

## **PETRO-CANADA LUBRICANTS** GUIDE TO GREASES

## **AN HF SINCLAIR BRAND**

															APPLICABLE INDUSTRY SEGMENTS									
		PETRO-CANADA LUBRICANTS GREASE PRODUCT	GREASE THICKENER	COLOR	NLGI GRADE	BASE OIL VISCOSITY (cSt)	4 BALL EP (KG)	WATER WASH OUT (%)	PERFORMANCE SPEC / OEM Approval	MIN. Ten °C/	/P.	MAX Tei °C,	MP.	FLEET	GEN. MAN.		FORESTRY		ی STEEL MILL			POWER GEN.	AUTOMOTIVE	
	Synthetic Lithium Complex	PRECISION Synthetic EP00	Lithium Complex		00	460	315	27.8		-40	-40	170	338	х	Х			X						Truck / tra
		PRECISION Synthetic			1	130	315	8.0	GC-LB	-40	-40	170		Х	Х	Х	Х	Х					Х	Centraliz
		PRECISION Synthetic 220			2	220	315	8.0	GC-LB	-35	-31	170	338	Х	Х	Х	Х	х					Х	Centraliz
		PRECISION Synthetic MOLY			1	130	400	9.8		-40	-40	170	338			Х	Х	Х					Х	Formulat
		PRECISION Synthetic Heavy 460 PRECISION Synthetic EMB			1.5	460 114	315	5.7		-30	-22	170	338	Y	X	Y	X		v	v	Y	v	v	Paper ma
	Multi- purpose Lithium and Lithium Complex	PRECISION Synthetic EMB PRECISION XL EP000			2	325	250			-40 -25	-40 -13	170 100	338 212	X	X	X	X	X	X	X	X	X	X	Electric m Low-spee
		PRECISION XL EP00	Lithium		00	117	250			-35	-31	100	212	Х		A	~	~			K			Centralize
		PRECISION XL EP1	Lithium Complex	•	1	220	315	1.3	GC-LB	-25	-13	160	320	x	х	х	х	x			х		х	Heavy-du Use EP1
		PRECISION XL EP2		٠	2	220	315	3.8	GC-LB	-20	-4	160	320	х	Х	х	х	х			х		х	Heavy-du Use EP1 t
	Lithium Moly	PRECISION XL 3 MOLY EP1			1	220	620	4.3	Bucyrus Int. SD 4711, 3% Moly	-25	-13	135	275			х	Х	х						
		PRECISION XL 3 MOLY EP2			2	460	500	3.0	Bucyrus Int. SD 4711, 3% Moly	-15	5	135	275			Х	Х	Х						Heavy-dı
		PRECISION XL 3 MOLY Arctic			1	38	315	12.5	3% Moly	-45	-49		275			Х	Х	х						
		PRECISION XL 5 MOLY EPO			0	133	500	6.4	Bucyrus Int. SD 4711, 5% Moly	-50	-58	120	248			Х	Х	X						Designed
		PRECISION XL 5 MOLY EP1 PRECISION XL 5 MOLY EP2			2	160 204	620 620	6.4 3.5	5% Moly 5% Moly	-30 -25	-22 -13	135 135	275 275		X	X	X	X						specificat
	Lithium General Purpose	PRECISION GP EP1	Lithium	•	1	160	250	6.0	370 WOIY	-30	-22	135	275	х	X	x	X	x						Centraliz
		PRECISION GP EP2		٠	2	160	250	2.8	LB	-25	-13	135	275	х	Х	х	х	х						Low to m
	Rail Curve Grease	PRECISION XL Rail Curve		•	1	24	400	2.8		-50	-58	120	248			х								Track-sid fish plate
		PEERLESS Poly EMB	Polyurea	٠	2	100			GE D6A2C23, ASTM D3336 >750 hrs	-25	-13	163	325	х	х	х	х	х	х	х	х	х	х	High-tem
M	Calcium Sulfonate Greases	PEERLESSLLG			2	100	500	1.5	GC-LB & HPM	-20	-4	200	392	Х	Х		Х		Х			Х	Х	High-tem
		PEERLESS OG0			0	38	315			-35	-31	163	325		Х		Х							Central Iu
ESS		PEERLESS OG1			1	53	400	2.8	GC-LB	-30	-22	163	325	Х	Х							Х	Х	Central Iu
		PEERLESS 0G2	Calcium Sulfonate		2	73	400	2.2	GC-LB	-25	-13	163	325		Х	Х	Х	Х				Х	Х	Wheel be farming e Wheel be
		PEERLESS OG2 Red PEERLESS OG Plus	Complex		2 2.5	73 78	500 500	2.8 0.1	GC-LB & HPM	-25 -20	-13 -4	163 163	325 325		Х	Х	X	X				Х	Х	farming e Wet beari
		PEERLESS SVG 102			1	80	620	1.5		-35	-31	163	325		х									Protectio
		PEERLESS 3 MOLY 322			2	320	620	1.0		-15	5	170	338			Х	Х	х						Off-highv
		PEERLESS XCG-FLEX			1	329	500	1.5	AGMA CG-1 & CG-2	-20	-4	163	325		Х	х		х						High-spe
	Multi- purpose Aluminum Complex	VULTREX MPG EP1	Aluminum	•	1	473	400	8.6	CAT SD4711, P&H 472	-25	-13	160	320	х	х	х	х	x	х		х			Off-highv Designed
		VULTREX MPG Synthetic Arctic	Aluminum Complex	٠	0	151	400	10.8	CAT SD4711, P&H 472	-40	-40		248			х	х	х			х			Cold wea logging e
		VULTREX G-124	_		2	220	315	3.5		-20	-4	160	320	Х		Х	Х	Х						Heavy-du
	Drilling	VULTREX Rock Drill EP000	Lithium	٠	000	129	200		Ingersoll-Rand, Joy and Parts Headquarters	-20	-4	100	212			х		х						Air-opera
		VULTREX Drill Rod Heavy	Barium Complex	•	3	163	315			-12	10	135	275							Х				Recomm
	Open Gear Lubricants	VULTREX Synthetic All Season 680	Aluminum	٠	0/00	814	800		CAT SD 4713, P&H 464 OGL, Komatsu Slew Ring Gear	-40	-40		77			х		х						All-seasc
		VULTREX Synthetic 2200	Complex	•	0	2181	800		CAT SD 4713, P&H 464 OGL Komatsu Slew Ring Gear	-15	5	40	104			х		Х						Moderate
		VULTREX Heavy 6200		•	0	6489	800		CAT SD 4713, P&H 464 OGL	-5	23	60	140			х		Х						Electric m
		VULTREX Gear Shield® NC		٠		4765	400		Foster Wheeler, Falk, Metso, FLS, Outotec							х		х	х		х			Open gea

## SUGGESTED APPLICATIONS

k / trailer wheel-end bearings, slow-speed leaky gearboxes

- ralized systems on HD mining equipment, high-performance wheel bearings, pumpjacks, low temp/viscosity
- ralized systems on HD mining and forestry equipment, high-performance wheel bearings, pumpjacks, higher temp/viscosity
- ulated for shock-loaded mobile equipment in mining, forestry and construction applications

r machine bearings, heavily loaded, slow-speed bearings

- ric motor bearings, high-speed antifriction bearings, fans, generators, non-EP product
- speed, leaky gearboxes, chain cases, bearings in centralized grease systems
- ralized, on-board, truck chassis lubrication systems, gear drive lubricant for high-visc., low-temp mobility
- ry-duty and general-purpose bearings, low and high speed, wheel bearings, chassis points, steering linkages.
- EP1 for centralized lubrication systems serving both heavy-duty and general-purpose bearings and for colder temperatures.
- y-duty and general-purpose bearings, low and high speed, wheel bearings, chassis points, steering linkages.
- P1 for centralized lubrication systems serving both heavy-duty and general-purpose bearings and for colder temperatures.

y-duty mining and construction applications including ball mills, conveyor and crusher bearings, off-highway operations

gned for protection against vibration and shock loading, suitable for the lubrication requirements of Caterpillar lubricant ffications for 5130 (7TJ & 5ZL), 5230 (7LL) mining excavators and 994 (9YF) wheel loaders

ralized greasing systems, heavily loaded conveyor bearings, mobile equipment, high-speed industrial bearings

to moderate speed bearings at moderate temperatures

t-side mechanical lubrication systems (Portec & Lincoln), on-board lubrication systems (Clicomatic), switches, switch plates, lates, joint bars, and other railway applications where graphite greases are recommended

-temp, long-life electric motor bearings, non-EP product, high-speed bearings

- -temp, long-life applications. Wheel bearings and automotive chassis, CV joints, ovens and kilns
- ral lubricating systems, low-temp applications, wet conditions
- ral lubricating systems, automotive chassis, low-temp applications, wet conditions
- el bearings, automotive chassis, forklift mast slides, power shovel bucket pins, mining scoop trams, rock crushers,
- ng equipment, pulp press roller bearings, wet conditions
- el bearings, automotive chassis, forklift mast slides, power shovel bucket pins, mining scoop trams, rock crushers,
- ing equipment, pulp press roller bearings, wet conditions
- pearings for paper mills, pulp press roller bearings

ection of valves against corrosion and deleterious effects of hydrogen sulfide, sour gas distribution, LPG and water injection systems nighway heavy-duty chassis, construction and mining equipment and industrial heavily loaded and low-speed industrial bearings -speed flexible couplings where severe centrifugal forces are generated, industrial couplings of the gear and flexible steel type

ighway vehicle chassis, wheel bearings. Ball mill conveyor and crusher bearings. Low speed gear couplings. Slab caster bearings. gned for pumpability and centralized lubrication systems

weather usage for forestry and logging shovels, draglines, excavators, blasthole drills and tracked equipment, forestry and ing equipment

y-duty truck components, wheel bearings, bushings, kingpins, chassis

perated rock drills and similar mining equipment

mmended for use on diamond drill rods to reduce friction between rods and rock strata

eason performance to lubricate gears, open gears, bearings, rollers and sliding surfaces on large mining shovels

erate-temperature performance to lubricate gears, open gears, bearings, rollers and sliding surfaces on large mining shovels

ric mining shovel hoist gear lubrication, high-temp lubrication for sliding surfaces on large mining shovels

gear applications, mill gears, ball mills, rod and sag mills, kilns, dryers