

OIL ANALYSIS REPORT

UNASSIGNED CVP-TUNGYU-06

Hydraulic System

ESSO NUTO H ISO 46 (--- GAL)

Sample Rating Trend **NORMAL**

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

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

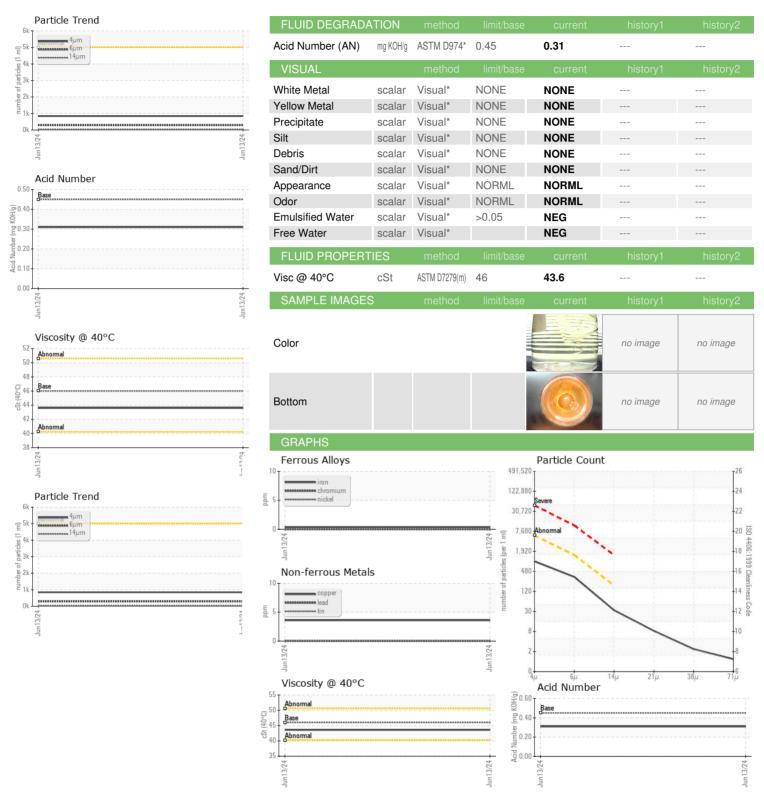
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0864960		
Sample Date		Client Info		13 Jun 2024		
Machine Age	hrs	Client Info		2950		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	0		
Lead	ppm	ASTM D5185(m)	>20	0		
Copper	ppm	ASTM D5185(m)	>20	4		
Tin	ppm	ASTM D5185(m)	>20	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			limit/base		history1	history2
ADDITIVES		method		current	history1	history2
Boron	ppm	method ASTM D5185(m)	0	current 0		
Boron Barium	ppm	method ASTM D5185(m) ASTM D5185(m)	0	current 0 0		
Boron Barium Molybdenum	ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0	current 0 0 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	current 0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	current 0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 5 50	current 0 0 0 0 <		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330	current 0 0 0 0 0 <-1 50 320		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330 410	current 0 0 0 0 0 <1 50 320 410		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330	current 0 0 0 0 0 <1 50 320 410 4678		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330 410 2700	current 0 0 0 0 0 <1 50 320 410 4678 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330 410	current 0 0 0 0 0 <1 50 320 410 4678 <1 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330 410 2700	current 0 0 0 0 0 <1 50 320 410 4678 <1 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330 410 2700	current 0 0 0 0 <1 50 320 410 4678 <1 current <1 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330 410 2700	current 0 0 0 0 0 <1 50 320 410 4678 <1 current		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330 410 2700	current 0 0 0 0 <1 50 320 410 4678 <1 current <1 <1	history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	0 0 0 5 50 330 410 2700 limit/base >15	current 0 0 0 0 <1 50 320 410 4678 <1 current <1 0		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) METHOD	0 0 0 5 50 330 410 2700 limit/base >15 >20	current 0 0 0 0 0 <1 50 320 410 4678 <1 current <1 0 current		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) method ASTM D5185(m)	0 0 0 5 50 330 410 2700 limit/base >15 >20 limit/base	current 0 0 0 0 0 <1 50 320 410 4678 <1 current <1 0 current	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) method ASTM D5185(m)	0 0 0 5 50 330 410 2700 limit/base >15 >20 limit/base >5000 >1300	current 0 0 0 0 0 <1 50 320 410 4678 <1 current <1 0 current 844 289	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) method ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 5 50 330 410 2700 limit/base >15 >20 limit/base >5000 >1300 >160	current 0 0 0 0 0 <1 50 320 410 4678 <1 current <1 0 current 844 289 29		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) method ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 5 50 330 410 2700 limit/base >15 >20 limit/base >5000 >1300 >160 >40	current 0 0 0 0 0 <1 50 320 410 4678 <1 current <1 <1 21 0 current 844 289 29 7		history2 history2

Contact/Location: Joe Ostrowercha - FRETIL



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number Unique Number : 5799525

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0864960 : 02641986

Received **Tested**

: 14 Jun 2024 : 17 Jun 2024

Diagnosed : 17 Jun 2024 - Wes Davis

Test Package : IND 2 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.

FREUDENBERG NOK

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