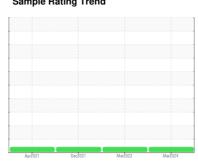


OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id

AV east mixer Gearbox

CHEVRON RANDO HD 68 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type.

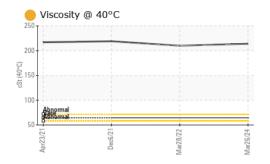
SAMPLE INFORMATION method limit base current mistory mistory			Apr202	1 Dec2021		ar2024		
Sample Date	SAMPLE INFORM	AOITAN	method	limit/base	current	history1	history2	
Sample Date	Sample Number		Client Info		PCA0082752	PCA0069541	PCA0052966	
Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info 0 0 0 0 Oil Changed Client Info Not Changd Not Changd N/A ATTENTION ATTE								
Oil Age hrs Client Info Not Changd Not Changd Not Changd Not Changd Not Sample Status Not Changd ATTENTION Not Changd Not C	·	hrs						
Oil Changed Client Info ATTENTION ATTENTION		hrs						
ATTENTION					Not Changd	Not Changd		
Water WC Method >0.2 NEG NEG NEG WEAR METALS method limi/base current history1 history2 Iron ppm ASTM D5185m >200 11 5 13 Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >10 0 0 0 Silver ppm ASTM D5185m >10 0 0 0 Aluminum ppm ASTM D5185m >50 <1 0 <1 Lead ppm ASTM D5185m >50 <1 0 <1 Copper ppm ASTM D5185m >50 <1 0 <1 Tin ppm ASTM D5185m >10 <1 0 <1 Antimony ppm ASTM D5185m >0 0 0 <0 Vanadium ppm ASTM D5185m >10 <1 0 <1	<u> </u>					ATTENTION	ATTENTION	
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 11 5 13 Chromium ppm ASTM D5185m >10 <1 0 <1 Nickel ppm ASTM D5185m >10 0 0 0 Titanium ppm ASTM D5185m <1 0 0 0 Aluminum ppm ASTM D5185m >50 <1 0 <1 <1 Aluminum ppm ASTM D5185m >50 <1 0 <1 <1 <1 <1 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <th>CONTAMINAT</th> <th>ION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CONTAMINAT	ION	method	limit/base	current	history1	history2	
Iron	Water		WC Method	>0.2	NEG	NEG	NEG	
Chromium ppm ASTM D5185m >10 <1 0 <1 Nickel ppm ASTM D5185m >10 0 0 0 Titanium ppm ASTM D5185m <1	WEAR METAL:	S	method	limit/base	current	history1	history2	
Nickel ppm ASTM D5185m >10 0 0 0 Titanium ppm ASTM D5185m <1	Iron	ppm	ASTM D5185m	>200	11	5	13	
Titanium ppm ASTM D5185m <1 0 0 Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >25 2 2 <1 Lead ppm ASTM D5185m >50 <1 0 <1 Copper ppm ASTM D5185m >50 <1 0 <1 Tin ppm ASTM D5185m >50 <1 0 <0 Antimony ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadrium ppm ASTM D5185m 30 39 24 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m <1 0 <1 1 Magnesium ppm ASTM D5185m <1 0 <1 <1	Chromium	ppm	ASTM D5185m	>10	<1	0	<1	
Silver	Nickel	ppm	ASTM D5185m	>10	0	0	0	
Aluminum ppm ASTM D5185m >25 2 2 <1 Lead ppm ASTM D5185m >50 <1	Titanium	ppm	ASTM D5185m		<1	0	0	
Lead ppm ASTM D5185m >50 <1	Silver	ppm	ASTM D5185m		0	0	0	
Copper ppm ASTM D5185m >200 <1	Aluminum	ppm	ASTM D5185m	>25	2	2	<1	
Tin ppm ASTM D5185m >10 <1	Lead	ppm	ASTM D5185m	>50	<1	0	<1	
Antimony ppm ASTM D5185m >5 <1	Copper	ppm	ASTM D5185m	>200	<1	0	<1	
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m <1	Tin	ppm	ASTM D5185m	>10	<1	0	0	
Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 30 39 24 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m <1	Antimony	ppm	ASTM D5185m	>5			<1	
ADDITIVES	Vanadium	ppm	ASTM D5185m		0	0	0	
Boron	Cadmium	ppm	ASTM D5185m		<1	0	0	
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m <1 0 <1 Manganese ppm ASTM D5185m <1 0 <1 Magnesium ppm ASTM D5185m <1 0 <1 Calcium ppm ASTM D5185m 3 3 8 Phosphorus ppm ASTM D5185m 247 259 321 Zinc ppm ASTM D5185m 6 0 0 Sulfur ppm ASTM D5185m 15088 15742 11734 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 7 24 Sodium ppm ASTM D5185m >20 2 0 0 Potassium ppm ASTM D5185m >20 2 0 0 Visual NONE NONE NONE	ADDITIVES		method	limit/base	current	history1	history2	
Molybdenum ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m		30	39	24	
Manganese ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m		0	0	0	
Magnesium ppm ASTM D5185m <1	<th>Molybdenum</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th><1</th> <th>0</th> <th><1</th>	Molybdenum	ppm	ASTM D5185m		<1	0	<1
Calcium ppm ASTM D5185m 3 3 8 Phosphorus ppm ASTM D5185m 247 259 321 Zinc ppm ASTM D5185m 6 0 0 Sulfur ppm ASTM D5185m 15088 15742 11734 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 7 24 Sodium ppm ASTM D5185m >50 0 0 0 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE	Manganese	ppm	ASTM D5185m		<1	0	<1	
Phosphorus ppm ASTM D5185m 247 259 321 Zinc ppm ASTM D5185m 6 0 0 Sulfur ppm ASTM D5185m 15088 15742 11734 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 7 24 Sodium ppm ASTM D5185m >20 2 0 0 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE N	Magnesium	ppm	ASTM D5185m		<1	0	<1	
Zinc ppm ASTM D5185m 6 0 0 Sulfur ppm ASTM D5185m 15088 15742 11734 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 7 24 Sodium ppm ASTM D5185m >0 0 0 0 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE	Calcium	ppm	ASTM D5185m		3	3	8	
Sulfur ppm ASTM D5185m 15088 15742 11734 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 7 24 Sodium ppm ASTM D5185m >0 0 0 0 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NORML NORML NORML Odo	Phosphorus	ppm	ASTM D5185m		247	259	321	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 7 24 Sodium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML	Zinc	ppm	ASTM D5185m		6	0	0	
Silicon ppm ASTM D5185m >50 12 7 24 Sodium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML	Sulfur	mag	ACTM DE10Em				4 4 70 4	
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Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORML	Silicon Sodium	TS ppm ppm	method ASTM D5185m ASTM D5185m	>50	current 12 0	history1 7 0	history2 24 0	
Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE LIGHT NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML	Silicon Sodium Potassium	TS ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20	current 12 0 2 current	history1 7 0 0	history2 24 0 0	
Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE LIGHT NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML NORML NORML	Silicon Sodium Potassium VISUAL	TS ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method	>50 >20 limit/base	current 12 0 2 current NONE	history1 7 0 0 history1	history2 24 0 0 history2	
Debrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORML	Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>50 >20 limit/base NONE	current 12 0 2 current NONE	history1 7 0 0 history1 NONE NONE	history2 24 0 0 NONE	
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORML	Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>50 >20 limit/base NONE NONE NONE	current 12 0 2 current NONE NONE	history1 7 0 0 history1 NONE NONE	history2 24 0 0 NONE NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORML	Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE	current 12 0 2 current NONE NONE NONE	history1 7 0 0 history1 NONE NONE NONE	history2 24 0 0 history2 NONE NONE NONE	
Odor scalar *Visual NORML NORML NORML NORML	Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE	current 12 0 2 current NONE NONE NONE NONE	history1 7 0 0 history1 NONE NONE NONE NONE	history2 24 0 0 NONE NONE NONE NONE	
	Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm scalar scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE NONE NONE	current 12 0 2 current NONE NONE NONE NONE LIGHT	history1 7 0 0 history1 NONE NONE NONE NONE NONE NONE	history2 24 0 0 history2 NONE NONE NONE NONE NONE NONE NONE	
Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm scalar scalar scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE	current 12 0 2 current NONE NONE NONE NONE LIGHT NONE	history1 7 0 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	history2 24 0 0 history2 NONE NONE NONE NONE NONE NONE NONE NONE	
	Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm scalar scalar scalar scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE	current 12 0 2 current NONE NONE NONE NONE NONE NONE NONE LIGHT NONE NORML	history1 7 0 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	history2 24 0 0 history2 NONE NONE	

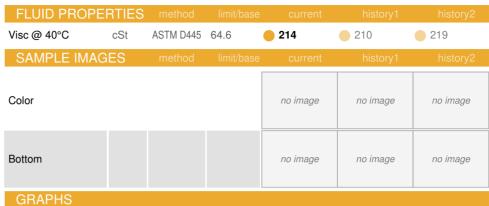
NEG

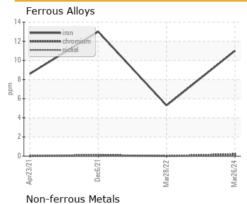
Submitted By: senjeczimmer

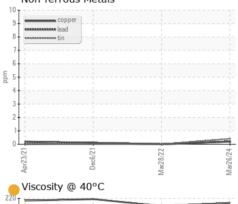


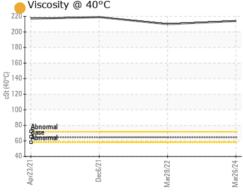
OIL ANALYSIS REPORT













Laboratory **Sample No.** : PCA0082752 Lab Number : 06155349 $\textbf{Unique Number} \quad : 10990772$

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received : 19 Apr 2024 Tested Diagnosed

: 24 Apr 2024 : 24 Apr 2024 - Sean Felton

AVR - APPLE VALLEY READY MIX 14698 GALAXY AVE APPLE VALLEY, MN US 55124

Contact: COLE DAMBROTEN coledambroten@avrconcrete.com T:

Test Package : FLEET Certificate 12367 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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