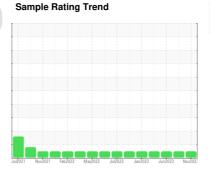


OIL ANALYSIS REPORT

CATERPILLAR D6 LGP 8181 (S/N GZ900341)





NORMAL

Diesel Engine

DIESEL ENGINE OIL SAE 40 (--- GAL)

SAMPLE INFORMATION method WC0879432 WC0837001 WC0816272 Sample Number **Client Info** Resample at the next service interval to monitor. Sample Date Client Info 24 Nov 2023 13 Sep 2023 14 Jun 2023 Please specify the brand, type, and viscosity of the Machine Age hrs **Client Info** 8146 7669 7194 Oil Age hrs Client Info 477 475 267 Oil Changed Client Info Changed Changed Changed Sample Status NORMAL NORMAL NORMAL CONTAMINATION There is no indication of any contamination in the Fuel >5 WC Method <1.0 <1.0 <1.0 Water WC Method >0.2 NEG NEG NEG The BN result indicates that there is suitable Glycol WC Method NEG NEG NEG alkalinity remaining in the oil. The condition of the WEAR METALS >100 25 15 10 Iron ppm ASTM D5185m ASTM D5185m >20 <1 Chromium ppm 1 <1 0 Nickel >2 0 ppm ASTM D5185m <1 Titanium ppm ASTM D5185m >2 0 0 0 Silver ASTM D5185m >2 0 0 0 ppm ASTM D5185m >25 3 3 Aluminum ppm 1 Lead ASTM D5185m >40 12 Δ ppm 1 ASTM D5185m >330 2 2 Copper ppm <1 0 Tin ppm ASTM D5185m >15 <1 <1 Vanadium ppm ASTM D5185m 0 0 <1 Cadmium 0 0 ASTM D5185m 0 ppm Boron mag ASTM D5185m 250 4 3 8 Barium ASTM D5185m 10 2 0 0 ppm Molybdenum ASTM D5185m 100 64 65 54 ppm ASTM D5185m Manganese ppm 0 <1 <1 Magnesium ASTM D5185m 450 927 964 886 ppm Calcium ppm ASTM D5185m 3000 1130 1185 1089 Phosphorus ASTM D5185m 1150 947 1073 981 ppm Zinc ppm ASTM D5185m 1350 1196 1317 1254 Sulfur ASTM D5185m 4250 2826 3551 3626 ppm CONTAMINANTS 3 4 3 Silicon ASTM D5185m >25 ppm Sodium ASTM D5185m >216 0 2 1 ppm Potassium ASTM D5185m >20 2 2 ppm <1 % 1 0.8 0.5 Soot % *ASTM D7844 >3 Nitration Abs/cm *ASTM D7624 >20 9.4 7.5 7.1 20.4 Sulfation *ASTM D7415 >30 19.4 19.5 Abs/.1mm FLUID DEGRADATION *ASTM D7414 >25 16.6 14.5 14.5 Oxidation Abs/.1mm Base Number (BN) mg KOH/g ASTM D2896 8.5 7.2 8.4 9.0



Recommendation

Contamination

Fluid Condition

Wear

oil

oil on your next sample.

All component wear rates are normal.

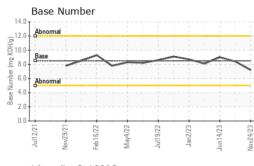
oil is suitable for further service.

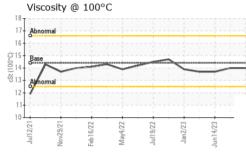
Component

Report Id: TRANEW [WUSCAR] 06026190 (Generated: 12/08/2023 04:41:47) Rev: 1

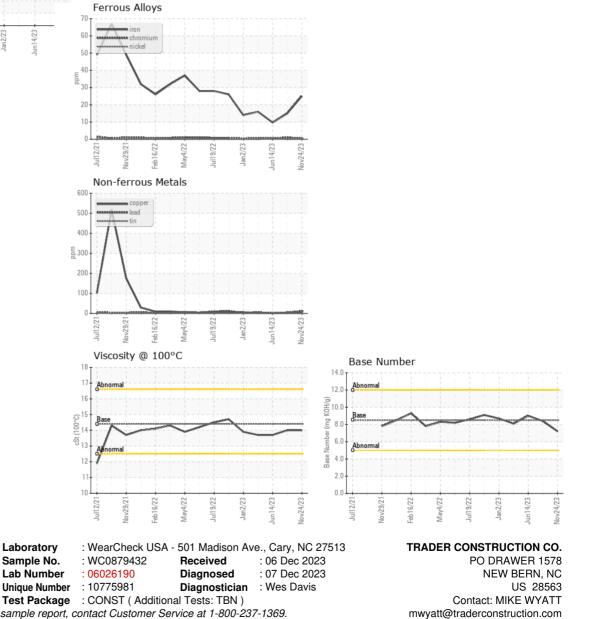


OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	14.0	14.0	13.7
GRAPHS						





 Certificate 12367
 Test Package
 : CONST (Additional Tests: TBN)

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 mwya

 * - 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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