

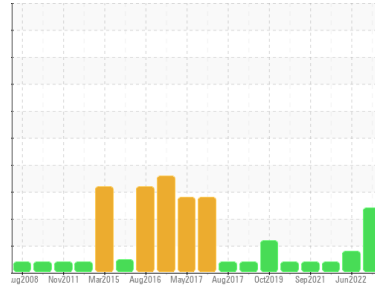


PROBLEM SUMMARY



Area
OKLAHOMA/102/EG - OTHER SERVICE
 Machine Id
78.66 [OKLAHOMA^102^EG - OTHER SERVICE]
 Component
Hydraulic System
 Fluid
MOBIL DELVAC MX 15W40 (--- GAL)

Sample Rating Trend

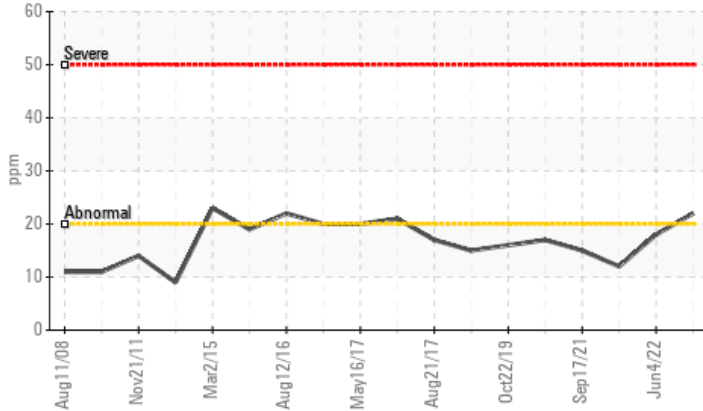


DIRT

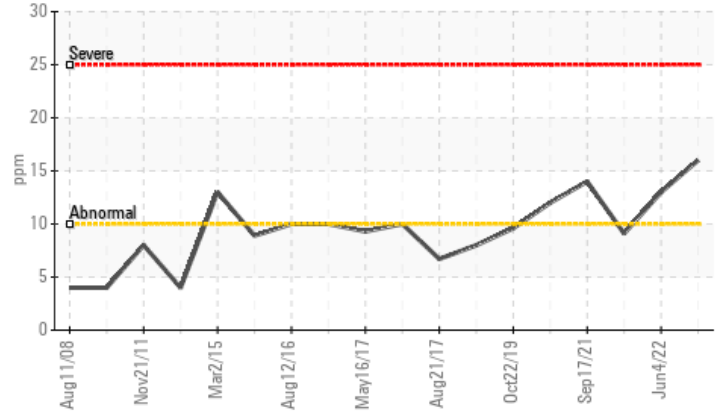


COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Aluminum (ppm)



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor. (Customer Sample Comment: 16559 hrs)

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ATTENTION	ATTENTION
Aluminum	ppm	ASTM D5185m	>10	▲ 16	13	9
Silicon	ppm	ASTM D5185m	>20	▲ 22	18	12

Customer Id: SHEWIC
 Sample No.: WC0819973
 Lab Number: 05928109
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

04 Jun 2022 Diag: Angela Borella

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 silt (particulates < 14 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



21 Feb 2022 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 silt (particulates < 14 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



17 Sep 2021 Diag: Don Baldrige

ISO



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 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



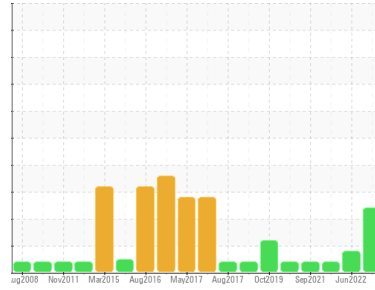


OIL ANALYSIS REPORT



Area
OKLAHOMA/102/EG - OTHER SERVICE
 Machine Id
78.66 [OKLAHOMA^102^EG - OTHER SERVICE]
 Component
Hydraulic System
 Fluid
MOBIL DELVAC MX 15W40 (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation
 We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor. (Customer Sample Comment: 16559 hrs)

Wear
 All component wear rates are normal.

Contamination
 Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable.

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0819973	WC0649273	WC0649288
Sample Date	Client Info		10 Aug 2023	04 Jun 2022	21 Feb 2022
Machine Age	hrs	Client Info	42060	15780	15280
Oil Age	hrs	Client Info	14790	0	27270
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ATTENTION	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	16	13	9
Chromium	ppm	ASTM D5185m >10	1	<1	<1
Nickel	ppm	ASTM D5185m >10	0	0	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	<1	0	<1
Aluminum	ppm	ASTM D5185m >10	▲ 16	13	9
Lead	ppm	ASTM D5185m >10	<1	1	1
Copper	ppm	ASTM D5185m >75	18	14	12
Tin	ppm	ASTM D5185m >10	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	<1
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	57	60	51
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	15	13	13
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	197	181	211
Calcium	ppm	ASTM D5185m	2535	2286	2578
Phosphorus	ppm	ASTM D5185m	948	859	998
Zinc	ppm	ASTM D5185m	1129	1007	1051
Sulfur	ppm	ASTM D5185m	6018	4775	4658

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	▲ 22	18	12
Sodium	ppm	ASTM D5185m	0	2	2
Potassium	ppm	ASTM D5185m >20	3	0	<1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		72335	104371	86863
Particles >6µm	ASTM D7647	>2500	2422	▲ 4598	▲ 3128
Particles >14µm	ASTM D7647	>640	29	20	49
Particles >21µm	ASTM D7647	>160	8	3	11
Particles >38µm	ASTM D7647	>40	0	1	0
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/18/16	23/18/12	▲ 24/19/11	▲ 24/19/13

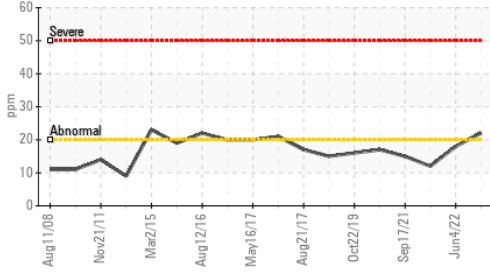
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.37	1.449	1.48

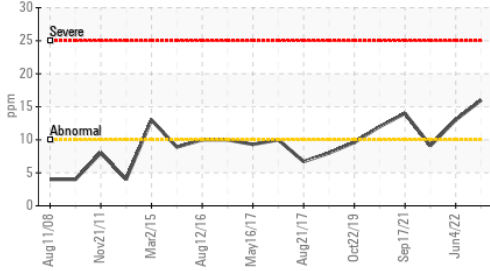


OIL ANALYSIS REPORT

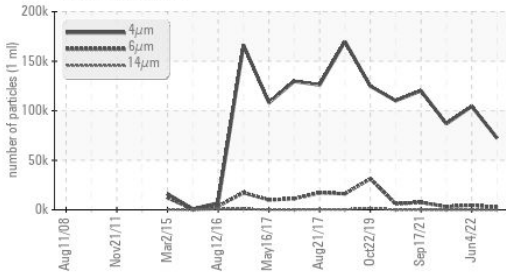
▲ Silicon (ppm)



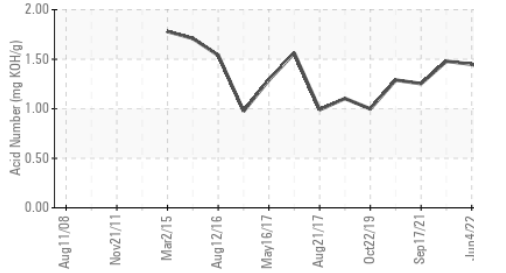
▲ Aluminum (ppm)



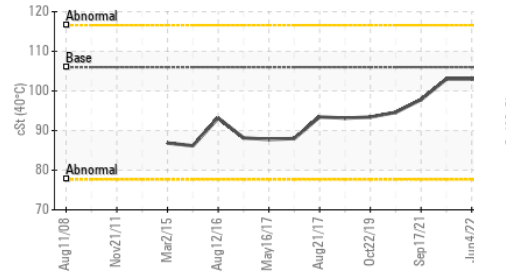
Particle Trend



Acid Number



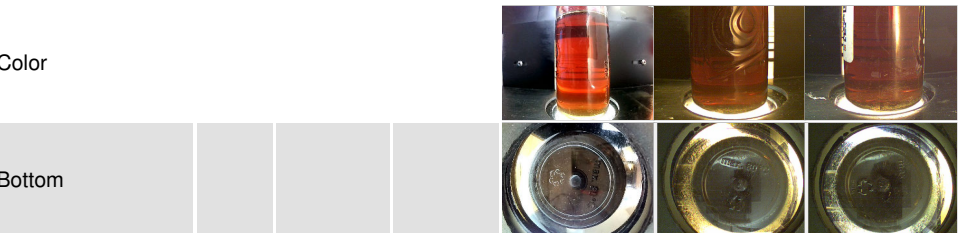
Viscosity @ 40°C



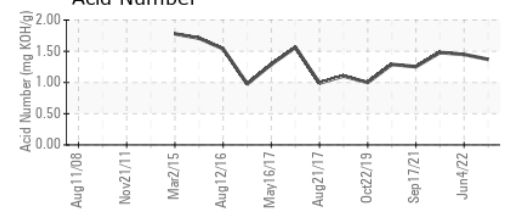
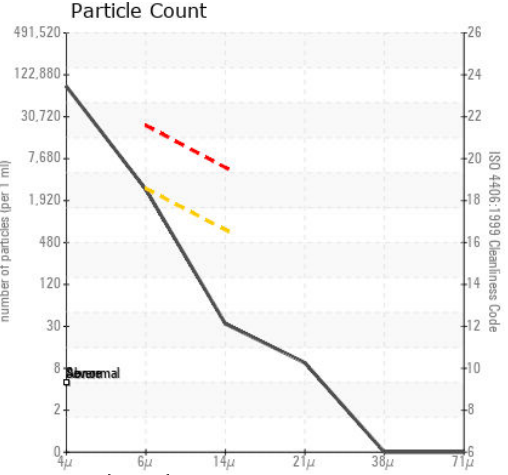
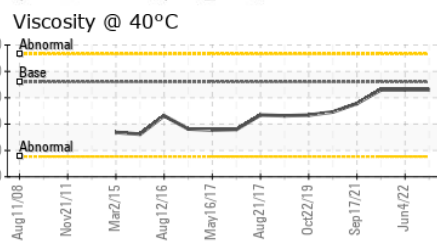
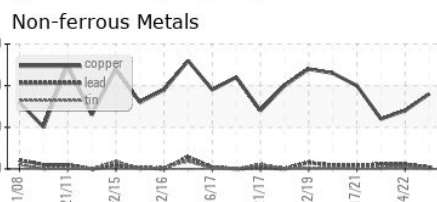
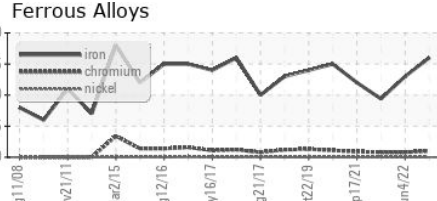
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	106	103	103

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0819973
Lab Number : 05928109
Unique Number : 10608056
Test Package : CONST
Received : 18 Aug 2023
Diagnosed : 21 Aug 2023
Diagnostician : Don Baldrige

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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)