



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
73EY-8D
 Component
Gearbox
 Fluid
ROYAL PURPLE SYNERGY 90/150 (--- GAL)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

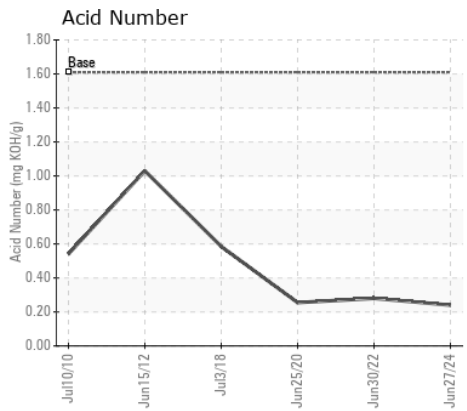
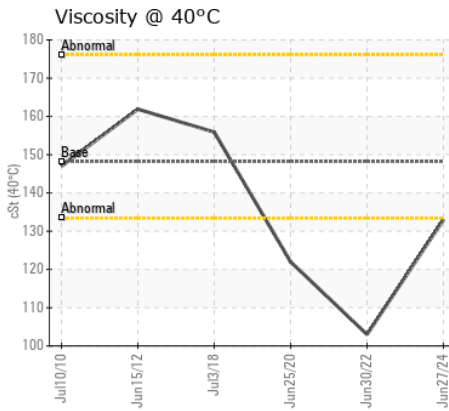
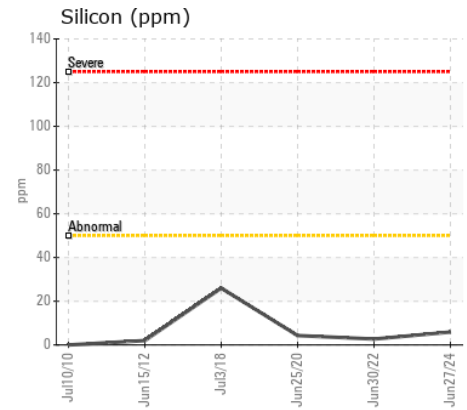
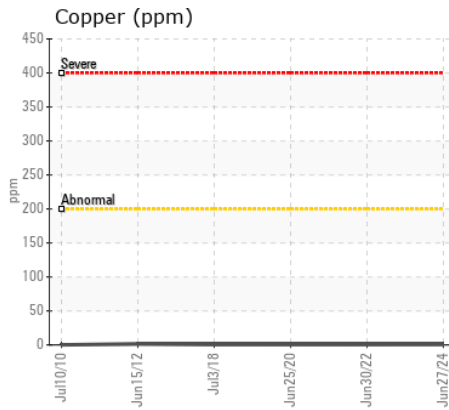
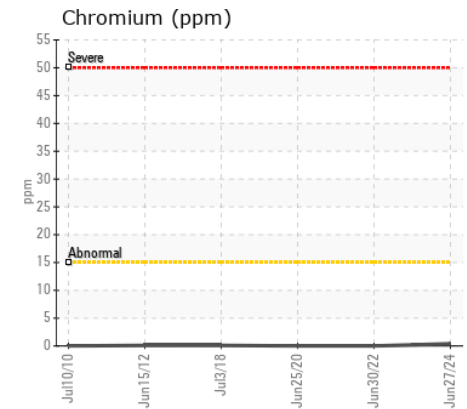
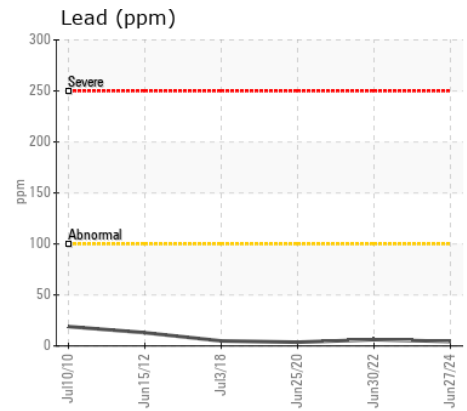
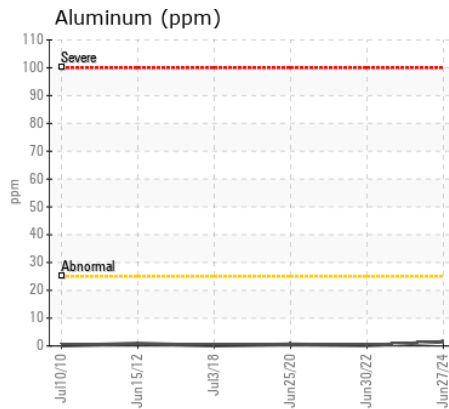
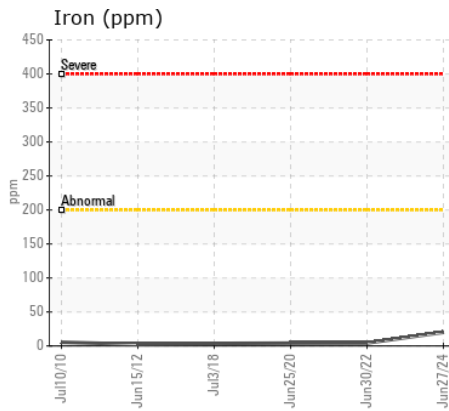
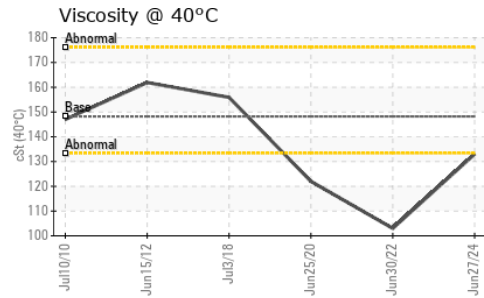
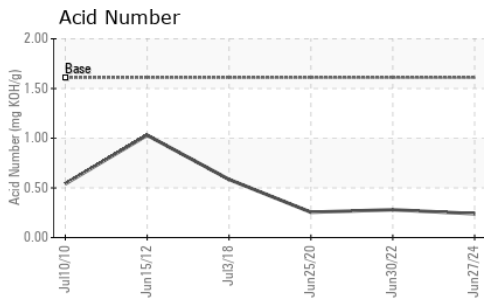
CONTAMINATION

Moderate concentration of visible dirt/debris present in the oil.

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HPL0004764	HPL0000514	HPL0005649
Sample Date		Client Info		27 Jun 2024	30 Jun 2022	25 Jun 2020
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	20	4	4
Chromium	ppm	ASTM D5185m	>15	<1	0	0
Nickel	ppm	ASTM D5185m	>15	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	<1	<1
Lead	ppm	ASTM D5185m	>100	4	6	4
Copper	ppm	ASTM D5185m	>200	<1	<1	<1
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	6	3	4
Potassium	ppm	ASTM D5185m	>20	<1	<1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT	VLITE
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
Sodium	ppm	ASTM D5185m		<1	0	<1
Boron	ppm	ASTM D5185m		0	<1	1
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		7	13	8
Calcium	ppm	ASTM D5185m		39	86	61
Phosphorus	ppm	ASTM D5185m	200	67	49	88
Zinc	ppm	ASTM D5185m		0	0	2
Sulfur	ppm	ASTM D5185m		18806	19635	12356
Acid Number (AN)	mg KOH/g	ASTM D8045	1.61	0.24	0.28	0.255
Visc @ 40°C	cSt	ASTM D445	148.2	133	103	122



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HPL0004764
Lab Number : 06228090
Unique Number : 11111583
Test Package : MOB 2

Received : 03 Jul 2024
Tested : 07 Jul 2024
Diagnosed : 07 Jul 2024 - Don Baldrige

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

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

T: (618)544-2121

F: x:

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)