



# OIL ANALYSIS REPORT

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

Machine Id  
**G61**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON URSA SUPER PLUS EC 15W40 (--- GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0841452</b>	WC0841474	WC0758954
Sample Date		Client Info		<b>22 Dec 2023</b>	10 Oct 2023	03 Apr 2023
Machine Age	hrs	Client Info		<b>13247</b>	12721	11531
Oil Age	hrs	Client Info		<b>527</b>	632	471
Filter Age	hrs	Client Info		<b>527</b>	632	471
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>MARGINAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>5</b>	6	6
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	3
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

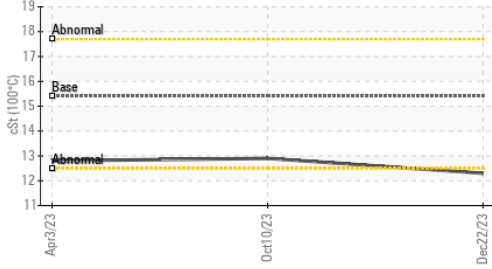
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	<1
Fuel	%	ASTM D3524	>5	<b>0.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.7</b>	7.6	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.4</b>	19.4	17.0
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

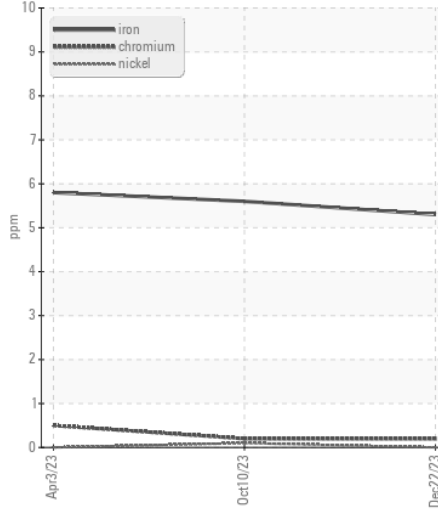
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	0
Boron	ppm	ASTM D5185m		<b>11</b>	11	28
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>71</b>	66	52
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>849</b>	877	84
Calcium	ppm	ASTM D5185m		<b>1115</b>	1334	2089
Phosphorus	ppm	ASTM D5185m	1200	<b>958</b>	1050	882
Zinc	ppm	ASTM D5185m	1300	<b>1159</b>	1372	1096
Sulfur	ppm	ASTM D5185m		<b>3215</b>	3371	4093
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.4</b>	14.0	11.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.0	<b>7.5</b>	7.4	4.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>▲ 12.3</b>	12.9	12.8

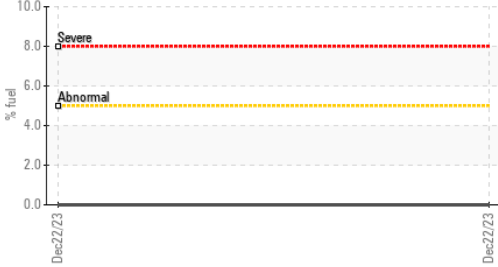
▲ Viscosity @ 100°C



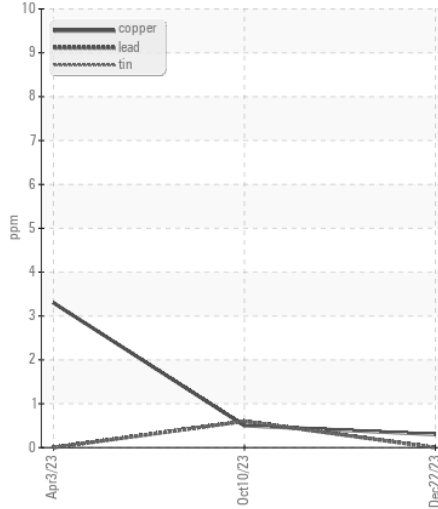
Ferrous Alloys



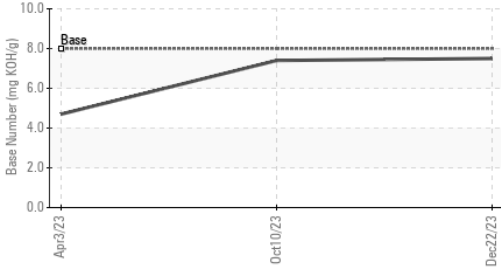
Fuel Dilution



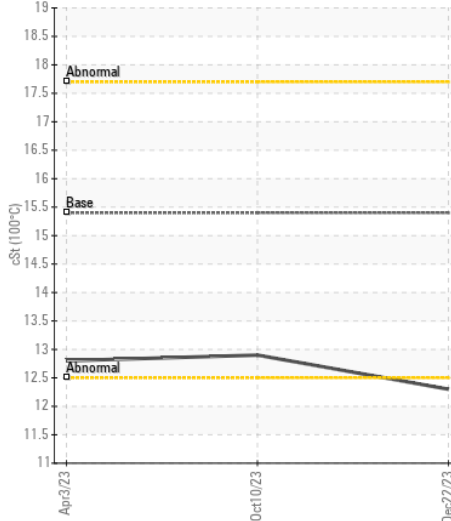
Non-ferrous Metals



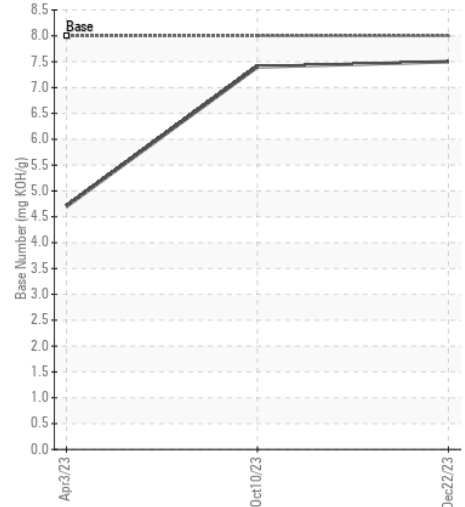
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0841452 **Received** : 10 Jan 2024  
**Lab Number** : 06057218 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10823167 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**Apple Valley Waste - SEW Location**  
 309 Salina Road  
 Sewell, NJ  
 US 08080  
 Contact: Service Manager

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)

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F: