WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL



## Machine Id CATERPILLAR CRAWLER

Diesel Engine

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

DIESEL ENGINE OIL SAE 13W4	DIESEL ENGINE OIL SAE 15W40 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2	
TECOMMENDATION	Sample Number		Client Info		PCA0074614			
Resample at the next service interval to monitor.	Sample Date		Client Info		18 May 2024			
	Machine Age	hrs	Client Info		0			
	Oil Age	hrs	Client Info		250			
	Filter Age	hrs	Client Info		250			
	Oil Changed		Client Info		N/A			
	Filter Changed		Client Info		N/A			
	Sample Status				NORMAL			
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	7			
	Chromium	ppm	ASTM D5185m	>20	<1			
	Nickel	ppm	ASTM D5185m	>2	0			
	Titanium	ppm	ASTM D5185m	>2	31			
	Silver	ppm	ASTM D5185m	>2	<1			
	Aluminum	ppm	ASTM D5185m	>25	1			
	Lead	ppm	ASTM D5185m		<1			
	Copper	ppm	ASTM D5185m	>330	<1			
	Tin	ppm	ASTM D5185m	>15	0			
	Vanadium	ppm	ASTM D5185m		<1			
	White Metal	scalar	*Visual	NONE	NONE			
	Yellow Metal	scalar	*Visual	NONE	NONE			
CONTAMINATION	Silicon	nnm	ASTM D5185m	- 2E	6			
CONTAIMINATION	Potassium	ppm	ASTM D5185m		6 2			
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0			
	Water		WC Method		NEG			
	Glycol		WC Method	<i>&gt;</i> 0.2	NEG			
	Soot %	%	*ASTM D7844	~3	0.4			
	Nitration	Abs/cm	*ASTM D7624	>20	5.2			
	Sulfation		*ASTM D7415		18.2			
	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			
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG			
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2			
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m	250	104			
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0			
	Molybdenum	ppm	ASTM D5185m	100	42			
	Manganese	ppm	ASTM D5185m		<1			
	Magnesium	ppm	ASTM D5185m		878			
	Calcium	ppm	ASTM D5185m		1562			
	Phosphorus	ppm	ASTM D5185m		1172			
	Zinc	ppm	ASTM D5185m		1414			
	Sulfur	ppm	ASTM D5185m		4588			
	Oxidation	Abs/.1mm	*ASTM D7414		12.8			
	Base Number (BN)		ASTM D2896		9.2			
	Visc @ 100°C	cSt	ASTM D445	14.4	14.3			





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Lab Number : 06188870 Unique Number : 11045622

: PCA0074614

Received Test Package : MOB 1 ( Additional Tests: TBN )

: 23 May 2024 **Tested** : 24 May 2024 Diagnosed

: 24 May 2024 - Wes Davis

TRI-STATE DISPOSAL 14050 WOOD ST DIXMOOR, IL US 60426

Contact: Service Manager

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

\* - 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)

T: F: