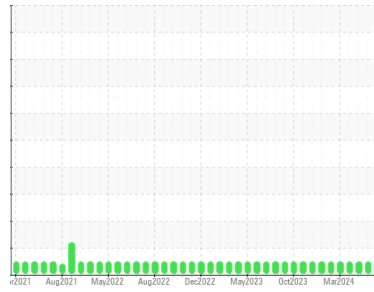




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
CRANE - ATTITUDE
 Machine Id
ATTITUDE (S/N 361176)
 Component
Port Genset
 Fluid
CHEVRON DELO 400 LE 15W40 (5 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.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0922308	WC0892695	WC0892649
Sample Date	Client Info			29 Jun 2024	23 May 2024	25 Apr 2024
Machine Age	hrs	Client Info		11657	11348	11144
Oil Age	hrs	Client Info		259	250	250
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	5	4	5
Chromium	ppm	ASTM D5185m	>4	<1	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	6	3	4
Lead	ppm	ASTM D5185m	>17	0	0	<1
Copper	ppm	ASTM D5185m	>70	<1	<1	0
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		246	321	319
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		114	116	118
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		554	599	651
Calcium	ppm	ASTM D5185m		1749	1765	1835
Phosphorus	ppm	ASTM D5185m	1200	838	803	853
Zinc	ppm	ASTM D5185m	1300	964	910	987
Sulfur	ppm	ASTM D5185m	3200	2631	3092	3402

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	2	9
Sodium	ppm	ASTM D5185m		2	2	<1
Potassium	ppm	ASTM D5185m	>20	2	<1	<1

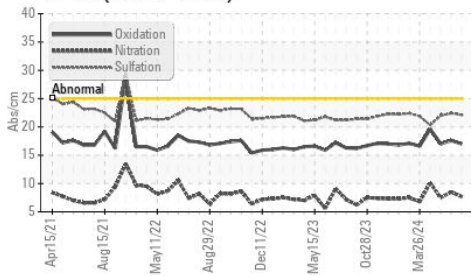
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.7	8.5	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	22.4	22.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	17.6	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	8.2	8.0	8.7

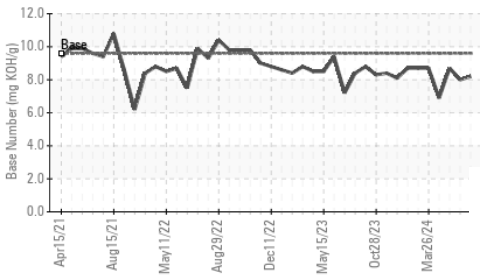


OIL ANALYSIS REPORT

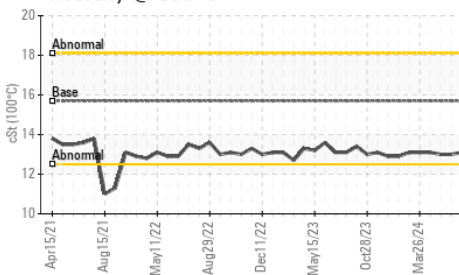
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

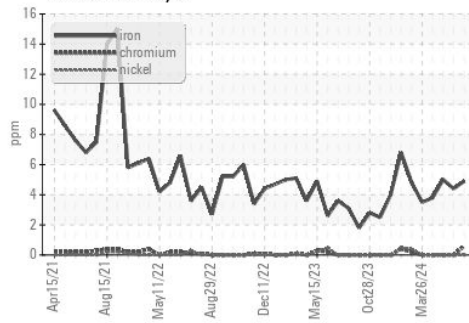


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

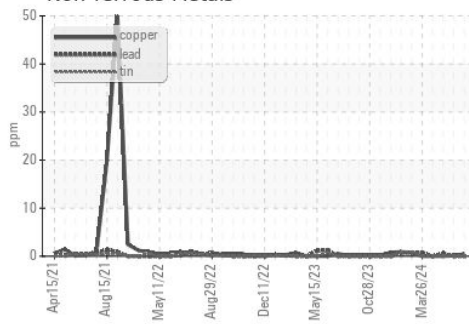
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	13.1	13.0

GRAPHS

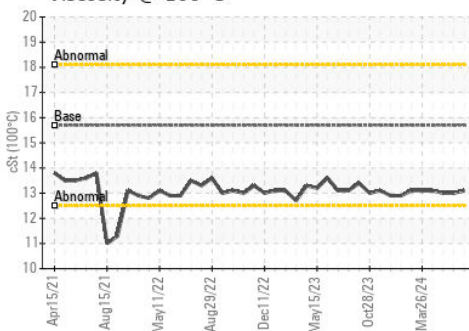
Ferrous Alloys



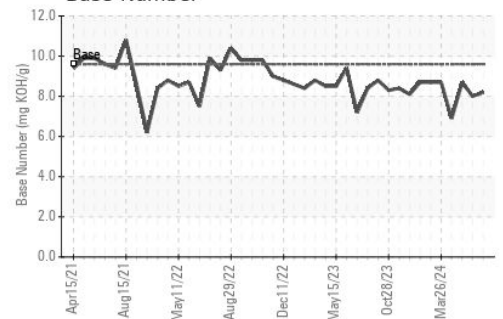
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0922308
Lab Number : 06234684
Unique Number : 11123518
Test Package : FLEET

Received : 12 Jul 2024
Tested : 15 Jul 2024
Diagnosed : 15 Jul 2024 - Wes Davis

ASSOCIATED TERMINALS - CRANE

CONVENT, LA
 US 70723

Contact: GREG JOSEY
 gjosey@associatedterminals.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: (225)562-3515