Cranmer Engineering, Inc.
Integrated Engineering Services

Sample Results

Lake Francis MWC
PO Box 422
Dobbins, CA 95935

Work Order: GHC0181
Received: 03/05/25 13:45
Reported: 03/24/25 12:51

Chemical-Well 05-Perchlorate

System Number: 5800805

Term and Qualifier Definitions

Item	Definition
ND	None detected at or above the reporting limit

Subcontracted Analyses

Sample Site: Well 05 PSW#5800805-005
Sample Number GHC0181-01
Source Type:

Date Collected: 3/5/2025 10:56:00AM
Collected by: William Stotts
Title 22 Designation:

Analyzing Laboratory: BSK Laboratory
Analysis Perchlorate

Report with Method References attached.

Justin Smith

Laboratory Manager

BSK Associates Laboratory Fresno
687 N. Laverne Avenue
Fresno, CA 93727
559-497-2888 (Main)

AIC1202
3/21/2025
Invoice: AI08380

Justin Smith
Cranmer Analytical Laboratory
1188 E. Main St.
Grass Valley, CA 95945

RE: Report for AIC1202 General for State Form Reporting

Dear Justin Smith,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 3/7/2025. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2016 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Client Services Representative, Sarah K. Guenther , at 559-497-2888.

Thank you again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Sarah K. Guenther, Senior Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

Case Narrative

Project and Report Details		Invoice Details	
Client:	Cranmer Analytical Laboratory	**Invoice To:**	Cranmer Analytical Laboratory
Report To:	Justin Smith	**Invoice Attn:**	Andrew Hamilton
Project #:	GHC0181 #5800805	**Project PO#:**	-
Received:	3/07/2025 - 14:30		
Report Due:	3/21/2025		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt ºC: 2.5

Containers Intact
COC/Labels Agree
Received On Ice
Packing Material - Other
Sample(s) were received in temperature range.
Initial receipt at BSK-SAC

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Justin Smith	FINAL.RPT	
Reporting	FINAL.RPT	

Certificate of Analysis

Sample ID: AIC1202-01
Sampled By: Client
Sample Description: GHC0181-01 // Well 05 PSW#5800805-005

Sample Date - Time: 03/05/2025 - 10:56
Matrix: Drinking Water
Sample Type: Grab

BSK Associates Laboratory Fresno

General Chemistry

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Conductivity @ 25C	SM 2510B	**570**	5.0	umhos/cm	1	AIC0551	03/09/25	03/09/25	
Perchlorate	EPA 314.0	ND	1.0	ug/L	1	AIC1267	03/19/25	03/19/25	

BSK Associates Laboratory Fresno

General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 314.0 - Quality Control											
Batch: AIC1267										Prepared: 3/19/2025	
Prep Method: Method Specific Preparation										Analyst: CYS	
Blank (AIC1267-BLK1)											
Perchlorate	ND	1.0	ug/L							03/19/25	
Blank Spike (AIC1267-BS1)											
Perchlorate	15	1.0	ug/L	15	ND	103	85-115			03/19/25	
Matrix Spike (AIC1267-MS1), Source: AIC1337-01											
Perchlorate	5.7	1.0	ug/L	5.0	ND	114	80-120			03/20/25	
Matrix Spike Dup (AIC1267-MSD1), Source: AIC1337-01											
Perchlorate	5.7	1.0	ug/L	5.0	ND	113	80-120	0	15	03/20/25	
SM 2510B - Quality Control											
Batch: AIC0551										Prepared: 3/9/2025	
Prep Method: Method Specific Preparation										Analyst: PXC	
Blank (AIC0551-BLK1)											
Conductivity @ 25C	ND	1.0	umhos/cm							03/09/25	
Blank Spike (AIC0551-BS1)											
Conductivity @ 25C	1400	1.0	umhos/cm	1400	ND	98	90-110			03/09/25	
Blank Spike Dup (AIC0551-BSD1)											
Conductivity @ 25C	1400	1.0	umhos/cm	1400	ND	98	90-110	0	5	03/09/25	
Duplicate (AIC0551-DUP1), Source: VIC0078-01											
Conductivity @ 25C	810	1.0	umhos/cm		810			0	5	03/09/25	

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Field tests are outside the scope of laboratory accreditation and there is no certification available for field testing.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.
- (2) - Formerly known as Bis(2-Chloroisopropyl) ether.
  Unless otherwise noted, TOC results by SM 5310C method do not include purgeable organic carbon, which is removed along with the inorganic carbon interference. The POC contribution to TOC is considered to be negligible.

Certificate of Analysis

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected below MRL/MDL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	PicoCuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit	U:	The analyte was not detected at or above the reported sample quantitation limit.

Please see the individual Subcontract Lab's report for applicable certifications.

The following parameters are not available for certification through CA ELAP:

Odor Diisopropyl ether (DIPE) by EPA 524.2

The following parameters are calculated values and are outside the scope of our NELAP accreditation:

Total Nitrogen Aggressive Index Trivalent Chromium

BSK is not accredited under the NELAP program for the following additional parameters: **NA**

Certificate of Analysis

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Fresno

State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-024
State of Nevada	NV-C24-00233	State of Oregon - NELAP	4021-024
EPA UCMR5	CA00079	State of Washington	C997-25

Sacramento

State of California - ELAP	1180-S1

San Bernardino

State of California - ELAP	1180-S2	Los Angeles CSD	9254478
NELAP certified	4119-009	State of Oregon - NELAP	4119-009

Vancouver

NELAP certified	WA100008-019	State of Oregon - NELAP	WA100008-019
State of Washington	C824-24		

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry **≤ 6°C** Micro **< 8°C**	Yes No NA	Were correct containers and preservatives received for the tests requested?	Yes No
If samples were taken today, is there evidence that chilling has begun?	Yes No NA	Bubbles Present VOAs (524.2/TTHM/TCP)? TB Received? (Check Method Below)	Yes No NA Yes No NA
Did all bottles arrive unbroken and intact?	Yes No	Was a sufficient amount of sample received?	Yes No
Did all bottle labels agree with COC?	Yes No	**Do samples have a hold time <72 hours?**	Yes No
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes NA	Was PM notified of discrepancies? PM: dt: email scan copy	Yes No NA

Bottles Received

" — " means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40mlVOA(V) 125ml(D)	Checks*	Passed?	1				
Bacti $Na_2S_2O_3$	—	—					
None (P) White Label	—	—	1A				
Cr6 (P) Lt. Green Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **DW**	Cl, pH > 8	P F					
Cr6 (P) Pink Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **WW**	pH 9.3-9.7	P F					
Cr6 (P) Black Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **7199** ***24 HOUR HOLD TIME***	pH 9.0-9.5	P F					
HNO_3 (P) Red Label or HCl (P) Purple Cap/Lt. Blue Label	—	—					
H_2SO_4 (P) or (AG) Yellow Label	pH < 2	P F					
NaOH (P) Green Cap/Label	Cl, pH >10	P F					
NaOH + ZnAc (P)	pH > 9	P F					
Dissolved Oxygen 300ml (g)	—	—					
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—					
HCl (AG) Lt. Blue Label O&G, Diesel, **TCP**	—	—					
Ascorbic, EDTA, KH_2Ct (AG) Pink Label 525	—	—					
Na_2SO_3 250mL (AG) Neon Green Label 515	—	—					
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—					
$Na_2S_2O_3$ (AG) Blue Label 548, THM, 524	—	—					
$Na_2S_2O_3$ (CG) Blue Label 504, 505, 547	—	—					
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	P F					
NH_4Cl (AG) Purple Label 552	—	—					
EDA (P) or (AG) Brown Label DBPs	—	—					
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—					
Buffer pH 4 (CG)	—	—					
H_3PO_4 (CG) Salmon Label	—	—					
Trizma – EPA 537.1 Light Blue Label **FB**	---	---					
Ammonia Acetate - EPA 533 Purple Label **FB**	---	—					
Bottled Water	—	—					
Clear Glass: Jar / VOA	—	—					
OTHER:	—	—					
OTHER:	—	—					

3/7/25

Split

	Container	Preservative	Lot #	Initials	Date/Time
S P					
S P					

Preservation Check
pH Lot #
Cl Lot #

Comments

*Preservation check completed by lab performing analysis.

✓ **Indicates Blanks Received**

504 ___ 524.2 ___ TTHM ___ 537/533 ___ TCP___

✓ **MS/MSD Received Method:** _____

Labeled by: **Checked by:**

Scanned: _____ Rush/Short HT Page: _____ Time:_____

T7

Cranmer Engineering, Inc.
Integrated Engineering Services

2.5
B3

Wet ice (Walk in)
1.1°C/55

AIC1202 Cranm7284 03/07/2025


10

Sending Laboratory:

CEI
PO Box 1240
Grass Valley, CA 95945
Phone: 530-273-7284
Fax: -

Project Manager: Justin Smith

Subcontracted Laboratory:

BSK Laboratory
687 N Laverne Avenue
Fresno, CA 93706
Phone: (559) 497-2888
Fax:

Work Order: GHC0181

Project # 5800805

Analysis	Comments	Source ID
Sample ID: GHC0181-01 Well 05 PSW#5800805-005 *Drinking Water Sampled: 03/05/2025 10:56*		CA5800805_005_005
Perchlorate		

Containers Supplied:
Poly 250mL (A)

Rec FAX
3.7.25 1430
BSK Wet

EDT Upload YES ☒ NO ☐

Released By — Date 3/6/25 @ 0085

Eric Wilde — 3/6/25 1400

Received By — Date 3/6/25

Maylen T. Dosan — 3/6/25 1402