



Combustion Services:

- Complete design of Combustion Section for any fire-heated application
- Drawings and engineering
- Installations
- Inspections
- Tuning
- Troubleshooting and repair
- Flame Arrestor testing
- Combustion efficiency test
- Burner efficiency upgrade
- Burner Management Systems installations
- Preventative Maintenance Program
- Safety Checks
- Planning, Co-ordination, Supervision and Execution of Turnaround Projects



Customer Information Data Base

NATCO Combustion has a detailed customer information data base and combustion techs fill reports about every place visited. The report contains information giving our engineers an entire picture of equipment installed. It covers every single detail, type of vessel and registration data, geometry and power rating of the fire tube, type of stack, type and characteristics of burners, list of fuel train components together with connection ports sizes, type and condition of flame arrestor, settings of temperature and pressure switches, and weather condition at the time of site visiting. Burner technicians have modern gas analyzers and are well trained to do measurements. The report includes readings of flue gases analysis which allow to obtain the whole understanding of combustion process into the fire heated unit and to make a necessary tune-up or to replace burner, in order to get the highest efficiency possible.

REPORT		REPORT	
Job #	LCA92-53	Date	Oct 30 2008
Company	Zargon (TNT)	Contact	Travis Deib
Location	Jarrow	Phone #	780 203 2466
Make	Wells Hall	Type	glycol reboiler
Serial #		AP	
Size	20" @ 6'	length	
Medium	eth. glycol	Temp	C
Distance from Burner Inlet to Liquid		inch	
Other:		Oper Temp	C
Number	one	Diameter	6/inch
Configuration	horizontal "U"	Length	5/feet
Distance from the center of the Firetube to the center of the Stack		BTU Rating	N/A
Stack Diameter	6/inch	Stack Height	15/feet
Stack Condition		Configuration	vertical flange
Arrestor Make	NATCO	Arrestor Style	aluminum
Arrestor Condition	good	Arrestor Size	12/inch
MAIN BURNER(S)	Make: ACL	Signal:	µA
Size:	1/inch	Orifice:	inch
Nozzel:	Optimizer	Fuel:	natural gas
Condition:		Configuration:	single
Mixer Type:	ACL	Size:	1 1/2"
Fuel:	natural gas	Tip Style:	RHSB
Condition:		Signal:	µA
Main Reg:	Fisher 627	Level Switch:	electric
Pilot Reg:	Fisher 67C	Flame Fall:	ACLS500
Instrument Reg:	Fisher 67CF	Temp. Controller:	HT 12
Shut Down Valve:	Fisher 119	HighTemp. Controller:	HT 12
High Press. Switch:	ACL	Peep Sight:	pyrex
Low Press. Switch:	Barksdale	Ignitor:	ACLS500
Switching Valve:	none	Instrument:	gas
WEATHER CONDITION:	overcast	Ambient Temp:	10 C
BURNER SETTINGS:	Left Burner	Right Burner	
Burner Pressure	initial final	Burner Pressure	initial final
Pilot Pressure		Pilot Pressure	
Flame Content	60/40	Flame Content	
NETT F	622	NETT F	
O2%	1.4	O2%	
CO ppm	10	CO ppm	
Eff%	76.2	Eff%	
CO2%	11	CO2%	
Flue F	670	Flue F	
Ambient	51.6	Ambient	
Xair%	6	Xair%	
NOX ppm	6	NOX ppm	
Draft		Draft	
IS BURNER B149.3 COMPLIANT?	Yes	COMMENTS AND RECOMMENDATIONS:	
Tuned burner, readjusted ignitor rod. Running good.			
Branch:	Leduc	NATCO Technician:	Customer Rep:



Our customers are:

Conocophillips, British Petroleum, Chevron (Alaska), Encana Resources, Suncor Energy, Occidental Petroleum Corporation, Marathon Oil Corp., XTO Energy, Lukoil, Advantage Oil & Gas Ltd., Altagas Services Inc., Apache Canada Ltd., Arc Resources Ltd., Canadian Natural Resources Ltd., CCS Midstream Services, Compton Petroleum, Canext Energy Inc., Gamet Resources Ltd., Glencoe Resources Ltd., Entegra Controls & Energy, EOG Resources Inc., Husky Oil Operations Ltd., Hunt Oil Company Of Canada Inc., Intrepid Energy Corporation, Nexen Petroleum International, Penn-West Petroleum Ltd., Pengrowth Corporation, PrimeWest Energy Inc., Shell Resources Ltd., Terra Energy, Talisman Energy Inc., TransCanada Pipelines Limited, Unocal Alaska Resources and many others.

Our crew

NATCO Canada Combustion technicians have an excellent qualification granted by years of experience and high educational requirements. The Combustion Crew received a high appreciation from customers servicing various processing equipment, such as:

- Boilers;
- Forced Drafters;
- Natural Drafters;
- Treaters;
- Incinerators;
- Desalters.

The basic list of standard industrial specialized educational courses for a Combustion tech includes:

- Petroleum Safety Training (PST) & CSTS Certification
- Detection and Control of Flammable Substances
- H₂S Alive
- Confined Space Entry/Rescue
- Transportation of Dangerous Goods (TDG)
- First Aid (Level C CPR)

Certification

In our installations we use parts and products approved by CSA (Canadian Standard Association) as worldwide recognized quality standards developing institution. Engineering and design of the installations base on high safety requirements of Canadian Gas Code and NFPA (National Fire Protection Association) Standard for Oven and Furnaces. Piping design conforms to current ASME/ANSI specifications.

