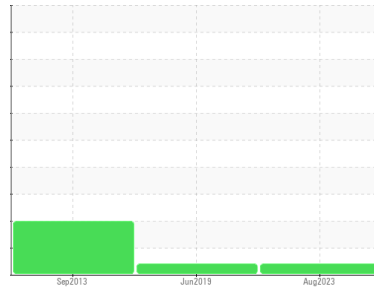




PROBLEM SUMMARY

Sample Rating Trend

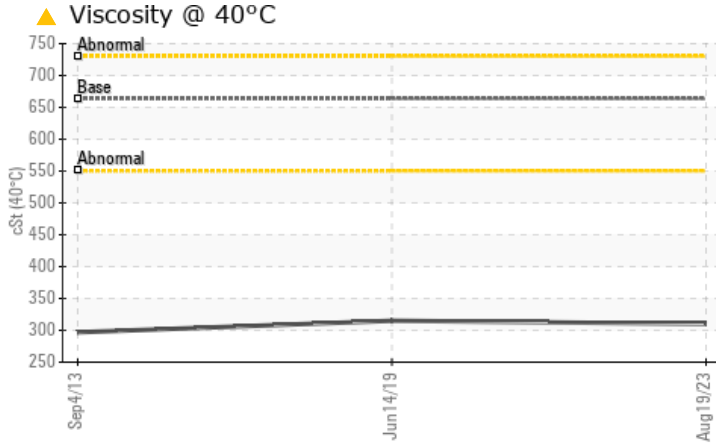


VISCOSITY



Machine Id
EBL TAKEAWAY SOUTH - CATEP INTERNATIONAL (S/N L9610320.2)
 Component
Gearbox
 Fluid
MOBIL SHC 636 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	MARGINAL
Visc @ 40°C	cSt	ASTM D445	663.8	▲ 310	▲ 315	296.9

Customer Id: THRFAL
 Sample No.: USP235994
 Lab Number: 05937274
 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

14 Jun 2019 Diag: Doug Bogart

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. Viscosity of sample indicates oil is within ISO 320 range. Confirm oil type. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



04 Sep 2013 Diag: Jonathan Hester

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

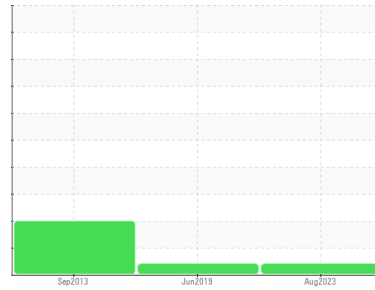




OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



Machine Id
EBL TAKEAWAY SOUTH - CATEP INTERNATIONAL (S/N L9610320.2)

Component
Gearbox
Fluid
MOBIL SHC 636 (--- GAL)

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. The amount and size of particulates present in the system are acceptable.

▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 320 range. Confirm oil type. 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		USP235994	USP192092	USP127823
Sample Date	Client Info		19 Aug 2023	14 Jun 2019	04 Sep 2013
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ATTENTION	MARGINAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	4	2	9
Chromium	ppm	ASTM D5185m >15	<1	0	<1
Nickel	ppm	ASTM D5185m >15	0	0	<1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	<1	0	<1
Lead	ppm	ASTM D5185m >100	2	2	3
Copper	ppm	ASTM D5185m >200	<1	<1	<1
Tin	ppm	ASTM D5185m >25	<1	0	0
Antimony	ppm	ASTM D5185m >5	---	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<1	6	2
Barium	ppm	ASTM D5185m	0	<1	0
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	1	<1	<1
Magnesium	ppm	ASTM D5185m	7	1	0
Calcium	ppm	ASTM D5185m	0	3	<1
Phosphorus	ppm	ASTM D5185m	167	212	236
Zinc	ppm	ASTM D5185m	20	6	5
Sulfur	ppm	ASTM D5185m	11347	10992	14111

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	1	2	2
Sodium	ppm	ASTM D5185m	2	<1	2
Potassium	ppm	ASTM D5185m >20	4	1	8
Water	%	ASTM D6304 >0.2	0.007	0.007	0.012
ppm Water	ppm	ASTM D6304 >2000	75.6	70	120

FLUID CLEANLINESS

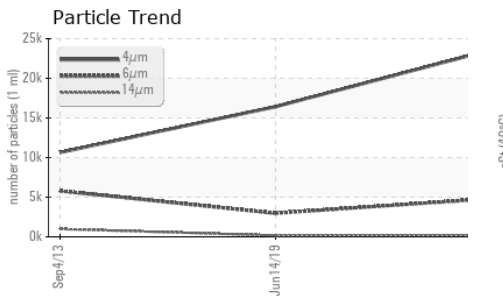
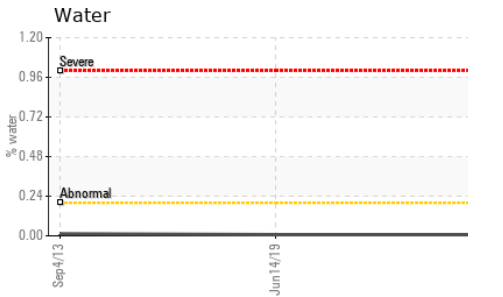
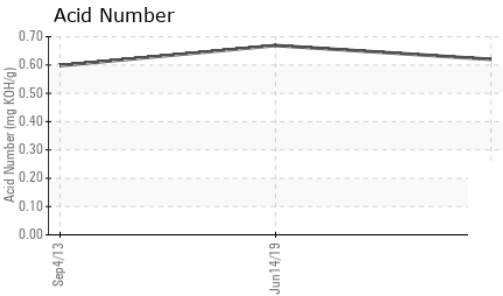
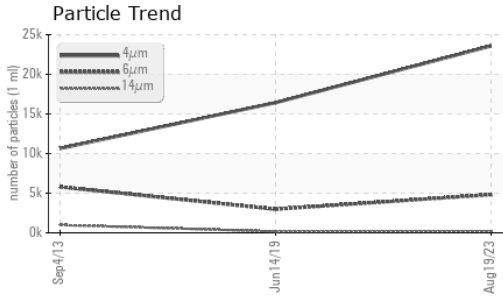
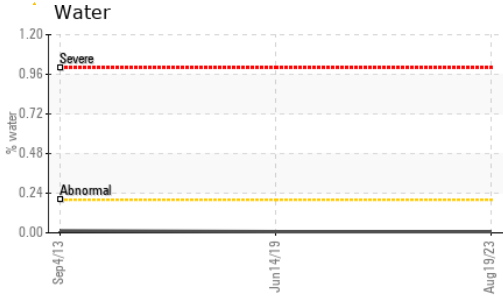
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		23587	16426	10641
Particles >6µm	ASTM D7647	>5000	4813	2979	▲ 5796
Particles >14µm	ASTM D7647	>640	204	164	▲ 987
Particles >21µm	ASTM D7647	>160	44	34	▲ 333
Particles >38µm	ASTM D7647	>40	2	1	▲ 51
Particles >71µm	ASTM D7647	>10	0	0	▲ 5
Oil Cleanliness	ISO 4406 (c)	>--/19/16	22/19/15	21/19/15	▲ 21/20/17

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.62	0.669	0.598



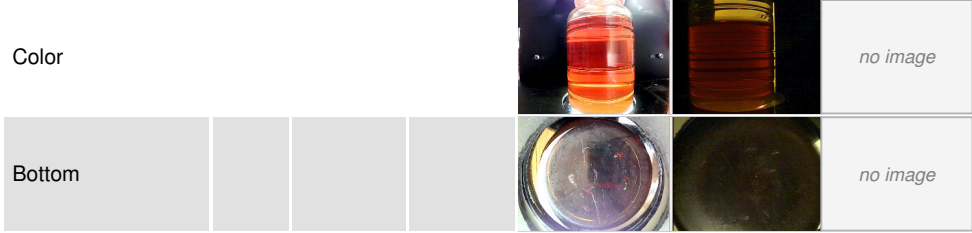
OIL ANALYSIS REPORT



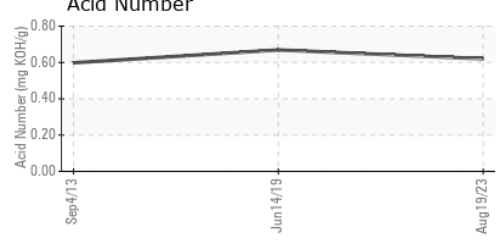
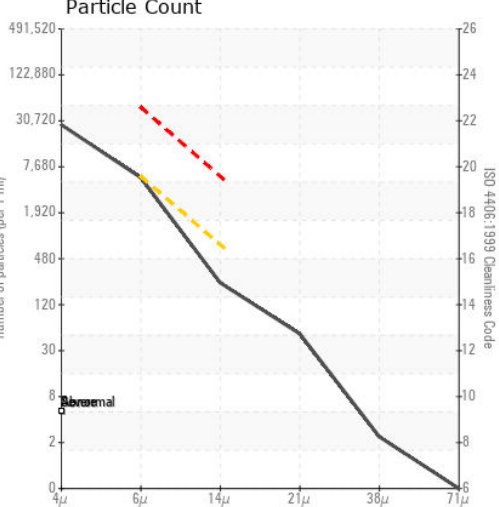
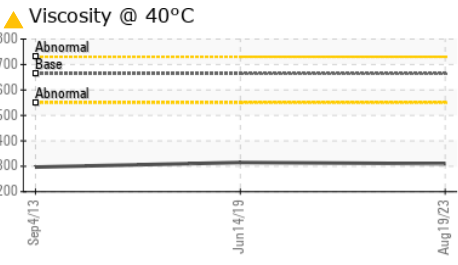
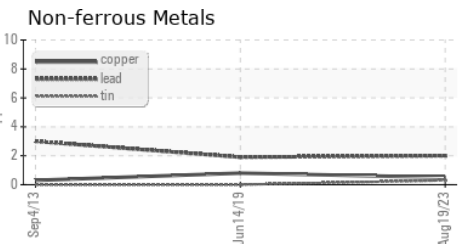
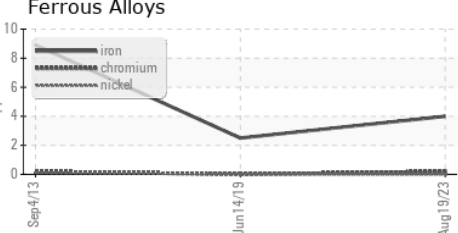
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 @ 40°C	cSt	ASTM D445	663.8 ▲ 310	▲ 315	296.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP235994 **Received** : 29 Aug 2023
Lab Number : 05937274 **Diagnosed** : 30 Aug 2023
Unique Number : 10622545 **Diagnostician** : Doug Bogart
Test Package : IND 2

3M - FAIRMONT
 710 NORTH STATE STREET
 FAIRMONT, MN
 US 56031
 Contact: JEFF NELSON
 jvnelson2@mmm.com
 T: (507)235-2111
 F: (507)235-2180

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)