



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area

OKLAHOMA/102/TR - TANKS

Machine Id

05.78 TANKS [OKLAHOMA^102^TR - TANKS]

Component

Diesel Engine

Fluid

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0821740	WC0873920	WC0857251
Sample Date		Client Info		16 Feb 2024	03 Jan 2024	27 Oct 2023
Machine Age	hrs	Client Info		16200	16000	15600
Oil Age	hrs	Client Info		200	200	200
Filter Age	hrs	Client Info		200	200	200
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	5	3	5
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	<1	0	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	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.

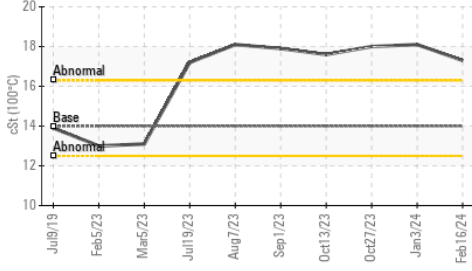
Silicon	ppm	ASTM D5185m	>25	4	4	4
Potassium	ppm	ASTM D5185m	>20	2	2	3
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.5	7.0	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	20.6	20.4
Silt	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

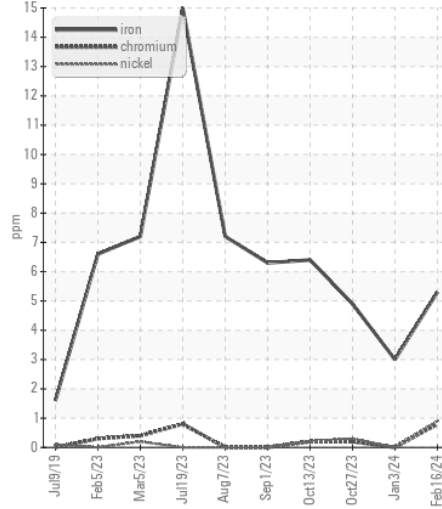
The oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		23	20	13
Boron	ppm	ASTM D5185m	0	22	24	30
Barium	ppm	ASTM D5185m	0	1	0	5
Molybdenum	ppm	ASTM D5185m	0	33	33	27
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	0	340	407	397
Calcium	ppm	ASTM D5185m		1128	1255	1206
Phosphorus	ppm	ASTM D5185m		523	628	619
Zinc	ppm	ASTM D5185m		653	749	670
Sulfur	ppm	ASTM D5185m		1953	2075	2564
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.8	18.4	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	7.4	8.2	7.9
Visc @ 100°C	cSt	ASTM D445	14	17.3	18.1	18.0

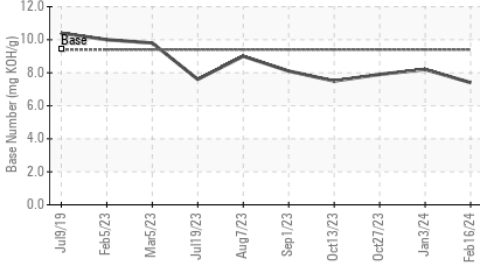
● Viscosity @ 100°C



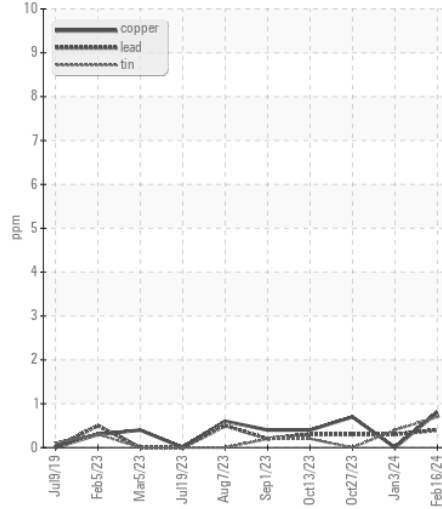
Ferrous Alloys



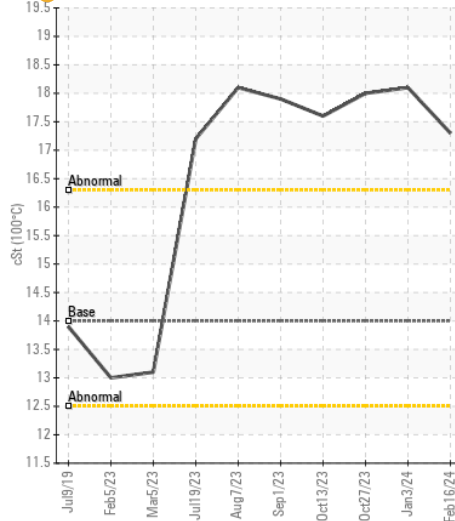
Base Number



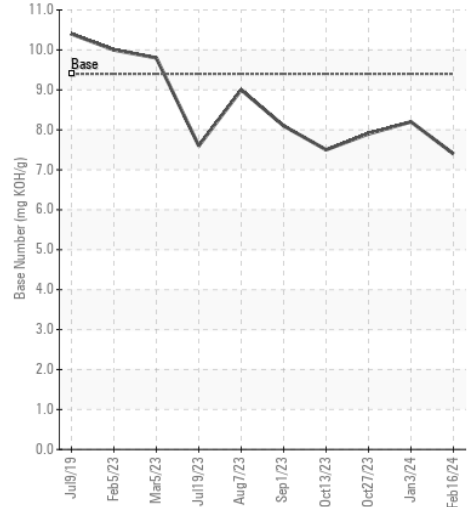
Non-ferrous Metals



● Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0821740 Received : 28 Feb 2024
 Lab Number : 06102723 Tested : 29 Feb 2024
 Unique Number : 10900953 Diagnosed : 29 Feb 2024 - Don Baldrige
 Test Package : CONST (Additional Tests: TBN)

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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)