls (PCBs) by Gas Chromatogr

Lab Sample ID: 580-67734-35 — **Client Sample ID: 580-67734-35**
Matrix: Waste — **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		mg/Kg			07/14/10 10:07	1
PCB-1221	ND		0.50		mg/Kg			07/14/10 10:07	1
PCB-1232	ND		0.50		mg/Kg			07/14/10 10:07	1
PCB-1242	ND		0.50		mg/Kg			07/14/10 10:07	1
PCB-1248	ND		0.50		mg/Kg			07/14/10 10:07	1
PCB-1254	ND		0.50		mg/Kg			07/14/10 10:07	1
PCB-1260	ND		0.50		mg/Kg			07/14/10 10:07	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*60 - 125*		*07/14/10 10:07*	*1*
Tetrachloro-m-xylene	*94*		*45 - 155*		*07/14/10 10:07*	*1*

Lab Sample ID: 580-67734-36 — **Client Sample ID: 580-67734-36**
Matrix: Waste — **Prep Type: total**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
PCB-1016			5.00	4.01		mg/Kg		80	40 - 140		
PCB-1260			5.00	4.89		mg/Kg		98	60 - 130		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*98*		*60 - 125*
Tetrachloro-m-xylene	*93*		*45 - 155*

Method: 8260B TCLP - Volatile Organic Compounds (GC/MS) TCLP

Lab Sample ID: 580-68375-6 — **Client Sample ID: 580-68375-6**
Matrix: Waste — **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		100		ug/L			07/26/10 09:40	100
1,2-Dichloroethane	ND		100		ug/L			07/26/10 09:40	100

Method: 8260B TCLP - Volatile Organic Compounds (GC/MS) TCLP (Continued)

Lab Sample ID: 580-68375-6 **Client Sample ID: 580-68375-6**
Matrix: Waste **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		1000		ug/L			07/26/10 09:40	100
Benzene	ND		100		ug/L			07/26/10 09:40	100
Carbon tetrachloride	ND		100		ug/L			07/26/10 09:40	100
Chlorobenzene	ND		100		ug/L			07/26/10 09:40	100
Chloroform	ND		100		ug/L			07/26/10 09:40	100
Tetrachloroethene	ND		100		ug/L			07/26/10 09:40	100
Trichloroethene	ND		100		ug/L			07/26/10 09:40	100
Vinyl chloride	ND		100		ug/L			07/26/10 09:40	100

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*07/26/10 09:40*	*100*
Ethylbenzene-d10	*90*		*80 - 120*		*07/26/10 09:40*	*100*
Fluorobenzene (Surr)	*98*		*80 - 120*		*07/26/10 09:40*	*100*
Toluene-d8 (Surr)	*91*		*85 - 120*		*07/26/10 09:40*	*100*
Trifluorotoluene (Surr)	*104*		*80 - 120*		*07/26/10 09:40*	*100*

Method: 8270C PAH - Semivolatile Compounds by Gas Chromatography/Mass

Lab Sample ID: 580-67750-4 **Client Sample ID: 580-67750-4**
Matrix: Waste **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		1500		ug/Kg			07/14/10 13:01	1
2,4-Dimethylphenol	ND		5000		ug/Kg			07/14/10 13:01	1
2-Methylnaphthalene	ND		1000		ug/Kg			07/14/10 13:01	1
2-Methylphenol	ND		5000		ug/Kg			07/14/10 13:01	1
3 & 4 Methylphenol	ND		10000		ug/Kg			07/14/10 13:01	1
Acenaphthene	ND		1000		ug/Kg			07/14/10 13:01	1
Acenaphthylene	ND		1000		ug/Kg			07/14/10 13:01	1
Anthracene	ND		1000		ug/Kg			07/14/10 13:01	1
Benzo[a]anthracene	ND		1200		ug/Kg			07/14/10 13:01	1
Benzo[a]pyrene	ND		1500		ug/Kg			07/14/10 13:01	1
Benzo[b]fluoranthene	ND		1000		ug/Kg			07/14/10 13:01	1
Benzo[g,h,i]perylene	ND		1200		ug/Kg			07/14/10 13:01	1
Benzo[k]fluoranthene	ND		1200		ug/Kg			07/14/10 13:01	1
Chrysene	ND		1200		ug/Kg			07/14/10 13:01	1
Dibenz(a,h)anthracene	ND		2000		ug/Kg			07/14/10 13:01	1
Fluoranthene	ND		1000		ug/Kg			07/14/10 13:01	1
Fluorene	ND		1000		ug/Kg			07/14/10 13:01	1
Indeno[1,2,3-cd]pyrene	ND		2000		ug/Kg			07/14/10 13:01	1
Naphthalene	ND		1000		ug/Kg			07/14/10 13:01	1
Phenanthrene	ND		1000		ug/Kg			07/14/10 13:01	1
Pyrene	ND		1000		ug/Kg			07/14/10 13:01	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*74*		*28 - 143*		*07/14/10 13:01*	*1*
2-Fluorobiphenyl	*87*		*42 - 140*		*07/14/10 13:01*	*1*
2-Fluorophenol	*92*		*36 - 145*		*07/14/10 13:01*	*1*

Method: 8270C PAH - Semivolatile Compounds by Gas Chromatography/Mass (Continued)

Lab Sample ID: 580-67750-4 **Client Sample ID: 580-67750-4**
Matrix: Waste **Prep Type: total**

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	85		38 - 141		07/14/10 13:01	1
Phenol-d5	90		38 - 149		07/14/10 13:01	1
Terphenyl-d14	72		42 - 151		07/14/10 13:01	1

Lab Sample ID: 580-67750-5 **Client Sample ID: 580-67750-5**
Matrix: Waste **Prep Type: total**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1-Methylnaphthalene	50200	46000		ug/Kg		91	48 - 148
2,4-Dimethylphenol	49300	49600		ug/Kg		101	58 - 133
2-Methylnaphthalene	50200	50200		ug/Kg		100	65 - 125
2-Methylphenol	50000	49300		ug/Kg		99	56 - 121
3 & 4 Methylphenol	50400	51400		ug/Kg		102	61 - 126
Acenaphthene	50000	43200		ug/Kg		86	65 - 130
Acenaphthylene	50000	47400		ug/Kg		95	69 - 129
Anthracene	50000	48400		ug/Kg		97	73 - 123
Benzo[a]anthracene	50000	44400		ug/Kg		89	64 - 124
Benzo[a]pyrene	50000	48600		ug/Kg		97	68 - 128
Benzo[b]fluoranthene	50000	41800		ug/Kg		84	66 - 136
Benzo[g,h,i]perylene	50200	51200		ug/Kg		102	57 - 142
Benzo[k]fluoranthene	50000	45000		ug/Kg		90	63 - 143
Chrysene	50200	44500		ug/Kg		89	71 - 126
Dibenz(a,h)anthracene	50200	50200		ug/Kg		100	57 - 142
Fluoranthene	50100	48900		ug/Kg		98	61 - 121
Fluorene	50400	45300		ug/Kg		90	68 - 128
Indeno[1,2,3-cd]pyrene	50200	54400		ug/Kg		109	59 - 139
Naphthalene	50000	43600		ug/Kg		87	64 - 129
Phenanthrene	50000	43900		ug/Kg		88	65 - 125
Pyrene	50200	47900		ug/Kg		95	54 - 134

Surrogate	LCS % Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	82		28 - 143
2-Fluorobiphenyl	83		42 - 140
2-Fluorophenol	91		36 - 145
Nitrobenzene-d5	86		38 - 141
Phenol-d5	89		38 - 149
Terphenyl-d14	78		42 - 151

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: 580-68389-8 **Client Sample ID: 580-68389-8**
Matrix: Water **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.10		ug/L			07/26/10 14:12	1
2-Methylnaphthalene	ND		0.13		ug/L			07/26/10 14:12	1
Acenaphthene	ND		0.10		ug/L			07/26/10 14:12	1

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-68389-8 **Client Sample ID: 580-68389-8**
Matrix: Water **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.10		ug/L			07/26/10 14:12	1
Anthracene	ND		0.10		ug/L			07/26/10 14:12	1
Benzo[a]anthracene	ND		0.10		ug/L			07/26/10 14:12	1
Benzo[a]pyrene	ND		0.20		ug/L			07/26/10 14:12	1
Benzo[b]fluoranthene	ND		0.10		ug/L			07/26/10 14:12	1
Benzo[g,h,i]perylene	ND		0.10		ug/L			07/26/10 14:12	1
Benzo[k]fluoranthene	ND		0.10		ug/L			07/26/10 14:12	1
Chrysene	ND		0.10		ug/L			07/26/10 14:12	1
Dibenz(a,h)anthracene	ND		0.10		ug/L			07/26/10 14:12	1
Fluoranthene	ND		0.10		ug/L			07/26/10 14:12	1
Fluorene	ND		0.10		ug/L			07/26/10 14:12	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L			07/26/10 14:12	1
Naphthalene	ND		0.10		ug/L			07/26/10 14:12	1
Phenanthrene	ND		0.10		ug/L			07/26/10 14:12	1
Pyrene	ND		0.10		ug/L			07/26/10 14:12	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*60 - 140*		*07/26/10 14:12*	*1*
Nitrobenzene-d5	*109*		*60 - 140*		*07/26/10 14:12*	*1*
Terphenyl-d14	*75*		*60 - 140*		*07/26/10 14:12*	*1*

Lab Sample ID: 580-68389-9 **Client Sample ID: 580-68389-9**
Matrix: Water **Prep Type: total**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1-Methylnaphthalene	10.0	9.25		ug/L		92	60 - 140
2-Methylnaphthalene	10.0	10.6		ug/L		105	60 - 140
Acenaphthene	10.0	9.72		ug/L		97	60 - 140
Acenaphthylene	10.0	11.5		ug/L		114	60 - 140
Anthracene	10.0	11.2		ug/L		111	60 - 140
Benzo[a]anthracene	10.0	10.8		ug/L		108	60 - 140
Benzo[a]pyrene	10.0	10.4		ug/L		104	60 - 140
Benzo[b]fluoranthene	10.0	8.85		ug/L		89	60 - 140
Benzo[g,h,i]perylene	10.0	7.79		ug/L		78	60 - 140
Benzo[k]fluoranthene	10.0	9.62		ug/L		96	60 - 140
Chrysene	10.0	9.45		ug/L		94	60 - 140
Dibenz(a,h)anthracene	10.0	8.53		ug/L		85	60 - 140
Fluoranthene	10.0	10.1		ug/L		101	60 - 140
Fluorene	10.1	11.4		ug/L		113	60 - 140
Indeno[1,2,3-cd]pyrene	10.0	8.80		ug/L		88	60 - 140
Naphthalene	10.0	9.83		ug/L		98	60 - 140
Phenanthrene	10.0	9.28		ug/L		93	60 - 140
Pyrene	10.0	9.59		ug/L		96	60 - 140

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*97*		*60 - 140*
Nitrobenzene-d5	*105*		*60 - 140*
Terphenyl-d14	*81*		*60 - 140*

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 2040735D **Client Sample ID: RDM-SW-002**
Matrix: Water **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	ND		9.95	8.29		ug/L		83	60 - 140	2	20
2-Methylnaphthalene	ND		9.95	9.37		ug/L		94	60 - 140	2	20
Acenaphthene	ND		9.90	9.33		ug/L		94	60 - 140	2	20
Acenaphthylene	ND		9.91	10.7		ug/L		108	60 - 140	0	20
Anthracene	ND		9.91	11.0		ug/L		111	60 - 140	4	20
Benzo[a]anthracene	ND		9.90	10.6		ug/L		107	60 - 140	5	20
Benzo[a]pyrene	ND		9.90	10.6		ug/L		108	60 - 140	4	20
Benzo[b]fluoranthene	ND		9.90	8.77		ug/L		89	60 - 140	2	20
Benzo[g,h,i]perylene	ND		9.93	8.37		ug/L		84	60 - 140	5	20
Benzo[k]fluoranthene	ND		9.90	10.3		ug/L		104	60 - 140	8	20
Chrysene	ND		9.94	9.69		ug/L		97	60 - 140	1	20
Dibenz(a,h)anthracene	ND		9.93	9.13		ug/L		92	60 - 140	5	20
Fluoranthene	ND		9.92	10.2		ug/L		103	60 - 140	2	20
Fluorene	ND		9.99	10.8		ug/L		109	60 - 140	1	20
Indeno[1,2,3-cd]pyrene	ND		9.93	9.33		ug/L		94	60 - 140	5	20
Naphthalene	ND		9.90	8.73		ug/L		88	60 - 140	1	20
Phenanthrene	ND		9.90	9.36		ug/L		95	60 - 140	1	20
Pyrene	ND		9.93	9.66		ug/L		97	60 - 140	2	20

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
2-Fluorobiphenyl	*99*		*60 - 140*
Nitrobenzene-d5	*109*		*60 - 140*
Terphenyl-d14	*85*		*60 - 140*

Lab Sample ID: 2040735S **Client Sample ID: RDM-SW-002**
Matrix: Water **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
1-Methylnaphthalene	ND		9.95	8.44		ug/L		85	60 - 140
2-Methylnaphthalene	ND		9.95	9.53		ug/L		96	60 - 140
Acenaphthene	ND		9.90	9.19		ug/L		93	60 - 140
Acenaphthylene	ND		9.91	10.7		ug/L		108	60 - 140
Anthracene	ND		9.91	10.6		ug/L		107	60 - 140
Benzo[a]anthracene	ND		9.90	10.1		ug/L		102	60 - 140
Benzo[a]pyrene	ND		9.90	10.2		ug/L		103	60 - 140
Benzo[b]fluoranthene	ND		9.90	8.59		ug/L		87	60 - 140
Benzo[g,h,i]perylene	ND		9.93	8.80		ug/L		89	60 - 140
Benzo[k]fluoranthene	ND		9.90	9.49		ug/L		96	60 - 140
Chrysene	ND		9.94	9.64		ug/L		97	60 - 140
Dibenz(a,h)anthracene	ND		9.93	9.60		ug/L		97	60 - 140
Fluoranthene	ND		9.92	10.0		ug/L		101	60 - 140
Fluorene	ND		9.99	10.9		ug/L		109	60 - 140
Indeno[1,2,3-cd]pyrene	ND		9.93	9.78		ug/L		98	60 - 140
Naphthalene	ND		9.90	8.79		ug/L		89	60 - 140
Phenanthrene	ND		9.90	9.31		ug/L		94	60 - 140
Pyrene	ND		9.93	9.51		ug/L		96	60 - 140

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
2-Fluorobiphenyl	*101*		*60 - 140*

Method: 8270C STD - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 2040735S **Client Sample ID: RDM-SW-002**
Matrix: Water **Prep Type: total**

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
Nitrobenzene-d5	*107*		*60 - 140*
Terphenyl-d14	*87*		*60 - 140*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: 580-68111-9 **Client Sample ID: 580-68111-9**
Matrix: Soil **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
2-Methylnaphthalene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Acenaphthene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Acenaphthylene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Anthracene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Benzo[a]anthracene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Benzo[a]pyrene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Benzo[b]fluoranthene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Benzo[g,h,i]perylene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Benzo[k]fluoranthene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Chrysene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Dibenz(a,h)anthracene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Fluoranthene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Fluorene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Naphthalene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Phenanthrene	ND		5.0		ug/Kg dry			07/20/10 17:56	1
Pyrene	ND		5.0		ug/Kg dry			07/20/10 17:56	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*42 - 140*		*07/20/10 17:56*	*1*
Nitrobenzene-d5	*95*		*38 - 141*		*07/20/10 17:56*	*1*
Terphenyl-d14	*63*		*42 - 151*		*07/20/10 17:56*	*1*

Lab Sample ID: 580-68158-5 **Client Sample ID: 580-68158-5**
Matrix: Soil **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
2-Methylnaphthalene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Acenaphthene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Acenaphthylene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Anthracene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Benzo[a]anthracene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Benzo[a]pyrene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Benzo[b]fluoranthene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Benzo[g,h,i]perylene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Benzo[k]fluoranthene	ND		5.0		ug/Kg dry			07/21/10 13:09	1

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-68158-5 **Client Sample ID: 580-68158-5**
Matrix: Soil **Prep Type: total**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Dibenz(a,h)anthracene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Fluoranthene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Fluorene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Naphthalene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Phenanthrene	ND		5.0		ug/Kg dry			07/21/10 13:09	1
Pyrene	ND		5.0		ug/Kg dry			07/21/10 13:09	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*42 - 140*		*07/21/10 13:09*	*1*
Nitrobenzene-d5	*102*		*38 - 141*		*07/21/10 13:09*	*1*
Terphenyl-d14	*73*		*42 - 151*		*07/21/10 13:09*	*1*

Lab Sample ID: 580-68111-10 **Client Sample ID: 580-68111-10**
Matrix: Soil **Prep Type: total**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1-Methylnaphthalene	1000	1000		ug/Kg dry		100	48 - 148
2-Methylnaphthalene	1000	1120		ug/Kg dry		112	65 - 125
Acenaphthene	1000	1020		ug/Kg dry		102	65 - 130
Acenaphthylene	1000	1180		ug/Kg dry		118	69 - 129
Anthracene	1000	1130		ug/Kg dry		113	73 - 123
Benzo[a]anthracene	1000	1160		ug/Kg dry		116	64 - 124
Benzo[a]pyrene	1000	1130		ug/Kg dry		113	68 - 128
Benzo[b]fluoranthene	1000	990		ug/Kg dry		99	66 - 136
Benzo[g,h,i]perylene	1000	1150		ug/Kg dry		115	57 - 142
Benzo[k]fluoranthene	1000	1020		ug/Kg dry		102	63 - 143
Chrysene	1000	971		ug/Kg dry		97	71 - 126
Dibenz(a,h)anthracene	1000	1130		ug/Kg dry		113	57 - 142
Fluoranthene	1000	971		ug/Kg dry		97	61 - 121
Fluorene	1010	1070		ug/Kg dry		106	68 - 128
Indeno[1,2,3-cd]pyrene	1000	1180		ug/Kg dry		117	59 - 139
Naphthalene	1000	1000		ug/Kg dry		100	64 - 129
Phenanthrene	1000	1130		ug/Kg dry		113	65 - 125
Pyrene	1000	913		ug/Kg dry		91	54 - 134

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*92*		*42 - 140*
Nitrobenzene-d5	*91*		*38 - 141*
Terphenyl-d14	*65*		*42 - 151*

Lab Sample ID: 580-68158-6 **Client Sample ID: 580-68158-6**
Matrix: Soil **Prep Type: total**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1-Methylnaphthalene	1000	1030		ug/Kg dry		102	48 - 148
2-Methylnaphthalene	1000	1140		ug/Kg dry		114	65 - 125

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-68158-6 **Client Sample ID: 580-68158-6**
Matrix: Soil **Prep Type: total**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Acenaphthene			1000	1080		ug/Kg dry		108	65 - 130		
Acenaphthylene			1000	1250		ug/Kg dry		125	69 - 129		
Anthracene			1000	1220		ug/Kg dry		122	73 - 123		
Benzo[a]anthracene			1000	1140		ug/Kg dry		114	64 - 124		
Benzo[a]pyrene			1000	1170		ug/Kg dry		117	68 - 128		
Benzo[b]fluoranthene			1000	1090		ug/Kg dry		109	66 - 136		
Benzo[g,h,i]perylene			1000	1140		ug/Kg dry		114	57 - 142		
Benzo[k]fluoranthene			1000	1030		ug/Kg dry		103	63 - 143		
Chrysene			1000	998		ug/Kg dry		99	71 - 126		
Dibenz(a,h)anthracene			1000	1160		ug/Kg dry		115	57 - 142		
Fluoranthene			1000	1070		ug/Kg dry		107	61 - 121		
Fluorene			1010	1170		ug/Kg dry		116	68 - 128		
Indeno[1,2,3-cd]pyrene			1000	1190		ug/Kg dry		118	59 - 139		
Naphthalene			1000	1030		ug/Kg dry		103	64 - 129		
Phenanthrene			1000	1200		ug/Kg dry		120	65 - 125		
Pyrene			1000	1030		ug/Kg dry		102	54 - 134		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*100*		*42 - 140*
Nitrobenzene-d5	*94*		*38 - 141*
Terphenyl-d14	*73*		*42 - 151*

Lab Sample ID: 2040717D **Client Sample ID: RDBH08-18-19**
Matrix: Soil **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	ND		1050	1460		ug/Kg dry		139	48 - 148	15	30
2-Methylnaphthalene	ND		1050	1650	F	ug/Kg dry		157	65 - 125	16	27
Acenaphthene	ND		1040	1470	F	ug/Kg dry		141	65 - 130	15	27
Acenaphthylene	ND		1040	1720	F	ug/Kg dry		164	69 - 129	15	28
Anthracene	ND		1040	1640	F	ug/Kg dry		157	73 - 123	17	27
Benzo[a]anthracene	9.2		1040	1640	F	ug/Kg dry		156	64 - 124	11	27
Benzo[a]pyrene	ND		1040	1530	F	ug/Kg dry		147	68 - 128	17	30
Benzo[b]fluoranthene	ND		1040	1310		ug/Kg dry		126	66 - 136	17	31
Benzo[g,h,i]perylene	ND		1050	1300		ug/Kg dry		125	57 - 142	13	28
Benzo[k]fluoranthene	ND		1040	1270		ug/Kg dry		122	63 - 143	17	31
Chrysene	ND		1050	1360	F	ug/Kg dry		130	71 - 126	16	26
Dibenz(a,h)anthracene	ND		1050	1510	F	ug/Kg dry		144	57 - 142	15	30
Fluoranthene	ND		1040	1550	F	ug/Kg dry		148	61 - 121	15	36
Fluorene	ND		1050	1590	F	ug/Kg dry		151	68 - 128	15	31
Indeno[1,2,3-cd]pyrene	ND		1050	1510	F	ug/Kg dry		144	59 - 139	14	29
Naphthalene	ND		1040	1480	F	ug/Kg dry		142	64 - 129	15	26
Phenanthrene	15		1040	1500	F	ug/Kg dry		143	65 - 125	15	28
Pyrene	ND		1050	1460	F	ug/Kg dry		140	54 - 134	14	31

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
2-Fluorobiphenyl	*128*		*42 - 140*
Nitrobenzene-d5	*137*		*38 - 141*
Terphenyl-d14	*108*		*42 - 151*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 2040717S — **Client Sample ID: RDBH08-18-19**
Matrix: Soil — **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
1-Methylnaphthalene	ND		1080	1250		ug/Kg dry		116	48 - 148
2-Methylnaphthalene	ND		1080	1410	F	ug/Kg dry		131	65 - 125
Acenaphthene	ND		1070	1270		ug/Kg dry		118	65 - 130
Acenaphthylene	ND		1080	1480	F	ug/Kg dry		138	69 - 129
Anthracene	ND		1080	1380	F	ug/Kg dry		129	73 - 123
Benzo[a]anthracene	9.2		1070	1460	F	ug/Kg dry		135	64 - 124
Benzo[a]pyrene	ND		1070	1300		ug/Kg dry		121	68 - 128
Benzo[b]fluoranthene	ND		1070	1110		ug/Kg dry		103	66 - 136
Benzo[g,h,i]perylene	ND		1080	1140		ug/Kg dry		106	57 - 142
Benzo[k]fluoranthene	ND		1070	1080		ug/Kg dry		100	63 - 143
Chrysene	ND		1080	1160		ug/Kg dry		108	71 - 126
Dibenz(a,h)anthracene	ND		1080	1300		ug/Kg dry		121	57 - 142
Fluoranthene	ND		1080	1340	F	ug/Kg dry		124	61 - 121
Fluorene	ND		1080	1370		ug/Kg dry		126	68 - 128
Indeno[1,2,3-cd]pyrene	ND		1080	1310		ug/Kg dry		122	59 - 139
Naphthalene	ND		1070	1280		ug/Kg dry		119	64 - 129
Phenanthrene	15		1070	1300		ug/Kg dry		119	65 - 125
Pyrene	ND		1080	1270		ug/Kg dry		118	54 - 134

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
2-Fluorobiphenyl	*107*		*42 - 140*
Nitrobenzene-d5	*115*		*38 - 141*
Terphenyl-d14	*92*		*42 - 151*

Lab Sample ID: 2040728D — **Client Sample ID: RDM-SED-002**
Matrix: Soil — **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	ND		1310	1430		ug/Kg dry		110	48 - 148	9	30
2-Methylnaphthalene	ND		1310	1590		ug/Kg dry		122	65 - 125	8	27
Acenaphthene	ND		1300	1450		ug/Kg dry		112	65 - 130	3	27
Acenaphthylene	ND		1300	1660		ug/Kg dry		128	69 - 129	2	28
Anthracene	ND		1300	1440		ug/Kg dry		111	73 - 123	2	27
Benzo[a]anthracene	ND		1300	1500		ug/Kg dry		115	64 - 124	6	27
Benzo[a]pyrene	ND		1300	1550		ug/Kg dry		119	68 - 128	9	30
Benzo[b]fluoranthene	ND		1300	1310		ug/Kg dry		100	66 - 136	2	31
Benzo[g,h,i]perylene	ND		1300	1670		ug/Kg dry		128	57 - 142	14	28
Benzo[k]fluoranthene	ND		1300	1380		ug/Kg dry		106	63 - 143	7	31
Chrysene	ND		1310	1280		ug/Kg dry		98	71 - 126	5	26
Dibenz(a,h)anthracene	ND		1300	1690		ug/Kg dry		130	57 - 142	16	30
Fluoranthene	ND		1300	1330		ug/Kg dry		102	61 - 121	4	36
Fluorene	ND		1310	1560		ug/Kg dry		119	68 - 128	2	31
Indeno[1,2,3-cd]pyrene	ND		1300	1680		ug/Kg dry		129	59 - 139	14	29
Naphthalene	ND		1300	1460		ug/Kg dry		112	64 - 129	9	26
Phenanthrene	ND		1300	1420		ug/Kg dry		109	65 - 125	3	28
Pyrene	ND		1300	1290		ug/Kg dry		99	54 - 134	4	31

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
2-Fluorobiphenyl	*104*		*42 - 140*

Method: 8270C STD Dry - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 2040728D **Client Sample ID: RDM-SED-002**
Matrix: Soil **Prep Type: total**

Surrogate	Matrix Spike Dup % Recovery	Matrix Spike Dup Qualifier	Limits
Nitrobenzene-d5	*101*		*38 - 141*
Terphenyl-d14	*71*		*42 - 151*

Lab Sample ID: 2040728S **Client Sample ID: RDM-SED-002**
Matrix: Soil **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
1-Methylnaphthalene	ND		1230	1310		ug/Kg dry		107	48 - 148
2-Methylnaphthalene	ND		1230	1460		ug/Kg dry		119	65 - 125
Acenaphthene	ND		1220	1400		ug/Kg dry		115	65 - 130
Acenaphthylene	ND		1220	1620	F	ug/Kg dry		132	69 - 129
Anthracene	ND		1220	1410		ug/Kg dry		115	73 - 123
Benzo[a]anthracene	ND		1220	1410		ug/Kg dry		115	64 - 124
Benzo[a]pyrene	ND		1220	1410		ug/Kg dry		115	68 - 128
Benzo[b]fluoranthene	ND		1220	1280		ug/Kg dry		104	66 - 136
Benzo[g,h,i]perylene	ND		1230	1450		ug/Kg dry		118	57 - 142
Benzo[k]fluoranthene	ND		1220	1290		ug/Kg dry		106	63 - 143
Chrysene	ND		1230	1220		ug/Kg dry		99	71 - 126
Dibenz(a,h)anthracene	ND		1230	1440		ug/Kg dry		118	57 - 142
Fluoranthene	ND		1230	1280		ug/Kg dry		105	61 - 121
Fluorene	ND		1230	1530		ug/Kg dry		124	68 - 128
Indeno[1,2,3-cd]pyrene	ND		1230	1460		ug/Kg dry		119	59 - 139
Naphthalene	ND		1220	1330		ug/Kg dry		109	64 - 129
Phenanthrene	ND		1220	1380		ug/Kg dry		113	65 - 125
Pyrene	ND		1230	1240		ug/Kg dry		101	54 - 134

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
2-Fluorobiphenyl	*105*		*42 - 140*
Nitrobenzene-d5	*95*		*38 - 141*
Terphenyl-d14	*73*		*42 - 151*

Method: 8270C TCLP - Semivolatile Compounds by Gas Chromatography/Mass

Lab Sample ID: 2040733S **Client Sample ID: RDM-SMDM-001**
Matrix: Waste **Prep Type: total**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
1,4-Dichlorobenzene	ND		50.0	47.5		ug/L		95	34 - 160
2,4-Dinitrotoluene	ND		50.0	47.2		ug/L		94	42 - 138
Pentachlorophenol	ND		49.1	51.8		ug/L		106	23 - 166

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
2,4,6-Tribromophenol	*93*		*47 - 158*
2-Fluorobiphenyl	*85*		*44 - 157*
2-Fluorophenol	*94*		*44 - 148*
Nitrobenzene-d5	*92*		*49 - 154*
Phenol-d5	*94*		*33 - 147*
Terphenyl-d14	*77*		*27 - 177*

Method: 9045C - pH

Lab Sample ID: 2040733X **Client Sample ID: RDM-SMDM-001**
Matrix: Waste **Prep Type: total**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
pH	5.96			5.970		SU				0	

Method: Moisture - Percent Moisture

Lab Sample ID: 204071X **Client Sample ID: RDBH01-6.5-8.5**
Matrix: Soil **Prep Type: total**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	20			18		%				8	20
Percent Solids	80			82		%				2	20

Lab Sample ID: 2040721X **Client Sample ID: RDBH11-30-31.5**
Matrix: Soil **Prep Type: total**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	8.6			7.8		%				9	20
Percent Solids	91			92		%				1	20

GCMS Volatiles

Prep Batch: 10G0085_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0085-BLK1	10G0085-BLK1	total	Water	EPA 5030B	
10G0085-BS1	10G0085-BS1	total	Water	EPA 5030B	
10G0085-BSD1	10G0085-BSD1	total	Water	EPA 5030B	
10G0085-DUP1	RDM-SW-002	total	Water	EPA 5030B	
10G0085-MS1	RDM-SW-002	total	Water	EPA 5030B	
10G0085-MSD1	RDM-SW-002	total	Water	EPA 5030B	
ATG0029-41	RDMSW-001	total	Water	EPA 5030B	
ATG0029-42	RDM-SW-002	total	Water	EPA 5030B	
ATG0029-43	RDM-SW-003	total	Water	EPA 5030B	
ATG0029-44	RDM-SW-004	total	Water	EPA 5030B	
ATG0029-45	RDM-SW-003-DUP	total	Water	EPA 5030B	
ATG0029-46	Trip Blank	total	Water	EPA 5030B	

Analysis Batch: T000333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0085-BLK1	10G0085-BLK1	total	Water	AK101-MS/EPA 8260B	10G0085_P
10G0085-BS1	10G0085-BS1	total	Water	AK101-MS/EPA 8260B	10G0085_P
10G0085-BSD1	10G0085-BSD1	total	Water	AK101-MS/EPA 8260B	10G0085_P
10G0085-DUP1	RDM-SW-002	total	Water	AK101-MS/EPA 8260B	10G0085_P
10G0085-MS1	RDM-SW-002	total	Water	AK101-MS/EPA 8260B	10G0085_P
10G0085-MSD1	RDM-SW-002	total	Water	AK101-MS/EPA 8260B	10G0085_P
ATG0029-41	RDMSW-001	total	Water	AK101-MS/EPA 8260B	10G0085_P
ATG0029-42	RDM-SW-002	total	Water	AK101-MS/EPA 8260B	10G0085_P
ATG0029-43	RDM-SW-003	total	Water	AK101-MS/EPA 8260B	10G0085_P
ATG0029-44	RDM-SW-004	total	Water	AK101-MS/EPA 8260B	10G0085_P
ATG0029-45	RDM-SW-003-DUP	total	Water	AK101-MS/EPA 8260B	10G0085_P
ATG0029-46	Trip Blank	total	Water	AK101-MS/EPA 8260B	10G0085_P

Fuels

Prep Batch: 10G0037_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0037-BLK1	10G0037-BLK1	total	Soil	EPA 3545	
10G0037-BS1	10G0037-BS1	total	Soil	EPA 3545	
10G0037-BSD1	10G0037-BSD1	total	Soil	EPA 3545	
10G0037-DUP1	RDBH08-18-19	total	Soil	EPA 3545	
10G0037-MS1	RDBH08-18-19	total	Soil	EPA 3545	
10G0037-MSD1	RDBH08-18-19	total	Soil	EPA 3545	
ATG0029-01	RDBH01-6.5-8.5	total	Soil	EPA 3545	
ATG0029-02	RDBH01-12.5-13.5	total	Soil	EPA 3545	
ATG0029-03	RDBH02-5-7	total	Soil	EPA 3545	
ATG0029-04	RDBH02-11.5-13	total	Soil	EPA 3545	
ATG0029-05	RDBH03-4-5	total	Soil	EPA 3545	
ATG0029-06	RDBH03-12-13	total	Soil	EPA 3545	
ATG0029-07	RDBH04-0.5-2	total	Soil	EPA 3545	
ATG0029-08	RDBH04-15-15.5	total	Soil	EPA 3545	

Fuels (Continued)

Prep Batch: 10G0037_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-09	RDBH05-22-23	total	Soil	EPA 3545	
ATG0029-10	RDBH05-34-35	total	Soil	EPA 3545	
ATG0029-11	RDBH06-11-13	total	Soil	EPA 3545	
ATG0029-12	RDBH06-21.5-22.5	total	Soil	EPA 3545	
ATG0029-13	RDBH06-921.5-22.5	total	Soil	EPA 3545	
ATG0029-14	RDBH07-8-9	total	Soil	EPA 3545	
ATG0029-15	RDBH07-22.5-23.5	total	Soil	EPA 3545	
ATG0029-16	RDBH08-0-1.5	total	Soil	EPA 3545	
ATG0029-17	RDBH08-18-19	total	Soil	EPA 3545	
ATG0029-18	RDBH09-10-11.5	total	Soil	EPA 3545	
ATG0029-19	RDBH09-15-16	total	Soil	EPA 3545	
ATG0029-20	RDBH10-2-4	total	Soil	EPA 3545	

Prep Batch: 10G0038_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0038-BLK1	10G0038-BLK1	total	Soil	EPA 3545	
10G0038-BS1	10G0038-BS1	total	Soil	EPA 3545	
10G0038-BSD1	10G0038-BSD1	total	Soil	EPA 3545	
10G0038-DUP1	RDM-SED-001	total	Soil	EPA 3545	
10G0038-MS1	RDM-SED-001	total	Soil	EPA 3545	
10G0038-MSD1	RDM-SED-001	total	Soil	EPA 3545	
ATG0029-21	RDBH11-30-31.5	total	Soil	EPA 3545	
ATG0029-22	RDBH11-930-31.5	total	Soil	EPA 3545	
ATG0029-23	RDBH10-6-7.5	total	Soil	EPA 3545	
ATG0029-24	RDBH11-0-2	total	Soil	EPA 3545	
ATG0029-25	RDBH12-1-3	total	Soil	EPA 3545	
ATG0029-26	RDBH12-21-22.5	total	Soil	EPA 3545	
ATG0029-27	RDM-SED-001	total	Soil	EPA 3545	
ATG0029-28	RDM-SED-002	total	Soil	EPA 3545	
ATG0029-29	RDM-SED-003	total	Soil	EPA 3545	
ATG0029-30	RDM-SED-004	total	Soil	EPA 3545	
ATG0029-31	RDM-SED-003-DUP	total	Soil	EPA 3545	
ATG0029-32	RDM-DC-001	total	Soil	EPA 3545	
ATG0029-33	RDM-SMDM-001	total	Soil	EPA 3545	

Analysis Batch: 10G0039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0039-DUP1	RDBH08-18-19	total	Soil	TA-SOP	10G0039_P
ATG0029-15	RDBH07-22.5-23.5	total	Soil	TA-SOP	10G0039_P
ATG0029-16	RDBH08-0-1.5	total	Soil	TA-SOP	10G0039_P
ATG0029-17	RDBH08-18-19	total	Soil	TA-SOP	10G0039_P
ATG0029-18	RDBH09-10-11.5	total	Soil	TA-SOP	10G0039_P
ATG0029-19	RDBH09-15-16	total	Soil	TA-SOP	10G0039_P
ATG0029-20	RDBH10-2-4	total	Soil	TA-SOP	10G0039_P
ATG0029-21	RDBH11-30-31.5	total	Soil	TA-SOP	10G0039_P
ATG0029-22	RDBH11-930-31.5	total	Soil	TA-SOP	10G0039_P
ATG0029-23	RDBH10-6-7.5	total	Soil	TA-SOP	10G0039_P
ATG0029-24	RDBH11-0-2	total	Soil	TA-SOP	10G0039_P
ATG0029-25	RDBH12-1-3	total	Soil	TA-SOP	10G0039_P
ATG0029-26	RDBH12-21-22.5	total	Soil	TA-SOP	10G0039_P
ATG0029-27	RDM-SED-001	total	Soil	TA-SOP	10G0039_P
ATG0029-28	RDM-SED-002	total	Soil	TA-SOP	10G0039_P

Fuels (Continued)

Analysis Batch: 10G0039 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-29	RDM-SED-003	total	Soil	TA-SOP	10G0039_P
ATG0029-30	RDM-SED-004	total	Soil	TA-SOP	10G0039_P
ATG0029-31	RDM-SED-003-DUP	total	Soil	TA-SOP	10G0039_P
ATG0029-32	RDM-DC-001	total	Soil	TA-SOP	10G0039_P
ATG0029-33	RDM-SMDM-001	total	Soil	TA-SOP	10G0039_P

Prep Batch: 10G0039_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0039-DUP1	RDBH08-18-19	total	Soil	*** DEFAULT PREP ***	
ATG0029-15	RDBH07-22.5-23.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-16	RDBH08-0-1.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-17	RDBH08-18-19	total	Soil	*** DEFAULT PREP ***	
ATG0029-18	RDBH09-10-11.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-19	RDBH09-15-16	total	Soil	*** DEFAULT PREP ***	
ATG0029-20	RDBH10-2-4	total	Soil	*** DEFAULT PREP ***	
ATG0029-21	RDBH11-30-31.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-22	RDBH11-930-31.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-23	RDBH10-6-7.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-24	RDBH11-0-2	total	Soil	*** DEFAULT PREP ***	
ATG0029-25	RDBH12-1-3	total	Soil	*** DEFAULT PREP ***	
ATG0029-26	RDBH12-21-22.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-27	RDM-SED-001	total	Soil	*** DEFAULT PREP ***	
ATG0029-28	RDM-SED-002	total	Soil	*** DEFAULT PREP ***	
ATG0029-29	RDM-SED-003	total	Soil	*** DEFAULT PREP ***	
ATG0029-30	RDM-SED-004	total	Soil	*** DEFAULT PREP ***	
ATG0029-31	RDM-SED-003-DUP	total	Soil	*** DEFAULT PREP ***	
ATG0029-32	RDM-DC-001	total	Soil	*** DEFAULT PREP ***	
ATG0029-33	RDM-SMDM-001	total	Soil	*** DEFAULT PREP ***	

Analysis Batch: 10G0040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0040-DUP1	ATG0015-01	total	Soil	TA-SOP	10G0040_P
ATG0029-01	RDBH01-6.5-8.5	total	Soil	TA-SOP	10G0040_P
ATG0029-02	RDBH01-12.5-13.5	total	Soil	TA-SOP	10G0040_P
ATG0029-03	RDBH02-5-7	total	Soil	TA-SOP	10G0040_P
ATG0029-04	RDBH02-11.5-13	total	Soil	TA-SOP	10G0040_P
ATG0029-05	RDBH03-4-5	total	Soil	TA-SOP	10G0040_P
ATG0029-06	RDBH03-12-13	total	Soil	TA-SOP	10G0040_P
ATG0029-07	RDBH04-0.5-2	total	Soil	TA-SOP	10G0040_P
ATG0029-08	RDBH04-15-15.5	total	Soil	TA-SOP	10G0040_P
ATG0029-09	RDBH05-22-23	total	Soil	TA-SOP	10G0040_P

Fuels (Continued)

Analysis Batch: 10G0040 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-10	RDBH05-34-35	total	Soil	TA-SOP	10G0040_P
ATG0029-11	RDBH06-11-13	total	Soil	TA-SOP	10G0040_P
ATG0029-12	RDBH06-21.5-22.5	total	Soil	TA-SOP	10G0040_P
ATG0029-13	RDBH06-921.5-22.5	total	Soil	TA-SOP	10G0040_P
ATG0029-14	RDBH07-8-9	total	Soil	TA-SOP	10G0040_P

Prep Batch: 10G0040_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0040-DUP1	ATG0015-01	total	Soil	*** DEFAULT PREP ***	
ATG0029-01	RDBH01-6.5-8.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-02	RDBH01-12.5-13.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-03	RDBH02-5-7	total	Soil	*** DEFAULT PREP ***	
ATG0029-04	RDBH02-11.5-13	total	Soil	*** DEFAULT PREP ***	
ATG0029-05	RDBH03-4-5	total	Soil	*** DEFAULT PREP ***	
ATG0029-06	RDBH03-12-13	total	Soil	*** DEFAULT PREP ***	
ATG0029-07	RDBH04-0.5-2	total	Soil	*** DEFAULT PREP ***	
ATG0029-08	RDBH04-15-15.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-09	RDBH05-22-23	total	Soil	*** DEFAULT PREP ***	
ATG0029-10	RDBH05-34-35	total	Soil	*** DEFAULT PREP ***	
ATG0029-11	RDBH06-11-13	total	Soil	*** DEFAULT PREP ***	
ATG0029-12	RDBH06-21.5-22.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-13	RDBH06-921.5-22.5	total	Soil	*** DEFAULT PREP ***	
ATG0029-14	RDBH07-8-9	total	Soil	*** DEFAULT PREP ***	

Prep Batch: 10G0057_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0057-BLK1	10G0057-BLK1	total	Water	EPA 3510	
10G0057-BS1	10G0057-BS1	total	Water	EPA 3510	
10G0057-BS2	10G0057-BS2	total	Water	EPA 3510	
10G0057-BS3	10G0057-BS3	total	Water	EPA 3510	
10G0057-BSD1	10G0057-BSD1	total	Water	EPA 3510	
10G0057-DUP1	RDM-SW-002	total	Water	EPA 3510	
10G0057-MS1	RDM-SW-002	total	Water	EPA 3510	
10G0057-MSD1	RDM-SW-002	total	Water	EPA 3510	
ATG0029-34	RDMSW-001	total	Water	EPA 3510	
ATG0029-35	RDM-SW-002	total	Water	EPA 3510	
ATG0029-36	RDM-SW-003	total	Water	EPA 3510	
ATG0029-37	RDM-SW-004	total	Water	EPA 3510	
ATG0029-38	RDM-SW-003-DUP	total	Water	EPA 3510	

Analysis Batch: T000279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0037-DUP1	RDBH08-18-19	total	Soil	AK102/103	10G0037_P
10G0037-MS1	RDBH08-18-19	total	Soil	AK102/103	10G0037_P

Fuels (Continued)

Analysis Batch: T000279 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0037-MSD1	RDBH08-18-19	total	Soil	AK102/103	10G0037_P
10G0038-DUP1	RDM-SED-001	total	Soil	AK102/103	10G0038_P
10G0038-MS1	RDM-SED-001	total	Soil	AK102/103	10G0038_P
10G0038-MSD1	RDM-SED-001	total	Soil	AK102/103	10G0038_P
ATG0029-01	RDBH01-6.5-8.5	total	Soil	AK102/103	10G0037_P
ATG0029-03	RDBH02-5-7	total	Soil	AK102/103	10G0037_P
ATG0029-05	RDBH03-4-5	total	Soil	AK102/103	10G0037_P
ATG0029-07	RDBH04-0.5-2	total	Soil	AK102/103	10G0037_P
ATG0029-09	RDBH05-22-23	total	Soil	AK102/103	10G0037_P
ATG0029-11	RDBH06-11-13	total	Soil	AK102/103	10G0037_P
ATG0029-13	RDBH06-921.5-22.5	total	Soil	AK102/103	10G0037_P
ATG0029-15	RDBH07-22.5-23.5	total	Soil	AK102/103	10G0037_P
ATG0029-17	RDBH08-18-19	total	Soil	AK102/103	10G0037_P
ATG0029-18	RDBH09-10-11.5	total	Soil	AK102/103	10G0037_P
ATG0029-20	RDBH10-2-4	total	Soil	AK102/103	10G0037_P
ATG0029-22	RDBH11-930-31.5	total	Soil	AK102/103	10G0038_P
ATG0029-24	RDBH11-0-2	total	Soil	AK102/103	10G0038_P
ATG0029-26	RDBH12-21-22.5	total	Soil	AK102/103	10G0038_P
ATG0029-27	RDM-SED-001	total	Soil	AK102/103	10G0038_P
ATG0029-29	RDM-SED-003	total	Soil	AK102/103	10G0038_P
ATG0029-31	RDM-SED-003-DUP	total	Soil	AK102/103	10G0038_P

Analysis Batch: T000280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0037-BLK1	10G0037-BLK1	total	Soil	AK102/103	10G0037_P
10G0037-BS1	10G0037-BS1	total	Soil	AK102/103	10G0037_P
10G0037-BSD1	10G0037-BSD1	total	Soil	AK102/103	10G0037_P
10G0038-BLK1	10G0038-BLK1	total	Soil	AK102/103	10G0038_P
10G0038-BS1	10G0038-BS1	total	Soil	AK102/103	10G0038_P
10G0038-BSD1	10G0038-BSD1	total	Soil	AK102/103	10G0038_P
ATG0029-02	RDBH01-12.5-13.5	total	Soil	AK102/103	10G0037_P
ATG0029-04	RDBH02-11.5-13	total	Soil	AK102/103	10G0037_P
ATG0029-06	RDBH03-12-13	total	Soil	AK102/103	10G0037_P
ATG0029-08	RDBH04-15-15.5	total	Soil	AK102/103	10G0037_P
ATG0029-10	RDBH05-34-35	total	Soil	AK102/103	10G0037_P
ATG0029-12	RDBH06-21.5-22.5	total	Soil	AK102/103	10G0037_P
ATG0029-14	RDBH07-8-9	total	Soil	AK102/103	10G0037_P
ATG0029-16	RDBH08-0-1.5	total	Soil	AK102/103	10G0037_P
ATG0029-19	RDBH09-15-16	total	Soil	AK102/103	10G0037_P
ATG0029-21	RDBH11-30-31.5	total	Soil	AK102/103	10G0038_P
ATG0029-23	RDBH10-6-7.5	total	Soil	AK102/103	10G0038_P
ATG0029-25	RDBH12-1-3	total	Soil	AK102/103	10G0038_P
ATG0029-28	RDM-SED-002	total	Soil	AK102/103	10G0038_P
ATG0029-30	RDM-SED-004	total	Soil	AK102/103	10G0038_P
ATG0029-32	RDM-DC-001	total	Soil	AK102/103	10G0038_P
ATG0029-33	RDM-SMDM-001	total	Soil	AK102/103	10G0038_P

Analysis Batch: T000301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0057-BS2	10G0057-BS2	total	Water	AK102/103	10G0057_P
10G0057-DUP1	RDM-SW-002	total	Water	AK102/103	10G0057_P
10G0057-MS1	RDM-SW-002	total	Water	AK102/103	10G0057_P

Fuels (Continued)

Analysis Batch: T000301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0057-MSD1	RDM-SW-002	total	Water	AK102/103	10G0057_P
ATG0029-35	RDM-SW-002	total	Water	AK102/103	10G0057_P

Analysis Batch: T000302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0057-BLK1	10G0057-BLK1	total	Water	AK102/103	10G0057_P
10G0057-BS1	10G0057-BS1	total	Water	AK102/103	10G0057_P
10G0057-BS3	10G0057-BS3	total	Water	AK102/103	10G0057_P
10G0057-BSD1	10G0057-BSD1	total	Water	AK102/103	10G0057_P

Analysis Batch: T000306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-36	RDM-SW-003	total	Water	AK102/103	10G0057_P
ATG0029-38	RDM-SW-003-DUP	total	Water	AK102/103	10G0057_P

Analysis Batch: T000307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-34	RDMSW-001	total	Water	AK102/103	10G0057_P
ATG0029-37	RDM-SW-004	total	Water	AK102/103	10G0057_P

GC Volatiles

Prep Batch: 10G0034_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0034-BLK1	10G0034-BLK1	total	Soil	AK101 Field Prep	
10G0034-BS1	10G0034-BS1	total	Soil	AK101 Field Prep	
10G0034-BSD1	10G0034-BSD1	total	Soil	AK101 Field Prep	
10G0034-DUP1	RDBH01-6.5-8.5	total	Soil	AK101 Field Prep	
10G0034-MS1	RDBH08-18-19	total	Soil	AK101 Field Prep	
10G0034-MSD1	RDBH08-18-19	total	Soil	AK101 Field Prep	
ATG0029-01	RDBH01-6.5-8.5	total	Soil	AK101 Field Prep	
ATG0029-02	RDBH01-12.5-13.5	total	Soil	AK101 Field Prep	
ATG0029-03	RDBH02-5-7	total	Soil	AK101 Field Prep	
ATG0029-04	RDBH02-11.5-13	total	Soil	AK101 Field Prep	
ATG0029-05	RDBH03-4-5	total	Soil	AK101 Field Prep	
ATG0029-06	RDBH03-12-13	total	Soil	AK101 Field Prep	
ATG0029-07	RDBH04-0.5-2	total	Soil	AK101 Field Prep	
ATG0029-08	RDBH04-15-15.5	total	Soil	AK101 Field Prep	
ATG0029-09	RDBH05-22-23	total	Soil	AK101 Field Prep	
ATG0029-10	RDBH05-34-35	total	Soil	AK101 Field Prep	
ATG0029-11	RDBH06-11-13	total	Soil	AK101 Field Prep	
ATG0029-12	RDBH06-21.5-22.5	total	Soil	AK101 Field Prep	

GC Volatiles (Continued)

Prep Batch: 10G0034_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-13	RDBH06-921.5-22.5	total	Soil	AK101 Field Prep	
ATG0029-14	RDBH07-8-9	total	Soil	AK101 Field Prep	
ATG0029-15	RDBH07-22.5-23.5	total	Soil	AK101 Field Prep	
ATG0029-16	RDBH08-0-1.5	total	Soil	AK101 Field Prep	
ATG0029-17	RDBH08-18-19	total	Soil	AK101 Field Prep	
ATG0029-18	RDBH09-10-11.5	total	Soil	AK101 Field Prep	
ATG0029-19	RDBH09-15-16	total	Soil	AK101 Field Prep	
ATG0029-20	RDBH10-2-4	total	Soil	AK101 Field Prep	

Prep Batch: 10G0035_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0035-BLK1	10G0035-BLK1	total	Soil	AK101 Field Prep	
10G0035-BS1	10G0035-BS1	total	Soil	AK101 Field Prep	
10G0035-BSD1	10G0035-BSD1	total	Soil	AK101 Field Prep	
10G0035-DUP1	ATF0070-01	total	Soil	AK101 Field Prep	
10G0035-MS1	ATF0070-01	total	Soil	AK101 Field Prep	
10G0035-MSD1	ATF0070-01	total	Soil	AK101 Field Prep	
ATG0029-21	RDBH11-30-31.5	total	Soil	AK101 Field Prep	
ATG0029-22	RDBH11-930-31.5	total	Soil	AK101 Field Prep	
ATG0029-23	RDBH10-6-7.5	total	Soil	AK101 Field Prep	
ATG0029-24	RDBH11-0-2	total	Soil	AK101 Field Prep	
ATG0029-25	RDBH12-1-3	total	Soil	AK101 Field Prep	
ATG0029-26	RDBH12-21-22.5	total	Soil	AK101 Field Prep	
ATG0029-27	RDM-SED-001	total	Soil	AK101 Field Prep	
ATG0029-28	RDM-SED-002	total	Soil	AK101 Field Prep	
ATG0029-29	RDM-SED-003	total	Soil	AK101 Field Prep	
ATG0029-30	RDM-SED-004	total	Soil	AK101 Field Prep	
ATG0029-31	RDM-SED-003-DUP	total	Soil	AK101 Field Prep	
ATG0029-32	RDM-DC-001	total	Soil	AK101 Field Prep	
ATG0029-33	RDM-SMDM-001	total	Soil	AK101 Field Prep	
ATG0029-39	Trip Blank - 1	total	Soil	AK101 Field Prep	

Prep Batch: 10G0048_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0048-BLK1	10G0048-BLK1	total	Soil	AK101 Field Prep	
10G0048-BS1	10G0048-BS1	total	Soil	AK101 Field Prep	

GC Volatiles (Continued)

Prep Batch: 10G0048_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0048-BSD1	10G0048-BSD1	total	Soil	AK101 Field Prep	
10G0048-DUP1	RDBH01-6.5-8.5	total	Soil	AK101 Field Prep	
10G0048-MS1	RDBH01-6.5-8.5	total	Soil	AK101 Field Prep	
10G0048-MSD1	RDBH01-6.5-8.5	total	Soil	AK101 Field Prep	
ATG0029-01	RDBH01-6.5-8.5	total	Soil	AK101 Field Prep	
ATG0029-03	RDBH02-5-7	total	Soil	AK101 Field Prep	
ATG0029-04	RDBH02-11.5-13	total	Soil	AK101 Field Prep	
ATG0029-05	RDBH03-4-5	total	Soil	AK101 Field Prep	
ATG0029-06	RDBH03-12-13	total	Soil	AK101 Field Prep	
ATG0029-07	RDBH04-0.5-2	total	Soil	AK101 Field Prep	
ATG0029-08	RDBH04-15-15.5	total	Soil	AK101 Field Prep	
ATG0029-09	RDBH05-22-23	total	Soil	AK101 Field Prep	
ATG0029-10	RDBH05-34-35	total	Soil	AK101 Field Prep	
ATG0029-11	RDBH06-11-13	total	Soil	AK101 Field Prep	
ATG0029-12	RDBH06-21.5-22.5	total	Soil	AK101 Field Prep	
ATG0029-13	RDBH06-921.5-22.5	total	Soil	AK101 Field Prep	
ATG0029-22	RDBH11-930-31.5	total	Soil	AK101 Field Prep	
ATG0029-23	RDBH10-6-7.5	total	Soil	AK101 Field Prep	
ATG0029-26	RDBH12-21-22.5	total	Soil	AK101 Field Prep	
ATG0029-33	RDM-SMDM-001	total	Soil	AK101 Field Prep	

Prep Batch: 10G0075_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0075-BLK1	10G0075-BLK1	total	Water	EPA 5030B	
10G0075-BS1	10G0075-BS1	total	Water	EPA 5030B	
10G0075-BSD1	10G0075-BSD1	total	Water	EPA 5030B	
10G0075-DUP1	RDM-SW-002	total	Water	EPA 5030B	
10G0075-MS1	RDM-SW-002	total	Water	EPA 5030B	
10G0075-MSD1	RDM-SW-002	total	Water	EPA 5030B	
ATG0029-34	RDMSW-001	total	Water	EPA 5030B	
ATG0029-35	RDM-SW-002	total	Water	EPA 5030B	
ATG0029-36	RDM-SW-003	total	Water	EPA 5030B	
ATG0029-37	RDM-SW-004	total	Water	EPA 5030B	
ATG0029-38	RDM-SW-003-DUP	total	Water	EPA 5030B	
ATG0029-40	Trip Blank	total	Water	EPA 5030B	

Analysis Batch: T000278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0034-BLK1	10G0034-BLK1	total	Soil	AK101/EPA 8021B	10G0034_P
10G0034-BS1	10G0034-BS1	total	Soil	AK101/EPA 8021B	10G0034_P

GC Volatiles (Continued)

Analysis Batch: T000278 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0034-BSD1	10G0034-BSD1	total	Soil	AK101/EPA 8021B	10G0034_P
10G0034-DUP1	RDBH01-6.5-8.5	total	Soil	AK101/EPA 8021B	10G0034_P
10G0034-MS1	RDBH08-18-19	total	Soil	AK101/EPA 8021B	10G0034_P
10G0034-MSD1	RDBH08-18-19	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-01	RDBH01-6.5-8.5	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-02	RDBH01-12.5-13.5	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-03	RDBH02-5-7	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-04	RDBH02-11.5-13	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-05	RDBH03-4-5	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-06	RDBH03-12-13	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-07	RDBH04-0.5-2	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-08	RDBH04-15-15.5	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-09	RDBH05-22-23	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-10	RDBH05-34-35	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-11	RDBH06-11-13	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-12	RDBH06-21.5-22.5	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-13	RDBH06-921.5-22.5	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-14	RDBH07-8-9	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-15	RDBH07-22.5-23.5	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-16	RDBH08-0-1.5	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-17	RDBH08-18-19	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-18	RDBH09-10-11.5	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-19	RDBH09-15-16	total	Soil	AK101/EPA 8021B	10G0034_P
ATG0029-20	RDBH10-2-4	total	Soil	AK101/EPA 8021B	10G0034_P

Analysis Batch: T000282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0035-BLK1	10G0035-BLK1	total	Soil	AK101/EPA 8021B	10G0035_P
10G0035-BS1	10G0035-BS1	total	Soil	AK101/EPA 8021B	10G0035_P
10G0035-BSD1	10G0035-BSD1	total	Soil	AK101/EPA 8021B	10G0035_P
10G0035-DUP1	ATF0070-01	total	Soil	AK101/EPA 8021B	10G0035_P
10G0035-MS1	ATF0070-01	total	Soil	AK101/EPA 8021B	10G0035_P
10G0035-MSD1	ATF0070-01	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-21	RDBH11-30-31.5	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-22	RDBH11-930-31.5	total	Soil	AK101/EPA 8021B	10G0035_P

GC Volatiles (Continued)

Analysis Batch: T000282 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-23	RDBH10-6-7.5	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-24	RDBH11-0-2	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-25	RDBH12-1-3	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-26	RDBH12-21-22.5	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-27	RDM-SED-001	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-28	RDM-SED-002	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-29	RDM-SED-003	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-30	RDM-SED-004	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-31	RDM-SED-003-DUP	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-32	RDM-DC-001	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-33	RDM-SMDM-001	total	Soil	AK101/EPA 8021B	10G0035_P
ATG0029-39	Trip Blank - 1	total	Soil	AK101/EPA 8021B	10G0035_P

Analysis Batch: T000294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0048-BLK1	10G0048-BLK1	total	Soil	AK101/EPA 8021B	10G0048_P
10G0048-BS1	10G0048-BS1	total	Soil	AK101/EPA 8021B	10G0048_P
10G0048-BSD1	10G0048-BSD1	total	Soil	AK101/EPA 8021B	10G0048_P
10G0048-DUP1	RDBH01-6.5-8.5	total	Soil	AK101/EPA 8021B	10G0048_P
10G0048-MS1	RDBH01-6.5-8.5	total	Soil	AK101/EPA 8021B	10G0048_P
10G0048-MSD1	RDBH01-6.5-8.5	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-01	RDBH01-6.5-8.5	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-03	RDBH02-5-7	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-04	RDBH02-11.5-13	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-05	RDBH03-4-5	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-06	RDBH03-12-13	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-07	RDBH04-0.5-2	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-08	RDBH04-15-15.5	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-09	RDBH05-22-23	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-10	RDBH05-34-35	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-11	RDBH06-11-13	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-12	RDBH06-21.5-22.5	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-13	RDBH06-921.5-22.5	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-22	RDBH11-930-31.5	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-23	RDBH10-6-7.5	total	Soil	AK101/EPA 8021B	10G0048_P

GC Volatiles (Continued)

Analysis Batch: T000294 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-26	RDBH12-21-22.5	total	Soil	AK101/EPA 8021B	10G0048_P
ATG0029-33	RDM-SMDM-001	total	Soil	AK101/EPA 8021B	10G0048_P

Analysis Batch: T000317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10G0075-BLK1	10G0075-BLK1	total	Water	AK101/EPA 8021B	10G0075_P
10G0075-BS1	10G0075-BS1	total	Water	AK101/EPA 8021B	10G0075_P
10G0075-BSD1	10G0075-BSD1	total	Water	AK101/EPA 8021B	10G0075_P
10G0075-DUP1	RDM-SW-002	total	Water	AK101/EPA 8021B	10G0075_P
10G0075-MS1	RDM-SW-002	total	Water	AK101/EPA 8021B	10G0075_P
10G0075-MSD1	RDM-SW-002	total	Water	AK101/EPA 8021B	10G0075_P
ATG0029-34	RDMSW-001	total	Water	AK101/EPA 8021B	10G0075_P
ATG0029-35	RDM-SW-002	total	Water	AK101/EPA 8021B	10G0075_P
ATG0029-36	RDM-SW-003	total	Water	AK101/EPA 8021B	10G0075_P
ATG0029-37	RDM-SW-004	total	Water	AK101/EPA 8021B	10G0075_P
ATG0029-38	RDM-SW-003-DUP	total	Water	AK101/EPA 8021B	10G0075_P
ATG0029-40	Trip Blank	total	Water	AK101/EPA 8021B	10G0075_P

TSEA

Analysis Batch:

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
2040717D	RDBH08-18-19	total	Soil	8270C STD Dry	
2040717S	RDBH08-18-19	total	Soil	8270C STD Dry	
204071X	RDBH01-6.5-8.5	total	Soil	Moisture	
2040721X	RDBH11-30-31.5	total	Soil	Moisture	
2040728D	RDM-SED-002	total	Soil	8270C STD Dry	
2040728S	RDM-SED-002	total	Soil	8270C STD Dry	
2040733S	RDM-SMDM-001	total	Waste	8270C TCLP	
2040733X	RDM-SMDM-001	total	Waste	9045C	
2040735D	RDM-SW-002	total	Water	8270C STD	
2040735S	RDM-SW-002	total	Water	8270C STD	
580-67719-1	580-67719-1	total	Waste	6010B TMP	
580-67719-2	580-67719-2	total	Waste	6010B TMP	
580-67719-3	580-67719-3	total	Waste	6010B TMP	
580-67719-5	580-67719-4	total	Waste	6010B TMP	
580-67719-6	580-67719-4	total	Waste	6010B TMP	
580-67719-7	580-67719-4	total	Waste	6010B TMP	
580-67734-35	580-67734-35	total	Waste	8082 STD	
580-67734-36	580-67734-36	total	Waste	8082 STD	
580-67750-4	580-67750-4	total	Waste	8270C PAH	
580-67750-5	580-67750-5	total	Waste	8270C PAH	
580-67858-1	580-67858-1	total	Waste	7471A	
580-67858-2	580-67858-2	total	Waste	7471A	

TSEA (Continued)

Analysis Batch: (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-67858-3	580-67858-3	total	Waste	7471A	
580-67858-5	580-67858-4	total	Waste	7471A	
580-67858-6	580-67858-4	total	Waste	7471A	
580-67858-7	580-67858-4	total	Waste	7471A	
580-68111-10	580-68111-10	total	Soil	8270C STD Dry	
580-68111-9	580-68111-9	total	Soil	8270C STD Dry	
580-68158-5	580-68158-5	total	Soil	8270C STD Dry	
580-68158-6	580-68158-6	total	Soil	8270C STD Dry	
580-68375-6	580-68375-6	total	Waste	8260B TCLP	
580-68389-8	580-68389-8	total	Water	8270C STD	
580-68389-9	580-68389-9	total	Water	8270C STD	

Analysis Batch: 67599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	1020A	67599_P

Prep Batch: 67599_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	NA	

Analysis Batch: 67600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	9045C	67600_P

Prep Batch: 67600_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	NA	

Analysis Batch: 67623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	8270C PAH	67623_P

Prep Batch: 67623_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	3580A	

Analysis Batch: 67624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	8082 STD	67624_P

Prep Batch: 67624_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	3580A	

Analysis Batch: 67643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-01	RDBH01-6.5-8.5	total	Soil	8270C STD Dry	67643_P
ATG0029-02	RDBH01-12.5-13.5	total	Soil	8270C STD Dry	67643_P
ATG0029-03	RDBH02-5-7	total	Soil	8270C STD Dry	67643_P
ATG0029-04	RDBH02-11.5-13	total	Soil	8270C STD Dry	67643_P
ATG0029-05	RDBH03-4-5	total	Soil	8270C STD Dry	67643_P
ATG0029-06	RDBH03-12-13	total	Soil	8270C STD Dry	67643_P

TSEA (Continued)

Analysis Batch: 67643 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-07	RDBH04-0.5-2	total	Soil	8270C STD Dry	67643_P
ATG0029-08	RDBH04-15-15.5	total	Soil	8270C STD Dry	67643_P
ATG0029-09	RDBH05-22-23	total	Soil	8270C STD Dry	67643_P
ATG0029-10	RDBH05-34-35	total	Soil	8270C STD Dry	67643_P
ATG0029-11	RDBH06-11-13	total	Soil	8270C STD Dry	67643_P
ATG0029-12	RDBH06-21.5-22.5	total	Soil	8270C STD Dry	67643_P
ATG0029-13	RDBH06-921.5-22.5	total	Soil	8270C STD Dry	67643_P
ATG0029-14	RDBH07-8-9	total	Soil	8270C STD Dry	67643_P
ATG0029-15	RDBH07-22.5-23.5	total	Soil	8270C STD Dry	67643_P
ATG0029-16	RDBH08-0-1.5	total	Soil	8270C STD Dry	67643_P
ATG0029-17	RDBH08-18-19	total	Soil	8270C STD Dry	67643_P
ATG0029-18	RDBH09-10-11.5	total	Soil	8270C STD Dry	67643_P
ATG0029-19	RDBH09-15-16	total	Soil	8270C STD Dry	67643_P
ATG0029-20	RDBH10-2-4	total	Soil	8270C STD Dry	67643_P

Prep Batch: 67643_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-01	RDBH01-6.5-8.5	total	Soil	3550B	
ATG0029-02	RDBH01-12.5-13.5	total	Soil	3550B	
ATG0029-03	RDBH02-5-7	total	Soil	3550B	
ATG0029-04	RDBH02-11.5-13	total	Soil	3550B	
ATG0029-05	RDBH03-4-5	total	Soil	3550B	
ATG0029-06	RDBH03-12-13	total	Soil	3550B	
ATG0029-07	RDBH04-0.5-2	total	Soil	3550B	
ATG0029-08	RDBH04-15-15.5	total	Soil	3550B	
ATG0029-09	RDBH05-22-23	total	Soil	3550B	
ATG0029-10	RDBH05-34-35	total	Soil	3550B	
ATG0029-11	RDBH06-11-13	total	Soil	3550B	
ATG0029-12	RDBH06-21.5-22.5	total	Soil	3550B	
ATG0029-13	RDBH06-921.5-22.5	total	Soil	3550B	
ATG0029-14	RDBH07-8-9	total	Soil	3550B	
ATG0029-15	RDBH07-22.5-23.5	total	Soil	3550B	
ATG0029-16	RDBH08-0-1.5	total	Soil	3550B	
ATG0029-17	RDBH08-18-19	total	Soil	3550B	
ATG0029-18	RDBH09-10-11.5	total	Soil	3550B	
ATG0029-19	RDBH09-15-16	total	Soil	3550B	
ATG0029-20	RDBH10-2-4	total	Soil	3550B	

Analysis Batch: 67662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-21	RDBH11-30-31.5	total	Soil	8270C STD Dry	67662_P
ATG0029-22	RDBH11-930-31.5	total	Soil	8270C STD Dry	67662_P
ATG0029-23	RDBH10-6-7.5	total	Soil	8270C STD Dry	67662_P
ATG0029-24	RDBH11-0-2	total	Soil	8270C STD Dry	67662_P
ATG0029-25	RDBH12-1-3	total	Soil	8270C STD Dry	67662_P
ATG0029-26	RDBH12-21-22.5	total	Soil	8270C STD Dry	67662_P
ATG0029-27	RDM-SED-001	total	Soil	8270C STD Dry	67662_P
ATG0029-28	RDM-SED-002	total	Soil	8270C STD Dry	67662_P
ATG0029-29	RDM-SED-003	total	Soil	8270C STD Dry	67662_P
ATG0029-30	RDM-SED-004	total	Soil	8270C STD Dry	67662_P
ATG0029-31	RDM-SED-003-DUP	total	Soil	8270C STD Dry	67662_P
ATG0029-32	RDM-DC-001	total	Soil	8270C STD Dry	67662_P

TSEA (Continued)

Prep Batch: 67662_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-21	RDBH11-30-31.5	total	Soil	3550B	
ATG0029-22	RDBH11-930-31.5	total	Soil	3550B	
ATG0029-23	RDBH10-6-7.5	total	Soil	3550B	
ATG0029-24	RDBH11-0-2	total	Soil	3550B	
ATG0029-25	RDBH12-1-3	total	Soil	3550B	
ATG0029-26	RDBH12-21-22.5	total	Soil	3550B	
ATG0029-27	RDM-SED-001	total	Soil	3550B	
ATG0029-28	RDM-SED-002	total	Soil	3550B	
ATG0029-29	RDM-SED-003	total	Soil	3550B	
ATG0029-30	RDM-SED-004	total	Soil	3550B	
ATG0029-31	RDM-SED-003-DUP	total	Soil	3550B	
ATG0029-32	RDM-DC-001	total	Soil	3550B	

Analysis Batch: 67670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	6010B TMP	67670_P

Prep Batch: 67670_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	3050B	

Analysis Batch: 67671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	7471A	67671_P

Prep Batch: 67671_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	7471A	

Analysis Batch: 67747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-34	RDMSW-001	total	Water	8270C STD	67747_P
ATG0029-35	RDM-SW-002	total	Water	8270C STD	67747_P
ATG0029-36	RDM-SW-003	total	Water	8270C STD	67747_P
ATG0029-37	RDM-SW-004	total	Water	8270C STD	67747_P
ATG0029-38	RDM-SW-003-DUP	total	Water	8270C STD	67747_P

Prep Batch: 67747_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-34	RDMSW-001	total	Water	3520C	
ATG0029-35	RDM-SW-002	total	Water	3520C	
ATG0029-36	RDM-SW-003	total	Water	3520C	
ATG0029-37	RDM-SW-004	total	Water	3520C	
ATG0029-38	RDM-SW-003-DUP	total	Water	3520C	

Analysis Batch: 67765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-01	RDBH01-6.5-8.5	total	Soil	Moisture	67765_P
ATG0029-02	RDBH01-12.5-13.5	total	Soil	Moisture	67765_P
ATG0029-03	RDBH02-5-7	total	Soil	Moisture	67765_P
ATG0029-04	RDBH02-11.5-13	total	Soil	Moisture	67765_P
ATG0029-05	RDBH03-4-5	total	Soil	Moisture	67765_P

TSEA (Continued)

Analysis Batch: 67765 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-06	RDBH03-12-13	total	Soil	Moisture	67765_P
ATG0029-07	RDBH04-0.5-2	total	Soil	Moisture	67765_P
ATG0029-08	RDBH04-15-15.5	total	Soil	Moisture	67765_P
ATG0029-09	RDBH05-22-23	total	Soil	Moisture	67765_P
ATG0029-10	RDBH05-34-35	total	Soil	Moisture	67765_P
ATG0029-11	RDBH06-11-13	total	Soil	Moisture	67765_P
ATG0029-12	RDBH06-21.5-22.5	total	Soil	Moisture	67765_P
ATG0029-13	RDBH06-921.5-22.5	total	Soil	Moisture	67765_P
ATG0029-14	RDBH07-8-9	total	Soil	Moisture	67765_P
ATG0029-15	RDBH07-22.5-23.5	total	Soil	Moisture	67765_P
ATG0029-16	RDBH08-0-1.5	total	Soil	Moisture	67765_P
ATG0029-17	RDBH08-18-19	total	Soil	Moisture	67765_P
ATG0029-18	RDBH09-10-11.5	total	Soil	Moisture	67765_P
ATG0029-19	RDBH09-15-16	total	Soil	Moisture	67765_P
ATG0029-20	RDBH10-2-4	total	Soil	Moisture	67765_P

Prep Batch: 67765_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-01	RDBH01-6.5-8.5	total	Soil	NA	
ATG0029-02	RDBH01-12.5-13.5	total	Soil	NA	
ATG0029-03	RDBH02-5-7	total	Soil	NA	
ATG0029-04	RDBH02-11.5-13	total	Soil	NA	
ATG0029-05	RDBH03-4-5	total	Soil	NA	
ATG0029-06	RDBH03-12-13	total	Soil	NA	
ATG0029-07	RDBH04-0.5-2	total	Soil	NA	
ATG0029-08	RDBH04-15-15.5	total	Soil	NA	
ATG0029-09	RDBH05-22-23	total	Soil	NA	
ATG0029-10	RDBH05-34-35	total	Soil	NA	
ATG0029-11	RDBH06-11-13	total	Soil	NA	
ATG0029-12	RDBH06-21.5-22.5	total	Soil	NA	
ATG0029-13	RDBH06-921.5-22.5	total	Soil	NA	
ATG0029-14	RDBH07-8-9	total	Soil	NA	
ATG0029-15	RDBH07-22.5-23.5	total	Soil	NA	
ATG0029-16	RDBH08-0-1.5	total	Soil	NA	
ATG0029-17	RDBH08-18-19	total	Soil	NA	
ATG0029-18	RDBH09-10-11.5	total	Soil	NA	
ATG0029-19	RDBH09-15-16	total	Soil	NA	
ATG0029-20	RDBH10-2-4	total	Soil	NA	

Analysis Batch: 67775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-21	RDBH11-30-31.5	total	Soil	Moisture	67775_P
ATG0029-22	RDBH11-930-31.5	total	Soil	Moisture	67775_P
ATG0029-23	RDBH10-6-7.5	total	Soil	Moisture	67775_P
ATG0029-24	RDBH11-0-2	total	Soil	Moisture	67775_P
ATG0029-25	RDBH12-1-3	total	Soil	Moisture	67775_P
ATG0029-26	RDBH12-21-22.5	total	Soil	Moisture	67775_P
ATG0029-27	RDM-SED-001	total	Soil	Moisture	67775_P
ATG0029-28	RDM-SED-002	total	Soil	Moisture	67775_P
ATG0029-29	RDM-SED-003	total	Soil	Moisture	67775_P
ATG0029-30	RDM-SED-004	total	Soil	Moisture	67775_P
ATG0029-31	RDM-SED-003-DUP	total	Soil	Moisture	67775_P

TSEA (Continued)

Analysis Batch: 67775 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-32	RDM-DC-001	total	Soil	Moisture	67775_P

Prep Batch: 67775_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-21	RDBH11-30-31.5	total	Soil	NA	
ATG0029-22	RDBH11-930-31.5	total	Soil	NA	
ATG0029-23	RDBH10-6-7.5	total	Soil	NA	
ATG0029-24	RDBH11-0-2	total	Soil	NA	
ATG0029-25	RDBH12-1-3	total	Soil	NA	
ATG0029-26	RDBH12-21-22.5	total	Soil	NA	
ATG0029-27	RDM-SED-001	total	Soil	NA	
ATG0029-28	RDM-SED-002	total	Soil	NA	
ATG0029-29	RDM-SED-003	total	Soil	NA	
ATG0029-30	RDM-SED-004	total	Soil	NA	
ATG0029-31	RDM-SED-003-DUP	total	Soil	NA	
ATG0029-32	RDM-DC-001	total	Soil	NA	

Analysis Batch: 68352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	8270C TCLP	68352_P

Prep Batch: 68352_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	3510C	

Analysis Batch: 68375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	8260B TCLP	68375_P

Prep Batch: 68375_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATG0029-33	RDM-SMDM-001	total	Soil	5030B	

Client Sample ID: RDBH01-6.5-8.5 — Lab Sample ID: ATG0029-01

Date Collected: 07/07/10 10:45 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 85.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9653	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/11/10 17:38	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		1.052	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	1.052	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 17:19	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 06:18	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 18:36		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH01-12.5-13.5 — Lab Sample ID: ATG0029-02

Date Collected: 07/07/10 11:00 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 91.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9723	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/11/10 17:38	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		1.048	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 19:33	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 18:55		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH02-5-7 — Lab Sample ID: ATG0029-03

Date Collected: 07/07/10 11:50 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 85.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9814	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/11/10 18:45	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		1.069	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	1.069	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage

Client Sample ID: RDBH02-5-7 — Lab Sample ID: ATG0029-03

Date Collected: 07/07/10 11:50 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 85.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 20:00	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 08:06	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 19:15		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH02-11.5-13 — Lab Sample ID: ATG0029-04

Date Collected: 07/07/10 13:15 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 88.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9447	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/11/10 18:45	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.7267	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.7267	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 21:21	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 08:33	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 19:34		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH03-4-5 — Lab Sample ID: ATG0029-05

Date Collected: 07/07/10 15:45 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 89.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9847	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/11/10 19:18	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.9276	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.9276	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 21:49	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 09:00	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 19:54		TestAmerica Seattle

Client Sample ID: RDBH03-4-5
Lab Sample ID: ATG0029-05

Date Collected: 07/07/10 15:45
Matrix: Soil
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH03-12-13
Lab Sample ID: ATG0029-06

Date Collected: 07/07/10 15:50
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9713	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/11/10 19:18	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.9211	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.9211	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 22:16	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 19:24	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 20:13		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH04-0.5-2
Lab Sample ID: ATG0029-07

Date Collected: 07/07/10 16:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9359	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/11/10 19:51	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.8347	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.8347	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 22:43	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 10:49	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 20:33		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH04-15-15.5

Lab Sample ID: ATG0029-08

Date Collected: 07/07/10 17:25
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9975	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/11/10 19:51	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.8446	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.8446	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 23:11	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 11:17	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 20:52		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH05-22-23

Lab Sample ID: ATG0029-09

Date Collected: 07/07/10 18:35
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9465	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/11/10 20:24	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.8311	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.8311	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 23:38	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 11:45	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 21:12		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH05-34-35

Lab Sample ID: ATG0029-10

Date Collected: 07/07/10 20:25
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9804	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/11/10 20:24	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage

Client Sample ID: RDBH05-34-35 — Lab Sample ID: ATG0029-10

Date Collected: 07/07/10 20:25 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 90.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	AK101 Field Prep		1.211	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	1.211	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 00:06	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 12:13	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 21:32		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH06-11-13 — Lab Sample ID: ATG0029-11

Date Collected: 07/08/10 08:45 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 83.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9259	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/11/10 20:57	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.6708	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.6708	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 00:33	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 12:41	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 21:52		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH06-21.5-22.5 — Lab Sample ID: ATG0029-12

Date Collected: 07/08/10 09:15 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 87.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.999	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/11/10 20:57	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.9048	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.9048	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 01:00	JMG	TestAmerica Anchorage

Client Sample ID: RDBH06-21.5-22.5

Lab Sample ID: ATG0029-12
Date Collected: 07/08/10 09:15
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 14:17	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 22:11		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH06-921.5-22.5

Lab Sample ID: ATG0029-13
Date Collected: 07/08/10 09:15
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9107	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/11/10 21:30	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.9055	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.9055	10G0048_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 01:26	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 14:44	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 22:31		TestAmerica Seattle

Client Sample ID: RDBH07-8-9

Lab Sample ID: ATG0029-14
Date Collected: 07/08/10 10:15
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9804	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/11/10 21:30	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0040_P	07/11/10 12:49	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0040	07/12/10 13:00	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.7253	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 03:14	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 22:50		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH07-22.5-23.5 — Lab Sample ID: ATG0029-15

Date Collected: 07/08/10 10:48 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 93.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.996	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/12/10 06:41	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.8735	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 03:41	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/20/10 23:10		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH08-0-1.5 — Lab Sample ID: ATG0029-16

Date Collected: 07/08/10 11:30 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 85.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9891	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/12/10 06:41	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		1.164	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 04:08	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/23/10 15:44		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH08-18-19 — Lab Sample ID: ATG0029-17

Date Collected: 07/08/10 13:20 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 93**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9766	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/11/10 14:21	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		1.257	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/10/10 18:13	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/23/10 16:03		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH08-18-19 — Lab Sample ID: ATG0029-17

Date Collected: 07/08/10 13:20 — **Matrix: Soil**
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH09-10-11.5 — Lab Sample ID: ATG0029-18

Date Collected: 07/08/10 14:00 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 91.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9818	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/12/10 07:14	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.7664	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 04:35	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/23/10 16:43		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:21		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:21		TestAmerica Seattle

Client Sample ID: RDBH09-15-16 — Lab Sample ID: ATG0029-19

Date Collected: 07/08/10 14:10 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 93.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9747	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/12/10 07:14	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.9283	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 05:01	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/23/10 17:22		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:26		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:26		TestAmerica Seattle

Client Sample ID: RDBH10-2-4 — Lab Sample ID: ATG0029-20

Date Collected: 07/08/10 14:50 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 91.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9438	10G0037_P	07/10/10 12:27	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/12/10 07:46	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage

Client Sample ID: RDBH10-2-4 — Lab Sample ID: ATG0029-20

Date Collected: 07/08/10 14:50 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 91.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.5951	10G0034_P	07/10/10 12:09	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000278	07/11/10 05:28	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67643_P	07/13/10 11:02		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67643	07/23/10 17:41		TestAmerica Seattle
total	Analysis	Moisture		1	67765	07/14/10 13:26		TestAmerica Seattle
total	Prep	NA		0	67765_P	07/14/10 13:26		TestAmerica Seattle

Client Sample ID: RDBH11-30-31.5 — Lab Sample ID: ATG0029-21

Date Collected: 07/08/10 16:58 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 92.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9751	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/12/10 07:46	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.9078	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 02:06	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 13:48		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDBH11-930-31.5 — Lab Sample ID: ATG0029-22

Date Collected: 07/08/10 16:58 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 92.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9615	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/12/10 08:19	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		1.047	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 02:33	JMG	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	1.047	10G0048_P	07/13/10 11:03	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 17:31	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 14:07		TestAmerica Seattle

Client Sample ID: RDBH10-6-7.5 — Lab Sample ID: ATG0029-23

Date Collected: 07/08/10 15:15 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 91.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9542	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/12/10 08:19	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.8093	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 03:00	JMG	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.8093	10G0048_P	07/13/10 11:03	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 17:59	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 14:27		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDBH11-0-2 — Lab Sample ID: ATG0029-24

Date Collected: 07/08/10 15:40 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 90**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9911	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/12/10 10:32	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.8251	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 03:27	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 14:47		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDBH12-1-3 — Lab Sample ID: ATG0029-25

Date Collected: 07/08/10 17:30 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 85.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9639	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/12/10 10:32	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.8229	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 03:54	JMG	TestAmerica Anchorage

Client Sample ID: RDBH12-1-3 — Lab Sample ID: ATG0029-25

Date Collected: 07/08/10 17:30 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 85.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 15:11		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDBH12-21-22.5 — Lab Sample ID: ATG0029-26

Date Collected: 07/08/10 18:05 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9828	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/12/10 11:05	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.6881	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 04:22	JMG	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.6881	10G0048_P	07/13/10 11:03	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	33.3	T000294	07/14/10 18:27	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 15:31		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDM-SED-001 — Lab Sample ID: ATG0029-27

Date Collected: 07/07/10 17:55 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 77.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		1.243	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/11/10 15:26	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.2534	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 06:10	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 15:50		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDM-SED-002

Lab Sample ID: ATG0029-28
Date Collected: 07/07/10 18:30
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.998	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/12/10 11:05	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.2484	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 06:36	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 16:10		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDM-SED-003

Lab Sample ID: ATG0029-29
Date Collected: 07/08/10 10:10
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9217	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/12/10 11:39	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.3907	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 07:03	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 17:09		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDM-SED-004

Lab Sample ID: ATG0029-30
Date Collected: 07/08/10 10:40
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9643	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/12/10 11:39	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.3689	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 07:30	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 17:28		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDM-SED-004 — Lab Sample ID: ATG0029-30

Date Collected: 07/08/10 10:40 — **Matrix: Soil**
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDM-SED-003-DUP — Lab Sample ID: ATG0029-31

Date Collected: 07/08/10 10:10 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 91.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9935	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000279	07/12/10 12:12	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.3045	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 07:57	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 17:48		TestAmerica Seattle

Client Sample ID: RDM-DC-001 — Lab Sample ID: ATG0029-32

Date Collected: 07/09/10 13:30 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 78.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		0.9713	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000280	07/12/10 12:12	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage
total	Prep	AK101 Field Prep		0.4065	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 08:24	JMG	TestAmerica Anchorage
total	Prep	3550B		0	67662_P	07/13/10 12:44		TestAmerica Seattle
total	Analysis	8270C STD Dry		1	67662	07/21/10 18:08		TestAmerica Seattle
total	Analysis	Moisture		1	67775	07/14/10 14:32		TestAmerica Seattle
total	Prep	NA		0	67775_P	07/14/10 14:32		TestAmerica Seattle

Client Sample ID: RDM-SMDM-001 — Lab Sample ID: ATG0029-33

Date Collected: 07/09/10 13:45 — **Matrix: Soil**
Date Received: 07/09/10 17:58 — **Percent Solids: 65.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3545		16.13	10G0038_P	07/10/10 12:30	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		100	T000280	07/11/10 15:59	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10G0039_P	07/10/10 17:06	rt	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10G0039	07/11/10 12:01	JN	TestAmerica Anchorage

Client Sample ID: RDM-SMDM-001

Lab Sample ID: ATG0029-33

Date Collected: 07/09/10 13:45
Matrix: Soil
Date Received: 07/09/10 17:58
Percent Solids: 65.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	AK101 Field Prep		0.9506	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.9506	10G0035_P	07/10/10 12:11	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		50	T000282	07/12/10 08:52	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	100	T000282	07/12/10 09:20	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	200	T000282	07/12/10 10:41	JMG	TestAmerica Anchorage
total	Prep	AK101 Field Prep	RE	0.9506	10G0048_P	07/13/10 11:03	JPN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B	RE	100	T000294	07/14/10 18:55	JMG	TestAmerica Anchorage
total	Analysis	1020A		1	67599	07/12/10 16:15		TestAmerica Seattle
total	Prep	NA		0	67599_P	07/12/10 16:15		TestAmerica Seattle
total	Prep	3050B		0	67670_P	07/13/10 14:14		TestAmerica Seattle
total	Analysis	6010B TMP		1	67670	07/13/10 18:15		TestAmerica Seattle
total	Prep	7471A		0	67671_P	07/13/10 14:22		TestAmerica Seattle
total	Analysis	7471A		1	67671	07/15/10 14:39		TestAmerica Seattle
total	Prep	3580A		0	67624_P	07/13/10 08:03		TestAmerica Seattle
total	Analysis	8082 STD		1	67624	07/14/10 10:36		TestAmerica Seattle
total	Analysis	8260B TCLP		100	68375	07/26/10 11:20		TestAmerica Seattle
total	Prep	5030B		0	68375_P	07/26/10 11:20		TestAmerica Seattle
total	Prep	3580A		0	67623_P	07/13/10 08:07		TestAmerica Seattle
total	Analysis	8270C PAH		10	67623	07/14/10 14:02		TestAmerica Seattle
total	Prep	3510C		0	68352_P	07/24/10 14:25		TestAmerica Seattle
total	Analysis	8270C TCLP		1	68352	07/27/10 16:52		TestAmerica Seattle
total	Analysis	9045C		1	67600	07/12/10 16:47		TestAmerica Seattle
total	Prep	NA		0	67600_P	07/12/10 16:47		TestAmerica Seattle

Client Sample ID: RDMSW-001

Lab Sample ID: ATG0029-34

Date Collected: 07/07/10 17:55
Matrix: Water
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3510		1.064	10G0057_P	07/15/10 14:21	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000307	07/17/10 02:39	JN	TestAmerica Anchorage
total	Prep	EPA 5030B		1	10G0075_P	07/20/10 14:44	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		1	T000317	07/20/10 20:38	JJB	TestAmerica Anchorage
total	Prep	3520C		0	67747_P	07/14/10 11:21		TestAmerica Seattle
total	Analysis	8270C STD		1	67747	07/26/10 14:51		TestAmerica Seattle

Client Sample ID: RDM-SW-002

Lab Sample ID: ATG0029-35

Date Collected: 07/07/10 18:15
Matrix: Water
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3510		0.885	10G0057_P	07/15/10 14:21	JPN	TestAmerica Anchorage

Client Sample ID: RDM-SW-002 — Lab Sample ID: ATG0029-35

Date Collected: 07/07/10 18:15 — **Matrix: Water**
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	AK102/103		1	T000301	07/15/10 19:47	JN	TestAmerica Anchorage
total	Prep	EPA 5030B		1	10G0075_P	07/20/10 14:44	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		1	T000317	07/20/10 21:05	JJB	TestAmerica Anchorage
total	Prep	3520C		0	67747_P	07/14/10 11:21		TestAmerica Seattle
total	Analysis	8270C STD		1	67747	07/26/10 15:11		TestAmerica Seattle

Client Sample ID: RDM-SW-003 — Lab Sample ID: ATG0029-36

Date Collected: 07/07/10 10:10 — **Matrix: Water**
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3510		0.8772	10G0057_P	07/15/10 14:21	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000306	07/17/10 03:12	JN	TestAmerica Anchorage
total	Prep	EPA 5030B		1	10G0075_P	07/20/10 14:44	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		1	T000317	07/20/10 19:15	JJB	TestAmerica Anchorage
total	Prep	3520C		0	67747_P	07/14/10 11:21		TestAmerica Seattle
total	Analysis	8270C STD		1	67747	07/26/10 16:15		TestAmerica Seattle

Client Sample ID: RDM-SW-004 — Lab Sample ID: ATG0029-37

Date Collected: 07/07/10 10:40 — **Matrix: Water**
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3510		0.8621	10G0057_P	07/15/10 14:21	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000307	07/17/10 03:12	JN	TestAmerica Anchorage
total	Prep	EPA 5030B		1	10G0075_P	07/20/10 14:44	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		1	T000317	07/20/10 19:43	JJB	TestAmerica Anchorage
total	Prep	3520C		0	67747_P	07/14/10 11:21		TestAmerica Seattle
total	Analysis	8270C STD		1	67747	07/26/10 16:34		TestAmerica Seattle

Client Sample ID: RDM-SW-003-DUP — Lab Sample ID: ATG0029-38

Date Collected: 07/07/10 10:10 — **Matrix: Water**
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3510		0.8333	10G0057_P	07/15/10 14:21	JPN	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000306	07/17/10 03:46	JN	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		1	T000317	07/20/10 20:11	JJB	TestAmerica Anchorage
total	Analysis	8270C STD		1	67747	07/26/10 16:54		TestAmerica Seattle

Client Sample ID: Trip Blank - 1
Lab Sample ID: ATG0029-39

Date Collected: 07/07/10 10:45
Matrix: Soil
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	AK101 Field Prep		1	10G0035_P	07/10/10 12:11	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		33.3	T000282	07/12/10 01:38	JMG	TestAmerica Anchorage

Client Sample ID: Trip Blank
Lab Sample ID: ATG0029-40

Date Collected: 07/07/10 00:00
Matrix: Water
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10G0075_P	07/20/10 14:44	JMG	TestAmerica Anchorage
total	Analysis	AK101/EPA 8021B		1	T000317	07/20/10 18:20	JJB	TestAmerica Anchorage

Client Sample ID: RDMSW-001
Lab Sample ID: ATG0029-41

Date Collected: 07/07/10 17:55
Matrix: Water
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10G0085_P	07/26/10 10:47	JMG	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		1	T000333	07/26/10 14:55	JB	TestAmerica Anchorage

Client Sample ID: RDM-SW-002
Lab Sample ID: ATG0029-42

Date Collected: 07/07/10 18:15
Matrix: Water
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10G0085_P	07/26/10 10:47	JMG	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		1	T000333	07/26/10 12:49	JB	TestAmerica Anchorage

Client Sample ID: RDM-SW-003
Lab Sample ID: ATG0029-43

Date Collected: 07/07/10 10:10
Matrix: Water
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10G0085_P	07/26/10 10:47	JMG	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		1	T000333	07/26/10 15:26	JB	TestAmerica Anchorage

Client Sample ID: RDM-SW-004
Lab Sample ID: ATG0029-44

Date Collected: 07/07/10 10:40
Matrix: Water
Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10G0085_P	07/26/10 10:47	JMG	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		1	T000333	07/26/10 15:57	JB	TestAmerica Anchorage

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Client Sample ID: RDM-SW-003-DUP

Lab Sample ID: ATG0029-45

Date Collected: 07/07/10 10:10

Matrix: Water

Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	AK101-MS/EPA 8260B		1	T000333	07/26/10 16:28	JB	TestAmerica Anchorage

Client Sample ID: Trip Blank

Lab Sample ID: ATG0029-46

Date Collected: 07/07/10 00:00

Matrix: Water

Date Received: 07/09/10 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10G0085_P	07/26/10 10:47	JMG	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		1	T000333	07/26/10 17:00	JB	TestAmerica Anchorage

Certification Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Laboratory	Authority	Program	EPA Region	Certification ID	Expiration Date
TestAmerica Anchorage	Alaska	State Program	10	UST-067	06/16/11
TestAmerica Anchorage	Alaska	State Program	10	AK00975	06/30/11
TestAmerica Seattle		USDA		P330-08-00099	05/22/11
TestAmerica Seattle	Alaska	State Program	10	UST-022	03/04/11
TestAmerica Seattle	California	NELAC Secondary AB	9	1115CA	01/31/11
TestAmerica Seattle	Florida	NELAC Secondary AB	4	E871074	06/30/11
TestAmerica Seattle	L-A-B	DoD ELAP	0	L2236	01/19/13
TestAmerica Seattle	L-A-B	ISO/IEC 17025	0	L2236	01/19/13
TestAmerica Seattle	Montana	State Program	8		04/30/20
TestAmerica Seattle	Montana	State Program	8	N/A	04/30/08
TestAmerica Seattle	Oregon	NELAC Primary AB	10	WA100007	11/06/10
TestAmerica Seattle	Washington	State Program	10	C553	02/17/11

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Method	Method Description	Protocol	Laboratory
AK101-MS/EPA 8260B	Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B		TAL ANC
AK102/103	Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO		TAL ANC
TA-SOP	Physical Parameters by APHA/ASTM/EPA Methods		TAL ANC
AK101/EPA 8021B	Gasoline Range Organics (C6-C10) and BTEX per AK101		TAL ANC
1020A	Ignitability, Setaflash Closed-Cup Method		TAL SEA
6010B TMP	Metals (ICP)		TAL SEA
7471A	Mercury (CVAA)		TAL SEA
8082 STD	Polychlorinated Biphenyls (PCBs) by Gas Chromatogr		TAL SEA
8260B TCLP	Volatile Organic Compounds (GC/MS) TCLP		TAL SEA
8270C PAH	Semivolatile Compounds by Gas Chromatography/Mass		TAL SEA
8270C STD	Semivolatile Organic Compounds (GC/MS SIM)		TAL SEA
8270C STD Dry	Semivolatile Organic Compounds (GC/MS SIM)		TAL SEA
8270C TCLP	Semivolatile Compounds by Gas Chromatography/Mass		TAL SEA
9045C	pH		TAL SEA
Moisture	Percent Moisture		TAL SEA

Protocol References:

=

Laboratory References:

TAL ANC = TestAmerica Anchorage, 2000 West International Airport Road Suite A10, Anchorage, AK 99502-1119, TEL (907) 563-9200

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253) 922-2310

Sample Summary

Client: Weston Solutions, Inc.
Project/Site: Red Devil Mine

TestAmerica Job ID: ATG0029
SDG: ATG0029

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
ATG0029-01	RDBH01-6.5-8.5	Soil	07/07/10 10:45	07/09/10 17:58
ATG0029-02	RDBH01-12.5-13.5	Soil	07/07/10 11:00	07/09/10 17:58
ATG0029-03	RDBH02-5-7	Soil	07/07/10 11:50	07/09/10 17:58
ATG0029-04	RDBH02-11.5-13	Soil	07/07/10 13:15	07/09/10 17:58
ATG0029-05	RDBH03-4-5	Soil	07/07/10 15:45	07/09/10 17:58
ATG0029-06	RDBH03-12-13	Soil	07/07/10 15:50	07/09/10 17:58
ATG0029-07	RDBH04-0.5-2	Soil	07/07/10 16:10	07/09/10 17:58
ATG0029-08	RDBH04-15-15.5	Soil	07/07/10 17:25	07/09/10 17:58
ATG0029-09	RDBH05-22-23	Soil	07/07/10 18:35	07/09/10 17:58
ATG0029-10	RDBH05-34-35	Soil	07/07/10 20:25	07/09/10 17:58
ATG0029-11	RDBH06-11-13	Soil	07/08/10 08:45	07/09/10 17:58
ATG0029-12	RDBH06-21.5-22.5	Soil	07/08/10 09:15	07/09/10 17:58
ATG0029-13	RDBH06-921.5-22.5	Soil	07/08/10 09:15	07/09/10 17:58
ATG0029-14	RDBH07-8-9	Soil	07/08/10 10:15	07/09/10 17:58
ATG0029-15	RDBH07-22.5-23.5	Soil	07/08/10 10:48	07/09/10 17:58
ATG0029-16	RDBH08-0-1.5	Soil	07/08/10 11:30	07/09/10 17:58
ATG0029-17	RDBH08-18-19	Soil	07/08/10 13:20	07/09/10 17:58
ATG0029-18	RDBH09-10-11.5	Soil	07/08/10 14:00	07/09/10 17:58
ATG0029-19	RDBH09-15-16	Soil	07/08/10 14:10	07/09/10 17:58
ATG0029-20	RDBH10-2-4	Soil	07/08/10 14:50	07/09/10 17:58
ATG0029-21	RDBH11-30-31.5	Soil	07/08/10 16:58	07/09/10 17:58
ATG0029-22	RDBH11-930-31.5	Soil	07/08/10 16:58	07/09/10 17:58
ATG0029-23	RDBH10-6-7.5	Soil	07/08/10 15:15	07/09/10 17:58
ATG0029-24	RDBH11-0-2	Soil	07/08/10 15:40	07/09/10 17:58
ATG0029-25	RDBH12-1-3	Soil	07/08/10 17:30	07/09/10 17:58
ATG0029-26	RDBH12-21-22.5	Soil	07/08/10 18:05	07/09/10 17:58
ATG0029-27	RDM-SED-001	Soil	07/07/10 17:55	07/09/10 17:58
ATG0029-28	RDM-SED-002	Soil	07/07/10 18:30	07/09/10 17:58
ATG0029-29	RDM-SED-003	Soil	07/08/10 10:10	07/09/10 17:58
ATG0029-30	RDM-SED-004	Soil	07/08/10 10:40	07/09/10 17:58
ATG0029-31	RDM-SED-003-DUP	Soil	07/08/10 10:10	07/09/10 17:58
ATG0029-32	RDM-DC-001	Soil	07/09/10 13:30	07/09/10 17:58
ATG0029-33	RDM-SMDM-001	Soil	07/09/10 13:45	07/09/10 17:58
ATG0029-34	RDMSW-001	Water	07/07/10 17:55	07/09/10 17:58
ATG0029-35	RDM-SW-002	Water	07/07/10 18:15	07/09/10 17:58
ATG0029-36	RDM-SW-003	Water	07/07/10 10:10	07/09/10 17:58
ATG0029-37	RDM-SW-004	Water	07/07/10 10:40	07/09/10 17:58
ATG0029-38	RDM-SW-003-DUP	Water	07/07/10 10:10	07/09/10 17:58
ATG0029-39	Trip Blank - 1	Soil	07/07/10 10:45	07/09/10 17:58
ATG0029-40	Trip Blank	Water	07/07/10 00:00	07/09/10 17:58
ATG0029-41	RDMSW-001	Water	07/07/10 17:55	07/09/10 17:58
ATG0029-42	RDM-SW-002	Water	07/07/10 18:15	07/09/10 17:58
ATG0029-43	RDM-SW-003	Water	07/07/10 10:10	07/09/10 17:58
ATG0029-44	RDM-SW-004	Water	07/07/10 10:40	07/09/10 17:58
ATG0029-45	RDM-SW-003-DUP	Water	07/07/10 10:10	07/09/10 17:58
ATG0029-46	Trip Blank	Water	07/07/10 00:00	07/09/10 17:58

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THE LEADER IN ENVIRONMENTAL TESTING

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2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 56

CHAIN OF CUSTODY REPORT

Work Order #: ATG0029

CLIENT: Weston Solutions

REPORT TO: Weston Solutions / Jody.Dillon@westonsolutions.com
ADDRESS: 425 G Street Ste 300
Anchorage, AK 99501
PHONE: 907.276.1016 FAX: 907.276.1094

INVOICE TO: same

P.O. NUMBER:

PROJECT NAME: Red Devil Mine, AST5-RI
PROJECT NUMBER:
SAMPLED BY: J. Dillon / K. Willingham

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [X] STD. [7] [5] [4] [3] [2] [1]
Petroleum Hydrocarbon Analyses: [5] STD. [4] [3] [2] [1]
OTHER Specify: 24 HR T
* Turnaround Requests less than standard may incur

PRESERVATIVE: MeOH

REQUESTED ANALYSES: DRO/RRO AK102/103; GRO AK101 BTEX 8021B/8260B; PAH 8270SIM

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME		DRO/RRO AK102/103	GRO AK101 BTEX 8021B/8260B	PAH 8270SIM	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS
1	RDBH01-10.5-8.5	7/7/10	1045	X	X	X	S	3	01
2	RDBH01-12.5-13.5	7/7/10	1100						02
3	RDBH02-5-7	7/7/10	1150						03
4	RDBH02-11.5-13	7/7/10	1315						04
5	RDBH03-4-5	7/7/10	1545						05
6	RDBH03-12-13	7/7/10	1550						06
7	RDBH04-0.5-2	7/7/10	1010						07
8	RDBH04-15-15.5	7/7/10	1725						08
9	RDBH05-22-23	7/7/10	1835						09
10	RDBH05-34-35	7/7/10	2025						10

RELEASED BY: Katurah Willingham
PRINT NAME: Katurah M. Willingham FIRM: Weston Solutions DATE: 09 July 2010 TIME: 1530
RECEIVED BY: [signature] PRINT NAME: Laura Wilson FIRM: Weston DATE: 7/9/10 TIME: 1130

RELEASED BY: [signature] PRINT NAME: Laura Wilson FIRM: Weston DATE: 7/9/10 TIME: 1100
RECEIVED BY: Robert Tsin PRINT NAME: Robert Tsin FIRM: TA-AK DATE: 7/9/ TIME: 1:26

ADDITIONAL REMARKS:
24 HR TAT FOR DRO/RRO AND GRO/BTEX SOIL SAMPLES ONLY!

TEMP: 1 PAGE

A: 4.6°C
B: 5.4°C
C: 2.7°C
D: 2.6°C

COC from Cooler A

167152

CMS

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THE LEADER IN ENVIRONMENTAL TESTING

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9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 90
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 56

CHAIN OF CUSTODY REPORT

Work Order #: ATG0029

CLIENT: Weston Solutions

REPORT TO: Weston Solutions / Jody.Dillon@westonsolutions.com
ADDRESS: 425 G St. Ste 300
Anchorage, AK 99501
PHONE: 907-276-6610 FAX: 907-276-6694

INVOICE TO: same

P.O. NUMBER:

PROJECT NAME: Red Devil Mine, AST 5-RI

PROJECT NUMBER:

SAMPLED BY: J. Dillon / K. Willingham

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 (STD.) 7 5 4 3 2 1
Petroleum Hydrocarbon Analyses: 5 (STD.) 4 3 2 1
OTHER Specify: 24 HR T
* Turnaround Requests less than standard may incur

PRESERVATIVE: M-Eolt

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME		DRO/RRO AK 102 & 103	GRO (AK 101) BTEX (8021B)	PAH 8270SIM	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS
1	RDBH06-11-13	7/8/10	0845	X	X	X	S	3	
2	RDBH06-21.5-22.5	7/8/10	0915						
3	RDBH06-921.5-22.5	7/8/10	0915						
4	RDBH07-8-9	7/8/10	~~1048~~ 1015						
5	RDBH07-22.5-23.5	7/8/10	~~1130~~ 1048						
6	RDBH08-0-1.5	7/8/10	~~1430~~ 1130						
7	RDBH08-18-19	7/8/10	~~1400~~ 1320					9	MS/MSD
8	RDBH09-10-11.5	7/8/10	1400					3	
9	RDBH09-15-16	7/8/10	1410						
10	RDBH10-2-4	7/8/10	1450						

RELEASED BY: Katura M. Willingham
PRINT NAME: Katura M. Willingham FIRM: Weston Solutions DATE: 09 July 2010 TIME: 1530

RECEIVED BY: [signature]
PRINT NAME: Laura Wilson FIRM: Weston DATE: 7/9/10 TIME: 1120

RELEASED BY: [signature]
PRINT NAME: Laura Wilson FIRM: Weston Solution DATE: 7/9/10 TIME: 11:00

RECEIVED BY: [signature]
PRINT NAME: Robert Tsin FIRM: TA-AK DATE: 7/9/10 TIME: 11:2

ADDITIONAL REMARKS:
24 HR TAT FOR DRO/RRO AND GRO/BTEX SOIL SAMPLES ONLY!

TEMP: A: ~~4.6°C~~ 7 PAGE

TA

COC from Cooler A

A: 4.6°C
B: 5.4°C
C: 2.7°C
D: 2.6°C

167152

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9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-

08/31/2010

CHAIN OF CUSTODY REPORT

Work Order #: ATG0029

CLIENT: Weston Solutions

REPORT TO: Weston Solutions / Jody.Dillon@westonsolutions.com

ADDRESS: 425 G St. Ste 300 Anchorage, AK 99501

PHONE: 907-276-6610 FAX: 907-276-6094

INVOICE TO: same

P.O. NUMBER:

PROJECT NAME: Red Devil Mine, AST5-RI

PROJECT NUMBER:

SAMPLED BY: J. Dillon / K. Willingham

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: X STD. | 7 | 5 | 4 | 3 | 2 | 1

Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify: 24 HR T

* Turnaround Requests less than standard may incur Rus

PRESERVATIVE: MeOH

REQUESTED ANALYSES: DRO/RRO AK102 103 | GRO/BTEX AK101 8021B 8260B | PAH 8270 SIM

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	DRO/RRO AK102 103	GRO/BTEX AK101 8021B 8260B	PAH 8270 SIM	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS
1 RDBH11-30-31.5	7/8/10 1658	X	X	X	S	3	21
2 RDBH11-930-31.5	7/8/10 1658						22
3 RDBH10-6-7.5	7/8/10 1515						23
4 RDBH11-0-2	7/8/10 1540						~~MS/MSD~~ (NW) 24
5 RDBH12-1-3	7/8/10 1730						25
6 RDBH12-21-22.5	7/8/10 1805						26
7 RDMSW-001	7/7/10 1755				W	7	34
8 RDM-SW-002	7/7/10 1815					21	MS/MSD 35
9 RDM-SW-003	7/7/10 1010					7	36
10 RDM-SW-004	7/7/10 1040					7	37

RELEASED BY: Laura Wilson
PRINT NAME: Kathleen M. Willingham FIRM: Weston Solutions DATE: 09 July 2010 TIME: 1530
RECEIVED BY: Laura Wilson PRINT NAME: Laura Wilson FIRM: Weston DATE: 7/9 TIME: 1:2

RELEASED BY: Laura Wilson
PRINT NAME: Laura Wilson FIRM: Weston DATE: 7/9/10 TIME: 11:00
RECEIVED BY: Robert Tsin PRINT NAME: Robert Tsin FIRM: TA-AK DATE: 7/9/10 TIME: 11:26

ADDITIONAL REMARKS:
24 HR TAT FOR DRO/RRO AND GRO/BTEX SOIL SAMPLES ONLY!

TEMP: A: 4.6°C B: 5.4°C C: 2.7°C D: 2.6°C

PAGE 3 TOTAL

COC from Cooler A

R.T

167152 CMS

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9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX

CHAIN OF CUSTODY REPORT

Work Order #: ATG0029

CLIENT: Weston Solutions

REPORT TO: Weston Solutions / Jody.Dillon@westonsolutions.com

ADDRESS: 425 G St. Ste 300 Anchorage, AK 99501

PHONE: 907.276.6610 FAX: 907.276.6694

PROJECT NAME: Red Devil Mine, AOTS-RI

PROJECT NUMBER:

SAMPLED BY: J. Dillon / K. Willingham

INVOICE TO: Same

P.O. NUMBER:

TURNAROUND REQUEST In Business Days *

Organic & Inorganic Analyses: ~~10~~ STD. | 7 | 5 | 4 | 3 | 2 | 1

Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | ☑

OTHER Specify: 24 HR T

* Turnaround Requests less than standard may incur R

PRESERVATIVE: MeOH

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	DRO/RRO AK102 103	GRO/BTEX AK101 8021B/8260B	PAH 8270SIM	RCRA Metals	Ignitability	SW1020A	Total PCBs SW8082A	PH	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS
1	RDM-SW-03-DUP	7/8/10 1010	X	X	X						W	7	38
2	RDM-SED-001	7/7/10 1755	X	X	X						S	3	27
3	RDM-SED-002	7/7/10 1830	X	X	X								28
4	RDM-SED-003	7/8/10 1010	X	X	X								29
5	RDM-SED-004	7/8/10 1040	X	X	X								30
6	RDM-SED-003-DUP	7/8/10 1010	X	X	X								31
7	RDM-DC-001	7/9/10 1330	X	X	X								32
8	RDM-SMDM-001	7/9/10 1345	X	X	X	X	X	X	X				*24 HR TAT
9													
10													

RELEASED BY: Katarina Willingham
PRINT NAME: Katarina M. Willingham FIRM: Weston Solutions DATE: 09 July 2010 TIME: 1530

RECEIVED BY: [illegible]
PRINT NAME: Laura Wilson FIRM: Weston DATE: 7/9/10 TIME: 1420

RELEASED BY: [illegible]
PRINT NAME: Laura Wilson FIRM: Weston DATE: TIME:

RECEIVED BY: Robert Tin
PRINT NAME: Robert Tin FIRM: TA-AK DATE: 7/9/10 TIME: 11:20

ADDITIONAL REMARKS: 24 HR TAT FOR DRO/RRO, GRO/BTEX and sample RDM-SMDM-001

Soil Only

TEMP: PAGE 4

A: 4.6°C
B: 5.4°C
C: 2.7°C
D: 2.6°C

COC from Cooler A

CMS 167152

A
Water

Test America Anchorage Cooler Receipt Form

(Army Corps. Compliant)

WORK ORDER # ATG0029 **CLIENT:** Weston **PROJECT:** Red Devil Mine, ASTSRI

Date /Time Cooler Arrived 7 / 09 / 10 11 : 26 Cooler signed for by: Robert Tsin
(Print name)

Preliminary Examination Phase:

Date cooler opened: [X] same as date received *or* ___/___/___

Cooler opened by (print) Robert Tsin (sign) Robert Tsin

1. Delivered by [ ] ALASKA AIRLINES [ ] Fed-Ex [ ] UPS [ ] NAC [ ] LYNDEN [X] CLIENT [ ] Other:

   Shipment Tracking # if applicable _____ (include copy of shipping papers in file)

2. Number of Custody Seals 0 Signed by _____ Date ___/___/___

   Were custody seals unbroken and intact on arrival? [ ] Yes [ ] No

3. Were custody papers sealed in a plastic bag? [X] Yes [ ] No

4. Were custody papers filled out properly (ink, signed, etc.)? [X] Yes [ ] No

5. Did you sign the custody papers in the appropriate place? [X] Yes [ ] No

6. Was ice used? [X] Yes [ ] No Type of ice: [ ] blue ice [X] gel ice [ ] real ice [ ] dry ice Condition of Ice: Solid

   Temperature by Digi-Thermo Probe 4.6 °C Thermometer # IR-Gun
   Acceptance Criteria: 0 - 6°C

7. Packing in Cooler: [X] bubble wrap [ ] styrofoam [ ] cardboard [ ] Other:

8. Did samples arrive in plastic bags? [X] Yes [ ] No

9. Did all bottles arrive unbroken, and with labels in good condition? [X] Yes [ ] No

10. Are all bottle labels complete (ID, date, time, etc.) [X] Yes [ ] No

11. Do bottle labels and Chain of Custody agree? [X] Yes [ ] No - Trip blanks not on COC

12. Are the containers and preservatives correct for the tests indicated? [X] Yes [ ] No

13. Conoco Phillips, Alyeska, BP H2O samples only: pH < 2? [ ] Yes [ ] No [X] N/A

14. Is there adequate volume for the tests requested? [X] Yes [ ] No

15. Were VOA vials free of bubbles? [ ] N/A [ ] Yes [X] No

    If "NO" which containers contained "head space" or bubbles? Trip blank had headspace

Log-in Phase:

Date of sample log-in 7 / 09 / 10

Samples logged in by (print) Robert Tsin (sign) Robert Tsin

1. Was project identifiable from custody papers? [X] Yes [ ] No
2. Do Turn Around Times and Due Dates agree? [X] Yes [ ] No
3. Was the Project Manager notified of status? [X] Yes [ ] No
4. Was the Lab notified of status? [X] Yes [ ] No
5. Was the COC scanned and copied? [X] Yes [ ] No

Test America Anchorage Cooler Receipt Form

(Army Corps. Compliant)

B
SOIL

WORK ORDER # ATG0029 CLIENT: Weston PROJECT: Red Devil Mine, AST5 RI

Date /Time Cooler Arrived 7 / 09 / 10 11 : 26 Cooler signed for by: Robert Tsin
(Print name)

Preliminary Examination Phase:

Date cooler opened: [X] same as date received or ___/___/___

Cooler opened by (print) Robert Tsin (sign) Robert Tsin

1. Delivered by [ ] ALASKA AIRLINES [ ] Fed-Ex [ ] UPS [ ] NAC [ ] LYNDEN [X] CLIENT [ ] Other: ____

   Shipment Tracking # if applicable ____ (include copy of shipping papers in file)

2. Number of Custody Seals 0 Signed by ____ Date ___/___/___

   Were custody seals unbroken and intact on arrival? [ ] Yes [ ] No

3. Were custody papers sealed in a plastic bag? [X] Yes [ ] No

4. Were custody papers filled out properly (ink, signed, etc.)? [X] Yes [ ] No

5. Did you sign the custody papers in the appropriate place? [X] Yes [ ] No

6. Was ice used? [X] Yes [ ] No Type of ice: [ ] blue ice [X] gel ice [ ] real ice [ ] dry ice Condition of Ice: Solid

   Temperature by Digi-Thermo Probe 5.4 °C Thermometer # IR GUN
   Acceptance Criteria: 0 - 6°C

7. Packing in Cooler: [X] bubble wrap [ ] styrofoam [X] cardboard [ ] Other: ____

8. Did samples arrive in plastic bags? [X] Yes [ ] No somewere in box

9. Did all bottles arrive unbroken, and with labels in good condition? [X] Yes [ ] No

10. Are all bottle labels complete (ID, date, time, etc.) [X] Yes [ ] No - Trip blanks not on COC

11. Do bottle labels and Chain of Custody agree? [X] Yes [ ] No - ATG0029-28 has 9 containers in cooler instead of 3 as noted on COC

12. Are the containers and preservatives correct for the tests indicated? [X] Yes [ ] No Only 6 containers for ATG0029-17 instead of 9 on COC

13. Conoco Phillips, Alyeska, BP H2O samples only: pH < 2? [ ] Yes [ ] No [X] N/A

14. Is there adequate volume for the tests requested? [X] Yes [ ] No

15. Were VOA vials free of bubbles? [X] N/A [X] Yes [ ] No

    If "NO" which containers contained "head space" or bubbles? ____

Log-in Phase:

Date of sample log-in 7 / 09 / 10

Samples logged in by (print) Robert Tsin (sign) Robert Tsin

1. Was project identifiable from custody papers? [X] Yes [ ] No
2. Do Turn Around Times and Due Dates agree? [X] Yes [ ] No
3. Was the Project Manager notified of status? [X] Yes [ ] No
4. Was the Lab notified of status? [X] Yes [ ] No
5. Was the COC scanned and copied? [X] Yes [ ] No

C

Test America Anchorage Cooler Receipt Form

(Army Corps. Compliant)

Water

WORK ORDER # ATG0029 CLIENT: Weston PROJECT: Red Devil Mine, ASTS RI

Date /Time Cooler Arrived 7 / 09 / 10 - 11 : 26 Cooler signed for by: Robert Tsin (Print name)

Preliminary Examination Phase:

Date cooler opened: ☒ same as date received or ___/___/___

Cooler opened by (print) Robert Tsin (sign) Robert Tsin

1. Delivered by ☐ ALASKA AIRLINES ☐ Fed-Ex ☐ UPS ☐ NAC ☐ LYNDEN ☒ CLIENT ☐ Other: ____

   Shipment Tracking # if applicable ____ (include copy of shipping papers in file)

2. Number of Custody Seals 0 Signed by ____ Date ___/___/___

   Were custody seals unbroken and intact on arrival? ☐ Yes ☐ No

3. Were custody papers sealed in a plastic bag? ☒ Yes ☐ No

4. Were custody papers filled out properly (ink, signed, etc.)? ☒ Yes ☐ No

5. Did you sign the custody papers in the appropriate place? ☒ Yes ☐ No

6. Was ice used? ☒ Yes ☐ No Type of ice: ☐ blue ice ☒ gel ice ☐ real ice ☐ dry ice Condition of Ice: solid

   Temperature by Digi-Thermo Probe 2.7 °C Thermometer # IR-GUN
   Acceptance Criteria: 0 - 6°C

7. Packing in Cooler: ☒ bubble wrap ☐ styrofoam ☐ cardboard ☐ Other: ____

8. Did samples arrive in plastic bags? ☒ Yes ☐ No

9. Did all bottles arrive unbroken, and with labels in good condition? ☒ Yes ☐ No

10. Are all bottle labels complete (ID, date, time, etc.) ☒ Yes ☐ No

11. Do bottle labels and Chain of Custody agree? ☒ Yes ☐ No - Trip blanks not on COC

12. Are the containers and preservatives correct for the tests indicated? ☒ Yes ☐ No

13. Conoco Phillips, Alyeska, BP H2O samples only: pH < 2? ☐ Yes ☐ No ☒ N/A

14. Is there adequate volume for the tests requested? ☒ Yes ☐ No

15. Were VOA vials free of bubbles? ☐ N/A ☐ Yes ☒ No

    If "NO" which containers contained "head space" or bubbles? Trip blank had headspace

Log-in Phase:

Date of sample log-in 7 / 09 / 10

Samples logged in by (print) Robert Tsin (sign) Robert Tsin

1. Was project identifiable from custody papers? ☒ Yes ☐ No
2. Do Turn Around Times and Due Dates agree? ☒ Yes ☐ No
3. Was the Project Manager notified of status? ☒ Yes ☐ No
4. Was the Lab notified of status? ☒ Yes ☐ No
5. Was the COC scanned and copied? ☒ Yes ☐ No

Test America Anchorage Cooler Receipt Form

(Army Corps. Compliant)

D

WORK ORDER # ATG0029 CLIENT: Weston PROJECT: Red Devil Mine, Soil AST5RI ~~AST5RI~~ R.T 7/09/10

Date /Time Cooler Arrived 7 / 09 / 10 11 : 26 Cooler signed for by: Robert Tsin (Print name)

Preliminary Examination Phase:

Date cooler opened: [X] same as date received or ___/___/___

Cooler opened by (print) Robert Tsin (sign) Robert Tsin

1. Delivered by [ ] ALASKA AIRLINES [ ] Fed-Ex [ ] UPS [ ] NAC [ ] LYNDEN [X] CLIENT [ ] Other:

   Shipment Tracking # if applicable _____ (include copy of shipping papers in file)

2. Number of Custody Seals 0 Signed by _____ Date ___/___/___

   Were custody seals unbroken and intact on arrival? [ ] Yes [ ] No

3. Were custody papers sealed in a plastic bag? [X] Yes [ ] No

4. Were custody papers filled out properly (ink, signed, etc.)? [X] Yes [ ] No

5. Did you sign the custody papers in the appropriate place? [X] Yes [ ] No

6. Was ice used? [X] Yes [ ] No Type of ice: [ ] blue ice [X] gel ice [ ] real ice [ ] dry ice Condition of Ice: Solid

   Temperature by Digi-Thermo Probe 2.6 °C Thermometer # IR GUN
   Acceptance Criteria: 0 - 6°C

7. Packing in Cooler: [X] bubble wrap [ ] styrofoam [X] cardboard [ ] Other:

8. Did samples arrive in plastic bags? [X] Yes [ ] No some were in a box

9. Did all bottles arrive unbroken, and with labels in good condition? [X] Yes [ ] No

10. Are all bottle labels complete (ID, date, time, etc.) [X] Yes [ ] No - Trip blanks not on COC

11. Do bottle labels and Chain of Custody agree? [X] Yes [ ] No - only 6 containers in cooler for ATG0029-17, 9 marked on COC

12. Are the containers and preservatives correct for the tests indicated? [X] Yes [ ] No - ATG0029-28 has 9 containers in cooler instead of 3 as noted on COC

13. Conoco Phillips, Alyeska, BP H2O samples only: pH < 2? [ ] Yes [ ] No [X] N/A

14. Is there adequate volume for the tests requested? [X] Yes [ ] No

15. Were VOA vials free of bubbles? [X] N/A [ ] Yes [ ] No

    If "NO" which containers contained "head space" or bubbles? _____

Log-in Phase:

Date of sample log-in 7 / 09 / 10

Samples logged in by (print) Robert Tsin (sign) Robert Tsin

1. Was project identifiable from custody papers? [X] Yes [ ] No
2. Do Turn Around Times and Due Dates agree? [X] Yes [ ] No
3. Was the Project Manager notified of status? [X] Yes [ ] No
4. Was the Lab notified of status? [X] Yes [ ] No
5. Was the COC scanned and copied? [X] Yes [ ] No