

Limit/Abn **Current** 

History1

History2

Test

UOM

Method

#### Machine Id **PETERBILT 117354** Component **Diesel Engine** Fluid **CHEVRON 15W40 (20 GAL)**

# RECOMMENDATION

Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

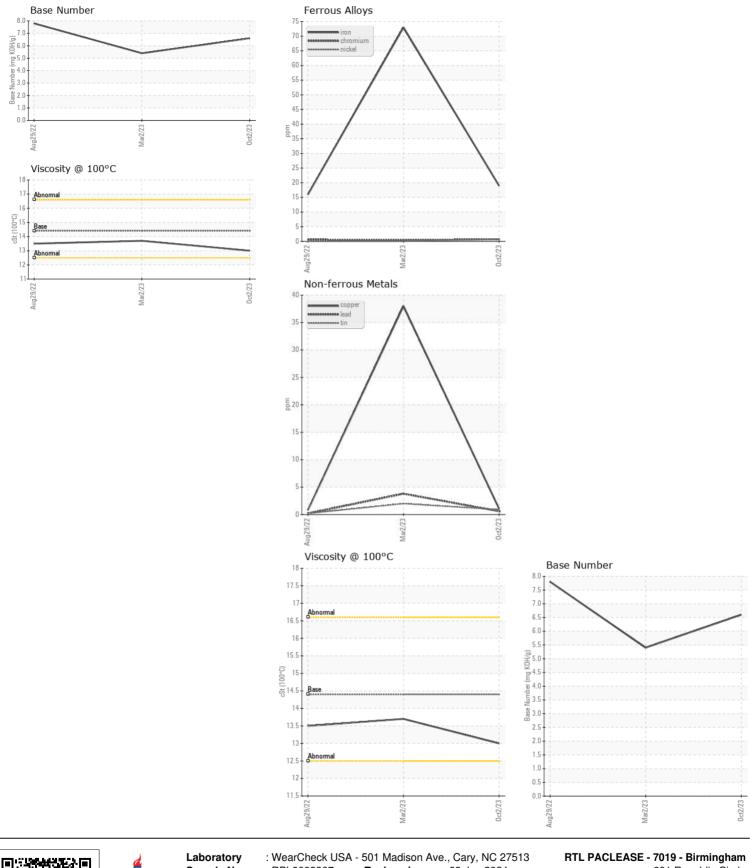
# CONTAMINATION

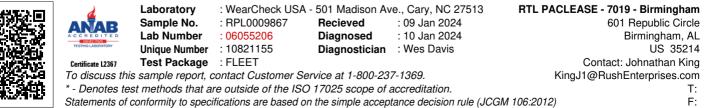
Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

	lest	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		RPL0009867	RPL0009922	RPL0003442
	Sample Date		Client Info		02 Oct 2023	02 Mar 2023	29 Aug 2022
	Machine Age	mls	Client Info		111830	111830	111830
	Oil Age	mls	Client Info		111830	111830	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed	_	Client Info		N/A	N/A	Changed
	Filter Changed		Client Info		N/A	N/A	Changed
	-		Ollent Into		NORMAL	NORMAL	NORMAL
	Sample Status				NORMAL	NORIVIAL	NORIVIAL
	Iron	ppm	ASTM D5185m	>100	19	73	16
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel		ASTM D5185m	>4	<1	0	0
		ppm		>4		2	0
	Titanium	ppm	ASTM D5185m	0	<1		
	Silver	ppm	ASTM D5185m	>3	0	0	<1
	Aluminum	ppm	ASTM D5185m	>20	7	2	15
	Lead	ppm	ASTM D5185m	>40	<1	4	<1
	Copper	ppm	ASTM D5185m	>330	1	38	<1
	Tin	ppm	ASTM D5185m	>15	<1	2	<1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
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	Silicon	ppm	ASTM D5185m	>25	8	9	9
	Potassium	ppm	ASTM D5185m	>20	12	7	23
	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.4	0.7	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	8.8	12.7	8.7
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	25.5	23.3
	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	>0.2	NEG	NEG	NEG
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	Sodium	ppm	ASTM D5185m	>50	0	2	0
	Boron	ppm	ASTM D5185m		236	28	346
	Barium	ppm	ASTM D5185m		0	0	2
	Molybdenum	ppm	ASTM D5185m		88	79	100
	Manganese	ppm	ASTM D5185m		<1	1	<1
	Magnesium	ppm	ASTM D5185m		399	391	418
	Calcium	ppm	ASTM D5185m		1441	1543	1564
	Phosphorus	ppm	ASTM D5185m		931	1021	1195
	Zinc	ppm	ASTM D5185m		1324	1240	1415
	Sulfur	ppm	ASTM D5185m		3221	2708	3559
	Oxidation	Abs/.1mm	*ASTM D3103111	>25	17.7	26.2	17.3
	Base Number (BN)		ASTM D7414 ASTM D2896	>20		5.4	7.8
	. ,	mg KOH/g		14.4	6.6 12.0		
	Visc @ 100°C	cSt	ASTM D445	14.4	13.0	13.7	13.5

### 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.





Submitted By: TECHNICIAN ACCOUNT