

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Hurricane Creek 3

Component
Natural Gas Engine

PETRO CANADA SENTRON LD 3000 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

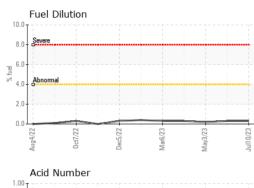
Fluid Condition

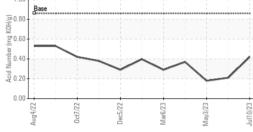
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

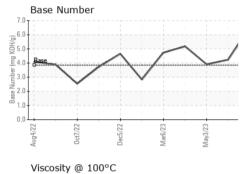
AL)		Aug2022	0ct2022 Dec2022	Mar2023 May2023	Jul2023	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0092112	PCA0092100	PCA0092147
Sample Date		Client Info		10 Jul 2023	05 Jun 2023	03 May 2023
Machine Age	hrs	Client Info		138215	137380	136584
Oil Age	hrs	Client Info		23437	22602	21806
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	<1
Chromium	ppm	ASTM D5185m	>4	0	<1	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>9	<1	0	6
Lead	ppm	ASTM D5185m	>30	<1	0	1
Copper	ppm	ASTM D5185m		<1	0	0
Tin	ppm	ASTM D5185m	>4	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	<1
Barium	ppm	ASTM D5185m	1	<1	0	0
Molybdenum	ppm	ASTM D5185m	2	1	2	3
Manganese	ppm	ASTM D5185m	1	0	<1	0
Magnesium	ppm	ASTM D5185m	5	10	12	32
Calcium	ppm	ASTM D5185m	1220	1369	1300	1433
Phosphorus	ppm	ASTM D5185m	298	280	294	321
Zinc	ppm	ASTM D5185m	350	356	362	365
Sulfur	ppm	ASTM D5185m	1995	2658	2911	2746
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	<1	2	1
Sodium	ppm	ASTM D5185m		0	0	2
Potassium	ppm	ASTM D5185m		1	0	0
Fuel	%	ASTM D3524	>4.0	0.3	0.3	0.2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	3.4	3.5	3.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	13.8	14.2	12.5
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.6	7.7	7.3
Acid Number (AN)	mg KOH/g	ASTM D8045	0.86	0.42	0.21	0.18
Base Number (BN)	mg KOH/g	ASTM D2896	3.85	6.51	4.23	3.91

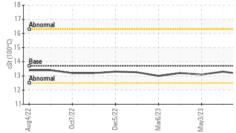


OIL ANALYSIS REPORT









	VISUAL		method	limit/base	curi	rent	hist	tory1	histo	ry2
	White Metal	scalar	*Visual	NONE	NONE	Ξ	NON	E	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	Ξ	NON	E	NONE	
	Precipitate		*Visual	NONE	NON	=	NON	E	NONE	
	Silt		*Visual	NONE	NONE	NONE		E	NONE	
	Debris		*Visual	NONE	NONE		NON	E	NONE	
	Sand/Dirt		*Visual	NONE	NON	NONE		E	NONE	
May3/23 - Jul10/23 -			*Visual	NORML	NORI	NORML		ML	NORM	1L
May Jul1	Odor	scalar	*Visual	NORML	NORI	NORML		ML	NORM	1L
	Emulsified Water	scalar	*Visual	>0.1	NEG		NEG		NEG	
	Free Water	scalar	*Visual		NEG		NEG		NEG	
	FLUID PROPI	ERTIES	method	limit/base	curi	rent	hist	tory1	histo	ry2
	Visc @ 100°C	cSt	ASTM D445	13.7	13.1		13.3		13.1	
\sim /	GRAPHS									
	Iron (ppm)				Lead (opm)				
33	80 Severe				50 Severe					
May3/23 Jul1 0/23	00			4	ł0 -					
	40	· · · · · · · · · · · · · · · · · · ·		udd 33		-				-
	20 -				20-					
	0				0					
~ /		Dec5/22 Mar6/23	May3/23	Jul10/23	Aug4/22	0ct7/22	Dec5/22	Mar6/23 -	May3/23	Jul10/23 -
\searrow	Aug	Mai Dec	May	Jult	Aug	00	Dec	Mai	May	Jult
	Aluminum (ppm)	1			Chrom	ium (p	pm)			
	20				8					
	15 - Severe			-	6 - Severe					_
	a 10 - Abnormal			u d	4 Abnormal					
May3/23	5-		~		2					
2			/			-				
	Aug4/22	Dec5/22	May3/23 -	Jul10/23	Aug4/22	0ct7/22	Dec5/22	Mar6/23	3/23 -	Jul10/23
	Aug ⁴ Octī	Marf	May3	Julto	Aug ⁴	0ct7	Dect	Marf	May3/23	Julio
	Copper (ppm)				Silicon	(ppm)				
	80 Severe			20)0 Severe					
	60			15						
	Abnormal			틆 10	00 - Abnormal	1				-
	20-				i0					
May3/23	0				0					
May		Dec5/22 - Mar6/23 -	May3/23 -	Jul10/23	Aug4/22	0ct7/22 -	Dec5/22 -	Mar6/23 -	May3/23 -	Jul10/23
	Aug	Mart	May	Jult	Aug	Oct	Dec	Marl	May	Jult
	Viscosity @ 100°	С			ase Number					
	18 Abnormal			(B/H)	.0					
ŝ				Oy Bu	.0-				~	/
	Abnormal			ther (n	.0 Base	->		-		_
	Abnormal			(B) 6) 6) 89 89 89 89 80 80 80 80 80 80 80 80 80 80 80 80 80	.0-	~				
	10				.0 ++	_				
		Dec5/22 Mar6/23	May3/23	Jul10/23	Aug4/22	0ct7/22	Dec5/22	Mar6/23 -	May3/23	Jul10/23
	Aug	Mai De	May	Jul	Aug	00	Dei	Ma	May	Jult
Laboratory Sample No. Lab Number	: WearCheck USA - : PCA0092112 : 05903896	Received Diagnos	d : 20 ed : 25	Jul 2023 Jul 2023	3 I			JREL BF	- HURRIG RANCH F /ANSAN	road T, Va
Unique Number Test Package	: 10565252 : MOB 2 (Additional	Diagnost		: Wes Davis tion_PercentFuel)			US 24656 Contact: Service Manager			

US 24656 Contact: Service Manager

Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel) Certificate L2367 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)

Contact/Location: Service Manager - ENEVANH