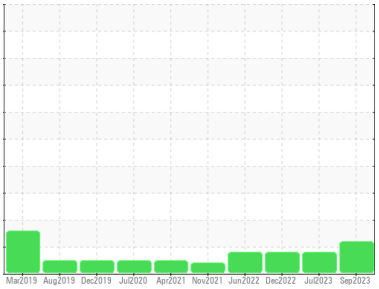
PROBLEM SUMMARY

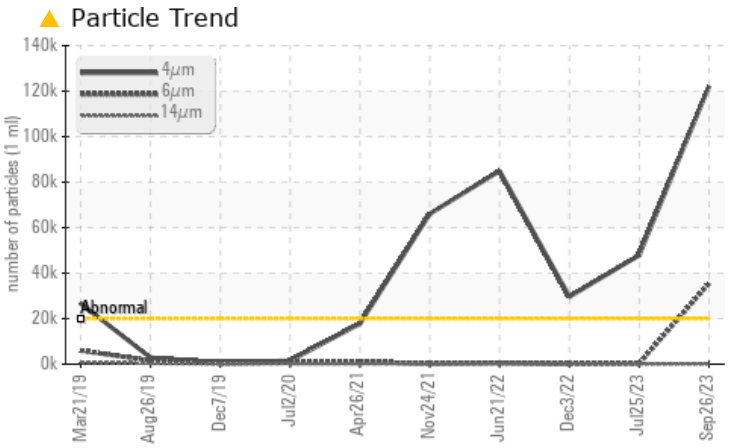
Sample Rating Trend



ISO

Machine Id
ESCALADE ESCALADE ESV (S/N 0031701B)
Component
Gasoline Engine
Fluid
MOBIL 1 5W30 (--- QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION
Particles >4µm		ASTM D7647	>20000	▲ **122171**	▲ 47861	▲ 29653
Particles >6µm		ASTM D7647	>5000	▲ **35503**	216	112
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/22/11**	▲ 23/15/10	▲ 22/14/9

Customer Id: JONLINNE
Sample No.: USP242144
Lab Number: 05965410
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

25 Jul 2023 Diag: Doug Bogart

ISO

Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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03 Dec 2022 Diag: Doug Bogart

ISO

Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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21 Jun 2022 Diag: Doug Bogart

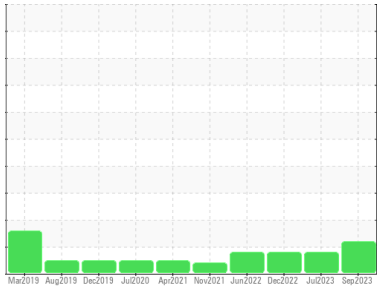
ISO

Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
ESCALADE ESCALADE ESV (S/N 0031701B)
Component
Gasoline Engine
Fluid
MOBIL 1 5W30 (--- QTS)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USP242144**	USP242368	USP232239
Sample Date		Client Info		**26 Sep 2023**	25 Jul 2023	03 Dec 2022
Machine Age	mls	Client Info		**168591**	167652	158612
Oil Age	mls	Client Info		**177**	15000	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	**<1.0**	<1.0	<1.0
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	**3**	51	16
Chromium	ppm	ASTM D5185m	>20	**0**	2	<1
Nickel	ppm	ASTM D5185m	>5	**0**	1	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>40	**6**	8	4
Lead	ppm	ASTM D5185m	>50	**1**	0	0
Copper	ppm	ASTM D5185m	>155	**6**	24	19
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

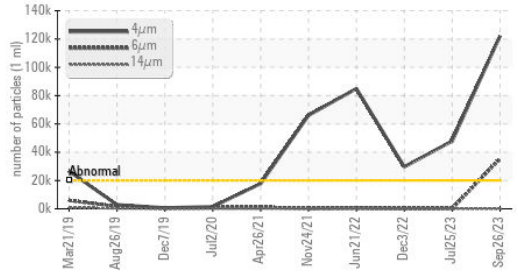
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	94	**63**	32	32
Barium	ppm	ASTM D5185m	0.0	**0**	1	0
Molybdenum	ppm	ASTM D5185m	0.0	**88**	81	75
Manganese	ppm	ASTM D5185m		**1**	1	<1
Magnesium	ppm	ASTM D5185m	1388	**643**	677	616
Calcium	ppm	ASTM D5185m	820	**687**	1064	973
Phosphorus	ppm	ASTM D5185m	720	**653**	669	626
Zinc	ppm	ASTM D5185m	780	**798**	851	737
Sulfur	ppm	ASTM D5185m	2240	**2235**	2116	2325

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	**16**	21	10
Sodium	ppm	ASTM D5185m	>400	**7**	7	0
Potassium	ppm	ASTM D5185m	>20	**2**	5	3
Water	%	ASTM D6304	>0.2	**0.019**	0.065	0.041
ppm Water	ppm	ASTM D6304	>2000	**192.2**	655.0	413.9

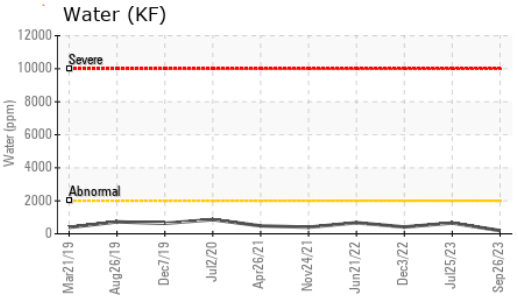
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **122171**	▲ 47861	▲ 29653
Particles >6µm		ASTM D7647	>5000	▲ **35503**	216	112
Particles >14µm		ASTM D7647	>640	**15**	6	4
Particles >21µm		ASTM D7647	>160	**2**	1	0
Particles >38µm		ASTM D7647	>40	**1**	1	0
Particles >71µm		ASTM D7647	>10	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/22/11**	▲ 23/15/10	▲ 22/14/9

OIL ANALYSIS REPORT

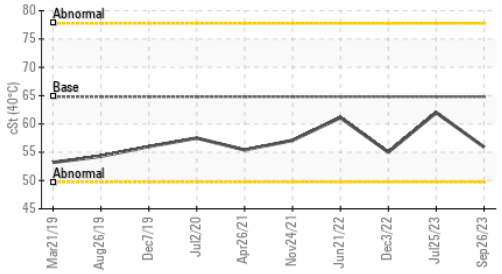
Particle Trend



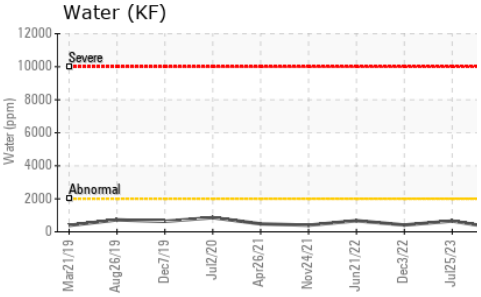
Water (KF)



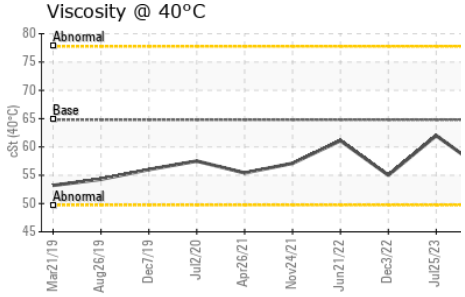
Viscosity @ 40°C



Water (KF)



Viscosity @ 40°C



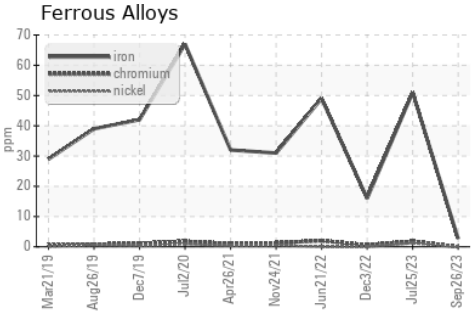
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.33**	3.70	1.58

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

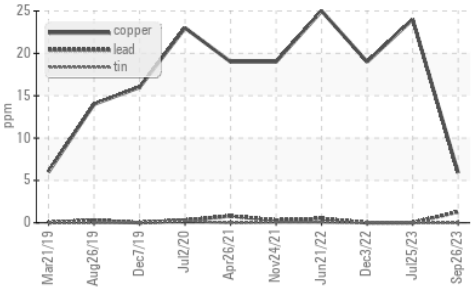
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	64.8	**55.9**	62.0	55.0

GRAPHS

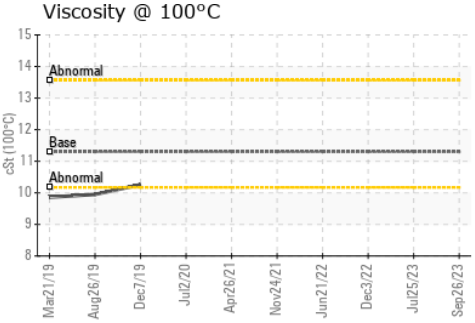
Ferrous Alloys



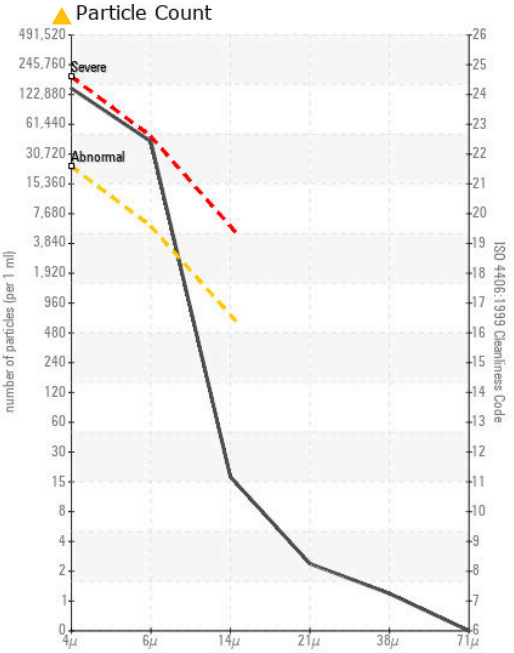
Non-ferrous Metals



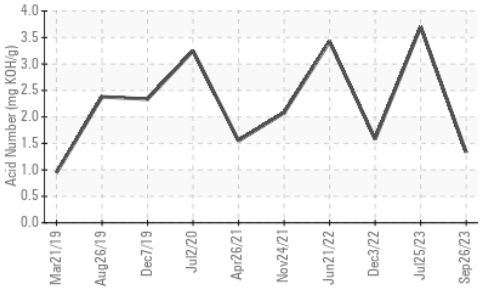
Viscosity @ 100°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP242144 **Received** : 29 Sep 2023
Lab Number : 05965410 **Diagnosed** : 02 Oct 2023
Unique Number : 10671961 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KV100)

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)

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US 68505
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