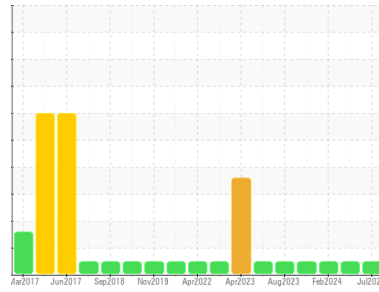




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
CONSTRUCTORS, INC
 Machine Id
40639
 Component
Gasoline Engine
 Fluid
MOBIL SUPER 5W30 (--- GAL)

DIAGNOSIS

- 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		SBP0007140	SBP0005835	SBP0006375
Sample Date	Client Info		11 Jul 2024	29 Apr 2024	02 Feb 2024
Machine Age	hrs	Client Info	8994	8622	8292
Oil Age	hrs	Client Info	372	330	310
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>150	34	31	29
Chromium	ppm	ASTM D5185m	>20	2	2	2
Nickel	ppm	ASTM D5185m	>5	0	2	1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	5	4	4
Lead	ppm	ASTM D5185m	>50	0	0	<1
Copper	ppm	ASTM D5185m	>155	6	8	10
Tin	ppm	ASTM D5185m	>10	0	2	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	1	<1

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		26	55	34
Barium	ppm	ASTM D5185m		0	0	13
Molybdenum	ppm	ASTM D5185m		70	76	73
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		551	567	477
Calcium	ppm	ASTM D5185m		1361	1415	1173
Phosphorus	ppm	ASTM D5185m		723	719	665
Zinc	ppm	ASTM D5185m		828	889	733
Sulfur	ppm	ASTM D5185m		3254	3484	2983

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	17	10	12
Sodium	ppm	ASTM D5185m	>400	3	2	0
Potassium	ppm	ASTM D5185m	>20	4	2	2

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	10.8	10.5	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.4	23.0	24.1

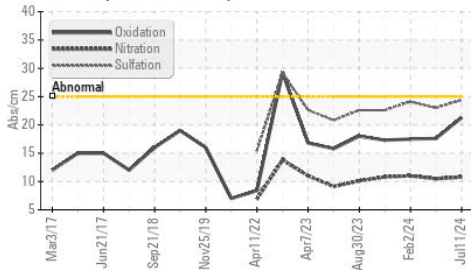
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.3	17.6	17.5
Base Number (BN)	mg KOH/g	ASTM D2896		3.0	3.5	3.2

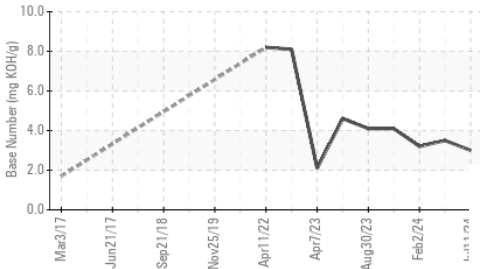


OIL ANALYSIS REPORT

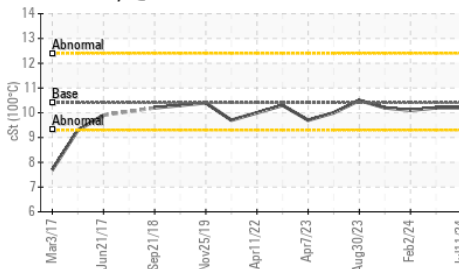
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

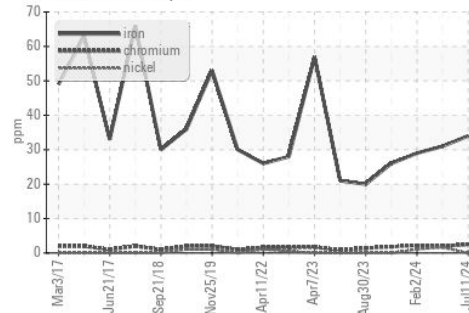


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

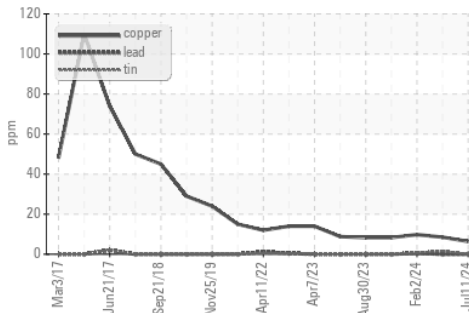
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.4	10.2	10.1

GRAPHS

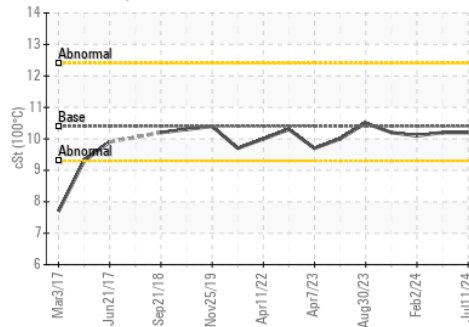
Ferrous Alloys



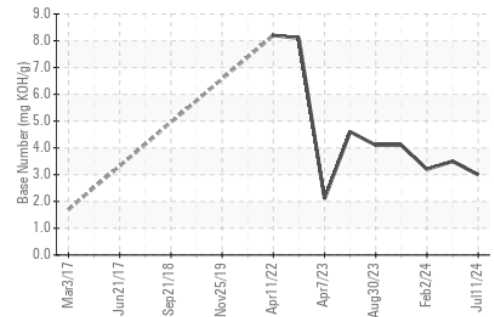
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0007140
Lab Number : 06237428
Unique Number : 11126262
Test Package : FLEET
Received : 15 Jul 2024
Tested : 16 Jul 2024
Diagnosed : 16 Jul 2024 - Wes Davis

Constructors Inc. - 603659
 6500 N 70TH ST
 LINCOLN, NE
 US 68507
 Contact: Loren Michael
 LorenM@constructorslincoln.com
 T: (402)434-2157
 F:

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)