



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**1991 MACK RB6905 T-19 (S/N 1M2AM20C6MM001775)**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 SDE SAE 15W40 (10 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0782681</b>	WC0655997	WC0597784
Sample Date		Client Info		<b>01 Mar 2023</b>	20 Jan 2022	23 Jul 2021
Machine Age	mls	Client Info		<b>80428</b>	65288	60963
Oil Age	mls	Client Info		<b>80428</b>	4325	1880
Filter Age	mls	Client Info		<b>15140</b>	4325	1880
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>31</b>	8	5
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>77</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>2</b>	1	<1
Copper	ppm	ASTM D5185m	>330	<b>3</b>	3	1
Tin	ppm	ASTM D5185m	>15	<b>2</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

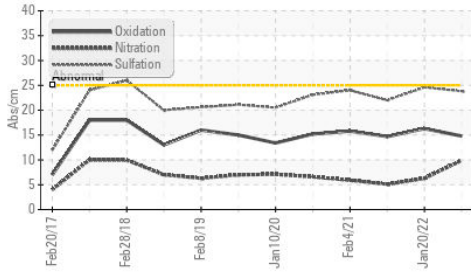
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	21	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>2.6</b>	0.8	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.9</b>	6.3	5.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.8</b>	24.6	22
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

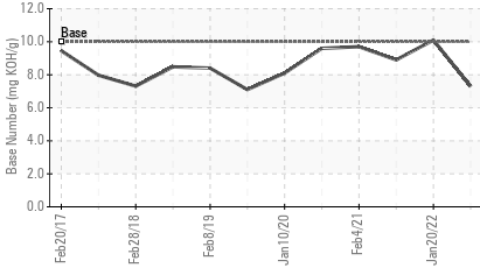
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	14	4
Boron	ppm	ASTM D5185m		<b>100</b>	364	460
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>13</b>	108	116
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>377</b>	636	616
Calcium	ppm	ASTM D5185m		<b>1739</b>	1483	1434
Phosphorus	ppm	ASTM D5185m	760	<b>928</b>	709	684
Zinc	ppm	ASTM D5185m	800	<b>1114</b>	774	787
Sulfur	ppm	ASTM D5185m	3000	<b>3560</b>	1923	1927
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.8</b>	16.3	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>7.3</b>	10.1	8.9
Visc @ 100°C	cSt	ASTM D445	14.6	<b>14.8</b>	13.5	13.3

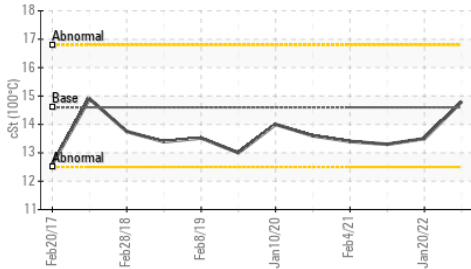
**FT-IR (Direct Trend)**



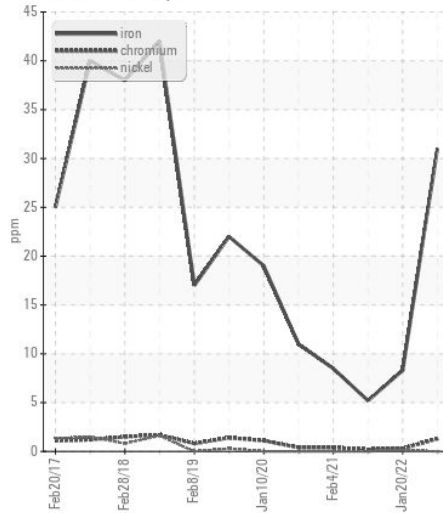
**Base Number**



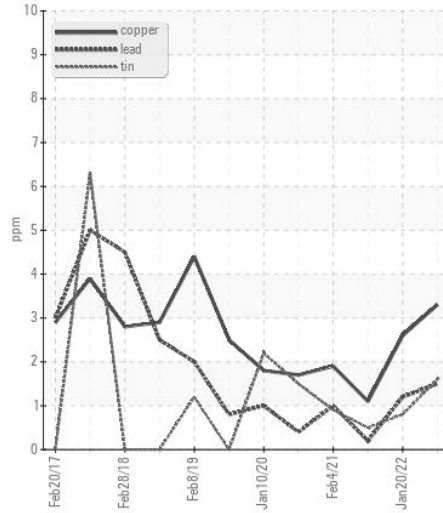
**Viscosity @ 100°C**



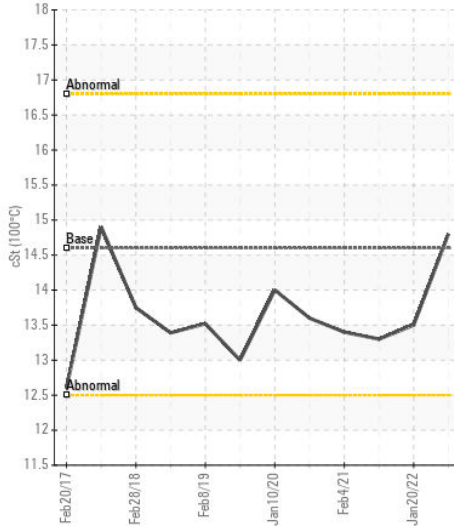
**Ferrous Alloys**



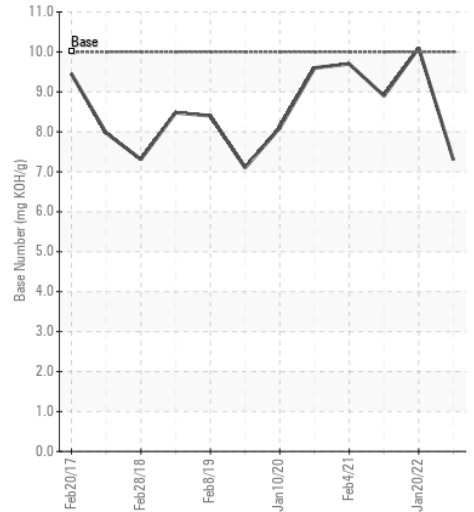
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0782681 **Received** : 09 Mar 2023  
**Lab Number** : 05787039 **Tested** : 10 Mar 2023  
**Unique Number** : 10371710 **Diagnosed** : 10 Mar 2023 - Angela Borella  
**Test Package** : CONST ( Additional Tests: TBN )

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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)