



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HL3111 AG1 (S/N 32065)

Component
1 Auxiliary Engine

Fluid
PETRO CANADA BP ENERGOL DS3 153 (450 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0807834	WC0807836	WC0807830
Sample Date		Client Info		31 Mar 2024	02 Mar 2024	04 Feb 2024
Machine Age	hrs	Client Info		94019	93616	93245
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185(m)	>35	7	7	8
Chromium	ppm	ASTM D5185(m)	>4	0	0	0
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	1	<1	2
Lead	ppm	ASTM D5185(m)	>7	0	0	0
Copper	ppm	ASTM D5185(m)	>65	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

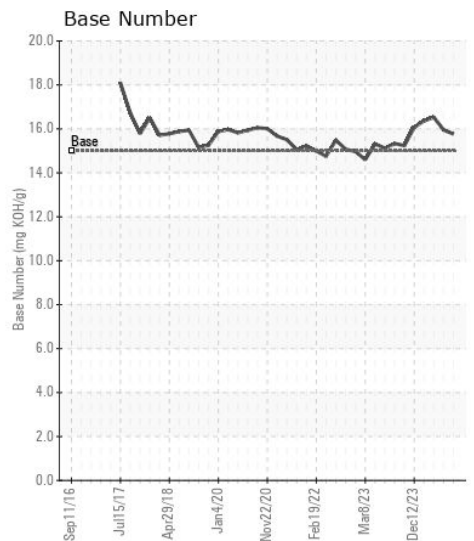
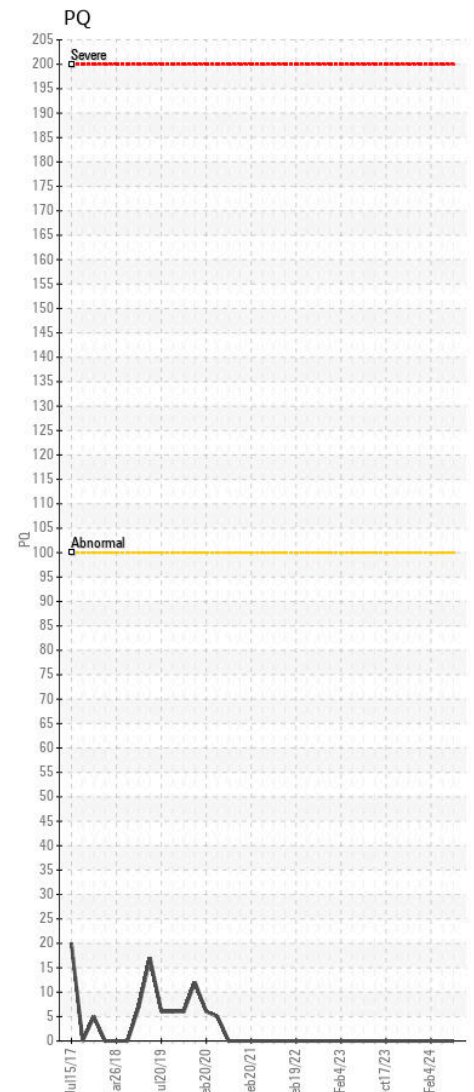
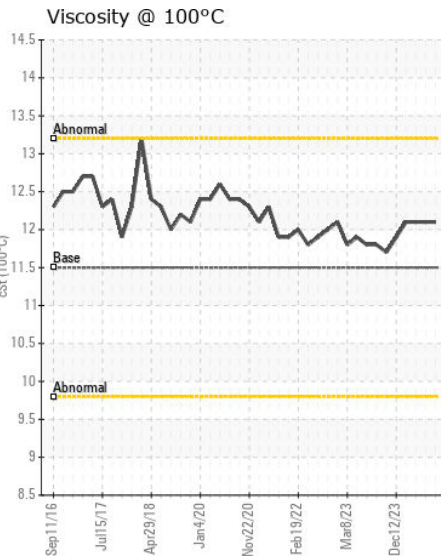
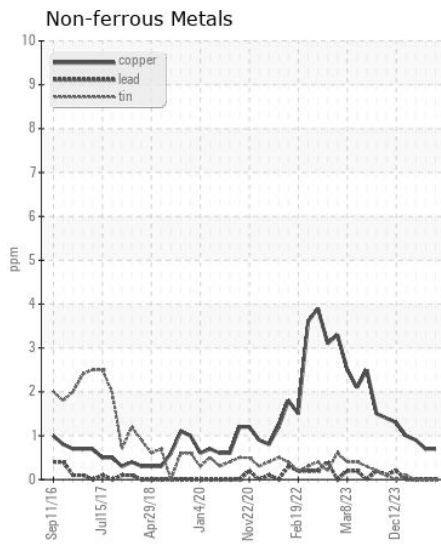
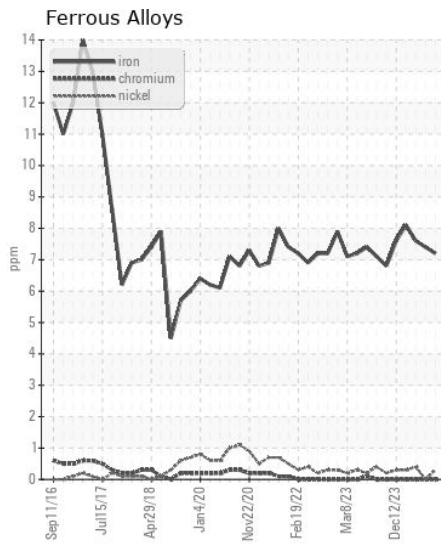
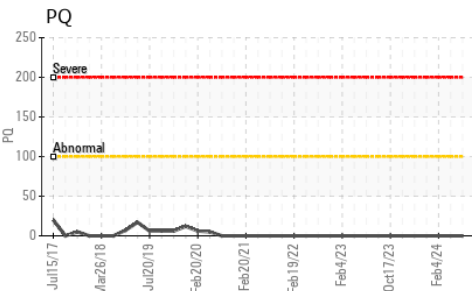
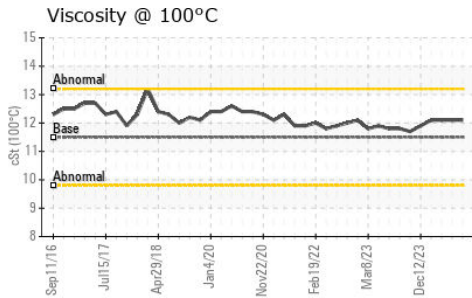
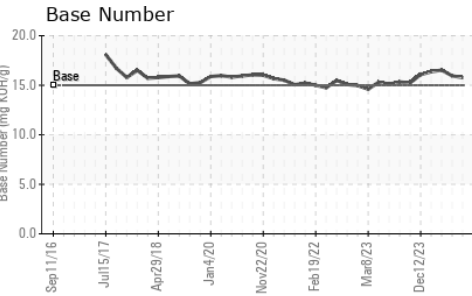
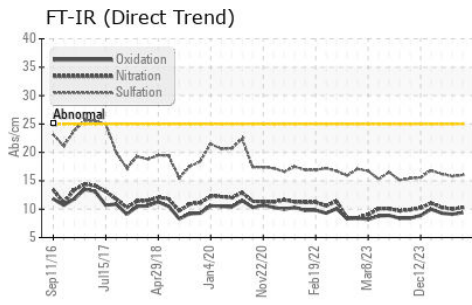
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	8	7	5
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>2	0.1	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	10.3	10.0	10.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	16.0	15.8	16.2
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 D5185(m)		1	2	1
Boron	ppm	ASTM D5185(m)		11	10	11
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		<1	<1	1
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)		35	37	35
Calcium	ppm	ASTM D5185(m)		5585	5674	5473
Phosphorus	ppm	ASTM D5185(m)		898	939	937
Zinc	ppm	ASTM D5185(m)		1034	1084	1034
Sulfur	ppm	ASTM D5185(m)		8805	9275	9385
Oxidation	Abs/.1mm	ASTM D7414*	>25	9.4	9.1	9.3
Base Number (BN)	mg KOH/g	ASTM D2896*	15	15.77	15.95	16.53
Visc @ 100°C	cSt	ASTM D7279(m)	11.5	12.1	12.1	12.1



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0807834
Lab Number : 02628104
Unique Number : 5761236
Test Package : MAR 2 (Additional Tests: PQ)

Received : 11 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 12 Apr 2024 - Wes Davis

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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