

Project: On Call Hydrology Support	Project No: 135895
To: Maggie Valentine, ConocoPhillips	
From: Karen Brown	Date: 9/6/2013
Subject: M0024 Water Quality Results	

- 1.0 Introduction 1
- 2.0 Sampling Methods 1
 - 2.1 Sample Location Selection 2
 - 2.2 In-Situ Water Quality Parameters 3
 - 2.2.1 Instrument Calibration 4
 - 2.3 Laboratory Sample Collection and Analysis 4
- 3.0 Results 4
 - 3.1 Field Conditions August 18, 2013 4
 - 3.2 In-Situ Results 6
 - 3.3 Laboratory Results 7
- Appendix A Laboratory Analytical Report

1.0 INTRODUCTION

Water quality sampling was performed at Lake M0024 on August 18, 2013. In-situ measurements included temperature, dissolved oxygen, salinity, turbidity, conductivity and specific conductance. Laboratory samples were collected and analyzed for total coliform, E-coli/LT2, pH, color, total suspended solids, turbidity, nitrate/nitrite, iron/magnesium/manganese (Fe/Mg/Mn), and hardness. Analytical services were provided by SGS Laboratory in Anchorage.

2.0 SAMPLING METHODS

A 2-person Baker team was staged at Alpine for the sampling event. Bristow Helicopters provided access to Lake M0024. In-situ water quality data measurements and laboratory sample collection were performed from two inflatable kayaks with an attached support raft for transporting the sampling equipment.



Photo 1: Inflatable kayaks and support raft used to access sampling location

2.1 Sample Location Selection

Previous in-situ monitoring of North Slope lakes indicates hydraulically isolated lakes are well-mixed during open water conditions. The likelihood of homogeneous conditions, which was verified with the in-situ measurements, supports the use of single point sampling. For this project, it is assumed that data collected at specific stations are representative of conditions throughout the well mixed water body and thus, water samples collected at a single location are representative of the lake.

The sample location selection was based on maximum lake depth. Lake bathymetry was used to identify the deepest part of the water body, and a single representative sampling location was selected. Sample locations were identified and confirmed using a handheld global positioning system Garmin Rino 520HCx referenced to the North American [horizontal] Datum of 1983. The sample location for Lake M0024 is shown in Figure 1.

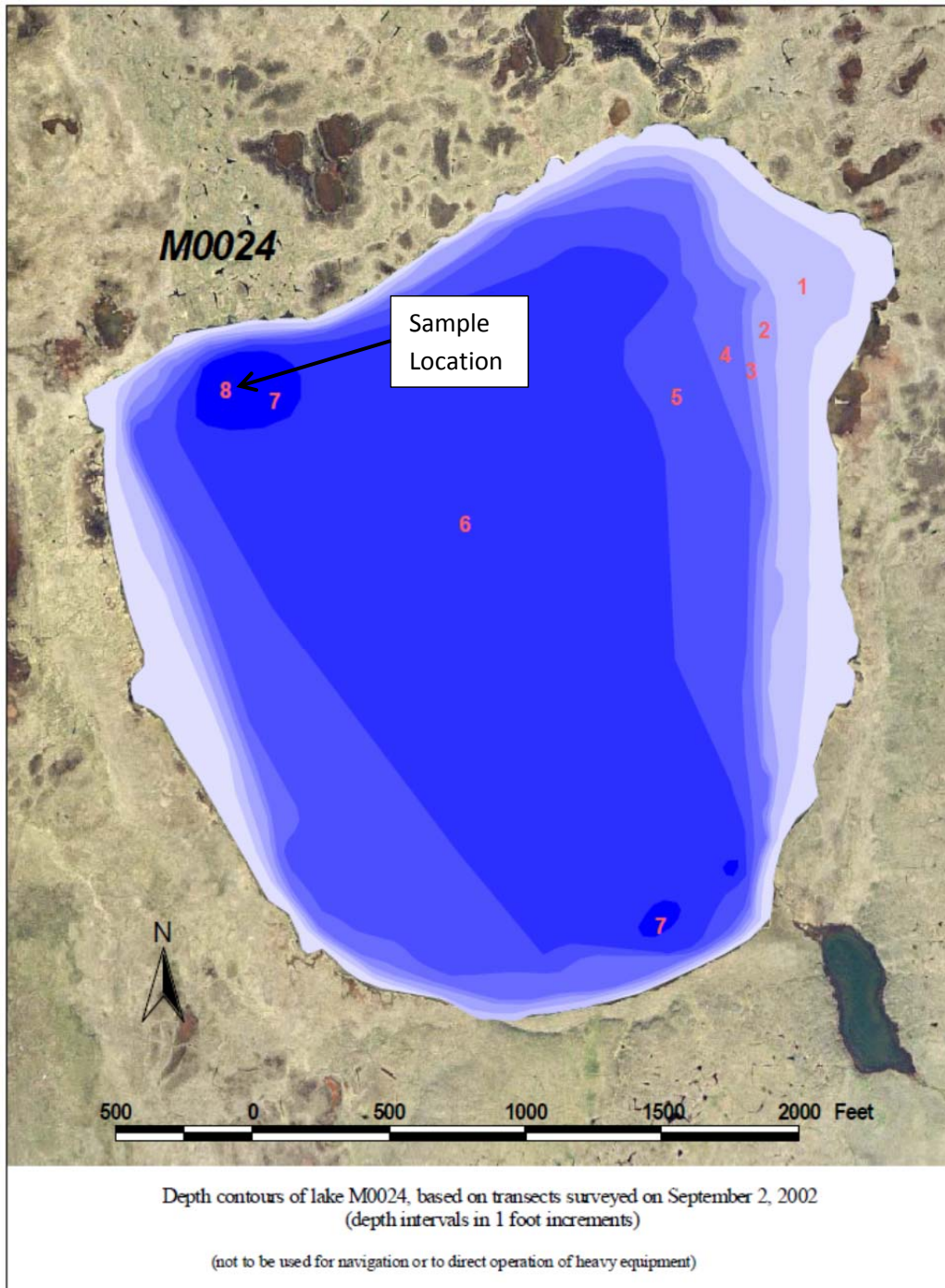


Figure 1: Lake M0024 bathymetry and sample location

2.2 In-Situ Water Quality Parameters

In-situ water quality was measured at 2-foot intervals throughout the water column. A list of parameters collected is presented in Table 2.1.

Table 2.1: In-Situ Water Quality Parameters

Parameter	Units	Notes
Temperature	°C	degrees Celsius
Dissolved Oxygen	mg/L	milligrams per liter
Salinity	ppt	parts per thousand
Conductivity	µS/cm	microsiemens per centimeter
Specific Conductance	µS/cm	microsiemens per centimeter
Turbidity	NTU	Nephelometric Turbidity Units

2.2.1 Instrument Calibration

A YSI 650 MDS handheld unit with YSI 6920V2 Sonde sensor was calibrated by TTT Environmental according to the manufacturer’s specifications. The YSI 690V2 meter was calibrated for conductivity and pH by Baker personnel the morning of sampling. The DO sensor calibration was checked using tap water as directed by the manufacture. Prior to sampling, the meter was thoroughly rinsed with lake water.

2.3 Laboratory Sample Collection and Analysis

In-situ sampling was performed to confirm well-mixed water quality constituents within the water column prior to laboratory sample collection. Neither oxycline (notable change in oxygen concentration with depth) nor thermocline (notable change in temperature values with depth) was apparent (see Table 3.1). Therefore, a representative single point sample at mid-depth was collected. Samples were collected using a 1.6” x 36” disposable polyethylene bailer (1,000 milliliter capacity). Nitrile gloves were worn during sample collection.

Sample bottles provided by SGS were stored in the provided cooler before, during, and after sample collection to maintain adequate storage temperatures and ensure chain of custody procedures were followed. Field samples were transported to SGS within 7 hours of initial sample collection. The procedures for transport and transfer are described in the SGS analysis report in Appendix A.

3.0 RESULTS

3.1 Field Conditions August 18, 2013

During the field sampling event, the temperature was 36°F. The weather was overcast with 20 mph winds. Lake surface waves were 0.5-1.0 feet in height.

Lake M0024 is situated in a large lake basin that encompasses other smaller lakes (Photo 2). The lake is characterized by emergent marshy vegetation on the east side and low grassy banks on the west side. At the time of sampling, no inflow or out flow was evident at Lake M0024, however, a defined drainage to the south suggests hydraulic connections persist during spring melt runoff (Photo 3).

There were no visual signs of contamination or potential sources of contamination (e.g. drums, derelict equipment or natural seeps) in the lake or within the lake basin.



Photo 2: Lake M0024 looking east



Photo 3: Defined drainage on the southeast end of Lake M0024

3.2 In-Situ Results

The in-situ water quality results from the August 18, 2013 sampling event are tabulated in Table 3.1.

Table 3.1: In-Situ Water Quality Results

**On Call Hydrology Support - M0024
In-Situ Water Quality**

Sample Date: August 19, 2013

Lake Location Time	Total Depth (ft)	Turbidity (NTU)	Depth (ft)	Temp (°C)	Conductivity (µS/cm)	Specific Conductance (µS/cm)	DO (mg/L)	DO (Percent Saturation)	Salinity (ppt)	pH
M0024 N70°12'44.5" W151°39'40.9" 8/19/2013 11:00	7.3	-0.7	1.0	9.02	52	76	11.40	98.6	0.03	7.38
			2.0	9.01	52	76	11.38	98.5	0.03	7.33
			4.0	9.02	52	76	11.39	98.6	0.03	7.29
			6.0	9.02	52	76	11.42	98.8	0.03	7.26

Notes:

- (1) Sample depth is measured from the water surface.
- (2) Turbidity, temperature, conductivity, dissolved oxygen, and salinity were measured using a YSI 650-6920V2 meter.
- (3) Turbidity is presented as an average of the sampled values in the water column.
- (4) Negative turbidity is typically traced to minute contamination of the zero calibration standard. According to the meter manufacture, a used instrument can contaminate a zero standard to almost 1.0 NTU.
- (5) Specific conductance (referenced to 25°C) was obtained using a conversion coefficient of 0.0196 based on empirical data.

3.3 Laboratory Results

Analytical results are shown in Table 3.2. The laboratory report is presented in Appendix A.

Table 3.2: Laboratory Analytical Results

Parameter	M0024 Results	Units
Total Coliform	10	MPN/100mL
E.Coli/LT2	2	MPN/100mL
pH	7.10	pH units
Color, True	8.00	PCU
Total Suspended Solids	2.16	mg/L
Turbidity	1.60	NTU
Nitrate/Nitrite	ND	mg/L
Iron	ND	µg/L
Magnesium	2080	µg/L
Manganese	8.10	µg/L
Hardness as CaCO ₃	26.1	mg/L
Calcium	7020	µg/L
MPN/100mL – Most probable number of coliform per 100 milliliters PCU – Platinum-cobalt units mg/L – Milligram per liter NTU - Nephelometric turbidity units µg/L – micrograms per liter Source: SGS Laboratory Analysis Report 1133918		

Appendix A LABORATORY ANALYTICAL REPORT

THIS SECTION MUST BE COMPLETED BY WATER SUPPLIER

Please select one:

PUBLIC WATER SYSTEM ID# _____

Free Residual Chlorine: _____ mg/L

PRIVATE WATER SYSTEM

Send Results

Send Invoice

Send Results

Send Invoice

Water System Name: <u>M0024</u>	Contact Name: <u>GARRETT YAGER</u>	
Company Name (if other than name of Water System): <u>MICHAEL BAKER JR INC.</u>		
E-mail (Required for automated reporting.): <u>GARRETT.YAGER@MBAKERCORP.COM</u>		
Phone Number: <u>907-334-0960</u>	Fax Number: <u>907-273-1689</u>	
Mailing Address: <u>1400 WEST RENON BOULEVARD SUITE 200</u>		
City: <u>ANCHORAGE</u>	State: <u>AK</u>	Zip Code: <u>99502</u>

If a second party is involved for reporting or invoicing, provide their information.	Contact Name	
Company Name (if other than name of Water System):		
E-mail (Required for automated reporting.):		
Phone Number	Fax Number	
Mailing Address		
City	State	Zip Code

1133918



SAMPLE COLLECTION DATA:

* NOTE: For valid results, analysis must begin within 30 hrs of sample collection.

Date:

<u>8</u>	<u>19</u>	<u>2013</u>
Month	Day	Year

Time: 1130 AM PM (Please circle one)

Location: M0024

Collector: GARRETT YAGER
Signature

NOTE: Unless otherwise requested, all samples will be analyzed by Presence/Absence method SM9223B.

METHOD REQUESTED:

Presence/Absence (SM9223B)

Membrane Filtration (SM9222B)

SAMPLE TYPE:

Routine

Treated Water

Repeat Sample

Untreated Water

(refer to lab no. _____)

Special Purpose

Transported to SGS by: Same as collector

Other: _____

Printed Name

Signature

Note: SGS analyzes bacteria samples in ADEC's 30 hour hold time unless prior arrangements have been made.

Surcharges will be applied for samples received <2 hours before expiration.

Business hours are Monday-Friday, 8 am-5 pm. Please contact your Project Manager at (907) 562-2343 with any questions.

TO BE COMPLETED BY LABORATORY

Sample Receiving:

Date: 8/19/13

Time: 17:41

Temp: Ambient or _____

Delivery Method: Client Commercial

Received by: [Signature]
Signature

Comments: _____

Sample over 30 hours old. Results may be unreliable.

48 Hour Waiver for Remote Locations

Sample Receiving notified Analyst of Short Hold Time

This section used by analyst for immediate notification of UNSATISFACTORY results only:

Bacteriological Water Analysis Record:

Analysis Began: 1910 8/19/13

Analyst: DSH

Result: Total Coliform: 10 colonies (MPN)
E. coli/Fecal Coliform: 2 MPN
Other Bacteria: _____

Analytical Method:

MMO-MUG (P/A) SM9223B Quant

Membrane Filter SM9222B

Reported to: _____ By: Fax Phone E-mail

Reported to: _____ By: Fax Phone E-mail

Analyst's: _____ Date/Time: 8/20/13 1615

PLEASE READ INSTRUCTIONS ON BACK

Garrett Yager
Michael Baker Jr., Inc
1400 West Benson Blvd, Ste 200
Anchorage, AK 99503

Work Order: 1133918
135895 Task 1 On-Call Hydrolog

Client: Michael Baker Jr., Inc.

Report Date: September 03, 2013

Enclosed are the analytical results associated with the above work order. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. If you have any questions regarding this report, or if we can be of any other assistance, please contact your SGS Project Manager at 907-562-2343. All work is provided under SGS general terms and conditions (http://www.sgs.com/terms_and_conditions.htm), unless other written agreements have been accepted by both parties.

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) & UST-005 (CS) for ADEC and 2944.01 for DOD ELAP/ISO 17025 (RCRA methods: 1020A, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035B, 6020, 7470A, 7471B, 8015C, 8021B, 8082A, 8260B, 8270D, 8270D-SIM, 9040B, 9045C, 9056A, 9060A, AK101 and AK102/103). 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.
- B Indicates the analyte is found in a blank associated with the sample.
- CCV Continuing Calibration Verification
- CL Control Limit
- D The analyte concentration is the result of a dilution.
- DF Dilution Factor
- DL Detection Limit (i.e., maximum method detection limit)
- E The analyte result is above the calibrated range.
- F Indicates value that is greater than or equal to the DL
- GT Greater Than
- ICV Initial Calibration Verification
- J The quantitation is an estimation.
- JL The analyte was positively identified, but the quantitation is a low estimation.
- LCS(D) Laboratory Control Spike (Duplicate)
- LOD Limit of Detection (i.e., 2xDL)
- LOQ Limit of Quantitation (i.e., reporting or practical quantitation limit)
- LT Less Than
- M A matrix effect was present.
- MB Method Blank
- MS(D) Matrix Spike (Duplicate)
- ND Indicates the analyte is not detected.
- Q QC parameter out of acceptance range.
- R Rejected
- RPD Relative Percent Difference
- U Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content.
All DRO/RRO analyses are integrated per SOP.



SGS Ref.# 1133918001
Client Name Michael Baker Jr., Inc.
Project Name/# 135895 Task 1 On-Call Hydrolog
Client Sample ID M0024
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 09/03/2013 12:04
Collected Date/Time 08/19/2013 11:30
Received Date/Time 08/19/2013 17:41
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<u>Metals by ICP/MS</u>									
Calcium	7020	500	ug/L	EP200.8	F		08/21/13	08/25/13	NRB
Hardness as CaCO3	26.1	5.00	mg/L	SM21 2340B	F		08/21/13	08/25/13	NRB
Iron	ND	250	ug/L	EP200.8	F		08/21/13	08/25/13	NRB
Magnesium	2080	50.0	ug/L	EP200.8	F		08/21/13	08/25/13	NRB
Manganese	8.10	1.00	ug/L	EP200.8	F		08/21/13	08/25/13	NRB
<u>Waters Department</u>									
pH	7.10	0.100	pH units	SM21 4500-H B	C			08/20/13	SDP
Total Nitrate/Nitrite-N	ND	0.100	mg/L	SM21 4500NO3-F	E			08/21/13	CDE
Total Suspended Solids	2.16	0.515	mg/L	SM21 2540D	D			08/24/13	MEV
Turbidity	1.60	0.100	NTU	SM21 2130B	C			08/20/13	MEV
Color, True	8.00	5.00	PCU	SM21 2120B	C	(<15)		08/21/13	MEV
<u>Microbiology Laboratory</u>									
Total Coliform	10	1	MPN/100mL	SM21 9223B	B			08/19/13	DSH
E. Coli	2	1	MPN/100mL	SM21 9223B	B			08/19/13	DSH



SGS North America Inc.
CHAIN OF CUSTODY RECORD

1133918



<p>CLIENT: MICHAEL BAKER JR INC CONTACT: GARRETT YAGER PHONE NO: 907.273.1699 PROJECT: ON-CALL HYDROLOGY SUPPORT PWSID/ PERMIT#: 135895 TASK 1 REPORTS TO: GARRETT YAGER E-MAIL: GARRETT.YAGER@MBAKER.COZ.COM INVOICE TO: GARRETT YAGER QUOTE #: P.O. #:</p>	<p>Section 1 Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis. Page 1 of 1</p>		<p>Section 2 RESERVED for lab use DA-F M0024</p>		<p>Section 3 Type C = COMP G = GRAB MI = Multi-Incremental Soils</p>		<p>Section 4 TC Equ PA NO2 MS NO3 TSS Color TICS, Hbds</p>										<p>Section 5 DOD Project? Yes () No (X) Cooler ID: 135895 Requested Turnaround Time and/or Special Instructions: Temp Blank °C: 5.4° #205 or Ambient [] Chain of Custody Seal: (Circle) INTACT 2F BROKEN ABSENT (See attached Sample Receipt Form)</p>	
			<p>Section 2 Matrix Code</p>			<p>Section 3 CONTAINER S</p>			<p>Section 4 REMARKS/ LOC ID</p>									
			<p>Section 2 DATE DATE TIME</p>			<p>Section 3 RECEIVED BY</p>			<p>Section 4 DATA DELIVERABLE REQUIREMENTS</p>									
			<p>Section 2 DATE TIME</p>			<p>Section 3 RECEIVED BY</p>			<p>Section 4 DATA DELIVERABLE REQUIREMENTS</p>									
			<p>Section 2 DATE TIME</p>			<p>Section 3 RECEIVED BY</p>			<p>Section 4 DATA DELIVERABLE REQUIREMENTS</p>									
			<p>Section 2 DATE TIME</p>			<p>Section 3 RECEIVED BY</p>			<p>Section 4 DATA DELIVERABLE REQUIREMENTS</p>									

PLEASE READ INSTRUCTIONS ON BACK

THIS SECTION MUST BE COMPLETED BY WATER SUPPLIER

Please select one:

PUBLIC WATER SYSTEM ID# _____

Free Residual Chlorine: _____ mg/L

PRIVATE WATER SYSTEM
 Send Results Send Invoice

1133918

Send Results Send Invoice

Water System Name: MOOZY		Contact Name: GARRETT YAGER	
Company Name (if other than name of Water System): MICHAEL BAKER JR INL			
E-mail (Required for automated reporting.): GARRETT.YAGER@BBAKERCORP.COM			
Phone Number: 907.334.0960		Fax Number: 907.273.1699	
Mailing Address: 1400 WEST BENON BOULEVARD SUITE 200			
City: ANCHORAGE		State: AK	Zip Code: 99502

If a second party is involved for reporting or invoicing, provide their information.		Contact Name	
Company Name (if other than name of Water System):			
E-mail (Required for automated reporting.):			
Phone Number		Fax Number	
Mailing Address			
City		State	Zip Code

SAMPLE COLLECTION DATA:

NOTE: Unless otherwise requested, all samples will be analyzed by Presence/Absence method SM9223B.

* NOTE: For valid results, analysis must begin within 30 hrs of sample collection.

Date: 8 / 19 / 2013
 Month Day Year

Time: 1130 (AM) PM (Please circle one)

Location: MOOZY

Collector: GARRETT YAGER
Signature

METHOD REQUESTED:
 Presence/Absence (SM9223B)

Membrane Filtration (SM9222B)

SAMPLE TYPE:

Routine Treated Water

Repeat Sample Untreated Water

(refer to lab no. _____)
 Special Purpose

Transported to SGS by: Same as collector

Other: _____
Printed Name Signature

Note: SGS analyzes bacteria samples in ADEC's 30 hour hold time unless prior arrangements have been made. Surcharges will be applied for samples received <2 hours before expiration.

Business hours are Monday-Friday, 8 am-5 pm. Please contact your Project Manager at (907) 562-2343 with any questions.

TO BE COMPLETED BY LABORATORY

Sample Receiving: Sample over 30 hours old. Results may be unreliable.

Date: 8/19/13

Time: 17:41

Temp: Ambient or _____

Delivery Method: Client Commercial Sample Receiving notified Analyst of Short Hold Time

Received by: [Signature]
Signature

Comments: _____

This section used by analyst for immediate notification of UNSATISFACTORY results only:

Bacteriological Water Analysis Record:

Analysis Began: _____

Analyst: _____

Analytical Method:
 MMO-MUG (PIA) SM9223B
 Membrane Filter SM9222B

Result: Total Coliform: _____
E. coli/Fecal Coliform _____
Other Bacteria: _____

Reported to: _____ By: Fax Phone E-mail

Reported to: _____ By: Fax Phone E-mail

Analyst's _____ Date/Time: _____



SAMPLE RECEIPT FORM

Review Criteria:	Condition:	Comments/Action Taken:
Were custody seals intact? Note # & location, if applicable. COC accompanied samples?	<input checked="" type="radio"/> Yes No N/A <input checked="" type="radio"/> Yes No N/A	2F
Temperature blank compliant* (i.e., 0-6°C after CF)? <i>* Note: Exemption permitted for chilled samples collected less than 8 hours ago.</i> Cooler ID: <u>135895</u> @ <u>5-01</u> w/ Therm.ID: <u>205</u> Cooler ID: _____ @ _____ w/ Therm.ID: _____ Cooler ID: _____ @ _____ w/ Therm.ID: _____ Cooler ID: _____ @ _____ w/ Therm.ID: _____ Cooler ID: _____ @ _____ w/ Therm.ID: _____ <i>Note: If non-compliant, use form FS-0029 to document affected samples/analyses.</i> If samples are received <u>without</u> a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "COOLER TEMP" will be noted to the right. In cases where neither a temp blank <u>nor</u> cooler temp can be obtained, note "ambient" or "chilled."	<input checked="" type="radio"/> Yes No N/A	
If temperature(s) <0°C, were all sample containers ice free?	Yes No <input checked="" type="radio"/> N/A	
Delivery method (specify all that apply): <input checked="" type="radio"/> Client USPS Alert Courier C&D Delivery AK Air Lynden Carlile ERA PenAir FedEx UPS NAC Other: → For WO# with airbills, was the WO# & airbill info recorded in the Front Counter eLog?	Note ABN/tracking # See Attached or N/A Yes No <input checked="" type="radio"/> N/A	
→ For samples received with payment, note amount (\$) and cash / check / CC (circle one) or note: → For samples received in FBKS, ANCH staff will verify all criteria are reviewed.		SRF Initiated by: <u>ces</u> <input checked="" type="radio"/> N/A
Were samples received within hold time? <i>Note: Refer to form F-083 "Sample Guide" for hold time information.</i> Do samples match COC* (i.e., sample IDs, dates/times collected)? <i>* Note: Exemption permitted if times differ <1hr; in that case, use times on COC.</i> Were analyses requested unambiguous?	<input checked="" type="radio"/> Yes No N/A <input checked="" type="radio"/> Yes No N/A <input checked="" type="radio"/> Yes No N/A	
Were samples in good condition (no leaks/cracks/breakage)? Packing material used (specify all that apply): Bubble Wrap Separate plastic bags Vermiculite Other:	<input checked="" type="radio"/> Yes No N/A	
Were all VOA vials free of headspace (i.e., bubbles ≤6 mm)? Were all soil VOAs field extracted with MeOH+BFB?	Yes No <input checked="" type="radio"/> N/A Yes No <input checked="" type="radio"/> N/A	
Were proper containers (type/mass/volume/preservative*) used? <i>* Note: Exemption permitted for waters to be analyzed for metals.</i> Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	<input checked="" type="radio"/> Yes No N/A Yes No <input checked="" type="radio"/> N/A	
For special handling (e.g., "MI" or foreign soils, lab filter, limited volume, Ref Lab), were bottles/paperwork flagged (e.g., sticker)?	Yes No <input checked="" type="radio"/> N/A	
For preserved waters (other than VOA vials, LL-Mercury or microbiological analyses), was pH verified and compliant? If pH was adjusted, were bottles flagged (i.e., stickers)?	<input checked="" type="radio"/> Yes No N/A Yes No <input checked="" type="radio"/> N/A	
For RUSH/SHORT Hold Time, were COC/Bottles flagged accordingly? Was Rush/Short HT email sent, if applicable?	<input checked="" type="radio"/> Yes No N/A	E-coli, TC, pH, Color, Turb
For SITE-SPECIFIC QC, e.g. BMS/BMSD/BDUP, were containers / paperwork flagged accordingly?	Yes No <input checked="" type="radio"/> N/A	
For any question answered "No," has the PM been notified and the problem resolved (or paperwork put in their bin)?	Yes No <input checked="" type="radio"/> N/A	SRF Completed by: <u>ces</u> PM = <input checked="" type="radio"/> N/A
Was PEER REVIEW of sample numbering/labeling completed?	Yes No N/A	Peer Reviewed by: N/A
Additional notes (if applicable):		

Note to Client: Any "no" circled above indicates non-compliance with standard procedures and may impact data quality.



SGS North America Inc.
 200 W. Potter Dr., Anchorage, AK 99518 (ph)
 3180 Peger Rd., Fairbanks, AK 99701 (ph) 90

1133918

Sample Kit Request

Client pickup Date: 8/8/2013 Time: 900
 Deliver to client:
 Shipment Method:
 Airline Carrier:
 Airbill Number:
 Date to ship by:
 Notes:
 Kit request taken by: FAT Date: 8/6/2013
 Kit prepared by: SL Date: 8-7-13
 Kit checked by: AKG Date: 7 Aug 13
 Kit shipped by: Date:
 Estimated date for samples returning to the lab:

Client Name: Michael Baker Corp
 Ordered By: Sara Eklund e-mail:
 Phone #: 135895
 Project Name:
 Quote #:
 Delivery:

PM Reminders:

- Track all Lot#
- SOW/SAP/QAPP
- Profile Build/Project Notice

- Total # Bottles includes bottles for % Solids
- Regulatory/Special Requirements
- DQOs
- Problem Matrix

Notes: Mark cooler as "135895"

No.	Samples	Matrix	Analysis	Container Size & Type	Pres.	Bottle Lot #	Pres. Lot #	Hold Time	#QC Bottles	Total Bottles
1	Water	TC		120-mL sterile	Na2S2O3			30 H		1
		Ecoli		120-mL sterile	Na2S2O3			30 H		1
		pH, Color, Turbidity		1 x 1-L	None			48 H		1
		TSS		1 x 1-L	None			7 D		1
		NO2+NO3		1 x 60-mL	H2SO4			28 D		1
		Fe, Mg, Mn, Hardness		1 x 250-mL	HNO3			6 M		1

Attention Client/Sampler: Please remember the following sampling guidelines -

Add extra ice packs and bubble wrap.

- 1. Do not rinse container before filling and be aware of any acid preservative in container.
- 2. Fill container to top, but do not overfill (except volatiles which should be headspace free).
- 3. Label the container with your sample/site ID, as well as the date & time of collection.
- 4. Fill in the Chain of Custody.
- 5. Add frozen gel packs or ice to your cooler & pack to prevent breakage.

Other Notes/Reminders for Kit Prep:

- * Blank COC
- * Drinking Water COC template
- * UST COC template
- * Landfill COC template
- * COC initiated by PM (attached)
- * WasteWater COC template
- * Mining COC template
- * TCLP COC template

Note: Charges may be invoiced for bottles which are unused or improperly used.

If you have any questions concerning this sample kit, please contact your Project Manager for assistance. Thank you.

- Pack for Shipping via air carrier
- 125mL Temperature Blank
- 500mL Temperature Blank
- Soil VOA Trip Blank - Lot#:
- Water VOA Trip Blank - Lot#:
- 524 VOA Trip Blank - Lot#:
- Low Level Mercury Trip Blank- Lot#:
- SGS COCs - Circle req'd format:
- Custody Seals
- Labels
- Coolers
- Bubble Wrap
- Gel Ice (circle one: in each cooler OR in a separate cooler)
- Pack similar bottles together OR custom packing (circle one)
- Send Instructions
- Include Foreign Soil Permit