

Cameco Australia Pty. Ltd.

Manyalluluk Project EL9452 - Outcrop Sample Descriptions and Properties

Sample Number	Assay Code	Formation	Lithology	Outcrop Description	TC Gamma (cps)	Mag_Sus	Grain Size	Max Clast (mm)	Comments
ML050200	Assay	Peg	porphyritic granite	small rounded rubbly outcrops and cobbles	450	0.63	Very Coarse Sand: 1 - 2 mm		quartz and feldspar phenocrysts up to 7mm diameter
ML050201	Assay	Peg	weathered porphyritic granite	clay weathered granite within shallow linear trend within low mounds of granite outcrops, localised radiometrics along 065 trend that may in part be fracture related; or be related to increased weathering or reduction within low drainage channel	1900	0.31	Very Coarse Sand: 1 - 2 mm		shallow linear trend within low mounds of rounded granitic cobbles; radiometrics may be fracture related that is unobserved or may be a relation to a more reducing environment within a small drainage pathway
ML050202	Assay	Peg	porphyritic granite	rounded boulders of fresh unaltered granite with minor subrounded xenoliths of fine grained mafic rock	260	1.49	Very Coarse Sand: 1 - 2 mm		anomaly may be related to topographic high
ML050203	Assay	Peg	porphyritic granitic volcanoclastic	outcrops of unmapped Peg volcanoclastics within cobbly rubbly granite outcrop	180	0.57	Very Coarse Sand: 1 - 2 mm		volcanoclastics are mapped further to the north east of location, solid outcrops are not very extensive
ML050204	Assay	Peg	brecciated volcanoclastic	heavily fractured, weakly brecciated volcanoclastic forms most of the hill, outcrop has a white grey surficial colouration due to clay alteration associated with fracturing	400	0.22	Very Coarse Sand: 1 - 2 mm		volcanoclastics have a white to grey surface colouration
ML050205	Assay	Peg	altered porphyritic granite	hematite and white clay altered granite, minor quartz veining	7400	0.17	Very Coarse Sand: 1 - 2 mm		approximately 1m from sample ML040247C1. Granite surface is about 2-3m stratigraphically below that of the ferricrete cap some 20m away to the east
ML050206	Assay	Peg	altered porphyritic granite	rubbly weathered clay altered granite with increased radiometrics associated with fracturing	6400	0.11	Very Coarse Sand: 1 - 2 mm		along fracture trend from ML050801 (strike 41 deg)
ML050207	Assay	Peg	porphyritic granite	drusy quartz and hematite veining within white clay altered granite	380	0.08	Very Coarse Sand: 1 - 2 mm		along fracture trend from ML050801 and ML050206; sample locality is weakly radiometrically anomalous
ML050208	Assay	Peg	altered porphyritic granite	small outcrop of white clay altered granite very close to the northern extent of the granite before disappearing beneath ferricrete cap	330	0.14	Very Coarse Sand: 1 - 2 mm		further along general fracture trend from ML050801; fresh granite cobble and boulders approx 15m to SE from site.
ML050209	Assay	Phl	black ferruginous sandstone	Ferricrete capped hills, very dark hematite altered sandstone outcrop on slope of hill down to sandstone outcrop, sample may represent surficially altered sandstone	120	0.91	Medium Sand: 0.25 - 0.5 mm		ferricrete capping on hill, sandstone outcrops are located at the base of the hill; sandstone has been weathered in part with increased clays and hematite
ML050210	Assay	Phl	medium grained sandstone	minor ropey textured sandstone pillars, weakly fractured planar bedded sandstone, very friable	45	0	Medium Sand: 0.25 - 0.5 mm		
ML050211	Assay	Phl	fine to medium grained sandstone	planar bedded and rippled castellated sandstone outcrops defining steep wall of valley, weathered out joints and fractures	45	0.02	Fine Sand: 0.125 - 0.25 mm		
ML050212	Mapping	Phrg	ferricrete	small flat area at base of dipping sandstone bedding littered with ferricrete and ferruginous sandstone rubble	260				weathered volcanics and ferruginous sandstone debris associated with the Gilruth Volcanics
ML050213	Assay	Phl	medium to coarse grained sandstone	large castellated trough crossbedded blocks of sandstone resting on sandstone subcrop and sand	55	0.11	Coarse Sand: 0.5 - 1.0 mm		lower fluvial sequence of the Marigowa Sandstone
ML050214	Assay	Phr	fine grained sandstone	fine grained planar bedded sandstone, undulating upper surface of Phe immediately below the Gilruth Volcanic horizon	65	0.08	Fine Sand: 0.125 - 0.25 mm		
ML050215	Mapping	Phrg	ferricrete	ferricrete and ferruginous sandstone debris related to volcanics	150				Gummarimbang (Phr) to west and Marigowa (Phl) to the east
ML050216	Assay	Phl	fine to m gr brecciated sandstone	flat slabby brecciated and quartz veined sandstone outcrop within shallow gully	45	0.02	Medium Sand: 0.25 - 0.5 mm		quartz veining over 2m with localised quartz dissolution and brecciation within central portion, moderate alteration of brecciated sandstone clasts
ML050217	Mapping	Phn	black soils		120				weathered volcanic black soils
ML050218	Assay	Phn	amygdulic rich basic volcanic	low rubbly outcrop of reddish brown weathered amygdulic rich volcanics on small rise; amygdulic infilled with limonite, quartz or greenish chert material	155	1.4	Fine Sand: 0.125 - 0.25 mm		
ML050219	Mapping	Phn	ferricrete and weathered volcanics	ferricrete and small volcanic cobbles contained within shallow gully	100				
ML050220	Assay	Phe	fine grained sandstone	low rubbly rounded fine grained sandstone outcrops on edge of open scrubby plain and sand timbered flat	30	0	Fine Sand: 0.125 - 0.25 mm		outcrop marks the upper margin of Phe immediately below the volcanics
ML050221	Assay	Phn	massive basic volcanics	rounded cobbles and rubble of amygdulic rich volcanics and scattered broken quartz geoids and crystals	125	1.52	Fine Sand: 0.125 - 0.25 mm		
ML050222	Mapping	K	sandstone debris flow talis	large outcrops of amalgamated sandstone debris flow or talis resting on sandy areas amidst undisturbed sandstone	50				Kombolgie sandstone debris flow/talis deposit; sedimentary breccia; large jumbled subrounded blocks of Phr and smaller clasts of sandstone, cemented by fine grained quartz and silica; outcrops resting on Phl
ML050223	Assay	Phl	medium grained sandstone		55	0.05	Medium Sand: 0.25 - 0.5 mm		
ML050224	Assay	Phr	fine grained sandstone	slabby and rounded blocks and rubble of thinly bedded sandstone pebbles	45	0.02	Fine Sand: 0.125 - 0.25 mm		upper stratigraphic portion of Phr immediately below Gilruth Volcanics
ML050225	Mapping	K	sandstone debris flow talis	tall linear outcrops of amalgamated sandstone debris flow or talis deposit formed from subrounded sandstone blocks and cobbles					approximate location; long linear outcrop (<250m long) and up to 10m high; amalgamation of subrounded Kombolgie Sandstone (possibly Phr) blocks and clasts; outcrop observed from helicopter
ML050226	Assay	Phr	lithic coarse grained sandstone	sheared fracture zone on small flat outcrop with rounded cobbles and lithic sandstone	1450	0.4	Coarse Sand: 0.5 - 1.0 mm		fanglomerate capping ridge to east of site
ML050227	Assay	Phr	sandstone fanglomerate	low outcrop of fanglomerate with white clay and hematite layer between cobble of lithic hematitic sandstone	1450	0.25	Coarse Sand: 0.5 - 1.0 mm		small void infilled with light apple green mineral, possible U secondary mineral
ML050228	Mapping	Phr	sandstone fanglomerate	large outcrop up to 6m thick of clast supported fanglomerate capping small hill; rounded blocks up to 400m in diameter of hematitic lithic sandstone	160				
ML050229	Assay	Phr	sandstone fanglomerate	hematitic fanglomerate near intersection of two fracture sets; increased radioactivity associated with a slight increase in hematite alteration of cobbles and lithic sand matrix	1500	0.08	Coarse Sand: 0.5 - 1.0 mm		coating of green clay material possibly U secondaries on a fracture

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ML050230	Mapping	Phr	sandstone fanglomerate	low outcrop of rounded cobble fanglomerate unit	55				higher radioactivity associated with fracture set trending N-S
ML050231	Assay	Phn	cherty silica band in volcanics	shallow gully separating outcrops of fanglomerate and open area of black soils, littered with red cherty rocks crosscut by drusy quartz and quartz veining; minor ferricrete and broken quartz geoids scattered	95	0.31	Silt/Mud: < 0.063 mm		
ML050232	Assay	Phn	weathered amygdulic volcanic	shallow gully with weathered amygdulic rich volcanics within low eroded bank	250	0.34	Fine Sand: 0.125 - 0.25 mm		gully defines boundary between fanglomerate of Peh and open black soil volcanic plain
ML050233	Assay	Phr	medium grained sandstone	small knoll of planar bedded boulders and slabby sandstone outcrops	65	0	Medium Sand: 0.25 - 0.5 mm		Peh lithic sandstone 40m to west separated by open recessive black soil
ML050234	Assay	Phr	v coarse grained lithic sandstone	dark maroon lithic sandstone with small clasts of red hematite altered clay	130	0.2	Very Coarse Sand: 1 - 2 mm		contact between Peh and Phr some 40m to the SSE.
ML050235	Mapping	Phr	basal conglomerate beds	brown soils	130				boundary between maroon lithic sandstone and basal conglomerate of Phr.
ML050236	Assay	Peh	v coarse grained lithic sandstone	blocky and rounded outcrops of lithic sandstone, angular pebbles and liesegang banding throughout	120	0.2	Very Coarse Sand: 1 - 2 mm		
ML050237	Assay	Phn	weathered amygdulic volcanic	very weathered basic amygdulic rich volcanics, quartz veins and green chalcedonic quartz geoids	150	0.63	Medium Sand: 0.25 - 0.5 mm		Peh outcropping to west of gully, with steep linear ridge to east.
ML050238	Assay	Phr	sandstone fault breccia	angular sdst breccia clasts within silicified hematite breccia	35	0	Medium Sand: 0.25 - 0.5 mm		strike of fault breccia 200 deg. Volcanics exposed at base of ridge within gully.
ML050239	Assay	Phr	sandstone fault breccia	angular sdst breccia clasts within silicified hematite breccia	25	0	Medium Sand: 0.25 - 0.5 mm		along trend from ML050239
ML050240	Assay	Phr	medium grained sandstone	blocky sandstone outcrop, minor fracturing. Fault breccia 40m to E	35	0	Medium Sand: 0.25 - 0.5 mm		
ML050241	Assay	Phr	basal conglomerate beds	small outcropping cobble conglomerate amongst scree	75	0.02	Coarse Sand: 0.5 - 1.0 mm		conglomerate comprised of rounded to subrounded cobbles of vein quartz (<35mm) and Kombolgie sdst (<200mm)
ML050242	Assay	Phd	amygdulic basic volcanic	large boulders and rubbly cobbles of dark brown to black basic amygdulic rich volcanics	210	2.35	Medium Sand: 0.25 - 0.5 mm		
ML050243	Assay	Peg	porphyritic granite	rounded granite boulders and mounds of boulders	480	11.5	Very Coarse Sand: 1 - 2 mm		
ML050244	Assay	Peg	very coarse granite	small boulders and granite rubble	320	1.11	Very Coarse Sand: 1 - 2 mm		
ML050245	Assay	Peg	weathered v c gr granite	low rounded bouldery mounds of granite and rubble	320	0.74	Very Coarse Sand: 1 - 2 mm		
ML050246	Assay	Peg	weathered porphyritic granite	weakly fractured low granite outcrop	290	0.45	Coarse Sand: 0.5 - 1.0 mm		
ML050247	Assay	Peg	fractured granite	low rounded and fractured mounds of granite	320	0.8	Coarse Sand: 0.5 - 1.0 mm		
ML050251	Assay	Phe	medium grained sandstone	rugged sandstone ridges between linear gorges	40	0.05	Medium Sand: 0.25 - 0.5 mm		
ML050252	Assay	Phe	coarse grained sandstone		45	0.02	Coarse Sand: 0.5 - 1.0 mm		
ML050253	Assay	Phe	medium grained sandstone	slabby blocks and pancake outcrops of medium grained thinly bedded and minor planar crossbedded sandstone	50	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050254	Assay	Phe	med to coarse gr sandstone	planar bedded, medium to coarse grained sandstone bench on edge of gorge, thin quartz veining	40	0			
ML050255	Assay	Phe	med gr qtz brecciated sandstone	silicified rounded blocky medium grained sandstone outcrops; 5cm wide jigsaw quartz breccia	30	0	Medium Sand: 0.25 - 0.5 mm		
ML050256	Assay	Phe	fine gr silicified sandstone	fine grained planar bedded sandstone, minor quartz veins	30	0.02	Fine Sand: 0.125 - 0.25 mm		
ML050257	Assay	Phe	med to coarse gr silicified sdst	rounded and rubbly silicified medium to coarse grained sandstone with thin white quartz veins; planar cross beds	30	0	Medium Sand: 0.25 - 0.5 mm		
ML050258	Assay	Phe	fine gr sdst hematitic qtz breccia	very fractured and brittle hematite quartz breccia within sandstone; hematite alteration of breccia matrix with bleached white sandstone breccia clasts	30	0	Fine Sand: 0.125 - 0.25 mm		3m wide breccia zone
ML050259	Assay	Phe	fine grained sandstone	rippled and planar bedded benches and slabby outcrops of fine to medium grained sandstone	30	0.11	Fine Sand: 0.125 - 0.25 mm		
ML050260	Mapping	Phrg	pisoliths	pisoliths and minor ferruginous sandstone debris littering sandy terrace	120				pisoliths and minor ferruginous sandstone debris littering sandy terrace, surrounded by blocky Phl sandstone.
ML050261	Assay	Phr	fine grained sandstone	rounded and blocky silicified sandstone, brittle fractures, baked appearance	40	0	Fine Sand: 0.125 - 0.25 mm		
ML050262	Assay	Phe	fine to medium grained sandstone	low slabby rock benches and pavement of fine to medium grained rippled and planar bedded sandstone	40	0	Fine Sand: 0.125 - 0.25 mm		
ML050263	Assay	Phn	amygdulic rich volcanic quartz bx	small terraces of quartz flow top breccia volcanics and weathered rubbly amygdulic rich basic volcanics	180	2.84			volcanic amygdulic infilled with blue green cherty mineral (pinnite?)
ML050264	Assay	Phr	v crs gr conglomeratic sandstone		85	0.05	Very Coarse Sand: 1 - 2 mm		fluvial large trough cross bedded sandstones overlaying near shore facies fine grained large rippled and planar bedded sandstones that are laying on top of the Nungbalgarri Volcanics
ML050265	Assay	Phn	amygdulic rich volcanic		180	1.09			
ML050266	Assay	Czl	ferricrete		140	1.03			
ML050267	Assay	Czl	ferricrete		120	0.97			
ML050268	Mapping	K	sedimentary breccia / debris flow		40				amalgamation of angular to sub-rounded blocks of Kombolgie Sandstone held together by a fine silica cement
ML050269	Mapping	Czl	ferricrete		140				rubble of Cretaceous sandstone laying on the ground next to ferricrete
ML050270	Assay	Phl	fine grained sandstone		40	0	Fine Sand: 0.125 - 0.25 mm		
ML050271	Assay	Phl	medium grained sandstone		30	0	Medium Sand: 0.25 - 0.5 mm		
ML050272	Assay	Phl	coarse grained sandstone breccia		65	0	Coarse Sand: 0.5 - 1.0 mm		linear terrace between two small ridges of sandstone gives the impression of a more recessive sandstone unit; the breccia trends along this terrace
ML050273	Mapping	K	sedimentary breccia / debris flow		25				elongate outcrop of Kombolgie Sandstone debris flow or sedimentary breccia that has been resilicified by fine silica; outcrop is a bright white colour and is more prominent than the surrounding sandstone

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ML050274	Assay	Phl	fine grained sandstone		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050275	Mapping	Czl	ferricrete		120				hill of ferricrete partially overlaps sandstone ridges at trends 140 deg; possible replacement of sandstone? Hematised and limonitised sandstone ferricrete
ML050276	Assay	Phr	medium grained sandstone		35	0	Medium Sand: 0.25 - 0.5 mm		
ML050277	Assay	Phr	fine grained sandstone		40	0	Fine Sand: 0.125 - 0.25 mm		
ML050278	Mapping	Cz	black soil swamp		1050				seepage below breccia at ML050279; highest counts within buffalo wallow holes
ML050279	Assay	Phr	siliceous breccia		150	0	Very Fine Sand: 0.063 - 0.125 mm		fine grained siliceous breccia, sandstone unrecognisable
ML050280	Mapping	Pep	brown soil		130				brown soil derived from Pep volcanics
ML050281	Assay	K	v fine gr sandstone/siltstone		110	0.02	Very Fine Sand: 0.063 - 0.125 mm		
ML050282	Assay	Pep	porph ryholitic volcanoclastic		380	0.22			radiometrics are "average" for Pep; slightly clay weathered
ML050283	Assay	Phe	c gr sandstone		80	0	Coarse Sand: 0.5 - 1.0 mm		sandstone boulders resting on Pep hill; fallen blocks/remnant outcrops proximal to original unconformity elevation
ML050284	Assay	Pep	weathered rhyolitic volcanoclastic		310	0.02			low weathered outcrop with closely spaced fractures
ML050285	Assay	Peh	c gr lithic sandstone		200	0	Coarse Sand: 0.5 - 1.0 mm		large outcropping hill of Peh; outcrop is between hills of Pep and partially overlain by Pep; unconformity between Pep and underlying Peh
ML050286	Assay	Peh	c gr granulestone lithic		250	0.22	Very Coarse Sand: 1 - 2 mm		lithic sandstone comprised of quartz and volcanic clasts and feldspar
ML050287	Assay	Pep	rhyolitic volcanoclastic porphyritic		735	0.48			radiometric anomaly within saddle between two peaks on steep hill
ML050288	Assay	Phe	med gr sandstone		45	0	Medium Sand: 0.25 - 0.5 mm		
ML050289	Assay	Phe	med gr sandstone		50	0.05	Medium Sand: 0.25 - 0.5 mm		
ML050290	Assay	Phe	v c gr congl sandstone		75	0.05	Very Coarse Sand: 1 - 2 mm		strong pervasive white clays
ML050291	Assay	Phe	v c gr sandstone		65	0	Very Coarse Sand: 1 - 2 mm		
ML050292	Assay	Phe	c gr sandstone		35	0	Coarse Sand: 0.5 - 1.0 mm		
ML050293	Assay	Phe	c gr sandstone		40	0	Coarse Sand: 0.5 - 1.0 mm		
ML050294	Assay	Phe	v c gr sandstone		40	0	Very Coarse Sand: 1 - 2 mm		
ML050295	Assay	Phr	med gr sil sandstone		35	0	Medium Sand: 0.25 - 0.5 mm		
ML050296	Assay	Phd	ferricrete v-f gr volc rock-silt		160	1.75	Very Coarse Sand: 1 - 2 mm		
ML050297	Assay	Phd	c gr conglomeratic sandstone		85	0.08	Coarse Sand: 0.5 - 1.0 mm		
ML050298	Assay	Phd	weathered basic volcanics		240	2.26			
ML050299	Assay	Phd	v f gr sandstone, siltstone shales		160	0.22	Very Fine Sand: 0.063 - 0.125 mm		
ML050300	Assay	Phw	c gr sandstone		160	0.08	Coarse Sand: 0.5 - 1.0 mm		
ML050301	Assay	Pha	v c gr sandstone		120	0.08	Very Coarse Sand: 1 - 2 mm		conglomerate with cobbles of up to 200m comprised of quartzite, quartz, silicified sandstone, volcanics, siltstone and conglomeratic clasts
ML050302	Assay	Phd	f-med gr volcanic basic		130	0.97	Fine Sand: 0.125 - 0.25 mm		
ML050303	Assay	Phg	c gr-v c gr sandstone		60	0.02	Coarse Sand: 0.5 - 1.0 mm		
ML050304	Mapping	Czl	ferricrete		180				
ML050305	Assay	Phs	f gr sil sandstone		100	0.11	Fine Sand: 0.125 - 0.25 mm		
ML050306	Assay	Phr	f gr sil sandstone		45	0.02	Fine Sand: 0.125 - 0.25 mm		
ML050307	Assay	Phl	med gr sandstone		50	0	Medium Sand: 0.25 - 0.5 mm		
ML050308	Assay	Phl	med-c gr sandstone		45	0	Medium Sand: 0.25 - 0.5 mm		small ~2.5cm blotches and knobs on sandstone clasts
ML050310	Mapping	Czl	ferricrete		120				scattered ferricrete and pisolites littering brown soil floodplains
ML050311	Mapping	K	pisoliths on K sdst plat		160				
ML050312	Assay	Peg	peg granite		270	0.4	Coarse Sand: 0.5 - 1.0 mm		
ML050313	Assay	Peg	granite		730	11.7	Coarse Sand: 0.5 - 1.0 mm		
ML050314	Assay	Peg	banded qtz mafic greissen		390	0.54	Coarse Sand: 0.5 - 1.0 mm		Tin Prospect as marked on Minloc
ML050315	Assay	Peg	laterised mafic banded greissen		240	1.23			
ML050316	Assay	Peg	laterised greissen		240	2.18			Tin Prospect, gossanous green clay altered greissen.
ML050317	Assay	Peg	banded qtz mafic greissen		240	0.68			Tin Prospect, banded quartz-mafic (tourmaline?) greissen
ML050318	Assay	Peg	med gr granite		640	0.66	Medium Sand: 0.25 - 0.5 mm		
ML050319	Assay	Phe	f gr sandstone qtz bx		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050320	Assay	Phe	m gr sandstone		30	0	Medium Sand: 0.25 - 0.5 mm		
ML050321	Assay	Phe	f-m gr sandstone		30	0	Medium Sand: 0.25 - 0.5 mm		
ML050322	Assay	Phe	m gr sandstone		25	0	Medium Sand: 0.25 - 0.5 mm		
ML050323	Assay	Phl	med gr sdst bx		40	0	Medium Sand: 0.25 - 0.5 mm		
ML050324	Assay	Phl	sandstone fault bx		35	0			
ML050325	Mapping	Cz	black soil		1400				black soil, spring seepage from breccia zone, water flowing from breccia within black soils is up to 1400cps; radon spring
ML050326	Assay	Phl	m gr sandstone		55	0	Medium Sand: 0.25 - 0.5 mm		
ML050327	Assay	Phl	m-c gr sandstone		50	0	Medium Sand: 0.25 - 0.5 mm		
ML050328	Assay	Phl	b m breccia		40	0			
ML050329	Assay	Phl	c gr sandstone		35	0	Coarse Sand: 0.5 - 1.0 mm		
ML050330	Assay	Phl	m gr sandstone		45	0	Medium Sand: 0.25 - 0.5 mm		
ML050331	Assay	Phr	c gr sandstone		40	0.02	Coarse Sand: 0.5 - 1.0 mm		
ML050332	Assay	Phr	m gr sandstone		58	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050333	Assay	Phl	f gr sandstone		40	0	Fine Sand: 0.125 - 0.25 mm		
ML050334	Assay	Phl	f gr sandstone		25	0	Fine Sand: 0.125 - 0.25 mm		
ML050335	Assay	Phl	f-med gr sandstone		25	0	Fine Sand: 0.125 - 0.25 mm		

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ML050336	Assay	Phl	f gr sandstone		25	0	Fine Sand: 0.125 - 0.25 mm		
ML050337	Mapping	Cz	ferricrete		140				
ML050338	Assay	Phr	f gr sil sandstone		40	0	Fine Sand: 0.125 - 0.25 mm		
ML050339	Assay	Phr	med gr txbed sandstone		45	0	Medium Sand: 0.25 - 0.5 mm		
ML050340	Assay	Phe	med-c gr sandstone		25	0	Medium Sand: 0.25 - 0.5 mm		
ML050341	Mapping	Czl	ferricrete developed on phe sdst		120				
ML050342	Assay	Phe	med-c gr sandstone		25	0	Medium Sand: 0.25 - 0.5 mm		
ML050343	Assay	Peh	med gr lithic sandstone		140	0.17	Medium Sand: 0.25 - 0.5 mm		
ML050344	Assay	Peh	c gr lithic sandstone		130	0.14	Coarse Sand: 0.5 - 1.0 mm		
ML050345	Assay	Peh	qtz pebble conglomerate		350	0.25	Coarse Sand: 0.5 - 1.0 mm		
ML050346	Assay	Peh	c gr poorly sorted lithic sdst		100	0.22	Coarse Sand: 0.5 - 1.0 mm		
ML050347	Assay	Phe	c gr lithic sandstone		160	0.08	Coarse Sand: 0.5 - 1.0 mm		
ML050348	Assay	Phe	c gr lithic sandstone		120	0.08	Coarse Sand: 0.5 - 1.0 mm		
ML050349	Assay	Phl	c gr sandstone		45	0	Coarse Sand: 0.5 - 1.0 mm		
ML050350	Assay	Phr	c gr conglomeratic sandstone		65	0.02	Coarse Sand: 0.5 - 1.0 mm		
ML050351	Assay	Phr	med gr sil sandstone		47	0.34	Medium Sand: 0.25 - 0.5 mm		
ML050352	Assay	Phr	med gr sdst+pebble conglomerate		85	0	Medium Sand: 0.25 - 0.5 mm		interbedded boulder congl, med gr sdst and pebble congl. Boulder congl comprised of lithic sdst (Peh) vein qtz, and volc derived material. Pebble congl subrounded vein qtz, lithic sdst (Peh) qtz arenite, chert, volcanoclastic.
ML050353	Assay	Phl	f-med gr sandstone		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050354	Assay	Phl	sil bx-f gr sandstone		40	0	Fine Sand: 0.125 - 0.25 mm		
ML050355	Assay	Phl	f-med gr sandstone		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050356	Assay	Phl	med-c gr sandstone		40	0	Medium Sand: 0.25 - 0.5 mm		
ML050357	Assay	Phl	med-c gr sandstone		40	0	Medium Sand: 0.25 - 0.5 mm		
ML050358	Assay	Phl	c gr sandstone		40	0	Coarse Sand: 0.5 - 1.0 mm		
ML050359	Assay	Phl	c gr sandstone		35	0.05	Coarse Sand: 0.5 - 1.0 mm		
ML050360	Assay	Phl	c gr sandstone		35	0	Coarse Sand: 0.5 - 1.0 mm		
ML050361	Assay	Phr	f-med gr sandstone		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050362	Assay	Phr	f gr sil sandstone		30	0.02	Fine Sand: 0.125 - 0.25 mm		
ML050363	Assay	Phl	med gr sandstone		40	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050364	Assay	Phl	med-c gr sandstone		50	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050365	Assay	Phl	med gr sandstone		40	0	Medium Sand: 0.25 - 0.5 mm		
ML050366	Assay	Phl	med gr sandstone		35	0	Medium Sand: 0.25 - 0.5 mm		
ML050367	Assay	Phl	med-c gr sandstone		50	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050368	Assay	Phl	med gr sandstone		50	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050369	Assay	Phl	med-c gr sandstone		35	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050370	Assay	Phl	med-c gr sandstone		30	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050371	Assay	Pep	volcaniclastic		260	0.2			Copper (minloc) anomaly not identified: multiple quartz veins and shears, purple hematite altered volcanoclastics with white clay on fractures/veins
ML050372	Assay	Phr	c gr sandstone		45	0	Coarse Sand: 0.5 - 1.0 mm		hydraulic solution breccia; angular sdst clasts floating within hematitic sandy breccia matrix and chaotic drusy quartz veining
ML050373	Assay	Phn	amygduloidal volcanics		185	0.37			purple to mauve weathered amygdule rich basic volcanic, bleached flattened amygdules
ML050374	Assay	Phr	boulder conglomerate		145	0.17			2m thick conglomerate near base of Phr, overlying Phn, clast supported cong with imbrication
ML050375	Assay	Phl	c gr sandstone		35	0	Coarse Sand: 0.5 - 1.0 mm		
ML050376	Assay	Peg	qtz vein breccia		270	0.25	Coarse Sand: 0.5 - 1.0 mm		
ML050377	Mapping	Peg	granitic scree		860				rounded granitic blocks on side of small gully, radiometrically anomalous over small area
ML050378	Assay	Peg	bleached clay altered granite		280	0.11	Coarse Sand: 0.5 - 1.0 mm		
ML050379	Assay	Phe	c gr sandstone		100	0.08	Coarse Sand: 0.5 - 1.0 mm		
ML050380	Assay	Phe	c-v c gr poorly sorted sdst		100	0.05	Coarse Sand: 0.5 - 1.0 mm		
ML050381	Assay	Phe	sdst solution bx / fault		500	0.25	Medium Sand: 0.25 - 0.5 mm		chaotic quartz veining and solution breccias to east of station
ML050382	Mapping	Phe	sdst solution breccia		100				fault / solution breccia within sandstone with pebble conglomerate clasts
ML050383	Assay	Peh	conglomerate		240	0.22			angular unconformity of Peh with overlying Phe exposed 3m stratigraphically above station
ML050384	Assay	Peh	conglomeratic sandstone		65	0.05	Very Coarse Sand: 1 - 2 mm		
ML050385	Assay	Phl	m gr sandstone		35	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050386	Assay	Phe	f gr sandstone		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050387	Assay	Phe	f gr sandstone		40	0	Fine Sand: 0.125 - 0.25 mm		
ML050388	Assay	Phe	f gr sandstone		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050389	Assay	Phr	f-med gr sandstone		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050390	Assay	Phr	med gr sandstone		45	0	Medium Sand: 0.25 - 0.5 mm		
ML050391	Assay	Phr	f gr sandstone		40	0	Fine Sand: 0.125 - 0.25 mm		
ML050392	Assay	Phr	c gr sandstone		30	0.02	Coarse Sand: 0.5 - 1.0 mm		
ML050393	Assay	Phl	f gr sandstone		40	0	Fine Sand: 0.125 - 0.25 mm		
ML050394	Assay	Phr	f-med gr sandstone		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050395	Assay	Phl	c gr sandstone		40	0	Coarse Sand: 0.5 - 1.0 mm		

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Sample Number	Assay Code	Formation	Lithology	Outcrop Description	TC Gamma (cps)	Mag. Sus	Grain Size	Max Clast (mm)	Comments
ML050396	Assay	Phr	f gr sandstone		35	0	Fine Sand: 0.125 - 0.25 mm		
ML050397	Assay	Phe	c gr sandstone		30	0	Coarse Sand: 0.5 - 1.0 mm		
ML050398	Assay	Phe	c gr sandstone		80	0.05	Coarse Sand: 0.5 - 1.0 mm		
ML050399	Assay	Phe	cong sandstone v c gr sandstone		60	0.02	Medium Sand: 0.25 - 0.5 mm		
ML050400	Assay	Phe	c gr sandstone		50	0	Coarse Sand: 0.5 - 1.0 mm		
ML050401	Assay	Phe	f-med gr sil sandstone		60	0	Fine Sand: 0.125 - 0.25 mm		
ML050402	Assay	Phr	med gr sandstone		30	0	Medium Sand: 0.25 - 0.5 mm		
ML050403	Assay	Peh	c gr sandstone		70	0.08	Coarse Sand: 0.5 - 1.0 mm		
ML050800	Assay	Peg	Granite	small weathered granite outcrop on western side of drainage	6100	0.11			
ML050800	Assay	Peg	Granite	small weathered granite outcrop on western side of drainage	6100				
ML050801	Assay	Peg	Grante	small outcrop of clay altered granite on western side of drainage	2500				
ML050801	Assay	Peg	Grante	small outcrop of clay altered granite on western side of drainage	2500	0.25			
ML050802	Assay	Peg	Granite	Weathered granite on eastern side of drainage	2600	0.17			
ML050802	Assay	Peg	Granite	Weathered granite on eastern side of drainage	2600				
ML050803	Assay	Peg	Hematitic granite	scattered gravel and weathered granite	13000	1.29			Up to 9500cps at surface
ML050803	Assay	Peg	Hematitic granite	scattered gravel and weathered granite	13000				Up to 9500cps at surface
ML050804	Assay	Phr	Fine sandstone	rounded silicified boulders	90	0.02	Fine Sand: 0.125 - 0.25 mm	1	
ML050804	Assay	Phr	Fine sandstone	rounded silicified boulders	90		Fine Sand: 0.125 - 0.25 mm	1	
ML050805	Assay	Phn	Basalt	red black ferruginous basalt pavement	210				
ML050805	Assay	Phn	Basalt	red black ferruginous basalt pavement	210	1.63			
ML050806	Assay	Czl	Ferruginous gravel	Ferruginous gravelly chips adjacent to sandstone outcrop	400			50	
ML050806	Assay	Czl	Ferruginous gravel	Ferruginous gravelly chips adjacent to sandstone outcrop	400	0.51		50	
ML050807	Assay	Phe	Lithic sandstone	massive fractured purple sandstone	990	0.2			
ML050807	Assay	Phe	Lithic sandstone	massive fractured purple sandstone	990				
ML050808	Mapping	Phe	Contact between Peh and Phr						
ML050809	Assay	Phr	Conglomeratic sandstone	pebbly conglomeratic outcrop	90	0	Pebble: 4 - 64 mm	50	
ML050809	Assay	Phr	Conglomeratic sandstone	pebbly conglomeratic outcrop	90		Pebble: 4 - 64 mm	50	
ML050810	Assay	Phe	Lithic sandstone	fractured and weathered lithic sandstone	320	0.22	Coarse Sand: 0.5 - 1.0 mm	3	
ML050810	Assay	Phe	Lithic sandstone	fractured and weathered lithic sandstone	320		Coarse Sand: 0.5 - 1.0 mm	3	
ML050811	Assay	Phr	Conglomeratic sandstone	conglomeratic boulder	120		Cobble: > 64 mm	50	
ML050811	Assay	Phr	Conglomeratic sandstone	conglomeratic boulder	120	0	Cobble: > 64 mm	50	
ML050812	Assay	Peh	Conglomeratic lithic sandstone	hematitic leiseeg band pebble conglomerate	150	22	Pebble: 4 - 64 mm	60	
ML050812	Assay	Peh	Conglomeratic lithic sandstone	hematitic leiseeg band pebble conglomerate	150		Pebble: 4 - 64 mm	60	
ML050813	Assay	Phr	Medium sandstone	low bouldery outcrop	70	0	Medium Sand: 0.25 - 0.5 mm	2	
ML050813	Assay	Phr	Medium sandstone	low bouldery outcrop	70		Medium Sand: 0.25 - 0.5 mm	2	
ML050814	Assay	Phr	Lithic boulder tanglomerate	numerous large tanglomerate outcrops	200	0.05	Cobble: > 64 mm	500	
ML050814	Assay	Phr	Lithic boulder tanglomerate	numerous large tanglomerate outcrops	200		Cobble: > 64 mm	500	
ML050815	Assay	Phe	Coarse sandstone	Dirty coloured sandstone dipping to the north east	140	0.05			
ML050815	Assay	Phe	Coarse sandstone	Dirty coloured sandstone dipping to the north east	140	0.05			
ML050815	Assay	Phe	Coarse sandstone	Dirty coloured sandstone dipping to the north east	140		Coarse Sand: 0.5 - 1.0 mm	3	
ML050816	Assay	Peg	Granite	Fractured granite rock bar crossing creek bed	500	0.88			
ML050816	Assay	Peg	Granite	Fractured granite rock bar crossing creek bed	500				
ML050816	Assay	Peg	Granite	Fractured granite rock bar crossing creek bed	500	0.88			
ML050817	Assay	Peg	Granite	Low rubbly granite outcrop 150m south of sandy creek	500	1.23			
ML050817	Assay	Peg	Granite	Low rubbly granite outcrop 150m south of sandy creek	500				
ML050817	Assay	Peg	Granite	Low rubbly granite outcrop 150m south of sandy creek	500	1.23			
ML050818	Assay	Phe	Fine sandstone	Crossbedded sandstone, 5m above granite unconformity	130		Fine Sand: 0.125 - 0.25 mm	1	
ML050818	Assay	Phe	Fine sandstone	Crossbedded sandstone, 5m above granite unconformity	130	0			
ML050819	Assay	Phe	Fine sandstone	flat lying bench, 30m on southern side of lineament gully	70		Fine Sand: 0.125 - 0.25 mm	1	
ML050819	Assay	Phe	Fine sandstone	flat lying bench, 30m on southern side of lineament gully	70	0.08			
ML050820	Assay	Phe	Hematite quartz sandstone		45	0			
ML050820	Assay	Phe	Hematite quartz sandstone		45		Fine Sand: 0.125 - 0.25 mm	1	
ML050821	Assay	Phe	Hematite quartz breccia	breccia	45	0			
ML050821	Assay	Phe	Hematite quartz breccia	breccia	45		Fine Sand: 0.125 - 0.25 mm	1	
ML050822	Assay	Phl	Fine sandstone	Elevated silicified sandstone ridge, 50m south of lineament gully	45		Fine Sand: 0.125 - 0.25 mm	1	
ML050823	Assay	Phl	Fine ferruginous sandstone	Flat lying ferruginous massive outcrop	70		Fine Sand: 0.125 - 0.25 mm	1	
ML050824	Assay	Phl	Fine sandstone	3m high sandstone outcrop	90		Fine Sand: 0.125 - 0.25 mm	1	
ML050825	Assay	Phr	Fine sandstone	Massive fractured boulder outcrop on southern side of lineament gully	60		Fine Sand: 0.125 - 0.25 mm	1	
ML050826	Assay	Phl	Coarse sandstone	Large sandstone outcrop among flat sandstone pavements	60		Coarse Sand: 0.5 - 1.0 mm	2	
ML050827	Assay	Phl	Coarse-pebbly sandstone	boulder slope on southern edge of lineament	65		Pebble: 4 - 64 mm	40	
ML050828	Assay	Phl	Medium sandstone	Cross bedded sandstone ridge	65		Medium Sand: 0.25 - 0.5 mm	2	
ML050829	Assay	Phl	Fine sandstone	flat pavement on northern side of gully	55		Fine Sand: 0.125 - 0.25 mm	1	
ML050830	Assay	Phl	Fine sandstone	flat lying outcrop on southern side of lineament gully	60		Fine Sand: 0.125 - 0.25 mm	1	
ML050831	Assay	Phl	Fine sandstone	flat lying sandstone outcrop with crossbeds on north side of lineament gully	55		Fine Sand: 0.125 - 0.25 mm	1	
ML050832	Assay	Phl	Pebbly sandstone	large outcrop on boulder slope on southern side of lineament	80		Pebble: 4 - 64 mm	40	
ML050833	Assay	Phl	Coarse-pebbly sandstone	cross bedded sandstone on northern side of lineament, 15m from valley edge	70		Pebble: 4 - 64 mm	30	

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Sample Number	Assay Code	Formation	Lithology	Outcrop Description	TC Gamma (cps)	Mag_Sus	Grain Size	Max Clast (mm)	Comments
ML050834	Assay	Phl	Coarse-pebbly sandstone	cross bedded flat lying sandstone 10m from valley edge	60		Pebble: 4 - 64 mm	30	
ML050835	Assay	Phr	Fine sandstone	grey boulder outcrop	65		Fine Sand: 0.125 - 0.25 mm	1	
ML050836	Assay	Phr	Dirty sandstone	2m high fractured sandstone bench	90		Fine Sand: 0.125 - 0.25 mm	1	
ML050837	Assay	Phl	Fine sandstone	cross bedded boulders of collapsed sandstone	70		Fine Sand: 0.125 - 0.25 mm	1	
ML050838	Assay	Pep	Volcanoclastic breccia	boulder outcrop on hill side	220				Copper Prospect?
ML050839	Assay	Phr	Hematitic Qtz pebble-cobble conglom	boulder of hematite qtz pebble conglomerate	120		Pebble: 4 - 64 mm	60	
ML050840	Assay	Phl	Fine grained sandstone	sandstone outcrop with ripple and cross beds	70		Fine Sand: 0.125 - 0.25 mm	1	
ML050841	Assay	Peg	Granite	Anomaly in soil adjacent to weathered granite outcrop	3500				
ML050842	Assay	Peg	Granite	weathered granite outcrop 25m west of hotspot ML050803	850				
ML050843	Assay	Peg	Granite	weathered granite 40m east of hotspot ML050803	550				
ML050844	Assay	Peg	Massive specular hematite	massive specular hematite rocks	9000				
ML050845	Assay	Peg	Granite	weathered granite outcrop 3m from hotspot ML050803	6700				
ML050846	Assay	Phe	Coarse-pebbly sandstone	large boulder outcrop on hill slope	220		Pebble: 4 - 64 mm	30	
ML050847	Assay	Phe	Hematitic boulder conglomerate	hematitic boulder conglomerate	120		Cobble: > 64 mm	400	
ML050848	Assay	K	Weathered volcanic	weathered scattered boulders and rocks, iron rich coating	120				
				unconformity surface between Hindrance Creek and Kombolgie (Gumarrinbang?)					
ML050849	Assay	Phe	Hematitic pebble-cobble conglomerat	(Gumarrinbang?)	220		Pebble: 4 - 64 mm	20	Unconformity between Hindrance Creek/Kombolgie Subgroup