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PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER

ANOMALIES.

by



N.H. FISHER & J. SLEIS.

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PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: First

Co-ordinate position on photomap: Marrakai 103652

Corrected co-ordinate position:

Photo Nos.: Marrakai Survey, Run #1, photos 5018 and 5017.

Access: Not difficult. Turn west at 40 mile peg on Stuart Highway, go about 2.7 miles along good track, then due south about 1.3 miles through bush. Bogs will be encountered during the worst of the wet season. A good road on high ground could be built without difficulty to the south of the present track.

Topography: The anomaly is located on a rough hill which, nevertheless, can be traversed by an auto--Rover. To the south are very steep, rough ridges impassable to motor vehicles. To the north are low rounded hills and flats with rather heavy brush cover but easily traversed.

Geology: The anomaly is in the Brock's Creek Group of slates and quartzites which are nearly vertical at this point. To the west they are east-west striking, vertical, and otherwise little disturbed. To the east, however, they have apparently undergone considerable folding and faulting and are difficult to trace.

The radioactivity appears to be in hematized slates which are partially silicified and contain thin quartz stringers along the bedding. There are no visible uranium, copper, or other significant minerals.

Radio-activity: The 4 times background area is about 600' long and of variable, rather narrow width. Small areas of 9 to 10 times background were found along the strike. Radioactivity could not be pinned down to any particular bed or rock type. Its nature is obscured by the coarse rock rubble on the surface.

Probable cause of anomaly: It seems most likely that the radiation is emanating from the hematized slates. There are no visible uranium minerals.

Further work recommended: This deposit is apparently of the same type as the Brodribb deposit and is nearly as good though the anomaly is not as extensive. A radiometric survey is warranted and possibly one costean. Should any drilling or development work be done on the Brodribb deposit, this deposit should then be re-evaluated in the light of information gained there.

Examined by: Frank J. Frankovich

Date: Dec. 30, 1952.

Mt Tolman

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomalies: (i) First (ii) to (v) Second ✓

Co-ordinate positions on photomap & photos: (i) 960198 (ii) 951199
(iii) 936209 (iv) 928210 (v) 920205 ✓

Corrected co-ordinate positions:

Photo Nos. L 5216-5219 Run 22 Pine Creek Survey 1375 15 June, 1952.

Access: In a west north-westerly direction through bush from a pronounced bend in the Stapleton-Daly R. Road, about 4 miles west of Stapleton homestead.

Topography: Generally flat to north-east, low stony ridges to south-west of granite contact.

Geology: (i) to (iv) lie along and (v) about $\frac{1}{2}$ mile south-east of the contact of granite and sediments of the Brocks Creek Group. Quartz reefs striking north-east cut the contact in several places. Sediments consist of quartzites, quartz breccias etc. and strike more or less parallel to the granite contact.

Radio-activity: Granite gives counts up to 200 per minute, sediments usually less than 100, quartz about 80.

Probable cause of anomalies: High radio-activity of granite. Anomalies caused by plane crossing contact.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis ✓

Date: 6 November, 1952.

Mt Tolmer (with area)
PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomalies: (i) to (iv) Second; (v) & (vi) Third

Co-ordinate positions on photomap & photos: (i) 915229 (ii) 911240 *not shown on aerial edition*
(iii) 915250 (iv) 917251 (v) 920245 *9671-92*
(vi) 925252 *3*

Corrected co-ordinate positions:

Photo Nos.: (i), (ii) & (vi) 5161, 5162 Run 20 Pine Creek, Survey 1375
15th June, 1952.
(iii), (iv), and (v) 5152-5154 Run 19 Pine Creek Survey 1375
15th June, 1952.

Access: Generally north-west then north for about 3 miles along flats of west branch of Sth. Finniss River from crossing about $7\frac{1}{2}$ miles west of Stapleton Homestead on the Stapleton Mt. Tolmer Road.

Topography: Fairly rugged stony hills along granite contact-relief up to 100 feet. East of contact granite surface is fairly flat with some hummocky granite and upstanding reef outcrops.

Geology: (i) & (ii) lie on contact between fine grained ^{granite} and quartzite, granitized grits etc. A prominently outcropping reef formation containing some quartz and hematite runs east-north-east into the granite from the contact for more than a mile.
(v) and (vi) lie on either side of this reef and (ii) very close to where it runs into the contact.
(iii) and (iv) are out in the granite to the north of it.

Radio-activity: Granite generally gives high counts up to 180 per minute. The reef formation gives counts up to 140 per minute. Sediments generally about 80.

Probable cause of anomalies: Most of the anomalies are probably due to the contrast in radioactivity on either side of the granite contact, particularly as this forms a prominent ridge, or to outcropping patches of granite. However the reef formation gives higher than background count and crops out strongly so it may have contributed.

Further work recommended: Radiometric traverse along reef formation.

Examined by: N.H. Fisher and J. Sleis.

Date: 6 November, 1952.

Tolmer
PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomalies: Second

Co-ordinate positions on photomap & photos: (i) 931285, (ii) 932277
(iii) 932273 (iv) 929264 (v) 946264 (vi) 946261, 2
(vii) 957273 (viii) 957253. *not marked*

Corrected co-ordinate positions: *13* *14*

Photo Nos.: (iii) to (viii) 5151, 5152, Run 19, Pine Creek Survey 1375
15 June 1952. " " " "
(i) & (ii) 5111, 5112, Run 18

Access: The area was actually examined by following the west branch of the Finnis River upstream from the point where it crosses a road which leads west from Batchelor Siding. Better access would be by following the same stream down from where it crosses the Stapleton-Mt. Tolmer road.

Topography: Generally flat or gently undulating with some low granite outcrops and one prominent reef formation.

Geology: The area in which these anomalies occur consists mainly of granite, fine-grained and slightly gneissic. A thin cover of laterite lies on the granite in places. Near (iii) is outcrop of a gneissic rock which appears to be a strongly schisted diorite. Immediately south of this is a prominent vertically-dipping reef formation which can be traced for $1\frac{1}{4}$ miles in an east-north-easterly direction. This reef consists mainly of quartz showing extremely well developed crustiform banding, spherulites etc.

Radio-activity: Laterite and granite both give 120 to 140 counts per minute. Diorite about 80, Quartz reef intermediate values.

Probable cause of anomalies: Outcrops of bare granite.

Further work recommended: When radiometric traverse is run along reef formation near points 920245 and 925242, 2 miles to the south-west, a similar traverse should be run along this reef in this area.

Examined by: N.H. Fisher and J. Sleis

Date: 5th November, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: First

Co-ordinate position on photomap & photos: 043322

Corrected co-ordinate position: 043327 ✓

Photo Nos.: Pine Creek Survey 1375
Run 16, Photos 5060-5061

Access: Good road south from Batchelor through Gould airstrip.

Topography: Fairly low lying undulating country rising to east.

Geology: Laterite overlying slates with quartz veins in vicinity of anomaly. Slates and quartz veins outcrop a short distance to east.

Radio-activity: No definite recognisable point but 125 counts per minute found over fairly wide area in vicinity anomaly. Slates generally give about 50 counts per minute.

Probable cause of anomaly: Mass effect of local area of high radioactivity.

Further work recommended: Needs further examination but prospects not very encouraging.

Examined by: R.S. Matheson and D. Dyson. ✓

Date: 3/11/52

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: First

Co-ordinate position on photomap & photos: 082336

Corrected co-ordinate position: 082342 31 2

Photo Nos.: Pine Creek Survey 1375
Run 15, Photos 5025-5026

Access: Difficult. Cross country off old track S.E. from
Gould airstrip to vicinity Predictor Hill on Stuart
Highway.

Topography: Rugged, sharp ridges and steep gullies.

Geology: Slates and quartzites of Brock's Creek Group.
Hematized laterized cappings on some hills. Quartz
veins present. Area favourable for prospecting.

Radio-activity: Not found.

Probable cause of anomaly: Anomaly not located but further search
is needed - probably on some sheer as anomaly
at 073312.

Further work recommended: Further work warranted for this anomaly
and also for anomalies at 084329, 085346,
084349, 083354 and 081358.

Examined by: R.S. Matheson

Date: 3/11/52.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: Second

Co-ordinate position on photomap & photos: 075310

Corrected co-ordinate position: 076315 ✓

Photo Nos.: Pine Creek Survey 1375
Run 16, Photos 5062-5063

Access: Off old track S.E. from Gould airstrip to vicinity
Predictor Hill on Stuart Highway.

Topography: Rugged country, sharp ridges and steep gullies.

Geology: Zone in slates striking 340° and dipping 60° N.E.
Radioactivity up to 9 x B.G. over width of 40 ft. and
length 50 ft - complete testing of radioactive zone
not yet done. Radioactive zone bounded on east by
hematitic quartz and silicified material some of which
contains pyrite. Specs. 4117, 4118, 4119 for assay
and mineralogical work. 4118 assayed 0.034 equivalent U3O8.

Radio-activity: Readings up to 350 counts per minute in slate
area which in general gives 50 counts per minute.

Probable cause of anomaly: Possible shear with radioactive minerals.

Further work recommended: Further investigations warranted and
there is a possible connection to north with
other anomalies.

Examined by: R.S. Matheson and D. Dyson.

Date: 3/11/52.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: First

Co-ordinate position on photomap & photos: 958327

Corrected co-ordinate position: 960330 2 32.

Photo Nos.: 5054, 5055 Run 16 Pine Creek Survey 1375 15 June, 1952.
5034, 5035 " 15 " " " " " " "

Access: West along creek flats from north south road near north end of Gould airstrip, or along road west from Batchelor to South Finnis river, then southwards on west side of river.

Topography: Flat or gently undulating, becoming more uneven to west.

Geology: Outcrops are few and consist mostly of granophyric rock in which feldspars have been connected to kaolin. At one place a gneissic rock-banded hematite quartzite - is exposed. Granite outcrops on the South Finnis River 1 mile to north-east and $\frac{1}{2}$ mile east of river is contact of granite and sediments.

Radio-activity: Hurried investigation showed counts about 100 per minute around plotted point, up to 160 per minute or exposed granite to east.

Probable cause of anomaly: Granite

Further work recommended: Radiometric traverses to determine if local high areas can be found.

Examined by: N.H. Fisher and J. Sleis

Date: 2 November, 1952.

Tolman

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: First

Co-ordinate position on photomap & photos: 970303 ✓

Corrected co-ordinate position:

Photo Nos: 5093, 5094, Run 17, Pine Creek, Survey 1375, 15 June, 1952.

Access: Westerly through bush from North-south road along railway line at point 5.7 miles south of Batchelor siding to South Finniss river, then in a north by north-westerly direction.

Topography: Generally flat, few outcrops.

Geology: Anomaly is situated on outcrop of granite which contains partly digested blocks of metamorphic rocks, striking 10 degrees and dipping vertically.

Radio-activity: Granite outcrop gives count of 180 per minute.

Probable cause of anomaly: Granite outcrop.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 2 November, 1952.

✓

*100 ft former
Batchelor 10 mile area - used hundred 4 7-7 clor*

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomalies: (i) First (ii), (iii), & (iv) Second

Co-ordinate positions on photomap & photos: (i) 978273 (ii) 979269
(iii) 968272 (iv) 979280

Corrected co-ordinate positions:

Photo Nos. 5113, 5114, 5115, Run 18, Pine Creek Survey 1375 15 June 1952.

Access: Westward through scrub from road along railway at point 5.7 miles south of Batchelor siding. Terrain is flat and going through bush fairly easy.

Topography: Flat. Finniss River is only a small stream here but banks are steep and it is not easy to cross in a vehicle, although at time of examination it consisted only of disconnected pools.

Geology: Points (i) and (ii) are on alluvium of river flats. (iii) is on laterite and (iv) on fairly fine-grained biotite granite. Sugary coarse quartzite outcrops a few hundred feet north-west of (iv). South and east is all granite.

Radio-activity: On laterite 100 to 120 counts per minute, rising in places to 140. Quartzite gives 90 to 100 counts per minute and granite at (iv) 160 counts per minute. East of Finniss river count on granite is mostly about 120 per minute.

Probable cause of anomalies: Higher radioactivity of granite compared to other rocks.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 2 November, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomalies: Second

Co-ordinate positions on photomap & photos: (i) 972284 (ii) 972287

Corrected co-ordinate position:

Photo Nos.: 5113, 5114, Run 18, Pine Creek, Survey 1375 15 June, 1952.

Access: West through bush from road along railway line at point
5.7 miles south of Batchelor siding.

Topography: Flat

Geology: Area is generally covered by thin lateritic layer.
Coarse sugary quartzite outcrops to south-west and
granite north, south and west.

Radio-activity: Quartzite 90 to 100, laterite 100 to 140 counts
per minute.

Probable cause of anomaly: Granite with thin laterite cover.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis.

Date: 2 November, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Chief Geologist

Order of anomaly: (i) & (ii) Second (iii) & (iv) Third

Co-ordinate position on photomap & photos: (i) 995346 (ii) 995339
(iii) 993335 (iv) 997330 (v) 993325 (vi) 000324

Corrected co-ordinate position: (i) 995351 (ii) 995343 (iii) 994339
(iv) 997334 (v) 993328 (vi) 000328 (vii) 998324?

Photo Nos.: 5031, 5032, Run 15, Pine Creek Survey 1375 15 June 1952.

Access: Westerly through bush from road along railway line near north end Gould airstrip.

Topography: Fairly rugged north-south line of hills rising up to 100 feet or more above general level.

Geology: Steeply dipping quartzites, granitized grits and sheared hematitic pebble beds striking north-south along prominent ridge. Gravel $\frac{1}{2}$ mile to east.

Radio-activity: Not taken but hematitic pebble beds elsewhere give counts of 100 per minute.

Probable cause of anomaly: Prominent ridge.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis.

Date: 2 November, 1952.

Estimated
order may have been changed
PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: (i) (ii) & (iii) First, (iv) Second

Co-ordinate positions on photomap & photos: (i) 025302 (ii) 025298
(iii) 021289 (iv) 027290
not marked on map
6 7

Corrected co-ordinate position:

Photo Nos.: 5090, 5091, Run 17 Pine Creek Survey 1375, 15 June, 1952.

Access: From Road along railway line at point where road from south end of Gould airstrip meets it.

Topography: Flat or very nearly so.

Geology: Most of surface is covered with laterite. Midway between (ii) and (iv) and between (ii) & (iv) are silicified outcrops striking about 80°, and near (i) is similar outcrop striking 300 degrees. In railway cutting east of (iv) is well-bedded shale striking north-north-east and dipping regularly east-south-east at 20 to 30 degrees. Similar shale outcrops between the line and (iv).

Radio-activity: Quartz outcrops 70 counts per minute, shale in cutting 80-100 and west of line 100 to 120 counts per minute. Areas covered by laterite give generally 80 to 100 counts per minute.

Probable cause of anomaly: Higher radio-activity of shale beds?

Further work recommended: Detailed radiometric traversing of area.

Examined by: N.H. Fisher and J. Sleis.

Date: 31 October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: (i) First, (ii) Second (iii) Second (iv) Third

Co-ordinate position on photomap & photos: (i) 957413 (ii) 946417
(iii) 949407 (iv) 951404

Corrected co-ordinate position: (i) 958418²³ (ii) 948422²⁴ (iii) 951412²⁵
(iv) 953409²⁶

Photo Nos.: 5178, 5179 Run 11 Darwin-Pine Creek Survey 1177 14 June 1951
5625, 5026 Run 12 Darwin-Pine Creek Survey 1176 14 June 1951

Access: Westerly through bush from Rum Jungle siding. Terrain is flat and going reasonably good for vehicle.

Topography: Generally flat surface elevated only a few feet above the flat dry watercourses. Surface around (i) is at higher level than average. $\frac{1}{4}$ mile south of (iv) is prominent east-west ridge about $\frac{1}{2}$ mile long.

Geology: Slate, schist, quartzite and limestone, nearly everywhere silicified on surface, covered in places by thin laterite cover. The area is one of structural disturbance and strike ranges from northeast to northwest. $\frac{1}{4}$ mile south of iv is prominent east-west strike ridge consisting of hematitic bed which was probably originally a lenticular sandstone with bands of conglomerate. This bed dips north at 56 degrees. Throughout area in which these anomalies occur there are numerous silicified cherty outcrops, most of which probably represent surface silicification of limestone during lateritization. Crystalline limestone was found at one point on surface.

Radio-activity: Soft schist in billabong $\frac{1}{4}$ mile north of (ii) gives 100 counts per minute and immediately to south-east of billabong up to 120 counts per minute. Silicified outcrops generally give 80 counts per minute, slate and the prominent bed 100 counts per minute. In an area 1000 feet east of (i) counts up to 250 per minute were obtained, laterite /on a "shelf" around a quartzitic outcrop.

Probable cause of anomaly: High counts recorded east of (i) would probably give a first order anomaly. Other anomalies may be due to the high ridge, or differences in radioactivity between rock formations, or unlocated areas with similar radioactivity to that east of (i).

Further work recommended: Systematic radiometric examination and plane-table mapping of geology.

Examined by: N.H. Fisher and J. Sleis.

Date: 31 October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: Second

Co-ordinate position on photomap & photos: 020363

Corrected co-ordinate position: 021367 ✓
17

Photo Nos.: 5193, 5196, Run 14 Pine Creek Survey 1374, 15 June, 1952.

Access: Tracks west from Batchelor siding

Topography: Low laterite ridge with several quarries.

Geology: Thick development of laterite. Only parent rock showing is one exposure in quarry west of plotted point of hematitic shale.

Radio-activity: Near plotted position of point laterite gives 80 counts per minute. In quarry to west readings are 120 to 140 per minute.

Probable cause of anomaly: High readings over exposed laterite in quarries.

Further work recommended: Detailed radiometric traversing of area covered by quarries.

Examined by: N.H. Fisher and J. Sleis

Date: 31 October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: (i) Second (ii) Third

Co-ordinate position on photomap & Photos: (i) 005363, (ii) 008360

Corrected co-ordinate position: (i) 006366 ✓ (ii) 009364 ✓

Photo Nos.: 5192, 5193, Run 14, Pine Creek Survey 1374 15 June 1952.

Access: Northwesterly through bush from road leading southwest
and west from Batchelor siding.

Topography: Flat

Geology: Alluvium and laterite

Radio-activity: About 70 counts per minute

Probable cause of anomaly: Possibly due to higher readings obtained
 $\frac{1}{2}$ mile east along silicified limestone(?) breccia
bed.

Further work recommended: None at plotted position.

Examined by: N.H. Fisher and J. Sleis

Date: 31 October, 1952. ✓

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: First

Co-ordinate position on photomap & photos: 060490

Corrected co-ordinate position: 061494

Photo Nos.: Darwin Pine Creek Survey 1177
Run 7, Photos 5111-5112

Access: Reasonably easy cross country north from west track.

Topography: Generally low lying soil covered area with
scattered granite rises.

Geology: Outcropping rise of gneissic granite
Spec. R85/52 Gneiss giving 175 to 250 counts per
minute mass effect.

Radio-activity: Anomaly gives 175 to 250 counts per minute
mass effect in area giving generally 100 counts
per minute.

Probable cause of anomaly: Local higher radioactivity in granite
and better outcropping conditions.

Further work recommended: Nil

Examined by: R.S. Matheson and D. Dyson

Date: 30/10/52.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: First

Co-ordinate position on photomap & photos: 073493 and 074496

Corrected co-ordinate position: 073497 and 075500 ✓

Photo Nos.: Darwin-Pine Creek Survey 1177
Run 7, Photos 5111-5112

Access: Reasonably easy access cross country north from west track.
r

Topography: Generally low lying soil covered area with scattered granite rises.

Geology: Granitic gneiss areas rising through granitic soil.

Radio-activity: Both anomalies show 175 counts per minute.

Probable cause of anomaly: Mass effect of locally higher radioactive areas in granite showing generally 100 counts per minute. Outcrop conditions better.

Further work recommended: Nil

Examined by: R.S. Matheson and D. Dyson

Date: 30/10/52.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: First

Co-ordinate position on photomap & photos: 082518

Corrected co-ordinate position: 083521 ✓

Photo Nos.: Darwin-Pine Survey 1177
Run 6, Photos 5079-5081

Access: Either cross country north from west track or cross
country south west from north west track.

Topography: Granite hills and rises outcropping through
generally soil covered area.

Geology: Granitic gneiss with higher radioactivity in area
of granitic gneisses and massive granite.

Radio-activity: 175 to 200 counts per minute in area generally
giving 100 counts per minute.

Probable cause of anomaly: Mass effect from local area with higher
radioactivity. Outcrop conditions good where
anomaly occurs.

Further work recommended: Nil

Examined by: R.S. Matheson & D. Dyson

Date: 30/10/52.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: First

Co-ordinate position on photomap & photos: 093526 and 098525

Corrected co-ordinate position: 094530[✓] and 099529²

Photo Nos.: Darwin-Pine Creek Survey 1177
Run 6, Photos 5079-5081

Access: Crosscountry either north from west track or south west
from north west track.

Topography: Granite hills and rises outcropping through generally
soil covered area.

Geology: Both anomalies consist of areas of granitic with locally
higher radioactivity than other granitic rocks in area,
which consist of massive granite and other granitic
gneisses.

Radio-activity: 095526 - 200 counts per minute
100525 - 175 to 200 counts per minute
Area generally 100 counts per minute

Probable cause of anomaly: Mass effect from local areas with higher
radioactivity. Outcrop conditions good.

Further work recommended: Nil

Examined by: R.S. Matheson and D. Dyson

Date: 30/10/52

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: First Order

Co-ordinate position on photomap & photos: 052480

Corrected co-ordinate position: 054485

Photo Nos.: Darwin-Pine Creek Survey 1177
Run 7 Photos 5111-5112

Access: Reasonably easy access cross country by heading north
from west track along granite-Brock's Creek group junction.

Topography: Generally low lying soil covered area with scattered
granite rises.

Geology: Granitic gneiss occurring as local zone in granitic
gneisses and massive granite with lesser radioactivity.

Spec. R83/52 granitic gneiss 100 counts/minute
Spec. R82/52 " " 200 counts/minute
counts refer to mass effect.

Radio-activity: Area gives 200 counts per minute which is
local effect in area giving generally 100
counts per minute.

Probable cause of anomaly: Considered due to mass effect of local
area in granite giving higher count. Outcrop
conditions also better.

Further work recommended: Nil

Examined by: R.S. Matheson and D. Dyson

Date: 30/10/52.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: Second

Co-ordinate position on photomap & photos: (i) 967430 (ii) 962437

Corrected co-ordinate position: (i) 968434¹⁸ (ii) 964440¹⁹ ✓

Photo Nos. 1 (i) 5177, 5178, Run 11 Darwin-Pine Creek Survey 1177,
(ii) 5173, 5174, Run 10 Pine Creek Survey (14th June, 1951.
1374, 15 June, 1952.

Access: By road from Brown's west across railway line to north
south road $\frac{1}{4}$ mile west, then $\frac{3}{4}$ mile south along that
road, then westerly through bush $\frac{1}{3}$ mile.

Topography: Flat soil-covered area at point (i). From a point 1000
feet north east of (i) a low ridge or slightly elevated
area trends east and north. East and north of this
again the surface is slightly lower. 400 feet north of
(ii) is small hill.

Geology: Sequence from east to west appears to be shale, quartzite,
shale and limestone. The quartzite, which outcrops
prominently along the ridge, is derived from a fine-grained
rock. The shale is somewhat similar to that at Whites.
The outcrop that was interpreted as representing a limestone
bed is completely silicified. The quartzite and presumably
the other beds follow a north to North-north-west strike to a
point 1000 feet N.E. of (i) then turn abruptly eastwards
to an east and east north-east strike. A prominent
amphibolite dyke, striking N.N.W., is immediately east of
(ii) and forms the small hill. The surface of the slightly
elevated area is partly covered with laterite, through
which the other formations show in places.

Radio-activity: Laterite gives count about 100 per minute, shale on
either side of quartzite gives in places 150 counts per
minute, quartzite 70-80 and silicified limestone 60-70
counts per minute.

Probable cause of anomaly: Anomaly is possibly due to occurrence of
uranium in shale beds. Conditions here are favourable for
uranium occurrence, the carbonaceous shales are present, the
beds are folded into what could be a suitable structure and
the granite on surface is about $\frac{3}{4}$ mile distant.

Further work recommended: This area should be geologically mapped
on 100 feet to the inch and radiometrically contoured.

Examined by: N.H. Fisher and J. Sleis

Date: 30th October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of Anomaly: (i) Third (ii) Second (iii) Third

Co-ordinate position on photomap & photos: (i) 950439, (ii) 945442
(iii) 941441

Corrected co-ordinate position: (i) 953443³⁰ (ii) 948447²¹ (iii) 943446²²

Photo Nos.: 5174, 5175, Run 10, Pine Creek, Survey 1374 15 June, 1952.

Access: West through bush from North-south track west of railway line, from point due west of Browns, to Tomahawk billabong on the South Finnis River.

Topography: Point (i) is on alluvial flat of South Finnis River. Points (ii) and (iii) are on fairly flat terrain west of river, slightly elevated above area of flats and covered by thicker bush than is usual. River channel here 10-15 feet deep.

Geology: Apart from one outcrop of quartz near the river the surface is covered by river alluvium on the flats and by laterite elsewhere. Some fragments of schist were found in the laterite.

Radio-activity: 100 counts per minute on the laterite, 70 per minute on alluvium.

Probable cause of anomaly: Comparatively higher reading on laterite covered areas may be sufficient to cause these small anomalies.

Further work recommended: General geological mapping to determine to what part of the sequence this area belongs.

Examined by: N.H. Fisher and J. Sleis.

Date: 30/10/52.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomaly: First

Co-ordinate position on photomap & photos: 988487

Corrected co-ordinate position: 989491 ✓

Photo Nos.: 5130, 5131, Run 9 Pine Creek Survey 1374, 15th June, 1952.
5117, 5118, Run 7 Darwin-Pine Creek Survey 1177, 14 June 1951.

Access: Easterly through bush from road along railway line.

Topography: Flat, with granite ridge 1200 feet east.

Geology: Granite, mostly soil covered. Prominent outcrop of solid granite 1200 feet east, 1200 long in north-south direction by 500 feet wide. Main joints in granite dip steeply, strike 40 and 5 degrees, latter in places containing quartz veins. East of granite outcrop scattered pebbles of metamorphic rock occur on surface (remnant of former conglomerate?) and an outcrop of quartz and an amphibolite dyke.

Radio-activity: On granite and soil 150 to 170 counts per minute, rising to 190 on massive outcrop. Quartz and amphibolite give 70 counts per minute.

Probable cause of anomaly: Prominent ridge of bare granite 1200 feet east of plotted position.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis.

Date: 29th October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: First

Co-ordinate position on photomap & photos: 970465

Corrected co-ordinate position: 973467 ✓

Photo Nos.: 5130, Run 9, Pine Creek, Survey 1374, 15 June, 1952.

Access: Through bush from road along railway line on north side of river, ~~98~~ Along south bank of E. Finnis River from road.

Topography: Generally flat with considerable amount of granite outcrops including large boulders. Point is on north bank of Finnis River and surface south of river is flat with no outcrops.

Geology: Finnis River here apparently follows contact of granite and sediments. All north side of river is granite.

Radio-activity: A general count in granite is about 150 per minute.

Probable cause of anomaly: Strongly outcropping granite, and contrast between radioactivity of granite and soil covered area south of river.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 29th October, 1952.

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PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: First

Co-ordinate position on photomap & photos: 930490

Corrected co-ordinate position: 932⁴693

Photo Nos.: 5127, 5128, Run 9 Pine Creek Survey 1374, 15 June, 1952

Access: From Mt. Fitch road, near billabong north of junction
of East Finniss and South Finniss Rivers.

Topography: Alluvial river flats

Geology: Alluvium

Radio-activity: Count 70-80 per minute

Probable cause of anomaly: This is probably mis-plot of anomaly
due to Mt. Fitch deposit.

Further work recommended: None at plotted position. Mt. Fitch
anomaly should be further mapped geologically
and radiometrically as a preliminary to possible
costeaming and drilling.

Examined by: N.H. Fisher and J. Sleis

Date: 29 October, 1952.

Batchelor
PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: (i) First (ii) Second

Co-ordinate position on photomap & photos: (i) 019359 (ii) 018358

Corrected co-ordinate position: (i) 019363¹⁵ (ii) 018362¹⁶

Photo Nos.: 5193, 5194 Run 14 Pine Creek, Survey 1374 15 June, 1952.

Access: Road south-west $\frac{1}{2}$ mile from Batchelor Siding.

Topography: Flat to gently undulating. Low ridge runs along between anomalies and railway line.

Geology: Well developed laterite up to more than 10 feet thick on higher areas. From vicinity of (ii) a silicified outcrop which may be a silicified limestone breccia trends north-west.

Radio-activity: Silicified outcrop 100 counts per minute, but along east side of outcrop counts up to 140 per minute were obtained and along west side 120 counts per minute.

Probable cause of anomaly: Higher readings along either side of silicified outcrop, or possibly due to numerous exposures in quarries 1000 feet north-east, of laterite giving up to 140 counts per minute.

Further work recommended: Detailed radiometric traversing of area.

Examined by: N.H. Fisher and J. Sleis.

Date: 29 October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomalies: (i) First (ii) Second

Co-ordinate positions on photomap & photos: (i) 001488 (ii) 008490

Corrected co-ordinate positions: (i) 002493 (ii) 008494

Photo Nos.: 5117, 5116, Run 7, Darwin-Pine Creek Survey 1177,
14 June, 1951.

Access: Easterly through bush from road along railway line.
Surface is flat and trees are sufficiently far apart
that in dry season a vehicle can be driven almost anywhere.

Topography: Flat

Geology: Granite. Scattered outcrops at (i), mostly alluvium
at (ii). Half a mile east of (ii) is ridge of quartz
striking 40 degrees.

Radio-activity: On granite 150 to 160 counts per minute, on
soil down to 100.

Probable cause of anomalies: (i) granite outcrops
(ii) No obvious reason.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis.

Date: 29 October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: Second

Co-ordinate position on photomap & photos: 972510

Corrected co-ordinate position: 973513 ✓

Photo Nos.: 5119, 5120, Run 7, Darwin Pine Creek, Survey 1177
14 June, 1951.

Access: On road along railway line.

Topography: Flat. Swampy area immediately to south.

Geology: Laterite over granite. Cutting in railway line, $\frac{1}{2}$ mile with exposed good profile of lateritized granite. Granite from which laterite has been stripped is exposed 300 feet south and south-east. This "island" of granite is completely surrounded by laterite.

Radio-activity: On laterite 70-80 counts per minute. On granite 120 to 140, and in one place 160, counts per minute.

Probable cause of anomaly: Island of granite with higher radioactivity in laterite-covered area.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 29th October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: Second

Co-ordinate position on photomap & photos: 979466

Corrected co-ordinate position: 981470 ✓

Photo Nos.: 5130, 5131, Run 9, Pine Creek, Survey 1379, 15th June, 1952.

Access: From road along railway line, opposite bend in railway,
 $\frac{1}{2}$ mile north of E. Finnis River crossing.

Topography: Generally flat, with small hummocks

Geology: Granite outcrops numerous. Granite contact roughly
coincides with Finnis river half a mile to the south.

Radio-activity: Count on granite generally about 150 per minute
but as low as 120 in places.

Probable cause of anomaly: Plotted position of anomaly is close
to large outcrop of granite.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis.

Date: 29th October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: Second

Co-ordinate position on photomap & photos: 981485

Corrected co-ordinate position: 983489 ✓

Photo Nos.: 5130, 5131, Run 9, Pine Creek Survey 1374 15 June, 1952.

Access: From road along railway line about $\frac{3}{4}$ mile north of point where West track meets railway line.

Topography: Flat, with flat dry stream courses.

Geology: Granite; outcrops are scarce near plotted position, but abundant to the south-west and south-east.

Radio-activity: Readings in granite 140 to 180, over soil only slightly less.

Probable cause of anomaly: Areas of granite outcrop to south-west or south-east.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 29th October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: Second

Co-ordinate position on photomap & photos: 952495

Corrected co-ordinate position: 954499 ²/₄

Photo Nos.: 5128, 5129, Run 9 Pine Creek, Survey 1374 15 June, 1952

Access: From Mt. Fitch Road at bend $\frac{3}{4}$ mile north-west of E. Finniss River crossing.

Topography: Generally flat with low outcrops of granite

Geology: Granite, with contact of sediments, trending north-north-westerly.

Radio-activity: Fairly regular on granite at 140 counts per minute.

Probable cause of anomaly: Granite outcrops, or ~~contact~~ across contact.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 29 October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: Second

Co-ordinate position on photomap & photos: 962477

Corrected co-ordinate position: 965482 ✓

Photo Nos.: 5129, 5130, Run 9, Pine Creek, Survey 1374, 15 June, 1952.

Access: Westerly nearly one mile from road along railway line at point one mile north of Finnis R. Crossing, or north-easterly from crossing of Finnis on Mt. Fitch Road 1600 feet N.N.W. of Jack White's House.

Topography: Flat, numerous granite outcrops to east, dry creek flat to west.

Geology: Granite

Radio-activity: Counts up to 200 per minute were obtained near the spot. General count on granite 140-160.

Probable cause of anomaly: High local area in granite and abundant granite outcrop.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis.

Date: 29 October, 1952.

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PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomalies: (i) Third (ii) Second (iii) First

Co-ordinate positions on photomap & photos: (i) 962487 (ii) 959484
(iii) 957486

Corrected co-ordinate positions: (i) 964487 (ii) 960488 (iii) 958490

Photo Nos.: 5129, 5130, Run 9, Pine Creek, Survey 1374, 15 June, 1952.

Access: Track leading north-easterly from Mt. Fitch road at point
1000 feet north-west of E. Finniss River crossing.

Topography: Generally flat to east. Immediately west of the
first order anomaly is a ridge about 20 feet high,
which strikes 40 degrees.

Geology: Granite, with alluvial cover along dry stream courses.
Granite outcrops more abundantly to west and north.

Radio-activity: General count in granite is about 180 per minute.
Ridge west of first order anomaly gives 160
counts per minute.

Probable cause of anomaly: Ridge mentioned above would be sufficient
to give one anomaly and others could be due to
granite outcrop areas. Position of these anomalies
is open to doubt as Mt. Fitch anomaly appears to
be considerably misplaced.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 29 October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomalies: (i) (ii) & (iii) Third (iv) Second

Co-ordinate positions on photomap & photos: (i) 020509 (ii) 027510
(iii) 030505 (iv) 034501

Corrected co-ordinate positions (i) 020512 (ii) 028514 (iii) 030510
(iv) 035506

Photo Nos. 5114, 5115, Run 7, Darwin-Pine Creek Survey 1177
14 June, 1951.

Access: Along dry stream, flats which can be reached from road
along railway line or from west track about a mile
west of Dysons.

Topography: Generally flat, (ii) is on alluvium, others in flat
areas with few outcrops.

Geology: Granite. Outcrop most plentiful around (i) - Gneissic
granite with foliation vertical and striking 310 degrees.
300 feet southeast of (iii) is line of quartz outcrops
striking north-east, which seems to be in alignment with
similar outcrop one mile to south-west (see report on 008490).

Radio-activity: Around (i) granite gives 130 to 160, soil about
100 counts per minute. Elsewhere count on granite
is 100 to 120.

Probable cause of anomalies: Probably due to small areas of
outcropping granite in area that is largely
covered with soil and alluvium.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 29 October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of anomalies: Third

Co-ordinate positions on photomap & photos: (i) 975503 (ii) 976500
(iii) 980497

Corrected co-ordinate positions: (i) 977506, (ii) 978504 (iii) 983502²

Photo Nos.: 5119, 5118, Run 7, Darwin-Pine Creek Survey 1177,
14 June, 1951.

Access: From road along railway line north of East Finniss River.

Topography: Generally flat.

Geology: Laterite on granite with granite exposed in one or two places. A small dry watercourse runs southwesterly between (ii) and (iii). South of this laterite disappears and granite is abundantly exposed.

Radio-activity: 120-140 counts per minute on granite, 80-90 on laterite.

Probable cause of anomalies: Outcrops of granite and contrast between radioactivity of granite and laterite.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 29th October, 1952.

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PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES

Order of Anomaly: First

Co-ordinate Positions on photomap & photos: (i) 001462; (ii) 998463

Corrected co-ordinate positions: (i) 002466 ✓ (ii) 998467 ✓

Photo Nos.: 5132, 5131, Run 9, Pine Creek, Survey 1374, 15th June, 1952.
5171, 5172, Run 10 " " " " " "

Access: From point on west track one mile west of Dysons, then southwesterly down dry flat, then generally west parallel to low ridge.

Topography: Generally flat to north of anomalies. 500 feet to south is low but sharp ridge marking contact of granite with sediments. This ridge rises to about 20 feet above the general granite surface, and on the south side of the ridge the surface level is about 10 feet lower than that of the granite surface.

Geology: The contact of the sediments with the granite, which strikes east, dips south at a moderate angle. The contact rock is a striking hematized quartz breccia or conglomerate. 1300 feet east of point 001462, the contact is displaced 2500 feet to the north-north-east by a fault.

Radio-activity: Count on granite uniformly high 170-180 rising to 200 in one or two places. Soil covered areas give about 130 and as low as 100. Hematitic breccia ranges from 90 to 130.

Probable cause of anomalies: These anomalies are undoubtedly related to the contrast in radioactivity between the granites and the sediments and represent highs caused by crossing the contact. The count in the granite itself is slightly higher near the margin and the granite is better exposed than the sediments south of the contact.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis.

Date: 28th October, 1952.

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PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of Anomaly: First

Co-ordinate Position of photomap & photos: 990465

Corrected co-ordinate position: 993467

Photo No.: 5131, 5132, Run 9, Pine Creek, Survey 1374, 15 June, 1952.
1" = 1250'

Access: From West track at a point about 2 miles west of Dysons,
then south about 1200 feet.

Topography: Generally flat.

Geology: Area of bare granite outcrops 12-1500 feet north of
granite-sedimentary contact.

Radio-activity: Generally fairly high, 170-180 counts per
minute, on exposed granite.

Probable cause of anomaly: Well exposed granite

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 28/10/52.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: First

Co-ordinate Position on photomap & photos: 988456

Corrected co-ordinate position: 989459 ² *not marked on map*

Photo No.: 5171 & 5172, Run 10. Pine Creek, Survey 1374, 15th June, 1952.
Scale 1" = 1250'

Access: Track along south bank of Finnis River from Browns.

Topography: Flat. Anomaly is central to large bend in river.

Geology: Granite is 300 feet north of corrected position. Immediately west is outcrop of silicified rock, striking 70 degrees. This type of outcrop is interpreted as being the silicified surface representation of a limestone bed.

Radio-activity: General count in this area south of the granite is 90 per minute. No significant variations were found.

Probable cause of anomaly: No obvious cause apart from the granite contact which is only a few hundred feet north of the corrected position.

Further work recommended: Area has been geologically mapped on 400 feet to an inch. A series of geiger traverses should be run to determine whether any significant variations can be picked up within bend of river.

Examined by: N.H. Fisher and J. Sleis.

Date: 28th October, 1952. ✓

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: First

Co-ordinate position on photomap & photos: 983460

Corrected co-ordinate position: 984464 ²

Photo Nos.: 5172, 5173, Run 10 Pine Creek, Survey 1374 15th June, 1952.
Scale 1" = 1250'

Access: From road along railway line, 1600 feet north of crossing
of East branch of Finnis River.

Topography: Flat 1200 feet west of bend in Finnis River, where
there is a sharp ridge of granite 30 feet high
on north bank of river.

Geology: Granite, with contact between granite and hematite
quartz-breccia of sediments 1200 feet east and south.
Granite is fairly well exposed in flat outcrops.

Radio-activity: Generally high on granite - 170 to 180 counts per
minute. Granite peak at bend of river gives
readings to 200 per minute.

Probable cause of anomaly: May be due to contrast between granite
and sediments to south. However if actual position
were about 900 feet east of corrected position,
the sharp ridge of exposed granite at the river
bend would be quite adequate to cause the anomaly.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 28th October, 1952.

Harsh

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: First

Co-ordinate Position on photomap & photos: 996471

Corrected co-ordinate position: 996475 ✓

Photo Nos.: 5131, 5132 Run 9, Pine Creek, Survey 1374, 15 June, 1952.

Access: "West Track" from near Dysons. Plotted position is close to track.

Topography: Generally flat with large areas of exposed granite. Anomaly lies between 2 small creeks which here have watercourses about 5 feet deep.

Geology: Entirely granite, $\frac{1}{2}$ mile north of contact with sediments. Granite is porphyritic, slightly gneissic. Steeply dipping joints in granite observed to strike 300° , 350° , 35° . Those striking 300° and 35° contain small quartz veins in places. Gneissosity in one place observed to strike 35 to 50° . Amphibolite dyke striking generally N.N.W. runs almost through plotted point.

Radio-activity: Granite gives fairly uniform count of 150 to 175 per minute, rising to 200 in one or two spots, one on a sheared zone. Quartz outcrops and amphibolite give 60-75 counts per minute.

Probable cause of anomaly: Strongly outcropping granite 100 feet east of plotted positions of anomaly, on east side of creek.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 28th October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: First

Co-ordinate Position on photomap & photos: 999470

Corrected co-ordinate position: 999474 ✓

Photo Nos.: 5131, 5132, Run 9, Pine Creek, Survey 1374 15 June, 1952.

Access: Track from Whites to Dysons, then on to west track.

Topography: Generally flat with large areas of exposed granite.
Plotted position is 500 feet east of shallow creek.

Geology: Entirely granite, $\frac{1}{2}$ mile north of contact with sediments. Small quartz outcrop 600 feet south-west, and amphibolite dyke 600 feet west. 3000 feet east is outcrop of laterite which appears to lie on granite, but which contains pebbles consisting of metamorphic rocks and quartz. However faulted contact of granite with sediments is 500 feet south-east of this place and metamorphic pebbles may have originated as pre-laterite scree from Mt. White, a hill immediately east of the fault.

Radio-activity: Fairly uniform over wide area at 170 counts per minute. No significant variation over alluvium or in creeks, but in places where soil appears to be thickest it may drop to 130 counts per minute. Amphibolite and quartz give 60-70 counts per minute.

Probable cause of anomaly: Bare granite exposures north and east up to $\frac{1}{4}$ mile from plotted position of point.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis.

Date: 28th October, 1952.

PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomaly: First

Co-ordinate Position on photomap & photos: 017480

Corrected co-ordinate position: 018484 ✓

Photo Nos.: 5132, 5133, Run 9, Pine Creek, Survey 1374 15th June 1952.

Access: From point on West track 1 mile west of Dysons, in N.N.E. direction along barely discernible bush track, over low ridge onto flats of north-easterly flowing drainage.

Topography: Flat, with dry flat waterways.

Geology: All granite, low scattered outcrops. Quartz outcrop nearby. Continuation of fault which displaces granite sediment contact can be traced through this area. Displacement on fault is east block to north-east. East block has dropped relative to west.

Radio-activity: 150 to 170 counts per minute on granite. 90 per minute on quartz.

Probable cause of anomaly: Nothing obvious. May be due to exposures in granite around plotted point and to the north, or to effect of fault on distribution of the granite.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis

Date: 28th October, 1952.

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PRELIMINARY REPORT ON AIR-BORNE SCINTILLOMETER ANOMALIES.

Order of anomalies: Second

Co-ordinate Positions on photomap & photos: 015469; 014492

Corrected co-ordinate positions: 016474, 015476

Photo Nos.: 5132, 5133, Run 9, Pine Creek, Survey 1374, 15th June, 1952.

Access: From point on west track 1 mile west of Dysons, in N.N.E. direction along barely discernible bush track.

Topography: Flat at plotted positions. Mt. White, which is faulted contact of granite and sediments, is 1200 feet S.S.W. of point 015469. This rises probably 100 feet above general level and ridge runs easterly from it. 1200 feet E.S.E. of point 015469 is south-easterly, striking ridge of silicified and sheared granite and quartz, which cuts granite-sedimentary contact obliquely

Geology: Low outcrops of granite. Fault passes a few hundred feet west (refer to report on 017480)

Radio-activity: Silicified granite and quartz ridge gives counts of 70 to 110 per minute, granite outcrops 150 to 170 per minute.

Probable cause of anomaly: May be due to higher radioactivity of granite compared with sediments to south.

Further work recommended: None

Examined by: N.H. Fisher and J. Sleis.

Date: 28th October, 1952.