



CONSTRUCTION EQUIPMENT

VOLVO EC480EL 314125 - DIESEL ENGINE



Sample No: VCP455162
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



ORANGE COUNTY SOLID WASTE
 5901 YOUNG PINE ROAD
 ORLANDO, FL
 US 32829
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SAMPLE INFORMATION

Sample Number	VCP455162	VCP362873	VCP377466	VCP345512
Sample Date	10 Apr 2024	31 Aug 2022	11 May 2022	28 Jan 2022
Machine Hours	1246	5634	5117	4491
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ATTENTION



OIL CONDITION

Visc @ 100°C	cSt	14.1	12.3	12.7	11.1
Base Number (BN)	mg KOH/g	10.2	10.0	7.9	6.0
Oxidation (PA)	%	53	95	51	55



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0.2	0.1	0.1
Nitration (PA)	%	42	73	61	69
Sulfation (PA)	%	48	68	49	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	0.6
Silicon	ppm	10	9	8	6
Sodium	ppm	0	4	2	0
Potassium	ppm	2	0	0	<1



WEAR METALS

Iron	ppm	3	7	8	6
Copper	ppm	1	4	2	3
Lead	ppm	<1	<1	2	1
Tin	ppm	<1	<1	1	<1
Aluminum	ppm	5	1	1	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	63	42	41	32
Nickel	ppm	<1	0	<1	0
Titanium	ppm	<1	0	<1	1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	<1



ADDITIVES

Calcium	ppm	1276	1655	1708	1709
Magnesium	ppm	973	492	512	349
Zinc	ppm	1422	1061	1042	914
Phosphorus	ppm	1101	886	901	781
Barium	ppm	0	1	0	0
Boron	ppm	51	30	23	14

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.

Depot: ORAORL
Unique No: 10970509
Signed: Don Baldrige
Report Date: 14 Apr 2024



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GRAPHS

