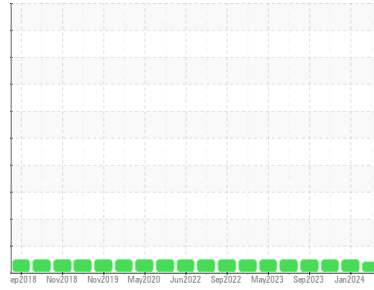




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
CONSTRUCTORS, INC

Machine Id
090779

Component
Diesel Engine

Fluid
MOBIL DELVAC 1300 SUPER 10W30 (--- GAL)

DIAGNOSIS

● Recommendation

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		SBP0006614	SBP0005714	SBP0004938
Sample Date	Client Info		19 Jun 2024	04 Jan 2024	19 Oct 2023
Machine Age	hrs	Client Info	14839	14531	14049
Oil Age	hrs	Client Info	500	482	493
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ATTENTION	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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 >250	24	12	13
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >5	<1	<1	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >35	3	1	1
Lead	ppm	ASTM D5185m >100	3	1	<1
Copper	ppm	ASTM D5185m >60	2	<1	<1
Tin	ppm	ASTM D5185m >5	<1	<1	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	8	7	29
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	62	60	46
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1018	970	611
Calcium	ppm	ASTM D5185m	1348	1269	1593
Phosphorus	ppm	ASTM D5185m	1089	1082	802
Zinc	ppm	ASTM D5185m	1409	1380	1030
Sulfur	ppm	ASTM D5185m	3486	3187	2498

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	4	3	4
Sodium	ppm	ASTM D5185m	4	3	4
Potassium	ppm	ASTM D5185m >20	4	0	3

INFRA-RED

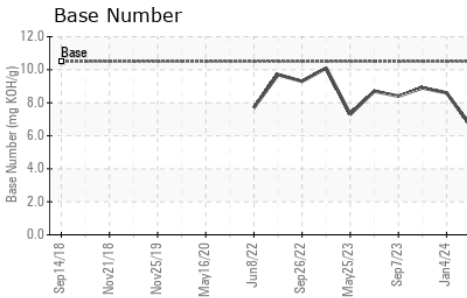
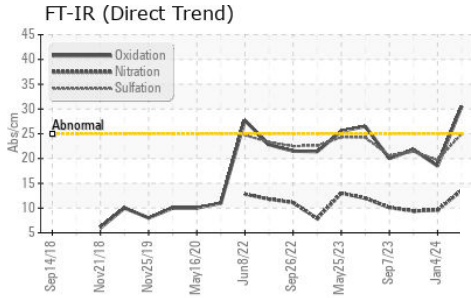
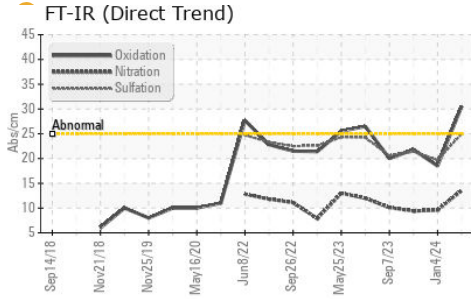
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.3	0.4	0.3
Nitration	Abs/cm	*ASTM D7624 >20	13.5	9.6	9.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.0	19.7	21.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	30.5	18.5	21.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.5	6.6	8.6	8.9



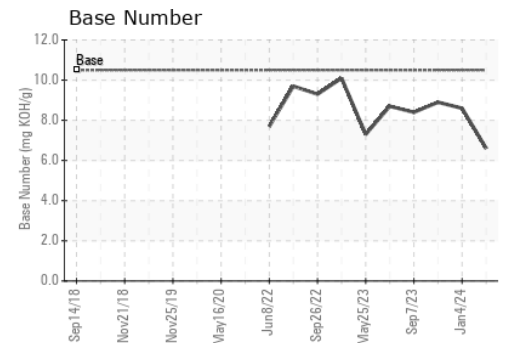
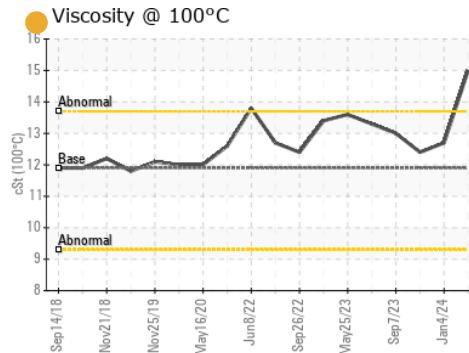
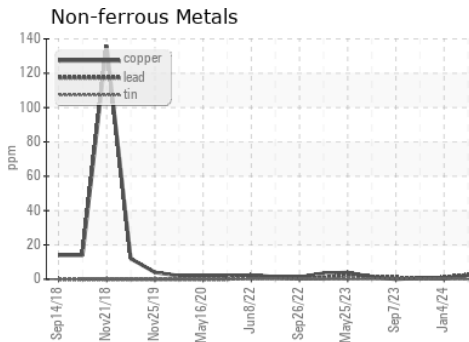
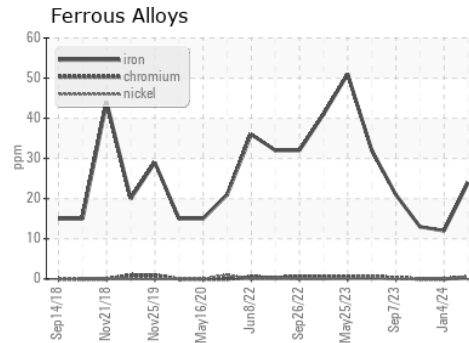
OIL ANALYSIS REPORT



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	11.9	15.0	12.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0006614
Lab Number : 06219004
Unique Number : 11097201
Test Package : FLEET

Received : 24 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Don Baldrige

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)