

LIEBHERR

CONSTRUCTION EQUIPMENT



[(357697)] LIEBHERR PR766 016664-1421 - Diesel Fuel

Sample No: LH0238100

Oil Type: No.1 DIESEL FUEL (ULTRALOW SULPHUR)



Sample Information

Sample Number	LH0238100	LH0238094	---	---
Sample Date	07 Apr 2023	21 Jan 2023	---	---
Machine Hours	5906	5306	---	---
Sample Status	SEVERE	NORMAL	---	---

HEAVY IRON INC
 370145 79 STREET EAST
 ALDERSYDE, AB
 CA T0L 0A0
 Contact: Service Manager



Fuel Condition

Initial Boiling Point	°C	● 168	---	---	---
10% Distill Point	°C	● 179	---	---	---
20% Distill Point	°C	● 186	---	---	---
30% Distill Point	°C	● 191	---	---	---
40% Distill Point	°C	● 198	---	---	---
50% Distill Point	°C	● 205	---	---	---
60% Distill Point	°C	● 212	---	---	---
70% Distill Point	°C	● 219	---	---	---
80% Distill Point	°C	● 228	---	---	---
90% Distill Point	°C	● 245	---	---	---
Final Boiling Point	°C	● 285	---	---	---
Cetane Index		● 39	---	---	---
API Gravity		● 40	---	---	---
Sulfur	ppm	● 9	● 6	---	---
Visc @ 40°C	cSt	● 1.4	● 2	---	---
Fuel Color	text	Pink	---	---	---

T:
F:

Diagnosis

We advise that you check all areas where contaminants can enter the system. Laboratory test indicate that this fuel is suitable for use and meets all test requirements. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you filter this fluid before use. Resample in 30-45 days to monitor this situation. {not applicable} There is a high amount of particulates (2 to 100 microns in size) present in the fuel. The water content is negligible. The fuel is still serviceable provided that the contaminant(s) can be reduced to acceptable levels. All laboratory tests indicate that this sample meets specifications for No.1 ultra-low-sulfur diesel fuel (US EPA/CGSB-3.517-3 type A).



Contamination

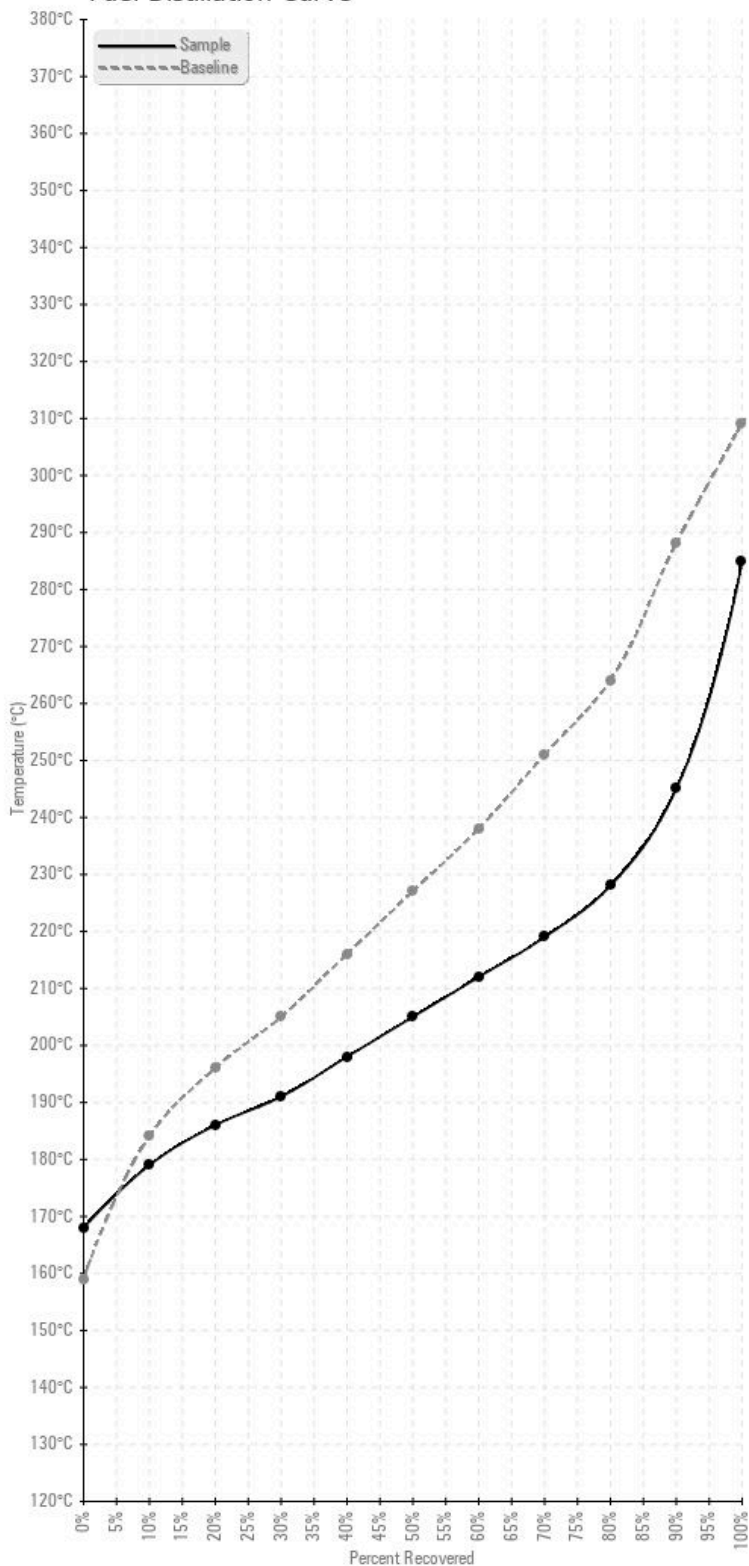
Water	%	● 0.003	---	---	---
Lead	ppm	● 0	● 0	---	---
Nickel	ppm	● 0	● 0	---	---
Aluminum	ppm	● 0	● 0	---	---
Vanadium	ppm	● 0	● 0	---	---
Silicon	ppm	● <1	● <1	---	---

Depot: HEAALD
Unique No: 5564565
Signed: Kevin Marson
Report Date: 21 Apr 2023



Graphs

Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



GCD Spectrum

