



CONSTRUCTION EQUIPMENT

SPM635014 VOLVO EC160DL 210090 - DIESEL ENGINE



Sample No: VCP430174
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SPM635014



SAMPLE INFORMATION

Sample Number	VCP430174	VCP415254	VCP422724	VCP404365
Sample Date	29 Nov 2023	28 Aug 2023	26 Apr 2023	10 Jan 2023
Machine Hours	9128	8565	7910	7275
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

CALUMET CITY AUTO WRECKERS
 630 E STATE ST
 CALUMET CITY, IL
 US 60409
 Contact: GARY

OIL CONDITION

Visc @ 100°C	cSt	13.6	13.7	13.3	13.6
Base Number (BN)	mg KOH/g	7.8	7.9	7.5	8.0
Oxidation (PA)	%	57	69	65	69

T: (815)600-9027
 F:

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 %	%	0.2	0.3	0.2	0.3
Nitration (PA)	%	63	82	76	83
Sulfation (PA)	%	52	53	48	54
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	4	4	3
Sodium	ppm	7	8	1	0
Potassium	ppm	9	16	3	0

WEAR METALS

Iron	ppm	6	11	10	9
Copper	ppm	3	4	4	4
Lead	ppm	0	<1	0	0
Tin	ppm	0	0	0	0
Aluminum	ppm	2	2	2	3
Chromium	ppm	<1	<1	0	<1
Molybdenum	ppm	46	61	60	53
Nickel	ppm	0	0	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0

ADDITIVES

Calcium	ppm	811	1154	1247	1081
Magnesium	ppm	805	1069	1010	861
Zinc	ppm	1029	1386	1414	1139
Phosphorus	ppm	960	1094	1095	948
Barium	ppm	0	0	0	0
Boron	ppm	12	0	12	4

Depot: CALCALIL
Unique No: 10792854
Signed: Jonathan Hester
Report Date: 20 Dec 2023



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GRAPHS

