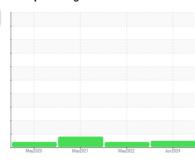


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **TA-306**

Rear Right Planetary

GEAR OIL SAE 80W90 (--- GAL)

Recommendation

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

Confirm oil type. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION method limit base current history1 history2 Sample Number Client Info WC0909462 WC0588174 WC0569395 Sample Date Client Info 5750 4840 4090 Oil Age hrs Client Info 0 4848 2000 Oil Changed Client Info N/A NoRMAL ABNORMAL ABNORMAL ABNORMAL ABNORMAL ABNORMAL CONTAMINATION method limit/base current history1 Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185n >500 41 29 17 Chromium ppm ASTM 05185n >10 0 <1 <1 Nickel ppm ASTM 05185n >10 0 <1 <1 <1 Alluminum ppm ASTM 05185n >10 </th <th></th> <th></th> <th>May202</th> <th>U May2021</th> <th>May2022 J</th> <th>un2024</th> <th></th>			May202	U May2021	May2022 J	un2024	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 5750 4840 4090 Oil Age hrs Client Info 0 4848 2000 Oil Changed Client Info N/A Not Changd Not Changd Sample Status NoRMAL ABNORMAL ABNORMAL CONTAMINATION method Imitibase current history1 history2 Water WC Method >0.2 NEG NEG NEG WEAR METALS method Imitibase current history1 history2 Iron ppm ASTM 05185m >50.0 41 29 17 Chromium ppm ASTM 05185m >10 0 -1 <1	Sample Number		Client Info		WC0909462	WC0588174	WC0569395
Oil Age hrs Client Info 0 4848 2000 Oil Changed Sample Status Client Info N/A Not Changd Not Changd Not Changd Not Changd ABNORMAL	Sample Date		Client Info		25 Jun 2024	17 May 2022	28 May 2021
Cilichanged Cilicht Info N/A Not Changd Not Changd ABNORMAL AB	Machine Age	hrs	Client Info		5750	4840	4090
MORMAL ABNORMAL ABNORMAL ABNORMAL ABNORMAL ABNORMAL CONTAMINATION method imit/base current history1 history2	Oil Age	hrs	Client Info		0	4848	2000
Water	Oil Changed		Client Info		N/A	Not Changd	Not Changd
Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >500 41 29 17 Chromium ppm ASTM D5185m >10 0 -1 -1 Nickel ppm ASTM D5185m >10 0 -1 -1 Silver ppm ASTM D5185m 0 -1 -1 -1 Aluminum ppm ASTM D5185m 0 0 -1 -1 Aluminum ppm ASTM D5185m >25 -1 2 3 Lead ppm ASTM D5185m >25 -1 -1 -1 -1 Copper ppm ASTM D5185m >10 0 -1 -1 -1 Tin ppm ASTM D5185m 5 0 Vanadium ppm ASTM D5185m 50	Sample Status				NORMAL	ABNORMAL	ABNORMAL
WEAR METALS	CONTAMINATION	١	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.2	NEG	NEG	NEG
Chromium ppm ASTM D5185m >10 0 <1 <1 Nickel ppm ASTM D5185m >10 0 0 0 Titanium ppm ASTM D5185m 0 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>500	41	29	17
Titanium ppm ASTM D5185m 0 <1 <1 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >25 <1	Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Silver	Nickel	ppm	ASTM D5185m	>10	0	0	0
Aluminum	Titanium	ppm	ASTM D5185m		0	<1	<1
Lead ppm ASTM D5185m >2.5 <1 <1 0 Copper ppm ASTM D5185m >7.5 <1 <1 <1 Tin ppm ASTM D5185m >10 0 <1 0 Antimony ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m 0 0 <1 0 Cadmium ppm ASTM D5185m 0 0 0 <1 Boron ppm ASTM D5185m 400 66 67 64 Barium ppm ASTM D5185m 20 0 0 0 Molybdenum ppm ASTM D5185m 12 0 1 <1 Magnesium ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 150 3061 3509 3561 Phosphorus ppm ASTM D5185m 125 1149	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >75 <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 <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 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Aluminum	ppm	ASTM D5185m	>25	<1	2	3
Tin	Lead	ppm	ASTM D5185m	>25	<1	<1	0
Antimony ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m 0 0 <1	Copper	ppm	ASTM D5185m	>75	<1	<1	<1
Antimony ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 400 66 67 64 Barium ppm ASTM D5185m 200 0 0 0 Molybdenum ppm ASTM D5185m 12 0 1 <1 Manganese ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 150 3061 3509 3561 Phosphorus ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 225 00 6446 6970 5886	Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium ppm ASTM D5185m 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 400 66 67 64 Barium ppm ASTM D5185m 12 0 1 <1 Manganese ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 150 3061 3509 3561 Phosphorus ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 25 14 14 <th< td=""><td>Antimony</td><td></td><td>ASTM D5185m</td><td>>5</td><th></th><td></td><td>0</td></th<>	Antimony		ASTM D5185m	>5			0
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 400 66 67 64 Barium ppm ASTM D5185m 200 0 0 0 Molybdenum ppm ASTM D5185m 12 0 1 <1	Vanadium		ASTM D5185m		0	0	<1
Boron	Cadmium		ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 200 0 0 0 Molybdenum ppm ASTM D5185m 12 0 1 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 12 0 1 <1 Manganese ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 150 3061 3509 3561 Phosphorus ppm ASTM D5185m 150 1068 1112 1165 Zinc ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 22500 6446 6970 5886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 14 14 16 Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1 0 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual	Boron	ppm	ASTM D5185m	400	66	67	64
Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 150 3061 3509 3561 Phosphorus ppm ASTM D5185m 1650 1068 1112 1165 Zinc ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 22500 6446 6970 5886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 14 14 16 Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1	Barium	ppm	ASTM D5185m	200	0	0	0
Manganese ppm ASTM D5185m <1 <1 <1 <1 Magnesium ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 150 3061 3509 3561 Phosphorus ppm ASTM D5185m 150 1068 1112 1165 Zinc ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 22500 6446 6970 5886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 14 14 16 Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1 0 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual	Molybdenum	ppm	ASTM D5185m	12	0	1	<1
Magnesium ppm ASTM D5185m 12 2 19 15 Calcium ppm ASTM D5185m 150 3061 3509 3561 Phosphorus ppm ASTM D5185m 1650 1068 1112 1165 Zinc ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 22500 6446 6970 5886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 14 14 16 Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1 0 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual </td <td>Manganese</td> <td></td> <td>ASTM D5185m</td> <td></td> <th><1</th> <td><1</td> <td><1</td>	Manganese		ASTM D5185m		<1	<1	<1
Calcium ppm ASTM D5185m 150 3061 3509 3561 Phosphorus ppm ASTM D5185m 1650 1068 1112 1165 Zinc ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 22500 6446 6970 5886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 14 14 16 Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1	Magnesium		ASTM D5185m	12	2	19	15
Phosphorus ppm ASTM D5185m 1650 1068 1112 1165 Zinc ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 22500 6446 6970 5886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 14 14 16 Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1	Calcium		ASTM D5185m	150	3061	3509	3561
Zinc ppm ASTM D5185m 125 1149 1331 1331 Sulfur ppm ASTM D5185m 22500 6446 6970 5886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 14 14 16 Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1	Phosphorus		ASTM D5185m	1650	1068	1112	1165
Sulfur ppm ASTM D5185m 22500 6446 6970 5886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 14 14 16 Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1			ASTM D5185m	125	1149	1331	1331
Silicon ppm ASTM D5185m >75 14 14 16 Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1 0 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE VLITE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE MODER MODER Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML	Sulfur		ASTM D5185m		6446		
Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m >170 6 4 4 Potassium ppm ASTM D5185m >20 <1 0 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE VLITE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE MODER MODER Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML	Silicon	ppm	ASTM D5185m	>75	14	14	16
Potassium ppm ASTM D5185m >20 <1 0 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE VLITE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE MODER MODER Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML	Sodium		ASTM D5185m	>170	6	4	4
White Metal scalar *Visual NONE NONE NONE VLITE 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 NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML			ASTM D5185m	>20	<1	0	<1
Yellow Metal scalar *Visual NONE MODER MODER MODER MODER MODER Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE NONE NONE NORML	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE MODER MODER Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML	White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE
Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE MODER MODER Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debris scalar *Visual NONE NONE MODER MODER Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORML	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORML	Debris	scalar	*Visual	NONE	NONE	▲ MODER	▲ MODER
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORML	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Odor scalar *Visual NORML NORML NORML NORML	Appearance	scalar	*Visual	NORML		NORML	NORML
	• •	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water				NEG	NEG	NEG

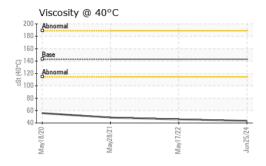
ation EDDIE SECONESPROA

NEG

scalar *Visual

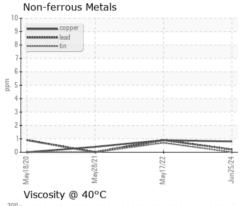


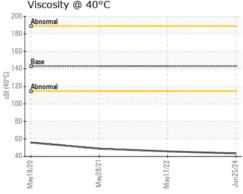
OIL ANALYSIS REPORT





Ferrous Alloys 25







Certificate 12367

Laboratory

Sample No. Lab Number : 06236620 Unique Number : 11125454

Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0909462

Received : 15 Jul 2024 Tested : 16 Jul 2024 Diagnosed

: 17 Jul 2024 - Don Baldridge

E.C. PACE CO. 1811 HOLLINS RD. ROANOKE, VA US 24012 Contact: EDDIE SECO ESECO@ECPACE.COM

T: (276)266-5849

F: (540)343-6909

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)

Report Id: ECPROA [WUSCAR] 06236620 (Generated: 07/17/2024 13:26:39) Rev: 1

Contact/Location: EDDIE SECO - ECPROA