



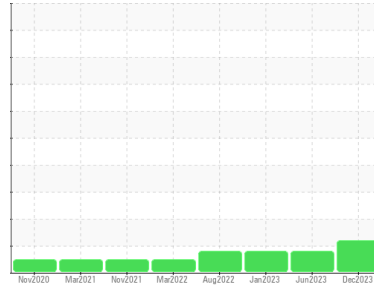
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area
DICK LAVY
 Machine Id
DICK LAVY 4827
 Component
Rear Differential
 Fluid
GEAR OIL SAE 75W90 (--- GAL)



DIAGNOSIS

Recommendation
 No corrective action is recommended at this time. 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 fluid.

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0876048	WC0828762	WC0771154
Sample Date	Client Info		24 Dec 2023	20 Jun 2023	15 Jan 2023
Machine Age	mls	Client Info	350496	292275	242011
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	111	106	97
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m >10	0	0	0
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	<1	1	2
Lead	ppm	ASTM D5185m >25	0	0	<1
Copper	ppm	ASTM D5185m >100	2	2	2
Tin	ppm	ASTM D5185m >10	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	273	314	292
Barium	ppm	ASTM D5185m 200	0	0	1
Molybdenum	ppm	ASTM D5185m 12	0	0	<1
Manganese	ppm	ASTM D5185m	6	6	6
Magnesium	ppm	ASTM D5185m 12	0	3	2
Calcium	ppm	ASTM D5185m 150	2	4	7
Phosphorus	ppm	ASTM D5185m 1650	1374	1343	1276
Zinc	ppm	ASTM D5185m 125	2	4	14
Sulfur	ppm	ASTM D5185m 22500	22217	25056	25432

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	28	27	25
Sodium	ppm	ASTM D5185m	6	6	5
Potassium	ppm	ASTM D5185m >20	<1	4	2
Water	%	ASTM D6304 >.2	0.023	0.040	0.006
ppm Water	ppm	ASTM D6304 >2000	232	400.9	64.1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 46805	▲ 28906	▲ 40113
Particles >6µm	ASTM D7647	>5000	▲ 7022	1085	1734
Particles >14µm	ASTM D7647	>640	290	10	11
Particles >21µm	ASTM D7647	>160	58	5	2
Particles >38µm	ASTM D7647	>40	1	0	0
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 23/20/15	▲ 22/17/10	▲ 23/18/11

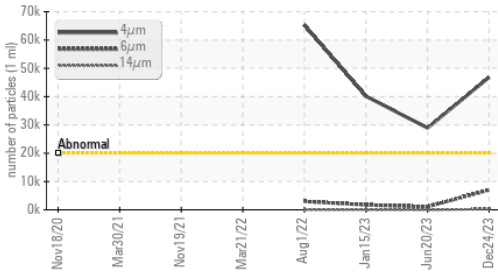
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 2.00	2.46	2.16	2.08

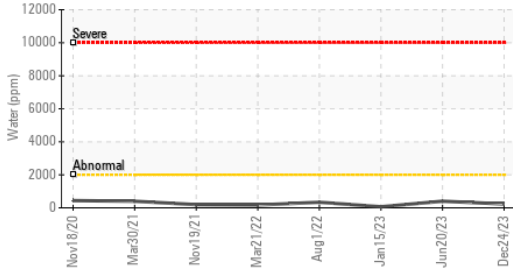


OIL ANALYSIS REPORT

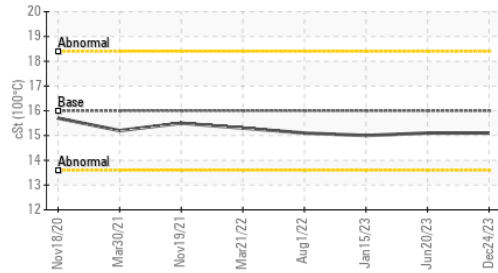
Particle Trend



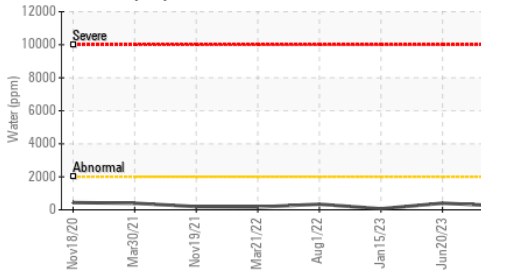
Water (KF)



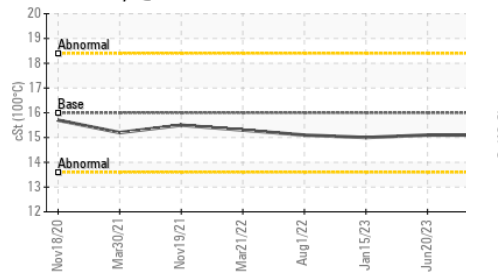
Viscosity @ 100°C



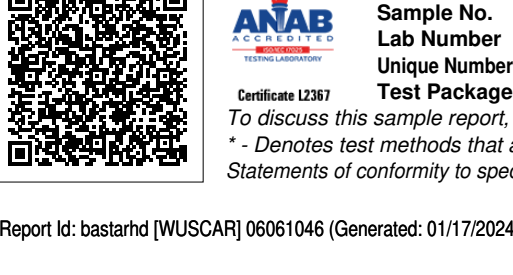
Water (KF)



Viscosity @ 100°C



Water (KF)



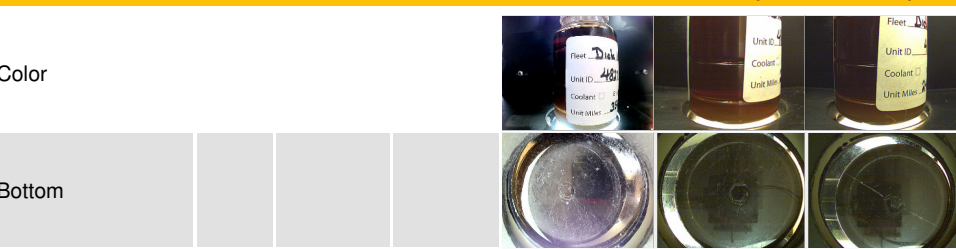
Viscosity @ 100°C



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	>.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

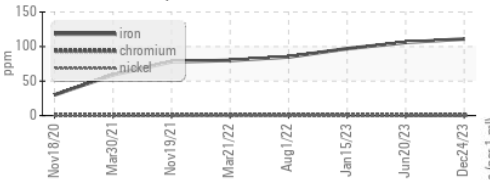
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	109	112	111
Visc @ 100°C	cSt	ASTM D445	16.0	15.1	15.0
Viscosity Index (VI)	Scale	ASTM D2270	157	140	141

SAMPLE IMAGES

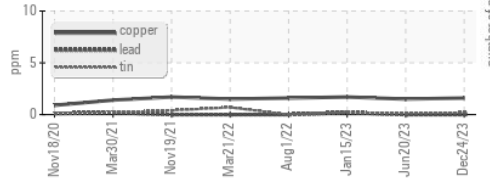


GRAPHS

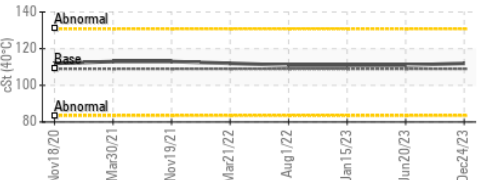
Ferrous Alloys



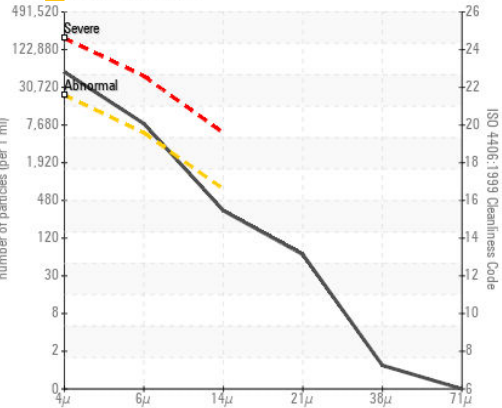
Non-ferrous Metals



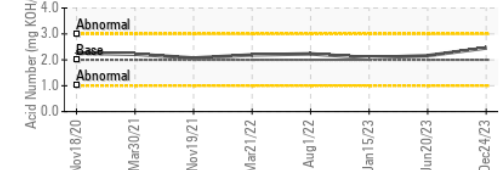
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0876048 **Received** : 16 Jan 2024
Lab Number : 06061046 **Diagnosed** : 17 Jan 2024
Unique Number : 10832428 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

BASF - GIANNA CREDAROLI
 500 WHITE PLAINS RD
 TARRYTOWN, NY
 US 10591
 Contact: GIANNA CREDAROLI
 gianna.credaroli@basf.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)

T:
F: