



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1611472

Report Created for: Schutze & Associates, Inc.

44358 South Grimmer Blvd
Fremont, CA 94538

Project Contact: Kevin Loeb

Project P.O.:

Project Name: Tung Soil Vapor Sampling/SCS 539.3

Project Received: 11/09/2016

Analytical Report reviewed & approved for release on 11/16/2016 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Schutze & Associates, Inc.
Project: Tung Soil Vapor Sampling/SCS 539.3
WorkOrder: 1611472

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/11/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: µL/L

Atmospheric Gases

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-3"	1611472-001A	SoilGas	11/07/2016 11:00	GC26	129806

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.80	25.55	AK

Analytes	Result	RL	DF	Date Analyzed
Oxygen	140,000	4000	1	11/11/2016 14:53

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-5'	1611472-002A	SoilGas	11/07/2016 11:00	GC26	129806

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.17	24.25	AK

Analytes	Result	RL	DF	Date Analyzed
Oxygen	130,000	4000	1	11/11/2016 15:14

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-2-5'	1611472-003A	SoilGas	11/07/2016 11:00	GC26	129806

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.23	26.44	AK

Analytes	Result	RL	DF	Date Analyzed
Oxygen	110,000	4000	1	11/11/2016 15:35

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/11/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: µL/L

Atmospheric Gases

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
DUP	1611472-004A	SoilGas	11/07/2016 13:00	GC26	129806

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.28	24.57	AK

Analytes	Result	RL	DF	Date Analyzed
Oxygen	140,000	4000	1	11/11/2016 15:56

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/14/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: %

Helium

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-3"	1611472-001A	SoilGas	11/07/2016 11:00	GC26	129810

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.80	25.55	AK

Analytes	Result	RL	DF	Date Analyzed
Helium	0.23	0.050	1	11/14/2016 15:58

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-5'	1611472-002A	SoilGas	11/07/2016 11:00	GC26	129810

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.17	24.25	AK

Analytes	Result	RL	DF	Date Analyzed
Helium	13	1.2	25	11/14/2016 17:15

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-2-5'	1611472-003A	SoilGas	11/07/2016 11:00	GC26	129810

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.23	26.44	AK

Analytes	Result	RL	DF	Date Analyzed
Helium	10	1.2	25	11/14/2016 17:28

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/14/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: %

Helium

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
DUP	1611472-004A	SoilGas	11/07/2016 13:00	GC26	129810

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.28	24.57	AK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	11/14/2016 16:48

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/11/16-11/14/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: uL/L

Light Gases

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-3"	1611472-001A	SoilGas	11/07/2016 11:00	GC26	129807

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.80	25.55	AK

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	300	40	1	11/14/2016 10:05
Methane	2.9	2.0	1	11/14/2016 10:05

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-5'	1611472-002A	SoilGas	11/07/2016 11:00	GC26	129807

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.17	24.25	AK

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	1000	40	1	11/14/2016 10:26
Methane	5.8	2.0	1	11/14/2016 10:26

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-2-5'	1611472-003A	SoilGas	11/07/2016 11:00	GC26	129807

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.23	26.44	AK

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	20,000	160	4	11/11/2016 15:35
Methane	ND	2.0	1	11/14/2016 10:47

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/11/16-11/14/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: uL/L

Light Gases

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
DUP	1611472-004A	SoilGas	11/07/2016 13:00	GC26	129807

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.28	24.57	AK

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	1100	40	1	11/14/2016 11:08
Methane	6.0	2.0	1	11/14/2016 11:08

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-3"	1611472-001A	SoilGas	11/07/2016 11:00	GC29	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.80	25.55	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	270	60	1	11/15/2016 20:26
Acrolein	ND	5.8	1	11/15/2016 20:26
Acrylonitrile	1.5	1.1	1	11/15/2016 20:26
tert-Amyl methyl ether (TAME)	ND	2.1	1	11/15/2016 20:26
Benzene	5.2	1.6	1	11/15/2016 20:26
Benzyl chloride	ND	2.6	1	11/15/2016 20:26
Bromodichloromethane	ND	3.5	1	11/15/2016 20:26
Bromoform	ND	5.2	1	11/15/2016 20:26
Bromomethane	ND	2.0	1	11/15/2016 20:26
1,3-Butadiene	ND	1.1	1	11/15/2016 20:26
2-Butanone (MEK)	110	75	1	11/15/2016 20:26
t-Butyl alcohol (TBA)	ND	31	1	11/15/2016 20:26
Carbon Disulfide	2.0	1.6	1	11/15/2016 20:26
Carbon Tetrachloride	ND	3.2	1	11/15/2016 20:26
Chlorobenzene	ND	2.4	1	11/15/2016 20:26
Chloroethane	ND	1.3	1	11/15/2016 20:26
Chloroform	7.8	2.4	1	11/15/2016 20:26
Chloromethane	ND	1.0	1	11/15/2016 20:26
Cyclohexane	ND	18	1	11/15/2016 20:26
Dibromochloromethane	ND	4.4	1	11/15/2016 20:26
1,2-Dibromo-3-chloropropane	ND	0.12	1	11/15/2016 20:26
1,2-Dibromoethane (EDB)	ND	3.9	1	11/15/2016 20:26
1,2-Dichlorobenzene	ND	3.0	1	11/15/2016 20:26
1,3-Dichlorobenzene	ND	3.0	1	11/15/2016 20:26
1,4-Dichlorobenzene	ND	3.0	1	11/15/2016 20:26
Dichlorodifluoromethane	3.0	2.5	1	11/15/2016 20:26
1,1-Dichloroethane	ND	2.0	1	11/15/2016 20:26
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	11/15/2016 20:26
1,1-Dichloroethene	ND	2.0	1	11/15/2016 20:26
cis-1,2-Dichloroethene	ND	2.0	1	11/15/2016 20:26
trans-1,2-Dichloroethene	ND	2.0	1	11/15/2016 20:26
1,2-Dichloropropane	ND	2.4	1	11/15/2016 20:26
cis-1,3-Dichloropropene	ND	2.3	1	11/15/2016 20:26

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-3"	1611472-001A	SoilGas	11/07/2016 11:00	GC29	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.80	25.55	AK

Analytes	Result	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	2.3	1	11/15/2016 20:26
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	11/15/2016 20:26
Diisopropyl ether (DIPE)	ND	2.1	1	11/15/2016 20:26
1,4-Dioxane	ND	1.8	1	11/15/2016 20:26
Ethanol	ND	96	1	11/15/2016 20:26
Ethyl acetate	ND	1.8	1	11/15/2016 20:26
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	11/15/2016 20:26
Ethylbenzene	14	2.2	1	11/15/2016 20:26
4-Ethyltoluene	5.8	2.5	1	11/15/2016 20:26
Freon 113	ND	3.9	1	11/15/2016 20:26
Heptane	ND	21	1	11/15/2016 20:26
Hexachlorobutadiene	ND	5.4	1	11/15/2016 20:26
Hexane	ND	18	1	11/15/2016 20:26
2-Hexanone	4.3	2.1	1	11/15/2016 20:26
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	11/15/2016 20:26
Methyl-t-butyl ether (MTBE)	ND	1.8	1	11/15/2016 20:26
Methylene chloride	ND	8.8	1	11/15/2016 20:26
Methyl methacrylate	ND	2.1	1	11/15/2016 20:26
Naphthalene	ND	5.3	1	11/15/2016 20:26
Propene	ND	88	1	11/15/2016 20:26
Styrene	ND	2.2	1	11/15/2016 20:26
1,1,1,2-Tetrachloroethane	ND	3.5	1	11/15/2016 20:26
1,1,2,2-Tetrachloroethane	ND	3.5	1	11/15/2016 20:26
Tetrachloroethene	ND	3.4	1	11/15/2016 20:26
Tetrahydrofuran	150	3.0	1	11/15/2016 20:26
Toluene	51	1.9	1	11/15/2016 20:26
1,2,4-Trichlorobenzene	ND	3.8	1	11/15/2016 20:26
1,1,1-Trichloroethane	ND	2.8	1	11/15/2016 20:26
1,1,2-Trichloroethane	ND	2.8	1	11/15/2016 20:26
Trichloroethene	ND	2.8	1	11/15/2016 20:26
Trichlorofluoromethane	ND	2.8	1	11/15/2016 20:26
1,2,4-Trimethylbenzene	13	2.5	1	11/15/2016 20:26
1,3,5-Trimethylbenzene	5.1	2.5	1	11/15/2016 20:26

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-3"	1611472-001A	SoilGas	11/07/2016 11:00	GC29	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.80	25.55	AK

Analytes	Result	RL	DF	Date Analyzed
Vinyl Acetate	ND	18	1	11/15/2016 20:26
Vinyl Chloride	ND	1.3	1	11/15/2016 20:26
Xylenes, Total	70	6.6	1	11/15/2016 20:26
Surrogates	REC (%)	Limits		
1,2-DCA-d4	106	70-130		11/15/2016 20:26
Toluene-d8	92	70-130		11/15/2016 20:26
4-BFB	102	70-130		11/15/2016 20:26



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-5'	1611472-002A	SoilGas	11/07/2016 11:00	GC29	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.17	24.25	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	11/15/2016 21:12
Acrolein	ND	5.8	1	11/15/2016 21:12
Acrylonitrile	ND	1.1	1	11/15/2016 21:12
tert-Amyl methyl ether (TAME)	ND	2.1	1	11/15/2016 21:12
Benzene	49	1.6	1	11/15/2016 21:12
Benzyl chloride	ND	2.6	1	11/15/2016 21:12
Bromodichloromethane	ND	3.5	1	11/15/2016 21:12
Bromoform	ND	5.2	1	11/15/2016 21:12
Bromomethane	ND	2.0	1	11/15/2016 21:12
1,3-Butadiene	ND	1.1	1	11/15/2016 21:12
2-Butanone (MEK)	ND	75	1	11/15/2016 21:12
t-Butyl alcohol (TBA)	ND	31	1	11/15/2016 21:12
Carbon Disulfide	5.9	1.6	1	11/15/2016 21:12
Carbon Tetrachloride	ND	3.2	1	11/15/2016 21:12
Chlorobenzene	ND	2.4	1	11/15/2016 21:12
Chloroethane	ND	1.3	1	11/15/2016 21:12
Chloroform	11	2.4	1	11/15/2016 21:12
Chloromethane	ND	1.0	1	11/15/2016 21:12
Cyclohexane	44	18	1	11/15/2016 21:12
Dibromochloromethane	ND	4.4	1	11/15/2016 21:12
1,2-Dibromo-3-chloropropane	ND	0.12	1	11/15/2016 21:12
1,2-Dibromoethane (EDB)	ND	3.9	1	11/15/2016 21:12
1,2-Dichlorobenzene	ND	3.0	1	11/15/2016 21:12
1,3-Dichlorobenzene	ND	3.0	1	11/15/2016 21:12
1,4-Dichlorobenzene	ND	3.0	1	11/15/2016 21:12
Dichlorodifluoromethane	2.5	2.5	1	11/15/2016 21:12
1,1-Dichloroethane	ND	2.0	1	11/15/2016 21:12
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	11/15/2016 21:12
1,1-Dichloroethene	ND	2.0	1	11/15/2016 21:12
cis-1,2-Dichloroethene	ND	2.0	1	11/15/2016 21:12
trans-1,2-Dichloroethene	ND	2.0	1	11/15/2016 21:12
1,2-Dichloropropane	ND	2.4	1	11/15/2016 21:12
cis-1,3-Dichloropropene	ND	2.3	1	11/15/2016 21:12

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-5'	1611472-002A	SoilGas	11/07/2016 11:00	GC29	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.17	24.25	AK

Analytes	Result	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	2.3	1	11/15/2016 21:12
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	11/15/2016 21:12
Diisopropyl ether (DIPE)	ND	2.1	1	11/15/2016 21:12
1,4-Dioxane	ND	1.8	1	11/15/2016 21:12
Ethanol	ND	96	1	11/15/2016 21:12
Ethyl acetate	ND	1.8	1	11/15/2016 21:12
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	11/15/2016 21:12
Ethylbenzene	8.9	2.2	1	11/15/2016 21:12
4-Ethyltoluene	4.1	2.5	1	11/15/2016 21:12
Freon 113	ND	3.9	1	11/15/2016 21:12
Heptane	33	21	1	11/15/2016 21:12
Hexachlorobutadiene	ND	5.4	1	11/15/2016 21:12
Hexane	41	18	1	11/15/2016 21:12
2-Hexanone	5.3	2.1	1	11/15/2016 21:12
4-Methyl-2-pentanone (MIBK)	3.3	2.1	1	11/15/2016 21:12
Methyl-t-butyl ether (MTBE)	ND	1.8	1	11/15/2016 21:12
Methylene chloride	ND	8.8	1	11/15/2016 21:12
Methyl methacrylate	ND	2.1	1	11/15/2016 21:12
Naphthalene	ND	5.3	1	11/15/2016 21:12
Propene	ND	120	1	11/15/2016 21:12
Styrene	ND	2.2	1	11/15/2016 21:12
1,1,1,2-Tetrachloroethane	ND	3.5	1	11/15/2016 21:12
1,1,2,2-Tetrachloroethane	ND	3.5	1	11/15/2016 21:12
Tetrachloroethene	ND	3.4	1	11/15/2016 21:12
Tetrahydrofuran	ND	3.0	1	11/15/2016 21:12
Toluene	34	1.9	1	11/15/2016 21:12
1,2,4-Trichlorobenzene	ND	3.8	1	11/15/2016 21:12
1,1,1-Trichloroethane	ND	2.8	1	11/15/2016 21:12
1,1,2-Trichloroethane	ND	2.8	1	11/15/2016 21:12
Trichloroethene	3.7	2.8	1	11/15/2016 21:12
Trichlorofluoromethane	ND	2.8	1	11/15/2016 21:12
1,2,4-Trimethylbenzene	11	2.5	1	11/15/2016 21:12
1,3,5-Trimethylbenzene	3.5	2.5	1	11/15/2016 21:12

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-1-5'	1611472-002A	SoilGas	11/07/2016 11:00	GC29	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.17	24.25	AK

Analytes	Result	RL	DF	Date Analyzed
Vinyl Acetate	ND	18	1	11/15/2016 21:12
Vinyl Chloride	ND	1.3	1	11/15/2016 21:12
Xylenes, Total	47	6.6	1	11/15/2016 21:12
Surrogates	REC (%)	Limits		Date Analyzed
1,2-DCA-d4	104	70-130		11/15/2016 21:12
Toluene-d8	93	70-130		11/15/2016 21:12
4-BFB	102	70-130		11/15/2016 21:12



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-2-5'	1611472-003A	SoilGas	11/07/2016 11:00	GC29	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.23	26.44	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	130	60	1	11/15/2016 21:57
Acrolein	ND	5.8	1	11/15/2016 21:57
Acrylonitrile	ND	1.1	1	11/15/2016 21:57
tert-Amyl methyl ether (TAME)	ND	2.1	1	11/15/2016 21:57
Benzene	7.0	1.6	1	11/15/2016 21:57
Benzyl chloride	ND	2.6	1	11/15/2016 21:57
Bromodichloromethane	ND	3.5	1	11/15/2016 21:57
Bromoform	ND	5.2	1	11/15/2016 21:57
Bromomethane	ND	2.0	1	11/15/2016 21:57
1,3-Butadiene	ND	1.1	1	11/15/2016 21:57
2-Butanone (MEK)	ND	75	1	11/15/2016 21:57
t-Butyl alcohol (TBA)	ND	31	1	11/15/2016 21:57
Carbon Disulfide	2.8	1.6	1	11/15/2016 21:57
Carbon Tetrachloride	ND	3.2	1	11/15/2016 21:57
Chlorobenzene	ND	2.4	1	11/15/2016 21:57
Chloroethane	ND	1.3	1	11/15/2016 21:57
Chloroform	ND	2.4	1	11/15/2016 21:57
Chloromethane	ND	1.0	1	11/15/2016 21:57
Cyclohexane	ND	18	1	11/15/2016 21:57
Dibromochloromethane	ND	4.4	1	11/15/2016 21:57
1,2-Dibromo-3-chloropropane	ND	0.12	1	11/15/2016 21:57
1,2-Dibromoethane (EDB)	ND	3.9	1	11/15/2016 21:57
1,2-Dichlorobenzene	ND	3.0	1	11/15/2016 21:57
1,3-Dichlorobenzene	ND	3.0	1	11/15/2016 21:57
1,4-Dichlorobenzene	ND	3.0	1	11/15/2016 21:57
Dichlorodifluoromethane	2.5	2.5	1	11/15/2016 21:57
1,1-Dichloroethane	ND	2.0	1	11/15/2016 21:57
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	11/15/2016 21:57
1,1-Dichloroethene	ND	2.0	1	11/15/2016 21:57
cis-1,2-Dichloroethene	ND	2.0	1	11/15/2016 21:57
trans-1,2-Dichloroethene	ND	2.0	1	11/15/2016 21:57
1,2-Dichloropropane	ND	2.4	1	11/15/2016 21:57
cis-1,3-Dichloropropene	ND	2.3	1	11/15/2016 21:57

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-2-5'	1611472-003A	SoilGas	11/07/2016 11:00	GC29	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.23	26.44	AK

Analytes	Result	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	2.3	1	11/15/2016 21:57
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	11/15/2016 21:57
Diisopropyl ether (DIPE)	ND	2.1	1	11/15/2016 21:57
1,4-Dioxane	ND	1.8	1	11/15/2016 21:57
Ethanol	150	96	1	11/15/2016 21:57
Ethyl acetate	ND	1.8	1	11/15/2016 21:57
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	11/15/2016 21:57
Ethylbenzene	17	2.2	1	11/15/2016 21:57
4-Ethyltoluene	6.3	2.5	1	11/15/2016 21:57
Freon 113	ND	3.9	1	11/15/2016 21:57
Heptane	ND	21	1	11/15/2016 21:57
Hexachlorobutadiene	ND	5.4	1	11/15/2016 21:57
Hexane	ND	18	1	11/15/2016 21:57
2-Hexanone	ND	2.1	1	11/15/2016 21:57
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	11/15/2016 21:57
Methyl-t-butyl ether (MTBE)	ND	1.8	1	11/15/2016 21:57
Methylene chloride	ND	8.8	1	11/15/2016 21:57
Methyl methacrylate	ND	2.1	1	11/15/2016 21:57
Naphthalene	ND	5.3	1	11/15/2016 21:57
Propene	ND	88	1	11/15/2016 21:57
Styrene	ND	2.2	1	11/15/2016 21:57
1,1,1,2-Tetrachloroethane	ND	3.5	1	11/15/2016 21:57
1,1,2,2-Tetrachloroethane	ND	3.5	1	11/15/2016 21:57
Tetrachloroethene	ND	3.4	1	11/15/2016 21:57
Tetrahydrofuran	120	3.0	1	11/15/2016 21:57
Toluene	58	1.9	1	11/15/2016 21:57
1,2,4-Trichlorobenzene	ND	3.8	1	11/15/2016 21:57
1,1,1-Trichloroethane	ND	2.8	1	11/15/2016 21:57
1,1,2-Trichloroethane	ND	2.8	1	11/15/2016 21:57
Trichloroethene	ND	2.8	1	11/15/2016 21:57
Trichlorofluoromethane	ND	2.8	1	11/15/2016 21:57
1,2,4-Trimethylbenzene	19	2.5	1	11/15/2016 21:57
1,3,5-Trimethylbenzene	6.5	2.5	1	11/15/2016 21:57

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SV-2-5'	1611472-003A	SoilGas	11/07/2016 11:00	GC29	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.23	26.44	AK

Analytes	Result	RL	DF	Date Analyzed
Vinyl Acetate	ND	18	1	11/15/2016 21:57
Vinyl Chloride	ND	1.3	1	11/15/2016 21:57
Xylenes, Total	88	6.6	1	11/15/2016 21:57
Surrogates	REC (%)	Limits		
1,2-DCA-d4	104	70-130		11/15/2016 21:57
Toluene-d8	93	70-130		11/15/2016 21:57
4-BFB	100	70-130		11/15/2016 21:57



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
DUP	1611472-004A	SoilGas	11/07/2016 13:00	GC24	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.28	24.57	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	11/16/2016 12:10
Acrolein	ND	5.8	1	11/16/2016 12:10
Acrylonitrile	ND	1.1	1	11/16/2016 12:10
tert-Amyl methyl ether (TAME)	ND	2.1	1	11/16/2016 12:10
Benzene	39	1.6	1	11/16/2016 12:10
Benzyl chloride	ND	2.6	1	11/16/2016 12:10
Bromodichloromethane	ND	3.5	1	11/16/2016 12:10
Bromoform	ND	5.2	1	11/16/2016 12:10
Bromomethane	ND	2.0	1	11/16/2016 12:10
1,3-Butadiene	ND	1.1	1	11/16/2016 12:10
2-Butanone (MEK)	ND	75	1	11/16/2016 12:10
t-Butyl alcohol (TBA)	ND	31	1	11/16/2016 12:10
Carbon Disulfide	5.2	1.6	1	11/16/2016 12:10
Carbon Tetrachloride	ND	3.2	1	11/16/2016 12:10
Chlorobenzene	ND	2.4	1	11/16/2016 12:10
Chloroethane	ND	1.3	1	11/16/2016 12:10
Chloroform	9.9	2.4	1	11/16/2016 12:10
Chloromethane	ND	1.0	1	11/16/2016 12:10
Cyclohexane	32	18	1	11/16/2016 12:10
Dibromochloromethane	ND	4.4	1	11/16/2016 12:10
1,2-Dibromo-3-chloropropane	ND	0.12	1	11/16/2016 12:10
1,2-Dibromoethane (EDB)	ND	3.9	1	11/16/2016 12:10
1,2-Dichlorobenzene	ND	3.0	1	11/16/2016 12:10
1,3-Dichlorobenzene	ND	3.0	1	11/16/2016 12:10
1,4-Dichlorobenzene	ND	3.0	1	11/16/2016 12:10
Dichlorodifluoromethane	ND	2.5	1	11/16/2016 12:10
1,1-Dichloroethane	ND	2.0	1	11/16/2016 12:10
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	11/16/2016 12:10
1,1-Dichloroethene	ND	2.0	1	11/16/2016 12:10
cis-1,2-Dichloroethene	ND	2.0	1	11/16/2016 12:10
trans-1,2-Dichloroethene	ND	2.0	1	11/16/2016 12:10
1,2-Dichloropropane	ND	2.4	1	11/16/2016 12:10
cis-1,3-Dichloropropene	ND	2.3	1	11/16/2016 12:10

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
DUP	1611472-004A	SoilGas	11/07/2016 13:00	GC24	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.28	24.57	AK

Analytes	Result	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	2.3	1	11/16/2016 12:10
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	11/16/2016 12:10
Diisopropyl ether (DIPE)	ND	2.1	1	11/16/2016 12:10
1,4-Dioxane	ND	1.8	1	11/16/2016 12:10
Ethanol	ND	96	1	11/16/2016 12:10
Ethyl acetate	ND	1.8	1	11/16/2016 12:10
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	11/16/2016 12:10
Ethylbenzene	6.9	2.2	1	11/16/2016 12:10
4-Ethyltoluene	3.8	2.5	1	11/16/2016 12:10
Freon 113	ND	3.9	1	11/16/2016 12:10
Heptane	26	21	1	11/16/2016 12:10
Hexachlorobutadiene	ND	5.4	1	11/16/2016 12:10
Hexane	27	18	1	11/16/2016 12:10
2-Hexanone	2.2	2.1	1	11/16/2016 12:10
4-Methyl-2-pentanone (MIBK)	3.8	2.1	1	11/16/2016 12:10
Methyl-t-butyl ether (MTBE)	ND	1.8	1	11/16/2016 12:10
Methylene chloride	ND	8.8	1	11/16/2016 12:10
Methyl methacrylate	ND	2.1	1	11/16/2016 12:10
Naphthalene	ND	5.3	1	11/16/2016 12:10
Propene	ND	120	1	11/16/2016 12:10
Styrene	ND	2.2	1	11/16/2016 12:10
1,1,1,2-Tetrachloroethane	ND	3.5	1	11/16/2016 12:10
1,1,2,2-Tetrachloroethane	ND	3.5	1	11/16/2016 12:10
Tetrachloroethene	ND	3.4	1	11/16/2016 12:10
Tetrahydrofuran	ND	3.0	1	11/16/2016 12:10
Toluene	32	1.9	1	11/16/2016 12:10
1,2,4-Trichlorobenzene	ND	3.8	1	11/16/2016 12:10
1,1,1-Trichloroethane	ND	2.8	1	11/16/2016 12:10
1,1,2-Trichloroethane	ND	2.8	1	11/16/2016 12:10
Trichloroethene	ND	2.8	1	11/16/2016 12:10
Trichlorofluoromethane	ND	2.8	1	11/16/2016 12:10
1,2,4-Trimethylbenzene	10	2.5	1	11/16/2016 12:10
1,3,5-Trimethylbenzene	3.2	2.5	1	11/16/2016 12:10

(Cont.)

Angela Rydelius, Lab Manager



Analytical Report

Client: Schutze & Associates, Inc.
Date Received: 11/9/16 18:35
Date Prepared: 11/15/16-11/16/16
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
DUP	1611472-004A	SoilGas	11/07/2016 13:00	GC24	129877

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.28	24.57	AK

Analytes	Result	RL	DF	Date Analyzed
Vinyl Acetate	ND	18	1	11/16/2016 12:10
Vinyl Chloride	ND	1.3	1	11/16/2016 12:10
Xylenes, Total	40	6.6	1	11/16/2016 12:10
Surrogates	REC (%)	Limits		
1,2-DCA-d4	91	70-130		11/16/2016 12:10
Toluene-d8	99	70-130		11/16/2016 12:10
4-BFB	101	70-130		11/16/2016 12:10

 Angela Rydelius, Lab Manager




Quality Control Report

Client: Schutze & Associates, Inc.
Date Prepared: 11/11/16
Date Analyzed: 11/11/16
Instrument: GC26
Matrix: SoilGas
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
BatchID: 129806
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: %
Sample ID: MB/LCS-129806

QC Summary Report for ASTM D1946-90

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Oxygen	ND	0.648	0.20	0.70	-	93	70-130

 QA/QC Officer



Quality Control Report

Client: Schutze & Associates, Inc.	WorkOrder: 1611472
Date Prepared: 11/14/16	BatchID: 129810
Date Analyzed: 11/14/16	Extraction Method: ASTM D 1946-90
Instrument: GC26	Analytical Method: ASTM D 1946-90
Matrix: Soilgas	Unit: %
Project: Tung Soil Vapor Sampling/SCS 539.3	Sample ID: MB/LCS-129810

QC Summary Report for ASTM D1946-90

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Helium	ND	0.0764	0.025	0.10	-	76	60-140

QA/QC Officer




Quality Control Report

Client: Schutze & Associates, Inc.
Date Prepared: 11/14/16
Date Analyzed: 11/14/16
Instrument: GC26
Matrix: SoilGas
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
BatchID: 129807
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: uL/L
Sample ID: MB/LCS-129807

QC Summary Report for ASTM D1946-90

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Carbon Dioxide	ND	93.9	20	100	-	94	70-130
Methane	ND	89.6	1.0	100	-	90	70-130

 QA/QC Officer



Quality Control Report


Client: Schutze & Associates, Inc.
Date Prepared: 11/14/16 - 11/15/16
Date Analyzed: 11/14/16 - 11/15/16
Instrument: GC29
Matrix: SoilGas
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
BatchID: 129877
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³
Sample ID: MB/LCS-129877

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	61.4	30	60	-	102	60-140
Acrolein	ND	62.1	2.9	58.25	-	107	60-140
Acrylonitrile	ND	63.0	0.55	55	-	115	60-140
tert-Amyl methyl ether (TAME)	ND	94.8	1.0	105	-	90	60-140
Benzene	ND	75.0	0.80	80	-	94	60-140
Benzyl chloride	ND	121	1.3	132.5	-	91	60-140
Bromodichloromethane	ND	141	1.8	175	-	80	60-140
Bromoform	ND	312	2.6	262.5	-	119	60-140
Bromomethane	ND	102	1.0	97.5	-	105	60-140
1,3-Butadiene	ND	60.2	0.55	55	-	110	60-140
2-Butanone (MEK)	ND	81.3	38	75	-	108	60-140
t-Butyl alcohol (TBA)	ND	79.3	16	77.5	-	102	60-140
Carbon Disulfide	ND	89.1	0.80	80	-	111	60-140
Carbon Tetrachloride	ND	140	1.6	160	-	87	60-140
Chlorobenzene	ND	124	1.2	117.5	-	105	60-140
Chloroethane	ND	71.4	0.65	67.5	-	106	60-140
Chloroform	ND	119	1.2	122.5	-	97	60-140
Chloromethane	ND	62.0	0.50	52.5	-	118	60-140
Cyclohexane	ND	91.6	9.0	87.5	-	105	60-140
Dibromochloromethane	ND	201	2.2	217.5	-	92	60-140
1,2-Dibromo-3-chloropropane	ND	242	0.060	245	-	99	60-140
1,2-Dibromoethane (EDB)	ND	161	2.0	195	-	83	60-140
1,2-Dichlorobenzene	ND	158	1.5	152.5	-	104	60-140
1,3-Dichlorobenzene	ND	158	1.5	152.5	-	104	60-140
1,4-Dichlorobenzene	ND	156	1.5	152.5	-	103	60-140
Dichlorodifluoromethane	ND	131	1.2	125	-	105	60-140
1,1-Dichloroethane	ND	108	1.0	102.5	-	105	60-140
1,2-Dichloroethane (1,2-DCA)	ND	96.5	1.0	102.5	-	94	60-140
1,1-Dichloroethene	ND	96.8	1.0	100	-	97	60-140
cis-1,2-Dichloroethene	ND	104	1.0	100	-	104	60-140
trans-1,2-Dichloroethene	ND	106	1.0	100	-	106	60-140
1,2-Dichloropropane	ND	99.9	1.2	117.5	-	85	60-140
cis-1,3-Dichloropropene	ND	102	1.2	115	-	89	60-140
trans-1,3-Dichloropropene	ND	100	1.2	115	-	87	60-140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	202	1.8	177.5	-	114	60-140
Diisopropyl ether (DIPE)	ND	120	1.0	105	-	114	60-140
1,4-Dioxane	ND	93.6	0.90	92.5	-	101	60-140

(Cont.)

 QA/QC Officer



Quality Control Report


Client: Schutze & Associates, Inc.
Date Prepared: 11/14/16 - 11/15/16
Date Analyzed: 11/14/16 - 11/15/16
Instrument: GC29
Matrix: SoilGas
Project: Tung Soil Vapor Sampling/SCS 539.3

WorkOrder: 1611472
BatchID: 129877
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³
Sample ID: MB/LCS-129877

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Ethanol	ND	39.1	48	47.5	-	82	60-140
Ethyl acetate	ND	99.5	0.90	92.5	-	108	60-140
Ethyl tert-butyl ether (ETBE)	ND	113	1.0	105	-	107	60-140
Ethylbenzene	ND	116	1.1	110	-	105	60-140
4-Ethyltoluene	ND	136	1.2	125	-	109	60-140
Freon 113	ND	201	2.0	195	-	103	60-140
Heptane	ND	98.0	10	105	-	93	60-140
Hexachlorobutadiene	ND	307	2.7	270	-	114	60-140
Hexane	ND	98.7	9.0	90	-	110	60-140
2-Hexanone	ND	88.8	1.0	105	-	85	60-140
Isopropyl Alcohol	ND	65.2	25	62.5	-	104	60-140
4-Methyl-2-pentanone (MIBK)	ND	96.2	1.0	105	-	92	60-140
Methyl-t-butyl ether (MTBE)	ND	95.4	0.90	92.5	-	103	60-140
Methylene chloride	ND	90.7	4.4	87.5	-	104	60-140
Methyl methacrylate	ND	94.9	1.0	104	-	91	60-140
Naphthalene	ND	279	2.6	265	-	105	60-140
Propene	ND	42.5	44	42.5	-	100	60-140
Styrene	ND	114	1.1	107.5	-	106	60-140
1,1,1,2-Tetrachloroethane	ND	184	1.8	175	-	105	60-140
1,1,2,2-Tetrachloroethane	ND	180	1.8	175	-	103	60-140
Tetrachloroethene	ND	154	1.7	172	-	89	60-140
Tetrahydrofuran	ND	78.9	1.5	75	-	105	60-140
Toluene	ND	83.2	0.95	95	-	88	60-140
1,2,4-Trichlorobenzene	ND	214	1.9	187.5	-	114	60-140
1,1,1-Trichloroethane	ND	120	1.4	137.5	-	87	60-140
1,1,2-Trichloroethane	ND	118	1.4	137.5	-	86	60-140
Trichloroethene	ND	119	1.4	137.5	-	86	60-140
Trichlorofluoromethane	ND	147	1.4	142.5	-	103	60-140
1,2,4-Trimethylbenzene	ND	135	1.2	125	-	108	60-140
1,3,5-Trimethylbenzene	ND	144	1.2	125	-	115	60-140
Vinyl Acetate	ND	93.8	9.0	90	-	104	60-140
Vinyl Chloride	ND	68.6	0.65	65	-	105	60-140
Xylenes, Total	ND	353	3.3	330	-	107	60-140

(Cont.)

 QA/QC Officer



Quality Control Report

Client: Schutze & Associates, Inc.	WorkOrder: 1611472
Date Prepared: 11/14/16 - 11/15/16	BatchID: 129877
Date Analyzed: 11/14/16 - 11/15/16	Extraction Method: TO15
Instrument: GC29	Analytical Method: TO15
Matrix: SoilGas	Unit: µg/m ³
Project: Tung Soil Vapor Sampling/SCS 539.3	Sample ID: MB/LCS-129877

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
1,2-DCA-d4	514	514		500	103	103	70-130
Toluene-d8	461	439		500	92	88	70-130
4-BFB	501	497		500	100	99	70-130

QA/QC Officer

1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1611472

ClientCode: SCO

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Kevin Loeb
Schutze & Associates, Inc.
44358 South Grimmer Blvd
Fremont, CA 94538
(510) 226-9944 FAX: (510) 625-8176

Email: kevin@schutze-inc.com; js@schutze-inc.co
cc/3rd Party:
PO:
ProjectNo: Tung Soil Vapor Sampling/SCS 539.3

Bill to:

Accounts Payable
Schutze & Associates, Inc.
44358 South Grimmer Blvd
Fremont, CA 94538
priscillajazz@yahoo.com

Requested TAT: 5 days;

Date Received: 11/09/2016

Date Logged: 11/10/2016

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1611472-001	SV-1-3"	SoilGas	11/7/2016 11:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A					
1611472-002	SV-1-5'	SoilGas	11/7/2016 11:00	<input type="checkbox"/>	A	A	A				A	A					
1611472-003	SV-2-5'	SoilGas	11/7/2016 11:00	<input type="checkbox"/>	A	A	A				A	A					
1611472-004	DUP	SoilGas	11/7/2016 13:00	<input type="checkbox"/>	A	A	A				A	A					

Test Legend:

1	ATMOSPHERICGAS_SG(UL/L)	2	HELIUM_LC_SOILGAS(%)	3	LG_SUMMA_SOILGAS	4	PREFD REPORT
5	PRHELIUM SHROUD	6	TO15_Scan-SIM_SOIL(UG/M3)	7	TO15-8260_SOIL(UG/M3)	8	
9		10		11		12	

Prepared by: Jena Alfaro

The following SampIDs: 001A, 002A, 003A, 004A contain testgroup TO15He_O2_CO2_Ch4_SG.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: SCHUTZE & ASSOCIATES, INC.

Project: Tung Soil Vapor Sampling/SCS 539.3

Work Order: 1611472

Client Contact: Kevin Loeb

QC Level: LEVEL 2

Contact's Email: kevin@schutze-inc.com; js@schutze-inc.com;
Mari@schutze-inc.com; claudine@schutze-inc.com

Comments:

Date Logged: 11/10/2016

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1611472-001A	SV-1-3"	SoilGas	TO15 w/ Helium, O2, CO2 and Methane	1	1L Summa	<input type="checkbox"/>	11/7/2016 11:00	5 days		<input type="checkbox"/>	
1611472-002A	SV-1-5'	SoilGas	TO15 w/ Helium, O2, CO2 and Methane	1	1L Summa	<input type="checkbox"/>	11/7/2016 11:00	5 days		<input type="checkbox"/>	
1611472-003A	SV-2-5'	SoilGas	TO15 w/ Helium, O2, CO2 and Methane	1	1L Summa	<input type="checkbox"/>	11/7/2016 11:00	5 days		<input type="checkbox"/>	
1611472-004A	DUP	SoilGas	TO15 w/ Helium, O2, CO2 and Methane	1	1L Summa	<input type="checkbox"/>	11/7/2016 13:00	5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



Sample Receipt Checklist

Client Name: **Schutze & Associates, Inc.**
 Project Name: **Tung Soil Vapor Sampling/SCS 539.3**
 WorkOrder No: **1611472** Matrix: SoilGas
 Carrier: Benjamin Yslas (MAI Courier)

Date and Time Received: **11/9/2016 18:35**
 Date Logged: **11/10/2016**
 Received by: Jena Alfaro
 Logged by: Jena Alfaro

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No NA
 Sample/Temp Blank temperature Temp: NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 Sample labels checked for correct preservation? Yes No
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes No NA
 Samples Received on Ice? Yes No

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes No NA

 Comments: