

PROBLEM SUMMARY

Sample Rating Trend

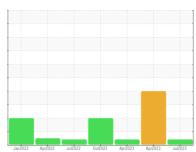
VISCOSITY

[98272645]

KR-GR-003237 - AGITATOR (S/N INJECT B - 11513039)

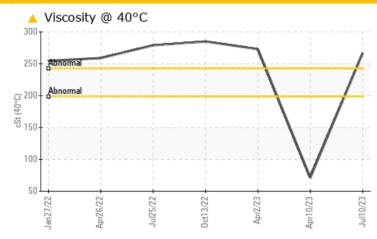
Gearbox

PETRO CANADA 220 (6 QTS)





COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATI	C TES	T RESULT	S		
Sample Status			ATTENTION	ATTENTION	ATTENTION
Visc @ 40°C	cSt	ASTM D445	<u>^</u> 267	<u></u> 4 71.4 ∠	<u>^</u> 273

Customer Id: KRAKIR
Sample No.: PCA0099347
Lab Number: 05895428
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

10 Apr 2023 Diag: Jonathan Hester

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Appearance is unacceptable There is a trace of moisture present in the oil. The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.



02 Apr 2023 Diag: Jonathan Hester

VISCOSITY



No corrective action is recommended at this time. 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 oil viscosity is higher than normal. Confirm oil type. The condition of the oil is acceptable for the time in service.



13 Oct 2022 Diag: Jonathan Hester

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a light concentration of water present in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. Confirm oil type.





OIL ANALYSIS REPORT

Sample Rating Trend

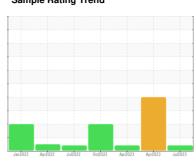
VISCOSITY



KR-GR-003237 - AGITATOR (S/N INJECT B - 11513039)

Gearbox

PETRO CANADA 220 (6 QTS)





DIAGNOSIS

Recommendation

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

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

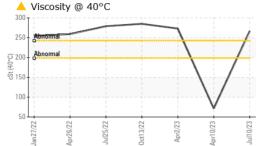
▲ Fluid Condition

The oil viscosity is higher than normal. Confirm oil type. The condition of the oil is acceptable for the time in service.

Sample Number Client Info PCA0099347 PCA0096599 PCA009473 Sample Date Client Info 10 Jul 2023 10 Apr 2023 02 Apr 2023 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status The Client Info N/A ATTENTION ATTENTION ATTENTION ATTENTION WEAR METALS method Immitbase current history1 history2 Iron ppm ASTM D5185m >200 4 4 0 Chromium ppm ASTM D5185m >15 0 <1			Jan 2022	Apr2022 Jul2022	Oct2022 Apr2023 Apr2023	Jul2023	
Sample Date	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 0 0 0 0 0 0	Sample Number		Client Info		PCA0099347	PCA0096599	PCA0094736
Oil Age hrs Client Info 0 0 0 N/A	Sample Date		Client Info		10 Jul 2023	10 Apr 2023	02 Apr 2023
Oil Changed Client Info	Machine Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 ATTENTION Iron ppm ASTM D5185m >200 4 4 0 Chromium ppm ASTM D5185m >15 0 <1	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 4 4 0 Chromium ppm ASTM D5185m >15 0 <1	Oil Changed		Client Info		N/A	N/A	N/A
Irron	Sample Status				ATTENTION	ATTENTION	ATTENTION
Chromium ppm ASTM D5185m >15 0 <1 0 Nickel ppm ASTM D5185m >15 0 <1	WEAR METAL	_S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>200	4	4	0
Titanium	Chromium	ppm	ASTM D5185m	>15	0	<1	0
Silver	Nickel	ppm	ASTM D5185m	>15	0	<1	0
Aluminum ppm ASTM D5185m >25 <1 0 0 Lead ppm ASTM D5185m >100 0 0 0 Copper ppm ASTM D5185m >200 0 2 <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >100 0 0 0 Copper ppm ASTM D5185m >200 0 2 <1	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >200 0 2 <1 Tin ppm ASTM D5185m >25 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m <1	Aluminum	ppm	ASTM D5185m	>25	<1	0	0
Tin	Lead	ppm	ASTM D5185m	>100	0	0	0
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 1 1 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m <1 <1 2 Manganese ppm ASTM D5185m <1 0 0 Magnesium ppm ASTM D5185m 8 △28 5 Phosphorus ppm ASTM D5185m 299 468 303 Zinc ppm ASTM D5185m 299 468 303 Zinc ppm ASTM D5185m 0 194 2 Sulfur ppm ASTM D5185m 13423 1837 10432 CONTAMINANTS method limit/base current history1 </td <td>Copper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>200</td> <td>0</td> <td>2</td> <td><1</td>	Copper	ppm	ASTM D5185m	>200	0	2	<1
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m <1 <1 2 Manganese ppm ASTM D5185m <1 0 0 Magnesium ppm ASTM D5185m 0 1 0 Calcium ppm ASTM D5185m 299 468 303 Zinc ppm ASTM D5185m 299 468 303 Zinc ppm ASTM D5185m 0 194 2 Sulfur ppm ASTM D5185m 0 194 2 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 1 4 3	Tin	ppm	ASTM D5185m	>25	0	0	0
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m <1	Vanadium	ppm	ASTM D5185m		0	0	0
Boron	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m <1	ADDITIVES		method	limit/base	current	history1	history2
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Manganese ppm ASTM D5185m <1 0 0 Magnesium ppm ASTM D5185m 0 1 0 Calcium ppm ASTM D5185m 8 △ 28 5 Phosphorus ppm ASTM D5185m 299 468 303 Zinc ppm ASTM D5185m 0 △ 194 2 Sulfur ppm ASTM D5185m 13423 △ 1837 10432 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 1 4 3 Sodium ppm ASTM D5185m >20 <1	Barium	ppm	ASTM D5185m		0	0	0
Magnesium ppm ASTM D5185m 0 1 0 Calcium ppm ASTM D5185m 8 ▲ 28 5 Phosphorus ppm ASTM D5185m 299 468 303 Zinc ppm ASTM D5185m 0 ▲ 194 2 Sulfur ppm ASTM D5185m 13423 ▲ 1837 10432 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 1 4 3 Sodium ppm ASTM D5185m >20 <1	Molybdenum	ppm	ASTM D5185m		<1	<1	2
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Phosphorus ppm ASTM D5185m 299 468 303 Zinc ppm ASTM D5185m 0 194 2 Sulfur ppm ASTM D5185m 13423 1837 10432 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 1 4 3 Sodium ppm ASTM D5185m >20 <1	Magnesium	ppm	ASTM D5185m		0	1	0
Zinc ppm ASTM D5185m 0 ▲ 194 2 Sulfur ppm ASTM D5185m 13423 ▲ 1837 10432 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 1 4 3 Sodium ppm ASTM D5185m 2 4 0 Potassium ppm ASTM D5185m >20 <1	Calcium	ppm	ASTM D5185m		8	△ 28	5
Sulfur ppm ASTM D5185m 13423 ▲ 1837 10432 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 1 4 3 Sodium ppm ASTM D5185m 2 4 0 Potassium ppm ASTM D5185m >20 <1	Phosphorus	ppm	ASTM D5185m		299	468	303
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 1 4 3 Sodium ppm ASTM D5185m 2 4 0 Potassium ppm ASTM D5185m >20 <1 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE NONE NONE Stilt scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Zinc	ppm	ASTM D5185m		0	<u>194</u>	2
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Sodium	CONTAMINAN	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML APZY NORML Odor scalar *Visual NORML NORML NORML NORML Free Water scalar *Visual NORML NEG NEG NEG	Silicon	ppm	ASTM D5185m	>50	1	4	3
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White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML → HAZY NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG 0.2% NEG Free Water Scalar *Visual NEG NEG NEG	Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Yellow Metal scalar *Visual NONE N	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML → HAZY NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG 0.2% NEG Free Water scalar *Visual NEG NEG NEG	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
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Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML HAZY NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG 0.2% NEG Free Water scalar *Visual NEG NEG NEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLHAZYNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEG0.2%NEGFree Waterscalar*VisualNEGNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLA HAZYNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEG0.2%NEGFree Waterscalar*VisualNEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odor scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG 0.2% NEG Free Water scalar *Visual NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.2 NEG 0.2% NEG Free Water scalar *Visual NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	▲ HAZY	NORML
Emulsified Water scalar *Visual >0.2 NEG 0.2% NEG Free Water scalar *Visual NEG NEG NEG	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water			>0.2		0.2%	NEG
FLUID PROPERTIES method limit/base current history1 history2	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROPE	ERTIES	method	limit/base	current	history1	history2

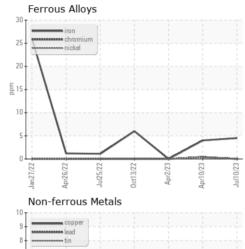


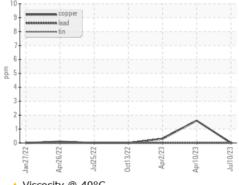
OIL ANALYSIS REPORT

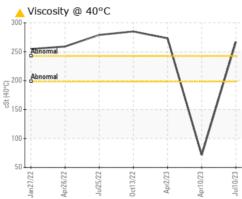




GRAPHS









Certificate L2367

Laboratory Sample No. Test Package : IND 1

Lab Number Unique Number : 10551238

: PCA0099347 : 05895428

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 11 Jul 2023 Diagnosed : 13 Jul 2023 Diagnostician : Don Baldridge

KraftHeinz - Kirksville - Plant 8333 PCA 2504 INDUSTRIAL DR

KIRKSVILLE, MO US 63501

Contact: WALLACE WARD wallace.ward@kraftheinzcompany.com

T: (660)627-1031 F: (660)627-5887

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)