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<section-header>          Public Durbus Care Care Care Care Care Care Care Care</section-header>	especially towards the end of its tenure - keenin	der Service, a uturkant protecting your driver ann rom a out or weat win have a significant in inpact on your drived and performance, or it much lower frietion hetter shifting reduced charge of chain done reduced charge of chain failure. All your sond things
<section-header>          Public Durbus Care Care Care Care Care Care Care Care</section-header>	Your chain and its lubricant work EXTREMELY ha	g in motion over including better similaring reduced charter of chain shop, reduced charter of chain samer, saret y good sings, and. Your chain has many moving parts per link, and they need lubrication under thousands for PSI pressure load, with high contamination exposure. Your humble big
<section-header>          Public Durbus Care Care Care Care Care Care Care Care</section-header>	chain, at the heart of propelling you forwards, is	s actually quite an extreme lubrication challenge that many underestimate, to their cost.
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	The ZFC test is a difficult test. Each block is 1000	km, and alternates between clean and contamination blocks. Most facilities lubricant tests are very short (hours).
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<text></text>	Assessing a lubricants performance via wear cor	relation is a relatively blunt tool. It cannot directly predict efficiency (speed). Ie if two lubricants return similar wear rate results,
I of a for a function reach is become you has a fight were it is part to include a law bedow, or under d 5 for the were iteration and were a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and a law bears or parts and the second and	the ZFC test cannot say which may be 5w loss lut	be or a 6w or 4w etc. As a blunt tool to measure performance, we are looking for large differences in wear rate, as a high wear
	rate denotes rapid wear of the chains steel parts	s, and it flat out takes friction to wear steel at a notable rate. So a 0.1 vs a 0.2, or 1.3 vs 1.4 etc - I don't care.
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het is huit a take huit mut taken stut to too metaken, when hui mukulu mutor at 100 cadenes. So It is in stutub biopid whentain: to the chain, all is huikcam: is hold too the is huit too too metaken is term. The stutue at a stutue that is the trutter of the mutor bio too too too too. The stutue at a stutue that is the trutter of the mutor bio too too too too. The stutue at a stutue that is the trutter of the mutor bio too too too too. The stutue at a stutue that is the trutter of the mutor bio too too too. The stutue at a stutue that is the trutter of the mutor bio too too too too too too too too too t		
bit be hand, and had hardnart is beige tated in ha ATUA use ease, not an evaluation effection proceedings or controls. The subject of the processing hand weak is the processing handweak is the processing han	Also look for notable changes by Block. Ie if a lub	oricant is impressive in block 1, but increases notably in block 2 - then it has absorbed a lot of contamination and become abrasive
bit be hand, and had hardnart is beige tated in ha ATUA use ease, not an evaluation effection proceedings or controls. The subject of the processing hand weak is the processing handweak is the processing han		
b la bia data was high dain was rich that Lit BUTRUET (milling has be high performing product in your ording. Ify us are happy with a product hat tests product has tests product hat tests product has tests product hat tests p		
au dia a catwabek of joy f you suktow to to high performing product of your performance (you, you way way diry cat.)  Below seal and about the garter much you have but with a your much halk have, if you tay the performance of your dive way way and you tay an		
<text></text>	you will do cartwheels of joy if you switched to a	anga penorming product of your presence (wei, wax, wax onp etc).
<text></text>	*Before you email me about the great results yo	u have had with X poor result lubricant , nk note that setting 10.000km from a chain is easy if you run it WAY past recommended
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a summary eliyou have been happy with a product that tests poorly in the ZFC test, you will be doing earthwheels of joy if you used a high performing product instead.  At the bottom of the abrient test page on website is the full test brief if you with to read the full test protocol and deeper information.  How to use this data?  The bottom of the abrient test page on website is the full test brief if you with to read the full test protocol and deeper information.  How to use this data?  The table below shows the wear recorded across the main test (cumulative - each blocks wear added to all previous wear).  To most data / cost comportions I use the first 5000km only, excluding harsh block 6, os most hubicants have failed forg before and I am using heavily extrapolated data to file.  The moint test you for the end of flock 7.5000km of test inginications inclusion block I - is an overall fairly tough test.  Lubricant with a result of 10 (one chain worn to the recommended chain wear replacement mark of 0.5% clongation wear the block inst so doet 1000 -	difficult for viewers to understand, and for the p for example, the worst performing lubircants we their chains and components from this wear as a do this, instead they keep running chain and dri when they get their bike back it feels brand new death viewer that the back it feels brand new death viewer are the standard state of the standard band many components can be very expensive. Us components a lubricant that prevents half the What would your rather spend your money on? that by simply buying a proven excellent lubrica However in light of the issues on original cost to as opposed to recommended replacement mark the cost to run 5 amounts. Remember also your another lubricant at \$1000, but your components Sadly - despite the changes, the cost provide the cost or on some cases people mask a poor lubricant b Yes - I know - for X lubricant that performs poor fring conditions or terrain. I am not testing you	by I had acktemely detailed modelling, factoring lubricant cost, different components etc. however the numbers were often poor performing lubricants, the cost to run numbers were pretty unbilevable - because in realifie no one would actually spend those \$5 ould as through many chains per 5000km or 10.000km to a 0 \$5 recommended wear replacement mark. And if one actually replaced should be done, the cost to run numbers been very accurate of that very high cost. But, people running such lubricants do not rheteria parts until they are very very worn, and then replace. Often they may have no idea just how worn their driverian was, they just know of but when they would see an number saying X huge amount of \$ per 10,000km, and they are not spending that due to riding things to the dwear - they would disregard cost to run calculations entirely as being wildly inaccurate - which in reality, for them - they were. bricknts that wear your chain (and thus drivetrain) components rapidly DO cost A LOT of cyclists A LOT of extra money every year. We now have chains costing over \$200 and cassettes costing \$700 to \$1000-p. su well as some very expensive chain rings. On high end wear - they would disregard cost to run calculations entirely as being wildly inaccurate - which in reality. For them - they were: wer so another inductant can iter rains yeave you \$200 on component were are over a years, 5000km, or 10,000km etc. Those news glasses you covet? Or shees? Or helmet? Or winter jackt? Or Cargo biss? - Or just burn it on buying new groupset components int vs a provem hor or polubicant - you can easily prevent that wear and nedder replacement. Cost to run is based on rider taking chain to 1.0% wear k of 0.5%, and then cost to replace components of \$500. If you components cost less than this, factor that for yourself when you are comparing roomponents may cost MUCH more than this, 6-fact accordingly. If the cost to run on ym odeling has one lubricant at \$500 and s will cost your \$1000 to replace wi
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xtrapolated data is the overage result for lubricants of that type that have physically been tested (better performing) in that block. It is likely if tested the red data fields would be warse than shown	difficult for viewers to understand, and for the p for example, the worst performing lubircants we their chains and components from this wear as a do this, instead they keep running chain and dri when they get their bike back it feels brand new death vier replacing, components at recommended But cost to run is a key driver of this testing. Lub And many components can be very expensive. V components a lubricant that prevents half the What would you rather spend your money on? that by simply buying a proven excellent lubrican However in light of the issues on original cost to as opposed to commended replacement mark the cost to run f amounts. Remember also your another lubricant at \$1000, but your components solly - despite the changes, the cost to run cake very worn for a long time. They pay for k in a ver Or in some cases people mask a poor lubricant by Yes - I know - for X lubricant that performs poor friding conditions or ther, in an ort testing you relative to a other rian. I am not testing you relative to a other rian. I am not testing you friding conditions or ther, in a mort with a performs for your cycling vs this benchmark test, the relat in summary - if you have been happy with a pro Al-lub below shows the wear recorded across <i>For most data f cost comparisons I use the first 55</i> <i>The hubin test up to result of J Block S chinowm to</i> <i>The table below shows the wear recorded across</i> <i>For most data f cost comparisons I use the first 55</i> <i>The main test up to result of J Block S chinowm to</i> <i>The Mohant why to result of J Block S chinowm to</i> <i>Low dave chinomantly of grout meet com</i> <i>A bubricent the typerorms with these conditions</i> .	by his determely detailed modelling, factoring lubricant cost, different components etc. however the numbers were often poor performing bubicants, the cost to run moles were perty unbelievable beause in real file no one would actually replaced should be done, the cost to run moles been very accurate of that very high cost. But, peopler running such hubricants do not hybrid the source of the replace often they may have no idea just how worn their divertain was, they just know will be used to exist the cost to run moles exprise the provide sea number syning 2 huge amount of 5 per 10,000m, and they are not spending that due to riding things to the sid wear - they would disregard cost to run calculations entirely as being wildly inaccurate -which in reality, for them - they were. brickants that wear your chain (and thus drivetrain) components rapidly D0 cost A LOT of cyclists A LOT of extra money every year. were work how are chains costing over \$200 and castettes costing \$700 to \$1000, and will as some very expensive chain rings. On high end wears a south of hybricant can iterary savely out \$200 and castettes costing \$700 to \$1000, per 10,000 mm, end they may have chains costing over \$200 and castettes costing \$700 to \$1000 to run its to a porter mole were years. were work how how chains costing over \$200 and castettes costing \$700 to \$1000 to run its based on rider taking chain to 1.0% wear ket 0.5%, and then cost to replace components of \$500. If you components cost loss than on you colleging have on you believe than so no work and they also replace and per 200 all buicants. They source of they source of they of more you source of they also replace to any one were years were you you you source and they can buicant at \$200 and source and they are and needed replacement. were sub-strained were you were you were you were you
	difficult for viewers to understand, and for the p for example, the worst performing lubicants we their chains and components from this wear as a doths, instead they keep running chain and dri when they get their blue back it feels brand new death vs replacing components at recommendes the cast tor run is a key driver of this testing, Lub And many components can be very expensive. V components a lubicant that prevents half the What would you rather spend your morey on? that by simply buying a proven excellent lubrica However in light of the issues on original cost to as opposed to commended replacement mark the cost tor run 5 amounts. Remember also your another lubricant at 51000, but your compenents Sadly - despite the changes, the cost to run calcs very worn for a long time. They pay for it in a ver Or in some cases people mask a poor lubricant b for your cycling vs this benchmark test, the relating you relative to each or ther. Hyour drig zavel, and in to for your cycling vs this benchmark test, the relating the main test you have been happy with a pro- At the bottom of the lubricant that performs poord riding conditions of ther. Hyour disk 5 (5000km of A buthous to the original backs (5 (5000km of A buthous to the original backs (5 (500km of A buthous to the result of 1.0 (one chaninown to For MOST cycling to the mode for the set of the set of A buthous the result of 1.0 (one chaninown to For MOST cycling one RED denote low one) for a lubricant the performs well in these conditions.	by had actemely detailed modelling, factoring lubricant cost, different components etc. however the numbers were often poor performing publications, the cost to run moles were perty unbilevable beausine in realifie no one would actually replaced should be done, the cost to run moles been were perty unbilevable beausine in realifie one would actually replaced should be done, the cost to run moles been were perty unbilevable beausine in realifies one would actually replaced should be done, the cost to run moles been were actuarted of that very high cost. Stur, people running such lubricants do not her driverain parts until they are very very worn, and then replace. Often they may have no idea just how worn their driverain was, they just know we law act they would see a number asying X huge amount of S per 10,000m, and they are not spending that due to riding things to the dwar- they would see an unbit or un calculations entirely as being wildly inaccurate - which in reality. for them - they were. berickness that wear your chain (and thus drivertain) components rapidly DO cost ALOT of cyclists ALOT of extra money every year. We now have chains costing over \$200 and cassettes costing \$700 to \$1000-p. sturies of yours of yours. These news glasses you covet? Or shees? Or helmet? Or winter jacke? Or Cargo bios?- Or just burit & no huying new groupset components min vs a proven meh or poor lubricant on target stury grean cound replacement. Cost to run is based on rider taking chain to 1.0% wear ker 0.5%, and then cost to replace components of 5500. If you components cost less than this, factor that for yourself when you are comparing roop poster ming your gost. MUCH more than this, is of race according huy the cost of run on ym odeling has one lubricant at \$500 and s will cost your spansing trouts and weak of they realed that has eachieved very different KMI's to owarrate in their was. But is an out of the start more yourself and of the real mate accounds will have on a bayent costs (and solvent

## Friction / wear test - CUMULATIVE WEAR - Main test protocol WAX / Wax DRIP / DRIP - WET / GREASE Number of chains worn to recommended replacement mark of 0.5%. 1.0 = 1 chain worn to 0.5% wear mark.

lumber of chains worn to recommende	d replacement mark	of 0.5%.  1.0 = 1 ch	ain worn to 0.59	% wear mark.			COST TO RUN - 5000km
							Based on drivetrain parts replacement cost of \$500, a
							replacement necessary after 1 x chain wear to a 1.0%
	Block 1 - No	Block 2 - Dry Offroad	Block 3 - No	Block 4 - Wet conditions	Block 5 - No	Block 6 - Harsh wet	elongation wear necessitating new components with a chain. Refer to Cost to run explainer in main informati
ubricant	Contamination	conditions	Contamination	riding	Contamination	conditions riding	section.
Silca Hot Melt	0.00	0.02	0.07	0.15	0.19	0.27	\$ 95.00
Mspeedwax New Formula	0.00	0.01	0.02	0.11	0.12	0.32	\$ 59.50
Finish Line Halo IM wax (*RE-Test Jan 25)	0.05	0.12	0.12	0.22	0.24	0.40	\$ 118.50
Rex Black Diamond Wax - 11+1 mix	0.00	0.01	0.02	0.07	0.09	0.45	\$ 44.50
Rex Black Diamond Wax - 4+1 Mix	0.00	0.00	0.01	0.20	0.21	0.49	\$ 107.00
Silca Hot wax X	0.00	0.00	0.00	0.23	0.28	0.60	\$ 141.00
Private Immersive wax (3)	0.01	0.03	0.03	0.35	0.38	0.76	\$ 190.50
Candle wax	0.05	0.15	0.20	0.34	0.40	0.78	\$ 201.00
Effetto Mariposa Flower power wax	0.02	0.05	0.05	0.37	0.48	0.80	\$ 240.00
Private immersive wax	0.00	0.06	0.06	0.40	0.46	0.83	\$ 230.00
Private immersive wax (2)	0.01	0.02	0.03	0.40	0.45	0.87	\$ 225.00
Ceramic Spd UFO Drip New Formula	0.02	0.06	0.06	0.39	0.56	0.92	\$ 278.00
Molten Speed Wax Original Formula	0.00	0.12	0.12	0.20	0.20	0.98	\$ 100.00
Tru Tension Tungsten Race - (*D.A)	0.05	0.07	0.10	0.48	0.78	1.17	\$ 390.00
Tru Tension Tungsten All Weather	0.14	0.24	0.36	0.67	0.85	1.17	\$ 425.00
Session S-Wax	0.15	0.20	0.25	0.58	0.85	1.21	\$ 423.00 \$ 367.00
Silca Super Secret Drip	0.03	0.08	0.08	0.44	0.73	1.33	\$ 367.00 \$ 458.50
Silca Synergetic Ceramic Speed Wet Conditions	0.12	0.18	0.43	0.70	1.10	1.4/	\$ 458.50 \$ 548.50
Rex Black Diamond	0.02	0.28	0.43	0.73	0.97		\$ 546.50 \$ 485.50
Smoove	0.02	0.13	0.30	0.73	1.18	1.61	\$ 590.00
Allied GRAX	0.19	0.40	0.59	1.01	1.18	1.70	\$ 635.50
Private wax drip (1)	0.05	0.10	0.10	0.69	1.12	1.72	\$ 560.50
Rex Domestique	0.05	0.34	0.49	0.93	1.08	1.73	\$ 538.00
Squirt	0.19	0.39	0.61	1.09	1.41	1.90	\$ 702.50
Nix Frix Shun	0.13	0.40	0.54	0.83	1.55	1.97	\$ 775.00
Boeshield T9 - Aerosol	0.11	0.43	0.66	1.13	1.35	2.07	\$ 677.00
Revolubes	0.04	0.22	0.40	1.01	1.19	2.12	\$ 594.00
Silca Synerg-E	0.02	0.10	0.29	1.03	1.23	2.33	\$ 612.50
Rock N Roll Gold	0.09	0.38	0.58	1.22	1.43	2.40	\$ 714.50
Finish Line Dry	0.15	0.50	0.77	1.31	1.76	2.57	\$ 877.50
Wend Wax test 2 (dissolved in)	0.36	0.69	0.98	0.40	2.06	2.71	\$ 1,029.50
Cycle Star Gold	0.22	0.53	0.98	1.55	2.00	2.86	\$ 1,002.00
Singer general purpose (\$6.95)	0.09	0.47	0.87	1.52	1.92	2.88	\$ 959.00
Private test - wet lubricant (1)	0.15	0.59	0.90	1.60	1.91	2.96	\$ 954.00
Wolf tooth wt-1 on Factory grease	0.18	0.55	1.03	1.66	2.15	3.09	\$ 1,073.00 \$ 1,068.50
AB Graphene Wax Wolf tooth wt-1	0.22	0.60	0.85	1.89	2.14 2.57	3.17	\$ 1,068.50 \$ 1,284.00
Dumonde Tech Pro X-Lite	0.17	0.85	1.24	2.05	2.57	3.38	\$ 1,284.00 \$ 1,116.50
Muc Off C3 Ceramic Dry	0.16	0.85	1.07	2.02	2.23	3.96	\$ 1,116.50 \$ 1,323.50
Private test wet lubricant (2)	0.11	0.37	0.93	1.95	2.03	4.03	\$ 1,254.00
White Lightning Epic Ride	0.23	0.57	1.61	2.01	3.25	4.15	\$ 1,625.00
Tunap Eco	0.11	1.23	1.01	2.54	3.04	4.26	\$ 1,518.50
Finish Line Wet (green bottle)	0.15	1.06	1.83	3.00	3.77	5.53	\$ 1,885.00
Prestacycle One	0.08	1.03	0.01	2.99	3.95	5.54	\$ 1,974.00
Muc Off Ludicrous AF	0.09	0.90	1.83	3.05	3.85	5.67	\$ 1,927.00
Muc Off Hydro Dynamic	0.28	1.27	2.11	3.36	4.21	6.08	\$ 2,103.50
Airolube	0.10	1.09	1.67	3.32	3.90	6.37	\$ 1,948.50
Muc Off Nano Lube	0.38	1.45	2.39	3.73	4.66	6.67	\$ 2,330.00
Cyclon All weather	0.24	1.21	2.09	3.73	4.61	7.07	
Shimano Factory Grease	0.11	0.32	N/A	N/A	N/A	N/A	
	0.72	N/A	N/A	N/A	N/A	N/A	
Wend Wax test 1 - stick only	0.74	N/A	N/A	N/A	N/A	N/A	
NO LUBRICANT	0.90	N/A	N/A	N/A	N/A	N/A	
Finish Line Halo Drip wax (*Re-Test TBA)	2.03	N/A	N/A	N/A	N/A	N/A	
Average	0.18			0.67 1.27	1	.64 2.	48
*D.A = Re lube applications doubled		as test stopped before te					
E.A = Extended application intervals	See Below Wear by block	k data table for current ex	trapolations.				

### Wear - Block by block (individual wear rate for each block)

How to use this data?					
The table below shows the wear recorded for each individual test block. This enables you to drill down to what lubricant performs for your riding - ie offroad? Frequent wet?					
A high result in block 1 may indicate initial penetration issues, especially if there is a similar or even lower wear rate in block 2 where abrasive contamination is now added.					
Or, if there is a high wear rate in block 1, followed by a much worse result in block 2, it is simply a very poor lubricant.					
A high amount of wear in block 2 (regardless of block 1 result) - shows the lubricant becomes abrasive once exposed to dry dust contamination = NOT suitable for offroad / gravel					
Block 3 gives us an indication if the lubricant was able to improve / flush clean itself after block 2 - ie any ability to "clean as it lubes".					
Block 4 gives us an indication of the lubricants performance in wet weather conditions.					
Block 5 is similar to block 3 - how does the lubricant recover post block 4's wet contamination.					
Block 6 is a harsher wet conditions test vs block 4 - it has double the amount of water, double the amount of contamination, this is applied twice as often (4x amount all up).					
Data fields that are RED denote the data is Extrapolated as the test was stopped at end of previous block due to high wear not warranting continuing test.					
Extrapolated data is the average result for lubricants of that type that have physically been tested (better performing) in that block. It is likely if tested the red data fields would be worse than shown					
SUMMARY					
If you only ride in dry road conditions - Any lubricant with a low wear rate in BLOCK 1 will suit you well, especially if you follow chain maintenacnce guide (instructions tab - ZFC)					
If you ride gravel or mtb in predominately dry conditions - you want a lubricant with a low wear rate in BLOCK 2. ZFC RECOMMENDS BELOW 1.5 chains per 5000km					
If you ride in frequent wet conditions (road or offroad) - you want a lubricant with a low (comparatively) wear rate in Block 4 - ZFC RECOMMENDS BELOW 2.5 Chains per 5000km					
If you ride in frequent VERY HARSH conditions - you want a lubricant with a low (comparatively) wear rate in Block 6, ZFC RECOMMENDS BELOW 3.5 chains per 5000km					

# Number of chains worn to recommended replacement mark of 0.5% in EACH block. 1.0 = 1 chain worn to 0.5% wear mark WAX / Wax DRIP / DRIP - WET / GREASE Block 2\_DPy Officed

			Block 2 - Dry Offroad					
			conditions - CHAINS			Block 4 - Wet conditions		
	Block 1 - 1000km- No	Block 2 - 1000km - Dry	WORN to 0.5% PER	Block 3 - No	Block 4 - Wet conditions	riding - Chains Worn to	Block 5 - No	Block 6 - Harsh wet
Lubricant	Contamination	Offroad conditions	5000km	Contamination	riding	0.5% per 5000km	Contamination	Block 6 - Harsh wet
Rex Black Diamond Wax - 11+1 mix	0.00	0.01	0.07	0.01	0.05	0.23	0.02	0.36
iilca Hot Melt	0.00	0.01	0.09	0.05	0.03	0.40	0.02	0.09
Alica Hot Meit Nolten Speed Wax Original Formula	0.00	0.02	0.60	0.05	0.08	0.40	0.04	0.09
Aspeedwax New Formula	0.00	0.01	0.06	0.00	0.08	0.40	0.00	0.20
inish Line Halo IM wax (re-test Jan 25)	0.05	0.01	0.36	0.01	0.09	0.46	0.01	0.16
Candle wax	0.05	0.10	0.48	0.01	0.14	0.47	0.02	0.27
tex Black Diamond Wax - 4+1 Mix	0.00	0.00	0.00	0.00	0.14	0.92	0.02	0.28
ilca Hot wax X	0.00	0.00	0.00	0.00	0.23	1.16	0.05	0.32
ilca Synergetic	0.00	0.19	0.93	0.24	0.27	1.37	0.22	0.55
Vix Frix Shun	0.13	0.27	1.37	0.14	0.27	1.37	0.73	0.43
ru Tension Tungsten All Weather	0.14	0.10	0.50	0.12	0.31	1.55	0.18	0.32
rivate Immersive wax (3)	0.01	0.02	0.12	0.00	0.32	1.59	0.00	0.37
ffetto Mariposa Flower power wax	0.02	0.02	0.12	0.00	0.32	1.60	0.11	0.32
eramic Spd UFO Drip New Formula	0.02	0.03	0.17	0.01	0.32	1.62	0.17	0.37
ession S-wax	0.15	0.06	0.29	0.05	0.33	1.63	0.27	0.37
rivate Immersive wax	0.00	0.06	0.29	0.00	0.33	1.05	0.00	0.37
rivate Immersive wax (2)	0.01	0.01	0.06	0.00	0.37	1.85	0.06	0.42
ilca Super Secret Drip	0.01	0.01	0.23	0.01	0.37	1.85	0.29	0.66
ru Tension Tungsten Race (D.A)	0.05	0.02	0.10	0.02	0.38	1.92	0.30	0.39
eramic Speed Wet Conditions	0.12	0.16	0.80	0.17	0.41	2.06	0.24	0.37
llied GRAX	0.22	0.18	0.92	0.19	0.42	2.10	0.24	0.43
ex Black Diamond	0.02	0.11	0.56	0.17	0.43	2.13	0.24	0.64
ex Domestique	0.05	0.29	1.43	0.15	0.44	2.19	0.15	0.66
moove	0.19	0.17	0.87	0.02	0.45	2.26	0.34	0.46
oeshield T9- Aerosol	0.11	0.32	1.62	0.22	0.47	2.37	0.22	0.71
quirt	0.19	0.22	1.10	0.18	0.49	2.45	0.33	0.50
inish Line Dry	0.15	0.35	1.76	0.27	0.54	2.72	0.44	0.82
ycle Star Gold	0.22	0.31	1.55	0.45	0.57	2.85	0.45	0.86
rivate wax drip (1)	0.05	0.05	0.23	0.00	0.59	2.96	0.43	0.60
Vend Wax test 2 (dissolved in)	0.36	0.34	1.68	0.29	0.60	2.99	0.46	0.65
Vhite Lightning Epic Ride	0.23	0.34	1.69	1.04	0.60	2.99	1.04	0.90
tevolubes	0.04	0.18	0.92	0.17	0.62	3.09	0.17	0.92
Volf tooth WT-1 on Factory Grease	0.18	0.37	1.86	0.48	0.63	3.16	0.48	0.95
inger General Purpose (\$6.95)	0.09	0.38	1.92	0.40	0.64	3.22	0.40	0.97
lock N Roll Gold	0.09	0.29	1.45	0.20	0.65	3.25	0.20	0.98
rivate test - wet lubricant	0.15	0.44	2.20	0.31	0.70		0.31	1.05
ilca Synerg-E	0.02	0.08	0.39	0.20	0.73	3.67	0.20	1.10
Volf tooth WT-1	0.17	0.53	2.65	0.54	0.79	3.95	0.54	0.81
unap Eco (on test)	0.11	1.13	5.63	0.49	0.82	4.09	0.49	1.23
luc Off C3 Ceramic Dry	0.11	0.62	3.09	0.52	0.88	4.39	0.52	1.32
Jumonde Tech Pro X-Lite	0.16	0.69	3.45	0.22	0.95	4.75	0.22	1.43
rivate test wet lubricant (2)	0.11	0.25	1.27	0.56	1.02	5.09	0.56	1.53
B Graphene Wax	0.22	0.38	1.92	0.25	1.04	5.18	0.25	1.04
Auc Off Ludicrous AF	0.09	0.78	3.90	0.64	1.04	5.21	0.64	1.56
inish Line Wet (green bottle)	0.15	0.91	4.56	0.77	1.17	5.86	0.77	1.76
restacycle One	0.08	0.95	4.75	0.81	1.21	6.06	0.81	1.82
luc Off Hydro Dynamic	0.28	0.99	4.95	0.85	1.25	6.25	0.85	1.88
luc Off Nano	0.38	1.08	5.39	0.93	1.34	6.69	0.93	2.01
yclon All weather	0.24	0.96	4.82	0.88	1.64	8.20	0.88	2.46
irolube	0.10	0.99	4.95	0.58	1.65	8.26	0.58	2.48
inish Line Halo Drip wax (*Re-Test start feb 25)	2.03							
himano Factory Grease	0.11	0.21	1.04					
nish line Ceramic Wax (unable to extrapolate data)	0.72							
Vend Wax test 1 - stick only	0.74							
IO LUBRICANT	0.90							
Average All lubes	17.9%	31.8%		27.4%	58.7%		33.9%	83.9%
							_	
D.A = Re lube applications doubled	Red = extrapolated data as test stopped before testing this block.							

e lube applications doubled Red = extrapolated data as test dended application intervals See Below Wear by block data a

Wet lubricants Extrapolation update - Nov 2024 Average All Wet Block 1 - 10.8% Average All Wet Block 2 - % Extrapolation = + 28.3%

# Block 3. Average All wet Block 2 = 53.1% Average all wet Block 3 = 38.8% Extrapolation = -14.3%

Block 4 Average All wet block 2 = 53.1% Average all tested wet block 4 = 79.2 Extrapolation = + 26.1%

Block 5 Too small data (only 3) Use their block 3 wear rate (very optimistic Extrapolation = use block 3

Block 6 - change to use a 1.5 multiplication on Block 4 Only one wet lubricant has been tested in block 6 - insufficient for data average extrapolation.

### Wax drip lubricants Extrapolation update - Nov 2024

Average All Wax Block 1 - 9.7% Average All Wax Block 2 -Extrapolation =

Block 3. Average All wax Block 2 = Average all wax Block 3 = Extrapolation = -3.0%

## Block 4 Average All wax block 2 = 9.7% Average all tested wax block 4 = 39.9 Extrapolation = + 30.2%

Block 5 Average all wax tested block 4 = 39.9% Average all wax tested block 5 = 23.8% Extrapolation = -16.1% reduction vs block 4

Block 6 Average all wax tested block 4 = 39.9% Average all wet tested block 6 = 40.6% Extrapolation = + 0.7% vs block 4

Immersive wax (excluding Finish line halo Block 5 - use block 3 Block 6 - avg all tested = 37.4 - use this except for AB graphen wax - use block 4