



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
SAKAI 54271
 Component
Diesel Engine
 Fluid
CHEVRON 15W40 (12 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0924427	WC0786216	WC0595691
Sample Date		Client Info		24 May 2024	08 Mar 2023	29 Jul 2021
Machine Age	hrs	Client Info		1769	1528	1263
Oil Age	hrs	Client Info		250	1500	250
Filter Age	hrs	Client Info		250	1500	250
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	30	41	42
Chromium	ppm	ASTM D5185m	>20	<1	1	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	4	6
Lead	ppm	ASTM D5185m	>40	<1	0	3
Copper	ppm	ASTM D5185m	>330	1	4	2
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

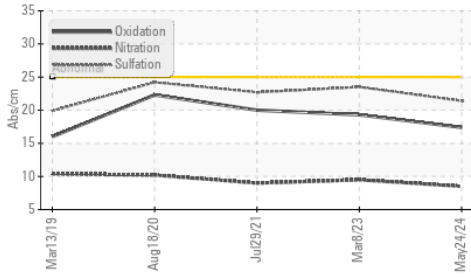
Silicon	ppm	ASTM D5185m	>25	8	13	22
Potassium	ppm	ASTM D5185m	>20	2	0	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.5	9.5	9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	23.5	22.7
Silt	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

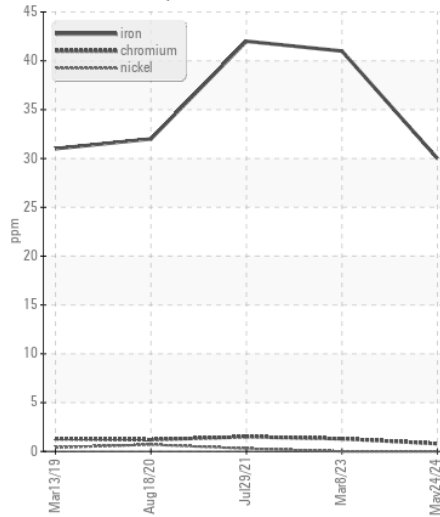
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>50	4	3	4
Boron	ppm	ASTM D5185m		267	243	311
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		83	93	129
Manganese	ppm	ASTM D5185m		<1	2	<1
Magnesium	ppm	ASTM D5185m		405	559	636
Calcium	ppm	ASTM D5185m		1481	1503	1551
Phosphorus	ppm	ASTM D5185m		961	949	794
Zinc	ppm	ASTM D5185m		1172	1201	884
Sulfur	ppm	ASTM D5185m		3289	3013	2378
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	19.3	20
Base Number (BN)	mg KOH/g	ASTM D2896		6.7	7.3	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.6	13.3	13.6

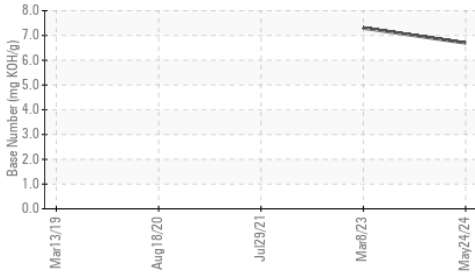
FT-IR (Direct Trend)



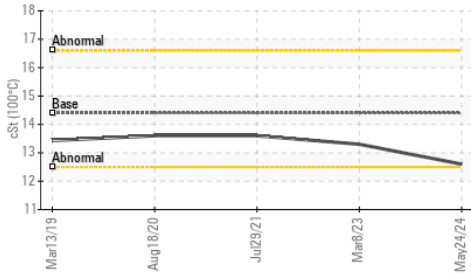
Ferrous Alloys



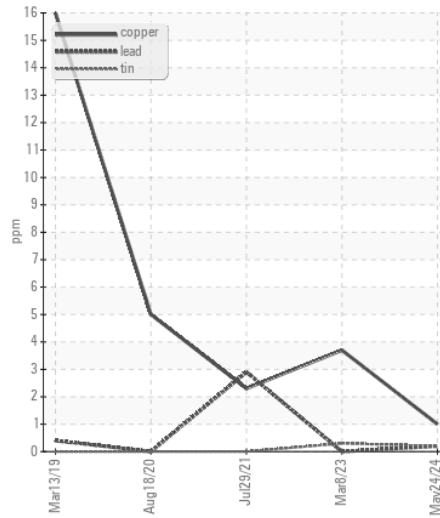
Base Number



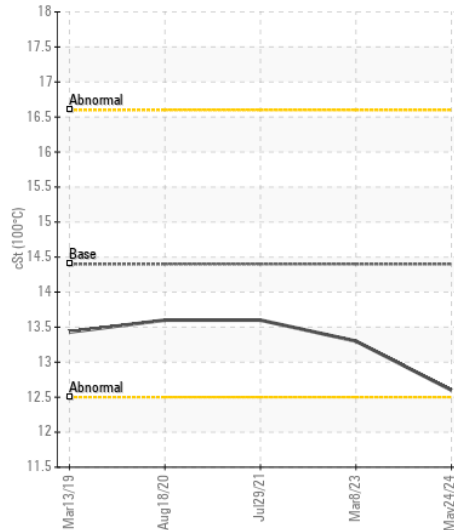
Viscosity @ 100°C



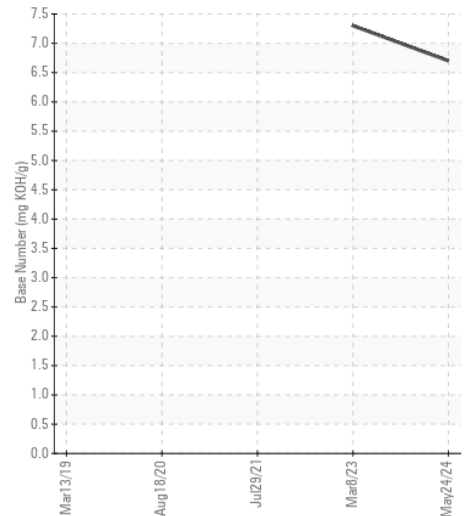
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0924427 **Received** : 30 May 2024
Lab Number : 06196151 **Tested** : 31 May 2024
Unique Number : 11058274 **Diagnosed** : 31 May 2024 - Wes Davis
Test Package : CONST (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)

SULLIVAN EASTERN INC
 2860 C SLATER RD
 MORRISVILLE, NC
 US 27560

Contact: SCOTT SULLIVAN
 ssullivan@sullivaneastern.com

T: (919)484-8993

F: (919)484-2136