

PROBLEM SUMMARY

Sample Rating Trend

VIS DEBRIS

Machine Id MINSTER MINSTER 34

Component **Gearbox**

PETRO CANADA DURATRAN (40 GAL)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATION	CTEST	RESULT	S			
Sample Status				ABNORMAL	NORMAL	NORMAL
Debris	scalar	*Visual	NONE	MODER	NONE	NONE

Customer Id: TREELK Sample No.: PCA0104043 Lab Number: 05935091 Test Package: IND 1

To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

22 Jun 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



24 May 2021 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 2 test kits, this testkit includes AN to determine the suitability of the oil for continued use. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service (unconfirmed).





OIL ANALYSIS REPORT

Sample Rating Trend

VIS DEBRIS

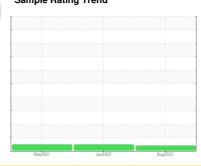
Machine Id

MINSTER MINSTER 34

Component

Gearbox

PETRO CANADA DURATRAN (40 GAL)





DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

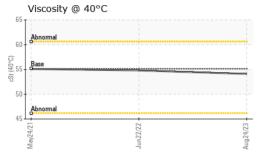
Fluid Condition

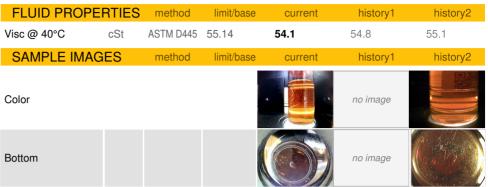
The condition of the oil is acceptable for the time in service.

		Ma	y2021	Jun2022 Aug20	23	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0104043	PCA0076578	PCA0032694
Sample Date		Client Info		24 Aug 2023	22 Jun 2022	24 May 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	1	1	2
Chromium	ppm	ASTM D5185m	>15	0	0	<1
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	0	<1	<1
Lead	ppm	ASTM D5185m	>100	14	12	10
Copper	ppm	ASTM D5185m	>200	6	5	5
Tin	ppm	ASTM D5185m	>25	<1	<1	<1
Antimony	ppm	ASTM D5185m	>5			0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	110	106	111	97
	ppm ppm	ASTM D5185m ASTM D5185m	110	106 0	111 0	97 0
Barium						
Barium Molybdenum	ppm	ASTM D5185m	0.0	0	0	0
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m	0.0	0	0 4	0 4
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.0 1	0 4 0	0 4 <1	0 4 <1
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.0 1 13	0 4 0 40	0 4 <1 36	0 4 <1 35
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.0 1 13 3610	0 4 0 40 3104	0 4 <1 36 2930	0 4 <1 35 3018
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.0 1 13 3610 1192	0 4 0 40 3104 1036	0 4 <1 36 2930 1023	0 4 <1 35 3018 1037
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.0 1 13 3610 1192 1455	0 4 0 40 3104 1036 1297	0 4 <1 36 2930 1023 1244	0 4 <1 35 3018 1037 1205
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.0 1 13 3610 1192 1455 2641	0 4 0 40 3104 1036 1297 3772	0 4 <1 36 2930 1023 1244 3141	0 4 <1 35 3018 1037 1205 2863
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.0 1 13 3610 1192 1455 2641 limit/base	0 4 0 40 3104 1036 1297 3772	0 4 <1 36 2930 1023 1244 3141 history1	0 4 <1 35 3018 1037 1205 2863 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	ASTM D5185m	0.0 0.0 1 13 3610 1192 1455 2641 limit/base	0 4 0 40 3104 1036 1297 3772 current 6	0 4 <1 36 2930 1023 1244 3141 history1	0 4 <1 35 3018 1037 1205 2863 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50	0 4 0 40 3104 1036 1297 3772 current 6	0 4 <1 36 2930 1023 1244 3141 history1 7	0 4 <1 35 3018 1037 1205 2863 history2 6 5
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50	0 4 0 40 3104 1036 1297 3772 current 6 4 0 current NONE	0 4 <1 36 2930 1023 1244 3141 history1 7 0 2 history1 NONE	0 4 <1 35 3018 1037 1205 2863 history2 6 5 0 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50 	0 4 0 40 3104 1036 1297 3772 current 6 4 0	0 4 <1 36 2930 1023 1244 3141 history1 7 0 2 history1 NONE NONE	0 4 <1 35 3018 1037 1205 2863 history2 6 5 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50	0 4 0 40 3104 1036 1297 3772 current 6 4 0 current NONE	0 4 <1 36 2930 1023 1244 3141 history1 7 0 2 history1 NONE	0 4 <1 35 3018 1037 1205 2863 history2 6 5 0 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m wethod *Visual	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50 >20 limit/base NONE NONE	0 4 0 40 3104 1036 1297 3772 current 6 4 0 current NONE NONE	0 4 <1 36 2930 1023 1244 3141 history1 7 0 2 history1 NONE NONE	0 4 <1 35 3018 1037 1205 2863 history2 6 5 0 history2 LIGHT NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m **Visual **Visual	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50 >20 limit/base NONE NONE NONE	0 4 0 40 3104 1036 1297 3772 current 6 4 0 current NONE NONE	0 4 <1 36 2930 1023 1244 3141 history1 7 0 2 history1 NONE NONE NONE	0 4 <1 35 3018 1037 1205 2863 history2 6 5 0 history2 LIGHT NONE NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm	ASTM D5185m method ASTM D5185m *Visual *Visual *Visual *Visual	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50 limit/base NONE NONE NONE	0 4 0 40 3104 1036 1297 3772 current 6 4 0 current NONE NONE NONE	0 4 <1 36 2930 1023 1244 3141 history1 7 0 2 history1 NONE NONE NONE	0 4 <1 35 3018 1037 1205 2863 history2 6 5 0 history2 LIGHT NONE NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50 NONE NONE NONE NONE NONE NONE NONE NONE	0 4 0 40 3104 1036 1297 3772 current 6 4 0 current NONE NONE NONE NONE NONE NONE MODER	0 4 <1 36 2930 1023 1244 3141 history1 7 0 2 history1 NONE NONE NONE NONE NONE NONE	0 4 <1 35 3018 1037 1205 2863 history2 6 5 0 history2 LIGHT NONE NONE NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm	ASTM D5185m method ASTM D5185m *Visual	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE	0 4 0 40 3104 1036 1297 3772 current 6 4 0 current NONE NONE NONE NONE NONE NONE NONE NON	0 4 <1 36 2930 1023 1244 3141 history1 7 0 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	0 4 <1 35 3018 1037 1205 2863 history2 6 5 0 history2 LIGHT NONE NONE NONE NONE NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual	0.0 0.0 1 13 3610 1192 1455 2641 limit/base >50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	0 4 0 40 3104 1036 1297 3772 current 6 4 0 current NONE NONE NONE NONE NONE NONE NONE NON	0 4 <1 36 2930 1023 1244 3141 history1 7 0 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	0 4 <1 35 3018 1037 1205 2863 history2 6 5 0 history2 LIGHT NONE NONE NONE NONE NONE NONE NONE NON



OIL ANALYSIS REPORT





GRAPHS Ferrous Alloys Non-ferrous Metals Viscosity @ 40°C 6f 58 46





Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10620362 Test Package : IND 1

: PCA0104043 : 05935091

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 25 Aug 2023 Diagnosed : 28 Aug 2023 Diagnostician : Don Baldridge

TREND TECHNOLOGIES 737 FARGO AVE

ELK GROVE VILLAGE, IL

US 60007 Contact: ROB GABL

rgabl@trendtechnologies.com T:

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)

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