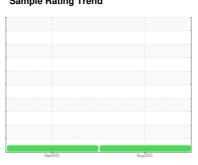


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



[] CRANE 7 NORTH BRIDGE

Gearbox

PETRO CANADA ENDURATEX EP 220 (---

DIAGNOSIS

Recommendation

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 no indication of any contamination in the

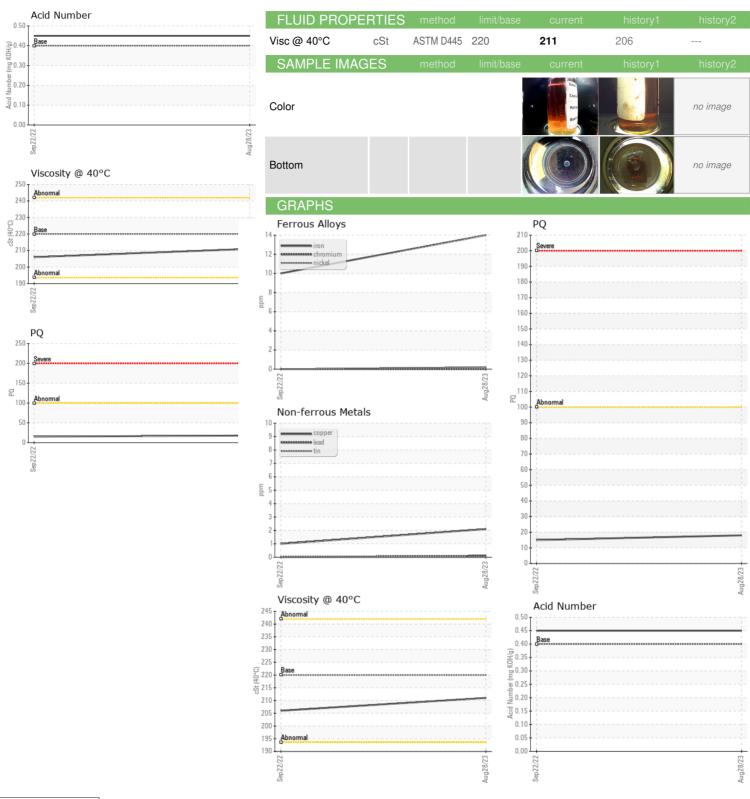
Fluid Condition

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

GAL)			Sep 2022	Aug ² 023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101549	PCA0080269	
Sample Date		Client Info		28 Aug 2023	22 Sep 2022	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	Not Changd	
Sample Status				NORMAL	NORMAL	
WEAR METAL	.S	method	limit/base	current	history1	history2
PQ		ASTM D8184		18	15	
Iron	ppm	ASTM D5185m	>200	14	10	
Chromium	ppm	ASTM D5185m	>15	0	0	
Nickel	ppm	ASTM D5185m	>15	<1	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm		>25	0	0	
Lead	ppm		>100	<1	0	
Copper		ASTM D5185m	>200	2	1	
Tin	ppm		>25	0	0	
Vanadium	ppm	ASTM D5165III	>20	0		
	ppm	710 1111 20 100111			0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	60	<1	0	
Barium	ppm	ASTM D5185m	0	21	15	
Molybdenum	ppm	ASTM D5185m	0	<1	0	
Manganese	ppm	ASTM D5185m	0	<1	<1	
Magnesium	ppm	ASTM D5185m	0	2	<1	
Calcium	ppm	ASTM D5185m	0	15	9	
Phosphorus	ppm	ASTM D5185m	270	202	179	
Zinc	ppm	ASTM D5185m	0	15	10	
Sulfur	ppm	ASTM D5185m	11200	13494	12883	
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	32	19	
Sodium	ppm	ASTM D5185m		0	<1	
Potassium	ppm	ASTM D5185m	>20	<1	0	
FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.40	0.45	0.45	
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	VLITE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
			> ∪.∠	NEG	ocation (BRAD E	IIIS - SDITE
Free Water	scalar	*Visual		NEG	UCALINE CORAD E	rrið- odii E



OIL ANALYSIS REPORT





Certificate L2367

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

: PCA0101549 : 05937388 : 10622659

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Aug 2023 Diagnosed

: 30 Aug 2023 Diagnostician : Wes Davis

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: