

Machine Id **2227014** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
December of the next convice interval to recritery. Discourse and if the	Sample Number		Client Info		PCA0123491	PCA0106415	PCA0068351
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the	Sample Date		Client Info		12 Apr 2024	04 Jan 2024	05 Oct 2023
brand, type, and viscosity of the oil on your next sample.	Machine Age	mls	Client Info		224357	30000	0
	Oil Age	mls	Client Info		30000	30000	30000
	Filter Age	mls	Client Info		30000	30000	30000
	Oil Changed		Client Info		Changed	Changed	N/A
	Filter Changed		Client Info		Changed	Changed	N/A
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	35	33	27
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	2	<1	<1
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>3	<1	0	<1
	Aluminum	ppm	ASTM D5185m	>20	2	2	0
	Lead	ppm	ASTM D5185m	>40	2	1	1
	Copper	ppm	ASTM D5185m	>330	10	15	12
	Tin	ppm	ASTM D5185m	>15	1	1	1
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		7	8	8
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	7	5	7
	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.8	0.9	0.8
	Nitration	Abs/cm	*ASTM D7624	>20	10.4	10.1	9.5
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	22.4	21.3
	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
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	2	3	<1
The DN result indicates that there is suitable situation remaining in the	Boron	ppm	ASTM D5185m	250	<1	2	<1
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	10	0	0	2
	Molybdenum	ppm	ASTM D5185m	100	67	66	68
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	870	973	905
	Calcium	ppm	ASTM D5185m	3000	1158	1115	1096
	Phosphorus	ppm	ASTM D5185m	1150	969	1026	925
	Zinc	ppm	ASTM D5185m		1239	1264	1202
	Culture		ACTM DE10Em	1050	0100	0010	0100

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m 4250

ASTM D445 14.4

Abs/.1mm *ASTM D7414 >25

Base Number (BN) mg KOH/g ASTM D2896 8.5

2810 3108

16.8

5.6

11.7

18.6

5.3

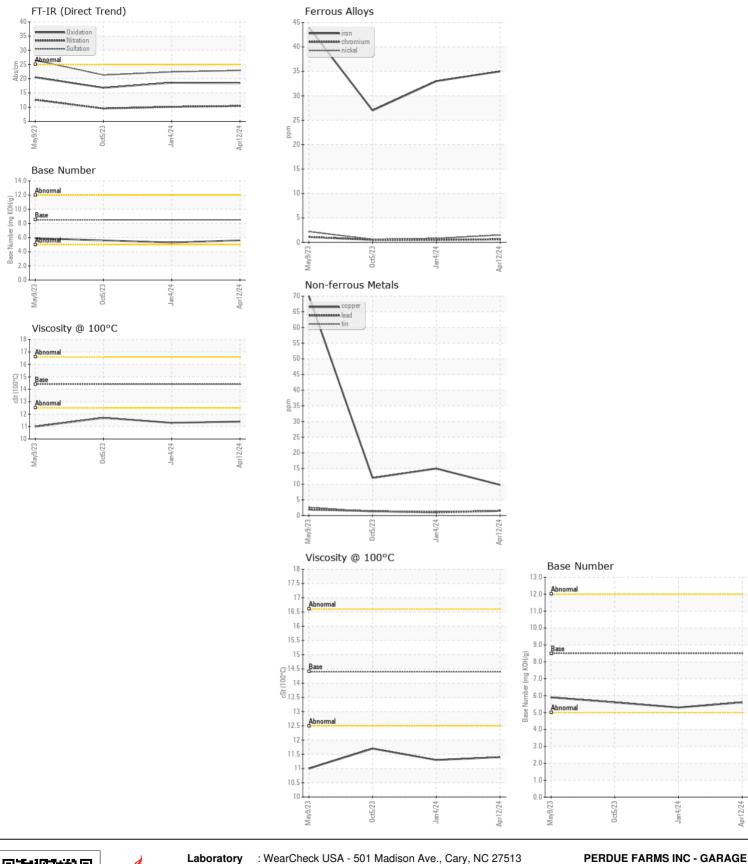
11.3

3166

18.4

5.6

11.4





: 14 May 2024 Lab Number : 06178227 Diagnosed Unique Number : 11029553 : 14 May 2024 - Wes Davis Test Package : FLEET Contact: Service Manager Certificate L2367 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.

Received

Tested

: 13 May 2024

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

: PCA0123491

189 PERDUE WAY

CANDOR, NC

US 27229

Sample No.

Contact/Location: Service Manager - PERCANNC Page 2 of 2