

SOUTH NICHOLSON BASIN

SOUTH NICHOLSON GROUP

Mittiebah Sandstone	Psi	Quartz sandstone, feldspathic sandstone, arkose
Mullera Formation	Psl	Micaceous siltstone, quartz sandstone, glauconitic sandstone, ferruginous sandstone and siltstone, ironstone
Constance Sandstone	Psa	Quartz sandstone
	Psa ₄	Medium quartz sandstone
	Psa _b	Siltstone, thin bedded and laminated micaceous; blocky white quartz sandstone interbeds
	Psa ₃	Quartz sandstone, reddish brown and white medium to coarse
	Psa _w	Fine sandstone and siltstone, purplish brown thin bedded and laminated, micaceous; quartz sandstone interbeds
	Psa ₂	Quartz sandstone, white, medium to coarse
	Psa _p	Micaceous siltstone, shale and fine sandstone, purplish brown and grey thin bedded and laminated
	Psa ₁	Sandstone, white medium to coarse; cobble conglomerate lenses

LAWN HILL PLATFORM

FICKLING GROUP

Doomadgee Formation	Pfd	Sandstone, grey and brown or reddish, fine to coarse; fissile shale and siltstone, dark grey, with flaggy claystone interbeds; dolomite, dolomitic sandstone and conglomerate
Mount Les Siltstone	Pfl	Dolomitic siltstone and shale; flaggy dolomite interbeds
Walford Dolomite	Pfw	Dolomite, blocky grey oolitic, stromatolitic and intraclastic; minor dolomitic sandstone and shale, often silicified at the top
Fish River Formation	Pff	Sandstone, fine to coarse, flaggy to massive; minor conglomerate and siltstone

TAWALLAH GROUP EQUIVALENT

Peters Creek Volcanics	Ptp	Alternating sequence of basalt, rhyolite and rhyodacite; some intermediate volcanics, possibly trachyte and andesite; minor tuff, shale, siltstone, sandstone, dolomite, and conglomerate
Wire Creek Sandstone	Pti	Coarse, gritty sandstone with scattered quartz pebbles; cobble and boulder conglomerate lenses

McARTHUR BASIN SEQUENCE

McARTHUR GROUP

Karns Dolomite	Pmk	Dolomite, algal dolomite, dolarenite; laminated, oolitic and algal chert; dolomitic siltstone and sandstone, silty and sandy dolomite, oolitic-chamosite dolomite
Masterton Sandstone	Pms	Sandstone, medium to coarse, pebbly in upper part; minor beds of clast-supported conglomerate; locally micaceous siltstone and breccia at the bottom

TAWALLAH GROUP

Pecksaddle Microgranite	Pgr	Microgranite, pink, porphyritic
Hobblechain Rhyolite	Pth	Rhyolite, reddish-brown, porphyritic
Gold Creek Volcanics	Ptg	Trachyte and latite flows, tuff, tuffaceous and lithic sandstone, siltstone
Wollogorang Formation	Pto ₂	Dolomitic and quartz sandstone, ferruginous in parts, feldspathic; dolomitic siltstone
	Pto ₁	Dolomitic siltstone; dolomite; stromatolitic dolomite; oolitic dolomite
Settlement Creek Volcanics	Pte	Quartz latite and quartz trachyte lava flows and sills; minor siltstone; volcanic breccia and conglomerate
Aquarium Formation	Ptq	Glauconitic sandstone, fine to medium; glauconitic and dolomitic siltstone; dolomitic siltstone; dolomite
Sly Creek Sandstone	Ptl	Lithic and quartz sandstone, fine to medium, flaggy, locally feldspathic, minor conglomerate
McDermott Formation	Ptd	Dolomite, laminated, stromatolitic, sandy, oolitic and intraclast-rich; dolarenite; quartz sandstone, fine to medium clayey; glauconitic sandstone; shale and siltstone
Seigal Volcanics	Pts	Vesicular and amygdaloidal basalt; massive non-vesicular basalt; thin siltstone, sandstone and tuff interbeds
Carolina Sandstone Member	Pts _c	Lithic sandstone and quartz sandstone, fine to medium, flaggy or massive; minor siltstone beds in north and conglomerate in south-west
	do	Dolerite dyke
Westmoreland Conglomerate	Ptw ₄	Matrix-supported cobble conglomerate overlain by conglomeratic, lithic and quartz sandstone, often ferruginous, pebble-free in upper part. Red, calcareous siltstone locally at the top
	Ptw ₃	Matrix-supported boulder and cobble conglomerate grading westward into lithic sandstone with thin pebble beds, feldspathic in central part
	Ptw _{2b}	Matrix- and clast-supported boulder and cobble conglomerate; interbeds of feldspathic sandstone; lithic sandstone at the top
	Ptw _{2a}	Lenses of mostly clast-supported pebble and cobble conglomerate overlain by lithic and quartz sandstone, ferruginous in parts
	Ptw ₁	Locally developed red micaceous siltstone, basal conglomerate and talus breccia overlain by lithic and quartz sandstone
	Ptw	Undivided Westmoreland Conglomerate

BASEMENT SEQUENCE

Nicholson Granite Complex	Pgn _b	Biotite ± muscovite granite and adamellite, medium to fine, equigranular
	Pgn _a	Hornblende-biotite adamellite and granodiorite, medium to coarse, inequigranular
Cliffdale Volcanics	Pcc _b	Billicumidji Rhyolite Member. Alkali rhyolite lava, red, flow-banded, with numerous ashfall tuff horizons
	Pcc _a	Rhyolitic and alkali rhyolitic ignimbrite; rhyolitic lava, ashfall tuff
Murphy Metamorphics	Plm ₂	Predominantly immature metasandstone, poorly sorted, fine- to coarse-grained
	Plm ₁	Predominantly metasilstone and shale, well sorted, often highly ferruginous Fish River area: quartz-albite-biotite-chlorite schist
	Plm	Nicholson River/Collins Creek area: undivided metasediments, commonly sheared and brecciated; quartz-mica schists