

SECRET

Field
Data

COMPANY: Solar Turbines
 REPORT #: 89-017
 UNIT ID: Turbine #1
 DATE: 6-26-89

ON-SITE DATA

SITE:

RUN #:

#1 #2 #3

TIME:

1230 1405 1540

Vm Dry sampled gas volume, dcf
 Y Meter calibration factor (met# 1004)
 P bar Barometric pressure, in Hg.....
 P static Stack static pressure, in H₂O.....
 Delta H Differential meter pressure, in H₂O.....
 Tm Meter temperature, deg F.....

27.85 28.51 27.43
1.018627 → →
29.90 → →
-0.55 -0.55 -0.55
1.30 1.40 1.46
87.6 83 83.6

Contents	Run 1			Run 2			Run 3		
	final	tare	net	final	tare	net	final	tare	net
D.I. H ₂ O	572.4	550.0	22.4	609.6	572.4	37.2	633.5	609.6	23.9
D.I. H ₂ O	625.9	623.0	2.9	626.2	625.9	0.30	630.3	626.2	4.1
K.O.	457.1	457.0	0.1	457.6	457.1	0.50	458.8	457.6	1.2
Silica	718.4	713.0	5.4	724.2	718.4	5.80	726.35	724.2	2.15
Gel									
lc, volume of H ₂ O, grams			<u>30.8</u> ✓			<u>43.8</u> ✓			<u>31.4</u> ✓

CO₂ % Dry Volume.....
 O₂ % Dry Volume.....
 N₂ % Dry Volume.....
 Cp Pitot tube coefficient (Pit# 6I)
 Delta P Avg Delta-P, in H₂O.....
 Ts Stack temperature, in deg F.....
 As Stack area, sq. ft.....
 Ds Stack Diameter, inches.....
 Dn Nozzle diameter, inches.....
 Dur Sampling time, min.....
 % Iso Mini Iso.....

#1 #2 #3
~~2.75~~ 2.75 2.75
17.7 17.5 17.4
0.84 0.84 0.84
0.836 0.835 0.829
567 566 549
30" 30" 30"
30 min 30 min 30 min

Filter #.....
 Filter tare weights, grams.....

INITIALS**

CONTROL BOX#: 1004
 Hi ΔP 1.20 Lo ΔP 0.40 Ave ΔP 0.80 Duct Temp. 544
 Diameters before disturb _____ After _____
 # of Points, total 24
 Overall (inches) 36" Coupling 6"

EPA method 23-4 FIELD DATA

Client: Solar Turbines Report #: 84-017

Location: SAN Marcos Lagoon; Turbide

Operator: Pam Penn

Date: 6-7-85

Run No:

Pump No.

Meter Box No.: 1004 Factor: _____

Meter ΔH @: 1,028

Pitot Tube No.:

Post Test Leak Chk.

Leak Rate: 0.000 cfm

Vacuum: 80 (in Hg)

Ambient Temp: 75°

Barometric Pressure: 29.90

Static Pressure. (in. Hg): - 55

Assumed Moisture %:

Nozzle Ident. No.:

Aver. Calib. Nozzle Diam.(in): —

Probe Liner Material: 33

Filter Number:

Duct Diam. (in): 30"

Traverse Point number	Time: (e) min	Vacuum in Hg	Stack Temper. (Ts) °F	Velocity Head (ΔPs) (in)H ₂ O	Pressure Differential across Orifice Meter ΔP (in H ₂ O)	Gas Sample Volume (ft ³)	Gas Sample Temp. at dry Gas Meter		Temperature: Stack (°F)	Temperature of Gas Leaving Condenser or La Impinger (°F)
							inlet (°F)	outlet (°F)		
1	1905	6.5	580.70	1.00	1.10	961.90	85°	77°	564	
2	1911	6.5	588.80	1.20	1.10	967.32	85°	77°	563	
3	1919	6.5	580.80	1.00	1.10	975.1	87°	78°	565	
4	1923	6.5	584.80	1.10	1.10	978.9	90°	80°	567	
5	1926	6.5	580.90	0.99	1.10	981.2	91°	79°	569	
6	1930	6.5	589.80	0.80	1.10	985.6	88°	81°	565	
7	1935	8.0	590.70	0.70	1.10	990.41	86°	80°	570	
8			590.10	0.70					564	
9			1.20	0.60					565	
10			599.10	0.50					564	
11			56.0	0.70	0.65				565	
12				0.65	0.63					

Post Test Leak Chk.

Leak Rate: 0.000 cfm
Vacuum: 7 (in Hg)

Ambient Temp: 33.0

Barometric Pressure: 29.90

Static Pressure, (in Hg):- 45

Assumed Moisture %:

Nozzle Ident. No.:

Aver. Calib. Nozzle Diam.(in): —

Probe Liner Material: SS

Filter Number: 1

Filter Number: _____
Duct Diam. (in): 30"

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COMPANY: Solar Turbines
 REPORT #: 89-017
 UNIT ID: Turbine #2
 DATE: 6-27-89

ON-SITE DATA

SITE:

RUN #:

#1

#2

#3

TIME:

093011451325

Vm Dry sampled gas volume, dcf
 Y Meter calibration factor (met# 1004)
 P bar Barometric pressure, in Hg.....
 P static Stack static pressure, in H₂O.....
 Delta H Differential meter pressure, in H₂O.....
 Tm Meter temperature, deg F.....

	#1	#2	#3
Vm	<u>24.99</u>	<u>27.80</u>	<u>34.7</u>
Y	<u>1.018627</u>		
P bar	<u>29.90</u>	<u>29.90</u>	<u>29.90</u>
P static	<u>-0.60</u>	<u>-0.60</u>	<u>-0.60</u>
Delta H	<u>1.15</u>	<u>1.14</u>	<u>1.11</u>
Tm	<u>80.0</u>	<u>81.5</u>	<u>83.6</u>

Contents	Run 1			Run 2			Run 3		
	final	tare	net	final	tare	net	final	tare	net
DI H ₂ O	647.7	629.5	18.2	669.5	647.7	11.8	686.6	669.5	17.1
DI H ₂ O	634.9	632.6	2.3	636.5	634.9	1.6	637.6	636.5	1.1
K ₂ O	459.8	458.9	1.9	459.8	459.8	-0-	460.7	459.8	0.9
Silica bri	744.8	739.9	4.9	749.0	744.8	4.2	833.6	752.9	3.7
lc, volume of H ₂ O, grams			<u>27.3</u>			<u>17.6</u>			<u>22.8</u>

CO₂ % Dry Volume.....
 O₂ % Dry Volume.....
 N₂ % Dry Volume.....
 Cp Pitot tube coefficient (Pit# 6I)
 Delta P Avg Delta-P, in H₂O.....
 Ts Stack temperature, in deg F.....
 As Stack area, sq. ft.....
 Ds Stack Diameter, inches.....
 Dn Nozzle diameter, inches.....
 Dur Sampling time, min.....
 % Iso Mini Iso.....

	#1	#2	#3
CO ₂	<u>12.68</u>	<u>2.80</u>	<u>2.75</u>
O ₂	<u>17.7</u>	<u>17.63</u>	<u>17.61</u>
N ₂	<u>0.84</u>	<u>0.84</u>	<u>0.84</u>
Cp	<u>0.897</u>	<u>0.971</u>	<u>0.846</u>
Delta P	<u>572.0</u>	<u>578.2</u>	<u>566</u>
Ts	<u>30"</u>	<u>30"</u>	<u>30"</u>
As	<u>30min</u>	<u>30min</u>	<u>30min</u>
Ds			
Dn			
Dur			
% Iso			

Filter #.....
 Filter tare weights, grams.....

INITIALS**

CONTROL BOX#: 1004
 Hi ΔP 0.897 Lo ΔP 0.788 Ave ΔP 0.843 Duct Temp. 572.95
 Diameters before disturb _____ After _____
 # of Points, total _____
 Overall (inches) 36" Coupling 6"

EPA method 214 FIELD DATA

$$\text{STACK} + \Delta P + \text{moisture}$$

Post Test Leak Chk.

Report #: 489-017

Client: SURE TUBES

Location: SANDWATER SAND FALL

Operator: R. Logan

Date: 6-27-89

Run No:

Pump No.: GAST

Meter Box No.: 1004

Meter ΔH @: 1.028

Pitot Tube No.: 61

WEEK POET STAX 2

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Traverse Point number	Time: (e) min	Vacuum in Hg	Stack Temper. (Ts) °F	Velocity Head (ΔPs) (in)H ₂ O	Pressure Differential across Orifice Meter ΔH (in H ₂ O)	Gas Sample Volume (ft ³)	Gas Sample Temp. at dry Gas Meter (°F)		Filter Holder Temperature: (°F)	Temperature of Gas Leaving Condenser or Last Impinger (°F)
							inlet	outlet		
12	0930	6.4 ₂		0.96	1.15	1.3	019.00	83°	68°	
11	0937	6.4 ₂	569.2	1.10	1.15	1.3	025.62	86°	69°	
10	0945	6.4 ₂		1.10	1.15	1.3	027.76	89°	70°	
9	0946	6.4 ₂	572.0	1.00	1.15	1.3	033.2	89°	73°	
8	0950	6.4 ₂		0.90		0.94	035.35	90°	75°	
7	0955	6.4 ₂	572.4	0.90		0.94	039.50	88°	78°	
6	1000	6.4 ₂		0.90		0.94	043.99	86°	76°	
5			572.2	0.80						
4				0.90						
3			571.6	0.80						
2			570.8	0.60						
1			567.0	0.50						
Total			See next page		1.15	24.99	avg.	avg.		
Average							avg. 87			

EPA method 2 FIELD DATA

69-017

Post Test Leak Chk.

Ambient Temp: 70°

Barometric Pressure: _____
Static Pressure, (in Hg): _____

Vacuum: _____ (in Hg)

Nozzle Ident. No.: _____
Aver. Calib. Nozzle Diam.(in): _____

Probe Liner Material:
Filter Number:

Duct Diam. (in):

~~POST~~ STACK

Traverse Point number	Time: (e) min	Vacuum in Hg	Stack Temper. (Ts) °F	Velocity Head (ΔPs) (in)H ₂ O	Pressure Differential across Orifice Meter ΔH (in H ₂ O)	Gas Sample Volume (ft ³)	Gas Sample Temp. at dry		Filter Holder Temperature: (°F)	Temperature of Gas Leaving Condenser or La Impinger (°F)
							Gas Meter inlet (°F)	outlet (°F)		
12	0855		575.4	0.70						
11				6.98						
10			569.4	1.00						
9				1.00						
8			573.4	1.00						
7				1.00						
6			574.2	1.00						
5				1.05						
4			575.0	1.05						
3				1.00						
2			575.8	0.90						
1	1010		576.0	0.70						
Total			572	0.897			avg.	avg.		
Average							avg.			

SACK + ΔP + MOISTURE

Client: Solar Turbines Report #: 83-017
Location: SAN MARCOS LAUDER
Operator: R. LOGAN
Date: 6-77-83
Run No: 2
Pump No.: GAST
Meter Box No.: 1004 Factor: _____
Meter ΔH @: 1.028
Pitot Tube No.: 61

Ambient Temp: 80°
Barometric Pressure: 29.90
Static Pressure, (in Hg): -0.60
Assumed Moisture %: —
Nozzle Ident. No.: —
Aver. Calib. Nozzle Diam.(in): —
Probe Liner Material: SS
Filter Number: —
Duct Diam. (in): 30

W Port Stack 2 * 30" WITH 6" COUPLING

Traverse Point number	Time: (e) min	Vacuum in Hg	Stack [*] Temper. (Ts) °F	Velocity Head (ΔPs) (in)H ₂ O	Pressure [*] Differential across Orifice Meter ΔH (in H ₂ O)	Gas Sample Volume (ft ³)	Gas Sample Temp. at dry		Filter Holder Temperature: (°F)	Temperature of Gas Leaving Condenser or La Impinger (°F)
							Gas Meter inlet (°F)	outlet (°F)		
12	1145 1145	6 Ha	572.8	0.90	0.80	044.80	760	770		
11	1151	6 Ha	572.8	0.95	1.00	050.00	840	770		
10	1158	7 Ha	577.4	0.85	1.00	056.50	870	780		
9	1208	7 Ha		0.95	1.45	063.50	880	780		
8	1208	7 Ha	581.0	0.95	1.45	067.70	890	780		
7	1213		584.2	1.00	1.45	072.60	880	780		
6				1.05						
5			584.8	1.05						
4				1.10						
3			584.8	1.15						
2				1.10						
1			575.5	1.10						
Total			See next page		1.40	27.80	avg.	avg.		
Average							avg. 82			

FIELD DATA

Client: Souae Tue Report #: 88-017 SAC

Post Test Leak Chk.

Leak Rate: .cfm

Vacuum: _____ (in Hg)

Run No: 2

GATE

Meter	Box	No.	1004	12010
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Meze: 4 H 6: 1.028

10

FILED: 1993 Nov: 6

* N Port Stack 2

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11941.2

Client: Source Tuganes Report #: 89-047
 Location: DAN WARRIOS LANDFILL
 Operator: B. LOGAN
 Date: 6-27-89
 Run No: 3
 Pump No.: 6A1
 Meter Box No.: 1004 Factor: _____
 Meter A H #: 1.028
 Picot Tube No.: 6I

Post Test Leak Chk.

Leak Rate: 0.000 cfm
Vacuum: 10 (in Hg)

Ambient Temp: 78°

Barometric Pressure: 29.90
 Static Pressure, (in Hg): -0.60
 Assumed Moisture %: -
 Nozzle Ident. No.: -
 Aver. Calib. Nozzle Diam.(in): -
 Probe Liner Material: SS
 Filter Number: -
 Dust Diam. (in): 30"

6" Moulding

WPORT

[illegible]