



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
1 White Oil/028 #1HTU/P Pump/202 Wash Water

Machine Id
N/A 28GP202

Component
Gearbox

Fluid
PETRO CANADA ENDURATEX SYNTHETIC EP 220 (5 LTR)

RECOMMENDATION

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you follow the water drain-off procedure for this component. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

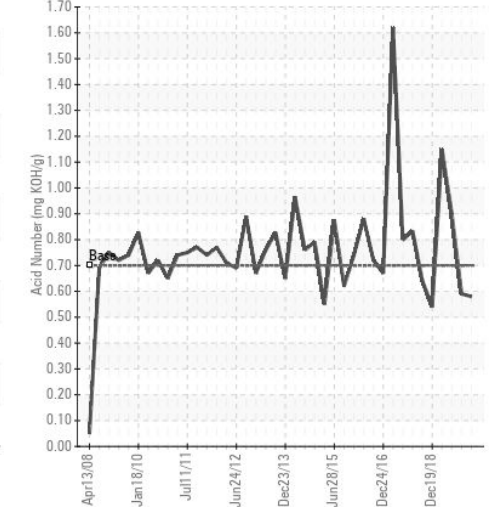
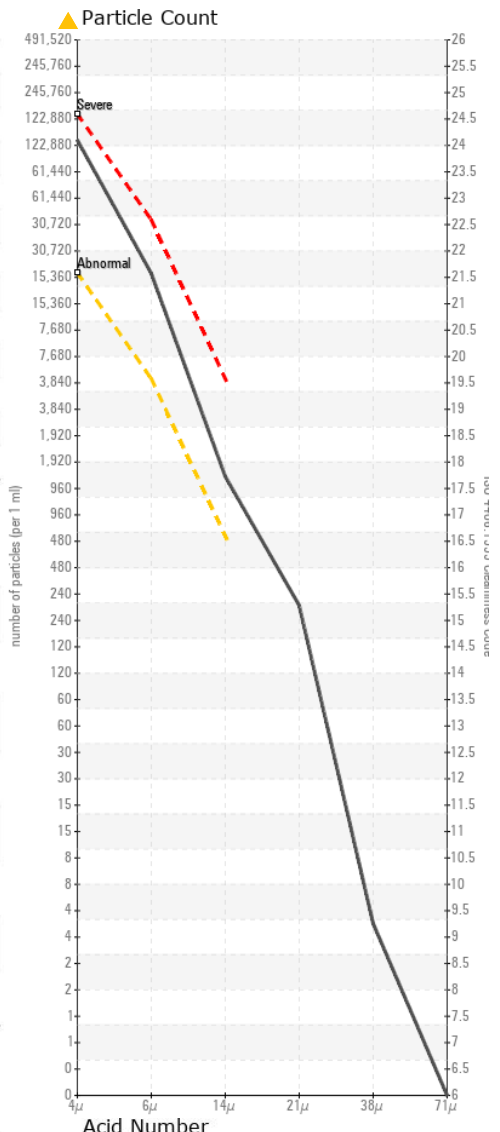
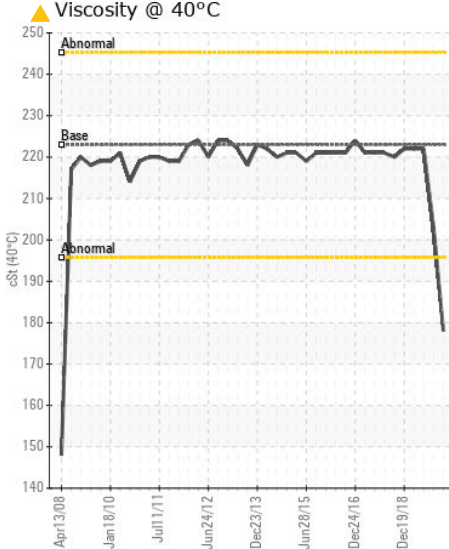
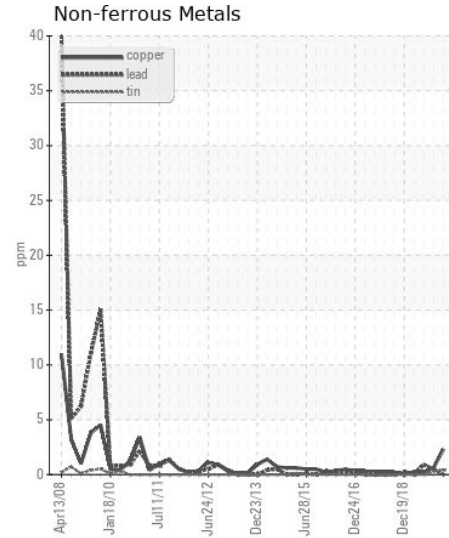
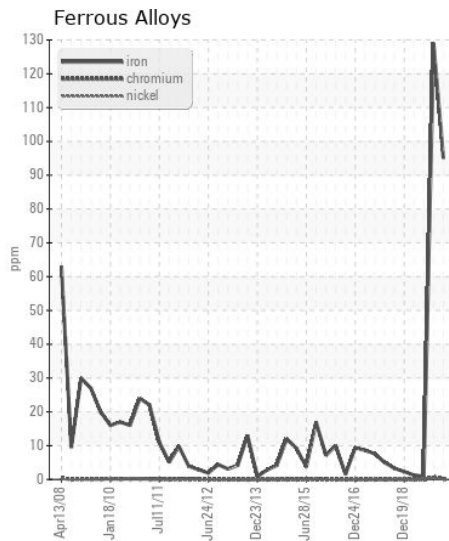
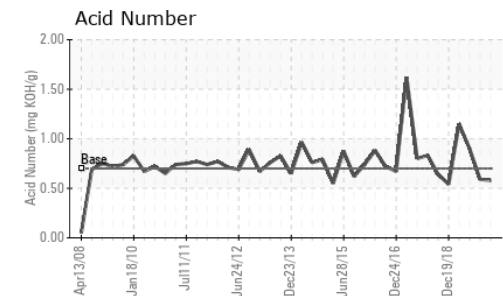
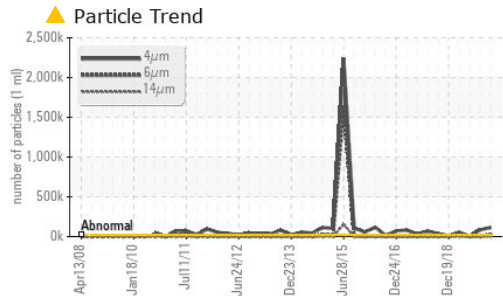
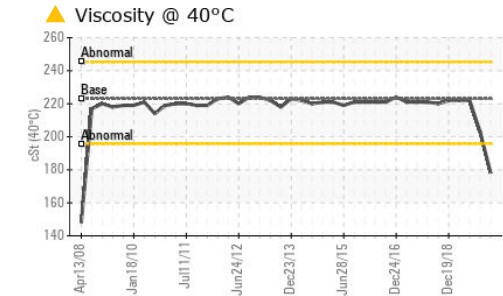
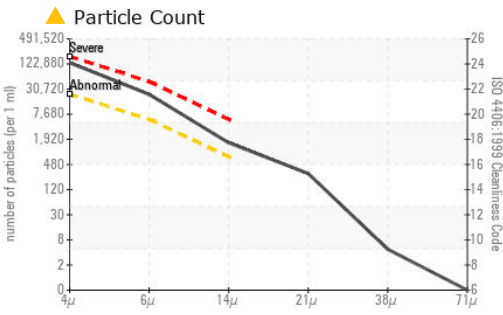
CONTAMINATION

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

FLUID CONDITION

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0883374	WC0736681	WC0500552
Sample Date		Client Info		29 Apr 2024	07 Dec 2022	24 Nov 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	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>200	95	129	<1
Chromium	ppm	ASTM D5185(m)	>15	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>15	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>100	0	<1	<1
Copper	ppm	ASTM D5185(m)	>200	2	<1	<1
Tin	ppm	ASTM D5185(m)	>25	<1	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>50	4	4	3
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	▲ 113668	▲ 85222	3922
Particles >6µm		ASTM D7647	>5000	▲ 19839	● 9642	447
Particles >14µm		ASTM D7647	>640	▲ 1392	471	32
Particles >21µm		ASTM D7647	>160	● 257	148	7
Particles >38µm		ASTM D7647	>40	4	5	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 24/21/18	▲ 24/20/16	19/16/12
Silt	scalar	Visual*	NONE	NONE	VLITE	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*	>0.2	.5%	NEG	NEG
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Boron	ppm	ASTM D5185(m)	33	10	10	31
Barium	ppm	ASTM D5185(m)	5	0	0	<1
Molybdenum	ppm	ASTM D5185(m)		0	<1	0
Manganese	ppm	ASTM D5185(m)		2	4	0
Magnesium	ppm	ASTM D5185(m)	5	50	48	<1
Calcium	ppm	ASTM D5185(m)	5	13	11	<1
Phosphorus	ppm	ASTM D5185(m)	437	202	291	416
Zinc	ppm	ASTM D5185(m)	5	12	15	1
Sulfur	ppm	ASTM D5185(m)	5000	4063	4720	4988
Acid Number (AN)	mg KOH/g	ASTM D974*	0.7	0.58	0.59	0.90
Visc @ 40°C	cSt	ASTM D7279(m)	223	▲ 178	203	222



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0883374
Lab Number : 02632897
Unique Number : 5774050
Test Package : IND 2
Received : 02 May 2024
Tested : 03 May 2024
Diagnosed : 03 May 2024 - Kevin Marson

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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.