

Area

Gas Compression [450310863]

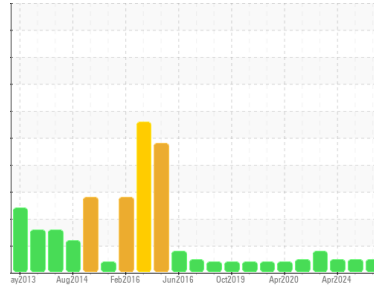
Machine Id
Methanol Wellhead Injection Pump C - Gearbox (S/N Sample Tag PD-42010C-S1)

Component

Gearbox

Fluid

PETRO CANADA ENDURATEX SYNTHETIC EP 220 (120 LTR)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info	PC	PC	PC
Sample Date	Client Info	09 Apr 2024	09 Apr 2024	09 Apr 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	---	NORMAL

CONTAMINATION method limit/base current history1 history2

Water	WC Method	>0.2	NEG	NEG	NEG
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WEAR METALS method limit/base current history1 history2

PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>150	3	6	4
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)	>10	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>5	0	0	<1
Lead	ppm	ASTM D5185(m)	>65	0	0	0
Copper	ppm	ASTM D5185(m)	>80	2	<1	4
Tin	ppm	ASTM D5185(m)	>8	0	0	0
Antimony	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

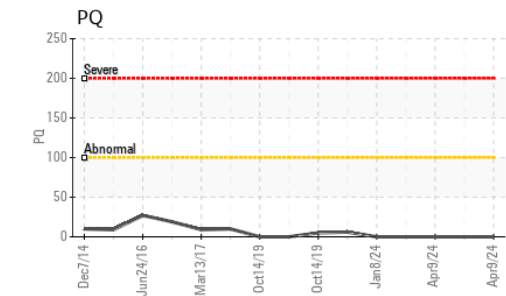
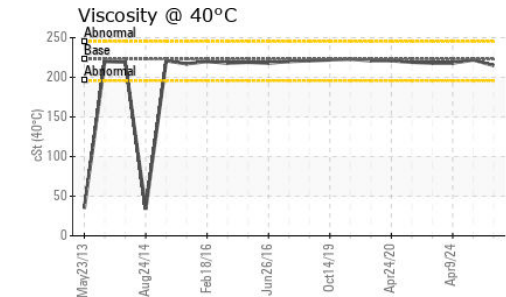
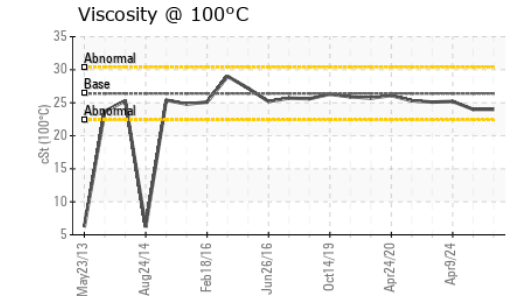
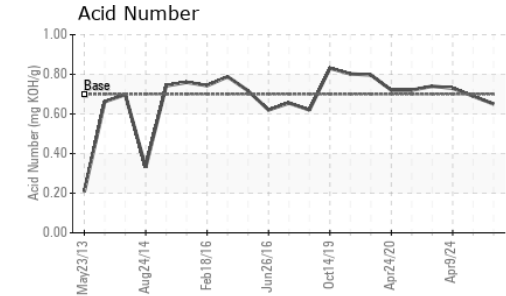
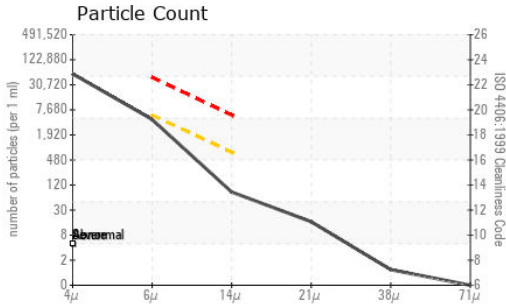
ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185(m)	33	37	11	42
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	5	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	5	0	1	0
Phosphorus	ppm	ASTM D5185(m)	437	358	370	387
Zinc	ppm	ASTM D5185(m)	5	<1	5	2
Sulfur	ppm	ASTM D5185(m)	5000	6054	4919	5424
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>20	0	0	0
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

OIL ANALYSIS REPORT



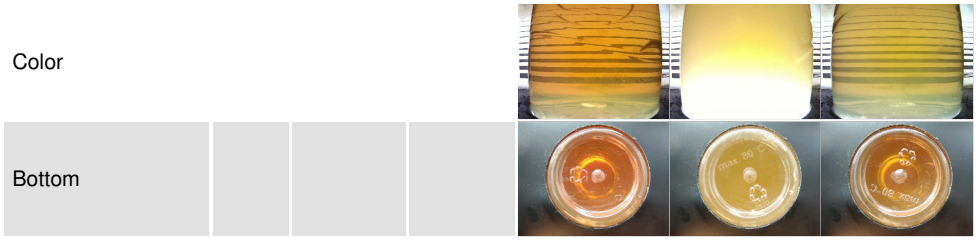
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647			48799	27697	68521
Particles >6µm	ASTM D7647	>5000		3930	3419	4748
Particles >14µm	ASTM D7647	>640		72	149	43
Particles >21µm	ASTM D7647	>160		14	30	6
Particles >38µm	ASTM D7647	>40		1	2	1
Particles >71µm	ASTM D7647	>10		0	0	1
Oil Cleanliness	ISO 4406 (c)	>--/19/16		23/19/13	22/19/14	23/19/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.7	0.65	0.69	0.73

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	VLITE	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	▲ HAZY	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	▲ .2%	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	223	215	222	218
Visc @ 100°C	cSt	ASTM D7279(m)	26.39	24.0	24.0	25.2
Viscosity Index (VI)	Scale	ASTM D2270*	151	138	134	146

SAMPLE IMAGES



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02631774
Unique Number : 5772927
Test Package : MAR 2 (Additional Tests: KV100, PQ, PrtCount, TAN Man, VI)
Received : 26 Apr 2024
Tested : 29 Apr 2024
Diagnosed : 29 Apr 2024 - Kevin Marson

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.