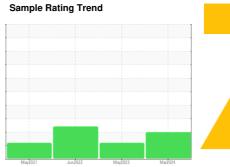


# **OIL ANALYSIS REPORT**

# VICAM Machine Id [VICAM] A-LINE TOW TRAVERSE FEEDER

Hydraulic System

PETRO CANADA HYDREX AW 32 (5 GAL)





## DIAGNOSIS

## Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

## Contamination

There is a high amount of particulates present in the oil.

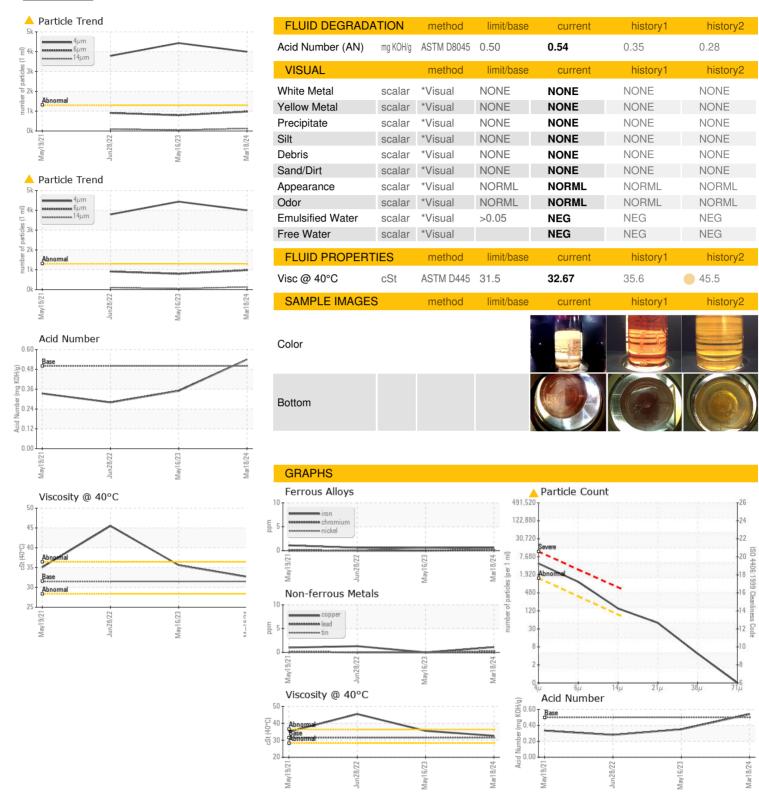
## **Fluid Condition**

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

		May202	1 Jun2022	May2023 M	ar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0005128	KFS0002211	KFS0000314
Sample Date		Client Info		18 Mar 2024	16 May 2023	28 Jun 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1	<1	<1
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>20	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	<1	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	1	0	1
Tin	ppm	ASTM D5185m	>20	<1	0	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	0 history1	0 history2
	ppm		limit/base 0	-		
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 0	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm	method ASTM D5185m ASTM D5185m	0	current 0 0	history1 0 0	history2 0 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 0 0 <	history1 0 0 0	history2 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 0 0 <	history1 0 0 0	history2 0 0 0 0 0
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium	ppm ppm ppm ppm	method  ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0	current 0 0 <-1 <-1 0	history1 0 0 0 0 <1 1	history2  0 0 0 0 0 0 50 252
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm	method  ASTM D5185m	0 0 0 0 0 0 50	current 0 0 <1 <1 0 40	history1  0 0 0 0 <1 1 2	history2  0 0 0 0 0 0 50
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus	ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	0 0 0 0 0 50 330	current 0 0 <1 <1 <1 0 40 294	history1  0 0 0 <1 1 2 101	history2  0 0 0 0 0 0 50 252
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	0 0 0 0 0 0 50 330 430	current  0  0 <1 <1 <1 0 40 294 362	history1  0 0 0 <1 1 2 101 26	history2  0  0  0  0  0  0  50  252  317
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0 50 330 430 760	current  0  0 <1 <1 <1 0  40 294 362 1202	history1  0 0 0 <1 1 2 101 26 3271	history2  0 0 0 0 0 50 252 317 1139
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0 50 330 430 760	current  0  0  <1 <1 <1 0  40 294 362 1202  current	history1  0 0 0 0 <1 1 2 101 26 3271 history1 0 <1	history2  0 0 0 0 0 0 50 252 317 1139 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 50 330 430 760 limit/base	current  0  0  <1 <1 0  40 294 362 1202  current 0	history1  0 0 0	history2  0 0 0 0 0 0 50 252 317 1139 history2 0
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	0 0 0 0 50 330 430 760 limit/base >15	current  0 0 0 <1 <1 0 40 294 362 1202  current 0 <1 0 current	history1  0 0 0 0 <1 1 1 2 101 26 3271 history1 0 <1 1	history2  0  0  0  0  0  50  252  317  1139  history2  0  <1  0  history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN  Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m method ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base >15 	current  0 0 0 <1 <1 <1 0 40 294 362 1202 current  0 <1 0 current  ▲ 3999	history1  0  0  0  <1  1  2  101  26  3271  history1  0  <1  1  history1  4436	history2  0  0  0  0  0  50  252  317  1139  history2  0  <1  0  history2   3791
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m method  ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base >15 	current  0 0 0 <1 <1 0 40 294 362 1202  current 0 <1 0 current	history1  0 0 0 0 <1 1 1 2 101 26 3271 history1 0 <1 1 history1  △ 4436 △ 794	history2  0  0  0  0  0  50  252  317  1139  history2  0  <1  0  history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN  Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >1300 >320 >80	current       0       0       <1       <1       0       40       294       362       1202       current       0       <1       0       current       △ 3999       △ 979       △ 127	history1  0 0 0 0 <1 1 1 26 3271 history1  0 <1 1 history1  △ 4436 △ 794 44	history2  0  0  0  0  0  50  252  317  1139  history2  0  <1  0  history2  △ 3791  △ 910  △ 98
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN  Particles >4µm  Particles >14µm  Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  Method  ASTM D5185m  ASTM D7647  ASTM D7647  ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >1300 >320 >80	current       0       0       <1       <1       0       40       294       362       1202       current       0       <1       0       current       △ 3999       △ 979       △ 127       △ 42	history1  0 0 0	history2  0  0  0  0  0  50  252  317  1139  history2  0  <1  0  history2  △ 3791  △ 910
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN  Particles >4µm  Particles >6µm  Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >1300 >320 >80	current       0       0       <1       0       40       294       362       1202       current       0       <1       0       current       △ 3999       △ 979       △ 127       △ 42       4	history1  0 0 0 0 <1 1 1 2 101 26 3271 history1 0 <1 1 history1  △ 4436 △ 794 44 13 2	history2  0 0 0 0 0 50 252 317 1139 history2 0 <1 0 history2  3791 910 98 24 1
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN  Particles >4µm  Particles >14µm  Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  Method  ASTM D5185m  ASTM D7647  ASTM D7647  ASTM D7647	0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >1300 >320 >80 >20 >4	current       0       0       <1       <1       0       40       294       362       1202       current       0       <1       0       current       △ 3999       △ 979       △ 127       △ 42	history1  0 0 0	history2  0 0 0 0 0 0 50 252 317 1139 history2 0 <1 0 history2  △ 3791 △ 910 △ 98 △ 24



# OIL ANALYSIS REPORT







Certificate L2367

Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Lab Number

: KFS0005128 : 06124852 Unique Number: 10939003

Test Package : IND 2

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

Received

Diagnosed

**Tested** 

: 21 Mar 2024

: 27 Mar 2024

: 27 Mar 2024 - Jonathan Hester

\* - 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)

VIAM/VICAM Manufacturing - Tennessee

87 Parktower Road Manchester, TN US 37355

Contact: Eric Thompson

ethompson@viammfg.com T: (931)461-2300