







Sample Rating Trend



PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Wear

Copper, nickel, lead and tin ppm levels are abnormal. Bearing and/or bushing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

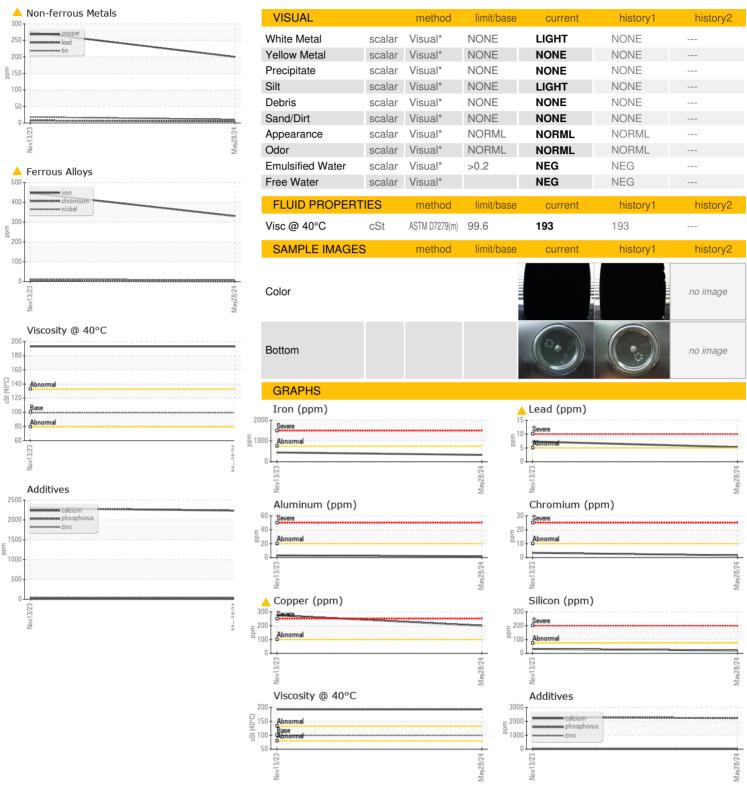
Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within SAE 90 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sample Number Sample Date Client Info WC0932661 WC0873005 Machine Age hrs Client Info 0 0 Oil Age hrs Client Info 0 0 Oil Changed Client Info Not Changed Sample Status BABORMAL SEVERE CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185(m) >75.0 330 44.7 Chromium ppm ASTM 05185(m) >10 2 3 Nickel ppm ASTM 05185(m) >3 & 8 12 Aluminum ppm ASTM 05185(m) >20 2 3 Lead ppm ASTM 05185(m) <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>							
Sample Date Client Info 28 May 2024 13 Nov 2023 Machine Age hrs Client Info 0 0 Oil Age hrs Client Info 0 0 Oil Changed Client Info Not Changed Sample Status BABNORMAL SEVERE CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG NEG Chromium ppm ASTM DS185(m) >75.0 33.0 44.7 Iron ppm ASTM DS185(m) >10 2 3 Nickel ppm ASTM DS185(m) >3 8 12 Nickel ppm ASTM DS185(m) >4 0 0 Aluminum ppm ASTM DS185(m) >20 2 3 Aluminum ppm ASTM DS185(m) >5	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0	Sample Number		Client Info		WC0932661	WC0873005	
Oil Age hrs Client Info Not Changed	Sample Date		Client Info		28 May 2024	13 Nov 2023	
Oil Changed Sample Status Client Info Not Changd ABNORMAL Changed SEVERE	Machine Age	hrs	Client Info		0	0	
ABNORMAL SEVERE	Oil Age	hrs	Client Info		0	0	
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >750 330 447 Chromium ppm ASTM D5185(m) >10 2 3 Nickel ppm ASTM D5185(m) >10 2 3 Nickel ppm ASTM D5185(m) >3 A 8 12 Titatanium ppm ASTM D5185(m) >4 0 0 Aluminum ppm ASTM D5185(m) >5 5 7 Lead ppm ASTM D5185(m) >100 200 275 Copper ppm ASTM D5185(m) >8 11 18 Antimony ppm ASTM D5185(m) 0<	Oil Changed		Client Info		Not Changd	Changed	
Water WC Method >0.2 NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >750 330 447 Chromium ppm ASTM D5185(m) >10 2 3 Nickel ppm ASTM D5185(m) >10 0 0 Titanium ppm ASTM D5185(m) >4 0 0 Aluminum ppm ASTM D5185(m) >20 2 3 Aluminum ppm ASTM D5185(m) >5 5 5 7 Copper ppm ASTM D5185(m) >6 0 0 Copper ppm ASTM D5185(m) >8 11 1 1 Antimony ppm ASTM D5185(m) 0 0 Vanadium ppm ASTM D5185(m) 0 0	Sample Status				ABNORMAL	SEVERE	
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >750 330 447 Chromium ppm ASTM D5185(m) >10 2 3 Nickel ppm ASTM D5185(m) >3 ▲ 8 ▲ 12 Titanium ppm ASTM D5185(m) >4 0 0 Silver ppm ASTM D5185(m) >20 2 3 Aluminum ppm ASTM D5185(m) >5 5 7 Lead ppm ASTM D5185(m) >5 5 7 Copper ppm ASTM D5185(m) >8 11 18 Tin ppm ASTM D5185(m) >4 0 0 Antimory ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m)	CONTAMINATIO	N	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.2	NEG	NEG	
Chromium ppm ASTM D5185(m) >10 2 3 Nickel ppm ASTM D5185(m) >3 ▲ 8 ▲ 12 Titanium ppm ASTM D5185(m) >4 0 0 Silver ppm ASTM D5185(m) >20 2 3 Aluminum ppm ASTM D5185(m) >20 2 3 Aluminum ppm ASTM D5185(m) >20 2 3 Aluminum ppm ASTM D5185(m) >5 5 A 7 Copper ppm ASTM D5185(m) >10 20 A 275 Tin ppm ASTM D5185(m) >4 0 0 Antimony ppm ASTM D5185(m) >4 0 0 Vanadium ppm ASTM D5185(m) 0 0 Ber	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185(m)	>750	330	447	
Titanium ppm ASTM D5185(m) >4 0 0 Silver ppm ASTM D5185(m) 0 <1	Chromium	ppm	ASTM D5185(m)	>10	2	3	
Silver	Nickel	ppm	ASTM D5185(m)	>3	<u>^</u> 8	1 2	
Aluminum ppm ASTM D5185(m) >20 2 3 Lead ppm ASTM D5185(m) >5 5 7 Copper ppm ASTM D5185(m) >6 5 7 Tin ppm ASTM D5185(m) >8 11 18 Antimony ppm ASTM D5185(m) 0 0 Vanadium ppm ASTM D5185(m) 0 0 Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 328 3 2 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 1 <1	Titanium	ppm	ASTM D5185(m)	>4	0	0	
Lead ppm ASTM D5185(m) >5 ▲ 5 ↑ 7 Copper ppm ASTM D5185(m) >100 ▲ 200 ▲ 275 Tin ppm ASTM D5185(m) >8 ▲ 11 ▲ 18 Antimony ppm ASTM D5185(m) >4 0 0 Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 328 3 2 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 1 <1 <1 <1 < ADDITIVES method limit/base current history1 history2 Barium ppm ASTM D5185(m) 1 <1	Silver	ppm	ASTM D5185(m)		0	<1	
Copper ppm ASTM D5185(m) >100 ▲ 200 ▲ 275 Tin ppm ASTM D5185(m) >8 ▲ 11 ▲ 18 Antimony ppm ASTM D5185(m) >4 0 0 Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 328 3 2 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 328 3 2 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 1 <1	Aluminum	ppm	ASTM D5185(m)	>20	2	3	
Tin ppm ASTM D5185(m) >8	Lead	ppm	ASTM D5185(m)	>5	<u> </u>	<u>^</u> 7	
Antimony ppm ASTM D5185(m) >4 0 0	Copper	ppm	ASTM D5185(m)	>100	<u>^</u> 200	275	
Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 328 3 2 Barium ppm ASTM D5185(m) 1 <1 <1 Molybdenum ppm ASTM D5185(m) 0 0 Manganese ppm ASTM D5185(m) 1 1 <1 Magnesium ppm ASTM D5185(m) 7 7 7 Phosphorus ppm ASTM D5185(m) 1145 2234 2296 Zinc ppm ASTM D5185(m) 17909 25556 25711 Sulfur ppm ASTM D5185(m) 17909 25556 25711 <td>Tin</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>>8</td> <td><u> 11</u></td> <td><u> </u></td> <td></td>	Tin	ppm	ASTM D5185(m)	>8	<u> 11</u>	<u> </u>	
Beryllium	Antimony	ppm	ASTM D5185(m)	>4	0	0	
Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 328 3 2 Barium ppm ASTM D5185(m) 1 <1	Vanadium	ppm	ASTM D5185(m)		0	0	
ADDITIVES	Beryllium	ppm	ASTM D5185(m)		0	0	
Boron ppm ASTM D5185(m) 328 3 2 Barium ppm ASTM D5185(m) 1 <1	Cadmium	ppm	ASTM D5185(m)		0	0	
Barium ppm ASTM D5185(m) 1 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185(m) 0 0 Manganese ppm ASTM D5185(m) 20 36 Magnesium ppm ASTM D5185(m) 1 1 <1 Calcium ppm ASTM D5185(m) 7 7 7 Phosphorus ppm ASTM D5185(m) 1145 2234 2296 Zinc ppm ASTM D5185(m) 3 39 49 Sulfur ppm ASTM D5185(m) 17909 25556 25711 Lithium ppm ASTM D5185(m) <1 <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 20 32 Sodium ppm ASTM D5185(m) 8 12	Boron	ppm	ASTM D5185(m)	328	3	2	
Manganese ppm ASTM D5185(m) 20 36 Magnesium ppm ASTM D5185(m) 1 1 <1	Barium	ppm	ASTM D5185(m)	1	<1	<1	
Magnesium ppm ASTM D5185(m) 1 1 <1 Calcium ppm ASTM D5185(m) 7 7 7 Phosphorus ppm ASTM D5185(m) 1145 2234 2296 Zinc ppm ASTM D5185(m) 3 39 49 Sulfur ppm ASTM D5185(m) 17909 25556 25711 Lithium ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)		0	0	
Calcium ppm ASTM D5185(m) 7 7 7 Phosphorus ppm ASTM D5185(m) 1145 2234 2296 Zinc ppm ASTM D5185(m) 3 39 49 Sulfur ppm ASTM D5185(m) 17909 25556 25711 Lithium ppm ASTM D5185(m) <1	Manganese	ppm	ASTM D5185(m)		20	36	
Phosphorus ppm ASTM D5185(m) 1145 2234 2296 Zinc ppm ASTM D5185(m) 3 39 49 Sulfur ppm ASTM D5185(m) 17909 25556 25711 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 20 32 Sodium ppm ASTM D5185(m) 8 12	Magnesium	ppm	ASTM D5185(m)	1	1	<1	
Zinc ppm ASTM D5185(m) 3 39 49 Sulfur ppm ASTM D5185(m) 17909 25556 25711 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 20 32 Sodium ppm ASTM D5185(m) 8 12	Calcium	ppm	ASTM D5185(m)	7	7	7	
Sulfur ppm ASTM D5185(m) 17909 25556 25711 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 20 32 Sodium ppm ASTM D5185(m) 8 12	Phosphorus	ppm	ASTM D5185(m)	1145	2234	2296	
Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 20 32 Sodium ppm ASTM D5185(m) 8 12		ppm	ASTM D5185(m)	3	39	49	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 20 32 Sodium ppm ASTM D5185(m) 8 12	Sulfur	ppm	ASTM D5185(m)	17909	25556	25711	
Silicon ppm ASTM D5185(m) >75 20 32 Sodium ppm ASTM D5185(m) 8 12	Lithium	ppm	ASTM D5185(m)		<1	<1	
Sodium ppm ASTM D5185(m) 8 12	CONTAMINANTS	3	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185(m) 8 12	Silicon	ppm	ASTM D5185(m)	>75	20	32	
			(/	-			
	Potassium	ppm	ASTM D5185(m)	>20	<1	0	



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02647186 Unique Number : 5812738 Test Package : MOBCE

: WC0932661

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 RONI/IRON SHORE EXCAVATING LTD. Received : 10 Jul 2024

Tested : 10 Jul 2024 Diagnosed

: 11 Jul 2024 - Kevin Marson

100 MACINTOSH BLVD VAUGHAN, ON CA L4K 4P3 Contact: Service Team service.team@roni.ca

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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