



CONSTRUCTION EQUIPMENT

595820 DIPRO CATERPILLAR 982M LLSU02686 - DIESEL ENGINE



Sample No: VCP401161
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 595820 DIPRO



SAMPLE INFORMATION

Sample Number	VCP401161	VCP411765	VCP382971	---
Sample Date	14 Sep 2023	11 Jul 2023	19 Jan 2023	---
Machine Hours	11568	10846	10401	---
Oil Hours	500	0	500	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	ABNORMAL	NORMAL	ATTENTION	---

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OIL CONDITION

Visc @ 100°C	cSt	13.9	14.0	▲ 11.7	---
Base Number (BN)	mg KOH/g	8.1	9.4	9.3	---
Oxidation (PA)	%	63	63	90	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



CONTAMINATION

Soot %	%	1	0.5	0.9	---
Nitration (PA)	%	73	63	88	---
Sulfation (PA)	%	56	53	63	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	0.7	---
Silicon	ppm	▲ 34	4	6	---
Sodium	ppm	2	1	2	---
Potassium	ppm	1	1	2	---



WEAR METALS

Iron	ppm	26	14	26	---
Copper	ppm	2	2	4	---
Lead	ppm	4	1	2	---
Tin	ppm	<1	<1	<1	---
Aluminum	ppm	4	4	6	---
Chromium	ppm	1	<1	1	---
Molybdenum	ppm	58	53	42	---
Nickel	ppm	<1	0	0	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	<1	0	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	1032	1099	1739	---
Magnesium	ppm	911	907	501	---
Zinc	ppm	1200	1248	1135	---
Phosphorus	ppm	983	1012	940	---
Barium	ppm	0	0	1	---
Boron	ppm	0	4	25	---

Depot: VOLVO2990
Unique No: 10657332
Signed: Angela Borella
Report Date: 21 Sep 2023



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GRAPHS

