



## Tampa Electric Laboratory Services

5012 Causeway Blvd Tampa FL 33619 \* Ph (813)630-7490 \* Fax (813)630-7360 \* DOH #E54272

Hardee Power Partner Limited  
Matt Drennan  
6695 County Road 663 North  
Bowling Green, FL 33834  
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Report Date: 04/12/12 10:56

### Sample Information

Client: Hardee Power Partner Limited  
Lab Sample ID: L12C200-01  
Sample Description: Fuel Oil Tank  
Sample Collection Method:

Project: Oil  
Sampled By: Client  
Date and Time Collected: 3/21/12 0:00  
Date of Sample Receipt: 3/21/12 8:30

### Laboratory Results

Parameter	Result	Units	PQL	Qualifier Code	Dil	Test Method	Analyst	Analysis Date & Time
Tampa Electric Company, Laboratory Services								
<b>CHN in Oil</b>								
Nitrogen	0.200	%	0.200		1	ASTM 5291	KAPXJ	3/22/12 12:40
<b>General Chemistry Parameters</b>								
Flashpoint	151	°F	60.0		1	EPA 1010	PXJ	3/26/12 10:32
Potassium	0.0700	mg/kg	0.500	U	1	ASTM D-3605	MCR	4/4/12 9:56
Sodium	0.0500	mg/kg	0.500	U	1	ASTM D-3605	MCR	4/4/12 9:13
<b>General Fuel Parameters</b>								
API Gravity @ 60 Deg. F	35.8	Degrees API	0.01		1	ASTM D-5002	PXJ	3/27/12 15:41
Ash in Oil	0.00100	mass %	0.00100	U	1	ASTM D-482	PXJ	4/2/12 10:00
Gross Heat of Combustion in Oil (HHV)	19503	BTU/Lb	1		1	ASTM D-240	PXJ	4/2/12 10:50
Gross Heat of Combustion in Oil (HHV)	137340	BTU/Gal	1		1	ASTM D-240	PXJ	3/27/12 10:06
Pounds SO2/Million BTU	0.0230	Lbs/MMBTU			1	Calc	SZS	4/2/12 10:50
Pounds/Gallon @ 60 Deg. F	7.042	Lbs/gal	1.000		1	D1250-80 Tbl 8	PXJ	3/27/12 10:06
Relative Density 60/60 Deg F	0.8458	-	0.0001		1	ASTM D-1250	PXJ	3/27/12 15:41
Sulfur, Low Level	0.0227	%	0.0001		1	ASTM D-5453	SZS	3/23/12 16:54
Kinematic Viscosity @ 100 F	2.77	cSt	1.00		1	ASTM D-445	PXJ	3/26/12 13:22
Saybolt Universal Viscosity @ 100F	35.2	SUS	0.100		1	ASTM D-2161	PXJ	3/26/12 13:22
Water and Sediment by Volume	0.0500	% by Volume	0.0500	U	1	ASTM D-2709	PXJ	3/26/12 12:00
<b>Total Metals by SW846 Method 6010B</b>								
Lead	0.0765	mg/kg	0.956	U	1	EPA 6010B	MCR	4/5/12 10:09
Vanadium	0.0430	mg/kg	0.956	U	1	EPA 6010B	MCR	4/5/12 10:09

### Comments

U Indicates that the compound was analyzed for but not detected.

I Estimated value

#### Subcontract Laboratories:

Laboratory Services certifies that the test result in this report meet all requirements of the NELAC standards, unless indicated otherwise in the body of the report. Unless otherwise noted, all methods followed are per the most current published version of 40 CFR Part 136, Table B. Results reported on this report pertain to the above referenced sample only.



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Tampa Electric Company, Laboratory Services

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

A handwritten signature in black ink, appearing to read "Peggy Penner", written over a horizontal line.

Peggy Penner, Manager, Laboratory Services

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MONTHLY OPERATIONS SUMMARY  
Hardee Power Station - Unit 2B

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REPORTING MONTH: January - 2012

	GAS		OIL	
TOTAL HOURS FIRED	6.25		0.00	
QUANTITY OF FUEL FIRED	48020.0	HSCF	0.0	LBS
HEAT INPUT OF FUEL FIRED (1)	5282.2	MMBTU (HHV)	0.0	MMBTU (HHV)
HEAT INPUT OF FUEL FIRED (1)	4758.9	MMBTU (LHV)	0.0	MMBTU (LHV)
AVERAGE HEAT INPUT OF FUEL	761.4	MMBTU/hr (LHV)	0.0	MMBTU/hr (LHV)
PERMIT LIMIT	950.0	MMBTU/hr (LHV)	1060.0	MMBTU/hr (LHV)
(@59 f, 60% RH, 14.7 PSIA) (2)				
AVERAGE SULFUR CONTENT OF FUEL (3)	0.077	gr/hcf	0.00	%
PERMIT LIMIT	2.000	gr/hcf	0.05	%
12 MONTH ROLLING HOURS OF OIL FIRED			0.00	
PERMIT LIMIT			876	
			(>400 triggers stack test on oil)	

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NOTES:

## - Indicates value Exceeded the Permit Limit

(1) HHV/LHV Ratio = 1.11 for Gas and 1.06 for Oil

(2) See Appendix G-1 of permit to correct for actual ambient conditions.

(3) Fuel Sulfur content for gas obtained from FGT website (daily average);  
for oil obtained from EAL lab analysis.

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MONTHLY OPERATIONS SUMMARY  
Hardee Power Station - Unit 2B

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REPORTING MONTH: February - 2012

	GAS		OIL	
TOTAL HOURS FIRED	0.00		0.00	
QUANTITY OF FUEL FIRED	0.0	HSCF	0.0	LBS
HEAT INPUT OF FUEL FIRED (1)	0.0	MMBTU (HHV)	0.0	MMBTU (HHV)
HEAT INPUT OF FUEL FIRED (1)	0.0	MMBTU (LHV)	0.0	MMBTU (LHV)
AVERAGE HEAT INPUT OF FUEL	0.0	MMBTU/hr (LHV)	0.0	MMBTU/hr (LHV)
PERMIT LIMIT	950.0	MMBTU/hr (LHV)	1060.0	MMBTU/hr (LHV)
(@59 f, 60% RH, 14.7 PSIA) (2)				
AVERAGE SULFUR CONTENT OF FUEL (3)	0.000	gr/hcf	0.00	%
PERMIT LIMIT	2.000	gr/hcf	0.05	%
12 MONTH ROLLING HOURS OF OIL FIRED			0.00	
PERMIT LIMIT			876	
			(>400 triggers stack test on oil)	

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for oil obtained from EAL lab analysis.

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MONTHLY OPERATIONS SUMMARY  
Hardee Power Station - Unit 2B

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REPORTING MONTH: March - 2012

	GAS		OIL	
TOTAL HOURS FIRED	10.50		0.00	
QUANTITY OF FUEL FIRED	83100.0	HSCF	0.0	LBS
HEAT INPUT OF FUEL FIRED (1)	9141.0	MMBTU (HHV)	0.0	MMBTU (HHV)
HEAT INPUT OF FUEL FIRED (1)	8235.2	MMBTU (LHV)	0.0	MMBTU (LHV)
AVERAGE HEAT INPUT OF FUEL	784.3	MMBTU/hr (LHV)	0.0	MMBTU/hr (LHV)
PERMIT LIMIT	950.0	MMBTU/hr (LHV)	1060.0	MMBTU/hr (LHV)
(@59 f, 60% RH, 14.7 PSIA) (2)				
AVERAGE SULFUR CONTENT OF FUEL (3)	0.090	gr/hcf	0.00	%
PERMIT LIMIT	2.000	gr/hcf	0.05	%
12 MONTH ROLLING HOURS OF OIL FIRED			0.00	
PERMIT LIMIT			876	
			(>400 triggers stack test on oil)	

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