

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



CRANE #6

Component

Gearbox

MOBIL MOBILUBE HD 85W140 (--- GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as MOBIL MOBILUBE HD 85W140, however, a fluid match indicates that this fluid is ISO 460 Gear Oil. Please confirm the oil type and grade on your next sample. 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 no indication of any contamination in the oil.

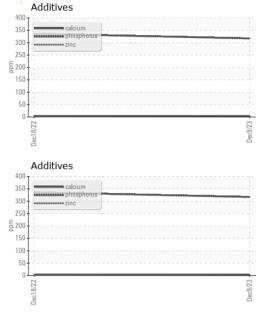
▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 460 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Cample Date Client Info O				Dec2022	Dec2023		
Client Info	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Alachine Age hrs Client Info 0 0 0 0 0 0 0 0 0	Sample Number		Client Info		WC0887214	WC0765204	
Dil Age	Sample Date		Client Info		09 Dec 2023	18 Dec 2022	
CONTAMINATION	Machine Age	hrs	Client Info		0	0	
CONTAMINATION method limit/base current history1 history2	Oil Age	hrs	Client Info		0	0	
Mater	Oil Changed		Client Info		N/A	N/A	
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185(m) >200 2 2 chromium ppm ASTM D5185(m) >15 0 0 chromium ppm ASTM D5185(m) >15 <1	Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS	CONTAMINATION	١	method	limit/base	current	history1	history2
Part Part	Water		WC Method	>0.2	NEG	NEG	
Description	WEAR METALS		method	limit/base	current	history1	history2
Solition Spring ASTM D5185(m) >15 <1 <1	Iron	ppm	ASTM D5185(m)	>200	2	2	
Description	Chromium	ppm	ASTM D5185(m)	>15	0	0	
Silver	Nickel	ppm	ASTM D5185(m)	>15	<1	<1	
ASTM D5185(m) >25	Titanium	ppm	ASTM D5185(m)		0	0	
Deed	Silver	ppm	ASTM D5185(m)		0	0	
Description	Aluminum	ppm	ASTM D5185(m)	>25	<1	0	
Antimony	Lead	ppm	ASTM D5185(m)	>100	0	0	
Antimony ppm ASTM D5185(m) >5 0 0 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) 3 4 Barium ppm ASTM D5185(m) 4 4 4 Molybdenum ppm ASTM D5185(m) 0 0 Manganese ppm ASTM D5185(m) 0 <1 Calcium ppm ASTM D5185(m) 0 <1 Calcium ppm ASTM D5185(m) 317 336 Calcium ppm ASTM D5185(m) 6 5 Calcium ppm ASTM D5185(m) 9980 10019 Cinc ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185(m) >50 1 1 CONTAMINANTS ppm ASTM D5185(m) >50 1 1 Solicon ppm ASTM D5185(m) Solicon ppm ASTM D5185(m) Solicon pp	Copper	ppm	ASTM D5185(m)	>200	<1	0	
Anadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 3 4 Barium ppm ASTM D5185(m) 4 4 Molybdenum ppm ASTM D5185(m) 0 0 Magnesium ppm ASTM D5185(m) 0 <1 Calcium ppm ASTM D5185(m) 4 2 Phosphorus ppm ASTM D5185(m) 317 336 Zinc ppm ASTM D5185(m) 9980 10019 Sulfur ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1	Tin	ppm	ASTM D5185(m)	>25	0	0	
Description	Antimony	ppm	ASTM D5185(m)	>5	0	0	
Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 3 4 Barium ppm ASTM D5185(m) 4 4 Molybdenum ppm ASTM D5185(m) 0 0 Manganese ppm ASTM D5185(m) 0 <1	Vanadium	ppm	ASTM D5185(m)		0	0	
ADDITIVES	Beryllium	ppm	ASTM D5185(m)		0	0	
Soron ppm ASTM D5185(m) 3 4	Cadmium	ppm	ASTM D5185(m)		0	0	
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185(m) 0 0 Manganese ppm ASTM D5185(m) 0 <1	Boron	ppm	ASTM D5185(m)		3	4	
Manganese ppm ASTM D5185(m) 0 <1 Magnesium ppm ASTM D5185(m) 0 <1	Barium	ppm	ASTM D5185(m)		4	4	
Magnesium ppm ASTM D5185(m) 0 <1 Calcium ppm ASTM D5185(m) 4 2 Phosphorus ppm ASTM D5185(m) 317 336 Zinc ppm ASTM D5185(m) 6 5 Sulfur ppm ASTM D5185(m) 9980 10019 Lithium ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)		0	0	
Calcium ppm ASTM D5185(m) 4 2 Phosphorus ppm ASTM D5185(m) 317 336 Zinc ppm ASTM D5185(m) 6 5 Sulfur ppm ASTM D5185(m) 9980 10019 Lithium ppm ASTM D5185(m) <1	Manganese	ppm	ASTM D5185(m)		0	<1	
Phosphorus ppm ASTM D5185(m) 317 336 Zinc ppm ASTM D5185(m) 6 5 Sulfur ppm ASTM D5185(m) 9980 10019 Lithium ppm ASTM D5185(m) <1	Magnesium	ppm	ASTM D5185(m)		0	<1	
Zinc ppm ASTM D5185(m) 6 5 Sulfur ppm ASTM D5185(m) 9980 10019 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 1 Godium ppm ASTM D5185(m) <1 <1	Calcium	ppm	ASTM D5185(m)		4	2	
Sulfur ppm ASTM D5185(m) 9980 10019 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 1 Sodium ppm ASTM D5185(m) <1 <1	Phosphorus		ASTM D5185(m)		317	336	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 1 Sodium ppm ASTM D5185(m) <1	Zinc	ppm	ASTM D5185(m)		6	5	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 1 Godium ppm ASTM D5185(m) <1	Sulfur	ppm	ASTM D5185(m)		9980	10019	
Silicon ppm ASTM D5185(m) >50 1 1 Sodium ppm ASTM D5185(m) <1 <1	Lithium	ppm	ASTM D5185(m)		<1	<1	
Sodium ppm ASTM D5185(m) <1	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium ppm ASTM D5185(m) <1 <1	Silicon	ppm	ASTM D5185(m)	>50	1	1	
1.1	Sodium		(/			<1	
	Potassium		. ,	>20	2	<1	

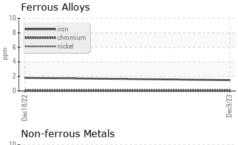


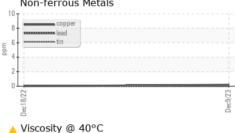
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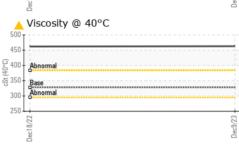


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Precipitate	scalar	Visual*	NONE	NONE	NONE	
Silt	scalar	Visual*	NONE	NONE	NONE	
Debris	scalar	Visual*	NONE	NONE	NONE	
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Appearance	scalar	Visual*	NORML	NORML	NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
Free Water	scalar	Visual*		NEG	NEG	
FLUID PROPERT	TES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	328	463	▲ 462	
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color						no image
Bottom						no image

GRAPHS









CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5698211

Test Package : IND 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : 02605126

: WC0887214

Recieved

: 22 Dec 2023 Diagnosed : 27 Dec 2023 Diagnostician : Kevin Marson **Continuous Colour Coat Limited** 1430 Martin Grove Rd

Rexdale, ON CA M9W 4Y1

Contact: Parminder Singh parminder.singh@materialsciencescorp.com

> T: (416)743-7980 F: (416)743-7138

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.

Contact/Location: Parminder Singh - METREX