CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
T-28
Component
Diesel Engine
Fluid
CHEVRON DELO 400 SDE SAE 15W40 (--- GAL)

RECOMMENDATION

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

WEAR

The lead level is abnormal. All other component wear rates are normal.

CONTAMINATION

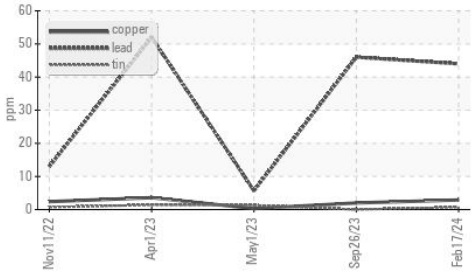
There is no indication of any contamination in the oil.

FLUID CONDITION

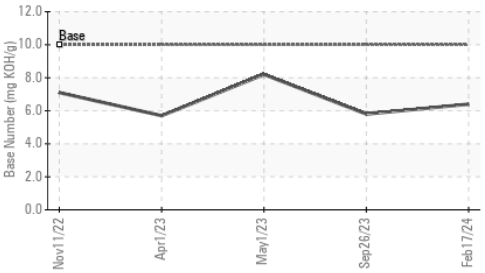
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0899824**	WC0819325	WC0809747
Sample Date		Client Info		**17 Feb 2024**	26 Sep 2023	01 May 2023
Machine Age	mls	Client Info		**195636**	179881	162748
Oil Age	mls	Client Info		**195636**	17133	162748
Filter Age	mls	Client Info		**195636**	17133	3235
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	**34**	29	9
Chromium	ppm	ASTM D5185m	>20	**2**	1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	0	<1
Titanium	ppm	ASTM D5185m		**99**	91	79
Silver	ppm	ASTM D5185m	>3	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>20	**4**	4	2
Lead	ppm	ASTM D5185m	>40	▲ **44**	▲ 46	6
Copper	ppm	ASTM D5185m	>330	**3**	2	<1
Tin	ppm	ASTM D5185m	>15	**<1**	0	1
Vanadium	ppm	ASTM D5185m		**<1**	0	1
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**8**	7	6
Potassium	ppm	ASTM D5185m	>20	**6**	11	6
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	**0.4**	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	**13.4**	12.9	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	**33.2**	31.7	23.1
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
Sodium	ppm	ASTM D5185m		**5**	8	5
Boron	ppm	ASTM D5185m		**75**	48	96
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**9**	● 15	4
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m		**613**	639	445
Calcium	ppm	ASTM D5185m		**2247**	1960	1907
Phosphorus	ppm	ASTM D5185m	760	**1313**	1175	1080
Zinc	ppm	ASTM D5185m	800	**1561**	1498	1330
Sulfur	ppm	ASTM D5185m	3000	**4230**	3788	4901
Oxidation	Abs/.1mm	*ASTM D7414	>25	**31.6**	28.8	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	10	**6.4**	5.8	8.2
Visc @ 100°C	cSt	ASTM D445	14.6	**16.9**	16.6	14.9

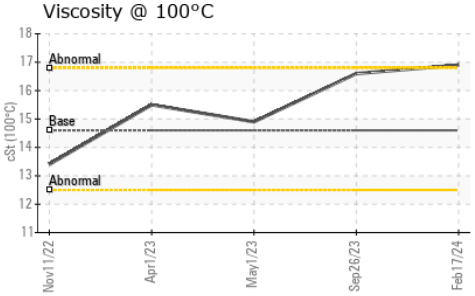
Non-ferrous Metals



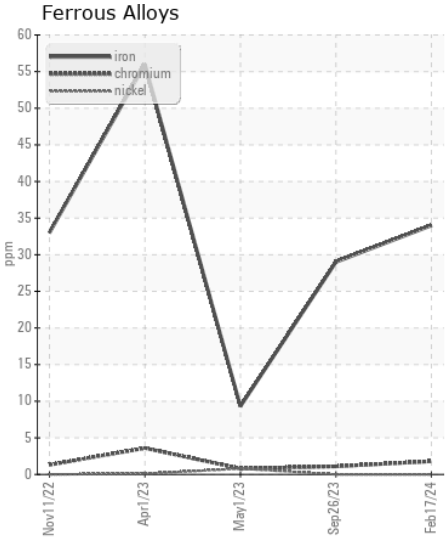
Base Number



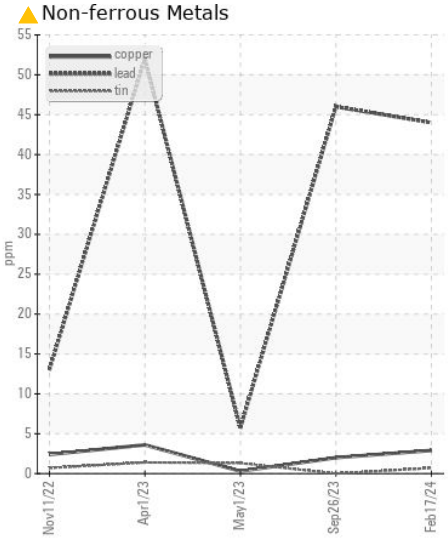
Viscosity @ 100°C



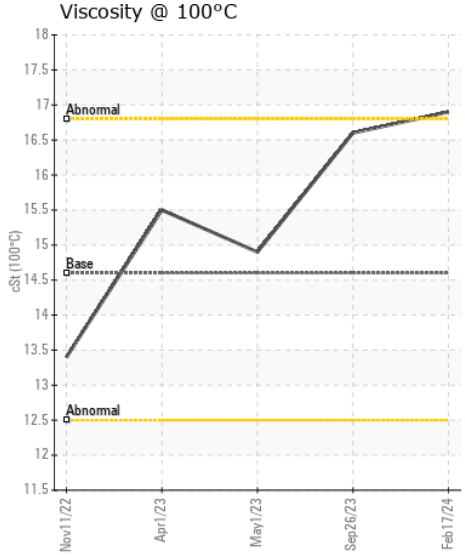
Ferrous Alloys



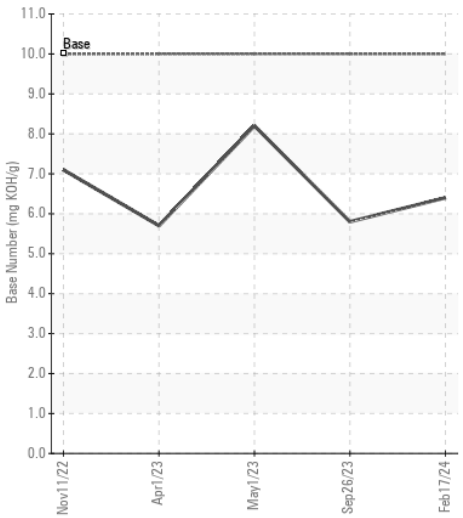
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0899824 **Received** : 27 Feb 2024
Lab Number : 06101300 **Tested** : 28 Feb 2024
Unique Number : 10899530 **Diagnosed** : 28 Feb 2024 - Jonathan Hester
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)

FRANKLIN IRON & METAL CORP
1939 EAST 1ST ST
DAYTON, OH
US 45403
Contact: BILL PITTL JR
parts@frankliniron.com
T: (937)253-8184
F: