



LUBE PLUS+

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
BIG CAM GS-4
Component
Diesel Engine
Fluid
FLEET GUARD 15W40 (9 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0001005	LP0001322	LP0000653
Sample Date		Client Info		23 Jan 2024	11 Nov 2023	22 Sep 2023
Machine Age	hrs	Client Info		3790	3373	2798
Oil Age	hrs	Client Info		250	230	250
Filter Age	hrs	Client Info		250	230	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	35	36	30
Chromium	ppm	ASTM D5185m	>20	7	8	6
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	8	7
Lead	ppm	ASTM D5185m	>40	5	11	11
Copper	ppm	ASTM D5185m	>330	4	6	8
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

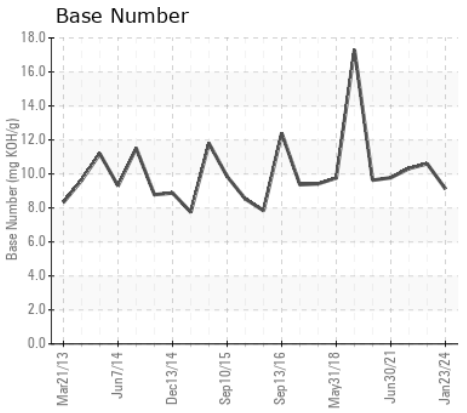
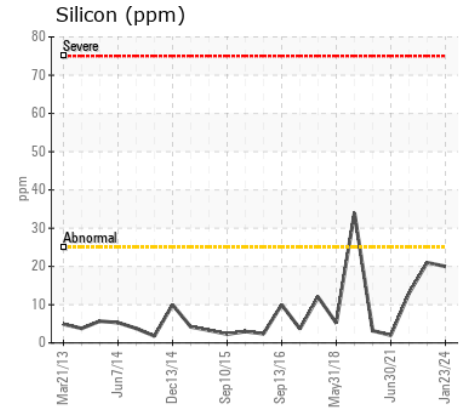
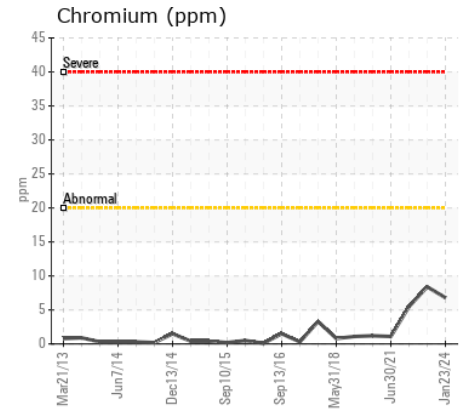
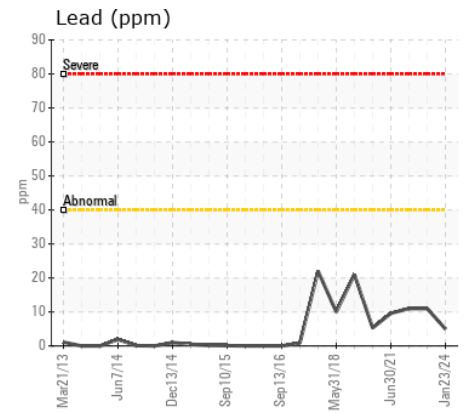
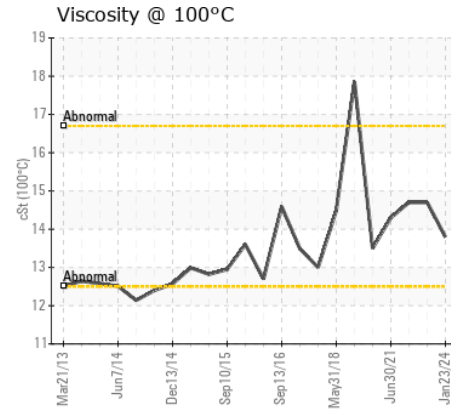
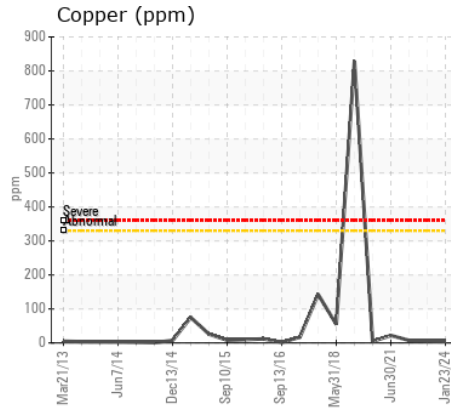
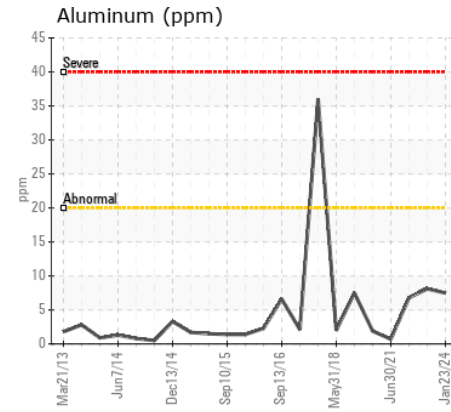
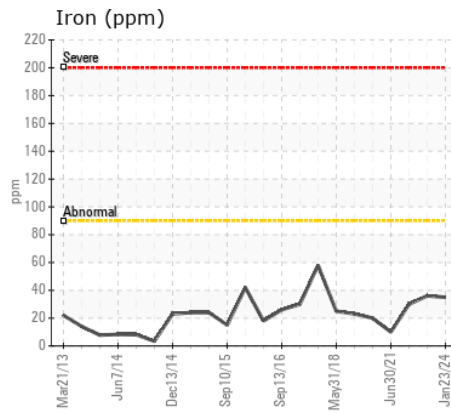
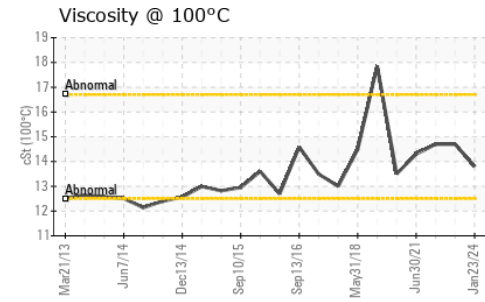
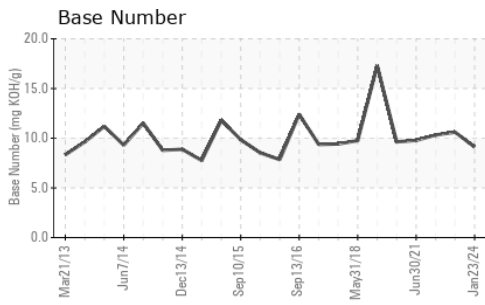
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	20	21	13
Potassium	ppm	ASTM D5185m	>20	3	5	0
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	1.2	1.6	1.3
Nitration	Abs/cm	*ASTM D7624	>20	8.6	10.0	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	22.3	21.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185m		2	4	4
Boron	ppm	ASTM D5185m		11	12	17
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		17	39	71
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		233	541	944
Calcium	ppm	ASTM D5185m		2002	1877	1433
Phosphorus	ppm	ASTM D5185m		860	1035	1107
Zinc	ppm	ASTM D5185m		1114	1334	1421
Sulfur	ppm	ASTM D5185m		3128	3429	3347
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	16.5	16.8
Base Number (BN)	mg KOH/g	ASTM D2896		9.12	10.60	10.32
Visc @ 100°C	cSt	ASTM D445		13.8	14.7	14.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : LP0001005

Lab Number : 06105432

Unique Number : 10903662

Test Package : MOB 2

Received : 29 Feb 2024

Tested : 01 Mar 2024

Diagnosed : 01 Mar 2024 - Wes Davis

S.M. LORUSSO & SONS

10 GROVE ST

WEST ROXBURY, MA

US 02132

Contact: MARK ERWIN

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T:

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)