



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
GM 13434
 Component
Diesel Engine
 Fluid
{not provided} (--- QTS)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

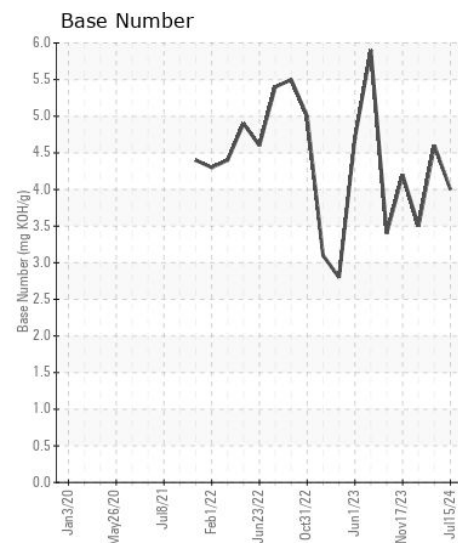
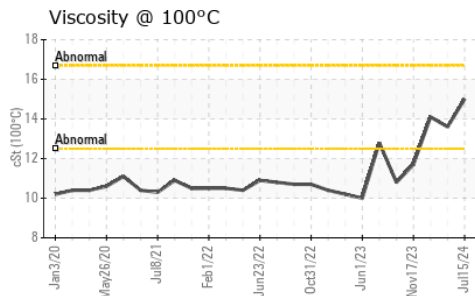
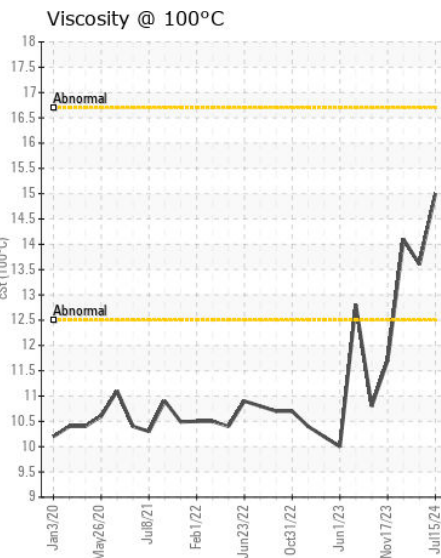
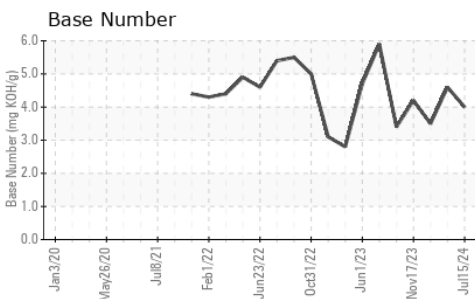
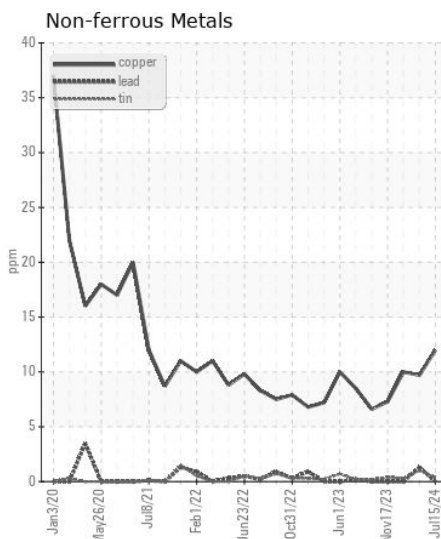
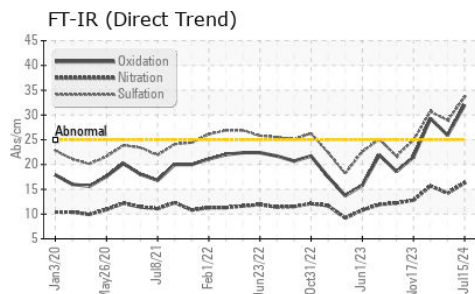
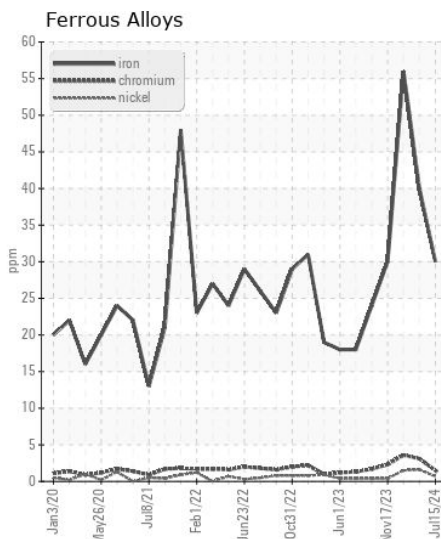
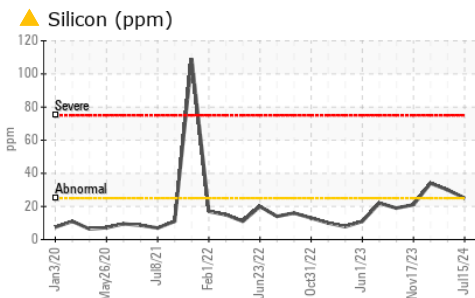
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0950734	WC0913788	WC0882714
Sample Date		Client Info		15 Jul 2024	04 Apr 2024	12 Feb 2024
Machine Age	mls	Client Info		234025	223528	215828
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

Iron	ppm	ASTM D5185m	>100	30	40	56
Chromium	ppm	ASTM D5185m	>20	2	3	4
Nickel	ppm	ASTM D5185m	>4	<1	2	2
Titanium	ppm	ASTM D5185m		1	1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	6	7	11
Lead	ppm	ASTM D5185m	>40	0	1	0
Copper	ppm	ASTM D5185m	>330	12	10	10
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>25	▲ 25	▲ 30	▲ 34
Potassium	ppm	ASTM D5185m	>20	7	5	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	16.3	14.2	15.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	33.6	28.9	30.7
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

Sodium	ppm	ASTM D5185m		3	3	6
Boron	ppm	ASTM D5185m		34	34	19
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		9	10	16
Manganese	ppm	ASTM D5185m		26	11	12
Magnesium	ppm	ASTM D5185m		674	707	694
Calcium	ppm	ASTM D5185m		1341	1335	1257
Phosphorus	ppm	ASTM D5185m		694	683	700
Zinc	ppm	ASTM D5185m		832	831	831
Sulfur	ppm	ASTM D5185m		2746	2868	2724
Oxidation	Abs/.1mm	*ASTM D7414	>25	32.0	25.9	29.3
Base Number (BN)	mg KOH/g	ASTM D2896		4.0	4.6	3.5
Visc @ 100°C	cSt	ASTM D445		15.0	13.6	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0950734 **Received** : 18 Jul 2024
Lab Number : 06239873 **Tested** : 18 Jul 2024
Unique Number : 11128707 **Diagnosed** : 19 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: TBN)

SULLIVAN EASTERN INC
 2860 C SLATER RD
 MORRISVILLE, NC
 US 27560

Contact: SCOTT SULLIVAN
 ssullivan@sullivaneastern.com

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)

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