

# **OIL ANALYSIS REPORT**

#### 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.

# NORMAL



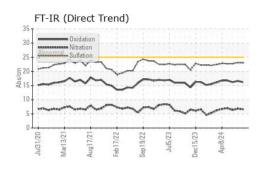
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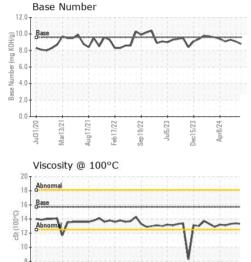
Sample Rating Trend

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0922349	WC0922341	WC0922387
Sample Date		Client Info		07 Jul 2024	21 Jun 2024	19 May 2024
Machine Age	hrs	Client Info		38234	37935	37665
Oil Age	hrs	Client Info		250	250	250
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	١	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	5	5
Chromium	ppm	ASTM D5185m	>4	<1	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	4	3	3
Lead	ppm	ASTM D5185m	>17	0	0	<1
Copper	ppm	ASTM D5185m	>70	0	0	<1
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		330	332	364
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m		330 0	332 0	364 0
Barium	ppm	ASTM D5185m		0	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m		0 130	0 128	0 130
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 130 0	0 128 <1	0 130 <1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1200	0 130 0 651	0 128 <1 685	0 130 <1 708
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1200 1300	0 130 0 651 1531	0 128 <1 685 1650	0 130 <1 708 1760
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 130 0 651 1531 679	0 128 <1 685 1650 785	0 130 <1 708 1760 786
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1300	0 130 0 651 1531 679 835	0 128 <1 685 1650 785 901	0 130 <1 708 1760 786 936
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1300 3200 limit/base	0 130 0 651 1531 679 835 2291	0 128 <1 685 1650 785 901 3099 history1 5	0 130 <1 708 1760 786 936 3150 history2 5
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1300 3200 limit/base	0 130 0 651 1531 679 835 2291 current 6 2	0 128 <1 685 1650 785 901 3099 history1	0 130 <1 708 1760 786 936 3150 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1300 3200 limit/base >25	0 130 0 651 1531 679 835 2291 current 6	0 128 <1 685 1650 785 901 3099 history1 5	0 130 <1 708 1760 786 936 3150 history2 5
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	1300 3200 limit/base >25	0 130 0 651 1531 679 835 2291 current 6 2	0 128 <1 685 1650 785 901 3099 history1 5 2	0 130 <1 708 1760 786 936 3150 history2 5 2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	1300 3200 limit/base >25 >20	0 130 0 651 1531 679 835 2291 current 6 2 2	0 128 <1 685 1650 785 901 3099 history1 5 2 0	0 130 <1 708 1760 786 936 3150 history2 5 2 1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1300 3200 limit/base >25 >20 limit/base	0 130 0 651 1531 679 835 2291 current 6 2 2 2	0 128 <1 685 1650 785 901 3099 history1 5 2 2 0	0 130 <1 708 1760 786 936 3150 history2 5 2 2 1 1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm	ASTM D5185m ASTM D5185m	1300 3200 limit/base >25 >20 limit/base >20	0 130 0 651 1531 679 835 2291 current 6 2 2 2 2 current 0.3	0 128 <1 685 1650 785 901 3099 history1 5 2 0 history1 0.3	0 130 <1 708 1760 786 936 3150 history2 5 2 1 1 history2 0.3
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1300 3200 limit/base >25 >20 limit/base >20	0 130 0 651 1531 679 835 2291 current 6 2 2 current 0.3 6.6	0 128 <1 685 1650 785 901 3099 history1 5 2 0 history1 0.3 6.8	0 130 <1 708 1760 786 936 3150 history2 5 2 1 history2 0.3 6.4
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1300 3200 limit/base >25 >20 limit/base >20 >30	0 130 0 651 1531 679 835 2291 current 6 2 2 current 0.3 6.6 23.0	0 128 <1 685 1650 785 901 3099 history1 5 2 0 history1 0.3 6.8 23.1	0 130 <1 708 1760 786 936 3150 history2 5 2 1 history2 0.3 6.4 22.7



# **OIL ANALYSIS REPORT**





Sep19/22

Jec15/73 Apr8/24

Mar13/21

un17/71 eb17/22

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	13.3	13.4	13.3

Ferrous Alloys

Non-ferrous Metals

10

6 Jul31/20

Laboratory

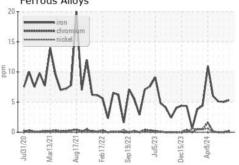
Sample No.

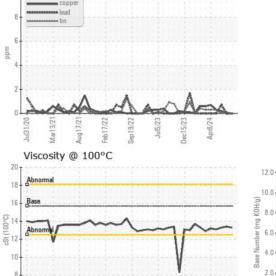
Aug17/21

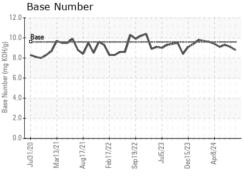
Feb 17/77

Mar13/21

: WC0922349







#### **ASSOCIATED TERMINALS - CRANE**

CONVENT, LA US 70723 Contact: GREG JOSEY gjosey@associatedterminals.com T:

Lab Number : 06241226 Tested : 19 Jul 2024 Unique Number : 11130060 Diagnosed : 19 Jul 2024 - Wes Davis Test Package : FLEET Certificate 12367 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

Received

Sep 19/22

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

Apr8/24

: 18 Jul 2024

Dec15/23

Report Id: STJCONKL [WUSCAR] 06241226 (Generated: 07/21/2024 11:52:52) Rev: 1

Contact/Location: GREG JOSEY - STJCONKL