

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



2 (S/N GZJ00315)

Component Natural Gas Engine

Fluid

PETRO CANADA SENTRON CG 40 (145 GAL)

SAMPLE INFORMATION method limit/base

Resample at the next service interval to monitor. (Sample Date		Client Info		18
Customer Sample Comment: Total oil added 22 gal	Machine Age	hrs	Client Info		11
)	Oil Age	hrs	Client Info		84
Wear	Oil Changed		Client Info		N/
All component wear rates are normal.	Sample Status				N
Contamination Fuel content negligible. There is no indication of	CONTAMINATION	١	method	limit/base	
any contamination in the oil.	Water		WC Method	>0.1	
Fluid Condition The BN result indicates that there is suitable	WEAR METALS		method	limit/base	
alkalinity remaining in the oil. The AN level is	Iron	ppm	ASTM D5185m	>50	
acceptable for this fluid. The condition of the oil is	Chromium	ppm	ASTM D5185m	>4	
suitable for further service.	Nickel	ppm	ASTM D5185m	>2	
	Titanium	ppm	ASTM D5185m		
	Silver	ppm	ASTM D5185m	>3	
	Aluminum	ppm	ASTM D5185m	>9	
	Lead	ppm	ASTM D5185m	>30	
	Copper	ppm	ASTM D5185m	>35	
	Tin	ppm	ASTM D5185m	>4	
	Vanadium	ppm	ASTM D5185m		
	Cadmium	ppm	ASTM D5185m		
	ADDITIVES		method		
	Boron	ppm	ASTM D5185m	0	
	Barium	ppm	ASTM D5185m	1	
	Molybdenum	ppm	ASTM D5185m	2	
	Manganese	ppm	ASTM D5185m	1	
	Magnesium	ppm	ASTM D5185m	9	



Sample Number		Client Info		WC0697939	WC0699030	WC0699034
Sample Date		Client Info		18 Jul 2022	11 Jul 2022	06 Jul 2022
Machine Age	hrs	Client Info		111600	111439	111328
Oil Age	hrs	Client Info		84	929	818
Oil Changed		Client Info		N/A	N/A	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	2	8	7
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>9	2	4	3
Lead	ppm	ASTM D5185m	>30	1	3	3
Copper	ppm	ASTM D5185m	>35	<1	3	3
Tin	ppm	ASTM D5185m	>4	2	7	6
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	3	2	3
Barium	ppm	ASTM D5185m	1	0	2	0
Molybdenum	ppm	ASTM D5185m	2	1	2	1
Manganese						
	ppm	ASTM D5185m	1	0	<1	<1
Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	1 9	0 13		
Magnesium Calcium				-	<1	<1
•	ppm	ASTM D5185m	9	13	<1 12	<1 10
Calcium	ppm ppm	ASTM D5185m ASTM D5185m	9 2712	13 2745	<1 12 3330	<1 10 2785
Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	9 2712 292	13 2745 263	<1 12 3330 324	<1 10 2785 267
Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	9 2712 292 342	13 2745 263 322	<1 12 3330 324 417	<1 10 2785 267 334
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	9 2712 292 342 2575	13 2745 263 322 3539	<1 12 3330 324 417 4223	<1 10 2785 267 334 3718
Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	9 2712 292 342 2575 limit/base	13 2745 263 322 3539 current	<1 12 3330 324 417 4223 history1	<1 10 2785 267 334 3718 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	9 2712 292 342 2575 limit/base	13 2745 263 322 3539 current 67	<1 12 3330 324 417 4223 history1 ▲ 389	<1 10 2785 267 334 3718 history2 ▲ 363
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	9 2712 292 342 2575 limit/base >+100	13 2745 263 322 3539 current 67 0	<1 12 3330 324 417 4223 history1 389 <1	<1 10 2785 267 334 3718 history2 363 0
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	9 2712 292 342 2575 limit/base >+100	13 2745 263 322 3539 <u>current</u> 67 0 0	<1 12 3330 324 417 4223 history1 389 <1 1	<1 10 2785 267 334 3718 history2 363 0 1
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	9 2712 292 342 2575 limit/base >+100 >20 >4.0	13 2745 263 322 3539 current 67 0 0 0 0.3	<1 12 3330 324 417 4223 history1 389 <1 1 0.3	<1 10 2785 267 334 3718 history2 ▲ 363 0 1 0.6
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	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	9 2712 292 342 2575 limit/base >+100 >20 >4.0 limit/base	13 2745 263 322 3539 current 67 0 0 0 0 0.3 Current	<1 12 3330 324 417 4223 history1 389 <1 1 0.3 history1	<1 10 2785 267 334 3718 history2 1 1 0.6

		method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.0	16.9	15.4		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.98	0.76	1.58	1.51		
Base Number (BN)	mg KOH/g	ASTM D2896	8.1	7.27	5.75	5.85		

Wear

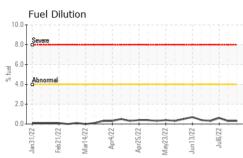
Recommendation

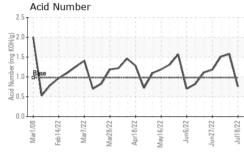
Contamination

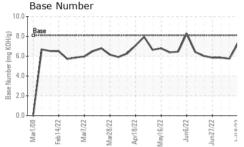
Fluid Condition

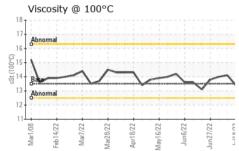


OIL ANALYSIS REPORT









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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)