



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Hit Summary Sheet
SW-846

SDG No.: Q1048 **Order ID:** Q1048
Client: VERINA CONSULTING GROUP, LLC **Project ID:** Rotor Clip NJ WTD - 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : WATER TREATMENT DISCHARGE								
Q1048-01	WATER TREATMENT DISCHA	Water	Chromium	236		0.66	5.00	ug/L
Q1048-01	WATER TREATMENT DISCHA	Water	Copper	12.5		7.07	10.0	ug/L
Q1048-01	WATER TREATMENT DISCHA	Water	Nickel	41.2		0.85	20.0	ug/L
Q1048-01	WATER TREATMENT DISCHA	Water	Zinc	1180		1.75	20.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	VERINA CONSULTING GROUP, LLC	Date Collected:	01/09/25
Project:	Rotor Clip NJ WTD - 2025	Date Received:	01/09/25
Client Sample ID:	WATER TREATMENT DISCHARGE	SDG No.:	Q1048
Lab Sample ID:	Q1048-01	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-47-3	Chromium	236		1	0.66	5.00	ug/L	01/13/25 10:35	01/17/25 14:23	SW6010	SW3010
7440-50-8	Copper	12.5		1	7.07	10.0	ug/L	01/13/25 10:35	01/17/25 14:23	SW6010	SW3010
7440-02-0	Nickel	41.2		1	0.85	20.0	ug/L	01/13/25 10:35	01/17/25 14:23	SW6010	SW3010
7440-66-6	Zinc	1180		1	1.75	20.0	ug/L	01/13/25 10:35	01/17/25 14:23	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group4			

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 D = Dilution
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 * = indicates the duplicate analysis is not within control limits.
 E = Indicates the reported value is estimated because of the presence of interference.
 OR = Over Range
 N =Spiked sample recovery not within control limits



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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: VERINA CONSULTING GROUP, LLC **SDG No.:** Q1048
Contract: VERI01 **Lab Code:** CHEM **Case No.:** Q1048 **SAS No.:** Q1048

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Chromium	10.0	+/-10.0	U	10.0	P	01/17/2025	11:30	LB134334
	Copper	20.0	+/-20.0	U	20.0	P	01/17/2025	11:30	LB134334
	Nickel	40.0	+/-40.0	U	40.0	P	01/17/2025	11:30	LB134334
	Zinc	40.0	+/-40.0	U	40.0	P	01/17/2025	11:30	LB134334

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: VERINA CONSULTING GROUP, LLC **SDG No.:** Q1048
Contract: VERI01 **Lab Code:** CHEM **Case No.:** Q1048 **SAS No.:** Q1048

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Chromium	10.0	+/-10.0	U	10.0	P	01/17/2025	12:00	LB134334
	Copper	20.0	+/-20.0	U	20.0	P	01/17/2025	12:00	LB134334
	Nickel	40.0	+/-40.0	U	40.0	P	01/17/2025	12:00	LB134334
	Zinc	40.0	+/-40.0	U	40.0	P	01/17/2025	12:00	LB134334
CCB02	Chromium	10.0	+/-10.0	U	10.0	P	01/17/2025	12:51	LB134334
	Copper	20.0	+/-20.0	U	20.0	P	01/17/2025	12:51	LB134334
	Nickel	40.0	+/-40.0	U	40.0	P	01/17/2025	12:51	LB134334
	Zinc	40.0	+/-40.0	U	40.0	P	01/17/2025	12:51	LB134334
CCB03	Chromium	10.0	+/-10.0	U	10.0	P	01/17/2025	13:41	LB134334
	Copper	20.0	+/-20.0	U	20.0	P	01/17/2025	13:41	LB134334
	Nickel	40.0	+/-40.0	U	40.0	P	01/17/2025	13:41	LB134334
	Zinc	40.0	+/-40.0	U	40.0	P	01/17/2025	13:41	LB134334
CCB04	Chromium	10.0	+/-10.0	U	10.0	P	01/17/2025	14:31	LB134334
	Copper	20.0	+/-20.0	U	20.0	P	01/17/2025	14:31	LB134334
	Nickel	40.0	+/-40.0	U	40.0	P	01/17/2025	14:31	LB134334
	Zinc	40.0	+/-40.0	U	40.0	P	01/17/2025	14:31	LB134334
CCB05	Chromium	10.0	+/-10.0	U	10.0	P	01/17/2025	15:38	LB134334
	Copper	20.0	+/-20.0	U	20.0	P	01/17/2025	15:38	LB134334
	Nickel	40.0	+/-40.0	U	40.0	P	01/17/2025	15:38	LB134334
	Zinc	40.0	+/-40.0	U	40.0	P	01/17/2025	15:38	LB134334
CCB06	Chromium	10.0	+/-10.0	U	10.0	P	01/17/2025	16:20	LB134334
	Copper	20.0	+/-20.0	U	20.0	P	01/17/2025	16:20	LB134334
	Nickel	40.0	+/-40.0	U	40.0	P	01/17/2025	16:20	LB134334
	Zinc	40.0	+/-40.0	U	40.0	P	01/17/2025	16:20	LB134334
CCB07	Chromium	10.0	+/-10.0	U	10.0	P	01/17/2025	17:16	LB134334
	Copper	20.0	+/-20.0	U	20.0	P	01/17/2025	17:16	LB134334
	Nickel	40.0	+/-40.0	U	40.0	P	01/17/2025	17:16	LB134334
	Zinc	40.0	+/-40.0	U	40.0	P	01/17/2025	17:16	LB134334
CCB08	Chromium	10.0	+/-10.0	U	10.0	P	01/17/2025	17:56	LB134334
	Copper	20.0	+/-20.0	U	20.0	P	01/17/2025	17:56	LB134334
	Nickel	40.0	+/-40.0	U	40.0	P	01/17/2025	17:56	LB134334
	Zinc	40.0	+/-40.0	U	40.0	P	01/17/2025	17:56	LB134334

Metals
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PREPARATION BLANK SUMMARY

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166037BL	WATER			Batch Number:	PB166037		Prep Date:	01/13/2025	
	Chromium	5.00	<5.00	U	5.00	P	01/17/2025	12:13	LB134334
	Copper	10.0	<10.0	U	10.0	P	01/17/2025	12:13	LB134334
	Nickel	20.0	<20.0	U	20.0	P	01/17/2025	12:13	LB134334
	Zinc	20.0	<20.0	U	20.0	P	01/17/2025	12:13	LB134334



METAL CALIBRATION DATA

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: VERINA CONSULTING GROUP, LLC **SDG No.:** Q1048

Contract: VERI01 **Lab Code:** CHEM **Case No.:** Q1048 **SAS No.:** Q1048

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Chromium	519	520	100	90 - 110	P	01/17/2025	11:21	LB134334
	Copper	517	510	101	90 - 110	P	01/17/2025	11:21	LB134334
	Nickel	508	530	96	90 - 110	P	01/17/2025	11:21	LB134334
	Zinc	999	1000	100	90 - 110	P	01/17/2025	11:21	LB134334

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: VERINA CONSULTING GROUP, LLC **SDG No.:** Q1048
Contract: VERI01 **Lab Code:** CHEM **Case No.:** Q1048 **SAS No.:** Q1048
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Chromium	9.66	10.0	97	80 - 120	P	01/17/2025	11:26	LB134334
	Copper	22.0	20.0	110	80 - 120	P	01/17/2025	11:26	LB134334
	Nickel	39.2	40.0	98	80 - 120	P	01/17/2025	11:26	LB134334
	Zinc	42.2	40.0	106	80 - 120	P	01/17/2025	11:26	LB134334

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: VERINA CONSULTING GROUP, LLC **SDG No.:** Q1048

Contract: VERI01 **Lab Code:** CHEM **Case No.:** Q1048 **SAS No.:** Q1048

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Chromium	1010	1000	101	90 - 110	P	01/17/2025	11:56	LB134334
	Copper	1250	1250	100	90 - 110	P	01/17/2025	11:56	LB134334
	Nickel	2470	2500	99	90 - 110	P	01/17/2025	11:56	LB134334
	Zinc	2560	2500	102	90 - 110	P	01/17/2025	11:56	LB134334
CCV02	Chromium	987	1000	99	90 - 110	P	01/17/2025	12:47	LB134334
	Copper	1250	1250	100	90 - 110	P	01/17/2025	12:47	LB134334
	Nickel	2440	2500	98	90 - 110	P	01/17/2025	12:47	LB134334
	Zinc	2520	2500	101	90 - 110	P	01/17/2025	12:47	LB134334
CCV03	Chromium	952	1000	95	90 - 110	P	01/17/2025	13:36	LB134334
	Copper	1210	1250	96	90 - 110	P	01/17/2025	13:36	LB134334
	Nickel	2360	2500	94	90 - 110	P	01/17/2025	13:36	LB134334
	Zinc	2440	2500	98	90 - 110	P	01/17/2025	13:36	LB134334
CCV04	Chromium	992	1000	99	90 - 110	P	01/17/2025	14:27	LB134334
	Copper	1240	1250	100	90 - 110	P	01/17/2025	14:27	LB134334
	Nickel	2440	2500	97	90 - 110	P	01/17/2025	14:27	LB134334
	Zinc	2520	2500	101	90 - 110	P	01/17/2025	14:27	LB134334
CCV05	Chromium	966	1000	97	90 - 110	P	01/17/2025	15:34	LB134334
	Copper	1220	1250	98	90 - 110	P	01/17/2025	15:34	LB134334
	Nickel	2390	2500	96	90 - 110	P	01/17/2025	15:34	LB134334
	Zinc	2430	2500	97	90 - 110	P	01/17/2025	15:34	LB134334
CCV06	Chromium	968	1000	97	90 - 110	P	01/17/2025	16:16	LB134334
	Copper	1230	1250	98	90 - 110	P	01/17/2025	16:16	LB134334
	Nickel	2410	2500	96	90 - 110	P	01/17/2025	16:16	LB134334
	Zinc	2460	2500	98	90 - 110	P	01/17/2025	16:16	LB134334
CCV07	Chromium	970	1000	97	90 - 110	P	01/17/2025	17:11	LB134334
	Copper	1220	1250	98	90 - 110	P	01/17/2025	17:11	LB134334
	Nickel	2400	2500	96	90 - 110	P	01/17/2025	17:11	LB134334
	Zinc	2450	2500	98	90 - 110	P	01/17/2025	17:11	LB134334
CCV08	Chromium	988	1000	99	90 - 110	P	01/17/2025	17:52	LB134334
	Copper	1240	1250	99	90 - 110	P	01/17/2025	17:52	LB134334
	Nickel	2420	2500	97	90 - 110	P	01/17/2025	17:52	LB134334
	Zinc	2490	2500	99	90 - 110	P	01/17/2025	17:52	LB134334



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Metals

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CRDL STANDARD FOR AA & ICP

Client: VERINA CONSULTING GROUP, LLC **SDG No.:** Q1048
Contract: VERI01 **Lab Code:** CHEM **Case No.:** Q1048 **SAS No.:** Q1048
Initial Calibration Source: _____
Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Chromium	9.43	10.0	94	40 - 160	P	01/17/2025	11:35	LB134334
	Copper	21.4	20.0	107	40 - 160	P	01/17/2025	11:35	LB134334
	Nickel	38.5	40.0	96	40 - 160	P	01/17/2025	11:35	LB134334
	Zinc	41.2	40.0	103	40 - 160	P	01/17/2025	11:35	LB134334

Metals
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INTERFERENCE CHECK SAMPLE

Client: VERINA CONSULTING GROUP, LLC **SDG No.:** Q1048
Contract: VERI01 **Lab Code:** CHEM **Case No.:** Q1048 **SAS No.:** Q1048
ICS Source: EPA **Instrument ID:** P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Chromium	55.0	52.0	106	42	62	01/17/2025	11:39	LB134334
	Copper	20.6	2.0	1030	-18	22	01/17/2025	11:39	LB134334
	Nickel	2.52	2.0	126	-38	42	01/17/2025	11:39	LB134334
	Zinc	3.10			-40	40	01/17/2025	11:39	LB134334
ICSAB01	Chromium	560	542	103	460	624	01/17/2025	11:43	LB134334
	Copper	496	511	97	434	588	01/17/2025	11:43	LB134334
	Nickel	974	954	102	810	1100	01/17/2025	11:43	LB134334
	Zinc	1050	952	110	809	1095	01/17/2025	11:43	LB134334



METAL QC DATA

metals
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MATRIX SPIKE SUMMARY

client: VERINA CONSULTING GROUP, LLC	level: low	sdg no.: Q1048
contract: VERI01	lab code: CHEM	case no.: Q1048 sas no.: Q1048
matrix: Water	sample id: Q1048-01	client id: WATER TREATMENT DISCHARGEMS
Percent Solids for Sample: NA	Spiked ID: Q1048-01MS	Percent Solids for Spike Sample: NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Chromium	ug/L	90 - 113	421		236		200	93		P
Copper	ug/L	86 - 114	148		12.5		150	90		P
Nickel	ug/L	88 - 113	286		41.2		250	98		P
Zinc	ug/L	87 - 115	1230		1180		100	52		P

metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: VERINA CONSULTING GROUP, LLC **level:** low **sdg no.:** Q1048
contract: VERI01 **lab code:** CHEM **case no.:** Q1048 **sas no.:** Q1048
matrix: Water **sample id:** Q1048-01 **client id:** WATER TREATMENT DISCHARGEMSD
Percent Solids for Sample: NA **Spiked ID:** Q1048-01MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Chromium	ug/L	90 - 113	415		236		200	90		P
Copper	ug/L	86 - 114	146		12.5		150	89		P
Nickel	ug/L	88 - 113	282		41.2		250	96		P
Zinc	ug/L	87 - 115	1220		1180		100	43		P

Metals
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Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Contract: VERI01

Lab Code: CHEM

Case No.: Q1048 **SAS No.:** Q1048

Matrix:

Level: LOW

Client ID:

Sample ID: **Spiked ID:**

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M
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A
B
C
D
E
F
G
H
I
J

Metals

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DUPLICATE SAMPLE SUMMARY

Client: VERINA CONSULTING GROUP, LLC **Level:** LOW **SDG No.:** Q1048
Contract: VERI01 **Lab Code:** CHEM **Case No.:** Q1048 **SAS No.:** Q1048
Matrix: Water **Sample ID:** Q1048-01 **Client ID:** WATER TREATMENT DISCHARGEDUP
Percent Solids for Sample: NA **Duplicate ID** Q1048-01DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Chromium	ug/L	20	236		231		2		P
Copper	ug/L	20	12.5		12.5		0		P
Nickel	ug/L	20	41.2		40.7		1		P
Zinc	ug/L	20	1180		1160		2		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client: VERINA CONSULTING GROUP, LLC **Level:** LOW **SDG No.:** Q1048
Contract: VERI01 **Lab Code:** CHEM **Case No.:** Q1048 **SAS No.:** Q1048
Matrix: Water **Sample ID:** Q1048-01MS **Client ID:** WATER TREATMENT DISCHARGEMSD
Percent Solids for Sample: NA **Duplicate ID** Q1048-01MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Chromium	ug/L	20	421		415		1		P
Copper	ug/L	20	148		146		1		P
Nickel	ug/L	20	286		282		1		P
Zinc	ug/L	20	1230		1220		1		P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Contract: VERI01

Lab Code: CHEM

Case No.: Q1048

SAS No.: Q1048

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166037BS							
Chromium	ug/L	200	199		100	90 - 113	P
Copper	ug/L	150	150		100	86 - 114	P
Nickel	ug/L	250	239		96	88 - 113	P
Zinc	ug/L	100	102		102	87 - 115	P

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ICP SERIAL DILUTIONS

SAMPLE NO.

WATER TREATMENT DISCHARGEL

Lab Name: Chemtech Consulting Group **Contract:** VERI01
Lab Code: CHEM **Lb No.:** lb134334 **Lab Sample ID :** Q1048-01L **SDG No.:** Q1048
Matrix (soil/water): Water **Level (low/med):** LOW
Concentration Units: ug/L

Analyte	Initial Sample Result (I)		C	Serial Dilution Result (S)			C	% Differ- ence	Q	M
Chromium		236			236			0		P
Copper		12.5			50.0	U		100.0		P
Nickel		41.2			42.0	J		2		P
Zinc		1180			1140			3		P

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ANALYSIS RUN LOG

Client: VERINA CONSULTING GROUP, LLC

Contract: VERI01

Lab code: CHEM

Case no.: Q1048

Sas no.: Q1048

Sdg no.: Q1048

Instrument id number:

Method:

Run number: LB134334

Start date: 01/17/2025

End date: 01/17/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1051	Cr,Cu,Ni,Zn
S1	S1	1	1055	Cr,Cu,Ni,Zn
S2	S2	1	1059	Cr,Cu,Ni,Zn
S3	S3	1	1104	Cr,Cu,Ni,Zn
S4	S4	1	1108	Cr,Cu,Ni,Zn
S5	S5	1	1112	Cr,Cu,Ni,Zn
ICV01	ICV01	1	1121	Cr,Cu,Ni,Zn
LLICV01	LLICV01	1	1126	Cr,Cu,Ni,Zn
ICB01	ICB01	1	1130	Cr,Cu,Ni,Zn
CRI01	CRI01	1	1135	Cr,Cu,Ni,Zn
ICSA01	ICSA01	1	1139	Cr,Cu,Ni,Zn
ICSAB01	ICSAB01	1	1143	Cr,Cu,Ni,Zn
CCV01	CCV01	1	1156	Cr,Cu,Ni,Zn
CCB01	CCB01	1	1200	Cr,Cu,Ni,Zn
PB166037BL	PB166037BL	1	1213	Cr,Cu,Ni,Zn
PB166037BS	PB166037BS	1	1217	Cr,Cu,Ni,Zn
CCV02	CCV02	1	1247	Cr,Cu,Ni,Zn
CCB02	CCB02	1	1251	Cr,Cu,Ni,Zn
CCV03	CCV03	1	1336	Cr,Cu,Ni,Zn
CCB03	CCB03	1	1341	Cr,Cu,Ni,Zn
Q1048-01	WATER TREATMENT DISCHA	1	1423	Cr,Cu,Ni,Zn
CCV04	CCV04	1	1427	Cr,Cu,Ni,Zn
CCB04	CCB04	1	1431	Cr,Cu,Ni,Zn
Q1048-01DUP	WATER TREATMENT DISCHA	1	1436	Cr,Cu,Ni,Zn
Q1048-01L	WATER TREATMENT DISCHA	5	1440	Cr,Cu,Ni,Zn
Q1048-01MSD	WATER TREATMENT DISCHA	1	1458	Cr,Cu,Ni,Zn
Q1048-01MS	WATER TREATMENT DISCHA	1	1504	Cr,Cu,Ni,Zn
CCV05	CCV05	1	1534	Cr,Cu,Ni,Zn
CCB05	CCB05	1	1538	Cr,Cu,Ni,Zn
CCV06	CCV06	1	1616	Cr,Cu,Ni,Zn
CCB06	CCB06	1	1620	Cr,Cu,Ni,Zn
CCV07	CCV07	1	1711	Cr,Cu,Ni,Zn
CCB07	CCB07	1	1716	Cr,Cu,Ni,Zn
CCV08	CCV08	1	1752	Cr,Cu,Ni,Zn
CCB08	CCB08	1	1756	Cr,Cu,Ni,Zn



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Contract: VERI01

Lab Code: CHEM

Case No.: Q1048

SAS No.: Q1048

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000



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Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Contract: VERI01

Lab Code: CHEM

Case No.: Q1048

SAS No.: Q1048

Instrument ID:

Date:

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		As	Ba	Be	Cd	Co
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Contract: VERI01

Lab Code: CHEM

Case No.: Q1048

SAS No.: Q1048

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Cr	Cu	K	Mn	Mo
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Contract: VERI01

Lab Code: CHEM

Case No.: Q1048

SAS No.: Q1048

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Na	Ni	Pb	Sb	Se
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

Metals
- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Contract: VERI01

Lab Code: CHEM

Case No.: Q1048

SAS No.: Q1048

Instrument ID:

Date:

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Sn	Ti	Tl	V	Zn
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000



LAB CHRONICLE

OrderID:	Q1048	OrderDate:	1/9/2025 12:08:00 PM
Client:	VERINA CONSULTING GROUP, LLC	Project:	Rotor Clip NJ WTD - 2025
Contact:	Michael Valenzi	Location:	M11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1048-01	WATER TREATMENT DISCHARGE	Water			01/09/25			01/09/25
			Metals Group4	6010D		01/13/25	01/17/25	



METAL PREPARATION & ANALYICAL SUMMARY

Metals
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SAMPLE PREPARATION SUMMARY

Client:	<u>VERINA CONSULTING GROUP, LLC</u>	SDG No.:	<u>Q1048</u>
Contract:	<u>VERI01</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q1048</u>
		SAS No.:	<u>Q1048</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB166037							
PB166037BL	PB166037BL	MB	WATER	01/13/2025	50.0	25.0	
PB166037BS	PB166037BS	LCS	WATER	01/13/2025	50.0	25.0	
Q1048-01	WATER TREATMENT DISCHARGE	SAM	WATER	01/13/2025	50.0	25.0	
Q1048-01DUP	WATER TREATMENT DISCHARGEDUP	DUP	WATER	01/13/2025	50.0	25.0	
Q1048-01MS	WATER TREATMENT DISCHARGEMS	MS	WATER	01/13/2025	50.0	25.0	
Q1048-01MSD	WATER TREATMENT DISCHARGEMSD	MSD	WATER	01/13/2025	50.0	25.0	

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB134334

Review By	kareem	Review On	1/20/2025 4:25:29 PM
Supervise By	jaswal	Supervise On	1/20/2025 10:09:42 PM
STD. NAME	STD REF.#		
ICAL Standard	MP83935,MP83936,MP83937,MP83938,MP83939,MP83941		
ICV Standard	MP83942		
CCV Standard	MP83945		
ICSA Standard	MP83943,MP83944		
CRI Standard	MP83941		
LCS Standard			
Chk Standard	MP83948,MP83949		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	01/17/25 10:51		Kareem	OK
2	S1	S1	CAL2	01/17/25 10:55		Kareem	OK
3	S2	S2	CAL3	01/17/25 10:59		Kareem	OK
4	S3	S3	CAL4	01/17/25 11:04		Kareem	OK
5	S4	S4	CAL5	01/17/25 11:08		Kareem	OK
6	S5	S5	CAL6	01/17/25 11:12		Kareem	OK
7	ICV01	ICV01	ICV	01/17/25 11:21	ICV01 Fail for Al,Ba,Be,Ca,MgMn,V	Kareem	OK
8	LLICV01	LLICV01	LLICV	01/17/25 11:26		Kareem	OK
9	ICB01	ICB01	ICB	01/17/25 11:30		Kareem	OK
10	CRI01	CRI01	CRDL	01/17/25 11:35		Kareem	OK
11	ICSA01	ICSA01	ICSA	01/17/25 11:39		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	01/17/25 11:43		Kareem	OK
13	ICSADL	ICSADL	ICSA	01/17/25 11:47		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	01/17/25 11:52		Kareem	OK
15	CCV01	CCV01	CCV	01/17/25 11:56		Kareem	OK
16	CCB01	CCB01	CCB	01/17/25 12:00		Kareem	OK
17	PB166054BL	PB166054BL	MB	01/17/25 12:05		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB134334

Review By	kareem	Review On	1/20/2025 4:25:29 PM
Supervise By	jaswal	Supervise On	1/20/2025 10:09:42 PM

STD. NAME	STD REF.#
ICAL Standard	MP83935,MP83936,MP83937,MP83938,MP83939,MP83941
ICV Standard	MP83942
CCV Standard	MP83945
ICSA Standard	MP83943,MP83944
CRI Standard	MP83941
LCS Standard	
Chk Standard	MP83948,MP83949

18	PB166054BS	PB166054BS	LCS	01/17/25 12:09	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
19	PB166037BL	PB166037BL	MB	01/17/25 12:13		Kareem	OK
20	PB166037BS	PB166037BS	LCS	01/17/25 12:17	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
21	PB166047BL	PB166047BL	MB	01/17/25 12:21		Kareem	OK
22	PB166047BS	PB166047BS	LCS	01/17/25 12:26	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
23	PB166025TB	PB166025TB	MB	01/17/25 12:30		Kareem	OK
24	PB166049BL	PB166049BL	MB	01/17/25 12:34		Kareem	OK
25	PB166049BS	PB166049BS	LCS	01/17/25 12:38	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
26	PB166026TB	PB166026TB	MB	01/17/25 12:42		Kareem	OK
27	CCV02	CCV02	CCV	01/17/25 12:47		Kareem	OK
28	CCB02	CCB02	CCB	01/17/25 12:51		Kareem	OK
29	PB166069BL	PB166069BL	MB	01/17/25 12:55		Kareem	OK
30	PB166069BS	PB166069BS	LCS	01/17/25 13:00	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
31	PB166084BL	PB166084BL	MB	01/17/25 13:04		Kareem	OK
32	PB166084BS	PB166084BS	LCS	01/17/25 13:08	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB134334

Review By	kareem	Review On	1/20/2025 4:25:29 PM
Supervise By	jaswal	Supervise On	1/20/2025 10:09:42 PM
STD. NAME	STD REF.#		
ICAL Standard	MP83935,MP83936,MP83937,MP83938,MP83939,MP83941		
ICV Standard	MP83942		
CCV Standard	MP83945		
ICSA Standard	MP83943,MP83944		
CRI Standard	MP83941		
LCS Standard			
Chk Standard	MP83948,MP83949		

33	Q1068-01	TR-06-1-10-2025	SAM	01/17/25 13:12		Kareem	OK
34	Q1068-01DUP	TR-06-1-10-2025DUP	DUP	01/17/25 13:16		Kareem	OK
35	Q1068-01L	TR-06-1-10-2025L	SD	01/17/25 13:20		Kareem	OK
36	Q1068-01MS	TR-06-1-10-2025MS	MS	01/17/25 13:25	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
37	Q1068-01MSD	TR-06-1-10-2025MSD	MSD	01/17/25 13:28	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
38	Q1068-01A	TR-06-1-10-2025A	PS	01/17/25 13:32	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
39	CCV03	CCV03	CCV	01/17/25 13:36		Kareem	OK
40	CCB03	CCB03	CCB	01/17/25 13:41		Kareem	OK
41	Q1036-02	NP-WS-002	SAM	01/17/25 13:45		Kareem	OK
42	Q1036-02DUP	NP-WS-002DUP	DUP	01/17/25 13:49		Kareem	OK
43	Q1036-02L	NP-WS-002L	SD	01/17/25 13:53		Kareem	OK
44	Q1036-02MS	NP-WS-002MS	MS	01/17/25 13:58	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
45	Q1036-02MSD	NP-WS-002MSD	MSD	01/17/25 14:02	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
46	Q1036-02A	NP-WS-002A	PS	01/17/25 14:06	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
47	Q1069-02	RW7B-CARBON-2023	SAM	01/17/25 14:10		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB134334

Review By	kareem	Review On	1/20/2025 4:25:29 PM
Supervise By	jaswal	Supervise On	1/20/2025 10:09:42 PM
STD. NAME	STD REF.#		
ICAL Standard	MP83935,MP83936,MP83937,MP83938,MP83939,MP83941		
ICV Standard	MP83942		
CCV Standard	MP83945		
ICSA Standard	MP83943,MP83944		
CRI Standard	MP83941		
LCS Standard			
Chk Standard	MP83948,MP83949		

48	Q1040-01	RW5-SP100-2025010	SAM	01/17/25 14:14		Kareem	OK
49	Q1040-03	RW5-SP303-2025010	SAM	01/17/25 14:18		Kareem	OK
50	Q1048-01	WATER TREATMENT	SAM	01/17/25 14:23	Na high	Kareem	Dilution
51	CCV04	CCV04	CCV	01/17/25 14:27		Kareem	OK
52	CCB04	CCB04	CCB	01/17/25 14:31		Kareem	OK
53	Q1048-01DUP	WATER TREATMENT	DUP	01/17/25 14:36	Na high	Kareem	Dilution
54	Q1048-01L	WATER TREATMENT	SD	01/17/25 14:40		Kareem	OK
55	Q1048-01MSD	WATER TREATMENT	MSD	01/17/25 14:58	Na high	Kareem	Dilution
56	Q1048-01MS	WATER TREATMENT	MS	01/17/25 15:04	Na high	Kareem	Dilution
57	Q1048-01A	WATER TREATMENT	PS	01/17/25 15:08	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
58	Q1081-04	RW7-SP303-2025011	SAM	01/17/25 15:12		Kareem	OK
59	Q1081-04DUP	RW7-SP303-2025011	DUP	01/17/25 15:17		Kareem	OK
60	Q1081-04L	RW7-SP303-2025011	SD	01/17/25 15:21		Kareem	OK
61	Q1048-01ADL	WATER TREATMENT	PS	01/17/25 15:25	NOT REQUIRED	Kareem	Not Ok
62	Q1048-01MSDL	WATER TREATMENT	MS	01/17/25 15:30	2x For Na	Kareem	Confirms
63	CCV05	CCV05	CCV	01/17/25 15:34		Kareem	OK
64	CCB05	CCB05	CCB	01/17/25 15:38		Kareem	OK
65	Q1048-01MSDDL	WATER TREATMENT	MSD	01/17/25 15:42	2x For Na	Kareem	Confirms
66	Q1048-01DL	WATER TREATMENT	SAM	01/17/25 15:47	2x For Na	Kareem	Confirms

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB134334

Review By	kareem	Review On	1/20/2025 4:25:29 PM
Supervise By	jaswal	Supervise On	1/20/2025 10:09:42 PM
STD. NAME	STD REF.#		
ICAL Standard	MP83935,MP83936,MP83937,MP83938,MP83939,MP83941		
ICV Standard	MP83942		
CCV Standard	MP83945		
ICSA Standard	MP83943,MP83944		
CRI Standard	MP83941		
LCS Standard			
Chk Standard	MP83948,MP83949		

67	Q1048-01DUPDL	WATER TREATMENT	DUP	01/17/25 15:51	2x For Na	Kareem	Confirms
68	Q1048-01LDL	WATER TREATMENT	SD	01/17/25 15:55	NOT REQUIRED	Kareem	Not Ok
69	Q1081-04MS	RW7-SP303-2025011	MS	01/17/25 16:00	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
70	Q1081-04MSD	RW7-SP303-2025011	MSD	01/17/25 16:04	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
71	Q1081-04A	RW7-SP303-2025011	PS	01/17/25 16:08	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
72	Q1093-01	RT-3407	SAM	01/17/25 16:12		Kareem	OK
73	CCV06	CCV06	CCV	01/17/25 16:16		Kareem	OK
74	CCB06	CCB06	CCB	01/17/25 16:20		Kareem	OK
75	Q1093-01DUP	RT-3407DUP	DUP	01/17/25 16:24		Kareem	OK
76	Q1093-01L	RT-3407L	SD	01/17/25 16:28		Kareem	OK
77	Q1093-01MS	RT-3407MS	MS	01/17/25 16:32	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
78	Q1093-01MSD	RT-3407MSD	MSD	01/17/25 16:36	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
79	Q1093-01A	RT-3407A	PS	01/17/25 16:40	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
80	Q1094-01	72-11938	SAM	01/17/25 16:44		Kareem	OK
81	Q1098-01	OILY-STONE-COMP	SAM	01/17/25 16:49		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB134334

Review By	kareem	Review On	1/20/2025 4:25:29 PM
Supervise By	jaswal	Supervise On	1/20/2025 10:09:42 PM
STD. NAME	STD REF.#		
ICAL Standard	MP83935,MP83936,MP83937,MP83938,MP83939,MP83941		
ICV Standard	MP83942		
CCV Standard	MP83945		
ICSA Standard	MP83943,MP83944		
CRI Standard	MP83941		
LCS Standard			
Chk Standard	MP83948,MP83949		

82	Q1099-01	OR-02-01152025	SAM	01/17/25 16:53		Kareem	OK
83	Q1097-01	402	SAM	01/17/25 16:57		Kareem	OK
84	Q1097-01DUP	402DUP	DUP	01/17/25 17:01		Kareem	OK
85	CCV07	CCV07	CCV	01/17/25 17:11		Kareem	OK
86	CCB07	CCB07	CCB	01/17/25 17:16		Kareem	OK
87	Q1097-01L	402L	SD	01/17/25 17:22		Kareem	OK
88	Q1097-01MS	402MS	MS	01/17/25 17:26	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
89	Q1097-01MSD	402MSD	MSD	01/17/25 17:30	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
90	Q1097-01A	402A	PS	01/17/25 17:34	0.1 ML OF M6010 AND M6001 WERE ADDED TO 10ML OF THE SAMPLE	Kareem	OK
91	LR1	LR1	HIGH STD	01/17/25 17:37		Kareem	OK
92	LR2	LR2	HIGH STD	01/17/25 17:42		Kareem	OK
93	CCV08	CCV08	CCV	01/17/25 17:52		Kareem	OK
94	CCB08	CCB08	CCB	01/17/25 17:56		Kareem	OK

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pipette ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BLOC K #1 2. N/A

Start Digest Date: 01/13/2025 Time : 10:35 Temp : 96 °C

End Digest Date: 01/13/2025 Time : 13:40 Temp : 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. # 1

Dig Technician Signature: *SLD*

Supervisor Signature: *SLD*

Temp : 1. 96°C 2. N/A

Standard Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6000
LFS-2	0.25	M6009
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	MP83498
1:1 HCL	5.00	M6126
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK#1 CELL #50 Temp: 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/13/25 14:40	<i>SLD met digestion</i>	<i>SLD (met lab) GEB</i>
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB166037BL	PBW037	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	1
PB166037BS	LCS037	<2	50	25	Colorless	Colorless	Clear	Clear	M6000,M6009	2
Q1040-01	RW5-SP100-20250108	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	3
Q1040-03	RW5-SP303-20250108	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	4
Q1048-01	WATER TREATMENT DISCHARGE	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	5
Q1048-01DUP	WATER TREATMENT DISCHARGEDUP	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	6
Q1048-01MS	WATER TREATMENT DISCHARGEMS	<2	50	25	Colorless	Colorless	Clear	Clear	M6000,M6009	7
Q1048-01MSD	WATER TREATMENT DISCHARGEMSD	<2	50	25	Colorless	Colorless	Clear	Clear	M6000,M6009	8
Q1049-01	FRAC-TANK-257952	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	9



SAMPLE DATA

Report of Analysis

Client:	VERINA CONSULTING GROUP, LLC	Date Collected:	01/09/25 10:17
Project:	Rotor Clip - PO# 5183.0001	Date Received:	01/09/25
Client Sample ID:	WATER TREATMENT DISCHARGE	SDG No.:	Q1048
Lab Sample ID:	Q1048-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	0.46		1	0.045	0.10	mg/L	01/10/25 09:15	01/10/25 13:01	SM 4500-NH3 B plus G-11
Residual Chlorine	0.022	HJ	1	0.016	0.10	mg/L		01/09/25 14:36	SM 4500-Cl G-11

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Project: Rotor Clip - PO# 5183.0001

RunNo.: LB134218

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Residual Chlorine	mg/L	0.413	0.4	103	90-110	01/09/2025
Sample ID: CCV1 Residual Chlorine	mg/L	0.403	0.4	101	90-110	01/09/2025
Sample ID: CCV2 Residual Chlorine	mg/L	0.403	0.4	101	90-110	01/09/2025

Initial and Continuing Calibration Verification

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Project: Rotor Clip - PO# 5183.0001

RunNo.: LB134227

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Ammonia as N	mg/L	0.97	1	97	90-110	01/10/2025
Sample ID: CCV1 Ammonia as N	mg/L	0.99	1	99	90-110	01/10/2025
Sample ID: CCV2 Ammonia as N	mg/L	1	1	100	90-110	01/10/2025

Initial and Continuing Calibration Blank Summary

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Project: Rotor Clip - PO# 5183.0001

RunNo.: LB134218

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Residual Chlorine	mg/L	< 0.0500	0.0500	U	0.016	0.1	01/09/2025
Sample ID: CCB1 Residual Chlorine	mg/L	< 0.0500	0.0500	U	0.016	0.1	01/09/2025
Sample ID: CCB2 Residual Chlorine	mg/L	< 0.0500	0.0500	U	0.016	0.1	01/09/2025

Initial and Continuing Calibration Blank Summary

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Project: Rotor Clip - PO# 5183.0001

RunNo.: LB134227

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	01/10/2025
Sample ID: CCB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	01/10/2025
Sample ID: CCB2 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	01/10/2025

Preparation Blank Summary

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1048

Project: Rotor Clip - PO# 5183.0001

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB134218BL							
Residual Chlorine	mg/L	< 0.0500	0.0500	U	0.016	0.1	01/09/2025
Sample ID: PB165991BL							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	01/10/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Sample ID:	Q1033-01
Client ID:	28612MS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/L	75-125	1.90		0.93		1	1	97		01/10/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Sample ID:	Q1033-01
Client ID:	28612MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/L	75-125	1.90		0.93		1	1	97		01/10/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Sample ID:	Q1048-01
Client ID:	WATER TREATMENT DISCHARGEMS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Residual Chlorine	mg/L	71-148	0.40		0.022	J	0.4	1	95		01/09/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Sample ID:	Q1048-01
Client ID:	WATER TREATMENT DISCHARGEMSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Residual Chlorine	mg/L	71-148	0.41		0.022	J	0.4	1	98		01/09/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Sample ID:	Q1033-01
Client ID:	28612DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Ammonia as N	mg/L	+/-20	0.93		0.94		1	1		01/10/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Sample ID:	Q1033-01
Client ID:	28612MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ammonia as N	mg/L	+/-20	1.90		1.90		1	0		01/10/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Sample ID:	Q1048-01
Client ID:	WATER TREATMENT DISCHARGEDUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Residual Chlorine	mg/L	+/-20	0.022	J	0.022	J	1	0		01/09/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Sample ID:	Q1048-01
Client ID:	WATER TREATMENT DISCHARGEMSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Residual Chlorine	mg/L	+/-20	0.40		0.41		1	2.45		01/09/2025

Laboratory Control Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Run No.:	LB134218

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB134218BS							
Residual Chlorine	mg/L	0.4	0.40		101	1	90-110	01/09/2025

Laboratory Control Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1048
Project:	Rotor Clip - PO# 5183.0001	Run No.:	LB134227

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB165991BS							
Ammonia as N	mg/L	1	1.00		100	1	90-110	01/10/2025

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134218

Review By	Niha	Review On	1/9/2025 3:27:37 PM
Supervise By	Iwona	Supervise On	1/9/2025 3:39:20 PM
SubDirectory	LB134218	Test	Residual Chlorine
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP111334,WP111329,WP111330,WP111331,WP111328,WP111332,WP111333,W3147		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	01/09/25 14:00		Niha	OK
2	CAL2	CAL2	CAL	01/09/25 14:03		Niha	OK
3	CAL3	CAL3	CAL	01/09/25 14:06		Niha	OK
4	CAL4	CAL4	CAL	01/09/25 14:09		Niha	OK
5	CAL5	CAL5	CAL	01/09/25 14:12		Niha	OK
6	CAL6	CAL6	CAL	01/09/25 14:15		Niha	OK
7	ICV	ICV	ICV	01/09/25 14:18		Niha	OK
8	ICB	ICB	ICB	01/09/25 14:21		Niha	OK
9	CCV1	CCV1	CCV	01/09/25 14:24		Niha	OK
10	CCB1	CCB1	CCB	01/09/25 14:27		Niha	OK
11	LB134218BL	LB134218BL	MB	01/09/25 14:30		Niha	OK
12	LB134218BS	LB134218BS	LCS	01/09/25 14:33		Niha	OK
13	Q1048-01	WATER TREATMENT	SAM	01/09/25 14:36		Niha	OK
14	Q1048-01DUP	WATER TREATMENT	DUP	01/09/25 14:39		Niha	OK
15	Q1048-01MS	WATER TREATMENT	MS	01/09/25 14:42		Niha	OK
16	Q1048-01MSD	WATER TREATMENT	MSD	01/09/25 14:45		Niha	OK
17	CCV2	CCV2	CCV	01/09/25 14:48		Niha	OK
18	CCB2	CCB2	CCB	01/09/25 14:51		Niha	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB134227

Review By	rubina	Review On	1/13/2025 8:37:45 AM
Supervise By	Iwona	Supervise On	1/13/2025 9:35:20 AM
SubDirectory	LB134227	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP111350		
ICV Standard	WP111352		
CCV Standard	WP111351		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111092		
Chk Standard	WP110416,WP110019,WP108709,WP108840		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	01/10/25 12:20		rubina	OK
2	0.1PPM	0.1PPM	CAL2	01/10/25 12:20		rubina	OK
3	0.2PPM	0.2PPM	CAL3	01/10/25 12:20		rubina	OK
4	0.4PPM	0.4PPM	CAL4	01/10/25 12:20		rubina	OK
5	1.0PPM	1.0PPM	CAL5	01/10/25 12:20		rubina	OK
6	1.3PPM	1.3PPM	CAL6	01/10/25 12:20		rubina	OK
7	2.0PPM	2.0PPM	CAL7	01/10/25 12:20		rubina	OK
8	ICV1	ICV1	ICV	01/10/25 12:50		rubina	OK
9	ICB1	ICB1	ICB	01/10/25 12:50		rubina	OK
10	CCV1	CCV1	CCV	01/10/25 12:50		rubina	OK
11	CCB1	CCB1	CCB	01/10/25 12:50		rubina	OK
12	RL	RL	SAM	01/10/25 12:50		rubina	OK
13	PB165991BL	PB165991BL	MB	01/10/25 12:50		rubina	OK
14	PB165991BS	PB165991BS	LCS	01/10/25 13:01		rubina	OK
15	Q1033-01	28612	SAM	01/10/25 13:01		rubina	OK
16	Q1033-01DUP	28612DUP	DUP	01/10/25 13:01		rubina	OK
17	Q1033-01MS	28612MS	MS	01/10/25 13:01		rubina	OK
18	Q1033-01MSD	28612MSD	MSD	01/10/25 13:01		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB134227

Review By	rubina	Review On	1/13/2025 8:37:45 AM
Supervise By	Iwona	Supervise On	1/13/2025 9:35:20 AM
SubDirectory	LB134227	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP111350		
ICV Standard	WP111352		
CCV Standard	WP111351		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111092		
Chk Standard	WP110416,WP110019,WP108709,WP108840		

19	Q1048-01	WATER TREATMENT	SAM	01/10/25 13:01		rubina	OK
20	Q1049-01	FRAC-TANK-257952	SAM	01/10/25 13:07		rubina	OK
21	CCV2	CCV2	CCV	01/10/25 13:07		rubina	OK
22	CCB2	CCB2	CCB	01/10/25 13:07		rubina	OK

LAB CHRONICLE

OrderID:	Q1048	OrderDate:	1/9/2025 12:08:00 PM
Client:	VERINA CONSULTING GROUP, LLC	Project:	Rotor Clip - PO# 5183.0001
Contact:	Michael Valenzi	Location:	M11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1048-01	WATER TREATMENT DISCHARGE	WATER			01/09/25 10:17			01/09/25
			Ammonia	SM4500-NH3		01/10/25	01/10/25 13:01	
			Residual Chlorine	SM4500 Cl G			01/09/25 14:36	

SOP ID : MSM4500-NH3 B,G-Ammonia-17

SDG No : N/A

Matrix : WATER

Pipette ID : WC

Balance ID : N/A

Hood ID : HOOD#2

Block ID : WC-DIST-BLOCK-1

Weigh By : N/A

Start Digest Date: 01/10/2025 Time : 09:15 Temp : 150 °C

End Digest Date: 01/10/2025 Time : 10:15 Temp : 158 °C

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : WC CYANIDE

Prep Technician Signature: RM

Supervisor Signature: 12

Standard Name	MLS USED	STD REF. # FROM LOG
LCSW	1.0ML	WP111092
MS/MSD SPIKE SOL.	1.0ML	WP111091
PBW	50.0ML	W3112
RL CHECK	0.1ML	WP111091
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
BORATE BUFFER	2.5ML	WP111325
NAOH 6N	0.5-2.0ML	WP111318
H2SO4 0.04N	5.0ML	WP110335
pH strip-Ammonia	N/A	W3133
KI-starch paper	N/A	W3155
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

ALL GLASSWEAR ARE STEAMED OUT AND THERE WERE NO TRACE OF AMMONIA USING NESLER REAGENT
WP108814,

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/10/2025 10:30	RM (WC)	RM (WC)
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB165991BL	PBW991	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
PB165991BS	LCS991	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1033-01	28612	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1033-01DUP	28612DUP	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1033-01MS	28612MS	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1033-01MSD	28612MSD	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1048-01	WATER TREATMENT DISCHARGE	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1049-01	FRAC-TANK-257952	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A