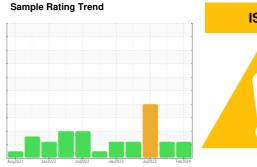


OIL ANALYSIS REPORT

Galv Line [Galv Line] 520095 - ENTRY CENTER GUIDE

Hydraulic System

PETRO CANADA HYDREX AW 46 (--- GAL)





DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

		Aug2021	Jan 2022 Jul 2022	Jan 2023 Jul 2023	Feb 2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0112987	PCA0101625	PCA0101502
Sample Date		Client Info		14 Feb 2024	25 Oct 2023	01 Jul 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	0	4
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>20	0	0	<1
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	<1	0	<1
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	▲ 36
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	3
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	0	0	5	0
Calcium	ppm	ASTM D5185m	50	45	56	1 0
Phosphorus	ppm	ASTM D5185m	330	313	355	260
Zinc	ppm	ASTM D5185m	430	389	465	▲ 7
Sulfur	ppm	ASTM D5185m	760	773	927	▲ 13091
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	0	0	4
Sodium	ppm	ASTM D5185m		<1	0	<1
Potassium	ppm	ASTM D5185m		0	0	0
Water	%	ASTM D6304		NEG	NEG	NEG
FLUID CLEANL	INESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<u> </u>	<u>^</u> 21498	<u>^</u> 64614
Particles >6µm		ASTM D7647	>1300	2825	△ 3531	<u>13376</u>
Particles >14µm		ASTM D7647	>160	104	54	<u>493</u>
Particles >21µm		ASTM D7647	>40	21	7	<u>103</u>
Particles >38µm		ASTM D7647	>10	1	0	1
Particles >71μm		ASTM D7647	>3	0	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u>21/19/14</u>	<u>22/19/13</u>	<u>\$\text{23/21/16}\$</u>
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2

Acid Number (AN)

mg KOH/g ASTM D8045 0.70

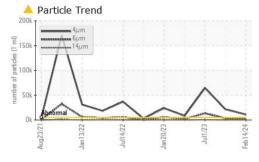
0.38

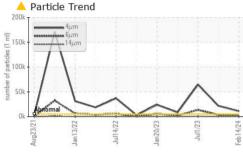
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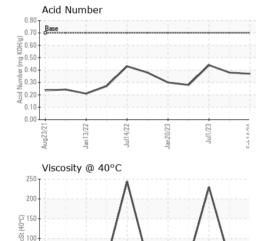
0.44



OIL ANALYSIS REPORT



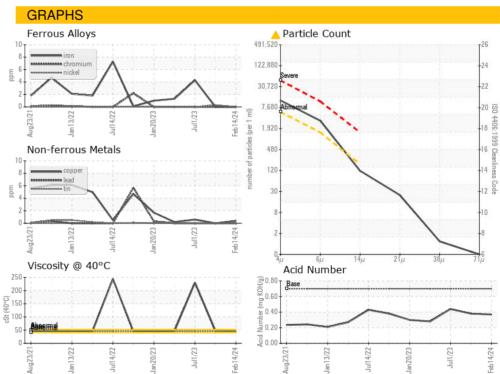




Jul14/22

Jan 20/23

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.4	45.8	48.3	▲ 230
SAMPLE IMAG	ES	method	limit/base	current	history1	history2
Color				7	Prod. Stop Exm. Petr	ENTE Petrs Address
Bottom						







Certificate L2367

Laboratory

Sample No.

: PCA0112987 Lab Number : 06090987 Unique Number : 10883840

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

Diagnosed Test Package : PLANT

: 15 Feb 2024 **Tested** : 18 Feb 2024 : 18 Feb 2024 - Don Baldridge

SDI - Steel DynamicsInc. - Heartland 455 West Industrial Drive

Terre Haute, IN US 47802

Contact: BRAD ELLIS brad.ellis@steeldynamics.com

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)

T:

F: