

PROBLEM SUMMARY

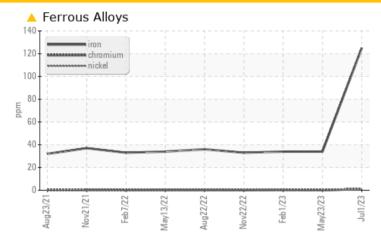
Galv Line [Galv Line] 670075-# 4 BRIDLE ROLL # 2

Gearbox

PETRO CANADA ENDURATEX EP 220 (--- GAL)

Sample Rating Trend **WEAR**

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATION	C TEST	EST RESULTS							
Sample Status				ATTENTION	NORMAL	NORMAL			
Iron	ppm	ASTM D5185m	>200	125	34	34			

Customer Id: SDITER Sample No.: PCA0101431 Lab Number: 05929795 Test Package: PLANT

To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 ihester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

23 May 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



01 Feb 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



22 Nov 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Galv Line Machine Id [Galv Line] 670075-# 4 BRIDLE ROLL # 2

Gearbox

PETRO CANADA ENDURATEX EP 220 (--- GAL)

FETHO CANADA ENDONATEX EF 220 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

An increase in the iron level is noted. All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

GAL)						
SAMPLE INFORI	MATION		limit/base	Current	history1	history2
	VIATION		IIIIIIIIIIIIII			
Sample Number		Client Info		PCA0101431	PCA0095441	PCA0089465
Sample Date		Client Info		01 Jul 2023	23 May 2023	01 Feb 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status	0			ATTENTION	NORMAL	NORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
PQ .		ASTM D8184	000	25	17	17
Iron	ppm	ASTM D5185m	>200	<u> </u>	34	34
Chromium	ppm	ASTM D5185m	>15	1	0	<1
Nickel	ppm	ASTM D5185m	>15	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m		<1	1	0
Lead	ppm	ASTM D5185m	>100	<1	0	0
Copper	ppm	ASTM D5185m	>200	<1	<1	<1
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	60	25	14	20
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0	0
Manganese	ppm	ASTM D5185m	0	1	<1	<1
Magnesium	ppm	ASTM D5185m	0	1	2	1
Calcium	ppm	ASTM D5185m	0	7	12	12
Phosphorus	ppm	ASTM D5185m	270	247	271	252
Zinc	ppm	ASTM D5185m	0	7	10	21
Sulfur	ppm	ASTM D5185m	11200	7408	10293	9372
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	nnm	ASTM D5185m	>50			4.4
	ppm		/00	14	10	11
Sodium	ppm	ASTM D5185m	250	14 0	10	11 <1
Sodium Potassium		ASTM D5185m ASTM D5185m			10	
	ppm	ASTM D5185m		0	1	<1
Potassium	ppm	ASTM D5185m	>20	0 <1	1 3	<1 0
Potassium FLUID DEGRAD	ppm ppm DATION	ASTM D5185m method	>20 limit/base	0 <1 current	1 3 history1	<1 0 history2
Potassium FLUID DEGRAD Acid Number (AN)	ppm ppm DATION	ASTM D5185m method ASTM D8045	>20 limit/base 0.40	0 <1 current 0.84	1 3 history1 0.68	<1 0 history2 0.61
Potassium FLUID DEGRAD Acid Number (AN) VISUAL	ppm ppm DATION mg KOH/g	ASTM D5185m method ASTM D8045 method	>20 limit/base 0.40 limit/base	0 <1 current 0.84 current	1 3 history1 0.68 history1	<1 0 history2 0.61 history2
Potassium FLUID DEGRAD Acid Number (AN) VISUAL White Metal	ppm ppm DATION mg KOH/g	ASTM D5185m method ASTM D8045 method *Visual	>20 limit/base 0.40 limit/base NONE	0 <1 current 0.84 current NONE	1 3 history1 0.68 history1 NONE	<1 0 history2 0.61 history2 NONE
Potassium FLUID DEGRAD Acid Number (AN) VISUAL White Metal Yellow Metal	ppm ppm DATION mg KOH/g scalar scalar	ASTM D5185m method ASTM D8045 method *Visual *Visual	>20 limit/base 0.40 limit/base NONE	0 <1 current 0.84 current NONE	1 3 history1 0.68 history1 NONE NONE	<1 0 history2 0.61 history2 NONE
Potassium FLUID DEGRAD Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate	ppm ppm DATION mg KOH/g scalar scalar scalar	ASTM D5185m method ASTM D8045 method *Visual *Visual *Visual	>20 limit/base 0.40 limit/base NONE NONE NONE	0 <1 current 0.84 current NONE NONE	history1 0.68 history1 NONE NONE NONE	<1 0 history2 0.61 history2 NONE NONE
Potassium FLUID DEGRAE Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm DATION mg KOH/g scalar scalar scalar scalar	ASTM D5185m method ASTM D8045 method *Visual *Visual *Visual *Visual *Visual *Visual	>20 limit/base 0.40 limit/base NONE NONE NONE NONE NONE NONE	0 <1 current 0.84 current NONE NONE NONE NONE NONE NONE NONE	history1 0.68 history1 NONE NONE NONE NONE NONE NONE	ohistory2 0.61 history2 NONE NONE NONE NONE NONE NONE NONE
Potassium FLUID DEGRAE Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm DATION mg KOH/g scalar scalar scalar	ASTM D5185m method ASTM D8045 method *Visual *Visual *Visual *Visual	>20 limit/base 0.40 limit/base NONE NONE NONE NONE	0 <1 current 0.84 current NONE NONE NONE NONE	history1 0.68 history1 NONE NONE NONE NONE	<1 0 history2 0.61 history2 NONE NONE NONE
Potassium FLUID DEGRAE Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm DATION mg KOH/g scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D8045 method *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 limit/base 0.40 limit/base NONE NONE NONE NONE NONE NONE NONE NON	0 <1 current 0.84 current NONE NONE NONE NONE NONE NONE NONE NON	history1 0.68 history1 NONE NONE NONE NONE NONE NONE NONE NON	ohistory2 0.61 history2 NONE NONE NONE NONE NONE NONE NONE NON

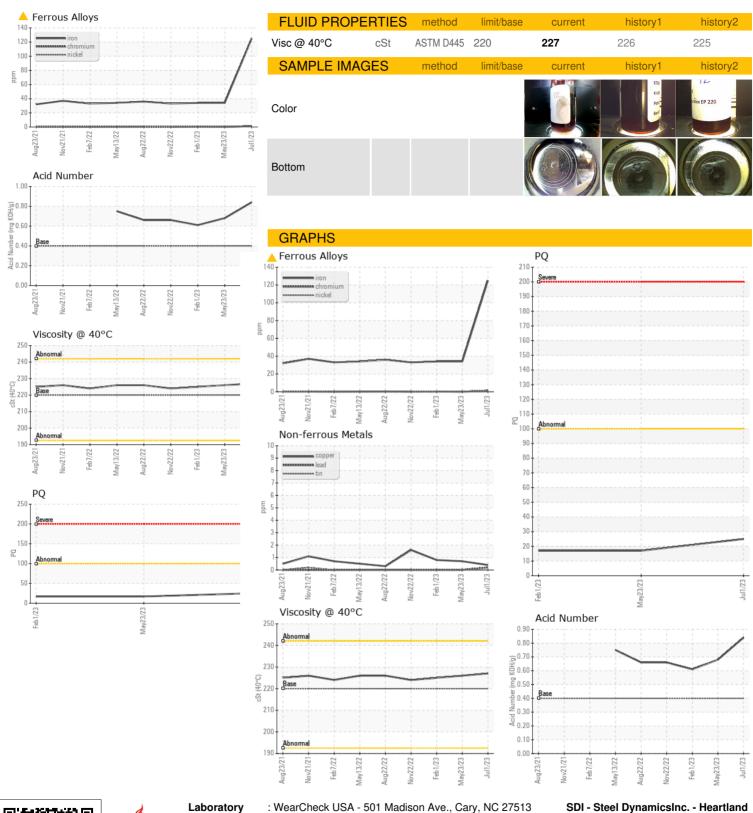
ocative BRAD ELLISIES DITER

NEG

scalar *Visual



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package : PLANT

: PCA0101431 : 05929795

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

Received Diagnosed : 10615066

: 21 Aug 2023 : 23 Aug 2023 Diagnostician : Jonathan Hester SDI - Steel DynamicsInc. - Heartland 455 West Industrial Drive

Terre Haute, IN US 47802

Contact: BRAD ELLIS

brad.ellis@steeldynamics.com T:

* - 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)

F: