

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [[617511]] LIEBHERR HS855 184788 - Diesel Engine

Sample No: LH0296508

Oil Type: PETRO CANADA 10W40



#### Sample Information

Sample Number	LH0296508	LH0289328	LH0281398	LH0261654
Sample Date	25 Jun 2024	03 May 2024	29 Dec 2023	10 May 2023
Machine Hours	26574	26113	0	24635
Oil Hours	0	0	0	0
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL

**HIGGS & HIGGS**  
RR # 4  
ST THOMAS, ON  
CA N5P 3S8  
Contact: Bernie Higgs



#### Oil Condition

Visc @ 100°C	cSt	13.9	14.3	13.7	14.0
Oxidation (PA)	%	67	63	69	79

T: (519)631-4095  
F: (519)631-2745



#### Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	1	0	0
Nitration (PA)	%	65	68	64	74
Sulfation (PA)	%	56	60	55	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	2	2	2	3
Sodium	ppm	4	2	2	3
Potassium	ppm	<1	<1	<1	<1

#### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



#### Wear Metals

Iron	ppm	9	12	7	6
Copper	ppm	1	1	1	1
Lead	ppm	0	0	<1	2
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	2	2	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	65	59	63	70
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	0	<1
Vanadium	ppm	0	0	0	0



#### Additives

Calcium	ppm	1085	1223	1127	1331
Magnesium	ppm	972	967	1046	1049
Zinc	ppm	1222	1241	1277	1381
Phosphorus	ppm	1064	1005	1065	1198
Barium	ppm	<1	<1	0	0
Boron	ppm	20	2	4	41

Depot: HIGSTT  
Unique No: 5813951  
Signed: Wes Davis  
Report Date: 17 Jul 2024



### Graphs

