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Hit Summary Sheet
SW-846

SDG No.: P4615

Order ID: P4615

Client: Portal Partners Tri-Venture

Project ID: Amtrak Sawtooth Bridges 2024

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : P4615-01	B-131-1-SB01 B-131-1-SB01	SOIL	Lead	80.3		0.17	0.66	mg/Kg
Client ID : P4615-02	B-131-2-SB01 B-131-2-SB01	SOIL	Lead	158		0.15	0.58	mg/Kg
Client ID : P4615-03	B-131-3-SB01 B-131-3-SB01	SOIL	Lead	120		0.14	0.57	mg/Kg



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/29/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/29/24
Client Sample ID:	B-131-1-SB01	SDG No.:	P4615
Lab Sample ID:	P4615-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	86.9

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-92-1	Lead	80.3	N	1	0.17	0.66	mg/Kg	10/31/24 12:00	11/01/24 16:12	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group3			

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/29/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/29/24
Client Sample ID:	B-131-2-SB01	SDG No.:	P4615
Lab Sample ID:	P4615-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	85

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-92-1	Lead	158	N	1	0.15	0.58	mg/Kg	10/31/24 12:00	11/04/24 19:23	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group3			

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/29/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/29/24
Client Sample ID:	B-131-3-SB01	SDG No.:	P4615
Lab Sample ID:	P4615-03	Matrix:	SOIL
Level (low/med):	low	% Solid:	86

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-92-1	Lead	120	N	1	0.14	0.57	mg/Kg	10/31/24 12:00	11/04/24 19:19	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group3			

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



- 3a -

Client:	Portal Partners Tri-Venture			SDG No.:	P4615
Contract:	PORT06	Lab Code:	CHEM	Case No.:	P4615
				SAS No.:	P4615

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Lead	12.0	+/-12.0	U	12.0	P	11/01/2024	15:40	LB133257

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Lead	12.0	+/-12.0	U	12.0	P	11/01/2024	16:07	LB133257
CCB02	Lead	12.0	+/-12.0	U	12.0	P	11/01/2024	17:00	LB133257
CCB03	Lead	12.0	+/-12.0	U	12.0	P	11/01/2024	18:01	LB133257
CCB04	Lead	12.0	+/-12.0	U	12.0	P	11/01/2024	18:59	LB133257
CCB05	Lead	12.0	+/-12.0	U	12.0	P	11/01/2024	19:22	LB133257

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Portal Partners Tri-Venture				SDG No.:	P4615			
Contract:	PORT06	Lab Code:	CHEM	Case No.:	P4615	SAS No.:	P4615		
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Lead	12.0	+/-12.0	U	12.0	P	11/04/2024	17:47	LB133296

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Lead	12.0	+/-12.0	U	12.0	P	11/04/2024	18:16	LB133296
CCB02	Lead	12.0	+/-12.0	U	12.0	P	11/04/2024	19:07	LB133296
CCB03	Lead	12.0	+/-12.0	U	12.0	P	11/04/2024	19:58	LB133296
CCB04	Lead	12.0	+/-12.0	U	12.0	P	11/04/2024	21:11	LB133296
CCB05	Lead	12.0	+/-12.0	U	12.0	P	11/04/2024	21:51	LB133296

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Portal Partners Tri-Venture				SDG No.:	P4615			
Contract:	PORT06	Lab Code:	CHEM	Case No.:	P4615	SAS No.:	P4615		
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	14:38	LB133344

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	15:05	LB133344
CCB02	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	15:58	LB133344
CCB03	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	16:49	LB133344
CCB04	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	18:04	LB133344
CCB05	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	18:37	LB133344
CCB06	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	19:12	LB133344
CCB07	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	20:02	LB133344
CCB08	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	21:02	LB133344
CCB09	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	21:55	LB133344
CCB10	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	22:56	LB133344
CCB11	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	23:47	LB133344
CCB12	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	00:43	LB133344
CCB13	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	01:01	LB133344

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture

SDG No.: P4615

Instrument: P4

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB164563BL		SOLID		Batch Number:	PB164563		Prep Date:	10/31/2024	
	Lead	0.59	<0.59	U	0.59	P	11/07/2024	23:55	LB133344



METAL CALIBRATION DATA

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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	Lead	969	1000	97	90 - 110	P	11/01/2024	15:31	LB133257

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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	Lead	10.8	12.0	90	80 - 120	P	11/01/2024	15:35	LB133257

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4615

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615

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	Lead	4830	5000	97	90 - 110	P	11/01/2024	16:03	LB133257
CCV02	Lead	5070	5000	102	90 - 110	P	11/01/2024	16:56	LB133257
CCV03	Lead	5090	5000	102	90 - 110	P	11/01/2024	17:57	LB133257
CCV04	Lead	4870	5000	97	90 - 110	P	11/01/2024	18:55	LB133257
CCV05	Lead	5340	5000	107	90 - 110	P	11/01/2024	19:18	LB133257

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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	Lead	979	1000	98	90 - 110	P	11/04/2024	17:28	LB133296

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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	Lead	11.8	12.0	98	80 - 120	P	11/04/2024	17:37	LB133296

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture SDG No.: P4615
 Contract: PORT06 Lab Code: CHEM Case No.: P4615 SAS No.: P4615
 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	Lead	5120	5000	102	90 - 110	P	11/04/2024	18:11	LB133296
CCV02	Lead	5320	5000	106	90 - 110	P	11/04/2024	19:02	LB133296
CCV03	Lead	5320	5000	106	90 - 110	P	11/04/2024	19:46	LB133296
CCV04	Lead	5020	5000	100	90 - 110	P	11/04/2024	21:07	LB133296
CCV05	Lead	5020	5000	100	90 - 110	P	11/04/2024	21:47	LB133296

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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	Lead	1020	1000	102	90 - 110	P	11/07/2024	13:49	LB133344

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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	Lead	11.4	12.0	95	80 - 120	P	11/07/2024	14:23	LB133344

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4615

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615

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	Lead	4920	5000	98	90 - 110	P	11/07/2024	15:01	LB133344
CCV02	Lead	4800	5000	96	90 - 110	P	11/07/2024	15:53	LB133344
CCV03	Lead	4970	5000	99	90 - 110	P	11/07/2024	16:45	LB133344
CCV04	Lead	5010	5000	100	90 - 110	P	11/07/2024	17:56	LB133344
CCV05	Lead	4880	5000	98	90 - 110	P	11/07/2024	18:32	LB133344
CCV06	Lead	4930	5000	99	90 - 110	P	11/07/2024	19:08	LB133344
CCV07	Lead	4850	5000	97	90 - 110	P	11/07/2024	19:58	LB133344
CCV08	Lead	4840	5000	97	90 - 110	P	11/07/2024	20:58	LB133344
CCV09	Lead	4780	5000	96	90 - 110	P	11/07/2024	21:51	LB133344
CCV10	Lead	4710	5000	94	90 - 110	P	11/07/2024	22:52	LB133344
CCV11	Lead	4800	5000	96	90 - 110	P	11/07/2024	23:43	LB133344
CCV12	Lead	4820	5000	96	90 - 110	P	11/08/2024	00:39	LB133344
CCV13	Lead	4870	5000	97	90 - 110	P	11/08/2024	00:57	LB133344



- 2b -

Client:	<u>Portal Partners Tri-Venture</u>	SDG No.:	<u>P4615</u>		
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>P4615</u>
SAS No.:	<u>P4615</u>				
Initial Calibration Source:	<u></u>				
Continuing Calibration Source:	<u></u>				

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Lead	10.6	12.0	88	40 - 160	P	11/01/2024	15:44	LB133257
CRI01	Lead	11.7	12.0	98	40 - 160	P	11/04/2024	17:52	LB133296
CRI01	Lead	11.3	12.0	94	40 - 160	P	11/07/2024	14:42	LB133344

Metals
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INTERFERENCE CHECK SAMPLE

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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	Lead	7.70			-12	12	11/01/2024	15:48	LB133257
ICSAB01	Lead	58.4	49.0	119	37	61	11/01/2024	15:58	LB133257
ICSA01	Lead	1.99			-12	12	11/04/2024	18:03	LB133296
ICSAB01	Lead	50.7	49.0	104	37	61	11/04/2024	18:07	LB133296
ICSA01	Lead	8.91			-12	12	11/07/2024	14:47	LB133344
ICSAB01	Lead	56.6	49.0	116	37	61	11/07/2024	14:51	LB133344



METAL QC DATA

metals
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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** P4615
contract: PORT06 **lab code:** CHEM **case no.:** P4615 **sas no.:** P4615
matrix: Solid **sample id:** P4645-01 **client id:** Z-02-WCMS
Percent Solids for Sample: 91.2 **Spiked ID:** P4645-01MS **Percent Solids for Spike Sample:** 91.2

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Lead	mg/Kg	75 - 125	192		131		44.2	138	N	P

metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: <u>Portal Partners Tri-Venture</u>	level: <u>low</u>	sdg no.: <u>P4615</u>
contract: <u>PORT06</u>	lab code: <u>CHEM</u>	case no.: <u>P4615</u> sas no.: <u>P4615</u>
matrix: <u>Solid</u>	sample id: <u>P4645-01</u>	client id: <u>Z-02-WCMSD</u>
Percent Solids for Sample: 91.2	Spiked ID: P4645-01MSD	Percent Solids for Spike Sample: 91.2

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Lead	mg/Kg	75 - 125	205		131		45.9	160	N	P

Metals
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POST DIGEST SPIKE SUMMARY

Client:	<u>Portal Partners Tri-Venture</u>	SDG No.:	<u>P4615</u>				
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>P4615</u>	SAS No.:	<u>P4615</u>
Matrix:	<u>Solid</u>	Level:	<u>LOW</u>	Client ID:	<u>Z-02-WCA</u>		
Sample ID:	<u>P4645-01</u>	Spiked ID:	<u>P4645-01A</u>				

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Lead	mg/Kg	75 - 125	199		131		44.9	150		P

A
B
C
D
E
F
G
H
I
J

Metals

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DUPLICATE SAMPLE SUMMARY

Client:	<u>Portal Partners Tri-Venture</u>	Level:	<u>LOW</u>	SDG No.:	<u>P4615</u>
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>P4615</u>
Matrix:	<u>Solid</u>	Sample ID:	<u>P4645-01</u>	Client ID:	<u>Z-02-WCDUP</u>
Percent Solids for Sample:	91.2	Duplicate ID	P4645-01DUP	Percent Solids for Spike Sample:	91.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Lead	mg/Kg	20	131		138		5		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client:	<u>Portal Partners Tri-Venture</u>	Level:	<u>LOW</u>	SDG No.:	<u>P4615</u>
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>P4615</u>
Matrix:	<u>Solid</u>	Sample ID:	<u>P4645-01MS</u>	Client ID:	<u>Z-02-WCMSD</u>
Percent Solids for Sample:	91.2	Duplicate ID	P4645-01MSD	Percent Solids for Spike Sample:	91.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Lead	mg/Kg	20	192		205		7		P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Portal Partners Tri-Venture

SDG No.: P4615

Contract: PORT06

Lab Code: CHEM

Case No.: P4615

SAS No.: P4615

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB164563BS Lead	mg/Kg	49.0	45.3		92	80 - 120	P

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

Z-02-WCL

Lab Name: Chemtech Consulting Group

Contract: PORT06

Lab Code: CHEM Lb No.: lb133296 Lab Sample ID : P4645-01L SDG No.: P4615

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
Lead	131	137	5		P

metals
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ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture

Contract: PORT06

Lab code: CHEM **Case no.:** P4615 **Sas no.:** P4615

Sdg no.: P4615

Instrument id number: **Method:**

Run number: LB133257

Start date: 11/01/2024 **End date:** 11/01/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1506	Pb
S1	S1	1	1510	Pb
S2	S2	1	1514	Pb
S3	S3	1	1518	Pb
S4	S4	1	1523	Pb
S5	S5	1	1527	Pb
ICV01	ICV01	1	1531	Pb
LLICV01	LLICV01	1	1535	Pb
ICB01	ICB01	1	1540	Pb
CRI01	CRI01	1	1544	Pb
ICSA01	ICSA01	1	1548	Pb
ICSAB01	ICSAB01	1	1558	Pb
CCV01	CCV01	1	1603	Pb
CCB01	CCB01	1	1607	Pb
P4615-01	B-131-1-SB01	1	1612	Pb
CCV02	CCV02	1	1656	Pb
CCB02	CCB02	1	1700	Pb
CCV03	CCV03	1	1757	Pb
CCB03	CCB03	1	1801	Pb
CCV04	CCV04	1	1855	Pb
CCB04	CCB04	1	1859	Pb
CCV05	CCV05	1	1918	Pb
CCB05	CCB05	1	1922	Pb

metals
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ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** P4615 **Sas no.:** P4615 **Sdg no.:** P4615

Instrument id number: **Method:** **Run number:** LB133296

Start date: 11/04/2024 **End date:** 11/04/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1657	Pb
S1	S1	1	1702	Pb
S2	S2	1	1706	Pb
S3	S3	1	1710	Pb
S4	S4	1	1714	Pb
S5	S5	1	1718	Pb
ICV01	ICV01	1	1728	Pb
LLICV01	LLICV01	1	1737	Pb
ICB01	ICB01	1	1747	Pb
CRI01	CRI01	1	1752	Pb
ICSA01	ICSA01	1	1803	Pb
ICSAB01	ICSAB01	1	1807	Pb
CCV01	CCV01	1	1811	Pb
CCB01	CCB01	1	1816	Pb
P4645-01DUP	Z-02-WCDUP	1	1842	Pb
P4645-01L	Z-02-WCL	5	1846	Pb
P4645-01MS	Z-02-WCMS	1	1850	Pb
P4645-01MSD	Z-02-WCMSD	1	1854	Pb
P4645-01A	Z-02-WCA	1	1858	Pb
CCV02	CCV02	1	1902	Pb
CCB02	CCB02	1	1907	Pb
P4615-03	B-131-3-SB01	1	1919	Pb
P4615-02	B-131-2-SB01	1	1923	Pb
CCV03	CCV03	1	1946	Pb
CCB03	CCB03	1	1958	Pb
CCV04	CCV04	1	2107	Pb
CCB04	CCB04	1	2111	Pb
CCV05	CCV05	1	2147	Pb
CCB05	CCB05	1	2151	Pb

metals
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ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** P4615 **Sas no.:** P4615 **Sdg no.:** P4615

Instrument id number: **Method:** **Run number:** LB133344

Start date: 11/07/2024 **End date:** 11/08/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1323	Pb
S1	S1	1	1328	Pb
S2	S2	1	1332	Pb
S3	S3	1	1336	Pb
S4	S4	1	1340	Pb
S5	S5	1	1345	Pb
ICV01	ICV01	1	1349	Pb
LLICV01	LLICV01	1	1423	Pb
ICB01	ICB01	1	1438	Pb
CRI01	CRI01	1	1442	Pb
ICSA01	ICSA01	1	1447	Pb
ICSAB01	ICSAB01	1	1451	Pb
CCV01	CCV01	1	1501	Pb
CCB01	CCB01	1	1505	Pb
CCV02	CCV02	1	1553	Pb
CCB02	CCB02	1	1558	Pb
CCV03	CCV03	1	1645	Pb
CCB03	CCB03	1	1649	Pb
CCV04	CCV04	1	1756	Pb
CCB04	CCB04	1	1804	Pb
CCV05	CCV05	1	1832	Pb
CCB05	CCB05	1	1837	Pb
CCV06	CCV06	1	1908	Pb
CCB06	CCB06	1	1912	Pb
CCV07	CCV07	1	1958	Pb
CCB07	CCB07	1	2002	Pb
CCV08	CCV08	1	2058	Pb
CCB08	CCB08	1	2102	Pb
CCV09	CCV09	1	2151	Pb
CCB09	CCB09	1	2155	Pb
CCV10	CCV10	1	2252	Pb
CCB10	CCB10	1	2256	Pb
CCV11	CCV11	1	2343	Pb
CCB11	CCB11	1	2347	Pb
PB164563BL	PB164563BL	1	2355	Pb
PB164563BS	PB164563BS	1	0005	Pb
CCV12	CCV12	1	0039	Pb
CCB12	CCB12	1	0043	Pb
CCV13	CCV13	1	0057	Pb
CCB13	CCB13	1	0101	Pb



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
Instrument ID: _____ **Date:** _____
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4615
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4615 **SAS No.:** P4615
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
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000

LAB CHRONICLE

OrderID:	P4615	OrderDate:	10/29/2024 2:04:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2024
Contact:	Joseph Krupansky	Location:	K51,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4615-01	B-131-1-SB01	SOIL	Metals Group3	6010D	10/29/24	10/31/24	11/01/24	10/29/24
P4615-02	B-131-2-SB01	SOIL	Metals Group3	6010D	10/29/24	10/31/24	11/04/24	10/29/24
P4615-03	B-131-3-SB01	SOIL	Metals Group3	6010D	10/29/24	10/31/24	11/04/24	10/29/24



METAL PREPARATION & ANALYICAL SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>Portal Partners Tri-Venture</u>	SDG No.:	<u>P4615</u>
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>P4615</u>
		SAS No.:	<u>P4615</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB164563							
P4615-01	B-131-1-SB01	SAM	SOLID	10/31/2024	2.08	100.0	86.90
P4615-02	B-131-2-SB01	SAM	SOLID	10/31/2024	2.42	100.0	85.00
P4615-03	B-131-3-SB01	SAM	SOLID	10/31/2024	2.46	100.0	86.00
P4645-01DUP	Z-02-WCDUP	DUP	SOLID	10/31/2024	2.40	100.0	91.20
P4645-01MS	Z-02-WCMS	MS	SOLID	10/31/2024	2.48	100.0	91.20
P4645-01MSD	Z-02-WCMSD	MSD	SOLID	10/31/2024	2.39	100.0	91.20
PB164563BL	PB164563BL	MB	SOLID	10/31/2024	2.04	100.0	100.00
PB164563BS	PB164563BS	LCS	SOLID	10/31/2024	2.04	100.0	100.00

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133257

Review By	mohan	Review On	11/6/2024 4:20:36 AM
Supervise By	kareem	Supervise On	11/6/2024 11:50:09 PM
STD. NAME	STD REF.#		
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086 MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091 MP83092		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	11/01/24 15:06		Kareem	OK
2	S1	S1	CAL2	11/01/24 15:10		Kareem	OK
3	S2	S2	CAL3	11/01/24 15:14		Kareem	OK
4	S3	S3	CAL4	11/01/24 15:18		Kareem	OK
5	S4	S4	CAL5	11/01/24 15:23		Kareem	OK
6	S5	S5	CAL6	11/01/24 15:27		Kareem	OK
7	ICV01	ICV01	ICV	11/01/24 15:31		Kareem	OK
8	LLICV01	LLICV01	LLICV	11/01/24 15:35		Kareem	OK
9	ICB01	ICB01	ICB	11/01/24 15:40		Kareem	OK
10	CRI01	CRI01	CRDL	11/01/24 15:44		Kareem	OK
11	ICSA01	ICSA01	ICSA	11/01/24 15:48		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	11/01/24 15:58		Kareem	OK
13	CCV01	CCV01	CCV	11/01/24 16:03		Kareem	OK
14	CCB01	CCB01	CCB	11/01/24 16:07		Kareem	OK
15	P4615-01	B-131-1-SB01	SAM	11/01/24 16:12		Kareem	OK
16	P4611-03	TP-1	SAM	11/01/24 16:17		Kareem	OK
17	P4611-06	TP-2	SAM	11/01/24 16:21		Kareem	OK
18	P4611-09	TP-3	SAM	11/01/24 16:26		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133257

Review By	mohan	Review On	11/6/2024 4:20:36 AM
Supervise By	kareem	Supervise On	11/6/2024 11:50:09 PM
STD. NAME	STD REF.#		
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086 MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091 MP83092		

19	P4611-12	TP-4	SAM	11/01/24 16:30		Kareem	OK
20	P4611-15	TP-5	SAM	11/01/24 16:35		Kareem	OK
21	P4611-18	TP-6	SAM	11/01/24 16:39		Kareem	OK
22	P4639-01	EO-01-103024	SAM	11/01/24 16:43		Kareem	OK
23	P4639-03	EO-02-103024	SAM	11/01/24 16:48		Kareem	OK
24	P4612-04	MOO-24-00335	SAM	11/01/24 16:52		Kareem	OK
25	CCV02	CCV02	CCV	11/01/24 16:56		Kareem	OK
26	CCB02	CCB02	CCB	11/01/24 17:00		Kareem	OK
27	P4613-02	ARS20-0001	SAM	11/01/24 17:07		Kareem	OK
28	P4616-04	BP-F10	SAM	11/01/24 17:11		Kareem	OK
29	P4616-08	BP-F9-MOVED	SAM	11/01/24 17:16		Kareem	OK
30	P4617-04	CONCRETE-PILE	SAM	11/01/24 17:20	MS Fail For Many Parameter	Kareem	Not Ok
31	P4460-06DL	WB-303-SWDL	SAM	11/01/24 17:25	Not Use	Kareem	Not Ok
32	P4460-06DUPDL	WB-303-SWDUPDL	DUP	11/01/24 17:29	Not Use	Kareem	Not Ok
33	P4460-06LDL	WB-303-SWLDL	SD	11/01/24 17:34	Not Use	Kareem	Not Ok
34	P4460-06MSDL	WB-303-SWMSDL	MS	11/01/24 17:38	Not Use	Kareem	Not Ok
35	P4460-06MSDDL	WB-303-SWMSDDL	MSD	11/01/24 17:43	Not Use	Kareem	Not Ok
36	P4460-06ADL	WB-303-SWADL	PS	11/01/24 17:52	Not Use	Kareem	Not Ok
37	CCV03	CCV03	CCV	11/01/24 17:57		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133257

Review By	mohan	Review On	11/6/2024 4:20:36 AM
Supervise By	kareem	Supervise On	11/6/2024 11:50:09 PM
STD. NAME	STD REF.#		
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086 MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091 MP83092		

38	CCB03	CCB03	CCB	11/01/24 18:01		Kareem	OK
39	P4460-06DL2	WB-303-SWDL2	SAM	11/01/24 18:05	25X for Na	Kareem	Confirms
40	P4460-06DUPDL2	WB-303-SWDUPDL2	DUP	11/01/24 18:10	25X for Na	Kareem	Confirms
41	P4460-06LDL2	WB-303-SWLDL2	SD	11/01/24 18:14	25X for Na	Kareem	Confirms
42	P4460-06MSDL2	WB-303-SWMSDL2	MS	11/01/24 18:18	25X for Na	Kareem	Confirms
43	P4460-06MSDDL2	WB-303-SWMSDDL2	MSD	11/01/24 18:23	25X for Na	Kareem	Confirms
44	P4460-06ADL2	WB-303-SWADL2	PS	11/01/24 18:27	25X for Na	Kareem	Confirms
45	P4617-04DUP	CONCRETE-PILEDU	DUP	11/01/24 18:32	MS Fail For Many Parameter	Kareem	Not Ok
46	P4617-04L	CONCRETE-PILEL	SD	11/01/24 18:36	MS Fail For Many Parameter	Kareem	Not Ok
47	P4617-04MS	CONCRETE-PILEMS	MS	11/01/24 18:40	MS Fail For Many Parameter	Kareem	Not Ok
48	P4617-04MSD	CONCRETE-PILEMS	MSD	11/01/24 18:45	MS Fail For Many Parameter	Kareem	Not Ok
49	CCV04	CCV04	CCV	11/01/24 18:55		Kareem	OK
50	CCB04	CCB04	CCB	11/01/24 18:59		Kareem	OK
51	P4617-04A	CONCRETE-PILEA	PS	11/01/24 19:05	MS Fail For Many Parameter	Kareem	Not Ok
52	LR1	LR1	HIGH STD	11/01/24 19:09		Kareem	OK
53	LR2	LR2	HIGH STD	11/01/24 19:14		Kareem	OK
54	CCV05	CCV05	CCV	11/01/24 19:18		Kareem	OK
55	CCB05	CCB05	CCB	11/01/24 19:22		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133296

Review By	jaswal	Review On	11/6/2024 3:15:05 AM
Supervise By	kareem	Supervise On	11/7/2024 12:42:46 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	11/04/24 16:57		Kareem	OK
2	S1	S1	CAL2	11/04/24 17:02		Kareem	OK
3	S2	S2	CAL3	11/04/24 17:06		Kareem	OK
4	S3	S3	CAL4	11/04/24 17:10		Kareem	OK
5	S4	S4	CAL5	11/04/24 17:14		Kareem	OK
6	S5	S5	CAL6	11/04/24 17:18		Kareem	OK
7	ICV01	ICV01	ICV	11/04/24 17:28		Kareem	OK
8	LLICV01	LLICV01	LLICV	11/04/24 17:37		Kareem	OK
9	ICB01	ICB01	ICB	11/04/24 17:47		Kareem	OK
10	CRI01	CRI01	CRDL	11/04/24 17:52		Kareem	OK
11	ICSA01	ICSA01	ICSA	11/04/24 18:03		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	11/04/24 18:07		Kareem	OK
13	CCV01	CCV01	CCV	11/04/24 18:11		Kareem	OK
14	CCB01	CCB01	CCB	11/04/24 18:16		Kareem	OK
15	P4640-01	MH-3	SAM	11/04/24 18:20		Kareem	OK
16	P4643-01	BP-F9-ADDITIONAL	SAM	11/04/24 18:25		Kareem	OK
17	P4643-05	BP-F8	SAM	11/04/24 18:29		Kareem	OK
18	P4643-09	TP-9	SAM	11/04/24 18:33		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133296

Review By	jaswal	Review On	11/6/2024 3:15:05 AM
Supervise By	kareem	Supervise On	11/7/2024 12:42:46 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

19	P4645-01	Z-02-WC	SAM	11/04/24 18:37		Kareem	OK
20	P4645-01DUP	Z-02-WCDUP	DUP	11/04/24 18:42		Kareem	OK
21	P4645-01L	Z-02-WCL	SD	11/04/24 18:46		Kareem	OK
22	P4645-01MS	Z-02-WCMS	MS	11/04/24 18:50	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
23	P4645-01MSD	Z-02-WCMSD	MSD	11/04/24 18:54	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
24	P4645-01A	Z-02-WCA	PS	11/04/24 18:58	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
25	CCV02	CCV02	CCV	11/04/24 19:02		Kareem	OK
26	CCB02	CCB02	CCB	11/04/24 19:07		Kareem	OK
27	PB164563BL	PB164563BL	MB	11/04/24 19:11	NOT USE	Kareem	Not Ok
28	PB164563BS	PB164563BS	LCS	11/04/24 19:15	NOT USE	Kareem	Not Ok
29	P4615-03	B-131-3-SB01	SAM	11/04/24 19:19		Kareem	OK
30	P4615-02	B-131-2-SB01	SAM	11/04/24 19:23		Kareem	OK
31	P4397-04	WB-301-SW	SAM	11/04/24 19:28	Na high	Kareem	Dilution
32	P4397-04DUP	WB-301-SWDUP	DUP	11/04/24 19:32	Na high	Kareem	Dilution
33	P4397-04L	WB-301-SWL	SD	11/04/24 19:37	Na high	Kareem	Dilution
34	P4397-04MS	WB-301-SWMS	MS	11/04/24 19:41	Na high	Kareem	Dilution
35	CCV03	CCV03	CCV	11/04/24 19:46		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133296

Review By	jaswal	Review On	11/6/2024 3:15:05 AM
Supervise By	kareem	Supervise On	11/7/2024 12:42:46 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

36	CCB03	CCB03	CCB	11/04/24 19:58		Kareem	OK
37	P4397-04MSD	WB-301-SWMSD	MSD	11/04/24 20:04	Na high	Kareem	Dilution
38	P4397-04A	WB-301-SWA	PS	11/04/24 20:08	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
39	P4663-02	TENNANT-PAD-2-3-S	SAM	11/04/24 20:12		Kareem	OK
40	P4663-04	RES-BUILDING-PAD-	SAM	11/04/24 20:17		Kareem	OK
41	P4663-06	RES-BUILDING-PAD-	SAM	11/04/24 20:21		Kareem	OK
42	P4663-08	RES-BUILDING-PAD-	SAM	11/04/24 20:25		Kareem	OK
43	LR1	LR1	HIGH STD	11/04/24 20:33		Kareem	OK
44	LR2	LR2	HIGH STD	11/04/24 20:38		Kareem	OK
45	PB164522TB	PB164522TB	MB	11/04/24 20:44		Kareem	OK
46	PB164564BL	PB164564BL	MB	11/04/24 20:48		Kareem	OK
47	CCV04	CCV04	CCV	11/04/24 21:07		Kareem	OK
48	CCB04	CCB04	CCB	11/04/24 21:11		Kareem	OK
49	PB164564BS	PB164564BS	LCS	11/04/24 21:16	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
50	P4397-04DL	WB-301-SWDL	SAM	11/04/24 21:21	10X for Na	Kareem	Confirms
51	P4397-04DUPDL	WB-301-SWDUPDL	DUP	11/04/24 21:25	10X for Na	Kareem	Confirms
52	P4397-04LDL	WB-301-SWLDL	SD	11/04/24 21:29	10X for Na	Kareem	Confirms
53	P4397-04MSDL	WB-301-SWMSDL	MS	11/04/24 21:34	10X for Na	Kareem	Confirms

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133296

Review By	jaswal	Review On	11/6/2024 3:15:05 AM
Supervise By	kareem	Supervise On	11/7/2024 12:42:46 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

54	P4397-04MSDDL	WB-301-SWMSDDL	MSD	11/04/24 21:38	10X for Na	Kareem	Confirms
55	P4397-04ADL	WB-301-SWADL	PS	11/04/24 21:42	Not used	Kareem	Not Ok
56	CCV05	CCV05	CCV	11/04/24 21:47		Kareem	OK
57	CCB05	CCB05	CCB	11/04/24 21:51		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

Review By	mohan	Review On	11/9/2024 12:07:42 AM
Supervise By	jaswal	Supervise On	11/9/2024 12:08:14 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	11/07/24 13:23		Kareem	OK
2	S1	S1	CAL2	11/07/24 13:28		Kareem	OK
3	S2	S2	CAL3	11/07/24 13:32		Kareem	OK
4	S3	S3	CAL4	11/07/24 13:36		Kareem	OK
5	S4	S4	CAL5	11/07/24 13:40		Kareem	OK
6	S5	S5	CAL6	11/07/24 13:45		Kareem	OK
7	ICV01	ICV01	ICV	11/07/24 13:49		Kareem	OK
8	LLICV01	LLICV01	LLICV	11/07/24 14:23		Kareem	OK
9	ICB01	ICB01	ICB	11/07/24 14:38		Kareem	OK
10	CRI01	CRI01	CRDL	11/07/24 14:42		Kareem	OK
11	ICSA01	ICSA01	ICSA	11/07/24 14:47		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	11/07/24 14:51		Kareem	OK
13	CCV01	CCV01	CCV	11/07/24 15:01		Kareem	OK
14	CCB01	CCB01	CCB	11/07/24 15:05		Kareem	OK
15	P4645-04	Z-02-WC	SAM	11/07/24 15:09		Kareem	OK
16	P4659-04	MH-2	SAM	11/07/24 15:14		Kareem	OK
17	P4660-03	WC-TA2-01-C	SAM	11/07/24 15:18		Kareem	OK
18	P4660-07	WC-WOOD-01-C	SAM	11/07/24 15:22		Kareem	OK

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ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

19	P4660-11	WC-CONCRETE-01-C	SAM	11/07/24 15:27		Kareem	OK
20	P4667-04	BP-F-6	SAM	11/07/24 15:31		Kareem	OK
21	P4667-08	BP-F-5	SAM	11/07/24 15:36		Kareem	OK
22	P4667-12	BP-F-10	SAM	11/07/24 15:40		Kareem	OK
23	P4667-16	BP-F-7	SAM	11/07/24 15:45		Kareem	OK
24	P4679-04	MH-1	SAM	11/07/24 15:49		Kareem	OK
25	CCV02	CCV02	CCV	11/07/24 15:53		Kareem	OK
26	CCB02	CCB02	CCB	11/07/24 15:58		Kareem	OK
27	P4680-04	BP-F26	SAM	11/07/24 16:02		Kareem	OK
28	P4680-08	BP-F25	SAM	11/07/24 16:06		Kareem	OK
29	P4684-01	MECHANIC-ST-SWEI	SAM	11/07/24 16:11		Kareem	OK
30	P4684-01DUP	MECHANIC-ST-SWEI	DUP	11/07/24 16:15		Kareem	OK
31	P4684-01L	MECHANIC-ST-SWEI	SD	11/07/24 16:20		Kareem	OK
32	P4684-01MS	MECHANIC-ST-SWEI	MS	11/07/24 16:24		Kareem	OK
33	P4684-01MSD	MECHANIC-ST-SWEI	MSD	11/07/24 16:28		Kareem	OK
34	P4684-01A	MECHANIC-ST-SWEI	PS	11/07/24 16:32		Kareem	OK
35	PB164560TB	PB164560TB	MB	11/07/24 16:36		Kareem	OK
36	PB164665BL	PB164665BL	MB	11/07/24 16:41		Kareem	OK
37	CCV03	CCV03	CCV	11/07/24 16:45		Kareem	OK
38	CCB03	CCB03	CCB	11/07/24 16:49		Kareem	OK

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CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

39	PB164665BS	PB164665BS	LCS	11/07/24 16:54		Kareem	OK
40	P4693-04	BP-G5-WC	SAM	11/07/24 16:58		Kareem	OK
41	P4693-08	BP-G4-WC	SAM	11/07/24 17:02		Kareem	OK
42	P4694-04	Z-03A	SAM	11/07/24 17:06		Kareem	OK
43	P4694-08	Z-04	SAM	11/07/24 17:11		Kareem	OK
44	P4695-04	Z-01	SAM	11/07/24 17:15		Kareem	OK
45	P4700-04	MH-8	SAM	11/07/24 17:20		Kareem	OK
46	P4701-01	BP-F3	SAM	11/07/24 17:24		Kareem	OK
47	P4701-08	BP-F4	SAM	11/07/24 17:29		Kareem	OK
48	P4711-05	CF-613-COMP-16	SAM	11/07/24 17:33		Kareem	OK
49	CCV04	CCV04	CCV	11/07/24 17:56		Kareem	OK
50	CCB04	CCB04	CCB	11/07/24 18:04		Kareem	OK
51	P4711-10	CF-613-COMP-17	SAM	11/07/24 18:08		Kareem	OK
52	P4702-01	TOTE-1	SAM	11/07/24 18:13		Kareem	OK
53	P4662-06DL2	102524-DDL2	SAM	11/07/24 18:17	NOT USE	Kareem	Not Ok
54	P4662-06DL	102524-DDL	SAM	11/07/24 18:22	NOT USE	Kareem	Not Ok
55	P4662-06	102524-D	SAM	11/07/24 18:28		Kareem	OK
56	CCV05	CCV05	CCV	11/07/24 18:32		Kareem	OK
57	CCB05	CCB05	CCB	11/07/24 18:37		Kareem	OK
58	P4702-01DUP	TOTE-1DUP	DUP	11/07/24 18:43		Kareem	OK

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ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

59	P4702-01L	TOTE-1L	SD	11/07/24 18:47		Kareem	OK
60	P4706-01	TR-04-110424	SAM	11/07/24 18:51		Kareem	OK
61	P4708-01	OR-02-110424	SAM	11/07/24 18:56		Kareem	OK
62	P4711-01	CF-613-COMP-16	SAM	11/07/24 19:00		Kareem	OK
63	P4711-06	CF-613-COMP-17	SAM	11/07/24 19:04		Kareem	OK
64	CCV06	CCV06	CCV	11/07/24 19:08		Kareem	OK
65	CCB06	CCB06	CCB	11/07/24 19:12		Kareem	OK
66	P4702-01MS	TOTE-1MS	MS	11/07/24 19:16		Kareem	OK
67	P4702-01MSD	TOTE-1MSD	MSD	11/07/24 19:20		Kareem	OK
68	P4702-01A	TOTE-1A	PS	11/07/24 19:24		Kareem	OK
69	PB164662TB	PB164662TB	MB	11/07/24 19:28		Kareem	OK
70	PB164685TB	PB164685TB	MB	11/07/24 19:32		Kareem	OK
71	PB164712BL	PB164712BL	MB	11/07/24 19:37		Kareem	OK
72	PB164712BS	PB164712BS	LCS	11/07/24 19:41		Kareem	OK
73	P4720-01	JC-701-COMP-01	SAM	11/07/24 19:45		Kareem	OK
74	P4720-01DUP	JC-701-COMP-01DUP	DUP	11/07/24 19:50		Kareem	OK
75	P4720-01L	JC-701-COMP-01L	SD	11/07/24 19:54		Kareem	OK
76	CCV07	CCV07	CCV	11/07/24 19:58		Kareem	OK
77	CCB07	CCB07	CCB	11/07/24 20:02		Kareem	OK
78	P4617-04	CONCRETE-PILE	SAM	11/07/24 20:08		Kareem	OK

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ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

79	P4617-04DUP	CONCRETE-PILEDU	DUP	11/07/24 20:12		Kareem	OK
80	P4617-04L	CONCRETE-PILEL	SD	11/07/24 20:17		Kareem	OK
81	P4617-04MS	CONCRETE-PILEMS	MS	11/07/24 20:21		Kareem	OK
82	P4617-04MSD	CONCRETE-PILEMS	MSD	11/07/24 20:25		Kareem	OK
83	P4549-04	TT-069-IDWGW-2024	SAM	11/07/24 20:34		Kareem	OK
84	P4617-04A	CONCRETE-PILEA	PS	11/07/24 20:41		Kareem	OK
85	P4549-04DUP	TT-069-IDWGW-2024	DUP	11/07/24 20:45		Kareem	OK
86	P4549-04L	TT-069-IDWGW-2024	SD	11/07/24 20:49		Kareem	OK
87	P4549-04MS	TT-069-IDWGW-2024	MS	11/07/24 20:54		Kareem	OK
88	CCV08	CCV08	CCV	11/07/24 20:58		Kareem	OK
89	CCB08	CCB08	CCB	11/07/24 21:02		Kareem	OK
90	P4549-04MSD	TT-069-IDWGW-2024	MSD	11/07/24 21:08		Kareem	OK
91	P4549-04A	TT-069-IDWGW-2024	PS	11/07/24 21:12		Kareem	OK
92	P4720-01MS	JC-701-COMP-01MS	MS	11/07/24 21:16		Kareem	OK
93	P4720-01MSD	JC-701-COMP-01MS	MSD	11/07/24 21:20		Kareem	OK
94	P4720-01A	JC-701-COMP-01A	PS	11/07/24 21:24		Kareem	OK
95	P4722-03	WC-1(0-6)	SAM	11/07/24 21:29	Fe high	Kareem	Dilution
96	P4722-08	WC-2(0-6)	SAM	11/07/24 21:33		Kareem	OK
97	P4722-13	WC-3(0-6)	SAM	11/07/24 21:38		Kareem	OK
98	PB164723BL	PB164723BL	MB	11/07/24 21:42		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

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CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

99	PB164723BS	PB164723BS	LCS	11/07/24 21:47		Kareem	OK
100	CCV09	CCV09	CCV	11/07/24 21:51		Kareem	OK
101	CCB09	CCB09	CCB	11/07/24 21:55		Kareem	OK
102	P4693-01	BP-G5-WC	SAM	11/07/24 22:09		Kareem	OK
103	P4693-05	BP-G4-WC	SAM	11/07/24 22:13		Kareem	OK
104	P4694-01	Z-03A	SAM	11/07/24 22:17		Kareem	OK
105	P4694-05	Z-04	SAM	11/07/24 22:22		Kareem	OK
106	P4695-01	Z-01	SAM	11/07/24 22:26		Kareem	OK
107	P4697-01	TP-1	SAM	11/07/24 22:30		Kareem	OK
108	P4699-01	MIXED-DEMO	SAM	11/07/24 22:34	Confirm Wt	Kareem	OK
109	P4699-01DUP	MIXED-DEMODUP	DUP	11/07/24 22:39	Confirm	Kareem	OK
110	P4699-01L	MIXED-DEMOL	SD	11/07/24 22:43		Kareem	OK
111	P4699-01MS	MIXED-DEMOMS	MS	11/07/24 22:47		Kareem	OK
112	CCV10	CCV10	CCV	11/07/24 22:52		Kareem	OK
113	CCB10	CCB10	CCB	11/07/24 22:56		Kareem	OK
114	P4699-01MSD	MIXED-DEMOMSD	MSD	11/07/24 23:00		Kareem	OK
115	P4699-01A	MIXED-DEMOA	PS	11/07/24 23:04		Kareem	OK
116	P4700-01	MH-8	SAM	11/07/24 23:09		Kareem	OK
117	P4701-01RE	BP-F3RE	SAM	11/07/24 23:13	NOT USE	Kareem	Not Ok
118	P4701-05	BP-F4	SAM	11/07/24 23:17		Kareem	OK

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ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

119	P4707-01	HD-02-110424	SAM	11/07/24 23:22		Kareem	OK
120	P4718-01	WB-307-SB01	SAM	11/07/24 23:26		Kareem	OK
121	P4718-02	WB-307-SB02	SAM	11/07/24 23:30		Kareem	OK
122	P4719-01	BAYAVE-STOCKPILE	SAM	11/07/24 23:34		Kareem	OK
123	PB164708BL	PB164708BL	MB	11/07/24 23:38		Kareem	OK
124	CCV11	CCV11	CCV	11/07/24 23:43		Kareem	OK
125	CCB11	CCB11	CCB	11/07/24 23:47		Kareem	OK
126	PB164708BS	PB164708BS	LCS	11/07/24 23:51		Kareem	OK
127	PB164563BL	PB164563BL	MB	11/07/24 23:55		Kareem	OK
128	PB164563BS	PB164563BS	LCS	11/08/24 00:05		Kareem	OK
129	PB164634BL	PB164634BL	MB	11/08/24 00:08		Kareem	OK
130	PB164634BS	PB164634BS	LCS	11/08/24 00:13		Kareem	OK
131	PB164647BL	PB164647BL	MB	11/08/24 00:17		Kareem	OK
132	PB164647BS	PB164647BS	LCS	11/08/24 00:21		Kareem	OK
133	P4722-03DL	WC-1(0-6)DL	SAM	11/08/24 00:26	5x for Fe	Kareem	Confirms
134	LR1	LR1	HIGH STD	11/08/24 00:30		Kareem	OK
135	LR2	LR2	HIGH STD	11/08/24 00:35		Kareem	OK
136	CCV12	CCV12	CCV	11/08/24 00:39		Kareem	OK
137	CCB12	CCB12	CCB	11/08/24 00:43		Kareem	OK
138	P4701-01DL	BP-F3DL	SAM	11/08/24 00:48	NOT USE	Kareem	Not Ok

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133344

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CCV Standard	MP83088
ICSA Standard	MP83086,MP83087
CRI Standard	MP83084
LCS Standard	
Chk Standard	MP83091,MP83092

139	CCV13	CCV13	CCV	11/08/24 00:57		Kareem	OK
140	CCB13	CCB13	CCB	11/08/24 01:01		Kareem	OK

SOP ID : M3050B-Digestion-20

SDG No : N/A

Matrix : SOIL

Pipette ID: ICP A

Balance ID : M SC-2

Filter paper ID : N/A

pH Strip ID : N/A

Hood ID : #3

Block ID: 1. HOT BLOCK #3 2. N/A

Start Digest Date: 10/31/2024 Time : 12:00 Temp : 95 °C

End Digest Date: 10/31/2024 Time : 14:10 Temp : 95 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. #3

Dig Technician Signature: *JGP*

Supervisor Signature: *[Signature]*

Temp : 1. 95°C 2. N/A

Standard Name	MLS USED	STD REF. # FROM LOG
LFS-1	1.00	M6000
LFS-2	1.00	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
1:1 HNO3	10.00	MP81119
Conc. HNO3	5.00	M6113
30% H2O2	3.00	M5634
CONC: HCL	10.00	M6095
PTFE Boiling Stones	N/A	M5585
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 # 3 Cell # 34 Temp: 95 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/31/24 15:00	<i>JGP / Met dig</i>	<i>ST Metals Lab</i>
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
P4615-01	B-131-1-SB01	N/A	2.08	100	Brown	Yellow	Medium	N/A	N/A	1
P4615-02	B-131-2-SB01	N/A	2.42	100	Brown	Yellow	Medium	N/A	N/A	2
P4615-03	B-131-3-SB01	N/A	2.46	100	Brown	Yellow	Medium	N/A	N/A	3
P4639-01	EO-01-103024	N/A	2.11	100	Brown	Yellow	Medium	N/A	N/A	4
P4639-03	EO-02-103024	N/A	2.20	100	Brown	Yellow	Medium	N/A	N/A	5
P4640-01	MH-3	N/A	2.36	100	Brown	Yellow	Medium	N/A	N/A	6
P4643-01	BP-F9-ADDITIONAL	N/A	2.27	100	Brown	Yellow	Medium	N/A	N/A	7
P4643-05	BP-F8	N/A	2.29	100	Brown	Yellow	Medium	N/A	N/A	8
P4643-09	TP-9	N/A	2.22	100	Brown	Yellow	Medium	N/A	N/A	9
P4645-01	Z-02-WC	N/A	2.44	100	Brown	Yellow	Medium	N/A	N/A	10
P4645-01DUP	Z-02-WCDUP	N/A	2.40	100	Brown	Yellow	Medium	N/A	N/A	11
P4645-01MS	Z-02-WCMS	N/A	2.48	100	Brown	Yellow	Medium	N/A	M6000,M6009	12
P4645-01MSD	Z-02-WCMSD	N/A	2.39	100	Brown	Yellow	Medium	N/A	M6000,M6009	13
PB164563BL	PBS563	N/A	2.04	100	Colorless	Colorless	Fine	N/A	N/A	14
PB164563BS	LCS563	N/A	2.04	100	Colorless	Colorless	Fine	N/A	M6000,M6009	15