

OIL ANALYSIS REPORT

Sample Rating Trend

DIRT



Recommendation

Contamination

(Si) above normal. Fluid Condition

suitable for further service.

gallons) **Wear** Machine Id GZJ00314 Component

Fluic

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: Total oil added 93

Fuel content negligible. Elemental level of silicon

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

All component wear rates are normal.

Biogas Engine

PETRO CANADA SENTRON CG 40 (145 GAL)

zuzz Swydazz Oczłasz Narłażz Fenzicz Hardaz Apricaz

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0799178	WC0799181	WC0799175
Sample Date		Client Info		22 May 2023	15 May 2023	08 May 202
Machine Age	hrs	Client Info		123123	122955	122789
Oil Age	hrs	Client Info		805	637	471
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMA
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>45	7	7	7
Chromium	ppm	ASTM D5185m	>2	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	2	4
Lead	ppm	ASTM D5185m	>5	0	0	0
Copper	ppm	ASTM D5185m	>14	2	2	1
Tin	ppm	ASTM D5185m	>13	6	6	6
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	0	<1	0	0
Barium	ppm	ASTM D5185m	1	0	0	0
Molybdenum	ppm	ASTM D5185m	2	<1	<1	<1
-						
Manganese	ppm	ASTM D5185m	1	<1	<1	<1
Manganese Magnesium	ppm ppm	ASTM D5185m	9	13	<1 13	<1 9
Manganese Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m	9 2712	13 3035	<1 13 3069	<1 9 3143
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	9 2712 292	13 3035 302	<1 13 3069 296	<1 9 3143 309
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	9 2712 292 342	13 3035 302 368	<1 13 3069 296 362	<1 9 3143 309 369
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	9 2712 292	13 3035 302	<1 13 3069 296	<1 9 3143 309
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	9 2712 292 342 2575 limit/base	13 3035 302 368 4287 current	<1 13 3069 296 362 4098 history1	<1 9 3143 309 369 4743 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm 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 3035 302 368 4287	<1 13 3069 296 362 4098 history1 351	<1 9 3143 309 369 4743 history2 286
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm 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 >200	13 3035 302 368 4287 <u>current</u> ▲ 387 1	<1 13 3069 296 362 4098 history1 351 1	<1 9 3143 309 369 4743 history2 286 1
Manganese Magnesium 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 >200	13 3035 302 368 4287 <u>current</u> ▲ 387 1 0	<1 13 3069 296 362 4098 history1 351 1 0	<1 9 3143 309 369 4743 history2 286 1 <1
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm 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 >200	13 3035 302 368 4287 <u>current</u> ▲ 387 1	<1 13 3069 296 362 4098 history1 351 1	<1 9 3143 309 369 4743 history2 286 1
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm 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 >200	13 3035 302 368 4287 <u>current</u> ▲ 387 1 0	<1 13 3069 296 362 4098 history1 351 1 0	<1 9 3143 309 369 4743 history2 ▲ 286 1 <1 0.3
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm 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 D3524	9 2712 292 342 2575 limit/base >200 >20 >20	13 3035 302 368 4287 current ▲ 387 1 0 0.3	<1 13 3069 296 362 4098 history1 351 1 0 0.3	<1 9 3143 309 369 4743 history2 ▲ 286 1 <1 0.3
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm 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 D524 method	9 2712 292 342 2575 limit/base >200 >4.0 limit/base	13 3035 302 368 4287 current 387 1 0 0.3 0.3 current	<1 13 3069 296 362 4098 history1 ▲ 351 1 0 0.3 history1	<1 9 3143 309 369 4743 history2 286 1 <1 0.3 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	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 ASTM D3524 method *ASTM D7844	9 2712 292 342 2575 limit/base >200 >4.0 limit/base	13 3035 302 368 4287 ▲ 387 1 0 0.3 Current 0.1	<1 13 3069 296 362 4098 history1 351 1 0 0.3 history1 0.1	<1 9 3143 309 369 4743 A743 286 1 <1 0.3 history2 0
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm % % Abs/tmm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7844	9 2712 292 342 2575 imit/base >200 >20 >20 >4.0	13 3035 302 368 4287 ▲ 387 1 0 0.3 Current 0.1 0.1 6.1	<1 13 3069 296 362 4098 history1 351 1 0 0.3 history1 0.1 5.8	<1 9 3143 309 369 4743 history2 ▲ 286 1 <1 0.3 history2 0 5.4 19.6
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm % % Abs/tmm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624	9 2712 292 342 2575 limit/base >200 >4.0 limit/base >20 >20 >4.0	13 3035 302 368 4287 current ▲ 387 1 0 0.3 current 0.1 6.1 22.3	<1 13 3069 296 362 4098 history1 351 1 0 0.3 history1 0.1 5.8 21.1	<1 9 3143 309 369 4743 history2 ▲ 286 1 <1 0.3 history2 0 5.4 19.6
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/cm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624 *ASTM D7415 method	9 2712 292 342 2575 ilmit/base >200 >20 >4.0 ilmit/base >20 >30 ilmit/base	13 3035 302 368 4287	<1 13 3069 296 362 4098 history1 351 1 0 0.3 history1 0.1 5.8 21.1 history1	<1 9 3143 309 369 4743 history2 ▲ 286 1 <1 0.3 history2 0 5.4 19.6 history2

Submitted By: Blain Middleton



OIL ANALYSIS REPORT

scalar

scalar

scalar

method

*Visual

*Visual

*Visua

limit/base

NONE

NONE

NONE

current

NONE

NONE

NONE

history1

NONE

NONE

NONE

history2

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

history2

NEG

NEG

13.49

eb 13/23 ar20/23

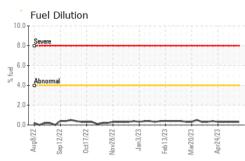
ar20/7

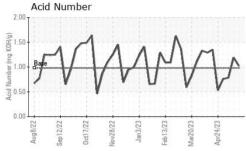
VISUAL

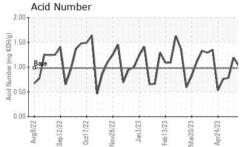
White Metal

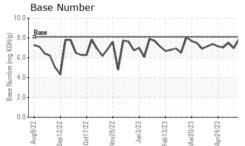
Yellow Metal

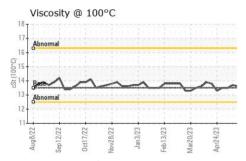
Precipitate

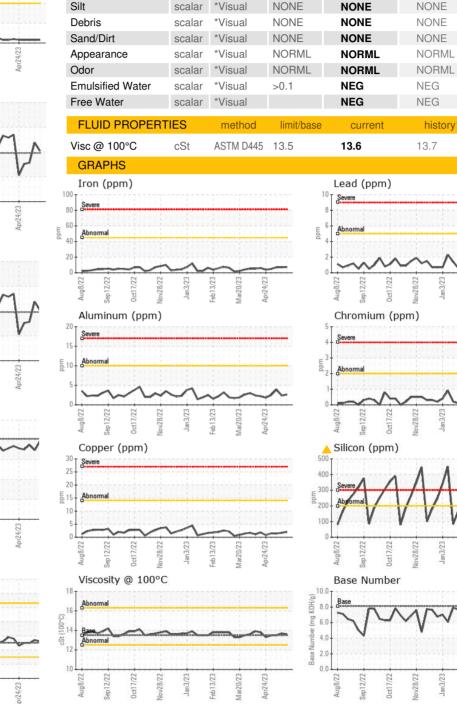












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eh13/7



To discuss this sample report, contact Customer Service at 1-800-237-1369. bmide * - 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)

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

: WC0799178

: 05856317

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Diagnosed

Tested

: 24 May 2023

: 26 May 2023

: 26 May 2023 - Angela Borella

Certificate L2367

Laboratory

Sample No.

Lab Number

Unique Number : 10485672

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