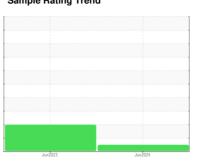


# **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id 376 Component Hydraulic System

PETRO CANADA HYDREX XV ALL SEASON HY

### DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

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 INFORMATIO  Sample Number  Sample Date  Machine Age yrs  Oil Age yrs  Oil Changed  Sample Status  CONTAMINATION  Water  WEAR METALS  Iron ppm Chromium ppm Nickel ppm Titanium ppm Lead ppm Copper ppm Tin ppm Antimony ppm Vanadium ppm Beryllium ppm Cadmium ppm Beryllium ppm Molybdenum ppm Manganese ppm Manganese ppm Manganese ppm Calcium ppm Contalcium ppm Contalcium ppm Calcium ppm Contalcium ppm	N method Client Info Client Info Client Info Client Info Client Info	limit/base	current PC0087735 24 Jun 2024	history1 PC0076483 27 Jun 2023	history2
Sample Date  Machine Age Oil Age Oil Age Oil Changed Sample Status  CONTAMINATION  Water  WEAR METALS  Iron Chromium Nickel ppm Titanium ppm Aluminum Lead Copper ppm Tin ppm Antimony Vanadium ppm Beryllium Cadmium ppm Barium Molybdenum ppm Manganese ppm Manganese ppm Calcium Phosphorus Zinc ppm Sodium Potassium ppm CONTAMINANTS  Silicon ppm Sodium Potassium ppm FLUID CLEANLINES Particles >4µm	Client Info Client Info Client Info				
Sample Date  Machine Age yrs Oil Age yrs Oil Changed Sample Status  CONTAMINATION  Water  WEAR METALS  Iron ppm Chromium ppm Nickel ppm Titanium ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Antimony ppm Seryllium ppm Beryllium ppm Barium ppm Manganese ppm Manganese ppm Manganese ppm Calcium ppm Phosphorus ppm Lithium ppm CONTAMINANTS Silicon ppm Sodium ppm CONTAMINANTS Silicon ppm FLUID CLEANLINES Particles >4µm	Client Info		24 Jun 2024	27 Jun 2023	
Dil Age yrs Dil Changed Gample Status  CONTAMINATION Water  WEAR METALS ron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Antimony ppm Cadmium ppm Darium ppm Darium ppm Cadmium ppm Cadmium ppm Calcium ppm Manganese ppm Manganese ppm Calcium ppm Contamination	Client Info				
CONTAMINATION Water  WEAR METALS  ron ppm Chromium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Antimony ppm Cadmium ppm Cadmium ppm Cadmium ppm Calcium ppm Manganese ppm Manganese ppm Calcium ppm Contaminants			0	0	
CONTAMINATION Water  WEAR METALS  ron ppm Chromium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Antimony ppm Cadmium ppm Cadmium ppm Cadmium ppm Calcium ppm Manganese ppm Manganese ppm Calcium ppm Contaminants	Client Info		1	2	
CONTAMINATION Water  WEAR METALS  ron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Antimony ppm Cadmium ppm Cadmium ppm Cadmium ppm Calcium ppm Manganese ppm Manganese ppm Calcium ppm Contaminants Contaminants			Changed	Filtered	
WEAR METALS  ron ppm Chromium ppm Silved ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Antimony ppm Cadmium ppm Cadmium ppm Cadmium ppm Calcium ppm Manganese ppm Manganese ppm Calcium ppm Contaminants Contaminants			NORMAL	ABNORMAL	
WEAR METALS  ron ppm Chromium ppm Silver ppm Silver ppm Chuminum ppm Lead ppm Copper ppm Tin ppm Antimony ppm Cadmium ppm Beryllium ppm Cadmium ppm Cadmium ppm Cadmium ppm Calcium ppm Manganese ppm Manganese ppm Calcium ppm Chosphorus ppm Contassium ppm Contaminants	method	limit/base	current	history1	history2
ron ppm Chromium ppm Nickel ppm Fitanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Fin ppm Antimony ppm Janadium ppm Beryllium ppm Cadmium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Manganese ppm Manganese ppm Calcium ppm Contaminants	WC Method	>0.05	NEG	NEG	
Chromium ppm  Nickel ppm  Titanium ppm  Silver ppm  Aluminum ppm  Lead ppm  Copper ppm  Tin ppm  Antimony ppm  Cadmium ppm  Cadmium ppm  Beryllium ppm  Cadmium ppm  Anarium ppm  Cadmium ppm  Calcium ppm  Chosphorus  Cinc ppm  Sodium ppm  FUID CLEANLINES  Carticles >4µm	method	limit/base	current	history1	history2
Silver ppm	ASTM D5185(m)	>20	<1	<1	
Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Antimony ppm Antimony ppm Cadmium ppm Cadmium ppm Cadmium ppm Cadmium ppm Calcium ppm Manganese ppm Manganese ppm Calcium ppm Chosphorus ppm Contaminants Contamina	ASTM D5185(m)	>20	0	0	
Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Antimony ppm Canadium ppm Cadmium ppm Cadmium ppm Cadmium ppm Cadmium ppm Calcium ppm Manganese ppm Magnesium ppm Calcium ppm Contaminants Contamin	ASTM D5185(m)	>20	0	0	
Aluminum ppm Jead ppm	ASTM D5185(m)		0	0	
Aluminum ppm Lead ppm	ASTM D5185(m)		0	0	
Copper ppm continony ppm conti	ASTM D5185(m)	>20	<1	<1	
Copper ppm Copper ppm Contimony ppm Continony ppm Continon	ASTM D5185(m)	>20	0	0	
Antimony ppm  Anadium ppm  Beryllium ppm  Cadmium ppm  ADDITIVES  Boron ppm  Barium ppm  Molybdenum ppm  Manganese ppm  Magnesium ppm  Calcium ppm  Chosphorus ppm  Strinc ppm	ASTM D5185(m)	>20	<1	<1	
Antimony ppm Vanadium ppm Vanaganese ppm Vanaganese ppm Vanaganesium ppm Vanaganesium ppm Vanaganesium ppm Vanadium ppm Va	ASTM D5185(m)	>20	0	0	
Beryllium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Calcium ppm Calcium ppm Calcium ppm Consphorus ppm Contaminants	ASTM D5185(m)		0	0	
recyllium ppm readmium ppm read	ASTM D5185(m)		0	0	
ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Plosphorus ppm Plosphorus ppm Bulfur pp	ASTM D5185(m)		0	0	
Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Chosphorus ppm Cinc ppm Bulfur ppm Jithium ppm CONTAMINANTS Collicon ppm Cotassium ppm FLUID CLEANLINES Carticles >4µm	ASTM D5185(m)		0	0	
Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Calcium ppm Calcium ppm Calcium ppm Coulfur ppm Coulfur ppm Cithium ppm Contaminants Contaminants Column ppm Cotassium ppm FLUID CLEANLINES Carticles >4µm	method	limit/base	current	history1	history2
Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Chosphorus ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Codium ppm Contassium ppm	ASTM D5185(m)	0	0	<1	
Manganese ppm Magnesium ppm Dalcium ppm Phosphorus ppm Sulfur ppm	ASTM D5185(m)	0	0	0	
Magnesium ppm Calcium ppm Chosphorus ppm Cinc ppm Sulfur ppm Ithium ppm CONTAMINANTS Collicon ppm Cotassium ppm FLUID CLEANLINES Carticles >4µm	ASTM D5185(m)	0	0	0	
calcium ppm Phosphorus ppm Phosphoru	ASTM D5185(m)	1	0	0	
chosphorus ppm inc ppm culfur ppm ithium ppm CONTAMINANTS cilicon ppm codium ppm cotassium ppm FLUID CLEANLINES carticles >4µm	ASTM D5185(m)	0	<1	<1	
inc ppm idulfur ppm ithium ppm  CONTAMINANTS illicon ppm idulum pp	ASTM D5185(m)	100	99	98	
inc ppm idulfur ppm ithium ppm  CONTAMINANTS illicon ppm idulum pp	ASTM D5185(m)	670	618	659	
CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm FLUID CLEANLINES Particles >4µm	ASTM D5185(m)	850	824	790	
CONTAMINANTS  Silicon ppm Sodium ppm Potassium ppm FLUID CLEANLINES Particles >4µm	ASTM D5185(m)	1600	1460	1448	
Silicon ppm Sodium ppm Potassium ppm FLUID CLEANLINES Particles >4µm	ASTM D5185(m)		<1	<1	
Potassium ppm Potassium ppm FLUID CLEANLINES Particles >4µm	method	limit/base	current	history1	history2
Potassium ppm Potassium ppm PLUID CLEANLINES Particles >4µm	ASTM D5185(m)	>15	0	<1	
Potassium ppm FLUID CLEANLINES Particles >4µm	ASTM D5185(m)		0	0	
Particles >4µm	ASTM D5185(m)	>20	<1	0	
· .	S method	limit/base	current	history1	history2
Particles >6um		>5000	1721	<u> </u>	
αι ιισίου νομιτί	ASTM D7647	>1300	155	<u> </u>	
articles >14µm				<b>▲</b> 786	
articles >21µm	ASTM D7647		11		
Particles >38µm	ASTM D7647 ASTM D7647	>160	11 7	<u>▲</u> 176	
Particles >71µm	ASTM D7647 ASTM D7647 ASTM D7647	>160 >40			
Dil Cleanliness	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>160 >40 >10	7	<u>▲</u> 176	



## OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number Unique Number : 5801579

: PC0087735

: 02644040

Received : 25 Jun 2024 **Tested** : 26 Jun 2024

: 26 Jun 2024 - Wes Davis

Diagnosed Test Package : IND 2 (Additional Tests: KV100, VI)

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.

938 GLENGARRY CRESCENT FERGUS, ON CA N1M 2W7

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T: (519)787-8227 F: (519)787-8210

Submitted By: Derek Gansekoele