



McCLUNG-LOGAN
EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
[W/O 10803]
Machine Id
VOLVO A30G 742461
Component
Diesel Engine
Fluid
CHEVRON 15W40 (10)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001318	VCP344965	VCP264555
Sample Date		Client Info		16 May 2024	16 Feb 2022	13 Dec 2019
Machine Age	hrs	Client Info		2923	1802	1255
Oil Age	hrs	Client Info		1121	0	0
Filter Age	hrs	Client Info		1121	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	8	17
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	13	12
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>25	3	2	2
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	5	10	56
Tin	ppm	ASTM D5185m	>15	2	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

There is no indication of any contamination in the oil.

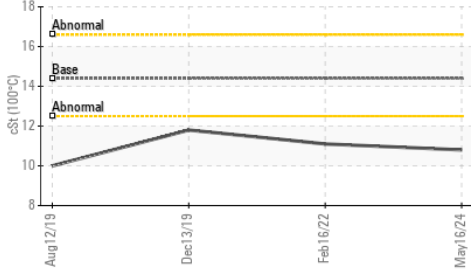
Silicon	ppm	ASTM D5185m	>25	5	6	9
Potassium	ppm	ASTM D5185m	>20	2	2	2
Fuel	%	ASTM D3524	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.9	10.1	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	20.6	20.6
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

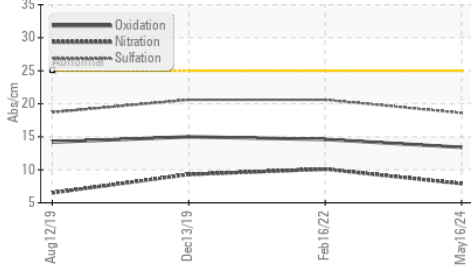
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>50	3	2	3
Boron	ppm	ASTM D5185m		80	69	28
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		51	23	24
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		333	697	611
Calcium	ppm	ASTM D5185m		1670	1507	1479
Phosphorus	ppm	ASTM D5185m		779	675	669
Zinc	ppm	ASTM D5185m		1063	789	759
Sulfur	ppm	ASTM D5185m		3111	2830	564
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.4	14.6	15
Base Number (BN)	mg KOH/g	ASTM D2896		7.0	7.4	---
Visc @ 100°C	cSt	ASTM D445	14.4	10.8	11.1	11.8

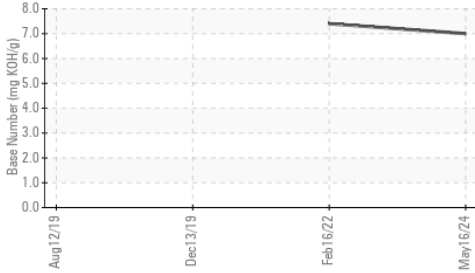
● Viscosity @ 100°C



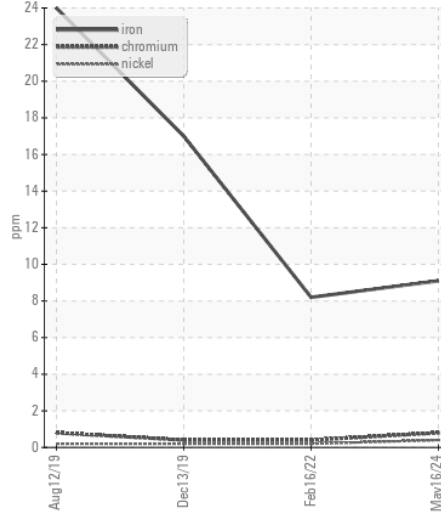
FT-IR (Direct Trend)



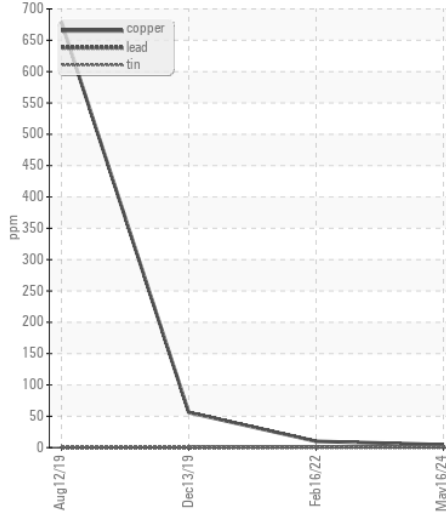
Base Number



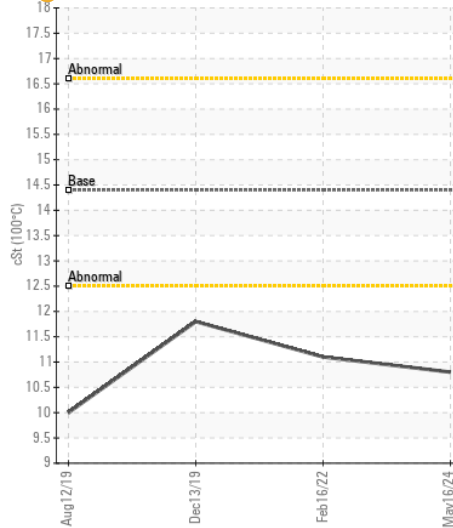
Ferrous Alloys



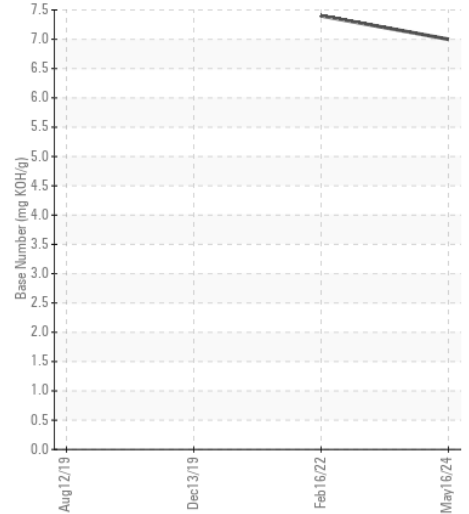
Non-ferrous Metals



● Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001318 **Received** : 24 May 2024
Lab Number : 06190333 **Tested** : 29 May 2024
Unique Number : 11047085 **Diagnosed** : 29 May 2024 - Don Baldrige
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, 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)

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