



CONSTRUCTION EQUIPMENT

621519 SIMS OH SENNEBOGEN 835 2069 - DIESEL ENGINE



Sample No: VCP431284
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 621519 SIMS OH



SAMPLE INFORMATION

Sample Number	VCP431284	VCP328503	---	---
Sample Date	28 Oct 2023	29 Oct 2021	---	---
Machine Hours	10627	9540	---	---
Oil Hours	0	500	---	---
Oil Changed	Changed	N/A	---	---
Sample Status	SEVERE	SEVERE	---	---

ALTA CONSTRUCTION EQUIPMENT LLC
G-3283 S. DORT HIGHWAY
BURTON, MI
US 48529
Contact: SHAWN LEWIS
shawn.lewis@altaequipment.com
T: (810)347-7011
F:



OIL CONDITION

Visc @ 100°C	cSt	▲ 12.0	▲ 11.4	---	---
Base Number (BN)	mg KOH/g	■ 7.1	---	---	---
Oxidation (PA)	%	■ 116	161	---	---



CONTAMINATION

Soot %	%	■ 1	■ 1.8	---	---
Nitration (PA)	%	■ 138	158	---	---
Sulfation (PA)	%	■ 77	92	---	---
Glycol	%	■ NEG	NEG	---	---
Fuel	%	● 10.7	● 17.7	---	---
Silicon	ppm	■ 9	■ 9	---	---
Sodium	ppm	■ <1	■ 5	---	---
Potassium	ppm	■ 4	■ 0	---	---

Diagnosis

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.



WEAR METALS

Iron	ppm	■ 72	■ 79	---	---
Copper	ppm	■ 4	■ 5	---	---
Lead	ppm	■ 7	▲ 88	---	---
Tin	ppm	■ <1	■ <1	---	---
Aluminum	ppm	■ 10	■ 6	---	---
Chromium	ppm	■ 2	■ 3	---	---
Molybdenum	ppm	■ 62	■ 43	---	---
Nickel	ppm	■ <1	■ 0	---	---
Titanium	ppm	■ 10	4	---	---
Silver	ppm	■ 0	■ 0	---	---
Manganese	ppm	■ 1	■ 1	---	---
Vanadium	ppm	■ 0	<1	---	---



ADDITIVES

Calcium	ppm	■ 1403	■ 1592	---	---
Magnesium	ppm	■ 650	■ 546	---	---
Zinc	ppm	■ 811	■ 956	---	---
Phosphorus	ppm	■ 750	■ 779	---	---
Barium	ppm	■ 5	■ 0	---	---
Boron	ppm	■ 112	■ 59	---	---

Depot: VOLVO5023
Unique No: 10728564
Signed: Sean Felton
Report Date: 08 Nov 2023

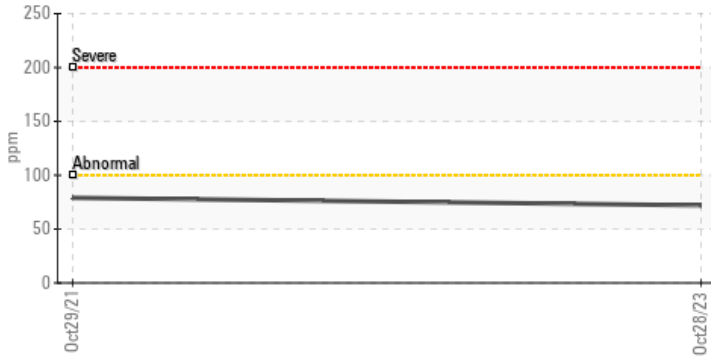


CONSTRUCTION EQUIPMENT

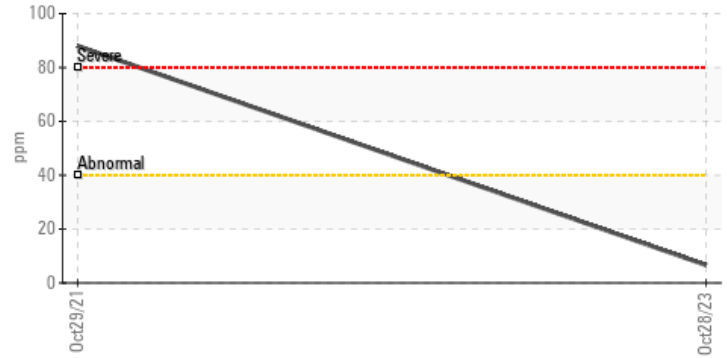


GRAPHS

Iron (ppm)



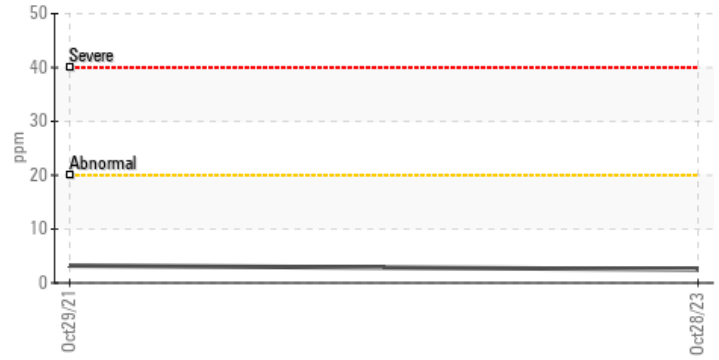
Lead (ppm)



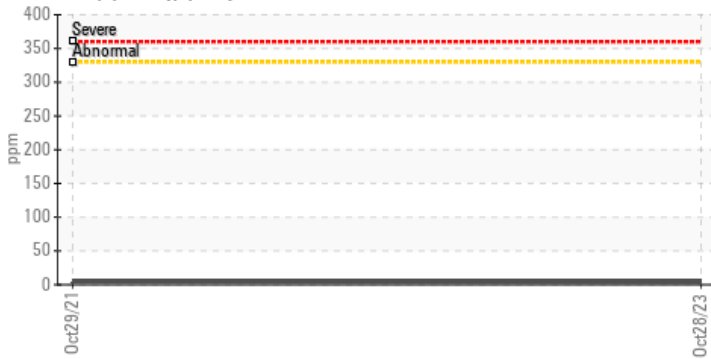
Aluminum (ppm)



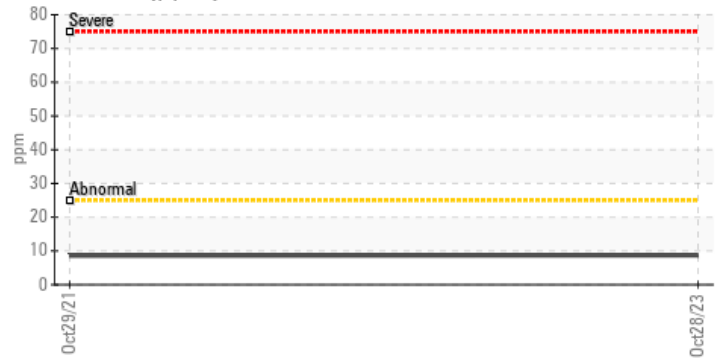
Chromium (ppm)



Copper (ppm)



Silicon (ppm)



▲ Viscosity @ 100°C



Base Number

