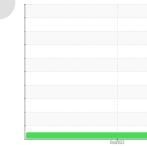


OIL ANALYSIS REPORT



Sample Rating Trend







Machine Id CATERPILLAR 119

Component **Diesel Engine**

CONOCO PHILLIPS GUARDOL ECT 15W40 (-

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

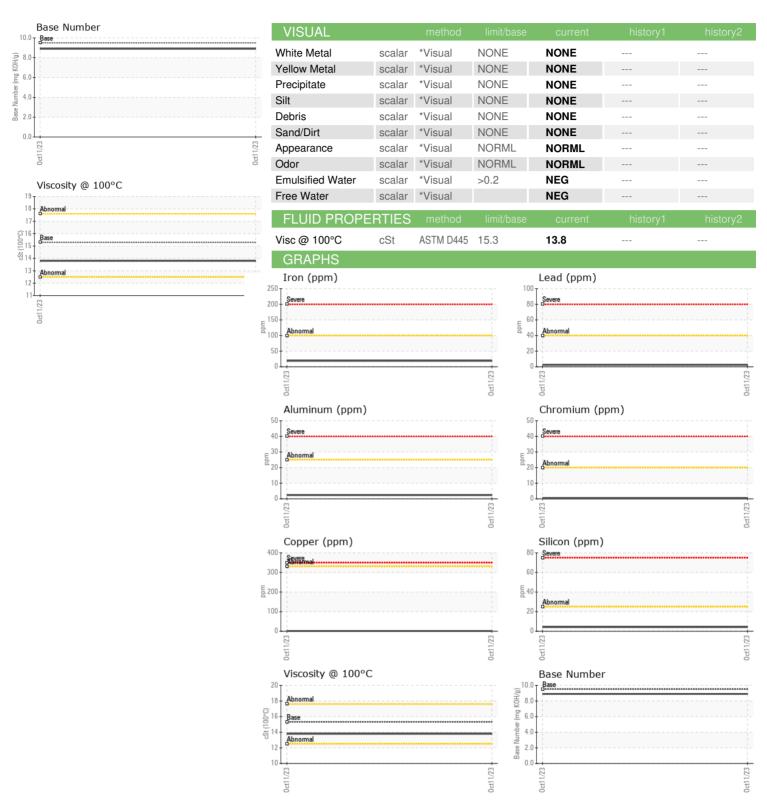
Fluid Condition

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

SAMPLE INFORMATION method limit/base current history1 history2	RDOL ECT 15W40	(Oz)			Oct2023		
Company Comp	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Company Comp	Sample Number		Client Info		PCA0028070		
Machine Age hrs Client Info 0 16871	· ·						
Oil Changed	•	hrs					
Contamped Client Info NoRMAL Contamped Conta	•						
CONTAMINATION method limit/base current history1 history2	-	0			-		
CONTAMINATION	-				_		
WC Method S	· · · ·	ION	method	limit/base		history1	historv2
WEAR METALS						,	· ·
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 19 Chromium ppm ASTM D5185m >20 <1				>5			
Chromium	,		VVC IVIELLIOU		NEG		
Chromium	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	ron	ppm	ASTM D5185m	>100	19		
Silver	Chromium	ppm	ASTM D5185m	>20	<1		
Soliver	Nickel	ppm	ASTM D5185m	>2	0		
Aluminum	Titanium	ppm	ASTM D5185m	>2	0		
Lead	Silver	ppm	ASTM D5185m	>2	0		
Copper	Aluminum	ppm	ASTM D5185m	>25	2		
Tin	_ead	ppm	ASTM D5185m	>40	2		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 85 2 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 59 Manganese ppm ASTM D5185m 0 Manganesium ppm ASTM D5185m 350 928 Calcium ppm ASTM D5185m 1800 1034 Phosphorus ppm ASTM D5185m 1000 883 Zinc ppm ASTM D5185m 3500 3026 CONTAMINANTS method limit/base current history1 history2	Copper	ppm	ASTM D5185m	>330	1		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 85 2 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 59 Manganese ppm ASTM D5185m 350 928 Magnesium ppm ASTM D5185m 1800 1034 Calcium ppm ASTM D5185m 1800 1034 Phosphorus ppm ASTM D5185m 1800 1034 Zinc ppm ASTM D5185m 1000 883 Sulfur ppm ASTM D5185m 3500 3026	Tin	ppm	ASTM D5185m	>15	0		
ADDITIVES	Vanadium		ASTM D5185m		0		
Boron ppm ASTM D5185m 85 2	Cadmium		ASTM D5185m		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 59 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 350 928 Calcium ppm ASTM D5185m 1800 1034 Phosphorus ppm ASTM D5185m 1000 883 Zinc ppm ASTM D5185m 1100 1223 Sulfur ppm ASTM D5185m 3500 3026 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Soot % % *ASTM D7844 >3 0.5	Boron	ppm	ASTM D5185m	85	2		
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 350 928 Calcium ppm ASTM D5185m 1800 1034 Phosphorus ppm ASTM D5185m 1000 883 Zinc ppm ASTM D5185m 1100 1223 Sulfur ppm ASTM D5185m 3500 3026 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3	Barium	ppm	ASTM D5185m		0		
Magnesium ppm ASTM D5185m 350 928 Calcium ppm ASTM D5185m 1800 1034 Phosphorus ppm ASTM D5185m 1000 883 Zinc ppm ASTM D5185m 1100 1223 Sulfur ppm ASTM D5185m 3500 3026 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Sulfation Abs/.1mm *ASTM D7624 >20 6.6 FLUID DEGRADATION method lim	Molybdenum	ppm	ASTM D5185m		59		
Calcium ppm ASTM D5185m 1800 1034 Phosphorus ppm ASTM D5185m 1000 883 Zinc ppm ASTM D5185m 1100 1223 Sulfur ppm ASTM D5185m 3500 3026 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/.1mm *ASTM D7415 >30 19.6 FLUID DEGRADATION method limi	Manganese	ppm	ASTM D5185m		0		
Calcium ppm ASTM D5185m 1800 1034 Phosphorus ppm ASTM D5185m 1000 883 Zinc ppm ASTM D5185m 1100 1223 Sulfur ppm ASTM D5185m 3500 3026 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/.1mm *ASTM D7415 >30 19.6 FLUID DEGRADATION method limi	Magnesium	ppm	ASTM D5185m	350	928		
Phosphorus ppm ASTM D5185m 1 000 883 Zinc ppm ASTM D5185m 1 100 1223 Sulfur ppm ASTM D5185m 3500 3026 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 <		ppm	ASTM D5185m	1800	1034		
Zinc ppm ASTM D5185m 1100 1223 Sulfur ppm ASTM D5185m 3500 3026	Phosphorus		ASTM D5185m	1000	883		
Sulfur ppm ASTM D5185m 3500 3026 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/.1mm *ASTM D7624 >20 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9			ASTM D5185m	1100	1223		
Silicon ppm ASTM D5185m >25 4	Sulfur						
Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2	Silicon	ppm	ASTM D5185m	>25	4		
Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9			ASTM D5185m		0		
Soot %	Potassium		ASTM D5185m	>20			
Nitration Abs/cm *ASTM D7624 >20 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9	INFRA-RED		method	limit/base	current	history1	history2
Nitration Abs/cm *ASTM D7624 >20 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9	Soot %	%	*ASTM D7844	>3	0.5		
Sulfation Abs/.1mm *ASTM D7415 >30 19.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9		Abs/cm					
Oxidation							
	FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9		



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number

Unique Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0028070 : 06002063

: 10735825

Received Diagnosed

: 10 Nov 2023 Diagnostician : Wes Davis

: 08 Nov 2023

Test Package : MOB 1 (Additional Tests: TBN)

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)

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