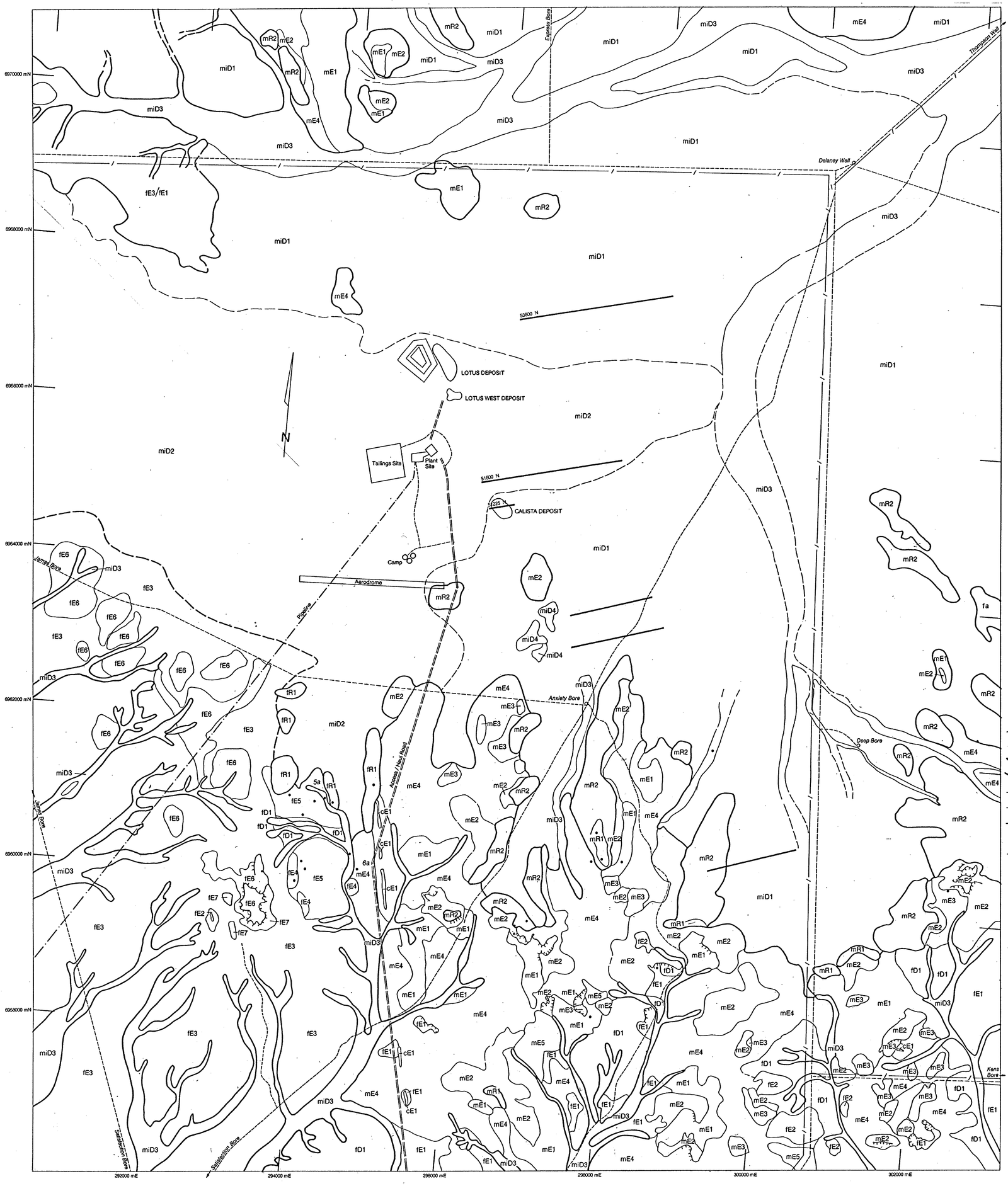
SURFACE DISTRIBUTION OF REGOLITH – LANDFORM UNITS

MT McCLURE



REFERENCE

RESIDUAL REGIME

Regolith developed from MAFIC BEDROCK
- mR1 — Black, magnetic, hematite-goethite-Maghemite rich, pisolitic and nodular iron rich duricrust, crests.
- mR2 — Reddish brown, kaolinite-goethite-hematite rich, loose lateritic pisoliths and nodules and nodular duricrust, blackslopes.

Regolith developed from FELSIC BEDROCK (Felsic volcanics)
- fR1 — Yellowish brown, kaolinite-goethite-hematite rich loose nodules on nodular duricrust, ridges.

EROSIONAL REGIME

Regolith developed from MAFIC BEDROCK
- mE1 — Black, massive, non-magnetic, goethite (lesser hematite) rich iron segregations: silicified saprolite, patches of hardpanized saprolite low hills and undulating tracts.
- mE2 — Light yellow-brown, non-magnetic, kaolinite-goethite rich ferruginous saprolite, breakaways, pediment slopes and bluffs bounded by breakaway.
- mE3 — Black, non-magnetic, hematite rich (lesser goethite) iron segregations, low hills and steep valleys.
- mE4 — Quartz and black, hematite rich (lesser goethite) iron segregations, low hills and undulating tracts.
- mE5 — Mafic (metamorphosed basalt, amphibolite) outcrop, rounded hills.

Regolith developed from FELSIC BEDROCK
- fE1 — Quartz sand on pale white saprolite, erosional plains.
- fE2 — Coarse blocky quartz lag surrounding quartz veins, ridges.
- fE3 — Quartz lag and micaceous quartz sand on gneiss, gentle slopes.
- fE4 — Ferruginous saprolite ridges developed from felsic volcanic rocks.
- fE5 — Iron segregations, quartz, silicified saprolite and patches of hardpanized saprolite developed from felsic volcanics, moderately steep slopes.
- fE6 — Gneiss saprock, low hills.
- fE7 — Gneiss outcrop, low hills.

CHERT
- cE1 — Chert ridges and surrounding lag of chert fragments.

DEPOSITIONAL REGIME

Colluvium-alluvium on MIXED LITHOLOGIES (Granites, Gneiss, basalt, ultramafics).
- miD1 — Mixed fine lag of quartz, lateritic pisoliths and nodules (without cutans), and red clayey sand. Lateritic residuum beneath 20m of hardpanized colluvium and alluvium.
- miD2 — Mixed fine gravelly lag of quartz, lateritic pisoliths and nodules (without cutans) and red clayey sand. Lateritic residuum is truncated, saprolite clays beneath 20-30m of hardpanized colluvium and alluvium and palaeochannel clays.
- miD3 — Lag of iron segregations, quartz, lateritic gravels (with and without cutans) and red clayey sand in minor and major tributaries.
- miD4 — Iron segregations, quartz and red clayey sand containing gypsum in local drainage sumps.

Colluvium on FELSIC BEDROCK
- fD1 — Iron segregations and quartz on red clayey sand (from upland mafic regions).

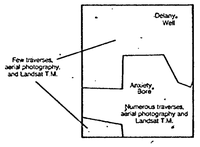
SYMBOLS

- Mapping unit boundaries
- Inferred mapping unit boundaries
- Transition between residual, erosional and depositional regimes (i.e. contacts between units from different regimes)
- Inferred transitions between residual, erosional and depositional regimes
- Fence line
- Roads and station tracks
- Water pipeline
- Station well
- Breakaway
- Sample and/or photograph locality
- R.A.B. line used for stratigraphic purposes

mi = mixed lithologies
m = mafic bedrock
f = felsic bedrock
c = chert
R = residual regime
E = erosional regime
D = depositional regime

LOCALITY MAP

RELIABILITY DIAGRAM



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SCALE: 1:25000

PLATE ONE

SURFACE DISTRIBUTION OF REGOLITH – LANDFORM UNITS FOR THE MT McCLURE DISTRICT