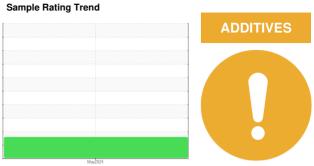


OIL ANALYSIS REPORT

Machine Id **EX0356**

Component **Hydraulic System**

PETRO CANADA HYDREX XV ALL S



DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. (Customer Sample Comment: Unit contains hytran ultra.)

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.

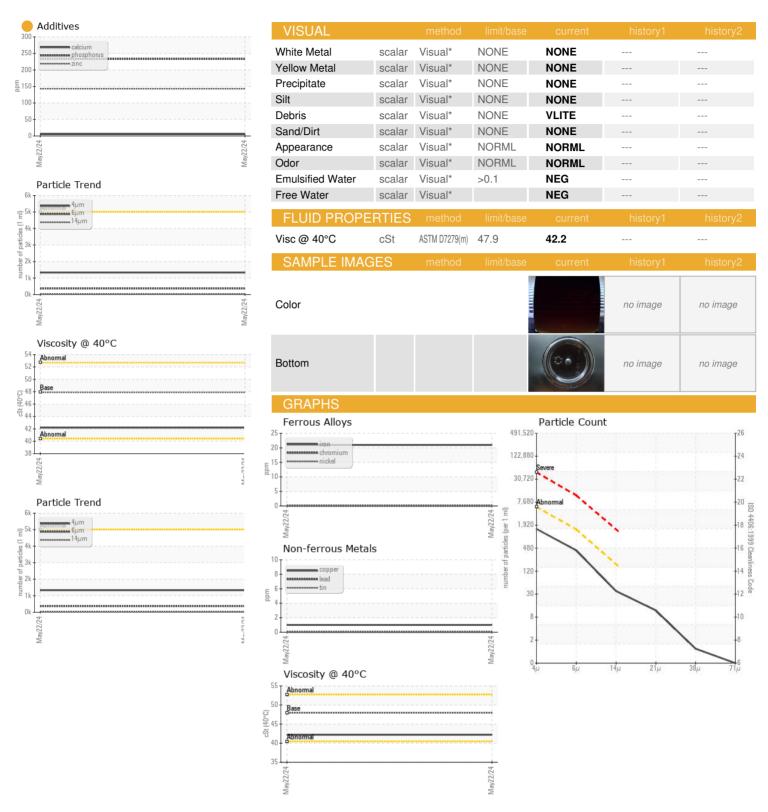
Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

SEASON HYDRAULIC OIL	(160 LTR)		1	May2024			
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		GFL0113352			
Sample Date		Client Info		22 May 2024			
Machine Age	hrs	Client Info		5728			
Oil Age	hrs	Client Info		3000			
Oil Changed		Client Info		Not Changd			
Sample Status				ATTENTION			
CONTAMINAT	ION	method	limit/base	current	history1	history2	
Water		WC Method	>0.1	NEG			
WEAR METAL	S	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>65	21			
Chromium	ppm	ASTM D5185(m)	>6	0			
Nickel	ppm	ASTM D5185(m)	>10	0			
Titanium	ppm	ASTM D5185(m)		0			
Silver	ppm	ASTM D5185(m)		0			
Aluminum	ppm	ASTM D5185(m)	>5	0			
Lead	ppm	ASTM D5185(m)	>45	0			
Copper	ppm	ASTM D5185(m)	>120	1			
Tin	ppm	ASTM D5185(m)	>4	0			
Antimony	ppm	ASTM D5185(m)		0			
Vanadium	ppm	ASTM D5185(m)		0			
Beryllium	ppm	ASTM D5185(m)		0			
Cadmium	ppm	ASTM D5185(m)		0			
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	1			
Barium	ppm	ASTM D5185(m)	0	<1			
Molybdenum							
Morybaeriairi	ppm	ASTM D5185(m)	0	0			
Manganese	ppm	. ,	0	0			
•		. ,					
Manganese	ppm	ASTM D5185(m)	1	0			
Manganese Magnesium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	0 2			
Manganese Magnesium Calcium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 0 100	0 2 5			
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 0 100 670	0 2 5 233			
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 0 100 670 850	0 2 5 233 143			
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 0 100 670 850	0 2 5 233 143 5876			
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 0 100 670 850 1600	0 2 5 233 143 5876 <1			
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD	1 0 100 670 850 1600	0 2 5 233 143 5876 <1 current	 history1	 history2	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) MASTM D5185(m) MASTM D5185(m)	1 0 100 670 850 1600	0 2 5 233 143 5876 <1 current 0	 history1	 history2	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium	ppm	ASTM D5185(m)	1 0 100 670 850 1600 limit/base >25	0 2 5 233 143 5876 <1 current 0 <1	 history1	history2	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185(m)	1 0 100 670 850 1600 limit/base >25 >20	0 2 5 233 143 5876 <1 current 0 <1 <1	 history1	history2	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEAN	ppm	ASTM D5185(m) MASTM D5185(m) MASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 0 100 670 850 1600 limit/base >25 >20	0 2 5 233 143 5876 <1 current 0 <1 <1 current	history1 history1	history2 history2	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEAN Particles >4µm	ppm	ASTM D5185(m) MASTM D5185(m) ASTM D5185(m)	1 0 100 670 850 1600 limit/base >25 >20 limit/base	0 2 5 233 143 5876 <1 current 0 <1 <1 current 1333	history1 history1	history2 history2	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm	ppm	ASTM D5185(m) METHOD ASTM D5185(m)	1 0 100 670 850 1600 limit/base >25 >20 limit/base >5000 >1300	0 2 5 233 143 5876 <1 current 0 <1 <1 current 1333 368	history1 history1	history2 history2	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEAN Particles >4µm Particles >6µm Particles >14µm	ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D7647 ASTM D7647	1 0 100 670 850 1600 limit/base >25 >20 limit/base >5000 >1300 >160	0 2 5 233 143 5876 <1 current 0 <1 <1 current 1333 368 32	history1 history1	history2 history2	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm	ASTM D5185(m) MASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	1 0 100 670 850 1600 limit/base >25 >20 limit/base >5000 >1300 >160 >40	0 2 5 233 143 5876 <1 current 0 <1 <1 current 1333 368 32 10	history1 history1	history2 history2	



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02637213 Unique Number : 5786375

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill : GFL0113352

Validity of results and interpretation are based on the sample and information as supplied.

Received **Tested** Diagnosed Test Package : MOB 1 (Additional Tests: PrtCount)

: 23 May 2024 : 27 May 2024

: 27 May 2024 - Kevin Marson

17125 Lafleche Road, Moose Creek, ON CA K0C 1W0 Contact: Charles Bergeron cbergeron@gflenv.com

T: (613)538-4853

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.

Submitted By: Charles Bergeron