

NEWS THIS MONTH

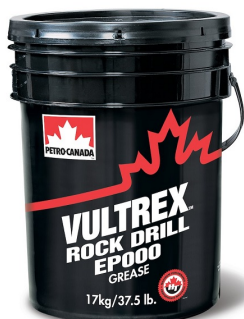
YOUR SOURCE FOR ALL THINGS ROCK-BREAKING



WINTER DRILLING WITH THE MDA

As much as we would all love to spend the winter on a warm sandy beach sipping exotic drinks and soaking up the sun, truth is a large portion of the time will be spent working in the cold of winter. We have sold a lot of MDA drills all over North America, with a large percentage here in Canada.

Currently in southern Ontario the weather has started to turn and the frost is making a regular occurrence. This is not only a sign of winter coming but also time to start making changes to your operating procedures with regard to operating your MDA pneumatic rock drill. As I hope all MDA operators know, rock drill lubrication is of the utmost importance. Keeping a film of cheap oil around all the wearable parts in the Joy AL67 rock drill is key to keeping the drill running happy. In all the commissions we have done over the years our motto to new drillers is always “more oil is better than no oil!”. The crucial specification for your oil is its temperature operating window, those with any experience see where this is headed. As the temperature drops the rock drill lubrication must get thinner to be able to maintain its ability to reach all those areas of the drill where metal meets metal. Here at Coogar Sales we stock a selection of rock drill



PROPERTY	TEST METHOD	ARDEE					
		32	46	68	100	150	220
Viscosity cSt @ 40°C/SUV @ 100°F cSt @ 100°C/SUV @ 210°F	D445	31.8/163 6.0/46	45/230 7.4/51	71.7/369 9.9/60	96.4/500 11.5/66	148.6/778 15.0/80	270/1089 19.0/97
Viscosity Index	D2270	137	129	119	107	101	103
Flash Point, °C / °F	D92	180/336	207/405	231/448	253/481	243/469	281/538
Pour Point, °C / °F	D5950	-48/-54	-42/-44	-42/-44	-33/-27	-30/-22	-24/-11
Total Acid Number (TAN)							
Steam Emulsion Number, sec	D1935*	1200+	1200+	1200+	1200+	1200+	1200+
Copper Corrosion, 3h@ 100°C	D130	1b	1b	1b	1b	1b	1b
Foam Characteristics, ml	D892						
Sequence 1		20/0	30/0	10/0	10/0	30/0	5/0
Sequence 2		20/0	20/0	35/0	20/0	50/0	15/0
Sequence 3		5/0	20/0	10/0	0/0	25/0	0/0
Rust Proc. A, 24 hrs	D665	Pass	Pass	Pass	Pass	Pass	Pass
Timken OK Load, kg / lb	D2782	20/9	30/14	30/14	30/14	30/14	30/14
Four-Ball Weld Load, kg	D2783	200	200	200	200	250	250
Four-Ball Wear, scar diam., mm	USS DM57	0.46	0.36	0.38	0.41	0.42	0.31
Falex EP, Proc A, lb, ft	D3233	7389/1660	-	7520/1690	7670/1725	7560/1700	7430/1670
Ramsbottom Carbon Residue, %	D524	0.26	0.32	0.31	0.41	0.46	0.34

The values quoted above are typical of normal production. They do not constitute a specification.

lubricants from Petro-Canada, Vultrex pourable grease to use in the sweltering heat of mid-August to ARDEE 100 when the mercury drops below -30 Celsius.

Making sure that you have the correct lubricant is pretty straight forward, as you can see on this chart (note the highlighted Pour Point). Even the highest viscosity rated ARDEE can work as low as -24 degrees celsius. The best performance however will never be achieved at either end of the spectrum.

The most crucial component to operating an MDA pneumatic rock drill is the pneumatic portion, Without air, an MDA drill isn't going to do much drilling. There is a crucial step to keeping your drill working all winter long, especially at the start and end of the winter season where daytime and nighttime temperatures can swing quite drastically. When you're drilling, the air compressor is going to be supplying hot air to your drill. During drilling and throughout the day this is perfectly fine, regardless of the outside temperature. Where this becomes an issue is once you have shut down for the day. The drill will be warm and the air inside the drill will contain a lot of moisture. This moisture if left unchecked will freeze up in the drill overnight and the next morning the drill just won't want to budge. Adding methyl hydrate to your air line at the compressor and then running it through the drill until you can smell it from the AL67 exhaust will eliminate this overnight freeze-up. Once the day and nighttime temperatures are stable this issue becomes much less of a problem, but still a good practice to keep everything working and dependable out in the field.

