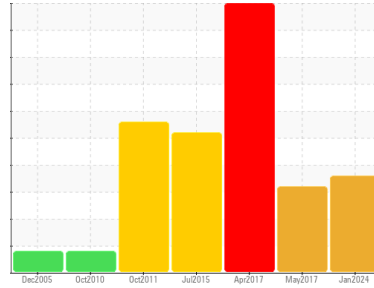
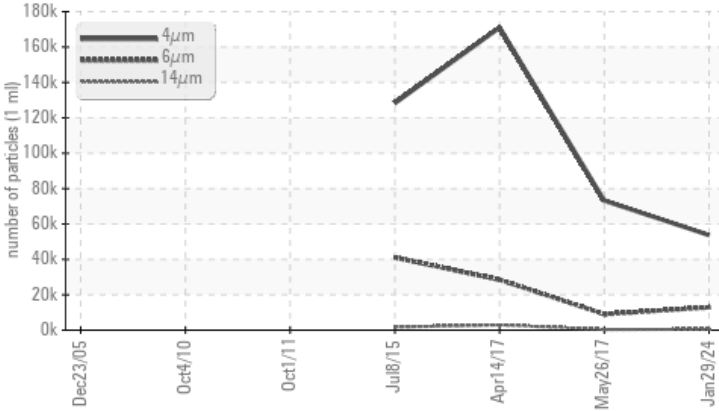


Area
Gas Compression
Machine Id
Pump LP Condensate (B) - Lube System (S/N Sample Tag PA-23009B-S1)
Component
Pump
Fluid
PETRO CANADA HYDREX MV 36 (--- LTR)



COMPONENT CONDITION SUMMARY

Particle Trend



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	SEVERE
Particles >6µm	ASTM D7647	>1300	12899	9008	28496
Particles >14µm	ASTM D7647	>160	472	348	2971
Particles >21µm	ASTM D7647	>40	103	54	577
Oil Cleanliness	ISO 4406 (c)	>--/17/14	23/21/16	23/20/16	25/22/19

Customer Id: TERHAM
Sample No.: PC
Lab Number: 02612835
Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Bill Quesnel CLS,OMA II,MLA-III,LLA-I +1
(289)291-4641 x4641
Bill.Quesnel@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

26 May 2017 Diag: Kevin Marson

WEAR



Check seals and/or filters for points of contaminant entry. We recommend that you drain the oil from the component if this has not already been done. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Iron ppm levels are abnormal. Particles >4µm are severely high. Oil Cleanliness is severe. Particles >14µm are abnormally high. Particles >6µm are abnormally high. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report



14 Apr 2017 Diag: Kevin Marson

WEAR



Check seals and/or filters for points of contaminant entry. We advise that you check all areas where contaminants can enter the system. We recommend that you drain the oil from the component if this has not already been done. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Chromium and iron ppm levels are severe. PQ levels are abnormal. The high ferrous density (PQ) index indicates that abnormal wear is occurring. Particles >14µm are severely high. Particles >21µm are severely high. Particles >6µm are severely high. Particles >4µm are severely high. Oil Cleanliness Oil Cleanliness Oil Cleanliness are severe. Particles >38µm are abnormally high. There is a moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report



08 Jul 2015 Diag: Wes Davis

ISO

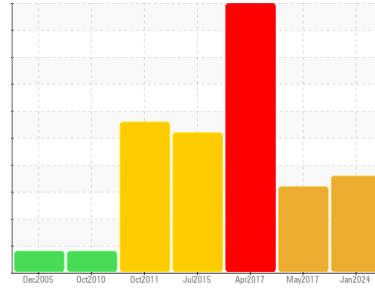


We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. Particles >14µm are severely high. Particles >6µm are severely high. Particles >4µm are severely high. Particles >21µm are abnormally high. The water content is negligible. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report



Area
Gas Compression
Machine Id
Pump LP Condensate (B) - Lube System (S/N Sample Tag PA-23009B-S1)
Component
Pump
Fluid
PETRO CANADA HYDREX MV 36 (--- LTR)



DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. 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 high amount of particulates (2 to 100 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

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 INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC	PC385317	PC
Sample Date	Client Info	29 Jan 2024	26 May 2017	14 Apr 2017
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		SEVERE	SEVERE	SEVERE

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	39	▲ 233
Iron	ppm ASTM D5185(m) >75	1	▲ 91	● 419
Chromium	ppm ASTM D5185(m) >5	0	3	● 19
Nickel	ppm ASTM D5185(m)	<1	<1	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	0	0	0
Aluminum	ppm ASTM D5185(m) >5	<1	<1	<1
Lead	ppm ASTM D5185(m) >10	0	0	<1
Copper	ppm ASTM D5185(m) >15	1	<1	3
Tin	ppm ASTM D5185(m)	0	0	0
Antimony	ppm ASTM D5185(m)	0	<1	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

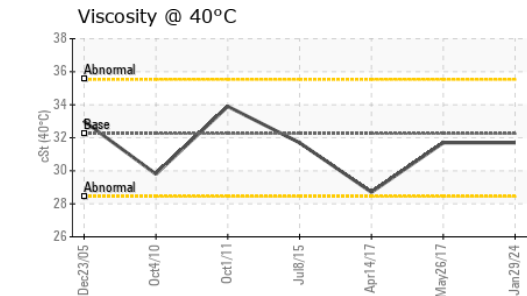
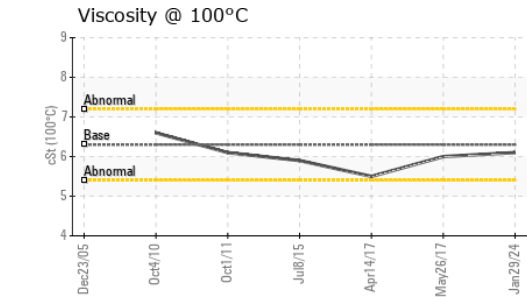
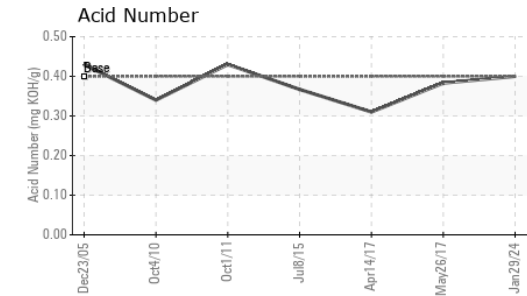
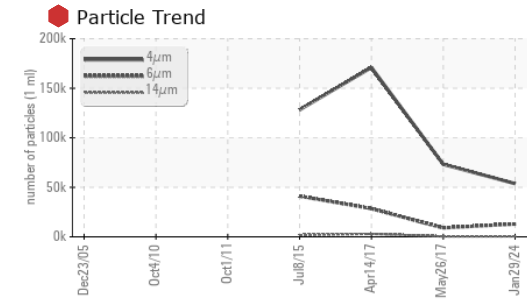
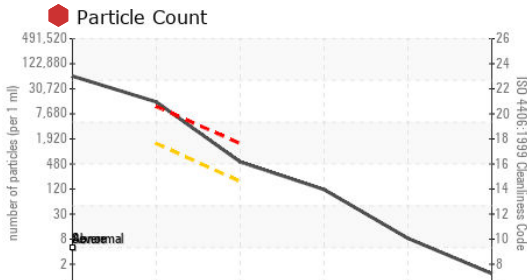
ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	0	<1	0
Barium	ppm ASTM D5185(m) 0	0	0	0
Molybdenum	ppm ASTM D5185(m) 0	0	0	<1
Manganese	ppm ASTM D5185(m) 1	0	<1	2
Magnesium	ppm ASTM D5185(m) 0	<1	0	<1
Calcium	ppm ASTM D5185(m) 135	43	75	51
Phosphorus	ppm ASTM D5185(m) 236	324	292	277
Zinc	ppm ASTM D5185(m) 317	402	388	298
Sulfur	ppm ASTM D5185(m) 561	761	668	612
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	0	<1	2
Sodium	ppm ASTM D5185(m)	1	3	3
Potassium	ppm ASTM D5185(m) >20	<1	0	0

OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02612835
Unique Number : 5721930
Test Package : MAR 2 (Additional Tests: KV100, PQ, PrtCount, VI)
Received : 01 Feb 2024
Diagnosed : 03 Feb 2024
Diagnostician : Bill Quesnel

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.

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647			53713	73206	170986
Particles >6µm	ASTM D7647	>1300		12899	9008	28496
Particles >14µm	ASTM D7647	>160		472	348	2971
Particles >21µm	ASTM D7647	>40		103	54	577
Particles >38µm	ASTM D7647	>10		7	2	21
Particles >71µm	ASTM D7647	>3		1	0	2
Oil Cleanliness	ISO 4406 (c)	>--/17/14		23/21/16	23/20/16	25/22/19

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.40	0.40	0.383	0.31

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	VLITE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	VLITE	VLITE
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*	>.1	NEG	NEG	▲ 1%
Free Water	scalar	Visual*		NEG	NEG	▲ 1%

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32.25	31.7	31.7	28.7
Visc @ 100°C	cSt	ASTM D7279(m)	6.3	6.1	6.0	5.5
Viscosity Index (VI)	Scale	ASTM D2270*	148	143	137	131

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						