



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
RIVER EAGLE

Machine Id
REA
Component
Port Main Engine

Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (39 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0063941	MW0063836	MW0063845
Sample Date		Client Info		18 Jun 2024	02 May 2024	10 Apr 2024
Machine Age	hrs	Client Info		5004	4161	4010
Oil Age	hrs	Client Info		835	833	0
Filter Age	hrs	Client Info		835	833	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	5	11	9
Chromium	ppm	ASTM D5185m	>8	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m	>3	14	13	14
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	<1	<1
Lead	ppm	ASTM D5185m	>18	<1	4	3
Copper	ppm	ASTM D5185m	>80	<1	2	1
Tin	ppm	ASTM D5185m	>14	0	2	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

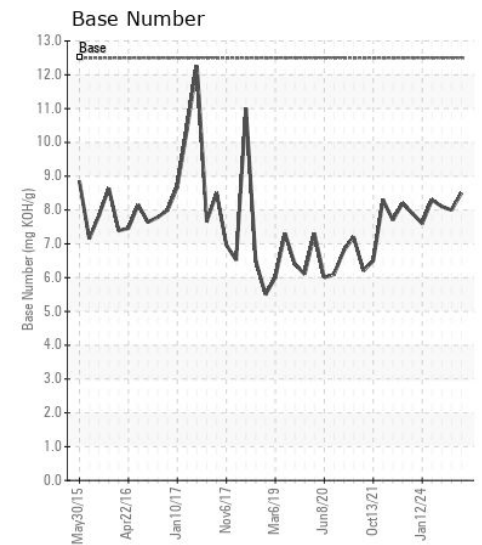
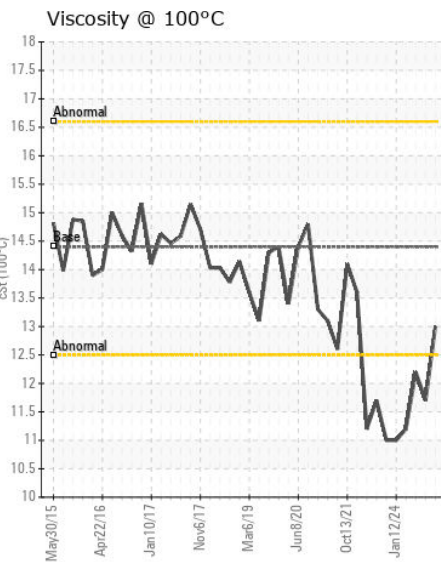
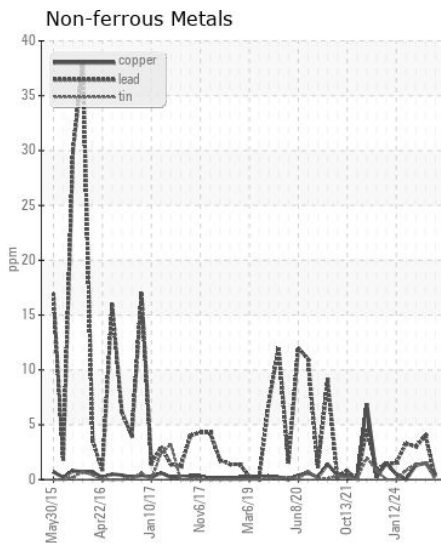
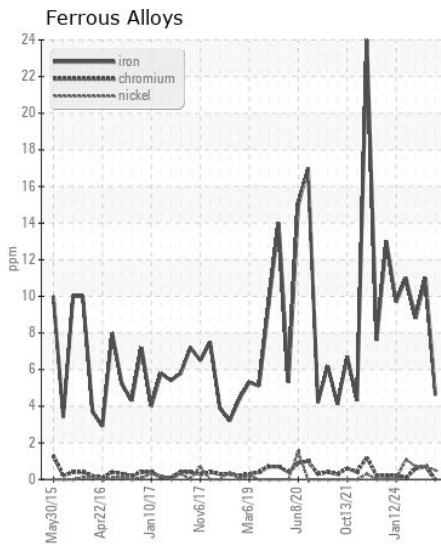
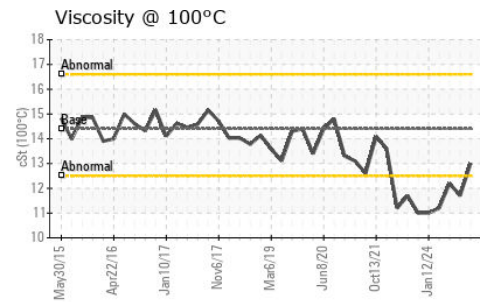
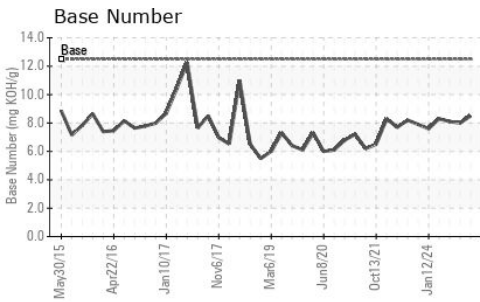
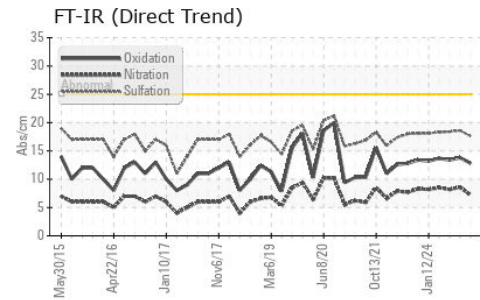
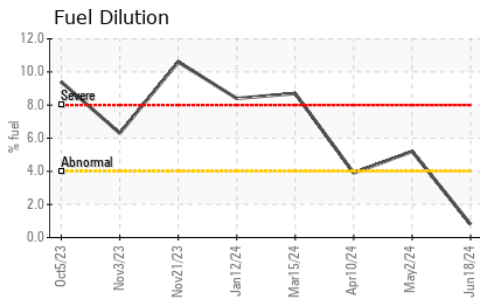
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	7	5
Potassium	ppm	ASTM D5185m	>20	3	4	4
Fuel	%	ASTM D3524	>4.0	0.8	▲ 5.2	▲ 3.9
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.2	8.6	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6	18.6	18.4
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>75	3	0	0
Boron	ppm	ASTM D5185m	151	100	94	101
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	40	36	36
Manganese	ppm	ASTM D5185m		<1	1	1
Magnesium	ppm	ASTM D5185m	0	791	647	664
Calcium	ppm	ASTM D5185m	2046	1535	1303	1336
Phosphorus	ppm	ASTM D5185m	1043	765	634	637
Zinc	ppm	ASTM D5185m	943	872	744	759
Sulfur	ppm	ASTM D5185m	5012	3814	3065	3148
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.8	13.8	13.4
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	8.5	8.0	8.1
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	▲ 11.7	▲ 12.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0063941 **Received** : 25 Jun 2024
Lab Number : 06219435 **Tested** : 27 Jun 2024
Unique Number : 11097632 **Diagnosed** : 27 Jun 2024 - Jonathan Hester
Test Package : MAR 2 (Additional Tests: PercentFuel)

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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)