



# OIL ANALYSIS REPORT

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

Machine Id  
**LINKBELT 6000QSL C-36 (S/N LE3I9-2823A)**  
 Component  
**Diesel Engine**  
 Fluid  
**CONOCO PHILLIPS GUARDOL ECT 15W40 (9 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0899836</b>	WC0879543	WC0833541
Sample Date		Client Info		<b>11 Apr 2024</b>	10 Nov 2023	04 Aug 2023
Machine Age	hrs	Client Info		<b>2300</b>	1988	1500
Oil Age	hrs	Client Info		<b>300</b>	1988	356
Filter Age	hrs	Client Info		<b>300</b>	1988	356
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	>90	<b>10</b>	7	6
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>76</b>	49	74
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Lead	ppm	ASTM D5185m	>40	<b>2</b>	3	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
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.

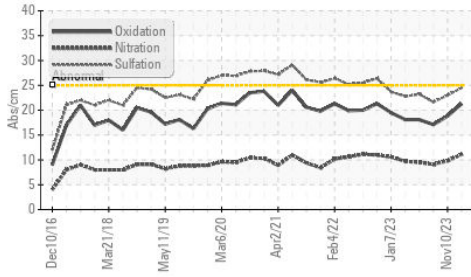
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.6</b>	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.1</b>	9.8	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.5</b>	23.0	21.6
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

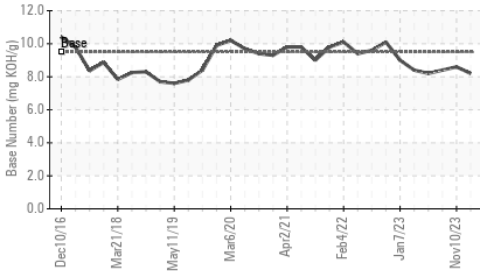
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	2	1
Boron	ppm	ASTM D5185m	85	<b>105</b>	57	78
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>10</b>	31	13
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	350	<b>453</b>	757	607
Calcium	ppm	ASTM D5185m	1800	<b>1975</b>	1563	1762
Phosphorus	ppm	ASTM D5185m	1000	<b>964</b>	1108	1082
Zinc	ppm	ASTM D5185m	1100	<b>1211</b>	1390	1335
Sulfur	ppm	ASTM D5185m	3500	<b>4323</b>	3707	4602
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.3</b>	18.8	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	<b>8.2</b>	8.6	8.4
Visc @ 100°C	cSt	ASTM D445	15.3	<b>15.0</b>	15.0	14.9

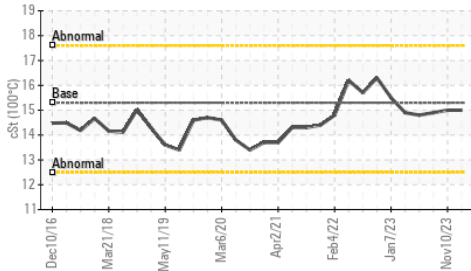
**FT-IR (Direct Trend)**



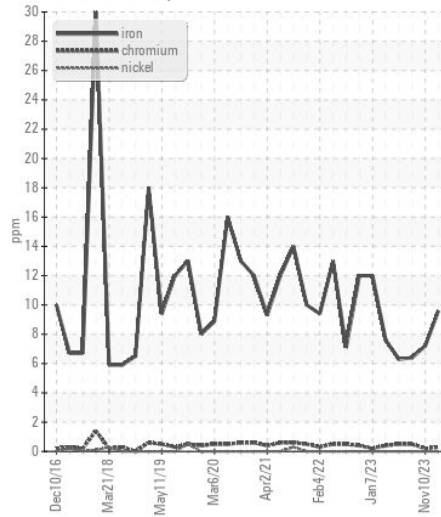
**Base Number**



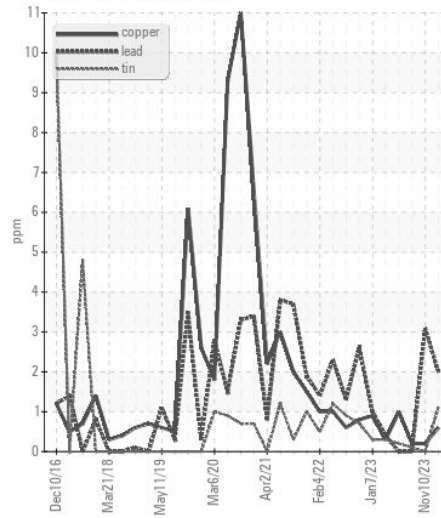
**Viscosity @ 100°C**



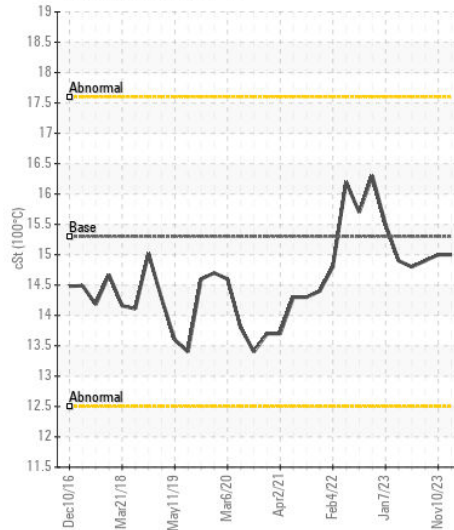
**Ferrous Alloys**



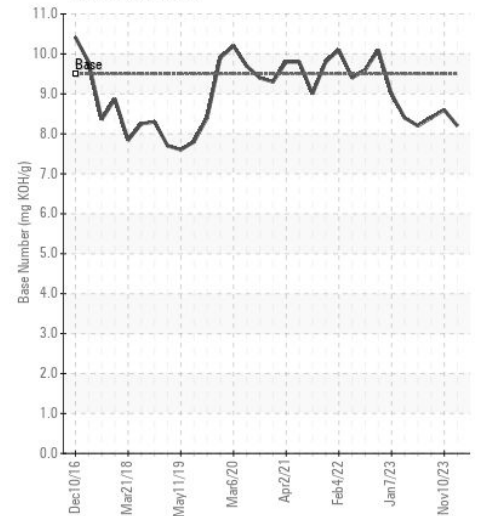
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0899836 **Received** : 16 Apr 2024  
**Lab Number** : 06150189 **Tested** : 17 Apr 2024  
**Unique Number** : 10980267 **Diagnosed** : 17 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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 F:

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)