



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HINO 13530
 Component
Diesel Engine
 Fluid
CHEVRON 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0913528	WC0846310	WC0905209
Sample Date		Client Info		09 Jun 2024	22 Apr 2024	24 Feb 2024
Machine Age	hrs	Client Info		8220	8018	7800
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	14	16
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	2	1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	5	6	5
Lead	ppm	ASTM D5185m	>40	<1	5	2
Copper	ppm	ASTM D5185m	>330	0	1	<1
Tin	ppm	ASTM D5185m	>15	<1	1	<1
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.

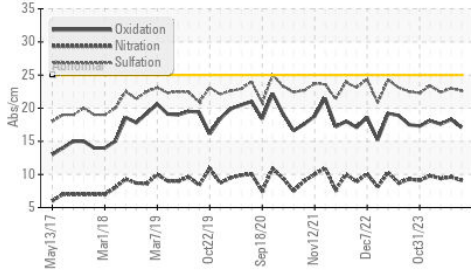
Silicon	ppm	ASTM D5185m	>25	6	9	9
Potassium	ppm	ASTM D5185m	>20	3	4	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1	1.2	1.1
Nitration	Abs/cm	*ASTM D7624	>20	9.1	9.6	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	23.0	22.4
Silt	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

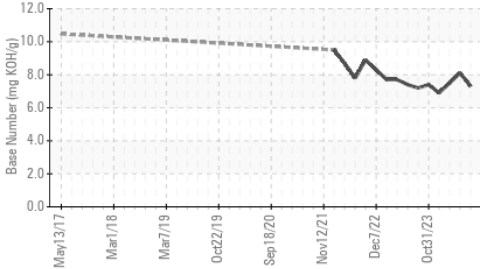
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>50	3	<1	2
Boron	ppm	ASTM D5185m		234	295	283
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		89	96	101
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		420	434	406
Calcium	ppm	ASTM D5185m		1456	1577	1400
Phosphorus	ppm	ASTM D5185m		1079	1243	1125
Zinc	ppm	ASTM D5185m		1299	1365	1250
Sulfur	ppm	ASTM D5185m		3763	3590	3324
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	18.3	17.6
Base Number (BN)	mg KOH/g	ASTM D2896		7.3	8.1	7.5
Visc @ 100°C	cSt	ASTM D445	14.4	12.8	13.0	12.6

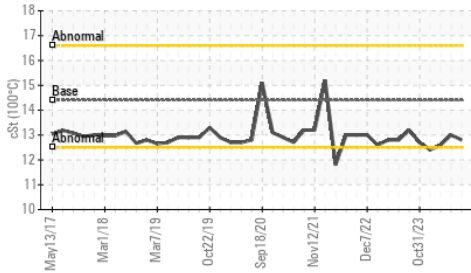
FT-IR (Direct Trend)



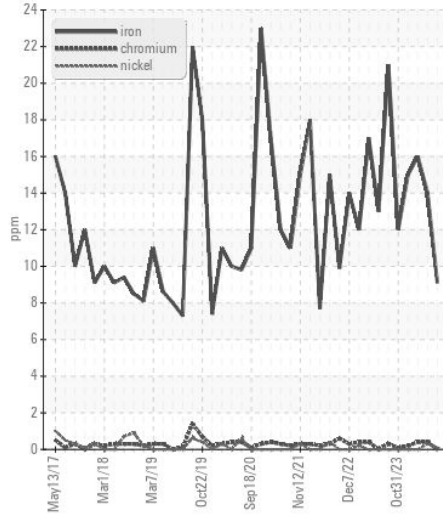
Base Number



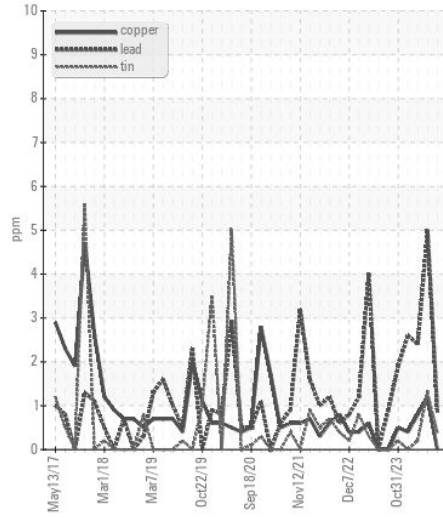
Viscosity @ 100°C



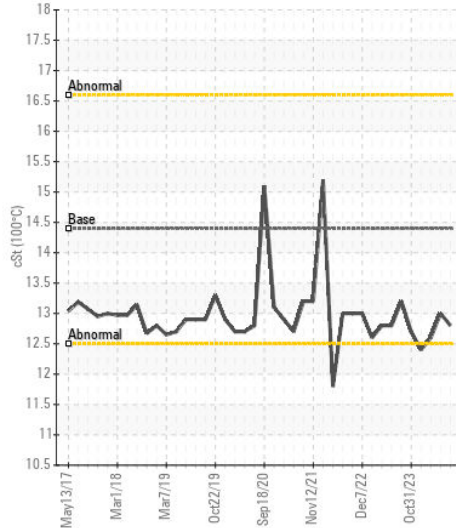
Ferrous Alloys



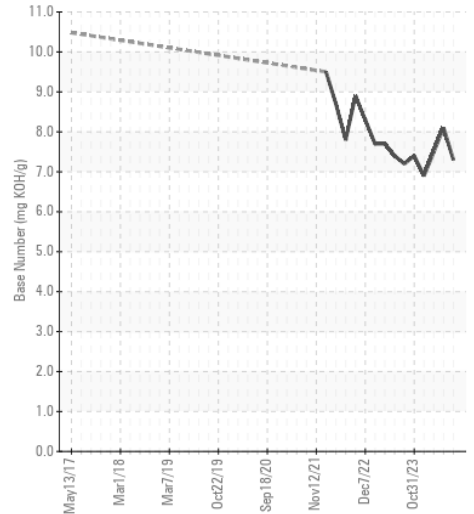
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0913528 **Received** : 19 Jun 2024
Lab Number : 06214482 **Tested** : 20 Jun 2024
Unique Number : 11087346 **Diagnosed** : 20 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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

Contact: SCOTT SULLIVAN
 ssullivan@sullivan-eastern.com

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)

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