

PROBLEM SUMMARY

Sample Rating Trend



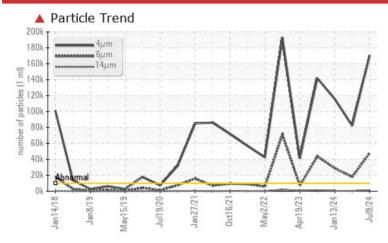
MP-110 [10024391993]

B62766 - DICER URSCHEL AFFINITY TOPPINGS COOK (S/N 182)

Gearbox

PETRO CANADA PURITY FG SYN GEAR ISO 220 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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 recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS							
Sample Status			SEVERE	SEVERE	SEVERE		
Particles >4µm	ASTM D7647	>10000	170693	▲ 82256	▲ 115717		
Particles >6µm	ASTM D7647	>2500	47906	▲ 17992	▲ 28907		
Particles >14µm	ASTM D7647	>320	<u> </u>	339	481		
Oil Cleanliness	ISO 4406 (c)	>20/18/15	25/23/17	2 4/21/16	2 4/22/16		

Customer Id: HORAUS **Sample No.:** WC0943450 Lab Number: 06234860 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

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

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Filter			?	We recommend you service the filters on this component.			
Resample			?	Resample in 30-45 days to monitor this situation.			
Information Required			?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.			
Check Breathers			?	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.			
Check Seals			?	Check seals and/or filters for points of contaminant entry.			

HISTORICAL DIAGNOSIS

ISO



10 Apr 2024 Diag: Wes Davis

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 recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



ISO



13 Jan 2024 Diag: Wes Davis

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IEO



10 Jul 2023 Diag: Wes Davis

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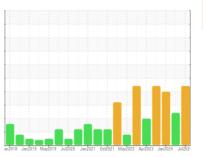
OIL ANALYSIS REPORT

MP-110 [10024391993]

B62766 - DICER URSCHEL AFFINITY TOPPINGS COOK (S/N 182)

Gearbox

PETRO CANADA PURITY FG SYN GEAR ISO 220 (--- GAL)



Sample Rating Trend



DIAGNOSIS	

Recommendation

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 recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

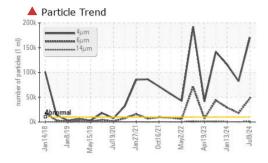
Fluid Condition

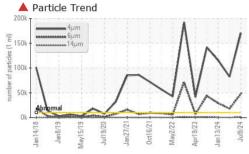
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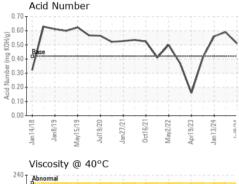
60 220 (GAL) ##2010 Jan2010 May2010 Jan2020 Jan2021 May2022 Aud2021 Jan2022 Jan202						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0943450	WC0907958	WC0880533
Sample Date		Client Info		09 Jul 2024	10 Apr 2024	13 Jan 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	SEVERE
CONTAMINATION	٧	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	9	7	8
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	0	0	<1
Lead	ppm	ASTM D5185m	>100	0	0	2
Copper	ppm	ASTM D5185m	>200	0	0	2
Tin	ppm	ASTM D5185m	>25	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/haea			
			limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	IIIIIIIIIIII	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	iiiiii basc	0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	mm base	0 0 0	0 0 0	0 0 <1
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1	0 0 0	0 0 <1 2
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1 0	0 0 0 0	0 0 <1 2
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	iiiiiii basc	0 0 0 <1 0 6	0 0 0 0 0	0 0 <1 2 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	IIIIIII	0 0 0 <1 0 6 447	0 0 0 0 0 0 2 419	0 0 <1 2 2 2 432
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	IIIIIII	0 0 0 <1 0 6	0 0 0 0 0	0 0 <1 2 2
Boron 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 ASTM D5185m	limit/base	0 0 0 <1 0 6 447	0 0 0 0 0 0 2 419	0 0 <1 2 2 2 432
Boron 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	limit/base	0 0 0 <1 0 6 447 <1 1364	0 0 0 0 0 0 2 419 0 1135	0 0 <1 2 2 2 432 1 1028
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	limit/base	0 0 0 <1 0 6 447 <1 1364	0 0 0 0 0 0 2 419 0 1135	0 0 <1 2 2 2 432 1 1028
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	0 0 0 <1 0 6 447 <1 1364 current	0 0 0 0 0 0 2 419 0 1135 history1	0 0 <1 2 2 2 432 1 1028 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50	0 0 0 <1 0 6 447 <1 1364 current	0 0 0 0 0 2 419 0 1135 history1 2	0 0 <1 2 2 2 432 1 1028 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50 >20	0 0 0 <1 0 6 447 <1 1364 current 2 1	0 0 0 0 0 2 419 0 1135 history1 2 0	0 0 <1 2 2 2 432 1 1028 history2 3 2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50 >20 limit/base	0 0 0 <1 0 6 447 <1 1364 current 2 1 0	0 0 0 0 0 2 419 0 1135 history1 2 0	0 0 <1 2 2 2 432 1 1028 history2 3 2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50 >20 limit/base >10000	0 0 0 <1 0 6 447 <1 1364 current 2 1 0 current ▲ 170693	0 0 0 0 0 2 419 0 1135 history1 2 0 0	0 0 <1 2 2 2 432 1 1028 history2 3 2 4 history2 115717
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >10000 >2500 >320 >80	0 0 0 <1 0 6 447 <1 1364 current 2 1 0 current ▲ 170693 ▲ 47906 ▲ 1094 ● 149	0 0 0 0 0 2 419 0 1135 history1 2 0 0 0 history1 ▲ 82256 ▲ 17992 ③ 339 ③ 38	0 0 <1 2 2 2 432 1 1028 history2 3 2 4 history2 ▲ 115717 ▲ 28907 ◆ 481 53
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >54µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >10000 >2500 >320 >80 >20	0 0 0 0 <1 0 6 447 <1 1364 current 2 1 0 current ▲ 170693 ▲ 47906 ▲ 1094 ● 149 2	0 0 0 0 0 2 419 0 1135 history1 2 0 0 history1 ▲ 82256 ▲ 17992 ○ 339 ○ 38 2	0 0 <1 2 2 432 1 1028 history2 3 2 4 history2 ▲ 115717 ▲ 28907 ◆ 481 53 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >10000 >2500 >320 >80 >20 >4	0 0 0 0 <1 0 6 447 <1 1364 current 2 1 0 current ▲ 170693 ▲ 47906 ▲ 1094 ● 149 2 0	0 0 0 0 0 0 2 419 0 1135 history1 2 0 0 history1 ▲ 82256 ▲ 17992 339 38 2 2	0 0 <1 2 2 2 432 1 1028 history2 3 2 4 history2 ▲ 115717 ▲ 28907 ◆ 481 53 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >54µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >10000 >2500 >320 >80 >20	0 0 0 0 <1 0 6 447 <1 1364 current 2 1 0 current ▲ 170693 ▲ 47906 ▲ 1094 ● 149 2	0 0 0 0 0 2 419 0 1135 history1 2 0 0 history1 ▲ 82256 ▲ 17992 ○ 339 ○ 38 2	0 0 <1 2 2 432 1 1028 history2 3 2 4 history2 ▲ 115717 ▲ 28907 ◆ 481 53 1

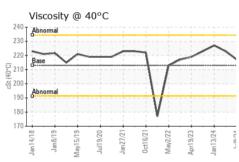


OIL ANALYSIS REPORT









VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	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
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	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

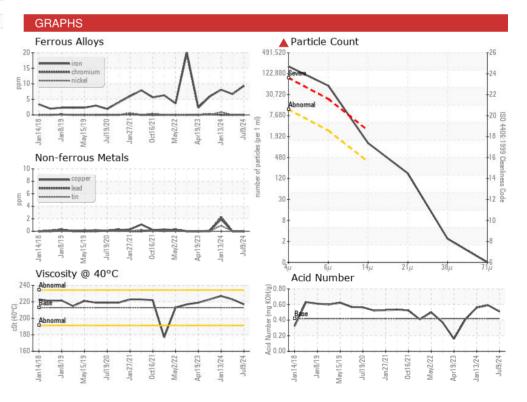
FLUID PROPER	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213	217	223	227

SAMPLE IMAGES	method	limit/base	current	history1	history2

Color











Certificate 12367

Report Id: HORAUS [WUSCAR] 06234860 (Generated: 07/15/2024 09:56:45) Rev: 1

Laboratory Sample No.

Lab Number : 06234860

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0943450

Unique Number : 11123694

Received **Tested** Diagnosed

: 12 Jul 2024 : 15 Jul 2024

: 15 Jul 2024 - Wes Davis

Test Package : IND 2 (Additional Tests: PrtCount)

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)

HORMEL FOODS - AUSTIN

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US 55912 Contact: RYAN LOWE rslowe@hormel.com

T: (507)437-5674 F: (507)437-9805

Contact/Location: RYAN LOWE - HORAUS