

LAB CHRONICLE

OrderID:	Q3736	OrderDate:	11/26/2025 3:35:00 PM
Client:	JPCL Engineering	Project:	NYCDPR BGCY Playground - W 145th St
Contact:	Jim Lau	Location:	A11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3736-01	D1	SOIL			11/26/25			11/26/25
			Mercury	7471B		12/01/25	12/02/25	
			Metals ICP-Group1	6010D		12/01/25	12/01/25	
Q3736-02	D1	TCLP			11/26/25			11/26/25
			TCLP ICP Metals	6010D		12/01/25	12/01/25	
			TCLP Mercury	7470A		12/01/25	12/01/25	



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Hit Summary Sheet
SW-846

SDG No.: Q3736
Client: JPCL Engineering

Order ID: Q3736
Project ID: NYCDPR BGCY Playground - W 145th St

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : D1								
Q3736-01	D1	SOIL	Arsenic	3.60	JD	0.99	5.20	mg/Kg
Q3736-01	D1	SOIL	Barium	274	D	3.80	26.0	mg/Kg
Q3736-01	D1	SOIL	Cadmium	0.75	JD	0.13	1.56	mg/Kg
Q3736-01	D1	SOIL	Chromium	23.9	D	0.24	2.60	mg/Kg
Q3736-01	D1	SOIL	Lead	255	D	0.68	3.12	mg/Kg
Q3736-01	D1	SOIL	Mercury	2.40	D	0.039	0.070	mg/Kg



SAMPLE DATA

Report of Analysis

Client: JPCL Engineering
Project: NYCDPR BGCY Playground - W 145th St
Client Sample ID: D1
Lab Sample ID: Q3736-01
Level (low/med): low

Date Collected: 11/26/25
Date Received: 11/26/25
SDG No.: Q3736
Matrix: SOIL
% Solid: 83.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	3.60	JD	5	0.99	5.20	mg/Kg	12/01/25 11:35	12/01/25 17:42	6010D	SW3050
7440-39-3	Barium	274	D	5	3.80	26.0	mg/Kg	12/01/25 11:35	12/01/25 17:42	6010D	SW3050
7440-43-9	Cadmium	0.75	JD	5	0.13	1.56	mg/Kg	12/01/25 11:35	12/01/25 17:42	6010D	SW3050
7440-47-3	Chromium	23.9	D	5	0.24	2.60	mg/Kg	12/01/25 11:35	12/01/25 17:42	6010D	SW3050
7439-92-1	Lead	255	D	5	0.68	3.12	mg/Kg	12/01/25 11:35	12/01/25 17:42	6010D	SW3050
7439-97-6	Mercury	2.40	D	5	0.039	0.070	mg/Kg	12/01/25 09:10	12/02/25 13:56	7471B	M7471B
7782-49-2	Selenium	5.20	UD	5	1.35	5.20	mg/Kg	12/01/25 11:35	12/01/25 17:42	6010D	SW3050
7440-22-4	Silver	2.60	UD	5	0.62	2.60	mg/Kg	12/01/25 11:35	12/01/25 17:42	6010D	SW3050

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



METAL CALIBRATION DATA

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV134	Mercury	3.97	4.0	99	90 - 110	CV	12/02/2025	12:39	LB138081

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV50	Mercury	5.06	5.0	101	90 - 110	CV	12/02/2025	12:44	LB138081
CCV51	Mercury	5.05	5.0	101	90 - 110	CV	12/02/2025	13:15	LB138081
CCV52	Mercury	5.05	5.0	101	90 - 110	CV	12/02/2025	13:43	LB138081
CCV53	Mercury	4.99	5.0	100	90 - 110	CV	12/02/2025	14:05	LB138081

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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	Arsenic	4020	4000	101	90 - 110	P	12/01/2025	13:16	LB138072
	Barium	7850	8000	98	90 - 110	P	12/01/2025	13:16	LB138072
	Cadmium	1940	2000	97	90 - 110	P	12/01/2025	13:16	LB138072
	Chromium	791	800	99	90 - 110	P	12/01/2025	13:16	LB138072
	Lead	3830	4000	96	90 - 110	P	12/01/2025	13:16	LB138072
	Selenium	4190	4000	105	90 - 110	P	12/01/2025	13:16	LB138072
	Silver	1000	1000	100	90 - 110	P	12/01/2025	13:16	LB138072

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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	Arsenic	23.8	20.0	119	80 - 120	P	12/01/2025	13:42	LB138072
	Barium	105	100	105	80 - 120	P	12/01/2025	13:42	LB138072
	Cadmium	6.23	6.0	104	80 - 120	P	12/01/2025	13:42	LB138072
	Chromium	9.35	10.0	94	80 - 120	P	12/01/2025	13:42	LB138072
	Lead	11.5	12.0	96	80 - 120	P	12/01/2025	13:42	LB138072
	Selenium	20.6	20.0	103	80 - 120	P	12/01/2025	13:42	LB138072
	Silver	9.97	10.0	100	80 - 120	P	12/01/2025	13:42	LB138072

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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	Arsenic	5040	5000	101	90 - 110	P	12/01/2025	14:30	LB138072
	Barium	9960	10000	100	90 - 110	P	12/01/2025	14:30	LB138072
	Cadmium	2470	2500	99	90 - 110	P	12/01/2025	14:30	LB138072
	Chromium	994	1000	99	90 - 110	P	12/01/2025	14:30	LB138072
	Lead	4970	5000	100	90 - 110	P	12/01/2025	14:30	LB138072
	Selenium	5140	5000	103	90 - 110	P	12/01/2025	14:30	LB138072
	Silver	1270	1250	102	90 - 110	P	12/01/2025	14:30	LB138072
CCV02	Arsenic	4990	5000	100	90 - 110	P	12/01/2025	15:26	LB138072
	Barium	10200	10000	102	90 - 110	P	12/01/2025	15:26	LB138072
	Cadmium	2410	2500	97	90 - 110	P	12/01/2025	15:26	LB138072
	Chromium	958	1000	96	90 - 110	P	12/01/2025	15:26	LB138072
	Lead	4870	5000	98	90 - 110	P	12/01/2025	15:26	LB138072
	Selenium	5090	5000	102	90 - 110	P	12/01/2025	15:26	LB138072
	Silver	1250	1250	100	90 - 110	P	12/01/2025	15:26	LB138072
CCV03	Arsenic	5100	5000	102	90 - 110	P	12/01/2025	16:33	LB138072
	Barium	10000	10000	100	90 - 110	P	12/01/2025	16:33	LB138072
	Cadmium	2450	2500	98	90 - 110	P	12/01/2025	16:33	LB138072
	Chromium	995	1000	100	90 - 110	P	12/01/2025	16:33	LB138072
	Lead	4940	5000	99	90 - 110	P	12/01/2025	16:33	LB138072
	Selenium	5180	5000	104	90 - 110	P	12/01/2025	16:33	LB138072
	Silver	1270	1250	102	90 - 110	P	12/01/2025	16:33	LB138072
CCV04	Arsenic	5140	5000	103	90 - 110	P	12/01/2025	17:25	LB138072
	Barium	10500	10000	104	90 - 110	P	12/01/2025	17:25	LB138072
	Cadmium	2500	2500	100	90 - 110	P	12/01/2025	17:25	LB138072
	Chromium	1010	1000	100	90 - 110	P	12/01/2025	17:25	LB138072
	Lead	5050	5000	101	90 - 110	P	12/01/2025	17:25	LB138072
	Selenium	5140	5000	103	90 - 110	P	12/01/2025	17:25	LB138072
	Silver	1310	1250	105	90 - 110	P	12/01/2025	17:25	LB138072
CCV05	Arsenic	5110	5000	102	90 - 110	P	12/01/2025	18:16	LB138072
	Barium	9960	10000	100	90 - 110	P	12/01/2025	18:16	LB138072
	Cadmium	2500	2500	100	90 - 110	P	12/01/2025	18:16	LB138072
	Chromium	1030	1000	103	90 - 110	P	12/01/2025	18:16	LB138072
	Lead	5020	5000	100	90 - 110	P	12/01/2025	18:16	LB138072
	Selenium	5160	5000	103	90 - 110	P	12/01/2025	18:16	LB138072

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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
CCV05	Silver	1300	1250	104	90 - 110	P	12/01/2025	18:16	LB138072
CCV06	Arsenic	5230	5000	105	90 - 110	P	12/01/2025	19:07	LB138072
	Barium	10300	10000	102	90 - 110	P	12/01/2025	19:07	LB138072
	Cadmium	2540	2500	102	90 - 110	P	12/01/2025	19:07	LB138072
	Chromium	1020	1000	102	90 - 110	P	12/01/2025	19:07	LB138072
	Lead	5110	5000	102	90 - 110	P	12/01/2025	19:07	LB138072
	Selenium	5320	5000	106	90 - 110	P	12/01/2025	19:07	LB138072
	Silver	1310	1250	105	90 - 110	P	12/01/2025	19:07	LB138072
CCV07	Arsenic	5410	5000	108	90 - 110	P	12/01/2025	19:24	LB138072
	Barium	10300	10000	103	90 - 110	P	12/01/2025	19:24	LB138072
	Cadmium	2630	2500	105	90 - 110	P	12/01/2025	19:24	LB138072
	Chromium	1040	1000	104	90 - 110	P	12/01/2025	19:24	LB138072
	Lead	5280	5000	106	90 - 110	P	12/01/2025	19:24	LB138072
	Selenium	5530	5000	110	90 - 110	P	12/01/2025	19:24	LB138072
	Silver	1340	1250	107	90 - 110	P	12/01/2025	19:24	LB138072

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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	Arsenic	3880	4000	97	90 - 110	P	12/02/2025	11:29	LB138085
	Barium	8280	8000	104	90 - 110	P	12/02/2025	11:29	LB138085
	Cadmium	1920	2000	96	90 - 110	P	12/02/2025	11:29	LB138085
	Chromium	781	800	98	90 - 110	P	12/02/2025	11:29	LB138085
	Lead	3790	4000	95	90 - 110	P	12/02/2025	11:29	LB138085
	Selenium	3970	4000	99	90 - 110	P	12/02/2025	11:29	LB138085
	Silver	1080	1000	108	90 - 110	P	12/02/2025	11:29	LB138085

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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	Arsenic	22.6	20.0	113	80 - 120	P	12/02/2025	11:34	LB138085
	Barium	104	100	104	80 - 120	P	12/02/2025	11:34	LB138085
	Cadmium	6.22	6.0	104	80 - 120	P	12/02/2025	11:34	LB138085
	Chromium	9.91	10.0	99	80 - 120	P	12/02/2025	11:34	LB138085
	Lead	11.3	12.0	94	80 - 120	P	12/02/2025	11:34	LB138085
	Selenium	18.8	20.0	94	80 - 120	P	12/02/2025	11:34	LB138085
	Silver	10.3	10.0	103	80 - 120	P	12/02/2025	11:34	LB138085

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering
Contract: JPCL01
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

SDG No.: Q3736
Lab Code: ACE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	4950	5000	99	90 - 110	P	12/02/2025	12:10	LB138085
	Barium	10200	10000	102	90 - 110	P	12/02/2025	12:10	LB138085
	Cadmium	2470	2500	99	90 - 110	P	12/02/2025	12:10	LB138085
	Chromium	1000	1000	100	90 - 110	P	12/02/2025	12:10	LB138085
	Lead	4950	5000	99	90 - 110	P	12/02/2025	12:10	LB138085
	Selenium	4980	5000	100	90 - 110	P	12/02/2025	12:10	LB138085
	Silver	1250	1250	100	90 - 110	P	12/02/2025	12:10	LB138085
CCV02	Arsenic	5050	5000	101	90 - 110	P	12/02/2025	13:13	LB138085
	Barium	9890	10000	99	90 - 110	P	12/02/2025	13:13	LB138085
	Cadmium	2500	2500	100	90 - 110	P	12/02/2025	13:13	LB138085
	Chromium	1020	1000	102	90 - 110	P	12/02/2025	13:13	LB138085
	Lead	5020	5000	100	90 - 110	P	12/02/2025	13:13	LB138085
	Selenium	5180	5000	104	90 - 110	P	12/02/2025	13:13	LB138085
	Silver	1280	1250	103	90 - 110	P	12/02/2025	13:13	LB138085
CCV03	Arsenic	5040	5000	101	90 - 110	P	12/02/2025	14:11	LB138085
	Barium	10100	10000	102	90 - 110	P	12/02/2025	14:11	LB138085
	Cadmium	2470	2500	99	90 - 110	P	12/02/2025	14:11	LB138085
	Chromium	987	1000	99	90 - 110	P	12/02/2025	14:11	LB138085
	Lead	4970	5000	100	90 - 110	P	12/02/2025	14:11	LB138085
	Selenium	5230	5000	105	90 - 110	P	12/02/2025	14:11	LB138085
	Silver	1260	1250	100	90 - 110	P	12/02/2025	14:11	LB138085
CCV04	Arsenic	5140	5000	103	90 - 110	P	12/02/2025	15:15	LB138085
	Barium	10500	10000	105	90 - 110	P	12/02/2025	15:15	LB138085
	Cadmium	2500	2500	100	90 - 110	P	12/02/2025	15:15	LB138085
	Chromium	990	1000	99	90 - 110	P	12/02/2025	15:15	LB138085
	Lead	5050	5000	101	90 - 110	P	12/02/2025	15:15	LB138085
	Selenium	5330	5000	107	90 - 110	P	12/02/2025	15:15	LB138085
	Silver	1280	1250	102	90 - 110	P	12/02/2025	15:15	LB138085
CCV05	Arsenic	5040	5000	101	90 - 110	P	12/02/2025	16:05	LB138085
	Barium	10600	10000	106	90 - 110	P	12/02/2025	16:05	LB138085
	Cadmium	2460	2500	98	90 - 110	P	12/02/2025	16:05	LB138085
	Chromium	968	1000	97	90 - 110	P	12/02/2025	16:05	LB138085
	Lead	4950	5000	99	90 - 110	P	12/02/2025	16:05	LB138085
	Selenium	5220	5000	104	90 - 110	P	12/02/2025	16:05	LB138085

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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
CCV05	Silver	1250	1250	100	90 - 110	P	12/02/2025	16:05	LB138085
CCV06	Arsenic	5050	5000	101	90 - 110	P	12/02/2025	16:55	LB138085
	Barium	10400	10000	104	90 - 110	P	12/02/2025	16:55	LB138085
	Cadmium	2470	2500	99	90 - 110	P	12/02/2025	16:55	LB138085
	Chromium	983	1000	98	90 - 110	P	12/02/2025	16:55	LB138085
	Lead	5000	5000	100	90 - 110	P	12/02/2025	16:55	LB138085
	Selenium	5220	5000	104	90 - 110	P	12/02/2025	16:55	LB138085
	Silver	1260	1250	101	90 - 110	P	12/02/2025	16:55	LB138085

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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	Arsenic	22.7	20.0	114	65 - 135	P	12/01/2025	13:50	LB138072
	Barium	102	100	102	65 - 135	P	12/01/2025	13:50	LB138072
	Cadmium	6.21	6.0	104	65 - 135	P	12/01/2025	13:50	LB138072
	Chromium	9.87	10.0	99	65 - 135	P	12/01/2025	13:50	LB138072
	Lead	13.2	12.0	110	65 - 135	P	12/01/2025	13:50	LB138072
	Selenium	22.4	20.0	112	65 - 135	P	12/01/2025	13:50	LB138072
	Silver	10.2	10.0	102	65 - 135	P	12/01/2025	13:50	LB138072
CRI01	Arsenic	20.2	20.0	101	65 - 135	P	12/02/2025	11:42	LB138085
	Barium	102	100	102	65 - 135	P	12/02/2025	11:42	LB138085
	Cadmium	6.34	6.0	106	65 - 135	P	12/02/2025	11:42	LB138085
	Chromium	10.6	10.0	106	65 - 135	P	12/02/2025	11:42	LB138085
	Lead	10.2	12.0	85	65 - 135	P	12/02/2025	11:42	LB138085
	Selenium	19.3	20.0	96	65 - 135	P	12/02/2025	11:42	LB138085
	Silver	10.1	10.0	101	65 - 135	P	12/02/2025	11:42	LB138085
CRA	Mercury	0.20	0.2	99	70 - 130	CV	12/02/2025	12:48	LB138081



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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB134	Mercury	0.076	+/-0.2	U	0.20	CV	12/02/2025	12:41	LB138081

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB50	Mercury	0.076	+/-0.2	U	0.20	CV	12/02/2025	12:46	LB138081
CCB51	Mercury	0.076	+/-0.2	U	0.20	CV	12/02/2025	13:17	LB138081
CCB52	Mercury	0.076	+/-0.2	U	0.20	CV	12/02/2025	13:45	LB138081
CCB53	Mercury	0.076	+/-0.2	U	0.20	CV	12/02/2025	14:07	LB138081

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	5.12	+/-10	U	20.0	P	12/01/2025	13:46	LB138072
	Barium	14.6	+/-50	U	100	P	12/01/2025	13:46	LB138072
	Cadmium	0.50	+/-3	U	6.00	P	12/01/2025	13:46	LB138072
	Chromium	2.12	+/-5	U	10.0	P	12/01/2025	13:46	LB138072
	Lead	2.30	+/-6	U	12.0	P	12/01/2025	13:46	LB138072
	Selenium	9.64	+/-10	U	20.0	P	12/01/2025	13:46	LB138072
	Silver	1.62	+/-5	U	10.0	P	12/01/2025	13:46	LB138072

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q3736
Contract: JPCL01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	5.12	+/-10	U	20.0	P	12/01/2025	14:34	LB138072
	Barium	14.6	+/-50	U	100	P	12/01/2025	14:34	LB138072
	Cadmium	0.50	+/-3	U	6.00	P	12/01/2025	14:34	LB138072
	Chromium	2.12	+/-5	U	10.0	P	12/01/2025	14:34	LB138072
	Lead	2.30	+/-6	U	12.0	P	12/01/2025	14:34	LB138072
	Selenium	9.64	+/-10	U	20.0	P	12/01/2025	14:34	LB138072
	Silver	1.62	+/-5	U	10.0	P	12/01/2025	14:34	LB138072
CCB02	Arsenic	5.12	+/-10	U	20.0	P	12/01/2025	15:31	LB138072
	Barium	14.6	+/-50	U	100	P	12/01/2025	15:31	LB138072
	Cadmium	0.50	+/-3	U	6.00	P	12/01/2025	15:31	LB138072
	Chromium	2.12	+/-5	U	10.0	P	12/01/2025	15:31	LB138072
	Lead	2.30	+/-6	U	12.0	P	12/01/2025	15:31	LB138072
	Selenium	9.64	+/-10	U	20.0	P	12/01/2025	15:31	LB138072
	Silver	1.62	+/-5	U	10.0	P	12/01/2025	15:31	LB138072
CCB03	Arsenic	5.12	+/-10	U	20.0	P	12/01/2025	16:38	LB138072
	Barium	14.6	+/-50	U	100	P	12/01/2025	16:38	LB138072
	Cadmium	0.50	+/-3	U	6.00	P	12/01/2025	16:38	LB138072
	Chromium	2.12	+/-5	U	10.0	P	12/01/2025	16:38	LB138072
	Lead	2.30	+/-6	U	12.0	P	12/01/2025	16:38	LB138072
	Selenium	9.64	+/-10	U	20.0	P	12/01/2025	16:38	LB138072
	Silver	1.62	+/-5	U	10.0	P	12/01/2025	16:38	LB138072
CCB04	Arsenic	5.12	+/-10	U	20.0	P	12/01/2025	17:29	LB138072
	Barium	14.6	+/-50	U	100	P	12/01/2025	17:29	LB138072
	Cadmium	0.50	+/-3	U	6.00	P	12/01/2025	17:29	LB138072
	Chromium	2.12	+/-5	U	10.0	P	12/01/2025	17:29	LB138072
	Lead	2.30	+/-6	U	12.0	P	12/01/2025	17:29	LB138072
	Selenium	9.64	+/-10	U	20.0	P	12/01/2025	17:29	LB138072
	Silver	1.62	+/-5	U	10.0	P	12/01/2025	17:29	LB138072
CCB05	Arsenic	5.12	+/-10	U	20.0	P	12/01/2025	18:20	LB138072
	Barium	14.6	+/-50	U	100	P	12/01/2025	18:20	LB138072
	Cadmium	0.50	+/-3	U	6.00	P	12/01/2025	18:20	LB138072
	Chromium	2.12	+/-5	U	10.0	P	12/01/2025	18:20	LB138072
	Lead	2.30	+/-6	U	12.0	P	12/01/2025	18:20	LB138072
	Selenium	9.64	+/-10	U	20.0	P	12/01/2025	18:20	LB138072
	Silver	1.62	+/-5	U	10.0	P	12/01/2025	18:20	LB138072
CCB06	Arsenic	5.12	+/-10	U	20.0	P	12/01/2025	19:11	LB138072
	Barium	14.6	+/-50	U	100	P	12/01/2025	19:11	LB138072
	Cadmium	0.50	+/-3	U	6.00	P	12/01/2025	19:11	LB138072
	Chromium	2.12	+/-5	U	10.0	P	12/01/2025	19:11	LB138072

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCLO1

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Lead	2.30	+/-6	U	12.0	P	12/01/2025	19:11	LB138072
	Selenium	9.64	+/-10	U	20.0	P	12/01/2025	19:11	LB138072
	Silver	1.62	+/-5	U	10.0	P	12/01/2025	19:11	LB138072
CCB07	Arsenic	5.12	+/-10	U	20.0	P	12/01/2025	19:28	LB138072
	Barium	14.6	+/-50	U	100	P	12/01/2025	19:28	LB138072
	Cadmium	0.50	+/-3	U	6.00	P	12/01/2025	19:28	LB138072
	Chromium	2.12	+/-5	U	10.0	P	12/01/2025	19:28	LB138072
	Lead	2.30	+/-6	U	12.0	P	12/01/2025	19:28	LB138072
	Selenium	9.64	+/-10	U	20.0	P	12/01/2025	19:28	LB138072
	Silver	1.62	+/-5	U	10.0	P	12/01/2025	19:28	LB138072

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	5.12	+/-10	U	20.0	P	12/02/2025	11:38	LB138085
	Barium	14.6	+/-50	U	100	P	12/02/2025	11:38	LB138085
	Cadmium	0.50	+/-3	U	6.00	P	12/02/2025	11:38	LB138085
	Chromium	2.12	+/-5	U	10.0	P	12/02/2025	11:38	LB138085
	Lead	2.30	+/-6	U	12.0	P	12/02/2025	11:38	LB138085
	Selenium	9.64	+/-10	U	20.0	P	12/02/2025	11:38	LB138085
	Silver	1.62	+/-5	U	10.0	P	12/02/2025	11:38	LB138085

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	5.12	+/-10	U	20.0	P	12/02/2025	12:14	LB138085
	Barium	14.6	+/-50	U	100	P	12/02/2025	12:14	LB138085
	Cadmium	0.50	+/-3	U	6.00	P	12/02/2025	12:14	LB138085
	Chromium	2.12	+/-5	U	10.0	P	12/02/2025	12:14	LB138085
	Lead	2.30	+/-6	U	12.0	P	12/02/2025	12:14	LB138085
	Selenium	9.64	+/-10	U	20.0	P	12/02/2025	12:14	LB138085
	Silver	1.62	+/-5	U	10.0	P	12/02/2025	12:14	LB138085
CCB02	Arsenic	5.12	+/-10	U	20.0	P	12/02/2025	13:17	LB138085
	Barium	14.6	+/-50	U	100	P	12/02/2025	13:17	LB138085
	Cadmium	0.50	+/-3	U	6.00	P	12/02/2025	13:17	LB138085
	Chromium	2.12	+/-5	U	10.0	P	12/02/2025	13:17	LB138085
	Lead	2.30	+/-6	U	12.0	P	12/02/2025	13:17	LB138085
	Selenium	9.64	+/-10	U	20.0	P	12/02/2025	13:17	LB138085
	Silver	1.62	+/-5	U	10.0	P	12/02/2025	13:17	LB138085
CCB03	Arsenic	5.12	+/-10	U	20.0	P	12/02/2025	14:15	LB138085
	Barium	14.6	+/-50	U	100	P	12/02/2025	14:15	LB138085
	Cadmium	0.50	+/-3	U	6.00	P	12/02/2025	14:15	LB138085
	Chromium	2.12	+/-5	U	10.0	P	12/02/2025	14:15	LB138085
	Lead	2.30	+/-6	U	12.0	P	12/02/2025	14:15	LB138085
	Selenium	9.64	+/-10	U	20.0	P	12/02/2025	14:15	LB138085
	Silver	1.62	+/-5	U	10.0	P	12/02/2025	14:15	LB138085
CCB04	Arsenic	5.12	+/-10	U	20.0	P	12/02/2025	15:20	LB138085
	Barium	14.6	+/-50	U	100	P	12/02/2025	15:20	LB138085
	Cadmium	0.50	+/-3	U	6.00	P	12/02/2025	15:20	LB138085
	Chromium	2.12	+/-5	U	10.0	P	12/02/2025	15:20	LB138085
	Lead	2.30	+/-6	U	12.0	P	12/02/2025	15:20	LB138085
	Selenium	9.64	+/-10	U	20.0	P	12/02/2025	15:20	LB138085
	Silver	1.62	+/-5	U	10.0	P	12/02/2025	15:20	LB138085
CCB05	Arsenic	5.12	+/-10	U	20.0	P	12/02/2025	16:09	LB138085
	Barium	14.6	+/-50	U	100	P	12/02/2025	16:09	LB138085
	Cadmium	0.50	+/-3	U	6.00	P	12/02/2025	16:09	LB138085
	Chromium	2.12	+/-5	U	10.0	P	12/02/2025	16:09	LB138085
	Lead	2.30	+/-6	U	12.0	P	12/02/2025	16:09	LB138085
	Selenium	9.64	+/-10	U	20.0	P	12/02/2025	16:09	LB138085
	Silver	1.62	+/-5	U	10.0	P	12/02/2025	16:09	LB138085
CCB06	Arsenic	5.12	+/-10	U	20.0	P	12/02/2025	16:59	LB138085
	Barium	14.6	+/-50	U	100	P	12/02/2025	16:59	LB138085
	Cadmium	0.50	+/-3	U	6.00	P	12/02/2025	16:59	LB138085
	Chromium	2.12	+/-5	U	10.0	P	12/02/2025	16:59	LB138085

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Lead	2.30	+/-6	U	12.0	P	12/02/2025	16:59	LB138085
	Selenium	9.64	+/-10	U	20.0	P	12/02/2025	16:59	LB138085
	Silver	1.62	+/-5	U	10.0	P	12/02/2025	16:59	LB138085

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB170765BL		SOLID		Batch Number:	PB170765		Prep Date:	12/01/2025	
	Mercury	0.0070	<0.013	U	0.013	CV	12/02/2025	12:55	LB138081

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Instrument: P4

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB170767BL	SOLID			Batch Number:	PB170767		Prep Date:	12/01/2025	
	Arsenic	0.19	<0.5	U	1.00	P	12/01/2025	17:00	LB138072
	Barium	0.73	<2.5	U	5.00	P	12/01/2025	17:00	LB138072
	Cadmium	0.024	<0.15	U	0.30	P	12/01/2025	17:00	LB138072
	Chromium	0.047	<0.25	U	0.50	P	12/01/2025	17:00	LB138072
	Lead	0.13	<0.3	U	0.60	P	12/01/2025	17:00	LB138072
	Selenium	0.26	<0.5	U	1.00	P	12/01/2025	17:00	LB138072
	Silver	0.12	<0.25	U	0.50	P	12/01/2025	17:00	LB138072

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: <u>JPCL Engineering</u>	SDG No.: <u>Q3736</u>
Contract: <u>JPCL01</u>	Lab Code: <u>ACE</u>
ICS Source: <u>EPA</u>	Instrument ID: <u>P4</u>

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	Arsenic	4.50			-20	20	12/01/2025	13:55	LB138072
	Barium	4.98	6.0	83	-94	106	12/01/2025	13:55	LB138072
	Cadmium	4.78	1.0	478	-5	7	12/01/2025	13:55	LB138072
	Chromium	59.8	52.0	115	42	62	12/01/2025	13:55	LB138072
	Lead	2.07			-12	12	12/01/2025	13:55	LB138072
	Selenium	-14.4			-20	20	12/01/2025	13:55	LB138072
	Silver	-8.77			-10	10	12/01/2025	13:55	LB138072
ICSAB01	Arsenic	106	104	102	88.4	120	12/01/2025	14:09	LB138072
	Barium	515	537	96	437	637	12/01/2025	14:09	LB138072
	Cadmium	979	972	101	826	1120	12/01/2025	14:09	LB138072
	Chromium	528	542	97	460	624	12/01/2025	14:09	LB138072
	Lead	53.1	49.0	108	37	61	12/01/2025	14:09	LB138072
	Selenium	41.4	46.0	90	26	66	12/01/2025	14:09	LB138072
	Silver	174	201	87	170	232	12/01/2025	14:09	LB138072
ICSA01	Arsenic	2.54			-20	20	12/02/2025	11:52	LB138085
	Barium	4.18	6.0	70	-94	106	12/02/2025	11:52	LB138085
	Cadmium	4.20	1.0	420	-5	7	12/02/2025	11:52	LB138085
	Chromium	46.6	52.0	90	42	62	12/02/2025	11:52	LB138085
	Lead	5.64			-12	12	12/02/2025	11:52	LB138085
	Selenium	-2.16			-20	20	12/02/2025	11:52	LB138085
	Silver	8.41			-10	10	12/02/2025	11:52	LB138085
ICSAB01	Arsenic	108	104	104	88.4	120	12/02/2025	11:57	LB138085
	Barium	500	537	93	437	637	12/02/2025	11:57	LB138085
	Cadmium	1000	972	103	826	1120	12/02/2025	11:57	LB138085
	Chromium	538	542	99	460	624	12/02/2025	11:57	LB138085
	Lead	52.6	49.0	107	37	61	12/02/2025	11:57	LB138085
	Selenium	41.4	46.0	90	26	66	12/02/2025	11:57	LB138085
	Silver	185	201	92	170	232	12/02/2025	11:57	LB138085



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client: JPCL Engineering level: low sdg no.: Q3736
contract: JPCL01 lab code: ACE
matrix: Solid sample id: Q3732-01 client id: HD-01-11-26-2025MS
Percent Solids for Sample: 86.9 Spiked ID: Q3732-01MS Percent Solids for Spike Sample: 86.9

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.34		0.0080	J	0.29	114		CV

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: JPCL Engineering **level:** low **sdg no.:** Q3736
contract: JPCL01 **lab code:** ACE
matrix: Solid **sample id:** Q3732-01 **client id:** HD-01-11-26-2025MSD
Percent Solids for Sample: 86.9 **Spiked ID:** Q3732-01MSD **Percent Solids for Spike Sample:** 86.9

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.34		0.0080	J	0.29	114		CV

metals
- 5a -
MATRIX SPIKE SUMMARY

client: <u>JPCL Engineering</u>	level: <u>low</u>	sdg no.: <u>Q3736</u>
contract: <u>JPCL01</u>		lab code: <u>ACE</u>
matrix: <u>Solid</u>	sample id: <u>Q3740-01</u>	client id: <u>WC1MS</u>
Percent Solids for Sample: 90	Spiked ID: Q3740-01MS	Percent Solids for Spike Sample: 90

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/Kg	75 - 125	114	D	75.8	D	38.6	99		P
Barium	mg/Kg	75 - 125	64.2	D	50.7	D	9.7	140		P
Cadmium	mg/Kg	75 - 125	12.3	D	1.90	D	9.7	107		P
Chromium	mg/Kg	75 - 125	16700	D	19200	D	19.3	-13355		P
Lead	mg/Kg	75 - 125	147	D	86.5	D	48.3	125		P
Selenium	mg/Kg	75 - 125	112	D	4.63	UD	96.6	116		P
Silver	mg/Kg	75 - 125	3.24	D	2.31	UD	3.6	108		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: JPCL Engineering	level: low	sdg no.: Q3736
contract: JPCL01		lab code: ACE
matrix: Solid	sample id: Q3740-01	client id: WC1MSD
Percent Solids for Sample: 90	Spiked ID: Q3740-01MSD	Percent Solids for Spike Sample: 90

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/Kg	75 - 125	114	D	75.8	D	38.6	99		P
Barium	mg/Kg	75 - 125	62.2	D	50.7	D	9.7	119		P
Cadmium	mg/Kg	75 - 125	12.2	D	1.90	D	9.7	106		P
Chromium	mg/Kg	75 - 125	16600	D	19200	D	19.3	-13646		P
Lead	mg/Kg	75 - 125	146	D	86.5	D	48.3	124		P
Selenium	mg/Kg	75 - 125	112	D	4.63	UD	96.6	116		P
Silver	mg/Kg	75 - 125	3.13	D	2.31	UD	3.6	105		P

Metals
- 5b -

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: <u>JPCL Engineering</u>	Level: <u>LOW</u>	SDG No.: <u>Q3736</u>
Contract: <u>JPCL01</u>		Lab Code: <u>ACE</u>
Matrix: <u>Solid</u>	Sample ID: <u>Q3732-01</u>	Client ID: <u>HD-01-11-26-2025DUP</u>
Percent Solids for Sample: 86.9	Duplicate ID Q3732-01DUP	Percent Solids for Spike Sample: 86.9

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.0080	J	0.010	J	22		CV

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client:	<u>JPCL Engineering</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q3736</u>
Contract:	<u>JPCL01</u>			Lab Code:	<u>ACE</u>
Matrix:	<u>Solid</u>	Sample ID:	<u>Q3732-01MS</u>	Client ID:	<u>HD-01-11-26-2025MSD</u>
Percent Solids for Sample:	86.9	Duplicate ID	Q3732-01MSD	Percent Solids for Spike Sample:	86.9

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.34		0.34		0		CV

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client:	<u>JPCL Engineering</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q3736</u>
Contract:	<u>JPCL01</u>			Lab Code:	<u>ACE</u>
Matrix:	<u>Solid</u>	Sample ID:	<u>Q3740-01</u>	Client ID:	<u>WC1DUP</u>
Percent Solids for Sample:	90	Duplicate ID	Q3740-01DUP	Percent Solids for Spike Sample:	90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/Kg	20	75.8	D	83.9	D	10		P
Barium	mg/Kg	20	50.7	D	53.7	D	6		P
Cadmium	mg/Kg	20	1.90	D	2.05	D	8		P
Chromium	mg/Kg	20	19200	D	19500	D	2		P
Lead	mg/Kg	20	86.5	D	93.8	D	8		P
Selenium	mg/Kg	20	4.63	UD	4.92	UD			P
Silver	mg/Kg	20	2.31	UD	2.46	UD			P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client:	<u>JPCL Engineering</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q3736</u>
Contract:	<u>JPCL01</u>			Lab Code:	<u>ACE</u>
Matrix:	<u>Solid</u>	Sample ID:	<u>Q3740-01MS</u>	Client ID:	<u>WC1MSD</u>
Percent Solids for Sample:	90	Duplicate ID	Q3740-01MSD	Percent Solids for Spike Sample:	90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/Kg	20	114	D	114	D	0		P
Barium	mg/Kg	20	64.2	D	62.2	D	3		P
Cadmium	mg/Kg	20	12.3	D	12.2	D	1		P
Chromium	mg/Kg	20	16700	D	16600	D	1		P
Lead	mg/Kg	20	147	D	146	D	1		P
Selenium	mg/Kg	20	112	D	112	D	0		P
Silver	mg/Kg	20	3.24	D	3.13	D	3		P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB170765BS Mercury	mg/Kg	0.24	0.25		105	80 - 120	CV

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB170767BS							
Arsenic	mg/Kg	40.0	40.0		100	80 - 120	P
Barium	mg/Kg	10.0	9.61		96	80 - 120	P
Cadmium	mg/Kg	10.0	9.72		97	80 - 120	P
Chromium	mg/Kg	20.0	20.1		100	80 - 120	P
Lead	mg/Kg	50.0	47.6		95	80 - 120	P
Selenium	mg/Kg	100	105		105	80 - 120	P
Silver	mg/Kg	3.8	3.85		101	80 - 120	P

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

HD-01-11-26-2025L

Lab Name: Alliance **Contract:** JPCL01
Lab Code: ACE **Lb No.:** lb138081 **Lab Sample ID :** Q3732-01L **SDG No.:** Q3736
Matrix (soil/water): Solid **Level (low/med):** LOW
Concentration Units: mg/Kg

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Differ- ence	Q	M
Mercury	0.0080 J	0.068 U	100.0		CV

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

WC1L

Lab Name: Alliance **Contract:** JPCL01
Lab Code: ACE **Lb No.:** lb138072 **Lab Sample ID :** Q3740-01L **SDG No.:** Q3736
Matrix (soil/water): Solid **Level (low/med):** LOW
Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference	Q	M
Arsenic	75.8	D	84.8	D	12		P
Barium	50.7	D	52.7	JD	4		P
Cadmium	1.90	D	1.76	JD	8		P
Chromium	17500	OR	19700	D	13		P
Lead	86.5	D	91.6	D	6		P
Selenium	4.63	UD	23.1	UD			P
Silver	2.31	UD	11.6	UD			P



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

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
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000

METAL
PREPARATION &
ANALYICAL
SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Method: _____

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB170765							
PB170765BL	PB170765BL	MB	SOLID	12/01/2025	0.55	35.0	100.00
PB170765BS	PB170765BS	LCS	SOLID	12/01/2025	0.59	35.0	100.00
Q3732-01DUP	HD-01-11-26-2025DUP	DUP	SOLID	12/01/2025	0.54	35.0	86.90
Q3732-01MS	HD-01-11-26-2025MS	MS	SOLID	12/01/2025	0.55	35.0	86.90
Q3732-01MSD	HD-01-11-26-2025MSD	MSD	SOLID	12/01/2025	0.56	35.0	86.90
Q3736-01	D1	SAM	SOLID	12/01/2025	0.60	35.0	83.60

Metals

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SAMPLE PREPARATION SUMMARY

Client: JPCL Engineering

SDG No.: Q3736

Contract: JPCL01

Lab Code: ACE

Method:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB170767							
PB170767BL	PB170767BL	MB	SOLID	12/01/2025	2.00	100.0	100.00
PB170767BS	PB170767BS	LCS	SOLID	12/01/2025	2.00	100.0	100.00
Q3736-01	D1	SAM	SOLID	12/01/2025	2.30	100.0	83.60
Q3740-01DUP	WC1DUP	DUP	SOLID	12/01/2025	2.26	100.0	90.00
Q3740-01MS	WC1MS	MS	SOLID	12/01/2025	2.30	100.0	90.00
Q3740-01MSD	WC1MSD	MSD	SOLID	12/01/2025	2.30	100.0	90.00

metals
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ANALYSIS RUN LOG

Client: JPCL Engineering

Contract: JPCL01

Lab code: ACE

Sdg no.: Q3736

Instrument id number: _____

Method: _____

Run number: LB138072

Start date: 12/01/2025

End date: 12/01/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1235	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1239	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1243	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1247	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1251	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1256	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1316	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1342	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1346	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1350	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1355	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1409	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1430	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1434	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1526	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1531	Ag,As,Ba,Cd,Cr,Pb,Se
Q3736-02	D1	1	1553	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1633	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1638	Ag,As,Ba,Cd,Cr,Pb,Se
PB170767BL	PB170767BL	1	1700	Ag,As,Ba,Cd,Cr,Pb,Se
PB170767BS	PB170767BS	1	1704	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1725	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1729	Ag,As,Ba,Cd,Cr,Pb,Se
Q3736-01	D1	5	1742	Ag,As,Ba,Cd,Cr,Pb,Se
Q3740-01DUP	WC1DUP	5	1812	Ag,As,Ba,Cd,Pb,Se
CCV05	CCV05	1	1816	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	1820	Ag,As,Ba,Cd,Cr,Pb,Se
Q3740-01L	WC1L	25	1825	Ag,As,Ba,Cd,Cr,Pb,Se
Q3740-01MS	WC1MS	5	1829	Ag,As,Ba,Cd,Pb,Se
Q3740-01MSD	WC1MSD	5	1833	Ag,As,Ba,Cd,Pb,Se
CCV06	CCV06	1	1907	Ag,As,Ba,Cd,Cr,Pb,Se
CCB06	CCB06	1	1911	Ag,As,Ba,Cd,Cr,Pb,Se
CCV07	CCV07	1	1924	Ag,As,Ba,Cd,Cr,Pb,Se
CCB07	CCB07	1	1928	Ag,As,Ba,Cd,Cr,Pb,Se

metals
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ANALYSIS RUN LOG

Client: JPCL Engineering

Contract: JPCL01

Lab code: ACE

Sdg no.: Q3736

Instrument id number: _____

Method: _____

Run number: LB138081

Start date: 12/02/2025

End date: 12/02/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1224	HG
S0.2	S0.2	1	1227	HG
S2.5	S2.5	1	1229	HG
S5	S5	1	1231	HG
S7.5	S7.5	1	1233	HG
S10	S10	1	1236	HG
ICV134	ICV134	1	1239	HG
ICB134	ICB134	1	1241	HG
CCV50	CCV50	1	1244	HG
CCB50	CCB50	1	1246	HG
CRA	CRA	1	1248	HG
PB170765BL	PB170765BL	1	1255	HG
PB170765BS	PB170765BS	1	1257	HG
Q3732-01DUP	HD-01-11-26-2025DUP	1	1305	HG
Q3732-01MS	HD-01-11-26-2025MS	1	1307	HG
Q3732-01MSD	HD-01-11-26-2025MSD	1	1313	HG
CCV51	CCV51	1	1315	HG
CCB51	CCB51	1	1317	HG
Q3732-01L	HD-01-11-26-2025L	5	1338	HG
CCV52	CCV52	1	1343	HG
CCB52	CCB52	1	1345	HG
Q3736-01	D1	5	1356	HG
CCV53	CCV53	1	1405	HG
CCB53	CCB53	1	1407	HG

metals
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ANALYSIS RUN LOG

Client: JPCL Engineering

Contract: JPCL01

Lab code: ACE

Sdg no.: Q3736

Instrument id number: _____

Method: _____

Run number: LB138085

Start date: 12/02/2025

End date: 12/02/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1104	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1108	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1112	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1116	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1121	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1125	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1129	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1134	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1138	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1142	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1152	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1157	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1210	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1214	Ag,As,Ba,Cd,Cr,Pb,Se
Q3740-01DUP	WC1DUP	25	1231	Cr
Q3740-01MS	WC1MS	25	1240	Cr
Q3740-01MSD	WC1MSD	25	1244	Cr
CCV02	CCV02	1	1313	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1317	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1411	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1415	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1515	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1520	Ag,As,Ba,Cd,Cr,Pb,Se
CCV05	CCV05	1	1605	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	1609	Ag,As,Ba,Cd,Cr,Pb,Se
CCV06	CCV06	1	1655	Ag,As,Ba,Cd,Cr,Pb,Se
CCB06	CCB06	1	1659	Ag,As,Ba,Cd,Cr,Pb,Se