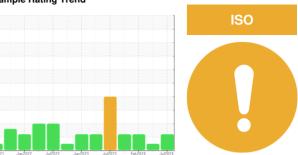


OIL ANALYSIS REPORT

Sample Rating Trend



Galy 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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a light 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	lan 2022 Jul 2022	Jan 2023 Jul 2023 Feb 2024	Jul2024	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0129337	PCA0117631	PCA0112987
Sample Date		Client Info		14 Jul 2024	07 Apr 2024	14 Feb 2024
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				ATTENTION	NORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1	<1	0
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>20	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	2	0
Lead	ppm	ASTM D5185m	>20	<1	0	0
Copper	ppm	ASTM D5185m	>20	<1	1	<1
Tin	ppm	ASTM D5185m	>20	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVEC			11 1.0			11110
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	method ASTM D5185m	0 limit/base	current 0	history1 0	nistory2 0
	ppm	ASTM D5185m				
Boron		ASTM D5185m	0	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0 0 0	0	0 <1	0
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 <1	0 <1 0	0 0 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 <1 0	0 <1 0	0 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0	0 0 <1 0 2	0 <1 0 0 2	0 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 0 50	0 0 <1 0 2 40	0 <1 0 0 2 59	0 0 0 0 0 0 45
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 50 330	0 0 <1 0 2 40 317	0 <1 0 0 2 59 346	0 0 0 0 0 0 45 313
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 0 50 330 430 760	0 0 <1 0 2 40 317 444 748	0 <1 0 0 2 59 346 437 871 history1	0 0 0 0 0 45 313 389 773
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 0 50 330 430 760	0 0 <1 0 2 40 317 444 748 current	0 <1 0 0 2 59 346 437 871 history1 0	0 0 0 0 0 45 313 389 773 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 50 330 430 760 limit/base	0 0 <1 0 2 40 317 444 748 current <1	0 <1 0 0 2 59 346 437 871 history1 0 0	0 0 0 0 0 45 313 389 773 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base >15	0 0 <1 0 2 40 317 444 748 current <1 0 <1	0 <1 0 0 2 59 346 437 871 history1 0 0 1	0 0 0 0 0 45 313 389 773 history2 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 50 330 430 760 limit/base >15	0 0 <1 0 2 40 317 444 748 current <1 0 <1	0 <1 0 0 2 59 346 437 871 history1 0 1 history1	0 0 0 0 0 45 313 389 773 history2 0 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base >20 limit/base	0 0	0 <1 0 0 2 59 346 437 871 history1 0 1 history1 2618	0 0 0 0 0 45 313 389 773 history2 0 <1 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300	0 0	0 <1 0 0 2 59 346 437 871 history1 0 0 1 history1 2618 342	0 0 0 0 0 45 313 389 773 history2 0 <1 0 history2 ▲ 10693 ▲ 2825
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m ASTM D7647 ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160	0 0	0 <1 0 0 2 59 346 437 871 history1 0 0 1 history1 2618 342 22	0 0 0 0 0 45 313 389 773 history2 0 <1 0 history2 △ 10693 △ 2825 104
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160 >40	0 0	0 <1 0 0 2 59 346 437 871 history1 0 0 1 history1 2618 342 22 5	0 0 0 0 0 45 313 389 773 history2 0 <1 0 history2 ▲ 10693 ▲ 2825 104 21
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	0 0	0 <1 0 0 2 59 346 437 871 history1 0 0 1 history1 2618 342 22 5 0	0 0 0 0 0 45 313 389 773 history2 0 <1 0 history2 ▲ 10693 ▲ 2825 104 21 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10 >3	0 0	0 <1 0 0 2 59 346 437 871 history1 0 0 1 history1 2618 342 22 5 0 0 0	0 0 0 0 0 45 313 389 773 history2 0 <1 0 history2 ▲ 10693 ▲ 2825 104 21 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	0 0	0 <1 0 0 2 59 346 437 871 history1 0 0 1 history1 2618 342 22 5 0	0 0 0 0 0 45 313 389 773 history2 0 <1 0 history2 ▲ 10693 ▲ 2825 104 21 1

Acid Number (AN)

mg KOH/g ASTM D8045 0.70

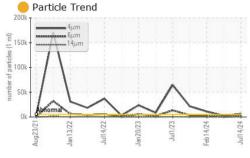
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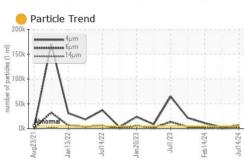
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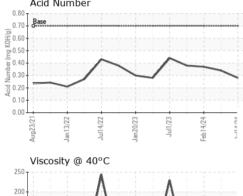
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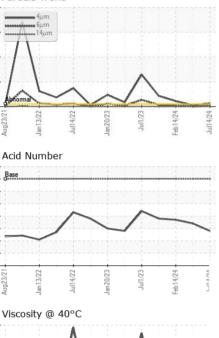


OIL ANALYSIS REPORT







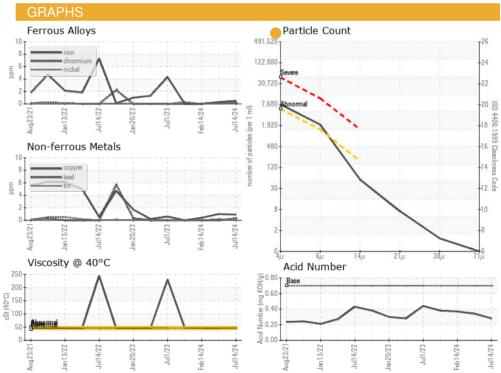


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	48.3	45.8	45.8
SAMPLE IMAG	ES	method	limit/base	current	history1	history2
				AL A		Silvania (

|--|

Color







₹ 100

Jan 13/22

Jul14/22

Jan 20/23



Certificate 12367

Feb14/24

Laboratory Sample No. Lab Number : 06235905

: PCA0129337

Unique Number : 11124739 Test Package : PLANT

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 15 Jul 2024

Tested : 16 Jul 2024 Diagnosed : 16 Jul 2024 - Wes Davis

455 West Industrial Drive Terre Haute, IN US 47802

Contact: BRAD ELLIS brad.ellis@steeldynamics.com

SDI - Steel DynamicsInc. - Heartland

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)

Report Id: SDITER [WUSCAR] 06235905 (Generated: 07/16/2024 14:30:00) Rev: 1

Contact/Location: BRAD ELLIS - SDITER

T:

F: