

## **OIL ANALYSIS REPORT**



45 Component Natural Gas Engine Fluid PETRO CANADA SENTRON LD 3000 (--- GAL)

### DIAGNOSIS

Machine Id

#### Recommendation

No corrective action is recommended at this time. 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

Fuel content negligible. There is no indication of any contamination in the oil.

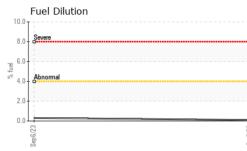
#### Fluid Condition

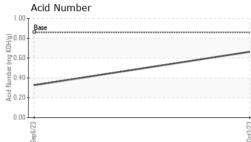
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

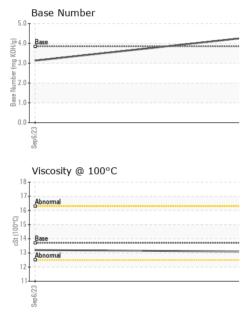
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0103419	PCA0103462	
Sample Date		Client Info		03 Oct 2023	06 Sep 2023	
Machine Age	hrs	Client Info		93366	93165	
Oil Age	hrs	Client Info		1651	499	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	2	1	
Chromium	ppm	ASTM D5185m	>4	<1	<1	
Nickel	ppm	ASTM D5185m	>2	<1	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>9	0	<1	
Lead	ppm	ASTM D5185m	>30	<1	0	
Copper	ppm	ASTM D5185m	>35	<1	0	
Tin	ppm	ASTM D5185m	>4	<1	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<1	0	
Barium	ppm	ASTM D5185m	1	0	0	
Molybdenum	ppm	ASTM D5185m	2	<1	0	
Manganese	ppm	ASTM D5185m	1	0	<1	
Magnesium	ppm	ASTM D5185m	5	8	8	
Calcium	ppm	ASTM D5185m	1220	1204	1406	
Phosphorus	ppm	ASTM D5185m	298	274	310	
Zinc	ppm	ASTM D5185m	350	348	373	
Sulfur	ppm	ASTM D5185m	1995	2691	3021	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	4	2	
Sodium	ppm	ASTM D5185m		0	<1	
Potassium	ppm	ASTM D5185m	>20	1	0	
Fuel	%	ASTM D3524	>4.0	0.1	0.3	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0	
Nitration	Abs/cm	*ASTM D7624	>20	3.6	3.7	
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.1	14.2	
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.9	8.0	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.86	0.664	0.327	
Base Number (BN)	mg KOH/g	ASTM D2896	3.85	4.31	3.13	



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	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	
0ct3/23 -	Appearance	scalar	*Visual	NORML	NORML	NORML	
Oct	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPE	ERTIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	13.7	13.1	13.2	
	GRAPHS						
	Iron (ppm)				Lead (ppm)		
	100 Severe			6	0		
0ct3/23	80			4			
	<sup>60</sup> Abnormal			<u></u> 3			-
	40+			2			
	20			1			
	33						/23 -
	Sep 6/23			0ct3/23	Sep 6/23		0ct3/23
	Aluminum (ppm)				Chromium (p	pm)	
	<sup>20</sup>				<sup>8</sup> I	F)	
	15 - Severe				6 Severe		
	E 10 - Abnormal			ud d	Abnormal		
				4			
	5-				2		
	0			en .	0		
	Sep 6/23			0ct3/23	Sep6/23		0ct3/23
	Copper (ppm)				Silicon (ppm)		
	80 Severe			20			
	60			15	0		
	E 40 - Abnormal			톱 10	Abnormal		
	a.40 - Abnormal				1		
	20 -			5	0 -		
	0						~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	Sep6/23			0ct3/23	Sep6/23		0ct3/23
	viscosity @ 100°	С		-	Base Number		-
	18 T			5. (B)	0		
	Abnormal			(b) 4. Hoy Bu3. unume 1. seg	0 - Base		
	(2) 00 14 - Base Abnormal			<u>ட</u> 3. ங	0 -		
	Abnormal				0		
				ase B	0		
	104			<b>→</b> 0.	0 ++		23 -
	Sep 6/23			0ct3/23	Sep 6/23		0ct3/23
Laboratory Sample No. Lab Number Unique Number	: WearCheck USA - : PCA0103419 : 05977771 : 10695066	501 Madi Receive Diagnos Diagnos	d :12 ed :16	ry, NC 2751 Oct 2023 Oct 2023 s Davis	3 ENERVE	<b>ST OPERATING -</b> 1705 BREAK	HAYSI BOOSTER S PARK ROAD HAYSI, VA US 24256
Test Package	: MOB 2 ( Additional contact Customer Server	Tests: Fu	elDilution, P			Contact: S	ervice Manager

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)

Certificate L2367