



# CONSTRUCTION EQUIPMENT

## A12860 ALPHA VOLVO EC160E 314175 - HYDRAULIC SYSTEM



**Sample No:** VCP445221  
**Oil Type:** MOBIL HYDRAULIC OIL AW 46  
**Job No:** A12860 ALPHA



### SAMPLE INFORMATION

Sample Number	<b>VCP445221</b>	VCP432248	VCP426954	VCP399926
Sample Date	<b>20 Jun 2024</b>	12 Jan 2024	16 Aug 2023	02 Mar 2023
Machine Hours	<b>7660</b>	6540	5360	4350
Oil Hours	<b>1000</b>	2000	1000	2000
Oil Changed	<b>Not Changd</b>	Changed	Not Changd	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**HOFFMAN EQUIPMENT - LIONVILLE**  
 120 GORDON DRIVE  
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### OIL CONDITION

Visc @ 40°C	cSt	<b>38.0</b>	42.4	41.8	38.7
Acid Number (AN)	mg KOH/g	<b>0.94</b>	0.87	0.94	1.03



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Particles >4µm		<b>2222</b>	29228	10619	2264
Particles >6µm		<b>732</b>	903	482	292
Particles >14µm		<b>121</b>	5	12	19
ISO 4406:1999 (c)		<b>18/17/14</b>	22/17/10	21/16/11	18/15/11
Silicon	ppm	<b>4</b>	3	3	5
Sodium	ppm	<b>&lt;1</b>	0	<1	1
Potassium	ppm	<b>1</b>	3	0	0

### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### WEAR METALS

Iron	ppm	<b>4</b>	5	3	5
Copper	ppm	<b>10</b>	22	19	34
Lead	ppm	<b>&lt;1</b>	<1	<1	0
Tin	ppm	<b>&lt;1</b>	<1	0	<1
Aluminum	ppm	<b>2</b>	2	<1	2
Chromium	ppm	<b>1</b>	2	2	<1
Molybdenum	ppm	<b>2</b>	<1	<1	<1
Nickel	ppm	<b>&lt;1</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	<1	0	0
Silver	ppm	<b>&lt;1</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	0	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	<1	0



### ADDITIVES

Calcium	ppm	<b>927</b>	1803	1532	2555
Magnesium	ppm	<b>10</b>	10	8	6
Zinc	ppm	<b>673</b>	926	810	1122
Phosphorus	ppm	<b>489</b>	859	672	1006
Barium	ppm	<b>1</b>	1	0	0
Boron	ppm	<b>2</b>	2	0	<1

**Depot:** VOLVO8879  
**Unique No:** 11101637  
**Signed:** Don Baldrige  
**Report Date:** 01 Jul 2024

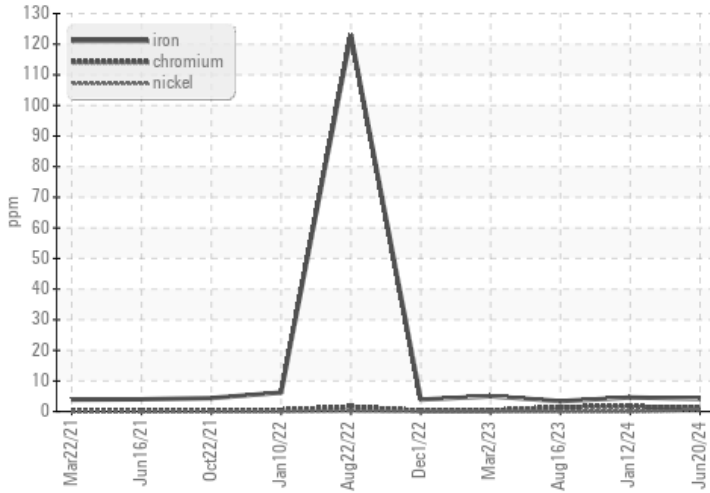


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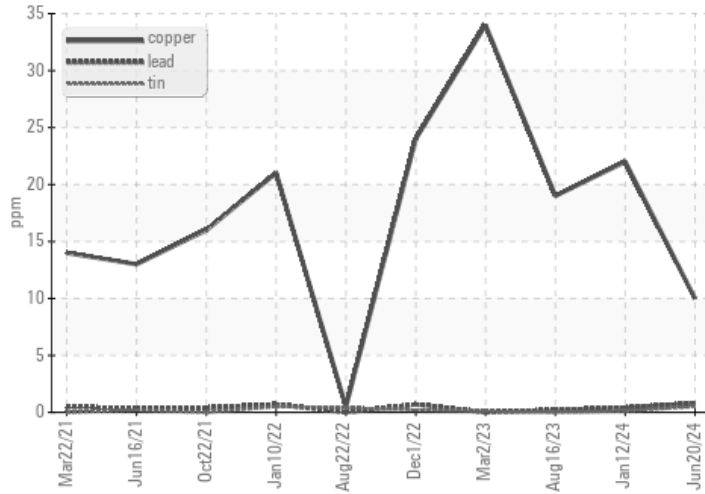


## GRAPHS

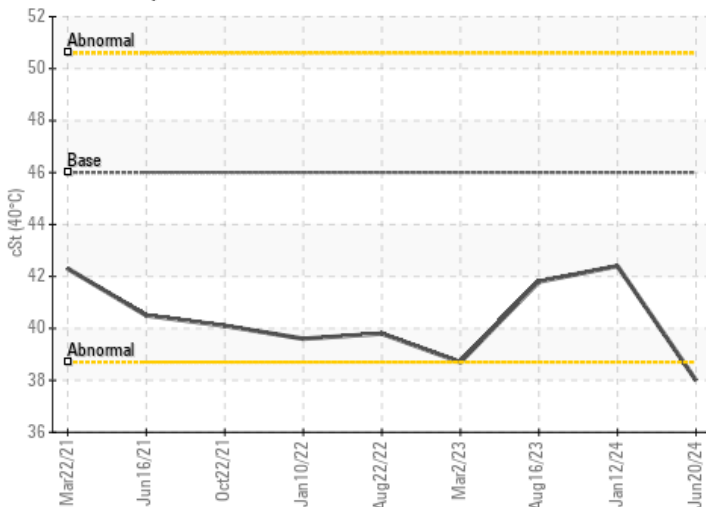
### Ferrous Alloys



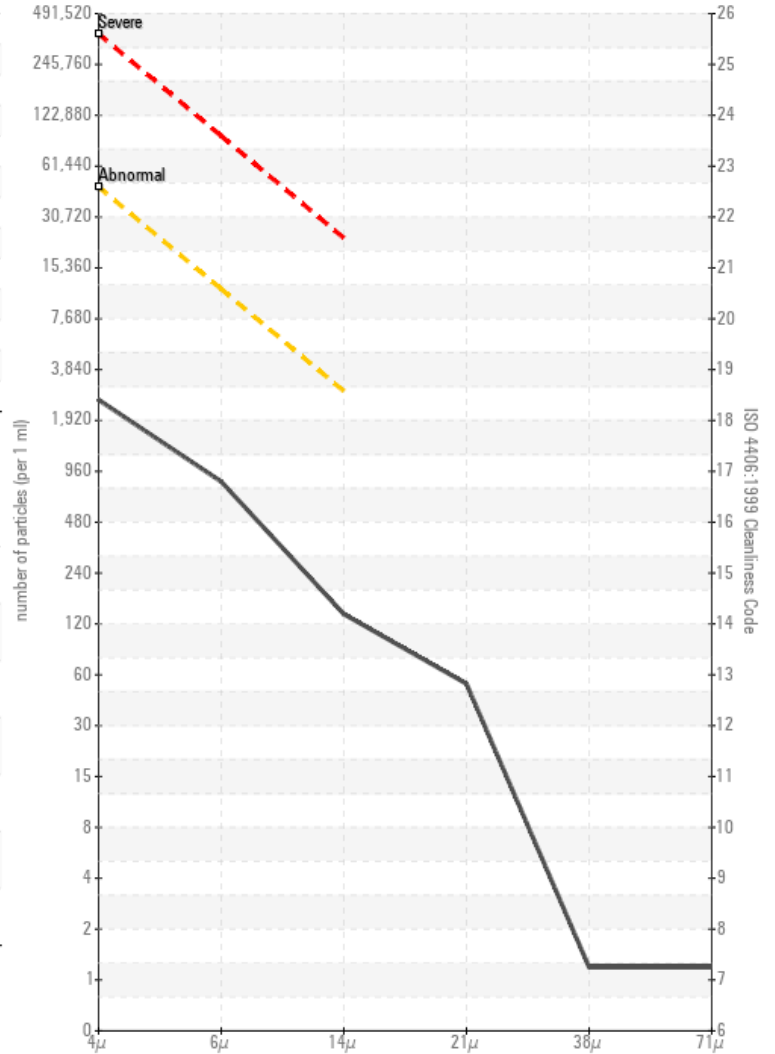
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

