

OIL ANALYSIS REPORT



CITY OF SURREY FIRE DEPARTMENT R4-63282 SPARTAN 457AW40932C040520 - DIESEL ENGINE

Sample No: VPA052321

Oil Type: {unknown}

SAMPLE INFORMATION

Sample Number	VPA052321	---	---	---
Sample Date	17 Apr 2024	---	---	---
Machine Hours	185994	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	SEVERE	---	---	---

CULLEN DIESEL POWER - 695335

9300 192 ST

SURREY, BC

CA V4N 3R8

Contact: Michelle Sayers

mns@cullendiesel.com

T: (604)888-1211

F:

OIL CONDITION

Visc @ 100°C	cSt	7.0	---	---	---
Oxidation (PA)	%	181	---	---	---

CONTAMINATION

Water	%	▲ 0.376	---	---	---
Soot %	%	■ 0	---	---	---
Nitration (PA)	%	45	---	---	---
Sulfation (PA)	%	86	---	---	---
Glycol	%	▲ >.70	---	---	---
Fuel	%	▲ 5.1	---	---	---
Silicon	ppm	■ 17	---	---	---
Sodium	ppm	● 64	---	---	---
Potassium	ppm	▲ 168	---	---	---

WEAR METALS

Iron	ppm	▲ 157	---	---	---
Copper	ppm	■ 104	---	---	---
Lead	ppm	■ 9	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 7	---	---	---
Chromium	ppm	■ 0	---	---	---
Molybdenum	ppm	■ 12	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	1	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	56	---	---	---
Magnesium	ppm	■ 3	---	---	---
Zinc	ppm	28	---	---	---
Phosphorus	ppm	169	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 35	---	---	---

Diagnosis

We advise that you check for the source of the coolant leak. We recommend that you change the oil at the next available stoppage or outage. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated. Test for glycol is positive. There is a moderate amount of fuel present in the oil. There is a high concentration of glycol present in the oil. There is a light concentration of water present in the oil. Tests confirm the presence of fuel in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: CULSUR

Unique No: 5772468

Signed: Kevin Marson

Report Date: 26 Apr 2024

OIL ANALYSIS REPORT



GRAPHS

