

5005-PR05-TAB05 Component Gearboox Fluid

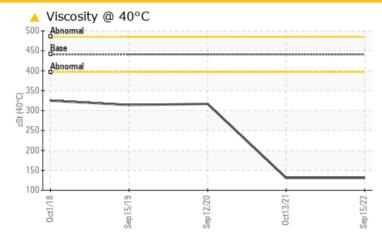
0-2018 Sey2019 Sey2020 0-2021 Sey2022

Sample Rating Trend

VISCOSITY

COMPONENT CONDITION SUMMARY

DAVLEY DARMEX RPL-NTO140 (--- GAL)



RECOMMENDATION

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS							
Sample Status				ABNORMAL	ABNORMAL	NORMAL	
Visc @ 40°C	cSt	ASTM D7279(m)	441	<u> </u>	1 31	317	

Customer Id: APOETO Sample No.: CB Lab Number: 02512827 Test Package: IND 2



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To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>

RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Description
Information Required			?	NOTE: Please provid and micron rating with

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

HISTORICAL DIAGNOSIS

13 Oct 2021 Diag: Kevin Marson



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

12 Sep 2020 Diag: Kevin Marson



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Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.







OIL ANALYSIS REPORT

Area [6019638] Machine Id 5005-PR05-TAB05 Component

Gearbox

DAVLEY DARMEX RPL-NTO140 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

		0ct2018		Sep2020 Oct2021	Sep2022	
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		СВ	СВ	CB0029741
Sample Date		Client Info		15 Sep 2022	13 Oct 2021	12 Sep 2020
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>200	2	1	1
Chromium	ppm	ASTM D5185(m)	>15	0	0	0
Nickel	ppm	ASTM D5185(m)	>15	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	0	0	0
Lead	ppm	ASTM D5185(m)	>100	0	0	0
Copper	ppm	ASTM D5185(m)	>200	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>25	0	<1	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	In the term of
			initia base	Current	HIStory	history2
Boron	ppm	ASTM D5185(m)		<1	<1	1
Boron Barium	ppm ppm					
Barium		ASTM D5185(m)		<1	<1	1
	ppm	ASTM D5185(m) ASTM D5185(m)		<1 0	<1 0	1 0
Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		<1 0 0	<1 0 0	1 0 0
Barium Molybdenum	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		<1 0 0 0	<1 0 0 0	1 0 0 0
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		<1 0 0 0 0	<1 0 0 0 0	1 0 0 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		<1 0 0 0 0 <1	<1 0 0 0 0 <1	1 0 0 <1 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		<1 0 0 0 0 <1 143	<1 0 0 0 0 <1 149	1 0 0 <1 <1 171
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		<1 0 0 0 0 <1 143 14	<1 0 0 0 0 <1 149 9	1 0 0 <1 <1 171 7
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	<1 0 0 0 <1 143 14 53	<1 0 0 0 0 <1 149 9 99	1 0 0 <1 <1 171 7 279
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		<1 0 0 0 <1 143 14 53 <1	<1 0 0 0 0 <1 149 9 99 <1	1 0 0 <1 <1 171 7 279 1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	<1 0 0 0 <1 143 14 53 <1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<1 0 0 0 <1 149 9 99 <1 kistory1	1 0 0 <1 <1 171 7 279 1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base	<1 0 0 0 <1 143 14 53 <1 2 1 <i>current</i> 5	<1 0 0 0 <1 149 9 99 <1 <1 history1 8	1 0 0 <1 <1 171 7 279 1 history2 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base >50	<1 0 0 0 <1 143 14 53 <1 5 5 0	<1 0 0 0 0 <1 149 9 99 99 <1 history1 8 0	1 0 0 <1 <1 171 7 279 1 history2 <1 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base >50 >20	<1 0 0 0 <1 143 14 53 <1 current 5 0 0	<1 0 0 0 <1 149 9 99 <1 history1 8 0 <1	1 0 0 <1 <1 171 7 279 1 history2 <1 0 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base >50 >20 limit/base	<1 0 0 0 (1 143 14 53 <1 5 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<1 0 0 0 <1 149 9 99 <1 history1 8 0 <1 history1	1 0 0 <1 <1 171 7 279 1 history2 <1 0 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base >50 >20 limit/base >20000	<1 0 0 0 (1 143 14 53 <1 5 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<1 0 0 0 (1 149 9 99 <1 history1 8 0 <1 history1 17353	1 0 0 <1 <1 171 7 279 1 history2 <1 0 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base >50 >20 limit/base >20000 >5000 >5000 >640	<1 0 0 0 -1 143 14 53 <1 <u>current</u> 5 0 0 0 <u>current</u> 2016 525	<1 0 0 0 (1 149 9 99 <1 history1 8 0 <1 history1 17353 3191	1 0 0 <1 <1 171 7 279 1 history2 <1 0 <1 history2 <1 0 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >20000 >5000 >5000 >640	<1 0 0 0 0 1 0 1 1 4 5 1 4 5 3 <1	<1 0 0 0 0 <1 149 9 99 <1 history1 8 0 <1 history1 17353 3191 186	1 0 0 <1 <1 171 7 279 1 history2 <1 0 <1 history2 <1 0 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >20000 >5000 >5000 >640 >160 >40	<1 0 0 0 0 1 143 14 53 14 53 <1 current 5 0 0 0 current 2016 525 29 5	<1 0 0 0 (1 149 9 99 99 <1 history1 8 0 <1 history1 17353 3191 186 41	1 0 0 (1 (1 7 279 1 7 279 1 1 history2 <1 0 <1 history2

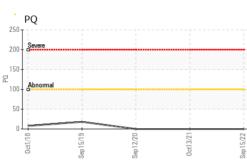


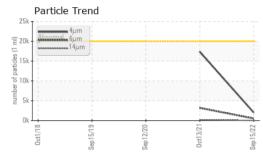
VISCOSITY

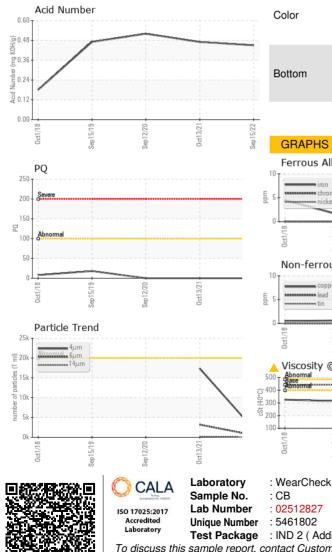
Sample Rating Trend



OIL ANALYSIS REPORT







FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.45	0.47	0.52
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*	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
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	441	1 31	1 31	317
SAMPLE IMAGES		method	limit/base	current	history1	history2
			7			

