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F-100 Turbine Engine Afterburner Emission Tests.

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FINAL REPORT FOR PERIOD NOVEMBER 1976-DECEMBER 1977

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CEEDO

CIVIL AND ENVIRONMENTAL ENGINEERING DEVELOPMENT OFFICE
(AIR FORCE SYSTEMS COMMAND)
TYNDALL AIR FORCE BASE
FLORIDA 32403

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Gas Turbine Engines	Air Pollution	Afterburner
Exhaust Emissions	Particulate	Total Hydrocarbons
F-100-P-100	Carbon Monoxide	Oxides of Nitrogen

20 ABSTRACT (Continue on reverse side if necessary and identify by block number)

The afterburner exhaust emissions from three F-100-P-100 engines were measured. Emission rates of hydrocarbons, carbon monoxide and oxides of nitrogen were calculated. Smoke numbers were also measured.

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PREFACE

This report documents the F-100-P-100 afterburner emission measurements and data reduction performed during the period November 1976 through Dec 1977 by Scott Environmental Technology, Inc, Plumsteadville PA 18949, under contract FY8952-77-625 with Det 1 Armament Development and Test Center, Air Force Systems Command, Tyndall Air Force Base FL 32403. Lieutenant Harold A Scott, Det 1 ADTC/ECA managed the program.

A special thanks is given to Col William R. Quasney, Aeronautical Systems Division/YFJ, for initiating the F-100 engine test program and Pratt and Whitney Aircraft, Government Products Divison, West Palm Beach FL for their support of the project.

The low cost afterburner sampling probe was developed by Mr Richard Williams, ARO, Inc, under contract to Arnold Engineering Development Center, Arnold Air Force Station TN and Det 1 ADTC/ECA.

This report has been reviewed by the Office of Information (IO) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.

This report is approved for publication.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

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SECTION I

INTRODUCTION

The F-15 and F-16 aircraft will be deployed in large numbers during the 1980s. Each time one of these aircraft is deployed at a U.S. Air Force installation, the aircraft's impact on the air quality must be assessed. Accurate engine emission factors are required to make air quality impact assessments. The emission factors are determined from actual exhaust plane measurements at each engine thrust setting. All thrusts except afterburner have been measured in previous tests. High temperatures and pressures did not permit afterburner emission measurements. The afterburner emission factors are extremely important to impact assessments because of high fuel flow rates and reactive plumes.

Scott Environmental Technology was contracted by Det 1 ADTC to measure minimum and maximum afterburner pollutant concentrations from three F-100-P-100 turbine engines. The raw measurement data, exhaust plane and downstream steady state emission factors are presented in this report. Steady state emission factors were derived by using an afterburner reactive plume model, these provide an estimate of the actual rate of the pollutants entering the ambient air.

SECTION II

EMISSION MEASUREMENTS

2.0 F-100 Emission Measurements

The F-100-P-100 engine exhaust emissions were measured using the AF Mobile Emission Measurement Laboratory (MEL). The MEL's instrumentation and sampling systems are described in Reference 1. The F-100 emission tests were performed on an outdoor sea level static test stand at Pratt and Whitney's West Palm Beach Facility. The jet exhaust blew straight back from the test stand without confinement. The engine's mounting rails were on an elevated platform. The probe's transversing assembly was mounted on the platform such that the sample inlet ports were located 0.127 meters behind the engine exhaust plane. The MEL was located adjacent to the test stand on the opposite side of the existing sound barrier wall. The noise level within the MEL during the minimum and maximum A/B tests (up to 95 dba) required the use of ear protection devices.

A specially designed, water cooled, "quick" quench A/B probe was used to sample the engine exhaust emissions (Figure 1). The probe's sample inlets were recessed and encased in a steel jacket. Water was circulated through the jacket at a regulated maximum flow rate of 1.26 l/s to keep the probe from melting under the 2000 ^{o}C plus exhaust temperatures. The probe cooling water was heated and kept at 148^{o}C to prevent condensation of the gaseous exhaust emissions and particulate matter.

The probe quenches or "stops" the chemical reaction of the gas. This quenching effect is accomplished by expansion cooling and heat transfer in the probe. Thus, the carbon monoxide, hydrocarbon and other gaseous pollutant emissions at the exhaust plane represent emissions before any plume ractions takes place. The tests consisted of exhaust gas and smoke level emissions analyses.

The emission analyses were performed using the MEL. The MEL meets all the standards set by the Environmental Protection Agency (40CFR87) and the SAE Aerospace Recommended Practice (ARP) 1256. It is a state-of-the-art analysis system for turbine engine exhaust emission measurements.

Thirteen point samples were taken at each power setting, six on each sampling diameter of the plus and minus thirty degree axes plus the center (Figure 2). The F-100 exhaust nozzle diameter varies with the A/B power setting. Therefore, the point locations along the sampling diameter representing equal areas were calculated for both the minimum and maximum A/B power settings. The normal sampling points used are shown in Table 1 and correspond to the sampling point numbers in Figure 2. The engine was operated continuously at both minimum A/B and maximum A/B for the emission tests.

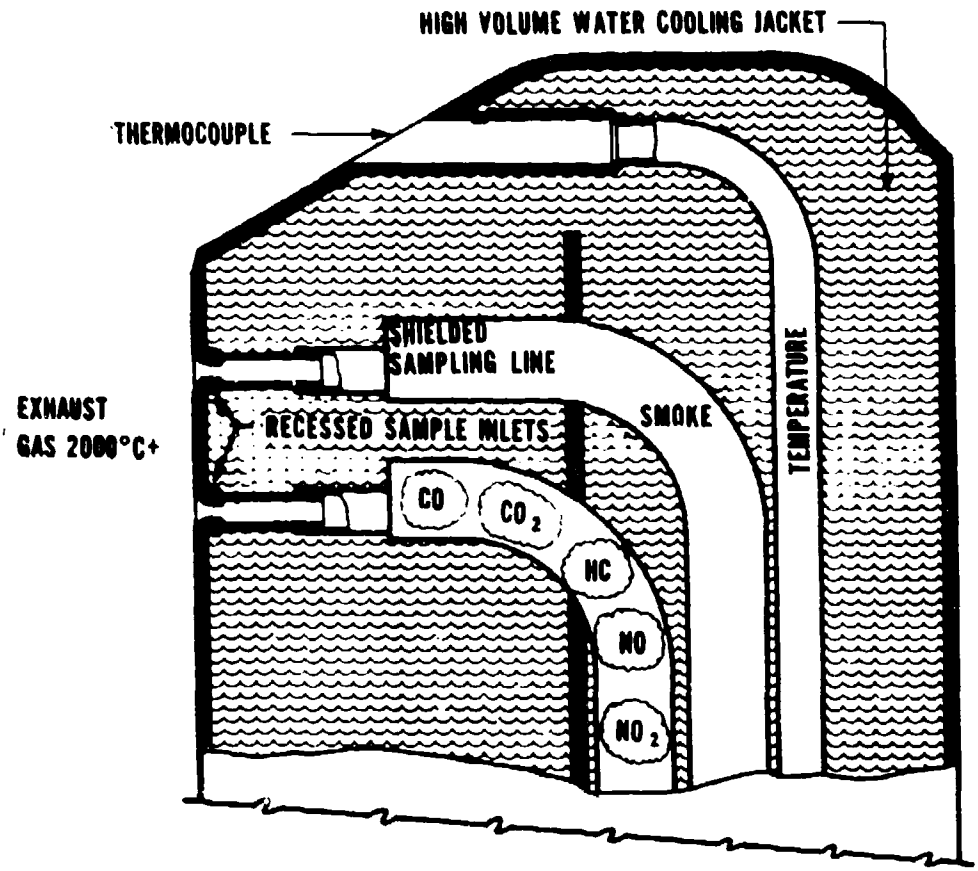

Figure 1. A/B Sampling Probe

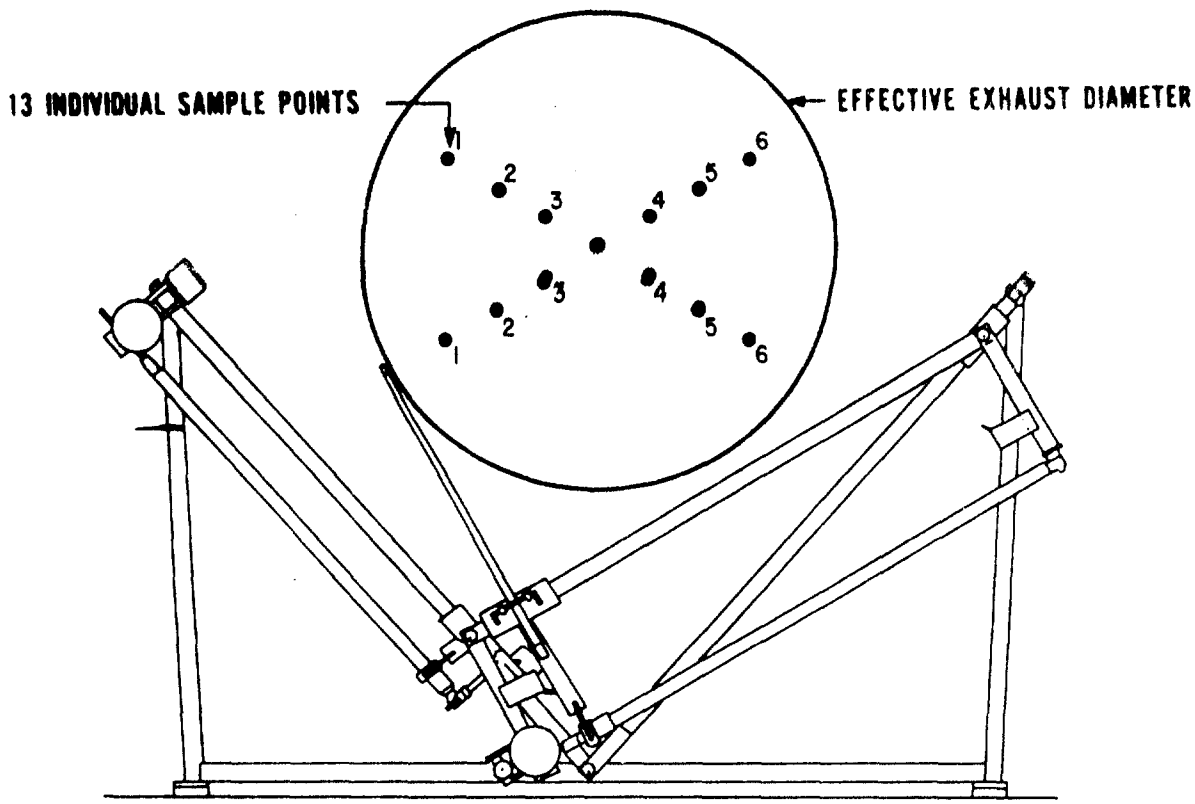

Figure 2. Probe Positioning Assembly (Front View)

TABLE 1. F-100 A'B SAMPLE POINTS

Power Setting	Nozzle Diameter (meters)	Sample Point Radius (meters) Points No 1 and 6	Points No 2 and 5	Points No 3 and 4
Minimum A/B	0.62	0.28	0.22	0.13
Maximum A/B	0.78	0.36	0.91	0.16

The total hydrocarbon, carbon monoxide, and total oxides of nitrogen emission rates for minimum and maximum AB thrust power settings were computed directly from the measured exhaust concentrations (Reference 1). Sulfur emission rates were determined assuming complete oxidation of the fuel sulfur to sulfur dioxide and fuel flow rates. Emission rates are reported as emission indices (g pollutant/per kg fuel) and kg/hr. The reports containing the results are presented in the appendix as follows:

a. Model Summary Report (Appendix A) - A statistical summary of the test results presented in an emission index format.

b. Individual Engine Test Reports (Appendix B) - Each engine's test results are described.

The raw data are also in the appendix. These data are catagorized in the following reports: Mass Calculation; Engine Edit Report; Smoke Edit Report; and Concentration Edit Report (Appendices C through F).

2.1 Emission Tests

The F-100-P-100 engines reached an average maximum A/B thrust of 89500 N with exhaust temperatures exceeding 2000°C. These conditions caused minor problems with the probe assembly and sampling systems. The problems did not have any significant effect on the overall results.

The iridium-iridium/rhodium thermocouple (Figure 1) performed for seven of the thirty-nine sample points tested. A maximum temperature of 2093°C was recorded. The extreme vibration and heat destroyed the thermocouple's zirconia shield within the first ten minutes during all three maximum A/B tests. The average for the seven recorded temperatures are used in mass flow calculations. The use of an average temperature did cause some problems with the hydrocarbon emission calculations and these problems are discussed in 2.2. The thermocouple assembly performed well for the minimum A/B measurement. A maximum temperature of only 760°C was recorded for minimum A/B.

The intense vibration loosened the probe assembly's fittings and fasteners. However, no sample line leaks were detected. Minor probe positioner repairs were required after the first minimum A/B test. No other repairs were made for the rest of the tests.

The high water content of the exhaust (approximately 14 percent) caused some difficulties in the analysis equipment. The water was kept in the gas phase by heating the instruments and sample lines in the MEL. All lines were heated to a minimum temperature of 66°C. Nevertheless, a small amount of water condensed in the lines and flowmeters downstream of the analyzers. Water droplets made it difficult to read the sample flow rates.

2.2 Data Observations

The total hydrocarbon levels at Max A/B power were much lower on the first engine tested than on the subsequent two engines. The emission index value for the first engine was 0.6 g/kg and the other two were 5.3 and 5.0 g/kg hydrocarbon index. The value of 5.0 g/kg hydrocarbon index on engine three is the area weighted value. Only seven temperatures were recorded for the Max A/B run. Since only those data points where temperature was recorded could be used to determine mass flow and the average emission index, the mass flow weighted average hydrocarbon index produced a distorted value of 3.6 g/kg of fuel. Therefore, mass weighted value for the hydrocarbon index was not used in the Model Summary (Appendix A).

The values of carbon monoxide emission index, total oxides of nitrogen emission index and smoke number are consistent in both power settings tested. The carbon monoxide levels at maximum A/B were greater than expected. The values were beyond the normal range of the MEL's instrumentation. A special calibration of the high concentration carbon monoxide analyzer was performed using two calibration gases borrowed from Pratt and Whitney. The carbon monoxide values measured at maximum A/B were consistent for all sample points except those on the outer edge of the exhaust plume. Checks of a similar instrument's electrical response indicates that the output electrical signal was still well below the staturation level.

SECTION III

DISCUSSION OF RESULTS

3.0 Emission Factors

The best estimates F-100-P-100 minimum and maximum A/B engine emission factors have been determined from the emission measurements. Gaseous emissions factors and smoke numbers (Table 2) are means for the three engines tested. In addition, J-79 reactive plume model factors are presented (Reference 2). The "A/B reactive plume" emission factors should be used where indicated. They are an approximation of the actual A/B pollutant emissions entering the atmosphere and are discussed in 3.2.

TABLE 2. F-100-P-100 ENGINE EMISSION FACTORS

Gaseous Emissions

Pollutant	Mode	Emission Index Grams Pollutant Per Kilograms of Fuel	Emission Rate Kilograms Pollutant Per Hour
Total Hydro-carbons	Min A/B*	7.4 (0.1)	39.0 (0.05)
	Max A/B*	3.6 (0.01)	76.2 (0.21)
Carbon Monoxide	Min A/B*	25.1 (4.06)	132.9 (21.53)
	Max A/B*	140.4 (4.06)	2929.9 (84.73)
Total Oxides of Nitrogen	Min A/B*	22.3	118.3
	Max A/B*	5.6	116.4
Parameter	**Mode**		**Smoke Number**
Smoke Number	Min A/B*		14
	Max A/B*		6
*Average Fuel Flow Rates	Min A/B	5.8 kg/s	
	Max A/B	1.4 kg/s	

( ) Indicates a pollutant emission factor corrected for a A/B plume reaction (see 3.2).

3.1 Analysis of Emission Factors

The A/B exhaust plane measurements must be analyzed very carefully for use in emission calculations. The afterburner has a significant effect on the pollutant emissions especially carbon monoxide and hydrocarbon. Further reaction of these two pollutants occurs in the plume downstream of the engine exhaust nozzle (Reference 2). Both pollutants are reduced by chemical reaction at a distance aft of the exhaust plane. There the carbon monoxide and hydrocarbon steady-state emissions entering the atmosphere are much lower than the exhaust emissions reported here.

To estimate carbon monoxide and hydrocarbon steady-state emission factors, previous J-79-G-15 and J-85-G-3 A/B reactive plume tests and models can be used (Reference 2). The results of computations based on these engines are presented in Section II. The emission factors are estimates for a point six meters aft of the engine exhaust plane where steady-state emission conditions exist. The minimum A/B carbon monoxide emissions (25 kg/s) are probably higher than maximum A/B (3.6 kg/s) because of partial oxidation of the emitted hydrocarbons at minimum A/B. At maximum A/B, with a near stoichiometric fuel-air ratio, rapid oxidation of carbon monoxide occurs in the plume along with complete consumption of hydrocarbons. The high maximum A/B carbon monoxide exhaust plane emissions are probably caused by equilibrium dislocation and localized oxygen depletion (Reference 2).

Oxides of nitrogen do not significantly react in the plume (Reference 2). Thus, the exhaust plane oxides of nitrogen measurements can be used as emission factors. The decrease in SN from military (SN = 31) (Reference 1) to maximum A/B (SN = 6) is caused by the combustion of smoke particles in the afterburner flame.

The F-100-P-100 exhaust emission factors should be confirmed using an A/B reactive plume model or downstream measurements. In the absence of this validation, the carbon monoxide and hydrocarbon emissions indicated in Section II should be used for F-100-P-100 emission calculations. This will probably lead to a high emission estimate for carbon monoxide because the F-100's combustor and A/B temperatures are higher than those of the J-79.

REFERENCES

1. Souza, A. F., and Daley, P. S., "US Air Force Turbine Engine Emission Survey - Volume I", CEEDO-TR-78-3, August 1978.

2. Lyon, T. F., Colley, W. C., Kenworthy, M. J., and Bahr, D. W., "Development of Emissions Measurement Techniques for Afterburning Engines," AFAPL-TR-75-52, October 1975.

APPENDIX A

MODEL SUMMARIES

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
ENGINE MODEL SUMMARY REPORT

SET 1628-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216

ENGINE MODEL : F-100

TEST LOCATION : P + W, FL.

ENGINE 1, PAGE 1

***** CATEGORY A TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	# / 1000# FUEL NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	# / HR NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
THC		0						0					
		0						0					
		0						0					
	MIN. A/B	3	9.77	3.92	7.36	3.060	41.55	3	113.76	46.65	85.74	34.896	40.70
	MAX. A/B	3	5.34	0.60	3.65	2.646	72.49	3	252.64	25.71	172.25	127.10	73.57
CO		0						0					
		0						0					
		0						0					
	MIN. A/B	3	28.46	19.07	25.07	5.208	20.78	3	331.4	227.0	292.4	56.96	19.48
	MAX. A/B	3	154.26	115.35	140.39	21.72	15.47	3	7337.3	4979.0	6494.8	1315.47	20.25
NOX		0						0					
		0						0					
		0						0					
	MIN. A/B	3	25.01	19.44	22.31	2.789	12.50	3	297.80	226.36	261.09	35.752	13.69
	MAX. A/B	3	5.66	5.52	5.58	0.072	1.29	3	269.05	238.37	256.80	16.252	6.33
NO		0						0					
		0						0					
		0						0					
	MIN. A/B	3	16.71	12.11	14.32	2.305	16.10	3	198.93	140.96	167.60	29.260	17.46
	MAX. A/B	3	4.22	4.02	4.13	0.103	2.48	3	198.48	173.42	189.87	14.254	7.51
NO2		0						0					
		0						0					
		0						0					
	MIN. A/B	3	8.35	7.33	8.00	0.578	7.22	3	98.87	85.40	93.49	7.132	7.63
	MAX. A/B	3	1.50	1.36	1.45	0.081	5.57	3	71.33	64.53	66.93	3.810	5.69
SOX		0						0					
		0						0					
		0						0					
	MIN. A/B	0						3	25.60	18.41	21.01	3.984	18.96
	MAX. A/B	0						3	94.87	75.61	82.17	11.001	13.39

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
ENGINE MODEL SUMMARY REPORT

SET 1628-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216

ENGINE MODEL : F-100

TEST LOCATION : P + W, FL.

ENGINE 1, PAGE 2

***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

		MEAS. FUEL FLOW - #/HR					SMOKE NUMBER					
	TEST MODE	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
		0						0					
		0						0					
		0						0					
	MIN. A/B	3	11905	11520	11690	196.4	1.68	3	16.75	11.91	14.50	2.437	16.81
	MAX. A/B	3	47565	43165	46010	2467.4	5.36	3	7.00	5.64	6.44	0.709	11.02

APPENDIX B

INDIVIDUAL ENGINE TEST REPORTS

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
INDIVIDUAL ENGINE TEST REPORT

SET 1628-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-021C

SCOTT TEST NUMBER 1, TYPE A

TEST DATE : 8/ 3/77

ENGINE 1, NUMBER 1

ENGINE TYPE & MODEL : F-100
ENGINE SERIAL # : P680160
TOTAL ENGINE TIME : 670 HRS.
PERFORMANCE TEST RESULTS : PASS

TEST LOCATION : P&WA-FLA.
TEST CELL NUMBER : A2
TEST CELL OPERATOR : MB
SCOTT SUPERVISOR : ZGT
INSTRUMENT OPERATOR : PR
SMOKE OPERATOR : FL

AIR FLOW MEASUREMENT METHOD : BELLMOUTH

TEST ENVIRONMENTAL CONDITIONS :

	START	FINISH
TEST TIME (MIL.TIME) :	1200	1500
INLET AIR TEMP.(DEG.F) :	92.0	90.0
ATMOSPHERIC PRESS.(IN.HG) :	30.06	30.02
RELATIVE HUMIDITY (%) :	55	57
INLET AIR HUMIDITY - (GM H2O/GM DRY AIR) :	0.0178	0.0173

SAMPLE LINE :
FLOW RATE : 23 LPM
TEMPERATURE : 300 DEG.F
LENGTH : 100 FT.

FUEL ANALYSIS :
SAMPLE # : 1
TYPE : JP-4
WT.% CARBON : 85.65
WT.% HYDROGEN : 14.42
WT.% SULFUR : 0.11
H/C RATIO-ATM.: 2.02
C/H RATIO-MASS: 5.94

TEST MODE	% RATED POWER	THRUST #	FUEL FLOW #/HR	AIR FLOW #/HR	F/A ACT	F/A CALC	EPR	THC PPMC	CO PPM	CO2 %	NOX PPM	NO PPM	NO2 PPM	SMOKE SN	SMOKE #/A
MIN. A/B		12945	11645	759600	.015	.012	1.785	204.08	340.4	2.33	141.57	86.17	53.41	16.75	0.0232
MAX. A/B		19185	43165	759600	.057	.061	1.781	61.35	6803.8	11.08	198.30	144.27	54.03	6.67	0.0231

EXHAUST MASS EMISSION INDICES :

	# / 1000# FUEL						# / HR						
	THC	CO	CO2	NOX	NO	NO2	THC	CO	CO2	NOX	NO	NO2	SOX
MIN. A/B	9.77	28.46	3062	19.44	12.11	7.33	113.76	331.4	35654	226.38	140.98	85.40	25.60
MAX. A/B	0.60	115.35	2950	5.52	4.02	1.50	25.71	4979.0	127353	238.37	173.42	64.95	94.87

** AVERAGE CONCENTRATION AND MASS EMISSION DATA ARE AREA-WEIGHTED.

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
INDIVIDUAL ENGINE TEST REPORT

SET 1628-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216

SCOTT TEST NUMBER 2, TYPE A

TEST DATE : 8/ 9/77

ENGINE 1, NUMBER 2

ENGINE TYPE & MODEL : F-100
ENGINE SERIAL # : P680325
TOTAL ENGINE TIME : 385 HRS.
PERFORMANCE TEST RESULTS : PASS

AIR FLOW MEASUREMENT METHOD : BELLMOUTH

TEST LOCATION : P&WA-FLA.
TEST CELL NUMBER : A2
TEST CELL OPERATOR : MB
SCOTT SUPERVISOR : ZBT
INSTRUMENT OPERATOR : PR
SMOKE OPERATOR : FL

TEST ENVIRONMENTAL CONDITIONS :

	START	FINISH
TEST TIME (MIL.TIME) :	900	1200
INLET AIR TEMP.(DEG.F) :	84.0	93.0
ATMOSPHERIC PRESS.(IN.HG) :	30.03	30.05
RELATIVE HUMIDITY (%) :	71	54
INLET AIR HUMIDITY - (GM H2O/GM DRY AIR) :	0.0178	0.0180

SAMPLE LINE :
FLOW RATE : 23 LPM
TEMPERATURE : 300 DEG.F
LENGTH : 100 FT.

FUEL ANALYSIS :
SAMPLE # : 2
TYPE : JP-4
WT.% CARBON : 85.70
WT.% HYDROGEN : 14.42
WT.% SULFUR : 0.08
H/C RATIO-ATM.: 2.02
C/H RATIO-MASS: 5.94

TEST MODE	% RATED POWER	THRUST #	FUEL FLOW #/HR	AIR FLOW #/HR	F/A ACT	F/A CALC	EPR	THC PPPC	CO PPM	CO2 %	NOX PPM	NO PPM	NO2 PPM	SMOKE SN	SMOKE M/A
MIN. A/B		13600	11520	784800	.015	.014	1.717	214.96	405.3	2.86	200.58	126.11	74.47	14.83	0.0231
MAX. A/B		20500	17300	781200	.061	.063	1.694	564.91	9178.6	11.10	205.02	154.72	50.30	5.69	0.0231

EXHAUST MASS EMISSION INDICES :

	# / 1000# FUEL						# / HR						
	THC	CO	CO2	NOX	NO	NO2	THC	CO	CO2	NOX	NO	NO2	SOX
MIN. A/B	8.97	27.67	3067	22.49	14.19	8.35	96.80	318.7	35329	259.10	162.90	96.20	18.41
MAX. A/B	5.39	151.55	2880	5.56	4.20	1.36	252.69	7168.2	136296	263.01	198.48	64.53	75.61

** AVERAGE CONCENTRATION AND MASS EMISSION DATA ARE AREA-WEIGHTED.

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
INDIVIDUAL ENGINE TEST REPORT

SET 1628-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216

SCOTT TEST NUMBER 3, TYPE A

TEST DATE : 8/18/77

ENGINE 1, NUMBER 3

ENGINE TYPE & MODEL : F-100
ENGINE SERIAL # : P680301
TOTAL ENGINE TIME : 130 HRS.
PERFORMANCE TEST RESULTS : PASS

AIR FLOW MEASUREMENT METHOD : BELLMOUTH

TEST LOCATION : P&WA-FLA.
TEST CELL NUMBER : A2
TEST CELL OPERATOR : MB
SCOTT SUPERVISOR : ZB1
INSTRUMENT OPERATOR : DO
SMOKE OPERATOR : FL

TEST ENVIRONMENTAL CONDITIONS :

	START	FINISH
TEST TIME (MIL.TIME) :	1000	1400
INLET AIR TEMP.(DEG.F) :	86.0	92.0
ATMOSPHERIC PRESS.(IN.HG) :	30.04	30.01
RELATIVE HUMIDITY (%) :	72	54
INLET AIR HUMIDITY - (GM H2O/GM DRY AIR) :	0.0192	0.0173

SAMPLE LINE :
FLOW RATE : 23 LPM
TEMPERATURE : 300 DEG.F
LENGTH : 100 FT.

FUEL ANALYSIS :
SAMPLE # : 3
TYPE : JP-4
WT.% CARBON : 85.75
WT.% HYDROGEN : 14.43
WT.% SULFUR : 0.08
H/C RATIO-ATM.: 2.02
C/H RATIO-MASS: 5.94

TEST MODE	% RATED POWER	THRUST #	FUEL FLOW #/HR	AIR FLOW #/HR	F/A ACT	F/A CALC	EPR	THC PPMC	CO PPM	CO2 %	NOX PPM	NO PPM	NO2 PPM	SMOKE SN	SMOKE M/A
MIN. A/B		14065	11905	784800	.015	.015	1.022	107.62	299.8	3.10	239.50	159.98	79.52	11.91	0.0231
MAX. A/B		20675	47565	784800	.061	.067	1.047	1059.53	9843.5	11.76	204.86	155.50	49.36	7.00	0.0232

EXHAUST MASS EMISSION INDICES :

	# / 1000# FUEL						# / HR						
	THC	CO	CO2	NOX	NO	NO2	THC	CO	CO2	NOX	NO	NO2	SOX
MIN. A/B	3.92	19.07	3093	25.01	16.71	8.31	46.65	227.0	36817	297.80	198.93	98.87	19.03
MAX. A/B	5.01	154.26	2877	5.66	4.16	1.50	238.39	7337.3	136850	269.05	197.72	71.33	76.03

** AVERAGE CONCENTRATION AND MASS EMISSION DATA ARE MASS-WEIGHTED.

$FIN

STOP REPORT

APPENDIX C

MASS DATA CALCULATIONS

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
EDIT REPORT - MASS DATA CALCULATIONS

* * * * * * * * * * * START RUN 1 * * * * * * * * * * *

ENGINE TYPE : F-100 ENGINE SN : P680160 TEST TYPE : A
BP : 30.09 IN.HG IAT : 91.0 DEG.F FUEL : # 1 - JP-4 H/C RATIO(ATM) : 2.02 FUEL SULFUR : .11 %

***** MODE 4 - MIN. A/B (THRUST = 12945 #) *****

PT1 = .00 IN.H20 PT2 = 2.25 IN.H20 PS2 = 48.23 IN.H20 PT3 = .0 PSIG PT5/7 = 23.3 IN.HG
EPR = 1.785 FUEL FLOW = 11695. #/HR AIR FLOW = 759600. #/HR ACTUAL F/A RATIO = .015

* SAMPLE POINT * NO	LOCATION	TEMP. DEG.F	PTOT PSIA	DENS. (RHO)	EXH.VEL FT/SEC	MASS FL. (RHO*V)	THC PPMC	CO PPM	CO2 %	NOX PPM	NO PPM	NO2 PPM	*--- SMOKE ---* SN	M/A
1	+30,-12.7	232.3	18.6	.0019	729.06	1.3961	70.73	108.99	.81	43.99	26.60	17.39	10.00	.0232
2	+30, -9.8	696.9	30.8	.0013	1623.13	2.1424	169.61	383.52	2.92	157.28	98.95	58.83	23.00	.0232
3	+30, -5.7	1256.8	30.5	.0009	1969.26	1.7327	112.29	908.06	4.35	277.03	201.39	75.64	26.00	.0232
4	+30, 5.5	1267.7	31.5	.0009	2014.70	1.7768	370.68	579.06	3.36	209.69	118.75	90.94	23.00	.0232
5	+30, 9.8	742.7	29.9	.0013	1629.85	2.0493	354.13	925.10	1.78	109.81	42.21	62.60	11.00	.0232
6	+30, 12.5	290.4	19.4	.0018	822.77	1.4708	166.47	144.46	.68	39.21	16.82	22.39	10.00	.0232
7	-30,-12.7	297.7	25.6	.0019	1150.39	2.2058	205.06	209.59	.97	57.43	29.31	28.12	19.00	.0233
8	-30, -9.9	972.6	30.7	.0011	1804.49	1.9136	242.70	429.01	2.44	138.45	75.99	62.46	14.00	.0232
9	-30, -5.9	1351.7	30.6	.0008	2027.68	1.6901	19.06	144.47	4.51	321.56	262.44	59.12	30.00	.0232
10	-30, 5.7	1110.2	30.7	.0010	1890.09	1.8251	228.08	688.09	3.56	200.47	114.96	85.51	21.00	.0232
11	-30, 9.7	553.5	30.7	.0015	1515.34	2.2862	248.82	258.26	1.15	68.11	31.22	36.89	10.00	.0232
12	-30, 12.6	51.5	15.9	.0025	273.00	.6701	162.99	70.77	.33	22.81	16.74	6.07	9.00	.0232
* 13	+30, .0	1184.9	30.9	.0009	1923.21	1.7662	3.24	65.81	3.77	306.57	254.58	51.99	31.00	.0232
AVERAGE : NUM.		735.3	27.0	.0014	1453.73	1.7628	195.46	320.36	2.24	136.74	86.24	50.50	16.75	.0232
MASS-WGHTD.							208.06	340.42	2.33	141.57	88.17	53.41		

CALCULATED F/A RATIOS FOR ABOVE AVERAGE CONCENTRATIONS : AREA-WGHTD.(NUM) = .011 , MASS-WGHTD. = .012

MASS EMISSIONS :

	---- THC ---- #/1000#	#/HR	*---- CO ----* #/1000#	#/HR	*---- CO2 ----* #/1000#	#/HR	*---- NOX ----* #/1000#	#/HR	*---- NO ----* #/1000#	#/HR	*---- NO2 ----* #/1000#	#/HR	* SOX * #/HR
AREA-WGHTD.	9.75	113.51	27.90	329.9	3063.	35665.	19.56	227.77	12.34	143.66	7.22	84.12	25.60
MASS-WGHTD.	9.77	113.76	28.46	331.4	3062.	35654.	19.44	226.38	12.11	140.98	7.33	85.40	25.60

* MID-POINT - NOT INCLUDED IN AVERAGES

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT - MASS DATA CALCULATIONS

SET 1628-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-C0216

* * * * * * * * * * * C O N T . R U N 1 * * * * * * * * * * *

ENGINE TYPE : F-100 ENGINE SN : P680160 TEST TYPE : A
BP : 30.09 IN.HG IAT : 91.0 DEG.F FUEL : # 1 - JP-4 M/C RATIO@ATMI : 2.02 FUEL SULFUR : .11 %

***** MODE 5 - MAX. A/B (THRUST = 19185 #) *****

PT1 = .00 IN.H20 PT2 = 1.95 IN.H20 PS2 = 47.79 IN.H20 PT3 = .0 PSIG PT5/7 = 23.2 IN.HG
EPR = 1.781 FUEL FLOW = 9365. #/HR AIR FLOW = 759600. #/HR ACTUAL F/A RATIO = .057

* SAMPLE POINT * NO	LOCATION	TEMP. DEG.F	PTOT PSIA	DENS. (RHO)	EXH.VEL FT/SEC	MASS FL. (RHO*V)	THC PPMC	CO PPM	CO2 %	NOX PPM	NO PPM	NO2 PPM	*--- SMOKE ---* SN	M/A
1	+30,-19.3	.0	30.9	.0000	.00	.0000	22.91	1842.79	10.18	97.57	59.64	37.93	26.00	.0231
2	+30,-11.0	.0	32.7	.0000	.00	.0000	426.29	11861.57	11.63	201.05	166.86	34.17	10.00	.0231
3	+30, -6.4	.0	30.7	.0000	.00	.0000	20.54	11208.86	13.64	320.32	251.76	68.56	6.00	.0231
4	+30, 6.2	.0	30.8	.0000	.00	.0000	16.86	6818.22	13.53	331.22	246.32	84.90	7.00	.0231
5	+30, 10.8	.0	32.2	.0000	.00	.0000	14.39	5899.44	13.10	179.84	121.93	57.91	6.00	.0231
6	+30, 14.1	.0	25.1	.0000	.00	.0000	66.37	1331.32	4.54	54.02	19.12	34.90	3.00	.0232
7	-30,-19.3	.0	28.7	.0000	.00	.0000	56.21	1680.64	6.64	70.36	36.25	34.11	4.00	.0231
8	" "	.0	32.2	.0000	.00	.0000	28.32	11944.06	13.06	297.07	230.14	66.93	5.00	.0231
9	" "	.0	30.2	.0000	.00	.0000	43.42	9083.39	13.18	313.51	235.21	78.30	2.00	.0232
10	" "	.0	30.2	.0000	.00	.0000	7.09	8924.51	13.16	308.69	231.78	76.91	3.00	.0231
11	-30, 10.9	.0	32.2	.0000	.00	.0000	5.43	6253.32	12.72	160.07	107.95	52.12	4.00	.0231
12	-30, 14.1	.0	28.7	.0000	.00	.0000	28.47	796.85	7.48	50.86	24.24	26.62	4.00	.0231
* 13	+30, .0	.0	30.4	.0000	.00	.0000	18.57	8150.33	13.71	316.44	240.71	75.73	4.00	.0231
AVERAGE : NUM.		.0	30.4	.0000	.00	.0000	61.35	6803.78	11.08	198.30	144.27	54.03	6.67	.0231
MASS-WGHTD.							.00	.00	.00	.00	.00	.00		

CALCULATED F/A RATIOS FOR ABOVE AVERAGE CONCENTRATIONS : AREA-WGHTD.(NOW) = .061 , MASS-WGHTD. = .000

MASS EMISSIONS :

	---- THC ---- #/1000#	#/HR	*---- CO ----* #/1000#	#/HR	*---- CO2 ----* #/1000#	#/HR	*---- NOX ----* #/1000#	#/HR	*---- NO ----* #/1000#	#/HR	*---- NO2 ----* #/1000#	#/HR	* SOX * #/HR
AREA-WGHTD.	.60	25.71	115.35	4979.0	2950.	127353.	5.52	238.37	4.02	173.42	1.50	64.95	99.87
MASS-WGHTD.	.00	.00	.00	.0	0.	0.	.00	.00	.00	.00	.00	.00	99.87

* MID-POINT - NOT INCLUDED IN AVERAGES

* * * * * * * * * * * E N D R U N 1 * * * * * * * * * * *

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SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1620-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-C216
EDIT REPORT - MASS DATA CALCULATIONS

* * * * * * * * * * * START RUN 2 * * * * * * * * * * *

ENGINE TYPE : F-100 ENGINE SN : P680325 TEST TYPE : A
BP 30.04 IN.HG IAT : 88.5 DEG.F FUEL : # 2 - JP-4 H/C RATIO(ATM) : 2.02 FUEL SULFUR : .08 %

***** MODE 4 - MIN. A/B (THRUST = 13600 #) *****

PT1 = .00 IN.H20 PT2 = 2.00 IN.H20 PS2 = 51.63 IN.H20 PT3 = .0 PSIG PT5/7 = 21.3 IN.HG
EPR = 1.717 FUEL FLOW = 11520. #/HR AIR FLOW = 784800. #/HR ACTUAL F/A RATIO = .015

* SAMPLE POINT * NO	LOCATION	TEMP. DEG.F	PTOT PSIA	DENS. (RHO)	EXH.VEL FT/SEC	MASS FL. (RHO*V)	THC PPMC	CO PPM	CO2 %	NOX PPM	NO PPM	NO2 PPM	*--- SMOKE ---* SN	SMOKE #/A
1	+30,-11.1	684.4	32.1	.0014	1654.35	2.2338	230.61	318.83	1.85	122.48	62.76	59.70	13.00	.0231
2	+30, -8.6	929.6	35.2	.0011	1924.34	2.1909	250.54	553.88	3.26	210.39	117.65	92.74	16.00	.0231
3	+30, -4.9	1377.5	35.4	.0009	2223.06	1.9031	64.52	387.72	4.71	356.15	272.67	83.48	25.00	.0231
4	+30, 5.1	1410.1	35.1	.0008	2233.35	1.8733	114.07	407.10	4.41	324.96	234.95	90.01	22.00	.0231
5	+30, 8.8	1032.2	34.7	.0011	1980.45	2.0877	321.71	570.56	2.80	171.09	76.65	94.44	14.00	.0231
6	+30, 11.2	465.8	22.7	.0015	1134.51	1.7162	189.22	227.97	1.29	79.31	35.92	43.39	8.00	.0231
7	-30,-11.1	655.7	34.1	.0014	1688.55	2.3805	406.79	502.02	1.88	126.09	54.01	72.08	12.00	.0231
8	-30, -8.6	1256.2	34.6	.0009	2128.88	1.9458	259.14	686.25	3.83	250.64	143.35	107.29	14.00	.0231
9	-30, -5.0	1371.5	35.9	.0009	2235.00	1.9270	13.30	125.96	4.48	385.96	318.74	67.22	23.00	.0231
10	-30, 5.2	1219.0	34.9	.0009	2108.52	1.9726	231.26	657.89	4.09	272.20	163.25	108.95	21.00	.0231
11	-30, 8.7	599.0	26.2	.0014	1387.71	1.9075	266.22	229.97	1.12	76.26	31.83	44.43	7.00	.0231
12	-30, 11.1	390.5	22.5	.0016	1076.58	1.7699	158.38	97.21	.56	37.93	18.01	19.92	3.00	.0231
* 13	+30, .1	1269.7	34.4	.0009	2124.61	1.9203	3.61	68.43	4.02	361.31	308.82	52.49	28.00	.0231
AVERAGE : NUM.		949.3	32.0	.0012	1814.61	1.9923	208.81	397.11	2.86	201.12	127.48	73.64	14.83	.0231
MASS-WGHTD,							214.96	405.30	2.86	200.58	126.11	74.47		

CALCULATED F/A RATIOS FOR ABOVE AVERAGE CONCENTRATIONS : AREA-WGHTD.(NUM) = .014 , MASS-WGHTD. = .014

MASS EMISSIONS :

	---- THC ---- #/1000#	#/HR	*---- CO ----* #/1000#	#/HR	*---- CO2 ----* #/1000#	#/HR	*---- NOX ----* #/1000#	#/HR	*---- NO ----* #/1000#	#/HR	*---- NO2 ----* #/1000#	#/HR	* SOX * #/HR
AREA-WGHTD.	8.17	94.11	27.13	312.5	3068.	35346.	22.57	260.01	14.31	164.81	8.26	95.20	18.41
MASS-WGHTD.	8.40	96.80	27.67	318.7	3067.	35329.	22.49	259.10	14.14	162.90	8.35	96.20	18.41

* MID-POINT - NOT INCLUDED IN AVERAGES

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
GS/F TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT - MASS DATA CALCULATIONS

* * * * * * * * * * * * CONT. RUN / * * * * * * * * * * * *

ENGINE TYPE : F-100 ENGINE SN : P680525 TEST TYPE : A
BP : 30.04 IN.HG IAT : 88.5 DEG.F FUEL : # 2 - JP-4 H/C RATIO(ATM) : 2.02 FUEL SULFUR : .05 %

***** MODE 5 - MAX. A/B (THRUST = 20500 #) *****

PT1 = .00 IN.H2O PT2 = 2.10 IN.H2O PS2 = 51.33 IN.H2O PT3 = .6 PSIG PT5/7 = 28.6 IN.HG
EPR = 1.694 FUEL FLOW = 47300. #/HR AIR FLOW = 781200. #/HR ACTUAL F/A RATIO = .061

* SAMPLE POINT * NO	LOCATION	TEMP. DEG.F	PTOT PSIA	D./S. (RHO)	EXH.VEL FT/SEC	MASS FL. (RHO*V)	THC PPMC	CO PPM	CO2 %	NOX PPM	NO PPM	NO2 PPM	SMOKE SN	SMOKE M/A
1	+30,-14.1	.0	31.4	.0000	.00	.0000	15.22	7569.55	12.48	129.07	81.35	47.72	4.00	.0231
2	+30,-10.9	.0	33.2	.0000	.00	.0000	4445.85	10703.45	9.66	160.61	139.72	20.89	14.00	.0231
3	+30, -6.3	.0	31.3	.0000	.00	.0000	917.08	10706.24	11.89	285.66	216.64	69.02	12.00	.0231
4	+30, 6.4	.0	31.1	.0000	.00	.0000	113.43	10698.93	12.52	295.88	235.05	60.83	5.00	.0231
5	+30, 11.0	.0	33.5	.0000	.00	.0000	511.24	10704.31	10.94	212.31	162.63	49.68	6.00	.0231
6	+30, 14.1	.0	29.6	.0000	.00	.0000	2.25	3942.99	8.19	85.18	40.76	44.48	1.00	.0231
7	-30,-14.0	.0	33.2	.0000	.00	.0000	418.78	10701.99	11.19	158.67	115.01	43.66	13.00	.0231
8	-30,-10.8	.0	32.3	.0000	.00	.0000	37.37	10703.07	12.64	318.83	255.09	63.74	.00	.0000
9	-30, -6.3	.0	31.2	.0000	.00	.0000	9.75	10706.40	12.48	310.62	250.71	59.91	1.00	.0231
10	-30, 6.4	.0	31.3	.0000	.00	.0000	74.09	10703.85	12.66	311.72	245.50	66.22	5.00	.0231
11	-30, 11.1	.0	32.7	.0000	.00	.0000	131.67	10699.09	13.19	158.71	110.58	48.13	1.00	.0231
12	-30, 14.1	.0	20.2	.0000	.00	.0000	102.26	2282.83	4.70	33.01	3.67	29.34	.00	.0231
* 13	+30, .1	.0	31.1	.0000	.00	.0000	5.89	10536.98	13.40	320.60	250.62	69.98	2.00	.0231
AVERAGE : NUM.		.0	30.9	.0000	.00	.0000	564.91	9178.56	11.10	205.02	154.72	50.30	5.64	.0231
MASS-WGHTD.							.00	.00	.00	.00	.00	.00		

CALCULATED F/A RATIOS FOR ABOVE AVERAGE CONCENTRATIONS : AREA-WGHTD.(NUM) = .063 , MASS-WGHTD. = .060

MASS EMISSIONS :

	THC #/1000#	THC #/HR	CO #/1000#	CO #/HR	CO2 #/1000#	CO2 #/HR	NOX #/1000#	NOX #/HR	NO #/1000#	NO #/HR	NO2 #/1000#	NO2 #/HR	* SOX * #/HR
AREA-WGHTD.	5.34	252.64	151.55	7168.2	2860.	135246.	5.56	263.01	4.26	198.46	1.36	64.53	75.61
MASS WGHTD.	.00	.00	.00	.0	0.	0.	.00	.00	.00	.00	.00	.00	75.61

* MID-POINT - NOT INCLUDED IN AVERAGES

* * * * * * * * * * * * END RUN * * * * * * * * * * * *

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT - MASS DATA CALCULATIONS

SET 1622-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216

* * * * * * * * * * * START RUN 3 * * * * * * * * * * *

ENGINE TYPE : F-100 ENGINE SN : P680301 TEST TYPE : A
BP : 30.02 IN.HG IAT : 89.0 DEG.F FUEL : P 3 - JP-4 H/C RATIO(ATM) : 2.02 FUEL SULFUR : .04 %

***** MODE 4 - MIN. A/B (THRUST = 14065 #) *****

PT1 = .00 IN.H2O PT2 = 2.00 IN.H2O PS2 = 51.92 IN.H2O PT3 = .0 PSIG PT5/7 = 24.4 IN.HG
EPR = 1.822 FUEL FLOW = 11905. #/HR AIR FLOW = 784800. #/HR ACTUAL F/A RATIO = .015

* SAMPLE POINT * NO	LOCATION	TEMP. DEG.F	PTOT PSIA	DENS. (RHO)	EXH.VEL FT/SEC	MASS FL. (RHO*V)	THC PPMC	CO PPM	CO2 %	NOX PPM	NO PPM	NO2 PPM	*--- SMOKE ---* SN	W/A
1	+30, -11.7	812.9	32.0	.0012	1742.99	2.1089	148.99	299.59	2.04	151.52	81.26	70.24	7.00	.0231
2	+30, -8.6	1167.9	35.1	.0010	2082.33	2.0134	130.66	443.10	3.70	266.42	164.63	101.79	12.00	.0231
3	+30, -4.9	1409.9	35.6	.0008	2249.61	1.8936	14.46	224.43	5.15	444.53	336.89	107.64	16.00	.0231
4	+30, 5.0	1421.3	35.3	.0008	2247.18	1.8755	101.18	532.46	4.56	359.67	235.99	123.68	17.00	.0231
5	+30, 8.7	973.7	34.7	.0011	1941.26	2.1313	237.78	461.14	2.46	162.30	74.63	87.67	9.00	.0231
6	+30, 11.2	344.4	24.6	.0018	1145.56	2.0433	146.80	200.77	1.24	79.96	37.86	42.10	.00	.0000
7	-30,-12.1	554.6	34.2	.0016	1612.46	2.5054	163.31	278.21	1.85	145.99	82.38	63.61	5.00	.0231
8	-30, -9.6	1174.8	34.6	.0010	2071.49	1.9664	119.73	410.72	3.66	259.90	164.25	95.65	10.00	.0231
9	-30, -5.9	1432.6	36.0	.0008	2276.20	1.8981	4.42	104.48	4.89	446.79	362.17	84.62	21.00	.0231
10	-30, 4.0	1415.8	35.6	.0008	2234.13	1.8659	25.35	279.25	5.11	361.64	266.20	95.44	20.00	.0231
11	-30, 7.6	851.7	30.2	.0012	1708.89	1.9730	82.36	220.18	2.06	153.32	96.55	56.77	10.00	.0231
12	-30, 10.2	582.1	22.9	.0013	1216.13	1.6357	66.76	102.88	.89	64.18	39.09	25.09	4.00	.0231
* 13	+30, .0	1256.6	35.0	.0009	2135.97	1.9542	1.24	61.43	4.31	420.15	344.04	76.11	25.00	.0231
AVERAGE : NUM.		1011.8	32.5	.0011	1877.37	1.9942	103.48	296.43	3.13	243.02	163.49	79.52	11.91	.0231
MASS-WGHTD.							107.62	299.85	3.10	239.50	159.98	79.52		

CALCULATED F/A RATIOS FOR ABOVE AVERAGE CONCENTRATIONS : AREA-WGHTD.(NUM) = .016 , MASS-WGHTD. = .015

MASS EMISSIONS :

	---- THC ---- #/1000#	#/HR	*---- CO ----* #/1000#	#/HR	*---- CO2 ----* #/1000#	#/HR	*---- NOX ----* #/1000#	#/HR	*---- NO ----* #/1000#	#/HR	*---- NO2 ----* #/1000#	#/HR	* SOX * #/HR
AREA-WGHTD.	3.72	44.32	18.62	221.7	3099.	36831.	25.08	298.56	16.87	200.86	8.21	97.70	19.03
MASS-WGHTD.	3.92	46.65	19.07	227.0	3093.	36817.	25.01	297.80	16.71	198.93	8.31	98.87	19.03

* MID-POINT - NOT INCLUDED IN AVERAGES

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT - MASS DATA CALCULATIONS

SET 1628-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-C-0216

* * * * * * * * * * * CONT. RUN 3 * * * * * * * * * * *

ENGINE TYPE : F-100 ENGINE SN : P680301 EST TYPE : A
BP : 30.02 IN.HG IAT : 89.0 DEG.F FUEL : # 3 - JP-4 H/C RATIO(ATM) : 2.02 FUEL SULFUR : .08 %

***** MODE 5 - MAX. A/B (THRUST = 20675 #) *****

PT1 = .00 IN.H2O PT2 = 1.80 IN.H2O PS2 = 53.74 IN.H2O PT3 = .0 PSIG PT5/7 = 25.2 IN.HG
EPR = 1.847 FUEL FLOW = 47565. #/HR AIR FLOW = 784600. #/HR ACTUAL F/A RATIO = .061

* SAMPLE POINT * NO	LOCATION	TEMP. DEG.F	PTOT PSIA	DENS. (RHO)	EXH.VEL FT/SEC	MASS FL. (RHO*V)	THC PPMC	CO PPM	CO2 %	NOX PPM	NO PPM	NO2 PPM	*--- SMOKE --- SN	W/A
1	+30,-13.9	2787.8	32.7	.0005	2835.61	1.3195	90.36	10799.24	13.28	164.25	123.35	40.90	7.00	.0232
2	+30,-10.7	2759.6	33.1	.0005	2842.70	1.3367	2121.38	10821.21	10.56	253.92	198.50	55.42	11.00	.0232
3	+30, -6.2	3687.7	27.3	.0003	2853.55	.9877	291.47	10843.73	12.10	312.71	237.42	75.29	7.00	.0232
4	+30, 6.2	3812.7	31.1	.0003	3164.58	1.0960	219.89	10865.90	12.38	302.34	228.99	73.35	5.00	.0232
5	+30, 10.9	3029.2	33.1	.0004	2959.06	1.2643	3122.89	10885.55	10.46	118.31	110.18	8.13	10.00	.0232
6	+30, 14.0	3785.9	29.6	.0003	3056.95	1.0531	7.02	4130.39	12.00	96.34	43.06	53.28	2.00	.0232
7	-30,-14.9	.0	33.1	.0000	.00	.0000	29.37	10903.00	12.77	156.83	106.99	49.84	17.00	.0232
8	-30,-11.6	.0	30.7	.0000	.00	.0000	999.86	10908.40	11.96	326.07	233.56	92.51	6.00	.0232
9	-30, -7.2	.0	30.7	.0000	.00	.0000	23.14	10918.91	12.75	334.19	258.77	75.42	4.00	.0232
10	-30, 5.4	.0	31.2	.0000	.00	.0000	23.33	10938.02	13.14	339.42	264.99	74.43	10.00	.0232
11	-30, 10.0	.0	32.0	.0000	.00	.0000	172.67	10937.79	13.19	158.22	98.85	59.37	3.00	.0232
12	-30, 13.0	.0	19.4	.0000	.00	.0000	59.20	3387.24	3.49	34.44	3.86	30.58	2.00	.0232
* 13	+30, .1	3596.3	30.6	.0004	3051.38	1.1107	63.42	10841.42	12.73	311.61	242.98	68.63	5.00	.0232
AVERAGE : NUM.		3309.7	30.3	.0004	2952.11	1.1799	550.05	9694.95	11.51	216.42	159.09	57.38	7.00	.0232
MASS-W6MTO.							1059.53	9843.52	11.76	209.86	155.50	49.36		

CALCULATED F/A RATIOS FOR ABOVE AVERAGE CONCENTRATIONS : AREA-W6MTO.(NUM) = .065 , MASS-W6MTO. = .067

MASS EMISSIONS :

	---- THC ---- #/1000#	#/HR	*---- CO ----* #/1000#	#/HR	*---- CO2 ----* #/1000#	#/HR	*---- NOX ----* #/1000#	#/HR	*---- NO ----* #/1000#	#/HR	*---- NO2 ----* #/1000#	#/HR	* SOX * #/HR
AREA-W6MTO.	5.01	238.39	159.26	7337.3	2877.	136850.	5.66	269.05	4.16	197.72	1.50	71.33	76.03
MASS-W6MTO.	9.41	447.74	152.71	7263.9	2867.	136391.	5.22	248.32	3.96	188.49	1.26	59.84	76.03

* MID-POINT - NOT INCLUDED IN AVERAGES

* * * * * * * * * * * END RUN 3 * * * * * * * * * * *

@FIN

STOP MASS

APPENDIX D

ENGINE EDIT REPORTS

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT - ENGINE TEST DATA

SET 1628-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216

SCOTT TEST NUMBER 1, TYPE A

TEST DATE : 8/ 3/77

ENGINE 1, NUMBER 1

ENGINE TYPE & MODEL : F-100
ENGINE SERIAL # : P680160
TOTAL ENGINE TIME : 670 HRS.
PERFORMANCE TEST RESULTS : PASS

AIR FLOW MEASUREMENT METHOD : BELLMOUTH

TEST LOCATION : P&WA-FLA.
TEST CELL NUMBER : A2
TEST CELL OPERATOR : MB
SCOTT SUPERVISOR : ZGT
INSTRUMENT OPERATOR : PR
SMOKE OPERATOR : FL

TEST ENVIRONMENTAL CONDITIONS :

	START	FINISH
TEST TIME (MIL.TIME) :	1200	1500
INLET AIR TEMP.(DEG.F) :	92.0	90.0
ATMOSPHERIC PRESS.(IN.HG) :	30.06	30.02
RELATIVE HUMIDITY (%) :	55	57
INLET AIR HUMIDITY - (GM H2O/GM DRY AIR) :	0.0178	0.0173

SAMPLE LINE :
FLOW RATE : 23 LPM
TEMPERATURE : 300 DEG.F
LENGTH : 100 FT.

FUEL ANALYSIS :
SAMPLE # : 1
TYPE : JP-4
WT.% CARBON : 85.65
WT.% HYDROGEN : 14.92
WT.% SULFUR : 0.11
H/C RATIO-ATM.: 2.02
C/H RATIO-MASS: 5.94

TEST MODE	% RATED POWER	THRUST #	FUEL FLOW #/HR	N1 SPEED RPM	N2 SPEED RPM	PT1 COTP IN.H2O	PT2 CITP IN.H2O	PS2 CISP IN.H2O	PT3 COTP PSIG	PT5/PT7 TOTP IN.HG	TT2 CIT DEG.F	TT5/TT7 EGT DEG.F	NOZZLE OPEN. %
MIN. A/B		12945	11645	9970	12760		2.25	48.23		23.3	91	1713	22
MAX. A/B		19185	43165	9960	12735		1.95	47.79		23.2	92	1710	78

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT - ENGINE TEST DATA

SET 1626-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-C216

SCOTT TEST NUMBER 2, TYPE A

TEST DATE : 8/ 9/77

ENGINE 1, NUMBER 2

ENGINE TYPE & MODEL : F-100
ENGINE SERIAL # : P680325
TOTAL ENGINE TIME : 385 HRS.
PERFORMANCE TEST RESULTS : PASS

AIR FLOW MEASUREMENT METHOD : BELLMOUTH

TEST LOCATION : PEWA-FLA.
TEST CELL NUMBER : A2
TEST CELL OPERATOR : MF
SCOTT SUPERVISOR : ZGT
INSTRUMENT OPERATOR : PR
SMOKE OPERATOR : FL

TEST ENVIRONMENTAL CONDITIONS :

	START	FINISH
TEST TIME (MIL.TIME) :	900	1200
INLET AIR TEMP.(DEG.F) :	84.0	93.0
ATMOSPHERIC PRESS.(IN.HG) :	30.03	30.05
RELATIVE HUMIDITY (%) :	71	54
INLET AIR HUMIDITY - (GM H2O/GM DRY AIR) :	0.0178	0.0183

SAMPLE LINE :
FLOW RATE : 23 LPM
TEMPERATURE : 300 DEG.F
LENGTH : 100 FT.

FUEL ANALYSIS :
SAMPLE # : 2
TYPE : JP-4
WT.% CARBON : 85.70
WT.% HYDROGEN : 14.42
WT.% SULFUR : 0.08
H/C RATIO-ATM.: 2.02
C/H RATIO-MASS: 5.94

TEST MODE	% RATED POWER	THRUST #	FUEL FLOW #/HR	N1 SPEED RPM	N2 SPEED RPM	PT1 CDTP IN.H2O	PT2 CITP IN.H2O	PS2 CISP IN.H2O	PT3 CDTP PSIG	PT5/PT7 IDTP IN.HG	TT2 CIT DEG.F	TT5/TT7 EGT DEG.F	NOZZLE OPEN. %
MIN. A/B		13600	11520	10100	12990		2.00	51.63		21.3	85	1712	21
MAX. A/B		20500	47300	10095	13005		2.10	51.33		20.6	89	1715	77

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT - ENGINE TEST DATA

SET 162M-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216

SCOTT TEST NUMBER 3, TYPE A

TEST DATE : 6/18/77

ENGINE 1, NUMBER 3

ENGINE TYPE & MODEL : F-100
ENGINE SERIAL # : P680301
TOTAL ENGINE TIME : 130 HRS.
PERFORMANCE TEST RESULTS : PASS

AIR FLOW MEASUREMENT METHOD : BELLMOUTH

TEST LOCATION : PEWA-FLA.
TEST CELL NUMBER : A2
TEST CELL OPERATOR : MP
SCOTT SUPERVISOR : ZBT
INSTRUMENT OPERATOR : DO
SMOKE OPERATOR : FL

TEST ENVIRONMENTAL CONDITIONS :

	START	FINISH
TEST TIME (MIL.TIME) :	1000	1400
INLET AIR TEMP.(DEG.F) :	86.0	92.0
ATMOSPHERIC PRESS.(IN.HG) :	30.04	30.01
RELATIVE HUMIDITY (%) :	72	54
INLET AIR HUMIDITY - (GM H2O/GM DRY AIR) :	0.0192	0.0173

SAMPLE LINE :
FLOW RATE : 23 LPM
TEMPERATURE : 300 DEG.F
LENGTH : 100 FT.

FUEL ANALYSIS
SAMPLE # : 3
TYPE : JP-4
WT.% CARBON : 85.75
WT.% HYDROGEN : 14.93
WT.% SULFUR : 0.08
H/C RATIO-ATM.: 2.02
C/H RATIO-MASS: 5.94

TEST MODE	% RATED POWER	THRUST #	FUEL FLOW #/HR	N1 SPEED RPM	N2 SPEED RPM	P11 CDTP IN.H2O	P12 CITP IN.H2O	PS2 CISP IN.H2O	P13 CDTP PSIG	PT5/PT7 TDTP IN.HG	T12 CIT DEG.F	T75/T17 EGT DEG.F	NOZZLE OPEN. %
MIN. A/B		14065	11905	10145	13000		2.00	51.92		24.4	87	1709	20
MAX. A/B		20675	17565	10135	12995		1.80	50.74		25.2	90	1708	15

28

$FIN

STOP ENGEOT

APPENDIX E

SMOKE EDIT REPORTS

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT -- SAMPLE POINT SMOKE DATA

SET 1626-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216

** RUN 1 **

SAMPLE POINT	TEMP DEG.F	PRESS PSIA	FLOW CFM	VOLUME CF	b/A #/SQ.IN	SAMPLE REFL.	PAPER REFL.	SN
401	85.0	14.8	.50	.459	.0232	90.00	100.00	10.00
402	85.0	14.8	.50	.459	.0232	77.00	100.00	23.00
403	85.0	14.8	.50	.459	.0232	74.00	100.00	26.00
404	85.0	14.8	.50	.459	.0232	77.00	100.00	23.00
405	85.0	14.8	.50	.459	.0232	89.00	100.00	11.00
406	85.0	14.8	.50	.459	.0232	90.00	100.00	10.00
407	85.0	14.8	.50	.462	.0233	81.00	100.00	19.00
408	85.0	14.8	.50	.459	.0232	86.00	100.00	14.00
409	85.0	14.8	.50	.459	.0232	70.00	100.00	30.00
410	85.0	14.8	.50	.459	.0232	79.00	100.00	21.00
411	85.0	14.8	.50	.459	.0232	90.00	100.00	10.00
412	85.0	14.8	.50	.459	.0232	96.00	100.00	4.00
413	85.0	14.8	.50	.459	.0232	69.00	100.00	31.00
501	90.0	14.8	.50	.462	.0231	74.00	100.00	26.00
502	90.0	14.8	.50	.462	.0231	90.00	100.00	10.00
503	90.0	14.8	.50	.462	.0231	94.00	100.00	6.00
504	90.0	14.8	.50	.462	.0231	93.00	100.00	7.00
505	90.0	14.8	.50	.462	.0231	94.00	100.00	6.00
506	85.0	14.8	.50	.459	.0232	97.00	100.00	3.00
507	90.0	14.8	.50	.462	.0231	96.00	100.00	4.00
508	90.0	14.8	.50	.462	.0231	95.00	100.00	5.00
509	95.0	14.8	.50	.467	.0232	96.00	100.00	2.00
510	90.0	14.8	.50	.462	.0231	97.00	100.00	3.00
511	90.0	14.8	.50	.462	.0231	96.00	100.00	4.00
512	90.0	14.8	.50	.462	.0231	96.00	100.00	4.00
513	90.0	14.8	.50	.462	.0231	96.00	100.00	4.00

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT - SAMPLE POINT SMOKE DATA

SET 1626-001-1077

REPORT DATE 10/28/77
USAF CONTRACT F08635-77-0216

** RUN 2 **

SAMPLE POINT	TEMP DEG.F	PRESS PSIA	FLOW CFM	VOLUME CF	W/A #/SQ.IN	SAMPLE REFL.	PAPER REFL.	SN
401	77.0	14.9	.50	.448	.0231	87.00	100.00	13.00
402	77.0	14.9	.50	.448	.0231	84.00	100.00	16.00
403	77.0	14.9	.50	.448	.0231	75.00	100.00	25.00
404	77.0	14.9	.50	.448	.0231	78.00	100.00	22.00
405	77.0	14.9	.50	.448	.0231	86.00	100.00	14.00
406	77.0	14.9	.50	.448	.0231	92.00	100.00	8.00
407	77.0	14.9	.50	.448	.0231	88.00	100.00	12.00
408	77.0	14.9	.50	.448	.0231	86.00	100.00	14.00
409	77.0	14.9	.50	.448	.0231	77.00	100.00	23.00
410	78.0	14.9	.50	.449	.0231	79.00	100.00	21.00
411	78.0	14.9	.50	.449	.0231	93.00	100.00	7.00
412	78.0	14.9	.50	.449	.0231	97.00	100.00	3.00
413	77.0	14.9	.50	.448	.0231	72.00	100.00	28.00
501	78.0	14.9	.50	.449	.0231	96.00	100.00	4.00
502	78.0	14.9	.50	.449	.0231	86.00	100.00	14.00
503	78.0	14.9	.50	.449	.0231	88.00	100.00	12.00
504	78.0	14.9	.50	.449	.0231	95.00	100.00	5.00
505	78.0	14.9	.50	.449	.0231	94.00	100.00	6.00
506	78.0	14.9	.50	.449	.0231	99.00	100.00	1.00
507	77.0	14.9	.50	.448	.0231	87.00	100.00	13.00
509	78.0	14.9	.50	.449	.0231	99.00	100.00	1.00
510	78.0	14.9	.50	.449	.0231	95.00	100.00	5.00
511	78.0	14.9	.50	.449	.0231	99.00	100.00	1.00
512	78.0	14.9	.50	.449	.0231	100.00	100.00	.00
513	78.0	14.9	.50	.449	.0231	97.00	100.00	3.00

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
EDIT REPORT - SAMPLE POINT SMOKE DATA

SET 1626-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F0F635-77-0216

** RUN 3 **

SAMPLE POINT	TEMP DEG.F	PRESS PSIA	FLOW CFM	VOLUME CF	A/A B/SQ.IN	SAMPLE REFL.	PAPER REFL.	SN
401	78.0	14.9	.50	.449	.0231	93.00	100.00	7.00
402	78.0	14.9	.50	.449	.0231	88.00	100.00	12.00
403	78.0	14.9	.50	.449	.0231	84.00	100.00	16.00
404	78.0	14.9	.50	.449	.0231	83.00	100.00	17.00
405	78.0	14.9	.50	.449	.0231	91.00	100.00	9.00
407	78.0	14.9	.50	.449	.0231	95.00	100.00	5.00
408	78.0	14.9	.50	.449	.0231	90.00	100.00	10.00
409	78.0	14.9	.50	.449	.0231	79.00	100.00	21.00
410	78.0	14.9	.50	.449	.0231	80.00	100.00	20.00
411	78.0	14.9	.50	.449	.0231	90.00	100.00	10.00
412	78.0	14.9	.50	.449	.0231	96.00	100.00	4.00
413	78.0	14.9	.50	.449	.0231	75.00	100.00	25.00
501	78.0	14.8	.50	.453	.0232	93.00	100.00	7.00
502	78.0	14.8	.50	.453	.0232	89.00	100.00	11.00
503	78.0	14.8	.50	.453	.0232	93.00	100.00	7.00
504	78.0	14.8	.50	.453	.0232	95.00	100.00	5.00
505	78.0	14.8	.50	.453	.0232	90.00	100.00	10.00
506	78.0	14.8	.50	.453	.0232	98.00	100.00	2.00
507	78.0	14.8	.50	.453	.0232	83.00	100.00	17.00
508	78.0	14.8	.50	.453	.0232	94.00	100.00	6.00
509	78.0	14.8	.50	.453	.0232	96.00	100.00	4.00
510	78.0	14.8	.50	.453	.0232	90.00	100.00	10.00
511	78.0	14.8	.50	.453	.0232	97.00	100.00	3.00
512	78.0	14.8	.50	.453	.0232	98.00	100.00	2.00
513	78.0	14.8	.50	.453	.0232	95.00	100.00	5.00

32

OF IN

STOP SHOW IN

APPENDIX F

CONCENTRATION EDIT REPORTS

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
CONCENTRATION EDIT REPORT

SET 1626-001-1077

REFERENCE CURVE TABLES - NON-LINEAR INSTRUMENTS

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-C216
CAL. DATE 7/22/77

	CO - HI			CO - LOW			CO2		
	PPMV	VOLTS	ANGLE	PPMV	VOLTS	ANGLE	% VOL	VOLTS	ANGLE
RANGE 1 :									
	.00	.0000	1.5705	.00	.0000	1.5695	.00	.0000	1.4161
	245.00	.0650	1.5705	30.10	.0400	1.5694	1.46	.1950	1.4600
	895.00	.2130	1.5706	60.30	.0830	1.5694	3.20	.3500	1.4950
	1840.00	.3930	1.5706	78.40	.1060	1.5696	4.49	.4310	1.5145
	2900.00	.4940	1.5706	176.00	.2240	1.5696	6.09	.5110	1.5259
	4127.00	.7760	1.5707	245.00	.3000	1.5698	8.90	.6230	1.5357
	8100.00	1.2080	1.5707	614.00	.6190	1.5700	12.10	.7200	1.5432
	9600.00	1.3780	1.5707	895.00	.8340	1.5700	15.00	.7920	1.5487
RANGE 2 :									
	.00	.0000	1.5703	.00	.0000	1.5676	.00	.0000	1.3459
	176.00	.0710	1.5705	30.10	.1000	1.5674	1.46	.2850	1.4101
	245.00	.0900	1.5705	60.30	.2060	1.5674	3.20	.5100	1.4605
	614.00	.2070	1.5705	78.40	.2640	1.5677	4.49	.6290	1.4886
	895.00	.3000	1.5705	176.00	.5570	1.5679	6.09	.7450	1.5051
	1840.00	.5910	1.5705	245.00	.7460	1.5682	8.90	.9110	1.5193
	2900.00	.7460	1.5705	-1.00	-1.0000	.0000	12.10	1.0520	1.5342
	4127.00	1.2320	1.5705	-1.00	-1.0000	.0000	-1.00	-1.0000	.0000
RANGE 3 :									
	.00	.0000	1.5687	.00	.0000	1.5611	.00	.0000	1.3382
	30.10	.0510	1.5695	30.10	.3000	1.5606	1.46	.3320	1.3562
	176.00	.1840	1.5700	60.30	.6150	1.5611	3.20	.6950	1.3884
	245.00	.2300	1.5700	78.40	.7790	1.5624	4.49	.9020	1.4350
	614.00	.6030	1.5697	-1.00	-1.0000	.0000	-1.00	-1.0000	.0000
	895.00	.9610	1.5694	-1.00	-1.0000	.0000	-1.00	-1.0000	.0000

** NOTES **

SPAN VOLTAGES ALREADY CORRECTED FOR ZERO GAS VOLTAGES.

A CONCENTRATION VALUE OF -1.0 INDICATES NO DATA.

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-DDI-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT FO8635-77-C-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F 10C # 660160 WPP FIELD TEST 1

CALIBRATION DATA FOR PERIOD 1136 TO 1242

NON-LINEAR INSTRUMENTS : REFERENCE CURVES CALIBRATION DATE : 7/22/77

	CO - HI		CO - LO		CO2	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
RANGE 1						
SPAN ADJ.FACTOR	.9730	.9730	.9934	.9934	1.0040	1.0040
ZERO READING	.0005	.0005	.0003	.0007	.0026	.0026
RANGE 2						
SPAN ADJ.FACTOR	.9940	1.0052	.9969	.9948	1.0112	1.0554
ZERO READING	.0016	.0069	.0043	-.0036	.0024	.0006
RANGE 3						
SPAN ADJ.FACTOR	.9532	.9532	.9919	.9919	.9937	.9937
ZERO READING	.0015	.0161	.0182	.0791	-.0033	-.0041

LINEAR INSTRUMENTS :

	THC		NOX		NO	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
SPAN ADJ.FACTOR	.9902	1.0333	1.0641	.9648	1.0928	1.1009

	ZEROES FOR RANGES (THC)	(NOX/NO)					
1	1.0	2.5	.1166	.1484	.1271	.7756	.3960	.2728
2	5.0	10.0	-.0014	.0637	.0316	.1939	.0975	.0662
3	10.0	25.0	-.0100	-.0022	.0029	.0776	.0166	.0154
4	50.0	100.0	-.0000	.0030	.0035	.0194	.0066	.0046
5	100.0	250.0	.0000	.0015	.0021	.0078	.0032	.0027
6	500.0	1000.0	.0000	.0003	.0003	.0019	.0010	.0007
7	1000.0	2500.0	.0000	.0001	.0001	.0008	.0004	.0003
8	5000.0	10000.0	.0000	.0000	.0000	.0002	.0001	.0001

SPAN GAS CONCENTRATIONS :

	THC-PPMC	NOX-PPM	NO-PPM	CO-HI-PPM	CO-LO-PPM	CO2-%
SPAN 1	24.48	19.70	19.70	295.00	78.40	4.49
SPAN 2	417.00	90.40	90.40	2400.00	295.00	8.90
SPAN 3	9620.00					

TOT.PRESS.FACT. 1.610, ALT. .00
SAMPLE PROBE TYPE - IP
THERMOCOUPLE TYPE - IR

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 # IDC # 680160 WPB FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 4-01														
SPAN/ZERO ADJ.	.97	.0229	1.03	.0094	1.10	.0091	.95	.0070	1.00	.0014	.99	-.0036		
SAMPLE DATA :														
TIME : 1201	5.00	.2855	100.00	.4362	100.00	.2683	3	.1192	2	.3664	3	.1967	112.2	80.8
PROBE POS.: +30		.2814		.4447		.2651		.1190		.3692		.1905	112.1	80.8
-12.70 IN.		.2740		.4391		.2657		.1186		.3618		.1918	112.0	80.7
PRESS.: 18.62 PSIA		.2834		.4384		.2644		.1180		.3614		.1942	111.5	80.6
		.2904		.4395		.2664		.1175		.3610		.1940	111.3	80.7
AVERAGE :		.2829		.4399		.2660		.1185		.3639		.1934	111.8	80.8
CONCENTRATION :	70.73 PPMC		43.99 PPMV		26.60 PPMV		95.83 PPMV		110.88 PPMV		.84 % VOL		232.3 DEG.F	
MODE-POINT : 4-02														
SPAN/ZERO ADJ.	.98	.0253	1.02	.0044	1.10	.0091	.95	.0075	.99	.0003	.99	-.0036		
SAMPLE DATA :														
TIME : 1203	5.00	.6614	250.00	.6275	100.00	.9629	3	.3563	1	.4264	3	.6445	165.6	80.4
PROBE POS.: +30		.6647		.6277		.9750		.3539		.4238		.6469	165.8	80.4
-9.76 IN.		.6517		.6322		.9956		.3557		.4272		.6524	165.5	80.4
AVERAGE :		.6592		.6291		.9845		.3553		.4258		.6479	165.6	80.4
CONCENTRATION :	164.81 PPMC		157.28 PPMV		98.45 PPMV		383.37 PPMV		386.71 PPMV		2.95 % VOL		696.9 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-C216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F IOC # 6P016C WPB FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 4-03														
SPAN/ZERO ADJ.	.98	.0270	1.02	.0010	1.10	.0052	.95	.0079	.99	.0003	.99	-.0037		
SAMPLE DATA :														
TIME : 1205	5.00	.4385	1000.00	.2783	250.00	.8280	3	.3698	1	.4459	3	.8961	236.5	80.5
PROBE POS.: +30		.4432		.2763		.8146		.3706		.4459		.8970	236.7	80.5
-5.71 IN.		.4707		.2777		.7949		.3720		.4479		.8878	236.2	80.6
PRESS.: 30.55 PSIA		.4468		.2771		.7971		.3729		.4470		.8854	236.8	80.6
		.4465		.2757		.7933		.3696		.4478		.8880	236.7	80.7
AVERAGE :		.4491		.2770		.8056		.3710		.4468		.8868	236.6	80.6
CONCENTRATION :	112.29 PPMC		277.03 PPMV		201.39 PPMV		399.32 PPMV		412.14 PPMV		4.35 % VOL		1256.8 DEG.F	
MODE-POINT : 4-04														
SPAN/ZERO ADJ.	.99	-.0061	1.01	.0049	1.10	.0050	.95	.0088	.99	.0003	.99	-.0037		
SAMPLE DATA :														
TIME : 1209	10.00	.7315	250.00	.8418	250.00	.9786	3	.5371	1	.5860	3	.7313	238.0	80.7
PROBE POS.: +30		.7283		.8429		.9819		.5361		.5857		.7338	237.9	80.7
5.52 IN.		.7515		.8413		.9733		.5399		.5846		.7322	238.1	80.7
PRESS.: 31.55 PSIA		.7311		.8381		.9769		.5421		.5838		.7299	238.0	80.5
		.7660		.8297		.9643		.5459		.5918		.7240	237.6	80.5
AVERAGE :		.7418		.8388		.9750		.5402		.5844		.7302	237.9	80.6
CONCENTRATION :	370.88 PPMC		209.69 PPMV		116.75 PPMV		558.61 PPMV		582.53 PPMV		3.39 % VOL		1267.7 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F 100 # 68016D WPB FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. F. REFER
MODE-POINT : 4-05														
SPAN/ZERO ADJ.	.99	-.0059	1.01	.0051	1.10	.0092	.95	.0092	.99	.0003	.99	-.0037		
SAMPLE DATA :														
TIME : 1211	10.00	.6999	250.00	.4146	100.00	.4239	3	.3838	1	.4606	3	.4075	171.9	80.6
PROBE POS.: +30		.7068		.4246		.4273		.3831		.4576		.4068	171.4	80.7
9.79 IN.		.7028		.4214		.4237		.3861		.4598		.4066	171.4	80.7
PRESS.: 29.93 PSIA		.7193		.4207		.4161		.3866		.4606		.4050	171.8	80.7
		.7125		.4149		.4195		.3855		.4588		.4125	171.8	80.8
AVERAGE :		.7083		.4193		.4221		.3850		.4595		.4077	171.7	80.7
CONCENTRATION :	354.13 PPMC		104.81 PPMV		42.21 PPMV		413.40 PPMV		427.57 PPMV		1.81 % VOL		742.7 DEG.F	
MODE-POINT : 4-06														
SPAN/ZERO ADJ.	.99	-.0055	1.01	.0126	1.10	.0133	.95	.0099	1.00	-.0002	.99	-.0038		
SAMPLE DATA :														
TIME : 1218	10.00	.3467	100.00	.3990	25.00	.6849	3	.1516	2	.4775	3	.1681	118.1	81.3
PROBE POS.: +30		.3295		.3909		.6718		.1481		.4673		.1653	118.4	81.3
12.55 IN.		.3295		.3912		.6646		.1501		.4733		.1667	118.3	81.2
PRESS.: 19.42 PSIA		.3338		.3885		.6692		.1477		.4694		.1650	117.8	81.2
		.3252		.3908		.6735		.1458		.4638		.1647	117.9	81.2
AVERAGE :		.3329		.3921		.6728		.1486		.4702		.1660	118.1	81.2
CONCENTRATION :	166.47 PPMC		39.21 PPMV		16.82 PPMV		131.67 PPMV		146.25 PPMV		.71 % VOL		290.4 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A

SET 1628-001-1077

8/ 3/77 F 100 # 680162 WP6

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216
FIELD TEST 1

	--- THC ---		*--- NOX ---*		*--- NO ---*		*-- CO-HI -*		*-- CO-LO -*		*--- CO2 ---*		*- TEMP.- F.-*	
	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	INPUT	REFER
*DOE-POINT : 4-07														
SPAN/ZERO ADJ.	1.00	-.0049	1.00	.0137	1.10	.0094	.95	.0109	1.00	-.0008	.99	-.0038		
SAMPLE DATA :														
TIME : 1219	10.00	.4167	100.00	.5775	100.00	.2886	3	.2031	2	.6466	3	.2276	118.7	80.6
PROBE POS.: -30		.4093		.5757		.2965		.2036		.6429		.2338	119.1	80.5
-12.66 IN.		.4134		.5738		.2946		.2029		.6447		.2296	118.8	80.5
PRESS.: 25.60 PSIA		.4041		.5742		.2926		.2029		.6394		.2272	118.7	80.6
		.4071		.5704		.2930		.2040		.6422		.2324	118.8	80.6
		------		------		------		------		------		------	------	------
AVERAGE :		.4101		.5743		.2931		.2033		.6436		.2301	118.8	80.6
CONCENTRATION :	205.06 PPMC		57.43 PPMV		29.31 PPMV		204.36 PPMV		236.59 PPMV		1.66 % VOL		297.7 DEG.F	
*DOE-POINT : 4-08														
SPAN/ZERO ADJ.	1.00	-.0046	1.00	.0060	1.10	.0094	.95	.0116	.99	.0003	.99	-.0039		
SAMPLE DATA :														
TIME : 1222	10.00	.4888	250.00	.5569	100.00	.7653	3	.3959	1	.4617	3	.5467	200.5	81.4
PROBE POS.: -30		.4881		.5472		.7518		.3966		.4642		.5541	201.0	81.4
-9.87 IN.		.4836		.5559		.7698		.3951		.4638		.5468	201.3	81.4
PRESS.: 30.68 PSIA		.4788		.5534		.7583		.3942		.4617		.5545	201.5	81.3
		.4878		.5557		.7545		.3937		.4637		.5472	201.7	81.3
		------		------		------		------		------		------	------	------
AVERAGE :		.4854		.5538		.7599		.3951		.4638		.5503	201.2	81.4
CONCENTRATION :	242.70 PPMC		138.45 PPMV		75.99 PPMV		423.39 PPMV		431.68 PPMV		2.47 % VOL		972.6 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F 10C 8 680160 WPR FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP.- F.- INPUT	TEMP.- F.- REFER
MODE-POINT : 4-09														
SPAN/ZERO ADJ.	1.01	.1397	.99	.0015	1.10	.0039	.95	.0121	1.00	-.0014	.99	-.0039		
SAMPLE DATA :														
TIME : 1224	1.00	.4588	1000.00	.3212	250.00	1.0529	3	.1523	2	.4860	3	.9082	248.0	81.1
PROBE POS.: -30		.3816		.3257		1.0604		.1400		.4580		.9066	248.2	81.1
-5.86 IN.		.3642		.3221		1.0519		.1470		.4725		.9116	248.3	81.0
PRESS.: 30.58 PSIA		.3734		.3184		1.0410		.1486		.4827		.9093	248.3	81.0
		.3276		.3204		1.0425		.1486		.4867		.9105	248.1	81.0
AVERAGE :		.3811		.3216		1.0497		.1473		.4772		.9092	248.2	81.0
CONCENTRATION :	19.06 PPMC		321.56 PPMV		262.44 PPMV		130.07 PPMV		148.59 PPMV		9.59 % VOL		1351.7 DEG.F	
MODE-POINT : 4-10														
SPAN/ZERO ADJ.	1.01	.0489	.99	.0016	1.10	.0037	.95	.0128	.99	.0003	.99	-.0039		
SAMPLE DATA :														
TIME : 1227	5.00	.9006	1000.00	.1992	250.00	.4541	3	.6557	1	.6721	3	.7668	219.1	80.6
PROBE POS.: -30		.9046		.1987		.4542		.6566		.6735		.7565	218.4	80.6
5.68 IN.		.8994		.2033		.4620		.6557		.6735		.7656	218.4	80.6
PRESS.: 30.65 PSIA		.9318		.2015		.4581		.6603		.6742		.7650	218.4	80.6
		.9252		.1997		.4709		.6586		.6723		.7668	218.0	80.7
AVERAGE :		.9123		.2005		.4599		.6574		.6731		.7641	218.5	80.6
CONCENTRATION :	228.08 PPMC		200.47 PPMV		114.96 PPMV		660.78 PPMV		691.64 PPMV		3.59 % VOL		1110.2 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-C01-1577 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F33615-77-C216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 6/ 3/77 F 10[illegible] [illegible] [illegible] FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP.-F. INPUT	TEMP.-F. REFER
MODE-POINT : 4-11														
SPAN/ZERO ADJ.	1.02	.0519	.96	.0165	1.13	.0696	.95	.0135	1.00	[illegible]	.99	[illegible]		
SAMPLE DATA :														
TIME : 1230	5.00	1.0066	100.00	.6735	100.00	.3092	3	.25[illegible]	4	.7[illegible]1	3	[illegible]	147.9	81.[illegible]
PROBE POS.: -30		.9883		.6844		.3144		.2493		.7[illegible]		[illegible]	147.9	81.3
9.69 IN.		.9912		.6832		.3160		.24[illegible]		.7[illegible]		[illegible]	146.1	81.3
PRESS.: 30.69 PSIA		.9825		.6646		.3126		.2440		.7[illegible]		[illegible]	147.8	81.4
		1.0077		.6749		.3085		.2466		.7[illegible]		[illegible]	147.6	81.4
AVERAGE :		.9953		.6811		.3122		.2[illegible]		.7[illegible]		[illegible]	147.9	81.3
CONCENTRATION :		248.82 PPMC		68.11 PPMV		31.22 PPMV		267.12 PPMV		[illegible] PPMV		[illegible]		[illegible] DEG.F
MODE-POINT : 4-12														
SPAN/ZERO ADJ.	1.02	.0536	.96	.0169	1.13	.0146	.95	.0170	.59	[illegible]	.99	[illegible]		
SAMPLE DATA :														
TIME : 1232	5.00	.6080	100.00	.2333	25.00	.6984	3	.0485	1	.7[illegible]	[illegible]	[illegible]	93.4	81.2
PROBE POS.: -30		.6335		.2394		.6996		.0[illegible]		.7[illegible]		[illegible]	93.2	81.1
12.58 IN.		.6452		.2305		.6865		.0[illegible]		.72[illegible]		[illegible]	93.2	81.1
PRESS.: 15.39 PSIA		.6696		.2222		.6400		.0[illegible]		.7[illegible]		[illegible]	9[illegible]	81.1
		.6935		.2151		.6236		.0773		.67[illegible]		[illegible]	9[illegible]	81.1
AVERAGE :		.6500		.2281		.6697		.0[illegible]		.7[illegible]		[illegible]	93.2	81.1
CONCENTRATION :		162.49 PPMC		22.81 PPMV		16.74 PPMV		47.2[illegible] PPMV		7.[illegible] PPMV		[illegible]		[illegible] DEG.F

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A P/ 3777 F 10C # 68016C NPE FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO PPM	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 4-13														
SPAN/ZERO ADJ.	.98	.0268	1.02	.0011	1.10	.0051	.95	.0083	1.00	.0007	.99	-.0037		
SAMPLE DATA :														
TIME : 1207	5.00	.0127	1000.00	.3054	250.00	1.0155	3	.0766	2	.2530	3	.7962	227.8	81.0
PROBE POS.: +30		.0085		.3057		1.0186		.0762		.2396		.7999	227.7	81.0
-.03 IN.		.0029		.3071		1.0208		.0742		.2322		.8006	227.9	81.0
PRESS.: 30.44 PSIA		.0020		.3075		1.0173		.0735		.2293		.7954	227.7	81.0
		-.0013		.3073		1.0193		.0749		.2257		.8015	227.8	80.9
AVERAGE :		.0050		.3066		1.0183		.0751		.2359		.7987	227.8	81.0
CONCENTRATION :		1.24 PPMC		306.57 PPMV		254.58 PPMV		50.57 PPMV		69.47 PPMV		3.80 % VOL	1184.9	DEG.F

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-C216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F 100 # 6n3icE WFP FIELD TEST A

CALIBRATION DATA FOR PERIOD 1242 TO 1605

NON-LINEAR INSTRUMENTS : REFERENCE CURVES CALIBRATION DATE : 7/22/77

	CO - HI PERIOD START	CO - HI PERIOD END	CO - LO PERIOD START	CO - LO PERIOD END	CO2 PERIOD START	CO2 PERIOD END
RANGE 1						
SPAN ADJ.FACTOR	.9730	1.1980	.9934	.9839	1.0040	1.2613
ZERO READING	.0005	.1461	.0003	.0621	.0026	.1940
RANGE 2						
SPAN ADJ.FACTOR	1.0052	1.3353	.9948	1.0201	1.0554	1.3812
ZERO READING	.0069	.2219	-.0036	.1763	.0006	.2021
RANGE 3						
SPAN ADJ.FACTOR	.9532	.8820	.9919	.7693	.9937	1.1132
ZERO READING	.0161	.1018	.0741	.3299	-.0041	.0445

LINEAR INSTRUMENTS :

			THC PERIOD START	THC PERIOD END	NOX PERIOD START	NOX PERIOD END	NO PERIOD START	NO PERIOD END
SPAN ADJ.FACTOR			1.0333	.9724	.9648	1.0381	1.1009	1.1853
ZEROES FOR RANGES	(THC)	(NOX/NO)						
1	1.0	2.5		.0107	.7756	.3650	.2726	.4722
2	5.0	10.0		.0069	.1939	.0962	.0622	.1161
3	10.0	25.0	-.0022	-.0023	.0776	.0318	.0154	.0211
4	50.0	100.0	.0030	.0002	.0194	.0092	.0098	.0100
5	100.0	250.0	.0015	.0001	.0078	.0047	.0027	.0061
6	500.0	1000.0	.0003	.0000	.0019	.0012	.0007	.0012
7	1000.0	2500.0	.0001	.0000	.0008	.0004	.0003	.0005
8	5000.0	10000.0	.0000	.0000	.0002	.0001	.0001	.0001

SPAN GAS CONCENTRATIONS :

	THC-PPMC	NOX-PPM	NO-PPM	CO-HI-PPM	CO-LO-PPM	CO2-%
SPAN 1	24.48	19.70	19.70	245.00	78.40	4.49
SPAN 2	417.00	90.40	90.40	2400.00	245.00	6.90
SPAN 3	4620.00					

TOT.PRESS.FACT. 1.01C, AUG. .LO
SAMPLE PROBE TYPE - IP
THERMOCOUPLE TYPE - IF

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-F01-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F 10C # 6R016C WP8 FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : S-01														
SPAN/ZERO ADJ.	.99	.0214	1.02	.0054	1.17	.0099	1.15	.1129	.99	.0481	1.31	.1562		
SAMPLE DATA :														
TIME : 1519	5.00	.1059	250.00	.3832	100.00	.5997	1	.3912	1	1.3306	2	.4774	-.1*	.0*
PROBE POS.: *30		.0908		.3938		.5914		.3960		1.3366		.4706	-.1*	.0*
-14.29 IN.		.0872		.3869		.5830		.3899		1.3306		.4709	-.1*	.0*
PRESS.: 30.88 PSIA		.0831		.3952		.6116		.4008		1.3412		.4803	-.1*	.0*
AVERAGE :		.0916		.3903		.5964		.3945		1.3346		.4748	.0	.0
CONCENTRATION :	22.91 PPMC		97.57 PPMV		59.64 PPMV		1847.94 PPMV		.00 PPMV		10.21 % VOL		.0 DEG.F	
MODE-POINT : S-02														
SPAN/ZERO ADJ.	.99	-.0023	1.02	.0054	1.17	.0069	1.15	.1196	.99	.0488	1.31	.1586		
SAMPLE DATA :														
TIME : 1521	10.00	.8500	250.00	.7968	250.00	.6777	1	1.6474	1	2.4298	2	1.0421	-.1*	.0*
PROBE POS.: *30		1.0349		.7974		.6716		1.6486		2.4254		1.0342	-.1*	.0*
-11.05 IN.		.8947		.8123		.6678		1.6486		2.4268		1.0385	-.1*	.0*
PRESS.: 32.74 PSIA		.6719		.7997		.6534		1.6478		2.4330		1.0369	-.1*	.0*
		.8110		.8130		.6672		1.6483		2.4353		1.0331	-.1*	.0*
AVERAGE :		.8525		.8042		.6675		1.6483		2.4291		1.0357	.0	.0
CONCENTRATION :	426.24 PPMC		201.05 PPMV		166.88 PPMV		11867.44 PPMV		.00 PPMV		11.66 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F 100 # 680160 #P8 FIELD TEST 1

	--- THC ---		*--- NOX ---*		*--- NO ---*		*-- CO-HI --*		*-- CO-LO --*		*--- CO2 ---*		*- TEMP.- F.-*	
	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	INPUT	REFER
MODE-POINT : 5-03														
SPAN/ZERO ADJ.	.98	.0202	1.02	.0012	1.17	.0070	1.15	.1159	.99	.0493	1.21	.0750		
SAMPLE DATA :														
TIME : 1523	5.00	.0869	1000.00	.3196	250.00	1.0004	1	1.5623	1	2.1739	1	.7629	-.1*	.0*
PROBE POS.: *30		.0806		.3202		1.0079		1.5716		2.1783		.7628	-.1*	.0*
-6.39 IN.		.0835		.3163		1.0054		1.5720		2.1921		.7605	-.1*	.0*
PRESS.: 30.73 PSIA		.0811		.3211		1.0083		1.5779		2.2043		.7586	-.1*	.0*
		.0792		.3224		1.0132		1.5610		2.2105		.7602	-.1*	.0*
		------		------		------		------		------		------	------	------
AVERAGE :		.0822		.3203		1.0070		1.5690		2.1918		.7610	.0	.0
CONCENTRATION :	20.54 PPMC		320.32 PPMV		251.76 PPMV		11215.66 PPMV		.00 PPMV		13.67 % VOL		.0 DEG.F	
MODE-POINT : 5-04														
SPAN/ZERO ADJ.	.98	.0364	1.02	.0011	1.17	.0071	1.16	.1190	.99	.0506	1.21	.0769		
SAMPLE DATA :														
TIME : 1527	1.00	.3550*	1000.00	.3319	250.00	.9885	1	1.0768	1	2.0884	1	.7600	.1*	.0*
PROBE POS.: *30		.3421		.3299		.9864		1.0612		2.0891		.7582	.1*	.0*
6.18 IN.		.3389		.3322		.9843		1.0779		2.0973		.7594	.1*	.0*
PRESS.: 30.83 PSIA		.3304		.3317		.9823		1.0673		2.1038		.7564	.1*	.0*
		.3197		.3304		.9847		1.0858		2.1168		.7571	.1*	.0*
		------		------		------		------		------		------	------	------
AVERAGE :		.3372		.3312		.9853		1.0738		2.0991		.7582	.0	.0
CONCENTRATION :	16.86 PPMC		331.22 PPMV		246.32 PPMV		6824.98 PPMV		.00 PPMV		13.56 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F 100 # 680160 WPB FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP.- F.- INPUT	TEMP.- F.- REFER
MODE-POINT : 5-05														
SPAN/ZERO ADJ.	.98	.0352	1.03	.0052	1.17	.0071	1.16	.1202	.99	.0512	1.22	.0777		
SAMPLE DATA :														
TIME : 1529	1.00	.3133	250.00	.7076	250.00	.5018	1	1.4302	1	2.1983	1	.7500	.1*	.0*
PROBE POS.: *30		.2850		.7043		.4848		1.3931		2.1883		.7472	.1*	.0*
10.80 IN.		.2804		.7004		.4794		1.4041		2.1799		.7483	.1*	.0*
PRESS.: 32.19 PSIA		.2870		.6927		.4876		1.4256		2.1927		.7477	.1*	.0*
		.2730		.6917		.4848		1.4147		2.2037		.7438	.1*	.0*
AVERAGE :		.2877		.6993		.4877		1.4135		2.1926		.7474	.0	.0
CONCENTRATION :	14.39 PPMC		174.84 PPMV		121.93 PPMV		9905.96 PPMV		.00 PPMV		15.13 % VOL		.0 DEG.F	
MODE-POINT : 5-06														
SPAN/ZERO ADJ.	.98	.0181	1.03	.0052	1.17	.0099	1.16	.1215	.99	.0517	1.22	.0786		
SAMPLE DATA :														
TIME : 1531	5.00	.2441	250.00	.2147	100.00	.1974	1	.3060	1	1.6356	1	.4391	.1*	.0*
PROBE POS.: *30		.2515		.2165		.1973		.3019		1.6202		.4378	.1*	.0*
14.11 IN.		.2811		.2190		.1918		.2988		1.6132		.4314	.1*	.0*
PRESS.: 25.11 PSIA		.2729		.2167		.1831		.2959		1.6016		.4351	.1*	.0*
		.2777		.2134		.1866		.2936		1.5782		.4336	.1*	.0*
AVERAGE :		.2655		.2161		.1912		.2992		1.6098		.4354	.0	.0
CONCENTRATION :	66.37 PPMC		54.02 PPMV		19.12 PPMV		1333.63 PPMV		.00 PPMV		4.57 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP.- F.- INPUT	TEMP.- F.- REFER
MODE-POINT : 5-07														
SPAN/ZERO ADJ.	.98	.0170	1.03	.0052	1.17	.0095	1.16	.1290	.99	.0530	1.22	.0819		
SAMPLE DATA :														
TIME : 1535	5.00	.2390	250.00	.2902	100.00	.3667	1	.3587	1	1.0156	1	.5907	-.10	.00
PROBE POS.: -30		.2298		.2879		.3681		.3575		1.0236		.5810	-.10	.00
-14.25 IN.		.2304		.2855		.3639		.3677		1.0005		.5761	-.10	.00
PRESS.: 28.65 PSIA		.2264		.2765		.3574		.3602		1.0523		.5376	-.10	.00
		.1985		.2872		.3760		.3764		1.0519		.5626	-.10	.00
AVERAGE :		.2298		.2814		.3625		.3662		1.0383		.5385	.0	.0
CONCENTRATION :		56.21 PPMC		70.36 PPMV		36.25 PPMV		1661.97 PPMV		.00 PPMV		6.72 % VOL		.0 DEG.F
MODE-POINT : 5-08														
SPAN/ZERO ADJ.	.98	.0165	1.03	.0011	1.17	.0075	1.17	.1254	.99	.0535	1.23	.0813		
SAMPLE DATA :														
TIME : 1537	5.00	.1239	1000.00	.2996	250.00	.9327	1	1.0574	1	2.2511	1	.7468	-.10	.00
PROBE POS.:		.0834		.2975		.9252		1.0593		2.2471		.7474	-.10	.00
-11.06 IN.		.1087		.2967		.9159		1.0591		2.2542		.7461	-.10	.00
PRESS.: 32.23 PSIA		.1123		.2976		.9137		1.0584		2.2620		.7459	-.10	.00
		.1382		.2960		.9173		1.0584		2.2617		.7455	-.10	.00
AVERAGE :		.1133		.2971		.9206		1.0588		2.2558		.7463	.0	.0
CONCENTRATION :		28.32 PPMC		297.07 PPMV		230.16 PPMV		11953.83 PPMV		.00 PPMV		11.04 % VOL		.0 DEG.F

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F 100 # 680160 WPB FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 5-09														
SPAN/ZERO ADJ.	.98	.0159	1.03	.0011	1.17	.0074	1.17	.1276	.99	.0543	1.23	.0823		
SAMPLE DATA :														
TIME : 1539	5.00	.2400	1000.00	.3101	250.00	.9351	1	1.3754	1	2.1609	1	.7502	-.1*	.0*
PROBE POS.:		.1636		.3109		.9381		1.3661		2.1689		.7493	-.1*	.0*
-6.42 IN.		.1476		.3170		.9400		1.2819		2.1660		.7494	-.1*	.0*
PRESS.: 30.16 PSIA		.1648		.3145		.9505		1.2937		2.1627		.7469	-.1*	.0*
		.1524		.3150		.9405		1.2803		2.1777		.7490	-.1*	.0*
AVERAGE :		.1737		.3135		.9408		1.3195		2.1672		.7494	.0	.0
CONCENTRATION :	43.42 PPMC		313.51 PPMV		235.21 PPMV		9090.45 PPMV		.00 PPMV		13.21 % VOL		.0 DEG.F	
MODE-POINT : 5-10														
SPAN/ZERO ADJ.	.98	.0270	1.03	.0011	1.18	.0074	1.17	.1289	.98	.0546	1.23	.0832		
SAMPLE DATA :														
TIME : 1541	1.00	.1395	1000.00	.3109	250.00	.9429	1	1.2851	1	2.1686	1	.7501	.1*	.0*
PROBE POS.:		.1412		.3102		.9261		1.2868		2.1776		.7495	.1*	.0*
6.30 IN.		.1468		.3078		.9300		1.3296		2.1877		.7492	.1*	.0*
PRESS.: 30.20 PSIA		.1501		.3056		.9181		1.3155		2.1974		.7468	.1*	.0*
		.1301		.3090		.9185		1.2897		2.1991		.7490	.1*	.0*
AVERAGE :		.1416		.3087		.9271		1.3013		2.1861		.7489	.0	.0
CONCENTRATION :	7.08 PPMC		308.69 PPMV		231.78 PPMV		9931.05 PPMV		.00 PPMV		13.19 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A 8/ 3/77 F 10C # 680160 WPB FIELD TEST 1

	INC RNG	INC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : S-11														
SPAN/ZERO ADJ.	.98	.0250	1.03	.0050	1.18	.0075	1.17	.1302	.95	.0554	1.23	.0840		
SAMPLE DATA :														
TIME : 1543	1.00	.1266	250.00	.6403	250.00	.4302	1	1.0055	1	2.0823	1	.7391	.1*	.0*
PROBE POS.: -30		.1109		.6430		.4380		1.0234		2.0822		.7371	.1*	.0*
10.91 IN.		.0757		.6401		.4296		.9844		2.0948		.7366	.1*	.0*
PRESS.: 32.17 PSIA		.1109		.6436		.4317		1.0213		2.1076		.7355	.1*	.0*
		.1193		.6396		.4294		1.0462		2.1151		.7373	.1*	.0*
		.1086		.6403		.4316		1.0162		2.0960		.7375	.0	.0
AVERAGE :														
CONCENTRATION :		5.43 PPMC		160.07 PPMV		107.95 PPMV		6259.67 PPMV		.00 PPMV		12.75 % VOL		.0 DEG.F
MODE-POINT : S-12														
SPAN/ZERO ADJ.	.98	.0141	1.03	.0101	1.18	.0100	1.30	.2016	.98	.0563	1.24	.0853		
SAMPLE DATA :														
TIME : 1546	5.00	.1187	100.00	.5146	100.00	.2929	2	.2719	1	1.5053	1	.5630	.1*	.0*
PROBE POS.: -30		.1123		.5108		.2906		.2693		1.4858		.5606	.1*	.0*
10.06 IN.		.1197		.5117		.2909		.2688		1.4551		.5760	.1*	.0*
PRESS.: 28.74 PSIA		.1079		.5061		.2928		.2691		1.4353		.5783	.1*	.0*
		.1167		.5000		.2948		.2664		1.3674		.5761	.1*	.0*
AVERAGE :		.1139		.5086		.2924		.2691		1.4456		.5712	.0	.0
CONCENTRATION :		28.47 PPMC		50.86 PPMV		24.24 PPMV		800.60 PPMV		.00 PPMV		7.51 % VOL		.0 DEG.F

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 1,TYPE A A/ 3/77 F 100 # 680160 WPS FIELD TEST 1

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	LO-HI RNG	LO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP INPUT	F. REFER
MODE-POINT : 5-13														
SPAN/ZERO ADJ.	.98	.0380	1.02	.0012	1.17	.0070	1.15	.1172	.99	.0499	1.21	.0759		
SAMPLE DATA :														
TIME : 1525	1.00	.3858	1000.00	.3147	250.00	.9590	1	1.2340	1	2.0858	1	.7642	-.0*	.0*
PROBE POS.: +30		.3775		.3169		.9617		1.2085		2.0797		.7686	.0*	.0*
-.02 IN.		.3743		.3175		.9685		1.2217		2.1015		.7613	.0*	.0*
PRESS.: 30.41 PSIA		.3696		.3169		.9629		1.1981		2.1111		.7627	.0*	.0*
		.3499		.3166		.9621		1.2133		2.1183		.7611	.0*	.0*
AVERAGE :		.3714		.3169		.9628		1.2143		2.0993		.7626	.0	.0
CONCENTRATION :	18.57 PPMC		316.44 PPMV		240.71 PPMV		8156.93 PPMV		.00 PPMV		13.74 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

@FIN

50 STOP CONC

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 F100 # 660325 WPN FIELD TEST 2

CALIBRATION DATA FOR PERIOD 922 TO 1019

NON-LINEAR INSTRUMENTS : REFERENCE CURVES CALIBRATION DATE : 7/22/77

	CO - HI		CO - LO		CO2	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
RANGE 1						
SPAN ADJ.FACTOR	.9876	.9769	.9840	.9681	1.0034	1.0416
ZERO READING	.0017	.0033	.0014	.0371	.0062	.0015
RANGE 2						
SPAN ADJ.FACTOR	.9824	.9900	.9829	.9156	1.0016	1.0405
ZERO READING	-.0002	.0036	.0064	.0970	.0069	.0029
RANGE 3						
SPAN ADJ.FACTOR	.9360	.9424	.9652	.3420	.9951	1.0628
ZERO READING	-.0054	.0045	.0134	.2866	.0018	-.0009

LINEAR INSTRUMENTS :

	THC		NOX		NO	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
SPAN ADJ.FACTOR	.9620	.9527	1.0163	1.0096	1.0291	1.1368

	ZEROES FOR RANGES (THC)	(NOX/NO)					
1	1.0	2.5	.0841	.1611	.4680	.8124	.9749	.6297
2	5.0	10.0	.0185	.0306	.1170	.2031	.2437	.1574
3	10.0	25.0	.0058	.0158	.0172	.0812	.0348	.0630
4	50.0	100.0	.0007	.0031	.0090	.0187	.0089	.0106
5	100.0	250.0	.0007	.0016	.0038	.0088	.0072	.0064
6	500.0	1000.0	.0001	.0003	.0024	.0020	.0008	.0016
7	1000.0	2500.0	.0001	.0002	.0005	.0008	.0010	.0006
8	5000.0	10000.0	.0000	.0000	.0001	.0002	.0002	.0002

SPAN GAS CONCENTRATIONS :

	THC-PPMC	NOX-PPM	NO-PPM	CO-HI-PPM	CO-LO-PPM	CO2-%
SPAN 1	24.48	19.70	19.70	245.00	78.40	4.49
SPAN 2	417.00	90.40	90.40	2400.00	245.00	8.90
SPAN 3	4620.00					

TOT.PRESS.FACT. 1.600, ADJ. .00
SAMPLE PROBE TYPE - IP
THERMOCOUPLE TYPE - IP

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 F100 # 663325 WPA FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP.-F. INPUT	TEMP.-F. REFER
MODE-POINT : 4-01														
SPAN/ZERO ADJ.	.96	.0088	1.01	.0053	1.26	.0075	.94	-.0324	.98	.0125	1.01	.0057		
SAMPLE DATA :														
TIME : 939	10.00	.4641	250.00	.4667	250.00	.2538	3	.2999	1	.3707	2	.3466	164.5	80.9
PROBE POS.: +30		.4647		.4929		.2496		.2990		.3701		.3498	164.6	80.9
-11.14 IN.		.4593		.4865		.2516		.3003		.3700		.3466	164.0	80.9
PRESS.: 32.08 PSIA		.4529		.4953		.2512		.3027		.3715		.3454	163.6	80.8
		.4652		.4861		.2522		.2990		.3644		.3522	163.7	80.8
AVERAGE :		.4617		.4849		.2533		.3066		.3701		.3481	164.1	80.9
CONCENTRATION :		230.61 PPMC		122.44 PPMV		62.18 PPMV		325.46 PPMV		321.36 PPMV		1.46 % VOL	644.4 DEG.F	
MODE-POINT : 4-02														
SPAN/ZERO ADJ.	.96	.0092	1.03	.0055	1.57	[illegible]	.96	-.0221	.98	.0136	1.01	.0055		
SAMPLE DATA :														
TIME : 941	10.00	.4935	250.00	[illegible]	250.00	[illegible]	5	.5216	1	.5726	2	.5235	195.4	81.2
PROBE POS.: +30		.5025		[illegible]		[illegible]		.5397		.5644		.5250	195.5	81.2
-8.61 IN.		.4968		[illegible]		[illegible]		.5332		.5611		.5192	195.3	81.2
PRESS.: 35.20 PSIA		.5031		[illegible]		[illegible]		.5346		.5626		.5267	196.1	81.3
		.5051		[illegible]		[illegible]		.5364		.5584		.5211	196.3	81.3
AVERAGE :		.5033		[illegible]		[illegible]		.5329		.5646		.5219	195.7	81.2
CONCENTRATION :		250.54 PPMC		210.39 PPMV		117.65 PPMV		552.11 PPMV		553.28 PPMV		1.51 % VOL	920.6 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK ARE NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-E01-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-C216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 9/ 5/77 F100 # 663325 AFB FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP., F. INPUT	TEMP., F. REFER
MODE-POINT : 4-03														
SPAN/ZERO ADJ.	.96	.0232.	1.01	.0023	1.07	.0044	.96	-.0015	.98	.0155	1.0.	.0053		
SAMPLE DATA :														
TIME : 944	5.00	.2707	1000.00	.3554	1000.00	.2204	1	.3587	1	.4272	2	.0474	251.0	81.1
PROBE POS.: +30		.2522		.3546		.2212		.3584		.4269		.0506	251.4	81.1
-4.95 IN.		.2585		.3563		.2244		.3587		.4264		.0468	251.6	81.1
PRESS.: 35.44 PSIA		.2520		.3567		.2231		.3514		.4306		.0464	251.1	81.0
		.2570		.3572		.2237		.3595		.4337		.0467	251.3	81.0
AVERAGE :		.2581		.3561		.2227		.3551		.4302		.0468	251.3	81.1
CONCENTRATION :	44.5. PPMC		356.15 PPMV		272.47 PPMV		163.17 PPMV		392.02 PPMV		4.74 % VOL		1377.5 DEG.F	
MODE-POINT : 4-04														
SPAN/ZERO ADJ.	.96	.0242	1.01	.0022	1.05	.0043	.94	-.0007	.94	.0184	1.02	.0050		
SAMPLE DATA :														
TIME : 949	5.00	.4637	1000.00	.3241	1000.00	.2154	3	.3593	1	.4391	2	.0253	255.4	81.5
PROBE POS.: +30		.4594		.3274		.2162		.3503		.4437		.0253	255.1	81.5
5.09 IN.		.4501		.3242		.2167		.3567		.4426		.0277	255.1	81.5
PRESS.: 35.11 PSIA		.4401		.3245		.2136		.3534		.4516		.0245	255.1	81.4
		.4375		.3220		.2114		.3523		.4445		.0230	255.4	81.4
AVERAGE :		.4563		.3250		.2149		.3547		.4461		.0252	255.2	81.5
CONCENTRATION :	114.07 PPMC		324.96 PPMV		230.55 PPMV		142.73 PPMV		411.2 PPMV		4.44 % VOL		1410.1 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK ARE NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A A/ 9/77 F100 # 680325 WPB FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 4-05														
SPAN/ZERO ADJ.	.96	.0110	1.01	.0064	1.09	.0078	.94	-.0002	.98	.0202	1.03	.0004		
SAMPLE DATA :														
TIME : 952	10.00	.6408	250.00	.6859	250.00	.3124	3	.5263	1	.5810	3	.6265	208.8	81.7
PROBE POS.: +30		.6397		.6831		.3069		.5339		.5659		.6306	209.9	81.7
8.83 IN.		.6466		.6875		.3022		.5265		.5787		.6186	208.8	81.7
PRESS.: 34.79 PSIA		.6395		.6865		.3072		.5288		.5824		.6231	208.6	81.8
		.6506		.6787		.3044		.5242		.5786		.6219	207.9	81.8
AVERAGE :		.6434		.6843		.3066		.5280		.5773		.6241	208.8	81.7
CONCENTRATION :	321.71 PPMC		171.09 PPMV		76.65 PPMV		547.66 PPMV		573.72 PPMV		2.83 % VOL		1032.2 DEG.F	
MODE-POINT : 4-06														
SPAN/ZERO ADJ.	.96	.0115	1.01	.0066	1.09	.0078	.94	.0002	.94	.0579	1.03	.0003		
SAMPLE DATA :														
TIME : 954	10.00	.3813	250.00	.3173	250.00	.1455	3	.2345	2	.7121	3	.3016	137.8	82.0
PROBE POS.: +30		.3858		.3163		.1441		.2385		.6907		.2975	137.6	81.9
11.24 IN.		.3784		.3186		.1415		.2325		.7115		.2969	137.3	81.9
PRESS.: 22.73 PSIA		.3745		.3189		.1438		.2333		.7116		.3009	138.3	81.9
		.3723		.3149		.1437		.2304		.7094		.3050	137.7	81.8
AVERAGE :		.3784		.3172		.1437		.2338		.7071		.3004	137.7	81.9
CONCENTRATION :	189.22 PPMC		79.31 PPMV		35.92 PPMV		249.56 PPMV		230.22 PPMV		1.32 % VOL		465.8 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT #08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 F100 # 680325 WPB FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP.- F.- INPUT	TEMP.- F.- REFER
MODE-POINT : 4-07														
SPAN/ZERO ADJ.	.96	.0125	1.01	.0071	1.10	.0080	.94	.0013	.97	.0254	1.04	-.0000		
SAMPLE DATA :														
TIME : 1000	10.00	.8130	250.00	.5023	250.00	.2147	3	.4651	1	.5226	3	.4345	160.5	82.3
PROBE POS.: -30		.8115		.5024		.2176		.4640		.5227		.4293	160.9	82.3
-11.09 IN.		.8221		.5075		.2165		.4664		.5261		.4316	161.1	82.3
PRESS.: 34.12 PSIA		.8115		.5051		.2198		.4789		.5127		.4306	160.3	82.3
		.8099		.5045		.2116		.4641		.5291		.4309	160.0	82.2
AVERAGE :		.8136		.5044		.2160		.4670		.5217		.4314	160.6	82.3
CONCENTRATION :	406.79 PPMC		126.09 PPMV		54.01 PPMV		492.66 PPMV		504.57 PPMV		1.91 % VOL		655.7 DEG.F	
MODE-POINT : 4-08														
SPAN/ZERO ADJ.	.96	.0128	1.01	.0021	1.11	.0080	.94	.0016	.97	.0266	1.04	-.0001		
SAMPLE DATA :														
TIME : 1002	10.00	.5206	1000.00	.2514	250.00	.5711	3	.6690	1	.6724	3	.8143	236.2	82.1
PROBE POS.: -30		.5053		.2526		.5721		.6627		.6721		.8129	237.7	82.0
-8.56 IN.		.5329		.2520		.5768		.6794		.6586		.8123	236.7	82.0
PRESS.: 34.85 PSIA		.5172		.2509		.5760		.6671		.6772		.8047	236.2	81.9
		.5154		.2469		.5710		.6646		.6786		.8037	236.6	82.0
AVERAGE :		.5183		.2506		.5734		.6686		.6718		.8096	236.7	82.0
CONCENTRATION :	259.14 PPMC		250.64 PPMV		143.35 PPMV		670.13 PPMV		689.99 PPMV		3.96 % VOL		1256.2 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 F100 # 680325 WPB FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : 9-09														
SPAN/ZERO ADJ.	.96	.1409	1.01	.0021	1.11	.0029	.94	.0019	.93	.0731	1.04	-.0002		
SAMPLE DATA :														
TIME : 1009	1.00	.3009	1000.00	.3820	1000.00	.3180	3	.1360	2	.4318	3	.9072	250.6	82.3
PROBE POS.: -30		.3229		.3842		.3174		.1341		.4177		.9043	250.8	82.3
-5.03 IN.		.2421		.3870		.3183		.1366		.4203		.9085	250.5	82.3
PRESS.: 35.95 PSIA		.2474		.3887		.3205		.1364		.4221		.9013	250.8	82.4
		.2171		.3880		.3195		.1372		.4189		.9049	250.9	82.4
AVERAGE :		.2660		.3860		.3187		.1361		.4222		.9053	250.7	82.3
CONCENTRATION :	13.30 PPMC		385.96 PPMV		318.74 PPMV		116.43 PPMV		130.12 PPMV		4.51 % VOL		1371.5 DEG.F	
MODE-POINT : 9-10														
SPAN/ZERO ADJ.	.95	.0281	1.01	.0021	1.11	.0027	.94	.0024	.97	.0296	1.05	-.0003		
SAMPLE DATA :														
TIME : 1007	5.00	.8942	1000.00	.2728	1000.00	.1660	3	.6615	1	.6491	3	.8479	232.9	82.3
PROBE POS.: -30		.9305		.2769		.1649		.6589		.6479		.8484	232.0	82.3
5.16 IN.		.9332		.2702		.1612		.6639		.6504		.8529	232.6	82.3
PRESS.: 34.87 PSIA		.9423		.2709		.1614		.6614		.6485		.8467	231.1	82.2
AVERAGE :		.9251		.2722		.1633		.6614		.6490		.8490	232.1	82.3
CONCENTRATION :	231.26 PPMC		272.20 PPMV		163.25 PPMV		664.13 PPMV		661.83 PPMV		4.12 % VOL		1219.1 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 F100 # 680325 WPP FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP INPUT	TEMP REFER
MODE-POINT : 9-11														
SPAN/ZERO ADJ.	.95	.0142	1.01	.0172	1.12	.0103	.94	.0030	.93	.0027	1.05	-.0005		
SAMPLE DATA :														
TIME : 1010	10.00	.5338	100.00	.7536	100.00	.3207	3	.2541	2	.7123	3	.2654	153.3	82.6
PROBE POS.: -30		.5365		.7673		.3084		.2470		.7308		.2623	153.9	82.6
8.79 IN.		.5359		.7560		.3121		.2412		.7154		.2616	153.8	82.6
PRESS.: 26.22 PSIA		.5326		.7663		.3203		.2497		.6994		.2665	153.0	82.7
		.5233		.7680		.3299		.2489		.7017		.2670	153.5	82.7
		------		------		------		------		------		------	------	------
AVERAGE :		.5329		.7626		.3183		.2482		.7120		.2646	153.5	82.6
CONCENTRATION :	266.22 PPMC		76.26 PPMV		31.83 PPMV		266.49 PPMV		232.09 PPMV		1.15 % VOL		599.0	DEG.F
MODE-POINT : 9-12														
SPAN/ZERO ADJ.	.95	.0146	1.01	.0176	1.12	.0104	.94	.0038	.92	.0065	1.05	-.0006		
SAMPLE DATA :														
TIME : 1012	10.00	.3208	100.00	.3769	100.00	.1764	3	.1180	2	.3250	3	.1377	129.2	82.8
PROBE POS.: -30		.3132		.3797		.1811		.1197		.3325		.1374	129.3	82.8
11.14 IN.		.3213		.3785		.1822		.1189		.3282		.1378	129.0	82.8
PRESS.: 22.54 PSIA		.3143		.3805		.1790		.1189		.3260		.1378	129.5	82.7
		.3141		.3808		.1816		.1179		.3270		.1364	129.5	82.7
		------		------		------		------		------		------	------	------
AVERAGE :		.3168		.3793		.1801		.1187		.3277		.1374	129.3	82.8
CONCENTRATION :	158.38 PPMC		37.93 PPMV		18.01 PPMV		96.11 PPMV		99.64 PPMV		.59 % VOL		390.5	DEG.F

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A P/ 9/77 F100 # 680325 WP6 FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP.- F.- INPUT	TEMP.- F.- REFER
MODE-POINT : 9-13														
SPAN/ZERO ADJ.	.96	.1181	1.01	.0022	1.08	.0045	.94	-.0010	.95	.0464	1.02	.0051		
SAMPLE DATA :														
TIME : 947	1.00	.0851	1000.00	.3600	1000.00	.3090	3	.0766	2	.2468	2	.5914	238.2	81.4
PROBE POS.: +30		.0562		.3602		.3079		.0792		.2438		.5930	238.3	81.5
.07 IN.		.1303		.3603		.3104		.0753		.2516		.5917	238.3	81.5
PRESS.: 30.39 PSIA		.0490		.3622		.3095		.0764		.2411		.5917	238.2	81.5
		.0451		.3640		.3073		.0763		.2410		.5915	238.4	81.6
AVERAGE :		.0721		.3613		.3088		.0768		.2449		.5918	238.3	81.5
CONCENTRATION :	3.61 PPMC		361.31 PPMV		308.82 PPMV		52.14 PPMV		72.29 PPMV		4.05 % VOL		1269.7 DEG.F	

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 F100 # 680325 WPB FIELD TEST 2

CALIBRATION DATA FOR PERIOD 1019 TO 1111

NON-LINEAR INSTRUMENTS : REFERENCE CURVES CALIBRATION DATE : 7/22/77

	CO - HI		CO - LO		CO2	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
RANGE 1						
SPAN ADJ.FACTOR	.9764	1.0024	.9681	1.3410	1.0416	1.1327
ZERO READING	.0033	.0440	.0371	.1552	.0015	.0279
RANGE 2						
SPAN ADJ.FACTOR	.9900	1.0062	.9156	1.4587	1.0405	1.1453
ZERO READING	.0036	.0617	.0970	.4192	.0029	.0468
RANGE 3						
SPAN ADJ.FACTOR	.9424	.6468	.3420	.3493	1.0628	1.1201
ZERO READING	.0045	.1153	.2866	.3336	-.0009	.0083

LINEAR INSTRUMENTS :

	THC		NOX		NO	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
SPAN ADJ.FACTOR	.9527	1.0226	1.0086	1.0349	1.1368	1.1383

	ZEROES FOR RANGES (THC)	(NOX/NO)					
1	1.0	2.5	.1611	.2119	.8123	1.3718	.6297	1.3990
2	5.0	10.0	.0306	.0400	.2031	.3429	.1574	.3467
3	10.0	25.0	.0158	.0158	.0812	.1372	.0630	.1395
4	50.0	100.0	.0031	.0029	.0167	.0276	.0106	.0112
5	100.0	250.0	.0016	.0018	.0088	.0124	.0064	.0084
6	500.0	1000.0	.0003	.0004	.0020	.0044	.0016	.0072
7	1000.0	2500.0	.0002	.0002	.0008	.0014	.0006	.0019
8	5000.0	10000.0	.0000	.0000	.0002	.0003	.0002	.0003

SPAN GAS CONCENTRATIONS :

	THC-PPMC	NOX-PPM	NO-PPM	CO-HI-PPM	CO-LO-PPM	CO2-%
SPAN 1	24.48	19.70	19.70	245.00	78.40	4.49
SPAN 2	417.00	90.40	90.40	2400.00	245.00	6.90
SPAN 3	4620.00					

TOT.PRESS.FACT. 1.000, ADJ. .00
SAMPLE PROBE TYPE - TF
THERMOCOUPLE TYPE - IR

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 F18C # 680325 WF6 FIELD TEST 2

	--- THC ---		*--- NOX ---*		*--- NO ---*		*-- CO-HI -*		*-- CO-LO -*		*--- CO2 ---*		*- TEMP.- F.-*	
	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	INPUT	REFER
MODE-POINT : 5-01														
SPAN/ZERO ADJ.	.97	.1728	1.01	.0096	1.14	.0084	.98	.0126	1.05	.0642	1.06	.0076		
SAMPLE DATA :														
TIME : 1031	1.00	.2990	250.00	.5219	250.00	.3351	1	1.1489	1	2.1309	1	.7326	-.1*	.0*
PROBE POS.: +30		.4993		.5140		.3215		1.1649		2.1593		.7303	-.1*	.0*
-14.14 IN.		.2229		.5159		.3224		1.1499		2.1515		.7308	-.1*	.0*
PRESS.: 31.38 PSIA		.2223		.5141		.3226		1.1372		2.1542		.7308	-.1*	.0*
		.2726		.5156		.3254		1.1668		2.1727		.7306	-.1*	.0*
AVERAGE :		.3044		.5163		.3254		1.1535		2.1537		.7310	.0	.0
CONCENTRATION :	15.22 PPMC		129.07 PPMV		81.35 PPMV		7595.76 PPMV		.00 PPMV		12.51 % VOL		.0	DEG.F
MODE-POINT : 5-02														
SPAN/ZERO ADJ.	.97	.0016	1.02	.0096	1.14	.0084	.98	.0145	1.07	.0697	1.07	.0068		
SAMPLE DATA :														
TIME : 1033	100.00	.9110	250.00	.6630	250.00	.5521	1	1.5076	1	2.6713	1	.6490	-.1*	.0*
PROBE POS.: +30		.8742		.6572		.5607		1.5079		2.6712		.6491	-.1*	.0*
-10.89 IN.		.8782		.6375		.5604		1.5087		2.6713		.6504	-.1*	.0*
PRESS.: 33.24 PSIA		.9113		.6337		.5604		1.5081		2.6712		.6478	-.1*	.0*
		.8711		.6209		.5607		1.5081		2.6710		.6506	-.1*	.0*
AVERAGE :		.8892		.6424		.5589		1.5081		2.6712		.6494	.0	.0
CONCENTRATION :	4445.85 PPMC		160.61 PPMV		139.72 PPMV		10708.32 PPMV		.00 PPMV		9.69 % VOL		.0	DEG.F

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1625-CC1-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F33615-77-C216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 6/ 7/77 F[illegible] # 6[illegible] [illegible] FIELD TEST 2

	--- THC -- RNG	VOLTS	*--- NOX --* RNG	VOLTS	*--- NO ---* RNG	VOLTS	*-- CO-HI -* RNG	VOLTS	*-- CO-LO -* RNG	VOLTS	*--- CO2 --* RNG	VOLTS	*-- TEMP.- F.-* INPUT	REFER
MODE-POINT : 5-03														
SPAN/ZERO ADJ.	.97	.0016	1.02	.0020	1.14	.0384	.96	.0[illegible]	1.00	.0737	1.07	.[illegible]		
SAMPLE DATA :														
TIME : 1035	100.00	.1907	1000.00	.2016	250.00	.0807	1	1.5041	1	2.6545	1	.7157	-.10	.00
PROBE POS.: +30		.2125		.2057		.0564		1.5082		2.6550		.7135	-.10	.00
-6.33 IN.		.1752		.2068		.0705		1.5092		2.6530		.7163	-.10	.00
PRESS.: 31.27 PSIA		.1630		.2071		.0674		1.5048		2.6656		.7156	-.10	.00
		.1753		.2012		.0498		1.5085		2.6537		.7137	-.10	.00
		------		------		------		------		------		------	------	------
AVERAGE :		.1839		.2057		.0666		1.5086		2.6527		.7150	.0	.0
CONCENTRATION :		917.08 PPMC		205.00 PPMV		216.00 PPMV		10712.2 PPMV		.[illegible] PPMV		[illegible] % VOL	.0 DEG.F	
MODE-POINT : 5-04														
SPAN/ZERO ADJ.	.98	.0150	1.02	.0033	1.14	.0[illegible]	.95	.0[illegible]	1.11	.[illegible]	1.07	.0110		
SAMPLE DATA :														
TIME : 1039	10.00	.2092	1000.00	.2961	250.00	.0901	1	1.5571	1	2.71[illegible]	1	.7349	.10	.00
PROBE POS.: +30		.2103		.2911		.0[illegible]		1.5[illegible]		2.71[illegible]		.7309	.10	.00
6.45 IN.		.2041		.2967		.0[illegible]		1.5[illegible]		2.7147		.73[illegible]	.10	.00
PRESS.: 31.14 PSIA		.1996		.2979		.0[illegible]		1.5[illegible]		2.71[illegible]		.73[illegible]	.10	.00
		.2012		.2915		.0[illegible]		1.5[illegible]		2.71[illegible]		.7300	.10	.00
		------		------		------		------		------		------	------	------
AVERAGE :		.2269		.2959		.0[illegible]		1.5277		2.7127		.73[illegible]	.0	.0
CONCENTRATION :		111.41 PPMC		295.40 PPMV		219.[illegible] PPMV		[illegible] PPMV		[illegible] PPMV		12.[illegible] % VOL	.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 27 9777 F100 # 680325 APB FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 5-05														
SPAN/ZERO ADJ.	.98	.0030	1.02	.0031	1.14	.0084	.99	.0206	1.13	.0873	1.06	.0127		
SAMPLE DATA :														
TIME : 1041	50.00	.2015	1000.00	.2156	250.00	.6563	1	1.5079	1	2.7906	1	.6881	.1*	.0*
PROBE POS.: *30		.1935		.2123		.6542		1.5063		2.7906		.6868	.1*	.0*
11.03 IN.		.2027		.2098		.6369		1.5081		2.7906		.6868	.1*	.0*
PRESS.: 33.50 PSIA		.2081		.2122		.6575		1.5087		2.7904		.6904	.1*	.0*
		.2166		.2112		.6479		1.5086		2.7905		.6867	.1*	.0*
AVERAGE :		.2045		.2123		.6505		1.5083		2.7905		.6882	.0	.0
CONCENTRATION :	511.24 PPMC		212.31 PPMV		162.63 PPMV		10709.85 PPMV		.00 PPMV		10.97 % VOL		.0 DEG.F	
MODE-POINT : 5-06														
SPAN/ZERO ADJ.	.98	.1845	1.02	.0164	1.14	.0084	.99	.0220	1.14	.0914	1.08	.0136		
SAMPLE DATA :														
TIME : 1043	1.00	.0490	250.00	.3465	250.00	.1582	1	.7692	1	2.2093	1	.5963	.1*	.0*
PROBE POS.: *30		.0512		.3414		.1662		.7594		2.2044		.6016	.1*	.0*
14.11 IN.		.0466		.3370		.1607		.7516		2.1963		.5938	.1*	.0*
PRESS.: 29.58 PSIA		.0427		.3400		.1629		.7429		2.1913		.5976	.1*	.0*
		.0357		.3447		.1660		.7316		2.1892		.6036	.1*	.0*
AVERAGE :		.0450		.3407		.1628		.7509		2.1981		.5966	.0	.0
CONCENTRATION :	2.25 PPMC		85.18 PPMV		40.70 PPMV		3947.15 PPMV		.00 PPMV		8.22 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 F.00 # 680325 WPH FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : 5-07														
SPAN/ZERO ADJ.	.99	.0030	1.02	.0108	1.14	.0084	.99	.0262	1.18	.1036	1.09	.0164		
SAMPLE DATA :														
TIME : 1048	50.00	.1395	250.00	.6433	250.00	.4627	1	1.5089	1	2.8705	1	.6995	-.1*	.0*
PROBE POS.: -30		.1442		.6303		.4569		1.5083		2.8751		.6968	-.1*	.0*
-14.02 IN.		.1834		.6369		.4644		1.5077		2.8769		.6923	-.1*	.0*
PRESS.: 33.21 PSIA		.1644		.6291		.4604		1.5072		2.8742		.6956	-.1*	.0*
		.2060		.6336		.4559		1.5081		2.8907		.6931	-.1*	.0*
AVERAGE :		.1675		.6347		.4600		1.5080		2.8795		.6954	.0	.0
CONCENTRATION :	418.78 PPMC		158.67 PPMV		115.01 PPMV		10707.57 PPMV		.00 PPMV		11.72 % VOL		.0 DEG.F	
MODE-POINT : 5-08														
SPAN/ZERO ADJ.	.99	.0362	1.02	.0035	1.14	.0084	.99	.0276	1.19	.1077	1.10	.0173		
SAMPLE DATA :														
TIME : 1050	5.00	.1547	1000.00	.3171	250.00	.9999	1	1.5083	1	2.8233	1	.7417	-.1*	.0*
PROBE POS.: -30		.1928		.3170		1.0156		1.5086		2.8385		.7391	-.1*	.0*
-10.80 IN.		.1328		.3177		1.0264		1.5082		2.8396		.7420	-.1*	.0*
PRESS.: 32.25 PSIA		.1325		.3210		1.0256		1.5080		2.8481		.7401	-.1*	.0*
		.1347		.3215		1.0342		1.5079		2.8644		.7403	-.1*	.0*
AVERAGE :		.1495		.3188		1.0204		1.5082		2.8426		.7406	.0	.0
CONCENTRATION :	37.37 PPMC		318.83 PPMV		255.09 PPMV		10709.49 PPMV		.00 PPMV		12.87 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 F100 # 680325 WPB FIELD TEST 2

	--- THC ---		*--- NOX ---*		*--- NO ---*		*-- CO-HI --*		*-- CO-LO --*		*--- CO2 ---*		*- TEMP.- F.-*	
	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	INPUT	REFER
MODE-POINT : 5-09														
SPAN/ZERO ADJ.	1.00	.0365	1.03	.0035	1.14	.0084	.99	.0290	1.20	.1118	1.10	.0182		
SAMPLE DATA :														
TIME : 1052	5.00	.0316	1000.00	.3106	250.00	1.0016	1	1.5081	1	2.8756	1	.7458	-.1*	.0*
PROBE POS.: -30		.0365		.3080		1.0007		1.5081		2.8806		.7437	-.1*	.0*
-6.31 IN.		.0400		.3090		.9957		1.5087		2.8834		.7431	-.1*	.0*
PRESS.: 31.24 PSIA		.0505		.3129		1.0108		1.5091		2.8844		.7443	-.1*	.0*
		.0360		.3127		1.0054		1.5092		2.8958		.7446	-.1*	.0*
AVERAGE :		.0389		.3106		1.0028		1.5086		2.8848		.7443	.0	.0
CONCENTRATION :	9.73 PPMC		310.62 PPMV		250.71 PPMV		10712.89 PPMV		.00 PPMV		13.01 % VOL		.0 DEG.F	
MODE-POINT : 5-10														
SPAN/ZERO ADJ.	1.00	.0370	1.03	.0037	1.14	.0084	.99	.0309	1.22	.1172	1.10	.0194		
SAMPLE DATA :														
TIME : 1059	5.00	.3141	1000.00	.3139	250.00	.9887	1	1.5092	1	2.9437	1	.7355	.1*	.0*
PROBE POS.: -30		.2845		.3113		.9855		1.5085		2.9526		.7354	.1*	.0*
6.62 IN.		.3350		.3109		.9719		1.5082		2.9552		.7363	.1*	.0*
PRESS.: 31.31 PSIA		.2214		.3117		.9822		1.5078		2.9587		.7354	.1*	.0*
		.3270		.3109		.9817		1.5081		2.9605		.7375	.1*	.0*
AVERAGE :		.2964		.3117		.9820		1.5083		2.9592		.7360	.0	.0
CONCENTRATION :	7a.09 PPMC		311.72 PPMV		245.50 PPMV		10710.17 PPMV		.00 PPMV		12.69 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/20/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A 8/ 9/77 FICO # 680325 WPB FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP.- F.- INPUT	TEMP.- F.- REFER
MODE-POINT : 5-11														
SPAN/ZERO ADJ.	1.00	.0373	1.03	.0037	1.14	.0084	.99	.0323	1.23	.1213	1.11	.0203		
SAMPLE DATA :														
TIME : 1056	5.00	.5876	1000.00	.1610	250.00	.4530	1	1.5076	1	2.9813	1	.7262	.1*	.0*
PROBE POS.: -30		.5468		.1551		.4326		1.5074		2.9804		.7515	.1*	.0*
11.06 IN.		.6389		.1595		.4461		1.5075		2.9695		.7501	.1*	.0*
PRESS.: 32.69 PSIA		.4102		.1589		.4381		1.5081		2.9644		.7453	.1*	.0*
		.4499		.1590		.4416		1.5082		2.9628		.7734	.1*	.0*
AVERAGE :		.5267		.1567		.4423		1.5078		2.9717		.7497	.0	.0
CONCENTRATION :	131.67 PPMC		158.71 PPMV		110.58 PPMV		10705.66 PPMV		.00 PPMV		13.22 % VOL		.0 DEG.F	
MODE-POINT : 5-12														
SPAN/ZERO ADJ.	1.00	.0376	1.03	.0254	1.14	.0110	1.00	.0337	1.25	.1254	1.11	.0212		
SAMPLE DATA :														
TIME : 1058	5.00	.4134	100.00	.3235	100.00	.0376	1	.4894	1	2.3701	1	.4965	.1*	.0*
PROBE POS.: -30		.3878		.3348		.0406		.4854		2.3888		.4973	.1*	.0*
19.15 IN.		.4101		.3330		.0357		.4741		2.4032		.4938	.1*	.0*
PRESS.: 20.23 PSIA		.4177		.3308		.0355		.4627		2.4078		.4935	.1*	.0*
		.4162		.3265		.0339		.4586		2.4086		.4915	.1*	.0*
AVERAGE :		.4091		.3301		.0367		.4740		2.3957		.4945	.0	.0
CONCENTRATION :	102.26 PPMC		33.01 PPMV		3.67 PPMV		2285.24 PPMV		.00 PPMV		8.73 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 2,TYPE A A/ 9/77 F100 # 680325 WPB FIELD TEST 2

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 5-13														
SPAN/ZERO ADJ.	.98	.1786	1.02	.0029	1.19	.0084	.99	.0173	1.10	.0776	1.07	.0106		
SAMPLE DATA :														
TIME : 1037	1.00	.1697	1000.00	.3213	250.00	1.0055	1	1.4885	1	2.4389	1	.7561	.0*	.0*
PROBE POS.: *30		.1387		.3210		.9985		1.4913		2.4326		.7561	.0*	.0*
.07 IN.		.1079		.3176		.9984		1.4816		2.4523		.7541	.0*	.0*
PRESS.: 31.08 PSIA		.1014		.3220		1.0042		1.4984		2.4665		.7543	.0*	.0*
		.0716		.3210		1.0058		1.4829		2.4711		.7540	.0*	.0*
AVERAGE :		.1179		.3206		1.0025		1.4885		2.4515		.7549	.0	.0
CONCENTRATION :	5.89 PPMC		320.60 PPMV		250.62 PPMV		10583.70 PPMV		.00 PPMV		13.43 % VOL		.0 DEE.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

99 $FIN

STOP CONC

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/18/77 F100 # 680301 SET 1626-001-1077 WPB

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-0216
FIELD TEST 3

CALIBRATION DATA FOR PERIOD 1047 TO 1155

REFERENCE CURVES CALIBRATION DATE : 7/22/77

NON-LINEAR INSTRUMENTS :

	CO - HI		CO - LO		CO2	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
RANGE 1						
SPAN ADJ.FACTOR	1.0134	4.7454	.9650	.9516	1.0676	1.0676
ZERO READING	.0039	.0065	.0012	.0227	.0030	.0062
RANGE 2						
SPAN ADJ.FACTOR	1.0197	1.0197	.9673	.9673	1.1948	1.1948
ZERO READING	.0047	.0068	.0008	.0596	.0038	-.0065
RANGE 3						
SPAN ADJ.FACTOR	-.6071	-.6071	.8809	.8657	1.0069	1.0980
ZERO READING	.0085	.0120	-.0036	.1704	-.0008	-.0051

LINEAR INSTRUMENTS :

	THC		NOX		NO	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
SPAN ADJ.FACTOR	.9107	.9311	1.0877	1.0206	1.1842	1.1203

	ZEROES FOR RANGES (THC)	(NOX/NO)						
1	1.0	2.5	.2368	.3797	.4131	1.1127	1.2620	1.4376
2	5.0	10.0	.0452	.0712	.1033	.2781	.3155	.3594
3	10.0	25.0	.0175	.0278	.0413	.1112	.1262	.1438
4	50.0	100.0	.0022	.0068	.0036	.0210	.0078	.0119
5	100.0	250.0	.0019	.0034	.0026	.0096	.0071	.0068
6	500.0	1000.0	.0004	.0007	.0021	.0038	.0069	.0074
7	1000.0	2500.0	.0002	.0003	.0004	.0011	.0013	.0014
8	5000.0	10000.0	.0000	.0001	.0001	.0003	.0003	.0004

SPAN GAS CONCENTRATIONS :

	THC-PPMC	NOX-PPM	NO-PPM	CO-HI-PPM	CO-LO-PPM	CO2-%
SPAN 1	24.48	19.70	19.70	245.00	78.40	4.49
SPAN 2	417.00	90.90	90.90	2400.00	245.00	8.90
SPAN 3	4620.00					

TOT.PRESS.FACT. 1.000, ADJ. .01
SAMPLE PROBE TYPE - TP
THERMOCOUPLE TYPE - IR

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 9/16/77 F100 # 680301 WPR FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 4-01														
SPAN/ZERO ADJ.	.92	.0551	1.06	.0053	1.16	.0094	-.61	.0099	.97	.0232	1.04	-.0024		
SAMPLE DATA :														
TIME : 1113	5.00	.5992	250.00	.6018	100.00	.8002	3	-.1141	2	.8256	3	.4561	176.3	82.0
PROBE POS.: +30		.5948		.5971		.8035		-.1151		.8805		.4534	176.9	82.0
-11.69 IN.		.5935		.5955		.7832		-.1100		.8841		.4570	176.3	82.0
PRESS.: 31.98 PSIA		.6044		.5961		.8010		-.1111		.8854		.4642	183.1	81.9
		.5878		.6398		.8761		-.2012		.9113		.5014	192.2	81.9
AVERAGE :		.5960		.6061		.8128		-.1103		.8894		.4664	181.0	82.0
CONCENTRATION :	148.99 PPMC		151.52 PPMV		81.28 PPMV		.00 PPMV		302.32 PPMV		2.07 % VOL		812.9 DEG.F	
MODE-POINT : 4-02														
SPAN/ZERO ADJ.	.92	.0562	1.06	.0028	1.16	.0078	-.61	.0100	.96	.0104	1.05	-.0026		
SAMPLE DATA :														
TIME : 1116	5.00	.5207	1000.00	.2648	250.00	.6558	3	-.0259	1	.4768	3	.7923	225.8	82.4
PROBE POS.: +30		.5211		.2684		.6699		-.0241		.4757		.7902	225.5	82.5
-8.62 IN.		.5130		.2666		.6544		-.0249		.4759		.7898	225.5	82.5
PRESS.: 35.05 PSIA		.5339		.2668		.6586		-.0243		.4789		.7809	226.1	82.5
		.5245		.2656		.6539		-.0264		.4686		.7869	226.4	82.5
AVERAGE :		.5227		.2664		.6585		-.0251		.4752		.7880	225.9	82.5
CONCENTRATION :	130.66 PPMC		266.42 PPMV		164.63 PPMV		.00 PPMV		446.65 PPMV		3.73 % VOL		1167.9 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1624-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/18/77 F100 # 680301 WPB FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : 4-03														
SPAN/ZERO ADJ.	.92	.0579	1.06	.0029	1.15	.0071	-.61	.0102	.96	.0113	1.05	-.0028		
SAMPLE DATA :														
TIME : 1119	5.00	.0624	1000.00	.4425	1000.00	.3363	3	-.1643	1	.2625	3	.9667	255.4	82.5
PROBE POS.: +30		.0590		.4433		.3355		-.1670		.2818		.9422	255.4	82.5
-9.94 IN.		.0639		.4464		.3377		-.1667		.2856		.9670	255.3	82.5
PRESS.: 35.60 PSIA		.0538		.4467		.3355		-.1642		.2857		.9895	255.3	82.4
		.0570		.4431		.3389		-.1640		.2844		.9888	255.4	82.3
		.0514		.4473		.3360		-.1658		.2825		.9902	255.1	82.4
AVERAGE :		.0578		.4445		.3369		-.1653		.2838		.9891	255.3	82.4
CONCENTRATION :	14.46 PPMC		444.53 PPMV		336.89 PPMV		.00 PPMV		228.98 PPMV		5.18 % VOL		1409.9 DEG.F	
MODE-POINT : 4-04														
SPAN/ZERO ADJ.	.92	.0595	1.05	.0031	1.15	.0072	-.61	.0105	.96	.0130	1.06	-.0031		
SAMPLE DATA :														
TIME : 1124	5.00	.4083	1000.00	.3611	1000.00	.2347	3	.0280	1	.5536	3	.9186	256.6	82.9
PROBE POS.: +30		.3881		.3594		.2371		.0307		.5418		.9128	256.2	82.9
5.01 IN.		.4098		.3581		.2344		.0275		.5547		.9136	257.2	82.9
PRESS.: 35.27 PSIA		.4018		.3562		.2387		.0062		.5435		.9187	256.7	82.8
		.4156		.3616		.2350		.0056		.5445		.9161	256.9	82.8
AVERAGE :		.4047		.3597		.2360		.0196		.5475		.9160	256.7	82.9
CONCENTRATION :	101.18 PPMC		359.67 PPMV		235.99 PPMV		9.91 PPMV		536.73 PPMV		4.59 % VOL		1421.3 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/18/77 FICO # 6R03G1 WPB FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 4-05														
SPAN/ZERO ADJ.	.92	.0236	1.05	.0031	1.15	.0072	-.61	.0106	.96	.0140	1.06	-.0033		
SAMPLE DATA :														
TIME : 1127	10.00	.4682	1000.00	.1625	1000.00	.0759	3	-.0024	1	.4855	3	.5579	202.1	82.5
PROBE POS.: +30		.4775		.1631		.0754		.0026		.4888		.5558	201.2	82.5
8.72 IN.		.4818		.1617		.0741		.0011		.4901		.5545	201.0	82.4
PRESS.: 34.69 PSIA		.4722		.1622		.0735		.0031		.4923		.5602	202.0	82.4
		.4782		.1620		.0743		.0001		.4887		.5527	201.1	82.5
AVERAGE :		.4756		.1623		.0746		.0009		.4891		.5562	201.5	82.5
CONCENTRATION :	237.78 PPMC		162.30 PPMV		74.63 PPMV		.43 PPMV		464.07 PPMV		2.49 % VOL		973.7 DEG.F	
MODE-POINT : 4-06														
SPAN/ZERO ADJ.	.92	.0241	1.04	.0147	1.14	.0104	-.61	.0108	.97	.0383	1.06	-.0035		
SAMPLE DATA :														
TIME : 1130	10.00	.2943	100.00	.7885	100.00	.3778	3	-.1790	2	.6332	3	.2903	124.0	82.9
PROBE POS.: +30		.2853		.7914		.3769		-.1719		.6346		.2891	124.2	83.0
11.19 IN.		.2995		.8090		.3818		-.1797		.6270		.2920	124.0	83.0
PRESS.: 24.57 PSIA		.2968		.8003		.3777		-.1741		.6445		.2883	124.7	83.1
		.2921		.8086		.3787		-.1804		.6258		.2906	124.1	83.1
AVERAGE :		.2936		.7996		.3786		-.1770		.6330		.2901	124.2	83.0
CONCENTRATION :	196.80 PPMC		79.96 PPMV		37.86 PPMV		.00 PPMV		202.96 PPMV		1.27 % VOL		344.4 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/16/77 F100 # 680301 PPM FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : 4-07														
SPAN/ZERO ADJ.	.93	.0251	1.04	.0078	1.14	.0083	-.61	.0111	.96	.0176	1.07	-.0039		
SAMPLE DATA :														
TIME : 1137	10.00	.3217	250.00	.5644	250.00	.3293	3	.2382	1	.3331	3	.4222	148.3	83.0
PROBE POS.: -30		.3256		.5843		.3293		.2400		.3328		.4225	148.0	83.0
-12.14 IN.		.3252		.5906		.3304		.2394		.3360		.4240	148.7	83.1
PRESS.: 34.15 PSIA		.3308		.5832		.3279		.2436		.3330		.4218	148.5	83.1
		.3298		.5772		.3306		.2400		.3337		.4274	147.5	83.1
AVERAGE :		.3266		.5839		.3295		.2402		.3337		.4236	148.2	83.1
CONCENTRATION :	163.31 PPMC		145.99 PPMV		82.38 PPMV		257.13 PPMV		280.75 PPMV		1.98 % VOL		554.6 DEG.F	
MODE-POINT : 4-08														
SPAN/ZERO ADJ.	.93	.0255	1.04	.0034	1.13	.0084	-.61	.0112	.95	.0178	1.06	-.0041		
SAMPLE DATA :														
TIME : 1139	10.00	.2498	1000.00	.2611	250.00	.6541	3	.3402	1	.4418	3	.7603	226.5	83.3
PROBE POS.: -30		.2415		.2587		.6540		.3405		.4484		.7792	224.9	83.2
-9.56 IN.		.2363		.2561		.6514		.3412		.4494		.7765	227.8	83.2
PRESS.: 34.64 PSIA		.2362		.2622		.6709		.3455		.4506		.7868	227.4	83.2
		.2336		.2595		.6548		.3381		.4531		.7835	227.4	83.1
AVERAGE :		.2395		.2599		.6570		.3411		.4487		.7812	226.8	83.2
CONCENTRATION :	119.73 PPMC		259.90 PPMV		164.25 PPMV		368.67 PPMV		414.36 PPMV		3.64 % VOL		1174.8 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3.TYPE A 8/16/77 F100 # 680301 WPB FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. F. REFER
MODE-POINT : 4-09														
SPAN/ZERO ADJ.	.93	.3506	1.03	.0035	1.13	.0073	-.61	.0113	.97	.0477	1.08	-.0042		
SAMPLE DATA :														
TIME : 1141	1.00	.1148	1000.00	.4480	1000.00	.3595	3	.1192	2	.3607	3	.9582	258.3	83.0
PROBE POS.: -30		.1167		.4446		.3600		.1159		.3607		.9593	257.6	82.8
-5.91 IN.		.0817		.4478		.3629		.0984		.3560		.9574	257.9	82.9
PRESS.: 36.02 PSIA		.0673		.4455		.3647		.1201		.3527		.9600	258.1	82.9
		.0617		.4482		.3638		.1169		.3601		.9561	258.4	82.9
AVERAGE :		.0885		.4468		.3622		.1145		.3581		.9582	258.1	82.9
CONCENTRATION :	4.42 PPMC		446.79 PPMV		362.17 PPMV		91.37 PPMV		108.95 PPMV		4.92 % VOL		1432.6	DEG.F
MODE-POINT : 4-10														
SPAN/ZERO ADJ.	.93	.3569	1.03	.0036	1.13	.0073	4.15	.0061	.97	.0503	1.08	-.0044		
SAMPLE DATA :														
TIME : 1144	1.00	.4727	1000.00	.3835	1000.00	.2864	1	******	2	.8300	3	.9837	256.2	83.5
PROBE POS.: -30		.5123		.3802		.2843		******		.8479		.9819	256.4	83.4
4.03 IN.		.5122		.3845		.2872		******		.8479		.9844	255.7	83.5
PRESS.: 34.49 PSIA		.5001		.3775		.2876		******		.8436		.9860	255.8	83.5
		.5380		.3825		.2855		******		.8526		.9827	256.6	83.5
AVERAGE :		.5071		.3816		.2862		******		.8444		.9837	256.1	83.5
CONCENTRATION :	25.35 PPMC		381.64 PPMV		286.20 PPMV		.00 PPMV		283.82 PPMV		5.14 % VOL		1415.8	DEG.F

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-C216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/16/77 F100 # 680301 #P6 FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : 9-11														
SPAN/ZERO ADJ.	.93	.0678	1.03	.0087	1.13	.0085	-.61	.0116	.97	.0518	1.09	-.0045		
SAMPLE DATA :														
TIME : 1146	5.00	.3291	250.00	.6089	250.00	.3794	3	.2078	2	.7177	3	.4724	186.6	83.4
PROBE POS.: -30		.3319		.6140		.3882		.2103		.6955		.4706	185.4	83.4
7.64 IN.		.3293		.6136		.3847		.2162		.6753		.4665	187.1	83.3
PRESS.: 30.29 PSIA		.3238		.6172		.3856		.2223		.6743		.4648	185.5	83.3
		.3330		.6126		.3930		.2193		.6793		.4728	186.8	83.2
AVERAGE :		.3294		.6133		.3862		.2152		.6874		.4694	186.1	83.3
CONCENTRATION :	82.36 PPMC		153.32 PPMV		96.55 PPMV		224.09 PPMV		222.89 PPMV		2.09 % VOL		651.7 DEG.F	
MODE-POINT : 9-12														
SPAN/ZERO ADJ.	.93	.0687	1.03	.0193	1.13	.0115	-.61	.0117	.97	.0539	1.09	-.0047		
SAMPLE DATA :														
TIME : 1148	5.00	.2755	100.00	.6357	100.00	.3784	3	.1235	2	.3462	3	.2123	151.7	83.1
PROBE POS.: -30		.2633		.6291		.3859		.1247		.3427		.2135	152.5	83.1
10.18 IN.		.2739		.6409		.3878		.1284		.3491		.2135	151.2	83.0
PRESS.: 22.90 PSIA		.2577		.6521		.4063		.1251		.3464		.2156	150.8	83.1
		.2648		.6514		.3962		.1240		.3490		.2115	151.2	83.0
AVERAGE :		.2671		.6418		.3909		.1252		.3457		.2133	151.5	83.1
CONCENTRATION :	66.76 PPMC		64.18 PPMV		39.09 PPMV		103.63 PPMV		104.89 PPMV		.92 % VOL		582.1 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
CONCENTRATION EDIT REPORT

SET 1628-001-1077

REPORT DATE 10/24/77
USAF CONTRACT F08635-77-C216
FIELD TEST 3

SCOTT TEST 3,TYPE A 8/18/77 F100 # 680301 APP

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : 4-13														
SPAN/ZERO ADJ.	.92	.3102	1.05	.0030	1.15	.0072	-.61	.0103	.97	.0310	1.05	-.0030		
SAMPLE DATA :														
TIME : 1122	1.00	.0217	1000.00	.4205	1000.00	.3446	3	-.3042	2	.2936	3	.8749	236.7	82.4
PROBE POS.: 430		.0104		.4200		.3439		-.3044		.2865		.8817	236.8	82.4
.05 IN.		.0353		.4205		.3440		-.3049		.2828		.8828	236.7	82.4
PRESS.: 35.00 PSIA		.0298		.4204		.3443		-.3017		.2833		.8801	236.8	82.4
		.0269		.4194		.3433		-.3022		.2836		.8813	236.9	82.5
AVERAGE :		.0247		.4201		.3440		-.3035		.2860		.8812	236.8	82.4
CONCENTRATION :	1.24 PPMC		420.15 PPMV		344.04 PPMV		.00 PPMV		85.49 PPMV		4.34 % VOL		1256.6 DEG.F	

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-C0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 9/16/77 F100 # 6P0301 WPB FIELD TEST 3

CALIBRATION DATA FOR PERIOD 1155 TO 1254

NON-LINEAR INSTRUMENTS : REFERENCE CURVES CALIBRATION DATE : 9/22/77

	CO - HI		CO - LO		CO2	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
RANGE 1						
SPAN ADJ.FACTOR	1.7454	.9690	.9518	.9590	1.0676	1.0013
ZERO READING	.0065	-.0011	.0227	-.0053	.0002	-.0003
RANGE 2						
SPAN ADJ.FACTOR	1.0197	.9729	.9673	.9677	1.1948	1.0039
ZERO READING	.0068	-.0021	.0596	-.0106	-.0005	-.0001
RANGE 3						
SPAN ADJ.FACTOR	-.6071	.8631	.8657	.8902	1.0980	1.0087
ZERO READING	.0120	-.0102	.1704	-.0449	-.0051	-.0049

LINEAR INSTRUMENTS :

	THC		NOX		NO	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
SPAN ADJ.FACTOR	.9311	.9821	1.0206	1.0641	1.1263	1.0667

	ZEROES FOR RANGES (THC)	(NOX/NO)					
1	1.0	2.5	.3797	.2016	1.1122	.3209	1.4376	1.2244
2	5.0	10.0	.0712	.0377	.2781	.0802	.3594	.3061
3	10.0	25.0	.0278	.0105	.1112	.0321	.1438	.1224
4	50.0	100.0	.0068	.0033	.0710	.0017	.0119	.0067
5	100.0	250.0	.0034	.0016	.0096	.0016	.0068	.0067
6	500.0	1000.0	.0007	.0003	.0036	.0018	.0074	.0068
7	1000.0	2500.0	.0003	.0002	.0011	.0003	.0034	.0017
8	5000.0	10000.0	.0001	.0000	.0003	.0001	.0004	.0003

SPAN GAS CONCENTRATIONS :

	THC-PPMC	NOX-PPM	NO-PPM	CO-HI-PPM	CO-LO-PPM	CO2-%
SPAN 1	24.48	19.70	19.70	245.00	78.40	4.49
SPAN 2	417.00	90.40	90.40	2400.00	245.00	8.90
SPAN 3	4620.00					

TOT.PRESS.FACT. 1.00, ADJ. .01
SAMPLE PROBE TYPE - IP
THERMOCOUPLE TYPE - IR

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-C216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/18/77 F100 # 6A0301 MPE FIELD TEST 3

CALIBRATION DATA FOR PERIOD 1254 TO 1335

NON-LINEAR INSTRUMENTS : REFERENCE CURVES CALIBRATION DATE : 7/22/77

	CO - HI		CO - LO		CO2	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
RANGE 1						
SPAN ADJ.FACTOR	.9690	1.1273	.9590	.9799	1.0013	1.2328
ZERO READING	-.0011	.1798	-.0053	.0483	-.0063	.1967
RANGE 2						
SPAN ADJ.FACTOR	.9724	.8554	.9677	.8341	1.0039	1.0317
ZERO READING	-.0021	-.0021	-.0106	-.0106	-.0001	-.0001
RANGE 3						
SPAN ADJ.FACTOR	.8631	.8631	.8902	.8902	1.0087	1.0087
ZERO READING	-.0102	-.0102	-.0449	-.0449	-.0049	-.0049

LINEAR INSTRUMENTS :

	THC		NOX		NO	
	PERIOD START	PERIOD END	PERIOD START	PERIOD END	PERIOD START	PERIOD END
SPAN ADJ.FACTOR	.9821	.9897	1.0641	1.0868	1.0667	1.0916

	ZEROES FOR RANGES (THC)	(NOX/NO)					
1	1.0	2.5	.2016	.2426	.3209	.5627	1.2244	1.2593
2	5.0	10.0	.0377	.0455	.0602	.1407	.3061	.3148
3	10.0	25.0	.0105	.0006	.0321	.0563	.1224	.1259
4	50.0	100.0	.0033	.0029	.0017	.0080	.0067	.0077
5	100.0	250.0	.0016	-.0059	.0016	.0039	.0067	.0071
6	500.0	1000.0	.0003	.0000	.0016	.0024	.0066	.0069
7	1000.0	2500.0	.0002	.0000	.0003	.0006	.0012	.0013
8	5000.0	10000.0	.0000	.0000	.0001	.0001	.0003	.0003

SPAN GAS CONCENTRATIONS :

	THC-PPMC	NOX-PPM	NO-PPM	CO-HI-PPM	CO-LO-PPM	CO2-%
SPAN 1	24.48	19.70	19.70	245.00	78.40	4.49
SPAN 2	417.00	90.40	90.40	2400.00	245.00	8.90
SPAN 3	4620.00					

TOT.PRESS.FACT. 1.000, ADD. .01
SAMPLE PROBE TYPE - TP
THERMOCOUPLE TYPE - IA

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1629-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/16/77 F100 # 660301 uPR FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : 5-01														
SPAN/ZERO ADJ.	.9[illegible]	.0069	1.07	.0024	1.09	.0069	1.03	.0645	.97	.0142	1.09	.0349		
SAMPLE DATA :														
TIME : 1256	10.00	.1385	250.00	.6567	250.00	.4939	1	1.5198	1	2.4016	1	.7516	410.3	83.1
PROBE POS.: +30		.1556		.6613		.4976		1.5194		2.3811		.7524	399.3	83.1
-13.89 IN.		.1879		.6600		.4989		1.5195		2.3895		.7521	399.3	83.1
PRESS.: 32.73 PSIA		.2114		.6543		.4857		1.5200		2.4196		.7519	399.0	83.1
		.1807		.6527		.4909		1.5202		2.4317		.7520	396.5	83.1
AVERAGE :		.1807		.5570		.4934		1.5198		2.4047		.7520	400.9	83.1
CONCENTRATION :	90.36 PPMC		364.25 PPMV		123.35 PPMV		10805.95 PPMV		.00 PPMV		13.31 % VOL		2787.8 DEG.F	
MODE-POINT : 5-02														
SPAN/ZERO ADJ.	.99	.0031	1.07	.0026	1.08	.0069	1.03	.0734	.97	.0166	1.10	.0396		
SAMPLE DATA :														
TIME : 1259	50.00	.8478	250.00	1.0459	250.00	.8132	1	1.5225	1	2.4668	1	.6803	389.9	82.8
PROBE POS.: +30		.8833		1.0124		.7834		1.5224		2.4668		.6769	394.1	82.8
-10.73 IN.		.8956		1.0156		.7949		1.5220		2.4667		.6745	400.3	82.9
PRESS.: 33.12 PSIA		.8599		1.0162		.8016		1.5220		2.4666		.6748	402.0	82.8
		.7563		.9861		.7769		1.5222		2.4666		.6771	404.2	82.7
AVERAGE :		.8486		1.0157		.7940		1.5222		2.4667		.6771	398.1	82.8
CONCENTRATION :	2121.38 PPMC		253.92 PPMV		196.50 PPMV		10826.57 PPMV		.00 PPMV		10.59 % VOL		2759.6 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/18/77 F100 # 680301 WPB FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 5-03														
SPAN/ZERO ADJ.	.99	.0061	1.07	.0021	1.08	.0069	1.04	.0787	.97	.0184	1.10	.0425		
SAMPLE DATA :														
TIME : 1301	10.00	.5527	1000.00	.3055	250.00	.9131	1	1.5250	1	2.4666	1	.7207	474.4	82.7
PROBE POS.: +30		.5894		.3068		.9480		1.5244		2.4665		.7228	460.5	82.7
-6.18 IN.		.6355		.3161		.9577		1.5256		2.4664		.7213	457.4	82.7
PRESS.: 27.35 PSIA		.6007		.3148		.9639		1.5252		2.4663		.7205	450.1	82.8
		.5363		.3183		.9655		1.5244		2.4664		.7183	542.6	82.9
AVERAGE :		.5829		.3127		.9497		1.5250		2.4665		.7207	477.0	82.8
CONCENTRATION :	291.47 PPMC		312.71 PPMV		237.42 PPMV		10849.75 PPMV		.00 PPMV		12.13 % VOL		3687.7 DEG.F	
MODE-POINT : 5-04														
SPAN/ZERO ADJ.	.99	.0052	1.08	.0027	1.08	.0069	1.05	.0947	.97	.0231	1.12	.0511		
SAMPLE DATA :														
TIME : 1306	10.00	.4440	1000.00	.3042	250.00	.9255	1	1.5277	1	2.4661	1	.7300	487.2	82.9
PROBE POS.: +30		.3654		.3079		.9296		1.5280		2.4655		.7294	487.3	82.8
6.24 IN.		.4812		.3006		.9100		1.5275		2.4663		.7266	484.5	82.7
PRESS.: 31.07 PSIA		.4284		.2966		.8986		1.5274		2.4663		.7284	484.8	82.7
AVERAGE :		.4298		.3023		.9160		1.5277		2.4661		.7286	485	82.8
CONCENTRATION :	214.89 PPMC		302.34 PPMV		228.99 PPMV		10872.07 PPMV		.00 PPMV		12.41 % VOL		3612.7 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 3628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-C216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/18/77 F100 # 680301 WPB FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : 5-05														
SPAN/ZERO ADJ.	.99	-.0026	1.08	.0029	1.08	.0069	1 5	.1000	.97	.0247	1.13	.0539		
SAMPLE DATA :														
TIME : 1308	100.00	.5924	250.00	.5395	250.00	.4488	1	1.5299	1	2.4671	1	.6850	423.4	83.1
PROBE POS.: +30		.6598		.4653		.4401		1.5294		2.4671		.6747	423.4	83.0
10.88 IN.		.6533		.4149		.4359		1.5293		2.4670		.6728	423.6	83.1
PRESS.: 33.13 PSIA		.6014		.3153*		.4418		1.5298		2.4670		.6720	422.7	83.2
		.6279		.2439*		.4381		1.5300		2.4670		.6742	423.5	83.2
		.6126		.1872*		.4394		1.5311		2.4668		.6698	421.9	83.3
AVERAGE :		.6296		.4732		.4407		1.5299		2.4670		.6748	423.1	83.1
CONCENTRATION :	3122.89	PPMC	118.31	PPMV	110.18	PPMV	10890.75	PPMV	.00	PPMV	10.51	% VOL	3024.2	DEG.F
MODE-POINT : 5-06														
SPAN/ZERO ADJ.	.99	.2265	1.08	.0030	1.08	.0070	1.07	.1089	.97	.0273	1.14	.0587		
SAMPLE DATA :														
TIME : 1311	1.00	.2284	250.00	.3805	250.00	.1685	1	.7968	1	2.1443	1	.7320	472.9	83.4
PROBE POS.: +30		.1603		.3805		.1696		.7711		2.1333		.7167	476.9	83.3
13.99 IN.		.1376		.3814		.1737		.7679		2.1327		.7147	483.0	83.3
PRESS.: 29.61 PSIA		.0894		.3869		.1749		.7807		2.1265		.7130	494.1	83.3
		.0661		.3956		.1747		.7698		2.1132		.7118	493.6	83.2
AVERAGE :		.1404		.3854		.1723		.7773		2.1300		.7160	484.1	83.3
CONCENTRATION :	7.02	PPMC	96.34	PPMV	43.06	PPMV	4136.39	PPMV	.00	PPMV	12.03	% VOL	3785.9	DEG.F

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-C216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/16/77 F100 # 680301 WP6 FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP.- F.- INPUT	TEMP.- F.- REFER
MODE-POINT : 5-07														
SPAN/ZERO ADJ.	.99	.0430	1.08	.0032	1.08	.0070	1.06	.1231	.97	.0315	1.16	.0663		
SAMPLE DATA :														
TIME : 1316	5.00	.0988	250.00	.6181	250.00	.4251	1	1.5316	1	2.4573	1	.7461	-.1*	.0*
PROBE POS.: -30		.1262		.6278		.4223		1.5323		2.4547		.7425	-.1*	.0*
-14.91 IN.		.1067		.6262		.4260		1.5325		2.4489		.7370	-.1*	.0*
PRESS.: 33.11 PSIA		.1319		.6321		.4316		1.5322		2.4520		.7329	-.1*	.0*
		.1238		.6303		.4349		1.5321		2.4503		.7352	-.1*	.0*
AVERAGE :		.1175		.6273		.4280		1.5321		2.4527		.7387	.0	.0
CONCENTRATION :	29.37 PPMC		156.83 PPMV		106.99 PPMV		10909.45 PPMV		.00 PPMV		12.80 % VOL		.0 DEG.F	
MODE-POINT : 5-08														
SPAN/ZERO ADJ.	.99	.0030	1.08	.0023	1.08	.0070	1.06	.1302	.97	.0336	1.17	.0701		
SAMPLE DATA :														
TIME : 1318	50.00	.1779	1000.00	.3252	250.00	.9408	1	1.5333	1	2.4539	1	.7250	-.1*	.0*
PROBE POS.: -30		.1632		.3257		.9385		1.5332		2.4581		.7160	-.1*	.0*
-11.61 IN.		.1963		.3275		.9246		1.5318		2.4537		.7152	-.1*	.0*
PRESS.: 30.65 PSIA		.2035		.3230		.9231		1.5325		2.4381		.7135	-.1*	.0*
		.1989		.3290		.9491		1.5328		2.4002		.7145	-.1*	.0*
AVERAGE :		.1779		.3261		.9342		1.5327		2.4408		.7169	.0	.0
CONCENTRATION :	444.86 PPMC		326.07 PPMV		233.56 PPMV		10914.39 PPMV		.00 PPMV		11.99 % VOL		.0 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

08

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1626-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/16/77 F100 # 680301 WPB FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	TEMP. REFER
MODE-POINT : 5-09														
SPAN/ZERO ADJ.	.99	.0436	1.08	.0023	1.09	.0070	1.09	.1355	.97	.0352	1.16	.0730		
SAMPLE DATA :														
TIME : 1320	5.00	.0954	1000.00	.3338	250.00	1.0346	1	1.5334	1	2.3859	1	.7384	-.1*	.0*
PROBE POS.: -30		.1076		.3370		1.0469		1.5339		2.3773		.7398	-.1*	.0*
-7.17 IN.		.0936		.3365		1.0469		1.5340		2.3824		.7375	-.1*	.0*
PRESS.: 30.70 PSIA		.1007		.3310		1.0240		1.5344		2.3777		.7361	-.1*	.0*
		.0654		.3326		1.0229		1.5344		2.3834		.7392	-.1*	.0*
AVERAGE :		.0925		.3342		1.0351		1.5340		2.3814		.7382	.0	.0
CONCENTRATION :	23.14 PPMC		334.19 PPMV		258.77 PPMV		10925.34 PPMV		.00 PPMV		12.78 % VOL		.0	DEG.F
MODE-POINT : 5-10														
SPAN/ZERO ADJ.	.99	.0440	1.08	.0023	1.09	.0069	1.10	.1444	.98	.0376	1.15	.0777		
SAMPLE DATA :														
TIME : 1323	5.00	.0831	1000.00	.3329	1000.00	.2576	1	1.5367	1	2.3402	1	.7460	.1*	.0*
PROBE POS.: -30		.0969		.3367		.2666		1.5368		2.3537		.7460	.1*	.0*
5.37 IN.		.1010		.3426		.2705		1.5359		2.3848		.7511	.1*	.0*
PRESS.: 31.22 PSIA		.0891		.3411		.2653		1.5357		2.4043		.7492	.1*	.0*
		.1014		.3418		.2651		1.5365		2.4147		.7463	.1*	.0*
AVERAGE :		.0933		.3394		.2650		1.5363		2.3795		.7485	.0	.0
CONCENTRATION :	23.33 PPMC		339.42 PPMV		264.99 PPMV		10944.56 PPMV		.00 PPMV		13.17 % VOL		.0	DEG.F

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SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/16/77 F100 # 680301 WPB FIELD TEST 3

	THC RNG	THC VOLTS	NOX RNG	NOX VOLTS	NO RNG	NO VOLTS	CO-HI RNG	CO-HI VOLTS	CO-LO RNG	CO-LO VOLTS	CO2 RNG	CO2 VOLTS	TEMP. INPUT	F. REFER
MODE-POINT : 5-11														
SPAN/ZERO ADJ.	.99	.0022	1.08	.0035	1.09	.0070	1.10	.1497	.98	.0394	1.19	.0806		
SAMPLE DATA :														
TIME : 1325	10.00	.3683	250.00	.6269	250.00	.3787	1	1.5363	1	2.3565	1	.7502	.1*	.0*
PROBE POS.: -30		.3009		.6211		.3925		1.5364		2.3486		.7475	.1*	.0*
10.00 IN.		.3559		.6965		.4078		1.5371		2.3593		.7500	.1*	.0*
PRESS.: 31.95 PSIA		.4257		.6418		.4064		1.5362		2.3633		.7501	.1*	.0*
		.2770		.6286		.3915		1.5356		2.3577		.7512	.1*	.0*
AVERAGE :		.3453		.6329		.3954		1.5363		2.3571		.7498	.0	.0
CONCENTRATION :	172.67 PPMC		158.22 PPMV		98.85 PPMV		10944.43 PPMV		.00 PPMV		13.22 % VOL		.0	DEG.F
MODE-POINT : 5-12														
SPAN/ZERO ADJ.	.99	.0445	1.08	.0072	1.09	.0076	1.11	.1568	.98	.0415	1.20	.0844		
SAMPLE DATA :														
TIME : 1327	5.00	.2318	100.00	.3448	100.00	.0386	1	.6822	1	1.8066	1	.3736	.1*	.0*
PROBE POS.: -30		.2519		.3289		.0316		.6580		1.7400		.3658	.1*	.0*
13.00 IN.		.2384		.3443		.0383		.6537		1.7058		.3712	.1*	.0*
PRESS.: 19.37 PSIA		.2373		.3529		.0418		.6679		1.7053		.3748	.1*	.0*
		.2296		.3518		.0426		.6632		1.6926		.3787	.1*	.0*
AVERAGE :		.2368		.3449		.0386		.6650		1.7301		.3728	.0	.0
CONCENTRATION :	59.20 PPMC		34.49 PPMV		5.86 PPMV		3388.98 PPMV		.00 PPMV		3.52 % VOL		.0	DEG.F

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

SCOTT ENVIRONMENTAL TECHNOLOGY INC. SET 1628-001-1077 REPORT DATE 10/24/77
USAF TURBINE ENGINE EMISSIONS INVENTORY USAF CONTRACT F08635-77-0216
CONCENTRATION EDIT REPORT SCOTT TEST 3,TYPE A 8/16/77 FICO # 680301 WPR FIELD TEST 3

	THC		NOX		NO		CO-HI		CO-LO		CO2		TEMP.- F.-	
	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	RNG	VOLTS	INPUT	REFER
MODE-POINT : 5-13														
SPAN/ZERO ADJ.	.99	.0057	1.08	.0021	1.08	.0069	1.05	.0858	.97	.0205	1.11	.0463		
SAMPLE DATA :														
TIME : 1303	10.00	.1470	1000.00	.3149	250.00	.9850	1	1.5253	1	2.4609	1	.7399	442.9	83.2
PROBE POS.: *30		.1370		.3106		.9726		1.5245		2.4605		.7389	464.3	83.2
.08 IN.		.1204		.3118		.9710		1.5250		2.4545		.7392	475.7	83.2
PRESS.: 30.64 PSIA		.1024		.3126		.9724		1.5248		2.4581		.7359	482.6	83.2
		.1314		.3062		.9585		1.5243		2.4630		.7353	485.8	83.2
AVERAGE :		.1276		.3116		.9715		1.5248		2.4594		.7379	470.3	83.2
CONCENTRATION :	63.82 PPMC		311.61 PPMV		242.98 PPMV		10847.85 PPMV		.60 PPMV		12.76 % VOL		3596.3 DEG.F	

** NOTE ** DATA MARKED WITH AN ASTERISK (*) NOT INCLUDED IN AVERAGE

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STOP CONC

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INITIAL DISTRIBUTION

ADTC/CZ	1
DDC/DDA	2
HQ AFSC/DL	1
HQ AFSC/SD	1
HQ USAF/LEEV	1
HQ USAF/SGPA	1
OSAF/MIQ	1
OSAF/OI	1
AFIT/Library	1
AFIT/DE	1
National Science Foundation	1
EPA/ORD	1
USA Chief, R&D/EQ	1
USN Chief, R&D/EQ	1
OEHL/CC	1
AFETO/DEV	1
USAFSAM/EDE	2
HQ AFISC	2
HQ AUL/LSE	1
HQ USAFA/Library	1
Det 1 ADTC/TST	1
1 MSEW	1
OUSDR&R	1
USAF Hospital, Wiesbaden	1
AFAPL/CC	1
AFAPL/SFF	1
AFAPL/TBC	1
ASD/YFJ	1
ASD/YPT	1
Naval Air Propulsion Center	1
NEPSS	1
HQ TAC/DEEV	1
HQ TAC/SGP	1
HQ USAFE/DEEV	1
HQ USAFE/SGP	1
HQ SAC/DEEV	1
Pratt & Whitney	2
Det 1 ADTC/ECA	6

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