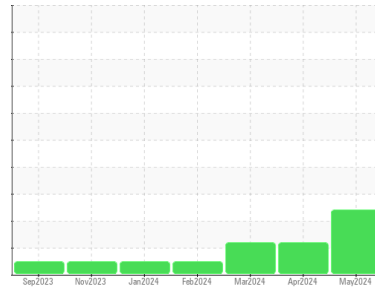


OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
2124
 Component
Natural Gas Engine
 Fluid
LO-ASH ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0111238	PCA0111232	PCA0111215
Sample Date	Client Info			16 May 2024	16 Apr 2024	07 Mar 2024
Machine Age	hrs Client Info			100314	99662	98650
Oil Age	hrs Client Info			7152	6500	5488
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	5	8	5
Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	2	2
Lead	ppm	ASTM D5185m	>30	6	6	4
Copper	ppm	ASTM D5185m	>35	2	2	2
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	37	7	6	8
Barium	ppm	ASTM D5185m	12	0	0	0
Molybdenum	ppm	ASTM D5185m	200	9	9	10
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	5	36	31	34
Calcium	ppm	ASTM D5185m	1600	1627	1538	1454
Phosphorus	ppm	ASTM D5185m	300	347	358	314
Zinc	ppm	ASTM D5185m	400	476	462	440
Sulfur	ppm	ASTM D5185m	2600	3012	2862	2640

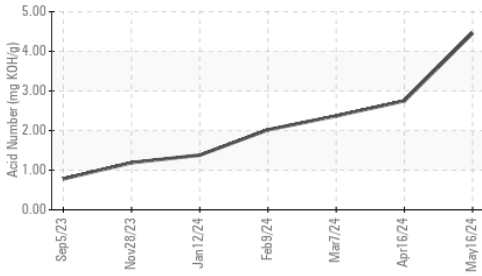
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	1	3	2
Sodium	ppm	ASTM D5185m		2	0	<1
Potassium	ppm	ASTM D5185m	>20	0	2	1
Fuel	%	ASTM D3524	>4.0	0.2	0.1	0.3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	7.9	7.4	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	21.5	20.9

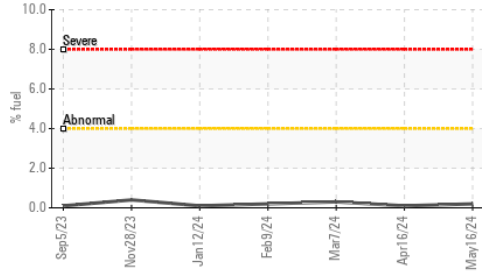
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	19.5	18.6
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ 4.46	▲ 2.75	▲ 2.37
Base Number (BN)	mg KOH/g	ASTM D2896	3.0	▲ 2.34	2.40	2.17

OIL ANALYSIS REPORT

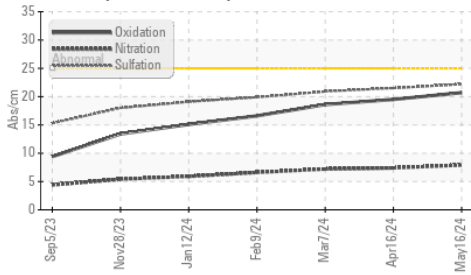
▲ Acid Number



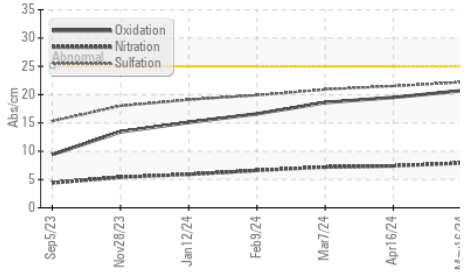
Fuel Dilution



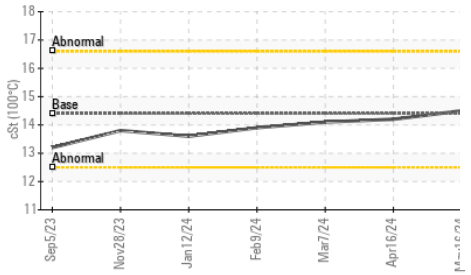
FT-IR (Direct Trend)



FT-IR (Direct Trend)



Viscosity @ 100°C

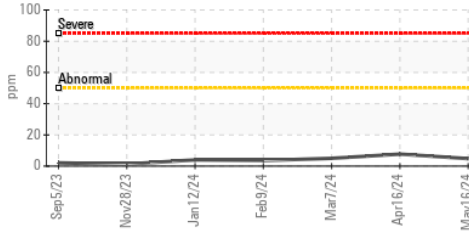


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

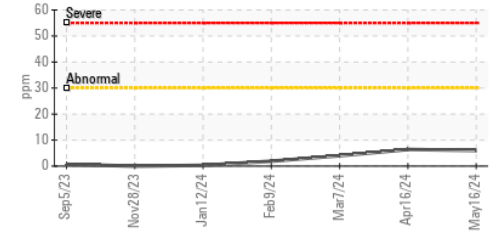
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	14.5	14.2

GRAPHS

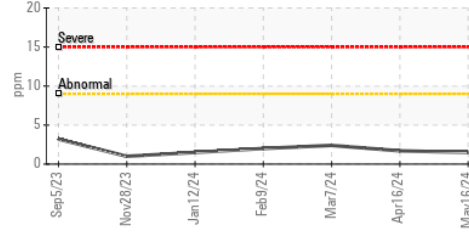
Iron (ppm)



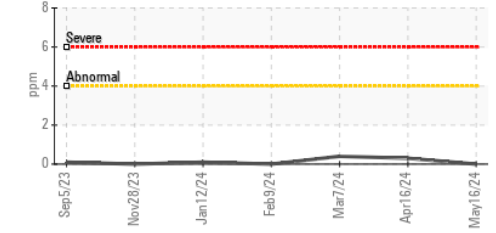
Lead (ppm)



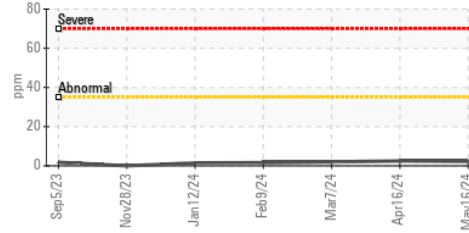
Aluminum (ppm)



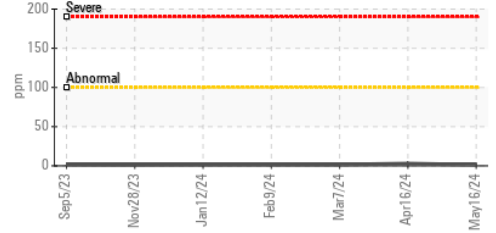
Chromium (ppm)



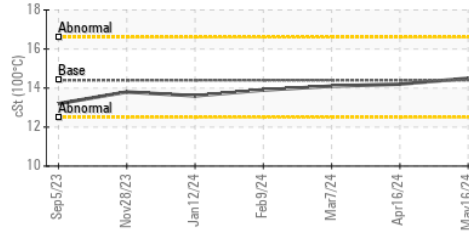
Copper (ppm)



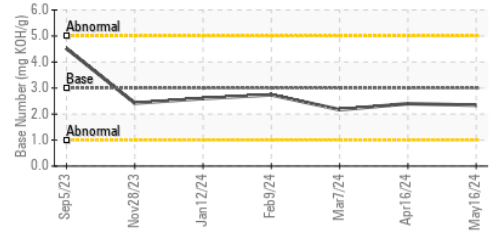
Silicon (ppm)



Viscosity @ 100°C



▲ Base Number



Certificate L2367

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

Sample No. : PCA0111238

Lab Number : 06195624

Unique Number : 11057747

Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

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)

Received : 30 May 2024

Tested : 04 Jun 2024

Diagnosed : 04 Jun 2024 - Jonathan Hester

USA COMPRESSION

375 S MAIN STREET

MANSFIELD, PA

US 16933

Contact: JASON KUZNESKI

jkuzneski@usacompression.com

T:

F: