

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 301GM

Component Gear Motor Fluid

PETRO CANADA PURITY FG EP GEAR FLUID 460 (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

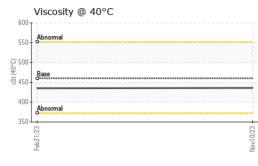
Fluid Condition

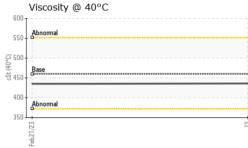
The condition of the oil is acceptable for the time in service.

· · · · ·			Feb2023	Nov2023		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0066916	PC0066920	
Sample Date		Client Info		10 Nov 2023	21 Feb 2023	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	3781	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	9	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>80	20	17	
Chromium	ppm	ASTM D5185(m)		0	0	
Nickel	ppm	ASTM D5185(m)	>2	<1 0	0	
Titanium Silver	ppm	ASTM D5185(m)		-		
	ppm	ASTM D5185(m)	>2	<1	0	
Aluminum Lead	ppm	ASTM D5185(m)	>20 >95	0	<1 0	
Copper	ppm	ASTM D5185(m) ASTM D5185(m)		<1 1	2	
	ppm				0	
Tin	ppm	ASTM D5185(m)	>9	0	<1	
Antimony Vanadium	ppm	ASTM D5185(m)				
	ppm	ASTM D5185(m)		0	0	
Beryllium Cadmium	ppm	ASTM D5185(m) ASTM D5185(m)			0	
				0	0	
	ppm					
ADDITIVES	ppin	method	limit/base	current	history1	history2
	ppm		limit/base		history1 <1	history2
ADDITIVES		method	limit/base	current	history1	
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base	current <1	history1 <1	
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	current <1 <1	history1 <1 0	
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	current <1 <1 0	history1 <1 0 0	
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	current <1 <1 0 0	history1 <1 0 0 <1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	current <1 <1 0 0 <1	history1 <1 0 0 <1 0	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)		<1 <1 0 0 <1 <1	history1 <1 0 0 <1 0 0 0	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		Current <1 <1 0 0 <1 <1 <1 150	history1 <1 0 0 <1 0 <1 0 <1 0 <181	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	135	Current <1 <1 0 0 <1 <1 <1 150 4	<1 0 0 <1 0 <1 0 <1 0 181 3	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	135	<1 <1 0 0 <1 <1 150 4 662	history1 <1 0 <1 0 <1 0 181 3 7777	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	135 660	Current <1 <1 0 0 <1 <1 150 4 662 <1	<1 0 0 0 0 0 1 0 0 181 3 7777 <1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	135 660 limit/base	Current <1 <1 0 0 <1 <1 150 4 662 <1 Current	<1 0 0 <1 0 <1 0 181 3 7777 <1 history1	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	135 660 limit/base	<1 <1 0 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <2 <1 <1 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2 <2	<1 0 0 0 1 0 1 0 1 0 181 3 7777 <1 history1 9	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	135 660 limit/base >25	<1 <1 0 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 662 <1 Current 8 <1	<1 0 0 0 <1 0 <1 0 181 3 7777 <1 history1 9 <1	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	135 660 limit/base >25 >20	Current <1 <1 0 0 <1 <1 150 4 662 <1 Current 8 8 <1 0 Current	<1 0 <1 0 <1 0 181 3 7777 <1 history1 9 <1 1	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	135 660 imit/base >25 >20 imit/base	<1 <1 0 0 <1 <1 <1 <50 <1 662 <1 Current 8 <1 0 current 0 current 0	<1 0 <1 0 <1 0 181 3 7777 <1 history1 9 <1 <1 0 0 0 0 0 0 0	 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	135 660 limit/base >25 >20 limit/base	<1 <1 0 0 <1 <1 150 4 662 <1 0 <1 0 <10 0 <<10 0 0 0 0 66.4	<1 0 <1 0 <1 0 181 3 7777 <1 history1 9 <1 0 1 0 33 7777 <1 history1 9 <1 0 3.3	 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D7844* ASTM D7415*	135 660 imit/base >25 >20 imit/base >20 imit/base	<1 <1 0 0 <1 <1 <10 <1 <10 <1 <10 <21 <10 <21 <21 <21 <21 <24.8	<1 0 <1 0 <1 0 181 3 7777 <1 history1 9 <1 o 0 3.3 14.2	 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D7844* ASTM D7624* ASTM D7415* method	135 660 limit/base >25 >20 limit/base >20 >20 >30	<1 <1 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	<1 0 <1 0 <1 0 181 3 7777 <1 history1 9 <1 iteration 1 0 3.3 14.2	 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D7844* ASTM D7415*	135 660 imit/base >25 >20 imit/base >20 imit/base	<1 <1 0 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 0 <1 0 current 0 0 <th><1 0 <1 0 <1 0 181 3 777 <1 history1 9 <1 history1 0 3.3 14.2 history1 5.1</th> <th> history2 history2 history2</th>	<1 0 <1 0 <1 0 181 3 777 <1 history1 9 <1 history1 0 3.3 14.2 history1 5.1	 history2 history2 history2

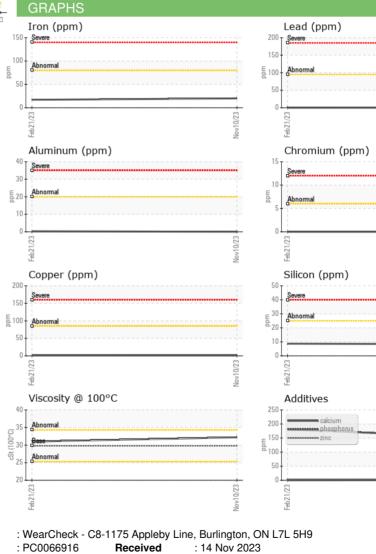


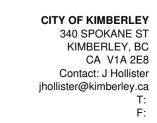
OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Precipitate	scalar	Visual*	NONE	NONE	NONE	
Silt	scalar	Visual*	NONE	NONE	NONE	
Debris	scalar	Visual*	NONE	NONE	NONE	
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Appearance	scalar	Visual*	NORML	NORML	NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	
Free Water	scalar	Visual*		NEG	NEG	
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	460	436	435	
Visc @ 100°C	cSt	ASTM D7279(m)	29.79	32.2	31.0	
Viscosity Index (VI)	Scale	ASTM D2270*	99	107	101	







Report Id: CITKIM [WCAMIS] 02596400 (Generated: 11/15/2023 15:53:15) Rev: 1

CALA

ISO 17025:2017 Accredited

Laboratory

Laboratory

Sample No.

Lab Number

Unique Number : 5681480

: 02596400

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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.

Diagnosed

Diagnostician : Wes Davis

: 15 Nov 2023