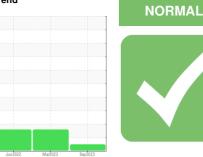


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 26387 - 2 Component

Rear Differential

PETRO CANADA TRAXON SYNTHETIC 75W90 (15 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

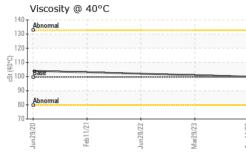
Fluid Condition

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

SAMPLE INFORM	NATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0106119	PCA0089330	PCA0076547
Sample Date		Client Info		11 Sep 2023	29 Mar 2023	28 Jun 2022
Machine Age	mls	Client Info		659299	636581	600146
Oil Age	mls	Client Info		659299	36581	600146
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method		NEG	NEG	NEG
WEAR METALS	2	method	limit/base	current	history1	history2
Iron		ASTM D5185m		240	359	334
Chromium	ppm	ASTM D5185m		3	4	4
Nickel	ppm ppm	ASTM D5185m	>10	8	4	13
Titanium	ppm	ASTM D5185m	~10	0	<1	<1
Silver		ASTM D5185m		0	0	0
Aluminum	ppm ppm	ASTM D5185m	>25	4	8	6
Lead		ASTM D5185m	>25	4 <1	0	<1
Copper	ppm ppm	ASTM D5185m	>100	9	6	19
Tin	ppm	ASTM D5185m	>100	9 1	1	2
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m	20	 <1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
	Ppm		15			
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	328	235	117	144
Barium	nnm	ASTM D5185m	1	0	0	0
	ppm					
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m		0 7	<1 13	<1 12
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1	0 7 0	<1 13 5	<1 12 1
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 7	0 7 0 0	<1 13 5 17	<1 12 1 13
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 7 1145	0 7 0 0 1427	<1 13 5 17 1439	<1 12 1 13 1340
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 7 1145 3	0 7 0 0 1427 0	<1 13 5 17 1439 29	<1 12 1 13 1340 33
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 7 1145	0 7 0 0 1427	<1 13 5 17 1439	<1 12 1 13 1340
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 7 1145 3 17909 limit/base	0 7 0 0 1427 0 23946 current	<1 13 5 17 1439 29 26333 history1	<1 12 1 13 1340 33
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	1 7 1145 3 17909 limit/base	0 7 0 0 1427 0 23946	<1 13 5 17 1439 29 26333 history1 116	<1 12 1 13 1340 33 24408 history2 111
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 7 1145 3 17909 Iimit/base >75	0 7 0 0 1427 0 23946 current	<1 13 5 17 1439 29 26333 history1 116 10	<1 12 1 13 1340 33 24408 history2 111 10
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 7 1145 3 17909 Iimit/base >75	0 7 0 0 1427 0 23946 current 72	<1 13 5 17 1439 29 26333 history1 116	<1 12 1 13 1340 33 24408 history2 111
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 7 1145 3 17909 Iimit/base >75	0 7 0 0 1427 0 23946 <u>current</u> 72 6	<1 13 5 17 1439 29 26333 history1 116 10	<1 12 1 13 1340 33 24408 history2 111 10
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 7 1145 3 17909 limit/base >75 >20	0 7 0 0 1427 0 23946 <u>current</u> 72 6 2	<1 13 5 17 1439 29 26333 history1 ▲ 116 10 7	<1 12 1 13 1340 33 24408 history2 ▲ 111 10 4
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	ppm ppm 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 ASTM D5185m	1 7 1145 3 17909 Iimit/base >75 >20 Iimit/base	0 7 0 1427 0 23946 current 72 6 2 2	<1 13 5 17 1439 29 26333 history1 ▲ 116 10 7 history1	<1 12 1 13 1340 33 24408 history2 111 10 4 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1 7 1145 3 17909 limit/base >75 >20 limit/base NONE	0 7 0 1427 0 23946 current 72 6 2 2 current NONE	<1 13 5 17 1439 29 26333 history1 ▲ 116 10 7 history1 NONE	<1 12 1 13 1340 33 24408 history2 111 10 4 history2 NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm scalar	ASTM D5185m ASTM D5185m Yisual	1 7 1145 3 17909 <i>limit/base</i> >75 >20 <i>limit/base</i> NONE NONE	0 7 0 0 1427 0 23946 <u>current</u> 72 6 2 2 <u>current</u> NONE NONE	<1 13 5 17 1439 29 26333 history1 116 10 7 history1 NONE NONE NONE NONE NONE NONE NONE NON	<1 12 1 13 1340 33 24408 history2 111 10 4 history2 NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Yuisual *Visual	1 7 1145 3 17909 imit/base >75 >20 imit/base NONE NONE NONE NONE	0 7 0 0 1427 0 23946 <u>current</u> 72 6 2 2 <u>current</u> NONE NONE NONE	<1 13 5 17 1439 29 26333 history1 116 10 7 history1 NONE NONE NONE NONE NONE	<1 12 1 13 1340 33 24408 history2 111 10 4 NONE NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	1 7 1145 3 17909 imit/base >75 >20 imit/base NONE NONE NONE NONE NONE	0 7 0 0 1427 0 23946 <u>current</u> 72 6 2 2 <u>current</u> NONE NONE NONE NONE MODER	<1 13 5 17 1439 29 26333 116 10 7 NONE NONE NONE NONE NONE NONE NONE N	<1 12 1 13 1340 33 24408 history2 111 10 4 NONE NONE NONE NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm 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 *Visual *Visual *Visual *Visual *Visual	1 7 1145 3 17909 <i>imit/base</i> >75 20 <i>imit/base</i> NONE NONE NONE NONE NONE NONE	0 7 0 0 1427 0 23946 current 72 6 2 2 current 8 2 current NONE NONE NONE NONE NONE NONE NONE	<1 13 5 17 1439 29 26333 116 10 7 NONE NONE NONE NONE NONE NONE NONE N	<1 12 1 13 1340 33 24408 history2 111 10 4 NONE NONE NONE NONE NONE NONE NONE N
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm 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 ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	1 7 1145 3 17909 imit/base >75 >20 imit/base >20 imit/base NONE NONE NONE NONE NONE NONE NONE NON	0 7 0 0 1427 0 23946 current 72 6 2 2 current NONE NONE NONE NONE NONE NONE NONE NON	<1 13 5 17 1439 29 26333 116 10 7 NONE NONE NONE NONE NONE NONE NONE N	<1 12 1 13 1340 33 24408 history2 111 10 4 history2 NONE NONE NONE NONE NONE NONE NONE NO
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm 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 ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	1 7 1145 3 17909 imit/base >75 20 imit/base NONE NONE NONE NONE NONE NONE NONE NON	0 7 0 0 1427 0 23946 current 72 6 2 2 current NONE NONE NONE NONE NONE NONE NONE NON	<1 13 5 17 1439 29 26333	<1 12 1 13 1340 33 24408
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm 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 ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	1 7 1145 3 17909 imit/base >75 20 imit/base >20 imit/base NONE NONE NONE NONE NONE NONE NONE NON	0 7 0 0 1427 0 23946 current 72 6 2 2 current NONE NONE NONE NONE NONE NONE NONE NON	<1 13 5 17 1439 29 26333 116 10 7 116 10 7 NONE NONE NONE NONE NONE NONE NONE N	<1 12 1 13 1340 33 24408



OIL ANALYSIS REPORT



	FLUID PROI	PERTIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	99.6	99.9	101	102
	SAMPLE IM	AGES	method	limit/base	current	history1	history2
Mar29/23	Color				no image	no image	no image
	Bottom				no image	no image	no image
	GRAPHS						
	Ferrous Alloys	Jun28/22	Mar29/23	Sep11/23 8ep11/23 8ep11/23			
		Receive Diagnos Diagnos ervice at 1-8	d : 11 ed : 14 tician : Sea 800-237-1369	Dec 2023 Dec 2023 an Felton 9.	C		SAVANAH RD RGETOWN, DE US 19947 T LOCKWOOD
	are outside of the iSC prifications are based o				UCGM 106-2012	2)	۰. F·

To discuss this sam * - 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)

Certificate L2367

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