



CONSTRUCTION EQUIPMENT

CITY OF TAMPA VOLVO EW160 323426 - DIESEL ENGINE



Sample No: VCP446181
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: CITY OF TAMPA



SAMPLE INFORMATION

Sample Number	VCP446181	VCP437896	VCP428685	VCP414752
Sample Date	22 May 2024	28 Feb 2024	08 Dec 2023	01 Sep 2023
Machine Hours	6234	5275	5787	5198
Oil Hours	0	500	700	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.6	13.0	12.9	12.6
Base Number (BN)	mg KOH/g	9.8	10.2	10.5	10.5
Oxidation (PA)	%	71	76	80	80

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	53	52	58	57
Sulfation (PA)	%	56	57	58	58
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	9	7	10	6
Sodium	ppm	3	1	2	4
Potassium	ppm	2	2	0	<1



WEAR METALS

Iron	ppm	2	4	6	2
Copper	ppm	<1	1	1	2
Lead	ppm	<1	<1	0	0
Tin	ppm	<1	<1	0	0
Aluminum	ppm	2	2	3	2
Chromium	ppm	0	<1	<1	0
Molybdenum	ppm	41	45	38	43
Nickel	ppm	<1	<1	0	0
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1520	1613	1705	1680
Magnesium	ppm	603	525	468	545
Zinc	ppm	1092	1085	1026	1198
Phosphorus	ppm	944	923	894	980
Barium	ppm	0	0	0	0
Boron	ppm	48	48	38	36

Depot: VOLVO0093
Unique No: 11050439
Signed: Wes Davis
Report Date: 30 May 2024



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VOLVO GRAPHS

