1.0 INTRODUCTION

1.1 SUMMARY OF TEST PROGRAM

The Heat Treating Services of America, Inc. (Facility ID: N6726), located in Pontiac, Michigan, contracted Montrose Air Quality Services, LLC (Montrose) of Detroit, Michigan, to conduct compliance stack emission testing for their Oil Quenching Operation (EUQUENCH). Testing was performed to satisfy the emissions testing requirements pursuant to Michigan Department of Environment, Great Lakes, and Energy (EGLE) Permit No. 169-01B. The testing was performed on June 4, 2019.

Simultaneous sampling was performed at the Oil Tank Exhaust Stack (SV-HR1-J), Furnace Inlet Exhaust Stack (SV-HR1-K), and Furnace Outlet Exhaust Stack (SV-HR1-V) to determine the emissions of total gaseous organics (TGO). Testing was conducted during maximum routine load. During this test emissions from Oil Tank Exhaust Stack, Furnace Inlet Exhaust Stack, and Furnace Outlet Exhaust Stack were uncontrolled.

The test methods that were conducted during this test were US EPA Methods 1, 2, 4, and 25A.

1.2 KEY PERSONNEL

The key personnel who coordinated this test program (and their phone numbers) were:

- Ken Rogghe, Corporate Engineering Manager, Heat Treating Services of America, Inc., 248-322-3066
- Lynn Jankowski, Project Manager, Civil & Environmental Consultants, Inc., 419-214-4416
- Mason Sakshaug QI, Field Project Manager, Montrose, 248-548-7980

2.0 SUMMARY AND DISCUSSION OF TEST RESULTS

2.1 OBJECTIVES AND TEST MATRIX

The purpose of this test was to determine the emissions of TGOs at the Oil Tank Exhaust Stack, Furnace Inlet Exhaust Stack, and Furnace Outlet Exhaust Stack during maximum routine load. Testing was performed to satisfy the emissions testing requirements pursuant to EGLE Permit No. 169-01B.

The specific test objectives for this test are as follows:

- Simultaneously measure the concentration of moisture and TGO at the Oil Tank Exhaust Stack, Furnace Inlet Exhaust Stack, and Furnace Outlet Exhaust Stack.
- Simultaneously Measure the actual and dry standard volumetric flow rate of the stack gas at the Oil Tank Exhaust Stack, Furnace Inlet Exhaust Stack, and Furnace Outlet Exhaust Stack.
- Utilize the above variables to determine the emissions of TGO at the Oil Tank Exhaust Stack, Furnace Inlet Exhaust Stack, and Furnace Outlet Exhaust Stack during maximum routine load.

Table 2.1 presents the sampling matrix log for this test.

2.2 FIELD TEST CHANGES AND PROBLEMS

A post test review of the data shows that a more sensitive manometer was required as per US EPA Method 2, Section 6.2 at the Oil Tank Exhaust Stack and Furnace Inlet Exhaust Stack. It is the opinion of Montrose that this may have had an undeterminable effect on the results of this test.

2.3 PRESENTATION OF RESULTS

Two sampling trains were utilized during each run at the Oil Tank Exhaust Stack, Furnace Inlet Exhaust Stack, and Furnace Outlet Exhaust Stack to determine the emissions of TGO. One sampling train measured the moisture content while a second sampling train measured the stack gas concentrations of TGO. Stack gas volumetric flow rate was measured prior to each concentration run and after the third concentration run.

Tables 2.2 to 2.4 displays the emissions of TGO measured at the Oil Tank Exhaust Stack, Furnace Inlet Exhaust Stack, and Furnace Outlet Exhaust Stack during maximum routine load.

Table 2.5 displays the combined emissions of TGO measured at all three exhaust stacks during maximum routine load.

Since the composition of the stack gas exhausted from the Oil Tank Exhaust Stack, Furnace Inlet Exhaust Stack, and Furnace Outlet Exhaust Stack were essentially comprised of ambient air (i.e. a non-combustion source), a dry molecular weight value of 29.0 g/g-mole was utilized at the testing location as per US EPA Method 2, Section 8.6.

Concentration values in Tables 2.4 and 2.5 denoted with a '<' were measured to be below the minimum detection limit (MDL) of the applicable analytical method. Mass emission rates denoted with a '<' in Table 2.4 and 2.5 were calculated utilizing the applicable MDL concentration value instead of the "as measured" concentration value.

The graphs that present the raw, uncorrected concentration data measured in the field by the US EPA Method 25A sampling systems at the Oil Tank Exhaust Stack, Furnace Inlet Exhaust Stack, and Furnace Outlet Exhaust Stack are located in the Field Data section of the Appendix.

TABLE 2.1
SAMPLING MATRIX OF TEST METHODS UTILIZED

Date	Run No.	Sampling Location	US EPA METHODS 1/2 (Pre Flows) Sampling Time / Duration (min)	US EPA METHODS 1/2 (Post Flows) Sampling Time / Duration (min)	US EPA METHOD 4 (%H_2O) Sampling Time / Duration (min)	US EPA METHOD 25A (TGO) Sampling Time / Duration (min)
6/4/2019	1	OIL TANK EXHAUST STACK	8:16 - 8:25 / 9	9:54 - 10:02 / 8		8:47 - 9:47 / 60
6/4/2019	2	OIL TANK EXHAUST STACK	9:54 - 10:02 / 8	12:22 - 12:30 / 8	8:53 - 9:23 / 30	11:06 - 12:06 / 60
6/4/2019	3	OIL TANK EXHAUST STACK	12:22 - 12:30 / 8	14:07 - 14:15 / 8		12:47 - 13:47 / 60
6/4/2019	1	FURNACE INLET EXHAUST STACK	8:03 - 8:13 / 10	10:13 - 10:21 / 8		8:47 - 9:47 / 60
6/4/2019	2	FURNACE INLET EXHAUST STACK	10:13 - 10:21 / 8	12:14 - 12:20 / 6	10:29 - 10:59 / 30	11:06 - 12:06 / 60
6/4/2019	3	FURNACE INLET EXHAUST STACK	12:14 - 12:20 / 6	14:00 - 14:06 / 6		12:47 - 13:47 / 60
6/4/2019	1	FURNACE OUTLET EXHAUST STACK	7:45 - 7:56 / 11	10:04 - 10:10 / 6		8:47 - 9:47 / 60
6/4/2019	2	FURNACE OUTLET EXHAUST STACK	10:04 - 10:10 / 6	12:32 - 12:38 / 6	12:50 - 13:20 / 30	11:06 - 12:06 / 60
6/4/2019	3	FURNACE OUTLET EXHAUST STACK	12:32 - 12:38 / 6	13:52 - 13:57 / 5		12:47 - 13:47 / 60

All times are Eastern Daylight Time.

TABLE 2.2
EMISSION RESULTS

Parameter	OIL TANK EXHAUST STACK			
	Run 1	**Run 2**	**Run 3**	**Average**
Metal Processed (lb/hr)*	9,800	9,800	9,800	9,800
Total Gaseous Organics Emissions (lb/ton as propane)	0.091	0.083	0.126	0.100
Total Gaseous Organics Emissions (lb/hr as propane)	0.45	0.40	0.62	0.49
Total Gaseous Organics Concentration (ppmvw as propane)	44.8	35.8	60.0	46.9
Stack Gas Average Flow Rate (acfm)	1,580	1,811	1,676	1,689
Stack Gas Average Flow Rate (scfm)	1,454	1,644	1,503	1,534
Stack Gas Average Flow Rate (dscfm)	1,430	1,617	1,479	1,509
Stack Gas Average Velocity (fpm)	322	369	341	344
Stack Gas Average Static Pressure (in-H_2O)	0.00	0.00	0.00	0.00
Stack Gas Average Temperature (°F)	98	106	113	106
Stack Gas Percent by Volume Moisture (%H_2O)	1.63	1.63	1.63	1.63
Measured Stack Inner Diameter (in)	30.0			

* Process data was provided by Heat Treating Services of America, Inc. personnel.

TABLE 2.3
EMISSION RESULTS

Parameter	FURNACE INLET EXHAUST STACK			
	Run 1	Run 2	Run 3	Average
Metal Processed (lb/hr)*	9,800	9,800	9,800	9,800
Total Gaseous Organics Emissions (lb/ton as propane)	0.031	0.043	0.042	0.039
Total Gaseous Organics Emissions (lb/hr as propane)	0.15	0.21	0.21	0.19
Total Gaseous Organics Concentration (ppmvw as propane)	11.7	16.6	16.6	15.0
Stack Gas Average Flow Rate (acfm)	2,248	2,170	2,126	2,182
Stack Gas Average Flow Rate (scfm)	1,902	1,858	1,818	1,860
Stack Gas Average Flow Rate (dscfm)	1,875	1,832	1,792	1,833
Stack Gas Average Velocity (fpm)	716	691	677	694
Stack Gas Average Static Pressure (in-H_2O)	-0.04	-0.04	-0.04	-0.04
Stack Gas Average Temperature (°F)	147	140	140	142
Stack Gas Percent by Volume Moisture (%H_2O)	1.43	1.43	1.43	1.43
Measured Stack Inner Diameter (in)	24.0			

* Process data was provided by Heat Treating Services of America, Inc. personnel.

TABLE 2.4
EMISSION RESULTS

Parameter	FURNACE OUTLET EXHAUST STACK			
	Run 1	**Run 2**	**Run 3**	**Average**
Metal Processed (lb/hr)*	9,800	9,800	9,800	9,800
Total Gaseous Organics Emissions (lb/ton as propane)†	<0.0048	<0.0048	<0.0049	<0.0049
Total Gaseous Organics Emissions (lb/hr as propane)†	<0.023	<0.024	<0.024	<0.024
Total Gaseous Organics Concentration (ppmvw as propane)†	<1.75	<1.86	<1.61	<1.74
Stack Gas Average Flow Rate (acfm)	4,140	4,251	4,229	4,207
Stack Gas Average Flow Rate (scfm)	1,692	1,704	1,746	1,714
Stack Gas Average Flow Rate (dscfm)	1,593	1,604	1,644	1,614
Stack Gas Average Velocity (fpm)	2,479	2,545	2,532	2,518
Stack Gas Average Static Pressure (in-H_2O)	-0.13	-0.13	-0.13	-0.13
Stack Gas Average Temperature (°F)	796	821	784	800
Stack Gas Percent by Volume Moisture (%H_2O)	5.85	5.85	5.85	5.85
Measured Stack Inner Diameter (in)	17.50			

* Process data was provided by Heat Treating Services of America, Inc. personnel.
† The "<" symbol indicates that compound was below the Minimum Detection Limit (MDL) of the analytical method. See Section 2.3 for details.

TABLE 2.5
EMISSION RESULTS

Parameter	COMBINED RESULTS			
	Run 1	Run 2	Run 3	Average
Metal Processed (lb/hr)*	9,800	9,800	9,800	9,800
Total Gaseous Organics Emissions (lb/ton as propane)†	<0.1275	<0.1307	<0.1735	<0.1439
Total Gaseous Organics Emissions (lb/hr as propane)†	<0.625	<0.640	<0.850	<0.705
Total Gaseous Organics Concentration (ppmvw as propane)†	<58.34	<54.30	<78.18	<63.61

* Process data was provided by Heat Treating Services of America, Inc. personnel.
† The "<" symbol indicates that compound was below the Minimum Detection Limit (MDL) of the analytical method. See Section 2.3 for details.

3.0 PLANT AND SAMPLING LOCATION DESCRIPTIONS

3.1 PROCESS DESCRIPTION AND OPERATION

Heat Treating Services of America, Inc. - Pontiac Plant provides steel heat treating services for customer supplied steel parts. The Oil Quench System (EUQUENCH) was in operation for this testing event.

Figure 3.1 depicts the process and sampling location schematic.

3.2 CONTROL EQUIPMENT DESCRIPTION

During this test, emissions from EUQUENCH were uncontrolled.

3.3 SAMPLING LOCATION(S)

3.3.1 Oil Tank Exhaust Stack

The Oil Tank Exhaust Stack had a measured inner diameter of 30.0-inches, was oriented in the vertical plane, and was accessed from a roof. Two sampling ports were located 90° apart from one another at a location that met US EPA Method 1, Section 11.1.1 criteria. Prior to emissions sampling, the stack was traversed to verify the absence of cyclonic flow. An average yaw angle of 0.0° was measured. Therefore, the sampling location also met US EPA Method 1, Section 11.4.2 criteria. During emissions sampling, the stack was traversed for stack gas volumetric flow rate. A single point was utilized to determine the moisture content. A second point, located within the central 10% of the stack cross-sectional area, was utilized for TGO concentration determination.

3.3.2 Furnace Inlet Exhaust Stack

The Furnace Inlet Exhaust Stack had a measured inner diameter of 24.0-inches, was oriented in the vertical plane, and was accessed from a roof. Two sampling ports were located 90° apart from one another at a location that met US EPA Method 1, Section 11.1.1 criteria. Prior to emissions sampling, the stack was traversed to verify the absence of cyclonic flow. An average yaw angle of 0.0° was measured. Therefore, the sampling location also met US EPA Method 1, Section 11.4.2 criteria. During emissions sampling, the stack was traversed for stack gas volumetric flow rate. A single point was utilized to determine the moisture content. A second point, located within the central 10% of the stack cross-sectional area, was utilized for TGO concentration determination.

3.3.3 Furnace Outlet Exhaust Stack

The Furnace Outlet Exhaust Stack had a measured inner diameter of 17.5-inches, was oriented in the vertical plane, and was accessed from a roof. Two sampling ports were located 90° apart from one another at a location that met US EPA Method 1, Section 11.1.1 criteria. Prior to emissions sampling, the stack was traversed to verify the absence of cyclonic flow. An average yaw angle of 0.31° was measured. Therefore, the sampling location also met US EPA Method 1, Section 11.4.2 criteria. During emissions sampling, the stack was traversed for stack gas volumetric flow rate. A single point was utilized to determine the moisture content. A second point, located within the central 10% of the stack cross-sectional area, was utilized for TGO concentration determination.

Figures 3.2 to 3.4 schematically illustrate the traverse point and sample port locations utilized.

3.4 PROCESS SAMPLING LOCATION(S)

The US EPA Reference Test Methods performed did not specifically require that process samples were to be taken during the performance of this testing event. It is in the best knowledge of Montrose that no process samples were obtained and therefore no process sampling location was identified in this report.

FIGURE 3.1
EUQUENCH PROCESS AND SAMPLING LOCATION SCHEMATIC

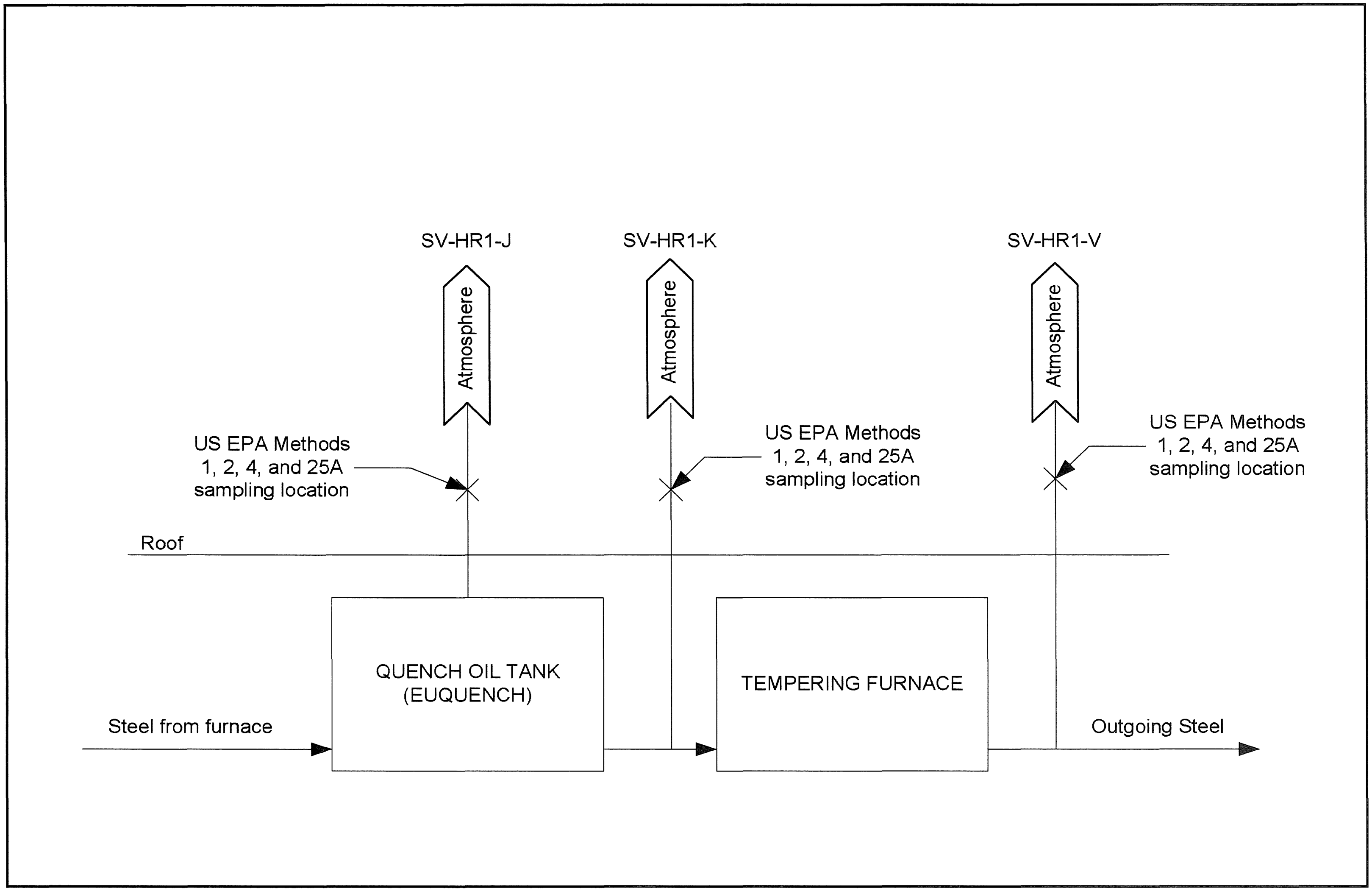
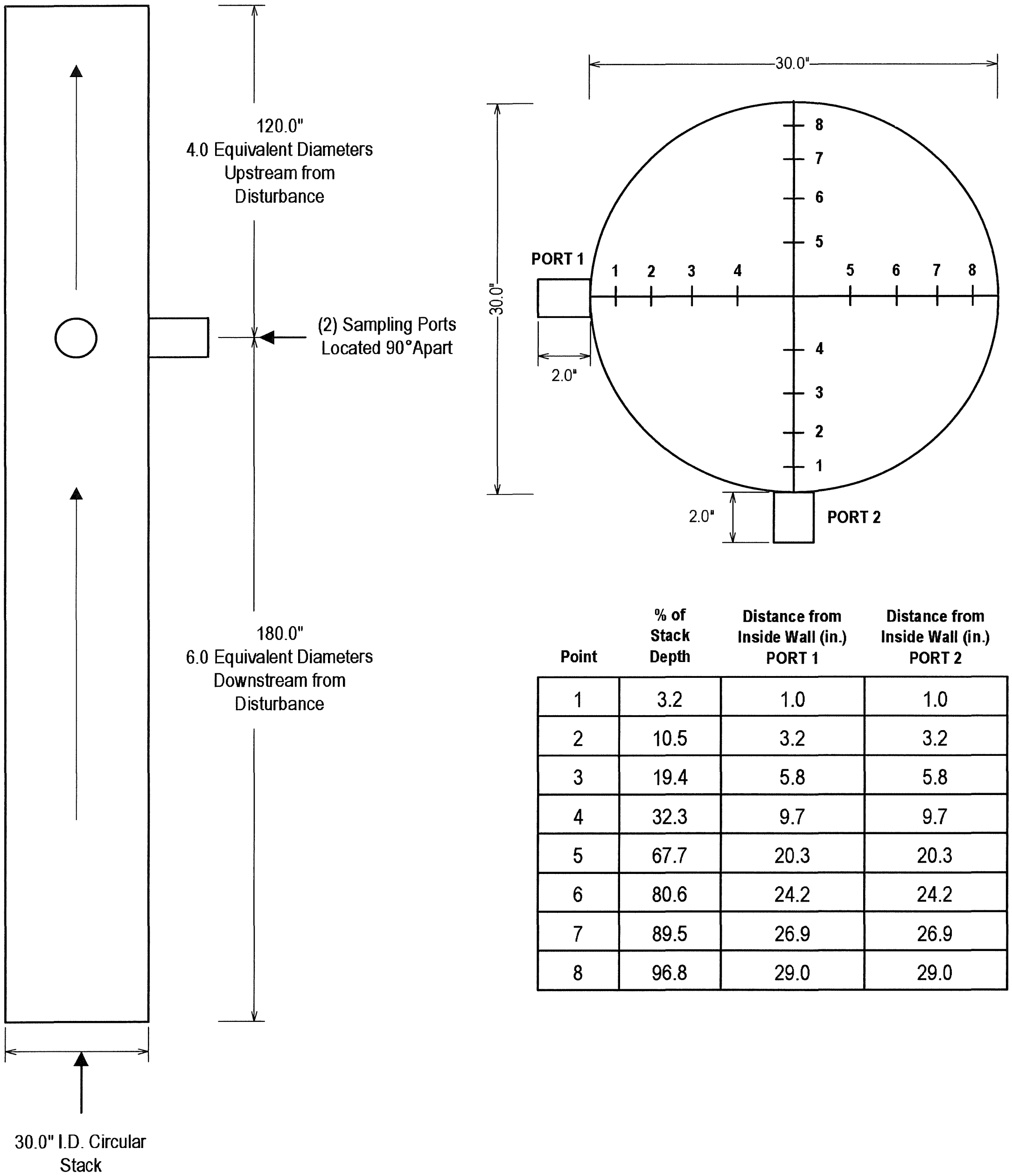
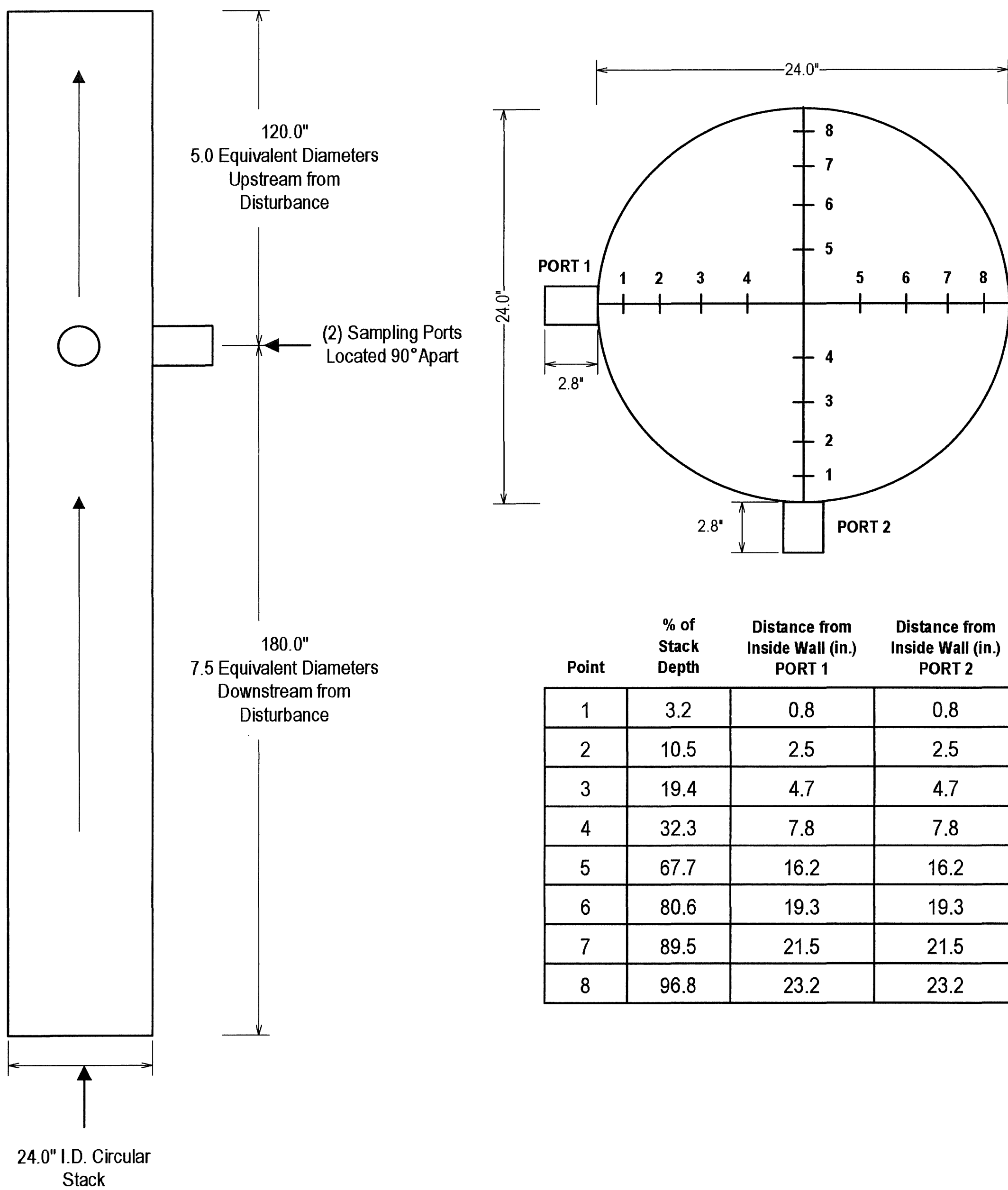


FIGURE 3.2
OIL TANK EXHAUST STACK TRAVERSE POINT LOCATION DRAWING



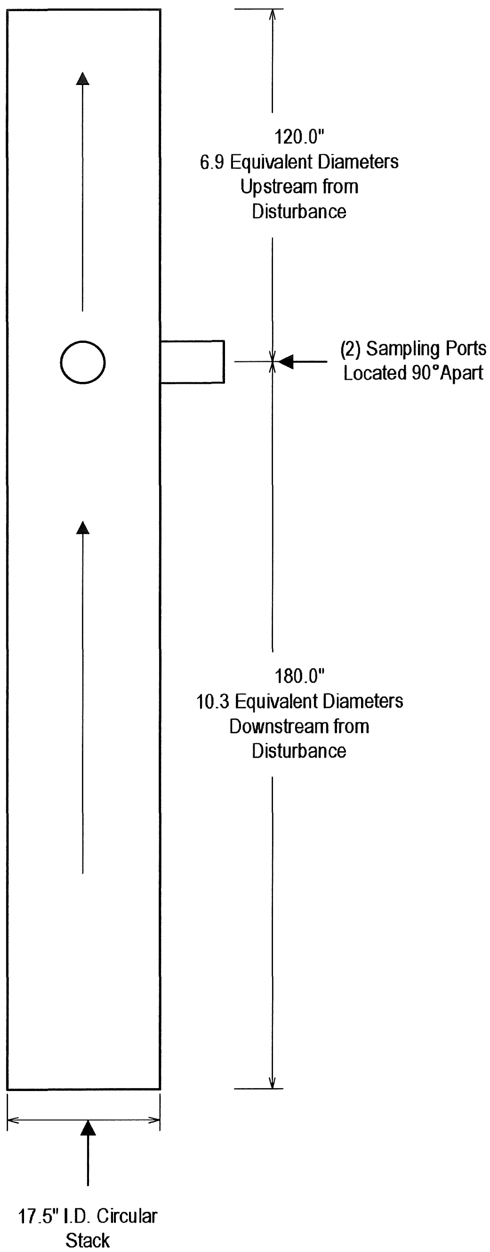
Point	% of Stack Depth	Distance from Inside Wall (in.) PORT 1	Distance from Inside Wall (in.) PORT 2
1	3.2	1.0	1.0
2	10.5	3.2	3.2
3	19.4	5.8	5.8
4	32.3	9.7	9.7
5	67.7	20.3	20.3
6	80.6	24.2	24.2
7	89.5	26.9	26.9
8	96.8	29.0	29.0

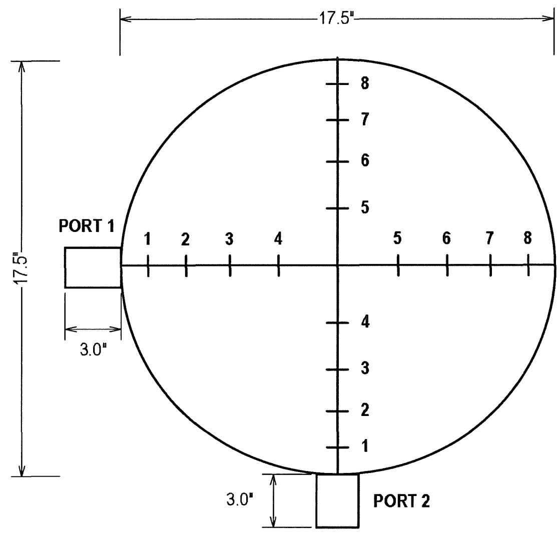
FIGURE 3.3
FURNACE INLET EXHAUST STACK TRAVERSE POINT LOCATION DRAWING



Point	% of Stack Depth	Distance from Inside Wall (in.) PORT 1	Distance from Inside Wall (in.) PORT 2
1	3.2	0.8	0.8
2	10.5	2.5	2.5
3	19.4	4.7	4.7
4	32.3	7.8	7.8
5	67.7	16.2	16.2
6	80.6	19.3	19.3
7	89.5	21.5	21.5
8	96.8	23.2	23.2

FIGURE 3.4
FURNACE OUTLET EXHAUST STACK TRAVERSE POINT LOCATION DRAWING





Point	% of Stack Depth	Distance from Inside Wall (in.) PORT 1	Distance from Inside Wall (in.) PORT 2
1	3.2	0.6	0.6
2	10.5	1.8	1.8
3	19.4	3.4	3.4
4	32.3	5.7	5.7
5	67.7	11.8	11.8
6	80.6	14.1	14.1
7	89.5	15.7	15.7
8	96.8	16.9	16.9

4.0 SAMPLING AND ANALYTICAL PROCEDURES

4.1 TEST METHODS

4.1.1 US EPA Method 1: "Sample and Velocity Traverses for Stationary Sources"

Principle: To aid in the representative measurement of pollutant emissions and/or total volumetric flow rate from a stationary source, a measurement site where the effluent stream is flowing in a known direction is selected, and the cross-section of the stack is divided into a number of equal areas. A traverse point is then located within each of these equal areas. This method was utilized in its entirety as per the procedures outlined in 40 CFR Part 60, Appendix A.

4.1.2 US EPA Method 2: "Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)"

Principle: The average gas velocity in a stack is determined from the gas density and from measurement of the average velocity head with a Type S (Stausscheibe or reverse type) pitot tube. This method was utilized in its entirety as per the procedures outlined in 40 CFR Part 60, Appendix A.

4.1.3 US EPA Method 4: "Determination of Moisture Content in Stack Gases"

Principle: A gas sample is extracted at a constant rate from the source; moisture is removed from the sample stream and determined either volumetrically or gravimetrically. This method was utilized in its entirety as per the procedures outlined in 40 CFR Part 60, Appendix A.

4.1.4 US EPA Method 25A: "Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer"

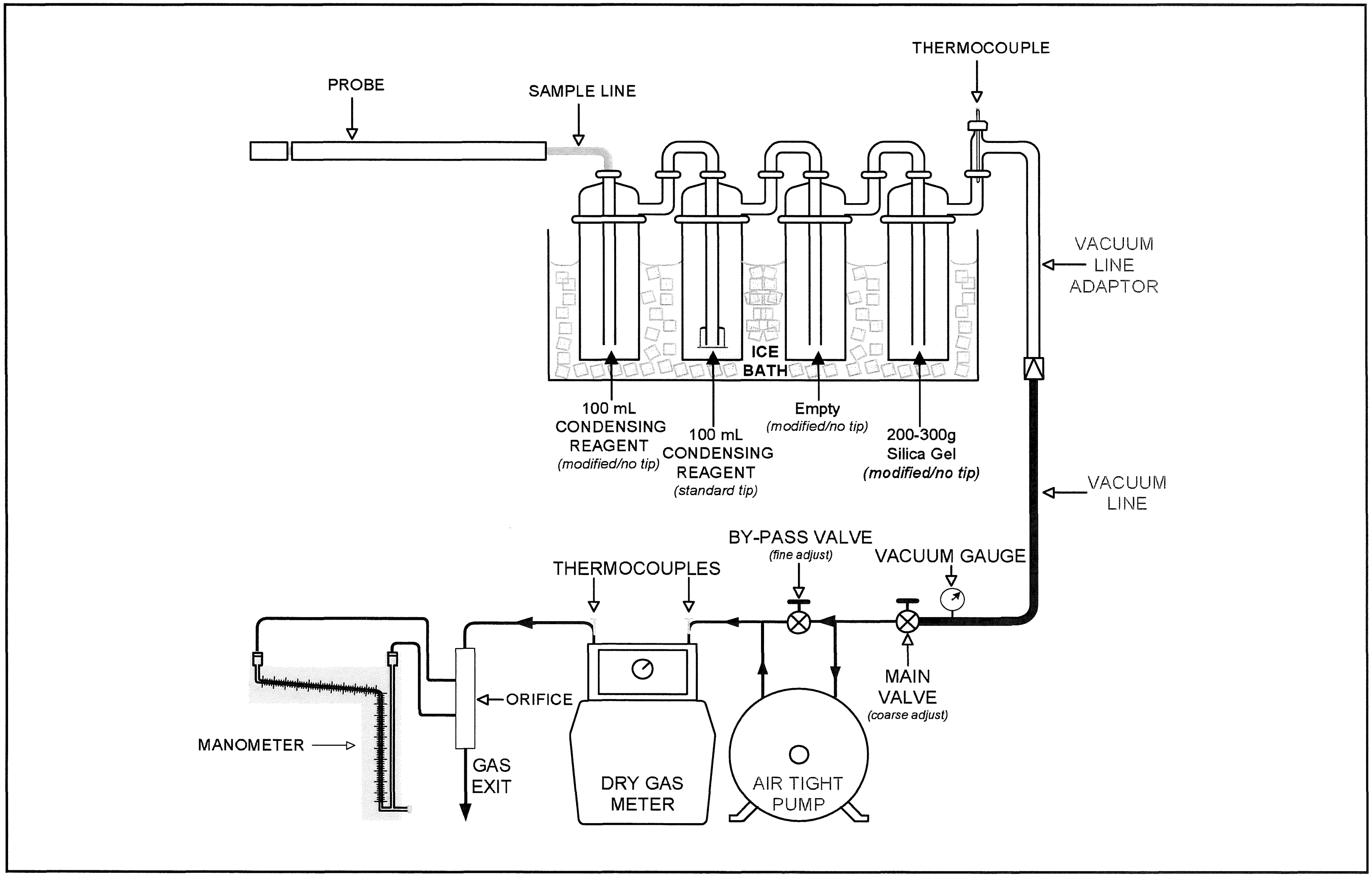
Principle: A gas sample is extracted from the source through a heated sample line, if necessary, and glass fiber filter to a flame ionization analyzer (FIA). Results are reported as volume concentration equivalents of the calibration gas or as carbon equivalents. Performance specifications and test procedures are provided to ensure reliable data. This method was utilized in its entirety as per the procedures outlined in 40 CFR Part 60, Appendix A.

The sampling trains utilized during this testing project are depicted in Figures 4.1 and 4.2.

4.2 PROCEDURES FOR OBTAINING PROCESS DATA

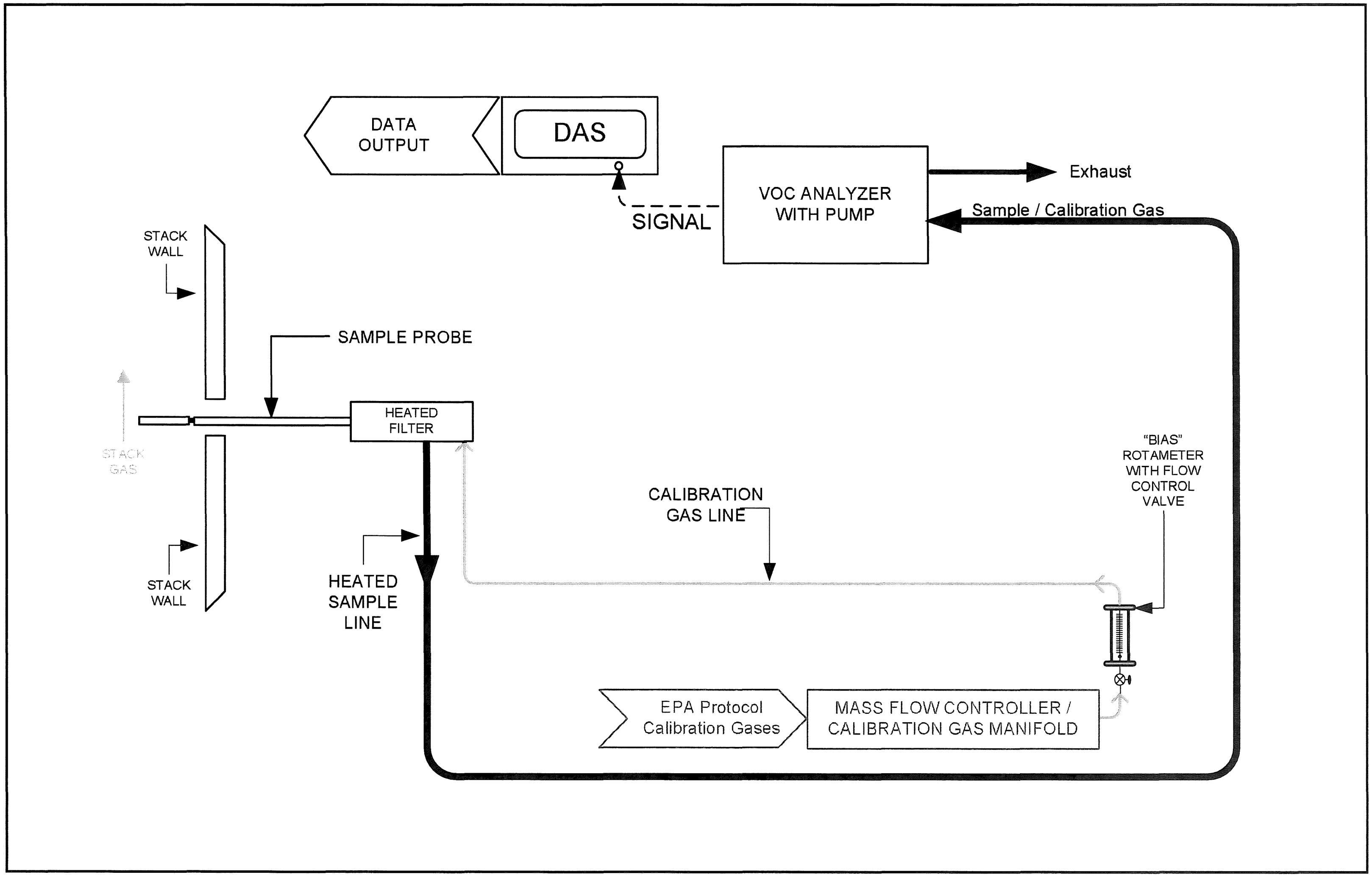
Process data was recorded by Heat Treating Services of America, Inc. personnel utilizing their typical record keeping procedures. Recorded process data was provided to Montrose personnel at the conclusion of this test event. The process data is located in Tables 2.2 to 2.4 and in the Appendix.

FIGURE 4.1
US EPA METHOD 4 SAMPLING TRAIN SCHEMATIC



MONTROSE

FIGURE 4.2
US EPA METHOD 25A SAMPLING TRAIN SCHEMATIC



5.0 INTERNAL QA/QC ACTIVITIES

5.1 QA AUDITS

Tables 5.1 to 5.4 illustrate the QA audits that were performed during this test.

All meter boxes and sampling trains used during sampling performed within the requirements of their respective methods as is shown in Tables 5.1 and 5.2. All post-test leak checks were well below the applicable limit. Minimum metered volumes were also met where applicable.

Tables 5.3.1 to 5.3.2 illustrate the FIA calibration audits which were performed during this test (and integral to performing US EPA Method 25A correctly) were, except where noted, within the Measurement System Performance Specifications of ±3% of span for the Zero and Calibration Drift Checks, and ±5% of the respective cylinder concentrations for the Calibration Error Checks.

Table 5.4 displays the US EPA Method 205 field evaluation of the calibration gas dilution system utilized during this test event. As shown, the average concentration output at each dilution level was within ±2% of the predicted value. The average concentration output of the direct inject gas was also within ±2% of the certified concentration.

5.2 QA/QC PROBLEMS

No QA/QC problems occurred during this test event.

5.3 QUALITY STATEMENT

Montrose is qualified to conduct this test program and has established a quality management system that led to accreditation with ASTM Standard D7036-04 (Standard Practice for Competence of Air Emission Testing Bodies). Montrose participates in annual functional assessments for conformance with D7036-04 which are conducted by the American Association for Laboratory Accreditation (A2LA). All testing performed by Montrose is supervised on site by at least one Qualified Individual (QI) as defined in D7036-04 Section 8.3.2. Data quality objectives for estimating measurement uncertainty within the documented limits in the test methods are met by using approved test protocols for each project as defined in D7036-04 Sections 7.2.1 and 12.10. Additional quality assurance information is presented in the report appendices.

TABLE 5.1
US EPA METHOD 4 SAMPLING TRAIN AUDIT RESULTS

Parameter	Run 1
Sampling Location	**OIL TANK EXHAUST STACK**
Post-Test Leak Rate Observed (cfm)	0.000
Applicable Method Allowable Leak Rate (cfm)	0.020
Acceptable	Yes
Volume of Dry Gas Collected (dscf)	22.757
Recommended Volume of Dry Gas Collected (dscf)	21.000
Acceptable	Yes
Sampling Location	**FURNACE INLET EXHAUST STACK**
Post-Test Leak Rate Observed (cfm)	0.000
Applicable Method Allowable Leak Rate (cfm)	0.020
Acceptable	Yes
Volume of Dry Gas Collected (dscf)	22.760
Recommended Volume of Dry Gas Collected (dscf)	21.000
Acceptable	Yes
Sampling Location	**FURNACE OUTLET EXHAUST STACK**
Post-Test Leak Rate Observed (cfm)	0.000
Applicable Method Allowable Leak Rate (cfm)	0.020
Acceptable	Yes
Volume of Dry Gas Collected (dscf)	22.775
Recommended Volume of Dry Gas Collected (dscf)	21.000
Acceptable	Yes

TABLE 5.2
US EPA METHOD 4 DRY GAS METER AUDIT RESULTS

Sampling Location	Pre-Test Dry Gas Meter Calibration Factor (Y)	Average Post-Test Dry Gas Meter Calibration Check Value (Yqa)	Post Test Dry Gas Meter Calibration Check Value Difference From Pre-Test Calibration Factor (%)	Applicable Method Allowable Difference (%)	Acceptable
OIL TANK EXHAUST STACK	1.0210	1.0517	-3.01%	5.00%	Yes
FURNACE INLET EXHAUST STACK	1.0210	1.0505	-2.89%	5.00%	Yes
FURNACE OUTLET EXHAUST STACK	1.0210	1.0472	-2.57%	5.00%	Yes

TABLE 5.3.1
US EPA METHOD 25A ANALYZER CALIBRATION AND QA

	OIL TANK EXHAUST STACK					
FID ANALYZER	**RUN 1**	**Acceptable**	**RUN 2**	**Acceptable**	**RUN 3**	**Acceptable**
Analyzer Span During Test Run (ppmv as propane)	101.0	YES	101.0	YES	101.0	YES
Average Stack Gas Concentration (ppmv as propane)	44.8	YES	35.5	YES	57.0	YES
Zero Drift (% of Span)	2.07	YES	2.38	YES	2.36	YES
Calibration Drift for Mid-Level Gas (% of Span)	-0.52	YES	-1.68	YES	0.14	YES
Calibration Error for Low-Level Gas (% of Cal. Gas Tag Value)	-0.10	YES	-0.10	YES	-0.10	YES
Calibration Error for Mid-Level Gas (% of Cal. Gas Tag Value)	-0.08	YES	-0.08	YES	-0.08	YES

	FURNACE INLET EXHAUST STACK					
FID ANALYZER	**RUN 1**	**Acceptable**	**RUN 2**	**Acceptable**	**RUN 3**	**Acceptable**
Analyzer Span During Test Run (ppmv as propane)	101.0	YES	101.0	YES	101.0	YES
Average Stack Gas Concentration (ppmv as propane)	12.1	YES	17.3	YES	17.4	YES
Zero Drift (% of Span)	0.40	YES	0.50	YES	0.40	YES
Calibration Drift for Mid-Level Gas (% of Span)	2.19	YES	-1.85	YES	2.37	YES
Calibration Error for Low-Level Gas (% of Cal. Gas Tag Value)	-0.80	YES	-0.80	YES	-0.80	YES
Calibration Error for Mid-Level Gas (% of Cal. Gas Tag Value)	-0.32	YES	-0.32	YES	-0.32	YES

TABLE 5.3.2
US EPA METHOD 25A ANALYZER CALIBRATION AND QA

	FURNACE OUTLET EXHAUST STACK					
FID ANALYZER	**RUN 1**	**Acceptable**	**RUN 2**	**Acceptable**	**RUN 3**	**Acceptable**
Analyzer Span During Test Run (ppmv as propane)	101.0	YES	101.0	YES	101.0	YES
Average Stack Gas Concentration (ppmv as propane)	1.7	YES	1.9	YES	1.6	YES
Zero Drift (% of Span)	-0.13	YES	0.42	YES	-0.13	YES
Calibration Drift for Mid-Level Gas (% of Span)	-1.54	YES	-2.54	YES	0.70	YES
Calibration Error for Low-Level Gas (% of Cal. Gas Tag Value)	-0.70	YES	-0.70	YES	-0.70	YES
Calibration Error for Mid-Level Gas (% of Cal. Gas Tag Value)	-0.16	YES	-0.16	YES	-0.16	YES

TABLE 5.4
US EPA METHOD 205 GAS DILUTION SYSTEM QA

Analyzer Serial Number: 2750806
Dilution System Serial Number: 3737

	Dilution Level 1	Dilution Level 2	Direct Inject Gas
Calibration Tag Value (ppm):	90.68	90.68	50.37
Dilution Ratio:	3.67	1.82	-
Predicted Diluted Value (ppm):	24.7	49.7	50.37
Injection 1 Response (ppm):	24.69	49.71	50.30
Injection 2 Response (ppm):	24.72	49.63	50.46
Injection 3 Response (ppm):	24.79	49.77	50.47
Average Response (ppm):	24.73	49.70	50.41
Difference From Predicted (%):	-0.13	-0.01	-0.08
Acceptable (Yes/No):	Yes	Yes	Yes