



CONSTRUCTION EQUIPMENT

VOLVO EC480EL 314321 - DIESEL ENGINE



Sample No: VCP405268
Oil Type: CHEVRON URSA SUPER PLUS EC 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP405268	VCP309693	VCP309686	VCP309956
Sample Date	18 Aug 2023	21 Mar 2023	01 Jul 2022	29 Oct 2021
Machine Hours	2609	2109	1511	995
Oil Hours	500	0	516	495
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ATTENTION	ATTENTION	ABNORMAL

CITY OF WISCONSIN RAPIDS

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 US 54495

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OIL CONDITION

Visc @ 100°C	cSt	12.0	11.6	12.1	12.3
Base Number (BN)	mg KOH/g	5.7	5.4	6.5	---
Oxidation (PA)	%	60	61	64	65

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. 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 %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	61	63	62	61
Sulfation (PA)	%	59	62	63	62
Glycol	%	0.0	NEG	NEG	NEG
Fuel	%	1.4	2.2	<1.0	0.7
Silicon	ppm	6	5	5	6
Sodium	ppm	2	3	3	2
Potassium	ppm	3	<1	<1	<1



WEAR METALS

Iron	ppm	6	6	6	5
Copper	ppm	2	4	18	84
Lead	ppm	2	<1	1	1
Tin	ppm	1	<1	1	2
Aluminum	ppm	2	2	2	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	86	88	84	82
Nickel	ppm	0	0	0	<1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1516	1498	1486	1558
Magnesium	ppm	424	447	411	404
Zinc	ppm	1307	1337	1300	1213
Phosphorus	ppm	1047	1083	1047	1036
Barium	ppm	0	0	0	0
Boron	ppm	304	248	307	302

Depot: CITWIS
Unique No: 10620391
Signed: Wes Davis
Report Date: 01 Sep 2023



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GRAPHS

