

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION ABNORMAL

KANSAS/44/EG - LOADER Machine Id 46.107L [KANSAS^44^EG - LOADER] Component Diesel Engine

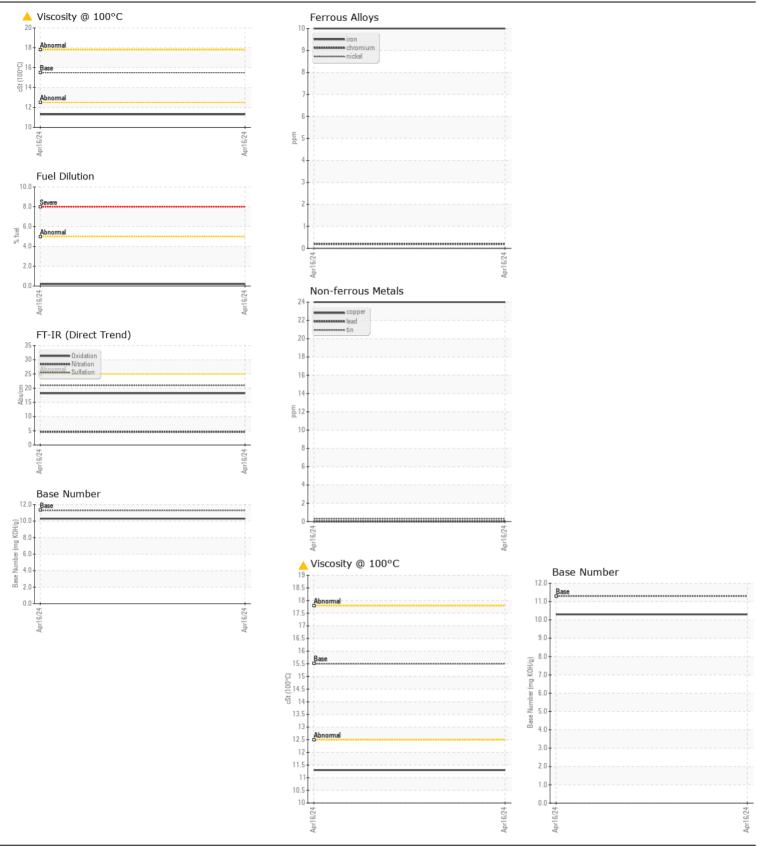
CAT DIESEL ENGINE OIL 15W40 (--- GAL)

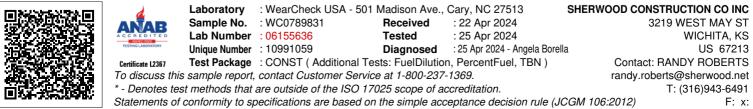
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0789831		
	Sample Date		Client Info		16 Apr 2024		
	Machine Age	hrs	Client Info		15		
	Oil Age	hrs	Client Info		15		
	Filter Age	hrs	Client Info		15		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				ABNORMAL		
WEAR All component wear rates are normal.	Iron	nnm	ASTM D5185m	> 100	10		
	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		3		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm ppm	ASTM D5185m		24		
	Tin		ASTM D5185m		24 <1		
	Vanadium	ppm ppm	ASTM D5185m	210	<1 0		-
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
		Scalar	visual	NONE			
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	11		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3		
	Fuel	%	ASTM D3524	>5	0.2		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	4.6		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium				4		
	Sodium	ppm	ASTM D5185m ASTM D5185m		4		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm			70		
	Barium	ppm	ASTM D5185m ASTM D5185m		12		
	Molybdenum	ppm			34		
	Manganese	ppm	ASTM D5185m ASTM D5185m		4		
	Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m		522 1593		
	Phosphorus	ppm	ASTM D5185m		967		
	-	ppm		1460			
	Zinc Sulfur	ppm	ASTM D5185m	1400	1113		
		ppm	ASTM D5185m	> 2F	3514		
	Oxidation	Abs/.1mm	*ASTM D7414		18.2		
	Base Number (BN)	nig KOH/g	ASTM D2896	11.3	10.3		

Visc @ 100°C cSt

ASTM D445 15.5

11.3





Submitted By: JASON GORGES Page 2 of 2