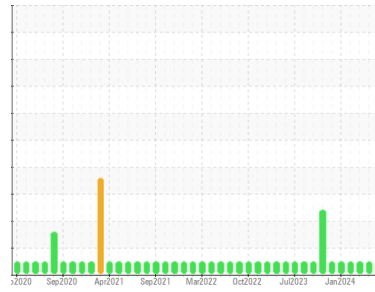




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**CRANE - T LANGE**  
Machine Id  
**T LANGE**  
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			<b>WC0892644</b>	WC0785601	WC0892617
Sample Date	Client Info			<b>08 Apr 2024</b>	09 Mar 2024	14 Feb 2024
Machine Age	hrs	Client Info		<b>37043</b>	52109	36529
Oil Age	hrs	Client Info		<b>250</b>	250	250
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.1		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>11</b>	4	4
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>2</b>	<1	<1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>8</b>	5	4
Lead	ppm	ASTM D5185m	>17	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>491</b>	342	349
Barium	ppm	ASTM D5185m		<b>1</b>	<1	<1
Molybdenum	ppm	ASTM D5185m		<b>195</b>	130	124
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>993</b>	648	643
Calcium	ppm	ASTM D5185m		<b>2351</b>	1555	1517
Phosphorus	ppm	ASTM D5185m	1200	<b>1024</b>	684	693
Zinc	ppm	ASTM D5185m	1300	<b>1283</b>	851	853
Sulfur	ppm	ASTM D5185m	3200	<b>3757</b>	2524	2640

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>9</b>	6	5
Sodium	ppm	ASTM D5185m		<b>4</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	2

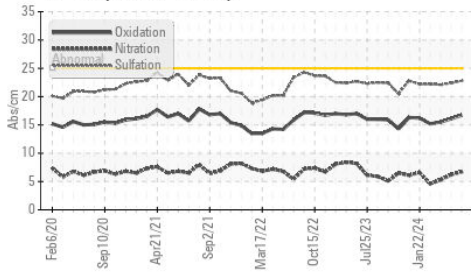
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.7</b>	6.2	5.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.8</b>	22.4	22.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.7</b>	16.1	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>9.4</b>	9.6	9.7

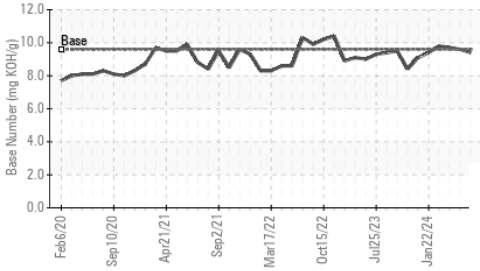


# OIL ANALYSIS REPORT

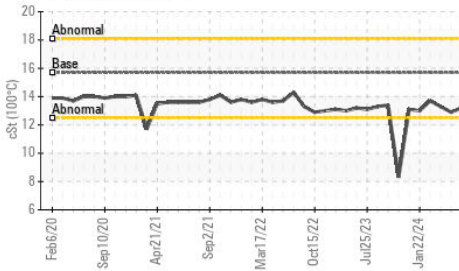
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

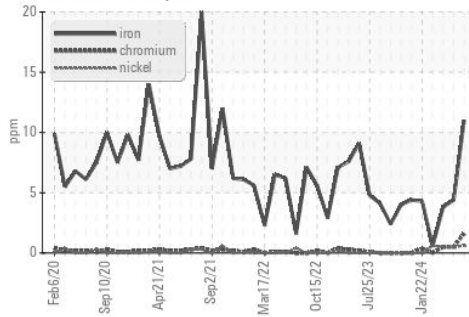


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

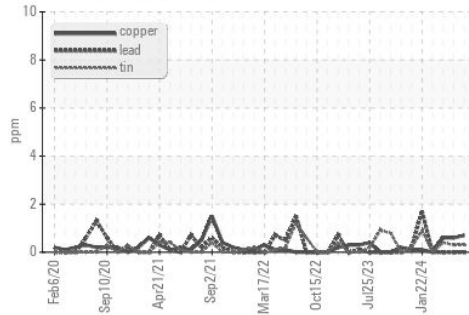
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	13.2	12.9

## GRAPHS

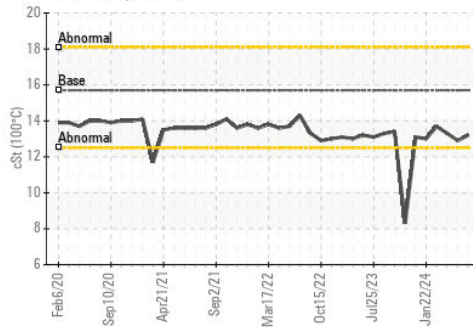
Ferrous Alloys



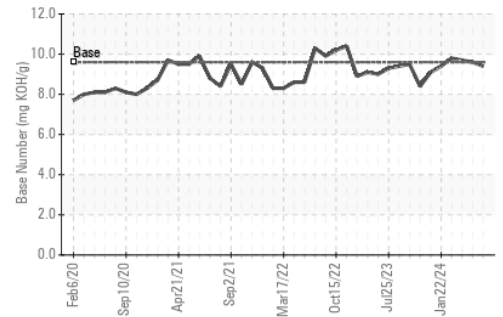
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0892644

Lab Number : 06156598

Unique Number : 10992021

Test Package : FLEET

Received : 22 Apr 2024

Tested : 23 Apr 2024

Diagnosed : 24 Apr 2024 - Sean Felton

ASSOCIATED TERMINALS - CRANE

CONVENT, LA

US 70723

Contact: GREG JOSEY

gjosey@associatedterminals.com

T:

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)

F: (225)562-3515