July 2021 through December 2023 Groundwater Remediation Sterling ZipMart, 38525 Swanson River Road Sterling, Alaska

December 2023



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TABLE OF CONTENTS

				Page
1.0	INTRO	DUCTI	ION	1
2.0	SITE I	DESCRI	PTION	1
3.0	BACK	GROUN	ND	1
4.0	PROJI	ECT OV	ERVIEW	3
5.0	REME	EDIATIC	ON SYSTEMS OPERATION AND MONITORING	4
	5.1	Restora	tion of Electrical Service	4
	5.2	SVE Sy	/stem	5
	5.3	Air Inje	ection Systems	6
		5.3.1	North AS	6
		5.3.2	South AS	7
		5.3.3	East AS	8
		5.3.4	Pump & Treat System	8
6.0	LABO	RATOR	Y ANALYSIS	9
7.0	DISCU	JSSION	OF RESULTS	10
	7.1	Remedi	iation Systems Monitoring	10
		7.1.1	SVE System	10
		7.1.2	AS System	11
		7.1.3	Pump & Treat System	11
8.0	QUAL	ITY AS	SURANCE SUMMARY	13
9.0	INVES	STIGAT	ION DERIVED WASTE	13
10.0	SUMN	/ARY A	ND CONCLUSIONS	13
	10.1	Restora	tion of Electrical Service	14
	10.2	Remedi	iation Systems Operation and Monitoring	14
	10.3	Conclus	sions	15
11.0	CLOS	URE/LIN	MITATIONS	15

TABLES

- 1 Summary of Vapor Field Measurements
- 2 Summary of SVE Analytical Results
- 3 Air Sparge System Monitoring Log
- 4 2021 Pump and Treat System Analytical Results
- 5 2022 Pump and Treat System Analytical Results

FIGURES

1 Fiscal Year 2021 (Site Plan)

APPENDICES

- A Field Photos
- B Results of Analytical Testing by SGS North America Inc.
- C Results of Analytical Testing by Eurofins Air Toxics, LLC
- D Field Notes
- E Important Information About Your Geotechnical/Environmental Report

JULY 2021 THROUGH DECEMBER 2023 GROUNDWATER REMEDIATION STERLING ZIPMART, 38525 SWANSON RIVER ROAD STERLING, ALASKA

1.0 INTRODUCTION

This report presents the results of Shannon & Wilson, Inc.'s (Shannon & Wilson's) groundwater remediation efforts conducted between July 1, 2021, and December 31, 2023, at and in the vicinity of the former Sterling ZipMart, located at 38525 Swanson River Road, Sterling, Alaska. The project scope included operation, monitoring, and maintenance of the active remediation systems.

This work was conducted under Shannon & Wilson's Alaska Department of Environmental Conservation (ADEC) Division of Spill Prevention and Response Term Contract No. 18-3012-18. ADEC authorization was received with Notice to Proceed (NTP) Number 18*996, signed by Jacqelli Ziegenfuss on May 24, 2021. The work was conducted in consultation with the ADEC Project Manager Ms. Lisa Krebs-Barsis. General operation and monitoring procedures are outlined in the *Fiscal Year 2014 Operations* work plan prepared by Shannon & Wilson dated October 2013.

2.0 SITE DESCRIPTION

The former ZipMart convenience store is located at 38525 Swanson River Road, approximately 800 feet north of the Sterling Highway, in Sterling, Alaska. The project site has expanded with the extent of gasoline contamination to include an east-southeast trending area approximately 800 feet wide and 3,000 feet long from the ZipMart property north of the Sterling Highway to Barbara Street south of the Sterling Highway. The project area and approximate property boundaries are shown in Figure 1. Figure 1 includes groundwater elevation contours and estimates of benzene extent from the Fiscal Year (FY) 2021 monitoring efforts. The ADEC File number for the site is 2334.26.007, and the ADEC RecKey number is 199523002851.

3.0 BACKGROUND

ZipMart was a vehicle fueling station that began operations in 1985. Whittier Properties, Inc., d.b.a. ZipMart, owned and operated the regulated underground storage tank (UST) systems between April 1990 and December 2000. Low levels of soil and shallow groundwater contamination were identified during a tank upgrade in 1995. In December 2001, a site assessment encountered gasoline-contaminated soil in soil borings and 13 inches of fuel in groundwater monitoring wells at the ZipMart property. A break in the gasoline tank fill pipe of

Sterling ZipMart 2021-2023 Report

the 1995 ZipMart UST was identified as the root cause of the release. It was estimated that 53,000 gallons of fuel were released to the environment based on delivery, inventory, and sales tracking. The State of Alaska has assumed management of cleanup activities related to the ZipMart UST systems.

To characterize, remediate, and monitor the fuel release, over 110 monitoring wells, 17 product recovery wells, 22 air sparging wells, 7 well points, and 7 soil gas points have been installed at the ZipMart property and vicinity. The extent of liquid-phase fuel (often referred to as product or free product, but technically a lighter-than-water non-aqueous phase liquid [LNAPL]) has been characterized. LNAPL recovery efforts have resulted in the removal of more than 18,000 gallons of liquid gasoline from the water table. Locations of drinking water wells, recovery wells, monitoring wells, and remediation systems are depicted in Figure 1. A measurable thickness of LNAPL was last observed in 2011, in Monitoring Well MW7.

The regional unconfined aquifer is used by many of the water wells in the immediate area. Thirteen drinking water wells have been monitored for gasoline constituents. Between 2002 and 2005 benzene was detected in the B&D Auto/Denny's Auto Body well at concentrations that exceed the drinking water standard. The Sterling Elementary School and Sterling Lutheran Church installed new, deeper water wells at locations further from the release. Limited indoor air and soil vapor sampling has been performed to monitor gasoline vapor migration.

The LNAPL recovery system, located on the Sterling Community Club property, was modified to a soil vapor extraction (SVE) system that began operation in the spring of 2005 to remove contaminants from the subsurface in the vapor phase. The SVE system was operated with a thermal oxidizer to combust the hydrocarbon constituents until June 2006. The system was modified to vent vapors directly to the atmosphere in August 2006. In the spring of 2007, one SVE blower was moved to the east of Swanson River Road to recover vapors from Wells MW7 and MW40. This SVE blower was moved to the ZipMart property to recover vapors from source area wells in November 2010.

In April 2009, 1,600 pounds of ORC Advanced® oxygen releasing compound (ORC) were mixed into a slurry and pumped into 20 reusable injection wells located down-gradient (southeast) of nested Well MW45N. In August and September 2011, approximately 5,000 pounds of ORC were injected into the subsurface along two transects. One transect used the April 2009 injection wells as conductor casing to inject ORC at greater depths. The other transect followed the property line of Government Lots 8 and 9 between Wells MW44N and MW51N.

In May 2009, the ZipMart 20,000-gallon three-compartment UST was decommissioned and over 750 tons of petroleum-impacted soil were removed from the UST site. Prior to backfilling, soil in the bottom of the UST excavation was treated with 600 pounds of ORC and 1,740 pounds of RegenOx[™] chemical oxidizer. Slotted 4-inch pipe was laid horizontally during the backfill of the excavation to provide passive soil ventilation. A shallow perched aquifer is present at the former location of the UST. The piping was set approximately 7 feet below ground surface (bgs), and subsequently flooded with water from the perched aquifer. A seasonal pump and treat system that pulls groundwater from the flooded vent piping has been operated since the summer of 2013. A feasibility study in June 2015 included applying 40 pounds of ORC as slurry in each of 29 boreholes advanced into the shallow perched aquifer east of the UST excavation.

An air injection/sparging (AS) pilot study was conducted using Recovery Wells RW3 and RW16 in June and July of 2010. From October 2010 through February 2011 a new AS system with ten wells was installed to enhance in-situ remediation on the ZipMart property (the N.AIS), and six recovery wells on the Community Club property were modified for AS (the S.AIS). In December 2012, 14 AS wells (located between Monitoring Wells MW13 and MW37) and a compressor shed were installed on the Sterling Baptist Church property east of Swanson River Road. The eastern AS system (E.AIS) was initially operated intermittently in the winter and continuously during the warmer months. Modifications made to the E.AIS in 2014 allow continuous operation through the winter.

4.0 PROJECT OVERVIEW

The ZipMart monitoring and remediation project has the overall objective of reducing potential risks to human health or the environment. The work presented in this report included the following tasks and objectives:

- operate, maintain, and monitor the SVE and AS remediation systems on the ZipMart, Community Club, and Sterling Baptist Church properties to enhance attenuation of contaminants;
- operate a seasonal pump and treat system (late summer 2022) to remove contaminant mass from the perched aquifer in the source area; and
- dispose of investigation-derived waste (IDW).

Due to budgeting issues and at the request of the ADEC, groundwater and drinking water monitoring were not performed during the July 2021 through December 2023 reporting period.

5.0 REMEDIATION SYSTEMS OPERATION AND MONITORING

The remediation systems include the SVE system, AS systems at three locations, and a seasonal pump and treat (P&T) system. Field visits to the remediations systems were conducted by Shannon & Wilson 26 times during the July 2021 to December 2023 reporting period. Field visits included general inspections for damage and safety hazards and observation of system function. Some visits included field measurements, analytical sampling, and maintenance work. Operation of the remediation systems included maintaining electrical service through three meters with Homer Electric Association (HEA). Restoring alternating current electricity to the northern portion of the remediation systems was a significant operational effort in 2023.

5.1 Restoration of Electrical Service

The building that housed the Sterling ZipMart convenience store has been abandoned for years. Between April 13 and April 25, 2023, the building collapsed under snow load. See Photo 1 in Appendix A. The electrical power for the northern remediation systems was supplied by HEA through a meter mounted on the south wall of the building. The telephone line that connected the remediation system remote monitoring to the internet was also mounted on the south wall. When the building collapsed, the overhead power line sagged into McCall Road and HEA disconnected the powerline. Also due to safety considerations, the Kenai Peninsula Borough (KPB) Assembly authorized funds to demolish and dispose of the aboveground portion of the former ZipMart building. The demolition was completed in July of 2023.

The N.AIS, SVE, remote monitoring, and P&T were out of service once electrical service was disconnected. In May 2023 Shannon & Wilson started working with HEA to re-establish electrical service to the remediation system. HEA's tariff is such that they own the electrical facilities up to the meter. HEA was unwilling to install a meter on an abandoned property without an easement signed by the landowner. In consultation with KPB and HEA it was agreed to install a pole and meter base within KPB's McCall Road right-of-way. In July 2023 Shannon & Wilson paid the engineering fee and signed an agreement with HEA, as well as contracting Peninsula Surveying LLC to reestablish the corners of the ZipMart lot (Lot 9A, Sterling Heights Subdivision) so that the southern boundary and right-of-way were clearly marked.

Once HEA completed the engineering and provided cost estimate for installation, Shannon & Wilson contracted Big G Electric and Engineering, LLC (Big G) to provide a meter drop assembly and connect the new meter to the northern remediation system with an underground electric line. The underground line was installed to the planned location of the meter pole on September 28, 2023. Photos 2 and 3 in Appendix A show the underground installation. The

pole, overhead line, and meter were installed by HEA on October 10, 2023. Big G connected the underground line to the meter and the SVE and N.AIS were restarted on October 13, 2023.

Connection through cellular phone towers was selected to reestablish remote communication with the data loggers monitoring the ZipMart remediation systems. A cellular Long Term Evolution (LTE) router with data provisioning over the AT&T network was purchased from Campbell Scientific, Inc. The router (See Photo 4 in Appendix A) and an LTE antenna were installed on September 28, 2023, but communication with the primary CR1000 data logger (using battery power) was not established until October 5, 2023, when the CR1000 operating system could be updated and the monitoring program reloaded.

5.2 SVE System

SVE Blower 2 (Blower 2), located on the ZipMart property, was operated in continuous mode during the reporting period. SVE system field readings, actions, and observations are summarized in Table 1. Blower 2 was not operating during two extended power outages. The first was from October 30 to December 16, 2022, due to unauthorized tampering with the circuit breakers at the south wall of the former ZipMart building. The second was roughly April 14 to October 13, 2023, due to the collapse of the former ZipMart building. Frost damage to the wellhead of Remediation Well RW1 and fouling of the well screen near the water table of RW2 impacted SVE efficiency in 2022. A broken well cap on RW1 was replaced. Scrubbing the RW2 well screen with a well brush provided some improvement in air flow. Vapors from sampling ports on the exhaust of Blower 2 and on piping from active vapor extraction wells were measured during eight visits over the reporting period. A flame ionization detector (FID) and at times a photoionization detector (PID) were used to measure total volatile hydrocarbon concentrations. A multi-sensor gas monitor was used to measure lower explosive limit (LEL) and oxygen levels.

Vapor sample VEZ41 was collected for laboratory analysis from the Blower 2 exhaust sample port on November 6, 2021. VEZ41 was collected in a 1-liter SUMMA® canister provided by Eurofins Air Toxics, LLC. (Air Toxics) of Folsom, California. Analytical sample collection is noted with field monitoring data in Table 1. Laboratory results are summarized in Table 2.

Based on remote monitoring data after October 13, 2023, until December 23, 2023, the SVE system has run continuously except for two power outages of less than 2.5 hours each. After the second power outage on November 15, the vacuum level climbed from under 33 inches of water to over 38 inches of water around November 20. The vacuum readings have slowly declined to

the 28 to 30-inches of water range in December. Frost accumulation in the lines until the snowpack built up enough to insulate the ground is a likely explanation.

5.3 Air Injection Systems

Compressor operating hours, flow rates, and pressures on the AS lines were documented and occasionally adjusted during the monitoring period. Adjustments to the AS systems were generally performed to balance the flow rates between the different AS wells and optimize system air pressure. Routine maintenance, including lubricating motor bearings, swapping and cleaning filters, inflating well packers, and changing transducer desiccant were performed based on operation time and observed conditions. Repairs were performed as needed. Summaries of AS system observations, readings, maintenance, and corrective actions are presented in Table 3. Based on remote monitoring data, the N.AIS, S.AIS, and E.AIS have been running within acceptable ranges since October 13, 2023, except for the two power outages mentioned above.

5.3.1 North AS

The N.AIS on the ZipMart property injects air into 10 wells, switching from five oddnumbered wells to five even-numbered wells every three hours. When the P&T system is operating, the airlines to Wells ASW7 and ASW8 are disconnected and used to aerate the groundwater holding tank, typically during two to four periods over the summer. The system was monitored during 24 visits between July 1, 2021, and October 13, 2023. The first portion of Table 3 summarizes flow and pressure readings, hours of operation, and maintenance performed for the N.AIS.

Three power outages reduced the amount of time sparging. The first was a 5.5-hour outage on December 28, 2021, at the end of which the main timer failed to restart the system, leaving the system off until December 30, 2021. The second was from October 30 to December 16, 2022, due to the unauthorized circuit breaker tampering. For the 658 days between June 24, 2021, and April 13, 2023, the hour meter tracking the compressor current indicates that the system was not operating for 49 days, or less than 8% down time. The third outage was roughly April 14 to October 13, 2023, due to the collapse of the former ZipMart building.

The rotary vane air compressor running the N.AIS failed and was replaced two times over the monitoring period. Both electronic switching timers failed at different times over the reporting period. The well switching timer was replaced, and the main timer was modified for manual switching. The well packers that separate the lower part of the well (where air injection occurs) from the water table (where vapor extraction occurs) were replaced in Wells RW1 and

RW2 due to leakage. The replacement packers had a different type of lower air fitting that we found difficult to seal, resulting in additional maintenance over the reporting period. The datalogger that records N.AIS and SVE monitor readings, collects data from the loggers at the S.AIS, and E.AIS, and communicates to the internet is located in the N.AIS shed. Modifications to this monitoring system are summarized in Section 5.1 above and in Table 3.

5.3.2 South AS

The S.AIS is located on the Sterling Community Club property and has air lines to six wells. Two of these wells (RW7 and RW16) are out of use. Page 2 of Table 2 summarizes the operation and maintenance of the S.AIS. The wells RW9, RW15, RW3, and RW12 were being run on an intermittent 4-hour on, 4-hour off schedule. The timer for intermittent operation failed in August 2021 in the on mode. A used timer from part of the SVE system was substituted for the failed timer on September 14, 2021, but it failed in a matter of hours in the off position. Five days later the repaired original timer was installed. On August 15, 2022, the timer was set to a 4-hour on, 2-hours off to increase aeration time with a lower output compressor. The timer failed in continuous-on mode a few hours later. A new timer was installed on September 16, 2022, and set to run 4-hours on, 2-hour off schedule. Communication between the S.AIS data logger and the main CR1000 data logger was lost at the end of October 2021 and restored on November 18, 2021. The AC adaptor for the S.AIS datalogger failed in January 2023. The logger battery was charged with a separate charger and the logger operated until March 7. A new AC adaptor was installed on April 13, 2023.

The rotary vane compressor designated E2 was running well in the S.AIS since October 2020. When the compressor in the N.AIS failed in July 2022, Compressor E2 was moved to the N.AIS and the weak, low output compressor E1 was installed in the S.AIS. On December 16, 2022, compressor E1 was found with the motor running but the compressor not spinning. The Spare compressor was installed in the S.AIS and the drive link between the motor and compressor of E1 was repaired in Anchorage. The E1 compressor was re-installed in the S.AIS on January 28, 2023.

On December 15, 2021, Well RW15 was found to have no air flow. The well packer and air diffuser assembly was pulled from the well and a new air diffuser was installed. The RW15 air diffuser began fouling again in the early winter of 2022, and by January 28, 2023, the well had no air flow. After a failed attempt in May, the RW15 well packer was successfully pulled, and a new diffuser installed on June 27, 2023. The air diffuser in Well RW12 appeared to be fouling in October 2023. The air temperature had dropped too low to pull the well packer on the evening of October 13, 2023.

5.3.3 East AS

The E.AIS on the Sterling Baptist Church property was operated in continuous mode during the reporting period. The E.AIS has two rotary vane compressors that inject air into 14 sparge wells. Page 3 of Table 3 summarizes the operation and maintenance of the E.AIS. Maintaining airflow through Well ASW10 has continued to be difficult. The well screen is under roughly 1 foot more water than the other E.AIS ASWs and is in heaving fine sand. Often the southern seven wells need to be closed at the piping 'T' to get pressure for breakthrough and air flow at ASW10. Wells ASW 10 and ASW13 are the most prone to accumulating condensate water in their flow meters.

Air pressure leaks around compressor outlet filter cannisters were identified on September 9, 2021. The deformed aluminum cannisters were replaced with glass cannisters covered with reinforcing tape on September 20, 2021. The vanes of the compressor in position #2 failed during a monitoring visit on October 18, 2021. The recently rebuilt compressor removed from the N.AIS was installed in position #2. The weak, low output compressor in position #1 was replaced with the rebuilt compressor from #2 on December 20, 2021. The vanes in the #1 compressor failed in late September 2023. The compressor named Spare was installed in the #1 position on October 5, 2023.

On June 27, 2023, the outer pump fan on #2 and the motor cooling fan on #1 were found to have failed, leaving plastic shavings throughout the shed. The outer pump fan from the Spare compressor was installed on compressor #2, and a new spare motor fan was installed on #1. Three broken plastic wellhead covers were replaced, and three trees of less than 6-inch diameter were removed from across the piping in 2023. Rodents have chewed up a number of wellhead insulating covers. Woven polypropylene 'sandbags' were used to help hold the insulation together over the wellheads until alternate insulation can be obtained.

5.3.4 Pump & Treat System

The P&T System was assembled and started on May 4, 2021, for the Summer 2021 season. Because the 2021 P&T operating season extended into November 2021, the results were not presented in the Fiscal Year 2021 Monitoring and Remediation report. Analytical sample results and pumping/discharge history for the operation of the P&T system over the summer of 2021 are included in Table 4. Funding came in place for the P&T system to be operated in July of 2022. Table 5 summarizes the analytical sample results and pumping/discharge history for the 2021 season. Details of the system layout and operation are included in the *Fall 2013 Monitoring and Remediation* report finalized by Shannon & Wilson in April 2014.

The P&T system was operated between May 4 and November 7, 2021. The holding tank was filled to the cut-off level and drained two times (June and September 2021) and partially filled again before being drained on November 3 and disassembled on November 7, 2021. The holding tank was drained through two 50 micrometer particulate filters and a 55-gallon drum of granular activated carbon (GAC) to discharge into Well MW4. Approximately 41,940 gallons of petroleum-impacted water were removed from the perched aquifer during the 2021 season. The groundwater pump did not restart after a September 29, 2021, power outage. The lead wires at the pump head were reworked to remove corrosion on October 7, 2021. The pump was overhauled during the winter of 2021-2022. Despite cracking due to exposure to gasoline, the pump diaphragm and valve bodies functioned through the 2022 operating period.

The P&T system was operated between July 28 and October 21, 2022. The holding tank was filled to the cutoff level once and to approximately 84 percent capacity once before draining on October 19 and disassembly on October 21, 2022. The steel filter drum for GAC was found to be perforated with rust holes when starting to drain the holding tank in September 2022. A salvaged plastic 55-gallon drum was set up as a filter drum with new GAC. The top of the plastic drum was found to flex under pressure and vacuum during use, requiring modification of the lid and extra effort to prevent leaks. Approximately 33,430 gallons of petroleum-impacted water were removed from the perched aquifer during 2022.

Samples of the groundwater entering the holding tank were collected three times during both the 2021 and 2022 P&T operation. Samples of the water in the holding tank during aeration were collected three times in 2021 and twice in 2022. Groundwater samples were collected directly from the tubing at the point of discharge to the holding tank and are designated UVxx. Samples from inside the holding tank were collected with a dedicated polyethylene bailer and are designated HTxx. Samples of the post-treatment water (designated TWDxx) were collected at the point of discharge to Well MW4. TWDxx samples were collected three times in 2021 and twice in 2022, each after water was discharging from the GAC for at least 45 minutes. Based on the laboratory results for sample TWD12 (September 2021), it was thought that the GAC used to remove residual hydrocarbons was reaching the end of its useful life. A composite sample of the GAC (Sample 100972-GAC21) was collected on November 6, 2021, from multiple locations as the material was transferred from the filter drum into a labeled open-top drum for storage and disposal.

6.0 LABORATORY ANALYSIS

Water samples were delivered to SGS North America Inc. (SGS) in Anchorage, Alaska following chain-of-custody procedures. Water samples from the P&T system (nine in 2021 and

seven in 2022) were analyzed for gasoline range organics (GRO) by Alaska Method (AK) 101 and benzene, toluene, ethylbenzene, and xylenes (BTEX) by Environmental Protection Agency (EPA) Solid Waste Method (SW) 8021B. One sample of GAC was delivered the SGS for GRO and BTEX analyses, plus benzene analysis by the toxicity characteristic leaching procedure (TCLP) and EPA Method SW8260D.

One vapor sample was shipped to Air Toxics via air cargo following chain-of-custody procedures for analysis of BTEX and total petroleum hydrocarbons (TPH) as gasoline by Modified EPA Method TO-3. Laboratory reports for P&T water samples are included in Appendix B. The vapor sample laboratory report is in Appendix C.

7.0 DISCUSSION OF RESULTS

The results of the field activities are discussed primarily in terms of field testing and laboratory results. Field notes are included in Appendix D.

7.1 Remediation Systems Monitoring

7.1.1 SVE System

SVE system field measurements and readings for the July 2021 through December 2023 reporting period are presented in Table 1 along with two earlier readings to include Sample VEZ40. The recovery of volatile hydrocarbons from soil vapor was impacted by various power outages and equipment failure during the reporting period. The average of five FID readings across a fairly stable period between July 9, 2021, and July 19, 2022, is 7.7 parts per million (ppm). The average of the FID readings for the FY21 reporting period, after removing an outlier, was 12.4 ppm, suggesting a 38 percent reduction in vapor recovery. Vapor Samples VEZ40 and VEZ41 were collected from the exhaust of the SVE system in May 2021 and November 2021, respectively, for laboratory analysis by Air Toxics. The laboratory report for Sample VEZ40 is in the FY21 Monitoring Report, but both sample results are summarized in Table 2. The TPH (as gasoline) of 5.5 ppm by volume in Sample VEZ41 is approximately 24 percent less than the 7.2 ppm TPH measured in Sample VEZ40. The ratio of benzene to TPH (as gasoline) continues a slowly increasing trend. Oxygen concentrations in the soil vapor ranged from 19.0 to 20.9 percent, and LEL measurements (calibrated to methane) ranged from zero to 2 percent over the reporting period.

Gasoline vapors remain in the subsurface, and the FID readings collected while the remediation system was recovering from repairs provide some insight into the dynamic system. On August 15, 2022, Well RW1 was repaired after a period of being open to the air and then

capped. The initial FID reading after repair was 10 ppm, and the concentration increased to 20 ppm while the system was being optimized for flow and recovery. On October 13, 2023, electrical power was restored to the northern remediation system after 6 months out of service. Before the AS system was started the initial FID reading for Blower 2 was 20 ppm. The vapor concentration climbed to 45 ppm over 26 minutes while the AS system was being prepared for restart. Two hours after starting the N.AIS, with the even numbered AS wells active, the FID reading from Blower 2 was 175 ppm.

The amount of hydrocarbons recovered as vapor can be estimated based on the analytical results, the Ideal Gas Law, flow rates and typical constants for gasoline. Estimates are included at the bottom of Table 2. For the period of May 6 to November 6, 2021, the estimate of 7.1 gallons of gasoline removed from the subsurface was calculated from the average of the TPH recovery rates for Samples VEZ40 and VEZ41 multiplied by 184 days. Approximately 4.9 pounds of benzene were removed over the same 6-month period. Using the recovery rates for Sample VEZ41 only over the period of November 6, 2021, to the October 30, 2022 power outage, we estimate that 12 gallons of gasoline and 8.8 pounds of benzene were recovered. Analytical vapor samples were not collected in 2022 or 2023, making an estimate of hydrocarbon recovery during the December 16, 2022 to April 13, 2023 operational period less reliable. Using the Sample VES41 recovery rates, approximately 4 gallons of gasoline and 2.9 pounds of benzene were recovered. Adding the three periods of estimation results in approximately 23 gallons of gasoline and 17 pounds (roughly 2 gallons) of benzene recovery over the reporting period. These estimates do not take into account the higher concentrations typically removed after a re-start of the SVEsystem.

7.1.2 AS System

During past reporting periods, dissolved oxygen (DO) concentrations in groundwater and GRO and BTEX results from monitoring wells near the AS systems have been reviewed to assess system performance. Groundwater sampling was not included in this reporting period.

7.1.3 Pump & Treat System

Tables 4 and 5 summarize the laboratory results and operation of the P&T system in 2021 and 2022, respectively. Approximately 41,940 gallons of water were pumped from the aquifer between May 4 and November 3, 2021, based on water depths in the holding tank. Three samples of groundwater were collected at the point of discharge to the holding tank (Samples UV11, through UV13). The GRO concentrations ranged from 40.8 milligrams per liter (mg/L) to 79.8 mg/L. Benzene concentrations ranged from 2.71 mg/L to 5.50 mg/L. By using the

numerical averages of the three laboratory results and the volume of water removed, approximately 21 pounds of gasoline and 1.5 pounds of benzene were removed from the aquifer in 2021.

Approximately 33,429 gallons of water were pumped from the aquifer between July 28 and October19, 2022. Samples UV21, UV22, and UV23 were collected from groundwater discharging to the holding tank. The GRO concentrations ranged from 62.2 mg/L to 97.2 mg/L, and the benzene concentrations ranged from 2.72 mg/L to 9.48 mg/L. Using the numerical averages of the analytical results and the volume of water, approximately 23 pounds of gasoline and 1.8 pounds of benzene were removed from the perched aquifer in 2022. 2022 was the tenth year the P&T system was operated.

Approximately 306 pounds of gasoline (just over 50 gallons) and 19.4 pounds of benzene (roughly 2.3 gallons) have been removed over the ten years of P&T operation. The graph at the bottom of Figure 5 summarizes hydrocarbon removal over ten years. Note that the slope of the curve, or rate of removal has remained fairly constant after the higher rate of the first year. Also note that the ratio of benzene to GRO has declined and the recovery lines crossed after the fourth year of operation.

Samples were collected from the aerated water in the P&T holding tank (HTxx samples) in both 2021 and 2022. The results of these sample can be used to evaluate the effectiveness and of holding tank aeration, help estimate necessary aeration duration, and assess the condition of the GAC when used in conjunction with results from samples of treated water discharged to Well MW4 (TWDxx samples). The results of the three samples from 2021 and two from 2022 suggest that aeration at the same time groundwater is being pumped into the holding tank can reduce the hydrocarbon concentration by over an order of magnitude. Aeration continuing for ten days to two weeks after the groundwater pumping has stopped can reduce hydrocarbon concentrations to below groundwater cleanup levels. Samples HT12 and TWD12, collected on the same day in 2021 suggested that the three-season old GAC was losing efficiency. Samples HT13 and TWD13 collected November 3, 2021, confirmed that the GAC was overloaded with hydrocarbons and was overdue for disposal. The benzene concentration exceed the goal of being less that the latest groundwater results from nearby Wells MW71S or MW72S. Samples HT22 and TWD22 from October 2022 show that relatively new GAC can reduce hydrocarbon concentrations to the limits of detection from concentrations similar to those measured in HT13.

8.0 QUALITY ASSURANCE SUMMARY

The project laboratories follow on-going quality assurance/quality control procedures to evaluate conformance to applicable ADEC and EPA data quality objectives (DQO). Internal laboratory quality controls for this project include surrogates, method blanks, laboratory control sample/laboratory control sample duplicates (LSC/LSCD), and internal duplicates. If a DQO for one of the controls is not met, the laboratory provides a brief explanation in the case narrative of their report. There are thirteen SGS work orders associated with the 2021 through 2022 P&T effort. SGS work order 1217377 contains the GAC21 sample results, and Air Toxics work order 2111302 contains the VEZ41 sample results. While Shannon & Wilson reviewed the data deliverables, preparing ADEC Laboratory Data Review Checklists for the vapor samples and P&T system process samples was not required for the project.

Based on our review of the 15 laboratory reports, only the GRO result for Sample GAC21 had data quality parameters outside of acceptance criteria. The GRO result was flagged as an estimate due to poor surrogate recovery from the carbon matrix and a method blank detection within a factor of ten of the estimated concentration.

9.0 INVESTIGATION DERIVED WASTE

Investigation derived waste for this project included decontamination water, miscellaneous sampling and maintenance waste, and P&T system operation materials. The miscellaneous sampling and maintenance waste included nitrile gloves, a polyethylene bailer, polypropylene twine, used paper toweling, and 9-volt batteries. The miscellaneous waste was discarded as non-hazardous solid waste except for the batteries. The batteries were placed in a battery recycling bin in Anchorage.

Water collected by the P&T system was aerated in the holding tank and treated through a particulate filter and GAC before discharge down Well MW4. Water used to rinse 50um filters between uses was returned to the holding tank. Based on the HT sample results, the P&T particulate filters were disposed as non-hazardous solid waste. The expired GAC was delivered to US Ecology in Anchorage, Alaska, for disposal as non-hazardous waste on August 4, 2022.

10.0 SUMMARY AND CONCLUSIONS

The groundwater remediation work conducted between July 2021 and December 2023 at the Sterling ZipMart site included remediation system operation, monitoring, and maintenance. The results of these activities are summarized below.

Sterling ZipMart 2021-2023 Report

10.1 Restoration of Electrical Service

Electrical service and internet connection was lost to the northern portion of the remediations systems in April of 2023 due to the collapse of the former ZipMart convenience store building. A new overhead line was hung, and a meter pole was installed in the KPB right-of-way on McCall Street. A new underground electrical line between the meter pole and the circuit breaker box on the SVE Blower 2 shed was installed. The installation of a LTE router and an antenna facilitated a cellular connection for remote monitoring. The north system was restarted on October 13, 2023.

10.2 Remediation Systems Operation and Monitoring

SVE System

Table 1 summarizes monitoring, operation, and maintenance of the SVE system. The SVE system on the ZipMart property (Blower 2) had two significant power outages and a period of short-circuiting due to a broken wellhead. Using the results of analytical vapor Samples VEZ40, and VEZ41 during periods of steady operation, an estimate of hydrocarbon recovery from the subsurface as vapor was calculated (See Table 2). Over approximately 660 days, at least 136 pounds (roughly 23.1 gallons) of gasoline-range hydrocarbons and 16.7 pounds of benzene recovery are estimated.

AS Systems

Table 3 summarizes monitoring and operation of the AS systems, with one page for each system. The N.AIS experienced three power outages, two compressor failures, two timer failures, and leaks at two AS wells during the July 2021 to December 2023 reporting period. The N.AIS operated for over 14,500 hours over the 20,100-hour period of June 24, 2021, to October 13, 2023. N.AIS sparging wells ASW7 and ASW8 were closed during the periods when the P&T holding tank was being aerated.

The S.AIS system did not experience extended power outages, but had one compressor failure, two timer failures, two fouled air diffusers, and a DC power adaptor failure over the reporting period. Based on hour meter readings, the S.AIS ran 54 percent of the time while the timer was set to 4 hours and 4 hours off, and 63 percent of the time while set to run 4 hours on and 2 hours off.

The E.AIS system ran nearly continuously over the reporting period. There were a handful of power outages of less than 2 hours each and one 6-hour outage in August of 2023. Two

compressors failed at the E.AIS, each shortly before a site visit. Additional maintenance at the E.AIS included cleaning flow meters, replacing outlet filter canisters, changing filters, replacing three wellhead covers, removing three fallen trees, replacing compressor cooling fans, and working to maintain flow through Well ASW10.

Pump & Treat System

The seasonal P&T system was operated between April 4, 2021, and November 6, 2021, and again between July 28, 2022 and October 21, 2022. Approximately 41,940 gallons of groundwater were treated through the system in 2021, resulting in the estimated removal of 21 pounds of total hydrocarbons (as GRO) and 1.5 pounds of benzene. Approximately 33,429 gallons of groundwater were treated in 2022, resulting in the removal of roughly 23 pounds of GRO and 1.8 pounds of benzene. Table 4 summarizes the operation and laboratory results for the 2021 P&T operation, and Table 5 summarizes the 2022 P&T results and operation.

10.3 Conclusions

The SVE system and seasonal P&T system continued to remove contaminant mass from the subsurface over the reporting period. The AS systems continued to inject atmospheric air into the groundwater with the intent of enhancing aerobic biodegradation of contaminants. Groundwater sampling was not performed to investigate the efficacy of the AS system. Recommendations were made in Shannon & Wilson's *Fiscal Year 2021 Monitoring and Remediation* report submitted to the ADEC in November of 2021. The results and observations from the July 2021 to December 2023 reporting period do not suggest significant changes to those recommendations.

11.0 CLOSURE/LIMITATIONS

This report was prepared for the exclusive use of our client and their representatives in the study of this site. The findings we have presented within this report are based on the limited research, sampling, and analyses that we conducted. They should not be construed as definite conclusions regarding the site's groundwater quality. As a result, the sampling, analyses, and data interpretations can provide you with only our professional judgment as to the environmental characteristics of this site, and in no way guarantee that an agency or its staff will reach the same conclusions as Shannon & Wilson, Inc. The data presented in this report should be considered representative of the time of our site assessment. Changes in site conditions can occur over time, due to natural forces or human activity. In addition, changes in government codes, regulations,

Sterling ZipMart 2021-2023 Report

or laws may occur. Because of such changes beyond our control, our observations and interpretations may need to be revised.

Shannon & Wilson has prepared the attachment in Appendix E "Important Information About Your Geotechnical/Environmental Report" to assist you and others in understanding the use and limitations of our report. We appreciate this opportunity to be of service and your confidence in our firm. If you have questions or comments regarding this submittal, please contact Dan McMahon or the undersigned at (907) 561-2120.

SHANNON & WILSON, INC.

Randy Hessong Engineering Staff

TABLE 1
SUMMARY OF VAPOR FIELD MEASUREMENTS

Recovery		Air Flow	FID	PID	LEL	Oxygen	CO ₂	Temper-	
Well/Line	Date	(cfm)	(ppm)	(ppm)	(%)	(%)	(%)	ature (°F)	Comments
Blower 2	5/6/21	106	12	3.0	-	-	-	76	28.5" vacuum. Sample VEZ40 (1L SUMMA), 12:00
	6/3/21	105	13	3.5	0%	20.0%	-	82	29.25" vacuum, knockout drum dry
	7/9/21	105	5.0	4.7	0%	19.8%	0.9	-	29" vacuum. ZJT w/ GA-90
	9/9/21	105	9.0	6.6	0%	19.7%	-	84	28" vacuum, knockout drum dry
	10/7/21	105	-	-	-	-	-	-	28" vacuum, RW1 = 65 CFM, RW2 gauge at 54 CFM seems high, heat trace on. Short power outage 9/29/21
	11/6/21	105	8.5	-	0%	19.9%	-	72	28.5" vacuum, Sample VEZ41 (1L SUMMA), 20:15
	12/30/21	111	-	-	-	-	-	-	24.5" vacuum, 6 gallons water drained from knockout drum. 5.5 hour power outage 12/28-29/21
	2/7/22	105	9.0	-	0%	21.1%	-	73	31" vacuum
	7/19/22	105	7.0	4.4	-	-	-	-	31.5" vacuum
	7/28/22	103	-	-	-	-	-	-	32" vacuum. RW1 monument settled - well cap broken, vacuum leaking. Solid cap added to allow SVE operation
	8/15/22	86	10	5.7	2%	19.9%	-	-	42" vacuum with VE1, RW1 and RW2 flowing after repair of RW1 and RW2
	8/15/22	102	20	12	2%	19.8%	-	-	30" vacuum running only RW1 and RW2
	9/16/22	95	-	-	-	-	-	-	27.5" vacuum, no water in KO
	10/19/22	92	-	-	-	-	-	-	40" vacuum. RW2 not flowing. Adjust
	10/19/22	101	7.0	4.3	0%	20.1%	-	77	33-34" vacuum. Heat trace turned on, AIS on odd bank
	10/19/22	103	-	-	-	-	-	-	31" vacuum. AIS on even bank, 19:30
	10/21/22	104	-	-	-	-	-	-	31" vacuum, RW2 at 26 CFM
	12/16/22	108	-	-	-	-	-	-	28" vacuum. After restart from power outage since 10/30/22 (main breaker tampered with)
	1/28/23	107	-	-	-	-	-	-	29.5" vacuum. KO drum dry
	5/22/23	-	-	-	-	-	-	-	ZipMart building collapsed under snow load in April. Power disconnected 4/25/23
	10/13/23	103	20	-	0%	20.9%	-	58	28.5" vacuum. Electrical power restored. Drain trace of water from knockouts. Reset packer pressures. N.AIS not running
	10/13/23	-	45	-	-	-	-	-	Recheck after running for 26 minutes. N.AIS not running
	10/13/23	98	175	-	0-6%	19.4%	-	77	N.AIS even bank of wells running 2.5 hours after restart

Key on Page 3 of Table 1

TABLE 1	
SUMMARY OF VAPOR FIELD MEA	SUREMENTS

Recovery		Air Flow FID PID LEL Oxygen		CO ₂	Temper-				
Well/Line	Date	(cfm)	(ppm)	(ppm)	(%)	(%)	(%)	ature (°F)	Comments
VEW1	7/28/22	35	-	-	-	-	-	-	Well reactivated because of problems with RW1
	8/15/22	26	3	2	0%	20.0%	-	-	Operating with RW1 and RW2. Well closed after measurements
	9/16/22	Closed	-	-	-	-	-	-	
	10/19/22	26	-	-	-	-	-	48	Reopened because RW2 is not flowing. AIS on odd bank
	10/19/22	24	-	-	-	-	-	-	AIS on even bank
	12/16/22	25	-	-	-	-	-	-	No flow/frozen at restart, opens up with time
	1/28/23	<25	-	-	-	-	_	-	Flow is present below gauge limit
	10/13/23	>0	12	-	failed	20.5%	-	45	Electricity restored. No flow registering, has vacuum and some flow
	10/13/23	~20	20	-	failed	20.6%	-	45	N.AIS even bank running
RW1	5/6/21	65	23	6.5	-	-	-	-	Sample VEZ40 , just before switch from odd to even N.AIS
	6/3/21	60	19	9.4	0%	19.8%	-	48	
	7/9/21	68	17	5.4	0%	20.2%	0.0	-	ZJT w/GA-90
	9/9/21	65	17	7.4	0%	19.3%	-	51	
	11/6/21	62	12	-	0%	19.4%	-	41	Sample VEZ41
	12/30/21	60	-	-	-	-	-	-	
	2/7/22	62	11	-	0%	19.9%	-	-	
	7/19/22	70	1	0.5	-	-	-	-	Wellhead likely broken
	7/28/22	90+	-	-	-	-	-	-	Well head cover has settled and broken well cap. Vacuum is short circuiting. 18 psi in packer. Solid cap added to allow SVE operation
	8/15/22	55	22	9.1	2%	19.7%	-	-	With VE1, RW1 and RW2 flowing after repair
	8/15/22	78	-	-	-	-	-	-	VE1 closed, vapor recovery maximized. Gauge likely partially fouled
	9/16/22	84-89	-	-	-	-	-	-	
	10/19/22	75	-	-	-	-	-	48	Was flowing 90-95 CFM before adjustments. Sampling pump failed
	10/19/22	61	_	-	-	-			AIS switched to even bank
	12/16/22	60	-	-	-	-	-	-	Started at 75 CFM and dropped as VE1 and RW2 opened up.
	1/28/23	53	-	-	-	-	-	-	Gauge likely cleared out
	10/13/23	52	100	-	0%	20.9%	-	46	Electricity restored. Well packer has no air pressure, filled to 33 psi
	10/13/23	69	195	-	failed	19.0%	-	46	N.AIS even bank running

Key on Page 3 of Table 1

TABLE 1
SUMMARY OF VAPOR FIELD MEASUREMENTS

Recovery		Air Flow	FID	PID	LEL	Oxygen	CO ₂	Temper-	
Well/Line	Date	(cfm)	(ppm)	(ppm)	(%)	(%)	(%)	ature (°F)	Comments
RW2	5/6/21	41	3.2	1.4	-	-	-	-	Sample VEZ40 , just before switch from odd to even N.AIS
	6/3/21	49	7.5	2.0	0%	20.1%	-	47	
	7/9/21	45	1.0	0.2	0%	20.9%	0.0	-	ZJT w/GA-90
	9/9/21	43	3.1	1.9	0%	20.0%	-	49	
	11/6/21	39	2.5	-	0%	20.3%	-	42	Sample VEZ41
	12/30/21	45	-	-	-	-	-	-	
	2/7/22	25	2.8	-	0%	20.4%	-	-	
	7/19/22	30	0	0	-	-	-	-	Likely no flow - short circuit to broken well RW1
	7/28/22	0-20	-	-	-	-	-	-	0 psi in packer, sparge air is flowing up inside of well. Packer pulled and well screen scrubbed with brush. Airline fitting (sparge) cracked. Replace with fitting from RW1.
	7/28/22	40	-	-	-	-	-	-	After well repair
	8/15/22	32	8.5	5.8	0%	19.8%	-	-	With VE1, RW1 and RW2 flowing after repair
	8/15/22	31	-	-	-	-	-	-	VE1 closed, vapor recovery maximized
	9/16/22	25	-	-	-	-	-	-	
	10/19/22	0	-	-	-	-	-	46	No flow as found. Opened VE1
	10/19/22	30	-	-	-	-	-	-	AIS switched to even bank. RW2 likely has a partial short circuit
	12/16/22	30	-	-	-	-	-	-	After restart from power outage
	1/28/23	31	-	-	I	-	I	-	Well head uncovered. Packer pressure = 24.5 psi. Adjusted to 27 psi.
	10/13/23	~25	2	-	0	20.9%	-	45	Flow meter may be stuck, possibly no flow. Packer inflated from 14 to 36 psi
	10/13/23	0-25	30	-	failed	20.3%	-	45	N.AIS even bank running

KEY DESCRIPTION

CFM	Cubic feet per minute
FID	Flame ionization detector
PID	Photoionization detector
LEL	Lower explosive limit (calibrated to methane)
CO_2	Carbon dioxide
<,>,~,+	Less than, greater than, approximately, at least
°F	Degrees Fahrenheit
ppm	Parts per million
psi	Pounds per square inch
%	Percent
"	Inches of water
-	Not measured or not applicable

		Sa	mple ID Number^	and Collection Da	ate
		S	oil Vapor Samples	s - Blower 2 (North	ı)
		VEZ40^^	VEZ41		
Parameter Tested	Method*	5/6/21	11/6/21		
Outlet FID Reading - ppmv	Sensidyne FID	12	9		
Lower Explosive Limit - percent	Q-Rae multigas	0	0		
Temperature - Fahrenheit	Dial thermometer	76	72		
Measured Flow Rate - cfm	Gauge	106	105		
Aromatic Volatile Organics (BTEX)					
Benzene - ppmv	TO-3 M	0.95	0.8		
Toluene - ppmv	TO-3 M	1.1	0.67		
Ethylbenzene - ppmv	TO-3 M	0.049	0.019		
Xylenes - ppmv	TO-3 M	0.71	0.30		
TPH (gasoline range) - ppmv	TO-3 M	7.2	5.5		
VPH - lbs/hour	Ideal Gas Law**	0.01	0.01		
VPH - gallons/day	5.88 lbs/gallon	0.04	0.03		
Benzene - lbs/day**	Ideal Gas Law**	0.03	0.02		

TABLE 2SUMMARY OF SVE ANALYTICAL RESULTS

	OVE	RALL VAPOR RECO	OVERY RATES - Blo	ower 2 (North)		
Start date	Stop date	number of days	avg. benzene rate, lbs./day	total benzene, lbs.	avg. GRO rate. gal./day	total GRO, gallons
5/6/2021	11/6/2021	184	0.027	4.93	0.039	7.14
11/6/2021	10/30/2022	358	0.025	8.82	0.034	12.01
12/16/2022	4/13/2023	118	0.025	2.91	0.034	3.96
	Totals:	660		16.7		23.1
	I		I	1	pounds:	135.9

KEY	DESCRIPTION
*	See laboratory report for reporting limits and method details
۸	Sample ID No. preceded by "100972-" on the chain of custody form
~~	Sample 100972-VEZ40 laboratory report is in the FY2021 monitoring report
**	Using a gas constant of R=0.7302 atm-ft^3/lbmol R
ppmv, lbs, cfm	Parts per million by volume, pounds, cubic feet per minute
TPH	Total Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
%	Percent
avg.	Average

TABLE 3 AIR SPARGE SYSTEM MONITORING LOG

ASYL ASYL <th< th=""><th></th><th></th><th></th><th></th><th></th><th>-</th><th></th><th>-</th><th></th><th>N</th><th>orth A</th><th>AS We</th><th>lls</th><th>-</th><th></th><th>-</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>						-		-		N	orth A	AS We	lls	-		-							
Date O'M PS D'M D'M <	_	AS	W1	AS	W3	AS	W5	AS	W7	RV	W1	AS	W2	AS	W4	AS	W6	R	W2	AS	SW8		
6221 1 1 1 2 1 4 2 5 1 4 2 5 7 1 4 2 5 7 1 4 2 5 7 1 1 3 8956 1620. Balls 9956 1600. 9 of cerent. 1 of poi dob. MXP x 5 and PX balls 9921 1 3 1 3 1 3 1 3 1 3 9956 1600. 9 of cerent. 100 pi dob 3000. fits connecting at lans to SWP A SAPS and pating. 9921 1 3 2 2 2 2 1 2 2 1 2 2 1 2	Date	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	Hour Meter	Comments
9921 19-3 X 14-6 Q 2.7 1 5.7 1 2.7 X 5.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 7.7 1.8 6.1 1.9 7.8 2.8 7.7 1.8 <	6/24/21	2.1	5.6	1.7	4.0	2.9	7.6	1.6	5.9	2.5	5.8	2.5	4.9	2.6	7.8	2.5	8.0	2.4	4.9	1.4	5.4	87826	12:20. Readings before connecting airlines from bubbler back to AS
9921 19 2 2.5 7.2 2.5 7.4 1.4 7.4	9/9/21	1.9+	3.8	1.4+	6.9	2.2-	7.1	1.4	5.1	1.9	4.1	2.9	4.5	2.5-	7.7	1.8	7.5	1.7+	4.6	1.1	5.5	89661	19:05, 9.9 psi (even), 11.7 psi (odd). ASW 7 & 8 on P&T bubbler.
91421 19 25 25 7.7 2.3 7.4 7.8 7.8 7.4 7.4 7.8	9/9/21	1.9	4.2	2.5	7.2	2.5	7.1	1.2+	7.9	2.0	4.1	1.9+	4.5	2.4-	7.5	2.5-	7.5	1.9+	4.6	1.9	6.4	-	20:05, after connecting air lines to ASW7 & ASW8 and adjusting
92221 19 85 85 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70 21 70	9/14/21	1.9	3.5	2.5-	7.0	2.3	7.2	1.4	7.8	2.0	4.1	1.9	4.5	2.4	7.6	2.3	7.4	2.0	4.5	1.8 +	6.4	89799	20:32, 9.5 psi (even), 10.0 psi (odd)
9 102 10 18 28 24 70 1.2 2.5 7.5 2.4 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5 2.5 7.5	9/22/21	1.9	3.5	2.3	7.0	2.1+	7.2	1.2	7.8	2.3-	3.8	1.9+	4.5	2.3	7.6	1.9-	7.6	2.3	4.4	2.0	6.5	89990	16:22, 9.6 psi (even), 10.0 psi (odd) before connecting pond bubbles
10721 1.7 0.0 - 1.2 - 1.9 - 0.0 - 2.0 - 1.2 - 7.6 pis. Skort poor anage 92921. Compressor very wak after 1 10721 3.0 4.1 4.4 7.5 4.1 7.8 3.0 4.6 1.3 4.6 9005 R955 1.991. Skort poor anage 92921. Compressor very wak after 1 111321 3.0 4.1 3.7 3.4 7.6 3.5 7.6 3.5 7.6 3.5 7.6 3.5 7.6 3.5 7.6 3.5 7.7 7.7 7.6 7.5 7.7	9/22/21	1.9	3.8	2.4-	6.9	2.4-	7.0	1.4	2.8	2.1	3.8	2.0	4.4	2.5	7.5	2.4	7.5	2.2	4.3	1.4	2.9	-	16:43, 9.5 psi (even), 10.0 psi (odd) after connecting pond bubbler
107121 30 4/ 4/ 7 5 1/2 7 4/2 7 4/2 7 4/2 7 4/2 7	10/7/21	1.7	-	0.0	-	0.0	-	1.2	-	2.0	-	1.9	-	0.0	-	0.0	-	2.0	-	1.2	•	-	7.6 psi. Short power outage 9/29/21. Compressor very weak after p
11/221 3.0 3.6 4.6 7.7 3.7 3.7 3.6 1.3 3.6 9.000 RVI vasue netwoin, Claud paricles from valve. 11.2 pi (val) 11/1201 3.3 4.4 3.6 7.6 3.4 3.4 <td>10/7/21</td> <td>3.0</td> <td>4.1</td> <td>4.4</td> <td>7.2</td> <td>4.3</td> <td>7.2</td> <td>1.6+</td> <td>2.5</td> <td>3.0</td> <td>3.8</td> <td>3.4</td> <td>4.8</td> <td>4.1</td> <td>7.5</td> <td>4.1</td> <td>7.8</td> <td>3.0</td> <td>4.3</td> <td>1.6+</td> <td>2.5</td> <td>90353</td> <td>20:59, 11.5 psi (even), 12.0 psi (odd) after installing Spare compress</td>	10/7/21	3.0	4.1	4.4	7.2	4.3	7.2	1.6+	2.5	3.0	3.8	3.4	4.8	4.1	7.5	4.1	7.8	3.0	4.3	1.6+	2.5	90353	20:59, 11.5 psi (even), 12.0 psi (odd) after installing Spare compress
11/12[1] 3.8 3.8 7.8 7.8 7.2 7.2 3.2 6.4 7.5 7.6 3.0 4.2 7.5 3.9 7.6 3.2 6.5 91000 1925.11 51 (scen). 11.5 ps (cod)) after recompcting ASW7 & 8 at 11/18 (scen). 11.5 ps (cod). Data logge down since 10262.11 12/202 3.2 4.6 3.5 7.6 3.0 4.3 4.4 4.5 4.7 3.0 4.3 6.4 9232 111 ps (even). 11.5 ps (cod). Data logge down since 10262.11 7/202 3.2 4.6 3.5 7.0 3.0 4.3 3.4 7.4 3.4 7.5 7.6 7.6 7.6 7.6 7.6 7.7 7.6 7.6 7	11/3/21	3.0	3.6	3.9	6.9	4.5	7.1	1.7	3.8	3.1b	4.4	3.3	4.4	3.4	7.5	4.5	7.7	3.9	4.6	1.3	3.6	90996	RW1 was not flowing. Cleared particles from valve. 11.2 psi (even),
111821 3.3 4.4 3.6 7.5 3.0 6.4 3.4 4.5 4.2 7.5 3.9 7.6 3.7 4.1 1.0 6.27 1.1 1.1 1.1 1.5 1.1 1.5 <	11/3/21	3.0-	3.8	3.3+	7.0	3.2	7.2	3.2	8.1	3.0-	4.2	3.1	4.5	3.3+	7.6	3.4-	7.5	2.9	4.6	3.2	6.5	91000	19:35, 11 psi (even), 11.5 psi (odd) after reconnecting ASW7 & 8 ar
12/302 3.2 4.0 3.4 7.0 3.2 7.8 3.3 4.7 3.4 7.4 3.4 <t< td=""><td>11/18/21</td><td>3.3</td><td>4.4</td><td>3.6</td><td>7.5</td><td>3.5</td><td>7.6</td><td>3.0</td><td>4.3</td><td>3.0</td><td>6.4</td><td>3.4</td><td>4.5</td><td>4.2</td><td>7.5</td><td>3.9+</td><td>7.6</td><td>3.7</td><td>4.3</td><td>1.0+</td><td>6.3</td><td>-</td><td>11.1 psi (even), 11.5 psi (odd). Data logger down since 10/26/21. F</td></t<>	11/18/21	3.3	4.4	3.6	7.5	3.5	7.6	3.0	4.3	3.0	6.4	3.4	4.5	4.2	7.5	3.9+	7.6	3.7	4.3	1.0+	6.3	-	11.1 psi (even), 11.5 psi (odd). Data logger down since 10/26/21. F
12/12/13 2/14 6/14 7/14 2/14 2/14	12/30/21	3.2	10	33	60	3.4	7.0	37	78	33	37	33	13	3.1+	71	3 1+	75	3.0	13	33	61	92326	Timer stuck in off mode due to 5.5 hr. power outage 12/28-12/29. R
2772 3.2+ 4.6 3.3- 7.7 3.4- 4.7 7.4- <t< td=""><td>12/30/21</td><td>5.2</td><td>4.0</td><td>5.5</td><td>0.9</td><td>5.4</td><td>7.0</td><td>5.2</td><td>7.0</td><td>5.5</td><td>5.7</td><td>5.5-</td><td>7.5</td><td>5.47</td><td>7.7</td><td>5.47</td><td>7.5</td><td>5.0</td><td>7.5</td><td>5.5</td><td>0.4</td><td>72320</td><td>11.0 psi (even), 11.5 psi (odd). Reading after adjustments to even n</td></t<>	12/30/21	5.2	4.0	5.5	0.9	5.4	7.0	5.2	7.0	5.5	5.7	5.5-	7.5	5.47	7.7	5.47	7.5	5.0	7.5	5.5	0.4	72320	11.0 psi (even), 11.5 psi (odd). Reading after adjustments to even n
11/12/2 3.0+ 7.7 2.2+ 6.8 3.7 2.7 6.8 3.7 7.8 3.7 4.2 3.0+ 6.8 97137 10.5 psi (even). 11.5 psi (odd) 728/22 2.2 4.0 2.8 7.4 2.6 8.1 2.4 4.3 -<	2/7/22	3.2+	4.6	3.3-	7.0	3.0	6.8	3.3-	8.4	3.4+	4.2	3.3+	4.3	3.4+	7.4	3.4-	7.4	3.5	3.7	3.3	6.5	93254	11.0 psi (even). Snow clearing
2822 2.2 4.0 2.8 7.4 2.6 8.1 2.4 4.3 - 2.5 <td>7/19/22</td> <td>3.0+</td> <td>3.7</td> <td>2.6+</td> <td>6.8</td> <td>3.0+</td> <td>7.2</td> <td>3.2+</td> <td>8.0</td> <td>3.3</td> <td>4.2</td> <td>3.2+</td> <td>4.6</td> <td>3.2+</td> <td>7.6</td> <td>3.0+</td> <td>7.8</td> <td>3.3+</td> <td>4.2</td> <td>3.0+</td> <td>6.8</td> <td>97137</td> <td>10.5 psi (even), 11.5 psi (odd)</td>	7/19/22	3.0+	3.7	2.6+	6.8	3.0+	7.2	3.2+	8.0	3.3	4.2	3.2+	4.6	3.2+	7.6	3.0+	7.8	3.3+	4.2	3.0+	6.8	97137	10.5 psi (even), 11.5 psi (odd)
1/28/2 . <td>7/28/22</td> <td>2.2</td> <td>4.0</td> <td>2.8</td> <td>7.4</td> <td>3.0</td> <td>7.4</td> <td>2.6+</td> <td>8.1</td> <td>2.4</td> <td>4.3</td> <td>-</td> <td>Vanes failed on active Spare compressor on 7/22. Compressor E2 fro</td>	7/28/22	2.2	4.0	2.8	7.4	3.0	7.4	2.6+	8.1	2.4	4.3	-	-	-	-	-	-	-	-	-	-	-	Vanes failed on active Spare compressor on 7/22. Compressor E2 fro
12822 2 4 1 <td>ררי פרי ד</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>alogad</td> <td></td> <td>25</td> <td>15</td> <td>27</td> <td>77</td> <td>27</td> <td>76</td> <td>2.5</td> <td>17</td> <td>27</td> <td>67</td> <td>_</td> <td>10.5 pci (avan) Main timer swapped with switching timer, program</td>	ררי פרי ד									alogad		25	15	27	77	27	76	2.5	17	27	67	_	10.5 pci (avan) Main timer swapped with switching timer, program
191622 2.4 3.3 7.5 3.4 7.8 3.4 7.8 3.4 8.0 7.6 3.4 7.9 2.1 5.0 1.2 5.7 1.5 1.5 5.7 <t< td=""><td>8/15/22</td><td>2.2</td><td>-</td><td>2.2</td><td>-</td><td>- 2.6</td><td>2.2</td><td>-</td><td>-</td><td>2.0</td><td>17</td><td>2.5</td><td>4.5</td><td>2.1</td><td>7.7</td><td>2.7</td><td>7.0</td><td>2.5</td><td>4.7</td><td>2.7</td><td>0.7</td><td>07787</td><td>11.0 psi (both) After well packers in RW1 and RW2 replaced RW1</td></t<>	8/15/22	2.2	-	2.2	-	- 2.6	2.2	-	-	2.0	17	2.5	4.5	2.1	7.7	2.7	7.0	2.5	4.7	2.7	0.7	07787	11.0 psi (both) After well packers in RW1 and RW2 replaced RW1
10102 2 4 5 2 4 6 3/1 6/3 2/3	0/15/22	3.3+	4.1	3.2+	7.0	5.0	5.5	1.0	3.4	2.0	4./	2.0	4.0	3.0	7.0	2.6	7.7	2.1	5.0	1.5	3.3	08550	Timer has foiled. Burning on even hark only
97102 22 4.4 29 7.5 3.5 7.4 2.4 4.0 3.5 7.6 2.4 4.0 3.5 7.6 2.4 4.0 3.5 7.6 2.4 4.0 3.5 7.6 2.4 4.0 3.5 7.6 2.4 4.0 3.5 7.6 2.4 4.0 3.5 7.6 2.4 4.0 3.5 7.6 2.4 4.0 3.5 7.6 2.4 4.0 3.5 7.6 2.4 6.0 7.1 1.5 psi (cvcn), 1.2 psi (odd). 972722 2.2 4.0 2.5 7.5 3.7 6.6 2.2 4.6 2.6 8.1 2.8 8.1 2.5 5.2 2.4 6.9 -1 1.5 psi (cvcn), 11.5 psi (odd). Town much flow to bubbler. Adjustee 10/19/22 2.4 4.1 3.4 7.7 3.4 7.8 1.4 4.4 2.5 5.0 1.4 4.4 - 11.6 psi (cvcn), 11.3 psi (odd). Psi	9/10/22	-	- 20	-	- 7.5	-	- 75	-	-	-	- 25	2.9	4.0	3.7	0.0 7.0	3.0	7.9	2.0-	5.0	1.2+	4./	96550	Timer has failed. Running on even bank only. Rw1 packer has leak
92/22 2.4 4.4 2.9 4.0 7.4 2.4 6.4 7.4 2.4 6.4 7.4 2.4 6.4 2.7 8.2 7.5 2.5 5.2 2.4 6.9 7.4 1.2.0 psi (dva). Packer pressures topped off. ASW7 10/19/22 2.2+ 4.0 2.5+ 7.5 2.5 7.5 2.6 8.1 2.8 7.9 2.5 5.2 2.3 5.1 99346 12.5 psi (even, 11.5 psi (dva). Packer pressures topped off. ASW7 10/19/22 2.2+ 4.1 3.4 7.8 1.4 4.4 2.5 4.8 2.6 4.9 2.4 8.1 2.5 5.1 1.4 4.4 - 11.6 psi (even, 11.5 psi (even, 11.5 psi (dva). Tormuch flow to bubbler. Adjuster 10/21/22 2.2 4.1 3.4 7.5 3.4 7.5 2.1 8.1 2.5 5.0 2.5 6.9 99395 11.5 psi (even, 11.5 psi (dva). Normal flow to bubbler. Adjuster 12/16/22 2.3 3.9 3.1 7.5 3.4 7.5 2.1 8.1 2.5	9/10/22	2.4	3.0	3.0+	7.5	3.0+	7.5	2.4	0.2	2.4	3.5	2.4-	4.0	3.0	7.9	3.0-	0.0 7.0	2.4-	5.2	2.4	0.9	-	115 rei (surg.) 12.0 rei (add)
997/212 2.4* 4.0 2.5* 7.5 3.7 6.6 2.2 4.0 2.5 5.2 2.4 6.9 - 12.0 psi (even), 11.5 psi (odd). Packer pressure topped off. ASW / 10/19/22 10/19/22 2.4 4.1 3.4 7.7 3.4 7.8 1.4 4.4 2.5 4.6 2.6 8.1 2.8 8.1 2.5 5.1 99346 12.5 psi (even, 11.4 psi (odd). Too much due to ubbler. Adjusted 10/19/22 2.4 4.1 3.4 7.7 3.2 7.7 2.0 8.3 2.5 4.1 2.9 8.1 2.9 8.1 2.5 5.0 2.5 6.9 99395 11.5 psi (even, 11.4 psi (odd). Bubbler working 12/16/22 2.3 3.9 3.1 7.5 3.4 7.5 2.1 8.1 2.9 8.1 2.5 5.0 2.5 6.9 99395 11.5 psi (even, 11.3 psi (odd). Power out since 10/30/22 (main bree intracking lines to ASW7 and intracking line to asymete intradintracking line to asymete intracking line to	9/22/22	2.4	4.4	2.9	4.0?	3.4	7.4	2.2	8.4	2.4+	3.9	2.2	4.9	3.1+	8.0	3.2-	7.9	2.8-	5.0	2.4	0.9	-	11.5 psi (even), 12.0 psi (odd) 12.0 $(-1)^{-1}$ (1) p 1 (-1) (5 ASW7
1019/22 2.2+ 4.0 2.5 7.5 5.7 6.0 2.2 4.0 2.0 4.9 2.6 8.1 2.8 8.1 2.5 5.1 2.5 5.1 2.5 5.1 2.5 5.1 2.5 5.1 1.6 9546 12.5 psi (even n1.4 psi (add). 106 much now to bubber). Adjusted 10021/2 2.2 4.1 3.4 7.7 3.4 7.8 1.4 4.4 2.5 5.1 1.4 4.4 - 11.6 psi (even and od). Bubbler working 1021/2 2.2 4.1 3.0 7.7 3.4 7.8 3.2 5.4 9.9 8.1 2.9 8.1 2.5 5.0 2.5 6.9 99395 11.5 psi (even, 11.4 psi (add). Bubbler working 10.9 action baction ba	9/21/22	2.2+	4.0	2.9	7.4	3.2+	7.0	2.9	0.5	2.2+	4.0	2.7	5.0	2.8	7.9	2.7	0.2	2.5	5.2	2.4	0.9	-	12.0 psi (even), 11.5 psi (odd). Packer pressures topped off. AS w/
10/19/22 2.4 4.7 3.4 7.7 3.4 7.8 1.4 4.4 2.5 4.8 2.5 5.7 1.4 4.4 - 11.5 psi (even and odd). Bubbler working 10/21/22 2.2 4.1 3.0+ 7.7 3.2 7.7 2.0+ 8.3 2.5 4.9 2.9 8.1 2.5 5.0 2.5 6.9 99395 11.5 psi (even and odd). Bubbler working 12/16/22 2.3 3.9 3.1 7.5 3.4 7.5 2.1+ 8.1 2.9 4.1 2.6+ 4.7 2.4 7.9 3.0 8.1 2.5 4.8 2.6+ 6.8 99612 11.5 psi (even and odd). Reading after attaching lines to ASW7 and there attaching lines to ASW7 an	10/19/22	2.2+	4.0	2.5+	/.5	2.5	7.5	3./-	0.0	2.2	4.0	2.6	4.9	2.6	8.1	2.8	8.1	2.5	5.2	2.3	5.1	99346	12.5 psi (even, 11.4 psi (odd). Too much flow to bubbler. Adjusted
1021/2 2.2 4.1 3.0+ 7.7 3.2 7.7 2.0+ 8.3 2.5 4.9 2.9 8.1 2.9 8.1 2.5 6.9 99595 11.5 psi (even and odd). Reading after attaching lines to ASW and 12/16/22 12/16/22 2.3 3.9 3.1 7.5 3.4 7.5 2.1+ 8.1 2.9 4.1 2.6+ 6.8 99612 11.5 psi (even, 11.3 psi (even, 11.3 psi (odd). Power out since 10/30/22 (main breat inter has failed - wired norma DSL modem. Disassemble and reassemble logger body 1/28/23 2.4 3.6 7.4 1.8 8.0 3.6 2.5 4.7 2.1 7.9 2.9 7.8 3.6 4.8 2.3+ 6.7 100640 11.0 psi (even). Snow clearing. Main timer has failed - wired norma DSL modem. Disassemble and reassemble logger body 1/28/23 2.4 3.8 3.0 7.5 3.2 7.5 2.2 8.1 2.5 4.7 3.8 4.9 2.5 6.5 1002435 10.5 psi (even). Snow clearing. Main timer has failed - wired norma DSL modem. Disassemble logger body 1/28/23 2.5 4.5 2.6 7.6 2.4 7.7	10/19/22	2.4	4.1	3.4	/./	3.4	7.8	1.4	4.4	2.5	4.8	2.6	4.9	3.4+	8.2	3.4+	8.2	2.5	5.1	1.4	4.4	-	11.6psi (even and odd). Bubbler working
12/16/22 2.3 3.9 3.1 7.5 3.4 7.5 2.1 8.1 2.4 7.9 3.0 8.1 2.5 4.8 2.6+ 6.8 99612 11.5 psi (even), 11.3 psi (odd). Power out since 10/30/22 (main breaching the second property of the second property of the second property. Padlock hasp 1/28/23 2.2+ 3.6 2.8- 7.4 3.0 7.4 1.8 8.0 3.6 3.6 2.5- 4.7 2.1 7.9 2.9 7.8 3.6 4.8 2.3+ 6.7 100640 11.0 psi (even), 11.3 psi (odd). Power out since 10/30/22 (main breaching the second property	10/21/22	2.2	4.1	3.0+	7.7	3.2	7.7	2.0+	8.3	2.5	4.5	2.5	4.9	2.9-	8.1	2.9	8.1	2.5b	5.0	2.5	6.9	99395	11.5 psi (even and odd). Reading after attaching lines to ASW/ and
1/28/23 2.2+ 3.6 2.8- 7.4 3.0 7.4 1.8 8.0 3.6 3.6 2.5- 4.7 2.1 7.9 2.9 7.8 3.6 4.8 2.3+ 6.7 100640 11.0 psi (even). Snow clearing. Main time has failed - wired normal DSL modem. Disassemble and reassemble logger body 1/28/23 2.4 3.8 3.0 7.5 3.2 7.5 2.2 8.1 2.5 3.5 2.4 4.6 2.9 7.9 2.9 7.8 2.5 4.7 2.6 6.8 - After adjustments. Switching timer working properly. Padlock hasp 4/13/23 2.5 4.5 2.6 7.1 2.4 7.0 3.0 8.5 2.4 3.5 2.5 4.6 2.5 7.6 2.4 7.7 3.8 4.9 2.5 6.5 102435 10.5 psi (even). 11.5 psi (odd) 5/22/23 0	12/16/22	2.3	3.9	3.1	7.5	3.4-	7.5	2.1 +	8.1	2.9	4.1	2.6+	4.7	2.4	7.9	3.0	8.1	2.5	4.8	2.6+	6.8	99612	11.5 psi (even), 11.3 psi (odd). Power out since 10/30/22 (main brea
1/28/23 2.2+ 3.6 2.8- 7.4 1.8 8.0 3.6 3.6 2.5- 4.7 2.1 7.9 2.9 7.8 3.6 4.8 2.3+ 6.7 100640 DSL modem. Disassemble and reassemble logger body 1/28/23 2.4 3.8 3.0 7.5 3.2 7.5 2.2 8.1 2.5 3.5 2.4 4.6 2.9 7.9 2.9 7.8 2.5 4.7 2.6 6.8 - After adjustments. Switching timer working properly. Padlock hasp 4/13/23 2.5 4.5 2.6 7.1 2.4 7.0 3.0 8.5 2.4 3.5 7.6 2.4 7.7 3.8 4.9 2.5 6.5 102435 10.5 psi (even), 11.5 psi (odd) 5/22/23 0<	1/20/22		2.6	•		2.0		1.0	0.0	2.6	2.6				-	2.0	-	2.6	1.0		6.7	100640	11.0 psi (even). Snow clearing. Main timer has failed - wired normal
1/28/23 2.4 3.8 3.0 7.5 3.2 7.5 2.2 8.1 2.5 3.6 2.4 7.9 2.9 7.8 2.5 4.7 2.6 6.8 After adjustments. Switching timer working properly. Padlock hasp 4/13/23 2.5 4.5 2.6 7.1 2.4 7.0 3.0 8.5 2.4 3.5 2.5 7.6 2.4 7.7 3.8 4.9 2.5 6.5 102435 10.5 psi (even), 11.5 psi (odd) 5/22/23 0<	1/28/23	2.2+	3.6	2.8-	7.4	3.0	7.4	1.8	8.0	3.6	3.6	2.5-	4.7	2.1	7.9	2.9	7.8	3.6	4.8	2.3+	6.7	100640	DSL modem. Disassemble and reassemble logger body
4/13/23 2.5 4.5 2.6 7.1 2.4 7.0 3.0 8.5 2.4 3.5 2.5 4.6 2.5 7.6 2.4 7.7 3.8 4.9 2.5 6.5 102435 10.5 psi (even), 11.5 psi (odd) 5/22/23 0 <td>1/28/23</td> <td>2.4</td> <td>3.8</td> <td>3.0</td> <td>7.5</td> <td>3.2</td> <td>7.5</td> <td>2.2</td> <td>8.1</td> <td>2.5</td> <td>3.5</td> <td>2.4</td> <td>4.6</td> <td>2.9</td> <td>7.9</td> <td>2.9</td> <td>7.8</td> <td>2.5</td> <td>4.7</td> <td>2.6</td> <td>6.8</td> <td>-</td> <td>After adjustments. Switching timer working properly. Padlock hasp</td>	1/28/23	2.4	3.8	3.0	7.5	3.2	7.5	2.2	8.1	2.5	3.5	2.4	4.6	2.9	7.9	2.9	7.8	2.5	4.7	2.6	6.8	-	After adjustments. Switching timer working properly. Padlock hasp
5/22/23 0 </td <td>4/13/23</td> <td>2.5</td> <td>4.5</td> <td>2.6</td> <td>7.1</td> <td>2.4</td> <td>7.0</td> <td>3.0</td> <td>8.5</td> <td>2.4</td> <td>3.5</td> <td>2.5</td> <td>4.6</td> <td>2.5</td> <td>7.6</td> <td>2.4</td> <td>7.7</td> <td>3.8</td> <td>4.9</td> <td>2.5</td> <td>6.5</td> <td>102435</td> <td>10.5 psi (even), 11.5 psi (odd)</td>	4/13/23	2.5	4.5	2.6	7.1	2.4	7.0	3.0	8.5	2.4	3.5	2.5	4.6	2.5	7.6	2.4	7.7	3.8	4.9	2.5	6.5	102435	10.5 psi (even), 11.5 psi (odd)
6/27/23 0 </td <td>5/22/23</td> <td>0</td> <td>102582</td> <td>Electrical power disconnected before 4/25/23 due to building colaps</td>	5/22/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102582	Electrical power disconnected before 4/25/23 due to building colaps
6/27/23 0 </td <td></td> <td>Remove data logger battery and charge. Put chain and padlock on ga</td>																							Remove data logger battery and charge. Put chain and padlock on ga
a a	6/27/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	flagged. Try to locate soutwest property corner marker. Not found.
9/28/23 - </td <td></td> <td>gas line marked (yellow) Underground neuroring installed from brooker box on Ployer 2 sho</td>																							gas line marked (yellow) Underground neuroring installed from brooker box on Ployer 2 sho
10/5/23 - </td <td>9/28/23</td> <td>-</td> <td>LTE antenna installed. CR1000 data logger has lost some programm</td>	9/28/23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LTE antenna installed. CR1000 data logger has lost some programm
$\frac{10/5/23}{10/13/23}$	10/5/22																						Install recharged battery. Data logger software updated, program res
10/13/23 2.0 4.2 3.0 - 7.8 3.0 + 7.7 1.8 + 8.4 2.6 4.8 2.2 5.0 2.7 8.0 2.7 8.0 2.5 5.1 2.5 + 7.0 102585 Electrical power restored. Inspect equipment, Free stuck Odd switch Inspect rotate, and reinstall motor cooling fan. Start N.AIS. Initial restored in the start flowing. Sort out some loose wires on datalogger to get good restored in the start flowing. Sort out some loose wires on datalogger to get good restored in the start flowing. Sort out some loose wires on datalogger to get good restored in the start flowing. Sort out some loose wires on datalogger to get good restored in the start flowing. Sort out some loose wires on datalogger to get good restored in the start flowing. Sort out some loose wires on datalogger to get good restored in the start flowing.	10/5/23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	through LTE cellular service. Data recovered from S.AIS and E.AIS
$\begin{bmatrix} 10/13/23 \\ 2.0 \\ 4.2 \\ 3.0- \\ 7.8 \\ 3.0+ \\ 7.7 \\ 1.8+ \\ 8.4 \\ 2.6 \\ 4.8 \\ 2.2 \\ 5.0 \\ 2.7 \\ 8.0 \\ 2.7 \\ 8.0 \\ 2.7 \\ 8.0 \\ 2.5 \\ 5.1 \\ 2.5 \\ 7.0 \\ 102585$	10// 2020				_ ~				. ·					. –	0.5		0.5					100505	Electrical power restored. Inspect equipment, Free stuck Odd switch
	10/13/23	2.0	4.2	3.0-	7.8	3.0+	7.7	1.8+	8.4	2.6	4.8	2.2	5.0	2.7	8.0	2.7	8.0	2.5	5.1	2.5+	7.0	102585	Inspect rotate, and reinstall motor cooling fan. Start N.AIS. Initial ro- start flowing. Sort out some loose wires on datalogger to get good re
																<u> </u>							istant nowing. Soft out some loose wires on datalogger to get good re

Key on Page 3 of Table 3.

hours

6/24/21-4/13/23 658 15792 14609

100972-001, 38525 Swanson River Road, Sterling, Alaska

W7 and ASW8
ower restored
or with clean outlet filter (pond bubbler is attached)
11.8 psi (odd), pond bubbler running
d adjusting
epaired with help of Campbell Scientific
ewired timer to normally closed. (power is from SVE 120V breaker) mbered wells
m S.AIS (20.5psi @ 10 CFM) moved to N.AIS and greased. Switching
but not AS operation
and restarted after RW2 repairs
cut down 0.17', air line repaired, ASW7 & 8 on bubbler
ed down, pump to 36 psi.
onnected to wells
& 8 lines to bubbler
ASW8 (bubbler off). RW1 packer pulled, air leak repaired.
ker tampered with). Timer reprogrammed, data logger battery recovered
y closed for manual operation. Datalogger not communicating with
broke, gate closed with cable ties
e. System off
e. Look at potential meter base locations. Southeast property corner
stimated location staked. ASW7 underground line marked (white). Old
to planned location of new meter pole. CSI Cell 205 LTE router and ing. Need laptop to update and reinstall program.
ored. Work with Campbell Scientific to get data logger communicating loggers
ng solenoid, reset timers, grease compressor, install clean outlet filter.
ugh running smooths out, pressure increases. ASW4, 6, and 8 slow to
anneo

TABLE 3AIR SPARGE SYSTEM MONITORING LOG

			S	South 4	AS We	lls						
	RW16	RW7	R	W9	RV	W15	R	W3	RV	V12		
Date	CFM PSI	CFM PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	Hour Meter	Comments
6/24/21	closed	closed	2.6	6.1	3.0	6.2	2.6	7.5	2.8	5.7	57930	
9/9/21	closed	closed	3.2+	5.4	3.3	6.0	3.0	7.1	3.5	5.6	59236	8.9 psi. 21:00. Timer not working, no obvious failure point, battery at 9.46 volts. Continuous operation since 8/9/21
9/14/21	closed	closed	3.2	5.4	3.3	6.0	3.0	6.9	3.4	5.5	59351	8.7 psi. 17:20. Take Intermatic timer from SVE Blower 1, adapt to S.AIS. Battery has corroded connections - may not hol
9/19/21	closed	closed	-	-	-	-	-	-	-	-	-	Intermatic timer failed in off position late 9/14/21. Original timer re-installed and reprogrammed to 4 hr. on, 4 hr. off
11/3/21	closed	closed	3.3	5.4	3.3	6.2	2.9	7.1	3.5	5.50	59890	8.8 psi. 16:58. 4 hours on, 4 hours off
12/30/21	closed	closed	3.5-	5.2	3.6-	6.2	3.0	7.5	3.6	5.80	60571	RW15 had no flow. RW15 packer pulled, new air diffuser installed, reset. 8.9 psi. 19:35
2/7/22	closed	closed	3.3+	5.3	3.6+	5.9	3.0-	7.2	3.4	5.60	61035	8.6 psi. Snow clearing
7/19/22	closed	closed	3.5+	5.5	3.6+	6.2	3.2+	7.5	3.5-	6.10	62977	9.0 psi.
7/28/22	closed	closed	3.0 to	3.5 ps	si on th	e four	wells				63086	8.9 psi running compressor E2 before moving E2 to N.AIS
7/28/22	closed	closed	2.3	5.1	2.4	5.6	2.2	6.7	2.3+	4.7	-	8.2 psi running Compressor E1. Test of E1 = 10.5 psi at 10 CFM
8/15/22	closed	closed	-	-	-	-	-	-	-	-	-	Timer battery dead, failed in on mode. Battery replaced, wire patched, programmed for 4 hours on - 2 hours off.
9/16/22	closed	closed	2.2	5.4	2.5	5.7	2.3	7.1	2.6	5.2	64078	8.7 psi. New timer installed (4 hr. on, 2 hr. off), normally closed
9/22/22	closed	closed	2.2	5.5	2.4	5.9	2.0	6.9	2.3	4.9	-	8.4 psi.
9/27/22	closed	closed	2.3	5.6	1.9	10.0	2.2	7.2	2.3	4.7	-	9.0 psi.
10/19/22	closed	closed	2.4+	5.6	1 b	10.2	2.2	7.4	2.3	4.7	64605	10.7 psi. Try to blow out RW15
10/19/22	closed	closed	2.6	5.7	1 b	9.2	2.6	7.9	2.6	4.8	-	9.8 psi. After adjustments. Heat trace on 10/21/23
12/16/22	closed	closed	4.2	6.4	1.4	11.9	3.6	10.4	4.2	5.9	65532	12.6 psi after restart. Found with motor running, compressor not spinning, failure date unclear due to CR1000 power outag adjusted but lock tab is broken. Greased, cleaned filters installed
1/28/23	closed	closed	3.7+	6.0	0.0	12.1	3.7+	9.7	3.8	5.4	66216	12.9 psi. Spare compressor motor fan loose again. AC transformer for data logger bad, 8 volts in logger. Charge with seper
1/28/23	closed	closed	3.1	5.5	0.0	9.3	3.4	7.7	3.1	4.8	-	10.0 psi. Reading after swapping in rebuilt E1 compressor and removing Spare. New motor fan installed on Spare compres weeks
4/13/23	closed	closed	2.5	5.4	0.0	11.0	2.5	6.6	2.4	5.4	67413	9.6 psi. Data logger battery drained 3/7/23. Replacement AC adaptor installed. Voltage rises to 12.4volts.
5/22/23	closed	closed	-	-	-	-	-	-	-	-	-	System running, Well RW15 remains fouled, tried to pull out well packer without success
6/27/23	closed	closed	2.4	5.9	closed	ł	2.4	6.9	2.0	6.1	68609	12.0 psi.
6/27/23	closed	closed	2.8	6.0	closed	1	2.8	7.2	2.2+	7.0	-	10.7 psi after adjustments.
6/27/23	closed	closed	2.4	6.0	2.4	7.1	2.4	6.9	1.8 +	5.5	-	9.1 psi after successfully pulling RW15 well packer and replacing air diffuser
9/28/23	closed	closed	2.8	6.1	2.5	7.3	2.7	7.1	1.3	5.9	70098	9.5 psi. Tried higher pressure on RW12. Diffuser likely needs replacment
10/13/23	closed	closed	2.4	6.2	2.3	7.5	2.5	7.1	1.2+	5.8	70338	9.5 psi. Well packer air pressures checked and pumped up. RW12 packer pressure near 0 psi.
Key on Pa	age 3 of Table	2.					6/2- 9/16, 12/16,	Date rc 4/21-7, /22-10, /22-10,	unge /28/22 /19/22 /13/23	Days 399 33 301	Calendar hours 9576 792 7224	Meterhours515653.8 % of time running52766.6 % of time running480666.5 % of time running

ld up.
ge. <u>Spare</u> compressor installed. Fan for motor side rubbing on case, fan
rate battery charger
ssor. Data logger battery reinstalled at 13.8 volts - should run a few

]	East A	S Well	s													
	ASV	W10	ASV	W11	AS	W12	AS	W13	ASV	W14	ASV	W15	AS	W16	AS	W17	AS	W18	AS	W19	AS	W20	AS	W21	ASV	N22	AS	W23]
Date	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	CFM	PSI	Comments
6/3/21	1.5+	7.6	-	-	1.8 +	6.5	1.5	5.6	-	-	-	-	1.4	5.5	-	-	-	-	1.6-	6.4	-	-	1.7	5.2	1.6	5.6	-	-	Replace pressure gauge. 7.2
9/9/21	2.2^	-	1.0^	-	fog	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	^	-	-	-	1.2	-	Both blowers running, 8.5 p heat trace on. Needs drainin
9/14/21	1.9	-	1.9	-	1.8	-	1.4	-	-	-	-	-	1.4	-	-	-	-	-	1.3 +	-	-	-	not re	adable		-	1.1	-	8.1-8.2 psi. Compressor #1
9/20/21	1.1^	wet	cloudy	/	barely	reada	not re	adable	cloudy	y	readat	ole	cleane	ed	readal	ole	readal	ole	readat	ble	cleane	ed	cleane	ed	cleane	d	cleane	ed	Cleaned 5 flow meters, wrap leaks are gone. Old aluminu
9/20/21	0.0	7.2	1.8-	4.6	1.8	-	1.7	-	1.8	7.9	1.8	6.4	1.8	5.1	1.8-	5.4	1.8	5.6	1.7	6.2	1.7 +	4.5	1.8-	4.8	1.7+	6.4	1.8-	5.4	7.2 psi, 19:30. After changi
9/22/21	0.0	7.2					1.8-	5.5	-	-	-	-	-	-	-	-	-	-	1.8+	6.2	-	-	-	-	-	-	1.8-	5.4	7.2 psi, 17:05. Glass jars wo
11/3/21	0.0	7.2	1.8	4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	4.9	-	-	1.8	5.4	7.2 psi, 20:10
11/18/21	0.0	7.2	1.4	4.5	-	-	-	-	-	-	-	-	1.8	5.2	-	-	-	-	-	-	-	-	1.8-	4.9	-	-	1.8	5.4	7.4 psi, 19:25. Test Compre after restart. Install poorly r motors greased
12/30/21	1.1-	7.1	2.0-	4.2	2.0+	6.1	-	-	2.0	7.4	-	-	1.9	5.1	2.0	5.3	-	-	-	-	1.9	4.3	-	-	-	-	2.0-	5.4	7.4 psi, 18:45. Replace wea @ 10 CFM. Readings are a
2/7/22	1.1	6.8	1.7	4.9	1.9	7.5	-	-	1.9	7.5	-	-	-	-	2.0	5.1	-	-	-	-	2.0	5.2	-	-	-	-	2.1	5.0	7.5 psi total, 6.5 psi # 1, 6.2 start ASW10
7/19/22	2.2	7.5	2.0	4.5	-	-	-	-	-	-	-	-	1.6	5.5	1.8	5.6	-	-	-	-	-	-	-	-	1.9	7.0	1.8	5.5	8.0 psi total
9/16/22	1.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.0 psi, all flow balls rattling
9/22/22	1.4+	7.9	1.8 +	4.9	1.8	7.0	1.8	6.1	1.9	7.5	1.9+	7.0	1.7	5.5	1.8	5.9	2.0	6.0	2.0	6.5	1.9	4.9	1.8	5.0	1.9+	7.0	2.0	5.9	8.2 psi. Water drained from
1/28/23	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9+	5.8	8.0 psi. Data logger OK. Th
4/13/23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Snow depth makes replacing
5/22/23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.0 psi. Purged water from c
6/27/23	0.0	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9+	6.0	8.6 psi. Outer pump fan on c fan on compressor #1 failed. Replace #2 inlet filter with v grease for both compressors
9/28/23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.0 psi. 6 hour power outage
10/5/23	0.0	7.4	>0	5.0	>0	7.0	0^	5.9	1.4	8.5	1.2	6.8	<1	5.8	1.0	6.0	1.0+	6.0	0.0	6.6	>0	5.2	1.3+	5.4	0.0	7.0	1.1	6.2	7.6 psi. Compressor 1 has fa ASW13, 16, and 17. New o Clean filters installed and m
10/5/23	0.0	7.9	1.9+	5.4	1.6?	7.2	1.6^	6.2	1.8+	8.2	1.8+	7.0	1.7	5.9	1.8-	6.0	1.9+	6.1	1.9	6.6	1.9+	5.1	1.8	5.4	1.9-	7.0	1.8 +	6.1	8.6 psi. Spare compressor or
10/13/23	1.2-	7.6	1.8	7.3	-	-	1.8	6.2	-	-	-	-	-	-	-	-	1.8	7.0	-	-	-	-	-	-	-	-	1.7+	6.1	8.6 psi. Close southern half ASW12, 13 and 22 insulation

TABLE 3AIR SPARGE SYSTEM MONITORING LOG

KEY DESCRIPTION

CFM Cubic feet per minute

PSI Pounds per square inch

- Not measured/not determined

^ Water present in flowmeter (flow readings inaccurate)

b Flow surges - gauge 'bounces"

~ Approximate or estimated value

< or > Estimated flow less than or greater than reported number

1.8 Flow with line connected to pump and treat bubbler

2 psi, both compressors running. Change compressor #1 inlet filter.

osi. Both outlet cannisters leaking, minimal change with tightening. Turn ng and cleaning

seems weak. Heat trace removed water

pped spare glass outlet filter cannisters with Gorilla tape and installed um canisters are deformed.

ing outlet filters and adjusting. Total blower output is low. orking well

essor 1: 7.5 psi at 10 CFM. Try and test Compressor 2 - vanes break up rebuilt compressor from N.AIS with cleaned inlet and outlet filters. Both

ak compressor #1 with rebuilt compressor. Test compressor #2: 16.5 psi after restart.

2 psi # 2 (sounding rough). ASW10 had no flow, south wells closed to

g. Three riser covers are cracked.

north outlet (9/27 - water drained from RW10 flow meter)

hree small trees fallen around ASW14, but did not hit well heads

g broken well covers impractical. System running, balls rattling

drain valves, most wells have flow balls rattling. Fixed gate latch

compressor #2 failed. Replaced with fan from Spare compressor. Motor I. Replace with new black fan. Knock plastic dust out of #1 inlet filter. washed filter. Cleanup plastic shivings in shed. Clean outlet filters and

e 8/30 to 8/31/23. Flow balls rattling at most wellheads

failed, motor running. Clear 3 fallen trees. Replace cracked well covers at outer cooling fan installed and Spare compressor installed in #1 position. notor greased.

nly = 8.0 psi. Drained water from ASW13 line, but it reformed.

of wells to get ASW10 flowing, open and check. Woven bags added to on

SHANNON & WILSON, INC.

TABLE 4 - 2021 PUMP AND TREAT SYSTEM ANALYTICAL RESULTS

						WATER		
	Analyte*:	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	Gallons of	
		(AK101)	(SW8021B)	(SW8021B)	(SW8021B)	(SW8021B)	Water in	
Sample ID	Date	mg/L	mg/L	mg/L	mg/L	mg/L	Holding Tank	Description
ADEC	Cleanup Level	2.2	0.0046	1.10	0.015	0.019	-	Standard for groundwater
-	5/4/2021	-	-	-	-	-	est. 750	System startup. 7.88 ft. initial depth to water in holding tank
UV11	5/6/2021	40.8	2.71	5.89	0.942	7.89	1,473	Groundwater from UST Vent, about 725 gal. pumped
UV12	6/03/21	79.8	5.50	14.1	1.90	16.7	15,050	Groundwater from UST Vent. Aeration bubbler started
-	6/12/21	-	-	-	-	-	17,676	Tank full to float switch
HT11	6/24/21	0.125	0.00581	0.0117	0.00157	0.0127	17,527	Water in holding tank, tank full to float switch
TWD11	6/24/21	0.0432 J	0.000230 J	0.000340 J	< 0.000500	< 0.00150	17,526	Post-treatment water at Well MW4, about 150 gallons drained. Aeration
	7/00/01							stopped
-	//09/21	-	-	-	-	-	2,457	Start refilling holding tank, restart aeration
-	9/08/21	-	-	-	-	-	17,675	Tank full to float switch
HT12	9/09/21	2.35	0.236	0.614	0.0327	0.373	17,675	Water in holding tank, tank full to float switch
TWD12	9/09/21	0.341	0.044	0.0775	0.00451	0.0520	17,235	Post-treatment water at Well MW4 after draining ~440 gallons
-	9/14/21	-	-	-	-	-	0	Start refilling holding tank. Very little water left after draining.
-	9/22/21	-	-	-	-	-	~2450	Aeration bubbler started
UV13	10/07/21	63.4	4.31	11.1	1.49	13.3	4,079	Groundwater from UST Vent at holding tank. Bubbler adjusted Short power outage 9/29/21. Grooundwater pump did not restart. Rewired corroded pump head leads
HT13	11/03/21	4.20	0.317	0.707	0.0713	0.902	9,796	Water in holding tank before starting to drain tank through filter and GAC to MW4. Aeration stopped
TWD13	11/03/21	1.90	0.129	0.259	0.0261	0.324	9,684	Post-treatment water at Well MW4 after draining ~112 gallons
-	11/06/21	-	-	-	-	-	<15	Tank drained for season. GAC sampled for disposal
Average con groundwat	centration in ter (mg/L)	61	4.2		Total Volume Pu	mped (gallons):	41,940	Estimated from water depths and tank dimensions
				N	Mass of GRO Ren	noved (pounds):	21	Estimated from three Sample UVxx results and volume pumped
				Mas	s of Benzene Ren	noved (pounds):	1.5	Estimated from three Sample UVxx results and volume pumped

KEY	DESCRIPTION
*	See laboratory report for methods, compounds tested, and
	laboratory reporting limits
<0.0500	Analyte not detected; laboratory limit of detection of 0.0500
<0.0500	mg/L
mg/L	Milligrams per liter
80 Q	Concentration exceeds the 18 AAC 75.345 (October 2023)
80.0	groundwater cleanup level
т	Estimated concentration less than the limit of quantitation and
J	greater than the detection limit
~	Approximate value
-	Not applicable or sample not tested for this analyte



TABLE 5 - 2022 PUMP AND TREAT SYSTEM ANALYTICAL RESULTS

						WATER		
	Analyte*:	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	Gallons of	
		(AK101)	(SW8021B)	(SW8021B)	(SW8021B)	(SW8021B)	Water in	
Sample ID	Date	mg/L	mg/L	mg/L	mg/L	mg/L	Holding Tank	Description
ADEC	Cleanup Level	2.2	0.0046	1.10	0.015	0.019	-	Standard for groundwater
_	7/28/2022	_	_	_	_	_	0	System startup. Water at 7.40 feet below top of infiltration gallery (UST
_	1/20/2022	_	_	_	_	_	0	vent) casing (USTV DTW)
UV21	8/15/2022	62.2	3.72	9.79	1.69	13.6	8.380	Groundwater pumped from UST Vent. Pond bubbler aeration started.
0.121	0,10,2022				1105	1010	0,000	USTV DTW 10.57'
HT21	9/16/22	< 0.0500	< 0.000250	< 0.000500	< 0.000500	< 0.00150	18.139	Tank full to float switch (8/30). Multiple rust hole found in GAC drum.
							-,	Stopped draining tank. Aeration stopped. USTV DTW 6.72
TWD21	9/22/22	< 0.0500	< 0.000250	< 0.000500	< 0.000500	< 0.00150	18,040	Plastic drum for GAC (new GAC). Difficulties sealing lid. 2 gpm
								discharge
UV22	9/27/22	97.2	9.48	19.8	1.89	13.3	~10	Tank empty. Start refilling holding tank. Sample 15 min. after startup.
	10/04/22							USTV DTW 6.95
UV23	10/04/23	86.6	6.56	15.9	1.97	14.8	?	Groundwater from UST vent. Aeration started
HT22	10/19/22	4.38	0.664	0.810	0.0555	0.893	15.300	Water in holding tank before starting to drian tank. Bubbler running hard
	10/13/22			0.010	0.0000	0.050	10,000	- reset to low flow. USTV DTW 8.91'
TWD22	10/19/22	< 0.0500	< 0.000200	< 0.000500	< 0.000500	< 0.00150	14,975	Post-treatment water at Well MW4 after draining ~325 gallons
-	10/21/22	-	-	-	-	-	~0	Tank drained, system dimantled for season
Average con	centration in							
groundwat	ter (mg/L)	82	6.6		Total Volume Pu	mped (gallons):	33,429	Estimated from water depths and tank dimensions
~	× ·		-	Ν	Aass of GRO Ren	noved (pounds):	23	Estimated from three Sample UVxx results and volume pumped
				Mas	s of Benzene Ren	noved (pounds).	1.8	Estimated from three Sample UVxx results and volume pumped
				ivius	s of Benzene Ren	novea (pounds).	1.0	Estimated from thee Sample e that results and volume pumped

KEY DESCRIPTION

*	See laboratory report for methods, compounds tested, and
	laboratory reporting limits
0.0500	Analyte not detected; laboratory limit of detection of 0.0500
< 0.0500	mg/L
mg/L	Milligrams per liter
00.0	Concentration exceeds the 18 AAC 75.345 (October 2023)
80.0	groundwater cleanup level
т	Estimated concentration less than the limit of quantitation and
J	greater than the detection limit

~ Approximate value

- Not applicable or sample not tested for this analyte





LEGEND
DRINKING WATER WELL
RECOVERY WELL LOCATION
MONITORING WELL LOCATION (N = NESTED WELL SET)
2009 ORC PILOT STUDY WELLS (re-injected in 2011)
AIR SPARGE WELLS
DUAL VAPOR EXTRACTION/AIR SPARGE WELLS
POTENTIOMETRIC GROUNDWATER ELEVATION IN FEET (based on May 5, 2021 measurements)
APPROXIMATED BENZENE CONCENTRATION IN mg/L 6 ("?" notes greatest degree of interpolation) This is an estimate and should not be relied on for water consumption and/or other use. See Note 2
2011 ORC INJECTION TRANSECT

1. Property boundaries and parcel identifications are based on the Kenai Peninsula Borough (KBP) Parcel Viewer. Property boundaries should be considered approximate and are only shown for informational purposes.

2. Benzene concentration contours are based on the latest results for each well, weighted towards results from the May 2021 samples. See text and tables of Fiscal Year 2021 Shannon & Wilson monitoring report for data used to generate this map. Concentrations are in milligrams per liter and boundaries are approximate.



SHANNON & WILSON, INC.

APPENDIX A

FIELD PHOTOS

100972-001



Photo 1: The former Sterling ZipMart convenience store building after collapsing under snow load, looking northwest. The electric meters were on the steel cabinet that has pulled away from the wall leaving an unpainted area at the far left. The lighter colored cabinet remaining on the wall is the telephone connection. (May 23, 2023)



Photo 2: Conduit for underground electrical line placed in trench, looking west along the south boundary of the ZipMart lot. The worker is standing at the planned location of a new meter pole. (September 28, 2023)





Photo 4: Data logger cabinet on the inside east wall of the N.AIS shed, with the old DSL modem removed and the new LTE router installed above the RF401 radio communication unit. (September 28, 2023)



SHANNON & WILSON, INC.

APPENDIX B

RESULTS OF ANALYTICAL TESTING BY

SGS NORTH AMERICA INC.

SGS				This pag Order 1 included	e extrac 21222 da d in FY20	ted from th ata package 21 Monitor	e Work that was ing report
Results of 100972-UV11							
Client Sample ID: 100972-UV11 Client Project ID: 100972-001 Sterling Lab Sample ID: 1212222014 Lab Project ID: 1212222	C R M Si						
Results by Volatile Fuels			_				
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 40.8	<u>LOQ/CL</u> 5.00	<u>DL</u> 1.55	<u>Units</u> mg/L	<u>DF</u> 50	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzec</u> 05/11/21 22:17
urrogates 4-Bromofluorobenzene (surr)	87.4	50-150		%	50		05/11/21 22:17
Batch Information Analytical Batch: VFC15578 Analytical Method: AK101 Analyst: MDT Analytical Date/Time: 05/11/21 22:17 Container ID: 1212222014-A		F F F	Prep Batch: Prep Methoo Prep Date/T Prep Initial V Prep Extract	VXX37024 d: SW5030B ime: 05/11/2 Vt./Vol.: 5 m : Vol: 5 mL	21 06:00 L		
						Allowable	
Parameter -	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Benzene	2710	25.0	7.50	ug/L	50		05/11/21 22:1
	942	50.0	15.5	ug/L	50		05/11/21 22:1
	2400	50.0 100	15.5	ug/L	50		05/11/21 22.1
	5490	50.0	15.5	ug/∟	50		05/11/21 22.1
Xylenes (total)	7890	150	46.5	ug/L	50		05/11/21 22:1
urrogates							
1,4-Difluorobenzene (surr)	88.9	77-115		%	50		05/11/21 22:1
Batch Information							
Analytical Batch: VFC15578 Analytical Method: SW8021B Analyst: MDT Analytical Date/Time: 05/11/21 22:17 Container ID: 1212222014-A		F F F F	Prep Batch: Prep Method Prep Date/T Prep Initial V Prep Extract	VXX37024 d: SW5030B ime: 05/11/2 Vt./Vol.: 5 m : Vol: 5 mL	21 06:00 L		
rint Date: 05/28/2021 10:10:29AM						J flaggin	n is activated

SGS North America Inc.

200 West Potter Drive Anchorage, AK 95518 t 907.562.2343 f 907.561.5301 www.us.sgs.com



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Ste. 3 Anchorage, AK 99518 (907)433-3215

Report Number: 1213010

Client Project: 100972-001 Sterling Zip Mart

Dear Randy Hessong,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 06/15/2021 3:43:33PM

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Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1213010 Project Name/Site: 100972-001 Sterling Zip Mart Project Contact: Randy Hessong

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. e integrated per SOP.

Print Date: 06/15/2021 3:43:38PM

Note:



Sample Summary									
<u>Client Sample ID</u> 100972-UV12	<u>Lab Sample ID</u> 1213010001	<u>Collected</u> 06/03/2021	<u>Received</u> 06/04/2021	<u>Matrix</u> Water (Surface, Eff., Ground)					
<u>Method</u> AK101	<u>Method Des</u> AK101/8021	<u>cription</u> Combo.							
SW8021B	AK101/8021	Combo.							

Print Date: 06/15/2021 3:43:40PM



Detectable Results Summary

Client Sample ID: 100972-UV12 Lab Sample ID: 1213010001 Volatile Fuels

<u>Parameter</u>	Result	<u>Units</u>
Benzene	5500	ug/L
Ethylbenzene	1900	ug/L
Gasoline Range Organics	79.8	mg/L
o-Xylene	5130	ug/L
P & M -Xylene	11500	ug/L
Toluene	14100	ug/L
Xylenes (total)	16700	ug/L

Print Date: 06/15/2021 3:43:42PM

SGS North America Inc.

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545							
Results of 100972-UV12							
Client Sample ID: 100972-UV12 Client Project ID: 100972-001 Sterling Lab Sample ID: 1213010001 Lab Project ID: 1213010	Collection Date: 06/03/21 17:10 Received Date: 06/04/21 15:15 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:						
Results by Volatile Fuels			_				
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 79.8	<u>LOQ/CL</u> 10.0	<u>DL</u> 3.10	<u>Units</u> mg/L	<u>DF</u> 100	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/11/21 00:06
Surrogates							
4-Bromofluorobenzene (surr)	81.1	50-150		%	100		06/11/21 00:06
Batch Information							
Analytical Batch: VFC15643 Analytical Method: AK101 Analyst: MDT Analytical Date/Time: 06/11/21 00:06 Container ID: 1213010001-A			Prep Batch: Prep Methoc Prep Date/T Prep Initial V Prep Extract	VXX37206 d: SW5030B ime: 06/10/2 Vt./Vol.: 5 m : Vol: 5 mL	21 06:00 L		
Parameter Benzene	Result Qual	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	Date Analyzed
Ethylbenzene	1900	100	31.0	ug/L	100		06/13/21 18:19
o-Xylene	5130	100	31.0	ug/L	100		06/13/21 18:19
P & M -Xylene	11500	200	62.0	ug/L	100		06/13/21 18:19
Toluene	14100	100	31.0	ug/L	100		06/13/21 18:19
Xylenes (total)	16700	300	93.0	ug/L	100		06/13/21 18:19
Surrogates							
1,4-Difluorobenzene (surr)	97.1	77-115		%	100		06/13/21 18:19
Batch Information							
Analytical Batch: VFC15652 Analytical Method: SW8021B Analyst: IJV Analytical Date/Time: 06/13/21 18:19 Container ID: 1213010001-A			Prep Batch: Prep Methoc Prep Date/T Prep Initial V Prep Extract	VXX37229 d: SW5030B ime: 06/13/2 Vt./Vol.: 5 m : Vol: 5 mL	21 06:00 L		
						J flaggin	a is activated

COC

SGS Method Blank		·				
Blank ID: MB for HBN 18206 Blank Lab ID: 1615624	Blank ID: MB for HBN 1820634 [VXX/37206] Blank Lab ID: 1615624		Matrix: Water (Surface, Eff., Ground)			
QC for Samples: 1213010001						
Results by AK101]				
Parameter	<u>Results</u>	LOQ/CL	<u>DL</u>	Units		
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L		
Surrogates 4-Bromofluorobenzene (surr)	84.2	50-150		%		
Batch Information						
Analytical Batch: VFC15643 Analytical Method: AK101 Instrument: Agilent 7890 PIE Analyst: MDT Analytical Date/Time: 6/10/2	/FID 021 8:14:00AM	Prep Ba Prep Me Prep Da Prep Init Prep Ex	tch: VXX37206 ethod: SW5030B tte/Time: 6/10/20 tial Wt./Vol.: 5 mL tract Vol: 5 mL	21 6:00:00AM L		

Print Date: 06/15/2021 3:43:45PM

-



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213010 [VXX37206] Blank Spike Lab ID: 1615625 Date Analyzed: 06/10/2021 09:08 Spike Duplicate ID: LCSD for HBN 1213010 [VXX37206] Spike Duplicate Lab ID: 1615626 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213010001

Results by AK101									
		Blank Spike (mg/L)			Spike Duplicate (mg/L)				
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	0.921	92	1.00	0.890	89	(60-120)	3.50	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		87	0.0500		88	(50-150)	0.94	
Batch Information									
Analytical Batch: VFC15643				Prep	Batch: V	XX37206			
Analytical Method: AK101				Prep	Method:	SW5030B			
Instrument: Agilent 7890 PID/FID				Prep Date/Time: 06/10/2021 06:00					
Analyst: MDT				Spik	e Init Wt./\	/ol.: 1.00 mg	g/L Extract \	Vol: 5 mL	
				Dup	e Init Wt./\	/ol.: 1.00 mg	g/L Extract V	ol: 5 mL	

Print Date: 06/15/2021 3:43:50PM

SGS

Method Blank

Blank ID: MB for HBN 1820791 [VXX/37229] Blank Lab ID: 1616180

QC for Samples: 1213010001

Results by SW8021B

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
Toluene	0.500U	1.00	0.310	ug/L
Xylenes (total)	1.50U	3.00	0.930	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	93.8	77-115		%

Batch Information

Analytical Batch: VFC15652 Analytical Method: SW8021B Instrument: Agilent 7890A PID/FID Analyst: IJV Analytical Date/Time: 6/13/2021 11:51:00AM

Prep Batch: VXX37229 Prep Method: SW5030B Prep Date/Time: 6/13/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 06/15/2021 3:43:53PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213010 [VXX37229] Blank Spike Lab ID: 1616181 Date Analyzed: 06/13/2021 12:27 Spike Duplicate ID: LCSD for HBN 1213010 [VXX37229] Spike Duplicate Lab ID: 1616182 Matrix: Water (Surface, Eff., Ground)

Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

QC for Samples: 1213010001

Results by SW8021B

		Blank Spike (ug/L) Spike Duplicate (ug/L)							
Parameter_	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CI
Benzene	100	106	106	100	113	113	(80-120)	5.90	(< 20)
Ethylbenzene	100	93.0	93	100	95.2	95	(75-125)	2.30	(< 20)
o-Xylene	100	95.3	95	100	97.4	97	(80-120)	2.30	(< 20)
^o & M -Xylene	200	188	94	200	193	96	(75-130)	2.30	(< 20)
oluene	100	97.9	98	100	99.0	99	(75-120)	1.10	(< 20)
(ylenes (total)	300	284	95	300	290	97	(79-121)	2.30	(< 20)
rrogates									
,4-Difluorobenzene (surr)	50		99	50		100	(77-115)	0.38	
Batch Information									
Analytical Batch: VFC15652				Pre	p Batch: V	XX37229			
Analytical Method: SW80211	В			Pre	p Method:	SW5030B			
Instrument: Agilent 7890A F	PID/FID			Pre	p Date/Tim	e: 06/13/202	21 06:00		
Analyst: IJV				Spi	ke Init Wt./\	Vol.: 100 ug/	L Extract V	ol: 5 mL	

Print Date: 06/15/2021 3:43:59PM

Laboratory <u>5 G 5 Race of ot</u> Attn: <u>Jac 847 a cora g e</u> ontainer Description if used)	3 Water Litely high	Signature: Time: Printed Name: Date: Printed Name: Date: Signature: Time: Signature: Time: Signature: Date: Polytic Name: Date: Company: Date: Altoritie Date:	1.9 Det No. 35100
OF-CUSTODY RECORD	× × ×	Relinquished By: Thelinquished By: Relinquished By: Time: Signature: Time: Zarady Printed Name: Printed Name: Date: Signature: Time: Signature: Time: Signature: Time: Signature: Printed Name:	A#33487120
BHANNON & WILSON, INC. CHAIN-G Geotechnical and Environmental Consultants CHAIN-G Geotechnical and Environmental Consultants 2705 Saint Andrews Loop, 8146-3564 A 98103 \$1. Louis, MO 63146-3564 A 99709 \$1. Louis, MO 63146-3564 A 99709 \$5430 Fairbanks Street, Suite 3 Anchorage, AK 99518 \$509) 946-6309 O600 1321 Barnock Street, Suite 2 Ins Way, Suite 100 1321 Barnock Street, Suite 200 Derver, CO 80204 Derver, CO 80204	Date Date Date Sample dentityDate Date SampledSample IdentityLab No.TimeSampled $72 - UVI2$ $OA-C$ $17:10$ $6/3/2i$	oject Information Sample Receipt Number: 100 マアス ~ Total Number of Containers Name: Strulus Zig Mart COC Seals/Intact? Y/N/NA Name: Strulus Zig Mart COC Seals/Intact? Y/N/NA Received Good Cond./Cold g Project? Yes 図 No □ Delivery Method: f: Rands Hesson 9 Received Good Cond./Cold g Project? Yes 図 No □ Delivery Method: f: Rands Hesson 9 III, if any) f: Rands Hesson 9 III, if any) f: Rands Hesson 9 Received Good Cond./Cold g Project? Yes 図 No □ Delivery Method: f: Rands Hesson 9 Nilson wilson wilson wilson wilson wilson wilson files	Hink - Shannon & Wilson - Job File
	Image: Stand Shannon & WLSON, INC. CHAIN-OF-CUSTODY RECORD Laboratory SG5 Page of an anomy of a	Elements of a contract of	

1213010

e-Samj	ple	Receip	ot	Form

1213010

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Poviou: Oritoria	Densities of			Evecation			U
	Condition (Yes,	NO, N/A		Exception	IS NOTED I	Delow	
Chain of Custody / Temperature Requi	irements	Y	es Exemp	tion permitted	it sampler h	and carries/deliv	/ers.
Were Custody Seals intact? Note # &	location No	Absent Ha	nd Deliver	ed			
COC accompanied sa	amples? Yes						
DOD: Were samples received in COC corresponding of	coolers? N/A						
N/A **Exemption permitted if	chilled & colle	cted <8 hou	irs ago, or	for samples wh	nere chilling	is not required	
Temperature blank compliant* (i.e., 0-6 °C after	er CF)? Yes	Cooler ID:		1	@ 1.	9 °C Therm. ID:	D64
		Cooler ID:		(0	°C Therm. ID:	
If samples received without a temperature blank, the "cooler temperature" wil	ll be	Cooler ID:		(@	°C Therm. ID:	
be noted if neither is available.		Cooler ID:		(@	°C Therm. ID:	
		Cooler ID:		(@	°C Therm. ID:	
*If >6°C, were samples collected <8 hours	s ago? N/A						
If <0°C, were sample containers ice	e free?						
Note: Identify containers received at non-compliant tempe	erature .						
Use form FS-0029 if more space is n	needed.						
Holding Time / Documentation / Sample Condition R	equirements	Note: Refer t	o form F-083	3 "Sample Guide	" for specific h	olding times.	
Were samples received within holding	g time? Yes						
		-					
Do samples match COC** (i.e., sample IDs, dates/times colle	ected)? Yes						
**Note: If times differ <1hr, record details & login per C	COC.						
***Note: If sample information on containers differs from COC, SGS will default to	COC information						
Were analytical requests clear? (i.e., method is specified for an	nalyses Yes						
with multiple option for analysis (Ex: BTEX,	Metals)						
		Y	es ***Exer	nption permitte	ed for metals	s (e.g.200.8/602	0B).
Were proper containers (type/mass/volume/preservative***	*)used?						<u> /:</u>
Volatile / LL-Ho Reo	uirements						
Were Trip Blanks (i.e., VOAs, LL-Ha) in cooler with sa	mples? No	No Trip Bl	ank per C(C			
Were all water VOA vials free of headspace (i.e., bubbles <	6mm)? Yes	-					
Were all soil VOAs field extracted with MeOH	+BEB? N/A						
			rd propod	roo and marks	nnost data	u olity	
Note to Chefit: Any No , answer above indicates no	on-compliance	with standal	lu procedu	res and may In	npact data d	uality.	
Additiona	al notes (if a	pplicable)):				

SGS



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition
1213010001-A	HCL to $pH < 2$	ОК			
1213010001-B	HCL to $pH < 2$	ОК			
1213010001-C	HCL to $pH < 2$	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Ste. 3 Anchorage, AK 99518 (907)433-3215

Report Number: 1213713

Client Project: 100972-001 Sterling Zip Mart

Dear Randy Hessong,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 07/09/2021 4:48:02PM

SGS North America Inc.

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Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1213713 Project Name/Site: 100972-001 Sterling Zip Mart Project Contact: Randy Hessong

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 07/09/2021 4:48:04PM

SGS North America Inc.

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. e integrated per SOP.

Print Date: 07/09/2021 4:48:06PM

Note:



	:	Sample Summary	,	
<u>Client Sample ID</u> 100972-HT11 100972-TWD11	<u>Lab Sample ID</u> 1213713001 1213713002	<u>Collected</u> 06/24/2021 06/24/2021	<u>Received</u> 06/25/2021 06/25/2021	<u>Matrix</u> Water (Surface, Eff., Ground) Water (Surface, Eff., Ground)
<u>Method</u> AK101 SW8021B	<u>Method Des</u> AK101/802 ⁷ AK101/802 ⁷	<u>scription</u> I Combo. I Combo.		

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Detectable Result	s Summary
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Client Sample ID: 1009/2-H111			
Lab Sample ID: 1213713001	Parameter	Result	<u>Units</u>
Volatile Fuels	Benzene	5.81	ug/L
	Ethylbenzene	1.57	ug/L
	Gasoline Range Organics	0.125	mg/L
	o-Xylene	3.98	ug/L
	P & M -Xylene	8.71	ug/L
	Toluene	11.7	ug/L
	Xylenes (total)	12.7	ug/L
Client Sample ID: 100972-TWD11			
Lab Sample ID: 1213713002	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Volatile Fuels	Benzene	0.230J	ug/L
	Gasoline Range Organics	0.0432J	mg/L
	Toluene	0.340J	ug/L

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Results of 100972-HT11							
Client Sample ID: 100972-HT11 Client Project ID: 100972-001 Sterling Lab Sample ID: 1213713001 Lab Project ID: 1213713	y Zip Mart	C R M S L	Collection Da Received Dat Iatrix: Water Polids (%): ocation:	te: 06/24/ te: 06/25/2 (Surface,	21 15:10 21 17:19 Eff., Gro	und)	
Results by Volatile Fuels			_				
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 0.125	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 07/02/21 21:16
Surrogates							
4-Bromofluorobenzene (surr)	92.9	50-150		%	1		07/02/21 21:16
Batch Information							
Analytical Batch: VFC15692 Analytical Method: AK101 Analyst: MDT Analytical Date/Time: 07/02/21 21:16 Container ID: 1213713001-A			Prep Batch: \ Prep Method: Prep Date/Tir Prep Initial W Prep Extract \	VXX37369 SW5030B ne: 07/02/2 t./Vol.: 5 m Vol: 5 mL	8 21 06:00 IL		
<u>Parameter</u> Benzene	<u>Result Qual</u> 5.81	<u>LOQ/CL</u> 0.500	<u>DL</u> 0.150	<u>Units</u> ug/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	Date Analyzed 07/02/21 21:16
Ethylbenzene	1.57	1.00	0.310	ug/L	1		07/02/21 21:16
o-Xylene	3.98	1.00	0.310	ug/L	1		07/02/21 21:16
P & M -Xylene	8.71	2.00	0.620	ug/L	1		07/02/21 21:16
Toluene	11.7	1.00	0.310	ug/L	1		07/02/21 21:16
Xylenes (total)	12.7	3.00	0.930	ug/L	1		07/02/21 21:16
Surrogates							
1,4-Difluorobenzene (surr)	102	77-115		%	1		07/02/21 21:16
Batch Information							
Analytical Batch: VFC15692 Analytical Method: SW8021B Analyst: MDT Analytical Date/Time: 07/02/21 21:16 Container ID: 1213713001-A			Prep Batch: \ Prep Method: Prep Date/Tir Prep Initial W Prep Extract \	VXX37369 SW5030E ne: 07/02/2 t./Vol.: 5 m Vol: 5 mL	3 21 06:00 IL		
Print Date: 07/09/2021 4:48:11PM						J flaggin	g is activated

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Results of 100972-TWD11							
Client Sample ID: 100972-TWD11 Client Project ID: 100972-001 Sterling Lab Sample ID: 1213713002 Lab Project ID: 1213713	g Zip Mart	C R M S	ollection Da eceived Dat latrix: Water olids (%): ocation:	te: 06/24/ te: 06/25/2 (Surface,	21 15:25 21 17:19 Eff., Gro	und)	
Results by Volatile Fuels]				
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 0.0432 J	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 07/02/21 21:33
Surrogates							
4-Bromofluorobenzene (surr)	86.3	50-150		%	1		07/02/21 21:33
Batch Information							
Analytical Batch: VFC15692 Analytical Method: AK101 Analyst: MDT Analytical Date/Time: 07/02/21 21:33 Container ID: 1213713002-A			Prep Batch: \ Prep Method: Prep Date/Tir Prep Initial W Prep Extract \	VXX37369 SW5030B ne: 07/02/2 't./Vol.: 5 m Vol: 5 mL	3 21 06:00 IL		
Parameter	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Allowable</u> <u>Limits</u>	Date Analyzed
Benzene	0.230 J	0.500	0.150	ug/L	1		07/02/21 21:33
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		07/02/21 21:33
o-Xylene	0.500 U	1.00	0.310	ug/L	1		07/02/21 21:33
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		07/02/21 21:33
Toluene	0.340 J	1.00	0.310	ug/L	1		07/02/21 21:33
Xylenes (total)	1.50 U	3.00	0.930	ug/L	1		07/02/21 21:33
Surrogates							
1,4-Difluorobenzene (surr)	101	77-115		%	1		07/02/21 21:33
Batch Information							
Analytical Batch: VFC15692 Analytical Method: SW8021B Analyst: MDT Analytical Date/Time: 07/02/21 21:33 Container ID: 1213713002-A		i i i i i i i i i i i i i i i i i i i	Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract	VXX37369 : SW5030B ne: 07/02/2 (t./Vol.: 5 m Vol: 5 mL	3 21 06:00 IL		
Print Date: 07/09/2021 4:48:11PM						J flaggin	q is activated

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SGS Method Blank	1
Blank ID: MB for HBN 1821967 [VXX/37369] Blank Lab ID: 1621672	Matrix: Water (Surface, Eff., Ground)
QC for Samples: 1213713001, 1213713002	

Results by AK101					
Parameter Gasoline Range Organics	<u>Results</u>	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> ma/l	
Surrogates	0.00000	0.100	0.0010	ing/L	
4-Bromofluorobenzene (surr)	52	50-150		%	
Batch Information					
Analytical Batch: VFC15692 Analytical Method: AK101 Instrument: Agilent 7890A PI Analyst: MDT Analytical Date/Time: 7/2/202	D/FID 21 11:20:00AM	Prep Bat Prep Mel Prep Dat Prep Initi Prep Exti	ch: VXX37369 hod: SW5030E e/Time: 7/2/202 al Wt./Vol.: 5 m ract Vol: 5 mL	21 6:00:00AM L	

Print Date: 07/09/2021 4:48:13PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213713 [VXX37369] Blank Spike Lab ID: 1621677 Date Analyzed: 07/02/2021 10:43 Spike Duplicate ID: LCSD for HBN 1213713 [VXX37369] Spike Duplicate Lab ID: 1621678 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213713001, 1213713002

Results by AK101									
	ŀ	Blank Spike	e (mg/L)	S	pike Dupli	cate (mg/L)			
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.15	115	1.00	1.12	112	(60-120)	2.90	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		100	0.0500		101	(50-150)	0.42	
Batch Information									
Analytical Batch: VFC15692 Analytical Method: AK101				Prep Prep	Batch: V Method:	XX37369 SW5030B			
Instrument: Agilent 7890A Pl Analyst: MDT	D/FID			Prep Spik Dup	o Date/Tim e Init Wt./\ e Init Wt./\	e: 07/02/202 /ol.: 1.00 mg /ol.: 1.00 mg	2 1 06:00 g/L Extract \ g/L Extract V	Vol: 5 mL ol: 5 mL	

Print Date: 07/09/2021 4:48:15PM

SGS

Method Blank

Blank ID: MB for HBN 1821967 [VXX/37369] Blank Lab ID: 1621672

QC for Samples: 1213713001, 1213713002

Results by SW8021B

		-		
<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
Toluene	0.500U	1.00	0.310	ug/L
Xylenes (total)	1.50U	3.00	0.930	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	102	77-115		%

Batch Information

Analytical Batch: VFC15692 Analytical Method: SW8021B Instrument: Agilent 7890A PID/FID Analyst: MDT Analytical Date/Time: 7/2/2021 11:20:00AM

Prep Batch: VXX37369 Prep Method: SW5030B Prep Date/Time: 7/2/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 07/09/2021 4:48:18PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213713 [VXX37369] Blank Spike Lab ID: 1621673 Date Analyzed: 07/02/2021 10:25 Spike Duplicate ID: LCSD for HBN 1213713 [VXX37369] Spike Duplicate Lab ID: 1621674 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213713001, 1213713002

Results by SW8021B

		Blank Spike	e (ug/L)	:	Spike Dupli	cate (ug/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Benzene	100	104	104	100	108	108	(80-120)	3.10	(< 20)
Ethylbenzene	100	88.2	88	100	90.0	90	(75-125)	1.90	(< 20)
o-Xylene	100	85.4	85	100	87.3	87	(80-120)	2.20	(< 20)
P & M -Xylene	200	172	86	200	177	89	(75-130)	3.10	(< 20)
Toluene	100	94.3	94	100	96.4	96	(75-120)	2.20	(< 20)
Xylenes (total)	300	257	86	300	265	88	(79-121)	2.80	(< 20)
urrogates									
1,4-Difluorobenzene (surr)	50		105	50		105	(77-115)	0.32	
Batch Information									
Analytical Batch: VFC15692				Pre	p Batch: V	XX37369			
Analytical Method: SW8021B				Pre	p wernog:	2112030B			

Instrument: Agilent 7890A PID/FID Analyst: MDT Prep Batch: VXX37369 Prep Method: SW5030B Prep Date/Time: 07/02/2021 06:00 Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 07/09/2021 4:48:20PM



Geotechnical and Environmental Consultants	CHAIN	-OF-C	USTODY	RECOR	D Labor	ratory <u>SGS Auchowage</u>
400 N. 34th Street, Suite 100 2043 Westport Center Drive Seattle, WA 98103 St. Louis, MO 63146-3564 (206) 632-8020 (314) 699-9660	2705 Saint Andrews Loo Pasco, WA 99301-3378 (509) 946-6309	p, Suite A		Analysis Paramete	ers/Sample Container I	Description
2355 Hill Road 5430 Fairbanks Street, Suite 3 Fairbanks, AK 99709 Anchorage, AK 99518 (907) 479-0600 907) 561-2120 3990 Collins Way, Suite 100 1321 Bannock Street, Suite 200 Lake Oswego, OR 97035 Denver, CO 80204 (503) 223-6147 (303) 825-3800	Date		B 10 10 10 10	A witter		Num ^{el} 18 ⁵
Sample Identity Lab No.	Time Sampleo		2 15 + 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	///	-	Remarks/Matrix
100972 - HT11 (AS	15710 6124/2	21 X	\times			3 Water
100972 - TWD 11 (AC)	15725 6/24/2	7) ×	\times			3 11
Project Information Sam	ole Receipt	Relin	quished By:	1. Relind	uished By: 2.	Relinquished By: 3.
Project Number: 100972-001 Total Number	of Containers	Signature:	Time: <u>(7</u>	519 Signature:	Time:	Signature: Time:
Project Name: Sterling Eip Murt COC Seals/Int	tact? Y/N/NA	Printed Name	Date: 3/	2572/ Printed Name	Date:	Printed Name: Date:
Contact: Randy Hessong Received God	od Cond./Cold	Ran	dy Hesse	Ting		
Ongoing Project? Yes V No	od:	Company:	Sur	Company:		Company:
Sampler: Cach Thom (attach shipping	j bill, if any)		, , , , , , , , , , , , , , , , , , ,			
Instructions		Recei	ived By:	1. Recei	ved By: 2.	Received By: 3.
Requested lurnaround lime: Standard		Signature:	1ime:	Signature:	nine:	
No trip blant		Printed Name	e: Date:	Printed Name	Date:	Printed Name: Date: 00/25/1
Distribution: White - w/shipment - returned to Shannon & W Yellow - w/shipment - for consignee files Pink - Shannon & Wilson - Job File	/ilson w/ laboratory report	Company:		Company:		Compension SGS HO LOC DUS

No._____12354246

e-Sam	ple	Recei	pt	Form

000	e-Sam	ple Receip	t Form			
262	SGS Workorder #:	1	21371	3	1 2	1 3 7 1 3
Rev	view Criteria	Condition (Yes,	, No, N/A	Exc	eptions Not	ed below
Chain of	Custody / Temperature Requi	rements	Yes	Exemption pe	rmitted if samp	er hand carries/delivers.
	Were Custody Seals intact? Note # &	location N/A	Absent			
	COC accompanied sa	amples? Yes				
DOD: Were sa	amples received in COC corresponding of	coolers? N/A				
	N/A **Exemption permitted if	chilled & colle	ected <8 hours	s ago, or for san	nples where chi	ling is not required
Temperatu	ire blank compliant* (i.e., 0-6 °C afte	er CF)? Yes	Cooler ID:	1	@	1.1 °C Therm. ID: D45
			Cooler ID:		@	°C Therm. ID:
If samples received without a to locumented instead & "COOLER TE	emperature blank, the "cooler temperature" will	l be villed" will	Cooler ID:		@	°C Therm. ID:
be no	ted if neither is available.		Cooler ID:		@	°C Therm. ID:
			Cooler ID:		@	°C Therm. ID:
*lf >6°	C, were samples collected <8 hours	s ago? N/A				
	If <0°C, were sample containers ice	e free? N/A				
Note: Identify containe	rs received at non-compliant tempe	rature .				
L	use form FS-0029 if more space is n	eeaea.				
Holding Time / De	our participation (Sample Condition P	auiromonto	Note: Defer to	form E 092 "Comp	le Quidell for anos	ifia halding timoa
<u>notaing nine / Da</u>	ere samples received within holding	a time? Yes	NOLE. REIEF LO	IUIIII F-UOS Sallip	le Guide Tor spec	inc holding times.
Do samples match COC	** (i.esample IDs.dates/times colle	ected)? Yes				
**Note: If times diff	er <1hr. record details & login per C	OC.				
**Note: If sample information on co	ntainers differs from COC, SGS will default to (COC information				
Were analytical requests cl	ear? (i.e. method is specified for ar	nalvses Yes				
with mul	tiple option for analysis (Ex: BTEX,	Metals)	2			
			N/A	***Exemption	permitted for m	etals (e.g.200.8/6020B).
Were proper containers	s (type/mass/volume/preservative***)used? Yes			•	
	Volatile / LL-Hg Req	uirements				
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with sa	mples? No	No trip blan	ks received wit	th samples.Pro	ceeded without trip
Were all water VOA vials	s free of headspace (i.e., bubbles ≤	6mm)? Yes	blanks.			
Were all s	soil VOAs field extracted with MeOH	+BFB? N/A				
Note to Clier	nt: Any "No", answer above indicates no	n-compliance	with standard	procedures and	d may impact da	ata quality.
			P 11.			
	م ما جا الحام ٨	h h h h h h h h h h	nnlinghight			



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1213713001-A	HCL to pH < 2	ОК			
1213713001-B	HCL to $pH < 2$	OK			
1213713001-C	HCL to $pH < 2$	OK			
1213713002-A	HCL to pH < 2	OK			
1213713002-B	HCL to pH < 2	OK			
1213713002-C	HCL to $pH < 2$	OK			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Ste. 3 Anchorage, AK 99518 (907)433-3215

Report Number: 1215975

Client Project: 100972-001 Sterling ZipMart

Dear Randy Hessong,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 09/21/2021 8:40:34AM

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Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1215975 Project Name/Site: 100972-001 Sterling ZipMart Project Contact: Randy Hessong

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 09/21/2021 8:40:35AM

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i	nclude a result for "Total Solids" have already been adjusted for moisture content.

Print Date: 09/21/2021 8:40:38AM

Note:



	Sample Summary					
Client Sample ID	Lab Sample ID	<u>Collected</u>	Received	Matrix		
100972-HT12	1215975001	09/09/2021	09/13/2021	Water (Surface, Eff., Ground)		
100972-TWD12	1215975002	09/09/2021	09/13/2021	Water (Surface, Eff., Ground)		
Method	Method Des	scription				
AK101	AK101/802	1 Combo.				
SW8021B	AK101/802	1 Combo.				

Print Date: 09/21/2021 8:40:39AM



Detectable Results Summary

Client Sample ID: 100972-HT12			
Lab Sample ID: 1215975001	Parameter	Result	<u>Units</u>
Volatile Fuels	Benzene	236	ug/L
	Ethylbenzene	32.7	ug/L
	Gasoline Range Organics	2.35	mg/L
	o-Xylene	279	ug/L
	P & M -Xylene	106	ug/L
	Toluene	614	ug/L
	Xylenes (total)	373	ug/L
Client Sample ID: 100972-TWD12			
Lab Sample ID: 1215975002	<u>Parameter</u>	Result	<u>Units</u>
Volatile Fuels	Benzene	44.0	ug/L
	Ethylbenzene	4.51	ug/L
	Gasoline Range Organics	0.341	mg/L
	o-Xylene	36.8	ug/L
	P & M -Xylene	10.7	ug/L
	Toluene	77.5	ug/L

Xylenes (total)

52.0

ug/L

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Mart esult Qual 2.35 84.2 84.2 esult Qual 236 32.7 279	LOQ/CL 0.100 50-150	Collection Da Received Da Matrix: Water Solids (%): Location: DL 0.0450 Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract	te: 09/09/ te: 09/13/2 r (Surface, <u>Units</u> mg/L % VXX37852 : SW5030B ne: 09/15/2 tr./Vol.: 5 mL Vol: 5 mL <u>Units</u> ug/L ug/L	21 16:52 21 14:35 Eff., Grou <u>DF</u> 1 1 1 21 06:00 L <u>DF</u> 1 1	und)	Date Analyzed 09/15/21 17:01 09/15/21 17:01 09/15/21 17:01
<u>esult Qual</u> 2.35 84.2 84.2 236 32.7 279	LOQ/CL 0.100 50-150 LOQ/CL 0.500 1.00	DL 0.0450 Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract DL 0.150 0.500	<u>Units</u> mg/L % VXX37852 : SW5030B me: 09/15/2 ft./Vol.: 5 mL Vol: 5 mL <u>Units</u> ug/L ug/L	<u>DF</u> 1 1 21 06:00 L <u>DF</u> 1	Allowable Limits	Date Analyzed 09/15/21 17:01 09/15/21 17:01 09/15/21 17:01 Date Analyzed 09/15/21 17:01
<u>esult Qual</u> 2.35 84.2 84.2 236 32.7 279	LOQ/CL 0.100 50-150 <u>LOQ/CL</u> 0.500 1.00	DL 0.0450 Prep Batch: ¹¹ Prep Method: Prep Date/Tir Prep Initial W Prep Extract ¹² 0.150 0.500	Units mg/L % VXX37852 : SW5030B ne: 09/15/2 /t./Vol.: 5 mL Vol: 5 mL <u>Units</u> ug/L ug/L	DF 1 1 21 06:00 L DF 1 1	Allowable Limits	Date Analyzed 09/15/21 17:01 09/15/21 17:01 09/15/21 17:01 Date Analyzed 09/15/21 17:01
84.2 esult Qual 236 32.7 279	50-150 <u>LOQ/CL</u> 0.500 1.00 10.0	Prep Batch: ' Prep Method: Prep Date/Tir Prep Initial W Prep Extract ' <u>DL</u> 0.150 0.500	% VXX37852 : SW5030B ne: 09/15/2 /t./Vol.: 5 mL Vol: 5 mL <u>Units</u> ug/L ug/L	1 21 06:00 L <u>DF</u> 1	Allowable Limits	09/15/21 17:01
84.2 esult Qual 236 32.7 279	50-150 <u>LOQ/CL</u> 0.500 1.00 10.0	Prep Batch: ¹ Prep Method: Prep Date/Tir Prep Initial W Prep Extract ¹ <u>DL</u> 0.150 0.500	% VXX37852 : SW5030B ne: 09/15/2 /t./Vol.: 5 mL Vol: 5 mL <u>Units</u> ug/L ug/L	1 21 06:00 L <u>DF</u> 1	Allowable Limits	09/15/21 17:01
<u>esult Qual</u> 236 32.7 279	LOQ/CL 0.500 1.00	Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract DL 0.150 0.500	VXX37852 : SW5030B ne: 09/15/2 tt./Vol.: 5 mL Vol: 5 mL <u>Units</u> ug/L ug/L	21 06:00 L <u>DF</u> 1	Allowable Limits	Date Analyzed 09/15/21 17:01
<u>esult Qual</u> 236 32.7 279	LOQ/CL 0.500 1.00	Prep Batch: ' Prep Method: Prep Date/Tir Prep Initial W Prep Extract ' DL 0.150 0.500	VXX37852 : SW5030B ne: 09/15/2 /t./Vol.: 5 m Vol: 5 mL <u>Units</u> ug/L ug/L	21 06:00 L <u>DF</u> 1	<u>Allowable</u> Limits	Date Analyzed 09/15/21 17:01
<u>esult Qual</u> 236 32.7 279	LOQ/CL 0.500 1.00	<u>DL</u> 0.150 0.500	<u>Units</u> ug/L ug/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	Date Analyzed 09/15/21 17:01
32.7 279	1.00	0.500	ua/L	1		00/15/01 17:04
279	10.0					09/10/21 17:01
	10.0	5.00	ug/L	10		09/16/21 13:42
106	2.00	0.900	ug/L	1		09/15/21 17:01
614	10.0	5.00	ug/L	10		09/16/21 13:42
373	3.00	1.40	ug/L	1		09/15/21 17:01
111	77-115		%	1		09/15/21 17:01
		Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract	VXX37859 : SW5030B me: 09/16/2 /t./Vol.: 5 m Vol: 5 mL	21 06:00 L		
		Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract	VXX37852 : SW5030B me: 09/15/2 /t./Vol.: 5 m Vol: 5 mL	21 06:00 L		
	111	614 10.0 373 3.00 111 77-115	614 10.0 5.00 373 3.00 1.40 111 77-115 Prep Batch: Prep Method Prep Date/Tin Prep Initial W Prep Extract Prep Batch: Prep Method Prep Date/Tin Prep Initial W Prep Extract Prep Batch: Prep Method Prep Date/Tin Prep Initial W Prep Extract	614 10.0 5.00 ug/L 373 3.00 1.40 ug/L 111 77-115 % Prep Batch: VXX37859 Prep Method: SW5030B Prep Date/Time: 09/16/2 Prep Initial Wt./Vol.: 5 mL Prep Batch: VXX37852 Prep Method: SW5030B Prep Date/Time: 09/15/2 Prep Method: SW5030B Prep Date/Time: 09/15/2 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL	614 10.0 5.00 ug/L 10 373 3.00 1.40 ug/L 1 111 77-115 % 1 Prep Batch: VXX37859 Prep Method: SW5030B Prep Date/Time: 09/16/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL Prep Batch: VXX37852 Prep Method: SW5030B Prep Date/Time: 09/15/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL Prep Extract Vol: 5 mL	614 10.0 5.00 ug/L 10 373 3.00 1.40 ug/L 1 111 77-115 % 1 Prep Batch: VXX37859 Prep Date/Time: 09/16/21 06:00 Prep Initial Wt./Vol.: 5 mL 5 mL Prep Batch: VXX37852 Prep Method: SW5030B Prep Date/Time: 09/15/21 06:00 9/16/21 06:00 Prep Batch: VXX37852 Prep Method: SW5030B Prep Date/Time: 09/15/21 06:00 9/16/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL Prep Extract Vol: 5 mL

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Results of 100972-TWD12							
Client Sample ID: 100972-TWD12 Client Project ID: 100972-001 Sterling Lab Sample ID: 1215975002 Lab Project ID: 1215975	g ZipMart	C F M S L	Collection Da Received Dat Matrix: Water Solids (%): .ocation:	te: 09/09/ te: 09/13/2 (Surface,	21 20:33 21 14:35 Eff., Grou	und)	
Results by Volatile Fuels							
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 0.341	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	Date Analyzec 09/15/21 17:19
urrogates 4-Bromofluorobenzene (surr)	77	50-150		%	1		09/15/21 17:1
Batch Information							
Analytical Batch: VFC15823 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 09/15/21 17:19 Container ID: 1215975002-A			Prep Batch: ' Prep Method: Prep Date/Tir Prep Initial W Prep Extract '	VXX37852 SW5030B ne: 09/15/2 t./Vol.: 5 m Vol: 5 mL	1 06:00 L		
Descusion	De suit Quel	1.00/01		11	DE	Allowable	Data Arrahma
Parameter Benzene	<u>Result Qual</u> 44.0	<u>LOQ/CL</u> 0.500	<u>DL</u> 0.150	<u>Units</u> ua/l	<u>DF</u> 1	Limits	Date Analyze
Ethylbenzene	4.51	1.00	0.500	ug/L	1		09/15/21 17:1
o-Xylene	36.8	1.00	0.500	ug/L	1		09/16/21 14:3
P & M -Xylene	10.7	2.00	0.900	ug/L	1		09/15/21 17:1
Toluene	77.5	1.00	0.500	ug/L	1		09/16/21 14:3
Xylenes (total)	52.0	3.00	1.40	ug/L	1		09/15/21 17:1
urrogates							
1,4-Difluorobenzene (surr)	90.5	77-115		%	1		09/15/21 17:1
Batch Information							
Analytical Batch: VFC15826 Analytical Method: SW8021B Analyst: IJV Analytical Date/Time: 09/16/21 14:39 Container ID: 1215975002-A			Prep Batch: ' Prep Method: Prep Date/Tir Prep Initial W Prep Extract '	VXX37859 SW5030B ne: 09/16/2 t./Vol.: 5 m Vol: 5 mL	21 06:00 L		
Analytical Batch: VFC15823 Analytical Method: SW8021B Analyst: IJV Analytical Date/Time: 09/15/21 17:19 Container ID: 1215975002-A			Prep Batch: ' Prep Method: Prep Date/Tir Prep Initial W Prep Extract '	VXX37852 SW5030B ne: 09/15/2 t./Vol.: 5 m Vol: 5 mL	1 06:00 L		

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Method Blank								
Blank ID: MB for HBN 18256 Blank Lab ID: 1636640	Blank ID: MB for HBN 1825604 [VXX/37852] Blank Lab ID: 1636640		Matrix: Water (Surface, Eff., Ground)					
QC for Samples: 1215975001, 1215975002								
Results by AK101								
<u>Parameter</u> Gasoline Range Organics	<u>Results</u> 0.0500U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L				
Surrogates 4-Bromofluorobenzene (surr)	79	50-150		%				
Batch Information								
Analytical Batch: VFC15823 Analytical Method: AK101 Instrument: Agilent 7890 PI Analyst: IJV Analytical Date/Time: 9/15/3	3 D/FID 2021 10:17:00AM	Prep Bato Prep Metł Prep Date Prep Initia Prep Extra	h: VXX37852 nod: SW5030 e/Time: 9/15/2 al Wt./Vol.: 5 r act Vol: 5 mL	B 1021 6:00:00AM nL				



Blank Spike Summary

Blank Spike ID: LCS for HBN 1215975 [VXX37852] Blank Spike Lab ID: 1636643 Date Analyzed: 09/15/2021 10:53 Spike Duplicate ID: LCSD for HBN 1215975 [VXX37852] Spike Duplicate Lab ID: 1636644 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1215975001, 1215975002

Results by AK101			_							
	ŀ	Blank Spike (mg/L)		Spike Duplicate (mg/L)						
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL	
Gasoline Range Organics	1.00	0.975	98	1.00	0.974	97	(60-120)	0.05	(< 20)	
Surrogates										
4-Bromofluorobenzene (surr)	0.0500		88	0.0500		89	(50-150)	0.50		
Batch Information										
Analytical Batch: VFC15823				Prep	Prep Batch: VXX37852					
Analytical Method: AK101				Prep	Method:	SW5030B				
Instrument: Agilent 7890 PID/FID				Prep Date/Time: 09/15/2021 06:00						
Analyst: IJV				Spik	e Init Wt./\	/ol.: 1.00 mg	g/L Extract \	/ol: 5 mL		
				Dup	Dupe Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL					

Print Date: 09/21/2021 8:40:46AM

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Method Blank

Blank ID: MB for HBN 1825604 [VXX/37852] Blank Lab ID: 1636640

QC for Samples: 1215975001, 1215975002

Results by SW8021B

<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
0.250U	0.500	0.150	ug/L
0.500U	1.00	0.500	ug/L
1.00U	2.00	0.900	ug/L
1.50U	3.00	1.40	ug/L
87.5	77-115		%
	<u>Results</u> 0.250U 0.500U 1.00U 1.50U 87.5	Results LOQ/CL 0.250U 0.500 0.500U 1.00 1.00U 2.00 1.50U 3.00 87.5 77-115	Results LOQ/CL DL 0.250U 0.500 0.150 0.500U 1.00 0.500 1.00U 2.00 0.900 1.50U 3.00 1.40 87.5 77-115

Batch Information

Analytical Batch: VFC15823 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: IJV Analytical Date/Time: 9/15/2021 10:17:00AM Prep Batch: VXX37852 Prep Method: SW5030B Prep Date/Time: 9/15/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 09/21/2021 8:40:49AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1215975 [VXX37852] Blank Spike Lab ID: 1636641 Date Analyzed: 09/15/2021 11:11 Spike Duplicate ID: LCSD for HBN 1215975 [VXX37852] Spike Duplicate Lab ID: 1636642 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1215975001, 1215975002

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	Rec (%)	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Benzene	100	114	114	100	119	119	(80-120)	3.90	(< 20)
Ethylbenzene	100	115	115	100	119	119	(75-125)	3.50	(< 20)
P & M -Xylene	200	227	114	200	235	117	(75-130)	3.20	(< 20)
Xylenes (total)	300	334	111	300	345	115	(79-121)	3.30	(< 20)
Surrogates									
1,4-Difluorobenzene (surr)	50		100	50		100	(77-115)	0.58	
Betch Information									

Analytical Batch: VFC15823 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: IJV Prep Batch: VXX37852 Prep Method: SW5030B Prep Date/Time: 09/15/2021 06:00 Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 09/21/2021 8:40:51AM
SGS

Method Blank

Blank ID: MB for HBN 1825652 [VXX/37859] Blank Lab ID: 1636824

QC for Samples: 1215975001, 1215975002

Results by SW8021B

Parameter	<u>Results</u>	LOQ/CL	DL	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
o-Xylene	0.500U	1.00	0.500	ug/L
Toluene	0.500U	1.00	0.500	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	86.8	77-115		%
Batch Information				

Analytical Batch: VFC15826 Analytical Method: SW8021B

Instrument: Agilent 7890 PID/FID Analyst: IJV Analytical Date/Time: 9/16/2021 10:27:00AM Prep Batch: VXX37859 Prep Method: SW5030B Prep Date/Time: 9/16/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 09/21/2021 8:40:54AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1215975 [VXX37859] Blank Spike Lab ID: 1636825 Date Analyzed: 09/16/2021 11:03 Spike Duplicate ID: LCSD for HBN 1215975 [VXX37859] Spike Duplicate Lab ID: 1636826 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1215975001, 1215975002

Results by SW8021B										-
		Blank Spike	e (ug/L)	:	Spike Dupli	cate (ug/L)				
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL	
Benzene	100	108	108	100	106	106	(80-120)	2.20	(< 20)	
o-Xylene	100	98.3	98	100	95.9	96	(80-120)	2.50	(< 20)	
Toluene	100	111	111	100	110	110	(75-120)	0.68	(< 20)	
Surrogates										
1,4-Difluorobenzene (surr)	50		96	50		96	(77-115)	0.02		

Batch Information

Analytical Batch: VFC15826 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: IJV Prep Batch: VXX37859 Prep Method: SW5030B Prep Date/Time: 09/16/2021 06:00 Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 09/21/2021 8:40:56AM



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No.

e-Sample Receipt Form

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SGS	Workorder	#:	
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1215975

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	Condition (Yes	, NO, N/A		Excep	uons No	lea below	
Chain of Custody / Temperature Requir	rements	Y	es	Exemption perm	itted if samp	ler hand carries/o	delivers.
Were Custody Seals intact? Note # & I	location N/A	Absent, HI	D				
COC accompanied sa	mples? Yes						
DOD: Were samples received in COC corresponding c	oolers? N/A						
Yes **Exemption permitted if	chilled & colle	ected <8 hou	irs a	igo, or for sample	es where chi	illing is not requir	ed
Temperature blank compliant* (i.e., 0-6 °C afte	er CF)? Yes	Cooler ID:		1	@	4.5 °C Therm.	ID: D65
		Cooler ID:			@	°C Therm.	ID:
If samples received without a temperature blank, the "cooler temperature" will	lbe	Cooler ID:			@	°C Therm	ID:
documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "	chilled"	Coolor ID:			@	°C Thorm	
Will be noted it neither is available.		Cooler ID.				C Therm.	
*If. COO ware complete callected to be use		Cooler ID:			<u></u>	^c Therm.	. ID:
Tr >6°C, were samples collected <8 hours	ago? N/A	ļ					
If <0°C, were sample containers ice	e free? N/A						
Note: Identify containers received at non-compliant temperature	e. Use						
form FS-0029 if more space is no	eeded.						
Holding Time / Documentation / Sample Condition Re	quirements	Note: Refer t	to for	rm F-083 "Sample (Guide" for spe	ecific holding times.	
Were samples received within holding	g time? Yes						
		1					
Do samples match COC** (i.e., sample IDs.dates/times colle	ected)? Yes						
**Note: If times differ <1hr record details & login per C(ос.	ï					
***Note: If cample information on containers differe from COC, SCS will default to l	COC information						
Note: It sample information on containers differs non COC, SGS will default to							
Were analytical requests clear? (i.e., method is specified for an with multiple option for analycis (Ex: PTEX A	halyses	ļ					
	vietais)						
		N	/ A	***Exemption pe	rmitted for m	netals (e.g,200.8/	<u>6020B).</u>
Were proper containers (type/mass/volume/preservative***))used? Yes						
		J					
Volatile / LL-Hg Req	uirements						
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with sar	mples? No						
Were all water VOA vials free of headspace (i.e., bubbles < 6	6mm)? Yes	1					
Were all soil VOAs field extracted with MeOH	+BFB? N/A						
Note to Client: Any "No", answer above indicates nor	o-compliance	with standar	rd n	rocedures and m	av impact d	ata quality	
	- compliance	min stanual	u pi		ay impact u	ata quanty.	
Additiona	<mark>l notes (if</mark> a	applicable)):				

SG



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> <u>Condition</u>	Container Id	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1215975001-A	HCL to $pH < 2$	ОК			
1215975001-B	HCL to pH < 2	ОК			
1215975001-C	HCL to pH < 2	ОК			
1215975002-A	HCL to pH < 2	ОК			
1215975002-B	HCL to pH < 2	ОК			
1215975002-C	HCL to $pH < 2$	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

- OK The container was received at an acceptable pH for the analysis requested.
- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.
- FR The container was received frozen and not usable for Bacteria or BOD analyses.
- IC The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
- NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
- PA The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
- PH The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Ste. 3 Anchorage, AK 99518 (907)433-3215

Report Number: 1216720

Client Project: 100972-001 Sterling Zip Mart

Dear Randy Hessong,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 10/20/2021 12:59:11PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage



Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1216720 Project Name/Site: 100972-001 Sterling Zip Mart Project Contact: Randy Hessong

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. e integrated per SOP.

Print Date: 10/20/2021 12:59:14PM

Note:



	S	Sample Summary	,	
<u>Client Sample ID</u> 100972-UV13	Lab Sample ID 1216720001	<u>Collected</u> 10/07/2021	<u>Received</u> 10/08/2021	<u>Matrix</u> Water (Surface, Eff., Ground)
<u>Method</u> AK101	<u>Method Des</u> AK101/8021	<u>cription</u> Combo.		
SW8021B	AK101/8021	Combo.		

Print Date: 10/20/2021 12:59:15PM



Detectable Results Summary

Client Sample ID: **100972-UV13** Lab Sample ID: 1216720001 **Volatile Fuels**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Benzene	4310	ug/L
Ethylbenzene	1490	ug/L
Gasoline Range Organics	63.4	mg/L
o-Xylene	4140	ug/L
P & M -Xylene	9200	ug/L
Toluene	11100	ug/L
Xylenes (total)	13300	ug/L

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200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com

Client Sample ID: 100972-UV13 Client Project ID: 100972-001 Sterling Zip Ma Lab Sample ID: 1216720001 Lab Project ID: 1216720 Results by Volatile Fuels Parameter Result Gasoline Range Organics 63.4 Surrogates 4-Bromofluorobenzene (surr) 92.7	rt <u>tQual LC</u> 4 10	Coll Rec Mat Soli Loc	lection Da ceived Da rix: Water ids (%): ation:	ite: 10/07// te: 10/08/2 · (Surface,	21 19:15 21 14:30 Eff., Grou	und)	
Parameter Result Gasoline Range Organics 63.4 Surrogates 4-Bromofluorobenzene (surr) 92.7	<u>tQual LC</u> I 10	DQ/CL					
Parameter Result Gasoline Range Organics 63.4 Surrogates 4-Bromofluorobenzene (surr) 92.7	<u>t Qual LC</u> I 10)Q/CL					
ratafrieter result Gasoline Range Organics 63.4 Gurrogates 4-Bromofluorobenzene (surr) 92.7	1 10 10			Linita	DE	Allowable	Data Apolyza
4-Bromofluorobenzene (surr) 92.7		0	<u>DL</u> 4 50	ma/l	<u>DF</u> 100	Limits	10/15/21 19:3
4-Bromofluorobenzene (surr) 92.7				iiig/ L	100		10/10/21 10:0
4-Bromoliuorobenzene (surr) 92.7	7 50	150		0/	100		40/45/04 40.0
	50	-150		70	100		10/15/21 19:3
Batch Information							
Analytical Batch: VFC15893		Pre	ep Batch:	VXX38030			
Analytical Method: AK101		Pre	ep Method	SW5030B			
Analyst: IJV		Pre	ep Date/Tir	ne: 10/15/2	1 06:00		
Container ID: 1216720001-B		Pre	ep Initial Vv ep Extract	t./vol.: 5 m Vol: 5 mL	L		
						Allowable	
Parameter Resul	<u>t Qual</u> <u>LC</u>	DQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyze
Benzene 4310) 50	.0	15.0	ug/L	100		10/15/21 19:3
Ethylbenzene 1490) 10	0	50.0	ug/L	100		10/15/21 19:3
O-Xylene 4140) 10	0	50.0	ug/L	100		10/15/21 19:3
F & M - Aylene 9200 Toluono 11100) 20	0	90.0 50.0	ug/∟	100		10/15/21 19.3
Xvlenes (total) 13300) 30	0	140	ug/L	100		10/15/21 19:3
		•		~g, _			
Surrogates		445		0/	100		40/45/04 40.0
1,4-Difluorobenzene (surr) 91.4	+ <i>//</i>	-115		%	100		10/15/21 19:3
Batch Information							
Analytical Batch: VEC15893		Pre	en Batch:	VXX38030			
Analytical Method: SW8021B		Pre	ep Method	SW5030B			
Analyst: IJV		Pre	ep Date/Tir	ne: 10/15/2	1 06:00		
Analytical Date/Time: 10/15/21 19:34 Container ID: 1216720001-B		Pre	ep Initial W en Extract	t./Vol.: 5 m Vol: 5 ml			
Container ID: 1216720001-B		Pre	ep Extract	Vol: 5 mL			

SGS

Blank ID: MB for HBN 1827240 [VXX/38030] Blank Lab ID: 1642599 QC for Samples: 1216720001 Results by AK101 <u>Parameter Results 0.0500U 0.100 0.0450 mg/L</u> Surrogates 4-Bromofluorobenzene (surr) 92.5 50-150 % Batch Information Analytical Batch: VFC15893 Analytical Method: AK101 Prep Batch: VXX38030 Prep Batch: VXX38030 Prep Method: SW5030B Prep Method: SW5030B
QC for Samples: 1216720001 Results by AK101 Parameter Results Gasoline Range Organics 0.0500U 0.100 0.0450 surrogates 4-Bromofluorobenzene (surr) 92.5 50-150 % Batch Information Analytical Batch: VFC15893 Analytical Method: AK101 Prep Batch: VXX38030 Prep Method: SW5030B
Results by AK101 Parameter Results LOQ/CL DL Units Gasoline Range Organics 0.0500U 0.100 0.0450 mg/L Surrogates 4-Bromofluorobenzene (surr) 92.5 50-150 % Batch Information Prep Batch: VXX38030 Prep Method: SW5030B Analytical Method: AK101 Prep Method: SW5030B Prep Method: SW5030B
Parameter Results LOQ/CL DL Units Gasoline Range Organics 0.0500U 0.100 0.0450 mg/L Surrogates 4-Bromofluorobenzene (surr) 92.5 50-150 % Batch Information Prep Batch: VFC15893 Analytical Batch: VFC15893 Prep Batch: VXX38030 Prep Method: SW5030B Prep Method: SW5030B
Surrogates 4-Bromofluorobenzene (surr) 92.5 50-150 % Batch Information
Batch Information Analytical Batch: VFC15893 Analytical Method: AK101 Prep Method: SW5030B Instruments Arilent 2000 DID/EID
Analytical Batch: VFC15893 Prep Batch: VXX38030 Analytical Method: AK101 Prep Method: SW5030B
Instrument: Aglient 7890 PiD/FiDPrep Date/Time: 10/15/2021 10:00:00AMAnalyst: IJVPrep Initial Wt./Vol.: 5 mLAnalytical Date/Time: 10/15/2021 11:40:00AMPrep Extract Vol: 5 mL



Blank Spike Summary

Blank Spike ID: LCS for HBN 1216720 [VXX38030] Blank Spike Lab ID: 1642602 Date Analyzed: 10/15/2021 12:34 Spike Duplicate ID: LCSD for HBN 1216720 [VXX38030] Spike Duplicate Lab ID: 1642603 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1216720001

Results by AK101									
	I	Blank Spike	e (mg/L)	S	pike Duplio	cate (mg/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	0.950	95	1.00	0.948	95	(60-120)	0.22	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		111	0.0500		102	(50-150)	8.10	
Batch Information									
Analytical Batch: VFC15893 Analytical Method: AK101				Prep Prep	Batch: V Method:	XX38030 SW5030B			
Instrument: Agilent 7890 PID Analyst: IJV	/FID			Prep Spik Dup	Date/Tim e Init Wt./\ e Init Wt./\	e: 10/15/202 /ol.: 1.00 mg /ol.: 1.00 mg	2 1 06:00 g/L Extract V g/L Extract V	√ol: 5 mL ol: 5 mL	

Print Date: 10/20/2021 12:59:23PM

SGS

Method Blank

Blank ID: MB for HBN 1827240 [VXX/38030] Blank Lab ID: 1642599

QC for Samples: 1216720001

Results by SW8021B

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.300J	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.500	ug/L
o-Xylene	0.500U	1.00	0.500	ug/L
P & M -Xylene	1.00U	2.00	0.900	ug/L
Toluene	0.500U	1.00	0.500	ug/L
Xylenes (total)	1.50U	3.00	1.40	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	87.6	77-115		%

Batch Information

Analytical Batch: VFC15893 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: IJV Analytical Date/Time: 10/15/2021 11:40:00AM Prep Batch: VXX38030 Prep Method: SW5030B Prep Date/Time: 10/15/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 10/20/2021 12:59:25PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1216720 [VXX38030] Blank Spike Lab ID: 1642600 Date Analyzed: 10/15/2021 12:16 Spike Duplicate ID: LCSD for HBN 1216720 [VXX38030] Spike Duplicate Lab ID: 1642601 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1216720001

Results by SW8021B

		Blank Spike	e (ug/L)	:	Spike Dupli	cate (ug/L)			
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Benzene	100	97.3	97	100	102	102	(80-120)	5.10	(< 20)
Ethylbenzene	100	99.3	99	100	104	104	(75-125)	4.90	(< 20)
o-Xylene	100	95.1	95	100	99.3	99	(80-120)	4.30	(< 20)
P & M -Xylene	200	196	98	200	206	103	(75-130)	5.00	(< 20)
Toluene	100	102	102	100	107	107	(75-120)	5.00	(< 20)
Xylenes (total)	300	291	97	300	306	102	(79-121)	4.80	(< 20)
urrogates									
1,4-Difluorobenzene (surr)	50		99	50		103	(77-115)	4.00	
Batch Information									
Analytical Batch: VFC15893				Pre	p Batch: V	XX38030			
Analytical Method: SW8021	B			Pre	p Method:	SW5030B	06:00		
Analyst I.IV	JIFID			Spi	ke Init Wt A	/ol: 10/15/202	I UG.UU	ol: 5 ml	
, and you to a				Dup	e Init Wt./V	/ol.: 100 ug/	L Extract Vo	l: 5 mL	

Print Date: 10/20/2021 12:59:28PM

p# 334871_XD

400 N. 34th Street, Suite 100 Seattle, WA 98103	N&W d Environ 2043 We St. Louis	ILSON, INC. mental Consultants estport Center Drive , MO 63146-3564	2705 Saint Pasco, WA	HAIN-(Andrews Loop, 99301-3378	OF Suite A	-C	UST	ODY	RE			Labo Attn:	Descrip	5 G-S Listin	Page Ancho	l of l oraçe
(206) 632-8020 2355 Hill Road Fairbanks, AK 99709 (907) 479-0600 3990 Collins Way, Suite 100 Lake Oswego, OR 97035 (503) 223-6147 Sample Identity	(314) 699 5430 Fai Anchorag (907) 56 1321 Bar Denver, 0 (303) 825	9-9660 rbanks Street, Suite 3 ge, AK 99518 1-2120 nock Street, Suite 200 CO 80204 i-3800 Lab No.	(509) 946-6	309 Date Sampled	Co	UNP CHE	2 (R ^D)	510180710 510180710 510180710	Analys	(include	preservativ	re if used)			6720	0
100972-UV	13	(IAC)	19115	10/7/21		×	\times						3	Watev	Lile. High	e19 Cc 111: 11 tra tr
Project Inform	ation	Sam	ole Recei	pt	Re	elinc	luishee	d By:	1.	Relinqu	uished E	By: 2.		Relinqu	ished I	Зу: <u>3</u> .
Project Number: 1009 Project Name: Strik Contact: Randy He Ongoing Project? Yes Sampler: Randy He	2-00 19 Eip M 550n g K No [550n g	I Total Number Image: Im	of Container tact? Y/N/N/ od Cond./Co od: g bill, if any)	s S	Signatur Printed Ra Compar	ne: Name: Name: Name: Name: S	-76 14 14	Time: <u>14</u> ; Date: <u>10</u> 255000	<u>3</u> 0 5 3 [2] 7 (Signature: Printed Name Company:	Time	9:	Sigr Prin Corr	ted Name: į	Tin Da	ne: te:
Requested Turnaround Special Instructions: 54 No Distribution: White - w/shipr Yellow - w/ship	Ins Time: Sw/SC Trip Ment - returnent - for	tructions Standard SPSA blaak unned to Shannon & V	/ilson w/ labora	F atory report	Re Bignatur Printed Compar	re: Name: ny:	ved By	Time:	1.	Receiv Signature Printed Name:	ed By: Time Date	2.	Sigr	Receive	ed By:	
Pink - Shannor	wilson	- Job File		L								5.,	pî	65 85	<u>ADSer</u> No1	135248

202	SGS Wor	korder #:		121	672	0	1 2	1672	
Revie	w Criteria		Condition (Ye	es, No, N/A		Exc	eptions No	ted below	
<u>Chain of C</u>	ustody / Temperat	ure Requi	irements		Yes	Exemption pe	ermitted if samp	oler hand carries/del	ivers.
V	Vere Custody Seals intac	ct? Note # &	location N/	A Absen	t				
	COC acc	companied s	amples? Ye	s					
DOD: Were sam	ples received in COC co	rresponding	coolers? N/	4					
	N/A **Exemption	n permitted if	f chilled & co	lected <8	hours a	ago, or for sam	nples where ch	illing is not required	
Temperature	blank compliant* (i.e.	, 0-6 °C aft	er CF)? Ye	s Coole	r ID:	1	@	5.8 °C Therm. ID	D: D65
				Coole	r ID:		@	°C Therm. ID):
If samples received without a tem cumented instead & "COOLER TEM	perature blank, the "cooler te P" will be noted to the right. "	emperature" wi 'ambient" or "cl	ll be hilled" will	Coole	r ID:		@	°C Therm. ID):
be noted	l if neither is available.			Coole	r ID:		@	°C Therm. ID):
				Coole	r ID:		@	°C Therm. ID):
*lf >6°C,	were samples collect	ed <8 hours	s ago? N/	A					
lf	<0°C, were sample co	ontainers ic	e free? N/	4					
Note: Identify containers Use	received at non-comp e form FS-0029 if more	bliant tempe e space is r	erature . needed.						
Holding Time / Doc	umentation / Sample (Condition R	equirement	s Note: R	efer to fo	rm F-083 "Samp	le Guide" for spe	cific holding times.	
We	re samples received w	<i>i</i> ithin holdin	g time? Ye	s		·	· ·		
Do samples match COC**	(i.e.,sample IDs,date	s/times coll	ected)? Ye	s					
**Note: If times differ	<1hr, record details &	login per C	COC.						
Note: If sample information on conta	iners differs from COC, SGS	s will default to	COC informati	on					
Nere analytical requests clea with multip	ar? (i.e., method is spe le option for analysis (ecified for a (Ex: BTEX,	nalyses Ye Metals)	s					
					N/A	***Exemption	permitted for r	netals (e.g,200.8/60	20B).
Were proper containers (ype/mass/volume/pre	servative**	*)used?	S					
	Volatile / L	L-Hg Red	quirement	S					
Were Trip Blanks (i.e	., VOAs, LL-Hg) in co	oler with sa	mples? No	No trip	o blank	received .Pro	ceeded per h	istory	
Were all water VOA vials f	ree of headspace (i.e.	, bubbles ≤	6mm)? Ye	s					
Were all so	I VOAs field extracted	with MeOH	I+BFB? N/	4					
Note to Client:	Any "No", answer above	e indicates no	on-complianc	e with sta	andard p	rocedures and	d may impact o	lata quality.	
		Additiona	al notes (if	applica	ble):			· · ·	

000



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition	Container Id	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1216720001-A	HCL to pH < 2	ОК			
1216720001-B	HCL to $pH < 2$	ОК			
1216720001-C	HCL to $pH < 2$	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Ste. 3 Anchorage, AK 99518 (907)433-3215

Report Number: 1217344

Client Project: 100972-001 Sterling ZipMart

Dear Randy Hessong,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 11/17/2021 8:38:41AM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage



Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1217344 Project Name/Site: 100972-001 Sterling ZipMart Project Contact: Randy Hessong

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 11/17/2021 8:38:42AM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com



Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. e integrated per SOP.

Print Date: 11/17/2021 8:38:45AM

Note:



SW8021B

	:	Sample Summary	,	
<u>Client Sample ID</u> 100972-HT13	<u>Lab Sample ID</u> 1217344001	<u>Collected</u> 11/03/2021	<u>Received</u> 11/04/2021	<u>Matrix</u> Water (Surface, Eff., Ground)
100972-TWD13	1217344002	11/03/2021	11/04/2021	Water (Surface, Eff., Ground)
Method	Method Des	scription		
AK101	AK101/802	1 Combo.		

AK101/8021 Combo.

Print Date: 11/17/2021 8:38:46AM



Detectable Results Summary

Client Sample ID: 100972-HT13			
Lab Sample ID: 1217344001	Parameter	Result	Units
Volatile Fuels	Benzene	317	ug/L
	Ethylbenzene	71.3	ug/L
	Gasoline Range Organics	4.20	mg/L
	o-Xylene	337	ug/L
	P & M -Xylene	564	ug/L
	Toluene	707	ug/L
	Xylenes (total)	902	ug/L
Client Sample ID: 100972-TWD13			
Lab Sample ID: 1217344002	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Volatile Fuels	Benzene	129	ug/L
	Ethylbenzene	26.1	ug/L
	Gasoline Range Organics	1.90	mg/L
	o-Xylene	127	ug/L
	P & M -Xylene	197	ug/L
	Toluene	259	ug/L
	Xylenes (total)	324	ug/L

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Collection D Received D: Matrix: Wate Solids (%): Location:	ate: 11/03/ ate: 11/04/2 er (Surface, <u>Units</u> mg/L % VXX38157 d: SW5030E ime: 11/08/2 Vt./Vol.: 5 mL Vt./Vol.: 5 mL <u>Units</u> ug/L ug/L	(21 18:55 21 16:36 Eff., Gro DF 10 10 10 3 21 06:00 1 10 10	Allowable Limits	Date Analyzed 11/08/21 19:19 11/08/21 19:19
 <u>DL</u> 0.450 Prep Batch: Prep Method Prep Date/T Prep Initial N Prep Extract <u>DL</u> 1.50 5.00 5.00 	Units mg/L % VXX38157 d: SW5030E ime: 11/08/2 Vt./Vol.: 5 mL t Vol: 5 mL <u>Units</u> ug/L ug/L	DF 10 10 21 06:00 1L DF 10	Allowable Limits	Date Analyzed 11/08/21 19:19 11/08/21 19:19
 <u>DL</u> 0.450 Prep Batch: Prep Method Prep Date/T Prep Initial N Prep Extract <u>DL</u> 1.50 5.00 5.00 	Units mg/L % VXX38157 d: SW5030E ime: 11/08/2 Vt./Vol.: 5 mL t Vol: 5 mL <u>Units</u> ug/L ug/L	DF 10 10 3 21 06:00 1L DF 10	Allowable Limits	Date Analyzed 11/08/21 19:19 11/08/21 19:19 Date Analyzed
Prep Batch: Prep Metho Prep Date/T Prep Initial \ Prep Extrac <u>DL</u> 1.50 5.00 5.00	% VXX38157 d: SW5030E ime: 11/08/2 Vt./Vol.: 5 mL t Vol: 5 mL <u>Units</u> ug/L ug/L	10 3 21 06:00 1L <u>DF</u> 10	<u>Allowable</u> Limits	11/08/21 19:1
Prep Batch: Prep Metho Prep Date/T Prep Initial \ Prep Extrac <u>DL</u> 1.50 5.00 5.00	VXX38157 d: SW5030E ime: 11/08/2 Vt./Vol.: 5 mL t Vol: 5 mL <u>Units</u> ug/L ug/L	3 21 06:00 hL <u>DF</u> 10	<u>Allowable</u> Limits	Date Analyzed
<u>DL</u> 1.50 5.00 5.00	<u>Units</u> ug/L ug/L	<u>DF</u> 10	<u>Allowable</u> <u>Limits</u>	Date Analyzed
1.50 5.00 5.00	ug/L ug/L	10		Bate / that j20
5.00 5.00	ug/L			11/08/21 19:1
5.00	0	10		11/08/21 19:1
	ug/L	10		11/08/21 19:1
9.00	ug/L	10		11/08/21 19:1
5.00	ug/L	10		11/08/21 19:1
14.0	ug/L	10		11/08/21 19:1
	0/	10		
	%	10		11/08/21 19:1
Prep Batch: Prep Metho Prep Date/T Prep Initial \ Prep Extrac	VXX38157 d: SW5030E ime: 11/08/2 Vt./Vol.: 5 m t Vol: 5 mL	3 21 06:00 1L		
	Prep Batch: Prep Methoo Prep Date/T Prep Initial V Prep Extract	% Prep Batch: VXX38157 Prep Method: SW5030E Prep Date/Time: 11/08/2 Prep Initial Wt./Vol.: 5 m Prep Extract Vol: 5 mL	% 10 Prep Batch: VXX38157 Prep Method: SW5030B Prep Date/Time: 11/08/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL	% 10 Prep Batch: VXX38157 Prep Method: SW5030B Prep Date/Time: 11/08/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Results of 100972-TWD13 Client Sample ID: 100972-TWD13 Client Project ID: 100972-001 Sterling Lab Sample ID: 1217344002 Lab Project ID: 1217344								
Results by Volatile Fuels								
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 1.90	<u>LOQ/CL</u> 1.00	<u>DL</u> 0.450	<u>Units</u> mg/L	<u>DF</u> 10	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzec</u> 11/08/21 19:33	
urrogates 4-Bromofluorobenzene (surr)	90.3	50-150		%	10		11/08/21 19:33	
Analytical Batch: VFC15936 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 11/08/21 19:37 Container ID: 1217344002-B			Prep Batch: Prep Method Prep Date/Ti Prep Initial V Prep Extract	VXX38157 I: SW5030E me: 11/08/2 Vt./Vol.: 5 m Vol: 5 mL	3 21 06:00 IL			
Parameter	Result Qual	LOQ/CL	DL	Units	DF	<u>Allowable</u> Limits	Date Analyzed	
Benzene	129	5.00	1.50	ug/L	10		11/08/21 19:37	
Ethylbenzene	26.1	10.0	5.00	ug/L	10		11/08/21 19:3	
o-Xylene	127	10.0	5.00	ug/L	10		11/08/21 19:3	
P & M -Xylene	197	20.0	9.00	ug/L	10		11/08/21 19:3	
Toluene	259	10.0	5.00	ug/L	10		11/08/21 19:3	
Xylenes (total)	324	30.0	14.0	ug/L	10		11/08/21 19:3	
urrogates 1 4 Difluorobenzene (surr)	101	77-115		0/2	10		11/08/21 10.3	
	101	11-115		70	10		11/00/21 19:5	
Batch Information Analytical Batch: VFC15936 Analytical Method: SW8021B Analyst: IJV Analytical Date/Time: 11/08/21 19:37 Container ID: 1217344002-B		Prep Batch: VXX38157 Prep Method: SW5030B Prep Date/Time: 11/08/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL						

Print Date: 11/17/2021 8:38:50AM

J flagging is activated

SGS Method Blank	
Blank ID: MB for HBN 1828305 [VXX/38157] Blank Lab ID: 1646619	
QC for Samples: 1217344001, 1217344002	

Matrix: Water (Surface, Eff., Ground)

Results by AK101							
<u>Parameter</u> Gasoline Range Organics	<u>Results</u> 0.0500U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L			
Surrogates 4-Bromofluorobenzene (surr)	86.7	50-150		%	%		
Batch Information							
Analytical Batch: VFC15936 Analytical Method: AK101 Instrument: Agilent 7890A PIE Analyst: IJV Analytical Date/Time: 11/8/20	D/FID 21 9:08:00AM	Prep Bat Prep Mef Prep Dat Prep Initi Prep Exti					

Print Date: 11/17/2021 8:38:51AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1217344 [VXX38157] Blank Spike Lab ID: 1646622 Date Analyzed: 11/08/2021 10:01 Spike Duplicate ID: LCSD for HBN 1217344 [VXX38157] Spike Duplicate Lab ID: 1646623 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1217344001, 1217344002

Results by AK101			_									
	Blank Spike			(mg/L) Spike Duplicate (mg/L)								
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL			
Gasoline Range Organics	1.00	1.00	100	1.00	0.978	98	(60-120)	2.70	(< 20)			
Surrogates												
4-Bromofluorobenzene (surr)	0.0500		100	0.0500		98	(50-150)	2.30				
Batch Information												
Analytical Batch: VFC15936 Analytical Method: AK101	Prep Prep	Prep Batch: VXX38157 Prep Method: SW5030B										
Instrument: Agilent 7890A PID/FID					Prep Date/Time: 11/08/2021 06:00							
Analyst: IJV				Spik Dup	Spike Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL							

Print Date: 11/17/2021 8:38:54AM

SGS

Method Blank

Blank ID: MB for HBN 1828305 [VXX/38157] Blank Lab ID: 1646619

QC for Samples: 1217344001, 1217344002

Results by SW8021B

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.500	ug/L
o-Xylene	0.500U	1.00	0.500	ug/L
P & M -Xylene	1.00U	2.00	0.900	ug/L
Toluene	0.500U	1.00	0.500	ug/L
Xylenes (total)	1.50U	3.00	1.40	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	99	77-115		%

Batch Information

Analytical Batch: VFC15936 Analytical Method: SW8021B Instrument: Agilent 7890A PID/FID Analyst: IJV Analytical Date/Time: 11/8/2021 9:08:00AM

Prep Batch: VXX38157 Prep Method: SW5030B Prep Date/Time: 11/8/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 11/17/2021 8:38:56AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1217344 [VXX38157] Blank Spike Lab ID: 1646620 Date Analyzed: 11/08/2021 09:43 Spike Duplicate ID: LCSD for HBN 1217344 [VXX38157] Spike Duplicate Lab ID: 1646621 Matrix: Water (Surface, Eff., Ground)

Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

QC for Samples: 1217344001, 1217344002

Results by SW8021B

		Blank Spike (ug/L)			Spike Dupli	cate (ug/L)						
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL			
Benzene	100	114	114	100	116	116	(80-120)	1.80	(< 20)			
Ethylbenzene	100	104	104	100	104	104	(75-125)	0.08	(< 20)			
o-Xylene	100	101	101	100	100	100	(80-120)	0.79	(< 20)			
P & M -Xylene	200	207	104	200	205	102	(75-130)	1.20	(< 20)			
Toluene	100	108	108	100	108	108	(75-120)	0.05	(< 20)			
Xylenes (total)	300	308	103	300	305	102	(79-121)	1.10	(< 20)			
urrogates												
1,4-Difluorobenzene (surr)	50		106	50		107	(77-115)	0.55				
Batch Information												
Analytical Batch: VFC15936				Pre	p Batch: V	XX38157						
Analytical Method: SW8021B				Pre	Prep Method: SW5030B							
Instrument: Agilent 7890A F	PID/FID			Pre	Prep Date/Time: 11/08/2021 06:00							
Analyst: IJV				Spi	ke Init Wt./\	/ol.: 100 ug/	L Extract V	ol: 5 mL				

Print Date: 11/17/2021 8:38:58AM



SGS North America Inc. CHAIN OF CUSTODY RECORD

1217344



CLIENT: Shannon & Wilson, Inc., Anchorage							lns C	tructio missio	ns: ons n	Sectionay de	ons 1 elay t	-5n heon	nust iset o	T anal	ysis.			Dans of	1	
-	CONTACT: Rand	CT: PHONE #: (907) 441-9295 and & Hessong				Sec	tion 3					Pre	eservat	ive						
Section	PROJECT PROJECT/ PWSID/ NAME: Sterling ZipMart PERMIT#: 100972-001				# C O															
	REPORTS TO	D: E-M Sy Hessong Pro	IAIL: rænd file #: 33487	ty hessor	ng C hanwil•con	N T A	Comp Grab	X \$112				Anal	ysis*					NOTE: *The following analyse	es	
	AP-A	uchorage P.O	DTE #: 544	0/56-5 1	MSA	I N E	MI (Multi- incre-	1076 101/80 101/80										require specific metho and/or compound list: BTEX. Metals. PFAS	'n	
	RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX MATRIX CODE	R S	mental)	626 87.20 27.20										REMARKS/LOC ID		
	(IAC) (ZAC)	100972 - HT13 100972-TWD13	11/3/21	18:55	GW			X X					Önc	VOA	hæş	bubl	1/2	Lifely low concentra	7	
on 2																			_	
Secti																			_	
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	Relinquishe	d By: (1)	Date 11/4/21	Time <i>613</i> 9	Received By	d By:				Section	on 4	DOE) Proje	ct? Ye	s (16)	Data	a Deliv	erable Requirements:		
ion 5	Relinquished By: (2) Date Time Received By		r:)			Reques 57	sted Tu Tun d	urnarou l <i>arc</i>	und Tir	ne and/ Vo	or Spe	cial Ins	structic enK	ons:					
Sect	Relinquished	d By: (3)	Date	Time	Received By	/ :				Temp E	Blank ^c	°C: _	1.5		063	Cha	ain of (Custody Seal: (Circle)	_	
	Relinquished	d By: (4)	Date 11/4/24	Time 1636	Received Fo		ratory By		14		Deli	or Am very M	bient ethod:] Hand [Deliver		ACT	BROKEN ABSENT)	

http://www.sgs.com/terms-and-conditions

		mple kec	еірт на	Form								
202	SGS Workorder	#:	12	1734	44	1 2	 	3 4				
Rev	view Criteria	Condition	n (Yes, No, N	/A	Exc	eptions No	oted belov	N				
Chain of	f Custody / Temperature Reg	quirement	s	Ye	s Exemption pe	rmitted if san	pler hand ca	arries/deliv	ve			
	Were Custody Seals intact? Note #	# & location	N/A Ab	sent								
	COC accompanied	d samples?	Yes									
DOD: Were sa	amples received in COC correspondin	ng coolers?	N/A									
	N/A **Exemption permitter	d if chilled &	collected	l <8 hour	s ago, or for sam	ples where o	chilling is not	required				
Temperatu	ure blank compliant* (i.e., 0-6 °C a	after CF)?	Yes Co	oler ID:	1	@	1.5 °C ⊤	herm. ID:	C			
			Co	oler ID:		@	°CT	herm. ID:	:			
If samples received without a t	emperature blank, the "cooler temperature"	' will be r "chilled" will	Co	oler ID:		@	°CT	herm. ID:	:			
be no	oted if neither is available.	Chined will	Co	oler ID:		@	°Ст	herm. ID:	:			
			Co	oler ID:		@	°CT	herm. ID:	:			
*lf >6°	°C, were samples collected <8 ho	ours ago?	N/A									
	If <0°C, were sample containers	ice free?	N/A									
Note: Identify containe	srs received at non-compliant tem	perature .										
L. L	Jse torm 1 3-0029 it more space is	s neeueu.										
Holding Time / Do	ocumentation / Sample Condition	Requireme	ents Not	e. Refer to	form E-083 "Samp	le Guide" for sr	ecific holding t	imes				
N	Vere samples received within hold	ding time?	Yes				oomo nolaing t					
	·											
Do samples match COC	C** (i.e.,sample IDs,dates/times c	ollected)?	Yes									
**Note: If times diff	er <1hr, record details & login pe	r COC.										
*Note: If sample information on co	ontainers differs from COC, SGS will default	to COC inform	nation									
Were analytical requests c	lear? (i.e., method is specified for	ranalyses	Yes						-			
with mul	Itiple option for analysis (Ex: BTE)	X, Metals)										
				N//	A ***Exemption	permitted for	metals (e.g.)	200.8/602	20[
Were proper containers	s (type/mass/volume/preservative	***)used?	Yes						_			
	- (.)	,										
	Volatile / LL-Hq R	equireme	nts									
Were Trip Blanks ((i.e., VOAs, LL-Hg) in cooler with	samples?	No No	trip blan	nk per client.				-			
Were all water VOA vials	s free of headspace (i.e., bubbles	≤ 6 mm)?	Yes									
Were all o	soil VOAs field extracted with Me(OH+BEB?	N/A									
Note to Clin	nt. Any "No", answer above indicates			atandara	d procedures one		data quality		_			
Note to Che	III. Any NO, answer above indicates	non-compila		Stanuard	a procedures and	і пау іпрасі	uala quality.		-			
	Additic	onal notes	(if appl	icable):								



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> <u>Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1217344001-A	HCL to pH < 2	ОК			
1217344001-B	HCL to pH < 2	ОК			
1217344001-C	HCL to $pH < 2$	ОК			
1217344002-A	HCL to $pH < 2$	ОК			
1217344002-B	HCL to $pH < 2$	ОК			
1217344002-C	HCL to pH < 2	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Suite 3 Anchorage, AK 99518

Report Number: **1224862**

Client Project: 100972-104 Zip Mart

Dear Zach Thon,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 08/24/2022 2:33:45PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage



Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1224862 Project Name/Site: 100972-104 Zip Mart Project Contact: Zach Thon

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 08/24/2022 2:33:46PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com



Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.							
!	Surrogate out of control limits.							
В	Indicates the analyte is found in a blank associated with the sample.							
CCV/CVA/CVB	Continuing Calibration Verification							
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification							
CL	Control Limit							
DF	Analytical Dilution Factor							
DL	Detection Limit (i.e., maximum method detection limit)							
E	The analyte result is above the calibrated range.							
GT	Greater Than							
IB	Instrument Blank							
ICV	Initial Calibration Verification							
J	The quantitation is an estimation.							
LCS(D)	Laboratory Control Spike (Duplicate)							
LLQC/LLIQC	Low Level Quantitation Check							
LOD	Limit of Detection (i.e., 1/2 of the LOQ)							
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)							
LT	Less Than							
MB	Method Blank							
MS(D)	Matrix Spike (Duplicate)							
ND	Indicates the analyte is not detected.							
RPD	Relative Percent Difference							
TNTC	Too Numerous To Count							
U	Indicates the analyte was analyzed for but not detected.							
Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.								

Print Date: 08/24/2022 2:33:48PM

Note:



Sample Summary										
<u>Client Sample ID</u> 100972-UV21	<u>Lab Sample ID</u> 1224862001	<u>Collected</u> 08/15/2022	<u>Received</u> 08/16/2022	<u>Matrix</u> Water (Surface, Eff., Ground)						
Method	Method Des	cription								
AK101	AK101/8021	Combo.								
SW8021B	AK101/8021	Combo.								

Print Date: 08/24/2022 2:33:50PM


Detectable Results Summary

Client Sample ID: **100972-UV21** Lab Sample ID: 1224862001

Volatile Fuels

Parameter	Result	<u>Units</u>
Benzene	3720	ug/L
Ethylbenzene	1690	ug/L
Gasoline Range Organics	62.2	mg/L
o-Xylene	4080	ug/L
P & M -Xylene	9510	ug/L
Toluene	9790	ug/L
Xylenes (total)	13600	ug/L

Print Date: 08/24/2022 2:33:51PM

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	С	ollection D	ate: 08/15/	22 20:00		
	R M S L	eceived Da latrix: Wate olids (%): ocation:	ate: 08/16/2 er (Surface,	22 10:24 Eff., Gro	und)	
					Allowable	
Result Qual 62.2	<u>LOQ/CL</u> 10.0	<u>DL</u> 4 50	<u>Units</u> ma/l	<u>DF</u> 100	<u>Limits</u>	Date Analyzed
02.2	10.0	1.00	<u>9</u> , _	100		00,10,22 10.0
98	50-150		%	100		08/19/22 18:0
	F	Prep Batch:	VXX39040			
	F	Prep Metho	d: SW5030B	2.00.00		
	F	Prep Date/ I Prep Initial V	Nt./Vol.: 5 m	L 06:00		
	F	Prep Extract	t Vol: 5 mL			
Regult Quel	1.00/01		Unito	DE	Allowable	Data Analyza
3720	<u>50.0</u>	<u>DL</u> 15.0	ug/L	100	LIIIIIIS	08/19/22 18:0
1690	100	50.0	ug/L	100		08/19/22 18:0
4080	100	50.0	ug/L	100		08/19/22 18:0
9510	200	90.0	ug/L	100		08/19/22 18:0
9790	100	50.0	ug/L	100		08/19/22 18:0
13600	300	140	ug/L	100		08/19/22 18:0
89.6	77-115		%	100		08/19/22 18:0
00.0	77-110		70	100		00/10/22 10:0
		Dren Batch:	VXX30040			
	F	Prep Method	d: SW5030B			
	Prep Date/Time: 08/19/22 06:00					
	1	Top Initial V		L		
	Result Qual 62.2 98 98 8 1690 4080 9510 9790 13600 89.6	Result Qual LOQ/CL 62.2 10.0 98 50-150 98 50-150 Result Qual LOQ/CL 3720 50.0 1690 100 4080 100 9510 200 9790 100 13600 300 89.6 77-115	Result Qual 62.2LOQ/CL 10.0DL 4.509850-150DL 4.509850-150DL Prep Batch: Prep Date/T Prep Initial V Prep ExtractResult Qual 3720LOQ/CL 50.0DL 4.5089.677-115Prep Batch: Prep Method 90.03001360030014089.677-115	Result QualLOQ/CLDLUnits9850-150%9850-150%Prep Batch: VXX39040 Prep Method: SW5030B Prep Date/Time: 08/19/2 Prep Initial WL/Vol.: 5 mLResult QualLOQ/CLDLUnits mg/L9850-150%Note: With the second secon	Collection Date: 08/15/22 20:00 Received Date: 08/16/22 10:24 Matrix: Water (Surface, Eff., Groupsolids (%): Location: Location: Result Qual LOQ/CL DL Units DF 62.2 10.0 4.50 rng/L 100 98 50-150 % 100 98 50-150 % 100 Prep Batch: VXX39040 VX50308 Prep Date/Time: 08/19/22 06:00 Prep Initial WL/Vol.: 5 mL Prep Date/Time: 08/19/22 06:00 Prep Initial WL/Vol.: 5 mL Prep Date/Time: 08/19/22 06:00 1690 100 50.0 ug/L 1690 100 50.0 ug/L 100 1690 100 50.0 ug/L 100 9710 200 90.0 ug/L 100 9790 100 50.0 ug/L 100 13600 300 140 ug/L 100 89.6 77-115 % 100	Result Qual LOQ/CL DL Units DE Allowable 98 50-150 % 100 100 100 98 50-150 % 100 100 100 Prep Batch: VXX39040 Prep Date/Time: 08/19/22 06:00 98 50-150 % 100 100 98 50-150 % 100 100 Prep Batch: VXX39040 Prep Date/Time: 08/19/22 06:00 9500 100 50.0 ug/L 100 1690 100 50.0 ug/L 100 9510 200 90.0 ug/L 100 98.6 77-115 % 100 100 13600

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Method Blank							
Blank ID: MB for HBN 184183 Blank Lab ID: 1680659	Matrix: Water (Surface, Eff., Ground)						
QC for Samples: 1224862001							
Results by AK101							
<u>Parameter</u> Gasoline Range Organics	<u>Results</u> 0.0500U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L			
Surrogates		/					
4-Bromoliuorobenzene (surr)	75.5	50-150		%			
Batch Information							
Analytical Batch: VFC16223		Prep Bat	ch: VXX39040				
Analytical Method: AK101		Prep Method: SW5030B					
Analyst: PHK	I/FID	Prep Initial Wt./Vol.: 5 mL					
Analytical Date/Time: 8/19/20	022 2:34:00PM	Prep Ext	ract Vol: 5 mL				

Print Date: 08/24/2022 2:33:54PM



Blank Spike ID: LCS for HBN 1224862 [VXX39040] Blank Spike Lab ID: 1680662 Date Analyzed: 08/19/2022 13:32 Spike Duplicate ID: LCSD for HBN 1224862 [VXX39040] Spike Duplicate Lab ID: 1680663 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224862001

Results by AK101										
	Blank Spik			(mg/L) Spike Duplicate (mg/L)						
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL	
Gasoline Range Organics	1.00	1.01	101	1.00	0.946	95	(60-120)	6.80	(< 20)	
Surrogates										
4-Bromofluorobenzene (surr)	0.0500		113	0.0500		99	(50-150)	12.80		
Batch Information										
Analytical Batch: VFC16223				Pre	Batch: V	XX39040				
Analytical Method: AK101				Prep Method: SW5030B						
Instrument: Agilent 7890 PID/FID				Prep Date/Time: 08/19/2022 06:00						
Analyst: PHK				Spik	e Init Wt./\	/ol.: 0.0500	mg/L Extra	ct Vol: 5 mL		
				Dup	e Init Wt./\	/ol.: 0.0500	mg/L Extrac	t Vol: 5 mL		

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SGS

Method Blank

Blank ID: MB for HBN 1841839 [VXX/39040] Blank Lab ID: 1680659

QC for Samples: 1224862001

Results by SW8021B

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.500	ug/L
o-Xylene	0.500U	1.00	0.500	ug/L
P & M -Xylene	1.00U	2.00	0.900	ug/L
Toluene	0.500U	1.00	0.500	ug/L
Xylenes (total)	1.50U	3.00	1.40	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	87.4	77-115		%

Batch Information

Analytical Batch: VFC16223 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Analytical Date/Time: 8/19/2022 2:34:00PM Prep Batch: VXX39040 Prep Method: SW5030B Prep Date/Time: 8/19/2022 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 08/24/2022 2:33:59PM



Blank Spike ID: LCS for HBN 1224862 [VXX39040] Blank Spike Lab ID: 1680660 Date Analyzed: 08/19/2022 13:14 Spike Duplicate ID: LCSD for HBN 1224862 [VXX39040] Spike Duplicate Lab ID: 1680661 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224862001

Results by SW8021B

		Blank Spike	e (ug/L)	:	Spike Dupli	cate (ug/L)			
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Benzene	100	105	105	100	110	110	(80-120)	4.60	(< 20)
Ethylbenzene	100	101	101	100	104	104	(75-125)	3.20	(< 20)
o-Xylene	100	100	100	100	102	102	(80-120)	2.20	(< 20)
P & M -Xylene	200	202	101	200	208	104	(75-130)	3.00	(< 20)
Toluene	100	101	101	100	106	106	(75-120)	5.00	(< 20)
Xylenes (total)	300	302	101	300	310	103	(79-121)	2.70	(< 20)
urrogates									
1,4-Difluorobenzene (surr)	50		101	50		100	(77-115)	0.28	
Batch Information									
Analytical Batch: VFC16223				Pre	p Batch: V	XX39040			

Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Prep Batch: VXX39040 Prep Method: SW5030B Prep Date/Time: 08/19/2022 06:00 Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 08/24/2022 2:34:01PM

					Prosi	k# 36	5153	DBL	_		.224	862
							SGS	North A	merica I	1 	11 1 1 1 11 1 11 1 11 1 1	() 1 (
Shannon & Wilson, Inc. 5430 Fairbanks Street, Suite 3 Anchorage, Alaska 99518 (907) 561-2120 Fax (206) 695-6777				GRO-AK101	BTEX - SW8021B							
Date	Time		Sample ID	Total Containers	VOA Vials HCl	VOA Vials HCl						
8/15/2022	20:00	100972-UV2	1	3	X	х						
											1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
Relinquished	By:		Relinquished By:			Project Info	rmation					
Signature	32		Signature:			Project Num	ber: 10097	/2-401				
Print Vame: Za	ich Thon		Print Name:	\rightarrow		Project Nam	e: ZipMart					-
Company: Sh	annon & Wilso	n, Inc.	Company:		· · · · · · · · · · · · · · · · · · ·	Contact: Stat	fford Glasha	in, Randy H	essong			
Date: 8/16/202	22		Date:	· · · ·		Sampler:	ZJT		··			
Time: 1012	3		Time:	and the second		Sample De	ceint	kely High C	oncentration			
Signature			Signature: MMM F/	112		Shipped Vi	a: Hand D	elivered				14 Mar 1
Print Name	/		Print Name: Nolan V	rahovid	4							
Company:			Company: 5G5	· · · · · · · · · · · ·		Cooler Ten	nperature U	Jpon Arriv	val:			
Date:			Date: 8/16/22			Sample Ma	trix: Wate	r				
Time:			Time: 10:74			10 Working	DAY TAT					

2.9°C D62

SGS Workorder #: 1224862 1 2 2 4 8 6 2 Review Criteria 2 ondition (Yes, No, N/A Exceptions Noted below Chain of Custody / Temperature Requirements Note: Temperature and COC seal information is found on the chain of custody for DOD only: Did all sample coolers have a corresponding COC? N/A							
Review Criteria Condition (Yes, No, N/A Exceptions Noted below Chain of Custody / Temperature Requirements Note: Temperature and COC seal information is found on the chain of custody for DOD only: Did all sample coolers have a corresponding COC? N/A							
Chain of Custody / Temperature Requirements Note: Temperature and COC seal information is found on the chain of custody for DOD only: Did all sample coolers have a corresponding COC? N/A							
DOD only: Did all sample coolers have a corresponding COC? N/A	m						
If v0%C ware comple containers ice free?							
11 <0°C, were sample containers ice free?							
Note containers received with ice:							
Identify any containers received at non-compliant temperature: (Use form FS-0029 if more space is needed)							
Iolding Time / Documentation / Sample Condition Requirement: Note: Refer to form F-083 "Sample Guide" for specific holding times and sample contain	ners.						
Were samples received within analytical holding time? Yes							
Do sample labels match COC? Record discrepancies. Yes							
Note: If information on containers differs from COC, default to COC information for login. If times differ <1hr, record details & login per COC.							
Were analytical requests clear? Yes							
(i.e. method is specified for analyses with multiple option for method (Eg, BTEX 8021 vs 8260, Metals 6020 vs 200.8)							
Were proper containers (type/mass/volume/preservative)used? Yes							
Note: Exemption for metals analysis by 200.8/6020 in water.							
Volatile Analysis Requirements (VOC, GRO, LL-Hg, etc.)							
Vere all soil VOAs received with a corresponding % solids container? N/A							
Were Trip Blanks (e.g., VOAs, LL-Hg) in cooler with samples?							
Were all water VOA vials free of headspace (e.g., bubbles ≤ 6mm)? Yes							
Were all soil VOAs field extracted with Methanol+BFB? N/A							
Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.							
Additional notes (if applicable):							

-



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition	Container Id	<u>Preservative</u>	<u>Container</u> Condition
1224862001-A	HCL to $pH < 2$	ОК			
1224862001-B	HCL to $pH < 2$	OK			
1224862001-C	HCL to pH < 2	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Suite 3 Anchorage, AK 99518

Report Number: 1225681

Client Project: 100972-001 Sterling Zip Mart

Dear Zach Thon,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 09/22/2022 12:22:15PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage



Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1225681 Project Name/Site: 100972-001 Sterling Zip Mart Project Contact: Zach Thon

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 09/22/2022 12:22:16PM

SGS North America Inc.

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Laboratory Qualifiers

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

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*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i	nclude a result for "Total Solids" have already been adjusted for moisture content.
All DRO/RRO analyses are	e integrated per SOP.

Print Date: 09/22/2022 12:22:18PM

Note:



Sample Summary									
Client Sample ID 100972-HT21	<u>Lab Sample ID</u> 1225681001	<u>Collected</u> 09/16/2022	<u>Received</u> 09/19/2022	<u>Matrix</u> Water (Surface, Eff., Ground)					
Method	Method Des	cription							
AK101	AK101/8021	Combo.							
SW8021B	AK101/8021	Combo.							

Print Date: 09/22/2022 12:22:19PM

<u>565</u>							
Results of 100972-HT21 Client Sample ID: 100972-HT21 Client Project ID: 100972-001 Sterling Lab Sample ID: 1225681001 Lab Project ID: 1225681	g Zip Mart	C R M S	ollection Da eceived Dat latrix: Water olids (%): ocation:	te: 09/16/ te: 09/19/2 (Surface,	/22 16:30 22 15:46 Eff., Gro	und)	
Results by Volatile Fuels							
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 09/20/22 18:31
Surrogates							
4-Bromofluorobenzene (surr)	84.3	50-150		%	1		09/20/22 18:31
Batch Information							
Analytical Batch: VFC16259 Analytical Method: AK101 Analyst: PHK Analytical Date/Time: 09/20/22 18:31 Container ID: 1225681001-A			Prep Batch: \ Prep Method: Prep Date/Tir Prep Initial W Prep Extract \	VXX39203 SW5030B ne: 09/20/2 t./Vol.: 5 m Vol: 5 mL	3 22 06:00 1L		
Parameter	Result Oual	100/01	וח	l Inits	DE	Allowable	Date Analyzed
Benzene	0.250 U	0.500	0.150	ua/L	1	Linits	09/20/22 18:31
Ethylbenzene	0.500 U	1.00	0.500	ug/L	1		09/20/22 18:31
o-Xylene	0.500 U	1.00	0.500	ug/L	1		09/20/22 18:31
P & M -Xylene	1.00 U	2.00	0.900	ug/L	1		09/20/22 18:31
Toluene	0.500 U	1.00	0.500	ug/L	1		09/20/22 18:31
Xylenes (total)	1.50 U	3.00	1.40	ug/L	1		09/20/22 18:31
Surrogates							
1,4-Difluorobenzene (surr)	89	77-115		%	1		09/20/22 18:31
Batch Information							
Analytical Batch: VFC16259 Analytical Method: SW8021B Analyst: PHK Analytical Date/Time: 09/20/22 18:31 Container ID: 1225681001-A			Prep Batch: \ Prep Method: Prep Date/Tir Prep Initial W Prep Extract \	VXX39203 SW5030E ne: 09/20/2 t./Vol.: 5 m Vol: 5 mL	3 22 06:00 1L		
Print Date: 09/22/2022 12:22:22PM						J flaggin	g is activated

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		1.			
Method Blank					
Blank ID: MB for HBN 18440 Blank Lab ID: 1686914	Blank ID: MB for HBN 1844014 [VXX/39203] Blank Lab ID: 1686914			e, Eff., Ground)	
QC for Samples: 1225681001					
Results by AK101					
Parameter Gasoline Range Organics	<u>Results</u> 0.0500U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L	
Surrogates 4-Bromofluorobenzene (surr)	84.9	50-150		%	
Batch Information					
Analytical Batch: VFC16259 Analytical Method: AK101 Instrument: Agilent 7890 PIE Analyst: PHK Analytical Date/Time: 9/20/2	D/FID 022 12:40:00PM	Prep Ba Prep Me Prep Da Prep Init Prep Ext	tch: VXX39203 thod: SW5030B te/Time: 9/20/202 ial Wt./Vol.: 5 mL tract Vol: 5 mL	22 6:00:00AM -	



Blank Spike ID: LCS for HBN 1225681 [VXX39203] Blank Spike Lab ID: 1686917 Date Analyzed: 09/20/2022 13:35 Spike Duplicate ID: LCSD for HBN 1225681 [VXX39203] Spike Duplicate Lab ID: 1686918 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1225681001

Results by AK101									
		Blank Spike (mg/L)		Spike Duplicate (mg/L)					
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	0.972	97	1.00	0.937	94	(60-120)	3.60	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		98	0.0500		89	(50-150)	9.80	
Batch Information									
Analytical Batch: VFC16259				Pre	Batch: V	XX39203			
Analytical Method: AK101				Pre	Method:	SW5030B			
Instrument: Agilent 7890 PID	/FID			Pre	Date/Tim	e: 09/20/202	2 06:00		
Analyst: PHK				Spik	e Init Wt./\	/ol.: 0.0500	mg/L Extra	ct Vol: 5 mL	
				Dup	e Init Wt./V	/ol.: 0.0500	mg/L Extrac	t Vol: 5 mL	

Print Date: 09/22/2022 12:22:25PM

SGS

Method Blank

Blank ID: MB for HBN 1844014 [VXX/39203] Blank Lab ID: 1686914

QC for Samples: 1225681001

Results by SW8021B

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.500	ug/L
o-Xylene	0.500U	1.00	0.500	ug/L
P & M -Xylene	1.00U	2.00	0.900	ug/L
Toluene	0.500U	1.00	0.500	ug/L
Xylenes (total)	1.50U	3.00	1.40	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	89.1	77-115		%

Batch Information

Analytical Batch: VFC16259 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Analytical Date/Time: 9/20/2022 12:40:00PM Prep Batch: VXX39203 Prep Method: SW5030B Prep Date/Time: 9/20/2022 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 09/22/2022 12:22:27PM

SGS North America Inc.



Blank Spike ID: LCS for HBN 1225681 [VXX39203] Blank Spike Lab ID: 1686915 Date Analyzed: 09/20/2022 13:16 Spike Duplicate ID: LCSD for HBN 1225681 [VXX39203] Spike Duplicate Lab ID: 1686916 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1225681001

Results by SW8021B

		Blank Spike	e (ug/L)		Spike Dupli	cate (ug/L)			
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Benzene	100	104	104	100	111	111	(80-120)	6.40	(< 20)
Ethylbenzene	100	97.6	98	100	106	106	(75-125)	7.90	(< 20)
o-Xylene	100	95.2	95	100	105	105	(80-120)	10.20	(< 20)
P & M -Xylene	200	194	97	200	212	106	(75-130)	8.60	(< 20)
Toluene	100	99.0	99	100	107	107	(75-120)	8.10	(< 20)
Xylenes (total)	300	289	96	300	317	106	(79-121)	9.10	(< 20)
Surrogates									
1,4-Difluorobenzene (surr)	50		100	50		102	(77-115)	1.80	

Analytical Batch: VFC16259 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Prep Batch: VXX39203 Prep Method: SW5030B Prep Date/Time: 09/20/2022 06:00 Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 09/22/2022 12:22:30PM

					P#3657	253 Kit		
	400 N. 34th Street, Suite 100 Seattle, WA 98103 Seattle, WA 98103 Seattle, WA 98103 Seattle, WA 98103 Seattle, WA 98103 St. Louis, MO 63	DN. INC. Consultants Center Drive 8146-3564 2705 Saint And Pasco, WA 993	AIN-OF-CO ews Loop, Suite A 11-3378			Laboratory کے Attn: کے کرے	SGS Anchorage	
	(206) 632-8020 (314) 699-9660 2355 Hill Road 5430 Fairbanks Fairbanks, AK 99709 5430 Fairbanks (907) 479-0600 (907) 561-2120 3990 Collins Way, Suite 100 1321 Bannock S Lake Oswego, OR 97035 Denver, CO 8020 (503) 223-6147 (303) 825-3800	(509) 946-6309 Street, Suite 3 99518 treet, Suite 200 04	Date ampled	S R OLD OUTON WILLI'S	(include preservat	ive if used)	Street and Street Stree	
J	100972-HT21	9/16/22	6:30 X	× [3	Water	
	Project Information	Sample Receipt	Relinc	uished By: 1.	Relinquished	By: 2.	Relinquished By: 3.	
1	Project Number: 100972-001 To	otal Number of Containers	Signature:	Time: 15145	Signature: Tir	ne: Signa	ature: Time:	
	Contact: Zach Thom R	eceived Good Cond./Cold	Printed Name: Rand	Date:	Printed Name: Da	te: Printe	ed Name: Date:	
	Sampler: Randy itessong (a	ttach shipping bill, if any)	Company: 5	4 w	Company:	Com	bany:	
	Instruct	ions	Receiv	ved By: 1.	Received By:	2.	Received By: 3.	
	Requested Turnaround Time: Steel Special Instructions: Na train	ndard blank	Signature:	Time:	Signature: Tir	ne: Sign:		
	SXW/SGS MSA	pi-vi -	Printed Name:	Date:	Printed Name: Da	ite: Printe	ad Name: Date:	
	Distribution: White - w/shipment - returned to Yellow - w/shipment - for consig Pink - Shannon & Wilson - Job F) Shannon & Wilson w/ laboratory nee files File	report Company:		Company:	Com	SGS	140

No.^{Page 10}35129

1225681

ÎA

e-Sample Receipt Form								
202	SGS Workorder #:	1225681	1225681					
Re	view Criteria	Condition (Yes, No, N/A	Exceptions Noted below					
Chain of Custor	ly / Temperature Requirements	Note: Temperature	e and COC seal information is found on the chain of custody form					
DOD only: Did all sa	mple coolers have a corresponding (COC? N/A						
	If <0°C, were sample containers ice	free? N/A						
	Note containers receive	<mark>d with ice:</mark>						
Identify any con	tainers received at non-compliant ter (Use form FS-0029 if more space i	nperature: s needed)						
olding Time / Docume	ntation / Sample Condition Req	uirement: Note: Refer to form	F-083 "Sample Guide" for specific holding times and sample containers.					
Were sampl	es received within analytical holding	time? Yes						
Do sample la	abels match COC? Record discrepa	ncies. Yes						
Note: If information on on formation for login. If time	containers differs from COC, default es differ <1hr, record details & login	to COC per COC.						
	Were analytical requests of	clear? Yes						
i.e. method is specified fo (Eg, BTEX 8021	r analyses with multiple option for me vs 8260, Metals 6020 vs 200.8)	ethod						
Were proper containe Note: Exemption for	rs (type/mass/volume/preservative)u metals analysis by 200.8/6020 in wa	sed? Yes ter.						
Volatile Analysis Re	equirements (VOC, GRO, LL-Hg	, etc.)						
ere all soil VOAs received	with a corresponding % solids conta	ainer? N/A						
Were Trip Blanks (e	.g., VOAs, LL-Hg) in cooler with sam	ples? No						
vere all water VOA vials	Tree of headspace (e.g., bubbles ≤ 6	mm)? Yes						
Note to Clients Are	"No" appwor obsite indicates and		d procedures and may impact data quality					
Note to Client: Any	NO, answer above indicates non-c	compliance with standard	u procedures and may impact data quality.					
	Additional r	notes (if applicable):						

-



Sample Containers and Preservatives

<u>Container Id</u>	Preservative	<u>Container</u> Condition	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition
1225681001-A 1225681001-B	HCL to pH < 2 HCL to pH < 2	ОК ОК			
1225681001-C	HCL to pH < 2	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

- OK The container was received at an acceptable pH for the analysis requested.
- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.
- FR The container was received frozen and not usable for Bacteria or BOD analyses.
- IC The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
- NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
- PA The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
- PH The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Ste. 3 Anchorage, AK 99518 (907)433-3215

Report Number: 1225800

Client Project: 100972-501 Zipmart-Sept. 2022

Dear Randy Hessong,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 09/28/2022 4:16:29PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage



Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1225800 Project Name/Site: 100972-501 Zipmart-Sept. 2022 Project Contact: Randy Hessong

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 09/28/2022 4:16:30PM

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content.

Print Date: 09/28/2022 4:16:32PM

Note:



	Sample Summary											
<u>Client Sample ID</u> 100972-TWD21	<u>Lab Sample ID</u> 1225800001	<u>Collected</u> 09/22/2022	<u>Received</u> 09/23/2022	<u>Matrix</u> Water (Surface, Eff., Ground)								
Method Method Description												
AK101 AK101/8021 Combo.												
SW8021B	AK101/8021 Combo.											

Client Sample ID: 100972-TWD21 Client Project ID: 100972-501 Zipmar Lab Sample ID: 1225800001 Lab Project ID: 1225800	t-Sept. 2022	Collection Date: 09/22/22 17:00 Received Date: 09/23/22 11:20 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:				und)	
Results by Volatile Fuels			_				
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 09/27/22 21:49
Surrogates							
4-Bromofluorobenzene (surr)	80.9	50-150		%	1		09/27/22 21:49
Batch Information							
Analytical Batch: VFC16270 Analytical Method: AK101 Analyst: PHK Analytical Date/Time: 09/27/22 21:49 Container ID: 1225800001-B		i i i i i i i i i i i i i i i i i i i	Prep Batch: \ Prep Method: Prep Date/Tir Prep Initial W Prep Extract \	VXX39243 SW5030B ne: 09/27/2 t./Vol.: 5 m Vol: 5 mL	3 22 06:00 IL		
Parameter	Result Qual	100/01	DI	Units	DF	<u>Allowable</u>	Date Analyzed
Benzene	0.250 U	0.500	0.150	ug/L	1		09/26/22 18:48
Ethylbenzene	0.500 U	1.00	0.500	ug/L	1		09/26/22 18:48
o-Xylene	0.500 U	1.00	0.500	ug/L	1		09/26/22 18:48
P & M -Xylene	1.00 U	2.00	0.900	ug/L	1		09/26/22 18:48
Toluene	0.500 U	1.00	0.500	ug/L	1		09/26/22 18:48
Xylenes (total)	1.50 U	3.00	1.40	ug/L	1		09/26/22 18:48
Surrogates							
1,4-Difluorobenzene (surr)	90.3	77-115		%	1		09/26/22 18:48
Batch Information							
Analytical Batch: VFC16268 Analytical Method: SW8021B Analyst: PHK Analytical Date/Time: 09/26/22 18:48 Container ID: 1225800001-A		i i i i i i i i i i i i i i i i i i i	Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract V	VXX39235 SW5030B ne: 09/26/2 t./Vol.: 5 m Vol: 5 mL	3 22 06:00 IL		
Drint Date: 00/28/2022 4-46-24DM							- : 4: - 4 - 1

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COC

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SGS

Method Blank

Blank ID: MB for HBN 1844282 [VXX/39235] Blank Lab ID: 1688014

QC for Samples: 1225800001

Results by SW8021B

Parameter	Results	LOQ/CL	DL	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.500	ug/L
o-Xylene	0.500U	1.00	0.500	ug/L
P & M -Xylene	1.00U	2.00	0.900	ug/L
Toluene	0.500U	1.00	0.500	ug/L
Xylenes (total)	1.50U	3.00	1.40	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	89.9	77-115		%

Batch Information

Analytical Batch: VFC16268 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Analytical Date/Time: 9/26/2022 12:34:00PM Prep Batch: VXX39235 Prep Method: SW5030B Prep Date/Time: 9/26/2022 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 09/28/2022 4:16:36PM



Blank Spike ID: LCS for HBN 1225800 [VXX39235] Blank Spike Lab ID: 1688015 Date Analyzed: 09/26/2022 13:10 Spike Duplicate ID: LCSD for HBN 1225800 [VXX39235] Spike Duplicate Lab ID: 1688016 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1225800001

Results by SW8021B

		Blank Spike	e (ug/L)	:	Spike Dupli	cate (ug/L)			
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Benzene	100	105	105	100	113	113	(80-120)	7.70	(< 20)
Ethylbenzene	100	92.1	92	100	98.1	98	(75-125)	6.30	(< 20)
o-Xylene	100	87.7	88	100	92.2	92	(80-120)	5.00	(< 20)
P & M -Xylene	200	181	90	200	192	96	(75-130)	6.00	(< 20)
Toluene	100	98.6	99	100	107	107	(75-120)	7.80	(< 20)
Xylenes (total)	300	269	90	300	284	95	(79-121)	5.70	(< 20)
urrogates									
1,4-Difluorobenzene (surr)	50		100	50		100	(77-115)	0.04	
Batch Information									
Applytical Batch: VEC16268				Dro	n Batch: V	VV20225			

Analytical Batch: VFC16268 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Prep Batch: VXX39235 Prep Method: SW5030B Prep Date/Time: 09/26/2022 06:00 Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 09/28/2022 4:16:38PM

SGS

Method Blank									
Blank ID: MB for HBN 18443 Blank Lab ID: 1688268	Blank ID: MB for HBN 1844336 [VXX/39243] Blank Lab ID: 1688268			Matrix: Water (Surface, Eff., Ground)					
QC for Samples: 1225800001									
Results by AK101)(
Parameter Gasoline Range Organics	<u>Results</u> 0.0500U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L					
Surrogates 4-Bromofluorobenzene (surr)	85.7	50-150		%					
Batch Information									
Analytical Batch: VFC16270 Analytical Method: AK101 Instrument: Agilent 7890A F Analyst: PHK Analytical Date/Time: 9/27/2	Prep Ba Prep Me Prep Da Prep Ini Prep Ex	tch: VXX39243 ethod: SW5030 ite/Time: 9/27/2 tial Wt./Vol.: 5 n tract Vol: 5 mL	8 B 2022 6:00:00AM mL						



Blank Spike ID: LCS for HBN 1225800 [VXX39243] Blank Spike Lab ID: 1688271 Date Analyzed: 09/27/2022 13:33 Spike Duplicate ID: LCSD for HBN 1225800 [VXX39243] Spike Duplicate Lab ID: 1688272 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1225800001

Results by AK101									
		Blank Spike	e (mg/L)	mg/L) Spike Duplicate (mg/L)					
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.05	105	1.00	1.05	105	(60-120)	0.38	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		90	0.0500		88	(50-150)	2.70	
Batch Information									
Analytical Batch: VFC16270				Prep	Batch: V	XX39243			
Analytical Method: AK101				Prep	Method:	SW5030B			
Instrument: Agilent 7890A PID/FID				Prep	Date/Tim	e: 09/27/202	2 06:00		
Analyst: PHK				Spik	e Init Wt./\	/ol.: 0.0500	mg/L Extra	ct Vol: 5 mL	
				Dup	e Init Wt./V	/ol.: 0.0500	mg/L Extrac	t Vol: 5 mL	

Print Date: 09/28/2022 4:16:42PM



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								SGS I	North An	петта п			
			Shannon &	Wilson, Inc.									
		543	30 Fairbanks	Street, Suite 3									
		A	Anchorage, A	Jaska 99518									
			(907) 56	51_2120									
-			(907) 30	/1-2120 /05 /777			21B					4	
			Fax (200)	095-0///		101	W80.						
			\mathcal{D}	/· 1122.1 mm /		-AK	x - S						
			l'r	oh (# 559 897 Cp	7	GRO	BTE						
					Total	VOA Vials	VOA Vials						
	Date	Time		Sample ID	Containers	HC1	HCl						
/I AC	9/22/2022	17:00	100972-TWI	021	3	x	Х						
	Relinquished	By:		Relinquished By:			Project Info	rmation					
	Signature:	y P		Signature:			Project Num	ber: 10097	2-501				
	Print Name: Zaca Than		Print Name:		Project Name: Zipmart - Sept. 2022								
	Company: Shannon & Wilson, Inc.			Company:		Contact: Zach Thon, Randy Hessong							
	Date: 9/23/23			Date:			Sampler: ZJT						
	Time: 11:20		Time:			Special Instructions:							
	Received By:		Received By:			Sample Receipt							
	Signature:	/		Print Name: Chase Ch.	<u>~ 63</u>	7		a: Hand De	enverea				
	Company:			Company Scs	12615		Cooler Temperature Upon Arrival: 0 8 102						
	Date:			Date: G/22/22			Sample Ma	trix: Water			<u></u>		-i
	Time:			Time: 11:20	10 Working DAY TAT								

363	SGS Workorder #:	1225800	1225800
Re	view Criteria	Condition (Yes, No, N/A	Exceptions Noted below
Chain of Custor	ly / Temperature Requirements	Note: Temperature a	nd COC seal information is found on the chain of custody for
DOD only: Did all sa	mple coolers have a corresponding	COC? N/A	
	If <0°C, were sample containers ice	free? N/A	
	Note containers receive	ed with ice:	
Identify any con	tainers received at non-compliant ter (Use form FS-0029 if more space)	mperature: <i>is needed)</i>	
olding Time / Docume	ntation / Sample Condition Req	uirement: Note: Refer to form F-	083 "Sample Guide" for specific holding times and sample contain
Were sample	es received within analytical holding	time? Yes	
Note: If information on on formation for login. If tim	containers differs from COC, default es differ <1hr, record details & login	to COC per COC.	
	Were analytical requests	clear? Yes	
i.e. method is specified fo (Eg, BTEX 8021	r analyses with multiple option for m vs 8260, Metals 6020 vs 200.8)	ethod	
Were proper containe	rs (type/mass/volume/preservative)u	Ised? Yes	
Note: Exemption for	metals analysis by 200.8/6020 in wa	ater.	
Volatile Analysis Re	equirements (VOC, GRO, LL-Hg	j, etc.)	
ere all soil VOAs received	with a corresponding % solids contained	ainer? N/A	
Were Trip Blanks (e	.g., VOAs, LL-Hg) in cooler with sam	nples? N/A	
Were all water VOA vials	free of headspace (e.g., bubbles ≤ 6	imm)? Yes	
Were all soil	VOAs field extracted with Methanol+	BFB? N/A	
			procedures and may impact data quality
Note to Client: Any	"No", answer above indicates non-	compliance with standard	siocodaloo and may impaor data quality.



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition
1225800001-A	HCL to pH < 2	ОК			
1225800001-B	HCL to $pH < 2$	ОК			
1225800001-C	HCL to $pH < 2$	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Ste. 3 Anchorage, AK 99518 (907)433-3215

Report Number: 1225911

Client Project: 100972 Zipmart

Dear Randy Hessong,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 10/06/2022 7:28:16AM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage



Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1225911 Project Name/Site: 100972 Zipmart Project Contact: Randy Hessong

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 10/06/2022 7:28:18AM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com



Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. e integrated per SOP.

Print Date: 10/06/2022 7:28:20AM

Note:


	\$	Sample Summary	1	
<u>Client Sample ID</u> 100972-UV22	Lab Sample ID 1225911001	<u>Collected</u> 09/27/2022	<u>Received</u> 09/28/2022	<u>Matrix</u> Water (Surface, Eff., Ground)
Method	Method Des	<u>cription</u>		
AK101	AK101/8021	Combo.		
SW8021B	AK101/8021	Combo.		

Print Date: 10/06/2022 7:28:21AM



Detectable Results Summary

Client Sample ID: **100972-UV22** Lab Sample ID: 1225911001

Volatile Fuels

Parameter	<u>Result</u>	<u>Units</u>
Benzene	9480	ug/L
Ethylbenzene	1890	ug/L
Gasoline Range Organics	97.2	mg/L
o-Xylene	4170	ug/L
P & M -Xylene	9120	ug/L
Toluene	19800	ug/L
Xylenes (total)	13300	ug/L

Print Date: 10/06/2022 7:28:22AM

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Client Sample ID: 100972-UV22 Client Project ID: 100972 Zipmart Lab Sample ID: 1225911001 Lab Project ID: 1225911	Collection Date: 09/27/22 13:45 Received Date: 09/28/22 09:23 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:						
Results by Volatile Fuels			_				
Parameter Casalina Parana Ornaniaa	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	Date Analyzed
Gasoline Range Organics	97.2	10.0	4.50	mg/L	100		10/03/22 20.0
Surrogates 4-Bromofluorobenzene (surr)	101	50-150		%	100		10/03/22 20:0
Batch Information Analytical Batch: VFC16279 Analytical Method: AK101		1	Prep Batch: Prep Method	VXX39277 d: SW5030E	}		
Analyst: PHK Analytical Date/Time: 10/03/22 20:01 Container ID: 1225911001-C		Ĩ	Prep Date/T Prep Initial V Prep Extract	ime: 10/03/2 Vt./Vol.: 5 m t Vol: 5 mL	22 06:00 IL		
Parameter_	<u>Result Qual</u>	LOQ/CL	DL	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	Date Analyze
Benzene	9480	50.0	15.0	ug/L	100		10/03/22 20:0
Ethylbenzene	1890	100	50.0	ug/L	100		10/03/22 20:0
o-Xylene	4170	100	50.0	ug/L	100		10/03/22 20:0
P & M -Xylene	9120	200	90.0	ug/L	100		10/03/22 20:0
	19800	100 300	50.0 140	ug/L	100		10/03/22 20:0
	13300	300	140	ug/L	100		10/03/22 20.0
urrogates 1,4-Difluorobenzene (surr)	99.3	77-115		%	100		10/03/22 20:0
Batch Information							
Analytical Batch: VFC16279 Analytical Method: SW8021B Analyst: PHK Analytical Date/Time: 10/03/22 20:01 Container ID: 1225911001-C		i i i i i i i i i i i i i i i i i i i	Prep Batch: Prep Methoo Prep Date/T Prep Initial V Prep Extract	VXX39277 d: SW5030E ime: 10/03/2 Vt./Vol.: 5 m t Vol: 5 mL	3 22 06:00 IL		

Print Date: 10/06/2022 7:28:23AM

SGS North America Inc.

200 West Potter Drive Anchorage, AK 95518 t 907.562.2343 f 907.561.5301 www.us.sgs.com J flagging is activated

SGS	
	-

Method Blank Blank ID: MB for HBN 1844935 [VXX/39277] Blank Lab ID: 1689518					
		Matrix: Water (Surface, Eff., Ground)			
QC for Samples: 1225911001					
Results by AK101) 			
<u>Parameter</u> Gasoline Range Organics	<u>Results</u> 0.0500U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L	
Surrogates 4-Bromofluorobenzene (surr)	68.6	50-150		%	
atch Information					
Analytical Batch: VFC16279 Analytical Method: AK101 Instrument: Agilent 7890 PII Analyst: PHK Analytical Date/Time: 10/3/2	9 D/FID 2022 11:57:00AM	Prep Ba Prep Me Prep Da Prep Init Prep Ex	tch: VXX39277 ethod: SW5030B te/Time: 10/3/20 tial Wt./Vol.: 5 m tract Vol: 5 mL	122 6:00:00AM L	

Print Date: 10/06/2022 7:28:24AM



Blank Spike ID: LCS for HBN 1225911 [VXX39277] Blank Spike Lab ID: 1689521 Date Analyzed: 10/03/2022 12:52 Spike Duplicate ID: LCSD for HBN 1225911 [VXX39277] Spike Duplicate Lab ID: 1689522 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1225911001

Results by AK101									
		Blank Spike	e (mg/L)	ng/L) Spike Duplicate (mg/L)					
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	0.879	88	1.00	1.00	100	(60-120)	13.10	(< 20)
urrogates									
4-Bromofluorobenzene (surr)	0.0500		84	0.0500		98	(50-150)	15.60	
Batch Information									
Analytical Batch: VFC16279				Pre	Batch: V	XX39277			
Analytical Method: AK101				Pre	Method:	SW5030B			
Instrument: Agilent 7890 PID	/FID			Pre	o Date/Tim	e: 10/03/202	2 06:00		
Analyst: PHK				Spik	te Init Wt./\	/ol.: 0.0500	mg/L Extra	ct Vol: 5 mL	
				Dup	e Init Wt./\	/ol.: 0.0500	mg/L Extrac	t Vol: 5 mL	

Print Date: 10/06/2022 7:28:27AM

SGS

Method Blank

Blank ID: MB for HBN 1844935 [VXX/39277] Blank Lab ID: 1689518

QC for Samples: 1225911001

Results by SW8021B

Parameter	Results	LOQ/CL	DL	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.500	ug/L
o-Xylene	0.500U	1.00	0.500	ug/L
P & M -Xylene	1.00U	2.00	0.900	ug/L
Toluene	0.500U	1.00	0.500	ug/L
Xylenes (total)	1.50U	3.00	1.40	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	89.6	77-115		%

Batch Information

Analytical Batch: VFC16279 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Analytical Date/Time: 10/3/2022 11:57:00AM Prep Batch: VXX39277 Prep Method: SW5030B Prep Date/Time: 10/3/2022 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 10/06/2022 7:28:29AM



Blank Spike ID: LCS for HBN 1225911 [VXX39277] Blank Spike Lab ID: 1689519 Date Analyzed: 10/03/2022 12:34 Spike Duplicate ID: LCSD for HBN 1225911 [VXX39277] Spike Duplicate Lab ID: 1689520 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1225911001

Results by SW8021B

		Blank Spike	e (ug/L)	Spike Duplicate (ug/L)					
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Benzene	100	101	101	100	109	109	(80-120)	6.90	(< 20)
Ethylbenzene	100	87.3	87	100	90.5	91	(75-125)	3.60	(< 20)
o-Xylene	100	83.4	83	100	83.9	84	(80-120)	0.63	(< 20)
P & M -Xylene	200	168	84	200	173	86	(75-130)	2.60	(< 20)
Toluene	100	91.7	92	100	97.1	97	(75-120)	5.80	(< 20)
Xylenes (total)	300	252	84	300	257	86	(79-121)	2.00	(< 20)
urrogates									
1,4-Difluorobenzene (surr)	50		99	50		102	(77-115)	2.90	
Batch Information									
Applytical Bataby VEC46270				Dro	n Dotoby V	VV20277			

Analytical Batch: VFC16279 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Prep Batch: VXX39277 Prep Method: SW5030B Prep Date/Time: 10/03/2022 06:00 Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 10/06/2022 7:28:32AM

Q										1	225	911
9						Profilet	+ 334	8719	4			
	· · · · · · · · · · · · · · · · · · ·						SGS	North A1	merica In			
Shannon & Wilson, Inc. 5430 Fairbanks Street, Suite 3 Anchorage, Alaska 99518 (907) 561-2120 Fax (206) 695-6777					GRO-AK101	BTEX - SW8021B						
				Total	VOA Vials	VOA Vials						
Date	Time	100072 111/2	Sample ID	Containers	HCl	HCl						
9/27/2022	13:45	1009/2-0 v2		3	X	X						
Relinquished	By:		Relinquished By:			Project Info	rmation					
Signature:	~ <i>√ ∕</i>		Signature:		· · · ·	Project Num	ber: 100972	2				
Print Name:	Zun	Thon	Print Name:		. 0	Project Nam	e: Zipmart					
Company: Sh	annon & Wilson	n, Inc.	Company:	>		Contact: Rar	ndy Hessong	" Zach Thon	1			
Date: 9/28/22 Date:					Sampler:	ZJT						
Time: 9:16					Special Instr	uctions:						
Received By:						Sample Re	ceipt					
Signature: Signature:					>	Shipped Vi	a: Hand D	elivered				
Print Name:	/	/	Print Name: Chris Schim	barg								
Company:	$ \longrightarrow$		Company: SGS			Cooler Ten	nperature U	Jpon Arriv	al: 3.2	062		
Date:	\subseteq		Date: 9/28/22			Sample Ma	trix: Wate	r				
Time:			Time: 9:23		10 Working	DAY TAT						

303	SGS Workorder #:	1225911	1 1225911
Re	eview Criteria	Condition (Yes, No, N/A	Exceptions Noted below
Chain of Custor	dy / Temperature Requirements	Note: Temperatur	re and COC seal information is found on the chain of custody for
DOD only: Did all sa	mple coolers have a corresponding	COC? N/A	
	If <0°C, were sample containers ice	e free? N/A	
	Note containers receive	<mark>ed with ice:</mark>	
Identify any con	tainers received at non-compliant te (Use form FS-0029 if more space	mperature: <i>is needed)</i>	
Iding Time / Docume	ntation / Sample Condition Rec	uirement: Note: Refer to form	n F-083 "Sample Guide" for specific holding times and sample contain
Were sampl	les received within analytical holding	time? Yes	
Do sample l	abels match COC? Record discrepa	ancies. Yes	
Note: If information on	containers differs from COC, default	to COC	
formation for login. If tim	es differ <1hr, record details & login	per COC.	
	Were analytical requests	clear? Yes	
e. method is specified fo	or analyses with multiple option for m	ethod	
(Eg, BTEX 8021	vs 8260, Metals 6020 vs 200.8)		
Were proper containe	ers (type/mass/volume/preservative)	used? Yes	
Note: Exemption for	metals analysis by 200.8/6020 in wa	ater.	
Volatilo Analysis Pr	auiromonte (VOC GPO II. He	r etc.)	
	with a corresponding % solids cont		
Were Trip Blanks (e	a with a corresponding $%$ solids cont		
Vere all water VOA viale	free of headspace (e.g. hubbles < 6	Smm)? Yes	
Were all soil	VOAs field extracted with Methanol-	BFB? N/A	
Note to Client: Any	v "No", answer above indicates non-	compliance with standar	d procedures and may impact data quality.



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition	Container Id	<u>Preservative</u>	<u>Container</u> Condition
1225911001-A	HCL to pH < 2	ОК			
1225911001-B	HCL to pH < 2	OK			
1225911001-C	HCL to $pH < 2$	OK			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

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FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Suite 3 Anchorage, AK 99518

Report Number: **1226079**

Client Project: 100972 Zipmart

Dear Zach Thon,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 10/13/2022 3:22:57PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage

Member of SGS Group



Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1226079 Project Name/Site: 100972 Zipmart Project Contact: Zach Thon

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 10/13/2022 3:22:58PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group



Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

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!	Surrogate out of control limits.
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CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
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DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. e integrated per SOP.

Print Date: 10/13/2022 3:23:00PM

Note:



		Samplo Summary		
		Sample Summary		
<u>Client Sample ID</u> 100972-UV23	<u>Lab Sample ID</u> 1226079001	<u>Collected</u> 10/04/2022	<u>Received</u> 10/05/2022	<u>Matrix</u> Water (Surface, Eff., Ground)
Method	Method Des	<u>cription</u>		
AK101	AK101/8021	Combo.		
SW8021B	AK101/8021	Combo.		

Print Date: 10/13/2022 3:23:01PM



Detectable Results Summary

Client Sample ID: **100972-UV23** Lab Sample ID: 1226079001

Volatile Fuels

Parameter	<u>Result</u>	Units
Benzene	6560	ug/L
Ethylbenzene	1970	ug/L
Gasoline Range Organics	86.6	mg/L
o-Xylene	4530	ug/L
P & M -Xylene	10200	ug/L
Toluene	15900	ug/L
Xylenes (total)	14800	ug/L

Print Date: 10/13/2022 3:23:03PM

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		-					
Client Sample ID: 100972-UV23 Client Project ID: 100972 Zipmart Lab Sample ID: 1226079001 Lab Project ID: 1226079		C R M Si Lo	ollection D eceived Da atrix: Wate olids (%): ocation:	ate: 10/04/ ate: 10/05/2 er (Surface,	22 18:20 22 11:09 Eff., Gro	und)	
Results by Volatile Fuels)				
						Allowable	
Parameter Gasoline Range Organics	<u>Result Qual</u> 86.6	<u>LOQ/CL</u> 10.0	<u>DL</u> 4.50	<u>Units</u> mg/L	<u>DF</u> 100	<u>Limits</u>	Date Analyzed
urrogates							
4-Bromofluorobenzene (surr)	103	50-150		%	100		10/12/22 18:45
Batch Information							
Analytical Batch: VFC16286 Analytical Method: AK101 Analyst: PHK Analytical Date/Time: 10/12/22 18:45 Container ID: 1226079001-B		F F F F	Prep Batch: Prep Method Prep Date/T Prep Initial V Prep Extract	VXX39316 d: SW5030E ime: 10/12/2 Nt./Vol.: 5 m t Vol: 5 mL	3 22 06:00 IL		
						Allowable	
Parameter Bonzono	Result Qual	<u>LOQ/CL</u>	<u>DL</u> 15.0	<u>Units</u>	<u>DF</u> 100	<u>Limits</u>	Date Analyzed
Ethylhenzene	1970	100	50.0	ug/L	100		10/12/22 18:4
o-Xvlene	4530	100	50.0	ug/L	100		10/12/22 18:4
P & M -Xvlene	10200	200	90.0	ug/L	100		10/12/22 18:4
Toluene	15900	100	50.0	ug/L	100		10/12/22 18:4
Xylenes (total)	14800	300	140	ug/L	100		10/12/22 18:4
urrogates							
1,4-Difluorobenzene (surr)	94.9	77-115		%	100		10/12/22 18:4
Batch Information							
Analytical Batch: VFC16286 Analytical Method: SW8021B Analyst: PHK		F F	Prep Batch: Prep Metho Prep Date/T	VXX39316 d: SW5030E ïme: 10/12/2	3 22 06:00		
Analytical Date/Time: 10/12/22 18:45		F	Prep Initial V Prep Extract	t Vol: 5 mL	IL		

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S	GS	

	7					
Method Blank						
Blank ID: MB for HBN 1845951 [VXX/39316] Blank Lab ID: 1691230	Matrix: Water (Surface, Eff., Ground)					
QC for Samples: 1226079001						
Results by AK101)					
ParameterResultsGasoline Range Organics0.0500U	LOQ/CL DL 0.100 0.0450	<u>Units</u> mg/L				
Surrogates4-Bromofluorobenzene (surr)100	50-150	%				
Batch Information						
Analytical Batch: VFC16286 Analytical Method: AK101 Instrument: Agilent 7890 PID/FID Analyst: PHK Analytical Date/Time: 10/12/2022 12:14:00PM	Prep Batch: VXX39316 Prep Method: SW5030B Prep Date/Time: 10/12/2022 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL	6:00:00AM				



Blank Spike ID: LCS for HBN 1226079 [VXX39316] Blank Spike Lab ID: 1691233 Date Analyzed: 10/12/2022 13:10 Spike Duplicate ID: LCSD for HBN 1226079 [VXX39316] Spike Duplicate Lab ID: 1691234 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1226079001

Results by AK101			_						
	I	Blank Spike	e (mg/L)	S	pike Dupli	cate (mg/L)			
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	0.990	99	1.00	0.983	98	(60-120)	0.73	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		104	0.0500		100	(50-150)	4.00	
Batch Information									
Analytical Batch: VFC16286				Prep	Batch: V	XX39316			
Analytical Method: AK101				Prep	Method:	SW5030B			
Instrument: Agilent 7890 PID	/FID			Prep	Date/Tim	e: 10/12/202	2 06:00		
Analyst: PHK				Spik	e Init Wt./\	/ol.: 0.0500	mg/L Extrac	ct Vol: 5 mL	
				Dup	e Init Wt./\	/ol.: 0.0500	mg/L Extract	Vol: 5 mL	

Print Date: 10/13/2022 3:23:08PM

SGS

Method Blank

Blank ID: MB for HBN 1845951 [VXX/39316] Blank Lab ID: 1691230

QC for Samples: 1226079001

Results by SW8021B

Parameter	Results	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.500	ug/L
o-Xylene	0.500U	1.00	0.500	ug/L
P & M -Xylene	1.00U	2.00	0.900	ug/L
Toluene	0.500U	1.00	0.500	ug/L
Xylenes (total)	1.50U	3.00	1.40	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	91	77-115		%

Batch Information

Analytical Batch: VFC16286 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Analytical Date/Time: 10/12/2022 12:14:00PM Prep Batch: VXX39316 Prep Method: SW5030B Prep Date/Time: 10/12/2022 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 10/13/2022 3:23:10PM



Blank Spike ID: LCS for HBN 1226079 [VXX39316] Blank Spike Lab ID: 1691231 Date Analyzed: 10/12/2022 12:51 Spike Duplicate ID: LCSD for HBN 1226079 [VXX39316] Spike Duplicate Lab ID: 1691232 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1226079001

Results by SW8021B

		Blank Spike	e (ug/L)	:	Spike Dupli	cate (ug/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Benzene	100	104	104	100	108	108	(80-120)	3.60	(< 20)
Ethylbenzene	100	103	103	100	106	106	(75-125)	3.60	(< 20)
o-Xylene	100	102	102	100	107	107	(80-120)	4.20	(< 20)
P & M -Xylene	200	206	103	200	214	107	(75-130)	3.60	(< 20)
Toluene	100	102	102	100	107	107	(75-120)	4.20	(< 20)
Xylenes (total)	300	308	103	300	320	107	(79-121)	3.80	(< 20)
urrogates									
1,4-Difluorobenzene (surr)	50		102	50		102	(77-115)	0.18	
Batch Information									
Analvtical Batch: VFC16286				Pre	p Batch: V	XX39316			

Analytical Batch: VFC16286 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: PHK Prep Batch: VXX39316 Prep Method: SW5030B Prep Date/Time: 10/12/2022 06:00 Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 10/13/2022 3:23:12PM

1226079

						 D	ofile#	36753	DVBP_		_		
Γ	<u></u>							SGS 1	North An	ierica In	c.		
	Shannon & Wilson, Inc. 5430 Fairbanks Street, Suite 3 Anchorage, Alaska 99518 (907) 561-2120 Fax (206) 695-6777					GRO-AK101	BTEX - SW8021B						
	Date	Time		Sample ID	Total Containers	VOA Vials HCl	VOA Vials HCl						
(HE)	10/4/2022	18:20	100972-UV2	23	3	<u> </u>	X	<u> </u>	<u> </u>			┼────	
			<u></u>					<u> </u>	┼───	+		 	
							<u> </u>	1					
										Service Statement and Scillarity Constant			
	Relinquished	By:		Relinquished By:			Project Inf	ormation					
	Signature	Le-P		Signature:			Project Nur	nber: 1009'	72				
	Print Name:	VZach	Tron	Print Name:			Project Nan	ne: Zipmart					
	Company: Sh	annon & Wilso	n, Inc.	Company:			Contact: Ra	indy Hesson	g, Zach Thoi	<u>n</u>			
	Date: 10/5/22 Date:			Date:			Sampler:						
	Time: ILOO Time:					Special Ins	tructions:			10.00			
, in the second s	Received By:	Received By:					Shinned V	<i>Tia</i> : Hand T)elivered				are supported to the second
	Signature:			Signature C	<u> </u>			10. 1101U I					
	Print Name:			Print Name: (hrð)chim	<u>×،ر</u>		Cooler Te	mperature	Upon Arriv	ral: 19	D58		
	Company:				<u> </u>		Sample M	1atrix: Wat	er				
	Date:			Time: 11:05			10 Working	3 DAY TAT					
	Time:			Time: //:09				g DAT TAT					=

000	SGS Workorder #:	1226079	1226079
Review C	riteria	Condition (Yes, No, N/A	Exceptions Noted below
Chain of Custody / Ter	nperature Requirements	Note: Temperature an	d COC seal information is found on the chain of custody for
DOD only: Did all sample co	olers have a corresponding (COC? N/A	
lf <0°C	were sample containers ice	free? N/A	
	Note containers receive	<mark>ed with ice:</mark>	
Identify any containers r (Use f	received at non-compliant ter	nperature: s needed)	
olding Time / Documentation	/ Sample Condition Req	time? Ves	83 "Sample Guide" for specific holding times and sample contain
Do sample labels m	atch COC? Record discrepa	ncies. Yes	
Note: If information on containe information for login. If times differ	rs differs from COC, default <1hr, record details & login	to COC per COC.	
	Were analytical requests of	clear? Yes	
i.e. method is specified for analys (Eg, BTEX 8021 vs 8260	es with multiple option for me), Metals 6020 vs 200.8)	ethod	
Were proper containers (type	(mage/valume/preservative)		
	mass/volume/preservative/u	sed? Tes	
Note: Exemption for metals	analysis by 200.8/6020 in wa	ter.	
Volatile Analysis Requirem	nents (VOC, GRO, LL-Hg	, etc.)	
Volatile Analysis Requirements of Volati	nass/volume/preservative/u analysis by 200.8/6020 in wa nents (VOC, GRO, LL-Hg corresponding % solids conta	, etc.)	
Volatile Analysis Requirem ere all soil VOAs received with a Were Trip Blanks (e.g., VOA	nents (VOC, GRO, LL-Hg corresponding % solids conta As, LL-Hg) in cooler with sam	, etc.) ainer? N/A ples? No	
Volatile Analysis Requirem ere all soil VOAs received with a Were Trip Blanks (e.g., VOA Were all water VOA vials free of h	nass/volume/preservative/u analysis by 200.8/6020 in wa nents (VOC, GRO, LL-Hg corresponding % solids conta As, LL-Hg) in cooler with sam headspace (e.g., bubbles \leq 6	ter. , etc.) ainer? N/A ples? No mm)? Yes	
Volatile Analysis Requirem ere all soil VOAs received with a o Were Trip Blanks (e.g., VOA Were all water VOA vials free of h Were all soil VOAs fie	nents (VOC, GRO, LL-Hg corresponding % solids conta As, LL-Hg) in cooler with sam headspace (e.g., bubbles \leq 6 eld extracted with Methanol+	sed? Tes iter. ainer? N/A ples? N/A mm)? Yes BFB? N/A	



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition	<u>Container Id</u>	Preservative	<u>Container</u> Condition
1226079001-A 1226079001-B 1226079001-C	No Preservative Required No Preservative Required No Preservative Required	ОК ОК ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St #3 Anchorage, AK 99518

Report Number: 1226457

Client Project: 100972-001 Sterling Zip Mart

Dear Alex Geilich,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 11/08/2022 12:15:20PM

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Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1226457 Project Name/Site: 100972-001 Sterling Zip Mart Project Contact: Alex Geilich

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 11/08/2022 12:15:21PM

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content.

Print Date: 11/08/2022 12:15:23PM

Note:



Sample Summary

Collected

Client Sample ID 100972-HT22 100972-TWD22

Lab Sample ID 1226457001 1226457002

Received 10/19/2022 10/20/2022 10/19/2022 10/20/2022

Matrix Water (Surface, Eff., Ground) Water (Surface, Eff., Ground)

<u>Method</u> SW8021B AK101 SW8260D Method Description BTEX 8021 Gasoline Range Organics (W) Volatile Organic Compounds (W)

Print Date: 11/08/2022 12:15:24PM



Detectable Results Summary

Client Sample ID: **100972-HT22** Lab Sample ID: 1226457001

Volatile Fuels

Parameter	Result	Units
Benzene	664	ug/L
Ethylbenzene	55.5	ug/L
Gasoline Range Organics	4.38	mg/L
o-Xylene	619	ug/L
P & M -Xylene	274	ug/L
Toluene	810	ug/L
Xylenes (total)	893	ug/L

Print Date: 11/08/2022 12:15:25PM

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	_									
Client Project ID: 100972-001 Sterling Zip Mart Lab Sample ID: 1226457001 Lab Project ID: 1226457				Collection Date: 10/19/22 17:00 Received Date: 10/20/22 16:55 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:						
]								
<u>Result Qual</u> 4.38	<u>LOQ/CL</u> 0.500	<u>DL</u> 0.225	<u>Units</u> mg/L	<u>DF</u> 5	<u>Allowable</u> <u>Limits</u>	<u>Date Analyze</u> 10/27/22 21:0				
82.4	50-150		%	5		10/27/22 21:0				
		Prep Batch: Prep Method Prep Date/Ti Prep Initial V Prep Extract	VXX39401 I: SW5030E ime: 10/27/2 Vt./Vol.: 5 m Vol: 5 mL	3 22 06:00 IL						
Result Oual		וח	l Inite	DE	Allowable	Date Analyze				
664	2.50	<u>0.7</u> 50	ug/L	5	Linits	10/27/22 21:0				
55.5	5.00	2.50	ug/L	5		10/27/22 21:0				
619	5.00	2.50	ug/L	5		10/27/22 21:0				
274	10.0	4.50	ug/L	5		10/27/22 21:				
810	5.00	2.50	ug/L	5		10/27/22 21:				
893	15.0	7.00	ug/L	5		10/27/22 21:				
101	77-115		%	5		10/27/22 21:				
101	77 110		70	Ū						
		Prep Batch: Prep Method Prep Date/Ti Prep Initial V Prep Extract	VXX39401 I: SW5030E ime: 10/27/2 Vt./Vol.: 5 m Vol: 5 mL	3 22 06:00 IL						
	Result Qual 4.38 82.4	g Zip Mart R Result Qual LOQ/CL 4.38 0.500 82.4 50-150 82.4 50-150 664 2.50 55.5 5.00 619 5.00 810 5.00 893 15.0 101 77-115	g Zip Mart Collection Dial Received Da Matrix: Wate Solids (%): Location: Result Qual LOQ/CL DL 4.38 0.500 0.225 82.4 50-150 Prep Batch: Prep Method Prep Date/Ti Prep Initial V Prep Extract Result Qual LOQ/CL DL 664 2.50 0.750 55.5 5.00 2.50 619 5.00 2.50 810 5.00 2.50 893 15.0 7.00 101 77-115 Prep Batch: Prep Method Prep Date/Ti Prep Initial V Prep Extract	g Zip Mart Collection Date: 10/19/ Received Date: 10/20/2 Matrix: Water (Surface, Solids (%): Location: Result Qual 4.38 LOQ/CL 0.500 DL 0.225 Units mg/L 82.4 50-150 % Prep Batch: VXX39401 Prep Method: SW5030E Prep Date/Time: 10/27/2 Prep Initial Wt./Vol.: 5 mL Result Qual 664 LOQ/CL 2.50 DL 0.750 Units 0.750 101 77-115 % Prep Batch: VXX39401 Prep Method: SW5030E Prep Date/Time: 10/27/2 Prep Initial Wt./Vol.: 5 mL Result Qual 619 LOQ/CL 0.750 Units 0.750 101 77-115 % Prep Batch: VXX39401 Prep Method: SW5030E Prep Date/Time: 10/27/2 Prep Initial Wt./Vol.: 5 mL Prep Batch: VXX39401 Prep Method: SW5030E Prep Extract Vol: 5 mL	g Zip Mart Collection Date: 10/19/22 17:00 Received Date: 10/20/22 16:55 Matrix: Water (Surface, Eff., Grossolids (%): Location: Location: Result Qual LOQ/CL DL Units DF 4.38 0.500 0.225 mg/L 5 82.4 50-150 % 5 Prep Batch: VXX39401 Prep Date/Time: 10/27/22 06:00 Prep Date/Time: 10/27/22 06:00 Prep Date/Time: 10/27/22 06:00 Prep Date/Time: 10/27/22 06:00 Prep Initial WL/Vol: 5 mL Result Qual LOQ/CL DL Units DF 664 2.50 0.750 ug/L 5 55.5 5.00 2.50 ug/L 5 619 5.00 2.50 ug/L 5 810 5.00 2.50 ug/L 5 893 15.0 7.00 ug/L 5 101 77-115 % 5 Prep Mathod: SWS030B Prep Date/Time: 10/27/22 06:00 Prep Date/Time: 10/27/22 06:00 Prep Mathod: SWS030B Prep Date/Time: 10/27/22 06:00 Prep Date/Time: 10/27/22 06:00	g Zip MartCollection Date: $10/20/22 17:00$ Received Date: $10/20/22 16:55$ Matrix: Water (Surface, Eff., Ground). Solids (%): Location:Result QualLOQ/CLDLUnitsDE4.1380.5000.225mg/L582.450-150%5Prep Batch: VXX39401 Prep Method: SW5030B Prep Date/Time: $10/27/22 06:00$ Prep Initial WL/Vol.: 5 mLResult QualLOQ/CLDLUnitsDEAllowable LimitsMethod: SW50308 Prep Date/Time: $10/27/22 06:00$ Prep Initial WL/Vol.: 5 mLSAllowable LimitsResult QualLOQ/CLDLUnitsDEAllowable Limits55.002.50ug/L56195.002.50ug/L589315.07.00ug/L510177-115%57Prep Batch: VXX39401 Prep Date/Time: $10/27/22 06:00$ Prep Initial WL/Vol.: 5 mLPrep Date/Time: $10/27/22 06:00$ Prep Initial WL/Vol.: 5 mLPrep Extract Vol.: 5 mLPrep Date/Time: $10/27/22 06:00$ Prep Initial WL/Vol.: 5 mLPrep Extract Vol.: 5 mL				

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Pesults of 100972 TWD22							
Client Sample ID: 100972-TWD22 Client Project ID: 100972-001 Sterling Lab Sample ID: 1226457002 Lab Project ID: 1226457	Collection Date: 10/19/22 18:36 Received Date: 10/20/22 16:55 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:						
Parameter Gasoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 10/25/22 20:04
Surrogates 4-Bromofluorobenzene (surr)	82.1	50-150		%	1		10/25/22 20:04
Analytical Batch: VFC16311 Analytical Method: AK101 Analyst: JY Analytical Date/Time: 10/25/22 20:04 Container ID: 1226457002-A		F					

Print Date: 11/08/2022 12:15:27PM

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J flagging is activated

Member of SGS Group

Results of 100972-TWD22

SG

Client Sample ID: **100972-TWD22** Client Project ID: **100972-001 Sterling Zip Mart** Lab Sample ID: 1226457002 Lab Project ID: 1226457 Collection Date: 10/19/22 18:36 Received Date: 10/20/22 16:55 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	DL	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
Benzene	0.200 U	0.400	0.120	ug/L	1		10/28/22 19:27
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		10/28/22 19:27
o-Xylene	0.500 U	1.00	0.310	ug/L	1		10/28/22 19:27
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		10/28/22 19:27
Toluene	0.500 U	1.00	0.310	ug/L	1		10/28/22 19:27
Xylenes (total)	1.50 U	3.00	1.00	ug/L	1		10/28/22 19:27
Surrogates							
1,2-Dichloroethane-D4 (surr)	107	81-118		%	1		10/28/22 19:27
4-Bromofluorobenzene (surr)	103	85-114		%	1		10/28/22 19:27
Toluene-d8 (surr)	100	89-112		%	1		10/28/22 19:27

Batch Information

Analytical Batch: VMS22117 Analytical Method: SW8260D Analyst: AZL Analytical Date/Time: 10/28/22 19:27 Container ID: 1226457002-B Prep Batch: VXX39422 Prep Method: SW5030B Prep Date/Time: 10/28/22 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 11/08/2022 12:15:27PM

J flagging is activated

Blank ID: MB for HBN 1847 Blank Lab ID: 1693732	Matrix: Water (Surface, Eff., Ground)					
QC for Samples: 1226457002						
Results by AK101						
Parameter Gasoline Range Organics	<u>Results</u> 0.0500U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0450	<u>Units</u> mg/L		
urrogates						
1,4-Difluorobenzene (surr)	88.5	77-115		%		
1-Bromofluorobenzene (surr)	81.9	50-150		%		
atch Information						
Analytical Batch: VFC1631	1	Prep Ba	tch: VXX39393			
Analytical Batch: VFC1631 Analytical Method: AK101	1	Prep Ba Prep Me	tch: VXX39393 ethod: SW5030B			
Analytical Batch: VEC1631	1	Pren Ba	tch: VXX39393			

Print Date: 11/08/2022 12:15:28PM



Blank Spike ID: LCS for HBN 1226457 [VXX39393] Blank Spike Lab ID: 1693735 Date Analyzed: 10/25/2022 13:27 Spike Duplicate ID: LCSD for HBN 1226457 [VXX39393] Spike Duplicate Lab ID: 1693736 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1226457002

Results by AK101											
		Blank Spike	e (mg/L)	S	pike Dupli	cate (mg/L)					
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL		
Gasoline Range Organics	1.00	0.927	93	1.00	0.940	94	(60-120)	1.40	(< 20)		
Surrogates											
4-Bromofluorobenzene (surr)	0.0500		89	0.0500		88	(50-150)	1.10			
Batch Information											
Analytical Batch: VFC16311				Pre	Batch: V	XX39393					
Analytical Method: AK101				Pre	Prep Method: SW5030B						
Instrument: Agilent 7890 PID	/FID			Prep Date/Time: 10/25/2022 06:00							
Analyst: JY				Spik	te Init Wt./\	/ol.: 0.0500	mg/L Extra	ct Vol: 5 mL			
				Dup	e Init Wt./\	/ol.: 0.0500	mg/L Extrac	t Vol: 5 mL			

Print Date: 11/08/2022 12:15:30PM

SGS

Method Blank

Blank ID: MB for HBN 1847368 [VXX/39401] Blank Lab ID: 1694202

QC for Samples: 1226457001

Results by AK101

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.000250U	0.000500	0.000150	mg/L
Ethylbenzene	0.000500U	0.00100	0.000500	mg/L
Gasoline Range Organics	0.0500U	0.100	0.0450	mg/L
o-Xylene	0.000500U	0.00100	0.000500	mg/L
P & M -Xylene	0.00100U	0.00200	0.000900	mg/L
Toluene	0.000500U	0.00100	0.000500	mg/L
Xylenes (total)	0.00150U	0.00300	0.00140	mg/L
Surrogates				
1,4-Difluorobenzene (surr)	88.7	77-115		%
4-Bromofluorobenzene (surr)	78.9	50-150		%
Batch Information				

Analytical Batch: VFC16313 Analytical Method: AK101 Instrument: Agilent 7890 PID/FID Analyst: JY Analytical Date/Time: 10/27/2022 1:04:00PM Prep Batch: VXX39401 Prep Method: SW5030B Prep Date/Time: 10/27/2022 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 11/08/2022 12:15:32PM



Blank Spike ID: LCS for HBN 1226457 [VXX39401] Blank Spike Lab ID: 1694203 Date Analyzed: 10/27/2022 13:41 Spike Duplicate ID: LCSD for HBN 1226457 [VXX39401] Spike Duplicate Lab ID: 1694204 Matrix: Water (Surface, Eff., Ground)

Dupe Init Wt./Vol.: 0.100 mg/L Extract Vol: 5 mL

QC for Samples: 1226457001

Results by AK101

		Blank Spike	e (mg/L)	/L) Spike Duplicate (mg/L)							
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CI		
Benzene	0.100	0.100	100	0.100	0.109	109	(80-120)	8.30	(< 20)		
Ethylbenzene	0.100	0.101	101	0.100	0.109	109	(75-125)	7.50	(< 20)		
-Xylene	0.100	0.0988	99	0.100	0.105	105	(80-120)	5.80	(< 20)		
⁰ & M -Xylene	0.200	0.201	100	0.200	0.216	108	(75-130)	7.20	(< 20)		
oluene	0.100	0.103	103	0.100	0.112	112	(75-120)	8.30	(< 20)		
ylenes (total)	0.300	0.300	100	0.300	0.321	107	(79-121)	6.70	(< 20)		
rrogates											
,4-Difluorobenzene (surr)	0.0500		99	0.0500		99	(77-115)	0.52			
atch Information											
Analytical Batch: VFC16313					Prep Batch: VXX39401						
Analytical Method: AK101				Pre	Prep Method: SW5030B						
Instrument: Agilent 7890 PI	D/FID			Pre	Prep Date/Time: 10/27/2022 06:00						
Analyst: JY				Spił	ke Init Wt./\	/ol.: 0.100 n	ng/L Extract	t Vol: 5 mL			

Print Date: 11/08/2022 12:15:34PM



Blank Spike ID: LCS for HBN 1226457 [VXX39401] Blank Spike Lab ID: 1694205 Date Analyzed: 10/27/2022 14:00 Spike Duplicate ID: LCSD for HBN 1226457 [VXX39401] Spike Duplicate Lab ID: 1694206 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1226457001

Results by AK101									
	I	Blank Spike	e (mg/L)	mg/L) Spike Duplicate (mg/L)					
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	0.870	87	1.00	0.898	90	(60-120)	3.20	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		87	0.0500		85	(50-150)	2.50	
Batch Information									
Analytical Batch: VFC16313				Pre	Batch: V	XX39401			
Analytical Method: AK101				Pre	Method:	SW5030B			
Instrument: Agilent 7890 PID	/FID			Prep Date/Time: 10/27/2022 06:00					
Analyst: JY				Spik	e Init Wt./\	/ol.: 0.0500	mg/L Extra	ct Vol: 5 mL	
				Dup	e Init Wt./V	/ol.: 0.0500	mg/L Extrac	t Vol: 5 mL	

Print Date: 11/08/2022 12:15:34PM
Method Blank

Blank ID: MB for HBN 1847368 [VXX/39401] Blank Lab ID: 1694202

QC for Samples: 1226457001

Results by SW8021B

Parameter	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.250U	0.500	0.150	ug/L
Ethylbenzene	0.500U	1.00	0.500	ug/L
o-Xylene	0.500U	1.00	0.500	ug/L
P & M -Xylene	1.00U	2.00	0.900	ug/L
Toluene	0.500U	1.00	0.500	ug/L
Xylenes (total)	1.50U	3.00	1.40	ug/L
Surrogates				
1,4-Difluorobenzene (surr)	88.7	77-115	77-115	

Batch Information

Analytical Batch: VFC16313 Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: JY Analytical Date/Time: 10/27/2022 1:04:00PM Prep Batch: VXX39401 Prep Method: SW5030B Prep Date/Time: 10/27/2022 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 11/08/2022 12:15:37PM

SGS North America Inc.



Blank Spike Summary

Blank Spike ID: LCS for HBN 1226457 [VXX39401] Blank Spike Lab ID: 1694203 Date Analyzed: 10/27/2022 13:41 Spike Duplicate ID: LCSD for HBN 1226457 [VXX39401] Spike Duplicate Lab ID: 1694204 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1226457001

Results by SW8021B

		Blank Spike (ug/L) Spike Duplicate (ug			cate (ug/L)	_)			
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Benzene	100	100	100	100	109	109	(80-120)	8.30	(< 20)
Ethylbenzene	100	101	101	100	109	109	(75-125)	7.50	(< 20)
o-Xylene	100	98.8	99	100	105	105	(80-120)	5.80	(< 20)
P & M -Xylene	200	201	100	200	216	108	(75-130)	7.20	(< 20)
Toluene	100	103	103	100	112	112	(75-120)	8.30	(< 20)
Xylenes (total)	300	300	100	300	321	107	(79-121)	6.70	(< 20)
urrogates									
1,4-Difluorobenzene (surr)	50		99	50		99	(77-115)	0.52	
Batch Information									
Analytical Batch: VFC16313 Analytical Method: SW8021B	Prep Batch: VXX39401 Prep Method: SW5030B								

Analytical Method: SW8021B Instrument: Agilent 7890 PID/FID Analyst: JY Prep Batch: VXX39401 Prep Method: SW5030B Prep Date/Time: 10/27/2022 06:00 Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 11/08/2022 12:15:39PM

Method Blank

Blank ID: MB for HBN 1847638 [VXX/39422] Blank Lab ID: 1695417

QC for Samples: 1226457002

Results by SW8260D

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.200U	0.400	0.120	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
Toluene	0.500U	1.00	0.310	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	104	81-118		%
4-Bromofluorobenzene (surr)	106	85-114		%
Toluene-d8 (surr)	100	89-112	89-112	

Batch Information

Analytical Batch: VMS22117 Analytical Method: SW8260D Instrument: Agilent 7890-75MS Analyst: AZL Analytical Date/Time: 10/28/2022 11:51:00AM Prep Batch: VXX39422 Prep Method: SW5030B Prep Date/Time: 10/28/2022 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 11/08/2022 12:15:41PM

Matrix: Water (Surface, Eff., Ground)



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Blank Spike Summary

Blank Spike ID: LCS for HBN 1226457 [VXX39422] Blank Spike Lab ID: 1695418 Date Analyzed: 10/28/2022 12:07 Spike Duplicate ID: LCSD for HBN 1226457 [VXX39422] Spike Duplicate Lab ID: 1695419 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1226457002

Results by SW8260D

		Blank Spike	e (ug/L)	:	Spike Dupli	cate (ug/L)			
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Benzene	30	30.6	102	30	29.7	99	(79-120)	2.80	(< 20)
Ethylbenzene	30	30.6	102	30	29.9	100	(79-121)	2.10	(< 20)
o-Xylene	30	30.6	102	30	30.2	101	(78-122)	1.20	(< 20)
P & M -Xylene	60	61.7	103	60	60.4	101	(80-121)	2.10	(< 20)
Toluene	30	29.5	98	30	28.7	96	(80-121)	2.70	(< 20)
Xylenes (total)	90	92.2	102	90	90.6	101	(79-121)	1.80	(< 20)
Surrogates									
1,2-Dichloroethane-D4 (surr)	30		97	30		97	(81-118)	0.59	
4-Bromofluorobenzene (surr)	30		100	30		101	(85-114)	0.56	
Toluene-d8 (surr)	30		100	30		98	(89-112)	1.10	

Batch Information

Analytical Batch: VMS22117 Analytical Method: SW8260D Instrument: Agilent 7890-75MS Analyst: AZL Prep Batch: VXX39422 Prep Method: SW5030B Prep Date/Time: 10/28/2022 06:00 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 11/08/2022 12:15:43PM

1226457			
		D10514#369916	6029-
Geotechnical and Environmental Consultants	CHAIN-OF-CUS	TODY RECORD	Page of Laboratory SGS Ancherage Attn: Justin
400 N. 34th Street, Suite 100 2043 Westport Center Drive 2705 Seattle, WA 98103 St. Louis, MO 63146-3564 Pase (206) 632-8020 (314) 699-9660 (509)	5 Saint Andrews Loop, Suite A co, WA 99301-3378) 946-6309	Analysis Parameters/Sau (include pres	nple Container Description ervative if used)
2355 Hill Road 5430 Fairbanks Street, Suite 3 Fairbanks, AK 99709 Anchorage, AK 99518 (907) 479-0600 (907) 561-2120		ot with the	
3990 Collins way, Suite 100 132 T Barnock Street, Suite 200 Lake Oswego, OR 97035 Denver, CO 80204 (503) 223-6147 (303) 825-3800	Date		Remarks/Matrix
Sample Identity Lab No. Tir	me Sampled C ⁵ C C		7 Likely mediuncould
100972-HT22 IND 177	$\frac{00}{10}\frac{10}{19}\frac{122}{22}$		7 Litely jow concentrates
100972-TWDZZ (HB) 181-	>0 10/19/22 ~~~		L Water
		,	
Project Information Sample R	Receipt Relinguish	ed By: 1. Relinquis	ned By: 2. Relinquished By: 3.
Project Number: 100972 -001 Total Number of Cor	ntainers Signature:	Time: 16753 Signature:	Time: Signature: Time:
Project Name: Sterling Ep Mart COC Seals/Intact?	Y/N/NA Printed Name:	Date: 10/20/22 Printed Name:	Date: Printed Name: Date:
Contact: Alex Geilich Received Good Cor	nd./Cold Randy	Hessons	
Ongoing Project? Yes 🗹 No 🗌 Delivery Method:	Company: 544	Company.	Company:
Sampler: Randy Hessong (attach shipping bill, if	any)		Described Buy 2
Instructions	Signature	By: 1. Received	Time: Signature: Time:
Requested Turnaround Time: Standard		linno.	
- No trip blank	Printed Name:	Date: Printed Name:	Date: Printed Name: Date:
- Only 2' VOAs persample		Company	
Distribution: White - w/shipment - returned to Shannon & Wilson v Yellow - w/shipment - for consignee files Pink - Shannon & Wilson - Job File	w/ laboratory report		- 365 3.0055

F-19-91/UR

Review Criteria Condition (Yes, No, Chain of Custody / Temperature Requirements No DOD only: Did all sample coolers have a corresponding COC? N/A If <0°C, were sample containers ice free? N/A Note containers received with ice: Note containers received with ice:	N/A Exceptions Noted below Date: Temperature and COC seal information is found on the chain of custody for
Chain of Custody / Temperature Requirements N/C DOD only: Did all sample coolers have a corresponding COC? N/A If <0°C, were sample containers ice free? N/A Note containers received with ice: N/A	ote: Temperature and COC seal information is found on the chain of custody for
DOD only: Did all sample coolers have a corresponding COC? N/A If <0°C, were sample containers ice free? N/A Note containers received with ice:	
If <0°C, were sample containers ice free? N/A Note containers received with ice:	
Note containers received with ice:	
Identify any containers received at non-compliant temperature: (Use form FS-0029 if more space is needed)	
olding Time / Documentation / Sample Condition Requirement: No	ote: Refer to form F-083 "Sample Guide" for specific holding times and sample contain
Were samples received within analytical holding time? Yes	
Do sample labels match COC? Record discrepancies.	
Note: If information on containers differs from COC, default to COC information for login. If times differ <1hr, record details & login per COC.	
Were analytical requests clear? Yes	
i.e. method is specified for analyses with multiple option for method (Eg, BTEX 8021 vs 8260, Metals 6020 vs 200.8)	
Were proper containers (type/mass/volume/preservative)used? Yes Note: Exemption for metals analysis by 200.8/6020 in water.	
Volatile Analysis Requirements (VOC, GRO, LL-Hg, etc.)	
ere all soil VOAs received with a corresponding % solids container? N/A	
Were Trip Blanks (e.g., VOAs, LL-Hg) in cooler with samples? No Tr	rip Blank not requested by client
Were all water VOA viais free of neadspace (e.g., bubbles 5 6mm)? Yes	
Note to Client: Any "No" onewer obeye indirected non exempliance w	ith standard procedures and may impact data sucht.
Note to Chent: Any No , answer above indicates non-compliance w	



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	Container Condition	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition
1226457001-A 1226457001-B 1226457002-A 1226457002-B	HCL to pH < 2 HCL to pH < 2 HCL to pH < 2 HCL to pH < 2	ОК ОК ОК ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Shannon & Wilson, Inc. 5430 Fairbanks St., Ste. 3 Anchorage, AK 99518 (907)433-3215

Report Number: 1217377

Client Project: 100972-001 Sterling Zip Mart

Dear Randy Hessong,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Justin Nelson

16:24:06 -09'00'

2021.12.07

Sincerely, SGS North America Inc.

Justin Nelson Project Manager Justin.Nelson@sgs.com Date

Print Date: 12/07/2021 11:52:24AM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage

Member of SGS Group



Case Narrative

SGS Client: Shannon & Wilson, Inc. SGS Project: 1217377 Project Name/Site: 100972-001 Sterling Zip Mart Project Contact: Randy Hessong

Refer to sample receipt form for information on sample condition.

100972-GAC21 (1217377001) PS

AK101 - Surrogate recovery for 4-bromofluorobenzene does not meet QC criteria due to matrix interference.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 12/07/2021 11:52:26AM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*		The analyte has exceeded allowable regulatory or control limits.
!		Surrogate out of control limits.
E	3	Indicates the analyte is found in a blank associated with the sample.
C	CCV/CVA/CVB	Continuing Calibration Verification
C	CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
C	CL	Control Limit
Ľ	DF	Analytical Dilution Factor
Ľ	DL	Detection Limit (i.e., maximum method detection limit)
E		The analyte result is above the calibrated range.
C	ЭТ	Greater Than
	В	Instrument Blank
10	CV	Initial Calibration Verification
J	l	The quantitation is an estimation.
L	.CS(D)	Laboratory Control Spike (Duplicate)
L	LQC/LLIQC	Low Level Quantitation Check
L	.OD	Limit of Detection (i.e., 1/2 of the LOQ)
L	.OQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
L	T	Less Than
Ν	ЛВ	Method Blank
Ν	/IS(D)	Matrix Spike (Duplicate)
٨	1D	Indicates the analyte is not detected.
F	RPD	Relative Percent Difference
Т	NTC	Too Numerous To Count
ι	J	Indicates the analyte was analyzed for but not detected.
S	sample summaries which in	nclude a result for "Total Solids" have already been adjusted for moisture content.
P	All DRO/RRO analyses are	Integrated per SOP.

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Note:

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SM21 2540G SW8260D TCLP

Sample	Summary
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Client Sample ID	Lab Sample ID	Collected	Received	Matrix	
100972-GAC21	1217377001	11/06/2021	11/08/2021	Soil/Solid (dry weight)	
100972-GAC21	1217377002	11/06/2021	11/08/2021	Solid/Soil (Wet Weight)	
Method	Method Des	Method Description			
AK101	AK101/8021 Combo. (S)				
SW8021B	AK101/8021 Combo. (S)				

TCLP Volatile Organic Compounds 8260

Percent Solids SM2540G

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	Detectable Results Summary					
Client Sample ID: 100972-GAC21						
Lab Sample ID: 1217377001	Parameter	Result	Units			
Volatile Fuels	Benzene	345	ug/kg			
	Ethylbenzene	35.2J	ug/kg			
	Gasoline Range Organics	5.93J	mg/kg			
	o-Xylene	140	ug/kg			
	P & M -Xylene	154J	ug/kg			
	Toluene	408	ug/kg			
	Xylenes (total)	294	ug/kg			
Client Sample ID: 100972-GAC21						
Lab Sample ID: 1217377002	<u>Parameter</u>	Result	<u>Units</u>			
TCLP Volatiles GC/MS	Benzene	0.0225	mg/L			

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262							
Results of 100972-GAC21							
Client Sample ID: 100972-GAC21 Client Project ID: 100972-001 Sterling Zip Mart Lab Sample ID: 1217377001 Lab Project ID: 1217377		Collection Date: 11/06/21 17:38 Received Date: 11/08/21 13:58 Matrix: Soil/Solid (dry weight) Solids (%):55.5 Location:					
Results by volatile Fuels			_				
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 5.93 J	<u>LOQ/CL</u> 9.02	<u>DL</u> 2.71	<u>Units</u> mg/kg	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 11/10/21 14:18
Surrogates							
4-Bromofluorobenzene (surr)	.54 *	50-150		%	1		11/10/21 14:18
Batch Information							
Analytical Batch: VFC15939 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 11/10/21 14:18 Container ID: 1217377001-B			Prep Batch: Prep Metho Prep Date/T Prep Initial \ Prep Extrac	VXX38164 d: SW5035A Time: 11/06/2 Wt./Vol.: 44.8 t Vol: 44.955	21 17:38 382 g 52 mL		
						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	DL	<u>Units</u>	DF	Limits	Date Analyzed
Benzene	345	45.1	14.4	ug/kg	1		11/10/21 14:18
Ethylbenzene	35.2 J	90.2	32.5	ug/kg	1		11/10/21 14:18
o-Xylene	140	90.2	32.8	ug/kg	1		11/10/21 14:18
P & M -Xylene	154 J	180	54.1	ug/kg	1		11/10/21 14:18
l oluene	408	90.2	28.1	ug/kg	1		11/10/21 14:18
	294	211	90.2	ug/kg	I		11/10/21 14.16
Surrogates							
1,4-Difluorobenzene (surr)	95	72-119		%	1		11/10/21 14:18
Batch Information							
Analytical Batch: VFC15939 Analytical Method: SW8021B Analyst: IJV Analytical Date/Time: 11/10/21 14:18 Container ID: 1217377001-B			Prep Batch: Prep Methor Prep Date/T Prep Initial \ Prep Extrac	VXX38164 d: SW5035A Time: 11/06/2 Wt./Vol.: 44.8 t Vol: 44.955	21 17:38 382 g 52 mL		
l							
Drint Date: 40/07/0004 44-50-00AM							

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Results of 100972-GAC21							
Client Sample ID: 100972-GAC21 Client Project ID: 100972-001 Sterling Lab Sample ID: 1217377002 Lab Project ID: 1217377	g Zip Mart	C R M S	ollection Dat eceived Dat latrix: Solid/S olids (%): ocation:	te: 11/06/ e: 11/08/2 Soil (Wet \	21 17:3 21 13:5 Weight)	8 8	
Results by TCLP Volatiles GC/MS							
<u>Parameter</u> Benzene	<u>Result Qual</u> 0.0225	<u>LOQ/CL</u> 0.0200	<u>DL</u> 0.00600	<u>Units</u> mg/L	<u>DF</u> 50	<u>Allowable</u> <u>Limits</u> (<0.5)	<u>Date Analyzed</u> 11/12/21 18:08
Surrogates							
1,2-Dichloroethane-D4 (surr)	102	81-118		%	50		11/12/21 18:08
4-Bromofluorobenzene (surr)	101	85-114		%	50		11/12/21 18:08
Toluene-d8 (surr)	99.3	89-112		%	50		11/12/21 18:08
Batch Information							
Analytical Batch: VMS21373 Analytical Method: SW8260D TCLP Analyst: MDT Analytical Date/Time: 11/12/21 18:08 Container ID: 1217377002-A		i i i i	Prep Batch: \ Prep Method: Prep Date/Tin Prep Initial Wt Prep Extract \	/XX38174 SW5030E ne: 11/12/2 /Vol.: 5 m /ol: 5 mL	3 21 06:00 IL		

Print Date: 12/07/2021 11:52:32AM

J flagging is activated

Member of SGS Group

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		_			
Method Blank					
Blank ID: MB for HBN Blank Lab ID: 164669	1828338 [SPT/11431] 8	Matrix	: Soil/Solid (d	dry weight)	
QC for Samples: 1217377001					
Results by SM21 2540	0G	·			
<u>Parameter</u> Total Solids	<u>Results</u> 100	LOQ/CL	DL	<u>Units</u> %	
Batch Information					
Analytical Batch: SP Analytical Method: S Instrument: Analyst: TMM Analytical Date/Time	T11431 SM21 2540G : 11/9/2021 5:00:00PM				

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12		
	G	GS

Duplicate Sample Summa	Irv				
Original Sample ID: 12173 Duplicate Sample ID: 1640 QC for Samples: 1217377001	376001 6699		Analysis Date: Matrix: Soil/So	11/09/2021 17:00 lid (dry weight)	
Results by SM21 2540G					
NAME	Original	Duplicate	Units	<u>RPD (%)</u>	RPD CL
Total Solids	93.7	94.4	%	0.70	(< 15)
Batch Information Analytical Batch: SPT11431 Analytical Method: SM21 2 Instrument: Analyst: TMM	l 540G				

Print Date: 12/07/2021 11:52:36AM

SGS Method Blank		1			
Blank ID: MB for HBN 182838 Blank Lab ID: 1646849 QC for Samples: 1217377001 Results by AK101	82 [VXX/38164]		Matrix	« Soil/Solid (d	ry weight)
Parameter Gasoline Range Organics Surrogates	<u>Results</u> 0.835J		LOQ/CL 2.50	<u>DL</u> 0.750	<u>Units</u> mg/kg
4-Bromofluorobenzene (surr)	83.7		50-150		%

Batch Information

Analytical Batch: VFC15939 Analytical Method: AK101 Instrument: Agilent 7890A PID/FID Analyst: IJV Analytical Date/Time: 11/10/2021 12:36:00PM Prep Batch: VXX38164 Prep Method: SW5035A Prep Date/Time: 11/10/2021 6:00:00AM Prep Initial Wt./Vol.: 50 g Prep Extract Vol: 25 mL

Print Date: 12/07/2021 11:52:41AM



Blank Spike Summary									
Blank Spike ID: LCS for HBN Blank Spike Lab ID: 1646852 Date Analyzed: 11/10/2021	1217377 2 12:00	[VXX38164]	Spi [VX Spi Ma	ke Duplica (X38164] ke Duplica trix: Soil/S	ate ID: LCS ate Lab ID: Solid (dry w	D for HBN 1 1646853 eight)	217377	
QC for Samples: 1217377	001								
Results by AK101									
	E	Blank Spike	(mg/kg)	S	pike Duplic	cate (mg/kg)			
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	12.5	13.8	111	12.5	13.0	104	(60-120)	6.10	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	1.25		94	1.25		90	(50-150)	4.70	
Batch Information									
Analytical Batch: VFC15939 Analytical Method: AK101 Instrument: Agilent 7890A PII Analyst: IJV	D/FID			Pre Pre Pre Spil Dur	p Batch: V p Method: p Date/Tim ke Init Wt./\ pe Init Wt./\	XX38164 SW5035A le: 11/10/202 Vol.: 12.5 mg /ol.: 12.5 mg	2 1 06:00 g/Kg Extract	t Vol: 25 mL Vol: 25 ml	

Print Date: 12/07/2021 11:52:43AM

ethod Blank	382 [\/YY/3816/]	Matri	x: Soil/Solid (dry we	iaht)	
lank Lab ID: 1646849	302 [VXX/30104]	Iviati i		agiit)	
C for Samples: 217377001					
esults by SW8021B					
arameter	Results	LOQ/CL	DL	<u>Units</u>	
enzene	6.25U	12.5	4.00	ug/kg	
thylbenzene	12.5U	25.0	9.00	ug/kg	
Xylene	12.5U	25.0	9.10	ug/kg	
& M -Xylene	25.0U	50.0	15.0	ug/kg	
oluene	12.50	25.0	7.80	ug/kg	
ylenes (total)	37.50	75.0	25.0	ug/kg	
r rogates 4-Difluorobenzene (surr)	98	72-119		%	
tch Information					
Analytical Batch: VFC1593	9	Prep Ba	tch: VXX38164		
Analytical Method: SW802	1B	Prep Me	ethod: SW5035A	0.00.00414	
Analyst: LIV	PID/FID	Prep Da Prep Ini	tial Wt /Vol : 50 a	6:00:00AM	
Analytical Date/Time: 11/10	D/2021 12:36:00PM	Prep Ex	tract Vol: 25 mL		

Print Date: 12/07/2021 11:52:45AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1217377 [VXX38164] Blank Spike Lab ID: 1646850 Date Analyzed: 11/10/2021 11:25 Spike Duplicate ID: LCSD for HBN 1217377 [VXX38164] Spike Duplicate Lab ID: 1646851 Matrix: Soil/Solid (dry weight)

QC for Samples: 1217377001

Results by SW8021B

	Blank Spike	e (ug/kg)	S	pike Duplic	cate (ug/kg)			
Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
1250	1330	107	1250	1430	114	(75-125)	6.90	(< 20)
1250	1280	102	1250	1300	104	(75-125)	1.70	(< 20)
1250	1210	97	1250	1250	100	(75-125)	3.30	(< 20)
2500	2550	102	2500	2580	103	(80-125)	1.40	(< 20)
1250	1270	102	1250	1330	107	(70-125)	4.70	(< 20)
3750	3750	100	3750	3830	102	(78-124)	2.00	(< 20)
1250		96	1250		100	(72-119)	4.80	
			Pre	p Batch: V	XX38164			
3			Pre	p Method:	SW5035A	4 00.00		
ID/FID			Pre	p Date/ I Im o Init Wt /	e: 11/10/202	1 06:00 a/ka Extract	Vol: 25 ml	
			Dur	e Init Wt A	/ol · 1250 u(n/kg Extract	Vol: 25 ml	
	Spike 1250 1250 2500 1250 3750 1250 1250	Spike Result 1250 1330 1250 1280 1250 1210 2500 2550 1250 1270 3750 3750 1250 1250	Blank Spike (ug/kg) Spike Result Rec (%) 1250 1330 107 1250 1280 102 1250 1210 97 2500 2550 102 1250 1270 102 3750 3750 100 1250 96 105	Blank Spike (ug/kg) S Spike Result Rec (%) Spike 1250 1330 107 1250 1250 1280 102 1250 1250 1210 97 1250 1250 1210 97 1250 1250 1210 97 1250 1250 1270 102 1250 3750 3750 100 3750 1250 96 1250 1250 1250 1250 1250 1250 1250 1270 102 1250 1250 96 1250	Blank Spike (ug/kg) Spike Duplic Spike Result Rec (%) Spike Result 1250 1330 107 1250 1430 1250 1280 102 1250 1300 1250 1210 97 1250 1250 2500 2550 102 2500 2580 1250 1270 102 1250 1330 3750 3750 100 3750 3830 1250 96 1250 1250 1250 1250 1250 96 1250 1250 1250 96 1250 1250 1250 1250 96 1250 1250 1250	Blank Spike (ug/kg) Spike Duplicate (ug/kg) Spike Result Rec (%) Spike Result Rec (%) 1250 1330 107 1250 1430 114 1250 1280 102 1250 1300 104 1250 1210 97 1250 1250 100 2500 2550 102 2500 2580 103 1250 1270 102 1250 1330 107 3750 3750 100 3750 3830 102 1250 96 1250 100 100 100 1250 96 1250 100 100 100 1250 96 1250 100 100 100 100	Blank Spike (ug/kg) Spike Duplicate (ug/kg) Spike Result Rec (%) Spike Result Rec (%) CL 1250 1330 107 1250 1430 114 (75-125) 1250 1280 102 1250 1300 104 (75-125) 1250 1210 97 1250 1250 100 (75-125) 2500 2550 102 2500 2580 103 (80-125) 1250 1270 102 1250 1330 107 (70-125) 3750 3750 100 3750 3830 102 (78-124) 1250 96 1250 100 (72-119) 100 (72-119)	Blank Spike (ug/kg) Spike Duplicate (ug/kg) Spike Result Rec (%) Spike Result Rec (%) CL RPD (%) 1250 1330 107 1250 1430 114 (75-125) 6.90 1250 1280 102 1250 1300 104 (75-125) 1.70 1250 1210 97 1250 1250 100 (75-125) 3.30 2500 2550 102 2500 2580 103 (80-125) 1.40 1250 1270 102 1250 1330 107 (70-125) 4.70 3750 3750 100 3750 3830 102 (78-124) 2.00 1250 96 1250 100 (72-119) 4.80

Print Date: 12/07/2021 11:52:48AM



Matrix Spike Summary

Original Sample ID: 1646854 MS Sample ID: 1646855 MS MSD Sample ID: 1646856 MSD Analysis Date: 11/10/2021 14:18 Analysis Date: 11/10/2021 14:35 Analysis Date: 11/10/2021 14:53 Matrix: Soil/Solid (dry weight)

QC for Samples: 1217377001

Results by SW8021B

		Mat	trix Spike (ı	ug/kg)	Spike	e Duplicate	(ug/kg)			
Parameter	Sample	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Benzene	107	1390	1760	119	1390	1730	117	75-125	1.50	(< 20)
Ethylbenzene	10.9J	1390	1560	111	1390	1560	111	75-125	0.05	(< 20)
o-Xylene	43.2	1390	1550	108	1390	1550	109	75-125	0.11	(< 20)
P & M -Xylene	47.6J	2790	3120	110	2790	3120	110	80-125	0.22	(< 20)
Toluene	126	1390	1730	115	1390	1710	114	70-125	1.10	(< 20)
Xylenes (total)	90.8	4180	4670	110	4180	4680	110	78-124	0.18	(< 20)
Surrogates										
1,4-Difluorobenzene (surr)		1390	1390	100	1390	1390	100	72-119	0.06	

Batch Information

Analytical Batch: VFC15939 Analytical Method: SW8021B Instrument: Agilent 7890A PID/FID Analyst: IJV Analytical Date/Time: 11/10/2021 2:35:00PM

Prep Batch: VXX38164 Prep Method: AK101 Extraction (S) Prep Date/Time: 11/10/2021 6:00:00AM Prep Initial Wt./Vol.: 44.88g Prep Extract Vol: 25.00mL

Print Date: 12/07/2021 11:52:49AM

Method Blank

Blank ID: MB for HBN 1828547 [VXX/38174] Blank Lab ID: 1647265

QC for Samples: 1217377002

Results by SW8260D TCLP

Parameter Persona	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Surrogates	0.0002000	0.000400	0.000120	mg/L
1,2-Dichloroethane-D4 (surr)	103	81-118		%
4-Bromofluorobenzene (surr)	98.7	85-114		%
Toluene-d8 (surr)	99.4	89-112		%

Batch Information

Analytical Batch: VMS21373 Analytical Method: SW8260D TCLP Instrument: VPA 780/5975 GC/MS Analyst: MDT Analytical Date/Time: 11/12/2021 10:53:00AM Prep Batch: VXX38174 Prep Method: SW5030B Prep Date/Time: 11/12/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 12/07/2021 11:52:51AM

Leaching Blank Blank ID: LB for HBN 1828416 [TCLP/11502 Matrix: Water (Surface, Eff., Ground) Blank Lab ID: 1646981 QC for Samples: 1217377002 Results by SW8260D TCLP Results LOQ/CL Units Parameter DL 0.0100U Benzene 0.0200 0.00600 mg/L **Surrogates** 1,2-Dichloroethane-D4 (surr) 99.1 81-118 % 4-Bromofluorobenzene (surr) 101 85-114 % Toluene-d8 (surr) 89-112 % 100 **Batch Information**

Analytical Batch: VMS21373 Analytical Method: SW8260D TCLP Instrument: VPA 780/5975 GC/MS Analyst: MDT Analytical Date/Time: 11/12/2021 1:45:00PM Prep Batch: VXX38174 Prep Method: SW5030B Prep Date/Time: 11/12/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 12/07/2021 11:52:51AM

Leaching Blank

Blank ID: LB for HBN 1828417 [TCLP/11503 Blank Lab ID: 1646982

QC for Samples: 1217377002

Results by SW8260D TCLP

<u>Parameter</u> Benzene	<u>Results</u> 0.0100U	<u>LOQ/CL</u> 0.0200	<u>DL</u> 0.00600	<u>Units</u> mg/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	104	81-118		%
4-Bromofluorobenzene (surr)	99.4	85-114		%
Toluene-d8 (surr)	99.2	89-112		%

Batch Information

Analytical Batch: VMS21373 Analytical Method: SW8260D TCLP Instrument: VPA 780/5975 GC/MS Analyst: MDT Analytical Date/Time: 11/12/2021 2:00:00PM Prep Batch: VXX38174 Prep Method: SW5030B Prep Date/Time: 11/12/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Print Date: 12/07/2021 11:52:51AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1217377 [VXX38174] Blank Spike Lab ID: 1647266 Date Analyzed: 11/12/2021 11:08 Spike Duplicate ID: LCSD for HBN 1217377 [VXX38174] Spike Duplicate Lab ID: 1647267 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1217377002

Results by SW8260D TCLP

	l	Blank Spike	e (mg/L)	S	pike Duplic	cate (mg/L)			
Parameter	Spike	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Benzene	0.0300	0.0281	94	0.0300	0.0272	91	(79-120)	3.30	(< 20)
Surrogates									
1,2-Dichloroethane-D4 (surr)	0.0300		98	0.0300		97	(81-118)	0.82	
4-Bromofluorobenzene (surr)	0.0300		101	0.0300		102	(85-114)	1.20	
Toluene-d8 (surr)	0.0300		100	0.0300		100	(89-112)	0.70	

Batch Information

Analytical Batch: VMS21373 Analytical Method: SW8260D TCLP Instrument: VPA 780/5975 GC/MS Analyst: MDT Prep Batch: VXX38174 Prep Method: SW5030B Prep Date/Time: 11/12/2021 06:00 Spike Init Wt./Vol.: 0.0300 mg/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 0.0300 mg/L Extract Vol: 5 mL

Print Date: 12/07/2021 11:52:53AM

1311		- 1906		NOTE: *The following analyses	require specific method and/or compound list: BTEY Metals DEAS	REMARKS/LOC ID				liverable Requirements:		tions:	f Custody Seal: (Circle)	BROKEN ABSENT	srical Delivery []
	tions 1 - 5 must be filled out. delay the onset of analysis.	Preservative		Analysis*						ction 4 DOD Project? Yes (10) Data De	oler ID: / 5 t d,	uested Turnaround Time and/or Special Instruc そい /らんら パらパ していっ ほ/っん	b Blank °c; 2, 7 D S Chain o	or Ambient [] INTACT	Delivery Method: Hand Delivery Comme
North America Inc. F CUSTODY RECORD	Instructions: Sec Omissions may	Section 3	1 th 12 12	N Comp A A A Grab A C C C C C C C C C C C C C C C C C C	21) = 5 178/11 2002(1) 2004	L A C A C A C A C A C A C A C A C A C A	rd Field X X			By:	8	By: Seq	By: Tem	For Laboratory By:	~ (all ~ ~
SGSI CHAIN O	, Inc.	10NE #: 907-433-3215	ojecti isidi (しつイアスーロ O(RMIT#:	MAIL: offile#:	JOTE #: <i>Орем</i> 0.#:	DATE TIME MATHO mm/dd/yy HH:MM CODE	11/06/21 17:38 Activit			Date Time Received	11/8/21 13:58	Date Time Received	Date Time Received	Date Time Received	11/8/21 12. 20 AV
SGS	CLIENT: Shannon t Wilson,	CONTACT: Pr Randy Hessong	PROJECT PRI PROJECT PRI	REPORTS TO: E-I Fandys hessong & shanwid Pr	INVOICE TO: QI A P-Anchorage P.C	RESERVED SAMPLE IDENTIFICATION for lab use	(AB) 100972-GAC21			Relinquished By: (1)	Back lybert	Relinquished By: (2)	Relinquished By: (3)	Relinquished By: (4)	

http://www.sgs.com/terms-and-conditions



Date Characterized: 11/8/21

Characterization of TCLP Samples for LIMS Login ____

Analyst: <u>RJC</u>

Sample Container ID:	Matrix	%	ls sufficient volume/mass available?	Notes:
100972	Xylene miscible (Top layer * = matrix 3 **)			If multiple jars were received, were they consistent? (Ves / No / NA If biphasic, was there only one layer with sufficient sample
-(3A(2)	Water miscible (Middle layer = matrix 6)		Yes)/ No	Yes / No (NA) Sample description/other observations:
	Solid (Bottom layer = matrix 7 or 2 if % solids required)	100		**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.
	Xylene miscible (Top layer * = matrix 3 **)			If multiple jars were received, were they consistent? Yes / No / NA If biphasic, was there only one layer with sufficient sample
	Water miscible (Middle layer = matrix 6)		Yes / No	Yes / No / NA Sample description/other observations:
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.
	Xylene miscible (Top layer * = matrix 3 **)			If multiple jars were received, were they consistent? Yes / No / NA If biphasic, was there only one layer with sufficient sample
	Water miscible (Middle layer = matrix 6)		Yes / No	Yes / No / NA Sample description/other observations:
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.
	Xylene miscible (Top layer * = matrix 3 **)			If multiple jars were received, were they consistent? Yes / No / NA If biphasic, was there only one layer with sufficient sample ?
	Water miscible (Middle layer = matrix 6)		Yes / No	Yes / No / NA Sample description/other observations:
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.
	Xylene miscible (Top layer * = matrix 3 **)	1		If multiple jars were received, were they consistent? Yes / No / NA If biphasic, was there only one layer with sufficient sample
	Water miscible (Middle layer = matrix 6)		Yes / No	Yes / No / NA Sample description/other observations:
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.

Remember:

= Chlorinated oils will be heavier than water and present as the bottom later.

** = Oils must be filterable to be logged in as matrix 3. Nonfilterable oils must be logged in as matrix 7. *** = Refer to F078 'Characterization of TCLP Samples for LIMS' to determine if there's sufficent volume/mass.

e-Sample Receipt Form

SGS Workorder #:

SGS

1217377

1217377

Review Criteria Cond	ition (Yes,	No, N/A	Exceptio	ons Noted be	low	
Chain of Custody / Temperature Requireme	<u>nts</u>	N	A Exemption permittee	d if sampler hand	d carries/deliv	vers.
Were Custody Seals intact? Note # & location	n N/A					
COC accompanied samples	? Yes					
DOD: Were samples received in COC corresponding coolers	? N/A					
**Exemption permitted if chilled	& colle	cted <8 hou	rs ago, or for samples v	where chilling is r	not required	
Temperature blank compliant* (i.e., 0-6 °C after CF)	? Yes	Cooler ID:	1	@ 2.7 °	C Therm. ID:	D52
lf complex received without a temperature black, the "cooler temperature" will be		Cooler ID:		@ °(C Therm. ID:	
documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" w	ill	Cooler ID:		@	C Therm. ID:	
be noted if neither is available.		Cooler ID:		@	C Therm. ID:	
*If >6°C were samples collected <8 hours and		Cooler ID:		w I		
II >0 C, were samples conected <0 hours ago?	IN/A					
If <0°C, were sample containers ice free?						
Note: Identify containers received at non-compliant temperature						
Use form FS-0029 if more space is needed	ł.					
Holding Time / Documentation / Sample Condition Require	ments	Note: Refer to	o form F-083 "Sample Guid	le" for specific holdi	ing times.	
Were samples received within holding time	? Yes					
Do samples match COC ** (i.e. sample IDs dates/times collected)	2 Yes					
**Note: If times differ <1hr, record details & login per COC						
***Note: If sample information on containers differs from COC, SGS will default to COC inf	ormation					
Were analytical requests clear? (i.e., method is specified for analyse	S Yes					
with multiple option for analysis (Ex: BTEX, Metals	s)	1				
		N	A ***Exemption permit	tted for metals (e	e.g,200.8/602	20A).
Were proper containers (type/mass/volume/preservative***)used	? Yes					
Volatile / LL-Hg Requirer	nents	No film to t		eemules.		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples	? No	NO TRIP DIA	ink was received with	samples		
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)	? N/A					
Were all soll VOAs field extracted with MeOH+BFB	? Tes	<u> </u>				
Note to Client: Any "No", answer above indicates non-com	pliance	with standar	a procedures and may	Impact data qua	lity.	
Additional note	es (if a	pplicable)	:			



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	Container Condition	Container Id	<u>Preservative</u>	<u>Container</u> Condition
1217377001-A 1217377001-B 1217377002-A	No Preservative Required Methanol field pres. 4 C No Preservative Required	OK OK OK			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.

SHANNON & WILSON, INC.

APPENDIX C

RESULTS OF ANALYTICAL TESTING BY

EUROFINS AIR TOXICS, LLC



11/24/2021 Mr. Randy Hessong Shannon & Wilson, Inc. 5430 Fairbanks Street Suite 3 Anchorage AK 99518

Project Name: Sterling Zip Mart Project #: 100972-001 Workorder #: 2111302

Dear Mr. Randy Hessong

The following report includes the data for the above referenced project for sample(s) received on 11/11/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Monica Tran at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ionica Fran

Monica Tran Project Manager

180 Blue Ravine Road, Suite B Folsom, CA 95630



WORK ORDER #: 2111302

Work Order Summary

CLIENT:	Mr. Randy Hessong Shannon & Wilson, Inc. 5430 Fairbanks Street Suite 3 Anchorage, AK 99518	BILL TO:	Mr. Randy Hessong Shannon & Wilson, Inc. 5430 Fairbanks Street Suite 3 Anchorage, AK 99518
PHONE:	907-561-2120	P.O. #	
FAX:	907-561-4483	PROJECT #	100972-001 Sterling Zip Mart
DATE RECEIVED:	11/11/2021	CONTACT:	Monica Tran
DATE COMPLETED:	11/24/2021	001111011	Women Hun

			RECEIPT	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	100972-VEZ41	TO-15	2.6 "Hg	9.9 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY:

layes end

DATE: <u>11/24/21</u>

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022. Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

> This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC. 180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000. (800) 985-5955. FAX (916) 351-8279

LABORATORY NARRATIVE EPA Method TO-15 Shannon & Wilson, Inc. Workorder# 2111302

One 1 Liter Summa Canister sample was received on November 11, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

The Chain of Custody (COC) information for sample 100972-VEZ41 did not match the entry on the sample tag with regard to sample identification. The information on the sample tag was used to process and report the sample.

Analytical Notes

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

Dilution was performed on sample 100972-VEZ41 due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 100972-VEZ41

Lab ID#: 2111302-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	3.7	810	12	2600
Toluene	3.7	670	14	2500
Ethyl Benzene	3.7	19	16	84
m,p-Xylene	3.7	210	16	910
o-Xylene	3.7	86	16	370
TPH ref. to Gasoline (MW=100)	370	5500	1500	22000



Client Sample ID: 100972-VEZ41 Lab ID#: 2111302-01A EPA METHOD TO-15 GC/MS FULL SCAN

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File Name: 3112215 Dil. Factor: 7.33		Date of Collection: 11/6/21 8:15:00 PM Date of Analysis: 11/22/21 07:33 PM			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Benzene	3.7	810	12	2600	
Toluene	3.7	670	14	2500	
Ethyl Benzene	3.7	19	16	84	
m,p-Xylene	3.7	210	16	910	
o-Xylene	3.7	86	16	370	
TPH ref. to Gasoline (MW=100)	370	5500	1500	22000	

Container Type: 1 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	104	70-130



Client Sample ID: Lab Blank Lab ID#: 2111302-02A EPA METHOD TO-15 GC/MS FULL SCAN

Т

File Name: Dil. Factor:	3112207c 1.00	Date Date	of Collection: NA of Analysis: 11/22	2/21 01:11 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	102	70-130


Air Toxics

Client Sample ID: CCV Lab ID#: 2111302-03A EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	3112203 1.00	Date of Collection: NA Date of Analysis: 11/22/21 10:39 AM
Compound		%Recovery
Benzene		94
Toluene		101
Ethyl Benzene		100
m,p-Xylene		102
o-Xylene		101
TPH ref. to Gasoline (MW=100)		100

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	107	70-130



Air Toxics

Client Sample ID: LCS Lab ID#: 2111302-04A EPA METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	3112204 1.00	Date of Collect Date of Analys	Date of Collection: NA Date of Analysis: 11/22/21 11:07 AM				
Compound		%Recovery	Method Limits				
Benzene		94	70-130				
Toluene		99	70-130				
Ethyl Benzene		98	70-130				
m,p-Xylene		104	70-130				
o-Xylene		100	70-130				
TPH ref. to Gasoline (MW=100)		Not Spiked					

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	105	70-130



Air Toxics

Client Sample ID: LCSD Lab ID#: 2111302-04AA EPA METHOD TO-15 GC/MS FULL SCAN

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File Name: Dil. Factor:	3112205 1.00	Date of Collection: NA Date of Analysis: 11/22/21 11:3				
Compound		%Recovery	Method Limits			
Benzene		94	70-130			
Toluene		100	70-130			
Ethyl Benzene		98	70-130			
m,p-Xylene		104	70-130			
o-Xylene		100	70-130			
TPH ref. to Gasoline (MW=100)		Not Spiked				

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	105	70-130

SHANNON & WILSON, INC.

APPENDIX D

FIELD NOTES

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	Rite in the.	Rain	

. 71.74 ``

00922	$\mathcal{U}(3/2\otimes 1)$	7274
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77.0	long as a stable.	
- P. 11	Aloss pump from UST. Vent	
t *** 17		
ATS	hoursing 9889.8 Total psi, 8.8	
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/ 15	3.73 6.72	:
3	2.9 . F. / 105	
+ 12	ZE EC VEL	
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	TER -> 13.505T 7005T -> 7.7.FM OCEM-160TI	, +- hen 14 p 51
	10051-714CA	a.
	to Soor compressor - NATS - Idett	= 30,057
(ISPSE 15pSE	is very high flow
	Dimpare to EZ in SAIS i 10 (FM=21-22psi 7,4CEn	= 25,057
	EZ is weak	••• .
	rivile to take repuild bark.	
18:46 -	Start durining PHT bold to yant.	
19.54 -	Start Ploving doto MWH	
18:55 -	Sumale 100972 HI13: From holding tonts no	rith end
	Viewed and adder 2400 at 10A al NCR - GRO/812	Y
f at	4 × The insule lase an inded XX	
F- (04	Fatil 2 5 gall million	
Pisch	Ve bubbler, of mp HSW 7. 19 back into the	TA N. AIT
N.AT	5 hv. 1 FOF99,5 Total evenillast add	lillises
Well	CEM, DSC Well Stor	057
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RWZ	2.9 4.6 7 3.2 8	
HSY8	2,2 6,5 19125 Rev 3,0 bounce 4	.2 19:25
Blove	+ 2 104 CFM 29" H. O KWI=64 CFM RWZ=	4ZCEM TRANS
Sample	100972-TWD13- 19:40 - Water after Filter	50 m 4 GAC,
at di	Scanar to Mur 4 - 3× 40 md VOM ~/Hed - GRO/BT	2×

100992	1/3/21	Rank
E. ALS: 7, ZpSi total		
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ASW II = BEFARE 4. BOST	AS 23 1.8 CEM 6 5.405 89 5	guirell.
		205111
7012h Affecter		
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	1/6/2/	-1730
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19133 On Site, WX: Overcast	232 F, 3 show on Freched.	
The P&T holding tank is en	193. The pump is not verning	•
GFCI breaker popped.		
- DISASSEMBLE PAT theat MENT	55588 1 CP 1	
17:3.0 Start transferring	GAC	
Make a composite sample oi	F GAC in backet for analytic.	semple
17-38-100972-GAC21-2018 to 70	2 A COMPLEX ACTIVATED CARA	Aug -
Primo + TVrof GAC docum	$ X + \alpha \neq \omega/2 = 0 \text{might} = \forall \alpha \neq \alpha / (AP)$	X 8 752X
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leaps tet.	TEapi #1 1- 1 capi t	2 5
Sangle 100972+ VEZ4/, 20:15	24 Air Toxids Scaling H. NGOYY, III	e 25.5
Final pressure = 3 140 Vac	From Blover 2 exhaute	
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00.972	121 71=	er.
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Rite in the Rain

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The recent to Recence anisis removed by Derthandor Interest commutations from the cost of another - DR lead closes of PP System Components att. 16:30 - NA25 on Old bons - consumered 2000 for Rows to UPTAL Guitable 16:35 - StAFS - Comming, StBpss., shaler books to UPSA (20) NATS costs Billion - Wolf a from the form to UPSA (20) NATS costs Billion - Wolf a from the form to UPSA (20) NATS costs Billion - Wolf a from the form to UPSA (20) NATS costs Billion - Billion - Billion - Costs and a form to UPSA (20) NATS costs Billion - Billion - Billion - Fill NATS costs Billion - Billion - Billion - Fill - To Billion - Post D - Billion -	01	2 back	of dava	logger	reconnec	t - Stavi	3. worthing	
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	C (ormunicat	tour fine	+ forest an	<u>sain.</u>			
 Off load clowned PHI Spring conjects. 16730 - NAZS on Old book Interney well 21/227 (millor flow) coll/p/al Gurshin 16755 ScAFS - running, flepse, similar flow (does no 11/2/21) NATS cury Bissis Well Charles Line Well CPM off provided for the flow of the provided flow	Re.	assentede	54571 831					
16:30 - Mintas on Old books conserve well allers similar thous to 11721 custobe - Mintas on Old books conserve well allers similar thous to 11721 16:35 S.A.F.S = running, the stir, similar to an end for the start of the start	- OH	flood cla	ented Pt	55-Ster	Loupon	EM75.	P1	
Surfet 16:755 SIAKS = numing, 8:8 psi, similar blans ro 11/8/21 NAES cuch R.S.c.: Well Compare rot 11/8 NAES cuch R.S.c.: Well Compare rot 11/8 NAES cuch R.S.c.: Well Compare rot 11/8 NAES cuch R.S. Yell Compare rot 11/8 Nath Reserver Compare rot 11/8 Yell Compare rot 11/8 Nath Reserver Compare rot 11/8 Yell Compare rot 11/8 Nath Reserver Compare rot 11/8 Yell Compare rot 11/8 Nath Reserver Compare rot 11/8 Yell Compare rot 11/8 Nath Reserver Compare rot 11/8 Yell Compare rot 11/8 Nath Reserver Compare rot 11/8 <td>16730 - 1</td> <td>VIAIS on</td> <td>Odd bonk</td> <td>* resulting</td> <td>well 211p</td> <td>SE SIMILA</td> <td>r flows i</td> <td>to 11/3/2/</td>	16730 - 1	VIAIS on	Odd bonk	* resulting	well 211p	SE SIMILA	r flows i	to 11/3/2/
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16:35 2:04 f. 5 numing, 8:18 pse, 1 should be body to U/E/E/E/E/E/E/E/E/E/E/E/E/E/E/E/E/E/E/E	1.1- 1	n			· .	2.1-4	/ >/	
NACS Curry R.S. Well CPM CPM Curry Curry<	16135 3	iAfs-r	unning, 8	18 050, 51	milar todou	15 to U/S		
10 MC2 CLEAR MITCH Well CLEAR PST AGUZ 3.4 Y.T MC2 3.2 Y.H M Y.Z 7.5 Y.G 7.6 7.5 M Y.Z 7.5 Y.G 7.6 7.5 H Y.Z 7.5 Y.G 7.6 7.5 H Y.Z 7.5 Y.G 7.6 7.5 H Y.Z Y.S Y.G 7.6 7.6 H Y.G Y.G Y.G 7.7 7.	~ / L	77	M 7-			, / -	(1.1	
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6 3.9 ⁴ 7.6 7.6 8 7.8 3.7 4.3 RUZ 3.0 4.3 2 1.94 1.0 ⁴ Strategy 6.3 8 1.94 1.0 ⁴ Strategy 6.3 8 1.94 1.0 ⁴ Strategy 6.3 8 6.5 get 00 just Strate 2. 3 nos t of work (Test blanes 1 - 10 CEM 8 7.5 ps. Just Bet & C 15 ps. Max 12.400 Recept on March 2. 2 spots Recept on March 2. 2 spots 1.94 1.05 ps. 100 for 1.2 spots 1.94 1.05 1.00 for 1.2 spots 1.94 1.05 1.00 for 1.2 spots - Take weak tebullet 4 port in Remer 2 spots - Wated into 4 or 100 for 1.2 spots Total pst. 7.4 Well flow pst. Mar 1914 04 strategy Mar 1914 04 strategy	MSW H	ノ14 リフ	- 715 -25	ASWZ	>15 -7 /	7.6 K		
3 711 713 RUZ 3.0 42 3.2 1711 1.0* 1.1 et 1.0 b) 8 3.0 44 1711 1.0* 1.1 et 1.0 b) 8 3.0 6.4 1711 1.0* 1.1 et 1.0 b) 8 3.0 6.4 1711 1.0* 1.1 et 1.0 b) 8 3.0 6.4 10 1.1 et 1.0 b) 1.1 b) 1.1 b) 1.1 b) E.A.L.S - Running botto 8 7.2 1.0 b) 1.1 b) E.A.L.S - Running botto 8 7.2 1.0 b) 1.1 b) E.A.L.S - Running botto 8 7.2 1.1 b) 1.1 b) E.A.L.S - Running botto 8 7.2 1.1 b) 1.1 b) E.A.L.S - Running botto 8 7.2 1.1 b) 1.1 b) F.A.L.S - Running botto 8 7.5 1.2 b) 1.1 b) Vestor 1 - 1.0 c) 1.1 b) 1.1 b) 1.1 b) Vestor 1 - 1.0 c) - 1.0 c) 1.1 b) 1.1 b) - Take weak rebuild 4 Port 1.1 b) 1.1 b) 1.1 b) - Washed 1.1 b) 1.1 b) 1.1 b) 1.1 b) - Washed 1.1 b) 1.	6	3.94	7.6	6	<u> </u>	Z.C PU		
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Image	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LOF Lit	et his o	r rue	3.0	6.4		
E.A. LS - Russing bold & Z tals psi. 6.5057 on just blace & Z nost of work of work Test blamer I - 10CFM & 7.5057. Just Born & 15 pst. Nav: 12.7001 Restort on blace Int - gound bad 6.3 steel pst. Test blaver Z - exolder on stortup. - Take weak tebuild & pat in Blaver 2 spot. - Washed inter torict fill tors on stortup. - Take weak tebuild & pat in Blaver 2 spot. - Washed inter torict fill tors on stort for the Z Both performance of fill tors on stort for the stort Comparison 2 Total pst 7.4. Well flow pst. - Masked inter toric blacks - Maloed Asw23 1.8 314 - Masked j.8 512	2	in Va	we 17:00			17:06		
E.A. # 5 - Running Korce #. 2 tors psi. 6.5 psi. on just Slaver & most of weat. Test blows I - 10 crm @ 7.5 psi. just Berne @ 15 psi. Maxi (7.7 psi Restart on blows & sec - sounds bod. 6.3 xtal psi. Test Blower 2 - excludes an stortup. - Take weak rebuild & put in Blower 2 spot. - Take weak rebuild & put in Blower 2 spot. - Washed intel towarter fill tors on new # 2 Both weiges graded. 19100 Stort Comparison 2 Total psi. 7.46 Well Flow psi. - Ma load Asw23 1.8 512 - Mashed j.8 5.2			and the second s			· · ·		
6.5 pri on just blace in 3 nos t it would Test blows I - 10 CFM & 7.5 pri. Just Bet a (15 pri. Max; 13, 3pri Restart on black I and - sound bud 6.3 total pri Test blower Z - explains an startup. - Take week rebuild & put in Blaces 2 spot. - Washed intel + porter fil tors on new # Z Both wells: grand 19:00 Start Compressed 2 Total pri 7.46 Well Flow CSC. Well Flow CSC. Malord Asw23 1.8 sign reriad blocks Malord Asw23 1.8 512	E.A.E.S	- Recention.	Early & S	R. Z. Hartal	051			
Test blemr I - 10 CEM & 7,5psi, just 3 CEM & 15 psi, navi 17,7psi Restort on ble constant - sound bad, 6.3 stand psi Test blemr 2 - exploits on stortup. - Take week rebuild & put in Blemer 2 spot. - Washed inter & or wer fill ters on new # 2. Both methers yreaced. 12100 Stort Compresser 2. Total psi 7.4. Well flow est. Asw23 1.8 324 RSW24 1.8 4. rerad blacks.		6.5007	no inst	Blace Co.	3 MOSK	of wort		
Pestovit on blance 3 nd - sound: 6 d. 6.3 retail ost. Test delaser 2 - exclodis an startup. - Take weak rebuild & put in Blanci 2 spot. - Washed inter + our let fill toris on new # 2. - Washed inter yeared. 19:00 Sterre Compressor 2. Total pst. 7.4. Well flow 25 As 423 1.8 314 As 421 1.8 4. refact bineses As 421 1.8 4. refact bineses		Test bl	burr I - 10	OCEM® 7.	5pgi. ju	Et BLEAG	15 psz. Ma.	ki (7,7051 C
- Take week rebuild & put in Blower 2 spot. - Take week rebuild & put in Blower 2 spot. - Washed inter & our at the toris on new # 2 Both method greated. 19100 Start Compresser 2 Total pst. 7.46 Well Flow pst. As 423 1.8 514 As 423 1.8 514 As 512		Pesto	It on ble		- 50 mil	6 6 ml. 6.3	Feter pst.	
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-Take weak rebuild & put in Blower 2 spot. - Washed inter & porter filteris on new # 2 Both medicies are aced. 19:00 Start Compressor 2 Total pst. 7.4t. Well Flow pst. As 623 1.8 Sty As 623 1.8 the refact blocker My low of she As 623 1.8 Sty As 623 1.8 the refact blocker					ć			
- Washed inter to or let fil toris on new # 2 Both methy: greated. 19100 Start Compresser 2 Total pst. 7.4t Well flow pst. 7.4t Asw23 1.8 324 Asw21 1.8 4.9 regar binker Asw21 1.8 512	- Ta	ke wak	rebuild &	put in Be	auci 2 30	st.		F
Bokh Melling greated. 12100 Start Congressed. Total pst. 7.4 Nullen Well Flow pst. Un load Asw23 1.8 514 RSW21 1.6 H.1 RSW21 1.6 S12	- Wa	shed inter	+ 0 at 6 1	fil deis	en ner	# 2		
Total pst 7.4 Muload Well Flow 056 Muload Asw23 1.8 314 19544 098 sAC Asw21 1.8 411 rright blocket Asw21 1.8 512 19544 098 sAC		E. A. Marta	an gre	a can de a	12:00	Frent C	1 m. 1. 1. 53	and all and a second
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	M3616	1.6 51	1					
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HSWW U T.C added Dag	H 5.W 10	0 1	e addi	100.9			· · · · · · · · · · · · · · · · · · ·	
				V 7 1 6 5				

100972		(12/30/21)	W. T. N
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14:40 N/1	925 840000		
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WAN SER		Well CEAN PSE	
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A-5 W 23 20	0- 5,4	2.0- 42 7	otelpso = 7,4
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Astro			
N. AIS	Fren	1:110 502:11.5	
hours, 443	43.13 Tobal - E		
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R 1 32 31	7 4.4 3 10	2 43 7 72 78	3.25 7.8
R 54 8 2.4	2 6.4 9 7.3	3 64 Panh B.3 3.7	3,3 3,7
		19.02	
Blanch 2			
ILICEM :	24.5 Vac. 1	RWI = 60 CEM RUZ = 45 CE	
	Drain 6 gallo	ons water From to R. 191.	3.5

Rite in the Rain

10097	2		12(30)	lzr		-255	BATH C
South A	HE-S					· · ·	
hours	60,571.4	Tot. PSI	- 8.9				
well 9	CFM	PSI 5.2.	•				e
EW15	3.1.	6,2		······································			
3	3.0	7.5		•		6	
12	3.6	5.8 19:33	<u>E</u>	oad g	eu1,		
19152	OFA S.A	c			· ·	· · · · · · · · · · · · · · · · · · ·	6
2-7-2022						•	ZJT
	-						
13:45 - On-	sife, 26°	overcast,	NE brees	2R	:		
Shovel	cleaving	to South	Shud. + 4	SATS, NAJ	s, and EAI	S. Several f	cet new Snow.
South /	AIS : how	urs 61,035	,3 Tot. 1	PSI · 8.6			
Well	CFM P	SI)
9	3.3 5	.3					
RW15	3.6* 5	7.9					
3	3,0- ~	1.2					
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A				11111 (11.11.11.11.11.11.11.11.11.11.11.11.11.			
North	ATS "how	Lrs - 93,2!	54,2 To	4.855- E	ren 11.0 000		
Well	GEM P	51	Wen C	FM PS	Z		
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	3.4 1	4	.3	3.3 7.1			
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KW X	3.5 2	·		212 0,4 2114 Ur	2		
AGN &	5,2 6	.5	KWI :	>/			
Blower 2	2			11 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		,	
CFM NO	LC FIQ	LEL	Or Te	mp			
105 31	.0 9.0	0 %	20.1 7.	3			
RWI		1				•	
efm Fi	ED LEL	02 5	emp	· · · · · · · · · · · · · · · · · · ·			
04 1	1.0 0%	19.9					
NWA							
CTMI P	TO LEL	. 02	Temp				
40	<u>6.0 0%</u>	20.4	F-				
				• • • •			

2-7-2022		237
EAIS: TH.	PSI = 7.5	
#1 PSI - 6.5		· · · · · · · · · · · · · · · · · · ·
#2 PSI - 6.2	(sounding rough ~ metallic ringing/ clanking internally)	
Nell CFM	50	
ASW20 2.0	5.2	
ASWIT 2.0	5,1	
ASW14 1.9	7.5	
ASW 11.7	4.9	
ASW10 1.1	6.8	· · ·
Had to close So	ath branch of EATS to clear ASW10, got it the	wing again
16:13 - Lood up	gear; lock up buildings heave the	2
7-19-22		+ A AG
SAIS : Howks.	62,977 Tot. PSI 9.0	· .
Well SCEM	PST	
9 3.5*	5.5	· · · · · · · · · · · · · · · · · · ·
RW15 3.6*	6.2	·
3 3.2*	7.5	
12 5.5	6.	
NINTE .		
Well SCEM	Det LIVEN SCEN DET	
3.0+	3.7 7 2 2.0+ 4.6	
3 2.6+	6.8 4 3.2+ 7.6	
5 3.0*	17.2 6 3.0 ⁺ 7.8	
7 3.2+	8.0 RW2 3.3 412	
RW1 3.3	42 8 3.0 6.8	
Blower 4: 105	SUFM 31.5 H20 VAC RWI 7055M RW2 30	SCEN
YIV-4	M FED-7.0 VID-0.5 VID-	0.0

. Rite in the Rain

_		
	2.25	
	- 19 - C	Barrensee
		11 1.40 Holladar

ETAS:	Hours - N/A	Tot	1 PST-8			· · · · · · · · · · · · · · · · · · ·	
			<u>Adam</u>	pi= 7.5		1	
			<u>Placer</u>	2 10 - 6.5			
		SCEM	<u>per</u>	1			
	ASNAW	22					
	ASWIL	20	hof for				
	ASW 16	1.6	<u> </u>				
	ASN 17	1.2	5.6				······································
	PSW 22	· 1.9	7.0				
	ACW23	1.2	5.5				
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7/28/22

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21-22 04	E Sitys.			
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		Rite in the Rain		

100972 18/15/22 a-27 /251 12:25: WY: OVERCASE = 60 Lo. N. breeze S.AIS Batters @ F.IV, overvide sait all not buloviting, break where on botters clip - erine repair - Program SiMIS. For 4hr. On 2hr Off Ż -Pull RW-2 setup - No air in packer. New packers hove differeng air supply fittings. e 13:45 Zach off for other Job + to look for firthings, e: - Peell Rul I Prepare to replace packer t cap. Gut RWZ down 0,17' NAIS PSI Tot. 11.0 psi ; 97,786 hr, SUFN Well PSI-3.3* 4.1 Strungs, 3.2* 3 7.0 3,3 3.6 5 3.4 7 4.7 2.0 RWI 19:00 Packer Pressaresi R.W1: 32 33pst RWZ 35pst Ferce up @ PKT Calibrate Vapor instruments. Blower Z WARNEL, RW , RW 2 . Il Flowing - RWZ high residence. CEM VAC ETO PIO dE LEL VEI RWI BWZ 86 42 10pm 5.7pm 19.9822 EFN: 26 550 cm \$.32 CFA FIDI 3 era 220 m Bis pon 102 30 Ho 20. ppm 12.0 pm 19.8% 2.0% PID: 1.7 pen 9.1 ppm 578 ppn 021, 20.07 19.7% 19.83 1.170 Closed 2 2% 0 7 780FM 31-CFM 20:00 - Sampled molding tank fill live in designated 100972 - 1721 (3x VOAS) Show find is staked up around pump + treat area. C ; NBAIS TOT DST 11.0 ; 97.787 Well OFM PSI 3.1+ 4.8 Ż 4 3.6 7.6 6 3.4 7.7 2.1 . 5.0 EUZ 1.5 3.3 8

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8/15/22

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RTH/ZIT

18

2031: UST Vent DTW Holding tank South	0.57 bis access DTW. 4.94; Ξ 8380 gal.
ZIROB Off Forte .	
100922-001	1.9/16/22 01.274
Pat 14/12 - 4	har bren feel since gladar Set of the local
DTW USTVERE.	672 El4iso, Holding Tanti 1:15 brownian
N. AIS Running	BIDC Good level to she tot switch.
Well. CEM psc	
ASUZ. Z.9 4.8 4 27 00	
6 3.6 7.9	
RWZ ZO bunke JU	
-Bulabler in PETTERA	
Blouce	
95 CFM 2715 120	Vac, K.U. OK, RWI: 84-89CFM bounce
	VELi closed
Sugar Kalling Ph	T 1 1 1 1 50 114 - 1 CAROLS 50
Carding In 11	A Molarry Tank Trough South Mills & Orld Prove
Nor dough N. AZS	C = 16 : 03
16:10 Shut down	draw has a lean converte of our al intege
Sample HILL (16:30	Vater in PAI Molding Tank, concerco 41
(cmarriage)	and dram discoursed several rust
herd. Dechde best h	at to drain tan Kr
Dran hopes + filt	ers to burket, return to tank
1 to The I cathered	01014 AVSC SSELINE CLV

· Rite in the Rain

177947			9/16/	2022			7.274 9
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21:05	Offsite	a		· ····································			
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and the second

100972	9/22/22	257
13:30 - Accure	proster MX. 50° nercast slight rain wind 7-10 NE	
	and to versione hard ware to set up P+T	
14:30 - CAR	i according all not share hid will not sear will ob	d rive
	e E de un ros anno de produce de la la la la	T. System
	choose and have a state in a fault places a mo	d Lange Cedil
	were and were and the artest prints the	
	Tel 1 1 Pullers	i and dawn
16:15 - FOUR	a a ball value, instance Die particle intere	Te gav gram
- to rea	me thow & pressure at aroun head to stop lea	Conc oppoind
) the GA		
16:45 - P2-	I running smooth, all leaks realed once in-the	was tured os vs
down !	Measured effluent C 2 gal /min discharge	
)		
17:00 - Coll	eer Sample 100972-TWDRI water after filter	- (50 ym) + GAC
O disu	norge to MWH ~ 3×40 mil VOA W/ HCL GRO/1	STEX
17.15		
NAIS	Tot PSI 1.5 Tot PSI 12,0	
Well	CFM PSI WUI CFU PSI	
2	2.2 49 Asust 24 44	
	3,14 80 3 2,9 4,0	
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RWZ	28- 5.0 7 2.2 8.4	
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Drained	H20 Rom EAIS 12 18 7.0 12 - New MSW	lation
, feller	near well 10 11.8+ 4.9 11- New your	lation
)	0 1.4+ 7.9 10- New 12	later -
18:00 - L	eare Site.	

Rite in the Rain

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100972	9/27/22	ZJT C
9:30 - Truck loaded W/ 9 12:45 - Arrive on-site. - Grob addition tools/ gea - Dissassemble GAG - Vellow power cord pump. ~ Pump is	eur-deport And office WX. 49°, clear, cam. - from Shed tren head to P+T Station - plumbing (put back in shed storage) GFCI tripped. Reset + checked Submersib fine, didn't burn up running dry.	
- Tank is completely - 13:30 - DTW @ UST 13:45 - Collect So PtT holding to	6.95' BTOC - Start up pump @ UST -> P+T + mple 100972-UV22; groundwater discharge mk from purched aquifer. 3x 210 mL VOAS	to GRD/BTEX the
Note- chick the thoat PT tank. 14:05-Move on to RW1 - peaked RW2 - peaked RW15-peaked	Overtan conversion of pressures. Unecking Sparger wells bladdar pressures. © 20 psi - pumped back up to 35 psi © 25 psi - 11 11 11 11 © ~27 psi - 11 11 11 11	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
14140 - SAIS Toto PSE Well CFM PSE 9 2.3 516 RW15 1.9 10.0 8 2.2 7.2 12 2.3 4.7	9.0	· · · · · · · · · · · · · · · · · · ·
14:50 - head down to 15:30 - Leave site.	EATS, quick clean-out of well 10 Plan gauge	

100972-001	10/19/2022	R=274
14:45 On \$170, WXI	Mostly cloudy, 44°E, S. bracte	
Prop to draith PAT	helding termite	
Dru Holding Tanki 2	.24 below vin @15:09 2 15,300 gallon	5
DTW UST Vent (8.9	Broc while pupping	
ISTIC POP Parping	1 40 m Verit Verit.	
15155 Start draining ta	MK - had tracible getting Wayne Very	p (101, prazi
Discharge rate at	ground (to bucket ~ 2 gpm	
Renare Abyst pump &	Moat scheck, Leave Caller Ining	/
Samele HT22 , 17:00	From north end of holding take us	Ing
dedicated poly	601/11. ZX40m WAWY4CL-GR	o/arex
When I and the	use to sample theaved water @ min	la ph
the water flow stop	ord - Pall the Wagne peray - not a	in nursiage
GECIE breaker not	tripped-power to cord.	м
out/ct in N. AIS	with used one from E. AIS.	
Tosted O.K. Wague	purp dayd. Instel mode pour	6.11
Little Cripat Source /	$p_{cr, p_{-}} = Flow = 5.25$ gpm. $Throttle = 7.5 = p_{m_{-}}$	1 Cherry
- amde 100972 : 18:36 - PYT.	discharge to MW4. ZX40ml VOR W/HCA GROX137.	EK
14, AIB 99345, 5 hours	11. 4psi odd 12,5psi even	- 10
9341 Z.Z. 4.0 Z.4	til 12 ASW2 2.6 4.9 2.6 4	5.9 X
3 Z.57 775 V. 3.4	7.7. 4 2.6 8.1 5 3.47 8	.2
Bubbler 7 3.7 Training & 1.4	7.8002.86153.7'8 4.45722.552.256	5,1
and 2.7 416 0 2.5	4.8 bubble 18 2.3 torright let	+14
	18:30 sweltch - your sele discusse	19700
Calrbrate Vapar inst	raments - Egrabbet old and chieck pany	pluggedin.
Blower 2 - Heat trace to	ward On RWI RWZ W	EL
CFM Vac FFTP PTD 0 az 4n"	$\frac{LEL}{2} \xrightarrow{CEN} 90-95 \xrightarrow{EP} = 20 \xrightarrow{CI}$	26
101 33-34 Sept 4.3ept 21	1.172 DB TEMP: 48F temp: 46F Teme	, 48 F
+Emp: 77 F 7	LoccasFral 2% No air check part	

Rite in the Rain

14292	10/19/22	n-an -
I SW	tehed NATS to even bank - New Blover Z reading	
Blower 2	overall	
CT-M	Vac RUL RUZ VEI	
103	31" 61 CFM 30 CFM 24 CFM 19130	
S. A.T.	646051 hours 10,7 totalpsc	
Coor	pressod docsat sound quite light.	
Well	CEM PSE CER PSC	
RW9	2.4t 5.6 1 2.6 5.7 Total ps5:9	. 8
15	0:4+0 13 6punce 10:2 5 21 6punce 9:2	
3	2.2 7.4 5 2.6 7.9	
× 12	2.3 4.7 0 26 4.8	
	19740 TVG TO blow out RUIS- No luck LC	450
E.A.F.	i Both complexers anding. 8,2061 total.	
		·
20100	Off Site	
100970	- col 10/2/22	<i>R-E / Y</i>
16:05	On STAC Whi Clean 40°F,	(
Tanl	is dramed, discreschible Pt T system.	
DTI	V UST VENT, 7,94 BTOCE 18112 10	
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19:00	- Pull Rul packer assy. Find alter a last	
	compression junt is racted - + ghten, seens to	
	Enstall & intlate to 32 psus	
	as you go to gehange diffuser to the to the	things C
······	The freeking up and (14. 15) 104CKCV, 35pstv	
	RW2 Acher Broke and	
N.ATS	- Avarl. ASW7+8. Adjust. Hours: 1737305	
Well	CFM PSE total: 11-5-11.6 Vell CFM PEC toral	
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7	2.0* 8.3	
R.W.I.	2.5 4.5 20:34 1750 2.5 6.9	
L'Blowe	12 31°H2 01 104 CFM; RW2=26CFM. 20170	
S.AFF	5 UIK as above. 20056 OIT SITE	

15105 Production with the case of the second dependent	100972-001	12/16/2022	RALL
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R. I. M. Z. 9 4.1 1. total 11.3 pst 17:50 Hotal Association 11.5 20100 Blance Z. K.O. July, R.V.1 R.V.1 R.V.2 CEMI 108, Vac. Z8 COCH 30 CEM 25 CEMI CStarted Clarg, VII Honder, 75 came of an experience CSTARTED Compression. Install space compression: CI-M Colters' is valled. Creased Starte 19:05 hours i 6553 6.8 Well CEM KS R. 9 Nell CEM KS R. 9 1.4 1.4 1.4 1.4 1.4 2.6 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4	7 2.17 8.1	R4 Z Z 15 48	
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$ \begin{array}{c} Dent(A = R, U, Teg, R, U) & R, U(A = VE) \\ C \in PM^* (D, R, Vac, Z) & GO_{C} \in PM^* (D, R, Vac, Z) & C \in PM^* (D, R, Vac, Z) \\ C fart(r, r, Z) & C fart(r, r, r, R) & C r, r,$			
CEPTINO, UQCILE 60 CFM 30 CFM 25 CFM (155 (Started show, VL1 + reserved 15 cm and ministration) Suffer Remark compression. Install space compression. Clean Kilteric is ralled. Creased Store (19:65) hours? 65531.8 Well CFM ps Rug trz 6.4 12:6 tatul ps 7 on geord. 5 1.4 1.9 3 3.6 0.4 12 4.7 5.9 12 4.7 5.9 12 14.7 5.9 14 15.0 14 10 0000000 10 000000 10 000000000000	Blanch L R. C. duc.	KWI RWE VEI	· · · · · · · · · · · · · · · · · · ·
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Still Permane compressor. Install space compressor. Climit filteric in ralled. Orceased Star @ 19125 hoursi 65531.8 Well CEM ps Rug tiz 6.4 Izib tatal psi on grand. 5 1.4 11.7 Igiss Open, stide for up 3 3.6 0.4 12 4.2 5.9 20:13 Off SHC. 12/19, Compressor El taken from 5. ALS - Flexible compling has Just stid aport. Both SH screws missing from for side. Install Space fam side Hyper. Test	LIGY LO STONE		
$\frac{1}{12/19} = \frac{1}{12/19} = $	SATS Remain own	recover Tastall career can are contained	
havers: 6.553 f.8 Well CFM est Ru9 t.2 6.4 12,6 total pst on guard. 5 1.4 11.7 1938 Open still fan up 3 3.6 0.4 12 4.2 5.9 20:13 Off Sitc. 12 1.4 5.5 - Flexible coupling has 5 1.5 - Flexible coupling has 5 1.5 - Flexible coupling has 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	· Elen Falters ,	realled breased 5420019:15	
We (1) CFM psi Rug tiz 6:44 12; 6 total psi on general. 5 1:4 11.7 19:38 Open stide fam up 3 3:6 0:44 5:38 Open stide fam up 12 4.7 5:99 10 10 10 10 10 10 10 10 10 20:13 Off Site. 12/19, Compressor EI taken from S. RES - Flexible coupling has Sust siid aport. Both site sciences missing from fam side. Install Space fam side typica of lock tight. Test	hours: 65531.8		
$R.u.9$ $H.Z$ $G.H$ IZ_1B $Idual psiconguard.5I.4IL9Iqi3BOpen, stide fan up33.60.4Iqi3BOpen, stide fan up12H.Z5.99Slotting trans.12H.Z5.99Idual timestant20:13Off Site.Idual timestantIZ/19Compressort EItaken from S. AZS - Flexelole compling hasSust slid appart. Both Set science missing from fan side. InstallSparc. fan side, tightant lack flight. TestIIS pst GIOCFN20:ch R3.BEFN$	Well CFM pst	Motor fan is r	4661245
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Rug 4.2 6.4	12,6 total pst on guard.	
$\frac{3}{12} \frac{3.6}{4.2} 0.4 \qquad 5.07 \qquad 5.07$	5 1.4 11.9	19:38 Open, stide f	an up
20:13 Off Sitc. 20:13 Off Sitc. 12/19: Congressor El taken from S. Ats - Flexible coupling has Sust Slid aport. Both set science missing from fan side. Install Spare fan side, trykte willeek Hight. Tere : 115 ost @ 10 c Fri 30 cct @ 3.8 c Fri Mitter	3 3.6 0.4	5hot - 4 9 400	M.
20:13 Off SItc. [12/19; Compresson El taken from S. AFS - Flexfile compling has Sust slid apart. Both Sit scients missing from for side. Install Spare. fan side tighten al lock Hight. Text	12 4.7 5.9		
20:13 OTT SITE. T12/19; Compresson El taken from S. AFS - Flexfile compling has Sust slid apart. Both set screws missing from for side. Install Spare. fan side, tighten al lock Hight. Text. : 11,5 psf @ 10 c Fri 30 cck @ 3,8 c FM 70224			
TI2/19; Compressor El taken from S. AFS - Flexible compling has Just slid appart. Both set screws missing from for side. Install Spare fan side tighten allock Hight. Text	20:13 017 51+6		
Just slid apport. Both set screws missing From for side Install Spare fan side tryfitea willow tright. Text			
Sparce fan side trykten willer k Night. Text	14/14, Compects of L	- TAKCA TTOM 3. PTD - FREXER OCUPI	125 125 Fall
: 11505 @ 10 CEAL 30 CC @ 3 8 CEAL 78224	CARRE. Fan side unit	Have SKT SCREWS MISSING TRAN TAN STACE IN.	1
	: 1115 057 @ 10°C EM	1 20 40 1991 . 15 1 77224	

Rite in the Rain

Supervision of the second

1009×1 [1/28/2023] ペイン 15:20 on sofe. Why: Prly cloudy, 30°F. 20 da site. Wy: 1719 clowy, w. N.A.C.S + Blowley 2 are ranning -look noormal DCL moder. Power, DSL, Enternet Tights are well. The to confirm -directed to ACS directed to ACS directed to ACS A À Motor cooling fan is lasse & colling an George compressed SATSI have 66216.0 psii 1229 (F) Reattery charge light to dute logger 100 on No AC & Louger - GHCT Runard warrant Still not changing 1.8Vinbatters Ac adapter bad ¢‡ 12 3.8 5.4 15150 Timer shuts of properly 216100 Try to find old NC scoply from E.AIS - not linde. The using PAT 12V power sapply for Settes legrer & colo SATS logger batters (discounceted). Sharel sand sulaw E. A.3 - both courses on running, 8.0 a Tiola Outa logger good. NIA-13: 00640, 8 hours, EVEN: U.Opsitodal.

 Well
 CFM
 psc
 CFM
 psc
 Well
 CFM
 psc
 CFM
 <t <u>p 51</u> 3-18 7.5 7.5 8.1 315 19154 Old-mark +imer for N. AIS dead. Forturates wired nod naily A closed. Turn off N.AIS blower tlogger. Disassemble CR 1000 to clean menory connections. Reassemble - Get connection to table I tast reading (217:30 17:45, Then loose connection. Try dissasce bling again - Wo luck, the correction decorrections incidentify 18,00 Turn compressor on - is on odd in it should be. -Swap ET compressor buck into S. A. I. Replace no tor fan ion Sparce compressor. Restarte 1976 Blower 2 107CFN, 2915 Vac, RWIS3CFM, RWZ 31CFM K.O. OK ASWI 2850 ASUL LESSEPA 38 2015 E 12

100972		1128/23		-42	774
Undown Ru	1-2 well hoo	d-check	packer	245 050-	gard.
Only able	to get it a	e 27 p.9	* WALL ber	id parp. Z	2510
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S. A 62 1010	2 1 5 1				
Well CFF		RUSIE			114-1
$-\frac{R}{15}$	515	Praz - Li	et inace is	oni, so noi	
3 3.4		on cherry	H Veplare d	Adder,	
12 3,141	4.8 20145	1		· ·	
	Datalan	Rolfere fu	1-13, 8V. 54.	ould ga a few	week
		, 2°			
Night 5 Ga	te - broke par	Allack these.	Just Z 17-4	ed closed	
		·····			
E.AIS Way	17 through 3	small tures +	celles appoind	HSCI 14, Miss	rd well
ASU I	10 - Not flowing	A TRUZEL		71-74	
7 013 d mag					
		1/10/00			-
100977		4/13/23		23	
100972		7/13/23		23	
100972 12:45- Avrive	on-site, clea	7/13/23	to main	ched.	
1009.72 12:45- Avrive 13:30- North	on-site, clea gote laten	+113/23	to main though cow	colled.	D.T.H.
1009.72 12:45- Anrive 13:30- North Langer mo	on-site, clea gate laten unting brack	+113/23 repaired. Al repaired. Al	to main though cow malls repaired.	colled. Id USE a brought part to	DTH DTH & He for other
1009.72 12:45- Avrive 13:30- North Langer mo	on-site, clea gate laten unting brack	+113/23 repaired. Al repaired. Al sets. (Not acc	to main though cow recalls repaired.	Colled. Id USE a brought part ba	DTH CAE for other
1009.72 12:45 Anive 13:30 North langer mo NAIS hr	on-site, clea gote laten unting brack 4 2,435 Even	+113/23 repaired. Al repaired. Al sets. (Not acc psi tot = 10.1	to main though cow malls repaired. 5 psi 022 p	ested. Id USE a brought part ba ti tot = 11.5	DTH DTH CAE for other
1009.72 12:45 Anrive 13:30 North Langer mo NAIS hr Wer CI	on-site, clea gote laten unting brack & 2,435 Even FM PSE	+//3/23 repaired. Al repaired. Al sets. (Not acc ps: fot = 10. Woll (to main though cow malls repaired. 5 psi 022 p 27M PSF	ested d USE a brought part ba ti dot = 11.5	DAN CAE For other
1009.72 12:45 Annue 13:30 North langer mo NAIS hr Wer CI Z	on-site, clea gote laten uniting brack & 2,435 Even FM PSI 2.5 4.6	+113/23 repaired. Al- repaired. Al- sets. (Not acc ps: fot = 10.0 Well (to main though cow recalled repaired. 5 pri 022 P 275 PSF 215 715	ested coted 12 USE a brought part 6a tidot = 11.5	DAH CAC Lo 1 other
100972 12:45- Avrive 13:30- North langer mc NAIS hr. WW CI 2 E 4 Z	on-site, clea gate laten whiting toracle & 2,435 Even EM PSI 2.5 4.6 .5 7.6	+113/23 repaired. Al repaired. Al sets. (Not acc psi tot = 10.0 Well (1 3 5	to main though cow really repaired. 5 psi 022 P 275 PSF 215 415 216 7.1 2.4 7.0	ested Cated 12 USE of brought part 60 51 fot - 11.5	DAH CAC Lo 1 other
1009.72 12:45- Annive 13:30- North langer mc NAIS hr Wen CI 2 E 4 Z 6 Z Phyz 3	on-site, clea gute laten whiting toracle & 2,435 Even FM PSI 25 4.6 .5 7.6 .4 7.7	+//3/23 repaired. Al- repaired. Al- cets. (Not acc psi tot = 10.1 Noil (1 3 5 7	to main though cow malls repaired. 5 pri 022 p 25 PSF 2,5 4,5 2,6 7,1 2,4 7,0 3,0 8,5	ested. 12 USE of brought part 6a 61 fot = 11.5	DAH CAC Go 1 of let
1009.72 12:45 Annue 13:30 North 1anger mc NAIS hr Wen CI 2 E 4 Z 6 Z 8 Z 8 Z 8 Z	0n-site, clea gate laten whiting toracle & 2,435 Even FM PSE 25 4.6 .5 7.6 .4 7.7 .8 4.9 .5 6,5	+113/23 repaired. Al repaired. Al repaire	to main though cow malls repaired. 5 psi 022 p 25 951 215 955 214 7.0 3.0 8.5 2.4 3.5	ested. d vse on brought part ba ti dot = 11.5	DAH CAC Go 1 of let
100972 12:45 Avrive 13:20 - North Langer MC NATS hr WM · CI 2 E 4 Z 6 Z EWZ 3 . 8 Z	0n-site, clea gute laten maturg toracle & 2,435 Even FM PSE 55 4.6 .5 7.6 .4 7.7 .8 4.9 .5 6,5	+113/23 repaired. Al repaired. Al repaire	to main though cow malls repaired 5 psi 022 p 2.15 41.5 2.15 41.5 2.16 7.1 2.4 7.0 3.0 8.15 2.4 3.5	eated Cated 12 USR of brought part 6a bit dot - 11.5 13	DIA DIA CHE For other
100972 12:45-Anrive 13:30-North 10nger mc NATS hr Wer CT 2 2 2 4 2 3 8 2 8 2 1400-Mistoken	on-site, clea gate laten whiting toracle & 2,435 Even FM PSI 25 4.6 .5 7.6 .4 7.7 .8 4.9 .5 6,5	+//3/23 PF a partn repaired. Al repaired. Al ref 5. (Vot acc p5: fot = 10. Woll (3 5 7 RWI Lapter Jo N	to main though cour malls repaired 5 psi 022 p 2.5 4.5 2.15 4.5 2.16 7.1 2.4 7.0 3.0 8.5 2.4 3.5 AFS data	Eled Caled brought part 6a brought - 11.5 Caled brought - 11.5 Caled brought - 11.5 Caled C	
100972 12:45- Annive 13:30- North 10nger mc NATS hr Wer CT 2 E 4 Z 6 Z 2 WZ 3 . 8 Z 1400- Mistoken 9 5mg to	on-site, clea gate laten whiting brack c 2,435 Even FM PSI 2.5 4.6 .5 7.6 .4 7.7 .8 4.9 .5 6.5	+113/23 PF a partn repaired. Al repaired. Al refs. (Not acc ps: fot = 10. Woll (3 5 7 RWI Lapter fo N DC adapter	to main though cour malled repaired 5 pri 022 p 2.5 4.5 2.5 4.5 2.6 7.1 2.4 7.0 3.0 8.5 2.4 3.5 2.4 3.5 AFS deta to SAFS	coled 10 USE a brought part ba 51 dot - 11.5 10 get . Nou datu legg	
100972 12:45- Annive 13:30- North 10nger mc NATS hr Wen CT 2 2 2 4 2 6 2 2 2 4 2 8 2 2 1400- Mistoken 8 2 2 1400- Mistoken 8 2	on-site, clea gate laten whiting toracle c 2,435 Even EM PSE 25 4,6 .5 7,6 .4 7,7 .8 4,9 .5 6,5 .4 5 .5 6,5	+//3/23 preparized. Al- reparized. Al- sets. (Not acc ps: fot = 10. Woll (1 3 5 7 RWI Lapter b N DC adapter	to main though cour malled repaired 5 pri 022 P 275 9,5 2,5 9,5 2,6 7,1 2,4 7,0 3,0 8,5 2,4 3,5 2,4 3,5 Afs data to 3,475	coled down to part to brought part to ti dot - 11.5 logger, Non down logg	
100972 12:45- Annive 13:30- North 10nger mc NATS m 2 2 2 4 2 6 2 2 2 4 2 2 4 2 2 2 4 2 2 4 2 2 4 2 2 4 2 2 4 2 2 4 2 2 4 2 2 2 2	on-site, clea gute laten whiting toracle c 2,435 Even EM PSE 25 4.6 .5 7.6 .4 7.7 .8 4.9 .5 6.5 .4 5 .4 7.7 .8 4.9 .5 6.5	+113/23 PEPaired. Al repaired. Al sets. (Not acc ps: +++ 10. Noil (1 3 5 7 RWI Lapter to N DC adapter SATS Juta	to main though cour malles repaired. 5 pri 022 P 27M PSF 215 415 216 7.1 2.4 7.0 3.0 8.5 2.4 3.5 2.4 3.5 AFS data to SAFS logger. Con	colled brought part ba brought part ba ba brought part ba brought par	
100972 12:45- Annive 13:30- North 10nger mc NAIS hr Wen · Ci 2 2 4 2 3 6 2 2 2 3 4 2 2 3 2 4 2 2 3 2 4 2 2 2 3 2 4 2 2 2 3 2 4 2 2 2 3 2 4 2 2 2 2	on-site, clea gute laten whiting toracle c 2,435 Even FM PST 25 4.6 .4 7.7 .8 4.9 .5 6.5 .4 5 .5 6.5 .4 5 .5 6.5 .4 5 .5 6.5 .5 Acri L boutry in a	HISZS Preparized. Al reparized. Al sets. (Not acc ps: fot = 10.0 Noill SATS Juta From 6.36 V	to main though cour malles repaired 5 pri 022 P 27M PST 215 415 216 7.1 2.4 7.0 3.0 8.5 2.4 3.5 2.4 3.5 AFS data to SATS logger. Con to 12.42 v	colled colled braught part ba braught	
100972 12:415 - Annive 13:30 - North langer mc NATS hr Wen · Ci 2 2 2 4 2 6 2 8 2 8 2 1400 - Mistalent 8 bmg to 15:00 - Checked Chairging Pi	on-site, clea gute laten whiting toracle c 2,435 Even FM PSI 25 4.6 .4 7.7 .8 4.9 .5 6,5 .4 5 .5 6,5 .4 5 .5 6,5 .4 5 .5 6,5 .4 5 .5 6,5 .4 5 .5 6,5 .4 5 .5 6,5 .5 6,5 .4 5 .5 6,5 .5 6,5 .5 6,5 .5 6,5 .5 7,6 .4 7,7 .8 4.9 .5 6,5 .5 7,6 .4 7,7 .5 6,5 .5 7,6 .5 7,6 .5 7,6 .5 7,6 .5 7,6 .5 7,7 .5 7,7 .5 7,7 .5 7,7 .5 7,6 .5 7,6 .5 7,6 .5 7,6 .5 7,6 .5 7,6 .5 7,6 .5 7,7 .5 7,7 .5 7,7 .5 7,7 .5 7,7 .5 7,7 .5 7,6 .5 7,7 .5 7	+//13/23 pr a partn repaired. Al sets. (Not acc ps: fot = 10.0 Noill 1 3 5 7 RWI Lapter for N DC adapter SAIS Juita From 6.360	to main though cour really repaired 5 psi 022 P 275 715 215 715 215 715 216 7.1 2.4 7.0 3.0 8.5 2.4 3.5 AIS data to 3AIS logger. Con to 12.421	E-Jed - brought part 6a brought part 6a brought - 11.5 - brought - 11.5 - broug	
100972 12:45- Annue 13:20- North 10nger mc NATS hr WW CI 2 E 4 Z 6 Z 2 WZ 3 2 WZ 3 2 WZ 3 2 WZ 3 2 WZ 3 2 North 10nger mc 10nger mc	on-site, clea gute laten whiting toracle c 2.435 Even FM PST 25 4.6 .5 7.6 .4 7.7 .8 4.9 .5 6.5 .4 5 .5 6.5 .4 5 .5 6.5 .4 5 .5 6.5 .4 5 .5 6.5 .4 5 .5 6.5	+113/23 pr a partn repaired. Al sets. (Not acc ps: tot = 10. Weil (Noil (1 3 5 7 FWI Lapter to N DC adapter SATS Juita From 6.36 V	to main though cour rually repaired 5 psi 022 P 275 715 215 715 216 7.1 2.4 7.0 3.0 8.5 2.4 3.5 AIS data to 3.4 FS logger. Con to 12.4 R	Cated Cated brought part 60 brought - 11.5 10 get -	

Rite in the Rain

4/13/23	275
IE GATO 1 - 67 413 BET Tol 9.1	
Wall CEM PST	
9 2.5 5.4	· ·
15 - 11.0	
3 2.5 6.6	
12 2.4 5.4	
15:30. More over to EAIS, altempt repair of well covers.	
5-22-23	
12:05 - DO-SHE WY. DONTHAN CLOWING - 570	· ·
observe + photograph Gnow duringe to Zip-mout b power line.	oldg + NIAIS
checked the modern for the data logger, radio, and	controllers in NATS
to ser it logger can be moved to the GAIS.	Unclear; nord
to talk to randy. Took pictures,	
and the second s	
checkee SALS. Well is completely possible, anompico	Mr.K whet will
paster and was what to allow to allow.	
Adjust the other wells, I head to EATS	
FAIS blower 2 had debris (plastic & given fibers) clean	out mode
Cooling fin guard. Dramed the HED out of the EA	Is trues.
then wolk through of the wells. wells D.K.	
Recheck How 2 EATS - maintaining 80 P32. Decide	to leave
in-place- Will likely need replacing 1 swap w/ spore	on next trip.
Fired the FATS rate labole americs to have been	bent from
the case being ever backed will snown	
Plan for next trip: pull 15 and vaplace diffuser.	potentially Swap
EATS #2 WI Space. Finalize data logger plans wi	Rondy
for the summer	
Power to NAIS ~ potentially run PtT off patteries	•

100972	6/27/2023	87.272
15-33 On sotte	2. Wy I mod. 505, 11ght rein NE bracze.	
5. A Z Z : 6860	9 gul hors, 120050	
Well CFM	PEC CEM DSC	
RW 9 2.4	5.9 2.8 6.0	
RW15 Closed		
nu 3 2.4	6.9 2 2.8 7.2	
RU12 2.0	6.1 8. 2.2 7.0	
	15:55 · Total 10,7057 19:59	
NIAIS - Turn	off tota logger-remark buttered - charge be	211-2-2-2
hours	at paur sint: 02572.0	
Put c	hain + pudlacte on garter	
Rebar Markein	9 5.40, corner of property 38525 same	Ed Rock (R.J.)
is care	to Find, Harflerg no. Add torke startic.	
- Clear out	bruch along property line to east	
- Try to 12	ecare Site corner of LET 717 - No reban te	rend
Mark ce t	-comportarge location based on rough sam	× ×175
- Markal	Proposed Power ding location = 2.5 south	074
property.	line so confortally in ROUL -Lory rate	A .
white e	saint = 20'55W of old ward well, =15,2	east
of Selvine	savner.	
- Mark gi	astric location w/ yellow portit	
- Mark A.	SUF an air I'me w/ white part Coverse	is deed)
Take pho	tos.	
RW-15 Pull po	raker/air acremials + replace air diffuser	- Last
price o	if new 1" 0.010 slot of Austra	
Flow Pro	of great frouble getting to Z cter @ 12 pst 1	492 7
pull ou	I some of year fly hose & ro - fit into 4"	Pre-
Better	- tinks a residence are getting bod - shace	17 1
1 Cplace	. w/ unice sirile, 20.40 .	
S. A. Z. S. C.F.M	EST TOTAL PST. 7.1	· · · ·
RW924	6.0	· · ·
Rw15 2.4	7.1	
Rw3 2,4	6.7	
R.W.12. 1.8+	5.5? 20:58	
nenetalainen en		
	Kite in the Kain	

Sector Sector

	6 (27/23	R-E-24
1 <u>G</u>		
E. A.L.S. Voth Maners.	Conversign C. 6 C. St. St. S.	
- 1 34 1 hard 16 4 bec	The The Charles of the Charles	
- Outse	V Fundo tran on Black V CO	145 761 160
flinging around	LOCSC. Take Fam DIF	ot spart
CONGRESSOV (with	d. Hiculig. I + was not p	ent ou the
shaff zuite ta.	enous 6, but usable	
I usrall on alouro	Z.	
- Black plastic a	+ unstor end fan of bilou	ver thas
also talled Rep	lace block fam with a	i u sparti
- Surce ind	2	
- Arek Hust	out of inlet pre-Filter o	+ plance
- Put Fresh inket	- Filmer on bloure Z	
- Fit Fresh own	yet Fillers on blowers 14	2
(blower 1 fil	ter holder falls out inc	anister
155 - Fredse both	motors .	
10148 creter E	8.6 150,	
Walk + brown E	At wells.	
· Z could block so	rules down ground ASW. 14	145 no donagy
- New 10 rid not	restant & Clast M	
~ All Other 10/13	410 1011 109, ASU23-144	C 6 p + C
(22)		(
1415 AR SAE		
SINA 477-083	7/2-8/23	RZH C
9:26 De Citre WXi I.	inst theothe drai calm	
9.74 Res E Contractor	1 SHE - Jay & Drandon.	Mini Excovator
alice Dia a second a second second second	. I partes & other. possible u	nderground.
Rell back BI ATS	in link frager, and	
Hele hand dea be	and true A whed. Cat up	Erish & treet
a structure of g	E. Farmers.	
	6-79" dree trench. 114" condu	A laid 4
(12) - P) L. VIII.	Ind through Contestion at 1	3 lower 2 breaker box made.
- + C CIL C C CELLY	25 ITE ranger & LTE Antenna	& try to set up
A Install USL UELL L	to CR 1000 secus to have lost:	some programming
CONTRACTO COMPANICA	Bothere thoreting in Setts date	power supply.
- Wash 11	to verinceall chain land fear	
10:38 R- 7 ELLI D	A citz	
- Pull agent FACCE	& reassemple, No lack.	
in apar a Victor		

100971	9/29/23	REZ
SATS 769812 hrs., Qu	psi	
VELL CEM Flow	6	
RW9 2.8 6.1	RW12 docent open up	-probable true
RW15 215 7.3	for new air difference	
RW3 2.7 7.1		
RW12 13 5.9 20:00		
ELAIS Vanning av 8	est- welle seeme	3 for (fatts reathing)
mile all the	-remember bow saw r	rext visdt
20,00 001 2700		
	1	
100972-001 10/5	1231	RAH
11.06 On site. Wx. Bureaze	Wind, 405 - Overcast	
Maria al and I (Hard C.	REATS AND	Arei
11042 Charger Dallarg The	Lever for the second se	
PEPIACE S. Mar Drighter Bayery		
Setus an MATCHINA	1 Ath last and a star R.	
in stall undated (3 < 37.0	5 - tore Ropes - No	com cell
Cauchell Ser Support - 40	Lie + Aroca do cartino de - 17	. Kr (pidou
Pet Bas 9 - Frist work	ma. Down Imen & aper. CF.	ZOOS are
Verg stor - Stop those	day nords for now.	- NO GRIDO
data returned from 6 of	ore power outoge.	
with new system, minist	USC PC400, Logger Net, or Log	ger Liter (
to see data.		
Pack up.		
13:42 OFFERE TE OFFER	- J- v /v	
15154 On sofe Use Rain		
detup Logger Lonk on	chone to new system - h	101155
-E, MISSE-Clead Falleon 7	ices out of the west	
SKeplace white I	cours on NSV 13:16 and 1	× w/th bocks
Well (FM PSI 64500 235 CO	ver is also cracked, but p.	it bad)
AKW 10 P ALL	ASW LZ LOCKA 6	Opsi
$\left[\begin{array}{ccc} 11 & \psi Fa(0,2) \\ 0 & \psi (2,0) \end{array}\right]$	18 1.0 6	
12 Urametiv cliver	6	
15 4 SEL WATOR 4062	20 Vratte 3.	4 ANPCIE Thek
1 17 11 003 cuased literated	+3 $2($ $1,3$ 3 3	
- 142 688 d		Repression
1° SINTLY, 0	1 2 111 0	t kepstallikill

Rite in the Rain

1009112 1015123		RZ1K
ErATS - Flow and to balls were in maly v	attaining oction on	7/28.,
Pressure transducer 2 6.2-6.3 = prop	abily and blower a	
Total main quela c + 7.600 Trat Velcan	my puccese it - andy diver	5 10 5 5 0 1
Compressor H Z is running & ma king pre	yall is	
Comparison # 1 is running but nating	no pressure 1	8.545
Put new concersor carry for an SPA	RE, elsect notal	Far - 9000
Grase Poter bearings - Sparte.		· ·
Install SPARE in E.AZS I position A	Tas decried to trus,	
(in the of add #3 fall of private	20:25 10:00 12	
Fringe did in the Carolina in about	+-c 8.0 m 4 1	SPATE
Constitute the sale water & con	1×3	
- pramed water from ASW13 It.	cone back	
Sthe GEP PS WC	11 CFR RE	
ASUN O 7.9 ASW	17 1.8 6.0	
11 119t 514	18 1.95 6.1.	
12 read-lib? 7.2 France	17 119 6 B	
1.6 Vet 6,2 2 pile thread	20 1.9 51	
1.8° 2.7 carts	21 1.8 5.4	
10 1.8 7.0	22 4.9 7 1	3
t 177 3,9 b.r.	25 1.8 6	
21:23 - Closed & Coverd With IS wells	•	
ar Cepach,	·	:
1113 Ilius off site		
10/17/27		REAT
100972		
12115 On SAC ZipMarts WX: Upper-	205 K Over cost, c	a/m
- Big Ghas completed the connection	to the metter. Pol	e there un place
Get Vapov, instruct & harging.	A Contraction of the second se	1
- Contiron power works. N.A.I.S. ode	t. suitching so I read	15 Hereti
al noting a partite bally reparts	are dead (No bettering)	Carron of acatel
- Put new dutterig (96) in old mak time	R. Reset clock, tte.	
- Typ and virate solenoid - begins w	ind King, Kest su	ittelige
time as capisitor charges.		
- Check out Knockouts on Blower LV	to get a little w	a torout
- Check out N. AIS Compressor - LI	caned outlet filter	odd,
touch of greese. Find motor tar	is on backwards	- tem 1t
around - has a bit of excess gree	if c & a cracter but	transtronge
	ニアー・アート コント・スタン アンガイズ しょう	18-5-1 K-152 268 -
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SHANNON & WILSON, INC.

APPENDIX E

IMPORTANT INFORMATION ABOUT

YOUR GEOTECHNICAL/ ENVIRONMENTAL REPORT
EIIISHANNON & WILSON

IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL/ENVIRONMENTAL REPORT

CONSULTING SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND FOR SPECIFIC CLIENTS.

Consultants prepare reports to meet the specific needs of specific individuals. A report prepared for a civil engineer may not be adequate for a construction contractor or even another civil engineer. Unless indicated otherwise, your consultant prepared your report expressly for you and expressly for the purposes you indicated. No one other than you should apply this report for its intended purpose without first conferring with the consultant. No party should apply this report for any purpose other than that originally contemplated without first conferring with the consultant.

THE CONSULTANT'S REPORT IS BASED ON PROJECT-SPECIFIC FACTORS.

A geotechnical/environmental report is based on a subsurface exploration plan designed to consider a unique set of project-specific factors. Depending on the project, these may include the general nature of the structure and property involved; its size and configuration; its historical use and practice; the location of the structure on the site and its orientation; other improvements such as access roads, parking lots, and underground utilities; and the additional risk created by scope-of-service limitations imposed by the client. To help avoid costly problems, ask the consultant to evaluate how any factors that change subsequent to the date of the report may affect the recommendations. Unless your consultant indicates otherwise, your report should not be used (1) when the nature of the proposed project is changed (for example, if an office building will be erected instead of a parking garage, or if a refrigerated warehouse will be built instead of an unrefrigerated one, or chemicals are discovered on or near the site); (2) when the size, elevation, or configuration of the proposed project is altered; (3) when the location or orientation of the proposed project is modified; (4) when there is a change of ownership; or (5) for application to an adjacent site. Consultants cannot accept responsibility for problems that may occur if they are not consulted after factors that were considered in the development of the report have changed.

SUBSURFACE CONDITIONS CAN CHANGE.

Subsurface conditions may be affected as a result of natural processes or human activity. Because a geotechnical/environmental report is based on conditions that existed at the time of subsurface exploration, construction decisions should not be based on a report whose adequacy may have been affected by time. Ask the consultant to advise if additional tests are desirable before construction starts; for example, groundwater conditions commonly vary seasonally.

Construction operations at or adjacent to the site and natural events such as floods, earthquakes, or groundwater fluctuations may also affect subsurface conditions and, thus, the continuing adequacy of a geotechnical/environmental report. The consultant should be kept apprised of any such events and should be consulted to determine if additional tests are necessary.

MOST RECOMMENDATIONS ARE PROFESSIONAL JUDGMENTS.

Site exploration and testing identifies actual surface and subsurface conditions only at those points where samples are taken. The data were extrapolated by your consultant, who then applied judgment to render an opinion about overall subsurface conditions. The actual interface between materials may be far more gradual or abrupt than your report indicates. Actual conditions in areas not sampled may differ from those predicted in your report. While nothing can be done to prevent such situations, you and your consultant can work together to help reduce their impacts. Retaining your consultant to observe subsurface construction operations can be particularly beneficial in this respect.

A REPORT'S CONCLUSIONS ARE PRELIMINARY.

The conclusions contained in your consultant's report are preliminary, because they must be based on the assumption that conditions revealed through selective exploratory sampling are indicative of actual conditions throughout a site. Actual subsurface conditions can be discerned only during earthwork; therefore, you should retain your consultant to observe actual conditions and to provide conclusions. Only the consultant who prepared the report is fully familiar with the background information needed to determine whether or not the report's recommendations based on those conclusions are valid and whether or not the contractor is abiding by applicable recommendations. The consultant who developed your report cannot assume responsibility or liability for the adequacy of the report's recommendations if another party is retained to observe construction.

THE CONSULTANT'S REPORT IS SUBJECT TO MISINTERPRETATION.

Costly problems can occur when other design professionals develop their plans based on misinterpretation of a geotechnical/environmental report. To help avoid these problems, the consultant should be retained to work with other project design professionals to explain relevant geotechnical, geological, hydrogeological, and environmental findings, and to review the adequacy of their plans and specifications relative to these issues.

BORING LOGS AND/OR MONITORING WELL DATA SHOULD NOT BE SEPARATED FROM THE REPORT.

Final boring logs developed by the consultant are based upon interpretation of field logs (assembled by site personnel), field test results, and laboratory and/or office evaluation of field samples and data. Only final boring logs and data are customarily included in geotechnical/environmental reports. These final logs should not, under any circumstances, be redrawn for inclusion in architectural or other design drawings, because drafters may commit errors or omissions in the transfer process.

To reduce the likelihood of boring log or monitoring well misinterpretation, contractors should be given ready access to the complete geotechnical engineering/environmental report prepared or authorized for their use. If access is provided only to the report prepared for you, you should advise contractors of the report's limitations, assuming that a contractor was not one of the specific persons for whom the report was prepared, and that developing construction cost estimates was not one of the specific purposes for which it was prepared. While a contractor may gain important knowledge from a report prepared for another party, the contractor should discuss the report with your consultant and perform the additional or alternative work believed necessary to obtain the data specifically appropriate for construction cost estimating purposes. Some clients hold the mistaken impression that simply disclaiming responsibility for the accuracy of subsurface information always insulates them from attendant liability. Providing the best available information to contractors helps prevent costly construction problems and the adversarial attitudes that aggravate them to a disproportionate scale.

READ RESPONSIBILITY CLAUSES CLOSELY.

Because geotechnical/environmental engineering is based extensively on judgment and opinion, it is far less exact than other design disciplines. This situation has resulted in wholly unwarranted claims being lodged against consultants. To help prevent this problem, consultants have developed a number of clauses for use in their contracts, reports, and other documents. These responsibility clauses are not exculpatory clauses designed to transfer the consultant's liabilities to other parties; rather, they are definitive clauses that identify where the consultant's responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses are likely to appear in your report, and you are encouraged to read them closely. Your consultant will be pleased to give full and frank answers to your questions.

The preceding paragraphs are based on information provided by the Geoprofessional Business Association (https://www.geoprofessional.org)