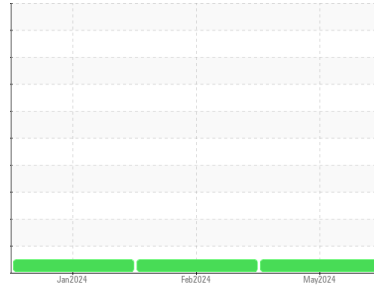




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
OSHKOSH 4409

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

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
Sample Number	Client Info		WC0917156	WC0909298	WC0893877
Sample Date	Client Info		29 May 2024	29 Feb 2024	29 Jan 2024
Machine Age	mls	Client Info	30247	26862	25456
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	3	2	2
Chromium	ppm	ASTM D5185m >20	0	0	<1
Nickel	ppm	ASTM D5185m >4	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	<1	<1	<1
Lead	ppm	ASTM D5185m >40	0	0	0
Copper	ppm	ASTM D5185m >330	0	0	0
Tin	ppm	ASTM D5185m >15	0	<1	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	0	1	2
Barium	ppm	ASTM D5185m 10	0	0	0
Molybdenum	ppm	ASTM D5185m 100	52	54	58
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 450	885	869	937
Calcium	ppm	ASTM D5185m 3000	1025	1036	1033
Phosphorus	ppm	ASTM D5185m 1150	1001	939	1062
Zinc	ppm	ASTM D5185m 1350	1152	1124	1234
Sulfur	ppm	ASTM D5185m 4250	3481	3419	2997

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	2	2	2
Sodium	ppm	ASTM D5185m >158	<1	2	2
Potassium	ppm	ASTM D5185m >20	0	0	0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	0.1	0.2
Nitration	Abs/cm	*ASTM D7624 >20	6.3	5.1	6.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.9	17.3	17.9

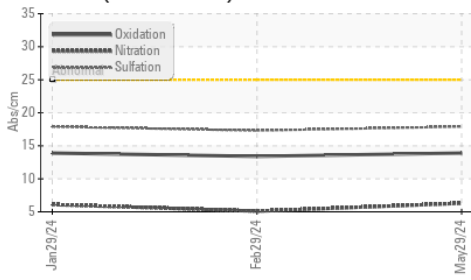
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.9	13.4	13.9
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	8.6	9.2	8.8

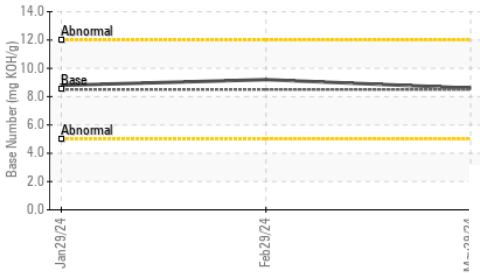


OIL ANALYSIS REPORT

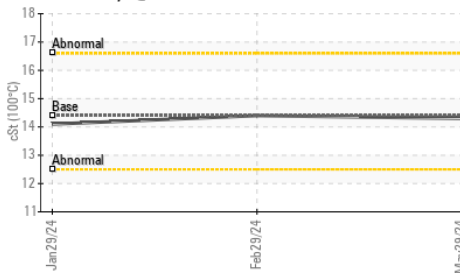
FT-IR (Direct Trend)



Base Number



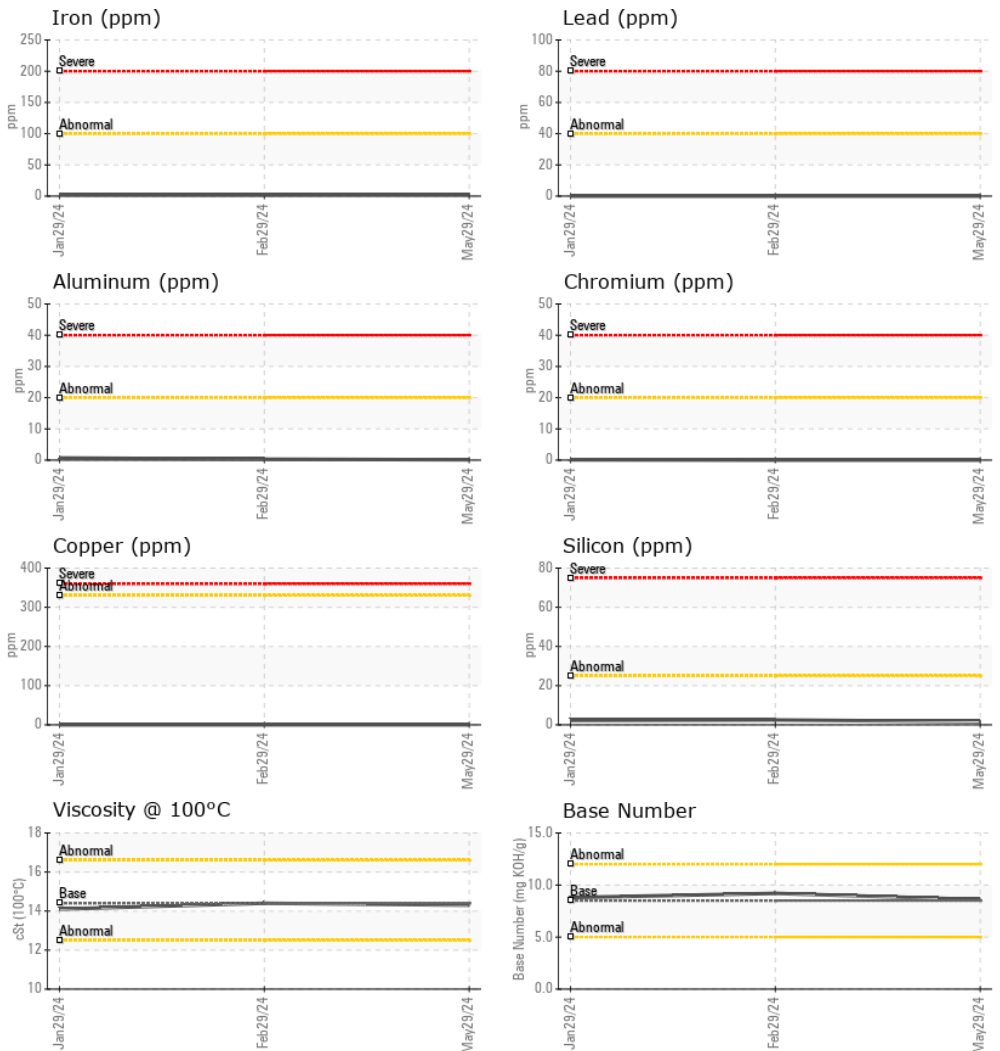
Viscosity @ 100°C



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	14.3	14.4	14.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0917156
Lab Number : 06214278
Unique Number : 11087142
Test Package : MOB 1 (Additional Tests: TBN)

Received : 19 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 20 Jun 2024 - Wes Davis

CONCRETE SERVICE CO - FAY BLOCK
 161 BUILDERS BLVD
 FAYETTEVILLE, NC
 US 28301

Contact: BRYAN VANNIMAN
 bryanvanniman@fayblock.com
 T: (800)326-9198

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)