CONST

James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1009
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

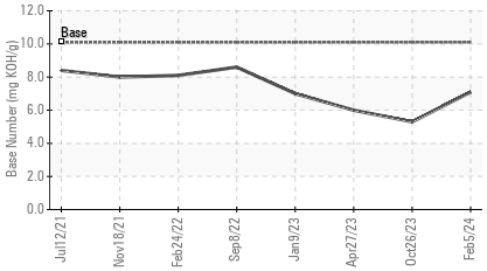
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**JR0195166**	JR0184562	JR0159820
Sample Date		Client Info		**05 Feb 2024**	26 Oct 2023	27 Apr 2023
Machine Age	hrs	Client Info		**10757**	7493	6828
Oil Age	hrs	Client Info		**500**	1000	500
Filter Age	hrs	Client Info		**500**	1000	500
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	MARGINAL
Iron	ppm	ASTM D5185m	>100	**6**	11	6
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**<1**	1	1
Lead	ppm	ASTM D5185m	>40	**0**	0	0
Copper	ppm	ASTM D5185m	>330	**1**	2	<1
Tin	ppm	ASTM D5185m	>15	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**4**	5	3
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	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	**0.1**	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**6.3**	7.8	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	**16.4**	19.6	15.4
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
Sodium	ppm	ASTM D5185m		**<1**	3	1
Boron	ppm	ASTM D5185m	316	**4**	6	9
Barium	ppm	ASTM D5185m	0.0	**0**	3	0
Molybdenum	ppm	ASTM D5185m	1.2	**2**	2	5
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	24	**44**	99	50
Calcium	ppm	ASTM D5185m	2292	**2079**	1960	2218
Phosphorus	ppm	ASTM D5185m	1064	**916**	885	873
Zinc	ppm	ASTM D5185m	1160	**1058**	955	1058
Sulfur	ppm	ASTM D5185m	4996	**3789**	3118	4135
Oxidation	Abs/.1mm	*ASTM D7414	>25	**9.6**	12.2	9.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	**7.1**	5.3	6.0
Visc @ 100°C	cSt	ASTM D445	15.7	**13.0**	12.8	▲ 12.4

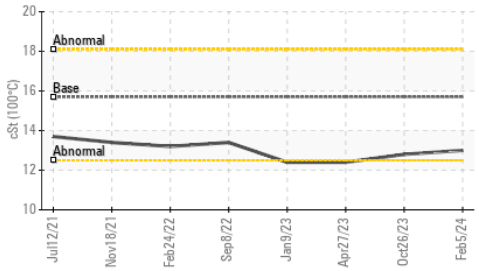
Report Id: PATSTE [WUSCAR] 06089414 (Generated: 02/15/2024 16:45:31) Rev: 1

Submitted By: BRANDON STEVENS

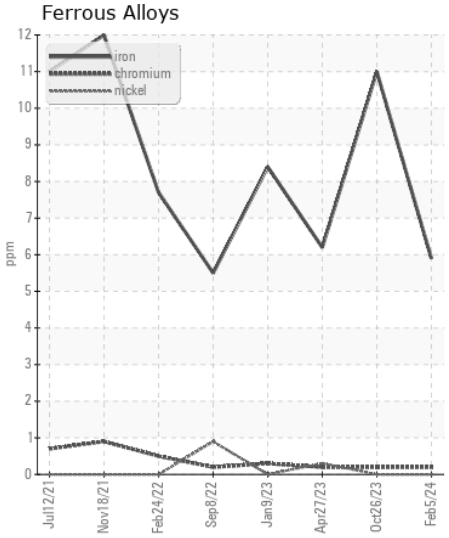
Base Number



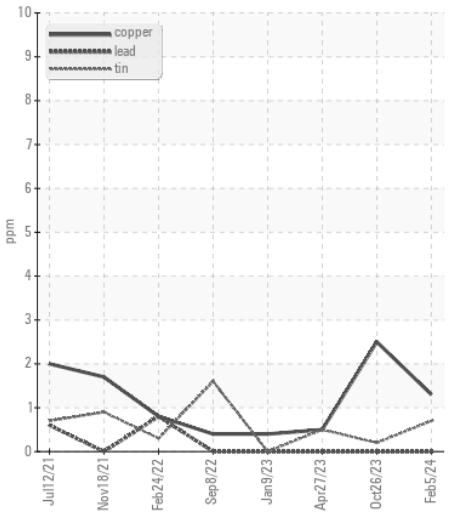
Viscosity @ 100°C



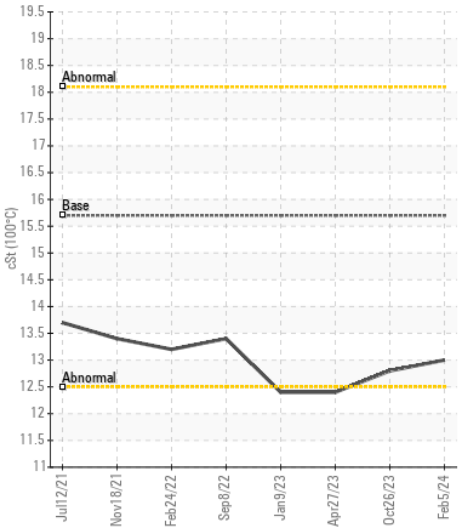
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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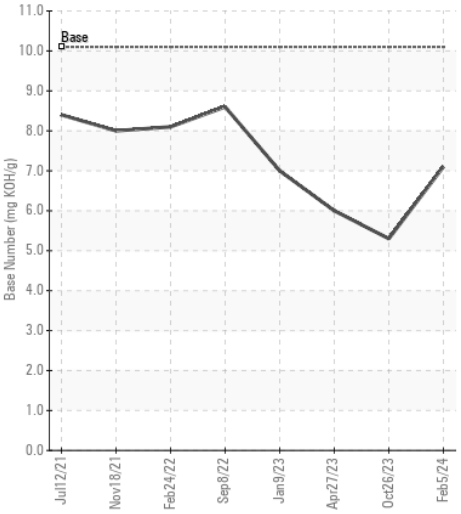

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0195166 **Received** : 14 Feb 2024
Lab Number : 06089414 **Tested** : 15 Feb 2024
Unique Number : 10876859 **Diagnosed** : 15 Feb 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)

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