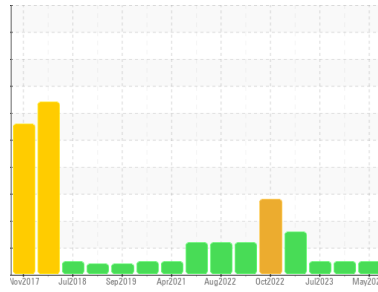




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
CONSTRUCTORS, INC
 Machine Id
040693
 Component
Gasoline Engine
 Fluid
MOBIL CLEAN 5W20 (--- 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		SBP0007155	SBP0004936	SBP0004779
Sample Date	Client Info		09 May 2024	19 Oct 2023	19 Jul 2023
Machine Age	hrs	Client Info	6683	6253	5843
Oil Age	hrs	Client Info	430	410	461
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	16	9	11
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	5	3	4
Lead	ppm	ASTM D5185m	>50	<1	0	0
Copper	ppm	ASTM D5185m	>155	2	1	2
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		44	33	40
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		77	72	68
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		525	536	515
Calcium	ppm	ASTM D5185m		1320	1263	1359
Phosphorus	ppm	ASTM D5185m		684	702	686
Zinc	ppm	ASTM D5185m		849	856	834
Sulfur	ppm	ASTM D5185m		2904	2630	2997

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	19	20	23
Sodium	ppm	ASTM D5185m	>400	2	3	2
Potassium	ppm	ASTM D5185m	>20	3	3	<1

INFRA-RED

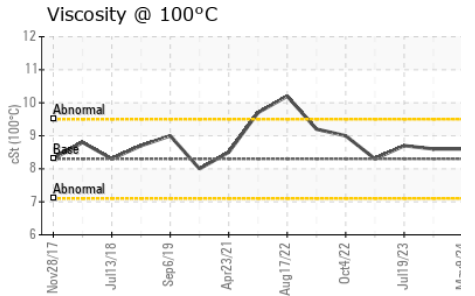
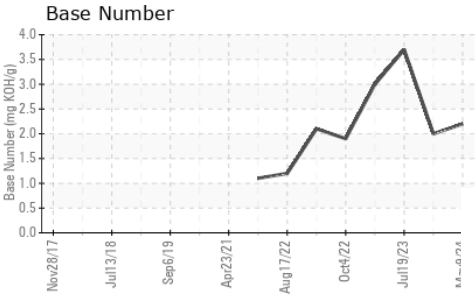
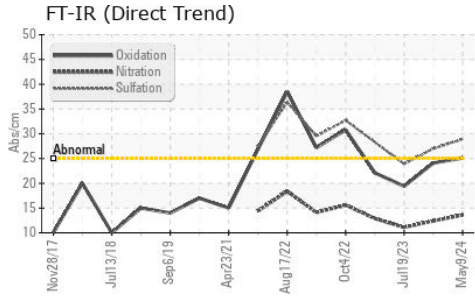
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	13.6	12.4	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.9	27.0	23.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.1	24.1	19.4
Base Number (BN)	mg KOH/g	ASTM D2896		2.2	2.0	3.7



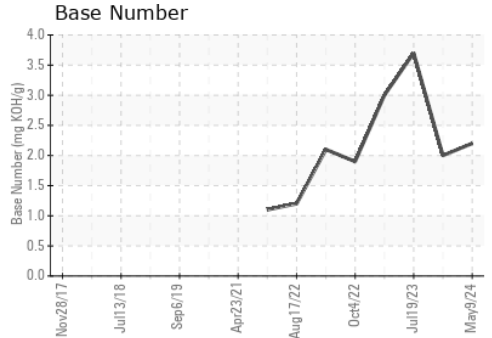
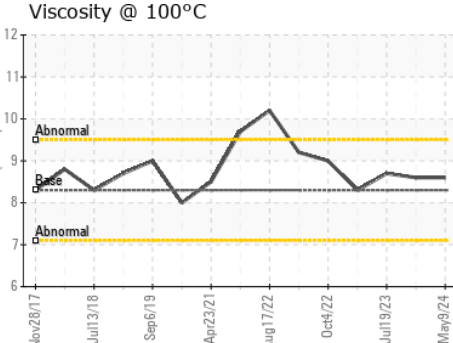
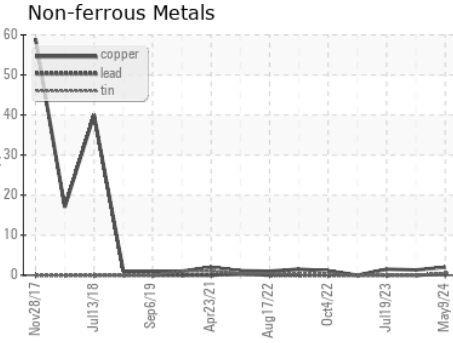
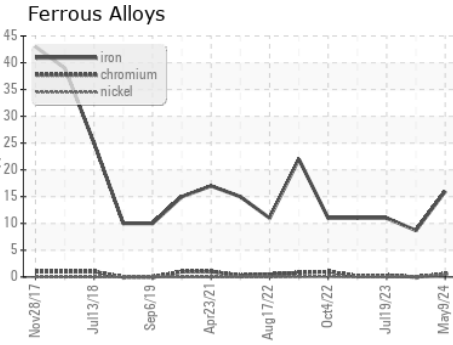
OIL ANALYSIS REPORT



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 8.3	8.6	8.6	8.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0007155 **Received** : 13 May 2024
Lab Number : **06178081** **Tested** : 14 May 2024
Unique Number : 11029407 **Diagnosed** : 15 May 2024 - Sean Felton
Test Package : FLEET

Constructors Inc. - 603659
 1815 Y Street
 Lincoln, NE
 US 68508
 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)