

## Appendix F

### Air Sampling Worksheets

# November 2013

## Air Sampling Worksheets



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-08-2013

START-3 Site Manager: John Koehnen

Sample ID:	DW01-110813	CW02-110813	UW03-110813	DW04-110813	FB-110813 (Field Blank)	
Location/Station #:	01*	02*	03*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 50mL-30L/min. Model: DCL-H, Rev. 1.08</small>	5352***	5352***	5352***	5352***	N/A	
Time Counter (Start):	1153	1148	1145	1213	1152	
Time Counter (Stop):	1641	1638	1636	1645	1152	
Total Run Time (Minutes):	288	290	291	272	0	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.10	10.10	10.07	9.928	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.97	10.16	9.74	9.970	N/A	
Avg Flow Rate (Liters/Minute):	10.035	10.13	9.905	9.949	N/A	
Sample Volume (Liters):	2890.08	2937.70	2882.36	2706.13	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Abischo 11/8/13

**Comments:**

Local Weather: Temp. 35-67°F, winds from the SW at 3-5mph, Sunny.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



# U.S. EPA Region 6 START-3 Air Sampling Worksheet

**DYNAMAC**  
CORPORATION

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-09-2013

START-3 Site Manager: John Koehnen

Sample ID:	DW01-110913	CW02-110913	UW03-110913	DW04-110913	FB02-110913 (Field Blank)	
Location/Station #:	01*	02*	03*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 50mL-30L/min. Model: DCL-H, Rev. 1.08</small>	5352***	5352***	5352***	5352***	N/A	
Time Counter (Start):	0821	0820	0813	0830	1152	
Time Counter (Stop):	1612	1610	1607	1619	1152	
Total Run Time (Minutes):	480	470	474	469	0	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.97	10.16	9.74	9.970 L/min	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.952	10.14	9.708	9.978 L/min	N/A	
Avg Flow Rate (Liters/Minute):	9.961	10.15	9.724	9.974	N/A	
Sample Volume (Liters):	4781.28	4770.50	4609.18	4677.81	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Abischo 11/09/13

**Comments:**

Local Weather: Temp. 36-63°F, winds from the SW and Variable at 3-5mph, Sunny/Clear.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



# U.S. EPA Region 6 START-3 Air Sampling Worksheet

**DYNAMAC**  
CORPORATION

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-12-2013

START-3 Site Manager: John Koehnen

Sample ID:	CW01-111213	DW02-111213	CW03-111213	CW04-111213	FB03-111213 (Field Blank)	
Location/Station #:	01*	02*	03*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 50mL-30L/min. Model: DCL-H, Rev. 1.08</small>	5352*** Note, during Post Calibration, BIOS DryCal unit became defective. Pre-Cal was used for volume calculation	5352*** Note, during Post Calibration, BIOS DryCal unit became defective. Pre-Cal was used for volume calculation	5352*** Note, during Post Calibration, BIOS DryCal unit became defective. Pre-Cal was used for volume calculation	5352*** Note, during Post Calibration, BIOS DryCal unit became defective. Pre-Cal was used for volume calculation	N/A	
Time Counter (Start):	0745	0742	0739	0751	0752	
Time Counter (Stop):	1656	1657	1655	1703	0752	
Total Run Time (Minutes):	491	495	495	552	1	
Pump Fault (Y/N):	Y	Y	Y	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.952	10.14	10.01	9.978	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.952	10.14	10.01	9.978	N/A	
Avg Flow Rate (Liters/Minute):	9.952	10.14	10.01	9.978	N/A	
Sample Volume (Liters):	4886.43	5019.3	4964.96	5507.86	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Abischo 11/12/13

**Comments:**

Y = Due to apparent pump fault (cord shortage) between 1215 and 1315hrs, final time was scaled back one hour.  
Local Weather: L: 42°F; H: 58°F; Winds variable, but primarily W and NW at 12 to 13 mph, with gusts up to 18. Mostly clear skies.  
UW – upwind; DW – Downwind; CW - Crosswind  
\* - Location/station numbers: See GPS on file.  
\*\* - Pump number: See equipment log for serial numbers.  
\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-13-2013

START-3 Site Manager: John Koehnen

Sample ID:	UW01-111313	CW02-111313	DW03-111313	UW04-111313	FB04-111313 (Field Blank)	
Location/Station #:	01*	02*	03*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 50mL-30L/min. Model: DCL-H, Rev. 1.08</small>	<small>Rotometer used today. Note, during Post Calibration on 11/12/13, BIOS DryCal unit became defective. New unit will arrive on 11/14/13.</small>	<small>Rotometer used today. Note, during Post Calibration on 11/12/13, BIOS DryCal unit became defective. New unit will arrive on 11/14/13.</small>	<small>Rotometer used today. Note, during Post Calibration on 11/12/13, BIOS DryCal unit became defective. New unit will arrive on 11/14/13.</small>	<small>Rotometer used today. Note, during Post Calibration on 11/12/13, BIOS DryCal unit became defective. New unit will arrive on 11/14/13.</small>	N/A	
Time Counter (Start):	0741	0738	0733	0750	0751	
Time Counter (Stop):	1613	1607	1604	1619	0751	
Total Run Time (Minutes):	512	509	511	509	1	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.0	10.0	10.0	10.0	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.5	10.0	9.5	10.0	N/A	
Avg Flow Rate (Liters/Minute):	9.75	10.0	9.75	10.0	N/A	
Sample Volume (Liters):	4992.00	5090.0	4982.25	5090.00	N/A	

MET Station on Site?: YES

START-3 Signature/Date:

*N. Biscocho* 11/13/13

**Comments:**

Local Weather: Low: 34°F; High: 58°F; Winds from NE 5 to 6 mph. Sunny, Clear in the morning, cloudy in the afternoon.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**



Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-14-2013

START-3 Site Manager: John Koehnen

Sample ID:	UW01-111413	CW02-111413	DW03-111413	UW04-111413	FB05-111413 (Field Blank)	
Location/Station #:	01*	02*	03*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	1215	1213	1211	1217	1220	
Time Counter (Stop):	1607	1605	1601	1613	1220	
Total Run Time (Minutes):	232	232	230	236	1	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.01	10.01	10.05	10.03	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	10.26	10.25	10.01	10.35	N/A	
Avg Flow Rate (Liters/Minute):	10.135	10.13	10.03	10.19	N/A	
Sample Volume (Liters):	2351.32	2350.16	2306.90	2404..84	N/A	

MET Station on Site?: YES

START-3 Signature/Date: *Noel Biscocho* 11/14/13

**Comments:**

Local Weather: Low: 40°F; High: 62°F; Winds from N 5 to 6 mph. Rain early morning to Clear in the day afternoon.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-15-2013

START-3 Site Manager: John Koehnen

Sample ID:	UW01-111513	CW02-111513	DW03-111513	UW04-111513	FB06-111513 (Field Blank)	
Location/Station #:	01*	02*	03*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0740	0737	0733	0726	0746	
Time Counter (Stop):	1456	1453	1452	1503	0746	
Total Run Time (Minutes):	436	436	439	457	1	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.26	10.25	10.01	10.35	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	10.09	10.1	9.940	10.16	N/A	
Avg Flow Rate (Liters/Minute):	10.175	10.175	9.975	10.255	N/A	
Sample Volume (Liters):	4436.30	4436.30	4379.03	4686.54	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Abisiocho 11/15/13

**Comments:**

Local Weather: Low: 36°F; High: 62°F; Winds from S at 16 mph. Gusts up to 24mph.

Sunny/cloudy in the morning, cloudy with some light rain in the afternoon.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.





**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-16-2013

START-3 Site Manager: John Koehnen

Sample ID:	UW06-111613	DW07-111613	CW08-111613	DW04-111613	FB07-111613 (Field Blank)	
Location/Station #:	06*	07*	08*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0835	0840	0852	0725	0725	
Time Counter (Stop):	1348	1344	1337	1335	0725	
Total Run Time (Minutes):	313	304	285	370	1	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.09	10.1	9.940	10.16	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	10.21	9.946	10.12	10.22	N/A	
Avg Flow Rate (Liters/Minute):	10.15	10.023	10.03	10.19	N/A	
Sample Volume (Liters):	3176.95	3046.99	2858.55	3770.30	N/A	

MET Station on Site?: YES

START-3 Signature/Date: *N. Biscocho* 11/16/13

**Comments:**

Local Weather: Low: 42°F; High: 62°F; Winds variable, but primarily from the S, SW ad W at 7-9 mph with gusts up to 15 mph  
Skies were mostly clear to cloudy with intermittent light rain.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 11-17-2013

START-3 Site Manager: John Koehn

Sample ID:	DW04-111713	DW07-111713	CW06-111713	UW08-111713	FB01-111713 (Field Blank)	
Location/Station #:	04*	07*	06*	08*	N/A	
Pump #:	4**	2**	3**	1**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0734	0753	0749	--	0737	
Time Counter (Stop):	1533	1525	1520	--	0737	
Total Run Time (Minutes):	479	452	451	--	1	
Pump Fault (Y/N):	N	N	N	Y	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.22	9.946	10.12	10.12	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.940	9.666	9.956	--	N/A	
Avg Flow Rate (Liters/Minute):	10.08	9.806	10.038	--	N/A	
Sample Volume (Liters):	4828.32	4432.31	4527.14	--	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 11/17/13

**Comments:**

Y – Location 8: not set due to frequent pump fault due to power source.

Local Weather: Low: 39°F; High: 60°F; Winds light and variable with gusts up to 5 - 6 mph. Clear skies.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-18-2013

START-3 Site Manager: John Koehnen

Sample ID:	DW01-111813	CW06-111813	UW03-111813	DW04-111813	FB01-111813 (Field Blank)	
Location/Station #:	01*	06*	03*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0746	0750	0744	0729	0731	
Time Counter (Stop):	1609	1607	1606	1600	0731	
Total Run Time (Minutes):	503	497	502	511	1	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.940	9.666	9.956	9.836	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.736	10.51	9.917	10.16	N/A	
Avg Flow Rate (Liters/Minute):	9.838	10.088	9.9365	9.998	N/A	
Sample Volume (Liters):	4948.51	5013.74	4988.12	5108.98	N/A	

MET Station on Site?: YES

START-3 Signature/Date: *N. Biscocho* 11/18/13

**Comments:**

Local Weather: Low: 34°F; High: 60°F; Winds light from the south/southwest at 5 to 6 mph. Clear skies.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-19-2013

START-3 Site Manager: John Koehnen

Sample ID:	UW06-111913	CW07-111913		DW04-111913	FB01-111913 (Field Blank)	
Location/Station #:	06*	07*	03*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0740	0735		0720	0725	
Time Counter (Stop):	1620	1628		1617	0725	
Total Run Time (Minutes):	520	533		537	1	
Pump Fault (Y/N):	N	N		N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.736	10.51		10.16	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	10.18	10.24		10.08	N/A	
Avg Flow Rate (Liters/Minute):	9.958	10.375		10.12	N/A	
Sample Volume (Liters):	5178.16	5529.88		5434.44	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Abisiocho 11/19/13

**Comments:**

Local Weather: Low: 34°F; High: 62°F; Winds light from the south/southwest at 4 to 6 mph. Clear skies.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



# U.S. EPA Region 6 START-3 Air Sampling Worksheet

**DYNAMAC**  
CORPORATION

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-20-2013

START-3 Site Manager: John Koehnen

Sample ID:	CW01-112013	CW02-112013	DW06-112013	DW04-112013	FB01-112013 (Field Blank)	
Location/Station #:	01*	02*	01 *	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0735	0738	0740	0724	0725	
Time Counter (Stop):	1313	N/A	1210	1215	0725	
Total Run Time (Minutes):	338	N/A	270	291	1	
Pump Fault (Y/N):	N	Y	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.958	10.24	9.917	10.08	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.884	10.39	9.987	10.07	N/A	
Avg Flow Rate (Liters/Minute):	9.921	N/A	9.952	10.075	N/A	
Sample Volume (Liters):	3353.30	N/A	2687.04	2931.83	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Abischo 11/20/13

## Comments:

Y = Filter separated from the cassette when checked at the end of the day. Cassette not set to the lab.

Local Weather: Low: 44°F; High: 54°F; Winds light from the south/southwest at 4 to 6 mph.

Overcast skies with light rain starting mid-morning and continuing throughout the day.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**



Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 11-21-2013

START-3 Site Manager: John Koehnen

Sample ID:	CW	CW06-112113	DW07-112113	DW04-112113	FB01-112113 (Field Blank)	
Location/Station #:	01*	06*	07*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):		0858	0903	0843	0909	
Time Counter (Stop):		1653	1658	1450	0909	
Total Run Time (Minutes):		475	475	367	1	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.884	10.39	9.987	10.07	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):		10.38	10.07	10.26	N/A	
Avg Flow Rate (Liters/Minute):		10.385	10.0285	10.165	N/A	
Sample Volume (Liters):		4932.88	4763.54	3730.56	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 11/21/13

**Comments:**

Pump 1 was projected to be a CW sample. However, air pump not deployed due to faulty power supply (shortage).  
 Local Weather: Low: 43°F; High: 56°F; Winds light from the northeast early, switching to south winds at 7 to 9 mph.  
 Overcast skies with intermittent light rain throughout the day.  
 UW – upwind; DW – Downwind; CW - Crosswind  
 \* - Location/station numbers: See GPS on file.  
 \*\* - Pump number: See equipment log for serial numbers.  
 \*\*\* - BIOS DryCal: See scanned calibration certificates on file.



# U.S. EPA Region 6 START-3 Air Sampling Worksheet

**DYNAMAC**  
CORPORATION

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-22-2013

START-3 Site Manager: John Koehnen

Sample ID:	CW01-112213	DW06-112213	LOT01_139777D D210_112213 (Lot Sample)	CW04-112213	FB01-112213 (Field Blank)	
Location/Station #:	01*	06*	N/A	04*	N/A	
Pump #:	1**	2**	N/A	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	N/A	4893***	N/A	
Time Counter (Start):	0821	0808	1005	0724	0824	
Time Counter (Stop):	1603	1608	N/A	1601	0824	
Total Run Time (Minutes):	462	480	N/A	517	N/A	
Pump Fault (Y/N):	N	N	N/A	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.27	10.38	N/A	10.26	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.949	10.39	N/A	9.970	N/A	
Avg Flow Rate (Liters/Minute):	10.1095	10.385	N/A	10.115	N/A	
Sample Volume (Liters):	4670.59	4984.80	N/A	5229.46	N/A	

MET Station on Site?: YES

START-3 Signature/Date: *N. Biscocho* 11/22/13

**Comments:**

Local Weather: Low: 34°F; High: 38°F; Winds from the east and variable at 8 to 16 mph, with local gusts noted up to 31 mph.  
Overcast skies with intermittent light rain throughout the day, turning partly into freezing rain/snow later in the day.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 11-25-2013

START-3 Site Manager: John Koehnen

Sample ID:	UW01-112513	CW06-112513		CW04-112513	FB01-112513 (Field Blank)	
Location/Station #:	01*	06*	03*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0739	0742		0750	0753	
Time Counter (Stop):	1535	1539		1543	0753	
Total Run Time (Minutes):	476	477		473	N/A	
Pump Fault (Y/N):	N	N		N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.949	10.39		9.970	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.966	9.633		10.14	N/A	
Avg Flow Rate (Liters/Minute):	9.9575	10.0115		10.055	N/A	
Sample Volume (Liters):	4739.77	4775.49		4756.02	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Abischo 11/25/13

**Comments:**

Local Weather: Low: 30°F; High: 40°F; Winds from the northwest at 7 to 9 mph. Overcast skies with clearing late.

UW – upwind; DW – Downwind; CW - Crosswind

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



# December 2013

## Air Sampling Worksheets



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**



Site: Southwest Vermiculite (Removal)

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-03-2013

START-3 Site Manager: John Koehn

Sample ID:	CW01-120313	UW02-120313	CW06-120313	DW04-120313	CW07-120313	FB01-120313 (Field Blank)
Location/Station #:	01*	02*	06*	04*	07*	N/A
Pump #:	1**	2**	3**	4**	5**	N/A
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	4893***	N/A
Time Counter (Start):	0741	0742	0747	0733	0753	0734
Time Counter (Stop):	1558	1554	1602	1610	1615	0734
Total Run Time (Minutes):	497	492	495	517	502	N/A
Pump Fault (Y/N):	N	N	N	N	N/A	N/A
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.910	10.03	9.849	9.994	9.852	N/A
Post-Calibration Flow Rate (End) (Liters/Minute):	9.963	10.13	10.06	10.11	10.30	N/A
Avg Flow Rate (Liters/Minute):	9.9365	10.08	9.9545	10.052	10.076	N/A
Sample Volume (Liters):	4938.44	4959.36	4927.48	5196.88	5058.15	N/A

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 12/03/13

**Comments:**

Local Weather: Low: 35°F; High: 64°F; Winds light and variable from the south/southwest early, climbing to 10+ mph and variable late in the day. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6**  
**START-3**  
**Air Sampling Worksheet**

**DYNAMAC**  
**CORPORATION**

Site: Southwest Vermiculite (Removal)

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-04-2013

START-3 Site Manager: John Koehn

Sample ID:	DW01-120413	CW02-120413		DW04-120413		FB01-120413 (Field Blank)
Location/Station #:	01*	02*		04*		N/A
Pump #:	1**	2**		4**		N/A
Media:	0.8 µm MCEF	0.8 µm MCEF		0.8 µm MCEF		0.8 µm MCEF
Lot No.:	13977-7DD-210	13977-7DD-210		13977-7DD-210		13977-7DD-210
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		NIOSH 7400 (PCM)		NIOSH 7400 (PCM)
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***		4893***		N/A
Time Counter (Start):	0731	0730		0733		0734
Time Counter (Stop):	1545	1542		1553		0734
Total Run Time (Minutes):	494	492		500		N/A
Pump Fault (Y/N):	N	N		N		N/A
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.963	10.13		10.11		N/A
Post-Calibration Flow Rate (End) (Liters/Minute):	9.970	9.934		9.974		N/A
Avg Flow Rate (Liters/Minute):	9.9832	10.032		10.042		N/A
Sample Volume (Liters):	4931.70	4935.74		5021.00		N/A

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 12/04/13

**Comments:**

Local Weather: Low: 40°F; High: 59°F; Winds moderate at up to 20 mph, with gusts up to 30 mph from the south/southwest early, switching to variable winds late in the day. Clear skies early with increased cloudiness late. No precipitation noted during the day.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 12-06-2013

START-3 Site Manager: John Koehnen

Sample ID:	DW07-120613	CW06-120613	DW09-120613	DW04-120613	FB01-120613 (Field Blank)	
Location/Station #:	07*	06*	09*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0830	0744	0756	0825	0914	
Time Counter (Stop):	1557	1300	1610	1620		
Total Run Time (Minutes):	447	316	494	475	N/A	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.952	9.910	9.970	10.05	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.711	9.800	9.828	9.946	N/A	
Avg Flow Rate (Liters/Minute):	9.8315	9.855	9.899	9.998	N/A	
Sample Volume (Liters):	4394.68	3114.18	4890.11	4749.05	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Abischo 12/06/13

**Comments:**

Local Weather: Low: 14°F; High: 38°F; Winds light (3-5 mph) from the south/southwest. Mostly clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 12-07-2013

START-3 Site Manager: John Koehnen

Sample ID:	UW01-120713	CW01-120713	DW09-120713	DW04-120713	FB01-120713 (Field Blank)	
Location/Station #:	01*	07*	09*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0759	0801	0748	0727	0729	
Time Counter (Stop):	1604	1559	1600	1602	0729	
Total Run Time (Minutes):	485	478	492	515	N/A	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.711	9.800	9.828	9.946	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.759	9.745	9.839	9.916	N/A	
Avg Flow Rate (Liters/Minute):	9.8651	9.7725	9.8335	9.931	N/A	
Sample Volume (Liters):	4784.57	4671.26	4838.08	5114.47	N/A	

MET Station on Site?: YES

START-3 Signature/Date: *Noel Biscocho* 12/07/13

**Comments:**

Local Weather: Low: 20°F; High: 32°F; Winds light (5-9 mph) from the south/southwest. Clear skies early, changing to overcast skies by mid-morning.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho/John Koehnen

U.S. EPA OSC: Mike McAteer

Date: 12-10-2013

START-3 Site Manager: John Koehnen

Sample ID:	DW01-121013	DW02-121013	CW09-121013	UW04-121013	FB01-121013 (Field Blank)	
Location/Station #:	01*	07*	09*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0740	0738	0750	0805	0807	
Time Counter (Stop):	1620	1616	1625	1630	0807	
Total Run Time (Minutes):	520	518	515	505	N/A	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.13	9.497	9.728	9.540	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.898	9.486	9.736	9.843	N/A	
Avg Flow Rate (Liters/Minute):	10.014	9.4915	9.732	9.6915	N/A	
Sample Volume (Liters):	5207.28	4916.60	5011.98	4894.21	N/A	

MET Station on Site?: YES

START-3 Signature/Date:

12/10/13

**Comments:**

Local Weather: Low: 12°F; High: 30°F; Winds variable light at 4-6 mph from the north/northwest. Mostly clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-11-2013

START-3 Site Manager: John Koehn

Sample ID:	DW01-121113		CW09-121113	UW04-121113	FB01-121113 (Field Blank)	
Location/Station #:	01*		09*	04*	N/A	
Pump #:	1**		3**	4**	N/A	
Media:	0.8 µm MCEF		0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210		13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)		NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***		4893***	4893***	N/A	
Time Counter (Start):	0748		0752	0755	0756	
Time Counter (Stop):	1611		1620	1400	0756	
Total Run Time (Minutes):	503		508	365	N/A	
Pump Fault (Y/N):	N		N	N <sup>1</sup>	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.898		9.736	9.843	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.850		9.863	9.856	N/A	
Avg Flow Rate (Liters/Minute):	9.874		9.7995	9.8495	N/A	
Sample Volume (Liters):	4966.62		4978.15	3595.07	N/A	

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

12/11/13

**Comments:**

N<sup>1</sup> = Source power fuse shortage at 1400.

Local Weather: Low: 20°F; High: 42°F; Winds variable at 3 - 5 mph from the north/northwest. Mostly clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.





**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-12-2013

START-3 Site Manager: John Koehnen

Sample ID:	UW01-121213	CW02-121213	UW06-121213	UW04-121213	FB01-121213 (Field Blank)	
Location/Station #:	01*	02*	06*	04*	N/A	
Pump #:	1**	2**	3**	4**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0733	0740	0755	0730	0728	
Time Counter (Stop):	1620	1625	1630	1230	0728	
Total Run Time (Minutes):	527	525	515	300	N/A	
Pump Fault (Y/N):	N	N <sup>1</sup>	N <sup>2</sup>	Y	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.850	9.963	9.863	9.856	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	10.01	9.887	9.898	9.856	N/A	
Avg Flow Rate (Liters/Minute):	9.93	9.925	9.8805	9.856	N/A	
Sample Volume (Liters):	5233.11	5210.63	5088.46	2956.80	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 12/12/13

**Comments:**

Y = Unit Shortage, returned to vendor by close of business day

N<sup>1</sup> = Cassette appeared to be wet when collected

N<sup>2</sup> = Cassette and unit wet. Unit still running by stop time.

Local Weather: Low: 24°F; High: 42°F; Winds variable at 0 - 3 mph from the north/northwest. Mostly clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-13-2013

START-3 Site Manager: John Koehnen

Sample ID:	CW01-121313	DW02-121313	UW06-121313	CW04-121313	FB01-121313 (Field Blank)	
Location/Station #:	01*	02*	06*	04*	N/A	
Pump #:	1**	2**	3**	5**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0750	0746	0752	0800	0801	
Time Counter (Stop):	1600	1603	1606	1609	0801	
Total Run Time (Minutes):	490	497	494	489	N/A	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.01	9.887	9.898	9.916	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.743	9.588	9.921	10.222	N/A	
Avg Flow Rate (Liters/Minute):	9.8765	9.7375	9.9095	10.069	N/A	
Sample Volume (Liters):	4839.49	4839.54	4825.29	4927.74	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 12/13/13

**Comments:**

Local Weather: Low: 31°F; High: 42°F; Winds variable at 4 - 5 mph, from the west/northwest. Cloudy skies early, clearing late morning.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): N/A

U.S. EPA OSC: Mike McAteer

Date: 12-14-2013

START-3 Site Manager: John Koehnen

Sample ID:	<b>No Air Samples Deployed today due to a shortened work day, and subsequently not enough volume will be collected. Air Monitors were deployed instead. See air monitor Data on-file.</b>					
Location/Station #:						
Pump #:						
Media:						
Lot No.:						
Analysis/Method:						
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>						
Time Counter (Start):						
Time Counter (Stop):						
Total Run Time (Minutes):						
Pump Fault (Y/N):						
Pre-Calibration Flow Rate (Start) (Liters/Minute):						
Post-Calibration Flow Rate (End) (Liters/Minute):						
Avg Flow Rate (Liters/Minute):						
Sample Volume (Liters):						

MET Station on Site?: YES

START-3 Signature/Date: Abisiocho 12/14/13

**Comments:**

Local Weather: Low: 26°F; High: 42°F; Winds variable at 4 - 5 mph, from the north/northwest. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-16-2013

START-3 Site Manager: John Koehn

Sample ID:	DW01-121613	CW06-121613	CW09-121613	UW04-121613	FB01-121613 (Field Blank)	
Location/Station #:	01*	06*	09*	04*	N/A	
Pump #:	1**	2**	3**	5**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0748	0742	1044	0730	0731	
Time Counter (Stop):	1606	1609	1615	1617	0731	
Total Run Time (Minutes):	498	507	331	527	N/A	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.743	9.588	9.921	10.222	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.739	10.08	9.952	10.11	N/A	
Avg Flow Rate (Liters/Minute):	9.741	9.834	9.9365	10.166	N/A	
Sample Volume (Liters):	4851.02	4985.84	3288.98	5357.48	N/A	

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

12/16/13

**Comments:**

Local Weather: Low: 28°F; High: 58°F; Winds variable at 5 - 6 mph, from the north/northwest. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-17-2013

START-3 Site Manager: John Koehn

Sample ID:	CW01-121713	DW02-121713	CW06-121713	UW04-121713	FB01-121713 (Field Blank)	
Location/Station #:	01*	02*	06*	04*	N/A	
Pump #:	1**	2**	3**	5**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0735	0737	0742	0722	0725	
Time Counter (Stop):	1558	1556	1601	1610	0725	
Total Run Time (Minutes):	503	499	499	528	N/A	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.739	10.08	9.952	10.11	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.976	10.20	9.994	10.26	N/A	
Avg Flow Rate (Liters/Minute):	9.8575	10.14	9.973	10.185	N/A	
Sample Volume (Liters):	4958.32	5059.86	4976.53	5377.68	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 12/17/13

**Comments:**

Local Weather: Low: 29°F; High: 60°F; Winds variable at 5 - 6 mph, from the north/northwest. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-18-2013

START-3 Site Manager: John Koehn

Sample ID:	CW01-121813	DW02-121813	DW06-121813	DW04-121813	FB01-121813 (Field Blank)	
Location/Station #:	01*	02*	06*	04*	N/A	
Pump #:	1**	2**	3**	5**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0740	0742	0749	0801	0802	
Time Counter (Stop):	1405****	1401****	1407****	1410****	0802	
Total Run Time (Minutes):	385	379	378	369	N/A	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.976	10.20	9.994	10.26	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.928	10.01	9.822	10.19	N/A	
Avg Flow Rate (Liters/Minute):	9.952	10.105	9.908	10.225	N/A	
Sample Volume (Liters):	3831.52	3829.80	3745.22	3773.03	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 12/18/13

**Comments:**

Local Weather: Low: 28°F; High: 58°F; Winds variable at 5 - 6 mph, from the south. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

\*\*\*\* - SCRIBE entry inadvertently input at 1400 instead of 1600 (4pm). Volumes adequate so no correction applied to paper work or labelling/COCs.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-19-2013

START-3 Site Manager: John Koehn

Sample ID:	CW01-121913	DW02-121913	DW06-121913	DW04-121913	FB01-121913 (Field Blank)	
Location/Station #:	01*	02*	06*	04*	N/A	
Pump #:	1**	2**	3**	5**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0735	0731	0742	0815	0716	
Time Counter (Stop):	1600	1600	1610	1615	0716	
Total Run Time (Minutes):	505	509	508	540	N/A	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.928	10.01	9.822	10.19	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.923	10.16	9.898	10.09	N/A	
Avg Flow Rate (Liters/Minute):	9.9255	10.085	9.86	10.14	N/A	
Sample Volume (Liters):	5012.38	5133.27	5008.88	5475.60	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 12/19/13

**Comments:**

Local Weather: Low: 30°F; High: 58°F; Winds variable at 6 - 7 mph, from the south. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**



Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 12-20-2013

START-3 Site Manager: John Koehn

Sample ID:	CW01-122013	DW02-122013	DW04-122013	FB01-122013 (Field Blank)		SWV Dust_ WAR3****
Location/Station #:	01*	02*	04*	N/A		Auxiliary Warehouse
Pump #:	1**	2**	3**	N/A		6**
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		0.8 µm MCEF
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		13977-7DD-210
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		ISO 10312 (TEM)
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		4893***
Time Counter (Start):	0735	0731	0815	0716		0805
Time Counter (Stop):	1600	1600	1615	0716		1552
Total Run Time (Minutes):	505	509	540	N/A		467
Pump Fault (Y/N):	N	N	N	N/A		N
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.928	10.01	10.19	N/A		3.903
Post-Calibration Flow Rate (End) (Liters/Minute):	9.923	10.16	10.09	N/A		4.620
Avg Flow Rate (Liters/Minute):	9.9255	10.085	10.14	N/A		4.2615
Sample Volume (Liters):	5012.38	5133.27	5475.60	N/A		1990.12

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 12/20/13

**Comments:**

Local Weather: Low: 30°F; High: 56°F; Winds variable at 4-6 mph, from the south/southeast. Mostly cloudy skies early, clearing mid-day.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

\*\*\*\* - Air sample pump within the W. Silver main warehouse to evaluate potential indoor air impacts. Collaboration with dust sampling activities today.



January 2014

Air Sampling Worksheets



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**



Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-07-2014

START-3 Site Manager: John Koehn

Sample ID:	CW11-010714	DW12-010714	DW10-010714		FB01-010714 (Field Blank)	
Location/Station #:	11*	12*	10*		N/A	
Pump #:	1**	2**	3**		N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210		13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***		N/A	
Time Counter (Start):	1103	1113	1118		1204	
Time Counter (Stop):	1535	1535	1540		1204	
Total Run Time (Minutes):	272	262	262		N/A	
Pump Fault (Y/N):	N	N	N		N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.916	10.03	9.982		N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	10.09	10.17	9.982		N/A	
Avg Flow Rate (Liters/Minute):	10.003	10.1	9.914		N/A	
Sample Volume (Liters):	2720.82	2646.20	2597.47		N/A	

MET Station on Site?: YES

START-3 Signature/Date: 01/07/14

**Comments:**

Local Weather: Low: 26°F; High: 48°F; Winds low to 5 - 6 mph, from the northwest. Clear skies early, switching to mostly cloudy skies later in the day.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**



Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-08-2014

START-3 Site Manager: John Koehnen

Sample ID:	UW10-010814	CW13-010814	FB01-010814 (Field Blank)			
Location/Station #:	10*	13*	N/A			
Pump #:	3**	1**	N/A			
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF			
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210			
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)			
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	N/A			
Time Counter (Start):	0750	0805	0800			
Time Counter (Stop):	1645	1640	0800			
Total Run Time (Minutes):	535	515	N/A			
Pump Fault (Y/N):	N	N	N/A			
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.846	9.916	N/A			
Post-Calibration Flow Rate (End) (Liters/Minute):	9.917	8.858	N/A			
Avg Flow Rate (Liters/Minute):	9.8815	9.387	N/A			
Sample Volume (Liters):	5286.60	4834.31	N/A			

MET Station on Site?: YES

START-3 Signature/Date: 01/08/14 *Noel Biscocho*

**Comments:**

Local Weather: Low: 25°F; High: 50°F; Winds to 5 mph, from the north. Clear skies early, changing to cloudy skies late.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-09-2014

START-3 Site Manager: John Koehn

Sample ID:	DW10-010914	CW13-010914	FB01-010914 (Field Blank)			
Location/Station #:	10*	13*	N/A			
Pump #:	3**	1**	N/A			
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF			
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210			
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)			
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	N/A			
Time Counter (Start):	0810	0805	0952			
Time Counter (Stop):	1612	1608	0952			
Total Run Time (Minutes):	482	483	N/A			
Pump Fault (Y/N):	N	N	N/A			
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.917	9.753	N/A			
Post-Calibration Flow Rate (End) (Liters/Minute):	9.835	9.325	N/A			
Avg Flow Rate (Liters/Minute):	9.8775	9.539	N/A			
Sample Volume (Liters):	4760.96	4607.34	N/A			

MET Station on Site?: YES

START-3 Signature/Date: 01/09/14

**Comments:**

Local Weather: Low: 28°F; High: 48°F; Winds to 5 mph, from the north. Clear skies early, changing to cloudy skies late.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-10-2014

START-3 Site Manager: John Koehn

Sample ID:	UW10-011014	CW13-011014	FB01-011014 (Field Blank)			
Location/Station #:	10*	13*	N/A			
Pump #:	3**	1**	N/A			
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF			
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210			
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)			
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	N/A			
Time Counter (Start):	0805	0810	0812			
Time Counter (Stop):	1615	1620	0812			
Total Run Time (Minutes):	490	490	N/A			
Pump Fault (Y/N):	N	N	N/A			
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.838	9.325	N/A			
Post-Calibration Flow Rate (End) (Liters/Minute):	9.508	8.489	N/A			
Avg Flow Rate (Liters/Minute):	9.723	8.907	N/A			
Sample Volume (Liters):	4764.27	4364.43	N/A			

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

01/10/14

**Comments:**

Local Weather: Low: 32°F; High: 56°F; Winds to 18 mph, with gusts to 29 mph from the northwest. Mostly clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-13-2014

START-3 Site Manager: John Koehn

Sample ID:	UW10-011314	DW13-011314	FB01-011314 (Field Blank)			
Location/Station #:	10*	13*	N/A			
Pump #:	3**	1**	N/A			
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF			
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210			
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)			
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	N/A			
Time Counter (Start):	0800	0820	0847			
Time Counter (Stop):	1605	1610	0847			
Total Run Time (Minutes):	485	470	N/A			
Pump Fault (Y/N):	N	N	N/A			
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.863	9.602	N/A			
Post-Calibration Flow Rate (End) (Liters/Minute):	9.883	9.834	N/A			
Avg Flow Rate (Liters/Minute):	9.873	9.718	N/A			
Sample Volume (Liters):	4788.41	4567.46	N/A			

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

01/13/14

**Comments:**

Local Weather: Low: 31°F; High: 54°F; Winds moderate to 11 – 12 mph, with gusts to 23 mph from the northwest. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): N/A

U.S. EPA OSC: Mike McAteer

Date: 01-14-2014

START-3 Site Manager: John Koehnen

Sample ID:	<b>No Air Samples deployed today due to a shortened work day. Backfill activities today and no soil disturbing (excavation) activities. Air Monitors were deployed instead. See air monitor Data on-file.</b>					
Location/Station #:						
Pump #:						
Media:						
Lot No.:						
Analysis/Method:						
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>						
Time Counter (Start):						
Time Counter (Stop):						
Total Run Time (Minutes):						
Pump Fault (Y/N):						
Pre-Calibration Flow Rate (Start) (Liters/Minute):						
Post-Calibration Flow Rate (End) (Liters/Minute):						
Avg Flow Rate (Liters/Minute):						
Sample Volume (Liters):						
MET Station on Site?: YES		START-3 Signature/Date: <u>Abisiocho</u> 01/14/14				
Comments: Local Weather: Low: 27°F; High: 56°F; Winds moderate to 8 - 10 mph, with gusts to 16 mph from the north. Clear skies. * - Location/station numbers: See GPS on file. ** - Pump number: See equipment log for serial numbers. *** - BIOS DryCal: See scanned calibration certificates on file.						



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): N/A

U.S. EPA OSC: Mike McAteer

Date: 01-15-2014

START-3 Site Manager: John Koehnen

Sample ID:	<b>No Air Samples deployed today due to a shortened work day. Backfill activities today and no soil disturbing (excavation) activities. Air Monitors were deployed instead. See air monitor Data on-file.</b>					
Location/Station #:						
Pump #:						
Media:						
Lot No.:						
Analysis/Method:						
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>						
Time Counter (Start):						
Time Counter (Stop):						
Total Run Time (Minutes):						
Pump Fault (Y/N):						
Pre-Calibration Flow Rate (Start) (Liters/Minute):						
Post-Calibration Flow Rate (End) (Liters/Minute):						
Avg Flow Rate (Liters/Minute):						
Sample Volume (Liters):						
MET Station on Site?: YES		START-3 Signature/Date: <u>Abisiocho</u> 01/15/14				
Comments: Local Weather: Low: 33°F; High: 57°F; Winds low to 5 - 6 mph from the west/northwest. Clear skies. * - Location/station numbers: See GPS on file. ** - Pump number: See equipment log for serial numbers. *** - BIOS DryCal: See scanned calibration certificates on file.						





# U.S. EPA Region 6 START-3 Air Sampling Worksheet

**DYNAMAC**  
CORPORATION

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-16-2014

START-3 Site Manager: John Koehn

Sample ID:	UW01-011614	CW02-011614	UW04-011614	FB01-011314 (Field Blank)		EP01_011614
Location/Station #:	01*	02*	04*	N/A		EPA Office Trailer (Indoor)
Pump #:	1**	3**	2**	N/A		5**
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		0.8 µm MCEF
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		13977-7DD-210
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		NIOSH 7400 (PCM)
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		4893***
Time Counter (Start):	0740	0744	0735	0738		0755
Time Counter (Stop):	1505	****wet/overloaded at @1400	1509	0738		1515
Total Run Time (Minutes):	445	-	454	N/A		440
Pump Fault (Y/N):	N	N	N	N/A		N
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.834	9.883	10.02	N/A		9.826
Post-Calibration Flow Rate (End) (Liters/Minute):	10.15	9.940	10.04	N/A		10.27
Avg Flow Rate (Liters/Minute):	9.992	-	10.03	N/A		10.048
Sample Volume (Liters):	4446.44	-	4553.62	N/A		4421.12

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 01/16/14

## Comments:

Local Weather: Low: 35°F; High: 57°F; Winds low to 5 - 6 mph from the west/northwest. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

\*\*\*\* - Air sample pump unit and cassette filter became wet wet/overloaded @1400 hrs. during dust suppression activities.

Cassette was not sent to the lab to be analyzed.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable      EP – EPA Office Trailer (Indoor)



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-17-2014

START-3 Site Manager: John Koehn

Sample ID:	CW01-011714	UW06-011714	UW04-011714	FB01-011714 (Field Blank)		
Location/Station #:	01*	06*	04*	N/A		
Pump #:	1**	2**	3**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0746	0807	0815	0810		
Time Counter (Stop):	1147	1145	1155	0810		
Total Run Time (Minutes):	241	218	220	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.17	9.602	9.508	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	10.57	9.828	9.696	N/A		
Avg Flow Rate (Liters/Minute):	10.37	9.715	9.602	N/A		
Sample Volume (Liters):	2499.17	2117.87	2112.44	N/A		

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

01/17/14

**Comments:**

Local Weather: Low: 28°F; High: 56°F; Winds low to 5 - 6 mph from the west/northwest. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-18-2014

START-3 Site Manager: John Koehn

Sample ID:	CW01-011814	UW06-011814	UW04-011814	FB01-011814 (Field Blank)		
Location/Station #:	01*	06*	04*	N/A		
Pump #:	1**	2**	3**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0742	0745	0750	0815		
Time Counter (Stop):	1635	1637	1640	0815		
Total Run Time (Minutes):	533	532	530	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.57	9.828	9.696	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	10.99	9.856	9.996	N/A		
Avg Flow Rate (Liters/Minute):	10.78	9.892	9.846	N/A		
Sample Volume (Liters):	5745.74	5262.54	5218.38	N/A		

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

01/18/14

**Comments:**

Local Weather: Low: 32°F; High: 56°F; Winds low to 4 - 5 mph from the west/northwest. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-19-2014

START-3 Site Manager: John Koehn

Sample ID:	DW01-011914	CW06-011914	DW04-011914	FB01-011914 (Field Blank)		
Location/Station #:	01*	06*	04*	N/A		
Pump #:	1**	2**	3**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0735	0737	0722	0730		
Time Counter (Stop):	1544	1547	1535	0730		
Total Run Time (Minutes):	489	490	493	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.99	9.956	9.996	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	10.93	9.958	9.852	N/A		
Avg Flow Rate (Liters/Minute):	10.96	9.958	9.924	N/A		
Sample Volume (Liters):	5359.44	4878.93	4892.53	N/A		

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 01/19/14

**Comments:**

Local Weather: Low: 28°F; High: 58°F; Winds low to 2 - 4 mph from the south. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-20-2014

START-3 Site Manager: John Koehn

Sample ID:	UW01-012014	CW06-012014	UW04-012014	FB01-012014 (Field Blank)		
Location/Station #:	01*	06*	04*	N/A		
Pump #:	1**	2**	3**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0730	0732	0726	0728		
Time Counter (Stop):	1607	1610	1620	0728		
Total Run Time (Minutes):	517	518	534	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.93	9.958	9.852	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	10.97	10.01	9.869	N/A		
Avg Flow Rate (Liters/Minute):	10.95	9.984	9.8605	N/A		
Sample Volume (Liters):	5661.15	5171.71	5265.51	N/A		

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

01/20/14

**Comments:**

Local Weather: Low: 32°F; High: 56°F; Winds low to 2 - 4 mph from the north. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind

DW – Downwind

CW – Crosswind

N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-21-2014

START-3 Site Manager: John Koehn

Sample ID:	UW01-012114	CW06-012114	UW04-012114	FB01-012114 (Field Blank)		
Location/Station #:	01*	06*	04*	N/A		
Pump #:	1**	2**	13**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0735	0740	0750	0749		
Time Counter (Stop):	1637	1640	1645	0749		
Total Run Time (Minutes):	542	540	535	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.97	10.01	10.10	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	10.99	10.06	10.06	N/A		
Avg Flow Rate (Liters/Minute):	10.98	10.035	10.08	N/A		
Sample Volume (Liters):	5951.16	5418.90	5392.80	N/A		

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

01/21/14

**Comments:**

Local Weather: Low: 28°F; High: 58°F; Winds light to 2 - 4 mph from the north. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind

DW – Downwind

CW – Crosswind

N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-22-2014

START-3 Site Manager: John Koehn

Sample ID:	UW01-012214	CW06-012214	UW04-012214	FB01-012214 (Field Blank)		
Location/Station #:	01*	06*	04*	N/A		
Pump #:	1**	2**	13**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0726	0728	0720	0725		
Time Counter (Stop):	1619	1622	1630	0725		
Total Run Time (Minutes):	533	534	550	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.99	10.06	10.06	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	11.04	9.934	9.852	N/A		
Avg Flow Rate (Liters/Minute):	11.015	9.997	9.956	N/A		
Sample Volume (Liters):	5871.00	5338.40	5475.80	N/A		

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

01/22/14

**Comments:**

Local Weather: Low: 27°F; High: 47°F; Winds light to 2 - 4 mph from the north. Mostly cloudy skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind

DW – Downwind

CW – Crosswind

N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**



Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-23-2014

START-3 Site Manager: John Koehnen

Sample ID:	EP02_012314	EP03_012314		SWVAir-WAR4	SWVAir_WSTrail01	SWVAir_WSTrail02
Location/Station #:	EPA Trailer Office (Indoor; SOUTH)	EPA Trailer Office (Indoor; NORTH)		W. Silver Recycling Auxiliary Warehouse (Indoor; WEST)	W. Silver Recycling Trailer Weigh Office (Indoor; MIDDLE)	W. Silver Recycling Trailer Weigh Office (Indoor; EAST)
Pump #:	6**	5**		13**	1**	2**
Media:	0.8 µm MCEF	0.8 µm MCEF		0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF
Lot No.:	13977-7DD-210	13977-7DD-210		13977-7DD-210	13977-7DD-210	13977-7DD-210
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***		4893***	4893***	4893***
Time Counter (Start):	0909	1009		0910	0850	0855
Time Counter (Stop):	1619	1620		1612	1602	1606
Total Run Time (Minutes):	430	371		422	432	431
Pump Fault (Y/N):	N	N		N	N	N
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.956	10.07		9.852	10.05	9.934
Post-Calibration Flow Rate (End) (Liters/Minute):	9.596	10.13		9.339	9.661	10.20
Avg Flow Rate (Liters/Minute):	9.776	10.1		9.5955	9.8555	10.067
Sample Volume (Liters):	4203.68	3747.10		4049.30	4215.59	4338.88

MET Station on Site?: YES

START-3 Signature/Date:

*Noel Biscocho*

01/23/14

**Comments:**

Local Weather: Low: 32°F; High: 45°F; Winds moderate to high at 13 to 16 mph, with gusts to 29 mph from the E. Mostly clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind

DW – Downwind

CW – Crosswind

N/A – Not Applicable

EP – EPA





**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-24-2014

START-3 Site Manager: John Koehn

Sample ID:	UW01-012414	UW05-012414	UW04-012414	FB01-012414 (Field Blank)		
Location/Station #:	01*	05*	04*	N/A		
Pump #:	1**	2**	13**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0730	0732	0722	0728		
Time Counter (Stop):	1622	1624	1630	0728		
Total Run Time (Minutes):	532	532	548	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.661	10.20	9.339	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	9.587	9.746	10.42	N/A		
Avg Flow Rate (Liters/Minute):	9.624	9.973	9.8795	N/A		
Sample Volume (Liters):	5119.97	5305.64	5413.97	N/A		

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 01/24/14

**Comments:**

Local Weather: Low: 18°F; High: 50°F; Winds light to 4 – 6 mph from the north. Mostly clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-25-2014

START-3 Site Manager: John Koehn

Sample ID:	UW01-012514	UW05-012514	CW06-012514	UW04-012514	FB01-012514 (Field Blank)	
Location/Station #:	01*	05*	06*	04*	N/A	
Pump #:	1**	2**	6**	13**	N/A	
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210	
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	4893***	N/A	
Time Counter (Start):	0715	0720	0725	0740	0745	
Time Counter (Stop):	1630	1635	1637	1700	0745	
Total Run Time (Minutes):	555	555	552	560	N/A	
Pump Fault (Y/N):	N	N	N	N	N/A	
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.587	9.746	9.596	10.42	N/A	
Post-Calibration Flow Rate (End) (Liters/Minute):	9.852	10.51	9.803	9.311	N/A	
Avg Flow Rate (Liters/Minute):	9.7195	10.128	9.6995	9.8655	N/A	
Sample Volume (Liters):	5394.32	5621.04	5354.12	5524.68	N/A	

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 01/25/14

**Comments:**

Local Weather: Low: 27°F; High: 56°F; Winds light to 4 – 6 mph from the north. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-26-2014

START-3 Site Manager: John Koehn

Sample ID:	UW05-012614	CW06-012614	VW04-012614	FB01-012614 (Field Blank)		
Location/Station #:	05*	06*	04*	N/A		
Pump #:	2**	1**	13**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0738	0735	0800	0755		
Time Counter (Stop):	1610	1615	1620	0755		
Total Run Time (Minutes):	512	520	500	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	10.51	9.803	9.311	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	10.61	9.292	9.057	N/A		
Avg Flow Rate (Liters/Minute):	10.56	9.549	9.184	N/A		
Sample Volume (Liters):	5406.72	4965.48	4592.00	N/A		

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 01/26/14

**Comments:**

Local Weather: Low: 32°F; High: 61°F; Winds light to 3 - 4 mph from the northwest. Clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**

**DYNAMAC  
CORPORATION**

Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-27-2014

START-3 Site Manager: John Koehn

Sample ID:	CW0F-012714	UW06-012714	UW04-012714	FB01-012714 (Field Blank)		
Location/Station #:	01*	06*	04*	N/A		
Pump #:	1**	2**	13**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0715	0725	0717	0720		
Time Counter (Stop):	1615	1620	1625	0720		
Total Run Time (Minutes):	540	535	548	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.295	10.61	9.438	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	9.254	10.61	9.474	N/A		
Avg Flow Rate (Liters/Minute):	9.2745	10.61	9.456	N/A		
Sample Volume (Liters):	5008.23	5676.35	5181.89	N/A		

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 01/27/14

**Comments:**

Local Weather: Low: 33°F; High: 53°F; Winds light to 6 – 8 mph from the N early, switching to S winds late. Mostly clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable



**U.S. EPA Region 6  
START-3  
Air Sampling Worksheet**



Site: Southwest Vermiculite

TDD#: 1/Dynamac-077-13-01

Sampler(s): Noel Biscocho

U.S. EPA OSC: Mike McAteer

Date: 01-28-2014

START-3 Site Manager: John Koehn

Sample ID:	CW01-012814	UW06-012814	UW04-012814	FB01-012814 (Field Blank)		
Location/Station #:	01*	06*	04*	N/A		
Pump #:	1**	2**	13**	N/A		
Media:	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF	0.8 µm MCEF		
Lot No.:	13977-7DD-210	13977-7DD-210	13977-7DD-210	13977-7DD-210		
Analysis/Method:	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)	NIOSH 7400 (PCM)		
BIOS DryCal (serial #): <small>DC-Lite 500mL-30L/min. Model: DCL-H, Rev. 1.08</small>	4893***	4893***	4893***	N/A		
Time Counter (Start):	0715	0719	0725	0727		
Time Counter (Stop):	1602	1604	1610	0727		
Total Run Time (Minutes):	527	525	525	N/A		
Pump Fault (Y/N):	N	N	N	N/A		
Pre-Calibration Flow Rate (Start) (Liters/Minute):	9.254	10.61	9.438	N/A		
Post-Calibration Flow Rate (End) (Liters/Minute):	9.290	10.43	9.427	N/A		
Avg Flow Rate (Liters/Minute):	9.272	10.52	9.4325	N/A		
Sample Volume (Liters):	4886.34	5523.00	4952.06	N/A		

MET Station on Site?: YES

START-3 Signature/Date: Noel Biscocho 01/28/14

**Comments:**

Local Weather: Low: 24°F; High: 53°F; Winds light to moderate at 8 - 10 mph from the northwest. Mostly clear skies.

\* - Location/station numbers: See GPS on file.

\*\* - Pump number: See equipment log for serial numbers.

\*\*\* - BIOS DryCal: See scanned calibration certificates on file.

UW – Upwind      DW – Downwind      CW – Crosswind      N/A – Not Applicable