

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **42** Component Natural Gas Engine Fluid PETRO CANADA SENTRON LD 3000 (--- GAL)

DIAGNOSIS

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.

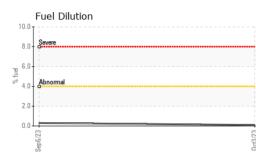
Fluid Condition

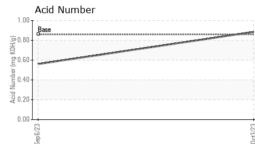
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

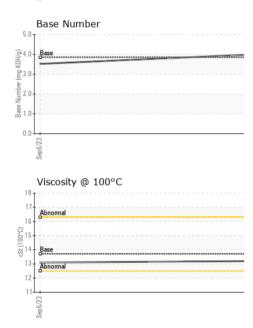
			Sep2023	0ct2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0103414	PCA0103468	
Sample Date		Client Info		03 Oct 2023	06 Sep 2023	
Machine Age	hrs	Client Info		95829	95286	
Oil Age	hrs	Client Info		1065	525	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
WEAR METALS	;	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	1	2	
Chromium	ppm	ASTM D5185m	>4	0	0	
Nickel	ppm	ASTM D5185m	>2	<1	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>9	0	<1	
Lead	ppm	ASTM D5185m	>30	<1	0	
Copper	ppm	ASTM D5185m	>35	<1	<1	
Tin	ppm	ASTM D5185m	>4	0	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	1	
Barium	ppm	ASTM D5185m	1	0	0	
Molybdenum	ppm	ASTM D5185m	2	4	6	
Manganese	ppm	ASTM D5185m	1	0	<1	
Magnesium	ppm	ASTM D5185m	5	9	9	
Calcium	ppm	ASTM D5185m	1220	1212	1368	
Phosphorus	ppm	ASTM D5185m	298	279	311	
Zinc	ppm	ASTM D5185m	350	349	366	
Sulfur	ppm	ASTM D5185m	1995	2573	2920	
CONTAMINANT	ſS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	2	2	
Sodium	ppm	ASTM D5185m		2	9	
Potassium	ppm	ASTM D5185m	>20	28	41	
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	4.3	4.3	
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.7	14.7	
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.0	8.7	
	mg KOH/g	ASTM D8045	0.86	0.884	0.56	
. ,	mg KOH/g	ASTM D2896	3.85	4.00	3.52	
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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 -		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 PROP	PERTIES	method	limit/base	current	history1	history2
		Visc @ 100°C	cSt	ASTM D445	13.7	13.2	13.1	
		GRAPHS						
		Iron (ppm)			60	Lead (ppm)		
		Severe			50	Severe		
	0ct3/23 -	60 Abaamal			40			
		40 Abnormal			툍 30			
		20 -			20			
		0			- 0			
	Sep6/23			0ct3/23	Sep 6/23			
	las.			00	Sei		(
	Aluminum (ppm)		Chromium (p	pm)			
	20			Ö	Converse .			
	15 - Severe			6	Severe			
	and the second s			ud 4	- Abnormal			
		5 -			2			
		0	_		0			
		Sep 6/23			0ct3/23	Sep 6/23 .		
					00	Sep		c
		Copper (ppm)			200	Silicon (ppm)		
		80 Severe						
	60			150	•			
		add Abnormal			툍 100	Abnormal		
		20			50			
		0						
		Sep 6/23			0ct3/23	Sep 6/23		c c
		Sep			Oct	Sep		
		Viscosity @ 100	°C		5.0	Base Number		
	Abnormal			5.0 (B)(HO) X Buil Ja (B)(HO)	Base			
		00-0			Ĕ 3.0			
		(5.00 00 14 - Base Abnormal			a 2.0			
		12			N 1.0	-		
		10			0.0	L+		
		Sep6/23			0ct3/23	Sep 6/23		64.6+-0
	Laboratory	: WearCheck USA : PCA0103414	- 501 Madia				ST OPERATING - 1705 BREAK	HAYSI BOOSTE
	Sample No. Lab Number Unique Number	: 05977769	Diagnos Diagnos	ed : 16 (Oct 2023 s Davis		IT OU BREAK	HAYSI, V US 2425

* - 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)