



CONSTRUCTION EQUIPMENT

632616 - DIESEL ENGINE



Sample No: VCP442295
Oil Type: SHELL Rotella T5 15W-40
Job No:



SAMPLE INFORMATION

Sample Number	VCP442295	VCP437115	VCP443061	VCP434063
Sample Date	15 Jun 2024	09 Apr 2024	15 Feb 2024	07 Dec 2023
Machine Hours	6821	6506	6331	6218
Oil Hours	300	250	106	1
Oil Changed	Changed	Changed	Not Changd	N/A
Sample Status	NORMAL	ABNORMAL	ABNORMAL	NORMAL

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 105 BRICKYARD RD
 FARMINGTON, CT
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 T:
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OIL CONDITION

Visc @ 100°C	cSt	12.0	11.5	11.9	13.4
Base Number (BN)	mg KOH/g	6.3	9.0	7.4	9.9
Oxidation (PA)	%	52	75	60	69

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	0.2	0.1
Nitration (PA)	%	59	49	53	46
Sulfation (PA)	%	49	59	55	56
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	0.3	<1.0
Silicon	ppm	8	33	25	8
Sodium	ppm	3	9	9	4
Potassium	ppm	4	13	7	2



WEAR METALS

Iron	ppm	4	11	6	6
Copper	ppm	2	11	5	<1
Lead	ppm	0	1	0	0
Tin	ppm	1	4	2	0
Aluminum	ppm	3	4	3	6
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	54	40	33	51
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	0	1	<1	0
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1839	1695	1536	1603
Magnesium	ppm	127	431	376	446
Zinc	ppm	1086	1077	905	1132
Phosphorus	ppm	862	948	832	946
Barium	ppm	0	0	0	0
Boron	ppm	54	59	53	63

Depot: DUNFAR
Unique No: 11098964
Signed: Jonathan Hester
Report Date: 27 Jun 2024



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GRAPHS

