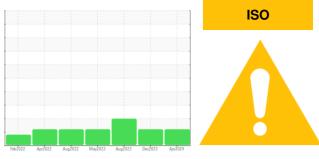


OIL ANALYSIS REPORT

Sample Rating Trend



BL-43 Component West Gearbox Fluid PETRO CANADA SYNDURO SHB ISO 220 (9 GAL)

DIAGNOSIS

Machine Id

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

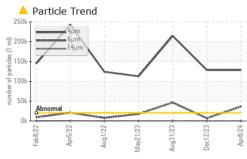
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		SBP0000910	SBP0001140	SBP0001822		
Sample Date		Client Info		08 Apr 2024	12 Dec 2023	31 Aug 2023		
Machine Age		Client Info		0	0	0		
Oil Age		Client Info		0	0	0		
Oil Changed		Client Info		N/A	N/A	N/A		
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2		
PQ		ASTM D8184		33	15	16		
Iron	ppm	ASTM D5185m	>200	9	3	4		
Chromium	ppm	ASTM D5185m	>15	0	0	0		
Nickel	ppm	ASTM D5185m	>15	<1	0	0		
Titanium	ppm	ASTM D5185m		0	0	0		
Silver	ppm	ASTM D5185m		0	0	0		
Aluminum	ppm	ASTM D5185m	>25	<1	0	0		
Lead	ppm	ASTM D5185m	>100	0	0	0		
Copper	ppm	ASTM D5185m	>200	2	0	0		
Tin	ppm	ASTM D5185m	>25	<1	0	0		
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	0	0		
Barium	ppm	ASTM D5185m	5.0	0	0	7		
Molybdenum	ppm	ASTM D5185m	0.0	0	0	0		
Manganese	ppm	ASTM D5185m		1	0	0		
Magnesium	ppm	ASTM D5185m	5.0	2	0	5		
Calcium	ppm	ASTM D5185m	5.0	7	0	0		
Phosphorus	ppm	ASTM D5185m	100	301	292	290		
Zinc	ppm	ASTM D5185m	5.0	0	0	3		
Sulfur	ppm	ASTM D5185m	1900	1077	675	741		
CONTAMINANTS	6	method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	<u>⊳50</u>	15	14	9		
Sodium	ppm	ASTM D5185m	200	2	0	0		
Potassium	ppm	ASTM D5185m	>20	2	0	<1		
Water	%	ASTM D6304		0.001	0.003	0.003		
ppm Water	ppm	ASTM D6304	>2000	9	30	34.0		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2		
Particles >4µm		ASTM D7647	>20000	128411	128544	214510		
Particles >6µm		ASTM D7647	>5000	<u> </u>	6882	4 6559		
Particles >14µm		ASTM D7647	>640	192	154	A 282		
Particles >21µm		ASTM D7647	>160	40	53	5 0		
Particles >38µm		ASTM D7647	>40	2	0	3		
Particles >71µm		ASTM D7647	>10	0	0	0		
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<u> </u>	▲ 24/20/14	▲ 25/23/15		
FLUID DEGRADA		method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.3	0.95	0.84	0.81		
:34:09) Rev: 1	- 0			S	Submitted By: NATHAN KUGLER			

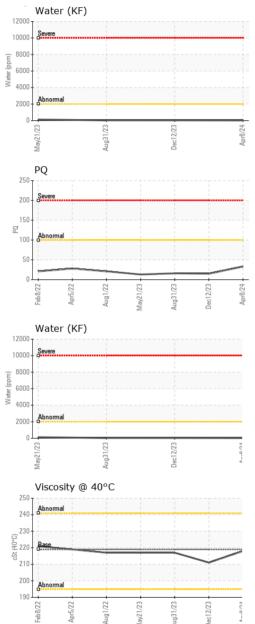
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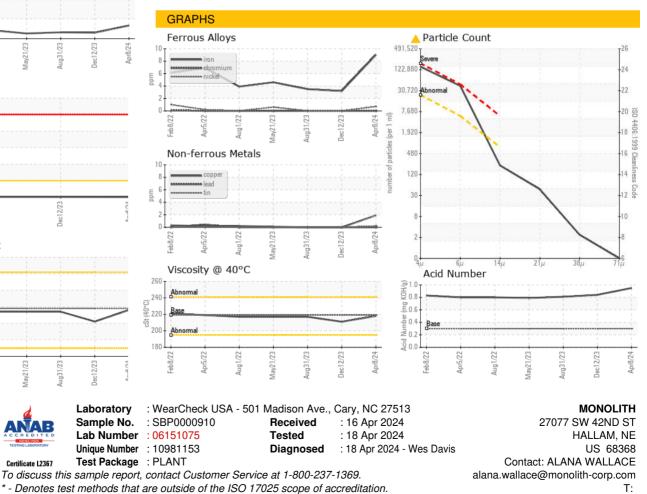


OIL ANALYSIS REPORT





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	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
FLUID PROPERT Visc @ 40°C	IES cSt	method ASTM D445	limit/base 219	current 218	history1 211	history2 217
	cSt					
Visc @ 40°C	cSt	ASTM D445	219	218	211	217



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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