



OIL ANALYSIS REPORT

WEAR	MARGINAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
AH23216 - Port Michell thrust Block
 Component
Thrust Bearing
 Fluid
PETRO CANADA PREMIUM R&O 100 (136 LTR)

RECOMMENDATION

We advise that you check for visible metal particles in the oil. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0855642	WC0855647	WC0753473
Sample Date		Client Info		24 Mar 2024	22 Jan 2024	10 Dec 2023
Machine Age	mths	Client Info		0	4	2
Oil Age	mths	Client Info		0	0	0
Filter Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	None	Not Changd
Sample Status				ABNORMAL	NORMAL	SEVERE

WEAR

Light concentration of visible metal present.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185(m)	>85	<1	<1	1
Chromium	ppm	ASTM D5185(m)	>20	2	0	3
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>40	0	<1	<1
Lead	ppm	ASTM D5185(m)	>60	6	5	3
Copper	ppm	ASTM D5185(m)	>7	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>40	4	<1	4
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	▲ VLITE	NONE	▲ LIGHT
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

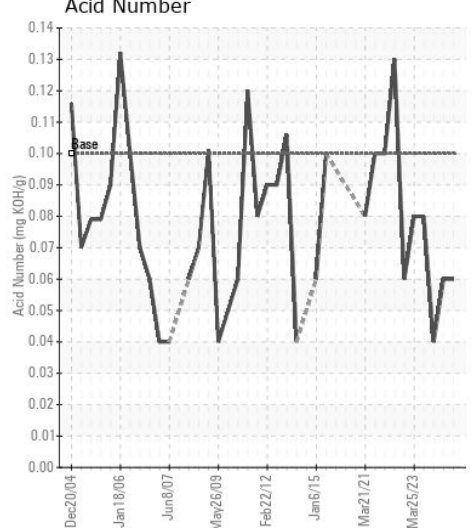
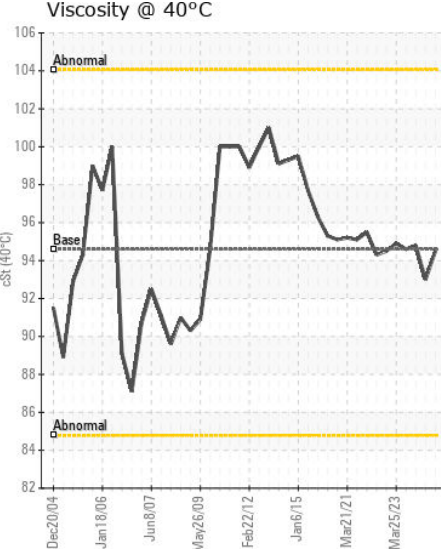
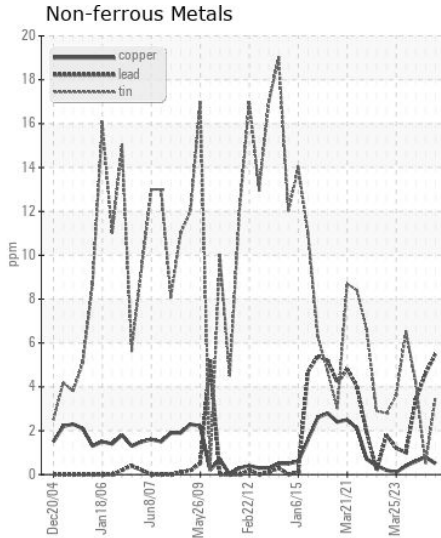
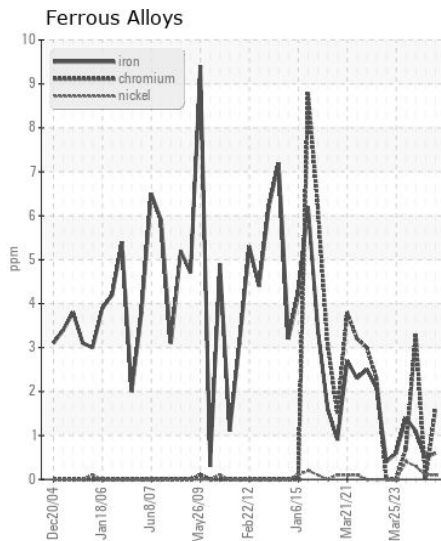
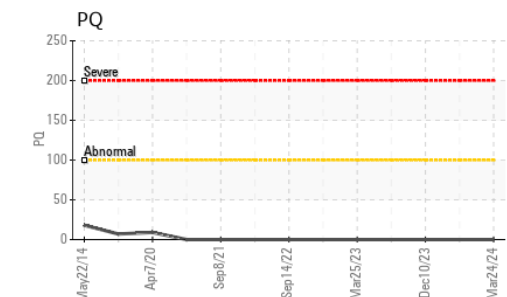
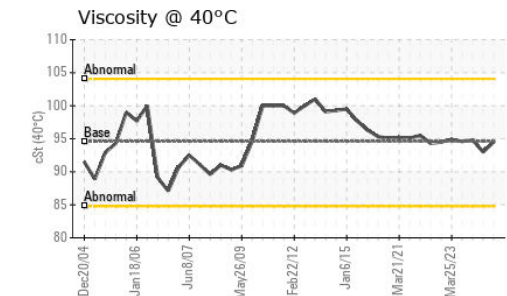
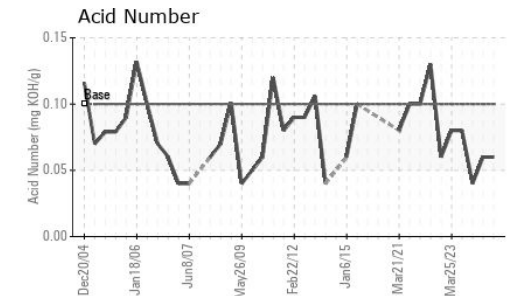
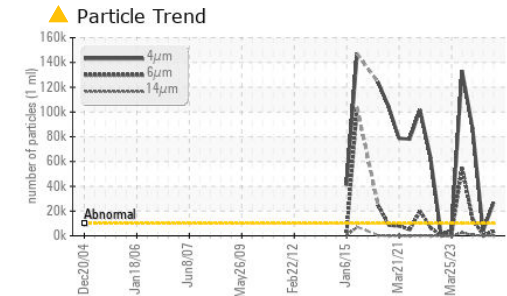
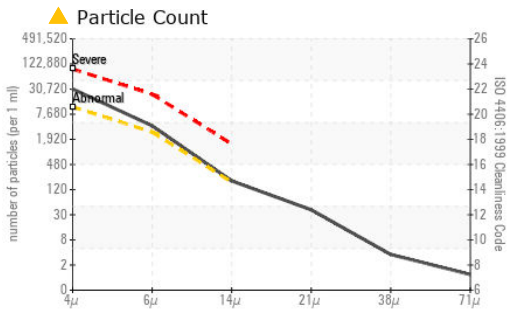
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	1	2	2
Potassium	ppm	ASTM D5185(m)	>20	0	<1	4
Water		WC Method	>2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>10000	▲ 26753	4045	▲ 86853
Particles >6µm		ASTM D7647	>2500	● 3540	686	▲ 13577
Particles >14µm		ASTM D7647	>160	● 171	32	▲ 655
Particles >21µm		ASTM D7647	>40	35	9	▲ 123
Particles >38µm		ASTM D7647	>10	3	1	7
Particles >71µm		ASTM D7647	>3	1	0	1
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ 22/19/15	19/17/12	▲ 24/21/17
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		<1	0	0
Boron	ppm	ASTM D5185(m)	0	4	5	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	0	2	0	0
Calcium	ppm	ASTM D5185(m)	0	3	<1	<1
Phosphorus	ppm	ASTM D5185(m)	0	7	6	5
Zinc	ppm	ASTM D5185(m)	0	5	4	3
Sulfur	ppm	ASTM D5185(m)	0	243	151	146
Acid Number (AN)	mg KOH/g	ASTM D974*	0.10	0.06	0.06	0.04
Visc @ 40°C	cSt	ASTM D7279(m)	94.6	94.5	93.0	94.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0855642
Lab Number : 02628299
Unique Number : 5761431
Test Package : MAR 2 (Additional Tests: BottomAnalysis, FilterPatch, PQ, PrtCount, PrtFilter, TAN

CANADIAN COAST GUARD/DFO
 CCGS ANN HARVEY, P.O. BOX 5667
 ST. JOHN'S, NL
 CA A1C 5X1

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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