

OIL ANALYSIS REPORT

COLORADO/443/EG - EXCAVATOR 20.303L [COLORADO^443^EG - EXCAVATOR]

Sample Rating Trend



NORMAL

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

SAMPLE INFORMATION WC0884011 WC0859595 WC0823120 Sample Number **Client Info** Sample Date Client Info 13 Mar 2024 05 Dec 2023 15 Sep 2023 Machine Age hrs Client Info 11451 11132 10862 Oil Age hrs Client Info 0 0 0 Oil Changed Changed Changed Changed **Client Info** NORMAL Sample Status NORMAL NORMAL CONTAMINATION Fuel >5 WC Method <1.0 <1.0 <1.0 Water WC Method >0.2 NEG NEG NEG Glycol WC Method NEG NEG NEG WEAR METALS >100 9 12 10 Iron ppm ASTM D5185m ASTM D5185m >20 0 Chromium ppm <1 <1 0 0 Nickel >2 ppm ASTM D5185m <1 Titanium ppm ASTM D5185m >2 0 0 0 Silver ASTM D5185m >2 0 0 0 ppm >25 4 7 6 Aluminum ppm ASTM D5185m 0 Lead ASTM D5185m >40 0 0 ppm ASTM D5185m >330 2 2 2 Copper ppm 0 Tin ppm ASTM D5185m >15 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 Cadmium 0 0 0 ASTM D5185m ppm Boron mag ASTM D5185m 0 44 41 44 Barium ASTM D5185m 0 0 0 0 ppm 47 Molybdenum ASTM D5185m 0 43 43 ppm 0 ASTM D5185m Manganese ppm <1 <1 Magnesium ASTM D5185m 0 529 569 545 ppm Calcium ppm ASTM D5185m 1716 1706 1770 Phosphorus ASTM D5185m 761 784 775 ppm

921

2800

6

11

0

0.2

7.6

22.1

21.3

9.4

1002

2332

8

14

1

0.2

7.3

22.1

21.0

9.9

937

3047

6

10

1

0.2

7.0

21.8

20.4

9.4

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Componen

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

Fluid Condition

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

> % Soot % *ASTM D7844 >3 Nitration Abs/cm *ASTM D7624 >20 Sulfation *ASTM D7415 >30 Abs/.1mm FLUID DEGRADATION *ASTM D7414 >25 Oxidation Abs/.1mm Base Number (BN) mg KOH/g ASTM D2896 9.4

CONTAMINANTS

Zinc

Sulfur

Silicon

Sodium

Potassium

ppm

ppm

ppm

ppm

ppm

ASTM D5185m

ASTM D5185m

ASTM D5185m

ASTM D5185m

ASTM D5185m

>25

>20



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VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	historv1	history2
	- 01			10.0	10.4	10.4
VISC @ 100°C	cSt	ASTM D445	14	13.6	13.4	13.4
ODADUO						



60 50





Test Package : CONST (Additional Tests: TBN) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. doug.king@sherwood.net * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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