

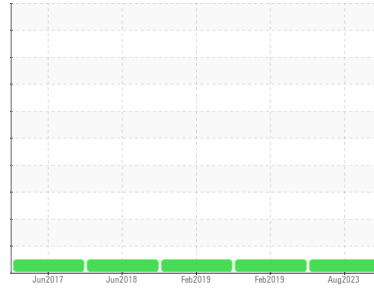


OIL ANALYSIS REPORT



Area
CONSTRUCTORS, INC
 Machine Id
CATERPILLAR 3306 06-0235
 Component
Front Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER 10W30 (--- GAL)

Sample Rating Trend



NORMAL



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		SBP0004666	SBP37177012	SBP37177012
Sample Date	Client Info		16 Aug 2023	01 Feb 2019	01 Feb 2019
Machine Age	hrs	Client Info	12710	11819	11819
Oil Age	hrs	Client Info	315	310	310
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	0.0	0.0

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>105	17	27	27
Chromium	ppm	ASTM D5185m	>5	<1	2	2
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	4	2	2
Lead	ppm	ASTM D5185m	>15	3	3	3
Copper	ppm	ASTM D5185m	>140	2	1	1
Tin	ppm	ASTM D5185m	>4	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		54	39	39
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		35	36	36
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		559	545	545
Calcium	ppm	ASTM D5185m		1516	1323	1323
Phosphorus	ppm	ASTM D5185m		756	732	732
Zinc	ppm	ASTM D5185m		934	809	809
Sulfur	ppm	ASTM D5185m		2767	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	2	6	6
Sodium	ppm	ASTM D5185m		<1	5	5
Potassium	ppm	ASTM D5185m	>20	2	0	0
Chlorine	ppm	ASTM D5185m		---	0	0

INFRA-RED

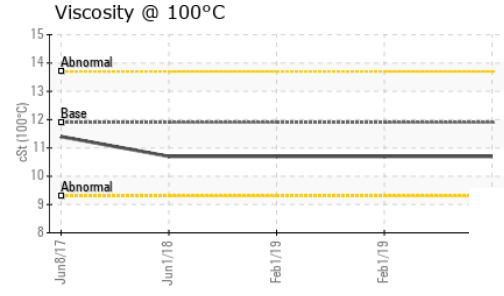
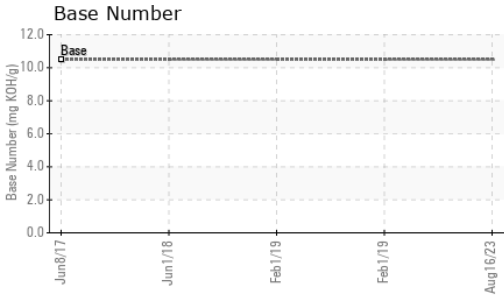
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.2	0.57	0.57
Nitration	Abs/cm	*ASTM D7624	>20	7.6	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	8.7	---	---



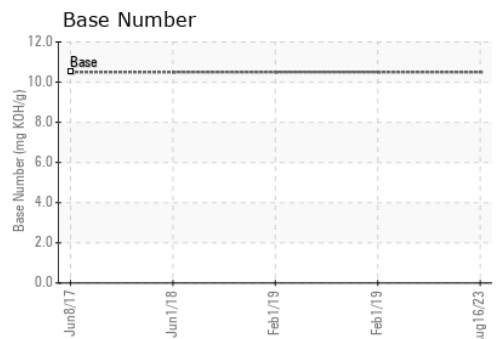
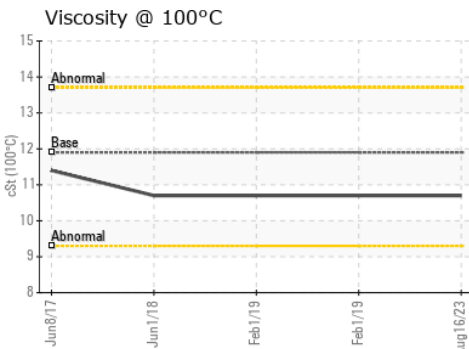
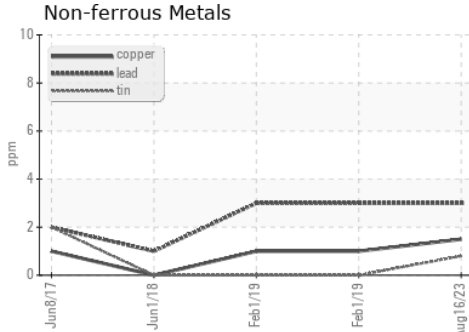
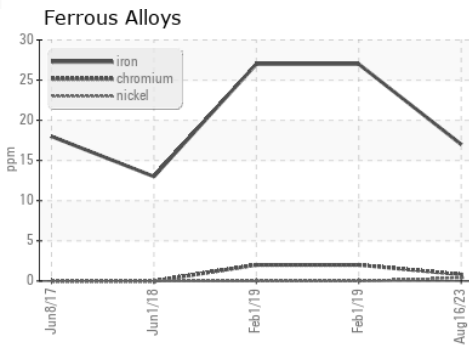
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.9	10.7	10.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0004666 **Received** : 21 Aug 2023
Lab Number : **05929356** **Diagnosed** : 22 Aug 2023
Unique Number : 10609303 **Diagnostician** : Wes Davis
Test Package : FLEET

Constructors Inc. - 603659
 1815 Y Street
 Lincoln, NE
 US 68508
 Contact: Jack Linhart
 jackl@constructorslincoln.com
 T: (402)434-2157
 F:

Certificate L2367
 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)