

OIL ANALYSIS REPORT

Sample Rating Trend

FUEL

Machine Id **P231 25054**

Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0083814		
Sample Date		Client Info		13 Jan 2024		
Machine Age	mths	Client Info		0		
Oil Age	mths	Client Info		6		
Oil Changed		Client Info		N/A		
Sample Status				MARGINAL		
CONTAMINATI	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	33		
Chromium	ppm	ASTM D5185(m)	>5	1		
Nickel	ppm	ASTM D5185(m)	>4	- <1		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	0		
Aluminum	ppm	ASTM D5185(m)	>15	3		
Lead	ppm	ASTM D5185(m)	>25	2		
Copper	ppm	ASTM D5185(m)	>100	5		
Tin	ppm	ASTM D5185(m)	>4	ر <1		
Antimony	ppm	ASTM D5185(m)	24	0		
Vanadium		ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
	ppm	()				
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<1		
Barium	ppm	ASTM D5185(m)	10	0		
Molybdenum	ppm	ASTM D5185(m)		61		
Manganese			100	61		
-	ppm	ASTM D5185(m)	100	0		
Magnesium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	450	-		
Calcium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	450 3000	0 966 1089		
Calcium Phosphorus	ppm	ASTM D5185(m) ASTM D5185(m)	450 3000 1150	0 966 1089 1004		
Calcium Phosphorus Zinc	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	450 3000 1150 1350	0 966 1089 1004 1179		
Calcium Phosphorus	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	450 3000 1150	0 966 1089 1004		
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	450 3000 1150 1350	0 966 1089 1004 1179	 	
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	450 3000 1150 1350	0 966 1089 1004 1179 2587	 	
Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	450 3000 1150 1350 4250	0 966 1089 1004 1179 2587 <1	 	
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN	ppm ppm ppm ppm ppm ppm TS	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	450 3000 1150 1350 4250 limit/base	0 966 1089 1004 1179 2587 <1 current	 history1	 history2
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm TS	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method ASTM D5185(m)	450 3000 1150 1350 4250 Iimit/base >25	0 966 1089 1004 1179 2587 <1 current 7	 history1	 history2
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm TS	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	450 3000 1150 1350 4250 Iimit/base >25 >158	0 966 1089 1004 1179 2587 <1 2587 <1 current 7 5	 history1	 history2
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	450 3000 1150 1350 4250 Iimit/base >25 >158 >20	0 966 1089 1004 1179 2587 <1 <1 current 7 5 1	 history1 	 history2
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	450 3000 1150 1350 4250 imit/base >25 >158 >20 >3.0	0 966 1089 1004 1179 2587 <1 current 7 5 1 1 ▲ 2.1	 history1 	 history2
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185(m) ASTM D5185(m)	450 3000 1150 1350 4250 imit/base >25 >158 >20 >3.0 imit/base >6	0 966 1089 1004 1179 2587 <1 current 7 5 1 2.1 2.1 current 2.2	 history1 history1	 history2 history2
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Solicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm TS ppm ppm %	ASTM D5185(m) ASTM D7593*	450 3000 1150 4250 imit/base >25 >158 >20 >3.0 imit/base	0 966 1089 1004 1179 2587 <1 <1 current 7 5 1 5 1 2.1	 history1 history1 history1	 history2 history2



Abnormal Base Copp 110 90 4 Abnormal

Viscosity @ 40°C

OIL ANALYSIS REPORT

FLUID DEGRAD			limit/base	current	history1	history
Oxidation	ADS/.1MM	ASTM D7414*	>25	29.1		
VISUAL		method	limit/base	current	history1	history
Emulsified Water	scalar	Visual*	>0.2	NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPER	RTIES	method	limit/base	current	history1	history
Visc @ 40°C	cSt	ASTM D7279(m)	115	113		
Visc @ 100°C Viscosity Index (VI)	cSt	ASTM D7279(m) ASTM D2270*	14.4	14.9 136		
GRAPHS	Scale	A31WI D2270	126	130		
Iron (ppm)				Lead (ppm)		
140 T			6	⁰ T		
120			5			
Abnormal			4 톱3			
			2			
20			1	0-		
24-10 54-10				24 ¹ 0		
Jan 13/24			Jan 13/24	Jan 13/24		
Aluminum (ppm)				Chromium (p	pm)	
30 Severe				2 Severe		
20			1	8		
Abnormal			-			
10-				4 Abnormal		
5				2 -		
²⁴				047		
Jan 13/24			Jan 13/24	Jan 13/24		
Copper (ppm)				Silicon (ppm)		
250 Severe			6	Severe		
			4			
Abnormal			Ed 3	0 - Abnormal		
				0		
50				0		
3/24 0			Jan 13/24	0 an 13/24		
Jan 13/24			Jan 1	Jan 1		
Viscosity @ 100°C			7.	Fuel Dilution		
17 Abnormal			6.	Severe		
16-			5.			
Base 14-			च4. जूर २१.३.	0 Abnormal		
13 Abnormal			2.	1		
12			1.	1		
4.4						
Jan 13/24			Jan 13/24	Jan 13/24		

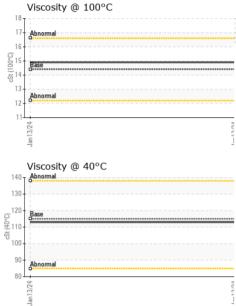
: 06 Mar 2024

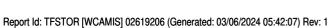
: 06 Mar 2024 - Kevin Marson

Tested

Test Package : MOB 1 (Additional Tests: FUELDILUTION, KV40, PercentFuel, VI)

Diagnosed





CALA

ISO 17025:2017 Accredited Laboratory Lab Number : 02619206

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.

Unique Number : 5736316

Contact/Location: Antonio Rodrigues - TFSTOR Page 2 of 2

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