



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
WILLIAM P MORELLI
Machine Id
[WILLIAM P MORELLI] 007 520785-7
Component
Port Genset
Fluid
CHEVRON DELO 400 LE 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0059942	MW0020445	MW0067922
Sample Date		Client Info		09 May 2024	16 Apr 2024	18 Mar 2024
Machine Age	hrs	Client Info		14012	13598	13280
Oil Age	hrs	Client Info		0	300	0
Filter Age	hrs	Client Info		0	300	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	9	9	14
Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		<1	2	1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	2	3	4
Lead	ppm	ASTM D5185m	>17	0	<1	2
Copper	ppm	ASTM D5185m	>70	13	53	▲ 99
Tin	ppm	ASTM D5185m	>15	0	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

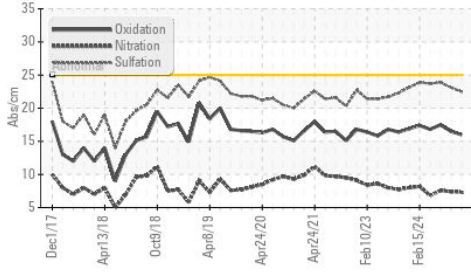
Silicon	ppm	ASTM D5185m	>25	5	6	7
Potassium	ppm	ASTM D5185m	>20	<1	2	2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.3	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.3	7.4	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	23.1	23.9
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

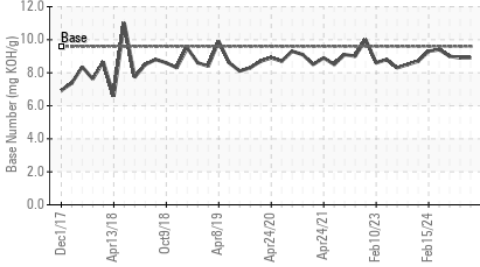
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	0	0
Boron	ppm	ASTM D5185m		284	362	383
Barium	ppm	ASTM D5185m		<1	2	2
Molybdenum	ppm	ASTM D5185m		108	125	133
Manganese	ppm	ASTM D5185m		2	1	2
Magnesium	ppm	ASTM D5185m		581	583	670
Calcium	ppm	ASTM D5185m		1735	1636	1833
Phosphorus	ppm	ASTM D5185m	1200	795	705	767
Zinc	ppm	ASTM D5185m	1300	925	796	906
Sulfur	ppm	ASTM D5185m	3200	3279	2716	3064
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	16.5	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	8.9	8.9	9.0
Visc @ 100°C	cSt	ASTM D445	15.7	13.2	13.2	13.3

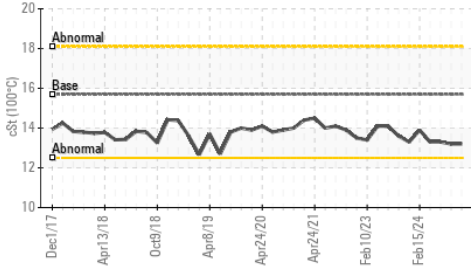
FT-IR (Direct Trend)



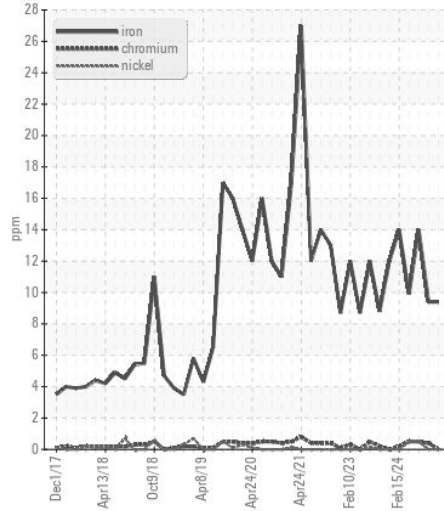
Base Number



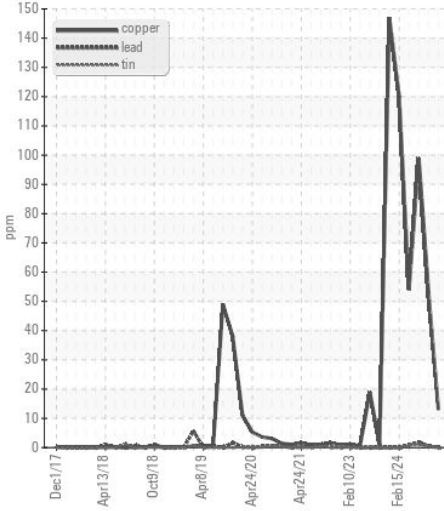
Viscosity @ 100°C



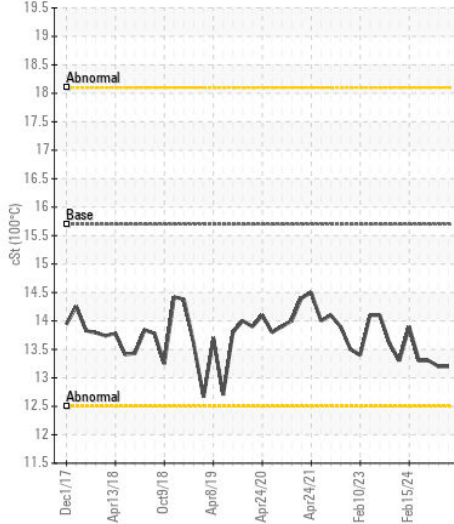
Ferrous Alloys



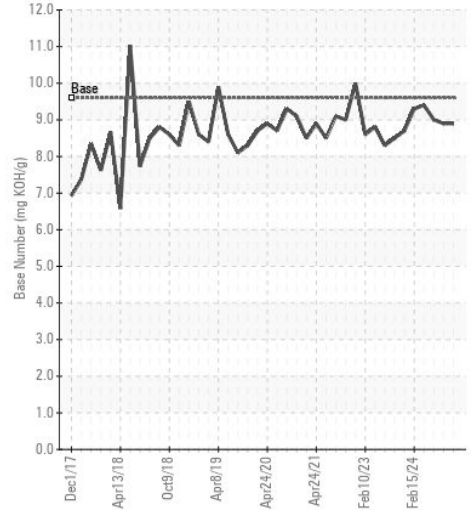
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0059942
Lab Number : 06229424
Unique Number : 11112917
Test Package : MAR 2
Received : 05 Jul 2024
Tested : 09 Jul 2024
Diagnosed : 09 Jul 2024 - Wes Davis

INGRAM BARGE
 900 S 3RD ST
 PADUCAH, KY
 US 42003

Contact: ANTHONY VAN CURA
 anthony.vancura@ingrambarga.com
 T: (270)415-4467
 F: (615)695-3697

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)