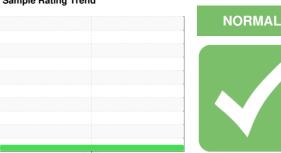


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

83E-44A3

Component Gearbox

ROYAL PURPLE SYNERGY 90/150 (--- 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 oil.

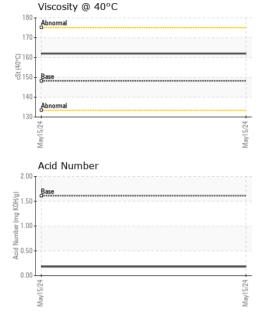
Fluid Condition

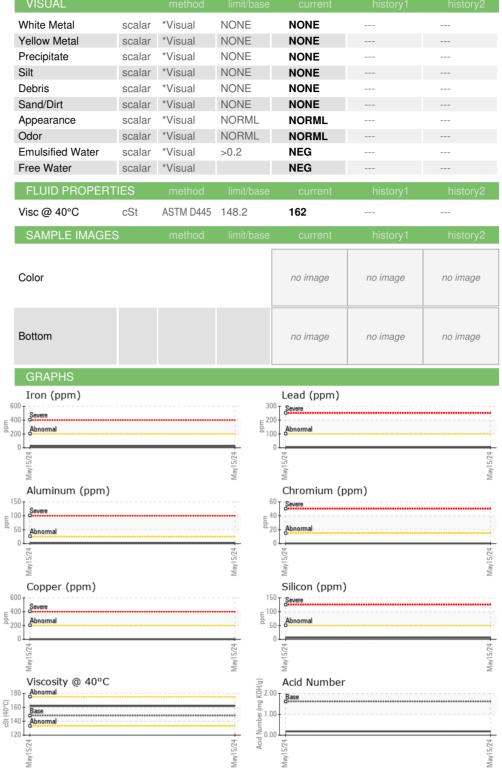
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		HPL0004876		
Sample Date		Client Info		15 May 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	21		
Chromium	ppm	ASTM D5185m	>15	<1		
Nickel	ppm	ASTM D5185m	>15	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>25	1		
Lead	ppm	ASTM D5185m	>100	1		
Copper	ppm	ASTM D5185m	>200	<1		
Tin	ppm	ASTM D5185m	>25	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		<1		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		<1		
Calcium	ppm	ASTM D5185m		33		
Phosphorus	ppm	ASTM D5185m	200	123		
Zinc	ppm	ASTM D5185m		0		
Sulfur	ppm	ASTM D5185m		17033		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	6		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	2		
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.61	0.18		



OIL ANALYSIS REPORT









Certificate 12367

Laboratory Sample No.

Lab Number : 06185198

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : HPL0004876

Unique Number : 11036524 Test Package : MOB 2

Received : 20 May 2024 Tested

: 21 May 2024 Diagnosed

MARATHON PETROLEUM CO. IL. REFININF DIVISION, 400 S MARATHON AVE ROBINSON, IL US 62454

: 22 May 2024 - Sean Felton

Contact: M.S. MANHART mmanhart@marathonpetroleum.com

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.

T: (618)544-2121 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x: