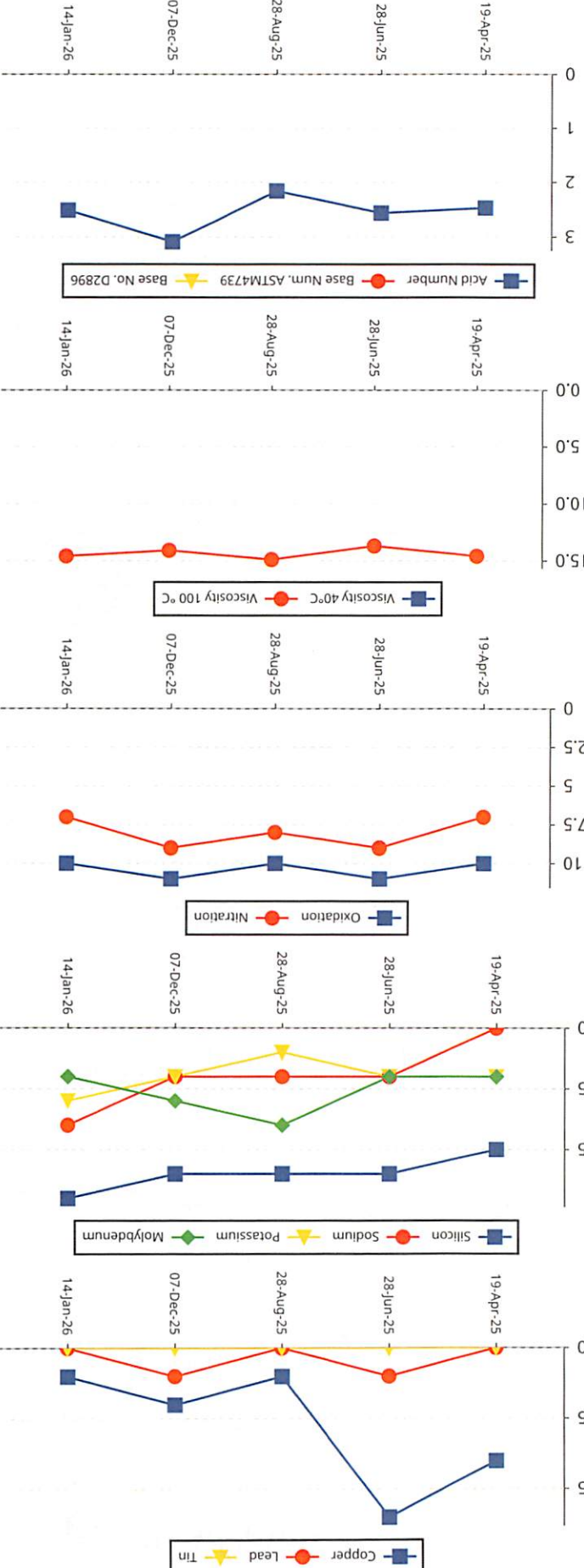
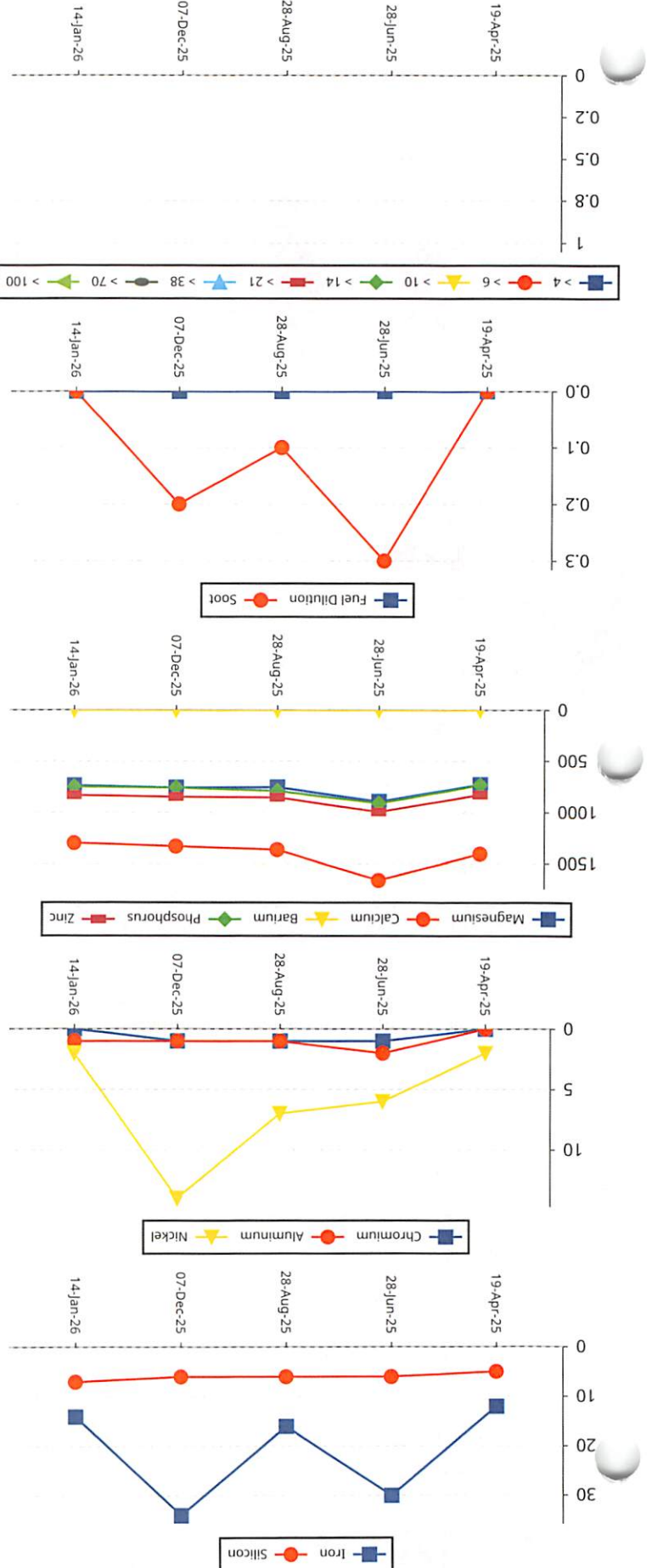




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Historical Comments	9	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Nickel is at a MINOR LEVEL; Possible valve train (valves, stems, guides etc.) metal;
	10	Suggest that diagnostics, additional testing, or other condition monitoring tools be used to help identify the cause of the abnormal wear condition. Nickel is at a SIGNIFICANT LEVEL; Possible valve train (valves, stems, guides etc.) metal; Iron is at a MINOR LEVEL. IRON SOURCES in engines can be cylinder liners, iron pistons, hardened steel camshafts, crankshafts, gears, hardened rocker arms, valve bridges, alloyed steel cam follower rollers, etc. Lubricant and filter change acknowledged. Resample at half interval.
	11	Suggest that diagnostics, additional testing, or other condition monitoring tools be used to help identify the cause of the abnormal wear condition. Nickel is at a SIGNIFICANT LEVEL; Possible valve train (valves, stems, guides etc.) metal; Resample at half interval.
	12	Suggest INSPECTING or using a BORESCOPE to check for SEVERE VALVE TRAIN WEAR (valves, stems, guides). Nickel is at a SEVERE LEVEL; Possible valve train (valves, stems, guides etc.) metal; Lubricant and filter change acknowledged. Resample at half interval.





0	1	2	3	4
NORMAL		ABNORMAL		CRITICAL

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: 6581 H Secondary ID: 1DW824PACPLX06657 Component Type: HYDRAULIC Manufacturer: JOHN DEERE Model: <a href="#">Information Requested</a> Application: CONSTRUCTION Sump Capacity: 159 L		Tracking Number: 25062Y44242 Lab Number: E-045880 Lab Location: Edmonton Data Analyst: FLG Sampled: 07-Dec-2025 Submitted: 17-Dec-2025 Received: <b>18-Dec-2025</b> Completed: 18-Dec-2025	
Filter Information		Miscellaneous Information		Product Information	
Filter Type: <a href="#">Information Requested</a> 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. Viscosity is MODERATELY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Chrome is at a MINOR LEVEL; CHROMIUM in hydraulic systems can be from piston/rods, hydraulic motor component, valves, and other chrome-plated surfaces (as applicable). Significantly elevated chromium content with low contamination and low acid number/oxidation can indicate a cavitation issue. 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). Please provide COMPONENT MODEL number to compare data to the correct standards for this component. Lubricant 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
2	4	0	0	0	3	1	0	0	0	0	4	3	1	0	0	0	0	0	0	2	86	0	633	683
3	6	2	0	0	3	0	0	0	0	0	3	3	1	0	0	0	0	0	0	1	89	0	588	725
4	8	5	0	0	3	0	0	0	0	0	5	3	1	0	0	0	0	0	1	1	77	0	543	711
5	13	9	0	1	4	0	0	0	0	0	5	3	1	0	0	0	0	0	1	1	109	0	692	869
6	11	7	0	1	3	0	0	0	0	0	4	4	2	0	0	0	0	0	5	35	132	0	539	763

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		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
2	17-Aug-2024	29-Aug-2024	0	1516	No	0	No			<.1 - FTIR	37.6		1.10		40	2
3	03-Nov-2024	08-Nov-2024	0	2041	No	0	Yes			<.1 - FTIR	37.3		1.26		40	3
4	09-Mar-2025	14-Mar-2025	0	2506	No	0	No			<.1 - FTIR	37.5		1.18		37	2
5	28-Jun-2025	07-Jul-2025	3071	3071	No	0	Yes			<.1 - FTIR	37.1		0.69		37	2
6	07-Dec-2025	18-Dec-2025	3596	3596	Yes	0	No			<.1 - FTIR	38.8		0.73		32	3

Sample #	ISO Code	Particle Count (particles/mL)									Test Method	Additional Testing
		Based On 4/6/14	> 4 particles / mL	> 6 particles / mL	> 10 particles / mL	> 14 particles / mL	> 21 particles / mL	> 38 particles / mL	> 70 particles / mL	> 100 particles / mL		
BL	//											
2	//											
3	//											
4	//											
5	//											
6	//											

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Historical Comments	2	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Acid Number is MODERATELY HIGH, which may be due to oxidation, contamination with an acidic product, extended drain interval, or lubricant mixing. Viscosity is MODERATELY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Infrared results indicate beginning lube oxidation; Flagged additive levels are higher than expected for the identified lubricant. This may have been topped off with a different lubricant, the fluid may be misidentified, or a different lubricant or formulation may have been in use prior to a recent change. Please provide COMPONENT MODEL number to compare data to the correct standards for this component. LUBRICANT TIME was not provided for this sample.
	3	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Acid Number is MODERATELY HIGH, which may be due to oxidation, contamination with an acidic product, extended drain interval, or lubricant mixing. Viscosity is MODERATELY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Infrared results indicate beginning lube oxidation; Flagged additive levels are different than what should be present for the identified lubricant. This may have been topped off with a different lubricant, the fluid may be misidentified, or a different lubricant or formulation may have been in use prior to a recent change. Please provide COMPONENT MODEL number to compare data to the correct standards for this component. LUBRICANT TIME was not provided for this sample. 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. Acid Number is MODERATELY HIGH, which may be due to oxidation, contamination with an acidic product, extended drain interval, or lubricant mixing. Viscosity is MODERATELY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Chrome is at a MINOR LEVEL; CHROMIUM in hydraulic systems can be from piston/rods, hydraulic motor component, valves, and other chrome-plated surfaces (as applicable). Significantly elevated chromium content with low contamination and low acid number/oxidation can indicate a cavitation issue. Infrared results indicate beginning lube oxidation; Flagged additive levels are higher than expected for the identified lubricant. This may have been topped off with a different lubricant, the fluid may be misidentified, or a different lubricant or formulation may have been in use prior to a recent change. Please provide COMPONENT MODEL number to compare data to the correct standards for this component. LUBRICANT TIME was not provided for this sample.
	5	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Chrome is at a MODERATE LEVEL; CHROMIUM in hydraulic systems can be from piston/rods, hydraulic motor component, valves, and other chrome-plated surfaces (as applicable). Significantly elevated chromium content with low contamination and low acid number/oxidation can indicate a cavitation issue. Viscosity is MODERATELY LOW. Causes include contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the component. Please provide COMPONENT MODEL number to compare data to the correct standards for this component. Filter change acknowledged.

