

A P P E N D I X H

HAZARDOUS MATERIALS
INFORMATION





25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

22 October 2020

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Enclosed are the results of analyses for samples received by the laboratory on 10/15/20 14:39. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Joann Marroquin
Director of Operations

██████████	Project: ██████████	
████████████████████	Project Number: █████	Reported:
██████████	Project Manager: ██████████	10/22/20 16:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Sample #1	T203608-01	Soil	10/15/20 00:00	10/15/20 14:39
Sample #2	T203608-02	Soil	10/15/20 00:00	10/15/20 14:39
Sample #3	T203608-03	Soil	10/15/20 00:00	10/15/20 14:39

SunStar Laboratories, Inc

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Joann Marroquin, Director of Operations

Project: [REDACTED]	Reported:
Project Number: [REDACTED]	10/22/20 16:01
Project Manager: [REDACTED]	

Sample #1
T203608-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

SunStar Laboratories, Inc.

TCLP Metals by 6000/7000 Series Methods

Mercury	ND	2.0	ug/l	1	0101637	10/16/20	10/21/20	EPA 1311/7470	
Arsenic	ND	0.10	mg/l	"	0101636	10/16/20	10/21/20	EPA 1311/6010/7 000	
Barium	0.38	0.10	"	"	"	"	"	"	
Cadmium	ND	0.10	"	"	"	"	"	"	
Chromium	ND	0.10	"	"	"	"	"	"	
Lead	1.4	0.10	"	"	"	"	"	"	
Selenium	ND	0.10	"	"	"	"	"	"	
Silver	ND	0.10	"	"	"	"	"	"	

SunStar Laboratories, Inc



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joann Marroquin, Director of Operations

Project: [REDACTED] Project Number: [REDACTED] Project Manager: [REDACTED]	Reported: 10/22/20 16:01
--	-----------------------------

Sample #2
T203608-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

SunStar Laboratories, Inc.

TCLP Metals by 6000/7000 Series Methods

Mercury	ND	2.0	ug/l	1	0101637	10/16/20	10/21/20	EPA 1311/7470	
Arsenic	ND	0.10	mg/l	"	0101636	10/16/20	10/21/20	EPA 1311/6010/7 000	
Barium	0.46	0.10	"	"	"	"	10/21/20	"	
Cadmium	ND	0.10	"	"	"	"	10/21/20	"	
Chromium	ND	0.10	"	"	"	"			
Lead	1.5	0.10	"	"	"	"	10/21/20	"	
Selenium	ND	0.10	"	"	"	"	10/21/20	"	
Silver	ND	0.10	"	"	"	"	"	"	

SunStar Laboratories, Inc



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joann Marroquin, Director of Operations

Project: [REDACTED]	Reported:
Project Number: [REDACTED]	10/22/20 16:01
Project Manager: [REDACTED]	

Sample #3
T203608-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

SunStar Laboratories, Inc.

TCLP Metals by 6000/7000 Series Methods

Mercury	ND	2.0	ug/l	1	0101637	10/16/20	10/21/20	EPA 1311/7470	
Arsenic	ND	0.10	mg/l	"	0101636	10/16/20	10/21/20	EPA 1311/6010/7 000	
Barium	0.37	0.10	"	"	"	"	"	"	
Cadmium	ND	0.10	"	"	"	"	"	"	
Chromium	ND	0.10	"	"	"	"	"	"	
Lead	1.3	0.10	"	"	"	"	"	"	
Selenium	ND	0.10	"	"	"	"	"	"	
Silver	ND	0.10	"	"	"	"	"	"	

SunStar Laboratories, Inc



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joann Marroquin, Director of Operations

██████████	Project: ██████████	Reported:
████████████████████	Project Number: █████	10/22/20 16:01
██████████	Project Manager: ██████████	

TCLP Metals by 6000/7000 Series Methods - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 0101636 - TCLP Metals

Blank (0101636-BLK1)										
					Prepared: 10/16/20 Analyzed: 10/21/20					
Arsenic	ND	0 10	mg/l							
Barium	ND	0 10	"							
Cadmium	ND	0 10	"							
Chromium	ND	0 10	"							
Lead	ND	0 10	"							
Selenium	ND	0 10	"							
Silver	ND	0 10	"							

LCS (0101636-BS1)										
					Prepared: 10/16/20 Analyzed: 10/21/20					
Arsenic	0 568	0 10	mg/l	0 500		114	75-125			
Barium	0 488	0 10	"	0 500		97 7	75-125			
Cadmium	0 527	0 10	"	0 500		105	75-125			
Chromium	0 496	0 10	"	0 500		99 3	75-125			
Lead	0 484	0 10	"	0 500		96 9	75-125			

Matrix Spike (0101636-MS1)										
			Source: T203608-01		Prepared: 10/16/20 Analyzed: 10/21/20					
Arsenic	0 510	0 10	mg/l	0 500	ND	102	75-125			
Barium	0 810	0 10	"	0 500	0 378	86 3	75 125			
Cadmium	0 469	0 10	"	0 500	0 000237	93 7	75-125			
Chromium	0 446	0 10	"	0 500	0 00161	88 8	75-125			
Lead	1 82	0 10	"	0 500	1 42	80 4	75-125			

Matrix Spike Dup (0101636-MSD1)										
			Source: T203608-01		Prepared: 10/16/20 Analyzed: 10/21/20					
Arsenic	0 497	0 10	mg/l	0 500	ND	99 4	75-125	2 64	30	
Barium	0 792	0 10	"	0 500	0 378	82 7	75-125	2 19	30	
Cadmium	0 460	0 10	"	0 500	0 000237	91 9	75-125	2 02	30	
Chromium	0 433	0 10	"	0 500	0 00161	86 3	75-125	2 83	30	
Lead	1 79	0 10	"	0 500	1 42	74 4	75-125	1 64	30	QM-05

SunStar Laboratories, Inc

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Joann Marroquin, Director of Operations

██████████	Project: ██████████	Reported:
████████████████████	Project Number: █████	10/22/20 16:01
██████████	Project Manager: ██████████	

TCLP Metals by 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 0101637 - TCLP Hg CV

Blank (0101637-BLK1)		Prepared: 10/16/20 Analyzed: 10/21/20								
Mercury	ND	2.0	ug/l							
LCS (0101637-BS1)		Prepared: 10/16/20 Analyzed: 10/21/20								
Mercury	5.34	2.0	ug/l	5.00		107	75-125			
Matrix Spike (0101637-MS1)		Source: T203608-01		Prepared: 10/16/20 Analyzed: 10/21/20						
Mercury	4.90	2.0	ug/l	5.00	0.0140	97.8	75-125			
Matrix Spike Dup (0101637-MSD1)		Source: T203608-01		Prepared: 10/16/20 Analyzed: 10/21/20						
Mercury	5.10	2.0	ug/l	5.00	0.0140	102	75-125	3.96	30	

SunStar Laboratories, Inc



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joann Marroquin, Director of Operations

Project: [REDACTED]

Project Number: [REDACTED]

Project Manager: [REDACTED]

Reported:

10/22/20 16:01

Notes and Definitions

- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

SunStar Laboratories, Inc



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joann Marroquin, Director of Operations

WORK ORDER

T203608

Client: [REDACTED]	Project Manager: Joann Marroquin
Project: [REDACTED]	Project Number: [none]

Report To:

[REDACTED]

Date Due: 10/22/20 17:00 (5 day TAT)
 Received By: Joann Marroquin Date Received: 10/15/20 14:39
 Logged In By: Joann Marroquin Date Logged In: 10/15/20 15:20

Samples Received at:			
Custody Seals	No	Received On Ice	No
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirmed	No		

Analysis	Due	TAT	Expires	Comments
T203608-01 Sample #1 [Soil] Sampled 10/15/20 00:00 (GMT-08:00) Pacific Time (US &				
TCLP Leaching Procedure Metals	10/22/20 15:00	5	04/13/21 00:00	
TCLP RCRA 8	10/22/20 15:00	5	04/13/21 00:00	
T203608-02 Sample #2 [Soil] Sampled 10/15/20 00:00 (GMT-08:00) Pacific Time (US &				
TCLP Leaching Procedure Metals	10/22/20 15:00	5	04/13/21 00:00	
TCLP RCRA 8	10/22/20 15:00	5	04/13/21 00:00	
T203608-03 Sample #3 [Soil] Sampled 10/15/20 00:00 (GMT-08:00) Pacific Time (US &				
TCLP Leaching Procedure Metals	10/22/20 15:00	5	04/13/21 00:00	
TCLP RCRA 8	10/22/20 15:00	5	04/13/21 00:00	

Analysis groups included in this work order	
<u>TCLP RCRA 8</u>	_____
sub TCLP RCRA 8	sub TCLP Hg CV



WORK ORDER

T203608

Client: [REDACTED]	Project Manager: Joann Marroquin
Project: [REDACTED]	Project Number: [none]

Report To:
[REDACTED]

Date Due: 10/22/20 17:00 (5 day TAT)	Date Received: 10/15/20 14:39
Received By: Joann Marroquin	Date Logged In: 10/15/20 15:20
Logged In By: Joann Marroquin	

Samples Received at:			
Custody Seals	No	Received On Ice	No
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirmed	No		

Analysis	Due	TAT	Expires	Comments
T203608-01 Sample #1 [Soil] Sampled 10/15/20 00:00 (GMT-08:00) Pacific Time (US &				
TCLP Leaching Procedure Metals	10/22/20 15:00	5	04/13/21 00:00	
TCLP RCRA 8	10/22/20 15:00	5	04/13/21 00:00	
T203608-02 Sample #2 [Soil] Sampled 10/15/20 00:00 (GMT-08:00) Pacific Time (US &				
TCLP Leaching Procedure Metals	10/22/20 15:00	5	04/13/21 00:00	
TCLP RCRA 8	10/22/20 15:00	5	04/13/21 00:00	
T203608-03 Sample #3 [Soil] Sampled 10/15/20 00:00 (GMT-08:00) Pacific Time (US &				
TCLP Leaching Procedure Metals	10/22/20 15:00	5	04/13/21 00:00	
TCLP RCRA 8	10/22/20 15:00	5	04/13/21 00:00	

Analysis groups included in this work order	
<u>TCLP RCRA 8</u>	
sub TCLP RCRA 8	sub TCLP Hg CV



Excelchem Laboratories, Inc.

A Silver State Analytical Company

STLC/TTLC Regulatory Limits

Soluble Threshold Limit Concentration (STLC) and Total Threshold Limit Concentration (TTLC) Regulatory Limits*

Organic Substances	STLC Level (mg/L)	TTLC Level (mg/Kg - wet weight)
Aldrin	0.14	1.4
Chlordane	0.25	2.5
DDT, DDE, DDD	0.1	1
2,4-Dichlorophenoxyacetic acid	10	100
Dieldrin	0.8	8
Dioxin (2,3,7,8-TCDD)	0.001	0.01
Endrin	0.02	0.2
Heptachlor	0.47	4.7
Kepone	2.1	21
Lead compounds, organic	-	13
Lindane (gamma-BHC)	0.4	4
Methoxychlor	10	100
Mirex	2.1	21
Pentachlorophenol	1.7	17
PCBs (Polychlorinated Biphenyls)	5.0	50
Toxaphene	0.5	5
Trichloroethylene	204	2040
2,4,-Trichlorophenoxypropionic acid	1.0	10

* Used for California regulated hazardous waste. Source is California Code of Regulations, Title 22, Chapter 11, Article 3.



Excelchem Laboratories, Inc.

A Silver State Analytical Company

STLC/TTLC Regulatory Limits

Soluble Threshold Limit Concentration (STLC) and Total Threshold Limit Concentration (TTLC) Regulatory Limits*

Inorganic Substances	STLC** Level (mg/L)	TTLC*** Level (mg/Kg - wet weight)
Antimony (and/or Sb compounds)	15	500
Arsenic (and/or As compounds)	5	50
Asbestos	-	1%
Barium (and/or Ba compounds)	100	10000****
Beryllium (and/or Be compounds)	0.75	75
Cadmium (and/or Cd compounds)	1	100
Chromium VI compounds	5	500
Chromium (and/or Cr III compounds)	5*****	2500
Cobalt (and/or Co compounds)	80	8000
Copper (and/or Cu compounds)	25	2500
Fluoride salts	180	18000
Lead (and/or Pb compounds)	5	1000
Mercury (and/or Hg compounds)	0.2	20
Molybdenum (and/or Mo compounds)	350	3500
Nickel (and/or Ni compounds)	20.0	2000
Selenium (and/or Se compounds)	1	100
Silver (and/or Ag compounds)	5	500
Thallium (and/or Tl compounds)	7.0	700
Vanadium (and/or V compounds)	24	2400
Zinc (and/or Zn compounds)	250	5000

* Used for California regulated hazardous waste. Source is California Code of Regulations, Title 22, Chapter 11, Article 3.

** If a substance is ten times (by rule of thumb) the STLC value found on the TTLC, the Waste Extraction test (WET) should be used. If any substance in the waste so analyze equals or exceeds the STLC value, it is considered a hazardous toxic waste.

***If a substance in a waste equals or exceeds the TTLC level, it is considered a hazardous toxic waste.

**** Excludes barium Sulfate

***** If the soluble chromium as determined by the TCLP is less than 5mg/L, and the soluble chromium as determined by the STLC test equals or exceeds 560mg/L, and the waste is not otherwise identified as a RCRA hazardous waste, then the waste is a non-RCRA hazardous waste.



Excelchem Laboratories, Inc.

A Silver State Analytical Company

TCLP

Toxicity Characteristic Leaching Procedure Regulatory Levels

Metals	TCLP Reg Level	units
Arsenic	5.0	mg/L
Barium	100.0	mg/L
Cadmium	1.0	mg/L
Chromium	5.0	mg/L
Lead	5.0	mg/L
Mercury	0.2	mg/L
Selenium	1.0	mg/L
Silver	5.0	mg/L

Volatile Organics	TCLP Reg Level	units
Benzene	0.5	mg/L
Carbon Tetrachloride	0.5	mg/L
Chlorobenzene	100.0	mg/L
Chloroform	6.0	mg/L
1,4-Dichlorobenzene	7.5	mg/L
1,2-Dichloroethane	0.5	mg/L
1,1-Dichloroethylene	0.7	mg/L
Methyl Ethyl Ketone	200.0	mg/L
tetrachloroethylene	0.7	mg/L
Trichloroethylene	0.5	mg/L
Vinyl Chloride	0.2	mg/L

Semi-Volatile Organics	TCLP Reg Level	units
o-Creosol*	200.0	mg/L
m-Creosol*	200.0	mg/L
p-Creosol*	200.0	mg/L
Creosol*	200.0	mg/L
2,4-Dinitrotoluene**	0.1	mg/L
Hexachlorobenzene**	0.1	mg/L
Hexachlorobutadiene	0.5	mg/L
Hexachloroethane	3.0	mg/L
Nitrobenzene	2.0	mg/L
Petachlorophenol	100.0	mg/L
Pyridine**	5.0	mg/L
2,4,5-Trichlorophenol	400.0	mg/L
2,4,6-Trichlorophenol	2.0	mg/L

* If o-, m-, and p-Creosol cannot be differentiated, total Creosol can be used.

** Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.



Excelchem Laboratories, Inc.
A Silver State Analytical Company

TCLP

Toxicity Characteristic Leaching Procedure Regulatory Levels

Organochlorine Pesticides	TCLP Reg Level	units
Chlordane	0.03	mg/L
Endrin	0.02	mg/L
Heptachlor (and Heptachlor Epoxide)	0.008	mg/L
Lindane (gamma-BHC)	0.40	mg/L
Methoxychlor	10.0	mg/L
Toxaphene	0.50	mg/L

Chlorophenoxy Acid Herbicides	TCLP Reg Level	units
2,4-D	10.0	mg/L
2,4,5-TP (Silvex)	1.0	mg/L