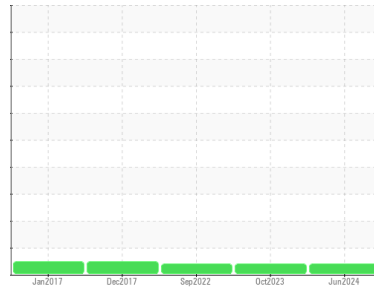




OIL ANALYSIS REPORT

Area
CONSTRUCTORS, INC
 Machine Id
01-0082
 Component
Front Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

Sample Rating Trend



VISCOSITY



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 lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		SBP0006788	SBP0004859	SBP0001403
Sample Date	Client Info		13 Jun 2024	12 Oct 2023	15 Sep 2022
Machine Age	hrs	Client Info	8547	8335	8008
Oil Age	hrs	Client Info	212	327	461
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ATTENTION	ATTENTION	ATTENTION

CONTAMINATION

	method	limit/base	current	history1	history2
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 >100	4	7	6
Chromium	ppm	ASTM D5185m >20	<1	1	<1
Nickel	ppm	ASTM D5185m >2	<1	<1	0
Titanium	ppm	ASTM D5185m >2	<1	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >25	2	2	2
Lead	ppm	ASTM D5185m >40	2	2	2
Copper	ppm	ASTM D5185m >330	1	2	5
Tin	ppm	ASTM D5185m >15	<1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	11	37	52
Barium	ppm	ASTM D5185m 0	0	3	0
Molybdenum	ppm	ASTM D5185m 0	54	45	41
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	855	610	547
Calcium	ppm	ASTM D5185m	1334	1394	1639
Phosphorus	ppm	ASTM D5185m	1043	760	781
Zinc	ppm	ASTM D5185m	1229	924	922
Sulfur	ppm	ASTM D5185m	3721	2455	2785

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	4	3
Sodium	ppm	ASTM D5185m	3	2	<1
Potassium	ppm	ASTM D5185m >20	6	<1	0
Chlorine	ppm	ASTM D5185m	---	---	---
Fuel	%	ASTM D3524 >5	<1.0	<1.0	0.8

INFRA-RED

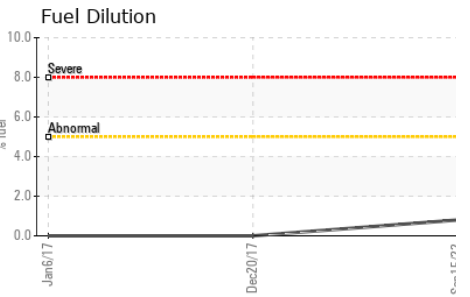
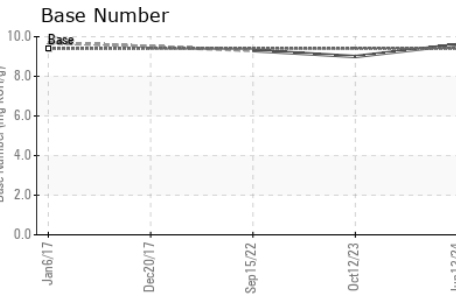
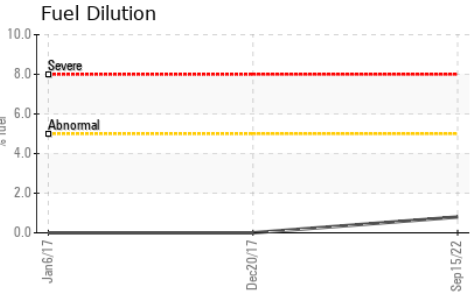
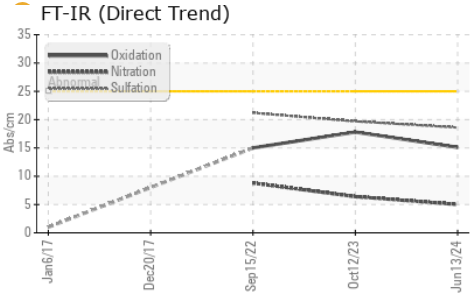
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0	0.1	0.5
Nitration	Abs/cm	*ASTM D7624 >20	5.0	6.4	8.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.6	19.7	21.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.1	17.8	15.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	9.6	9.0	9.3



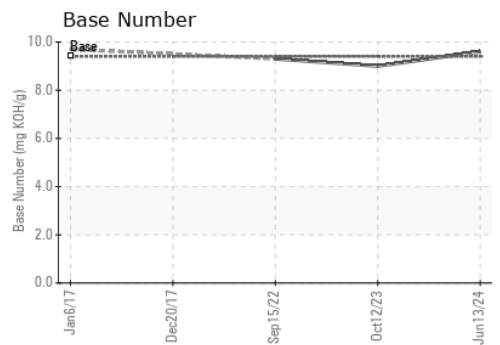
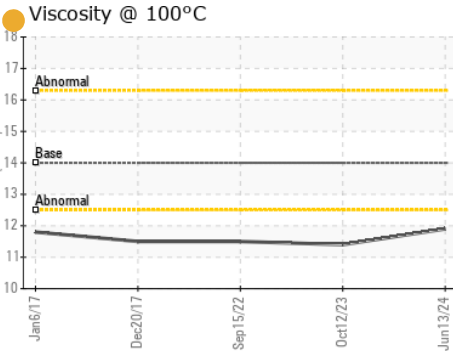
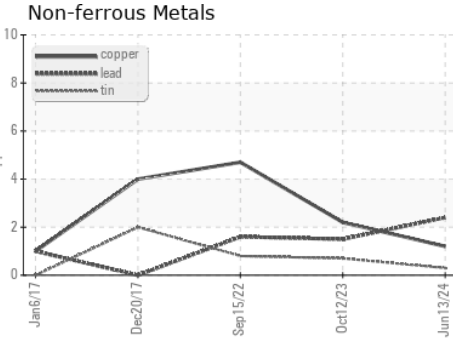
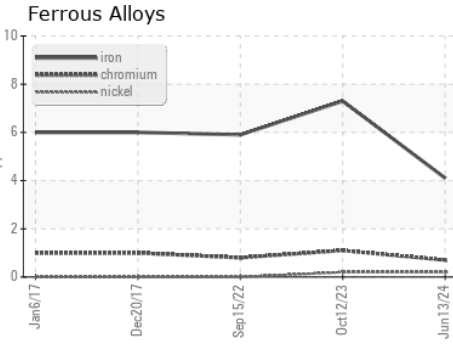
OIL ANALYSIS REPORT



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 14	● 11.9	● 11.4	● 11.5

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0006788 **Received** : 24 Jun 2024
Lab Number : 06219014 **Tested** : 26 Jun 2024
Unique Number : 11097211 **Diagnosed** : 26 Jun 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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)