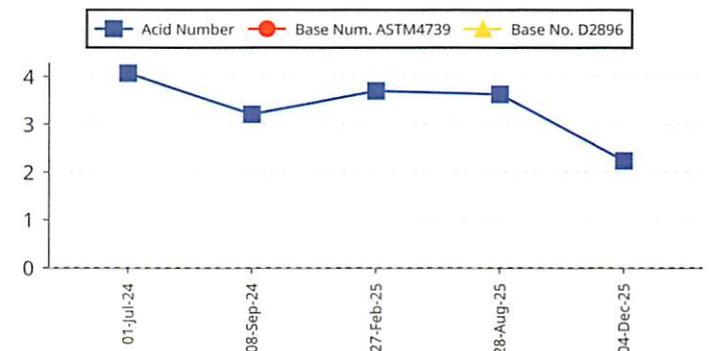
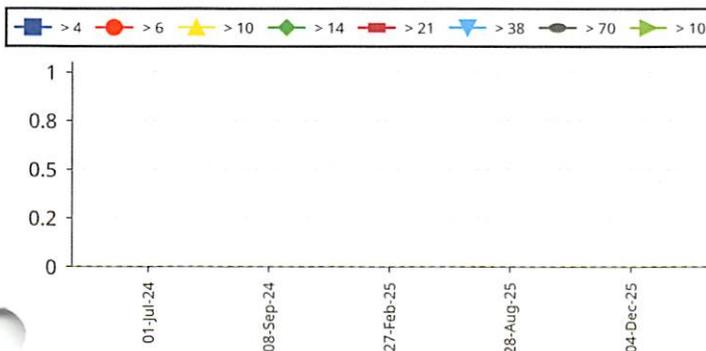
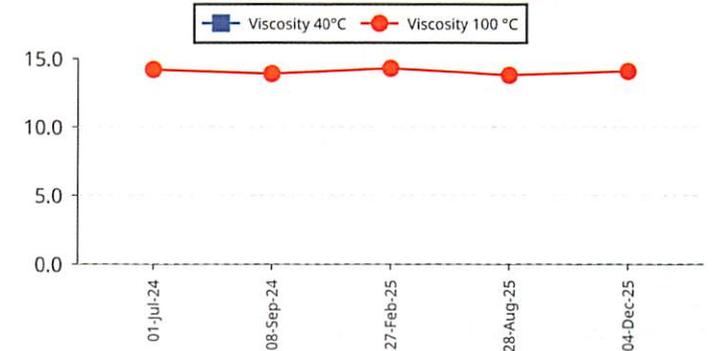
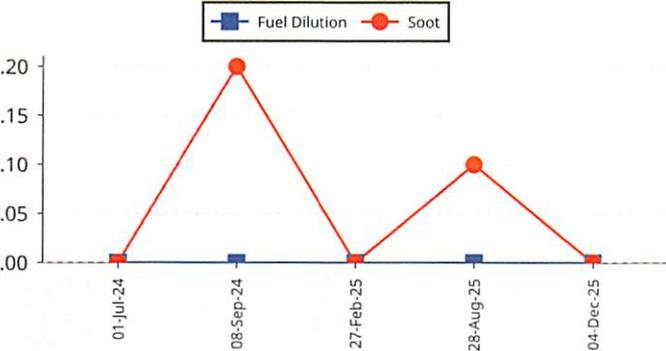
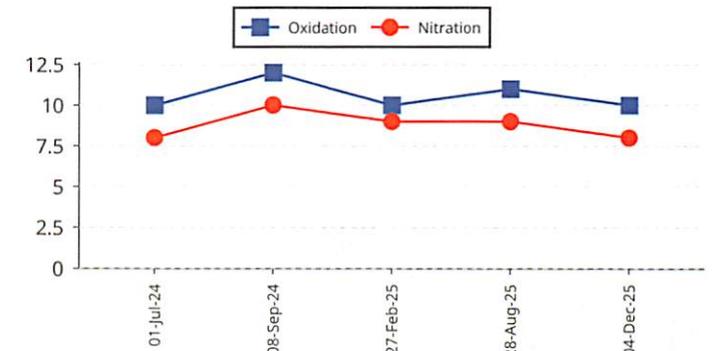
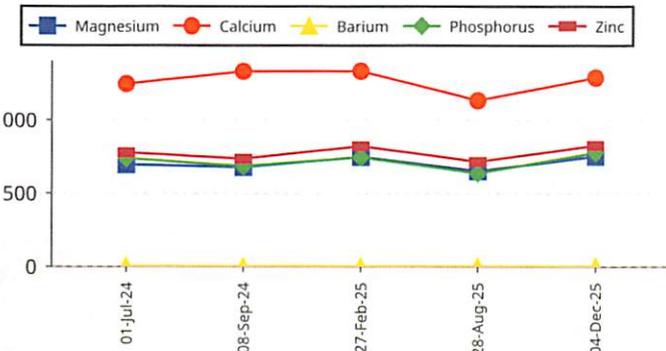
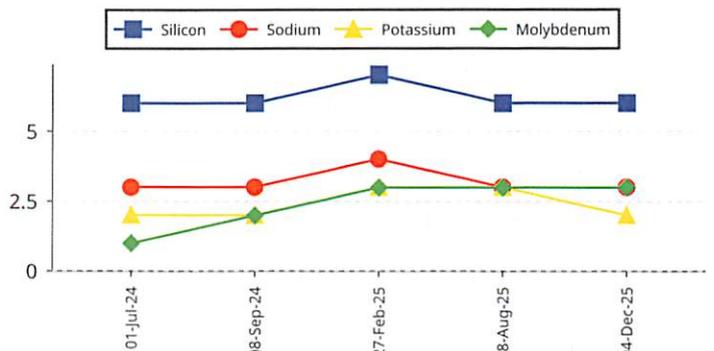
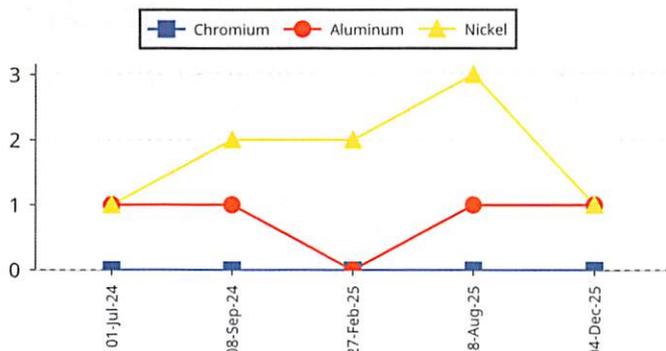
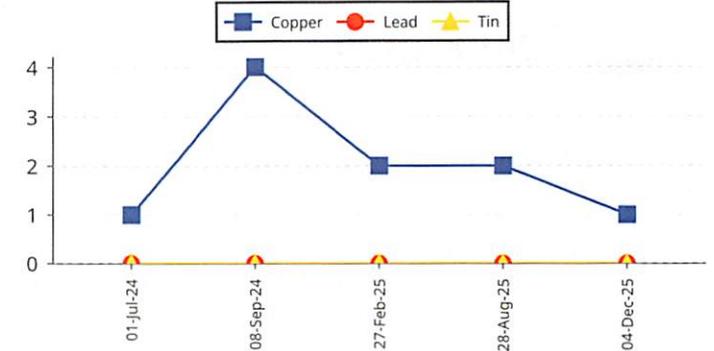
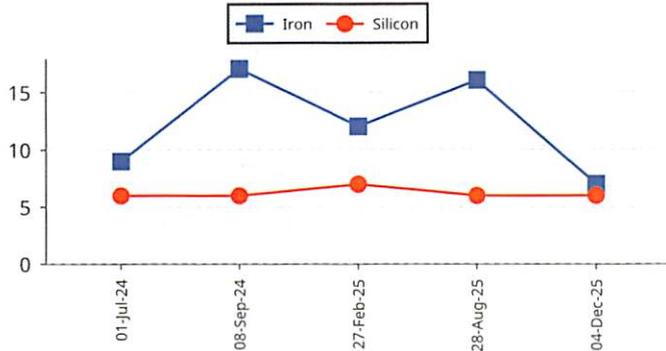




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Historical Comments	11	Data indicates no abnormal findings. Resample at normal interval. LUBRICANT TIME was not provided for this sample.
	12	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Cylinder region metals (pistons, rings, liners etc.) are at a MINOR LEVEL;
	13	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Nickel is at a MINOR LEVEL; Possible valve train (valves, stems, guides etc.) metal;
	14	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Nickel is at a MODERATE LEVEL; Possible valve train (valves, stems, guides etc.) metal; Lubricant and filter change acknowledged.





# Lubricant Analysis Report

North America: +1-866-341-0487

0	1	2	3	4
NORMAL	ABNORMAL			

Overall report severity based on comments.

Account Information		Component Information		Sample Information	
Account Number: LUB307-0037-0000 Company Name: PIDHERNEY'S Contact: CARLA MERKLIN Address: RANGE RD 70 PO BOX 940 ROCKY MOUNTAIN HOUSE, AB T4T 1A7 CA Phone Number: 403-845-3072		Component ID: 6555 H Secondary ID: 1DW524PAPMLZ12577 Component Type: HYDRAULIC Manufacturer: JOHN DEERE Model: 524P Application: CONSTRUCTION Sump Capacity: 83 L		Tracking Number: 25168S93751 Lab Number: E-030192 Lab Location: Edmonton Data Analyst: ENC Sampled: 28-Aug-2025 Submitted: 17-Sep-2025 Received: <b>19-Sep-2025</b> Completed: 23-Sep-2025	
Filter Information		Miscellaneous Information		Product Information	
Filter Type: <b>Information Requested</b> Micron Rating: 0		Wildcard 1: Your Rep.: Cary Maxwell Wildcard 2: Ph:(403) 861-9957		Product Manufacturer: JOHN DEERE Product Name: HYDRAU XR Viscosity Grade: ISO 46	
Comments	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Flagged additives do not match current baseline reference for the specified product (this does not imply the lubricant does not meet proper API, SAE, or ISO classifications). LUBRICANT TIME was not provided for this sample. Lubricant and filter change acknowledged.				

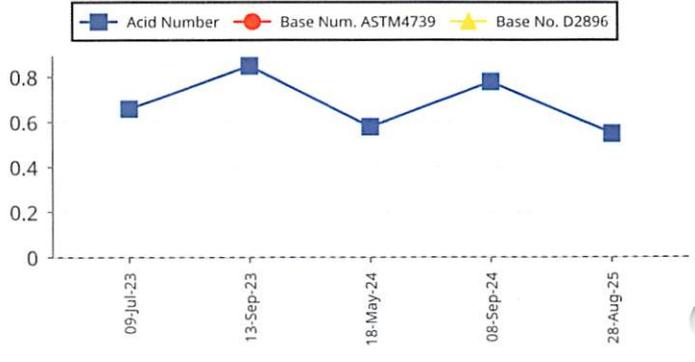
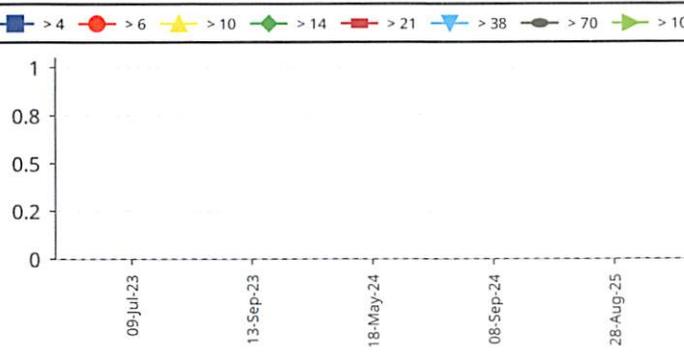
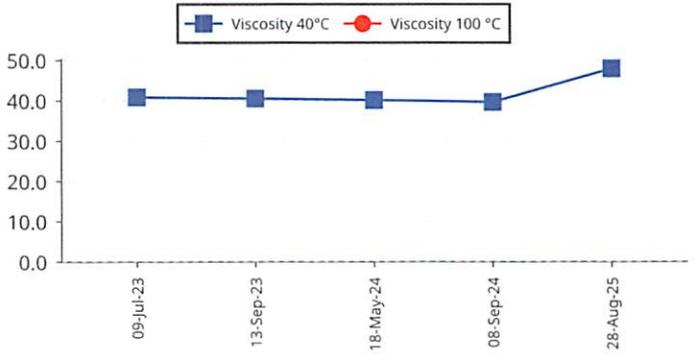
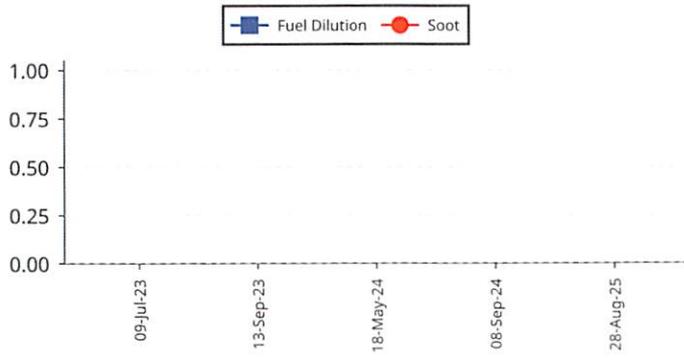
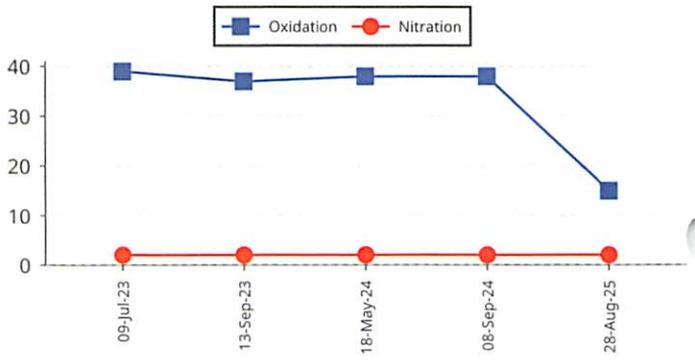
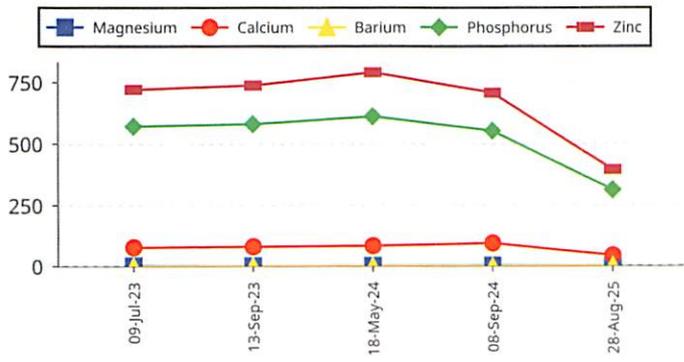
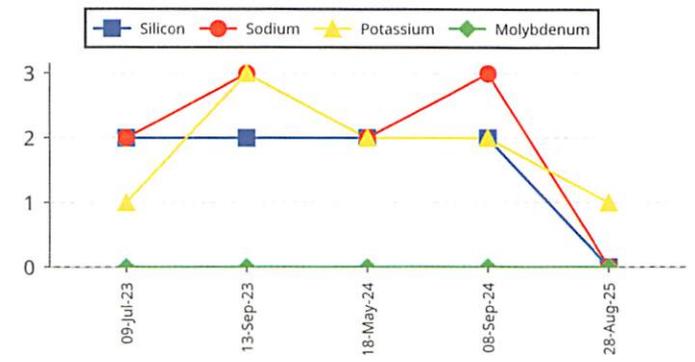
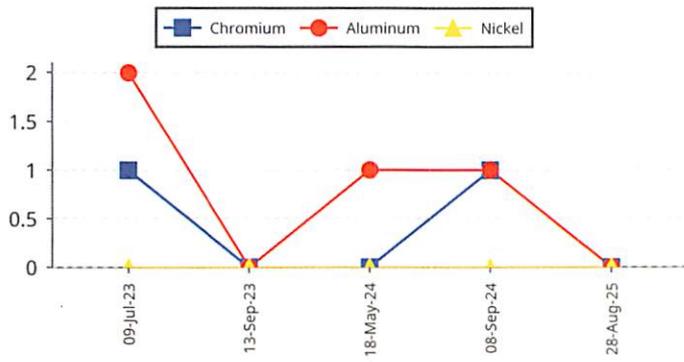
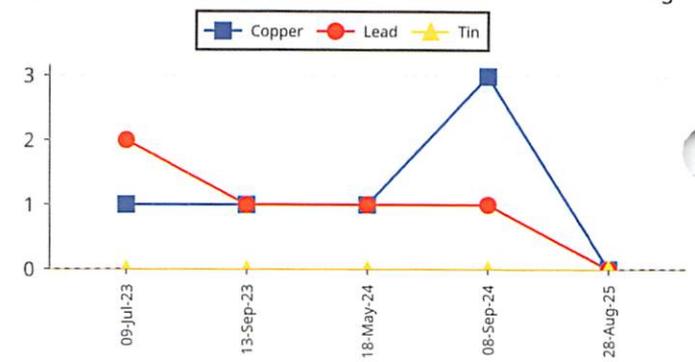
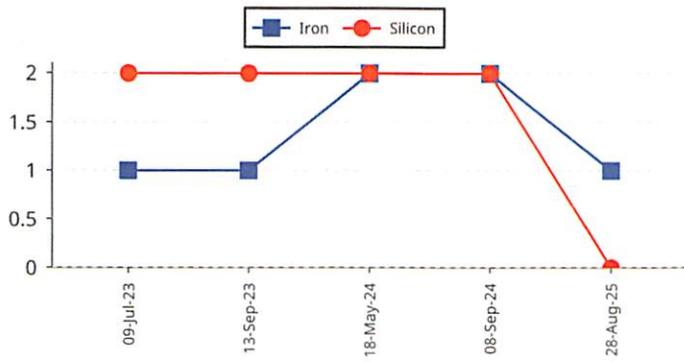
Sample #	Wear Metals (ppm)										Contaminant Metals (ppm)			Multi-Source Metals (ppm)					Additive Metals (ppm)					
	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
BL	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	84	0	636	835
3	1	1	0	2	1	2	0	0	0	0	2	2	1	0	0	0	0	0	1	2	78	0	573	727
4	1	0	0	0	1	1	0	0	0	0	2	3	3	0	0	0	0	0	1	81	0	582	739	
5	2	0	0	1	1	1	0	0	0	0	2	2	2	0	0	0	0	0	1	84	0	613	792	
6	2	1	0	1	3	1	0	0	0	0	2	3	2	0	0	0	0	0	2	95	0	555	709	
7	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	44	0	314	395	

Sample #	Sample Information				Contaminants			Fluid Properties								
	Date Sampled	Date Received	Lube Time	Unit Time	Lube Change	Lube Added	Filter Change	Fuel Dilution	Soot	Water	Viscosity 40°C	Viscosity 100°C	Acid Number	Base Num. ASTM4739	Oxidation	Nitration
			h	h	Lube Change	L		%	%	%	cSt	cSt	mg KOH / g	mg KOH / g	abs / cm	abs / 0.1mm
BL	18-Dec-2023	20-Dec-2023	0	0	No	0	No			<.1 - FTIR	42.9		1.00		43	3
3	09-Jul-2023	12-Jul-2023	0	2060	No	0	Yes			<.1 - FTIR	40.9		0.66		39	2
4	13-Sep-2023	18-Sep-2023	0	2431	No	0	No			<.1 - FTIR	40.6		0.85		37	2
5	18-May-2024	05-Jun-2024	0	2992	No	0	Yes			<.1 - FTIR	40.2		0.58		38	2
6	08-Sep-2024	12-Sep-2024	0	3515	No	0	No			<.1 - FTIR	39.7		0.78		38	2
7	28-Aug-2025	19-Sep-2025	0	3945	Yes	0	Yes			<.1 - FTIR	48.0		0.55		15	2

Sample #	ISO Code	Particle Count (particles/mL)									Test Method	Additional Testing
		Based On	> 4	> 6	> 10	> 14	> 21	> 38	> 70	> 100		
BL	//	4/6/14	particles/mL									
3	//											
4	//											
5	//											
6	//											
7	//											

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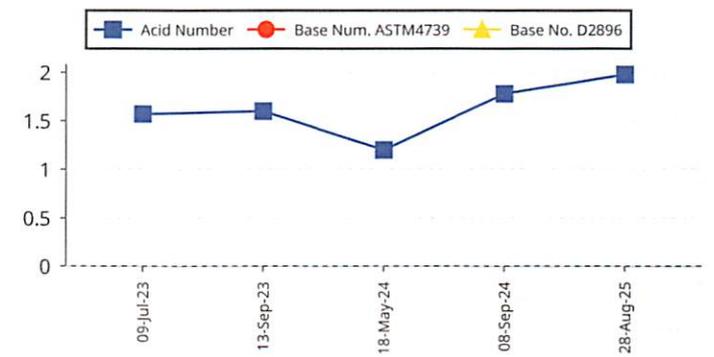
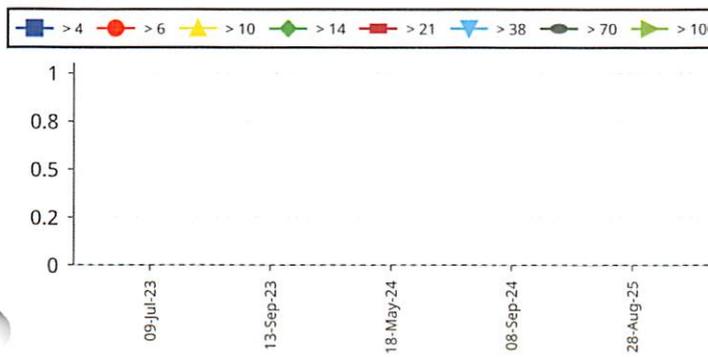
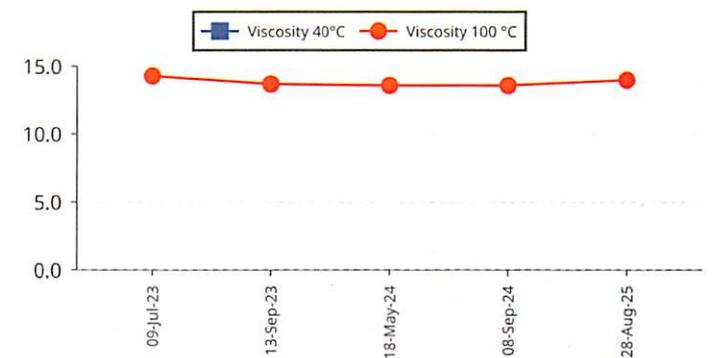
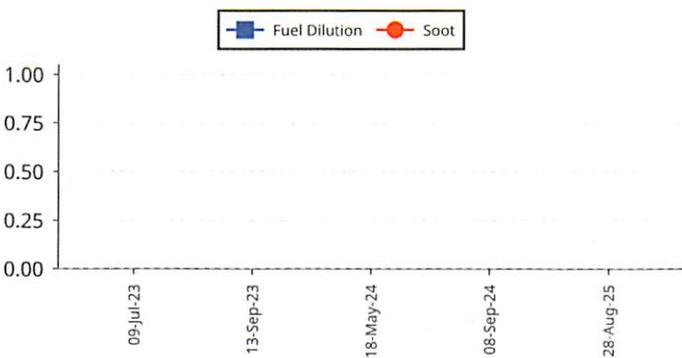
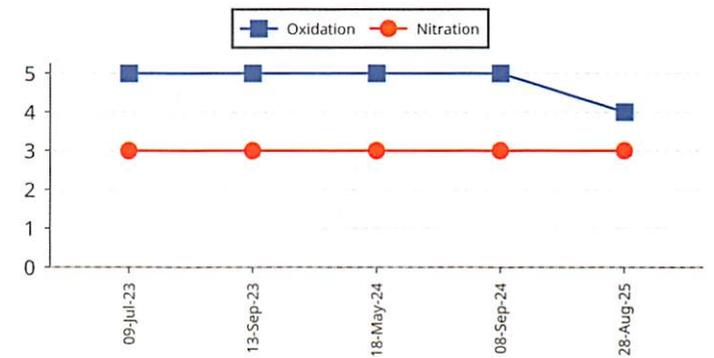
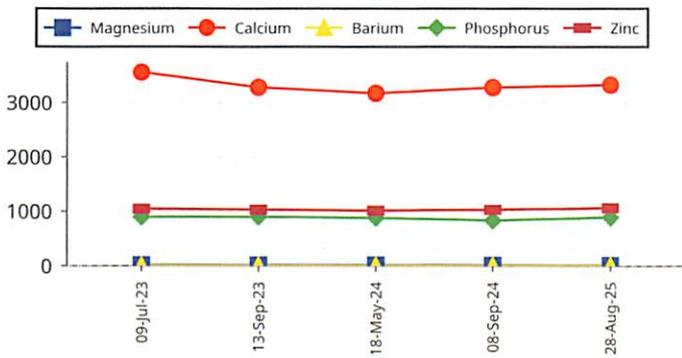
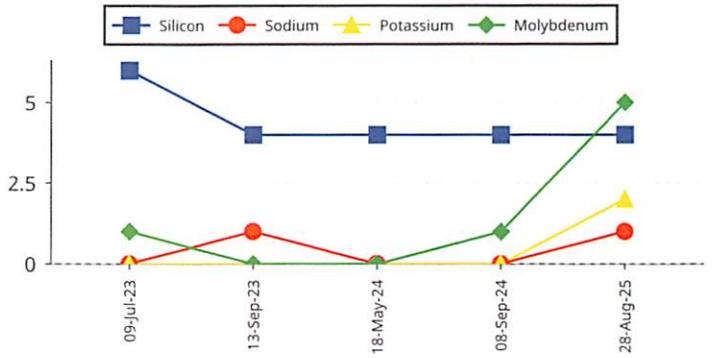
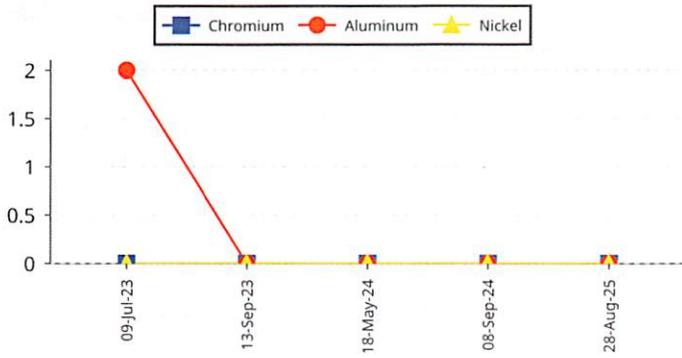
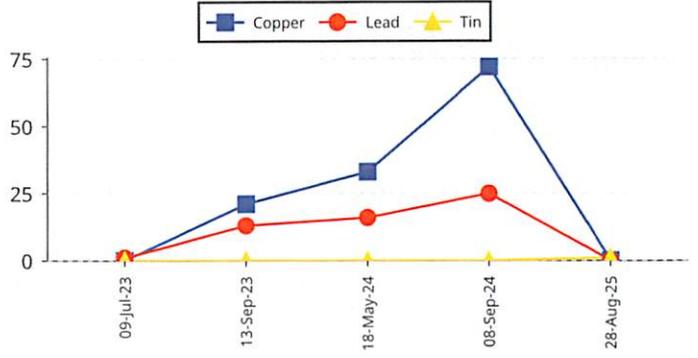
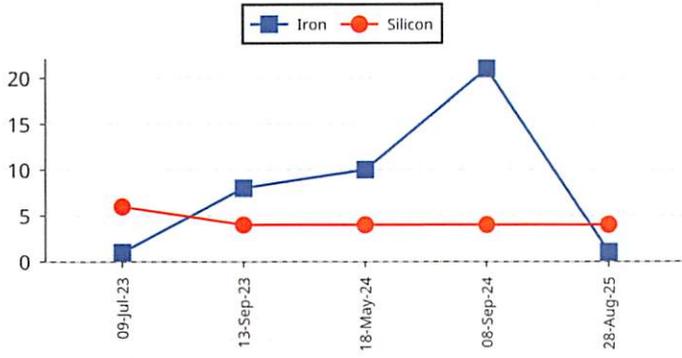
Historical Comments	3	LUBRICANT CHANGE is suggested if not done at sampling time. Infrared results indicate OXIDATION is SEVERELY HIGH; Acid Number is SLIGHTLY HIGH, which may be due to oxidation, contamination with an acidic product, extended drain interval, or lubricant mixing. Bearing metal is at a MINOR LEVEL; Viscosity is SLIGHTLY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Flagged additives do not match current baseline reference for the specified product (this does not imply the lubricant does not meet proper API, SAE, or ISO classifications). LUBRICANT TIME was not provided for this sample.
	4	LUBRICANT and FILTER CHANGE is suggested if not done at sampling time. Infrared results indicate OXIDATION is SEVERELY HIGH; Acid Number is SLIGHTLY HIGH, which may be due to oxidation, contamination with an acidic product, extended drain interval, or lubricant mixing. Viscosity is SLIGHTLY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Flagged additives do not match current baseline reference for the specified product (this does not imply the lubricant does not meet proper API, SAE, or ISO classifications). LUBRICANT TIME was not provided for this sample.
	5	LUBRICANT CHANGE is suggested if not done at sampling time. Infrared results indicate OXIDATION is SEVERELY HIGH; Viscosity is SLIGHTLY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. LUBRICANT TIME was not provided for this sample. Filter change acknowledged.
	6	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Viscosity is SLIGHTLY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. LUBRICANT TIME was not provided for this sample.





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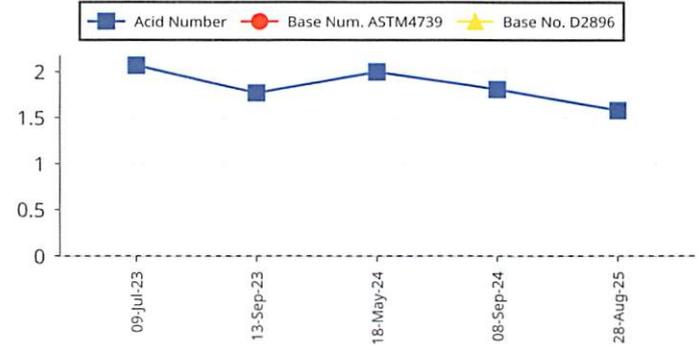
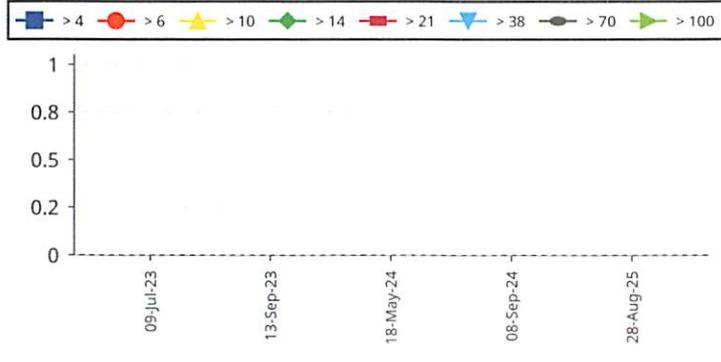
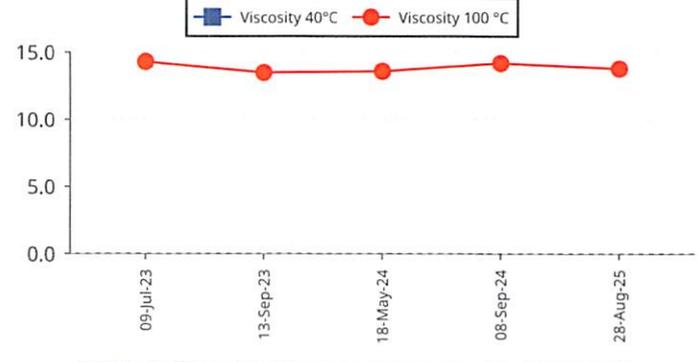
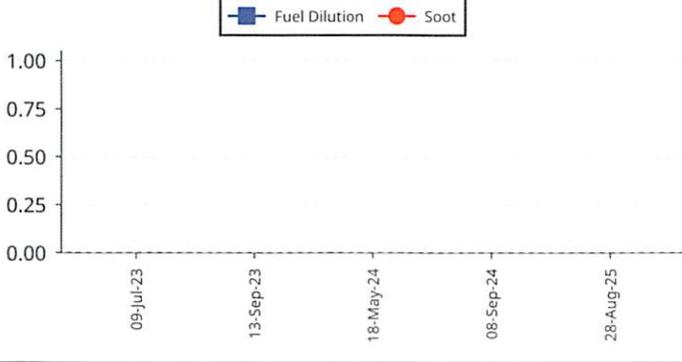
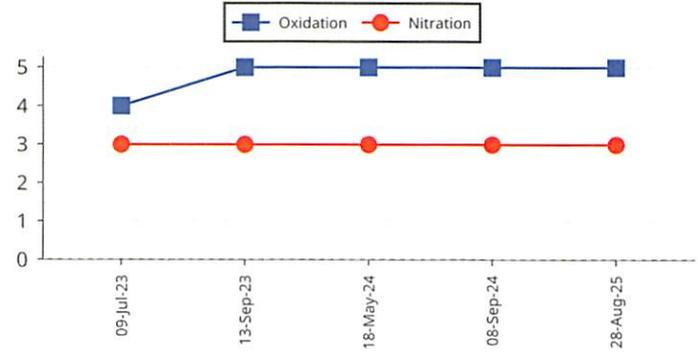
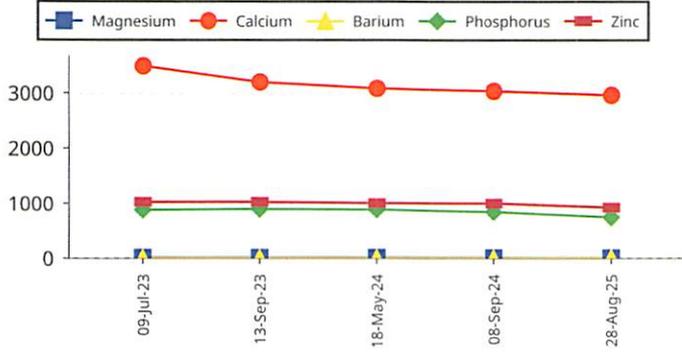
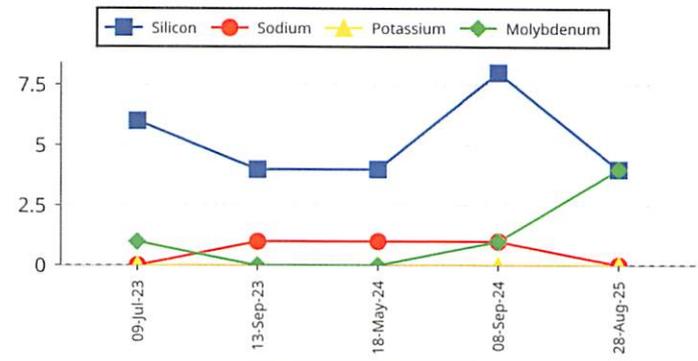
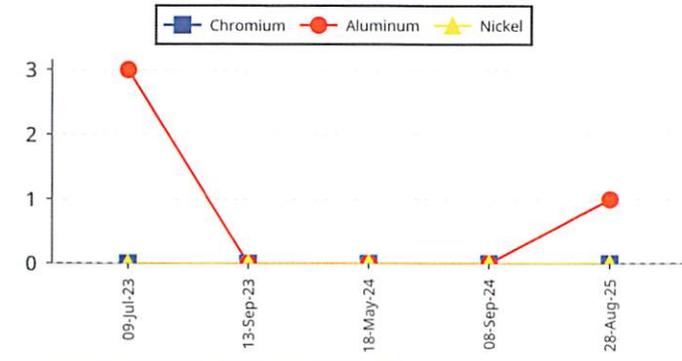
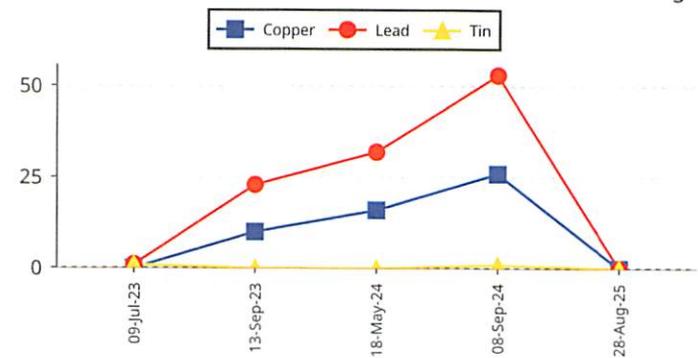
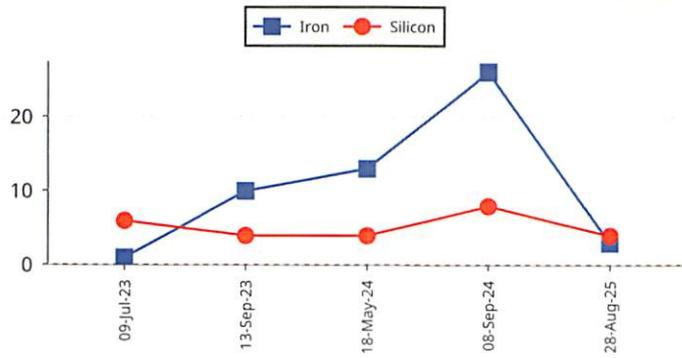
Historical Comments	3	Data indicates no abnormal findings. Resample at normal interval. LUBRICANT TIME was not provided for this sample. Lubricant change acknowledged.
	4	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Bushing/Thrust metal is at a MINOR LEVEL; Gear and/or bearing metal is at a MINOR LEVEL;
	5	Data indicates no abnormal findings. Resample at normal interval.
	6	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Bushing/Thrust metal is at a MINOR LEVEL; Gear and/or bearing metal is at a MINOR LEVEL;





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Historical Comments	3	Data indicates no abnormal findings. Resample at normal interval. LUBRICANT TIME was not provided for this sample. Lubricant change acknowledged.
	4	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Bushing/Thrust metal is at a MINOR LEVEL; Gear and/or bearing metal is at a MINOR LEVEL;
	5	Data indicates no abnormal findings. Resample at normal interval.
	6	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Lead is at a MINOR LEVEL; LEAD source in GEAR SYSTEMS may be from BUSHING/THRUST overlay, LEAD SOLDER, Coating surface, or contamination from GREASE;





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Historical Comments	3	Data indicates no abnormal findings. Resample at normal interval. Please specify MANUAL or AUTO/POWERSHIFT transmission. LUBRICANT TIME was not provided for this sample. Lubricant and filter change acknowledged.
	4	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Viscosity is MODERATELY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Abrasives (silicon/dirt) are at a MINOR LEVEL; Gear and/or bearing metal is at a MINOR LEVEL; Flagged additives do not match current baseline reference for the specified product (this does not imply the lubricant does not meet proper API, SAE, or ISO classifications).
	5	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Viscosity is MODERATELY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Abrasives (silicon/dirt) are at a MINOR LEVEL; LUBRICANT TIME was not provided for this sample. Please specify MANUAL or AUTO/POWERSHIFT transmission. Filter change acknowledged.
	6	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Viscosity is MODERATELY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Abrasives (silicon/dirt) are at a MINOR LEVEL;

