

OIL ANALYSIS REPORT



Machine Id **648** Component **Rear Differential** Fluid **{not provided} (--- GAL)**

DIAGNOSIS

A Recommendation

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

🔺 Wear

Bearing and/or bushing wear is indicated. Moderate concentration of visible metal present.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

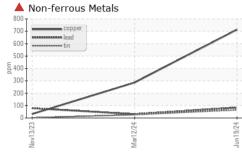
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

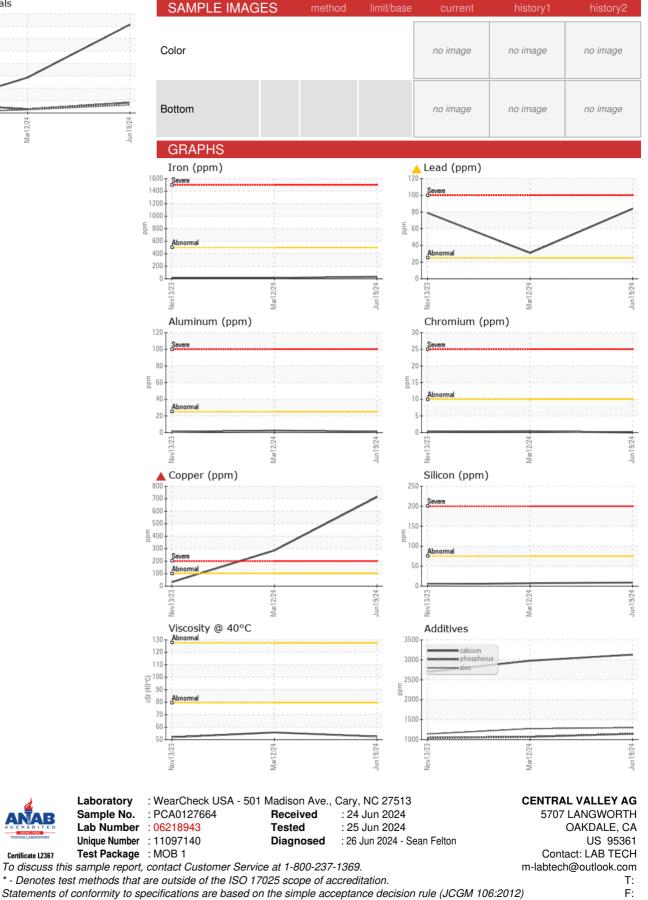
Sample Number Client Info PCA0127664 PCA0096402 PCA0096383 Sample Date Client Info 209 Jun 2024 12 Mar 2024 13 Nov 2023 Machine Age hrs Client Info 209 Jun 2024 13 Nov 2023 Oil Changed Client Info 2000 Changed Canged Sample Status Client Info Changed Changed Changed CONTAMINATION method Imitbase Current Nickort Nickort Vater WC Method >2 NEG NEG Nickort Vater WC Method >2 NEG Nickort Nickort Vater WC Method >2 NEG Nickort Nickort Tran ppm ASTM 05165m >10 0 <1 <1 Silver ppm ASTM 05165m >25 1 2 <1 Copper ppm ASTM 05165m >10 0 0 0 Cadmium ppm ASTM 05165m	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 20591 20152 19585 Oil Age hrs Client Info 439 567 2000 Oil Changed Client Info Changed Changed Changed Changed Sample Status Image Client Info Changed Changed Changed CONTAMINATION method Imit/base current history1 history2 Water WC Method >.2 NEG NEG NEG WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >10 0 <1	Sample Number		Client Info		PCA0127664	PCA0096402	PCA0096383
Oil Age hrs Client Info 439 567 2000 Oil Changed Client Info Changed Changed Changed Changed Severe ABNORMAL CONTAMINATION method Imit/base current history1 history2 Water WC Method >.2 NEG NEG NEG Contramin ppm ASTM 05185m >10 0 <1	Sample Date		Client Info		19 Jun 2024	12 Mar 2024	13 Nov 2023
Oil Changed Sample Status Client Info Changed SEVERE Changed SEVERE Changed SEVERE Changed ABNORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >.2 NEG NEG NEG Water WC Method >.2 NEG NEG NEG Iron ppm ASTM D5185n >500 33 15 16 Chromium ppm ASTM D5185n >10 0 <1	Machine Age	hrs	Client Info		20591	20152	19585
Sample Status SEVERE SEVERE SEVERE ABNORMAL CONTAMINATION method imit/base current history1 history2 Water WC Method >.2 NEG NEG NEG Wear METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >10 0 <1	Oil Age	hrs	Client Info		439	567	2000
CONTAMINATION method limit/base current history1 history2 Water WC Method >.2 NEG NEG NEG Wear WC Method >.2 NEG NEG NEG Wear ppm ASTM 05185m >500 33 15 16 Chromium ppm ASTM 05185m >10 0 <1 <1 Nickel ppm ASTM 05185m >10 0 <1 <1 Silver ppm ASTM 05185m >25 1 2 <1 Lead ppm ASTM 05185m >25 844 31 79 Copper ppm ASTM 05185m >10 0 0 0 Yanadium ppm ASTM 05185m 10 65 26 2 Vanadium ppm ASTM 05185m 10 0 0 1 Maganese ppm ASTM 05185m 2 3 7 Maga	Oil Changed		Client Info		Changed	Changed	Changed
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Aluminum ppm ASTM D5185m >25 1 2 <1 Lead ppm ASTM D5185m >25 ▲ 84 ▲ 31 ▲ 79 Copper ppm ASTM D5185m >100 ▲ 713 ▲ 286 32 Tin ppm ASTM D5185m >10 ▲ 65 ▲ 26 2 Vanadium ppm ASTM D5185m 0 0 0 <1	Titanium	ppm	ASTM D5185m		0	0	<1
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TinppmASTM D5185m>10▲ 65▲ 262VanadiumppmASTM D5185m000CadmiumppmASTM D5185m00<1	Lead	ppm	ASTM D5185m	>25	<u> </u>	A 31	7 9
TinppmASTM D5185m>10▲ 65▲ 262VanadiumppmASTM D5185m000CadmiumppmASTM D5185m00<1	Copper	ppm	ASTM D5185m	>100	A 713	2 86	32
VanadiumppmASTM D5185m000<1CadmiumppmASTM D5185m00<1	Tin	ppm			6 5	▲ 26	2
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BoronppmASTM D5185m828725BariumppmASTM D5185m001MolybdenumppmASTM D5185m237ManganeseppmASTM D5185m<1	Cadmium	ppm	ASTM D5185m		0	0	<1
BariumppmASTM D5185m001MolybdenumppmASTM D5185m237ManganeseppmASTM D5185m<1	ADDITIVES		method	limit/base	current	history1	history2
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MagnesiumppmASTM D5185m6461132CalciumppmASTM D5185m312929782694PhosphorusppmASTM D5185m114610711044ZincppmASTM D5185m130112751141SulfurppmASTM D5185m372638013189CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75974SodiumppmASTM D5185m>20<1	Molybdenum	ppm	ASTM D5185m		2	3	7
CalciumppmASTM D5185m312929782694PhosphorusppmASTM D5185m114610711044ZincppmASTM D5185m130112751141SulfurppmASTM D5185m372638013189CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75974SodiumppmASTM D5185m>75974PotassiumppmASTM D5185m>20<1	Manganese	ppm	ASTM D5185m		<1	0	<1
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SulfurppmASTM D5185m372638013189CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75974SodiumppmASTM D5185m>75974PotassiumppmASTM D5185m>20<1	Phosphorus	ppm	ASTM D5185m		1146	1071	1044
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75974SodiumppmASTM D5185m311PotassiumppmASTM D5185m>20<1	Zinc	ppm	ASTM D5185m		1301	1275	1141
SiliconppmASTM D5185m< >75974SodiumppmASTM D5185m311PotassiumppmASTM D5185m>20<1	Sulfur	ppm	ASTM D5185m		3726	3801	3189
SodiumppmASTM D5185m311PotassiumppmASTM D5185m<>20<1	CONTAMINAN	TS	method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>20<112VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONEMODERNONENONEPrecipitatescalar*VisualNONEMODERNONENONESiltscalar*VisualNONEMODERNONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGNEG	Silicon	ppm	ASTM D5185m	>75	9	7	4
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Emulsified Water scalar *Visual >.2 NEG NEG Free Water scalar *Visual MEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Waterscalar*Visual>.2NEGNEGFree Waterscalar*VisualNEGNEGNEG	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual		NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG

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