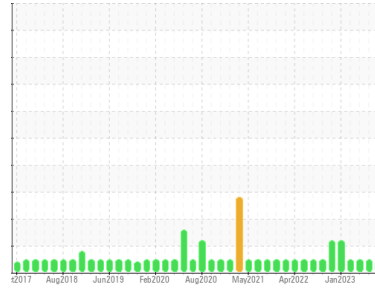




# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Area  
**M45**  
 Machine Id  
**45-P-2820B HP METHANOL INJECTION PUMP (S/N Maint Plan 22463)**  
 Component  
**Pump**  
 Fluid  
**MOBIL DTE EXCEL 100 (--- LTR)**

### 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 DTE EXCEL 100, however, a fluid match indicates that this fluid is ISO 150 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 150 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.

### SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PP</b>	PP	PP
Sample Date	Client Info	<b>19 Dec 2023</b>	14 Nov 2023	14 Nov 2023
Machine Age	days	<b>0</b>	0	0
Oil Age	days	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

### CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >.1	<b>NEG</b>	NEG	NEG

### WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >75	<b>10</b>	<1	0
Chromium	ppm ASTM D5185(m) >5	<b>0</b>	0	0
Nickel	ppm ASTM D5185(m)	<b>0</b>	<1	0
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m)	<b>0</b>	<1	<1
Aluminum	ppm ASTM D5185(m) >5	<b>&lt;1</b>	0	0
Lead	ppm ASTM D5185(m) >10	<b>0</b>	<1	<1
Copper	ppm ASTM D5185(m) >15	<b>&lt;1</b>	1	<1
Tin	ppm ASTM D5185(m)	<b>0</b>	0	0
Antimony	ppm ASTM D5185(m)	<b>0</b>	0	0
Vanadium	ppm ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm ASTM D5185(m)	<b>0</b>	0	0

### ADDITIVES

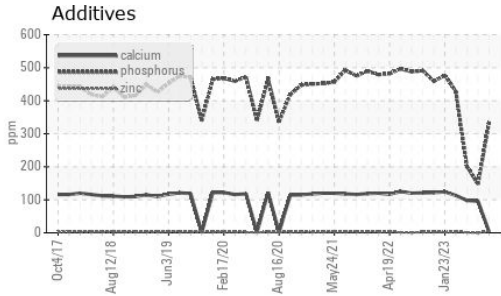
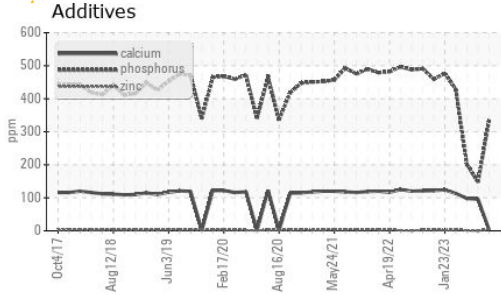
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	<b>53</b>	0	0
Barium	ppm ASTM D5185(m)	<b>0</b>	<1	<1
Molybdenum	ppm ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm ASTM D5185(m)	<b>3</b>	<1	<1
Calcium	ppm ASTM D5185(m)	<b>3</b>	96	98
Phosphorus	ppm ASTM D5185(m)	<b>334</b>	148	201
Zinc	ppm ASTM D5185(m)	<b>4</b>	<1	2
Sulfur	ppm ASTM D5185(m)	<b>13929</b>	563	690
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

### CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	<b>3</b>	0	0
Sodium	ppm ASTM D5185(m)	<b>18</b>	0	0
Potassium	ppm ASTM D5185(m) >20	<b>1</b>	0	0



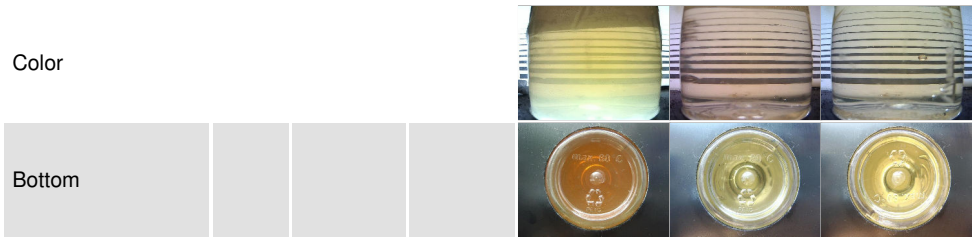
# OIL ANALYSIS REPORT



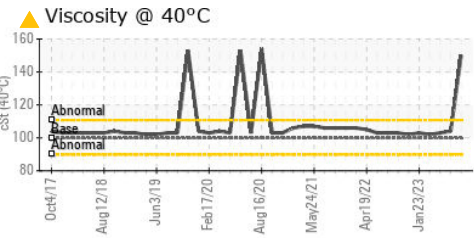
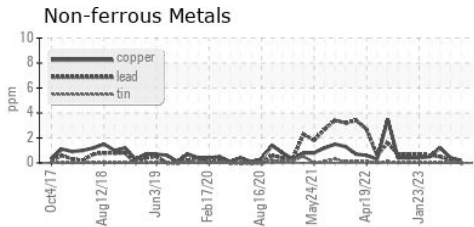
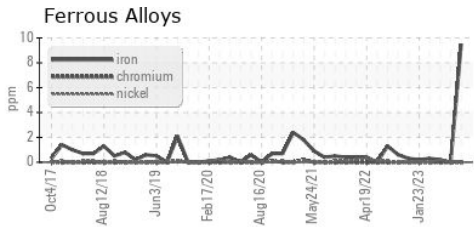
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	99.8 ▲ 150	104	103

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 HUSKY SEA ROSE /AKER SOLUTIONS  
**Sample No.** : PP **Received** : 17 Jan 2024  
**Lab Number** : 02609530 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 5710616 **Diagnostician** : Kevin Marson  
**Test Package** : IND 1

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: Maintenance Supervisor  
 maintsuper.searose@huskyenergy.ca  
 T: x:  
 F: x: