Preliminary Assessment and Site Inspection Report for Warrior of Idaho

Canyon County

State of Idaho
Department of Environmental Quality

and

July 2014

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STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C. L. "Butch" Otter, Governor
Curt Fransen, Director

July 24, 2014

Mr. Ken Marcy
U.S. Environmental Protection Agency
Region 10
12928 SW 276th Street
Vashon, WA 98070

Subject: Preliminary Assessment and Site Inspection Report for Warrior of Idaho, Canyon County, Idaho

Dear Mr. Marcy:

The Idaho Department of Environmental Quality (DEQ) completed the enclosed Preliminary Assessment and Site Inspection (PA/SI) report for the Warrior of Idaho site under a cooperative agreement with Region 10 of the United States Environmental Protection Agency (EPA). Under this agreement, DEQ provides technical support for completion of preliminary assessments.

The Warrior of Idaho site is located at 412 South Kit Avenue in Caldwell, Idaho on private property. DEQ received notification on January 4, 2010 from EarthTouch, Inc. of Layton, Utah that tetrachloroethene (also known as perchloroethylene or PCE) levels in soil and ground water at the Warrior of Idaho property exceeded Idaho risk screening levels. This PA/SI was conducted with the permission of the property owner and the owner will receive a copy of this report.

For conducting this industrial site PA/SI, DEQ initially visited the site on February 4, 2014. Evaluation of the four migration/exposure pathways (ground water, surface water, soil and air), using information gathered during the site visit and desktop research, identified the ground water pathway as the top priority since limited information was available to determine the extent of ground water contamination onsite and no information was available regarding possible migration off-site. Well installation and ground water sampling activities were performed on May 6 and 7, 2014.

Based on available information and current conditions, the results of this PA/SI do not suggest that an imminent threat to human health and the environment is present at this site at this time. However, based on historic industrial uses, PA/SI observations, and remaining data gaps for potential contaminant pathways to receptors, DEQ recommends **Further Site Inspections** (as stated in Section 6, Conclusions and Recommendations, of this report) to make a final determination for the Warrior of Idaho site.

This PA/SI report can also be found on DEQ's Preliminary Assessment web page: http://www.deq.idaho.gov/preliminary-assessments. If you have any questions, please feel free to call me at (208) 373-0296 or email dana.swift@deq.idaho.gov.

Sincerely,

Dana Swift

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Preliminary Assessment and Site Inspection Report for Warrior of Idaho

Canyon County

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Prepared by

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Acknowledgments

DEQ would like to thank Warrior of Idaho, LLC for permitting access to this site.

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List of Acronyms

amsl	above mean sea level
bgs	below ground surface
BLLD	below laboratory limit of detection
BTOC	below top of casing
DCE	dichloroethene
DEQ	Idaho Department of Environmental Quality
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
ESC	ESC Lab Sciences
Fox	Fox Land Surveys
ft	foot/feet
HWMA	Hazardous Waste Management Act
IDTLs	initial default target levels
IDW	investigation-derived waste
IDWR	Idaho Department of Water Resources
LCS/LCSD	laboratory control sample/laboratory control sample duplicate
LSI	limited surface investigation
LUST	leaking underground storage tank
MCDC	Missouri Census Data Center
MCL	maximum contaminant level
MDL	method detection limit
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
NTU	nephelometric turbidity unit
ORP	oxidation reduction potential
PA	preliminary assessment
PCBs	polychlorinated biphenyls
PCE	perchlorothylene
PID	photo-ionization detector
PPE	probable point of entry
ppm	parts per million
PVC	polyvinyl chloride plastic
PWS	public water system
QAPP	Quality Assurance Project Plan
QC	quality control

RPD	relative percent difference
RV	recreational vehicle
SI	site inspection
SSHP	Site Safety and Health Plan
TCE	trichloroethene
TCLP	toxicity characteristic leaching procedure
TDL	target distance limit
TPH-DRO	total petroleum hydrocarbons-diesel range organics
µg/L	micrograms per liter
USFWS	United States Fish and Wildlife Service
VOCs	volatile organic compounds

1 Introduction

This report presents the preliminary assessment and site inspection (PA/SI) results for the Warrior of Idaho site in Canyon County, Idaho. The Idaho Department of Environmental Quality (DEQ) received a signed access agreement from Warrior of Idaho on November 4, 2013. The purpose of this PA/SI is to assess the threat posed to human health and the environment based on the available information gathered during desktop research and the current conditions observed from the field site inspection. Since the scope of a PA/SI does not include a complete site characterization, this report also includes recommendations to assist in determining a path forward for further site investigations or remediation.

Under a cooperative agreement with the United States Environmental Protection Agency (EPA) Region 10, the DEQ provides technical support for performing the PA/SI process at various mine and industrial sites located on private, state, or mixed ownership (public and private) lands. DEQ initiated the PA program in February 2002 to prioritize and assess potentially contaminated sites. Additional information about DEQ's PA program can be found at: *www.deq.idaho.gov/preliminary-assessments*.

The PA/SI process for this site is presented in the following sections:

- Section 2, **Site Background**, includes location, ownership, and a brief site description.
- Section 3, **Desktop Research and Migration/Exposure Pathways**, summarizes past contaminant investigations; ground water flow direction; observations and potential targets for the ground water pathway, surface water pathway, soil exposures and air pathway; and data gaps.
- Section 4, **Field Site Inspection**, provides an overview of the completed PA/SI field activities.
- Section 5, **Results**, compiles the field information and analytical data collected during the PA/SI field site inspection.
- Section 6, **Conclusions and Recommendations**, presents the PA/SI conclusions and recommendations based on the information gathered and the current site conditions.

2 Site Background

DEQ received notification on January 4, 2010 from EarthTouch, Inc. of Layton, Utah that tetrachloroethene (also known as perchloroethylene or PCE) levels in soil and ground water at the Warrior of Idaho property exceed Idaho risk screening levels (EarthTouch 2010a). The results of follow-on investigations (EarthTouch 2010b, 2010c) provide additional site characterization to confirm the presence of contamination in soil and ground water above Idaho risk screening levels and above the ground water maximum contaminant level (MCL) for PCE.

2.1 Site Location and Ownership

Site Name:	Warrior of Idaho
Location:	412 South Kit Avenue, Caldwell, Idaho 83605
County:	Canyon
Latitude/Longitude:	43.66839/-116.70509
Site Owner:	Warrior of Idaho, LLC

Review of historical information compiled for a Phase I Environmental Site Assessment (ESA; EarthTouch 2009) identified past site use as an industrial facility. An aerial photo from 1939 shows an unpaved landing strip transecting the property northeast to southwest. During the 1960s, Kit Manufactured Homes developed the site with multiple buildings used to manufacture prefabricated homes. By the mid-1980s, the site expanded southwest to include what had been the taxiway and a portion of the runway for the Caldwell Municipal Airport. The site continued to be used as an industrial facility, occupied by Kit Manufactured Homes and Extreme Recreational Vehicle (RV) Manufacturing, through the time of the Phase I ESA in 2009.

At the time of this PA/SI, no industrial activities or processes were observed at the site. Observed current site uses included: storage of approximately two million pounds of treated bean seeds within two warehouse complexes, a trucking school and a church (see Section 3.5 for additional details). The trucking school and church were present at the time of the Phase I ESA in 2009; however, bean seed storage was a recent change in site use.

2.2 Site Description

The Warrior of Idaho site is within the western industrial portion of the City of Caldwell (Figure 1). Caldwell is the county seat of Canyon County and is located in southwestern Idaho about 28 miles west of Boise. The property is an irregular-shaped parcel encompassing approximately 26.46-acres of land and bounded to the east by South Kit Avenue, north by Warehouse Street, and south of Garber Street. The site is situated on relatively flat land at an approximate elevation of 2,375 feet above mean sea level (amsl). The property includes 16 various sized structures, asphalt paved surfaces (primarily in the northern portion) and a large open grassy and dirt field (covering the southern portion).

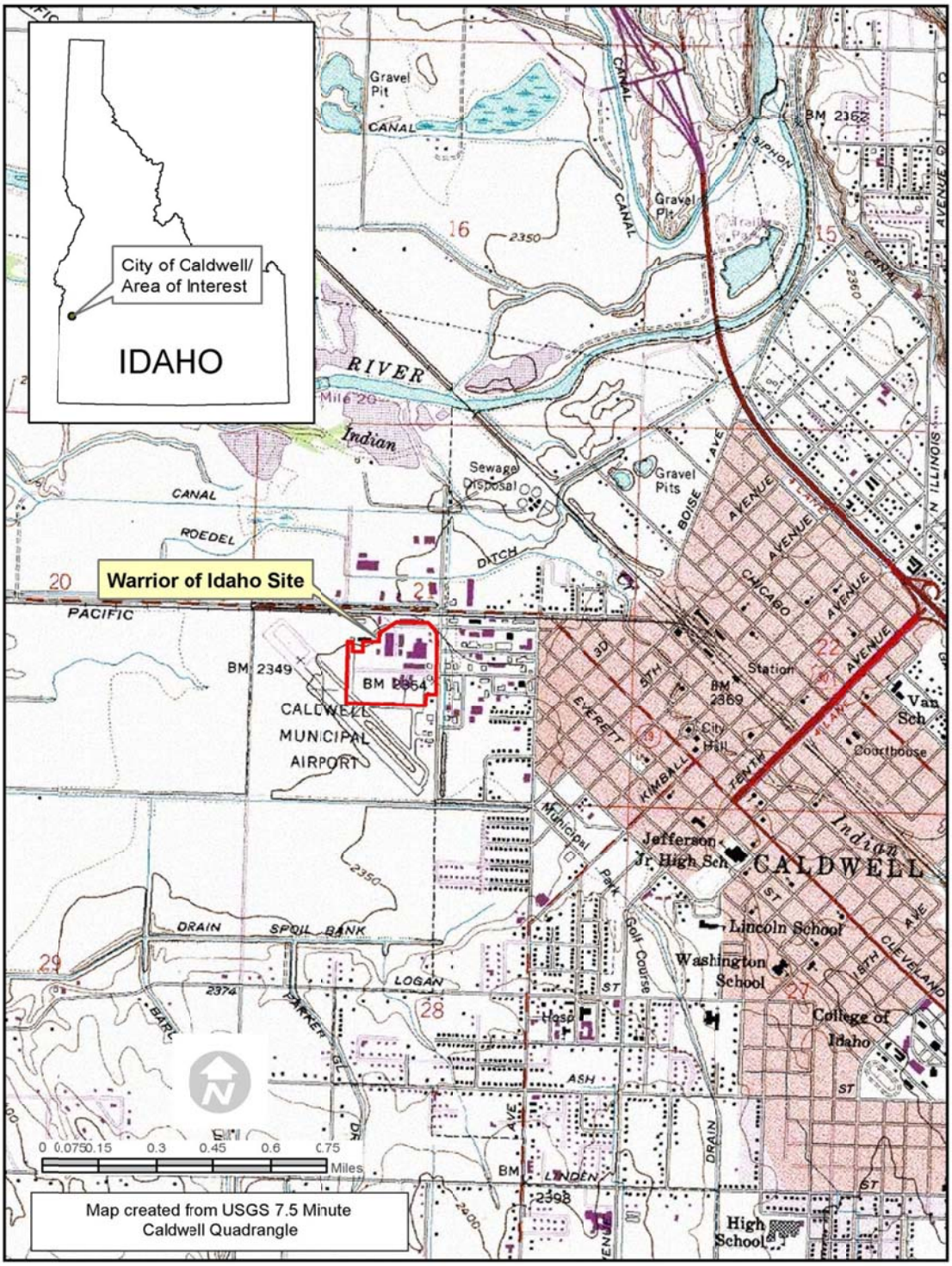

Figure 1. Location map for the Warrior of Idaho site.

3 Desktop Research and Migration/Exposure Pathways

The purpose of a PA/SI is to identify if any releases or potentials for release are present and if these releases have a migration/exposure pathway that presents an imminent threat to human health and the environment. The scope of a PA/SI does not include a complete site characterization; therefore, this PA/SI does not fully delineate or characterize the extent of soil and ground water contamination at this site. Desktop research included summarizing contamination observed during past investigations (Section 3.1) and gathering information about ground water flow direction from surrounding sites (Section 3.2).

Migration and exposure pathways that may lead to human or ecological receptors/targets include: ground water (Section 3.3), surface water (Section 3.4), soil (Section 3.5), and air (Section 3.6). Pathway evaluations are included in each of these sections. Based on desktop research, pathway prioritization and possible data gaps for the field site inspection were identified (Section 3.7)

3.1 Contamination Observed During Past Investigations

Past site investigations conducted in response to requests from Zions Bank included: Phase I ESA (EarthTouch 2009), Limited Subsurface Investigation (LSI; EarthTouch 2010a), Secondary LSI (EarthTouch 2010b), and Additional Soil and Groundwater Investigation Report (EarthTouch 2010c). In addition, DEQ conducted a Hazardous Waste Management Act (HWMA)/Resource Conservation and Recovery Act (RCRA) compliance inspection in August 2010 (DEQ 2010). As part of PA/SI planning, DEQ conducted a site visit on February 4, 2014 (see photos in Appendix A). Data and observations from these investigations and site visits are incorporated into this section.

In 2009, several potentially hazardous substances and petroleum products were noted on the property, including one 55-gallon drum of PCE. The bulk storage of these substances in a haphazard manner and the industrial use of this site constituted a Phase I ESA recognized environmental condition and prompted additional investigations (EarthTouch 2009). Since no sampling is conducted during a Phase I ESA, sampling was conducted by EarthTouch during the three follow-on investigations: LSI, Secondary LSI and Additional Soil and Groundwater Investigation.

A summary of relevant background data collected during these three investigations is shown in Tables 1 and 2 with an associated sample location map (from EarthTouch 2010c) shown as Figure 2. All past sampling was conducted by installing and abandoning temporary boreholes. Past laboratory analysis included Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DRO), TPH-Gasoline Range Organics and Volatile Organic Compounds (VOCs) in subsurface soil and ground water.

PCE was detected in soil above the IDTL in SB-9 at a concentration of 2,800 mg/kg and in ground water above the IDTL and MCL in B4-W1 at a concentration of 3,750 µg/L and in SBW-10 at a concentration of 6.1 µg/L. For the purposes of this PA/SI, PCE is considered the primary contaminant of concern; therefore, only PCE data was used in PA/SI planning. No degradation products of PCE (including trichloroethene [TCE], dichloroethene [DCE] or vinyl chloride) were detected during the past investigations.

Based on a photo in the Phase I ESA (EarthTouch 2009), the 55-gallon drum of PCE appears to have been stored immediately west of the SB-9 boring location within this warehouse. During DEQ's February 2014 site visit, the location of SB-9 was identified to be immediately south of a small circular dirt opening (approximately 0.5 ft diameter; photos included in Appendix A) within the warehouse concrete floor.

As a separate observation, this circular dirt opening appears to be part of a former in-ground hydraulic lift. Documentation of this lift was not found in the Phase I ESA or any of the three follow-on investigations. Although there was no documentation, subsurface soil and ground water samples from SB-9 were analyzed for polychlorinated biphenyls (PCBs) during the LSI likely because PCBs are historically known to be associated with lifts. No PCB detections were reported in these samples; therefore, additional investigations for PCBs were not conducted during this PA/SI.

Table 1. Relevant soil laboratory analytical data from past investigations.

Site Area Description	Past Investigation	Sample Location	Depth (ft bgs)	PCE Concentration (µg/kg)	PCE Analytical Reporting Limit (µg/kg)
Source Area	LSI	SB-9	7.5-8	**2,800**	24
	LSI	SB-6	Soil was not analyzed for VOCs.		
	LSI	SB-7	7-7.5	3.6	2.8
	Additional GW	B3-S1	8-10	5.98	2.55
	Additional GW	B4-S1	6-8	3.48	2.65
	Additional GW	B4-S2	23-25	15.3	2.68
	Additional GW	B5-S1	8-10	3.94	2.33
Downgradient Area	LSI	SB-4	Soil was not analyzed for VOCs.		
	LSI	SB-5			
	LSI	SB-8	7.5-8	BLLD	2.7
Northeast Corner	LSI	SB-1	7.5-8	BLLD	2.5
East Side and Southeast Corner	LSI	SB-2	7.5-8	BLLD	2.9
	LSI	SB-3	5.5-6	BLLD	2.4
Southern Boundary	LSI	SB-10	6.5 to 7	BLLD	2.8
	Additional GW	B1-S1	7-9	3.01	2.54
	Additional GW	B1-S2	23-25	3.96	2.66
	Additional GW	B2-S1	8-9	4.46	2.44

LSI = Limited Subsurface Investigation (EarthTouch 2010a); Secondary LSI = Secondary Limited Subsurface Investigation (EarthTouch 2010b); Additional GW = Additional Soil and Groundwater Investigation Report (EarthTouch 2010c); BLLD = below the laboratory limit of detection. **BOLD** = detection above Initial Default Target Level (IDTL) for PCE of 28.8 µg/kg.

Table 2. Relevant ground water laboratory analytical data from past investigations.

Site Area Description	Past Investigation	Sample Location	Depth (ft bgs)	PCE Concentration (µg/L)	PCE Analytical Reporting Limit (µg/L)
Source Area	LSI	SBW-9	7-8*	2.0	2.0
	LSI	SB-6	Ground water was not analyzed for VOCs.		
	LSI	SBW-7	7-8*	BLLD	2.0
	Additional GW	B3-W1	10-12	BLLD	2.0
	Additional GW	B4-W1	23-25	**3,750**	200**
	Additional GW	B5-W1	10-12	2.0	2.0
Downgradient Area	LSI	SB-4	Ground water was not analyzed for VOCs.		
	LSI	SB-5			
	LSI	SBW-8	7-8*	BLLD	2.0
	Additional GW	B6-W1	28-30	BLLD	20**
	Additional GW	B7-W1	27-29	BLLD	2.0
Northeast Corner	LSI	SBW-1	7-8*	2.4	2.0
East Side and Southeast Corner	LSI	SBW-2	7-8*	BLLD	2.0
	LSI	SBW-3	7-8*	BLLD	20**
Southern Boundary	LSI	SBW-10	7-8*	**6.1**	2.0
	Secondary LSI	GP-1	6-8*	BLLD	2.0
		GP-2	6-8*	BLLD	2.0
		GP-3	6-8*	BLLD	2.0
		GP-4	6-8*	BLLD	2.0
		GP-5	6-8*	BLLD	2.0
	Additional GW	B1-W1	26-30	BLLD	2.0
	Additional GW	B2-W1	10-12	BLLD	2.0

LSI = Limited Subsurface Investigation (EarthTouch 2010a); Secondary LSI = Secondary Limited Subsurface Investigation (EarthTouch 2010b); Additional GW = Additional Soil and Groundwater Investigation Report (EarthTouch 2010c); BLLD = below the laboratory limit of detection. *****No depth specified; assume ground water sample collected immediately below the water table. ******Reporting limit above IDTL and the maximum contaminant level (MCL) for PCE of 5 µg/L. **BOLD** = detection above the IDTL and MCL for PCE of 5 µg/L.

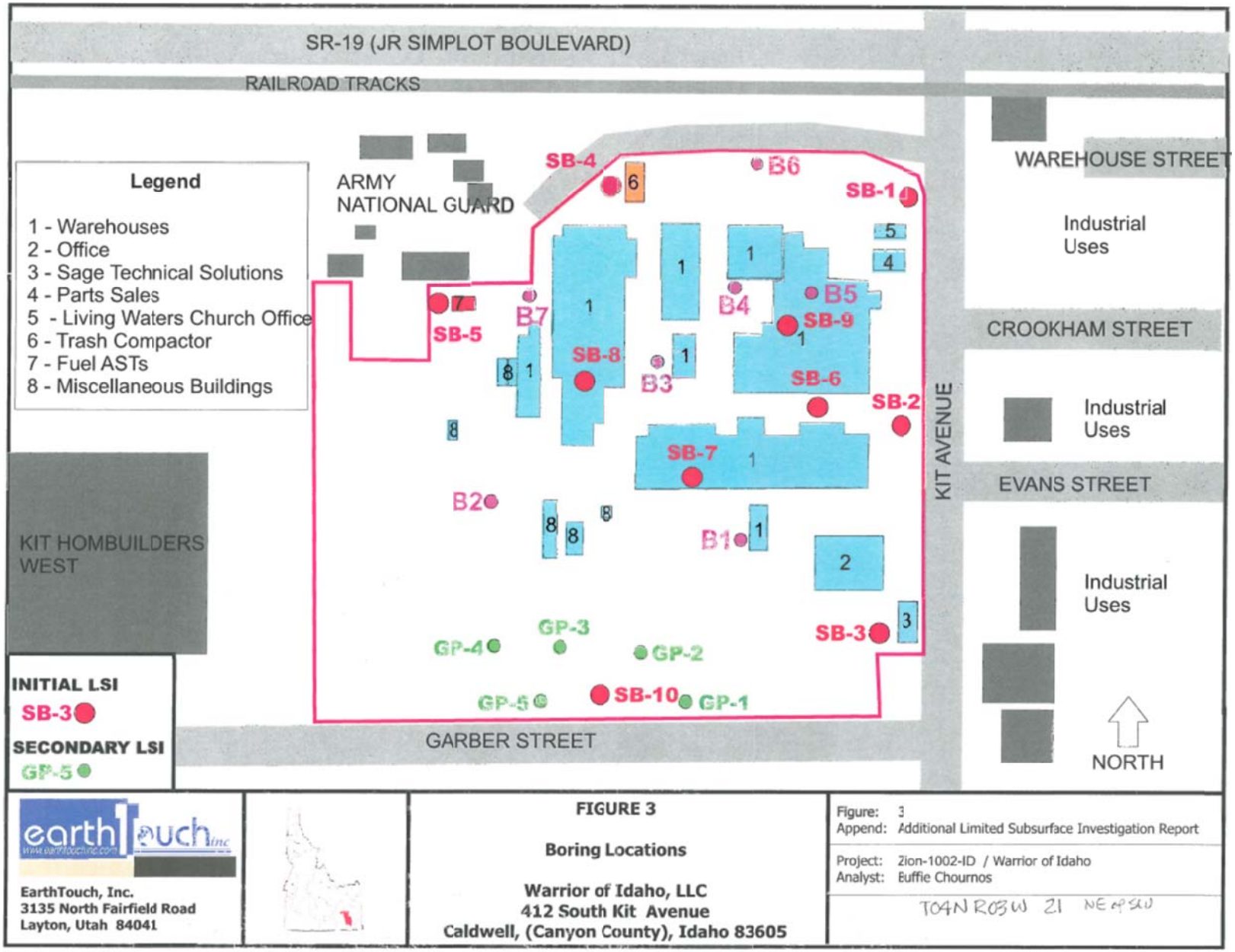

Figure 2. Sample location map for past investigations (from EarthTouch 2010c).

3.2 Ground Water Flow Direction

The Phase I ESA suggests that the shallow ground water gradient likely follows topography in the vicinity for the site and would be in a general westward direction toward the Boise River and Snake River (EarthTouch 2009). Ground water flow direction was not confirmed during the past investigations.

Additional ground water flow direction information is available for the Idaho Army National Guard Facility, located directly to the northwest and adjacent to the site at 700 West Warehouse Street (Figure 2). This facility was the location of a leaking underground storage tank (LUST) cleanup in the 1990s. Remediation included installation of 18 monitoring wells, aquifer tests, and several years of water level measurements to demonstrate that ground water flow is primarily to the west-northwest (Maxim Technologies 1994-1999). All of the monitoring wells at this site have been abandoned. Limited water level data is also available for the V-1 Oil property located across Simplot Boulevard to the northwest of the site at 824 Simplot Boulevard. Data from this site also suggest ground water flow to the west-northwest (RMEA 2009). See Section 4.3 for ground water flow direction information based on data collected during the PA/SI.

3.3 Ground Water Migration Pathway

Ground water within four miles of the site supplies 1,761 domestic wells and 59 public water systems (PWS; Figure 3). The closest PWS to the site include City of Caldwell PWS (ID3140013) approximately 0.3 mile to the south and three Simplot Potato PWS (ID3140174) wells approximately 1 to 1.5 miles to the west and northwest. Based on a review of the available drill logs from Idaho Department of Water Resources (IDWR) and use of surrounding properties as industrial, no wells are currently present on the site and none of the permitted wells within a 0.25 mile radius of the site are suspected to be currently used as a drinking water source. See Section 5.1 for ground water data collected during the PA/SI.

Climate information is based on a summary for Caldwell, Idaho obtained from the Western Regional Climate Center (*http://www.wrcc.dri.edu/climatedata/climsum/*). The climatological data is collected at the Caldwell Station (101380; elevation 2,370 ft amsl). Based on data collected from 1904 to 2005, total annual precipitation averages 10.6 inches. The driest months of the year are July and August. The average annual high temperature is 65.0°F and the average annual low temperature is 37.2°F. July is the hottest month with an average annual high temperature of 92.4°F. January is the coldest month with an average annual low temperature of 20.5°F.

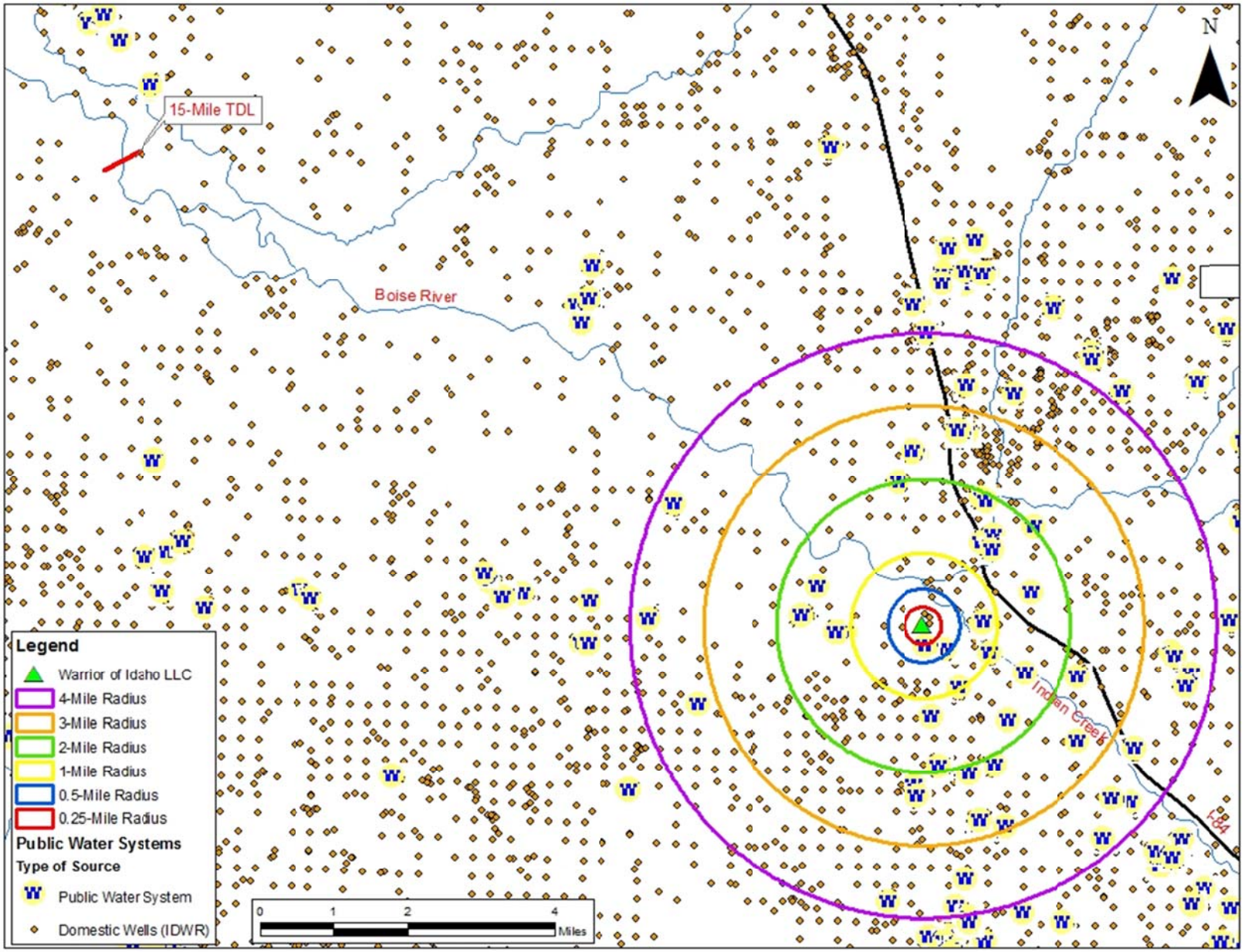

Figure 3. Ground water and surface water migration pathways.

3.4 Surface Water Migration Pathway

The surface water migration pathway begins at the probable point of entry (PPE) of source water runoff from the site to the nearest surface water body and extends downstream for approximately 15 miles. Based on observations during DEQ's site visit on February 4, 2014 and historical information (EarthTouch 2009), water accumulates and ponds on the paved and dirt surfaces following storm events. The storm water management system around the site includes curbs-and-gutters located along Kit Avenue and Garber Street. Water on the unimproved grassy and dirt field (covering the southern portion) percolates into the soil. The surface water migration pathway begins with the storm water management system as the PPE which directs water to nearby surface water bodies and extends downstream along the Boise River for approximately 15 miles (Figure 3). The 15-mile target distance limit (TDL) is completed on the Boise River, which flows to the northwest of the site. Riverine and freshwater wetlands and ponds are located within a 2-mile radius from the site (Figure 4).

Based on DEQ's February 2014 site visit, additional surface water observations include:

- The site owner stated that the southern portion of the site was only used to store finished RVs. Historical use of this area included an airfield in the 1930s (EarthTouch 2009). Although historic contamination from airfield operations may have occurred, this area was not the focus of the PA/SI.

- Adjacent to the western-most building (Figure 2), possible conduits for surface water migration to ground water were observed at the former location of four large posts used during RV manufacturing. These posts have been cut off at ground surface, currently remain as open holes, are suspected to be at least 8 feet deep, and contained water during the site visit (photos included in Appendix A). Although no contamination is suspected in this area, DEQ recommends proper filling and closure of these post holes.

Sensitive species can have large habitat ranges that overlap the 4-mile radius surrounding the site. Based on the list of *Endangered, Threatened, Proposed, and Candidate Species with Associated Proposed and Critical Habitats in Idaho* (USFWS 2013), the following species are identified for Canyon County:

- Mollusks: Snake River Physa, *Haitia (Physa) natricina*, endangered species.

- Plants: Slickspot Peppergrass, *Lepidium papilliferum*, proposed species-proposed critical habitat.

Surface water sample collection was not part of this PA/SI.

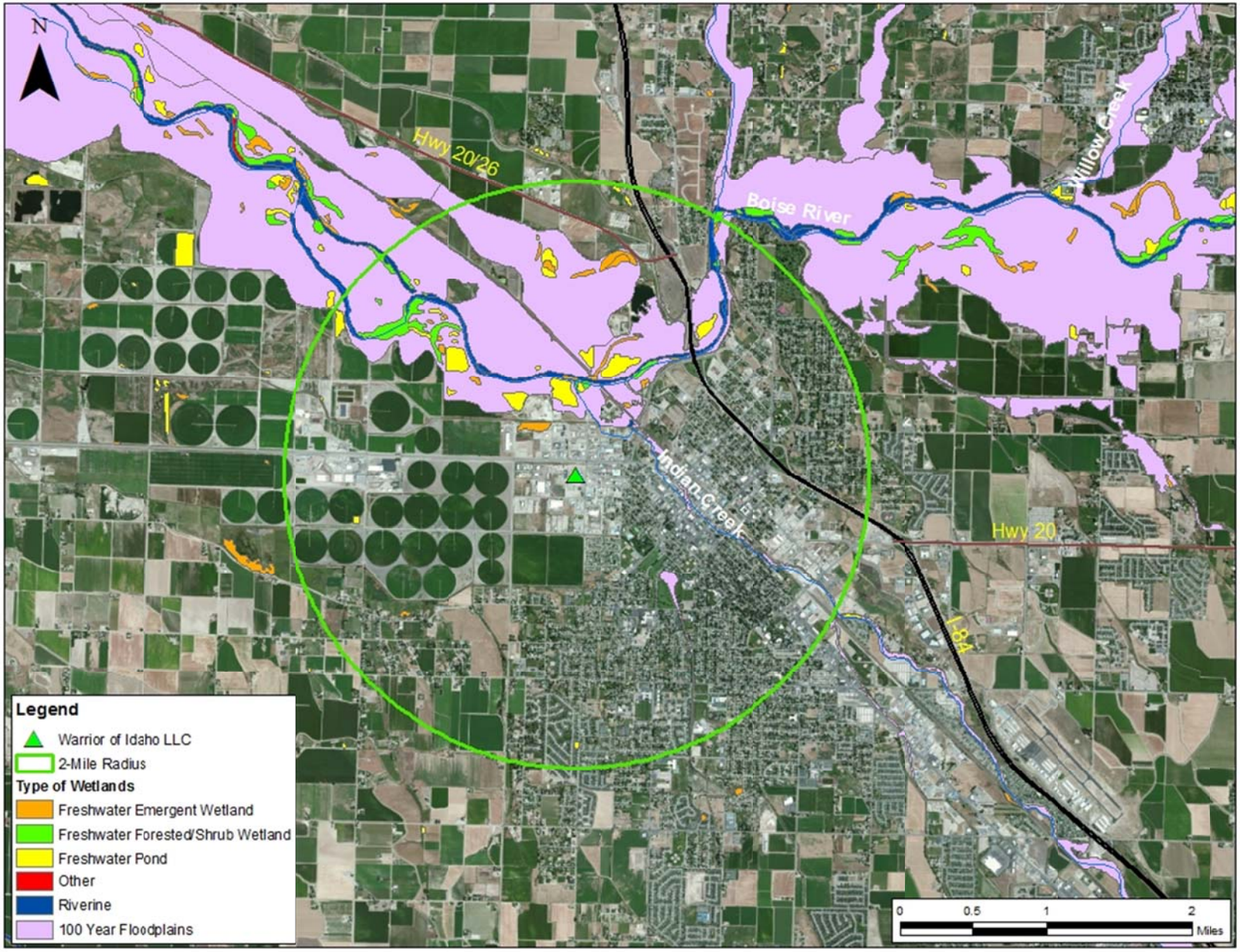

Figure 4. Surface water migration pathways.

3.5 Soil Exposure Pathway

The soil exposure pathway is evaluated based on the potential threat to nearby residents within one mile and current and future onsite workers and visitors from direct-contact exposure if soil within the top two feet is exposed. The estimated population within a 1-mile radius of the site is 3,451 people (MCDC 2014). The nearest school, Lincoln Elementary School, is located approximately 1 mile southwest of the site, and the nearest child-care facility is also located approximately 1 mile to the southwest of the site (MapQuest 2014). Onsite receptors identified during DEQ's February 2014 site visit include:

- **Workers:** Treasure Valley Seed Company currently uses two warehouse complexes (see warehouses located in the northeastern and central portions of the site containing soil borings SB-7 and SB-9 on Figure 2) to store approximately two million pounds of treated seed beans. The beans are stored in super sack totes and approximately ten workers were present during DEQ's February 2014 site visit.
- **Students:** Sage Trucking School occupies a building for classroom training on the southeast corner of the site. They also use part of the southern portion of the property as a practice driving course.
- **Visitors:** A small building located in the northeast corner of the property is used as a church. The church's information sign lists two services on Sundays. No one was present during DEQ's site visit.

Limited concerns for surface soil contamination were identified during the Phase I ESA (EarthTouch 2009); therefore, surface soil was not sampled during past investigations. During DEQ's February 2014 site visit, suspected soil contamination included weathering of lead-based paint and asbestos containing materials from the warehouse buildings since these buildings do not appear to be currently maintained on a regular basis. Another potential source of soil contamination is historical site use as an airfield. The soil exposure pathway was not further evaluated during the PA/SI.

3.6 Air Migration Pathway

The air migration pathway is evaluated based on the threat to onsite and nearby populations within a 4-mile radius TDL from releases to air. The estimated population within a 4-mile radius of the site is 43,598 (MCDC 2014). No air samples were collected on the property during past investigations. The air migration pathway was not further evaluated during the PA/SI.

3.7 Desktop Research Data Gaps

Based on past site investigations and associated information, several desktop research data gaps are identified. Evaluation of the four pathways identifies ground water as the top priority since PCE was detected at B4 above the MCL and IDTL (Table 2), limited information is known about the extent of ground water contamination onsite, and no known information about possible migration off-site. Although there are still data gaps for the surface water, soil, and air pathways, further evaluation is not a priority at this time given limited PA/SI funding. Therefore, the other pathways (surface water, soil exposure, and air) were not evaluated as part of this PA/SI.

Data gaps for the ground water pathway, along with methods for addressing or not addressing these data gaps, are summarized in Table 3. All of these data gaps cannot be addressed under the scope and funding of a PA/SI; therefore, the objectives of this field site inspection for the ground water migration pathway included: 1) the source area of onsite ground water contamination and 2) downgradient ground water migration that could be a potential risk to off-site receptors. This PA/SI also included evaluation of background concentrations in one upgradient location selected based on the suspected ground water flow direction. Also, an initial evaluation of ground water flow direction was conducted; however, monthly or quarterly water level measurements and installation of additional ground water wells are necessary to confirm flow direction and evaluate seasonal changes. In addition, delineating the extent of ground water contamination was beyond the scope of a PA/SI.

Subsurface soil data gaps, beyond the scope of a PA/SI, include delineating the extent of subsurface soil contamination and investigating vapor intrusion pathways. The surface soil pathway was not investigated given that 1) the soil exposure pathway only includes evaluation within the top two feet of soil and past PCE detections were at depths of 7.5 to 25 ft below ground surface (bgs) and 2) the ground surface is either a warehouse concrete floor or a paved outdoor surface within the suspected source area where PCE was detected above the IDTL (SB-9, Table 1).

Table 3. Ground water data gaps for the Warrior of Idaho site.

Data Gap	Unknowns	Addressing the Data Gap
Source Area	Past PCE detections are inconsistent with depth: • **SB-9 and SBW-9:** high concentrations (2,800 µg/kg) in shallow soil (7.5-8 ft bgs); low concentrations (2.0 µg/L) in shallow ground water (7-8 ft bgs) • **B4-S1, B4-S2, and B4-W1:** low concentrations (3.48 and 15.3 µg/kg) in shallow and deep soil (6-8 ft and 23-25 ft bgs); high concentrations (3,750 µg/L) in deep ground water (23-25 ft bgs)	Investigate shallow and deep ground water concentrations by installing a paired set of shallow/deep wells between SB-9 and B4 and sampling for VOCs. **MW-2:** Shallow well; piezometric surface expected at 6-8 ft bgs **MW-3:** Deep well; drilled to the blue-clay layer (observed at 23-25 ft bgs during installation of B4); minimum of 5 feet of screen
Downgradient Migration	Data gaps for possible downgradient borings: • **SB-4 and SB-5** were not analyzed for VOCs in ground water. • **B6-W1:** No detection in deep ground water sample (28-30 ft bgs). Analytical reporting limit set at 20 µg/L (above the IDTL and MCL). • **B7-W1:** No detection in deep ground water sample (27-29 ft bgs).	Since historic ground water flow direction at adjacent sites was observed to be west-northwest and past investigations included deep ground water sampling, investigate possible contamination within shallow ground water by installing two wells and sampling for VOCs: **MW-4 and MW-5:** Shallow wells; downgradient to the west-northwest of the potential source area; piezometric surface expected 7-8 ft bgs
Background	PCE detection (2.4 µg/L at SBW-1). Analytical reporting limit set at 20 µg/L (above the IDTL and MCL) at SBW-3.	Collection of a background sample for VOCs at the same time as other samples is necessary; therefore, install and sample **MW-1** as a shallow well.
Ground Water Flow Direction	Not confirmed onsite during past investigations.	Collect water levels at all new wells. However, given the close proximity of the new wells and only a one-time measurement; the flow direction may not be confirmed during the PA/SI.
Potential Upgradient Sources	Possible upgradient sources will need to be investigated given past low-level PCE detections: • Northeast corner of site: SBW-1 has a ground water detection of 2.4 µg/L. • Southeast corner of site: Analytical reporting limit set at 20 µg/L (above the IDTL and MCL) at SBW-3. • Southern boundary: SBW-10 had a ground water detection of 6.1 µg/L	This data gap will not be addressed during the PA/SI.

4 Field Site Inspection

Field site inspection activities conducted for this PA/SI included advancing direct push soil borings, ground water well installation, well development and low-flow ground water sampling. DEQ contracted URS to perform the field activities identified in this section under Contract #C973, Task Order 15. Well installation and sampling activities were performed on May 6 and 7, 2014 by URS and DEQ personnel and subcontractors. All field activities were overseen by Derek Young, Idaho Professional Geologist (#1018) and Senior Environmental Geologist from URS' Boise office. Photos are provided in Appendix A.

Unless otherwise described herein, field activities were performed in accordance with the Quality Assurance Project Plan (QAPP, URS 2014a) generated by URS and approved by DEQ prior to the commencement of field activities. URS contacted DigLine of Idaho to locate and mark buried utilities in the areas of the site proposed for subsurface investigation. In addition, URS subcontracted Gem State Locating, a private utility locating service, to clear each proposed boring location for utilities not located by DigLine.

URS was scoped with the following field activities:

- Subcontract a direct push driller licensed in the State of Idaho to install and develop up to five new ground water monitoring wells using direct push drilling techniques (Section 4.1);
- Perform low-flow ground water sampling for VOCs and collect water levels in each of the new monitoring wells for VOCs (Section 4.2 and 4.3);
- Containerize investigation-derived waste (IDW), including borehole cuttings and monitoring well purge water, and collect representative samples of both the IDW soil and IDW purge water for waste management characterization (Section 4.4); and
- Subcontract a surveyor licensed in the State of Idaho to perform a survey including location data and top of casing data for the new ground water monitoring wells (Section 4.5).

All field activities were carried out in accordance with the Site Safety and Health Plan (SSHP) (URS 2014b). The URS representative acted as the Site Safety and Health Officer for the project and performed both safety and environmental surveillance during the fieldwork. The direct push drilling contractor and DEQ employees who worked on the site were provided a copy of the SSHP and signed acceptance forms (Appendix B). In the morning prior to commencing work, a site safety (tailgate) meeting was held by the URS representative to cover the day's activities and potential safety hazards. The meeting's topics and attendees are documented on the Daily Safety Meeting forms (Appendix B).

Quality control of field activities was assured and documented by the URS representative. Daily Quality Control Reports are provided in Appendix C.

4.1 Direct Push Ground Water Well Installation and Development

Licensed Idaho well driller, Earth Probe Environmental Services (Earth Probe) from Bountiful, Utah was subcontracted by URS to mobilize and perform direct push drilling services at the site. Earth Probe utilized a track mounted Geoprobe® 7822DT direct push drill rig to advance and sample borings for monitoring wells MW-1 through MW-5 (Figure 5). The wells were installed in this order starting with the lowest suspected concentration of PCE contamination: MW-1, MW-5, MW-4, MW-2, and MW-3.

All monitoring wells except MW-3, installed to 34.5 feet bgs, were installed to a depth of 17.9 feet bgs. Earth Probe permitted the ground water wells through the IDWR; however, four of the five wells (MW-1, MW-2, MW-4 and MW-5) did not exceed the IDWR guideline depth of 18 feet bgs where permitting is required. As such, only monitoring well MW-3 is permitted under permit number 965655-871714 and Tag number D0066307. The boring logs for each monitoring well, IDWR well permit, and a well completion diagram are provided in Appendix D.

Wells are constructed of 1-inch outside diameter Schedule 40 polyvinyl chloride plastic (PVC) with flush-threaded joints. The well casings extend from the bottom of the boring to approximately 2 inches below the ground surface. Well screens with 0.010-inch-wide slots in five and ten-foot lengths were suspended just above the bottom of the boring prior to adding annulus materials. Colorado Silica Sand with a 10-20 gradation was placed to serve as a filter pack around the well screens from the base of the wells to approximately 2 feet above the top of the screen. A minimum of 3 feet of hydrated bentonite granules were placed immediately above the filter pack. Granular bentonite was then placed as the annular seal to the surface. A lockable cap was placed on the top of the well casing with a flush-mounted steel traffic-rated cover and vault embedded in concrete at the ground surface to complete the well installations.

Monitoring wells were developed immediately after installation using a pump and surge method until purge water was clear. Between five to 15 gallons of purge/development water were recovered and containerized from each well.

The recommendation for addressing the source area data gap (Table 3) was to install a paired set of shallow/deep wells (MW-2 and MW-3) between SB-9 and B4. However, during a DEQ/URS pre-field work site walk-through on April 16, 2014, this location was found to be inaccessible because the current tenant had stacked metal boxes within this entire area (Figure 5) and the boxes were stacked as tall as the warehouse buildings (see photos in Appendix A). These metal boxes did not cover this area during DEQ's site visit in February 2014. Therefore, the locations of MW-2 and MW-3 were moved to the west and slightly north of the originally planned location.

One of the goals of the Additional Soil and Groundwater Investigation (EarthTouch 2010c) was to collect ground water samples immediately above the blue-clay layer reported to be at depths of 25 to 40 ft bgs in the vicinity of this site. During this past investigation, a clayey silt layer was reported in the boring logs for B4 (between 23-25 ft bgs) and B7 (at 27 ft bgs). During the PA/SI field site investigation, the plan was to advance MW-3 to the depth of the blue-clay layer. Although a clay layer was observed in MW-3 at 29.4 ft bgs, this clay was not similar to the reduced blue-clay observed in other sites within the Caldwell area; therefore, the boring was terminated at the point of refusal (34.5 ft bgs).

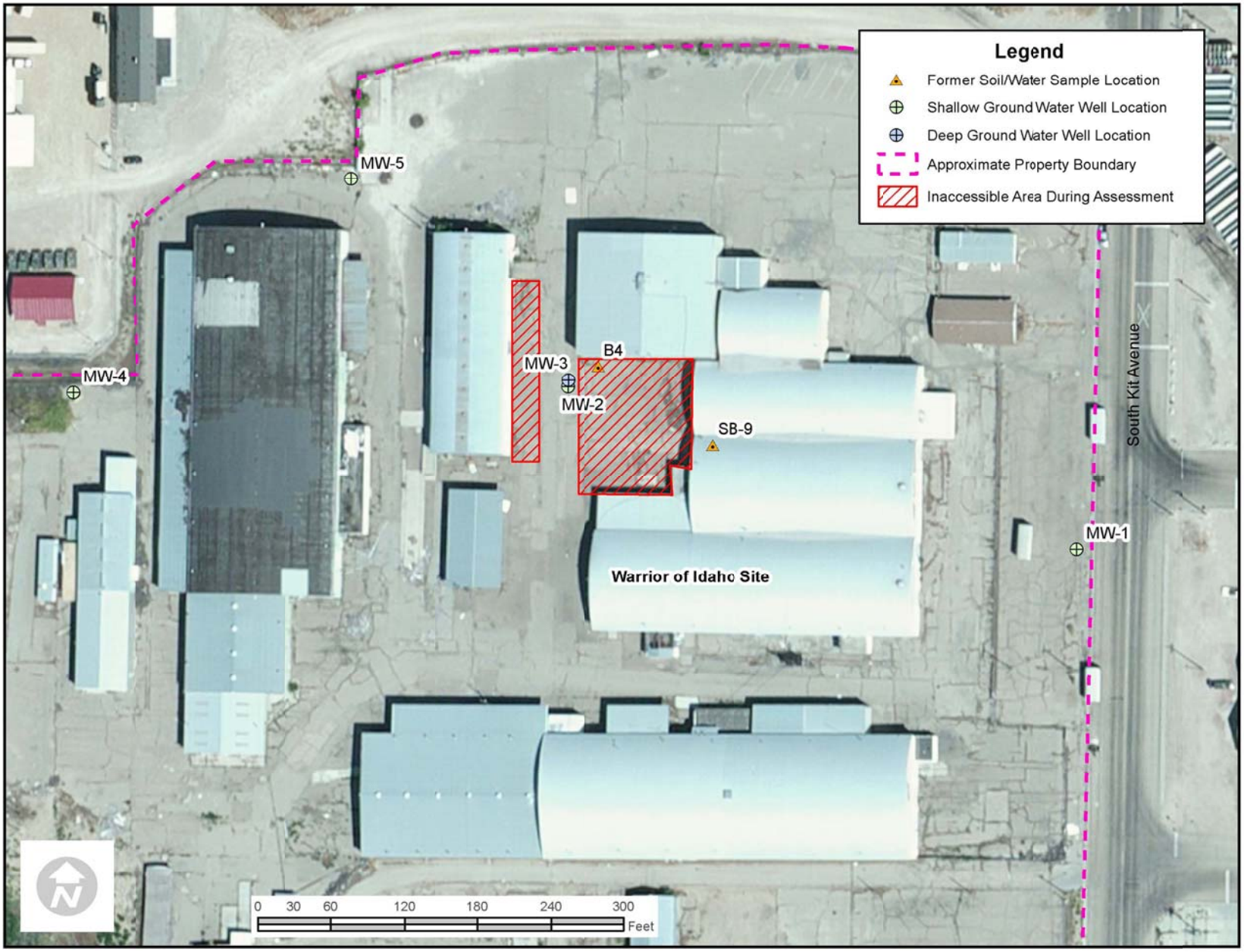

Figure 5. Ground water monitoring location map for the Warrior of Idaho site.

4.2 Ground Water Low-Flow Sampling

Ground water sampling of all five wells was performed on May 7, 2014. Prior to low-flow purging, depth to ground water was measured in each well with an electronic water level meter and the potential presence of floating free-phase product was measured using an electronic interface meter. Measurable free-phase floating product was not detected in the monitoring wells. The wells were purged using a low-flow peristaltic pump and flow cell in general accordance with the EPA standard operating procedure EPASOP-GW-001 (EPA 2010). Please note that this procedure calls for use of two-inch diameter and larger monitoring wells using Teflon tubing and a separate turbidity meter. However, wells installed at the site were one-inch diameter and URS sampling utilized disposable polyethylene tubing and an integrated turbidity meter within the flow cell.

Water quality parameters including temperature, oxygen reduction potential, turbidity, specific conductivity, pH and dissolved oxygen were monitored and recorded during purging activities. Ground water samples were typically collected after ground water parameters stabilized and the turbidity reading was less than 10 NTUs, or had stabilized. Stabilization was defined as the last two readings from 5-minute intervals showing dissolved oxygen within 10%, pH within 0.1 unit, temperature within 10%, specific conductivity within 3%, depth to water within 0.2 feet, and turbidity within 10%. Water quality parameters recorded during low-flow sampling are provided in Appendix E and equipment was calibrated in accordance with the manufacturer's instructions (Appendix F).

In total, six ground water samples (five samples plus one field duplicate) were collected from the five new monitoring wells. The samples, along with one trip blank, were submitted for analysis of VOCs by EPA Method 8260B. Samples were submitted to Environmental Science Corporation (ESC) and a standard laboratory turn-around time was requested. Low-flow ground water sampling results are included in Section 5.

4.3 Water Levels and Ground Water Flow Direction

The depth to static water from top of casing in the new ground water wells ranges from 5.74 feet below top of casing in well MW-4 to 7.67 feet below top of casing in well MW-1. Ground water levels were measured prior to ground water sampling activities on May 7, 2014 and again on June 9, 2014. Depth to water measurements and resulting ground water elevations are included in Table 4.

Table 4. Monitoring well ground water measurements and elevations.

Monitoring Well	Northing (feet)	Easting (feet)	Ground Elevation (feet)	Top of Casing Elevation (feet)	Date	Depth to Water (feet)	Resulting Ground water Elevation (feet)
MW-1	730803.7	2372360.5	2356.4	2356.180	5/7/2014	7.67	2348.51
					6/9/2013	7.81	2348.37
MW-2	730936.7	2371943.2	2355.3	2354.878	5/7/2014	6.44	2348.44
					6/9/2013	6.70	2348.18
MW-3	730942.3	2371943.4	2355.2	2354.795	5/7/2014	6.34	2348.45
					6/9/2013	6.61	2348.19
MW-4	730932.2	2371538.4	2354.4	2354.079	5/7/2014	5.74	2348.34
					6/9/2013	6.10	2347.98
MW-5	731107.2	2371766.0	2354.8	2354.531	5/7/2014	6.13	2348.40
					6/9/2013	6.415	2348.11

Ground water elevation contours (Figure 6), derived from the depth to ground water measurement data collected on May 7, 2014, illustrate a relatively flat ground water gradient with a general west-northwest ground water flow direction across the property.

4.4 Investigation-Derived Waste Sampling

Investigation-derived waste consisted of approximately 65 gallons of ground water monitoring well purge water contained within one 55-gallon blue plastic drum and two five-gallon plastic buckets and one five-gallon bucket containing approximately five gallons of soil cuttings from the exploratory boreholes.

A representative VOC and RCRA metals ground water sample was collected from the containerized purge water to characterize the IDW purge water and assess Toxicity Characteristic Leaching Procedure (TCLP) toxicity characteristic hazardous waste constituents for the water. A composite ground water sample was collected from the containerized ground water purge water using a peristaltic pump drawing a representative volume of sample. The purge water sample was collected directly from the pump discharge tubing into laboratory supplied sampling containers.

In addition, a single VOC and RCRA metals composite IDW soil sample was collected from containerized soil cuttings to assess TCLP toxicity characteristic hazardous waste constituents for the soil. The soil sample was collected from the containerized cuttings after the cuttings had been lightly mixed, by tumbling and shaking the sealed containers. The sample was submitted to ESC for total VOC and total RCRA metals analysis. IDW analytical results for VOC and RCRA metals detections in the IDW soil and purge water samples are summarized in tables included in Appendix G.

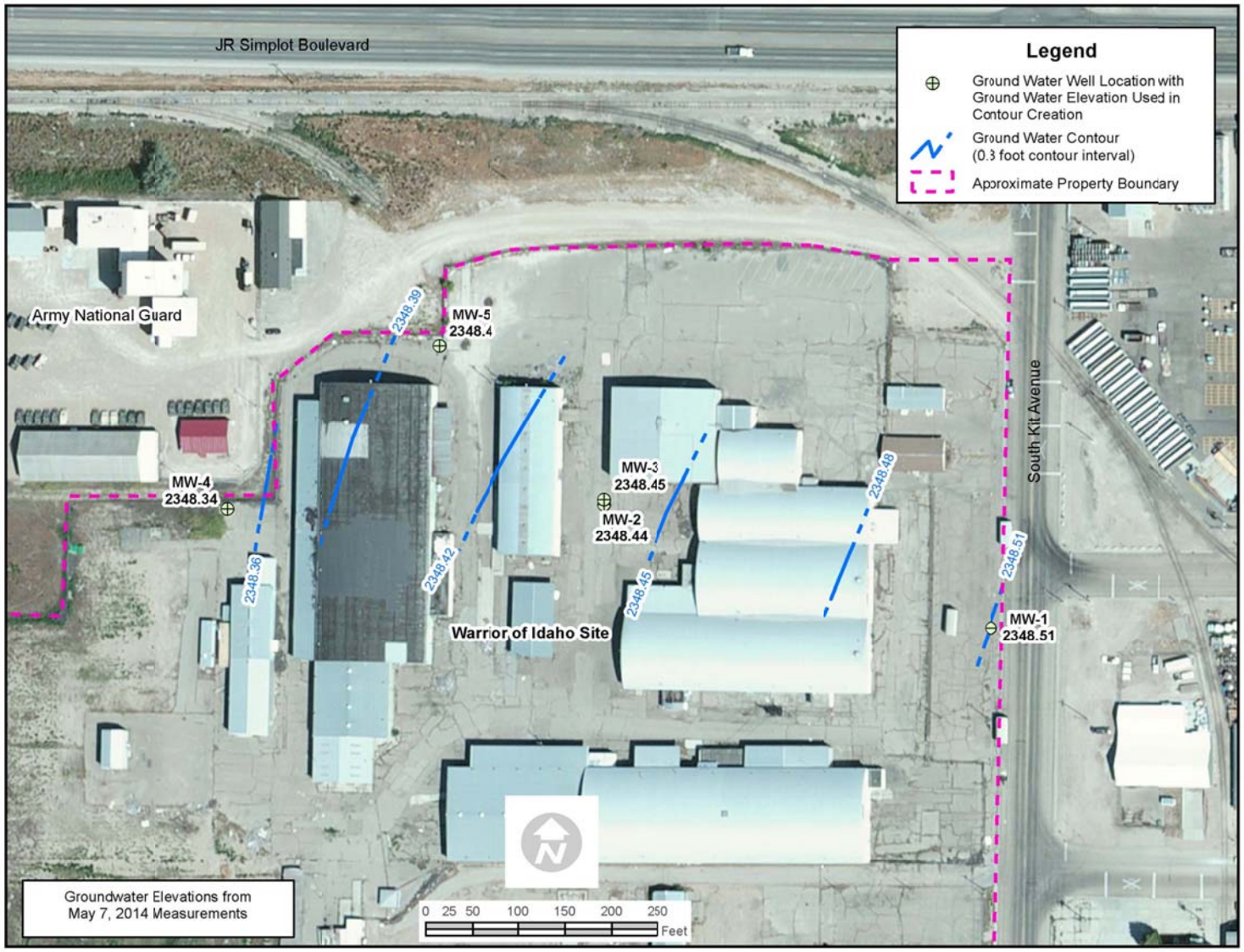

Figure 6. Ground water contour map for the Warrior of Idaho site.

4.5 Surveying

Fox Land Surveys (Fox) from Meridian, Idaho was contracted by URS to survey the location and top of casing elevation for each of the new ground water monitoring wells. Ground water monitoring well top of casing elevations were surveyed via optical technique to an absolute vertical position within a nominal 0.1 feet of the North American Vertical Datum of 1988. The relative vertical tolerance (well to well) is less than or equal to 0.004 feet at the 95% confidence level. Horizontal survey data were recorded utilizing survey grade global positioning system equipment. The full survey report from Fox is included as Appendix H. Northing and Easting coordinates are provided in feet from the Idaho State Plane Western Projection and North American Datum of 1983, and elevations are measured in feet above sea level recorded from the North American Vertical Datum of 1988.

5 Results

Results of the field site inspection include a summary of the ground water sampling results and field observations (Section 5.1); data verification, validation and usability assessment for the analytical data package (Section 5.2); and waste management considerations (Section 5.3).

5.1 Ground Water Sampling and Field Observations

A summary of ground water analytical detections are shown in Table 5 and all VOC results are shown in Table 6. Only low-levels of PCE and TCE were detected with results below the IDTLs and MCLs. PCE was detected in shallow ground water downgradient of the source area (MW-2) and downgradient at the northwest edge of the property (MW-5). TCE was detected in the background well (MW-1) and in deep ground water downgradient of the source area (MW-3). It should be noted that the upgradient detection of TCE in MW-1 is not a contributing factor to the downgradient PCE detections since TCE can be present in ground water either from a TCE source or as an anaerobic reductive dechlorination product of PCE (ITRC 2008).

Table 5. Summary of ground water analytical detections.

Well	Total Well Depth (ft bgs)	Data Gap	PCE (mg/L)	TCE (mg/L)
MW-1	17.9	Background Shallow Well	<0.00037	0.0004
MW-2	17.9	Downgradient of Source Area Shallow Well of Paired Set	0.00083	<0.00040
MW-2		*Duplicate Sample Result*	0.00096	<0.00040
MW-3	34.5	Downgradient of Source Deep Well of Paired Set	<0.00037	0.00046
MW-4	17.9	Downgradient, West Edge of Property Shallow Well	<0.00037	<0.00040
MW-5	17.9	Downgradient, Northwest Edge of Property Shallow Well	0.0023	<0.00040
		IDTL	*0.005*	*0.00332*
		MCL	*0.005*	*0.005*

ft bgs = feet below ground surface

Table 6. Summary of monitoring well ground water sample results for volatile organic compounds.

Sample Name						TRIP BLANK		WC-MW-1		WC-MW-2		WC-MW-2-D		WC-MW-3		WC-MW-4		WC-MW-5	
Collect Date						5/7/2014		5/7/2014		5/7/2014		5/7/2014		5/7/2014		5/7/2014		5/7/2014	
Method	Parameter	Units	IDTL	RUSL	MCL	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
8260B	Acetone	mg/l	9.39	NS	NS	<0.010		<0.010		<0.010		<0.010		<0.010		<0.010		<0.010	
8260B	Acrolein	mg/l	0.00521	NS	NS	<0.0089		<0.0089		<0.0089		<0.0089		<0.0089		<0.0089		<0.0089	
8260B	Acrylonitrile	mg/l	0.000103	NS	NS	<0.0019		<0.0019		<0.0019		<0.0019		<0.0019		<0.0019		<0.0019	
8260B	Benzene	mg/l	0.005	0.005	0.005	<0.00033		<0.00033		<0.00033		<0.00033		<0.00033		<0.00033		<0.00033	
8260B	Bromobenzene	mg/l	NS	NS	NS	<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035	
8260B	Bromodichloromethane	mg/l	0.000901	NS	0.08	<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038	
8260B	Bromoform	mg/l	0.00707	NS	0.08	<0.00047		<0.00047		<0.00047		<0.00047		<0.00047		<0.00047		<0.00047	
8260B	Bromomethane	mg/l	0.0146	NS	NS	<0.00087		<0.00087		<0.00087		<0.00087		<0.00087		<0.00087		<0.00087	
8260B	n-Butylbenzene	mg/l	NS	NS	NS	<0.00036		<0.00036		<0.00036		<0.00036		<0.00036		<0.00036		<0.00036	
8260B	sec-Butylbenzene	mg/l	0.104	NS	NS	<0.00036		<0.00036		<0.00036		<0.00036		<0.00036		<0.00036		<0.00036	
8260B	tert-Butylbenzene	mg/l	0.104	NS	NS	<0.00040		<0.00040		<0.00040		<0.00040		<0.00040		<0.00040		<0.00040	
8260B	Carbon tetrachloride	mg/l	0.00456	NS	0.005	<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038	
8260B	Chlorobenzene	mg/l	0.1	NS	0.1	<0.00035	J4	<0.00035	J4	<0.00035	J4	<0.00035	J4	<0.00035	J4	<0.00035	J4	<0.00035	J4
8260B	Chlorodibromomethane	mg/l	0.000665	NS	0.08	<0.00033		<0.00033		<0.00033		<0.00033		<0.00033		<0.00033		<0.00033	
8260B	Chloroethane	mg/l	0.0193	NS	NS	NS		<0.00045		<0.00045		<0.00045		<0.00045		<0.00045		<0.00045	
8260B	2-Chloroethyl vinyl ether	mg/l	NS	NS	NS	<0.0030	R	<0.0030	R	<0.0030	R	<0.0030	R	<0.0030	R	<0.0030	R	<0.0030	R
8260B	Chloroform	mg/l	0.0018	NS	0.08	<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032	
8260B	Chloromethane	mg/l	0.0043	NS	NS	<0.00028		<0.00028		<0.00028		<0.00028		<0.00028		<0.00028		<0.00028	
8260B	2-Chlorotoluene	mg/l	0.209	NS	NS	<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038	
8260B	4-Chlorotoluene	mg/l	NS	NS	NS	<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035	
8260B	1,2-Dibromo-3-Chloropropane	mg/l	0.0002	NS	0.0002	<0.0013		<0.0013		<0.0013		<0.0013		<0.0013		<0.0013		<0.0013	
8260B	1,2-Dibromoethane	mg/l	NS	0.00005	NS	NS		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038	
8260B	Dibromomethane	mg/l	NS	NS	NS	<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035	
8260B	1,2-Dichlorobenzene	mg/l	0.6	NS	0.6	<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035	
8260B	1,3-Dichlorobenzene	mg/l	0.00939	NS		<0.00022		<0.00022		<0.00022		<0.00022		<0.00022		<0.00022		<0.00022	
8260B	1,4-Dichlorobenzene	mg/l	0.075	NS	0.075	<0.00027		<0.00027		<0.00027		<0.00027		<0.00027		<0.00027		<0.00027	
8260B	Dichlorodifluoromethane	mg/l	0.195	NS	NS	<0.00055		<0.00055		<0.00055		<0.00055		<0.00055		<0.00055		<0.00055	
8260B	1,1-Dichloroethane	mg/l	1.04	NS	NS	<0.00026		<0.00026		<0.00026		<0.00026		<0.00026		<0.00026		<0.00026	
8260B	1,2-Dichloroethane	mg/l	0.005	0.005	0.005	<0.00036		<0.00036		<0.00036		<0.00036		<0.00036		<0.00036		<0.00036	
8260B	1,1-Dichloroethene	mg/l	0.007	NS	0.007	<0.00040		<0.00040		<0.00040		<0.00040		<0.00040		<0.00040		<0.00040	
8260B	cis-1,2-Dichloroethene	mg/l	0.07	NS	0.07	<0.00026		<0.00026		<0.00026		<0.00026		<0.00026		<0.00026		<0.00026	
8260B	trans-1,2-Dichloroethene	mg/l	0.1	NS	0.1	<0.00040		<0.00040		<0.00040		<0.00040		<0.00040		<0.00040		<0.00040	
8260B	1,2-Dichloropropane	mg/l	0.005	NS	0.005	<0.00031		<0.00031		<0.00031		<0.00031		<0.00031		<0.00031		<0.00031	
8260B	1,1-Dichloropropene	mg/l	NS	NS	NS	<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035	
8260B	1,3-Dichloropropane	mg/l	NS	NS	NS	<0.00037		<0.00037		<0.00037		<0.00037		<0.00037		<0.00037		<0.00037	
8260B	cis-1,3-Dichloropropene	mg/l	0.000559	NS	NS	<0.00042		<0.00042		<0.00042		<0.00042		<0.00042		<0.00042		<0.00042	

Table 6. Summary of monitoring well ground water sample results for volatile organic compounds.

Sample Name						TRIP BLANK		WC-MW-1		WC-MW-2		WC-MW-2-D		WC-MW-3		WC-MW-4		WC-MW-5	
Collect Date						5/7/2014		5/7/2014		5/7/2014		5/7/2014		5/7/2014		5/7/2014		5/7/2014	
Method	Parameter	Units	IDTL	RUSL	MCL	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
8260B	trans-1,3-Dichloropropene	mg/l	0.000559	NS	NS	<0.00042		<0.00042		<0.00042		<0.00042		<0.00042		<0.00042		<0.00042	
8260B	2,2-Dichloropropane	mg/l	NS	NS	NS	<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032	
8260B	Di-isopropyl ether	mg/l	NS	NS	NS	<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032	
8260B	Ethylbenzene	mg/l	0.7	0.05	0.7	<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038	
8260B	Hexachloro-1,3-butadiene	mg/l	NS	NS	NS	<0.00026		<0.00026		<0.00026		<0.00026		<0.00026		<0.00026		<0.00026	
8260B	Isopropylbenzene	mg/l	1.04	NS	NS	<0.00033		<0.00033		<0.00033		<0.00033		<0.00033		<0.00033		<0.00033	
8260B	p-Isopropyltoluene	mg/l	NS	NS	NS	<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035	
8260B	2-Butanone (MEK)	mg/l	6.26	NS	NS	<0.0039		<0.0039		<0.0039		<0.0039		<0.0039		<0.0039		<0.0039	
8260B	Methylene Chloride	mg/l	0.00745	NS	0.005	<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010	
8260B	4-Methyl-2-pentanone (MIBK)	mg/l	8.97	NS	NS	<0.0021		<0.0021		<0.0021		<0.0021		<0.0021		<0.0021		<0.0021	
8260B	Methyl tert-butyl ether	mg/l	0.0169	0.04	NS	<0.00037		<0.00037		<0.00037		<0.00037		<0.00037		<0.00037		<0.00037	
8260B	Naphthalene	mg/l	0.209	0.07	NS	<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010	
8260B	n-Propylbenzene	mg/l	NS	NS	NS	<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035		<0.00035	
8260B	Styrene	mg/l	0.1	NS	0.1	<0.00031		<0.00031		<0.00031		<0.00031		<0.00031		<0.00031		<0.00031	
8260B	1,1,1,2-Tetrachloroethane	mg/l	0.00215	NS	NS	<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038	
8260B	1,1,2,2-Tetrachloroethane	mg/l	0.000279	NS	NS	<0.00058		<0.00058		<0.00058		<0.00058		<0.00058		<0.00058		<0.00058	
8260B	1,1,2-Trichlorotrifluoroethane	mg/l	NS	NS	NS	<0.00030		<0.00030		<0.00030		<0.00030		<0.00030		<0.00030		<0.00030	
8260B	Tetrachloroethene	mg/l	0.005	NS	0.005	<0.00037	J4	<0.00037	J4	**0.00083**	J, J4	**0.00096**	J, J4	<0.00037	J4	<0.00037	J4	**0.0023**	J4
8260B	Toluene	mg/l	1	1	1	<0.00078		<0.00078		<0.00078		<0.00078		<0.00078		<0.00078		<0.00078	
8260B	1,2,3-Trichlorobenzene	mg/l	NS	NS	NS	<0.00023		<0.00023		<0.00023		<0.00023		<0.00023		<0.00023		<0.00023	
8260B	1,2,4-Trichlorobenzene	mg/l	0.07	NS	0.07	<0.00021		<0.00021		<0.00021		<0.00021		<0.00021		<0.00021		<0.00021	
8260B	1,1,1-Trichloroethane	mg/l	0.2	NS	0.2	<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032	
8260B	1,1,2-Trichloroethane	mg/l	0.005	NS	0.005	<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038		<0.00038	
8260B	Trichloroethene	mg/l	0.00332	NS	0.005	<0.00040	J4	**0.0004**	J, J4	<0.00040	J4	<0.00040	J4	**0.00046**	J, J4	<0.00040	J4	<0.00040	J4
8260B	Trichlorofluoromethane	mg/l	2.05	NS	NS	<0.0012		<0.0012		<0.0012		<0.0012		<0.0012		<0.0012		<0.0012	
8260B	1,2,3-Trichloropropane	mg/l	0.0000279	NS	NS	<0.00081		<0.00081		<0.00081		<0.00081		<0.00081		<0.00081		<0.00081	
8260B	1,2,4-Trimethylbenzene	mg/l	0.439	NS	NS	<0.00037		<0.00037		<0.00037		<0.00037		<0.00037		<0.00037		<0.00037	
8260B	1,2,3-Trimethylbenzene	mg/l	NS	NS	NS	<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032		<0.00032	
8260B	1,3,5-Trimethylbenzene	mg/l	0.304	NS	NS	<0.00039		<0.00039		<0.00039		<0.00039		<0.00039		<0.00039		<0.00039	
8260B	Vinyl chloride	mg/l	0.002	NS	0.002	<0.00026		<0.00026		<0.00026		<0.00026		<0.00026		<0.00026		<0.00026	
8260B	Xylenes, Total	mg/l	4.34	8.7	10	<0.0011		<0.0011		<0.0011		<0.0011		<0.0011		<0.0011		<0.0011	

IDTL Idaho default target level
J Estimated value below the lowest calibration point. Confidence correlates with concentration.
J4 The associated batch QC was outside the established quality control range for accuracy.
MCL Environmental Protection Agency National Primary Drinking Water Regulations Maximum Contaminant Level
mg/l milligrams per liter
NS no standard
R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
RUSL residential use screening level
Bold entries represent detected results; however, none of the results were above the associated IDTL, RUSL or MCL.

Monitoring well placements for the field site inspection were determined based on desktop research of surrounding sites suggesting ground water flow in the vicinity is primarily to the west-northwest. Ground water elevation contours collected in May and June 2014 concur with this flow direction by illustrating a relatively flat ground water gradient with a general west-northwest flow direction (Figure 6).

The following are observations from collection of field parameters. Photo-ionization detector (PID) readings collected during direct push drilling show non-detect results at all depths of the boreholes except for low level detections in MW-2 (2 ppm) and MW-3 (0.2 ppm) at a depth of 2.5 to 5 ft bgs. A slight petroleum odor was also observed with these low level detections. In general, the ground water quality parameters suggest anaerobic conditions with dissolved oxygen of 0 mg/L and negative oxygen reduction potential (ORP) measurements at all wells.

5.2 Data Verification, Validation and Usability Assessment

One analytical data package (L697788) was generated for this project from ESC for the ground water and IDW data (Appendix I). The data package was reviewed for data verification and manual validation in accordance with Stage 2A verification and validation methods specified in *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (*EPA, 2009). The data package was also reviewed to assess precision, accuracy, representativeness, comparability, completeness, and sensitivity requirements for the project's data quality objectives (URS 2014a). The data verification, validation and usability assessment was performed by Jennifer Garner, Quality Assurance Officer and Chemist from URS' Seattle office.

A review of the chain of custody form and laboratory case narrative indicates that proper chain of custody was maintained. The appropriate preparation and analysis methods appear to have been performed on the samples based on the intended use of the data. All samples were received in good condition at the laboratory (not broken and received at the appropriate temperature of 2.6°C for ground water samples). The samples were analyzed within method holding time requirements.

A ground water field duplicate pair, WC-MW-2/WC-MW-2-D, was collected and analyzed for this project. Other laboratory quality control (QC) sample analyses performed for each analytical method are summarized as part of the laboratory analytical package (located in Appendix I).

2-Chloroethylvinyl ether (2-CVE) has been shown to be unstable in the presence of acids. As all of the associated samples were acidified for preservation, results for 2-CVE in all samples were rejected and flagged 'R'.

The data reported in these laboratory groups, as qualified, are considered to be usable for meeting project objectives. Rejected results are not useable. The completeness for these data sets is greater than 99%.

Stage 2A Data Verification and Manual Validation. The following Stage 2A verification and manual validation checks were performed: (1) requested methods were performed; (2) method dates for handling, preparation and analysis are present, as appropriate; (3) sample-related QC data and QC acceptance criteria are provided and linked to the project samples including the

field QC samples (trip blank); (4) requested spike analytes have been added, as appropriate; (5) sample holding times have been evaluated; (6) frequency of QC samples is checked and appropriate; and (7) sample results are evaluated by comparing holding times and sample-related QC data to EPA and project data validation guidelines.

Precision. Precision is the measure of agreement among individual measurements of the same property under similar conditions. Precision for this project has been expressed in terms of the relative percent difference (RPD) between two samples. Duplicate samples can be evaluated quantitatively for precision only when contaminants are detected in both the sample and the duplicate. Duplicates with RPDs within the control limits indicate adequate sampling practices and/or good analytical precision. Duplicates with RPDs outside the control limits may result from inappropriate sampling procedures, matrix interferences, or non-homogeneity of the sample matrix. In addition, poor precision can be attributed to deviations from the analytical methodology or to poor reproducibility of target analyte concentrations at or near the detection limits. Laboratory duplicates were performed for the analyses. The criteria used for ground water samples is <20% RPD for detections five times greater than the reporting limit. Precision was evaluated for this project by comparing field duplicate results, laboratory control sample/laboratory control sample duplicate (LCS/LCSD) results, laboratory duplicate results, and matrix spike/matrix spike duplicate (MS/MSD) results for project samples. Note that if the laboratory duplicate or MS/MSD analysis was performed on another client's sample within the method batch, any qualifiers applied to the data are not applicable to this project's samples.

- For WC-MW-2/WC-MW-2-D field duplicate pair, no VOCs were detected greater than five times the reporting limits; therefore, field duplicate precision was not evaluated.
- All LCS/LCSD RPDs were within the QC limits.
- A laboratory duplicate for total metals was performed on IDW-WC-WATER. Results were comparable to the laboratory precision criteria outlined in Appendix B of the QAPP (URS 2014a).
- MS/MSDs for VOCs and total metals in ground water and soil were performed on other clients' samples; therefore, these results are not discussed in this report and no data were qualified based on the MS/MSD results.

Accuracy. The assessment of accuracy is evaluated by comparison of the percent recoveries (%R) computed from the known concentration of analyte spikes and their recovered concentration versus the analytical method acceptance criteria. Spike recoveries provide an indication of bias, where the reported data may either over-estimate or under-estimate the actual concentration of detected compounds and/or the detection limits. Accuracy was assessed using sample surrogate percent recoveries, LCS/LCSD percent recoveries, MS/MSD percent recoveries, and serial dilutions (for metals analyses only) for project samples.

- All sample surrogate recoveries were within QC limits.
- All LCS/LCSD recoveries were within QC limits, with the following exceptions:
    - The percent recoveries for the following compounds in the LCS and LCSD for water were outside the control limits as described below.

Analyte	LCS	LCSD	Control Limits
2-Chloroethylvinyl ether	45.3%	**39.6%**	43.8-150%
Chlorobenzene	**121%**	118%	78.1-119%
Tetrachloroethene	**129%**	121%	72.6-126%
Trichloroethene	**123%**	116%	77.7-118%

Values in **bold** and underlined font indicate that the result was outside the control limits

    - As 2 out of the 3 quality control parameters were acceptable (LCS, LCSD, and/or RPD), data were not qualified for 2-CVE, chlorobenzene, tetrachloroethene, and trichloroethene based on these LCS/LCSD results.

- An MS/MSD for total metals was performed on IDW-WC-WATER.
    - The percent recoveries for silver in the MS (12%) and MSD (17%) were below the control limits of 75-125% and the RPD (37%) exceeded the control limit of 20%. A post-digestion spike was performed with acceptable recovery. The result for silver in IDW-WC-WATER was qualified as estimated and flagged 'UJ' based on these MS/MSD results.

- Internal standard responses and retention times were within QC limits.

Representativeness. Representativeness of the environmental sample analytical data was assessed by evaluating holding times, trip blank, and laboratory method blank results.

- Holding Times. All samples were analyzed within the method-required preparation and analytical holding times.
- Trip Blank. The trip blank was free of contamination.
- Method Blanks. All method blanks were free of contamination.

Comparability. All samples were analyzed using appropriate EPA analytical methods. Sample results were reported in appropriate units. The analytical methods are considered acceptable for generating analytical data for the purpose of this project.

Completeness. Completeness is the quantitative measure of the amount of data obtained from a measurement process compared with the amount expected to be obtained under the conditions of measurement. Therefore, greater than 98% of the data were considered complete, with 98.5% of the critical data (original samples and field duplicates) considered complete. EPA considers a completeness goal of 80% acceptable for investigation projects.

Sensitivity. The reporting limits and method detection limits were below the screening levels. When a reporting limit exceeded the screening level, the corresponding method detection limit

was evaluated. Data with method detection limits below the screening levels required no further evaluation.

If a compound was detected below the reporting limit, but above the method detection limit (MDL), it was qualified by the laboratory as an estimated value (flagged 'J').

Summary. With the exception of the rejected data, it is URS' professional opinion that data collected, where qualified, does not affect the overall goal or usability of the data in making site specific decisions regarding site risk. In the case of the rejected data, the specific analyte rejected, 2-CVE, is not being considered for evaluating overall site risk.

Regarding LCS/LCSD recoveries, data usability is not affected by the results (with the exception of 2-CVE). As noted above, the percent recoveries for chlorobenzene, tetrachloroethene, and trichloroethene were elevated in the associated LCS; however, data were not qualified based on the LCS recoveries as the LCSD recoveries and RPDs were acceptable. Results reported as detected for these compounds are potentially biased high. Results for these compounds reported as not detected are not impacted by the elevated LCS recoveries.

Regarding MS/MSD recoveries, data usability is not affected by the results (with the exception of 2-CVE as noted above). The result for silver in IDW-WC-WATER is biased low, based on the MS/MSD results.

Overall the analytical data are considered acceptable and have met the quality control and quality assurance objectives and goals of this project.

5.3 Waste Management Considerations

IDW generated during the assessment consisted of approximately 65 gallons of ground water monitoring well purge water contained within one 55-gallon blue plastic drum and two five-gallon plastic buckets and one five-gallon bucket containing approximately five gallons of soil cuttings from the exploratory boreholes. IDW was containerized onsite until analytical results were obtained and reviewed. IDW analytical results are summarized in tables included in Appendix G.

The analytical total results were used to compare to TCLP regulatory levels using the Rule of 20 (EPA-R-94-005a), which allows a generator to divide solid sample results by 20 and then compare the results to the TCLP regulatory limits (the division factor reflects the 20-to-1 ratio of extraction fluid to solid used in the TCLP). Alternatively, the TCLP regulatory limits can be multiplied by a factor of 20 to allow for direct comparison to the total solid results. Section 1.2 of the TCLP states, "If a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run." EPA states that this analysis can provide the generator with a cost effective means of determining if a TCLP is needed. If total results do not exceed the 20 times TCLP regulatory values, no TCLP is needed and the waste can be managed as non-hazardous.

The IDW samples collected on site demonstrated the containerized IDW soil and purged ground water to be non-hazardous. As such, the IDW soil and purge water were transported by Master

Environmental from the site to Idaho Waste Systems in Elmore County, Idaho for disposal under non-hazardous waste manifest #060414TB2. The non-hazardous waste manifest is provided in Appendix G.

6 Conclusions and Recommendations

The purpose of this PA/SI was to assess the threat posed to human health and the environment, not to fully delineate or characterize the extent of soil and ground water contamination at the site. Based on available information gathered during desktop research and current conditions observed from the field site inspection, the results of this PA/SI do not suggest that an imminent threat to human health and the environment is present at this site at this time. However, based on historic industrial uses, PA/SI observations, and remaining data gaps for potential contaminant pathways to receptors, DEQ recommends **Further Site Inspections** to make a final determination for the Warrior of Idaho site.

Although PCE and TCE were not detected above the regulatory thresholds in ground water during this PA/SI, the following conclusions and recommendations warrant **Further Site Inspections**:

1. Determine the extent of PCE in soil and ground water in the area between SB-9 and B4:
    - The PCE detection above the IDTL (2,800 µg/kg) in soil at SB-9 (7.5-8 ft bgs) suggests presence of a possible PCE source above the water table.
    - Low levels of PCE in shallow ground water downgradient of the source area (MW-2 and MW-5) suggest a possible slow source release into ground water.
    - The PCE detection above the MCL and IDTL (3,750 µg/L) in deep ground water at B4 (collected at 23-25 ft bgs) suggests the presence of a possible deep source with unknown origin.
    - An initial investigation of this area was planned as part of this PA/SI using the paired set of shallow/deep wells (MW-2 and MW-3); however, this area was found to be inaccessible immediately before field work due to the placement of stacked metal boxes by the tenant. Therefore, the paired well set could not be placed between SB-9 and B4 and was instead drilled to the southwest of B4.

2. Continue ground water monitoring to evaluate potential contaminant transport timeframes; determine if VOC concentrations are stable, increasing or decreasing; and determine if a plume is present:
    - Install a ground water monitoring well on the northwest edge of the property between MW-4 and MW-5 to further investigate possible offsite contaminant migration.
    - Monthly or quarterly water level measurements to confirm ground water flow direction and evaluate seasonal changes.
    - Quarterly ground water monitoring of all wells for VOCs to determine if the low-levels of contaminants are stable, increasing or decreasing and determine the presence of any PCE degradation products.
    - If ground water contamination is found to potentially be migrating off-site, additional investigations of nearby domestic wells is recommended.

3. Determine if vapor intrusion within the warehouse containing soil boring SB-9 is occurring. This building is currently occupied during working hours by Treasure Valley Seed Company employees and investigation of this pathway is beyond the scope of a PA/SI.

At this time, DEQ also recommends proper filling and closure of four large postholes adjacent to the western-most building (per Section 3.4). Although no contamination is suspected in this area, these post holes are possible conduits for surface water migration to ground water since the posts were cut off at ground surface, currently remain as open holes, are suspected to be at least 8 feet deep, and contained water during DEQ's site visit in February 2014.

7 References

DEQ (Idaho Department of Environmental Quality). 2010. *Hazardous Waste Management Act (HWMA)/Resource Conservation and Recovery Act (RCRA) Compliance Inspection Report for Warrior of Idaho, LLC*. August 3, 2010. TRIM Record Number 2013BCP383.

EarthTouch. 2009. *Phase I Environmental Site Assessment of the Warrior of Idaho Industrial Property located at 412 South Kit Avenue, in the City of Caldwell, (Canyon County), Idaho (Warrior of Idaho, LLC Property)*. Layton, UT: Prepared for Zions Bank. November 13, 2009.

EarthTouch. 2010a. *Limited Subsurface Investigation of the Warrior of Idaho Industrial Property located at 412 South Kit Avenue, in the City of Caldwell, (Canyon County), Idaho (Warrior of Idaho, LLC Property)*. Layton, UT: Prepared for Zions Bank. January 5, 2010.

EarthTouch. 2010b. *Secondary Limited Subsurface Investigation of the Warrior of Idaho Industrial Property located at 412 South Kit Avenue, in the City of Caldwell, (Canyon County), Idaho (Warrior of Idaho, LLC Property)*. Layton, UT: Prepared for Zions Bank. February 12, 2010.

EarthTouch. 2010c. *Additional Soil and Groundwater Investigation Report and Revised Assessment of the Environmental Condition of the Warrior of Idaho Property located at 412 South Kit Avenue in the City of Caldwell, (Canyon County), Idaho (Warrior of Idaho, LLC Property)*. Layton, UT: Prepared for Zions Bank. September 8, 2010.

EPA (U.S. Environmental Protection Agency). 2010. *Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells*. EPASOP-GW-001.

ITRC. 2008. *In Situ Bioremediation of Chlorinated Ethene: DNAPL Source Zones*. BioDNAPL-3. Washington, D.C.: Interstate Technology & Regulatory Council, Bioremediation of DNAPLs Team. www.itrcweb.org.

Maxim Technologies, Inc. 1994-1999. Groundwater Contour Maps from 1994 to 1999 included within *Quarterly Groundwater Monitoring Reports, Idaho Army National Guard OMS Facility, Caldwell, Idaho*. TRIM Record Number 2011BBK1166.

MapQuest, 2014. http://classic.mapquest.com/. Accessed online February 28, 2014.

MCDC (Missouri Census Data Center. 2014. Website: MABLE/Geocorr*2K*: Geographic Correspondence Engine with Census 2000 Geography. http://mcdc.missouri.edu/websas/caps10c.html. Accessed online February 28, 2014.

RMEA (Rocky Mountain Environmental Associates, Inc.). 2009. *Fourth Quarter (Post ORC Injection) Groundwater Sampling Report for the Former V-1 Oil Site in Caldwell, Idaho*. July 24, 2009. TRIM Record Number 2013BBL668.

URS. 2014a. *Quality Assurance Project Plan, Environmental Site Assessment, Warrior of Idaho Site, 412 South Kit Avenue, Caldwell, Idaho.* Revision 1. IDEQ Contract #C973, Task Order 15. TRIM Record Number 2014CAC43. URS Project Number 36258892. April 2014.

URS. 2014b. *Site Safety and Health Plan, Environmental Site Assessment Activities, Warrior of Idaho Site, 412 South Kit Avenue, Caldwell, Idaho.* TRIM Record Number 2014CAC49. April 2014.

USFWS (United States Fish and Wildlife Service). 2013. "Endangered, Threatened, Proposed, and Candidates Species with Associated Proposed and Critical Habitats in Idaho." USFWS – Idaho Fish and Wildlife Office. Species list was revised by the USFWS on 10/23/2013 and is valid for 90 days after review on 06/25/2014.

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Appendix A. Project Photos

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The following 12 photos were taken by DEQ on February 4, 2014.

Looking northwest at the warehouse complex on the eastern side of the property.

Looking southeast at the largest warehouse on the western side of the property.

Looking northwest at the corner of the property.

Looking north from the southern edge of the property.

Small church building located in the northeast corner of the property.

Practice driving course for Sage Trucking School.

Looking south at bulk seed storage and the location of former boring SB-9 (which is immediately south of the former in-ground hydraulic lift).

Looking north at the former in-ground hydraulic lift with a small circular dirt opening in the center.

One of four former large posts used during RV manufacturing which have been cut off at ground surface.

These former post holes are possible conduits for surface water migration to ground water; however, they are not within the area of suspected ground water contamination.

Looking north at the location of former boring B4.

Looking southeast from location of former boring B4.

The following 10 photos were taken by URS on May 6-7, 2014.

Looking northwesterly at the direct push rig boring monitoring well MW-1.

Looking southeasterly at the finished surface completion of monitoring well MW-1.

Looking south at the direct push rig boring monitoring well MW-2.

Looking northwesterly at the in-progress development pumping of MW-3 and the finished surface completion of MW-2.

Looking southerly at the in-progress development pumping of MW-3.

In-progress low-flow purging of MW-1 prior to sampling.

In-progress low-flow purging of MW-4 prior to sampling.

In-progress low-flow purging of MW-3 prior to sampling.

Looking southerly at the IDW temporary storage location.

Looking southerly at a close-up of the temporary IDW storage.

Appendix B. Daily Safety Meeting and Site Safety and Health Plan Acceptance Forms

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SITE SAFETY AND HEALTH PLAN ACCEPTANCE FORM

ENVIRONMENTAL SITE ASSESSMENT ACTIVITIES
WARRIOR OF IDAHO SITE
412 SOUTH KIT AVENUE
CALDWELL, IDAHO

I, Tina Clayer, have read, understand, and agree to abide by all requirements of the Site Safety and Health Plan (SSHP) for the site.

I understand that my failure to abide by any aspect of the SSHP can lead to disciplinary action, including immediate permanent removal from the project.

Name _____ Date 5/16/14

SITE SAFETY AND HEALTH PLAN ACCEPTANCE FORM

ENVIRONMENTAL SITE ASSESSMENT ACTIVITIES
WARRIOR OF IDAHO SITE
412 SOUTH KIT AVENUE
CALDWELL, IDAHO

I, DEREK YOUNG, have read, understand, and agree to abide by all requirements of the Site Safety and Health Plan (SSHP) for the site.

I understand that my failure to abide by any aspect of the SSHP can lead to disciplinary action, including immediate permanent removal from the project.

Name _____ Date 5/6/14

R Casey 5/6/14

SITE SAFETY AND HEALTH PLAN ACCEPTANCE FORM

ENVIRONMENTAL SITE ASSESSMENT ACTIVITIES
WARRIOR OF IDAHO SITE
412 SOUTH KIT AVENUE
CALDWELL, IDAHO

I, Pat Casey, have read, understand, and agree to abide by all requirements of the Site Safety and Health Plan (SSHP) for the site.

I understand that my failure to abide by any aspect of the SSHP can lead to disciplinary action, including immediate permanent removal from the project.

R Casey
Name

5/6/14
Date

SAFETY MEETING/TRAINING SIGNATURE SHEET

Safety Meeting/Training		
Location: Warrior of Idaho Site Caldwell, ID	Date: 5/6/14	Time: 0820
Task Manager (print/signature): Derek Young		
SSHO (print/signature): Derek Young		
Topic(s) Reviewed (attach additional descriptive materials as necessary). (1) REVIEW DRILLING LOCATIONS (2) SITE HAZARDS / HAZCON (3) HOSPITAL LOCATION (4) PLAN FOR DAY		

Personnel Present Name (print/signature)	Organization	Remarks
PAT CASEY /	EarthProbe	
Tina Blayer /	DEQ	

Appendix C. Daily Quality Control Reports

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DAILY QUALITY CONTROL REPORT

Report No.____1_____
Date: 5/6/2014

Warrior of Idaho Environmental Site Assessment
412 South Kit Avenue, Caldwell, Idaho

Weather: (X) Clear () P. Cloudy (X) Cloudy Wind: 0 –35 mph.

Temperature: High: 65 Low: 50

Precipitation: .none

Site Conditions: ok.

Lost time Due to Inclement Weather/site conditions: 0.5 hours

Section 1: Prime Contractor/Subcontractors and Areas of Responsibility/Labor Count:

URS: (1) Derek Young

Earth Probe Environmental Field Services: (1) Pat Casey (Driller)

IDEQ: (1) Tina Elayer

Section 2: Work Performed: (Indicate location and description of work performed including equipment used. Refer to work performed by prime and/or subcontractors as previously designated by letter above.)

Mobilized to site. Reviewed utility locations and proposed boring locations. Probed, logged, Installed, completed and developed ground water wells MW-1 through MW-5.

Section 3: Materials and/or Equipment Delivered: (Indicate a description of materials and/or equipment, quantity, and supplier.)

Geoprobe 7822DT track mounted probe rig, support truck and trailer.

Section 4: Results of Surveillance: (Include satisfactory work completed, or deficiencies with action to be taken.)

a. Preparatory inspection: Ok_____

b. Initial inspection: Ok_____

c. Follow-up inspection: Ok_____

d. Safety inspection (include safety violations and corrective actions taken): Ok

Section 5: QC Tests Performed and Results: (As required by scope and/or project plans.)

None.

Section 6: Verbal Instructions Received or Given: (List any instructions received from government personnel or given by them on construction deficiencies identified, required retesting, etc., and the corresponding action to be taken.) IDEQ consulted as to final depth of MW-3 as "blue clay" expected to be encountered at or near 30 feet below ground surface not encountered and driller reported refusal of probe at 34.5 feet. IDEQ (Dana Swift, PM) concurs that depth of 34.5 feet will be adequate for deeper screened well.

Section 7: Changed Conditions/Delays/Conflicts Encountered: (List any conflicts with the delivery order [i.e., scope and/or project plans], any delays to the project attributable to site and weather conditions, etc.)

Very windy conditions onsite.

Section 8: Meetings: (List the meetings, i.e., Health and Safety, Site Operations, Cost/Schedule, etc.)

Safety tailgate meeting and plan of the day at start of shift.

Section 9: Visitors: (List name and affiliation).

Donald Day, site representative visits MW-4 boring site briefly to review progress and request when sampling and results will be made available to the site owners.

Section 10: Remarks: (Any additional information pertinent to the project not defined by the previous entries).

None.

Contractor's Verification: The above report is complete and correct.

Quality Control Inspector	5/6/2014 Date

DAILY QUALITY CONTROL REPORT

Report No. 2
Date: 5/7/2014

Warrior of Idaho Environmental Site Assessment
412 South Kit Avenue, Caldwell, Idaho

Weather: (X) Clear () P. Cloudy (X) Cloudy Wind: 0 –40 mph.
Temperature: High: 58 Low: 42
Precipitation: .none
Site Conditions: ok.
Lost time Due to Inclement Weather/site conditions: None.

Section 1: Prime Contractor/Subcontractors and Areas of Responsibility/Labor Count:
URS: (1) Derek Young

Section 2: Work Performed: (Indicate location and description of work performed including equipment used. Refer to work performed by prime and/or subcontractors as previously designated by letter above.)
Mobilized to site. Collected low-flow samples from ground water wells MW-1 through MW-5.

Section 3: Materials and/or Equipment Delivered: (Indicate a description of materials and/or equipment, quantity, and supplier.)
Required sampling equipment.

Section 4: Results of Surveillance: (Include satisfactory work completed, or deficiencies with action to be taken.)
a. Preparatory inspection: Ok
b. Initial inspection: Ok
c. Follow-up inspection: Ok
d. Safety inspection (include safety violations and corrective actions taken): Ok

Section 5: QC Tests Performed and Results: (As required by scope and/or project plans.)
Field duplicate sample collected from MW-2 (MW-2-D).

Section 6: Verbal Instructions Received or Given: (List any instructions received from government personnel or given by them on construction deficiencies identified, required retesting, etc., and the corresponding action to be taken.) None.

Section 7: Changed Conditions/Delays/Conflicts Encountered: (List any conflicts with the delivery order [i.e., scope and/or project plans], any delays to the project attributable to site and weather conditions, etc.)

None.

Section 8: Meetings: (List the meetings, i.e., Health and Safety, Site Operations, Cost/Schedule, etc.)

None.

Section 9: Visitors: (List name and affiliation).

None.

Section 10: Remarks: (Any additional information pertinent to the project not defined by the previous entries).

65 gallons of monitoring well purge water IDW left onsite (55 gallons in a metal drum and 10 gallons in two 5-gallon plastic buckets) and 5 gallons of soil IDW in one 5-gallon plastic bucket left onsite pending analysis. Containers labeled as to contents and contact information.

Contractor's Verification: The above report is complete and correct.

Quality Control Inspector

5/7/2014

Date

DAILY QUALITY CONTROL REPORT

Report No.____3_____
Date: 6/9/2014

Warrior of Idaho Environmental Site Assessment
412 South Kit Avenue, Caldwell, Idaho

Weather: (X) Clear () P. Cloudy () Cloudy Wind: __0 –5 mph.
Temperature: High: 65 Low: _65
Precipitation: .none
Site Conditions: ok.
Lost time Due to Inclement Weather/site conditions: None.

Section 1: Prime Contractor/Subcontractors and Areas of Responsibility/Labor Count:
URS: (1) Derek Young

Section 2: Work Performed: (Indicate location and description of work performed including equipment used. Refer to work performed by prime and/or subcontractors as previously designated by letter above.)
Mobilized to site. Collected an additional round of depth to water measurements from ground water wells MW-1 through MW-5.

Section 3: Materials and/or Equipment Delivered: (Indicate a description of materials and/or equipment, quantity, and supplier.)
Required well sounding and decon equipment.

Section 4: Results of Surveillance: (Include satisfactory work completed, or deficiencies with action to be taken.)
a. Preparatory inspection: Ok_____
b. Initial inspection: Ok_____
c. Follow-up inspection: Ok_____
d. Safety inspection (include safety violations and corrective actions taken): Ok

Section 5: QC Tests Performed and Results: (As required by scope and/or project plans.)
None.

Section 6: Verbal Instructions Received or Given: (List any instructions received from government personnel or given by them on construction deficiencies identified, required retesting, etc., and the corresponding action to be taken.) Additional measurements outside of original scope but authorized by D. Swift/IDEQ so as to confirm depth to water/groundwater flow direction.

Section 7: Changed Conditions/Delays/Conflicts Encountered: (List any conflicts with the delivery order [i.e., scope and/or project plans], any delays to the project attributable to site and weather conditions, etc.)

See above.

Section 8: Meetings: (List the meetings, i.e., Health and Safety, Site Operations, Cost/Schedule, etc.)

None.

Section 9: Visitors: (List name and affiliation).

None.

Section 10: Remarks: (Any additional information pertinent to the project not defined by the previous entries).

IDW has been removed from site. .

Contractor's Verification: The above report is complete and correct.

Quality Control Inspector	6/9/2014 Date

Appendix D. Ground Water Boring Logs, Well Permit, and Construction Diagram

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WELL NUMBER MW-1

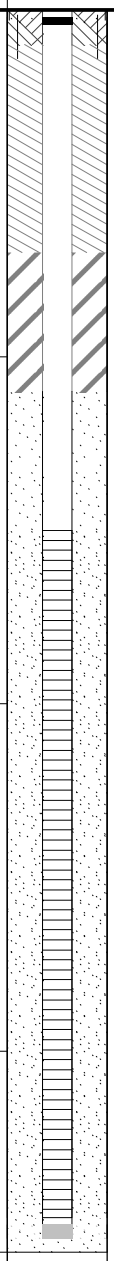
URS

CLIENT IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
PROJECT NAME Warrior of Idaho Property
PROJECT NUMBER 36258892
PROJECT LOCATION Caldwell, ID

DRILLING CONTRACTOR Earth Probe, Bountiful, UT
DRILLER Pat Casey
DRILLING METHOD Direct Push
LOGGED BY Derek Young **CHECKED BY** Lisa Gates
HOLE SIZE 2.5 Inch **DRILL MAKE/MODEL** GeoProbe 7822DT
GROUND ELEVATION 2356.4 ft NAVD 1988

DATE: STARTED 5/6/14 **COMPLETED** 5/6/14
WELL DEVELOPEMENT COMPLETED 5/6/2014
COORDINATES 730803.7 / 2372360.5
TOP OF CASING ELEVATION 2356.18 ft
WATER ELEVATION 2348.51 ft **MEASUREMENT DATE** 5/7/2014
NOTES Set 1-inch diameter groundwater monitoring well in boring.

DEPTH (ft)	INTERVAL	RECOVERY %	CORE PID SAMPLE (HS) RESULTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION (Name, Gradation or Plasticity, Particle Size, Distribution, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy, USCS Group Symbol)	Depth	Elevation	MAXIMUM PID (ppm) ALONG CORE 10.6 eV Bulb
0						Asphalt	0.3	2356.1	
				SP		Sand with Gravel. Pale yellowish brown, very moist, fine to medium sand with angular gravel to 1 inch diameter.	0.5	2355.9	
	1	62	ND, ND, ND	ML		Silt. Medium brown darkening with depth to dark brown, very moist towards top of unit but decreasing moisture with depth with blocky texture.			ND
5									
	2	90	ND, ND, ND				9.0	2347.4	ND
10				GP		Sandy Gravel. Pale yellowish brown to light brown with depth, saturated, angular to sub-rounded gravel to 1 inch diameter with fine to medium sand.			
	3	60	ND, ND, ND						ND
15									
	4	72	ND, ND, ND				17.9	2338.5	ND
						Bottom of hole at 17.9 feet.			



WELL NUMBER MW-2

URS

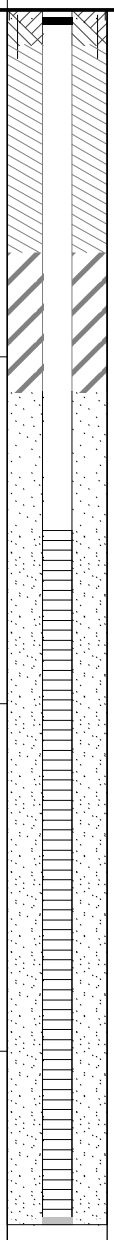
CLIENT IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
PROJECT NAME Warrior of Idaho Property
PROJECT NUMBER 36258892
PROJECT LOCATION Caldwell, ID

DRILLING CONTRACTOR Earth Probe, Bountiful, UT
DRILLER Pat Casey
DRILLING METHOD Direct Push
LOGGED BY Derek Young **CHECKED BY** Lisa Gates
HOLE SIZE 2.5 Inch **DRILL MAKE/MODEL** GeoProbe 7822DT
GROUND ELEVATION 2355.3 ft NAVD 1988

DATE: STARTED 5/6/14 **COMPLETED** 5/6/14
WELL DEVELOPEMENT COMPLETED 5/7/2014
COORDINATES 730936.7 / 2371943.2
TOP OF CASING ELEVATION 2354.878 ft
WATER ELEVATION 2348.44 ft **MEASUREMENT DATE** 5/6/2014
NOTES Set 1-inch diameter groundwater monitoring well in boring.

DEPTH (ft)	INTERVAL	RECOVERY %	CORE PID SAMPLE (HS) RESULTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION (Name, Gradation or Plasticity, Particle Size, Distribution, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy, USCS Group Symbol)	Depth	Elevation	MAXIMUM PID (ppm) ALONG CORE 10.6 eV Bulb
0							0.3	2355.0	
				SW		Asphalt	0.8	2354.5	
			ND			Sand with Gravel. Pale yellowish brown, very moist, fine to medium sand with angular gravel to 1 inch diameter.			
	1	56	2.0			Silty Clay. Dark grey, low plasticity, dense, very moist towards with slight petroleum odor from 2.5 to 5.0 feet.			2.0
5			ND	CL-ML					
			ND						
	2	70	ND				7.5	2347.8	ND
				SP-SM		Sand with Silt. Pale yellowish brown, saturated, very fine to fine sand.	9.5	2345.8	
10			ND						
			ND			Sandy Gravel. Pale yellowish brown to light brown with depth, saturated, angular to sub-rounded gravel to 1.5 inch diameter with fine to coarse sand.			
	3	36	ND						ND
15			ND	GW					
			ND						
	4	38	ND						ND
			ND				17.9	2337.4	
						Bottom of hole at 17.9 feet.			

WELL DIAGRAM



WELL NUMBER MW-3

URS

CLIENT IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
PROJECT NAME Warrior of Idaho Property
PROJECT NUMBER 36258892
PROJECT LOCATION Caldwell, ID

DRILLING CONTRACTOR Earth Probe, Bountiful, UT
DATE: STARTED 5/6/14 **COMPLETED** 5/6/14
DRILLER Pat Casey
WELL DEVELOPEMENT COMPLETED 5/6/2014
DRILLING METHOD Direct Push
COORDINATES 730942.3 / 2371943.4
LOGGED BY Derek Young **CHECKED BY** Lisa Gates
TOP OF CASING ELEVATION 2354.795 ft
HOLE SIZE 2.5 Inch **DRILL MAKE/MODEL** GeoProbe 7822DT
WATER ELEVATION 2348.45 ft **MEASUREMENT DATE** 5/7/2014
GROUND ELEVATION 2355.2 ft NAVD 1988
NOTES Set 1-inch diameter groundwater monitoring well in boring.

DEPTH (ft)	INTERVAL	RECOVERY %	CORE PID SAMPLE (HS) RESULTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION (Name, Gradation or Plasticity, Particle Size, Distribution, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy, USCS Group Symbol)	Depth	Elevation	MAXIMUM PID (ppm) ALONG CORE 10.6 eV Bulb	WELL DIAGRAM
0							0.3	2354.9		
				SW		Asphalt	0.8	2354.4		Surface Completion Concrete
			ND			Sand with Gravel. Pale yellowish brown, very moist, fine to medium sand with angular gravel to 1 inch diameter.				
	1	76	0.2	CL-ML		Silty Clay. Dark grey, low plasticity, dense, very moist towards with slight petroleum odor from 2.5 to 5.0 feet.			0.2	Dry Granular Bentonite
			ND							
5							5.5	2349.7		
			ND	CL		Clay. Greenish gray, very moist, moderate plasticity.				1 inch diameter Sch. 40 PVC Riser
	2	66	ND				7.5	2347.7	ND	
				SP-SM		Sand with Silt. Pale yellowish brown to moderate brown with depth, saturated, very fine to fine sand with common iron oxide veining/staining.				
			ND				9.5	2345.7		
10				GW		Sandy Gravel. Pale yellowish brown to light brown with depth, saturated, angular to sub-rounded gravel to 1.5 inch diameter with fine to coarse sand.				
			ND							
	3	52	ND						ND	
			ND							
15										
			ND							
	4	54	ND						ND	
			ND							
20										

(Continued Next Page)

WELL NUMBER MW-3

URS

CLIENT IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY **PROJECT NAME** Warrior of Idaho Property

PROJECT NUMBER 36258892 **PROJECT LOCATION** Caldwell, ID

DEPTH (ft)	INTERVAL	RECOVERY %	CORE PID SAMPLE (HS) RESULTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION (Name, Gradation or Plasticity, Particle Size, Distribution, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy, USCS Group Symbol) Depth / Elevation	MAXIMUM PID (ppm) ALONG CORE 10.6 eV Bulb	WELL DIAGRAM
20								
	5	56	ND ND ND	GW		Sandy Gravel. Pale yellowish brown to light brown with depth, saturated, angular to sub-rounded gravel to 1.5 inch diameter with fine to coarse sand. *(continued)*	ND	- Dry Granular Bentonite
25								
	6	30	ND ND ND			29.0 / 2326.2	ND	- Hydrated Bentonite Well Seal
				CL		29.4 / 2325.8 Clay. Moderate brown, low plasticity, saturated with trace very fine sand.		
30				GW		30.0 / 2325.2 Sandy Gravel. Pale yellowish brown to light brown with depth, saturated, angular to sub-rounded gravel to 1.5 inch diameter with fine to coarse sand.		
	7	0	ND ND			No recovery. Driller reports likely rock stuck in sampler shoe. 33.0 / 2322.2	ND	- 10/20 Silica Sand Filter Pack - 1 inch diameter Sch. 40 PVC 10 Slot Screen
	8	187	ND ND	GW		Sandy Gravel. Pale yellowish brown to light brown with depth, saturated, angular to sub-rounded gravel to 1.5 inch diameter with fine to coarse sand. Drill rods refused at 34.5 and will not advance further. Driller comments refusal is likely due to large boulder/cobbles. 34.5 / 2320.7	ND	- Bottom Cap

Bottom of hole at 34.5 feet.

WELL NUMBER MW-4

URS

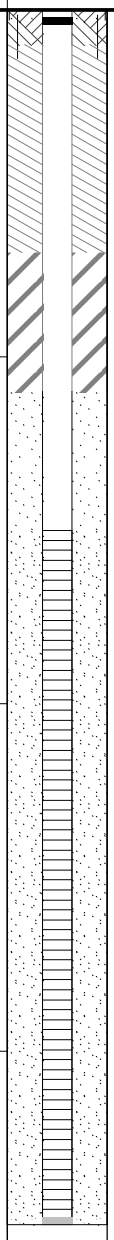
CLIENT IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
PROJECT NAME Warrior of Idaho Property
PROJECT NUMBER 36258892
PROJECT LOCATION Caldwell, ID

DRILLING CONTRACTOR Earth Probe, Bountiful, UT
DRILLER Pat Casey
DRILLING METHOD Direct Push
LOGGED BY Derek Young **CHECKED BY** Lisa Gates
HOLE SIZE 2.5 Inch **DRILL MAKE/MODEL** GeoProbe 7822DT
GROUND ELEVATION 2354.4 ft NAVD 1988

DATE: STARTED 5/6/14 **COMPLETED** 5/6/14
WELL DEVELOPEMENT COMPLETED 5/6/2014
COORDINATES 730932.2 / 2371538.4
TOP OF CASING ELEVATION 2354.079 ft
WATER ELEVATION 2348.34 ft **MEASUREMENT DATE** 5/7/2014
NOTES Set 1-inch diameter groundwater monitoring well in boring.

DEPTH (ft)	INTERVAL	RECOVERY %	CORE PID SAMPLE (HS) RESULTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION (Name, Gradation or Plasticity, Particle Size, Distribution, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy, USCS Group Symbol)	Depth	Elevation	MAXIMUM PID (ppm) ALONG CORE 10.6 eV Bulb
0						Asphalt	0.2	2354.2	
			ND	SW		Sand with Gravel. Pale yellowish brown, very moist, fine to coarse sand with angular gravel to 1.5 inch diameter.	1.5	2352.9	
	1	60	ND	ML		Silt. Dark brown, moist with increasing moisture with depth to very moist with blocky texture. Rare very fine sand seams up to 1 mm thick present.			ND
5			ND						
			ND						
	2	76	ND	ML		Sandy Silt. Pale yellowish brown, very moist with very fine to fine sand.	7.0	2347.4	ND
10			ND	SP-SM		Sand with Silt. Pale yellowish brown, saturated, very fine to fine sand.	8.0	2346.4	
	3	64	ND						ND
15			ND	GW		Sandy Gravel. Pale yellowish brown to light brown with depth, saturated, angular to sub-rounded gravel to 1.5 inch diameter with fine to coarse sand.	13.0	2341.4	
	4	72	ND						ND
			ND				17.9	2336.5	
			ND			Bottom of hole at 17.9 feet.			

WELL DIAGRAM



- Surface Completion Concrete
- Dry Granular Bentonite
- Hydrated Bentonite Well Seal
- 1 inch diameter Sch. 40 PVC Riser
- 10/20 Silica Sand Filter Pack
- 1 inch diameter Sch. 40 PVC 10 Slot Screen
- Bottom Cap

WELL NUMBER MW-5

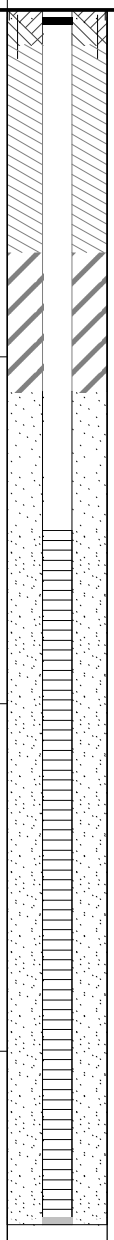
URS

CLIENT IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
PROJECT NAME Warrior of Idaho Property
PROJECT NUMBER 36258892
PROJECT LOCATION Caldwell, ID

DRILLING CONTRACTOR Earth Probe, Bountiful, UT
DRILLER Pat Casey
DRILLING METHOD Direct Push
LOGGED BY Derek Young **CHECKED BY** Lisa Gates
HOLE SIZE 2.5 Inch **DRILL MAKE/MODEL** GeoProbe 7822DT
GROUND ELEVATION 2354.8 ft NAVD 1988

DATE: STARTED 5/6/14 **COMPLETED** 5/6/14
WELL DEVELOPEMENT COMPLETED 5/6/2014
COORDINATES 731107.2 / 2371766
TOP OF CASING ELEVATION 2354.531 ft
WATER ELEVATION 2348.4 ft **MEASUREMENT DATE** 5/7/2014
NOTES Set 1-inch diameter groundwater monitoring well in boring.

DEPTH (ft)	INTERVAL	RECOVERY %	CORE PID SAMPLE (HS) RESULTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION (Name, Gradation or Plasticity, Particle Size, Distribution, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy, USCS Group Symbol)	Depth	Elevation	MAXIMUM PID (ppm) ALONG CORE 10.6 eV Bulb
0						Asphalt	0.2	2354.6	
			ND	SW		Sand with Gravel. Pale yellowish brown, very moist, fine to coarse sand with angular gravel to 1.5 inch diameter.	1.0	2353.8	
	1	68	ND	ML		Silt. Dark brown, blocky texture, moist with increasing moisture with depth to saturated at 7 feet. Rare very fine sand seams up to 1 mm thick present throughout unit.			ND
5			ND						
			ND						
	2	70	ND				7.5	2347.3	ND
			ND	SP-SM		Sand with Silt. Pale yellowish brown, saturated, very fine to fine sand with iron oxide staining and veining.	10.0	2344.8	
10									
			ND	SP		Sand. Pale yellowish brown, saturated, very fine to medium, with iron oxide staining and veining.			
	3	86	ND				13.6	2341.2	ND
			ND	GW		Sandy Gravel. Pale yellowish brown to light brown with depth, saturated, angular to sub-rounded gravel to 1.5 inch diameter with fine to coarse sand.			
15									
	4	52	ND						ND
			ND						
			ND				17.9	2336.9	
						Bottom of hole at 17.9 feet.			



- Surface Completion Concrete
- Dry Granular Bentonite
- Hydrated Bentonite Well Seal
- 1 inch diameter Sch. 40 PVC Riser
- 10/20 Silica Sand Filter Pack
- 1 inch diameter Sch. 40 PVC 10 Slot Screen
- Bottom Cap

Form 235-1
02/2014

RECEIVED
APR 21 2014
WATER RESOURCES
WESTERN REGION

Drilling Permit No. 965655-87174
Drilling Permit I.D. Tag No. D0066307
Water Right Permit No
Injection Permit No.

State of Idaho
Department of Water Resources

APPLICATION FOR DRILLING PERMIT
(FOR THE CONSTRUCTION OF A WELL)

1. Property Owner (please print): Warrior of Idaho - Jim Homburger

2. Current Mailing Address: P.O. Box 1420

City: Caldwell State: ID Zip Code: 83606 Telephone (____)

3. Proposed Well Location: Twp. 4 N, Rge. 3 W, Sec. 21, NE (10) 1/4 NE (40) 1/4 SW (160) 1/4

Gov't Lot No. ____ County Canyon Lat. 43 40.096' Long. 116 42.300'

Street Address of Well Location 412 S. Kit Ave. City Caldwell
Give at least name of road + Distance to Nearest Road or Landmark

Lot, block and subdivision Approximately 700 feet SW of the intersection of Kit Ave. and JR Simplot Blvd.

4. Proposed Use of Well: (Note: Any well drilled for a Public Water Supply requires prior DEQ approval.)

☐ DOMESTIC (42-111a): The use of water for homes, organization camps, public campgrounds, livestock and for any other purpose in connection therewith, including irrigation of up to ½ acre of land, if the total use is not in excess of 13,000 gpd.

☐ DOMESTIC (42-111b): Any other use if the diversion rate does not exceed 0.04 cfs (18 gpm) and a diversion volume of 2500 gpd.

NON-DOMESTIC: ☐ Irrigation ☐ Municipal ☐ Industrial ☐ Public Water Supply
☐ Commercial ☐ Other ____ (Describe)

☐ INJECTION

☑ MONITORING: A well bore schematic and map is required. No. of proposed wells: 1

5. Well Construction Information:

A. ☑ New well ☐ Modify ☐ Deepening ☐ Replace Previous Well # ____

B. Proposed Casing Diameter 1" Proposed Maximum Depth 30'

C. Anticipated bottom hole temperature:
☑ 85°F or less (Cold Water Well) ☐ 85°F to 212°F (Low Temp. Geo. Well) ☐ 212°F or more (Geothermal Well)

6. Construction Start Date: May 6, 2014

7. Drilling Company Name: EarthProbe Environmental Field Services, Inc. Driller's Lic. No. 602
NOTE: The actual well driller must be identified prior to drilling.

8. Applicant's Signature: [signature] Date: April 18, 2014

Title: Vice President

Address (if different than owner): 1353 Stellaria Cir.

City: Bountiful State: UT Zip Code: 84010 Telephone: 801-558-5231

DRILLER'S COPY

ACTION OF THE DEPARTMENT OF WATER RESOURCES

This Permit is APPROVED Date 4/22/14

If approved, this permit authorizes the construction or modification of a well subject to the following conditions. **READ CAREFULLY!**

GENERAL CONDITIONS:

1. This drilling permit is valid for two (2) months from the above approval date for the start of construction and is valid for one(1) year from the approval date for completion of the well unless an extension has been granted.

2. This permit does not constitute an approval of the District Health Department or the Idaho Department of Health and Welfare, which may be required before construction of the well. All wells must be drilled a minimum distance of 100 feet from a drain field. Domestic and Public Water Supply wells must be drilled a minimum of 50 feet and 100 feet respectively from a septic tank.

3. The well shall be constructed by a driller currently licensed in the State of Idaho who must maintain a copy of the drilling permit and the well ID tag at the drilling site.

4. Approval of this drilling permit does not authorize trespass on the land of another party.

5. This permit does not constitute other local, county, state, or federal approvals which may be required for construction of a well.

6. This drilling permit does not represent a right to divert and use the water of the State of Idaho. If the well being drilled is associated with approved water right(s) use of the well must comply with conditions of said water right(s).

7. If the depth of this well exceeds 500 feet or the well is in an area known to have LTG water, bottom hole temperature must be measured and recorded on the Driller's Log, and reported on the Well Driller's Report.

8. If a bottom hole temperature of 85°F or greater is encountered, well construction shall cease and the well driller shall contact the Department immediately.

9. Idaho Code, S 55-2201 - 55-2210 requires the applicant and/or his contractors to contact "Digline" (DigLine is a one-call center for utility notification) not less than 2 working days prior to the start of any excavation for this project. The "DigLine" Number for your area is 1-800-342-1585.

10. The stainless steel I. D. tag must be securely and permanently attached to the well casing by the Driller upon completion of the well, and prior to removing the drill rig from the drill site and must remain permanently attached above ground level for the life of the well. The well tag shall be attached by welding at least 3 sides or using four (4) stainless steel, closed-end pop rivets.

11. Any well being replaced by a new well shall be properly abandoned by the well driller prior to removing the drilling equipment, unless otherwise authorized by the department.

SPECIFIC CONDITIONS:

Signature of Authorized Department Representative

Geologist
Title

Receipt No. W042043 Receipted by CNUTE Fee 75.00 Date 4/21/14

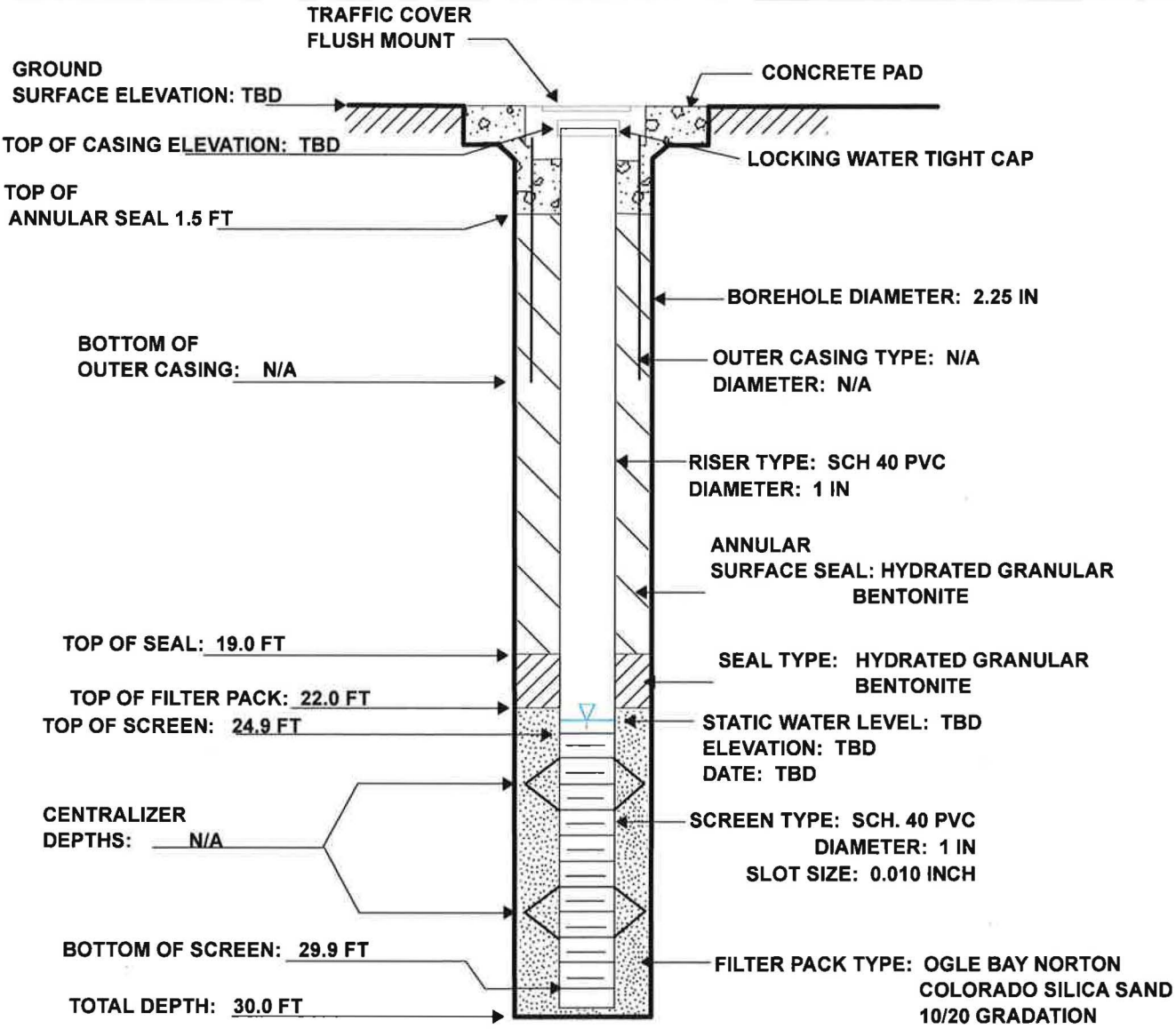
EXTENSION OF DRILLING PERMIT

Extension approved by _____ Approval Date _____

This extension expires: _____

PROPOSED WELL CONSTRUCTION

PROJECT: Warrior of Idaho
LOCATION: 412 S. Kit Ave., Caldwell, ID
WELL ID: MW-3
PROPOSED INSTALL DATE: May 6, 2014
URS REPRESENTATIVE: Derek Young, P.G.
DRILLER: EarthProbe, Bountiful, UT



COMMENTS: Well to be installed via direct-push methods.

URS

REGISTERED PROFESSIONAL GEOLOGIST
DEREK A. YOUNG
1018
4/17/14
STATE OF IDAHO

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Appendix E. Low Flow Ground Water Sampling Water Quality Parameters

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MW-1

Start low flow pumping on 5/7/2014 at 0819 hours. Sampling performed at 0915 hours. Initial water level at 7.67 feet below top of casing (BTOC).

Time	Cum. Purge Volume (gallons)	pH	Temp (°C)	Cond. (mS/m)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Depth of Water Below Top of Casing (ft.)
0820		7.34	15.19	0.890	-405	0.41	170	7.75
0825		7.25	15.09	0.845	-457	0	169	7.76
0830		7.29	15.02	0.786	-476	0	90	7.76
0835		7.32	14.96	0.758	-488	0	52	7.76
0840		7.35	15.04	0.740	-486	0	33	7.76
0845		7.32	15.06	0.728	-473	0	25	7.76
0850		7.30	15.10	0.721	-456	0	20.1	7.76
0855		7.29	15.09	0.717	-453	0	12.1	7.76
0900		7.27	15.16	0.712	-451	0	9.5	7.76
0905		7.25	15.22	0.709	-447	0	7.5	7.76
0910	~4 gallons	7.25	15.17	0.710	-446	0	5.1	7.76

MW-2

Start low flow pumping on 5/7/2014 at 1235 hours. Sampling performed at 1315 hours, duplicate sample at 1320 hours. Initial water level at 6.44 feet BTOC.

Time	Cum. Purge Volume (gallons)	pH	Temp (°C)	Cond. (mS/m)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Depth of Water Below Top of Casing (feet)
1240		7.27	15.75	1.13	-528	0	29.3	6.47
1245		7.24	15.84	1.10	-535	0	15.4	6.47
1250		7.22	15.85	1.10	-535	0	6.2	6.47
1255		7.20	15.79	1.09	-539	0	3.6	6.47
1300		7.19	16.01	1.09	-532	0	1.7	6.47
1305		7.19	16.17	1.09	-539	0	1.1	6.47
1310	~3.5 gallons	7.18	16.04	1.08	-537	0	0.8	6.47

MW-3

Start low flow pumping on 5/7/2014 at 1128 hours. Sampling performed at 1225 hours. Initial water level at 6.34 feet BTOC.

Time	Cum. Purge Volume (gallons)	pH	Temp (°C)	Cond. (mS/m)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Depth of Water Below Top of Casing (feet)
1130		7.93	16.18	0.697	-518	0.44	484	7.60
1135		7.92	16.54	0.690	-620	0	>800	7.60
1140		7.78	16.76	0.671	-596	0	600	7.62
1145		7.70	16.93	0.667	-522	0	68.2	7.65
1150		7.67	16.94	0.664	-471	0	61.3	7.67
1155		7.65	17.00	0.663	-456	0	31.2	7.68
1200		7.64	17.04	0.663	-434	0	21.3	7.72
1205		7.63	16.98	0.665	-412	0	9.7	7.72
1210		7.61	17.02	0.661	-408	0	10.2	7.72
1215		7.60	17.05	0.662	-405	0	9.1	7.72
1220	~5 gallons	7.59	17.07	0.663	-401	0	9.7	7.72

Note: Slug of sediment drawn from well approximately 10 minutes after pumping began but quickly dissipated and flushed from flow cell.

MW-4

Start low flow pumping 5/7/2014 at 0932 hours. Sampling performed at 1015 hours. Initial water level at 5.74 feet BTOC.

Time	Cum. Purge Volume (gallons)	pH	Temp (°C)	Cond. (mS/m)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Depth of Water Below Top of Casing (feet)
0935		7.34	13.80	0.911	-245	2.30	90.0	5.80
0940		7.15	14.03	1.13	-341	0.21	14.3	5.81
0945		7.16	14.15	1.18	-332	0	10.2	5.81
0950		7.16	14.12	1.18	-308	0	10.3	5.81
0955		7.16	14.20	1.19	-280	0	5.5	5.81
1000		7.17	14.24	1.19	-256	0	6.0	5.81
1005		7.18	14.24	1.19	-251	0	4.9	5.81
1010	~4 gallons	7.19	14.31	1.19	-248	0	3.3	5.81

MW-5

Start low flow pumping 5/7/2014 at 1027 hours. Sampling performed at 1120 hours. Initial water level at 6.13 feet BTOC.

Time	Cum. Purge Volume (gallons)	pH	Temp (°C)	Cond. (mS/m)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Depth of Water Below Top of Casing (feet)
1030		8.21	14.28	0.492	-185	1.27	264	6.16
1035		7.96	14.32	0.493	-259	0.05	464	6.16
1040		7.84	14.28	0.502	-260	0	331	6.16
1045		7.73	14.26	0.512	-230	0	55.0	6.16
1050		7.70	14.30	0.518	-215	0	28.0	6.16
1055		7.67	14.31	0.526	-200	0	15.7	6.16
1100		7.66	14.35	0.530	-196	0	12.3	6.16
1105		7.64	14.41	0.535	-190	0	9.4	6.16
1110		7.63	14.43	0.541	-188	0	6.1	6.16
1115	~4.5 gallons	7.63	14.43	0.543	-184	0	5.2	6.16

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Appendix F. Field Equipment Calibration Certifications

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ARGUS-HAZCO

Certificate of Compliance and Calibration

Certificate Number 4/30/2014 - 5751

Order#	03007498-1	***Make/Model***	RAE/MINIRAE 3000-BT
Customer#	0004115	***Asset #***	1117299
Customer Name	URS-E&C	***Serial Number***	592-904131

Sensor Installed	*Standard*	*Lot Number*	*Cal Set Point*	*Final Span*
VOC	100	045225	100	100.6

Notes

Location	Dallas, TX	***Asset Released In Tolerance***	☑
Technician	TC	***All Tests Passed***	☑
Date	4/30/2014		
Time	12:07		
SOP#			

Quality Control: Tom Calli **Date:** 4-30

Please Note: All tests performed with NIST Traceable Master Gas at ambient room temperature, humidity, and pressure at the location listed above. Time in transit or any change in temperature, pressure, humidity, or elevation may result in changes to the calibration values listed. Performance of a bump test is recommended prior to each use; refer to owners manual for bump testing and calibration procedures. Use of this test sheet constitutes proof that the testing environment was within manufacturers' limitation and the instrument conforms to manufacturers' specification. For a copy of the calibration standard certificate of analysis or MSDS, contact us at 800-332-0435.

ARGUS-HAZCO

Certificate of Compliance and Calibration

Certificate Number 4/29/2014 - 1445

Order#	02005589-2	**Make/Model**	HOR/U52 10M
Customer#	0004115	**Asset #**	0000444
Customer Name	URS-E&C	**Serial Number**	W99APXEF

pH Sensor Installed and Calibrated				☑
Set Point	7.00	10.00		
Lot Number	3112552	3102956		
Final Span	7.00	10.01		
DO Sensor Installed and Calibrated	☑		**ORP Installed?**	☐
Temperature:			**ORP Cal Value:**	
Set Point	8.58		**ORP Lot#:**	
Final Span	8.58		**Final Span**	
Conductivity Sensor Installed and Calibrated				☑
Set Point	0.0	1.41		
Lot Number	04020400	4012778		
Final Span	0.0	1.41		
Turbidity Sensor Installed and Calibrated				☑
Set Point	0.0	100		
Lot Number	04020400	A4085		
Final Span	0.0	101		

Notes

Location	Dallas, TX	***Asset Released In Tolerance***	☑
Technician	TC	***All Tests Passed***	☑
Date	4/29/2014		
Time	15:23		
SOP#			

Quality Control: Tom Call **Date:** 4-30

Please Note: All tests performed with NIST Traceable Calibration Solutions at ambient room temperature, humidity, and pressure at the location listed above. Time in transit or any change in temperature, pressure, humidity, or elevation may result in changes to the calibration values listed. Performance of a bump test is recommended prior to each use; refer to owners manual for bump testing and calibration procedures. Use of this test sheet constitutes proof that the testing environment was within manufacturers' limitation and the instrument conforms to manufacturers' specification. For a copy of the calibration standard certificate of analysis or MSDS, contact us at 800-332-0435.

Appendix G. IDW Analytical Results and Non-Hazardous Waste Manifest

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Table G-1: Summary of Investigation Derived Waste Purge Water Sample Results for RCRA Metals

Method		7470A		6010B		6010B		6010B		6010B		6010B		6010B		6010B	
Parameter		Mercury		Arsenic		Barium		Cadmium		Chromium		Lead		Selenium		Silver	
Units		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
TCLP		0.2		5		100		1		5		5		1		5	
Sample ID	Date	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
IDW-WC-WATER	5/7/2014	<0.00020		<0.020		**0.16**		<0.0050	P1	**0.023**		**0.015**		<0.020		<0.010	J6, J3

J3 The associated batch QC was outside the established quality control range for precision.
P1 RPD value not applicable for sample concentrations less than 5 times the reporting limit.
J6 The sample matrix interfered with the ability to make any accurate determination; spike value is low.
mg/L milligrams per liter
TCLP toxicity characteristic leaching procedure

Table G-2: Summary of Investigation Derived Waste Purge Water Sample Results for Applicable Volatile Organic Chemicals

Method		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B	
Parameter		Benzene		Carbon tetrachloride		Chlorobenzene		Chloroform		1,4-Dichlorobenzene		1,2-Dichloroethane		1,1-Dichloroethene		Hexachloro-1,3-butadiene		2-Butanone (MEK)		Tetrachloroethene		Trichloroethene		Vinyl chloride	
Units		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
TCLP		0.5		0.5		100		6		7.5		0.5		0.7		0.5		200		0.7		0.5		0.2	
Sample ID	Date	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
IDW-WC-WATER	5/7/2014	<0.0010		<0.0010		<0.0010	J4	<0.0050		<0.0010		<0.0010		<0.0010		<0.0010		<0.010		<0.0010	J4	<0.0010	J4	<0.0010	

J4 The associated batch QC was outside the established quality control range for accuracy.
mg/L milligrams per liter
TCLP toxicity characteristic leaching procedure

Table G-3: Summary of Investigation Derived Waste Soil Sample Results for RCRA Metals

Method		7471		6010B		6010B		6010B		6010B		6010B		6010B		6010B	
Parameter		Mercury		Arsenic		Barium		Cadmium		Chromium		Lead		Selenium		Silver	
Units		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
TCLP (Rule of 20)		0.2 (4)		5(100)		100 (2,000)		1(20)		5(100)		5 (158)		1(20)		5(100)	
Sample ID	Date	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
IDW-WC-SOIL	5/7/2014	<0.024		**4.8**		**110**		**0.19**	J	**16**		**7.9**		**1.4**	J	**0.72**	J

mg/kg milligrams per kilogram
J Estimated value below the lowest calibration point. Confidence correlates with concentration.
TCLP toxicity characteristic leaching procedure

Table G-4: Summary of Investigation Derived Waste Soil Sample Results for Applicable Volatile Organic Compounds																									
Method		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B	
Parameter		Benzene		Carbon tetrachloride		Chlorobenzene		Chloroform		1,4-Dichlorobenzene		1,2-Dichloroethane		1,1-Dichloroethene		Hexachloro-1,3-butadiene		2-Butanone (MEK)		Tetra-chloroethene		Trichloroethene		Vinyl chloride	
Units		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
TCLP (Rule of 20)		0.5(10)		0.5(10)		100 (2,000)		6 (120)		7.5 (150)		0.5 (10)		0.7 (14)		0.5 (10)		200 (4,000)		0.7 (14)		0.5 (10)		0.2 (4)	
Sample ID	Date	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
IDW-WC-SOIL	5/7/2014	<0.0014		<0.0016		<0.0011		<0.0011		<0.0011		<0.0013		<0.0015		<0.0017		<0.023		<0.0014		<0.0014		<0.0014	

mg/kg milligrams per kilogram
TCLP toxicity characteristic leaching procedure

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	CESQG	1	866-680-7979	060414TB2

5. Generator's Name and Mailing Address

WARRIOR OF IDAHO-FORMER KIT MFG. CO IDEQ
412 SOUTH KIT AVENUE
NAMPA, ID 83651

Generator's Site Address (if different than mailing address)

Generator's Phone: 208-373-0296

6. Transporter 1 Company Name: MASTER ENVIRONMENTAL — U.S. EPA ID Number: IDR000202929

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address — U.S. EPA ID Number:

IDAHO WASTE SYSTEMS
15415 N.W. WASTE SITE DR.
MAYFIELD, ID 83716

Facility's Phone: 208-796-2727

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. NON HAZARDOUS, NON REGULATED LIQUIDS (NOT USDOT OR USEPA REGULATED MATERIAL)	001	DM	0055	G	
	2. NON HAZARDOUS, NON REGULATED LIQUIDS (NOT USDOT OR USEPA REGULATED MATERIAL)	002	DF	0010	G	
	3. NON HAZARDOUS, NON REGULATED SOLIDS (NOT USDOT OR USEPA REGULATED)	001	DF	0050	P	
	4.					

13. Special Handling Instructions and Additional Information

IDW DERIVED PURGE WATER AND SOIL - L697788

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Dana Swift — Signature: Dana Swift — Month 06 Day 04 Year 14

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Travis S. Brueggeman — Signature: Travis S. Brueggeman — Month 06 Day 04 Year 14

Transporter 2 Printed/Typed Name — Signature — Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Judi Claudt — Signature — Month 06 Day 19 Year 14

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

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Appendix H. Survey Report

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FOX LAND SURVEYS

1515 S. Shoshone St., Boise, ID 83705
Office (208)342-7957 Fax (208)342-7437

Derek Young
URS Corporation
720 Park Boulevard
Boise, ID 83712-7714

May 14, 2014

Derek,
We have completed the survey of the Monitor Wells at the KIT Site in Caldwell, Idaho. The results are as follows:

FIELD SURVEY:
The crew visited the site on May 8th, 2014. They established a site benchmark and obtained horizontal locations using redundant RTK techniques. The observations were taken relative to the Middleton Reference Station operated by Bonneville Blueprint. Secondary observations were taken relative to the Nampa Station, also operated by Bonneville Blue. The vertical value of the benchmark was held fixed and a closed differential level loop was observed through all Monitor Wells. All wells were used as turn points, with 4 of the 5 turned through twice.

DATA TREATMENT / DATUM:
The GPS observations were evaluated using Topcon Magnet Tools Software. The differential level loop was manually reduced and adjusted. All quality indicators and residuals were well within the project specifications. The resulting horizontal uncertainty is a nominal 0.3' absolute and 0.2' relative. The absolute vertical position is within a nominal 0.1' of NAVD88, as determined using GEOID 12A. The relative vertical tolerance (well to well) is less than or equal to 0.004' at the 95% confidence level. All published horizontal values are NAD83 (2011) (epoch 2010). The units are US Survey Feet. As previously stated, the elevations are nominal NAVD88.

POINT#	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	730831.8	2372377.6	2356.192	CHISELED SQUARE (TBM1)
100	730803.7	2372360.5	2356.180	MONITOR WELL 1
200	730936.7	2371943.2	2354.878	MONITOR WELL 2
300	730942.3	2371943.4	2354.795	MONITOR WELL 3
400	730932.2	2371538.4	2354.079	MONITOR WELL 4
500	731107.2	2371766.0	2354.531	MONITOR WELL 5

NOTE: Well Elevations were taken on the mark at the top of the well casing (inside the cover).

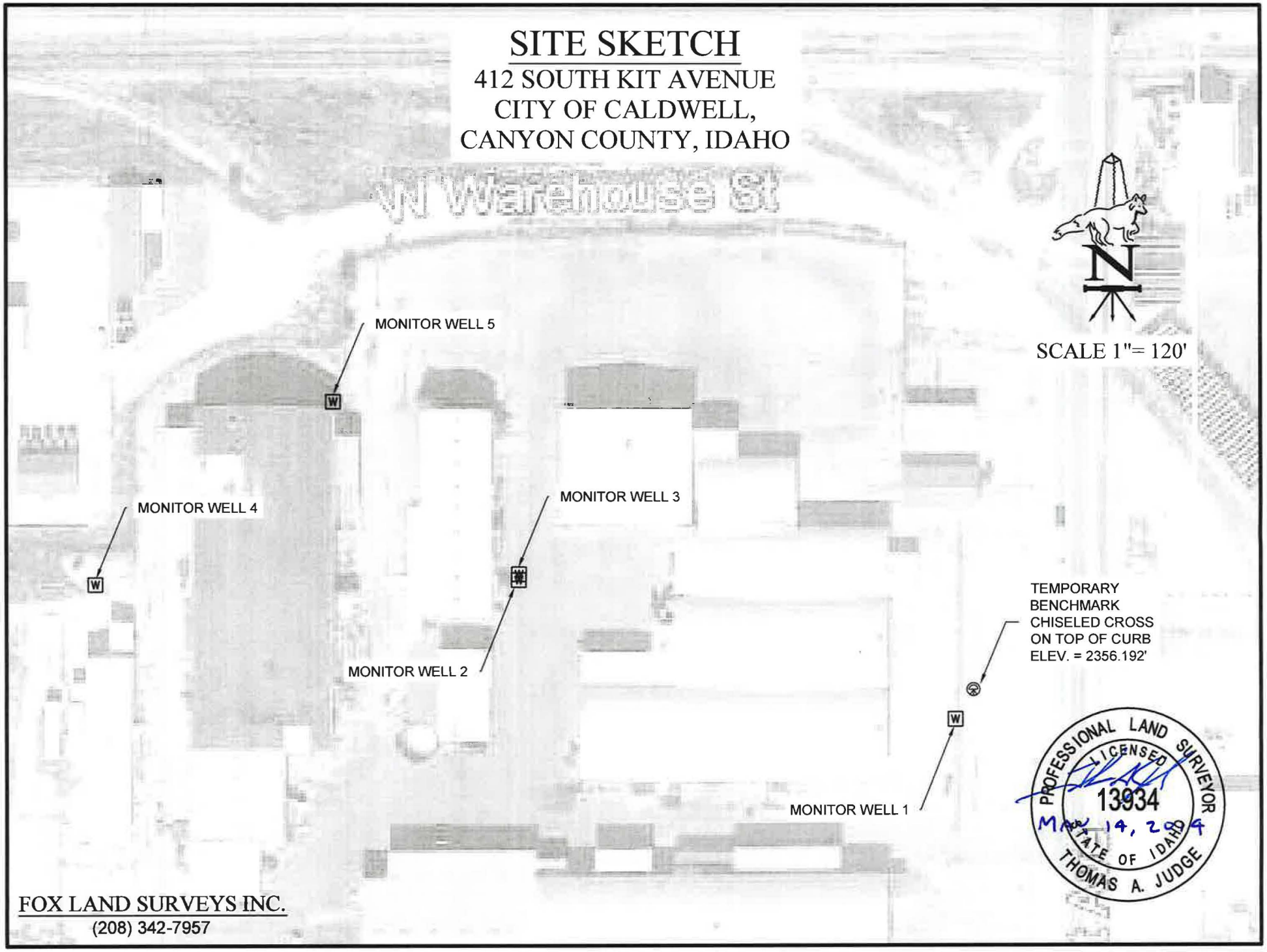
An image with the benchmark and well locations noted is attached. Please contact us if you have questions or comments.

Respectfully,
Fox Land Surveys, Inc.
Thomas A. Judge, PLS 13934, Project Manager
TAJ:taj
W:\Projects\2014\1436-URS Kit .Prj\Proj\FLSI Docs\Reports\1436-REPORT-5-13-14.docx

PROFESSIONAL LAND SURVEYOR LICENSE 13934 MAY 14, 2014 STATE OF IDAHO THOMAS A. JUDGE

SITE SKETCH

412 SOUTH KIT AVENUE
CITY OF CALDWELL,
CANYON COUNTY, IDAHO



FOX LAND SURVEYS INC.
(208) 342-7957

Appendix I. Analytical Laboratory Report

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12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
(800) 767-5859
Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L697788

For: URS- Boise, ID
Project: Warrior of Idaho
May 15, 2014

Sample Receiving and Handling

All sample aliquots were received at the correct temperature, in the proper containers, and with the appropriate preservatives. All method specified holding times were met.

Total Solids by Method 2540 G-2011

Laboratory Control Sample

Sample L697788-08 was analyzed in analytical batch WG720054. The laboratory control sample associated with this sample was within the laboratory control limits for all target analytes reported from this batch.

Sample Duplicate Analysis

For analytical batch WG720054 sample duplicate analysis was performed on sample L697784-03. The relative percent differences were within the method limits for target analytes reported from this batch.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Mercury by Method 7471

Laboratory Control Sample

Sample L697788-08 was analyzed in analytical batch WG720040. The laboratory control sample associated with this sample was within the laboratory control limits for all target analytes reported from this batch.

Sample L697788-07 was analyzed in analytical batch WG720092. The laboratory control sample associated with this sample was within the laboratory control limits for all target analytes reported from this batch.

Sample Duplicate Analysis

For analytical batch WG720040 sample duplicate analysis was performed on sample L697905-04. The relative percent difference exceeded the method limits for Mercury.

For analytical batch WG720092 sample duplicate analysis was performed on sample L697796-04. The relative percent differences were within the method limits for target analytes reported from this batch.

Matrix Spike/Matrix Spike Duplicate

For analytical batch WG720040 matrix spike/matrix spike duplicate analysis was performed on sample L697905-04. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes reported from this batch.

For analytical batch WG720092 matrix spike/matrix spike duplicate analysis was performed on sample L697796-04. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes reported from this batch.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

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Mt. Juliet, TN 37122
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(800) 767-5859
Fax (615) 758-5859
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Est. 1970

Quality Control Summary
SDG: L697788

For: URS- Boise, ID
Project: Warrior of Idaho
May 15, 2014

Trace Metals by Method 6010B

Laboratory Control Sample

Sample L697788-08 was analyzed in analytical batch WG720129. The laboratory control sample associated with this sample was within the laboratory control limits for all target analytes reported from this batch.

Sample L697788-07 was analyzed in analytical batch WG720564. The laboratory control sample associated with this sample was within the laboratory control limits for all target analytes reported from this batch.

Sample Duplicate Analysis

For analytical batch WG720129 sample duplicate analysis was performed on sample L697503-17. The relative percent differences were within the method limits for target analytes reported from this batch.

For analytical batch WG720564 sample duplicate analysis was performed on sample L697788-07. The relative percent difference exceeded the method limits for Cadmium.

Matrix Spike/Matrix Spike Duplicate

For analytical batch WG720129 matrix spike/matrix spike duplicate analysis was performed on sample L697503-17. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes reported from this batch.

For analytical batch WG720564 matrix spike/matrix spike duplicate analysis was performed on sample L697788-07. The matrix spike recoveries were below laboratory control limits for Silver. The spike recoveries were within limits for the remaining target compounds reported from this batch. The relative percent difference exceeded laboratory limits for Silver.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Volatile Organic Compounds by Method 8260B

Laboratory Control Sample

Samples L697788-01, -02, -03, -04, -05, -06, -07, and -09 were analyzed in analytical batch WG719982. The laboratory control sample associated with these samples had all target analytes within method limits except for 2-Chloroethyl vinyl ether, Chlorobenzene, Tetrachloroethene, and Trichloroethene. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Sample L697788-08 was analyzed in analytical batch WG720225. The laboratory control sample associated with this sample was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Matrix Spike/Matrix Spike Duplicate

For analytical batch WG719982 matrix spike/matrix spike duplicate analysis was performed on sample L697717-02. The matrix spike recoveries were above laboratory control limits for Chloroethane. The matrix spike recoveries were below laboratory control limits for 2-Chloroethyl vinyl ether. The spike recoveries were within limits for the remaining target compounds reported from this batch. The relative percent difference exceeded laboratory limits for 2-Chloroethyl vinyl ether.

12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
(800) 767-5859
Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L697788

For: URS- Boise, ID
Project: Warrior of Idaho
May 15, 2014

For analytical batch WG720225 matrix spike/matrix spike duplicate analysis was performed on sample L697836-01. The matrix spike recoveries were above laboratory control limits for Bromomethane. The spike recoveries were within limits for the remaining target compounds reported from this batch. The relative percent difference exceeded laboratory limits for Hexachloro-1,3-butadiene.

Blank Analysis
The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Nancy F. McLain
ESC Representative
ESC Lab Sciences

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

Report Summary

Wednesday May 14, 2014

Report Number: L697788
Samples Received: 05/08/14
Client Project: 36258892

Description: Warrior of Idaho

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jarred Willis

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences.
Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-01

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-1

Collected By : Derek Young
Collection Date : 05/07/14 09:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	05/10/14	1
Acrolein	U	8.9	50.	ug/l		8260B	05/10/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	05/10/14	1
Benzene	U	0.33	1.0	ug/l		8260B	05/10/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	05/10/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	05/10/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	05/10/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	05/10/14	1
Chlorobenzene	U	0.35	1.0	ug/l	J4	8260B	05/10/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	05/10/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	05/10/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l	J4	8260B	05/10/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	05/10/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	05/10/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	05/10/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	05/10/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	05/10/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	05/10/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	05/10/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	05/10/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	05/10/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	05/10/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	05/10/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	05/10/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	05/10/14	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-01

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-1

Collected By : Derek Young
Collection Date : 05/07/14 09:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	05/10/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	05/10/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	05/10/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	05/10/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	05/10/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Styrene	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	05/10/14	1
Tetrachloroethene	U	0.37	1.0	ug/l	J4	8260B	05/10/14	1
Toluene	U	0.78	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	05/10/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	05/10/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Trichloroethene	0.40	0.40	1.0	ug/l	JJ4	8260B	05/10/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	05/10/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	05/10/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	05/10/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	05/10/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	05/10/14	1
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	05/10/14	1
Dibromofluoromethane	99.5			% Rec.		8260B	05/10/14	1
a,a,a-Trifluorotoluene	109.			% Rec.		8260B	05/10/14	1
4-Bromofluorobenzene	109.			% Rec.		8260B	05/10/14	1

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-02

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-2

Collected By : Derek Young
Collection Date : 05/07/14 13:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	05/10/14	1
Acrolein	U	8.9	50.	ug/l		8260B	05/10/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	05/10/14	1
Benzene	U	0.33	1.0	ug/l		8260B	05/10/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	05/10/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	05/10/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	05/10/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	05/10/14	1
Chlorobenzene	U	0.35	1.0	ug/l	J4	8260B	05/10/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	05/10/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	05/10/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l	J4	8260B	05/10/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	05/10/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	05/10/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	05/10/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	05/10/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	05/10/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	05/10/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	05/10/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	05/10/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	05/10/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	05/10/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	05/10/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	05/10/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	05/10/14	1

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-02

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-2

Collected By : Derek Young
Collection Date : 05/07/14 13:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	05/10/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	05/10/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	05/10/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	05/10/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	05/10/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Styrene	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	05/10/14	1
Tetrachloroethene	0.83	0.37	1.0	ug/l	JJ4	8260B	05/10/14	1
Toluene	U	0.78	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	05/10/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	05/10/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Trichloroethene	U	0.40	1.0	ug/l	J4	8260B	05/10/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	05/10/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	05/10/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	05/10/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	05/10/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	05/10/14	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	05/10/14	1
Dibromofluoromethane	98.2			% Rec.		8260B	05/10/14	1
a,a,a-Trifluorotoluene	112.			% Rec.		8260B	05/10/14	1
4-Bromofluorobenzene	112.			% Rec.		8260B	05/10/14	1

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-03

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-2-D

Collected By : Derek Young
Collection Date : 05/07/14 13:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	05/10/14	1
Acrolein	U	8.9	50.	ug/l		8260B	05/10/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	05/10/14	1
Benzene	U	0.33	1.0	ug/l		8260B	05/10/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	05/10/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	05/10/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	05/10/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	05/10/14	1
Chlorobenzene	U	0.35	1.0	ug/l	J4	8260B	05/10/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	05/10/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	05/10/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l	J4	8260B	05/10/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	05/10/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	05/10/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	05/10/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	05/10/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	05/10/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	05/10/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	05/10/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	05/10/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	05/10/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	05/10/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	05/10/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	05/10/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	05/10/14	1

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-03

Date Received : May 08, 2014
Description : Warrior of Idaho

Site ID : CALDWELL, ID

Sample ID : WC-MW-2-D

Project # : 36258892

Collected By : Derek Young
Collection Date : 05/07/14 13:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	05/10/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	05/10/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	05/10/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	05/10/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	05/10/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Styrene	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	05/10/14	1
Tetrachloroethene	0.96	0.37	1.0	ug/l	JJ4	8260B	05/10/14	1
Toluene	U	0.78	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	05/10/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	05/10/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Trichloroethene	U	0.40	1.0	ug/l	J4	8260B	05/10/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	05/10/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	05/10/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	05/10/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	05/10/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	05/10/14	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	05/10/14	1
Dibromofluoromethane	99.6			% Rec.		8260B	05/10/14	1
a,a,a-Trifluorotoluene	110.			% Rec.		8260B	05/10/14	1
4-Bromofluorobenzene	110.			% Rec.		8260B	05/10/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-04

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-3

Collected By : Derek Young
Collection Date : 05/07/14 12:25

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	05/10/14	1
Acrolein	U	8.9	50.	ug/l		8260B	05/10/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	05/10/14	1
Benzene	U	0.33	1.0	ug/l		8260B	05/10/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	05/10/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	05/10/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	05/10/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	05/10/14	1
Chlorobenzene	U	0.35	1.0	ug/l	J4	8260B	05/10/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	05/10/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	05/10/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l	J4	8260B	05/10/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	05/10/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	05/10/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	05/10/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	05/10/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	05/10/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	05/10/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	05/10/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	05/10/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	05/10/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	05/10/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	05/10/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	05/10/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	05/10/14	1

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-04

Date Received : May 08, 2014
Description : Warrior of Idaho

Site ID : CALDWELL, ID

Sample ID : WC-MW-3

Project # : 36258892

Collected By : Derek Young
Collection Date : 05/07/14 12:25

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	05/10/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	05/10/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	05/10/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	05/10/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	05/10/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Styrene	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	05/10/14	1
Tetrachloroethene	U	0.37	1.0	ug/l	J4	8260B	05/10/14	1
Toluene	U	0.78	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	05/10/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	05/10/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Trichloroethene	0.46	0.40	1.0	ug/l	JJ4	8260B	05/10/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	05/10/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	05/10/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	05/10/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	05/10/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	05/10/14	1
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	05/10/14	1
Dibromofluoromethane	98.5			% Rec.		8260B	05/10/14	1
a,a,a-Trifluorotoluene	109.			% Rec.		8260B	05/10/14	1
4-Bromofluorobenzene	112.			% Rec.		8260B	05/10/14	1

U = ND (Not Detected)
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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-05

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-4

Collected By : Derek Young
Collection Date : 05/07/14 10:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	05/10/14	1
Acrolein	U	8.9	50.	ug/l		8260B	05/10/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	05/10/14	1
Benzene	U	0.33	1.0	ug/l		8260B	05/10/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	05/10/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	05/10/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	05/10/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	05/10/14	1
Chlorobenzene	U	0.35	1.0	ug/l	J4	8260B	05/10/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	05/10/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	05/10/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l	J4	8260B	05/10/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	05/10/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	05/10/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	05/10/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	05/10/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	05/10/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	05/10/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	05/10/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	05/10/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	05/10/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	05/10/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	05/10/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	05/10/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	05/10/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-05

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-4

Collected By : Derek Young
Collection Date : 05/07/14 10:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	05/10/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	05/10/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	05/10/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	05/10/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	05/10/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Styrene	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	05/10/14	1
Tetrachloroethene	U	0.37	1.0	ug/l	J4	8260B	05/10/14	1
Toluene	U	0.78	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	05/10/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	05/10/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Trichloroethene	U	0.40	1.0	ug/l	J4	8260B	05/10/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	05/10/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	05/10/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	05/10/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	05/10/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	05/10/14	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	05/10/14	1
Dibromofluoromethane	99.1			% Rec.		8260B	05/10/14	1
a,a,a-Trifluorotoluene	110.			% Rec.		8260B	05/10/14	1
4-Bromofluorobenzene	108.			% Rec.		8260B	05/10/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-06

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-5

Collected By : Derek Young
Collection Date : 05/07/14 11:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	05/10/14	1
Acrolein	U	8.9	50.	ug/l		8260B	05/10/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	05/10/14	1
Benzene	U	0.33	1.0	ug/l		8260B	05/10/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	05/10/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	05/10/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	05/10/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	05/10/14	1
Chlorobenzene	U	0.35	1.0	ug/l	J4	8260B	05/10/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	05/10/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	05/10/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l	J4	8260B	05/10/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	05/10/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	05/10/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	05/10/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	05/10/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	05/10/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	05/10/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	05/10/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	05/10/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	05/10/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	05/10/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	05/10/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	05/10/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	05/10/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-06

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : WC-MW-5

Collected By : Derek Young
Collection Date : 05/07/14 11:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	05/10/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	05/10/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	05/10/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	05/10/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	05/10/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Styrene	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	05/10/14	1
Tetrachloroethene	2.3	0.37	1.0	ug/l	J4	8260B	05/10/14	1
Toluene	U	0.78	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	05/10/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	05/10/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Trichloroethene	U	0.40	1.0	ug/l	J4	8260B	05/10/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	05/10/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	05/10/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	05/10/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	05/10/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	05/10/14	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	05/10/14	1
Dibromofluoromethane	95.6			% Rec.		8260B	05/10/14	1
a,a,a-Trifluorotoluene	110.			% Rec.		8260B	05/10/14	1
4-Bromofluorobenzene	108.			% Rec.		8260B	05/10/14	1

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14,2014

ESC Sample # : L697788-07

Date Received : May 08, 2014
Description : Warrior of Idaho

Site ID : CALDWELL, ID

Sample ID : IDW-WC-WATER

Project # : 36258892

Collected By : Derek Young
Collection Date : 05/07/14 13:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	U	0.049	0.20	ug/l		7470A	05/13/14	1
Arsenic	U	6.5	20.	ug/l		6010B	05/14/14	1
Barium	160	1.7	5.0	ug/l		6010B	05/14/14	1
Cadmium	U	0.70	5.0	ug/l	P1	6010B	05/14/14	1
Chromium	23.	1.4	10.	ug/l		6010B	05/14/14	1
Lead	15.	1.9	5.0	ug/l		6010B	05/14/14	1
Selenium	U	7.4	20.	ug/l		6010B	05/14/14	1
Silver	U	2.8	10.	ug/l	J6J3	6010B	05/14/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	05/10/14	1
Acrolein	U	8.9	50.	ug/l		8260B	05/10/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	05/10/14	1
Benzene	U	0.33	1.0	ug/l		8260B	05/10/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	05/10/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	05/10/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	05/10/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	05/10/14	1
Chlorobenzene	U	0.35	1.0	ug/l	J4	8260B	05/10/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	05/10/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	05/10/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l	J4	8260B	05/10/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	05/10/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	05/10/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	05/10/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	05/10/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	05/10/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	05/10/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	05/10/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14,2014

ESC Sample # : L697788-07

Date Received : May 08, 2014
Description : Warrior of Idaho

Site ID : CALDWELL, ID

Sample ID : IDW-WC-WATER

Project # : 36258892

Collected By : Derek Young
Collection Date : 05/07/14 13:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	05/10/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	05/10/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	05/10/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	05/10/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	05/10/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	05/10/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	05/10/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	05/10/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	05/10/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	05/10/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	05/10/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Styrene	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	05/10/14	1
Tetrachloroethene	U	0.37	1.0	ug/l	J4	8260B	05/10/14	1
Toluene	U	0.78	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	05/10/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	05/10/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Trichloroethene	U	0.40	1.0	ug/l	J4	8260B	05/10/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	05/10/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	05/10/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	05/10/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	05/10/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	05/10/14	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	05/10/14	1
Dibromofluoromethane	98.5			% Rec.		8260B	05/10/14	1
a,a,a-Trifluorotoluene	108.			% Rec.		8260B	05/10/14	1
4-Bromofluorobenzene	99.4			% Rec.		8260B	05/10/14	1

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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-08

Date Received : May 08, 2014
Description : Warrior of Idaho

Site ID : CALDWELL, ID

Sample ID : IDW-WC-SOIL

Project # : 36258892

Collected By : Derek Young
Collection Date : 05/07/14 12:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	83.6	0.0333		%		2540 G-2	05/10/14	1
Mercury	U	0.0028	0.024	mg/kg		7471	05/12/14	1
Arsenic	4.8	0.65	2.4	mg/kg		6010B	05/13/14	1
Barium	110	0.17	0.60	mg/kg		6010B	05/13/14	1
Cadmium	0.19	0.070	0.60	mg/kg	J	6010B	05/13/14	1
Chromium	16.	0.14	1.2	mg/kg		6010B	05/13/14	1
Lead	7.9	0.19	0.60	mg/kg		6010B	05/13/14	1
Selenium	1.4	0.74	2.4	mg/kg	J	6010B	05/13/14	1
Silver	0.72	0.28	1.2	mg/kg	J	6010B	05/13/14	1
Volatile Organics								
Acetone	U	0.050	0.30	mg/kg		8260B	05/13/14	5
Acrylonitrile	U	0.0090	0.060	mg/kg		8260B	05/13/14	5
Benzene	U	0.0014	0.0060	mg/kg		8260B	05/13/14	5
Bromobenzene	U	0.0014	0.0060	mg/kg		8260B	05/13/14	5
Bromodichloromethane	U	0.0013	0.0060	mg/kg		8260B	05/13/14	5
Bromoform	U	0.0021	0.0060	mg/kg		8260B	05/13/14	5
Bromomethane	U	0.0067	0.030	mg/kg		8260B	05/13/14	5
n-Butylbenzene	U	0.0013	0.0060	mg/kg		8260B	05/13/14	5
sec-Butylbenzene	U	0.0010	0.0060	mg/kg		8260B	05/13/14	5
tert-Butylbenzene	U	0.0010	0.0060	mg/kg		8260B	05/13/14	5
Carbon tetrachloride	U	0.0016	0.0060	mg/kg		8260B	05/13/14	5
Chlorobenzene	U	0.0011	0.0060	mg/kg		8260B	05/13/14	5
Chlorodibromomethane	U	0.0019	0.0060	mg/kg		8260B	05/13/14	5
Chloroethane	U	0.0047	0.030	mg/kg		8260B	05/13/14	5
2-Chloroethyl vinyl ether	U	0.012	0.30	mg/kg		8260B	05/13/14	5
Chloroform	U	0.0011	0.030	mg/kg		8260B	05/13/14	5
Chloromethane	U	0.0019	0.015	mg/kg		8260B	05/13/14	5
2-Chlorotoluene	U	0.0015	0.0060	mg/kg		8260B	05/13/14	5
4-Chlorotoluene	U	0.0012	0.0060	mg/kg		8260B	05/13/14	5
1,2-Dibromo-3-Chloropropane	U	0.0052	0.030	mg/kg		8260B	05/13/14	5
1,2-Dibromoethane	U	0.0017	0.0060	mg/kg		8260B	05/13/14	5
Dibromomethane	U	0.0019	0.0060	mg/kg		8260B	05/13/14	5
1,2-Dichlorobenzene	U	0.0015	0.0060	mg/kg		8260B	05/13/14	5
1,3-Dichlorobenzene	U	0.0012	0.0060	mg/kg		8260B	05/13/14	5
1,4-Dichlorobenzene	U	0.0011	0.0060	mg/kg		8260B	05/13/14	5
Dichlorodifluoromethane	U	0.0036	0.030	mg/kg		8260B	05/13/14	5
1,1-Dichloroethane	U	0.0010	0.0060	mg/kg		8260B	05/13/14	5
1,2-Dichloroethane	U	0.0013	0.0060	mg/kg		8260B	05/13/14	5
1,1-Dichloroethene	U	0.0015	0.0060	mg/kg		8260B	05/13/14	5
cis-1,2-Dichloroethene	U	0.0012	0.0060	mg/kg		8260B	05/13/14	5

Results listed are dry weight basis.
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-08

Date Received : May 08, 2014
Description : Warrior of Idaho

Site ID : CALDWELL, ID

Sample ID : IDW-WC-SOIL

Project # : 36258892

Collected By : Derek Young
Collection Date : 05/07/14 12:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,2-Dichloroethene	U	0.0013	0.0060	mg/kg		8260B	05/13/14	5
1,2-Dichloropropane	U	0.0018	0.0060	mg/kg		8260B	05/13/14	5
1,1-Dichloropropene	U	0.0016	0.0060	mg/kg		8260B	05/13/14	5
1,3-Dichloropropane	U	0.0010	0.0060	mg/kg		8260B	05/13/14	5
cis-1,3-Dichloropropene	U	0.0013	0.0060	mg/kg		8260B	05/13/14	5
trans-1,3-Dichloropropene	U	0.0013	0.0060	mg/kg		8260B	05/13/14	5
2,2-Dichloropropane	U	0.0014	0.0060	mg/kg		8260B	05/13/14	5
Di-isopropyl ether	U	0.0012	0.0060	mg/kg		8260B	05/13/14	5
Ethylbenzene	U	0.0015	0.0060	mg/kg		8260B	05/13/14	5
Hexachloro-1,3-butadiene	U	0.0017	0.0060	mg/kg		8260B	05/13/14	5
Isopropylbenzene	U	0.0012	0.0060	mg/kg		8260B	05/13/14	5
p-Isopropyltoluene	U	0.0010	0.0060	mg/kg		8260B	05/13/14	5
2-Butanone (MEK)	U	0.023	0.060	mg/kg		8260B	05/13/14	5
Methylene Chloride	U	0.0050	0.030	mg/kg		8260B	05/13/14	5
4-Methyl-2-pentanone (MIBK)	U	0.0094	0.060	mg/kg		8260B	05/13/14	5
Methyl tert-butyl ether	U	0.0011	0.0060	mg/kg		8260B	05/13/14	5
Naphthalene	U	0.0050	0.030	mg/kg		8260B	05/13/14	5
n-Propylbenzene	U	0.0010	0.0060	mg/kg		8260B	05/13/14	5
Styrene	U	0.0012	0.0060	mg/kg		8260B	05/13/14	5
1,1,1,2-Tetrachloroethane	U	0.0013	0.0060	mg/kg		8260B	05/13/14	5
1,1,2,2-Tetrachloroethane	U	0.0018	0.0060	mg/kg		8260B	05/13/14	5
1,1,2-Trichlorotrifluoroethane	U	0.0018	0.0060	mg/kg		8260B	05/13/14	5
Tetrachloroethene	U	0.0014	0.0060	mg/kg		8260B	05/13/14	5
Toluene	U	0.0022	0.030	mg/kg		8260B	05/13/14	5
1,2,3-Trichlorobenzene	U	0.0015	0.0060	mg/kg		8260B	05/13/14	5
1,2,4-Trichlorobenzene	U	0.0019	0.0060	mg/kg		8260B	05/13/14	5
1,1,1-Trichloroethane	U	0.0014	0.0060	mg/kg		8260B	05/13/14	5
1,1,2-Trichloroethane	U	0.0014	0.0060	mg/kg		8260B	05/13/14	5
Trichloroethene	U	0.0014	0.0060	mg/kg		8260B	05/13/14	5
Trichlorofluoromethane	U	0.0019	0.030	mg/kg		8260B	05/13/14	5
1,2,3-Trichloropropane	U	0.0037	0.015	mg/kg		8260B	05/13/14	5
1,2,4-Trimethylbenzene	U	0.0010	0.0060	mg/kg		8260B	05/13/14	5
1,2,3-Trimethylbenzene	U	0.0014	0.0060	mg/kg		8260B	05/13/14	5
1,3,5-Trimethylbenzene	U	0.0013	0.0060	mg/kg		8260B	05/13/14	5
Vinyl chloride	U	0.0014	0.0060	mg/kg		8260B	05/13/14	5
Xylenes, Total	U	0.0035	0.018	mg/kg		8260B	05/13/14	5
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	05/13/14	5
Dibromofluoromethane	95.8			% Rec.		8260B	05/13/14	5
a,a,a-Trifluorotoluene	104.			% Rec.		8260B	05/13/14	5
4-Bromofluorobenzene	105.			% Rec.		8260B	05/13/14	5

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-09

Date Received : May 08, 2014
Description : Warrior of Idaho

Site ID : CALDWELL, ID

Sample ID : TRIP BLANK

Project # : 36258892

Collected By : Derek Young
Collection Date : 05/07/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	05/10/14	1
Acrolein	U	8.9	50.	ug/l		8260B	05/10/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	05/10/14	1
Benzene	U	0.33	1.0	ug/l		8260B	05/10/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	05/10/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	05/10/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	05/10/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	05/10/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	05/10/14	1
Chlorobenzene	U	0.35	1.0	ug/l	J4	8260B	05/10/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	05/10/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	05/10/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l	J4	8260B	05/10/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	05/10/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	05/10/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	05/10/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	05/10/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	05/10/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	05/10/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	05/10/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	05/10/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	05/10/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	05/10/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	05/10/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	05/10/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	05/10/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	05/10/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	05/10/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	05/10/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Derek Young
URS- Boise, ID
720 Park Blvd.
Boise, ID 83712-7714

May 14, 2014

ESC Sample # : L697788-09

Site ID : CALDWELL, ID

Project # : 36258892

Date Received : May 08, 2014
Description : Warrior of Idaho

Sample ID : TRIP BLANK

Collected By : Derek Young
Collection Date : 05/07/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	05/10/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	05/10/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	05/10/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	05/10/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	05/10/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	05/10/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	05/10/14	1
Styrene	U	0.31	1.0	ug/l		8260B	05/10/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	05/10/14	1
Tetrachloroethene	U	0.37	1.0	ug/l	J4	8260B	05/10/14	1
Toluene	U	0.78	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	05/10/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	05/10/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	05/10/14	1
Trichloroethene	U	0.40	1.0	ug/l	J4	8260B	05/10/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	05/10/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	05/10/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	05/10/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	05/10/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	05/10/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	05/10/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	05/10/14	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	05/10/14	1
Dibromofluoromethane	98.2			% Rec.		8260B	05/10/14	1
a,a,a-Trifluorotoluene	111.			% Rec.		8260B	05/10/14	1
4-Bromofluorobenzene	109.			% Rec.		8260B	05/10/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L697788-01	WG719982	SAMP	Chlorobenzene	R2919026	J4
	WG719982	SAMP	2-Chloroethyl vinyl ether	R2919026	J4
	WG719982	SAMP	Tetrachloroethene	R2919026	J4
	WG719982	SAMP	Trichloroethene	R2919026	JJ4
L697788-02	WG719982	SAMP	Chlorobenzene	R2919026	J4
	WG719982	SAMP	2-Chloroethyl vinyl ether	R2919026	J4
	WG719982	SAMP	Tetrachloroethene	R2919026	JJ4
	WG719982	SAMP	Trichloroethene	R2919026	J4
L697788-03	WG719982	SAMP	Chlorobenzene	R2919026	J4
	WG719982	SAMP	2-Chloroethyl vinyl ether	R2919026	J4
	WG719982	SAMP	Tetrachloroethene	R2919026	JJ4
	WG719982	SAMP	Trichloroethene	R2919026	J4
L697788-04	WG719982	SAMP	Chlorobenzene	R2919026	J4
	WG719982	SAMP	2-Chloroethyl vinyl ether	R2919026	J4
	WG719982	SAMP	Tetrachloroethene	R2919026	J4
	WG719982	SAMP	Trichloroethene	R2919026	JJ4
L697788-05	WG719982	SAMP	Chlorobenzene	R2919026	J4
	WG719982	SAMP	2-Chloroethyl vinyl ether	R2919026	J4
	WG719982	SAMP	Tetrachloroethene	R2919026	J4
	WG719982	SAMP	Trichloroethene	R2919026	J4
L697788-06	WG719982	SAMP	Chlorobenzene	R2919026	J4
	WG719982	SAMP	2-Chloroethyl vinyl ether	R2919026	J4
	WG719982	SAMP	Tetrachloroethene	R2919026	J4
	WG719982	SAMP	Trichloroethene	R2919026	J4
L697788-07	WG719982	SAMP	Chlorobenzene	R2919026	J4
	WG719982	SAMP	2-Chloroethyl vinyl ether	R2919026	J4
	WG719982	SAMP	Tetrachloroethene	R2919026	J4
	WG719982	SAMP	Trichloroethene	R2919026	J4
	WG720564	SAMP	Cadmium	R2920667	P1
	WG720564	SAMP	Silver	R2920667	J6J3
L697788-08	WG720129	SAMP	Cadmium	R2920866	J
	WG720129	SAMP	Selenium	R2920866	J
	WG720129	SAMP	Silver	R2920866	J
L697788-09	WG719982	SAMP	Chlorobenzene	R2919026	J4
	WG719982	SAMP	2-Chloroethyl vinyl ether	R2919026	J4
	WG719982	SAMP	Tetrachloroethene	R2919026	J4
	WG719982	SAMP	Trichloroethene	R2919026	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
05/14/14 at 15:30:30

TSR Signing Reports: 358
R5 - Desired TAT

Log all samples for QC2MODCN.

Sample: L697788-01 Account: WASHGRBID Received: 05/08/14 09:00 Due Date: 05/15/14 00:00 RPT Date: 05/14/14 15:29

Sample: L697788-02 Account: WASHGRBID Received: 05/08/14 09:00 Due Date: 05/15/14 00:00 RPT Date: 05/14/14 15:29

Sample: L697788-03 Account: WASHGRBID Received: 05/08/14 09:00 Due Date: 05/15/14 00:00 RPT Date: 05/14/14 15:29

Sample: L697788-04 Account: WASHGRBID Received: 05/08/14 09:00 Due Date: 05/15/14 00:00 RPT Date: 05/14/14 15:29

Sample: L697788-05 Account: WASHGRBID Received: 05/08/14 09:00 Due Date: 05/15/14 00:00 RPT Date: 05/14/14 15:29

Sample: L697788-06 Account: WASHGRBID Received: 05/08/14 09:00 Due Date: 05/15/14 00:00 RPT Date: 05/14/14 15:29

Sample: L697788-07 Account: WASHGRBID Received: 05/08/14 09:00 Due Date: 05/15/14 00:00 RPT Date: 05/14/14 15:29

Sample: L697788-08 Account: WASHGRBID Received: 05/08/14 09:00 Due Date: 05/15/14 00:00 RPT Date: 05/14/14 15:29

Sample: L697788-09 Account: WASHGRBID Received: 05/08/14 09:00 Due Date: 05/15/14 00:00 RPT Date: 05/14/14 15:29

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Total Solids by Method 2540 G-2011		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720054**
Analysis Date:	5/10/2014 8:12:00 AM	Analyst:	475
Instrument ID:	LOGBAL1		
Sample Numbers:	L697788-08		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
Total Solids	TSOLIDS	< 0.100	< 0.0333	

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Total Solids	1	50	49.995	100	85 - 115	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Total Solids by Method 2540 G-2011		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720054**
Analysis Date:	5/10/2014 8:12:00 AM	Analyst:	475
Instrument ID:	LOGBAL1		
Sample Numbers:	L697788-08		

Sample Duplicate

L697784-03

Analyte	Dil	Sample Result	DUP Result	% RPD	Limit	Qualifier
Total Solids	1	81.662	83.558	2.29	5	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Mercury by Method 7471		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720040**
Analysis Date:	5/12/2014 11:57:00 AM	Analyst:	628
Instrument ID:	CVAA1	Prep Date:	5/9/2014
Sample Numbers:	L697788-08		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
Mercury	7439-97-6	< 0.0200	< 0.00280	

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Mercury	50	12.4	10.238	83	71.6 - 128	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Mercury by Method 7470A		
Project No:	36258892	Matrix:	Water - ug/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720092**
Analysis Date:	5/13/2014 9:58:00 AM	Analyst:	628
Instrument ID:	CVAA3	Prep Date:	5/9/2014
Sample Numbers:	L697788-07		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
Mercury	7439-97-6	< 0.200	< 0.0490	

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Mercury	1	3	2.8221	94	85 - 115	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Mercury by Method 7471		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720040**
Analysis Date:	5/12/2014 11:57:00 AM	Analyst:	628
Instrument ID:	CVAA1	Prep Date:	5/9/2014
Sample Numbers:	L697788-08		

Sample Duplicate

L697905-04

Analyte	Dil	Sample Result	DUP Result	% RPD	Limit	Qualifier
Mercury	1	0.0176	0.0073	82	20	P1

Serial Dilution

L697905-04

Analyte	Dil	Sample Result	SD Result	% RPD	Limit	Qualifier
Mercury	5	0.0176	0.0069	61	10	

Matrix Spike / Matrix Spike Duplicate

L697905-04

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
Mercury	1	0.5	0.0176	0.4519	87	0.4951	96	80 - 120		9	20	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Mercury by Method 7470A		
Project No:	36258892	Matrix:	Water - ug/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720092**
Analysis Date:	5/13/2014 9:58:00 AM	Analyst:	628
Instrument ID:	CVAA3	Prep Date:	5/9/2014
Sample Numbers:	L697788-07		

Sample Duplicate

L697796-04

Analyte	Dil	Sample Result	DUP Result	% RPD	Limit	Qualifier
Mercury	1	<0.049	<0.049		20	

Serial Dilution

L697796-04

Analyte	Dil	Sample Result	SD Result	% RPD	Limit	Qualifier
Mercury	5	<0.049	<0.245		10	

Matrix Spike / Matrix Spike Duplicate

L697796-04

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
Mercury	1	3	0.0204	2.4929	82	2.5489	84	80 - 120		2	20	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Trace Metals by Method 6010B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720129**
Analysis Date:	5/13/2014 7:40:00 PM	Analyst:	454
Instrument ID:	ICP11	Prep Date:	5/9/2014
Sample Numbers:	L697788-08		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
Arsenic	7440-38-2	< 2.00	< 0.650	
Barium	7440-39-3	< 0.500	< 0.170	
Cadmium	7440-43-9	< 0.500	< 0.0700	
Chromium	7440-47-3	< 1.00	< 0.140	
Lead	7439-92-1	< 0.500	< 0.190	
Selenium	7782-49-2	< 2.00	< 0.740	
Silver	7440-22-4	< 1.00	< 0.280	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Trace Metals by Method 6010B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720564**
Analysis Date:	5/14/2014 12:51:00 AM	Analyst:	447
Instrument ID:	ICP5	Prep Date:	5/13/2014
Sample Numbers:	L697788-07		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
Arsenic	7440-38-2	< 0.0200	< 0.00650	
Barium	7440-39-3	< 0.00500	< 0.00170	
Cadmium	7440-43-9	< 0.00500	< 0.000700	
Chromium	7440-47-3	< 0.0100	< 0.00140	
Cobalt	7440-48-4	< 0.0100	< 0.00230	
Copper	7440-50-8	< 0.0200	< 0.00530	
Lead	7439-92-1	< 0.00500	< 0.00190	
Nickel	7440-02-0	< 0.0200	< 0.00490	
Selenium	7782-49-2	< 0.0200	< 0.00740	
Silver	7440-22-4	< 0.0100	< 0.00280	
Vanadium	7440-62-2	< 0.0100	< 0.00240	
Zinc	7440-66-6	< 0.0300	< 0.00590	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Trace Metals by Method 6010B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720129**
Analysis Date:	5/13/2014 7:40:00 PM	Analyst:	454
Instrument ID:	ICP11	Prep Date:	5/9/2014
Sample Numbers:	L697788-08		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Arsenic	1	237	250.16	106	83.1 - 117	
Barium	1	252	262.38	104	84.1 - 116	
Cadmium	1	191	186.78	98	83.2 - 117	
Chromium	1	128	132.75	104	81.3 - 118	
Lead	1	103	103.13	100	83.1 - 117	
Selenium	1	110	122.18	111	78.7 - 122	
Silver	1	47.3	51.334	109	66.2 - 134	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Trace Metals by Method 6010B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720564**
Analysis Date:	5/14/2014 12:51:00 AM	Analyst:	447
Instrument ID:	ICP5	Prep Date:	5/13/2014
Sample Numbers:	L697788-07		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Arsenic	1	1	1.0553	106	80 - 120	
Barium	1	1	1.0762	108	80 - 120	
Cadmium	1	1	1.0719	107	80 - 120	
Chromium	1	1	1.0746	107	80 - 120	
Cobalt	1	1	1.1046	110	80 - 120	
Copper	1	1	1.0220	102	80 - 120	
Lead	1	1	1.0791	108	80 - 120	
Nickel	1	1	1.0080	101	80 - 120	
Selenium	1	1	1.0674	107	80 - 120	
Silver	1	1	1.0290	103	80 - 120	
Vanadium	1	1	1.0807	108	80 - 120	
Zinc	1	1	1.0574	106	80 - 120	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Trace Metals by Method 6010B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720129**
Analysis Date:	5/13/2014 7:40:00 PM	Analyst:	454
Instrument ID:	ICP11	Prep Date:	5/9/2014
Sample Numbers:	L697788-08		

Sample Duplicate

L697503-17

Analyte	Dil	Sample Result	DUP Result	% RPD	Limit	Qualifier
Arsenic	1	4.1455	3.7494	10	20	

Serial Dilution

L697503-17

Analyte	Dil	Sample Result	SD Result	% RPD	Limit	Qualifier
Arsenic	5	4.1455	4.2891	3	10	

Matrix Spike / Matrix Spike Duplicate

L697503-17

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
Arsenic	1	50	4.1455	47.711	87	48.871	89	75 - 125		2	20	

Post Digest Spike

L697503-17

Analyte	Dil	Spike Value	Sample	Result	% Rec	Control Limits	Qualifier
Arsenic	1	49.5	4.1764	54.314	101	75-125	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Trace Metals by Method 6010B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720564**
Analysis Date:	5/14/2014 12:51:00 AM	Analyst:	447
Instrument ID:	ICP5	Prep Date:	5/13/2014
Sample Numbers:	L697788-07		

Sample Duplicate

L697788-07

Analyte	Dil	Sample Result	DUP Result	% RPD	Limit	Qualifier
Arsenic	1	<0.0065	<0.0065		20	
Barium	1	0.1569	0.1577	1	20	
Cadmium	1	0.0006	0.0008	27	20	P1
Chromium	1	0.0227	0.0237	4	20	
Cobalt	1	0.0044	0.0047	9	20	
Copper	1	0.0099	0.0091	9	20	
Lead	1	0.0148	0.0172	15	20	
Nickel	1	0.0135	0.0139	3	20	
Selenium	1	<0.0074	<0.0074		20	
Silver	1	<0.0028	<0.0028		20	
Vanadium	1	0.0221	0.0228	3	20	
Zinc	1	0.0850	0.0854	0	20	

Serial Dilution

L697788-07

Analyte	Dil	Sample Result	SD Result	% RPD	Limit	Qualifier
Arsenic	5	<0.0065	<0.0325		10	
Barium	5	0.1569	0.1603	2	10	
Cadmium	5	<0.0007	<0.0035		10	
Chromium	5	0.0227	0.0234	3	10	
Cobalt	5	0.0044	0.0045	3	10	
Copper	5	0.0099	0.0096	3	10	
Lead	5	0.0148	0.0280	89	10	
Nickel	5	0.0135	0.0148	10	10	
Selenium	5	<0.0074	<0.037		10	
Silver	5	<0.0028	<0.014		10	
Vanadium	5	0.0221	0.0224	2	10	
Zinc	5	0.0850	0.0916	8	10	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Trace Metals by Method 6010B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720564**
Analysis Date:	5/14/2014 12:51:00 AM	Analyst:	447
Instrument ID:	ICP5	Prep Date:	5/13/2014
Sample Numbers:	L697788-07		

Matrix Spike / Matrix Spike Duplicate

L697788-07

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
Arsenic	1	1	0.0015	1.0549	105	1.0520	105	75 - 125		0	20	
Barium	1	1	0.1569	1.1907	103	1.1919	104	75 - 125		0	20	
Cadmium	1	1	0.0006	1.0416	104	1.0399	104	75 - 125		0	20	
Chromium	1	1	0.0227	1.0548	103	1.0596	104	75 - 125		0	20	
Cobalt	1	1	0.0044	1.0585	105	1.0629	106	75 - 125		0	20	
Copper	1	1	0.0099	1.0309	102	1.0338	102	75 - 125		0	20	
Lead	1	1	0.0148	1.0521	104	1.0571	104	75 - 125		0	20	
Nickel	1	1	0.0135	1.0235	101	1.0287	102	75 - 125		1	20	
Selenium	1	1	0.0023	1.0586	106	1.0561	105	75 - 125		0	20	
Silver	1	1	-0.001	0.1167	12	0.1690	17	75 - 125	J6	37	20	J3
Vanadium	1	1	0.0221	1.0791	106	1.0802	106	75 - 125		0	20	
Zinc	1	1	0.0850	1.1396	105	1.1303	105	75 - 125		1	20	

Post Digest Spike

L697788-07

Analyte	Dil	Spike Value	Sample	Result	% Rec	Control Limits	Qualifier
Arsenic	1	1.12	0.0015	1.1244	100	75-125	
Barium	1	1.12	0.1569	1.2629	99	75-125	
Cadmium	1	1.12	0.0006	1.1155	100	75-125	
Chromium	1	1.12	0.0227	1.1330	99	75-125	
Cobalt	1	1.12	0.0044	1.1342	101	75-125	
Copper	1	1.12	0.0099	1.1040	98	75-125	
Lead	1	1.12	0.0148	1.1306	100	75-125	
Nickel	1	1.12	0.0135	1.0863	96	75-125	
Selenium	1	1.12	0.0023	1.1416	102	75-125	
Silver	1	1.12	-0.001	0.9979	89	75-125	
Vanadium	1	1.12	0.0221	1.1536	101	75-125	
Zinc	1	1.12	0.0850	1.2051	100	75-125	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
1,1,1,2-Tetrachloroethane	630-20-6	< 0.00100	< 0.000385	
1,1,1-Trichloroethane	71-55-6	< 0.00100	< 0.000319	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.00100	< 0.000585	
1,1,2-Trichloroethane	79-00-5	< 0.00100	< 0.000383	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.00100	< 0.000303	
1,1-Dichloroethane	75-34-3	< 0.00100	< 0.000259	
1,1-Dichloroethene	75-35-4	< 0.00100	< 0.000398	
1,1-Dichloropropene	563-58-6	< 0.00100	< 0.000352	
1,2,3-Trichlorobenzene	87-61-6	< 0.00100	< 0.000230	
1,2,3-Trichloropropane	96-18-4	< 0.00250	< 0.000807	
1,2,3-Trimethylbenzene	526-73-8	< 0.00100	< 0.000321	
1,2,4-Trichlorobenzene	120-82-1	< 0.00100	< 0.000214	
1,2,4-Trimethylbenzene	95-63-6	< 0.00100	< 0.000373	
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.00500	< 0.00133	
1,2-Dibromoethane	106-93-4	< 0.00100	< 0.000381	
1,2-Dichlorobenzene	95-50-1	< 0.00100	< 0.000349	
1,2-Dichloroethane	107-06-2	< 0.00100	< 0.000361	
1,2-Dichloropropane	78-87-5	< 0.00100	< 0.000306	
1,3,5-Trimethylbenzene	108-67-8	< 0.00100	< 0.000387	
1,3-Dichlorobenzene	541-73-1	< 0.00100	< 0.000220	
1,3-Dichloropropane	142-28-9	< 0.00100	< 0.000366	
1,4-Dichlorobenzene	106-46-7	< 0.00100	< 0.000274	
2,2-Dichloropropane	594-20-7	< 0.00100	< 0.000321	
2-Butanone (MEK)	78-93-3	< 0.0100	< 0.00393	
2-Chloroethyl vinyl ether	110-75-8	< 0.0500	< 0.00301	
2-Chlorotoluene	95-49-8	< 0.00100	< 0.000375	
4-Chlorotoluene	106-43-4	< 0.00100	< 0.000351	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 0.0100	< 0.00214	
Acetone	67-64-1	< 0.0500	< 0.0100	
Acrolein	107-02-8	< 0.0500	< 0.00887	
Acrylonitrile	107-13-1	< 0.0100	< 0.00187	
Benzene	71-43-2	< 0.00100	< 0.000331	
Bromobenzene	108-86-1	< 0.00100	< 0.000352	
Bromodichloromethane	75-27-4	< 0.00100	< 0.000380	
Bromoform	75-25-2	< 0.00100	< 0.000469	
Bromomethane	74-83-9	< 0.00500	< 0.000866	
Carbon tetrachloride	56-23-5	< 0.00100	< 0.000379	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
Chlorobenzene	108-90-7	< 0.00100	< 0.000348	
Chlorodibromomethane	124-48-1	< 0.00100	< 0.000327	
Chloroethane	75-00-3	< 0.00500	< 0.000453	
Chloroform	67-66-3	< 0.00500	< 0.000324	
Chloromethane	74-87-3	< 0.00250	< 0.000276	
cis-1,2-Dichloroethene	156-59-2	< 0.00100	< 0.000260	
cis-1,3-Dichloropropene	10061-01-5	< 0.00100	< 0.000418	
Dibromomethane	74-95-3	< 0.00100	< 0.000346	
Dichlorodifluoromethane	75-71-8	< 0.00500	< 0.000551	
Di-isopropyl ether	108-20-3	< 0.00100	< 0.000320	
Ethylbenzene	100-41-4	< 0.00100	< 0.000384	
Hexachloro-1,3-butadiene	87-68-3	< 0.00100	< 0.000256	
Isopropylbenzene	98-82-8	< 0.00100	< 0.000326	
Methyl tert-butyl ether	1634-04-4	< 0.00100	< 0.000367	
Methylene Chloride	75-09-2	< 0.00500	< 0.00100	
Naphthalene	91-20-3	< 0.00500	< 0.00100	
n-Butylbenzene	104-51-8	< 0.00100	< 0.000361	
n-Propylbenzene	103-65-1	< 0.00100	< 0.000349	
p-Isopropyltoluene	99-87-6	< 0.00100	< 0.000350	
sec-Butylbenzene	135-98-8	< 0.00100	< 0.000365	
Styrene	100-42-5	< 0.00100	< 0.000307	
tert-Butylbenzene	98-06-6	< 0.00100	< 0.000399	
Tetrachloroethene	127-18-4	< 0.00100	< 0.000372	
Toluene	108-88-3	< 0.00500	< 0.000780	
trans-1,2-Dichloroethene	156-60-5	< 0.00100	< 0.000396	
trans-1,3-Dichloropropene	10061-02-6	< 0.00100	< 0.000419	
Trichloroethene	79-01-6	< 0.00100	< 0.000398	
Trichlorofluoromethane	75-69-4	< 0.00500	< 0.00120	
Vinyl chloride	75-01-4	< 0.00100	< 0.000259	
Xylenes, Total	1330-20-7	< 0.00300	< 0.00106	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
1,1,1,2-Tetrachloroethane	630-20-6	< 0.00100	< 0.000264	
1,1,1-Trichloroethane	71-55-6	< 0.00100	< 0.000286	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.00100	< 0.000365	
1,1,2-Trichloroethane	79-00-5	< 0.00100	< 0.000277	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.00100	< 0.000365	
1,1-Dichloroethane	75-34-3	< 0.00100	< 0.000199	
1,1-Dichloroethene	75-35-4	< 0.00100	< 0.000303	
1,1-Dichloropropene	563-58-6	< 0.00100	< 0.000317	
1,2,3-Trichlorobenzene	87-61-6	< 0.00100	< 0.000306	
1,2,3-Trichloropropane	96-18-4	< 0.00250	< 0.000741	
1,2,3-Trimethylbenzene	526-73-8	< 0.00100	< 0.000287	
1,2,4-Trichlorobenzene	120-82-1	< 0.00100	< 0.000388	
1,2,4-Trimethylbenzene	95-63-6	< 0.00100	< 0.000211	
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.00500	< 0.00105	
1,2-Dibromoethane	106-93-4	< 0.00100	< 0.000343	
1,2-Dichlorobenzene	95-50-1	< 0.00100	< 0.000305	
1,2-Dichloroethane	107-06-2	< 0.00100	< 0.000265	
1,2-Dichloropropane	78-87-5	< 0.00100	< 0.000358	
1,3,5-Trimethylbenzene	108-67-8	< 0.00100	< 0.000266	
1,3-Dichlorobenzene	541-73-1	< 0.00100	< 0.000239	
1,3-Dichloropropane	142-28-9	< 0.00100	< 0.000207	
1,4-Dichlorobenzene	106-46-7	< 0.00100	< 0.000226	
2,2-Dichloropropane	594-20-7	< 0.00100	< 0.000279	
2-Butanone (MEK)	78-93-3	< 0.0100	< 0.00468	
2-Chloroethyl vinyl ether	110-75-8	< 0.0500	< 0.00234	
2-Chlorotoluene	95-49-8	< 0.00100	< 0.000301	
4-Chlorotoluene	106-43-4	< 0.00100	< 0.000240	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 0.0100	< 0.00188	
Acetone	67-64-1	< 0.0500	< 0.0100	
Acrylonitrile	107-13-1	< 0.0100	< 0.00179	
Benzene	71-43-2	< 0.00100	< 0.000270	
Bromobenzene	108-86-1	< 0.00100	< 0.000284	
Bromodichloromethane	75-27-4	< 0.00100	< 0.000254	
Bromoform	75-25-2	< 0.00100	< 0.000424	
Bromomethane	74-83-9	< 0.00500	< 0.00134	
Carbon tetrachloride	56-23-5	< 0.00100	< 0.000328	
Chlorobenzene	108-90-7	< 0.00100	< 0.000212	

Parameters in bold text are reported in this SDG

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Est. 1970

Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
Chlorodibromomethane	124-48-1	< 0.00100	< 0.000373	
Chloroethane	75-00-3	< 0.00500	< 0.000946	
Chloroform	67-66-3	< 0.00500	< 0.000229	
Chloromethane	74-87-3	< 0.00250	< 0.000375	
cis-1,2-Dichloroethene	156-59-2	< 0.00100	< 0.000235	
cis-1,3-Dichloropropene	10061-01-5	< 0.00100	< 0.000262	
Dibromomethane	74-95-3	< 0.00100	< 0.000382	
Dichlorodifluoromethane	75-71-8	< 0.00500	< 0.000713	
Di-isopropyl ether	108-20-3	< 0.00100	< 0.000248	
Ethylbenzene	100-41-4	< 0.00100	< 0.000297	
Hexachloro-1,3-butadiene	87-68-3	< 0.00100	< 0.000342	
Isopropylbenzene	98-82-8	< 0.00100	< 0.000243	
Methyl tert-butyl ether	1634-04-4	< 0.00100	< 0.000212	
Methylene Chloride	75-09-2	< 0.00500	< 0.00100	
Naphthalene	91-20-3	< 0.00500	< 0.00100	
n-Butylbenzene	104-51-8	< 0.00100	< 0.000258	
n-Propylbenzene	103-65-1	< 0.00100	< 0.000206	
p-Isopropyltoluene	99-87-6	< 0.00100	< 0.000204	
sec-Butylbenzene	135-98-8	< 0.00100	< 0.000201	
Styrene	100-42-5	< 0.00100	< 0.000234	
tert-Butylbenzene	98-06-6	< 0.00100	< 0.000206	
Tetrachloroethene	127-18-4	< 0.00100	< 0.000276	
Toluene	108-88-3	< 0.00500	< 0.000434	
trans-1,2-Dichloroethene	156-60-5	< 0.00100	< 0.000264	
trans-1,3-Dichloropropene	10061-02-6	< 0.00100	< 0.000267	
Trichloroethene	79-01-6	< 0.00100	< 0.000279	
Trichlorofluoromethane	75-69-4	< 0.00500	< 0.000382	
Vinyl chloride	75-01-4	< 0.00100	< 0.000291	
Xylenes, Total	1330-20-7	< 0.00300	< 0.000698	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0300	120	74.2 - 124	
1,1,1-Trichloroethane	1	0.025	0.0290	116	73.2 - 123	
1,1,2,2-Tetrachloroethane	1	0.025	0.0232	92.7	70.7 - 122	
1,1,2-Trichloroethane	1	0.025	0.0271	108	77.7 - 118	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0288	115	67.2 - 143	
1,1-Dichloroethane	1	0.025	0.0281	112	70.7 - 126	
1,1-Dichloroethene	1	0.025	0.0287	115	67.8 - 129	
1,1-Dichloropropene	1	0.025	0.0277	111	73.1 - 125	
1,2,3-Trichlorobenzene	1	0.025	0.0263	105	64.9 - 135	
1,2,3-Trichloropropane	1	0.025	0.0229	91.8	71.8 - 121	
1,2,3-Trimethylbenzene	1	0.025	0.0259	103	72.3 - 116	
1,2,4-Trichlorobenzene	1	0.025	0.0272	109	69.7 - 136	
1,2,4-Trimethylbenzene	1	0.025	0.0288	115	75 - 123	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0216	86.4	65.4 - 128	
1,2-Dibromoethane	1	0.025	0.0267	107	76.6 - 121	
1,2-Dichlorobenzene	1	0.025	0.0259	103	78.4 - 117	
1,2-Dichloroethane	1	0.025	0.0247	98.9	68.8 - 124	
1,2-Dichloropropane	1	0.025	0.0279	112	76.5 - 119	
1,3,5-Trimethylbenzene	1	0.025	0.0293	117	75.6 - 124	
1,3-Dichlorobenzene	1	0.025	0.0293	117	70.8 - 128	
1,3-Dichloropropane	1	0.025	0.0263	105	77.4 - 117	
1,4-Dichlorobenzene	1	0.025	0.0250	100	78.8 - 115	
2,2-Dichloropropane	1	0.025	0.0273	109	62.4 - 133	
2-Butanone (MEK)	1	0.125	0.0893	71.4	55 - 149	
2-Chloroethyl vinyl ether	1	0.125	0.0567	45.3	43.8 - 150	
2-Chlorotoluene	1	0.025	0.0300	120	74.7 - 122	
4-Chlorotoluene	1	0.025	0.0290	116	77.5 - 120	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1076	86.1	70.5 - 133	
Acetone	1	0.125	0.0944	75.5	35.6 - 163	
Acrolein	1	0.125	0.1023	81.8	10 - 190	
Acrylonitrile	1	0.125	0.1067	85.3	55.2 - 130	
Benzene	1	0.025	0.0259	104	74.8 - 121	
Bromobenzene	1	0.025	0.0276	111	77.5 - 116	
Bromodichloromethane	1	0.025	0.0281	112	75.1 - 116	
Bromoform	1	0.025	0.0276	110	67.5 - 130	
Bromomethane	1	0.025	0.0338	135	49.9 - 162	

Parameters in bold text are reported in this SDG

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Est. 1970

Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Carbon tetrachloride	1	0.025	0.0293	117	70.2 - 123	
Chlorobenzene	1	0.025	0.0303	121	78.1 - 119	J4
Chlorodibromomethane	1	0.025	0.0284	114	74 - 121	
Chloroethane	1	0.025	0.0317	127	61.7 - 135	
Chloroform	1	0.025	0.0267	107	76 - 121	
Chloromethane	1	0.025	0.0282	113	61.5 - 129	
cis-1,2-Dichloroethene	1	0.025	0.0286	114	76 - 119	
cis-1,3-Dichloropropene	1	0.025	0.0279	111	78.2 - 120	
Dibromomethane	1	0.025	0.0265	106	79.5 - 118	
Dichlorodifluoromethane	1	0.025	0.0276	110	54.8 - 135	
Di-isopropyl ether	1	0.025	0.0266	106	65.6 - 132	
Ethylbenzene	1	0.025	0.0299	120	78.8 - 122	
Hexachloro-1,3-butadiene	1	0.025	0.0293	117	64.7 - 129	
Isopropylbenzene	1	0.025	0.0309	123	78.6 - 132	
Methyl tert-butyl ether	1	0.025	0.0247	98.7	71.2 - 126	
Methylene Chloride	1	0.025	0.0247	98.7	70.3 - 120	
Naphthalene	1	0.025	0.0239	95.8	68.4 - 128	
n-Butylbenzene	1	0.025	0.0275	110	76.2 - 126	
n-Propylbenzene	1	0.025	0.0302	121	78.2 - 122	
p-Isopropyltoluene	1	0.025	0.0307	123	74 - 131	
sec-Butylbenzene	1	0.025	0.0311	124	74.4 - 127	
Styrene	1	0.025	0.0298	119	80.4 - 126	
tert-Butylbenzene	1	0.025	0.0307	123	75.3 - 126	
Tetrachloroethene	1	0.025	0.0323	129	72.6 - 126	J4
Toluene	1	0.025	0.0286	114	79.7 - 116	
trans-1,2-Dichloroethene	1	0.025	0.0285	114	72.6 - 121	
trans-1,3-Dichloropropene	1	0.025	0.0267	107	74.3 - 123	
Trichloroethene	1	0.025	0.0308	123	77.7 - 118	J4
Trichlorofluoromethane	1	0.025	0.0297	119	63.5 - 135	
Vinyl chloride	1	0.025	0.0276	111	65.9 - 128	
Xylenes, Total	1	0.075	0.0865	115	78.7 - 121	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0292	117	74.2 - 124	
1,1,1-Trichloroethane	1	0.025	0.0279	112	73.2 - 123	
1,1,2,2-Tetrachloroethane	1	0.025	0.0231	92.6	70.7 - 122	
1,1,2-Trichloroethane	1	0.025	0.0251	100	77.7 - 118	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0279	111	67.2 - 143	
1,1-Dichloroethane	1	0.025	0.0265	106	70.7 - 126	
1,1-Dichloroethene	1	0.025	0.0271	108	67.8 - 129	
1,1-Dichloropropene	1	0.025	0.0267	107	73.1 - 125	
1,2,3-Trichlorobenzene	1	0.025	0.0253	101	64.9 - 135	
1,2,3-Trichloropropane	1	0.025	0.0235	93.8	71.8 - 121	
1,2,3-Trimethylbenzene	1	0.025	0.0254	101	72.3 - 116	
1,2,4-Trichlorobenzene	1	0.025	0.0278	111	69.7 - 136	
1,2,4-Trimethylbenzene	1	0.025	0.0282	113	75 - 123	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0206	82.4	65.4 - 128	
1,2-Dibromoethane	1	0.025	0.0255	102	76.6 - 121	
1,2-Dichlorobenzene	1	0.025	0.0246	98.2	78.4 - 117	
1,2-Dichloroethane	1	0.025	0.0237	94.9	68.8 - 124	
1,2-Dichloropropane	1	0.025	0.0268	107	76.5 - 119	
1,3,5-Trimethylbenzene	1	0.025	0.0291	117	75.6 - 124	
1,3-Dichlorobenzene	1	0.025	0.0292	117	70.8 - 128	
1,3-Dichloropropane	1	0.025	0.0251	100	77.4 - 117	
1,4-Dichlorobenzene	1	0.025	0.0248	99.1	78.8 - 115	
2,2-Dichloropropane	1	0.025	0.0272	109	62.4 - 133	
2-Butanone (MEK)	1	0.125	0.0899	71.9	55 - 149	
2-Chloroethyl vinyl ether	1	0.125	0.0495	39.6	43.8 - 150	J4
2-Chlorotoluene	1	0.025	0.0297	119	74.7 - 122	
4-Chlorotoluene	1	0.025	0.0287	115	77.5 - 120	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1026	82	70.5 - 133	
Acetone	1	0.125	0.0973	77.9	35.6 - 163	
Acrolein	1	0.125	0.1034	82.7	10 - 190	
Acrylonitrile	1	0.125	0.1034	82.7	55.2 - 130	
Benzene	1	0.025	0.0250	99.9	74.8 - 121	
Bromobenzene	1	0.025	0.0271	108	77.5 - 116	
Bromodichloromethane	1	0.025	0.0262	105	75.1 - 116	
Bromoform	1	0.025	0.0266	106	67.5 - 130	
Bromomethane	1	0.025	0.0314	126	49.9 - 162	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Carbon tetrachloride	1	0.025	0.0282	113	70.2 - 123	
Chlorobenzene	1	0.025	0.0294	118	78.1 - 119	
Chlorodibromomethane	1	0.025	0.0270	108	74 - 121	
Chloroethane	1	0.025	0.0309	124	61.7 - 135	
Chloroform	1	0.025	0.0256	103	76 - 121	
Chloromethane	1	0.025	0.0269	108	61.5 - 129	
cis-1,2-Dichloroethene	1	0.025	0.0276	110	76 - 119	
cis-1,3-Dichloropropene	1	0.025	0.0263	105	78.2 - 120	
Dibromomethane	1	0.025	0.0253	101	79.5 - 118	
Dichlorodifluoromethane	1	0.025	0.0269	108	54.8 - 135	
Di-isopropyl ether	1	0.025	0.0256	102	65.6 - 132	
Ethylbenzene	1	0.025	0.0290	116	78.8 - 122	
Hexachloro-1,3-butadiene	1	0.025	0.0283	113	64.7 - 129	
Isopropylbenzene	1	0.025	0.0298	119	78.6 - 132	
Methyl tert-butyl ether	1	0.025	0.0243	97.2	71.2 - 126	
Methylene Chloride	1	0.025	0.0235	94.1	70.3 - 120	
Naphthalene	1	0.025	0.0231	92.5	68.4 - 128	
n-Butylbenzene	1	0.025	0.0277	111	76.2 - 126	
n-Propylbenzene	1	0.025	0.0295	118	78.2 - 122	
p-Isopropyltoluene	1	0.025	0.0305	122	74 - 131	
sec-Butylbenzene	1	0.025	0.0299	119	74.4 - 127	
Styrene	1	0.025	0.0287	115	80.4 - 126	
tert-Butylbenzene	1	0.025	0.0301	121	75.3 - 126	
Tetrachloroethene	1	0.025	0.0303	121	72.6 - 126	
Toluene	1	0.025	0.0270	108	79.7 - 116	
trans-1,2-Dichloroethene	1	0.025	0.0277	111	72.6 - 121	
trans-1,3-Dichloropropene	1	0.025	0.0250	100	74.3 - 123	
Trichloroethene	1	0.025	0.0291	116	77.7 - 118	
Trichlorofluoromethane	1	0.025	0.0287	115	63.5 - 135	
Vinyl chloride	1	0.025	0.0276	110	65.9 - 128	
Xylenes, Total	1	0.075	0.0831	111	78.7 - 121	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0300	120	0.0292	117	74.2 - 124		2.75	20	
1,1,1-Trichloroethane	1	0.025	0.0290	116	0.0279	112	73.2 - 123		3.73	20	
1,1,2,2-Tetrachloroethane	1	0.025	0.0232	92.7	0.0231	92.6	70.7 - 122		0.1	20	
1,1,2-Trichloroethane	1	0.025	0.0271	108	0.0251	100	77.7 - 118		7.69	20	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0288	115	0.0279	111	67.2 - 143		3.25	20	
1,1-Dichloroethane	1	0.025	0.0281	112	0.0265	106	70.7 - 126		5.78	20	
1,1-Dichloroethene	1	0.025	0.0287	115	0.0271	108	67.8 - 129		5.7	20	
1,1-Dichloropropene	1	0.025	0.0277	111	0.0267	107	73.1 - 125		3.64	20	
1,2,3-Trichlorobenzene	1	0.025	0.0263	105	0.0253	101	64.9 - 135		3.65	20	
1,2,3-Trichloropropane	1	0.025	0.0229	91.8	0.0235	93.8	71.8 - 121		2.19	20	
1,2,3-Trimethylbenzene	1	0.025	0.0259	103	0.0254	101	72.3 - 116		1.95	20	
1,2,4-Trichlorobenzene	1	0.025	0.0272	109	0.0278	111	69.7 - 136		2.23	20	
1,2,4-Trimethylbenzene	1	0.025	0.0288	115	0.0282	113	75 - 123		2.1	20	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0216	86.4	0.0206	82.4	65.4 - 128		4.73	20	
1,2-Dibromoethane	1	0.025	0.0267	107	0.0255	102	76.6 - 121		4.47	20	
1,2-Dichlorobenzene	1	0.025	0.0259	103	0.0246	98.2	78.4 - 117		5.2	20	
1,2-Dichloroethane	1	0.025	0.0247	98.9	0.0237	94.9	68.8 - 124		4.17	20	
1,2-Dichloropropane	1	0.025	0.0279	112	0.0268	107	76.5 - 119		3.98	20	
1,3,5-Trimethylbenzene	1	0.025	0.0293	117	0.0291	117	75.6 - 124		0.73	20	
1,3-Dichlorobenzene	1	0.025	0.0293	117	0.0292	117	70.8 - 128		0.41	20	
1,3-Dichloropropane	1	0.025	0.0263	105	0.0251	100	77.4 - 117		4.62	20	
1,4-Dichlorobenzene	1	0.025	0.0250	100	0.0248	99.1	78.8 - 115		1.02	20	
2,2-Dichloropropane	1	0.025	0.0273	109	0.0272	109	62.4 - 133		0.23	20	
2-Butanone (MEK)	1	0.125	0.0893	71.4	0.0899	71.9	55 - 149		0.69	20	
2-Chloroethyl vinyl ether	1	0.125	0.0567	45.3	0.0495	39.6	43.8 - 150	J4	13.5	20	
2-Chlorotoluene	1	0.025	0.0300	120	0.0297	119	74.7 - 122		1.2	20	
4-Chlorotoluene	1	0.025	0.0290	116	0.0287	115	77.5 - 120		1.15	20	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1076	86.1	0.1026	82	70.5 - 133		4.78	20	
Acetone	1	0.125	0.0944	75.5	0.0973	77.9	35.6 - 163		3.09	23.9	
Acrolein	1	0.125	0.1023	81.8	0.1034	82.7	10 - 190		1.1	28.1	
Acrylonitrile	1	0.125	0.1067	85.3	0.1034	82.7	55.2 - 130		3.1	20	
Benzene	1	0.025	0.0259	104	0.0250	99.9	74.8 - 121		3.69	20	
Bromobenzene	1	0.025	0.0276	111	0.0271	108	77.5 - 116		2.05	20	
Bromodichloromethane	1	0.025	0.0281	112	0.0262	105	75.1 - 116		6.74	20	
Bromoform	1	0.025	0.0276	110	0.0266	106	67.5 - 130		3.69	20	
Bromomethane	1	0.025	0.0338	135	0.0314	126	49.9 - 162		7.19	20	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
Carbon tetrachloride	1	0.025	0.0293	117	0.0282	113	70.2 - 123		3.87	20	
Chlorobenzene	1	0.025	0.0303	121	0.0294	118	78.1 - 119	J4	2.97	20	
Chlorodibromomethane	1	0.025	0.0284	114	0.0270	108	74 - 121		5.22	20	
Chloroethane	1	0.025	0.0317	127	0.0309	124	61.7 - 135		2.64	20	
Chloroform	1	0.025	0.0267	107	0.0256	103	76 - 121		4.13	20	
Chloromethane	1	0.025	0.0282	113	0.0269	108	61.5 - 129		4.43	20	
cis-1,2-Dichloroethene	1	0.025	0.0286	114	0.0276	110	76 - 119		3.67	20	
cis-1,3-Dichloropropene	1	0.025	0.0279	111	0.0263	105	78.2 - 120		5.71	20	
Dibromomethane	1	0.025	0.0265	106	0.0253	101	79.5 - 118		4.7	20	
Dichlorodifluoromethane	1	0.025	0.0276	110	0.0269	108	54.8 - 135		2.36	20	
Di-isopropyl ether	1	0.025	0.0266	106	0.0256	102	65.6 - 132		3.9	20	
Ethylbenzene	1	0.025	0.0299	120	0.0290	116	78.8 - 122		3.16	20	
Hexachloro-1,3-butadiene	1	0.025	0.0293	117	0.0283	113	64.7 - 129		3.45	20	
Isopropylbenzene	1	0.025	0.0309	123	0.0298	119	78.6 - 132		3.42	20	
Methyl tert-butyl ether	1	0.025	0.0247	98.7	0.0243	97.2	71.2 - 126		1.53	20	
Methylene Chloride	1	0.025	0.0247	98.7	0.0235	94.1	70.3 - 120		4.73	20	
Naphthalene	1	0.025	0.0239	95.8	0.0231	92.5	68.4 - 128		3.44	20	
n-Butylbenzene	1	0.025	0.0275	110	0.0277	111	76.2 - 126		0.7	20	
n-Propylbenzene	1	0.025	0.0302	121	0.0295	118	78.2 - 122		2.51	20	
p-Isopropyltoluene	1	0.025	0.0307	123	0.0305	122	74 - 131		0.48	20	
sec-Butylbenzene	1	0.025	0.0311	124	0.0299	119	74.4 - 127		3.96	20	
Styrene	1	0.025	0.0298	119	0.0287	115	80.4 - 126		3.77	20	
tert-Butylbenzene	1	0.025	0.0307	123	0.0301	121	75.3 - 126		1.96	20	
Tetrachloroethene	1	0.025	0.0323	129	0.0303	121	72.6 - 126	J4	6.44	20	
Toluene	1	0.025	0.0286	114	0.0270	108	79.7 - 116		5.55	20	
trans-1,2-Dichloroethene	1	0.025	0.0285	114	0.0277	111	72.6 - 121		3.1	20	
trans-1,3-Dichloropropene	1	0.025	0.0267	107	0.0250	100	74.3 - 123		6.56	20	
Trichloroethene	1	0.025	0.0308	123	0.0291	116	77.7 - 118	J4	5.84	20	
Trichlorofluoromethane	1	0.025	0.0297	119	0.0287	115	63.5 - 135		3.64	20	
Vinyl chloride	1	0.025	0.0276	111	0.0276	110	65.9 - 128		0.29	20	
Xylenes, Total	1	0.075	0.0865	115	0.0831	111	78.7 - 121		3.95	20	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0276	110	72.9 - 124	
1,1,1-Trichloroethane	1	0.025	0.0269	107	73.7 - 124	
1,1,2,2-Tetrachloroethane	1	0.025	0.0256	102	69.4 - 122	
1,1,2-Trichloroethane	1	0.025	0.0277	111	79.1 - 118	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0305	122	70 - 146	
1,1-Dichloroethane	1	0.025	0.0261	104	75 - 124	
1,1-Dichloroethene	1	0.025	0.0288	115	70.4 - 129	
1,1-Dichloropropene	1	0.025	0.0269	107	74.9 - 124	
1,2,3-Trichlorobenzene	1	0.025	0.0289	116	69.3 - 131	
1,2,3-Trichloropropane	1	0.025	0.0256	103	71.4 - 123	
1,2,3-Trimethylbenzene	1	0.025	0.0265	106	73.6 - 113	
1,2,4-Trichlorobenzene	1	0.025	0.0302	121	71.9 - 137	
1,2,4-Trimethylbenzene	1	0.025	0.0276	110	75.5 - 122	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0242	96.8	62.8 - 133	
1,2-Dibromoethane	1	0.025	0.0263	105	78.6 - 120	
1,2-Dichlorobenzene	1	0.025	0.0274	110	78.3 - 118	
1,2-Dichloroethane	1	0.025	0.0254	102	70.1 - 124	
1,2-Dichloropropane	1	0.025	0.0256	103	77.9 - 119	
1,3,5-Trimethylbenzene	1	0.025	0.0286	115	75.9 - 124	
1,3-Dichlorobenzene	1	0.025	0.0281	112	72 - 126	
1,3-Dichloropropane	1	0.025	0.0259	103	79.1 - 117	
1,4-Dichlorobenzene	1	0.025	0.0262	105	78.3 - 117	
2,2-Dichloropropane	1	0.025	0.0264	106	61.3 - 136	
2-Butanone (MEK)	1	0.125	0.1252	100	53.7 - 153	
2-Chloroethyl vinyl ether	1	0.125	0.1341	107	37.7 - 157	
2-Chlorotoluene	1	0.025	0.0279	112	75.6 - 121	
4-Chlorotoluene	1	0.025	0.0277	111	77.3 - 120	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1215	97.2	70.4 - 137	
Acetone	1	0.125	0.1190	95.2	35.1 - 175	
Acrylonitrile	1	0.125	0.1259	101	56.4 - 128	
Benzene	1	0.025	0.0259	104	77.1 - 121	
Bromobenzene	1	0.025	0.0265	106	78.2 - 115	
Bromodichloromethane	1	0.025	0.0241	96.5	74.9 - 115	
Bromoform	1	0.025	0.0269	108	65.9 - 132	
Bromomethane	1	0.025	0.0381	152	48.7 - 165	
Carbon tetrachloride	1	0.025	0.0274	110	70 - 124	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chlorobenzene	1	0.025	0.0281	113	79.1 - 119	
Chlorodibromomethane	1	0.025	0.0266	106	73.5 - 121	
Chloroethane	1	0.025	0.0275	110	66.2 - 132	
Chloroform	1	0.025	0.0250	99.8	76.7 - 122	
Chloromethane	1	0.025	0.0270	108	63.4 - 131	
cis-1,2-Dichloroethene	1	0.025	0.0253	101	78.2 - 119	
cis-1,3-Dichloropropene	1	0.025	0.0265	106	79.6 - 120	
Dibromomethane	1	0.025	0.0249	99.5	79.4 - 120	
Dichlorodifluoromethane	1	0.025	0.0323	129	57.1 - 137	
Di-isopropyl ether	1	0.025	0.0247	98.7	70.4 - 133	
Ethylbenzene	1	0.025	0.0276	110	79.7 - 122	
Hexachloro-1,3-butadiene	1	0.025	0.0299	120	68.2 - 123	
Isopropylbenzene	1	0.025	0.0282	113	80 - 135	
Methyl tert-butyl ether	1	0.025	0.0235	94.2	73 - 129	
Methylene Chloride	1	0.025	0.0241	96.3	72.6 - 120	
Naphthalene	1	0.025	0.0260	104	69.8 - 128	
n-Butylbenzene	1	0.025	0.0287	115	77.5 - 126	
n-Propylbenzene	1	0.025	0.0282	113	77.9 - 123	
p-Isopropyltoluene	1	0.025	0.0291	116	75.8 - 129	
sec-Butylbenzene	1	0.025	0.0288	115	75.8 - 126	
Styrene	1	0.025	0.0277	111	82.4 - 126	
tert-Butylbenzene	1	0.025	0.0287	115	76.4 - 126	
Tetrachloroethene	1	0.025	0.0296	119	73.9 - 125	
Toluene	1	0.025	0.0259	103	79.7 - 118	
trans-1,2-Dichloroethene	1	0.025	0.0261	104	73.8 - 122	
trans-1,3-Dichloropropene	1	0.025	0.0253	101	75.9 - 124	
Trichloroethene	1	0.025	0.0289	116	77.9 - 118	
Trichlorofluoromethane	1	0.025	0.0296	118	67.7 - 131	
Vinyl chloride	1	0.025	0.0301	120	66.7 - 130	
Xylenes, Total	1	0.075	0.0831	111	78.8 - 121	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0273	109	72.9 - 124	
1,1,1-Trichloroethane	1	0.025	0.0262	105	73.7 - 124	
1,1,2,2-Tetrachloroethane	1	0.025	0.0246	98.5	69.4 - 122	
1,1,2-Trichloroethane	1	0.025	0.0274	110	79.1 - 118	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0298	119	70 - 146	
1,1-Dichloroethane	1	0.025	0.0256	102	75 - 124	
1,1-Dichloroethene	1	0.025	0.0284	114	70.4 - 129	
1,1-Dichloropropene	1	0.025	0.0266	106	74.9 - 124	
1,2,3-Trichlorobenzene	1	0.025	0.0286	114	69.3 - 131	
1,2,3-Trichloropropane	1	0.025	0.0237	94.8	71.4 - 123	
1,2,3-Trimethylbenzene	1	0.025	0.0261	104	73.6 - 113	
1,2,4-Trichlorobenzene	1	0.025	0.0293	117	71.9 - 137	
1,2,4-Trimethylbenzene	1	0.025	0.0278	111	75.5 - 122	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0221	88.2	62.8 - 133	
1,2-Dibromoethane	1	0.025	0.0256	102	78.6 - 120	
1,2-Dichlorobenzene	1	0.025	0.0265	106	78.3 - 118	
1,2-Dichloroethane	1	0.025	0.0241	96.3	70.1 - 124	
1,2-Dichloropropane	1	0.025	0.0249	99.4	77.9 - 119	
1,3,5-Trimethylbenzene	1	0.025	0.0289	116	75.9 - 124	
1,3-Dichlorobenzene	1	0.025	0.0284	114	72 - 126	
1,3-Dichloropropane	1	0.025	0.0247	98.8	79.1 - 117	
1,4-Dichlorobenzene	1	0.025	0.0260	104	78.3 - 117	
2,2-Dichloropropane	1	0.025	0.0259	103	61.3 - 136	
2-Butanone (MEK)	1	0.125	0.1177	94.2	53.7 - 153	
2-Chloroethyl vinyl ether	1	0.125	0.1165	93.2	37.7 - 157	
2-Chlorotoluene	1	0.025	0.0281	113	75.6 - 121	
4-Chlorotoluene	1	0.025	0.0278	111	77.3 - 120	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1117	89.3	70.4 - 137	
Acetone	1	0.125	0.1100	88	35.1 - 175	
Acrylonitrile	1	0.125	0.1135	90.8	56.4 - 128	
Benzene	1	0.025	0.0255	102	77.1 - 121	
Bromobenzene	1	0.025	0.0265	106	78.2 - 115	
Bromodichloromethane	1	0.025	0.0234	93.6	74.9 - 115	
Bromoform	1	0.025	0.0253	101	65.9 - 132	
Bromomethane	1	0.025	0.0380	152	48.7 - 165	
Carbon tetrachloride	1	0.025	0.0269	108	70 - 124	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chlorobenzene	1	0.025	0.0284	114	79.1 - 119	
Chlorodibromomethane	1	0.025	0.0258	103	73.5 - 121	
Chloroethane	1	0.025	0.0283	113	66.2 - 132	
Chloroform	1	0.025	0.0247	98.7	76.7 - 122	
Chloromethane	1	0.025	0.0265	106	63.4 - 131	
cis-1,2-Dichloroethene	1	0.025	0.0247	98.7	78.2 - 119	
cis-1,3-Dichloropropene	1	0.025	0.0256	102	79.6 - 120	
Dibromomethane	1	0.025	0.0233	93.4	79.4 - 120	
Dichlorodifluoromethane	1	0.025	0.0314	126	57.1 - 137	
Di-isopropyl ether	1	0.025	0.0241	96.2	70.4 - 133	
Ethylbenzene	1	0.025	0.0279	111	79.7 - 122	
Hexachloro-1,3-butadiene	1	0.025	0.0293	117	68.2 - 123	
Isopropylbenzene	1	0.025	0.0284	114	80 - 135	
Methyl tert-butyl ether	1	0.025	0.0225	90.1	73 - 129	
Methylene Chloride	1	0.025	0.0238	95.2	72.6 - 120	
Naphthalene	1	0.025	0.0247	98.9	69.8 - 128	
n-Butylbenzene	1	0.025	0.0288	115	77.5 - 126	
n-Propylbenzene	1	0.025	0.0285	114	77.9 - 123	
p-Isopropyltoluene	1	0.025	0.0294	118	75.8 - 129	
sec-Butylbenzene	1	0.025	0.0294	117	75.8 - 126	
Styrene	1	0.025	0.0276	110	82.4 - 126	
tert-Butylbenzene	1	0.025	0.0289	116	76.4 - 126	
Tetrachloroethene	1	0.025	0.0298	119	73.9 - 125	
Toluene	1	0.025	0.0254	101	79.7 - 118	
trans-1,2-Dichloroethene	1	0.025	0.0256	102	73.8 - 122	
trans-1,3-Dichloropropene	1	0.025	0.0239	95.7	75.9 - 124	
Trichloroethene	1	0.025	0.0282	113	77.9 - 118	
Trichlorofluoromethane	1	0.025	0.0291	116	67.7 - 131	
Vinyl chloride	1	0.025	0.0296	119	66.7 - 130	
Xylenes, Total	1	0.075	0.0834	111	78.8 - 121	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0276	110	0.0273	109	72.9 - 124		1.11	20	
1,1,1-Trichloroethane	1	0.025	0.0269	107	0.0262	105	73.7 - 124		2.36	20	
1,1,2,2-Tetrachloroethane	1	0.025	0.0256	102	0.0246	98.5	69.4 - 122		3.94	20	
1,1,2-Trichloroethane	1	0.025	0.0277	111	0.0274	110	79.1 - 118		0.83	20	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0305	122	0.0298	119	70 - 146		2.33	20	
1,1-Dichloroethane	1	0.025	0.0261	104	0.0256	102	75 - 124		2	20	
1,1-Dichloroethene	1	0.025	0.0288	115	0.0284	114	70.4 - 129		1.43	20	
1,1-Dichloropropene	1	0.025	0.0269	107	0.0266	106	74.9 - 124		1.07	20	
1,2,3-Trichlorobenzene	1	0.025	0.0289	116	0.0286	114	69.3 - 131		1.22	20	
1,2,3-Trichloropropane	1	0.025	0.0256	103	0.0237	94.8	71.4 - 123		7.85	20	
1,2,3-Trimethylbenzene	1	0.025	0.0265	106	0.0261	104	73.6 - 113		1.34	20	
1,2,4-Trichlorobenzene	1	0.025	0.0302	121	0.0293	117	71.9 - 137		3.07	20	
1,2,4-Trimethylbenzene	1	0.025	0.0276	110	0.0278	111	75.5 - 122		0.78	20	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0242	96.8	0.0221	88.2	62.8 - 133		9.22	20	
1,2-Dibromoethane	1	0.025	0.0263	105	0.0256	102	78.6 - 120		2.67	20	
1,2-Dichlorobenzene	1	0.025	0.0274	110	0.0265	106	78.3 - 118		3.18	20	
1,2-Dichloroethane	1	0.025	0.0254	102	0.0241	96.3	70.1 - 124		5.46	20	
1,2-Dichloropropane	1	0.025	0.0256	103	0.0249	99.4	77.9 - 119		3.12	20	
1,3,5-Trimethylbenzene	1	0.025	0.0286	115	0.0289	116	75.9 - 124		0.95	20	
1,3-Dichlorobenzene	1	0.025	0.0281	112	0.0284	114	72 - 126		1.2	20	
1,3-Dichloropropane	1	0.025	0.0259	103	0.0247	98.8	79.1 - 117		4.61	20	
1,4-Dichlorobenzene	1	0.025	0.0262	105	0.0260	104	78.3 - 117		1.03	20	
2,2-Dichloropropane	1	0.025	0.0264	106	0.0259	103	61.3 - 136		2.18	20	
2-Butanone (MEK)	1	0.125	0.1252	100	0.1177	94.2	53.7 - 153		6.18	21.2	
2-Chloroethyl vinyl ether	1	0.125	0.1341	107	0.1165	93.2	37.7 - 157		14.1	20	
2-Chlorotoluene	1	0.025	0.0279	112	0.0281	113	75.6 - 121		0.92	20	
4-Chlorotoluene	1	0.025	0.0277	111	0.0278	111	77.3 - 120		0.47	20	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.1215	97.2	0.1117	89.3	70.4 - 137		8.43	20	
Acetone	1	0.125	0.1190	95.2	0.1100	88	35.1 - 175		7.8	26.1	
Acrylonitrile	1	0.125	0.1259	101	0.1135	90.8	56.4 - 128		10.3	20	
Benzene	1	0.025	0.0259	104	0.0255	102	77.1 - 121		1.76	20	
Bromobenzene	1	0.025	0.0265	106	0.0265	106	78.2 - 115		0.06	20	
Bromodichloromethane	1	0.025	0.0241	96.5	0.0234	93.6	74.9 - 115		2.98	20	
Bromoform	1	0.025	0.0269	108	0.0253	101	65.9 - 132		6.14	20	
Bromomethane	1	0.025	0.0381	152	0.0380	152	48.7 - 165		0.15	20	
Carbon tetrachloride	1	0.025	0.0274	110	0.0269	108	70 - 124		1.81	20	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
Chlorobenzene	1	0.025	0.0281	113	0.0284	114	79.1 - 119		1.04	20	
Chlorodibromomethane	1	0.025	0.0266	106	0.0258	103	73.5 - 121		2.96	20	
Chloroethane	1	0.025	0.0275	110	0.0283	113	66.2 - 132		2.71	20	
Chloroform	1	0.025	0.0250	99.8	0.0247	98.7	76.7 - 122		1.14	20	
Chloromethane	1	0.025	0.0270	108	0.0265	106	63.4 - 131		1.96	20	
cis-1,2-Dichloroethene	1	0.025	0.0253	101	0.0247	98.7	78.2 - 119		2.45	20	
cis-1,3-Dichloropropene	1	0.025	0.0265	106	0.0256	102	79.6 - 120		3.57	20	
Dibromomethane	1	0.025	0.0249	99.5	0.0233	93.4	79.4 - 120		6.4	20	
Dichlorodifluoromethane	1	0.025	0.0323	129	0.0314	126	57.1 - 137		2.84	20	
Di-isopropyl ether	1	0.025	0.0247	98.7	0.0241	96.2	70.4 - 133		2.52	20	
Ethylbenzene	1	0.025	0.0276	110	0.0279	111	79.7 - 122		1.04	20	
Hexachloro-1,3-butadiene	1	0.025	0.0299	120	0.0293	117	68.2 - 123		1.95	20	
Isopropylbenzene	1	0.025	0.0282	113	0.0284	114	80 - 135		0.67	20	
Methyl tert-butyl ether	1	0.025	0.0235	94.2	0.0225	90.1	73 - 129		4.43	20	
Methylene Chloride	1	0.025	0.0241	96.3	0.0238	95.2	72.6 - 120		1.16	20	
Naphthalene	1	0.025	0.0260	104	0.0247	98.9	69.8 - 128		5.12	20	
n-Butylbenzene	1	0.025	0.0287	115	0.0288	115	77.5 - 126		0.48	20	
n-Propylbenzene	1	0.025	0.0282	113	0.0285	114	77.9 - 123		1.21	20	
p-Isopropyltoluene	1	0.025	0.0291	116	0.0294	118	75.8 - 129		1.19	20	
sec-Butylbenzene	1	0.025	0.0288	115	0.0294	117	75.8 - 126		1.9	20	
Styrene	1	0.025	0.0277	111	0.0276	110	82.4 - 126		0.21	20	
tert-Butylbenzene	1	0.025	0.0287	115	0.0289	116	76.4 - 126		0.68	20	
Tetrachloroethene	1	0.025	0.0296	119	0.0298	119	73.9 - 125		0.38	20	
Toluene	1	0.025	0.0259	103	0.0254	101	79.7 - 118		1.9	20	
trans-1,2-Dichloroethene	1	0.025	0.0261	104	0.0256	102	73.8 - 122		1.87	20	
trans-1,3-Dichloropropene	1	0.025	0.0253	101	0.0239	95.7	75.9 - 124		5.65	20	
Trichloroethene	1	0.025	0.0289	116	0.0282	113	77.9 - 118		2.42	20	
Trichlorofluoromethane	1	0.025	0.0296	118	0.0291	116	67.7 - 131		1.64	20	
Vinyl chloride	1	0.025	0.0301	120	0.0296	119	66.7 - 130		1.61	20	
Xylenes, Total	1	0.075	0.0831	111	0.0834	111	78.8 - 121		0.35	20	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Matrix Spike / Matrix Spike Duplicate

L697717-02

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
1,1,1,2-Tetrachloroethane	1	0.025	0.0	0.0276	110	0.0286	114	64 - 128		3.63	20	
1,1,1-Trichloroethane	1	0.025	0.0	0.0280	112	0.0272	109	58.7 - 134		2.81	20	
1,1,2,2-Tetrachloroethane	1	0.025	0.0	0.0220	88.2	0.0249	99.5	56 - 132		12.1	22.2	
1,1,2-Trichloroethane	1	0.025	0.0	0.0267	107	0.0266	106	66.3 - 125		0.4	20	
1,1,2-Trichlorotrifluoroethane	1	0.025	0.0	0.0308	123	0.0287	115	54.8 - 154		7.09	22.5	
1,1-Dichloroethane	1	0.025	0.0	0.0274	109	0.0266	106	58.5 - 132		2.82	20	
1,1-Dichloroethene	1	0.025	0.0	0.0300	120	0.0290	116	51.1 - 140		3.42	20.2	
1,1-Dichloropropene	1	0.025	0.0	0.0267	107	0.0258	103	57.3 - 136		3.3	20	
1,2,3-Trichlorobenzene	1	0.025	0.0	0.0282	113	0.0252	101	59.1 - 138		11	23.7	
1,2,3-Trichloropropane	1	0.025	0.0	0.0223	89.1	0.0262	105	61.4 - 128		16.2	22.4	
1,2,3-Trimethylbenzene	1	0.025	0.0	0.0258	103	0.0253	101	61.3 - 122		2.08	20	
1,2,4-Trichlorobenzene	1	0.025	0.0	0.0304	122	0.0273	109	63.6 - 143		10.8	21.9	
1,2,4-Trimethylbenzene	1	0.025	0.0	0.0267	107	0.0293	117	57.4 - 137		9.38	20	
1,2-Dibromo-3-Chloropropane	1	0.025	0.0	0.0223	89.4	0.0221	88.6	57.3 - 136		0.93	27	
1,2-Dibromoethane	1	0.025	0.0	0.0264	105	0.0267	107	67.1 - 125		1.4	20	
1,2-Dichlorobenzene	1	0.025	0.0	0.0266	106	0.0254	101	68.2 - 123		4.7	20	
1,2-Dichloroethane	1	0.025	0.0	0.0254	102	0.0246	98.3	60 - 126		3.42	20	
1,2-Dichloropropane	1	0.025	0.0	0.0272	109	0.0275	110	64.2 - 123		1.14	20	
1,3,5-Trimethylbenzene	1	0.025	0.0	0.0269	108	0.0308	123	63.6 - 132		13.5	20.5	
1,3-Dichlorobenzene	1	0.025	0.0	0.0284	114	0.0308	123	63.1 - 131		7.98	20	
1,3-Dichloropropane	1	0.025	0.0	0.0249	99.6	0.0256	103	67.9 - 121		2.83	20	
1,4-Dichlorobenzene	1	0.025	0.0	0.0256	102	0.0249	99.7	68.6 - 123		2.51	20	
2,2-Dichloropropane	1	0.025	0.0	0.0262	105	0.0258	103	50.5 - 144		1.58	21.9	
2-Butanone (MEK)	1	0.125	0.0	0.0917	73.4	0.0925	74	22.4 - 138		0.86	27	
2-Chloroethyl vinyl ether	1	0.125	0.0	0.0069	5.52	0.0018	1.41	10 - 155	J6	118.6	20	J3
2-Chlorotoluene	1	0.025	0.0	0.0269	108	0.0312	125	63.6 - 128		14.7	20	
4-Chlorotoluene	1	0.025	0.0	0.0268	107	0.0300	120	65.7 - 127		11.1	20	
4-Methyl-2-pentanone (MIBK)	1	0.125	0.0	0.1202	96.2	0.1132	90.5	60.8 - 140		6.03	25.1	
Acetone	1	0.125	0.0025	0.1064	83.1	0.0962	75	10 - 130		10.1	27.9	
Acrolein	1	0.125	0.0	0.1212	96.9	0.1165	93.2	10 - 200		3.92	27.7	
Acrylonitrile	1	0.125	0.0	0.1143	91.4	0.1129	90.4	49.4 - 133		1.16	25.3	
Benzene	1	0.025	0.0	0.0256	102	0.0245	97.8	54.3 - 133		4.45	20	
Bromobenzene	1	0.025	0.0	0.0253	101	0.0281	112	63.9 - 124		10.4	20	
Bromodichloromethane	1	0.025	0.0	0.0276	110	0.0274	110	63.9 - 121		0.81	20	
Bromoform	1	0.025	0.0	0.0265	106	0.0289	116	59.5 - 134		8.46	20.5	
Bromomethane	1	0.025	0.0	0.0344	138	0.0332	133	41.7 - 155		3.63	21.9	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Matrix Spike / Matrix Spike Duplicate

L697717-02

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
Carbon tetrachloride	1	0.025	0.0	0.0283	113	0.0273	109	55.7 - 134		3.82	20	
Chlorobenzene	1	0.025	0.0	0.0280	112	0.0290	116	67 - 125		3.21	20	
Chlorodibromomethane	1	0.025	0.0	0.0283	113	0.0279	112	64.3 - 125		1.48	20.8	
Chloroethane	1	0.025	0.0	0.0348	139	0.0323	129	51.5 - 136	J5	7.43	40	
Chloroform	1	0.025	0.0	0.0261	105	0.0259	103	63 - 129		1.05	20	
Chloromethane	1	0.025	0.0	0.0289	115	0.0286	114	42.4 - 135		1.01	20	
cis-1,2-Dichloroethene	1	0.025	0.0	0.0276	110	0.0279	111	59.2 - 129		0.99	20	
cis-1,3-Dichloropropene	1	0.025	0.0	0.0275	110	0.0271	108	66.4 - 125		1.65	20	
Dibromomethane	1	0.025	0.0	0.0266	106	0.0260	104	68.2 - 124		2.25	20	
Dichlorodifluoromethane	1	0.025	0.0	0.0287	115	0.0280	112	40.6 - 144		2.2	20.2	
Di-isopropyl ether	1	0.025	0.0	0.0265	106	0.0254	101	56.9 - 136		4.22	20	
Ethylbenzene	1	0.025	0.0	0.0275	110	0.0283	113	61.4 - 133		2.92	20	
Hexachloro-1,3-butadiene	1	0.025	0.0	0.0290	116	0.0262	105	55.1 - 136		10.1	23.6	
Isopropylbenzene	1	0.025	0.0	0.0283	113	0.0315	126	66.8 - 141		10.7	20	
Methyl tert-butyl ether	1	0.025	0.0	0.0263	105	0.0245	98	57.7 - 134		6.99	20	
Methylene Chloride	1	0.025	0.0	0.0259	103	0.0240	95.9	58.1 - 122		7.59	20	
Naphthalene	1	0.025	0.0	0.0261	105	0.0232	92.7	58 - 135		12	25.5	
n-Butylbenzene	1	0.025	0.0	0.0279	112	0.0267	107	62.7 - 140		4.38	20.3	
n-Propylbenzene	1	0.025	0.0	0.0277	111	0.0305	122	65.9 - 131		9.61	20	
p-Isopropyltoluene	1	0.025	0.0	0.0287	115	0.0320	128	63.2 - 139		10.9	20.4	
sec-Butylbenzene	1	0.025	0.0	0.0282	113	0.0321	128	62.2 - 136		12.7	20.3	
Styrene	1	0.025	0.0	0.0276	111	0.0294	118	66.8 - 133		6.19	20	
tert-Butylbenzene	1	0.025	0.0	0.0284	113	0.0311	125	63.3 - 134		9.33	21	
Tetrachloroethene	1	0.025	0.0004	0.0310	123	0.0311	123	53 - 139		0.35	20	
Toluene	1	0.025	0.0	0.0288	115	0.0275	110	61.4 - 130		4.63	20	
trans-1,2-Dichloroethene	1	0.025	0.0	0.0299	120	0.0276	111	56.5 - 129		7.8	20	
trans-1,3-Dichloropropene	1	0.025	0.0	0.0286	114	0.0266	106	64.1 - 128		7.49	20	
Trichloroethene	1	0.025	0.0	0.0305	122	0.0293	117	44.1 - 149		4.06	20	
Trichlorofluoromethane	1	0.025	0.0	0.0313	125	0.0307	123	49.6 - 145		1.76	21.2	
Vinyl chloride	1	0.025	0.0	0.0304	122	0.0294	118	47.8 - 137		3.36	20	
Xylenes, Total	1	0.075	0.0	0.0791	105	0.0826	110	63.3 - 131		4.31	20	

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Matrix Spike / Matrix Spike Duplicate

L697836-01

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
1,1,1,2-Tetrachloroethane	5	0.025	0.0	0.1389	111	0.1398	112	64 - 128		0.63	20	
1,1,1-Trichloroethane	5	0.025	0.0	0.1360	109	0.1478	118	58.7 - 134		8.3	20	
1,1,2,2-Tetrachloroethane	5	0.025	0.0	0.1221	97.7	0.1246	99.7	56 - 132		2.04	22.2	
1,1,2-Trichloroethane	5	0.025	0.0	0.1371	110	0.1385	111	66.3 - 125		1.04	20	
1,1,2-Trichlorotrifluoroethane	5	0.025	0.0	0.1545	124	0.1643	131	54.8 - 154		6.16	22.5	
1,1-Dichloroethane	5	0.025	0.0	0.1289	103	0.1355	108	58.5 - 132		5	20	
1,1-Dichloroethene	5	0.025	0.0	0.1466	117	0.1592	127	51.1 - 140		8.25	20.2	
1,1-Dichloropropene	5	0.025	0.0	0.1377	110	0.1459	117	57.3 - 136		5.76	20	
1,2,3-Trichlorobenzene	5	0.025	0.0005	0.1228	97.9	0.1064	84.8	59.1 - 138		14.3	23.7	
1,2,3-Trichloropropane	5	0.025	0.0	0.1213	97	0.1240	99.2	61.4 - 128		2.24	22.4	
1,2,3-Trimethylbenzene	5	0.025	0.0	0.1286	103	0.1252	100	61.3 - 122		2.61	20	
1,2,4-Trichlorobenzene	5	0.025	0.0005	0.1301	104	0.1080	86	63.6 - 143		18.6	21.9	
1,2,4-Trimethylbenzene	5	0.025	0.0	0.1353	108	0.1277	102	57.4 - 137		5.75	20	
1,2-Dibromo-3-Chloropropane	5	0.025	0.0	0.1125	90	0.1250	100	57.3 - 136		10.5	27	
1,2-Dibromoethane	5	0.025	0.0	0.1290	103	0.1300	104	67.1 - 125		0.77	20	
1,2-Dichlorobenzene	5	0.025	0.0	0.1311	105	0.1274	102	68.2 - 123		2.83	20	
1,2-Dichloroethane	5	0.025	0.0	0.1242	99.4	0.1266	101	60 - 126		1.88	20	
1,2-Dichloropropane	5	0.025	0.0	0.1245	99.6	0.1258	101	64.2 - 123		1.04	20	
1,3,5-Trimethylbenzene	5	0.025	0.0	0.1415	113	0.1350	108	63.6 - 132		4.67	20.5	
1,3-Dichlorobenzene	5	0.025	0.0004	0.1403	112	0.1315	105	63.1 - 131		6.46	20	
1,3-Dichloropropane	5	0.025	0.0	0.1274	102	0.1267	101	67.9 - 121		0.55	20	
1,4-Dichlorobenzene	5	0.025	0.0004	0.1279	102	0.1257	100	68.6 - 123		1.7	20	
2,2-Dichloropropane	5	0.025	0.0	0.1363	109	0.1509	121	50.5 - 144		10.2	21.9	
2-Butanone (MEK)	5	0.125	0.0050	0.5943	94.3	0.6268	99.5	22.4 - 138		5.32	27	
2-Chloroethyl vinyl ether	5	0.125	0.0	0.5961	95.4	0.5964	95.4	10 - 155		0.06	40	
2-Chlorotoluene	5	0.025	0.0	0.1391	111	0.1360	109	63.6 - 128		2.21	20	
4-Chlorotoluene	5	0.025	0.0	0.1364	109	0.1327	106	65.7 - 127		2.8	20	
4-Methyl-2-pentanone (MIBK)	5	0.125	0.0	0.5631	90.1	0.5779	92.5	60.8 - 140		2.58	25.1	
Acetone	5	0.125	0.0578	0.6137	88.9	0.6417	93.4	10 - 130		4.46	27.9	
Acrylonitrile	5	0.125	0.0	0.5802	92.8	0.6128	98	49.4 - 133		5.45	25.3	
Benzene	5	0.025	0.0	0.1272	102	0.1350	108	54.3 - 133		5.95	20	
Bromobenzene	5	0.025	0.0003	0.1302	104	0.1291	103	63.9 - 124		0.84	20	
Bromodichloromethane	5	0.025	0.0	0.1180	94.4	0.1170	93.6	63.9 - 121		0.83	20	
Bromoform	5	0.025	0.0	0.1290	103	0.1313	105	59.5 - 134		1.75	20.8	
Bromomethane	5	0.025	0.0	0.1941	155	0.2110	169	41.7 - 155	J5	8.31	20.5	
Carbon tetrachloride	5	0.025	0.0	0.1397	112	0.1506	120	55.7 - 134		7.51	20.3	

Parameters in bold text are reported in this SDG

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Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Matrix Spike / Matrix Spike Duplicate

L697836-01

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
Chlorobenzene	5	0.025	0.0	0.1406	112	0.1416	113	67 - 125		0.72	20	
Chlorodibromomethane	5	0.025	0.0	0.1330	106	0.1337	107	64.3 - 125		0.55	20	
Chloroethane	5	0.025	0.0	0.1464	117	0.1568	125	51.5 - 136		6.81	20.8	
Chloroform	5	0.025	0.0003	0.1241	99	0.1304	104	63 - 129		4.95	20	
Chloromethane	5	0.025	0.0	0.1318	105	0.1459	117	42.4 - 135		10.1	20	
cis-1,2-Dichloroethene	5	0.025	0.0	0.1282	103	0.1325	106	59.2 - 129		3.31	20	
cis-1,3-Dichloropropene	5	0.025	0.0	0.1299	104	0.1274	102	66.4 - 125		1.94	20	
Dibromomethane	5	0.025	0.0	0.1188	95.1	0.1210	96.8	68.2 - 124		1.83	20	
Dichlorodifluoromethane	5	0.025	0.0	0.1686	135	0.1804	144	40.6 - 144		6.72	20.2	
Di-isopropyl ether	5	0.025	0.0	0.1201	96.1	0.1242	99.3	56.9 - 136		3.29	20	
Ethylbenzene	5	0.025	0.0	0.1391	111	0.1401	112	61.4 - 133		0.78	20	
Hexachloro-1,3-butadiene	5	0.025	0.0	0.1186	94.9	0.0748	59.8	55.1 - 136		45.3	23.6	J3
Isopropylbenzene	5	0.025	0.0	0.1424	114	0.1403	112	66.8 - 141		1.51	20	
Methyl tert-butyl ether	5	0.025	0.0	0.1179	94.3	0.1220	97.6	57.7 - 134		3.42	20	
Methylene Chloride	5	0.025	0.0	0.1207	96.5	0.1267	101	58.1 - 122		4.9	20	
Naphthalene	5	0.025	0.0009	0.1154	91.7	0.1129	89.6	58 - 135		2.25	25.5	
n-Butylbenzene	5	0.025	0.0	0.1367	109	0.1144	91.5	62.7 - 140		17.8	20	
n-Propylbenzene	5	0.025	0.0	0.1402	112	0.1340	107	10 - 176		4.58	26.6	
p-Isopropyltoluene	5	0.025	0.0	0.1410	113	0.1240	99.2	63.2 - 139		12.8	20.4	
sec-Butylbenzene	5	0.025	0.0	0.1412	113	0.1241	99.3	62.2 - 136		12.9	20.3	
Styrene	5	0.025	0.0	0.1367	109	0.1348	108	66.8 - 133		1.42	20	
tert-Butylbenzene	5	0.025	0.0	0.1407	113	0.1317	105	63.3 - 134		6.62	20.3	
Tetrachloroethene	5	0.025	0.0	0.1509	121	0.1487	119	53 - 139		1.44	20	
Toluene	5	0.025	0.0004	0.1272	101	0.1297	103	61.4 - 130		1.92	20	
trans-1,2-Dichloroethene	5	0.025	0.0	0.1299	104	0.1393	111	56.5 - 129		6.95	20	
trans-1,3-Dichloropropene	5	0.025	0.0	0.1202	96.2	0.1186	94.9	64.1 - 128		1.37	20	
Trichloroethene	5	0.025	0.0	0.1464	117	0.1493	119	44.1 - 149		1.97	20	
Trichlorofluoromethane	5	0.025	0.0	0.1539	123	0.1695	136	49.6 - 145		9.65	21.2	
Vinyl chloride	5	0.025	0.0	0.1558	125	0.1715	137	47.8 - 137		9.58	20	
Xylenes, Total	5	0.075	0.0006	0.4177	111	0.4157	111	63.3 - 131		0.48	20	

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Est. 1970

Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Internal Standard Response and Retention Time Summary

File ID: 0510_03
Analyzed: 05/10/14 050700

	DCB		IS2		IS3		IS1	
	Response	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
12 Hr. Std	336975	8.17	751914	4.61	120279	5.78	432201	4.29
Upper Limit	674000	8.67	1500000	5.11	241000	6.28	864000	4.79
Lower Limit	168000	7.67	376000	4.11	60100	5.28	216000	3.79
Sample ID	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
L697788-09	295227	8.17	672605	4.61	103853	5.78	387404	4.29
L697788-01	303346	8.17	674567	4.61	106173	5.78	385871	4.29
L697788-02	297734	8.17	667662	4.61	102831	5.78	392321	4.29
L697788-03	308522	8.17	666692	4.61	101369	5.78	385648	4.29
L697788-04	305771	8.17	672427	4.62	102789	5.78	390946	4.29
L697788-05	297400	8.17	665875	4.61	102896	5.78	389590	4.29
L697788-06	297625	8.17	675108	4.62	103605	5.78	398969	4.29
L697788-07	290420	8.17	736620	4.62	113232	5.78	426516	4.29
MSD WG719982	336354	8.17	679611	4.61	109341	5.78	397965	4.29
MS WG719982	309409	8.17	683718	4.61	117403	5.78	395044	4.29
LCSD WG719982	317454	8.17	725213	4.61	112443	5.78	414844	4.29
LCS WG719982	327969	8.17	746334	4.61	117308	5.78	428069	4.29
BLANK WG719982	314109	8.17	678217	4.61	106418	5.78	393463	4.29

Legend:

DCB -- 1,4-DICHLOROBENZENE-D4
IS2 -- 1,4-DIFLUOROBENZENE
IS3 -- 2-BROMO-1-CHLOROPROPANE
IS1 -- PENTAFLUOROBENZENE

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Internal Standard Response and Retention Time Summary

File ID: 0513_02
Analyzed: 05/13/14 090700

	DCB		IS2		IS3		IS1	
	Response	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
12 Hr. Std	293893	8.15	757251	4.63	105053	5.78	446859	4.31
Upper Limit	588000	8.65	1510000	5.13	210000	6.28	894000	4.81
Lower Limit	147000	7.65	379000	4.13	52500	5.28	223000	3.81
Sample ID	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
L697788-08 5X	267242	8.15	678160	4.63	88079	5.78	404087	4.31
MSD WG720225 5X	248890	8.15	667585	4.63	90942	5.78	385336	4.31
MS WG720225 5X	270246	8.15	703396	4.63	96904	5.78	413414	4.31
LCSD WG720225	276709	8.15	707721	4.63	97980	5.78	418063	4.31
LCS WG720225	286057	8.15	723845	4.63	102871	5.78	426200	4.30
BLANK WG720225	241548	8.15	607792	4.63	79059	5.78	367083	4.31

Legend:

DCB -- 1,4-DICHLOROBENZENE-D4
IS2 -- 1,4-DIFLUOROBENZENE
IS3 -- 2-BROMO-1-CHLOROPROPANE
IS1 -- PENTAFLUOROBENZENE

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Water - mg/L
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG719982**
Analysis Date:	5/10/2014 11:01:00 AM	Analyst:	644
Instrument ID:	VOCMS28		
Sample Numbers:	L697788-01, -02, -03, -04, -05, -06, -07, -09		

Surrogate Summary

			BFB		TFT		DFM		TD8	
Laboratory Sample ID	Instrument	File ID	ppm	% Rec	ppm	% Rec	ppm	% Rec	ppm	% Rec
L697788-01	VOCMS28	0510_21	0.0435	109	0.0434	109	0.0398	99.5	0.0402	100
L697788-02	VOCMS28	0510_22	0.0448	112	0.0447	112	0.0393	98.2	0.0408	102
L697788-03	VOCMS28	0510_23	0.0440	110	0.0439	110	0.0398	99.6	0.0408	102
L697788-04	VOCMS28	0510_24	0.0446	112	0.0437	109	0.0394	98.5	0.0401	100
L697788-05	VOCMS28	0510_25	0.0433	108	0.0442	110	0.0396	99.1	0.0406	101
L697788-06	VOCMS28	0510_26	0.0431	108	0.0440	110	0.0383	95.6	0.0403	101
L697788-07	VOCMS28	0510_27	0.0397	99.4	0.0433	108	0.0394	98.5	0.0408	102
L697788-09	VOCMS28	0510_12	0.0437	109	0.0445	111	0.0393	98.2	0.0411	103
LCS WG719982	VOCMS28	0510_04	0.0431	108	0.0433	108	0.0390	97.4	0.0411	103
LCSD WG719982	VOCMS28	0510_05	0.0438	109	0.0426	106	0.0391	97.6	0.0410	102
MS WG719982	VOCMS28	0510_07	0.0395	98.7	0.0438	110	0.0387	96.7	0.0419	105
MSD WG719982	VOCMS28	0510_08	0.0456	114	0.0438	109	0.0387	96.8	0.0411	103
BLANK WG719982	VOCMS28	0510_10	0.0439	110	0.0444	111	0.0393	98.3	0.0413	103

BFB --4-BROMOFLUOROBENZENE	True Value: 0.04 ppm	Limits: 71 - 126
TFT --A,A,A-TRIFLUOROTOLUENE	True Value: 0.04 ppm	Limits: 85 - 114
DFM --DIBROMOFLUOROMETHANE	True Value: 0.04 ppm	Limits: 78.30 - 121
TD8 --TOLUENE-D8	True Value: 0.04 ppm	Limits: 88.5 - 111

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Quality Control Summary
SDG: L697788
URS- Boise, ID

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	36258892	Matrix:	Soil - mg/kg
Project:	Warrior of Idaho	EPA ID:	TN00003
Collection Date:	5/7/2014	**Analytic Batch:**	**WG720225**
Analysis Date:	5/13/2014 1:12:00 PM	Analyst:	644
Instrument ID:	VOCMS13		
Sample Numbers:	L697788-08		

Surrogate Summary

			BFB		TFT		DFM		TD8	
Laboratory Sample ID	Instrument	File ID	ppm	% Rec	ppm	% Rec	ppm	% Rec	ppm	% Rec
L697788-08 5x	VOCMS13	0513_14	0.0422	105	0.0417	104	0.0383	95.8	0.0404	101
LCS WG720225	VOCMS13	0513_03	0.0401	100	0.0411	103	0.0396	99.0	0.0406	102
LCSD WG720225	VOCMS13	0513_04	0.0408	102	0.0416	104	0.0389	97.2	0.0405	101
MS WG720225 5x	VOCMS13	0513_06	0.0402	100	0.0413	103	0.0398	99.6	0.0406	102
MSD WG720225 5x	VOCMS13	0513_07	0.0404	101	0.0407	102	0.0402	100	0.0403	101
BLANK WG720225	VOCMS13	0513_09	0.0420	105	0.0423	106	0.0377	94.3	0.0401	100

BFB --4-BROMOFLUOROBENZENE	True Value: 0.04 ppm	Limits: 71 - 126
TFT --A,A,A-TRIFLUOROTOLUENE	True Value: 0.04 ppm	Limits: 85 - 114
DFM --DIBROMOFLUOROMETHANE	True Value: 0.04 ppm	Limits: 78.30 - 121
TD8 --TOLUENE-D8	True Value: 0.04 ppm	Limits: 88.5 - 111

URS- Boise, ID

720 Park Blvd.
Boise, ID 83712-7714

Billing Information:
Accounts Payable- Derek Young
720 Park Blvd.
Boise, ID 83712-7714

Report to: **Derek Young**

Email To: **derek.young@urs.com**

Project Description: **Warrior of Idaho**

City/State Collected: CALDWELL, ID

Phone: **208-386-6523**
Fax: **208-386-7146**

Client Project #: 36258892

Lab Project #: **WASHGRBID-WARRIOR**

Collected by (print): DEREK YOUNG

Site/Facility ID #: **CALDWELL, ID**

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: STANDARD TAT

Email? ___No X_Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
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L# 697788

C104

Acctnum: **WASHGRBID**
Template: **T93609**
Prelogin: **P466120**
TSR: **358 - Jarred Willis**
PB: 4-23-14 AE

Shipped Via: **FedEx Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	RCRA8 Metals 2ozClr-NoPres	RCRA8 Metals 500mlHDPE-HNO3 L2	V8260 / TS 4ozClr-NoPres	V8260 40mlAmb-HCl	V8260- Trip Blank 40mlAmb-HCl-Blk	Rem./Contaminant	Sample # (lab only)
WC-MW-1	GRAB	GW	N/A	5/7/14	0915	3				X			-01
WC-MW-2	GRAB	GW	N/A	5/7/14	1315	3				X			-02
WC-MW-2-D	GRAB	GW	N/A	5/7/14	1320	3				X			-03
WC-MW-3	GRAB	GW	N/A	5/7/14	1225	3				X			-04
WC-MW-4	GRAB	GW	N/A	5/7/14	1015	3				X			-05
WC-MW-5	GRAB	GW	N/A	5/7/14	1120	3				X			-06
IDW-WC-WATER	COMP	GW	N/A	5/7/14	1330	4		X		X			-07
IDW-WC-SOIL	COMP	SS	N/A	5/7/14	1200	2	X		X				-08
TRIP BLANK		GW	N/A	N/A	N/A	1					X		-09

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks: RETURNED OVERNIGHT DELIVERY (STANDARD OVERNIGHT)
FEDEX TRACK # 5990 1130 7683

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	5/7/14	1430	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Michael [signature]

Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ _____

Temp: 2.6 °C Bottles Received: 25

Date: 5-8-14 Time: 0900

Condition: (OK) (lab use only) 701

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: L2 NCF: