No. K1-11

NORTHERN TERRITORY ADMINISTRATION

BJECT:

NORTH AUSTRALIAN URANIUM CORP.

PROGRESS REPORTS 1.9.54 TO 31-12-56

N. Territory - uranium

6/56 6779

OPEN FILE

CR54/

CONTENTS

COPY.

N.A.U.C.
Sleisbeck Prospect.

First Period Report

Report on Operations for the period 1/9/54 - 11/9/54 inclusive.

GENERAL.

Operations prior to 1/9/54 consisted of airstrip and road and housing construction, preliminary investigations of the prospect, level and base line surveying, the establishment of grids, detailed instrument grid traverses, chip sampling of exposed lode surfaces, the initial opening of two exposures by costeaning and mining and the commencement of diamond drilling on one of these - Exposure No. 4.

ADMINISTRATION.

Company Employees -
Employees on site 1/9/54 numbered 16,
" " " 11/9/54 " 14.

3 men left, 1 man started.

Contractors.
Mining contracts consisted of one team of two men and all equipment.
Carting contracts consisted of one truck and driver.

Personnel on Loan.
Two drillers on loan from Enterprise Exploration are operating the Mindrill A2000 on diamond drill hole No. 1.

BUILDING CONSTRUCTION.

Buildings erected at the end of this period consisted of the following units :
Mess and kitchen - complete.
Storeroom annex to Mess - 50% complete.
Meat room - 95% complete.
Two small offices - 95% complete.
Large office - 50% complete.
Ablution block of 3 toilets, 2 hand basins and 4 showers complete with septic tank.
Water tower and tank and necessary pipe lines - complete.
One double hut unit - complete.
Two double hut units - 80% complete.
One single hut unit - complete.
Two double hut units permanently wired for electricity.

ROAD AND AIRSTRIP CONSTRUCTION.

The airstrip has now been cleared and smoothed over a length of approximately 1 mile and a width of 100 yards.

Approximately 400 yards of gravel were carted prior to 1/9/54. Most of this was loaded by the D.4 from a temporarily constructed side loading ramp and spread in and around the camp site. No further gravel was carted during this period.

The clearing of a road leading straight through to the airstrip from the main camp - prospect road was completed by the D.4 and the construction of a low level creek crossing on this road was commenced.

PLANT OPERATION.

Units Operating
Petrol Driven
1 Sullivan Drill 22 plus water pump
1 water pump - camp water supply
1 International AR 100 - Liberty Waggon
1 " AR 160 - Water Cart

/2.

PLANT OPERATION (contd)

Plant Operating
Petrol Driven (contd)

1 International AR 180 - Tipper
7 Land Rovers - including 2 vehicles on outside prospecting.

Diesel.
1 Mindrill A2000 plus water pump
1 Atlas Compressor 250
1 Caterpillar D.4 bulldozer
1 Deutz 35 K.V.A. alternator.

Fuel Consumption.
Total Motor spirit consumed - 304 gallons
" Distillate " - 368 "
" Lubricants " - 22 "

Maintenance.
All necessary servicing of all new units was completed by the end of this period. Daily maintenance continues as the personal responsibility of each operator.

FIELD AND RADIO-METRIC GRIDDING.

Flats between Eastern and Middle Hills.
560,000 square feet of grid pegging completed and the same area covered with instrument traverses.

No. 5 Exposure.
140,000 square feet surrounding No. 5 Exposure grid pegged and instrument traverses covering the same area completed.

Total area gridded and traversed with instruments by 11/9/54 is 1,200,000 square feet.

COSTEANING.

No further costeaning has been completed.
The previously reported costean No. 1 at exposure No. 4 was traversed with radiometric instruments. The counts increased significantly on approaching the open cut, which was due in part to the mass effect from the exposed ore. Other than this, no readings were sufficiently outstanding to warrant further attention.

DRILLING.

D.D.H.1 No. 4 Exposure.
Location on local grid 367N. 00E.
Azimuth " " " 180 degrees.
Inclination - depressed 30 degrees.

Hole designed to test developed ore at depth on the initial assumption that this was dipping north; the selection of this site was convenient also, in that, by having the drill on the other side of the hill, it allowed mining operations to continue simultaneously.
Hole advance 103 feet 6 inches from 81 feet to 184 feet 6 inches in massive sandstone with occasional bands of mudstone, apparently barren.
Core recovery - 75%
Bit consumption - 7 AX bits used averaging 15 feet of drilling per bit.

/3.

DRILLING (contd)

D.D.H.2. No. 1 Exposure.

Location on local grid 200S. 23W.
Azimuth " " " 0 degrees
Inclination - depressed 50 degrees.

Hole designed to test surface radiometric highs at depth on the assumption that the uranium present is transported. The site was chosen, above the exposed lode material, on top of the hill in order to allow mining operations to continue simultaneously and also to test effectively the unknowns out on the flats. The hole is proceeding below the surface lode material and will advance until the testing of a possible ore horizon out on the flats is exhausted.
Drilling started on 4/9/54.
Hole advanced 38 feet 6 inches from 0 feet to 38 feet 6 inches in very hard quartzite breccia which is apparently barren.
Core recovery - 74%.
Bit consumption - 6 BX bits used - (some still useable) averaging 6 feet of drilling per bit.

MINING OPERATIONS.

Dirt Broken.
Operations at No. 4 Exposure consisted of popping and bogging large boulders of development ore to facilitate removal and the popping of heavy boulders on the hill surface above the development face so that this overburden might more easily be removed.
Operations at No. 5 Exposure commenced on 8/9/54.
20 feet of costeaning 4 feet wide and an average of 6 feet deep was completed by the end of this period.

Dirt Carted.
The haulage of dirt from No. 4 Exposure continued and consisted of the following :

5 yards of first-grade ore
130 " " second " "
190 " " third " "
220 " " mullock containing some uranium.

This makes the total dirt carted to 11/9/54:

40 yards of first-grade ore
130 " " second " "
260 " " third " "
420 " " mullock containing some uranium.

REMARKS.

Exploration to date has been handicapped through not having the machinery required to clean up development work.

It is intended to adopt the policy of furnishing fortnightly reports coinciding with the pay periods. This report will be followed by a weekly report. Thereafter reports will be submitted at the end of each pay fortnight.

H. J. NEWTON,
Geologist,
N.A.U.C.

COPY.

N.A.U.C.
Sleisbeck Prospect.

Second Period Report.

Report on Operations for the week ending 18/9/54.

GENERAL.

With the close approach of the wet season, most attention has been given to the gravelling of the airstrip. The metalling of the airstrip road and construction of a low level crossing were necessary prerequisites.

The original gravel side loading ramp was undermined and collapsed when cleaning up with the D4. Three days were spent in constructing a substantial chinaman chute at the gravel pit.

ADMINISTRATION.

Company Employees.
Employees on site 12/9/54 numbered 14.
" " " 18/9/54 " 15.

1 man started.

Contractors.
Mining contracts consisted of one team of two men and all equipment.

Carting contracts consisted of two trucks and drivers.

Personnel on Loan.
Two drillers on loan from Enterprise Exploration were operating the Mindril A2000 on D.D.H.1. and later the Mindril E1000 on D.D.H.2.

BUILDING CONSTRUCTION.

Further buildings erected at the end of this period consisted of the following units:

Storeroom annex to mess - completed.

Main Office - completed.

2 double hut units - completed.

2 " " " - 90% completed.

2 " " " - 70% "

4 " " " - 40% ".

Another 4 double hut units and the main office have been permanently wired for electricity.

ROAD AND AIRSTRIP CONSTRUCTION.

The construction of a low level crossing with storm drains was completed using 30 yards of carted rocks.

The construction of a substantial chinaman chute for loading gravel was completed.

The gravelling of the airstrip road was completed with the carting of 732 yards of gravel.

/2.

PLANT OPERATION.

Units Operating. Petrol Driven	Designated Number.
1 Sullivan Drill 22 plus	14.
Novo Water pump	16.
1 water pump - camp water supply	17.
1 International AR 100 - Liberty Waggon	11.
1 " AR 160 - Water Cart	9.
2 " AR 180 - Tippers	10 & 12.
7 Land Rovers 0 includes 2 vehicles on outside prospecting	1 to 8.
Diesel.	
1 Mindril A2000 plus	13.
Mindrol water pump	15.
1 " El000 plus	22.
Mindril water pump	23.
1 Atlas Compressor	19.
1 Caterpillar D4 bulldozer	20.
1 Deutz 35 KVA alternator	18.
Air Driven	
1 Atlas Waggon Drill.	21.
Fuel Consumption.	
Total Motor Spirit consumed	201 gallons.
" Distillate "	154 "
" Lubricants "	7½ "

Maintenance.

Unit No. 4: - Repairs to tie rods and steering arms. Tightening of body bolts.

Unit No. 5: - Repairs to exhaust muffler and door latches.

Unit No. 20: - Corner cutters and cutting blades sharpened.

FIELD AND RADIOMETRIC GRIDDING.

A further 150,000 square feet on the eastern extension of No. 2 Exposure was grid pegged and instrument traverses covering the same area completed.

COSTEANING.

No further costeaning with the bulldozer was attempted.

DRILLING.

Diamond Drilling.

D.D.H.1 — No. 4 Exposure.

Location on local grid — 367N 00E.

Azimuth " " " — 180 degrees.

Inclination:- depressed — 30 degrees.

Hole advanced 15 feet 6 inches from 184 feet 6 inches to 200 feet in massive sandstone with occasional bands of mudstone - apparently barren.

Drilling was stopped at 200 feet. It was considered that any intersection likely to arise with further drilling could be more effectively obtained from another site.

Core Recovery - 46%.

Bit Consumption - Nil. Average for 120 feet of hole - 17 feet of drilling per bit.

D.D.H.2. — No. 1 Exposure.

Location on local grid. — 200S. 23W.

Azimuth " " " — 00 degrees.

Inclination - depressed — 50 degrees.

Hole advanced 108 feet from 38 feet 6 inches to 146 feet 6 inches mostly in massive sandstone with some sections of hard brecciated quartzite - all a pparently barren.

Core Recovery - 91%.

Bit Consumption - 4 BX bits used averaging 27 feet of drilling per bit.

D.D.H.3. — No. 4 Exposure.

Location on local grid — 150N. 50W.

Azimuth " " " — 00 degrees.

Inclination - depressed — 40 degrees.

Hole designed to test No. 4 ore body at depth along supposed westward extension.

Drilling started 15/9/54.

Hole advanced 50 feet from 0 feet to50 feet in very soft slates.

Core Recovery - 9%,

Bit consumption - 3 AX bits used - averaging 17 feet of drilling per bit.

WAGGON DRILLING.

The Atlas waggon drill was assembled and given a trial run on the development floor of No. 4 Exposure. Some trouble was experienced due to missing parts.

Five holes were put down and radiometrically probed to a total depth of 163 feet.

Sites were chosen for convenience rather than the optimum in information, but the data obtained is recorded as follows :-

Hole No.	Location	Inclination	Depth Probed	Intersections.
WD.1	209N.19E	Vertical	16 feet	17.5 lbs over 15½ feet
WD.2	210N .10E	"	28 feet	10.5 lbs over 8½ feet
WD.3	206N. 8E	"	39 feet	6.8 lbs over 14 feet
WD.4	206N.00E	50 degrees S.	30 feet	4.5 lbs over 7 feet
WD.5	190N.19E	Vertical	50½ "	4.1 lbs over 7 feet.

The probe results in counts per minute have been averaged and listed in terms of the assay equivalents.

MINING OPERATIONS.

Exploratory Development.

Mining costeaning at No. 5 Exposure continued and a further 20 feet of costeaning 4 feet wide and an average depth of 6 feet was completed, making the total length of this costean 40 feet.

The major portion of this development is in weathered slaty material. A more resistant fresh quartzite band shows traces of uranium micas throughout, but the only material exposed to date, which approaches ore grade, is extremely localised over a few inches.

Dirt Carted.

There was no further haulage of dirt from No. 4 Exposure over this period.

REMARKS. Waggon Drilling.

Steps are being taken to recover all cutting returns from boring. This - apart from serving as a check against prove results - will also provide information from that portion of the hole not accessible to the probe.

EXPLORATION POLICY.

It has been decided to direct efforts towards the proving of No. 4 Exposure until a sizeable orebody has been established. Testing of the other exposures will be restricted.

Diamond drilling at No. 4 Exposure will continue in order to test extensions at depth and in length at depth.

The removal of overburden from No. 4 will proceed as soon as the necessary equipment arrives.

EXPLORATION POLICY (contd) -

The surface of ore ultimately exposed will be cleaned up, channel sampled and grid drilled with vertical waggon drill holes on 5 feet centres in order to block out the ore reserves to a depth of 50 or 60 feet.

It is pointed out, however, that waggondrill holes must be probed soon after boring and it is therefore essential to have this equipment on hand.

H. J. NEWTON.

21/9/54.

COPY

THIRD PERIOD REPORT

Sleisbeck Prospect

Report on Operations for the fortnight ending 2.10.54

General

Most efforts this period have been concerned with the gravelling of the airstrip.

The power shovel and D7 bulldozer arrived on the 29.9.54 and, after servicing, began work on the 1.10.54.

Supplies from the operating gravel pit were exhausted by this time, so that a new site - in which the shovel is now loading - was developed by the D7.

Two important intersections obtained in drilling over this period firmly establish No. 4 Exposure as a sizeable ore body.

A company gardening project is under way with the laying out of 15 vegetable seed beds.

Administration

Company Employees

Employees on site 19.9.54 numbered 15
" " " 2.10.54 " 11

One fitter is on leave without pay while temporarily driving a contractor's truck.

One general hand transferred permanently to contract truck driving.

One driller and one drill helper transferred to contract drilling.

Two general hands were transferred to the Alligator River Prospect on 26.9.54

A.Neil departed for Alligator River prospect 29.9.54.

One truck driver resigned.

One fitter transferred to company employment from the catering staff.

One plant operator, one general hand, one gardener and one field assistant started

Contractors

Drilling

All future drilling has been let under contract to W. Burrows as from 25.9.54. Burrows has taken over and provides for the operation of all company owned drilling equipment. His team to date consists of 6 men

Mining

Mining contracts consisted of one team of 2 men who departed for the Alligator River prospect on 29.9.54.

Carting

Carting contracts consisted of 3 trucks and drivers on hourly hire, and a Bucyrus 19 power shovel with 2 operators also on hourly hire.

Building Construction

The erection of buildings advanced by the following amount this period

2 small offices	- completed		
5 double hut units	- 95%	complete	
3 " " "	- 60%	"	90
2 " " "	- 40%	"	
2 " " "	- 20%	"	40%
1 single " "	- 50%	"	80%
Extra ablution block	-40%	"	90%
Canteen	- 90%		
Power House	- 10%	"	30%

The two small offices have been permanently wired for electricity.

Road and Airstrip Construction

Roads

270 yards of overburden from No.4 Exposure was spread over a bad section of the road to No. 4 Exposure. 35 yards of gravel was spread around the office buildings and car park areas.

Airstrip

A section 1000 yards long and 16 yards wide has been metalled with the carting of 3240 yards of gravel.

Plant Operation

Units operating - Refer to previous report for designated numbers.

Petrol Driven

10 units operating - numbers 1,4,5,8,9,10,11,12,14,16. Units number 14 and 16 operated since 25.9.54 at the drilling contractor's expense.

Diesel

6 units operating - numbers 18,19,20,22,23 and the Caterpillar D.7 bulldozer No.25.

Units number 19,22 and 23 operated since 25.9.54 at the drilling contractor's expense.

Air driven

Unit No.21 operated at the drilling contractor's expense.

Fuel Consumption

Total motor spirit consumed - 377 gallons includes 74 gallons taken to Alligator River Prospect.
Total Distillate consumed - 337 gallons
" Lubricants " - 15½ "

Those figures do not include fuel supplied to constrxtors who are using company equipment.

Maintenance.

The following outlines the maintenance performed additional to general servicing.

Unit No.1 - Power take-off fitted.
" No.8 - Exhaust pipe welded.
" No.16 - New buckets fitted and unit assembled.
" No.17 - Water spraying pipes fitted
" No.20 - Oil pipe line repaired. Side plates repaired.
" No.21 - Improvised shims cut and fitted to bar mounting bracket.
" No.24 - The portable Atlas compressor - fitted to Unit No.1 and complete assembly ready for use.

Field and Radiometric Gridding

A further 120,000 square feet on the northern and western extension of No.4 Exposure grid, was grid pegged on 50 feet centres and instrument traverses over the same area completed.

Drilling

Diamond Drilling

D.D.H.I. No. 4 Exposure.

Hole was stopped at a depth of 200 feet in the last period. Probe results to this depth were uniformly low. The highest reading ob-tained represented an assay equivalent of 0.5 lbs U_3O_8 per ton. Subsequent drilling in other holes suggests that this hole may have deflected appreciably.

D.D.H.2. No.1 Exposure

Location on local grid 200S. 23W.
Asimuth " " " 00 degrees

Inclination - depressed 50 degrees.

Hole advanced 170 feet 6 inches from 146 feet 6 inches to 317'.

Core recovery - 63%

Drilling was in quartzite to 151 feet and thereafter in very contorted chloritic schists with stringers of reef quartz in places.

This intersection of rock type change is 95 feet vertically below the ground surface and indicates that the quartzite wall is dipping vertically to this depth.

D.D.H.3 — No. 4 Exposure

Location on local grid 150N. 50W.

Azimuth " " " 00 degrees

Inclination - depressed 40 degrees.

Hole advanced 54 feet 6 inches from 50 feet to 104' 6 inches

Hole was stopped at 104 feet 6 inches.

Core recovery - 25%. Because recovery was difficult core was sacrificed for drilling rate.

Drilling was in soft red slates, black slates and bleached slates to 94 feet and thereafter in quartzite with occasional bands of shaly material.

In those sections of core recovered uranium micas were showing from 60 feet to 96 feet.

The hole was probed to a depth of 104 feet 6 inches and the following intersections proved, in assay equivalents of probe results:

Depth in Hole	Assay Equivalent
60 feet to 65 feet 6 inches	1.6 lbs U308/ton over 5 feet 6 ins.
70 feet to 73 feet 6 inches	2.2 " " " " 3 feet 6 ins.
73'6" to 77 feet	4.0 " " " " 3 feet 6 ins.
77 feet to 77 feet 6 inches	1.6 " " " " 0 feet 6 ins.
81'6" to 85 feet 6 inches	1.8 " " " " 4 feet
85'6" to 96 feet 6 inches	8.3 " " " " 11 feet

60 feet to 96 feet 6 inches averages 4.2 lbs.U308/ton over 36' 6".

70 feet to 96 feet 6 inches averages 5.2 lbs.U308/ton over 26'6".

This intersection is at an average depth of 70 feet below the ground surface and displaced 50 feet to the west of the centre of the surface development. The mineralisation and rock types - particularly the quartzite wall rock - as seen in the ore are identica.

with those exposed in the surface development. Allowing for the apparent width of such an intersection, the hole proves a mineable width of at least 20 feet at this depth.

DD.H. 4 — No. 4 Exposure

Location on local grid 150N. 100W.
Azimuth " " " 00 degrees
Inclination - depressed 40 degrees.
Hole advanced 119 feet 6 inches from 0 feet to 119 feet 6 inches.

Core recovery - 18.5%

Because recovery was difficult through inadequate equipment, core was sacrificed for drilling rate.

Drilling was in heavy surface talus to 22 feet and thereafte in slates.

Drilling continues, but as mineral was showing in the sludges from a depth of 30 feet, the hole was prematurely probed to a depth of 63 feet.

The following intersection was obtained in assay equivalents of probe results:

Depth in Hole	Assay Equivalent
25 feet to 50 feet averages	6.3 lbs U308/ton over 25 feet

This intersection establishes the ore body as at least 130 feet in length.

Drilling continues and as mineral is showing in places below the depth probed, it is expected that final probing will prove a further intersection.

Waggon Drilling

The development floor at No.4 Exposure has now been cleaned up and a 5 feet grid established within its extremities.

Vertical grid drilling to a depth of 60 feet on these 5 feet centres is in progress and 2 holes have been drilled for a total footage of 140 feet.

The data obtained is recorded as follows:

Hole No.	Coords.	Depth Drilled	Depth Probed	Intersection.
W.D.6	200N.25E.	55 feet	54 ft. 6 ins.	4.1 lbs U308/ton over 10 ft
W.D.7	200N.00E.	85 feet	78 ft. 6 ins.	2.2 lbs U308/ton over 16 ft

Mining Operations

Exploratory Development

No. 5 Exposure

A further 2 costesns 6 feet deep and 4 feet wide were completed with a total length of 47 feet. Each exposed the same uraniferous sheared quartzite shale contact as was exposed in the first costean,but progressively further west.

These costeans have presented helpful information as to rock type association and structure, but no material of mineable grade has been exposed. The general picture is similar to that presented by No. 4 exposure with uranium micas occurring in cracks in the quartzite wall rock, but development has so far failed to reveal an ore body in the adjacent shales.

Dirt Carted.

No. 4 Exposure

The development floor was cleaned up by the power shovel and haulage of ore consisted of the following:
5 yards of first grade ore
15 yards of second grade ore
85 yards of third grade ore
making the total dirt stockpiled to date
45 yards of first grade ore
145 yards of second grade ore
345 yards of third grade ore.

A total of 270 yards of overburden was removed and spread on bad sections of the road to No. 4 Exposure.

Remarks

Drilling

All bits and reamers used by the company prior to the letting of the drilling contract on 25.9.54, were returned for diamond recovery. An estimate of the footages drilled with all used bits has been made and the following figures obtained:

Type of Bit	Total No. used	Total footage drilled	Average foot. per bit
Mintung AX	18	275 ft. 6 ins.	15 ft. 4 ins.
Mintung BX	13	184 ft. 9 ins.	14 ft. 3 ins.

Carting

To illustrate the improvement in loading rate with the advent of the power shovel the following comparison is drawn.

With the D4 loading on a chinaman chute a high daily output was 260 yards of gravel carted. With the power shovel 535 yards of gravel was carted the same distance in one day.

Signed: H.J. Newton 3. 9. 54.

N.A.U.C. Sleisbeck Prospect

Eighth Period Report

Report on Operations for the Fortnight Ending
11. 12. 54

General

The low level crossing on the airstrip road was washed away and repaired.

Both diamond and waggon drilling made good progress although operations were hampered by probe battery failures.

Administration

Company Employees

Employees on site 11.12.54 numbered 18. No men started. No men left.

Contractors

Drilling, Mining and Cartage contracts as previously.

Building Construction

Work commenced on the construction of a round timber hangar on the airstrip.

The time-keeper's office was permanently wired for electricity.

Road and Airstrip Construction

Roads: A by-pass road to the workshop site was cleared and graded.

A further 750 yards of gravel was used in building up the low level crossing and maintaining weak stretches of the prospect roads. A further 80 yards of gravel was spread around the camp.

Airstrip: Low lying sections of the airstrip were top-dressed with the carting of 520 yards of gravel.

Plant Operation

Units operating at Company's expense: See seventh period report for numbers.

Petrol Driven: 12 units operating - numbers 1, 4, 5, 8, 9, 10, 11, 12, 30, 33 and 34.

Diesel: 5 units operating - numbers 18, 25, 26, 27 and 28.

Fuel Consumption: Total motor spirit consumed - 281 galls.
Total Distillate consumed - 403 galls.
Total Lubricants consumed - 11 galls.

Maintenance: performed additional to general servicing.

Unit No.

5 - 4 new tyres and tubes fitted. Steering repaired.
10 - Hydraulic hoist adjusted. Carburettor overhauled.
11 - Bumper bar repaired.
18 - Split in stand welded.
25 - Starter handle welded.

27 - 2 broken track plates removed, welded and replaced. Tracks readjusted. Gib liners renewed and saddle block fitted. New teeth fitted. Used teeth drawn out and tipped.

31 - New tyre and tube fitted.

34 - Coupling repaired and fitted.

35 - Electric compressor composed of electric motor and Cletrac receiver. Unit assembled and mounted on frame and installed in assay laboratory.

36 - Diesel winch - driven by old Southern Cross diesel for 5 KVA alternator. Unit assembled and mounted on winch frame.

Drilling

Diamond Drilling

D.D.H.18 — No.2 Exposure

Hole was not probed, it being considered impracticable with the equipment on hand. Full core was recovered over the section showing mineral and the assay returns from the split core are listed as follows:

Depth in Hole in Feet		Radiometric Assay
88-90		1.5 lbs U308/ton over 2 feet
90-92		1.2 lbs U308/ton over 2 feet
92-94		2.5 lbs U308/ton over 2 feet
94-96		1.5 lbs U308/ton over 2 feet
96-98		0.5 lbs U308/ton over 2 feet.
88-96	averages	1.7 lbs U308/ton over 8 feet

D.D.H.20 — No. 4 Exposure

Hole advanced 4 feet 9 inches from 209 feet to 213 feet 9 inches. Stopped.

Core Recovery - 84%.

Drilling was in bleached mudstone to 212 feet and thereafter in 'hill' quartzite. Probe and assay results previously reported.

D.D.H.21 — No. 2 Exposure

Hole advanced 100 feet from 80 feet to 180 feet. Stopped.

Core Recovery - 96%.

Drilling was in 'hill' quartzite to 113 feet, in red mudstone to 116 feet 6 inches, in partly oxidised schists to 125 feet and thereafter in 'hill' quartzite.

Hole was probed to a depth of 155 feet. Probe results were uniformly low with the exception of one intersection from 80 feet to 83 feet 6 inches equivalent to 1.4 lbs U308/ton over 3 ft 6ins.

D.D.H.22 — No. 4 Exposure

Hole advanced 63 feet from 62 feet to 125 feet. Stopped.

Core recovery - 79%.

Fourth Period Report

Report on Operations for the fortnight ending 16.10.54

General

The D.12 grader arrived on 13.10.54 and commenced work on the airstrip 14.10.54.

Buidding construction suffered considerably over this period due to shortage of materials.

We now have sufficient fuel on hand for the Wet season.

Administration

Company Employees

Employees on site 3.10.54 number 12

Embployees on site 16.10.54 numbered 13

One plant operator was transferred to the South Alligator River Prospect from 4.10.54

One truck driver left.

One fitter- previously on leave without pay - resigned in order to drive contractor's truck.

Two plant operators and two general hands started.

Contractors

Drilling: W. Burrows' team now consists of 10 men using company equipment and operating on a footage basis

Mining: One team of two men using private equipment and paid on a footage basis.

Carting: Carting contracts consist of 4 trucks and drivers on hourly hire.

The Bueyrus shovel has been the property of the company since 9.10.54.

Building Construction

The erection of buildings advanced by the following amount this period:

3 double-hut units - from 60% to 90% complete
2 double-hut units - from 20% to 40% complete
1 single hut unit - from 50% to 80% complete
Ablution block - from 40% to 90% complete
Power House - from 10% to 40% complete

The mess and the canteen have been permanently wired for electricity.

Road and Airstrip Construction

Roads: 990 yards of overburden was carted and dumped along the road to No.4 Exposure.

A further 35 yeards of gravel was carted and spread around the camp site.

Airstrip: A section 1400 yards long and 28 yards wide has been metalled and graded with the carting of a further 5500 yards of gravel.

Plant Operation

Units operating at company's expense.- refer to previous reports for designated numbers.

Petrol Driven: 8 units operating - numbers 4,5,8,9,10,11, 12, 17.

Diesel: 6 units operating - numbers 18, 20, 25, 26, 27, 28.

Note: - Unit No. 26 - Deutz 20 KVA Alternator
" No. 27 - Bucyrus 19 Shovel
" No. 28 - Grader D.12

Fuel Consumption

Total motor spirit consumed -333 gallons
Total distillate consumed -425 gallons
Total lubricants consumed - 38

Maintenance

The following outlines the maintenance performed additional to general servicing:

Unit No. 2 - Front spring built up.
Unit No.17 - Stand constructed for pump.
Unit No.18 - Injectors and filters cleaned, new brushes fitted.
Unit No.25 - Pipe frame canopy constructed.
Unit No.26 - Installed, wired and operated and voltmeter repaired.
Unit No.28 - Pilot motor checked and cleaned.

Drilling

Diamond Drilling

D.D.H.2 No. 1 Exposure

Location on local grid 200S.23W.
Azimuth on local grid 00 degress
Inclination - depressed 50 degrees
Hole advanced 33 feet from 317 feet to 350 feet. Drilling stopped at this depth.
Core recovery - 91%
Drilling remained in chloritic schists.
Hole was probed to a depth of 250 feet - lacking a longer cable - and the readings obtained were uniformly low. Core recovery was good in the unprobed section and the hole may be taken conclusively as barren.

D.D.H.4 No. 4 Exposure

Location on local grid 150N. 100W.
Azimuth on local grid 00 degrees
Inclination - depressed 40 degrees.
Hole advanced 11 feet 6 inches from 119 feet 6 inches to 131 feet. Drilling stopped at this depth.
Core Recovery - 70%
Quartzite was intersected at 119 feet 6 inches and thereafter drilling was in quartzite.
Hole was reprobed - (see last report) - to a depth of 130 feet 6 inches and the following intersections were obtained:

Depth in Hole			Assay Equivalents of Probe Results
6 ft. 6 ins.	to 10 ft.	average	2.0 lbs U308/ton over 3ft 6ins
24 ft. 6 ins.	to 44'6"	averages	7.1 lbs U308/ton over 20 ft.
48 ft. 6 ins.	to 50 ft.	averages	2.4 lbs U308/ton over 1ft 6 ins
82 ft	to 85 ft.	averages	2.2 lbs U308/ton over 3 ft.
102 ft	to 108'	averages	5.2 lbs U308/ton over 4 ft.

D.D.H.5 — No.4 Exposure

Location on local grid 130N.150W.

Azimuth on local grid 00 degrees

Inclination - depressed 40 degrees

Hole advanced 160 feet from 0 feet to 160 feet. Drilling stopped at this depth.

Core Recovery - Nil

Drilling - according to sludge returns - was red mudstone to 70 feet, in grey and bleached slates to 156 feet and thereafter in quartzite.

Hole was probed to a depth of 157 feet. Results obtained were uniformly low, the highest being equivalent to 0.6 lbs U308/ton at a depth of 28 feet.

D.D.H. 6 — No. 4 Exposure

Location on local grid 50N.75W.

Azimuth on local grid 00 degrees.

Inclination - depressed 40 degrees.

Hole advanced 237 feet from 0 feet to 237 feet. Drilling stopped at this depth.

Core recovery - 72%.

Drilling was in grey and brown schists to 132 feet, in green chloritic schists to 224 feet 6 inches and thereafter in quartzite with some bands of red mudstone.

This hole cannot be probed until a sufficient length of co-axial cable is acquired. However with this core recovery the hole may be assumed barren.

D.D.H. 7 — No. 4 Exposure

Location on local grid 150N.50E.

Azimuth on local grid 00 degrees

Inclination - depressed 40 degrees.

Hole advanced 81 feet from 0 feet to 81 feet. Drilling stopped at this depth.

Core recovery - 47.5%

Drilling was in red mudstones to 70 feet and thereafter in massive quartzite.

Hole was probed to a depth of 80 feet. The results obtained were uniformly low.

This hole projects directly below the ore body where first exposed by development. Subsequent waggon drilling shows

clearly why this hole failed to intersect lode material. Such information suggests a west pitch for that part of the ore body tested to date.

D.D.H.8 — No. 4 Exposure

Location on local grid 130N. 00E.

Azimuth on local grid 00 degrees

Inclination - depressed 40 degrees.

Hole advanced 106 feet from 0 feet to 106 feet. Drilling stopped at this point.

Core Recovery - 34.5%

Drilling was in red mudstones to 100 feet and thereafter in massive quartzite. Hole was probed to a depth of 105 feet. The results were low; the highest readings obtained being equivalent to 0.6 lbs. U308 per ton over 6 feet.

The remarks on D.D.H.7 also apply to this hole.

D.D.H.9 — No. 4 Exposure

Location on local grid 150N.200W.

Azimuth on local grid 00 degrees

Inclination - depressed 40 degrees

Hole advanced 151 feet from 0 feet to 151 feet. Drilling in progress.

Core recovery - 33%

Drilling was in red mudstone and slates.

D.D.H.10 — No. 4 Exposure

Location on local grid 50N. 150W.

Azimuth on local grid 00 degrees

Inclination - depressed 40 degrees.

Hole advanced 22 feet from 0 feet to 22 feet. Drilling in progress.

Core recovery - nil

Drilling was in overburden and grey schists.

The total footage drilled for this period = 801 feet 6 inches

Waggon Drilling

Vertical grid drilling to a depth of 60 feet on 5 feet centres progressed by 31 holes for a total footage of 1845 feet. The data obtained is recorded as follows: (See attachment).

Mining Operations

Exploratory Development

No. 2 Exposure: The sinking of a pit in the middle of No.2 Exposure is in progress. Development to date consists of an opening 9 feet long by 4 feet wide and 8 feet deep. Uranium minerals are showing over a width of 5 feet on one face with instrument readings of up to 3000/min.

Work is continuing by breaking into this face.

No. 4 Exposure: Heavy boulders in the surface scree west of the open cut have been popped to facilitate the stripping of

overburden by the power shovel.

Dirt Carted

No. 4 Exposure

A further 990 yards of overburden was removed and stripping as far as the 80' W line completed.

Remarks

The average diamond recovery on the first six diamond drill bits used was 63.7%.

Signed H.J. Newton
20.10.54

DATA OBTAINED FROM WAGGON DRILLING

Hole No.	Coordinates	Depth Drilled	Depth Probed	Averaged Grade of Intersections
WD 8	180N.20E	64	64	4.2 lbs U308/ton over 8 feet
" 9	185N.20E	63	63	4.2 " " " " 11 feet 6"
"10	190N.20E	61	61	3.4 " " " " 10 " 6"
" 11	195N.20E	60	54	2.9 " " " " 1 " 6"
" 12	200N.20E	63	63	3.0 " " " " 13 "
" 13	205N.20E	60	59	2.7 " " " " 16 " 6"
" 14	180N.15E	62	61	3.4 " " " " 8 " 6"
" 15	185N.15E	60	58	4.9 " " " " 9 " 6"
" 16	190N.15E	60	59	4.3 " " " " 11 " 6"
" 17	195N.15E	60	58	2.1 " " " " 12 " 6"
" 18	200N.15E	60	60	3.5 " " " " 12 " 6"
" 19	205N.15E	60	36	4.0 " " " " 18 "
" 20	210N.15E	60	58	8.5 " " " " 19 "
" 21	185N.10E	60	59	3.7 " " " " 13 " 6"
" 22	190N.10E	60	56	4.2 " " " " 14 "
" 23	195N.10E	60	57	2.1 " " " " 15 "
" 24	200N.10E	62	62	2.9 " " " " 21 "
" 25	205N.10E	60	59	5.3 " " " " 22 " 6"
" 26	210N.10E	60	57	12.5 " " " " 21 "
" 27	215N.10E	50	50	20.0 " " " " 15 " 6"
" 28	195N.5E	62	62	12.4 " " " " 19 "
" 29	200N.5E	60	60	3.6 " " " " 11 " 6"
" 30	205N.5E	60	60	3.8 " " " " 20 " 6"
" 31	210N.5E	60	36	12.9 " " " " 20 " 6"
" 32	195N.00E	60	57	2.3 " " " " 12 " 6"
" 33	205N.00E	60	59	2.7 " " " " 22 " 6"
" 34	195N.5W	60	59	2.0 " " " " 18 " 6"
" 35	200N.5W	60	59	2.0 " " " " 18 "
" 36	205N.5W	60	58	3.0 " " " " 20 "
" 37	195N.10W	60	30	2.0 " " " " 7 " 6"

N.A.U.C.
Sleisbeck Prospect

Summary of Operations prior to 17th October, 1954

Camp Site

Buildings completed - 1 mess, kitchen and storeroom annex
1 meatroom
2 ablution blocks
1 canteen
12 double-hut units
2 single-hut units
2 single room offices
1 five room office
1 water tower
complete with water and power lines.

Airstrip

An area 1 mile long by 150 yards wide cleared. A section of this 1500 yards long by 30 yards wide gravelled and formed with the carting of 8000 yards of gravel.

Roads

A total length of approximately 3 miles - to prospect and airstrip - gravelled and formed and a low level creek crossing constructed.

Gridding

A total of 1,300,000 square feet of gridding established with pegs on 50 feet centres. Close instrument traverses over this area have been completed, plotted and radiometric plans compiled.

Drilling

Diamond: 9 holes completed
3 holes in progress
Total footage completed - 1,795 feet

Waggon: 48 holes completed
Total footage 2,2755 feet.

Mining Development

No. 1 Exposure - 1000 tons of dirt broken

No. 2 Exposure - a 9 ft. x 6 ft. pit sunk to a depth of 8'- in progress

No. 4 Exposure - an area of 5,500 square feet stripped to an average depth of 8 feet.
A costbean 100 ft long taken out to an average depth of 6 ft.

Dirt carted and stockpiled
45 yards of first grade ore
145 yeards of second grade ore
345 yards of third grade ore
420 yards of fourth grade ore
A total of 1300 yeards of overburden has been removed and spread on roads around the workings.

No. 5 Exposure - 3 costeans of dimensions 6ft. by 4ft. completed for a total length of 87 feet.

3 chinaman chutes have been constructed in the course of operations

---

COPY.

N.A.U.C. Sleisbeck Prospect.

Fifth Period Report.

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 30/10/54.

GENERAL.

Heavy rain was experienced over this period. This affected operations only sightly but temporarily cut off access by road.

Building construction suffered drastically through shortage of materials.

The petrol bowser has been installed and is functioning.

Total petrol on hand 30/10/54 amounted to 216 drums or 9,500 gallons. Total distillate on hand 30/10/54 amounted to 455 drums or 20,000 gallons.

The radiometric assaying equipment, including the crusher and pulveriser, has been assembled and is operating.

ADMINISTRATION.

COMPANY EMPLOYEES.

Employees on site 16/10/54 number 13.

" " " 30/10/54 " 12.

One plant operator and one field assistant left.

One truck driver started.

CONTRACTORS.

As per preceding report.

BUILDING CONSTRUCTION.

The erection of buildings advanced by the following amount this period:

1 single hut unit	80% to 100% complete
Ablution block	90% to 100% "
Power House	40% to 60% "
Canteen	90% to 100% "

1 small lubricants store completed.

All poles necessary for the camp power supply have been erected.

ROAD AND AIRSTRIP CONSTRUCTION.

ROADS; A further 900 yards of overburden and 880 yards of gravel was carted and spread on the airstrip and prospect roads. The gravelled portions of the roads have been graded and drainage channels formed. A further 70 yards of gravel was carted and spread around the camp site.

AIRSTRIP: A further 2,200 yards of gravel was carted to the airstrip and used in forming a crown to the strip and turning-circles at either end of the strip.

The strip is almost completed and is now gravelled and graded over a mile in length and 100 feet in width. The forming of drainage channels is in progress.

PLANT OPERATIONS.

UNITS OPERATING AT COMPANY'S EXPENSE.

Refer to previous reports for numbers.

PETROL DRIVEN.

9 units operating - numbers 2,4,5,8,9,10,11,12 and 17.

DIESEL.

5 units operating - numbers 18,25,26,27 and 28.

Unit No. 20 was transferred to the South Alligator River Prospect during last period.

FUEL CONSUMPTION.

Total Motor Spirit consumed - 378 gallons
" Distillate " - 645 gallons
" Lubricants " - 53 gallons.

MAINTENANCE.

The following outlines the maintenance performed additional to general servicing:

Unit No. 4 - starter motor repaired.
" No. 8 - new speedometer installed.
" No. 17 - glands repaired.

DRILLING.

DIAMOND DRILLING.

D.D.H.6 No. 4 Exposure.

Drilling previously reported, but probed in this period.

Hole probed to a depth of 219 feet. Results obtained very low.

D.D.H.9. No. 4 Exposure.

Location on local grid 150N. 200W.
Azimuth " " " 00 degrees.

Inclination - depressed 40 degrees.

Hole advanced 24 ft from 151 ft to 175 ft. Drilling stopped at this depth. Core Recovery - 25%.

No information as to rock types from 151 ft to 165 ft. From 165 ft to 175 ft drilling was in 'hill' quartzite.

Hole was probed to a depth of 168 feet. The results obtained were generally low, but one intersection, from 160 feet to 163 feet averaged 0.8 lbs. U_3O_8/ton over 3 feet, in assay equivalents.

/3.

D.D.H.10. No. 4 Exposure.

Location on local grid 50N 150W

Azimuth " " " 00 degrees

Inclination - depressed 40 degrees.

Hole advanced 205 feet 6 inches from 22 feet to 227 feet 6 inches. Drilling stopped at this depth. Core Recovery - 70%.

Drilling was in schists to 193 feet 6 inches and thereafter in 'hill' quartzite, with some shale in places. Hole was probed to a depth of 221 feet. Results obtained were uniformly very low.

D.D.H.11. No. 4 Exposure.

Location on local grid 112N. 75W.

Azimuth " " " 00 degrees.

Inclination - depressed 40 degrees.

Hole advanced 179 feet from 0 feet to 179 feet. Drilling stopped at this depth. Core Recovery - 53%.

Drilling was in schists to 82 feet, in quartzite to 101 feet, in schists with some carbonaceous bands to 163 feet, in red mudstones to 173 feet 6 inches and thereafter in 'hill' quartzite.

Hole was probed to a depth of 171 feet. The results obtained indicated an intersection at 151 feet equivalent to 5.7 lbs U_3O_8/ ton over 6 inches. This being included in an average grade of 1.9 lbs U_3O_8/tons over 7 feet 6 inches, from 150 feet to 157 feet 6 inches.

As full core was recovered over this section, the core was split and radiometric assays were run locally. The assay returns are listed as follows :

Depth in Hole in feet.	Radiometric Assay.
148-149	0.4 lbs U_3O_8/ton over 12 inches
149-150	0.7 " " " " " "
150-151	9.5 " " " " " "
151-152	1.1 " " " " " "
152-154	0.4 " " " " 24 "
154-156	0.9 " " " " " "
156-158	1.2 " " " " " "
158-160	0.3 " " " " " "

The same samples have been forwarded to the South Australian Mines Department for chemical assay and radiometric checks.

/4.

D.D.H. 12 No. 4 Exposure.

Location on local grid 150N. 200W.

Azimuth " " " 00 degrees

Inclination - depressed 60 degrees.

Hole advanced 146 feet from 0 feet to 146 feet. Drilling stopped at this depth. Core Recovery - 27%.

Drilling was in schists to 105 feet 6 inches, some carbonaceous shales were recovered to 111 feet, in red siltstones to 136 feet and thereafter in 'hill' quartzite. Hole was proved to a depth of 145 feet. Results obtained were very low.

D.D.H. 13 No. 4 Exposure.

Location on local grid 170N. 150W.

Azimuth " " " 00 degrees.

Inclination - depressed 40 "

Hole advanced 80 feet from 0 feet to 80 feet. In progress.

Core Recovery - 81%.

Drilling was in schists to this depth with some bleached and carbonaceous material between 62 and 67 feet.

D.D.H. 14.

Location on local grid 100N. 50W.

Azimuth " " " 00 degrees.

Inclination - depressed 40 degrees.

Hole advanced 44 feet from 0 feet to 44 feet. In progress.

Core Recovery - 96%.

Drilling was in schists to this depth.

Total diamond drilling footage for the period was 678 feet 6 inches.

Waggon Drilling.

Vertical grid drilling proceeded in No. 4 open cut and progressed by 10 holes for a total footage of 420 feet. Operations were affected by rain and the last 4 holes collapsed before probing. For this reason further drilling was temporarily suspended. WD 38, previously reported was probed during this period.

The probe data obtained is recorded as follows :

(Continued Page 5.)

Hole No.	Coordinates	Depth Drilled	Depth Probed	Average Grade of Intersections.
WD 38	200N 10W	60 feet	46 feet	1.91lbs U_3O_8/ton over 5 ft.
39	205N 10W	60 " 6 ins.	60 " 6 ins	3.5 " " " 4 "
40	205N 15W	60	57 " "	2.7 " " " 13½ "
41	200N 15W	60	58 "	2.8 " " " 29 "
42	195N 15W	60	47 " 6 ins	1.9 " " " 10 "
43	190N 15W	31	31 "	2.3 " " " 10 "
44	190N 00E	30	16 " 6 ins.	2.7 " " " 10 "
45	185N 00E	30	Collapsed	3.8 " " " 12 "
46	190N 5W	30	"	
47	185N 10W	30	"	
48	190N 10W	29	"	

MINING OPERATIONS.

Exploratory Development.

No. 2 Exposure: The opening of the exploratory pit continued and attained the average dimensions of 20 feet by 9 feet to a depth of 10 feet. Uranium micas have been showing consistently throughout the breaking and it now seems probable that this may be a sizeable low grade ore body.

It is intended to waggon drill the area in order to test for extensions not evident in surface indications.

No. 4 Exposure: A further 900 yards of overburden was removed from the open cut area. A further 100 yards of third grade ore has been stockpiled. The 3 ore dumps have been coned.

(Sgd) H. J. NEWTON,

5/11/54.

COPY.

N.A.U.C. Sleisbeck Prospect.

Sixth Period Report.

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 13/11/54.

GENERAL.

With the temporary cessation of rain, creek crossings were repaired and road access re-established.

Sufficient material to complete this season's building programme arrived. Extra equipment in the form of a cletrac, water waggon, crane truck and a half-track waggon drill and compressor unit arrived.

ADMINISTRATION.

Company Employees.

Employees on site 31/10/54 numbered 12.

" " " 13/11/54 " 11.

One truck driver and one general hand left. One truck driver started.

Contractors - Drilling and Mining contracts as previously.

Carting - Cartage contracts were reduced during this period to 2 trucks and drivers on hourly hire.

BUILDING CONSTRUCTION.

The erection of buildings advanced by the following amount :

3 double-hut units	- from	90 to 100% complete
2 " " "	- "	40 to 100% "
Power House	-	60 to 100% "

Permanent mains from the power house to the camp have been wired.

ROAD AND AIRSTRIP CONSTRUCTION.

Roads: A further 2,200 yards of overburden and 1,350 yards of gravel was carted and spread on the roads. The gravelled portions of the roads have been graded and drainage channels formed.

Airstrip: A further 144 yards of gravel was used in trimming up the strip. The forming of drainage channels is completed.

PLANT OPERATIONS.

Units operating at Company's expense: Refer previous reports for numbers.

Petrol Driven: 12 units operating - numbers 1,4,5,8,9, 10,11,12,17,29 - Cletrac, 30-Chevrolet (6x6) water cart and 31-chevrolet (4x4) crane truck.

Diesel: 5 units operating - numbers 18,25,26,27 and 28.

Fuel Consumption: Total Motor Spirit consumed - 336 gallons
" Distillate " - 525 "
" Lubricants " - 22½ "

/2.

PLANT OPERATIONS (contd)

Maintenance - performed additional to general servicing.

Unit No. 17 - broken piston repaired; gasket fitted; new electrical unit installed.

" No. 18 - installed in power house.

" No. 26 - " " " "

" No. 33 - Rotary Hoe - serviced and test run.

DRILLING.

Diamond Drilling.

D.D.H. 13 No. 4 Exposure.

Location on local grid 170N. 150W.

Azimuth " " " 00 degrees.

Inclination - depressed 40 degrees.

Hole advanced 49 feet from 80 feet to 129 feet. Stopped.

Core Recovery - 77%

Drilling was in oxidised and fresh schists to 123 feet 6 inches with zones of bleached and carbonaceous schists and thereafter in 'hill' quartzite. Hole was probed to a depth of 123 feet 6 inches. Results obtained were uniformly low.

D.D.H. 14. No. 4 Exposure.

Location on local grid 100N. 50W.

Azimuth " " " 00 degrees

Inclination - depressed 40 degrees.

Hole advanced 85 feet from 44 feet to 129 feet. Stopped.

Core Recovery - 98%.

Drilling was in oxidised schists to 118 feet, in 'hill' quartzite to 124 feet and thereafter in red mudstone. Not yet probed.

D.D.H. 15. No. 4 Exposure.

Location on local grid 100N. 100W.

Azimuth " " " 00 degrees.

Inclination - depressed 40 degrees.

Hole advanced 191 feet from 0 feet to 191 feet. Stopped.

Core Recovery - 86%.

Drilling was oxidised schists to 86 feet, in 'hill' quartzite to 109 feet, in red mudstones to 116 feet 6 inches, in schists to 170 feet with bleached and carbonaceous zones abundant, in red mudstones to 185 feet and thereafter in 'hill' quartzite.

Hole was probed to a depth of 188 feet. Results obtained were very low with the exception of one section from 56 feet to 58 feet which averaged 0.6 lbs U_3O_8/ton over 2 feet in assay equivalents.

/3.

D.D.H. 16. No. 4 Exposure.

Location on local grid 200N. 75W.

Azimuth " " " 00 degrees.

Inclination - depressed 60 degrees.

Hole advanced 81 feet from 0 feet to 81 feet. Stopped.

Core Recovery - 98%.

Drilling was in bleached and carbonaceous schists to 46 feet, in various forms of mudstone to 78 feet and thereafter in 'hill' quartzite. Mineral was showing consistently from 30 feet to 62 feet.

Hole was probed to a depth of 75 feet 6 inches. The results obtained were all reasonably high, but the outstanding intersections are listed as follows :-

Depth in Hole		Assay Equivalent in Probe Results.
28 feet	to 33 feet	3.1 lbs U_3O_8/ton over 5 feet
33 "	" 37 "	4.8 " " " " 4 feet
37 "	" 41 "	2.5 " " " " 4 feet
41 "	" 52 " 6 ins.	11.0 " " " " 11 " 6 ins.
52 " 6 ins.	" 53 " " "	2.0 " " " " 1 "
57 "	" 57 " " "	1.6 " " " " 0 " 6 ins.

28 feet to 53 feet 6 ins. averages greater than 7.0 lbs U_3O_8/ over 25 feet 6 inches. This section of the core was split and assayed locally. The assay returns are listed as follows :

Depth in Hole in Feet	Radiometric Assay.
28-30	No core
30-32	2.7 lbs U_3O_8/ton over 2 feet.
32-34	1.9
34-36	1.6
36-38	3.4
38-40	6.0
40-42	1.6
42-44	2.0
44-46	6.4
46-48	31.0
48-50	14.5
50-52	34.2
52-54	35.0
54-56	3.3
56-58	1.2

Depth in Hole in Feet	Radiometric Assay (contd)
58-60	0.7
60-62	1.0
62-64	0.9 lbs U_3O_8/ ton over 2 feet
64-66	0.5 "
66-68	0.3 "
68-70	0.2 "

D.D.H. 17. No. 4 Exposure.

Location on local grid 190N. 200W

Azimuth " " " 00 degrees

Inclination - depressed 40 degrees

Hole advanced 137 feet from 0 feet to 137 feet. In progress.

Core Recovery - 38%

Drilling was in oxidised schists to this depth with a considerable amount of carbonaceous material after 87 feet. Not yet probed.

D.D.H. 18. No. 2 Exposure.

Location on local grid 125S. 400E.

Azimuth " " " 180 degrees

Inclination - depressed 20 degrees

Hole advanced 25 feet from 0 feet to 25 feet. In progress.

Core Recovery - 80%.

Drilling was in 'hill' quartzite to this depth.

Total diamond drilling footage for the period was 568 feet.

WAGGON DRILLING.

Attempts to grid drill in the vicinity of No. 2 Exposure have been delayed through equipment failures, lack of probing gear, and chiefly through the hard nature of the ground for which this treatment has proved unsuitable. Drilling progressed by only 3 holes for a total footage of 184 feet. The data obtained is recorded as follows:

Hole No.	Location	Co-ordinates	Depth Drilled	Depth Probed.
WD 49	No. 2 Expos.	240S. 435E.	47 feet	25 feet 6 inches.
	Results low, but highest reading obtained at 25 feet 6 inches.			
WD 50	No. 2 Expos. Hole was abandoned.	120S.400E	17 feet	Nil
WD 51	No. 4 Expos. Results uniformly low.	150N.200W	120 feet	106 feet.

MINING OPERATIONS.

Exploratory Development: No. 2 Exposure.

Breaking in the exploratory pit continued over a 12 feet by 4 feet face and advanced 16 feet south. Uranium micas were showing consistently over 12 feet of this development and breaking was stopped 4 feet into the mullock wall. This proved a width of 28 feet between walls and in all 200 tons of lode dirt and 46 tons of mullock were broken.

From the inadequate samples taken it is expected that the grade of the dirt broken will average approximately 1 lb. U_3O_8/ton.

No. 4 Exposure.

A further 2,200 yards of oberburden was removed from the open cut. An area of 13,700 square feet has now been stripped between the co-ordinates 100E and 125W. A further 50 yards of third grade ore was added to the stockpile in cleaning up the cut.

Signed: H. J. Newton

18/11/54.

Seventh Period Report N.A.U.C. Sleisbeck Prospect

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 27.11.54

General

Very heavy rain was experienced during the period throughout which the airstrip and prospect roads remained serviceable.

Delivery was taken of an electric welding set.

The present programme of camp construction was completed by 20th November.

Highlight of the period has been a diamond drill hole ore intersection 350 feet west of the most easterly showing of mineral at No.4 Exposure.

Administration

Company Employees

Employees on site 14.11.54 numbered 11

Employees on site 27.11.54 numbered 18

One gardener left. One fitter, one plant operator and one timekeeper started. One carpenter and two laboure s transferred from the building contractor's employment upon completion of that contract. One cook and one kitchen hand transferred from the caterer's employment upon the cancellation of that contract.

Contractors

Drilling and mining contracts as previously

Building c ntract terminated 20.11.54

Cartage contracts were reduced during the period to one truck and driver on hourly hire.

Building Construction

The present building programme was completed with the addition of a self-contained assay laboratory and crushing room.

The construction now completed comprises the following units:

Mess, Kitchen and store

Meatroom

Water tower

Canteen

2 ablution blocks, consisting of a total of 6 toilets, 7 showers and 5 hand basins

Power house

14 double-hut units

2 single huts - one of which is the timekeeper's office

Assay laboratory and crushing room

2 single room offices with a common roof

1 five-roomed office with private toilet

Permanent wiring of the huts continues. Four double-hut units and the timekeeper's office remain to be wired.

Extra mains from the power house to the mess and from the power house to the assay laboratory have been installed.

Road and Airstrip Construction

Roads: A further 2220 yards of overburden was carted and spread on the roads. These portions of the roads were graded and formed.

The road from Sleisbeck to the south Alligator leases received some attention. Clearing and smoothing was carried out with the bull-dozer and a truck hauled five ton as far as the river.

Airstrip: Some time was spent on rolling the airstrip after the rains and in reforming the low level crossing on the airstrip road.

Plant Operation

Units operating at company's expense: See attached list of equipment numbers.

Petrol Driven: 10 units operating - numbers 1, 4, 5, 8, 9, 10, 11, 12, 31 and 34 - electric welding set.

Diesel: 5 units operating - numbers 18, 25, 26, 27 and 28

Fuel Consumption: Total Motor Spirit consumed - 228 gallons
Total Distillate consumed - 405 gallons
Total Lubricants consumed - 43 gallons

Maintenance: performed additional to general servicing.

Unit No. 4 - clutch and steering adjusted, mudguard repaired, 2 new tyres fitted.
Unit No.18 - new filter borl fitted.
Unit No.25 - back rippers welded to blade, new winch rope fitted.
Unit No.27 - shovel teeth tipped.
Unit No.28 - steering adjusted, new blade fitted, new tyre and tube fitted, engine overhauled.
Unit No.29 - engine overhauled - valves straightened.
Unit No.31 - carburettor freed of rust, petrol tank flushed, crane erected.

Drilling

Diamond Drilling

D.D.H.4 | No. 4 Exposure

Refer sixth period report.

Hole extended and advanced 45 ft from 129 ft to 174 ft. Stopped. Core Recovery - 97%.

Drilling was in red mudstone to 131 ft 6 ins, in 'hill' quartzite to 132 feet 6 inches, in red mudstone to 152 feet, in 'hill' quartzite to 161 feet, in carbonaceous shists to 164 feet, in chloritic schist to 168 feet in red mudstone to 172 feet and in 'hill' quartzite to 174 feet.

Hole was probed to a depth of 174 feet. The results obtained were uniformly low with the exception of one reading at 170 feet - equivalent to 0.7 lbs. U308/ton.

D.D.H.17 No. 4 Exposure

Hole advanced 16 feet from 137 feet to 153 feet. Stopped. Core Recovery - 50%.

Drilling recovered sludge only to 145 feet and was thereafter in 'hill' quartzite.

Hole was probed to a depth of 140 feet. The intersections obtained were as follows:-

Depth in Hole	Assay Equivalents of Probe Results
114 ft. 6 ins. - 116 ft. 6 ins	0.7 lbs U308/ton over 2 ft.
116 ft 6 ins. - 117 ft. 6 ins	2.0 lbs U308/ton over 1 ft.
117 ft. 6 ins. - 119 ft.	0.7 lbs U308/ton over 1 ft. 6 ins.
114 ft. 6 ins. - 119 ft. averages	1.0 lbs U308/ton over 4 ft. 6 ins.
134 ft. 6 ins. - 136 ft.	0.8 lbs U308/ton over 1 ft. 6 ins.
138 ft. 6 ins. - 140 ft.	2.0 lbs U308/ton over 1 ft. 6 ins.

These portions of the core were split and assayed locally. The assay returns are listed as follows:-

Depth in Hole	Radiometric Assay
115 feet to 117 feet	0.2 lbs U308/ton over 2 ft.
117 feet to 119 feet	0.5 lbs U308/ton over 2 ft.
119 feet to 121 feet	0.6 lbs U308/ton over 2 ft.
121 feet to 123 feet	0,2 lbs U308/ton over 2 ft.
115 feet to 123 feet averages	0.4 lbs U308/ton over 8 ft.
138 feet to 140 feet	0.5 lbs U308/ton over 2 ft.

D.D.H.18 — No. 2 Exposure

Hole advanced 134 feet from 25 feet to 159 feet. Stopped.

Core recovery - 97%.

Drilling was in 'hill' quartzite to 56 feet 6 inches, in oxidised chloritic shists to 73 feet and thereafter in 'hill' quartzite

Mineral is showing in places in the core from 88 ft to 94 ft.

Not yet probed.

D.D.H.19 — No. 4 Exposure

Location on local grid 190N 250W

Azimuth on local grid 00 degrees

Inclination - depressed 50 degrees.

Hole advanced 201 feet 6 inches from 0 feet to 201 feet 6 inches, stopped.

Core Recovery - 73%.

Drilling was in oxidised and fresh chloritic schists to 102 ft, in bleached and carbonaceous schists to 192 ft 6 ins., in red mudstone to 193 feet 6 inches and thereafte in 'hill' quartzite.

Hole was probed to a d epth of 154 feet. The results showed a total of 27 feet averaging 017 lbs U308/ton and one section from 143 feet 6 inches to 147 feet 6 inches averaged 1.1 lbs U308/ton over 4 ft. This portion of the core and also a deeper section - inaccessible to the probe - was split and assayed. The assay returns are listed as follows:

Depth in Hole	Radiometric Assay
145 ft. 6 ins. to 146 ft. 6 ins.	0.5 lbs U308/ton over 1 ft.
181 feet to 183 feet	0.2 lbs U308/ton over 2 ft.
183 feet to 185 feet	0.3 lbs U308/ton over 2 ft.
185 feet to 187 feet	0.4 lbs U308/ton over 2 ft.
187 feet to 189 feet	0.4 lbs U308/ton over 2 ft.
189 feet to 191 feet	0.3 lbs U308/ton over 2 ft.

Depth in hole	Radiometric Assay
191 feet to 192 feet 6 ins.	1.0 lbs U308/ton over 1ft 6 ins.
192 feet 6 ins. to 193 ft. 6 ins.	2.0 lbs U308/ton over 1 ft.

D.D.H. 20 — No. 4 Exposure

Location on local grid 180N 300W.
Azimuth on local grid 00 degrees.
Inclination - depressed 50 degrees.
Hole advanced 209 feet from 0 feet to 209 feet. In progess.
Core Recovery - 61 %.

Drilling was in oxidised schists to 91 feet, in bleached and carbonaceous schists to 113 feet, in oxidised and fresh chloritic schists to 146 feet 6 inches and thereafter in carbonaceous schists.
Mineral is showing in the core from 110 feet to 115 feet.
Hole was probed to a depth of 157 feet. The intersection obtained were as follows:

Depth in Hole	Assay Equivalent of Probe Results.
108 feet 6 ins. to 11 ft.	1.7 lbs U308/ton over 2 ft 6 ins.
111 feet to 116 ft. 6 ins.	9.7 lbs U308/ton over 5 ft 6 ins.
116 ft. 6 ins to 120 ft.	1.7 lbs U308/ton over 3 ft 6 ins.

108 ft. 6 ins. to 120 ft. averages 5.1 lbs U308/ton over 11 ft 6 ins.
The assay returns for this portion of the core are listed as follows:-

Depth in Hole in feet	Radiometric Assay
110-112	4.0 lbs U308/ton over 2 ft.
112-114	6.6 lbs U308/ton over 2 ft.
114-116	5.0 lbs U308/ton over 2 ft.
116-118	1.1 lbs U308/ton over 2 ft.
118-120	1.0 lbs U308/ton over 2 ft.
120-122	0.5 lbs U308/ton over 2 ft.
122-124	0.3 lbs U308/ton over 2 ft.
110-120 averages	3.5 lbs U308/ton over 10 ft.

The discrepancy in the probe and assay results can be definitely attributed to incompleteness of core.

D.D.H.21 — No. 2 Exposure

Location on local grid 125S. 400E.
Azimuth on local grid 180 degrees
Inclination - depressed 45 degrees.
Hole advanced 80 feet from 0 feet to 80 feet. In progress.
Core recovery - 87 %.
Drilling was in 'hill' quartzite to 33 feet, in oxidised and fresh chloritic schists to 76 feet 6 inches and thereafter in 'hill' quartzite

D.D.H.22 — No. 4 Exposure

Location on local grid 190N 250W
Azimuth on local grid 00 degrees
Inclination - depressed 30 degrees.
Hole advanced 62 feet from 0 feet to 62 feet. In progress.
Core Recovery - 66 %.

Drilling was in oxidised schists and cherty material to this depth.

Total diamond drilling footage for this period was 747 ft. 6ins.

Waggon Drilling

No. 2 Exposure: Two more holes were attempted.

Hole No.	Coordinated	Depth Drilled	Depth Probed	Intersection
WD 53	230S.435E	40	Nil	Collapsed
WD 54	220S.435E	25	15	0.8 lbs U308/ton over 10ft 6 ins.

No. 4 Exposure

Vertical traverse drilling in the stripped area was resumed and a further 14 holes were completed. Data obtained is recorded as follows:

Hole No.	Coordinated	Depth Drilled	Depth Probed	Average Grade of Intersections
WD 52	215N.00E	33	28	6.5 lbs U308/ton over 26'
WD 55	175N.100W	40	40	10.0 lbs U308/ton over 31'6"
WD 56	186N.100W	60	60	2.0 lbs U308/ton over 47'6"
WD 57	197N.100W	60	55	1.3 lbs U308/ton over 12'
WD 58	207N.100 W?	60	60	1.4 lbs U308/ton over 23'
WD 59	217N.100W	60	59	2.0 lbs U308/ton over 16'
WD 60	225N.100W	60	60	1.1 lbs U308/ton over 11'
WD 61	163N.100W	31	30	1.6 lbs U308/ton over 15'
WD 62	175N. 75W	40	32	1.9 lbs U308/ton over 32'
WD 63	185N. 75W	60	55	2.2 lbs U308/ton over 20'
WD 64	235N.100W	60	56	1.8 lbs U308/ton over 11 ft
WD 65	195N. 75W	60	60	3.6 lbs U308/ton over 35'
WD 66	205N. 75W	60	57	1.9 lbs U308/ton over 16'6"
WD 67	215N. 75W	60	57	1.5 lbs U308/ton over 12'

16 Waggon drill holes were completed over the period for a total footage of 809 feet.

Mining Operations

Exploratory Development No. 3 Exposure

The mining of a costean across the lode material was completed. Development extended over a horizontal distance of 32 feet, from the eastern wall - across the lode - and through the western wall, at which position there was 15 feet of backs.

Uranium micas are showing in places, but from instrument readings it is expected that the values exposed are very low. The development established the western wall as wall rock. Channel samples along each wall are yet to be assayed.

No.4 Exposure

A further 1640 yeards of overburden was removed from the open cut An area of 17,600 square feet has now been stripped between the co-ordinates 200W, 100E, and north of 150N. A further 20 yards of second grade ore was added to the stockpile in cleaning up.

No.1 Exposure.

Cleaning up the development face commenced and 580 yards of broken dirt and overburden was removed.

Remarks

Exploration has been severely handicapped lately through lack of probing equipment. Such equipment has been borrowed from T.E.P. and B.M.R. but as the instruments and attachments vary in each case, the results obtained are confusing.

An Electronic Associates Ltd. probing unit arrived on 24th November, 1954, unaccompanied by any information. This necessitated lengthy calibrations by Mr. Newman before results could be equated in terms of assay equivalents. The unit is proving quite satisfactory but has insufficient cable attached.

Assay returns from the South Australian Mines Department - refer D.D.H. 11, fifth period report - compare very well, both chemically and radiometrically with the assays run locally and show the ore to be in equilibrium.

Signed H.J. Newton
2.12.54

LIST OF EQUIPMENT WITH NUMBERS USED AT SLEISBECK

Unit Number	Equipment
1 to 8	Land Rovers
9	International AR 160 (flat top)
10	International AR 180 (tipper)
11	International AR 110 (utility)
12	International AR180 (tipper)
13	Mindrill A2000
14	Sullivan Drill (22)
15	Enfield Water Pump
16	Novo Water Pump
17	B.S.A. Water Pump
18	Deutz Alternator 35KVA
19	Atlas Diesel Compressor
20	D.4 Caterpillar Bulldozer
21	Atlas Waggon Drill
22	Mindrill E1000
23	Enfield Water pump
24	Atlas Power Take-off Compressor
25	D 7 Caterpillar Bulldozer
26	Deutz Alternator 20KVA
27	Ruston Bucyrus Shovel (19)
28	Grader D.12
29	Cletrac
30	Chevrolet 6 x 6 Water Truck
31	Chevrolet 4 x 4 Crane Truck
32	Half-track Waggon Drill and Compressor (Gardiner Denver)
33	Rotary Hoe
34	Electric Welding Set

SUMMARY OF REPORTS (H.J. NEWTON) ON OPERATIONS AT SLEISBECK

TO 27. 11. 54.

Road and Airstrip Construction

Roads: 6580 yards of overburden
2370 yards of gravel
30 yards of rocks

Airstrip: 11,084 yeards of gravel

Field and Radiometric Gridding: 1,470,000 square feet

Drilling: Diamond: 3536 feet 6 inches
Waggon: 3561 feet 6 inches

Mining Operations: Costeaning: 32 feet on No. 3 Exposure
87 feet on No. 5 Exposure
Exploratory Pit: 20 x 9 x 10 and 16 x 12 x 4 on No. 2 Exposure.
Dirt Broken: No.2 Exposure: 200 tons lode dirt
46 tons mullock
Dirt Carted: Overburden (used on roads)
From No. 4 Exposure: 6000 yards
From No. 1 Exposure: 580 yards

Ore (Stockpiled)

1st grade	45 yards
2nd grade	165 yards
3rd grade	495 yards
mullock	420 yards

Drilling was in oxidised schists to 93 feet, in fresh chloritic schists to 98 feet, in bleached and carbonaceous schists to 120 feet and thereafter in 'hill' quartzite.
Hole was probed to a depth of 125 feet. The results obtained are recorded as follows:

Depth in Hole			Assay Equivalents of Probe Results
36 ft. 6 ins.	-	39 ft. 6 ins.	1.1 lbs U308/ton over 3 feet
89 ft. 6 ins.	-	93 ft. 6 ins.	1.0 lbs U308/ton over 4 feet
95 ft.	-	99 ft.	2.3 lbs U308/ton over 4 feet
109 ft.	-	111 ft. 6 ins.	1.9 lbs U308/ton over 2 ft. 6 ins.
111 ft. 6 ins.	-	114 ft.	2.9 lbs U308/ton over 2 ft. 6 ins.
114 ft	-	117 ft. 6 ins.	1.8 lbs U308/ton over 3 ft. 6 ins.
109 ft.	-	117 ft. 6 ins.	2.3 lbs U308/ton over 8 ft. 6 ins.

Depth in Hole in Feet	Radiometric Assay
108-110	0.6 lbs U308/ton over 2 feet
110-112	1.8 "
112-114	1.2 "
114-116	0.8 "

D.D.H.23 — No. 4 Exposure

Location on local grid 220N. 300W.
Azimuth on local grid 00 degrees.
Inclination - depressed 50 degrees.
Hole advanced 119 feet 6 inches from 0 feet to 119 feet 6 inches. Stopped.
Core Recovery - 87%.
Drilling was in oxidised schists to 90 feet, in fresh chloritic schists to 105 feet, in bleached and carbonaceous schists to 113 feet, in red mudstone to 116 feet 6 inches and thereafter in 'hill' quartzite.
Hole was probed to a depth of 119 feet. The results obtained were later found to be unacceptable due to instrument failures but relative highs were recorded at 98 feet and from 106 feet to 110'.
The core assay returns over this section are listed as follows:

Depth in Hole in Feet	Radiometric Assay
104-106	0.8 lbs U308/ton over 2 feet
106-108	3.0 "
108-110	1.0 "
110-112	0.5 "

D.D.H. 24 — No. 4 Exposure

Location on local grid 180N. 350W.
Azimuty on local grid 00 degrees
Inclination - depressed 50 degrees.
Hole advanced 211 feet from 0 feet to 211 feet. Stopped.
Core Recovery - 73%.

Drilling was in oxidised schists to 181 feet, in bleached and carbonaceous schists to 206 feet, in red mudstone to 209 feet and thereafter in 'hill' quartzite. Not yet probed.

D.D.H. 25 — No. 2 Exposure

Location on local grid 185S. 400E.
Azimuth on local grid 180 degrees
Inclination - depressed 45 degrees.

Hole advanced 207 feet from 0 feet to 207 feet. In progress
Core recovery - 65 %.
Drilling was in oxidised chloritic schists to 128 feet 6 inches, in 'hill' quartzite to 144 feet, in oxidised schists to 160 feet 6 inches and thereafter in 'hill' quartzite.

D.D.H. 26 — No. 4 Exposure

Location on local grid 140N. 300W.
Azimuth on local grid 00 degrees.
Inclination - depressed 50 degrees.
Hole advanced 75 feet 6 inches from 0 feet to 75 feet 6 inches.
In progress. Core Recovery - 68%.
Drilling was in bleached and oxidised schists to this depth.

D.D.H. 27 — No. 4 Exposure

Location on local grid 140N. 400E.
Azimuth on local grid 00 degrees.
Inclination - depressed 45 degrees.
Hole advanced 71 feet from 0 feet to 71 feet. In progress.
Core recovery - 73 %.
Drilling was in oxidised chloritic schists to this depth.
Total diamond drilling footage for the period was 852 feet.

Waggon Drilling: — No. 4 Exposure

Vertical traverse drilling in the stripped area continued and a further 22 holes were completed for a total footage of 1336 feet. Data obtained is recorded as follows:

Hole No.	Coordinates	Depth Drilled	Depth Probed	Average Grade of Intersections.	
68	225N. 75W	60	60	3.8 lbs U308/ton	over 55'
69	185N. 50W	52	23	5.4	" 13'6"
70	195N. 50W	60	60	3.3	" 41'
71	205N. 50W	60	59	5.0	" 58'
72	215N. 50W	60	59	19.1	" 59'
73	215N. 25W	60	60	11.8	" 56'6"
74	224N. 50W	60	60	6.3	" 33'6"
75	205N. 25W	60	59	6.1	" 36'6"
76	195N. 25W	60	59	2.4	" 30'
77	185N. 25W	60	47	2.4	" 30'6"
78	190N. 50W	60	56	9.6	" 22'
79	210N. 50W	60	60	11.4	" 51'6"

Hole No.	Coordinates	Depth Drilled	
80	219N. 50W	60	not yet probed.
81	190N. 75W	60	"
82	210N. 75W	60	"
83	219N. 75W	60	"
84	190N.100W	80	"
85	210N.100W	60	"
86	220N.100W	60	"
87	185N.125W	64	"
88	195N.125W	60	"
89	205N.125W	60	"

Mining Operations

Exploratory Development

No. 1 Exposure

A further 440 yards of overburden was removed and dumped on stripping with a view to waggon drilling.

No. 5 Exposure

Mining in No. 2 costean was resumed and development advanced 30 feet over a 6 x 4 face towards the southern quartzite wall.

Development exposed weakly radioactive chloritic schists under 2 to 3 feet of overburden and was abandoned in favour of stripping with the power shovel.

Stripping east between the limits of the northern and southern quartzite walls commenced on 10th December, 1954, when 68 yards of overburden was removed and dumped.

Stripping is being carried out to gain wall rock information and also with a view to waggon drilling. Most of the overburden will be used in forming a road to this exposure.

Grade of Development

No. 2 Exposure

Channel samples taken in 2 feet lengths along the east and west walls of the exploratory pit showed a maximum grade of 4.3 lbs U308/ton over a width of 2 feet in the centre of the west wall and an average grade of 1.5 lbs U308/ton for the 31 samples taken.

No. 3 Exposure

Channel samples taken in 2 feet length along the north and south walls of the costean showed a maximum grade of 3.0 lbs U U308/ton over a width of 4 feet in the centre of the south wall and an average grade of 2.0 lbs U308/ton over a width of 14 feet along this wall. The centre of the north wall showed an average grade of 1.1 lbs U308/ton over a width of 6 feet.

No. 4 Exposure

Channel sampling over 4 feet lengths along coordinate traverses 25 feet apart returned ore grade assays on the 25'W.,

00'E. and 25'E. lines but not on the 100'W., 75'W and 50'E lines.

The purpose of this sampling was to complete drilling cross sections and much of the exposed ore was not covered. Sampling across the lode along traverses 5 feet apart will be undertaken as soon as possible when all the results will be recorded together.

Remarks

The cuttings from all waggon drill holes bored since W.D.63 have been collected over 5 feet intervals and radiometrically assayed. These total to date 297 assays which serve as a rough check on the probe results.

The bulldozing of a costean on the flats between the 'Eastern' and 'Central' hills commenced some months ago and has been persevered with spasmodically. In all the bucyrus T.D.18, the Cat. D.4 and the Cat.D.7 towing rippers were tried unsuccessfully. The blade mounted back rippers on the D.7 finally proved capable of moving the 8 feet of clayey soil necessary.

The costean is completed over a length of 250 feet on the 'field' coordinates 850S to 1100S with the centre line along 25'E - but filled with water before information could be obtained.

Stripping in No. 1 Exposure was suspended owing to the area's susceptibility to flooding and commenced on the higher ground at No.5 Exposure.

Signed: H.J. Newton
18. 12. 54

N.A.U.C. Sleisbeck Prospect

Ninth Period Report

Report on Operations for the Fortnight Ending 25.12.54

General

For purposes of reorganising accounts all personnel, other than staff, were paid up and signed off at the commencement of the holiday period on 24.12.54.

The end of the period was largely devoted to cleaning up the camp site and storing away equipment for preservation over the standown period.

Administration

Company Employees

Employees on site 12. 12. 54 numbered 18.

Employees on site 25.12.54 numbered 2.

Contractors

Drilling and cartage contracts as previously up to 24.12.54

No mining contracts let.

Building Construction

The construction of the hangar completed all but for the iron.

Road Construction

A further 2,380 yards of overburden were used in forming the road to No. 5 Exposure. This section of the road was graded.

Plant Operation

Units Operating at Company's Expense

Petrol driven; 9 units operating - 1, 4, 5, 8, 9, 10, 11, 12 & 31

Diesel: 5 units operating - 18, 25, 26, 27, and 28.

Fuel Consumption:

Total motor spirit consumed - 152 gallons

Total distillate consumed - 421 gallons

Total lubricants consumed - 15 gallons.

Maintenance: performed additional to general servicing.

Unit No. 4 - brakes adjusted. Exhaust system repaired.

Unit No.10 - brakes adjusted. Hoist repaired and installed.

Unit No.25 - canopy constructed and fitted.

Unit No. 26 - repairs to field wiring in generator.

Unit No.28 - Tie-rod repaired.

Drilling

Diamond Drilling

D.D.H. 24 Refer preceding report.

Hole was probed to a depth of 202 feet. The two intersections obtained are listed as follows:

Depth in Hole (ft)	Assay Equivalent
35-44	1.2 lbs U308/ton over 9 feet
198-202	1.6 " 4 feet

D.D.H. 25 — No. 2 Exposure

Hole advanced 133 feet from 207 feet to 340 feet. Stopped.

Drilling was in quartzite to 211 feet, in bleached schists to 214 feet, in quartzite to 215 feet 6 inches, in bleached schists to 219 feet, in oxidised schists to 234 feet, in chloritic schists to 248 feet, in graphitic schists to 256 feet and thereafter in chloritic schists.

Hole was probed to a depth of 340 feet. The two intersections obtained are listed as follows:

Depth in Hole (ft.)	Assay equivalent
257-265	0.9 lbs U308/ton over 8 feet
288-291	1.2 lbs U308/ton over 3 feet.

D.D.H. 26 — No. 4 Exposure

Hole advanced 205 feet from 75 feet 6 ins. to 280 feet 6 ins. Stopped.

Drilling was in partly oxidised chloritic schists to 185 feet 6 inches, in bleached carbonaceous schists to 209 feet, in chloritic schists to 216 feet 6 inches, in quartzite to 221 feet 6 inches, in oxidised schists to 235 feet, in carbonaceous schists to 274 feet 6 inches, in quartzite to 275 feet 6 inches, in red mudstone to 277 feet 6 inches, and thereafter in quartzite.

Hole was probed to a depth of 278 feet. The one intersection obtained averaged 1.95 lbs. U308/ton over 6 feet from 203 feet to 209 feet.

D.D.H.27 — No. 4 Exposure

Hole advanced 128 feet from 71 feet to 199 feet. In progress.

Drilling was in oxidised schists to 126 feet, in carbonaceous schists to 127 feet, in partly oxidised schists to 137 feet, and carbonaceous schists to 192 feet 6 inches and thereafter in chloritic schists.

Hole was probed prematurely to a depth of 156 feet. Results obtained were uniformly low.

Total diamond drilling footage for the period was 466 feet.

Waggon Drilling

The waggon drill was not operating during this period. The 10 holes reported but not probed, during the last period were probed during this period. The results obtained are listed as follows:

Hole No.	Depth Probed	Average grade of Intersection
80	59 ft. 9	11.5 lbs U308/ton over 59 feet
81	59	1.4 " 57 feet
82	60	1.3 " 51 feet

Hole No.	Depth Probed	Average Grade of Intersection
83	58 feet	9.1 lbs U308/ton over 13 feet
84	80 feet	1.2 " 7 "
85	60 feet	1.2 " 9 "
86	60 feet	1.0 " 1 "
87	60 feet	1.0 " 1 "
88	60 feet	Nil
89	60 feet	Nil

Mining Operations

No. 5 Exposure

A further 2,380 yards of overburden were removed in stripping operations. The total area now stripped is 6,400 square feet.

This stripping has revealed carbonaceous schists against the southern wall of quartzite.

Signed: H.J. Newton
20. 1. 55

N.A.U.C. Sleisbeck Prospect.

Tenth Period Report

REPORT ON OPERATIONS FOR FORTNIGHT ENDED 8.1.55

By direction of the Board, no operations were carried outover this period.

Two employees remained on the site.
Power was required for light and refrigeration.
Total motor spirit consumed - 16 gallons
Total distillate consumed - 67 gallons
Total lubricants consumed - 1 gallon

Signed H.J. Newton
20. 1. 55

N.A.U.C. Sleisbeck Prospect

Eleventh Period Report

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 22.1.55

General

By the direction of the Board no operations were carried out on the prospect over this period.

Selected personnel were returned in preparing to resume operations and were engaged on general camp and equipment maintenance.

Administration

Company Employees:

Employees on site 8.1.55 numbered 2

Employees on site 22.1.55 numbered 10.

The timekeeper, 2 field assistants, 3 general hands, 1 plant operator and 1 truck driver returned.

Plant Operation:

Units Operating at Company Expense

Petrol driven; 9 units operating, Nos.4,5,8,10,11,12,29, 31 and 34.

Diesel: 1 unit operating - number 18.

Fuel Consumption: total motor spirit consumed - 100 galls.
total distillate consumed - 250 galls.
total lubricants consumed - 6 galls.

Maintenance - additional to general servicing.

Unit No. 4 - exhaust welded, starter motor repaired.
10 - new axle fitted, window cut in cabin guard.
12 - window cut in cabin guard.
27 - 2 complete sets of teeth drawn out and tipped

Camp Maintenance

All grass was removed from around the camp site. White ants were temporarily suppressed.

Road Maintenance

The low level crossing was again repaired and buttressed against flood waters. Drainage ways were constructed across low stretches of the roads and gravel was carted in top dressing weak portions.

Signed: H.J. Newton
10.2.55

N.A.U.C. Sleisbeck Prospect

Twelfth Period Report

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 5.2.55

General

Operations on the prospect amounted to only 60 feet of diamond drilling.

Probing an extra 8 feet, previously inaccessible, in D.D.H. 27 revealed a small intersection of ore. This intersection on the 400W. section is the farthest west yet obtained at No. 4 exposure.

Camp and equipment maintenance continued.

Administration

Company Employees:

Employees on site 22.1.55 numbered 10.

Employees on site 5. 2.55 numbered 13.

1 carpenter returned, 1 fitter started, and a contract miner was temporarily assigned to mess duties.

Contractor: Drilling contractors consisted of 1 team of 5 men.

Camp Maintenance and Construction

A new kitchen stove was freighted in by air and installed; a round timber bakehouse was constructed beside the meat room and the old stove was installed in this. General camp improvement continued.

Road Maintenance: General maintenance continued.

Plant Operation:

Units Operating At Company Expense

Petrol Driven: 7 units operating - Nos.1,4,5,8,10,11 & 30.

Diesel: 2 units operating - Nos. 18 and 26.

Fuel Consumption: Total motor spirit consumed - 63 gallons
Total distillate consumed - 249 "
Total lubricants consumed - 12 "

Maintenance - additional to general servicing.

Unit No. 1 - New starter sleeve assembly, governor belts, distributor points and plugs fitted. Valves adjusted.
4.- Steering and valves.
5 - Water tank repaired. Steering adjusted.
8 - Brakes adjusted. Flywire fitted over radiator.
18 - Generator and exhaust repaired. Complete top overhaul
26 - Repaired generator installed.
31 - Fuel tank repaired.

Diamond Drilling

D.D.H. 21 No. 2 Exposure

Refer eighth period report.

Hole was re-entered and advanced 60 feet from 180 feet to 240 feet. It was intended to continue drilling to 270 feet for probable intersections; however the hole collapsed and was abandoned at 240 feet.

Drilling was in quartzite to 180 feet 6 inches, in partly bleached schists to 185 feet, in oxidised schists to 200 feet, in fresh chloritic schists to 223 feet, in graphitic schists to 224 feet, in partly oxidised schists to 229 feet, in graphitic schists to 231 feet and thereafter in chloritic schists.

Hole was probed to 232 feet. No further intersections were obtained.

D.D.H. 27 — No. 4 Exposure

Refer eighth period report and ninth period report.

Hole collapsed over the stand down period. Attempts were made to pick up the footage and continue drilling, but these only succeeded in lowering the casing an additional few feet.

Hole was reprobed to 163 feet in order to take advantage of this extra information and resulted in the following intersections:

Depth in Hole (feet)	Assay Equivalent of Probe Result
155-158	1.1 lbs U308/ton over 3 feet
158-160	4.4 lbs " 2 feet
155-160	2.4 " 5 feet

Remarks

The intersection in D.D.H.27 proves ore grade material 450 feet west of the most easterly showing of mineral at No.4 Exposure.

This hole had advanced to 199 feet before Xmas and a further 30 feet of carbonaceous schists were intersected.

It is considered likely that a greater width of ore is obtainable on this section.

Signed: H.J. Newton
11.2.55

N.A.U.C. Sleisbeck Prospect

Thirteenth Period Report

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 19.2.55

General

Operations were confined to equipment maintenance and the improvement of the camp and roads.

Administration

Company Employees

Employees on site 5.2.55 numbered 13

Employees on site 19.2.55 numbered 13.

No men left. No men started.

Plant Operation

Units operating at Company Expense:

Petrol driven - 5 units operating, Nos. 4, 5, 11, 12 & 31

Diesel: 3 units operating - Nos. 18, 25 and 26.

Fuel Consumption:

Total motor spirit consumed - 50 gallons.

Total distillate consumed - 232 gallons.

Total lubricants consumed - 11 gallons.

Maintenance - additional to general servicing.

Unit No.1 - brakes adjusted. Ignition retimed.

5 - Fuel line repaired. Ignition retimed.

8 - Brakes and clutch adjusted.

10 - Cluth adjusted.

18 - Voltage cut-out fitted.

31 - New petrol pump and fuel line fitted.

Filter repaired. Brakes repaired and adjusted.

The electric motor of the water pump was changed while undergoing repairs.

Signed: H.J. Newton

24.3.55

N.A.U.C. Sleisbeck Prospect

Fourteenth Period Report

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 5.3.55

General

Operations were confined to equipment maintenance and the improvement of the camp and roads.

Administration

Company Employees

Employees on site 19.2.55 numbered 13

Employees on site 5.3.55 numbered 12

One plant operator left.

Plant Operations

Units operating at Company expense:

Petrol driven: 6 units operating, Nos.4,5,10,11,12 and 31

Diesel: 2 units operating, numbers 18 and 26.

Fuel Consumption: Total Motor Spirit consumed - 73 gallons

Total Distillate consumed - 246 gallons

Total Lubricants consumed - 5 gallons

Maintenance - additional to general servicing.

Unit No. 1 - compressor drive repaired.

4 - steering assembly repaired. Brake re-lined.

5 - tappets adjusted, brakes relined.

10 - new axle fitted.

12 - brakes adjusted. Hoist checked.

18 - radiator repaired.

25 - blade corner built up.

28 - New front steering tie-rod constructed and fitted.

Signed: H.J. Newton

24.3.55

N.A.U.C. Sleisbeck Prospect

Fifteenth Period Report

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 19.3.55

General

Operations were confined to equipment maintenance and the improvement of camp and roads.

Administration

Company Employees

Employees on site 5.3.55 numbered 12.

Employees on site 19.3.55 numbered 12.

No turnover.

Plant Operation

Units operating at Company Expenses

Petrol driven: 6 units operating, Nos.1, 4,5,10,11, and 12.

Diesel: 4 units operating, Nos. 18, 25, 26 and 27.

Fuel Consumption: Total motor spirit consumed - 92 gallons
Total distillate consumed - 324 gallons
Total lubricants consumed - 11 gallons

Maintenance - additional to general servicing.

Unit No. 1 - starter motor repaired.
2 - new tyre and tube fitted.
4 - starter motor repaired.
10 - repairs to rear spring assembly.

Signed: H.J. Newton
24.3.55

Sixteenth Period Report

General

Diamond drilling was resumed.

The construction of a cattle yard commenced.

Administration

Company Employees

Employees on site 19.3.55 numbered 12.

Employees on site 2.4.55 numbered 10.

1 carpenter was temporarily transferred to another company. The temporary mess duties assigned to a contract miner ceased.

Contractors

Drilling contractors consisted of 1 team of 4 men operating two rigs.

Construction

Camp maintenance continued. Electrical installations in the camp area continued. A hot water service from the kitchen stove was installed.

The construction of a stockyard to hold 20 head of cattle was half completed.

Plant Operation

Units operating at Company's expense

Petrol driven: 8 units operating - 1, 4, 5, 8, 9, 10, 11,12.

Diesel: 2 units operating - 18 and 26.

Fuel Consumption: Total motor spirit consumed - 68 gallons
Total distillate consumed - 254 "
Total lubricants consumed - 9 "

Maintenance - performed additional to general servicing.

Unit No.4 - Front end drive shaft removed, repaired and fitted. Master cylinder repaired. Front springs removed.

10 - fitted new centre bolt rear main spring.

24 - new air hose fitted.

25 tracks adjusted. Rippers removed.

26 - new brushes cut and fitted. New switchboard stand constructed and installed.

28 - used spare tyre and new tube fitted to replace blowout.

Drilling

Diamond Drilling

D.D.H. 28 No. 4 Exposure

Location on local grid 140N. 550W.

Azimuth on local grid 00 degrees.

Inclination - depressed 50 degrees.

Hole advanced 66 feet from 0 feet to 66 feet. In progress.

Core recovery - 97%.

Drilling was in soil to 13 feet and thereafter in ozidised schists.

D.D.H. 29 Geobotanical Anomaly

Location on field grid 185S.2725W.

Azimuth on field grid 180 degrees.

Inclination - depressed 50 degrees.

Hole advanced 72feet from 0 feet to 72 feet. Stopped.

Core recovery - 96%.

Drilling was in soil to 10 feet, in oxidised schists to 51 feet and thereafter in quartzite. The quartzite from 52 feet to 59 feet 6 inches was very broken and impure.

Hole was probed to 68 feet. Results obtained were completely negative, the best readings being slightly above background.

Remarks

It is at present intended to spread exploratory operations in order to gain a quick appraisal of the field's potential.

In the current drilling programme the holes are widely and irregularly spaced and any ore intersections obtained will be left for detailed testing in the future.

This programme is chiefly concerned with the speculative testing of likely places. Indications of such places are considered to be sharp irregularities in the wall rock contact (i.e. changes in the strike of the ridges), instrument anomalies associated with quartzite outcrops on the flats, sulphide boxworks showing radioactivity west of the hills and the geobotanical anomalies obtained from A.H. Debnam's survey of the prospect.

D.D.H. 28 is testing a section 150 west of the last drill hole on No.4 exposure, in the vicinity of geobotanical anomalies and where the strike of the ridge changes abruptly. This hole is now drilling carbonaceous schists and positive results may be expected.

D.D.H.29 was collared approximately half way between No.3 and No.4 exposures. This hole was designed to test a geobotanical anomaly associated with a sharp break in strike, in an area where only low surface readings are obtainable. This hole was negative, but the same locality is now being tested from the other side of the ridge.

Signed: H.J. Newton

4.4. 55.

N.A.U.C. Sleisbeck Prospect

Seventeenth Period Report

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 16.4.55

General

Diamond drilling was temporarily discontinued at the end of the period. Two gazetted holidays occurred in this period.

Administration

Company Employees

Employees on site 2.4.55 numbered 10

Employees on site 16.4.55 numbered 10

L.G. Turner, licensed surveyor, started.

1 general hand was temporarily absent sick.

Contractors

Diamond drilling contractors ceased operations.

A waggon drilling contract on a footage basis was accepted by the team of two mining contractors.

Construction

The construction of the stockyard is 90% complete.

Firebreaks were formed where necessary by bulldozing.

Plant Operation

Units Operating at Company expense:

Petrol driven: 6 units operating, Nos.5,8,10,11,12 and 32

Diesel: 4 units operating, Nos. 18, 19, 26 and 32.

Fuel Consumption: Total motor spirit consumed - 56 gallons
Total distillate consumed - 291 gallons
Total lubricants consumed - 11 gallons

Maintenance - additional to general servicing.

Unit No. 2 - new return spring fitted to starter motor.
12 - starter motor wiring repaired.
19 - fuel line repaired.
26 - new stud fitted to generator
32 - the bottom clamp exchanged for new. The old clamp cut and welded to frame to serve as a 'centre steady'. Air hammer overhauled and worn parts replaced from spare machine.

Drilling

Diamond Drilling

D.D.H. 28 No. 4 Exposure

Hole advanced 91 feet from 66 feet to 157 feet. Stopped.

Core recovery - 93%.

Drilling was in oxidised schists to 96 feet, in carbonaceous schists to 148 feet, in bleached and oxidised schists to 151 feet 6 inches, in quartzite to 154 feet 6 inches, in red mudstone to 156 feet and thereafter in quartzite.

Hole was probed to 148 feet. The results obtained were negative, but the best reading was the deepest.

Attempts are being made to probe the extra feet.

D.D.H.30 Geobotanical Anomaly

Location on field grid 310S.2650W.

Azimuth on field grid 00 degrees.

Inclination - depressed 60.

Hole advanced 129 feet from 0 feet to 129 feet. Bit lost, hole abandoned.

Core recovery - 99%

Drilling was in soil to 10 feet, in oxidised schists to 86 feet, in fresh chloritic schists to 117 feet, in oxidised schists to 125 feet 6 inches and thereafter in quartzite.

Hole was probed to 128 feet. The results obtained were negative.

D.D.H. 31 Instrument Anomaly

Location on field grid 1125S.994E.

Azimuth on field grid 180 degrees.

Inclination - depressed 50 degrees.

Hole advanced 88 feet from 0 feet to 88 feet. stopped.

Core recovery - 84%

Drilling was in soil to 15 feet 6 inches, in silicified slate to 24 feet, in oxidised schists to 33 feet, in quartzite to 55 feet, in bleached chloritic schists with some carbon to 57 feet, in crushed chloritic schists to 74 feet, in quartzite to 75 feet 6 inches, in redmudstone to 81 feet 6 inches and thereafter in quartzite.

Hole was probed to 85 feet. The results obtained were negative.

Waggon Drilling

Vertical waggon drilling was resumed and a further 17 holes were completed for a total footage of 900 feet.

This drilling was carried out at No.4 and No.5 exposures and at the geogotanical anomaly. The results obtained are listed under the locality as follows:

No.4 Exposure

Hole No.	Coordinates	Depth Drilled	Depth Probed	Average Grade of Intersections
W.D.90	220N. 125W.	60	60	Nil
" 91	230N. 125W.	65	64	Nil
" 92	240N. 125W	40	inaccessible - steel jammed	
" 93	185N. 87½W	54	52	8.9 lbs U308/ton over 20 ft.
			and 1.5 lbs	" 26 ft.
" 94	230N. 100W	54	49	1.8 " 6 ft.
" 95	220N. 87½W	73	72	1.4 " 32 ft.
" 96	214N. 62½W	90	89	14.1 " 81 ft.
" 97	212N. 37½W	61	61	9.9 " 61 ft.
" 98	170N. 112½W	41	40	1.8 " 26 ft.
Geobotanical Anomaly				
W.D.99	168S.2725W	27	26	Nil

No. 5 Exposure

Hole No.	Coordinates	Depth Drilled	Depth Probed	Average Grade of Intersections
W.D.100	1235S 1725E	47	47	Nil
101	1225S 1725E	43	43	Nil
102	1215S 1775E	47	47	Nil
103	1205S 1775E	42	42	Nil
104	1195S 1775E	54	54	Nil
No.4 Exposure				
W.D.105	242½N 125W	60	60	1.9 lb U308/ton over 12 ft
106	235 N 100W	42	inaccessible - steel jammed.	

Exploratory Development

Instrument anomaly

The bulldowing of 2 costeans Nos. 3 and 4 in the vicinity of D.D.H.31, was completed. No. 2 costean approximately 20 feet west of D.D.H.31 is 100 feet long. No. 3 costean approximately 25 feet east of D.D.H. 31 is 110 feet long.

These costeans exposed a brand of quartzite interbedded with chloritic schists.

Remarks (Specific)

Hold ups were experienced due to probe instrument failures and the jamming of waggon drill steel. Efforts are being made to recover a total of 82 feet of steel at present blocked in holes.

No. 4 Exposure: The results of D.D.H. 28 are inconclusive. This site required deeper drilling, but the hole was abandoned due to theloss of a bit. The most interesting portion of the hole has not yet been probed.

W.D.93, 95, 96, 97 and 98 were testing for continuity between the established sections. W.D.96 intersected high grade ore continuously to 20 feet deeper than was previously indicated. W.D. 105 resulted in the first intersection ore obtained on the 125W section.

No.5 Exposure:This one traverse of 5 waggon drill holes proved the supposition of a synclinal structure correct. All 5 holes bottomed in quartzite at depths of between 42 and 54 feet below the stripped surface. The trough is therefore wide and shallow on this section. A tighter control may be expected further west.

Geobotanical Anomaly: The drilling suggests a structure similar to that at No.4 Exposure which warrants further testing by cheaper exploratory methods.

Instrument Anomaly:D.D.H.31 tested a high surface anomaly of 18 times background thought to be associated with another trough structure some 700 feet west of the No.5 Exposure. The hole established a tight quartzite syncline containing some carbonaceous material in the enclosed schists. Strong shearing is also indicated in the core. This area warrants considerably more testing.

Signed: H.J. Newton
18.4.55

Summary of Operations Carried Out by N.A.U.C. at Sleisbeck, Turnoff Creek, Alligator Project and Coronation Hill for the Period 17.4.55 to 23.7.55

General

A total of 61 miles of road were cleared and graded to provid access to the bitumen and between the various areas. This total was comprised of 30 miles of road between Sleisbeck and the Alligator Project, 21 miles between the Alligator Project and Goodparla homestead and 10 miles between Sleisbeck and Turnoff Creek prospect.

Operations at Sleisbeck

Surveying: A surveyed base plan - scale 100 feet - 1 inch - of all existing workings is completed. This entailed the surveying of a further total length of 18,700 feet of control lines, the establishment and relative levelling of a further 6 permanent survey stations and the picking up and levelling of all workings.

Gridding: A survey grid was established over a further total area of 1,730,000 square feet of which 890,000 square feet was radiometrically traversed on 10 by 5 feet centres. The results obtained were consistent with those expected.

Sampling: No. 4 Exposure was thoeoughly sampled by taking runs of channel samples 24 inches long across the stripped surface of the ore body along lines 5 feet apart.

The 290 samples taken were assayed locally and found to indicate reserves of 1232 lbs. U308 per vertical foot at an average grade of 6.6 lbs U308/ton.

Bulldozed Costeans: An extensive exploration programme of costeaning and waggon drilling was embarked upon and a further 46 costeans - numbers 5 to 50-were completed for a total length of 11,581 ft. Each costean was radiometrically traversed upon completion with no significant results. The most important results obtained were those of rock types.

Waggon Drilling:

A systematic programme of waggon drilling at regular intervals along the costeans commenced. The intervals varied considerably with the early holdes when closer drilling as undertaken on more important areas and trouble was experienced due to ground water.

In all 277 holes - numbers W.D.107 to W.D. 91A and W.D.92B - were completed for a total footage drilled of 11,554 feet and a total footage probed of 9,995 feet. Those holes which recorded positive probe results are listed as follows:

Hole No.	Field Coordinates	Depth Drilled	Depth Probed	Probe Intersections (lbs U308/ton overft.)	
W.D.115	1185S 1015E	19	18	2.1	3
118	199S 2850E?	40	39	0.5	1
125	1041S.1530W?	39	38	0.5	3
127	1137S.1530W?	99	98	0.5	2
132	1189S. 975E?	50	46	0.7	15
134	1188S. 920E	54	45	0.6	21

Hole No.	Field Coordinates	Depth Drilled	Depth Probed	Probe Intersections lbs U308/ton	over feet
136	1192S. 920E	45	20	0.6	14
138	(Ex.4 175N.112½W)	47	46	1.5	40
161	1238S. 775E	24	23	1.2	1
162	1263S. 680E	54	50	0.5	4
163	1226S. 775E	41	40	1.1	19
164	1252S. 680E	36	35	0.6	1
167	1221.S 775E	50	49	1.2	4'6"
168	1237S. 680E	67	65	0.6	13
169	1231S. 775E	31	29	0.6	8
170	1323S. 680E	60	46	1.0	4
171	1223S. 775E	42	41	1.0	2'6"
172	1232S. 680E	80	78	9.7	9
174	1243S. 680E	78	74	0.7	21
180	1227S. 680E	72	69	0.6	8
195	1239S. 725E	37	36	0.7	4
199	1241S. 725E	37	36	0.6	2
16B	1303S. 525E	37	29	0.5	1

Both positive and negative holes bottom, if possible, against the quartzite and, by so doing, furnish most important information on the behaviour of the wall rock below the country rock.

Diamond Drilling

Two holes were completed and one hole is in progress for a total footage of 582 feet.

D.D.H.32 **No. 4 Exposure**

Location on local grid - 180N. 450W.
Azimuth - on local grid - 00 degrees
Inclination - depressed - 60.degrees.
Hole advanced 270 feet from 0 feet to 270 feet. Stopped. Hole was probed to a depth of 270 feet. The main intersection obtained was discernible in the core. Intersections were as follows:

Depth in Hole	Assay Equivalents of Probe Results.
152'6" - 154' 6"	0.5 lbs U308/ton over 2 feet
166' - 175' 6"	0.8 lbs U308/ton over 9 feet 6 ins.
at235'	0.5 lbs U308/ton over 1 ft.

D.D.H.33 — No. 2 Exposure

Location on local grid - 110S.450E.
Azimuth on local grid - 180 degrees
Inclination - depressed - 60 degrees
Hole advanced 299 feet from 0 feet to 299 feet. Stopped. Hole was probed to a depth of 298 feet. The weak intersections obtained were as follows:

Depth in Hole	Assay Equivalents of Probe Results
189 ft. to 190' 6"	0.4 lbs U308/ton over 1 ft 6 ins.
195 ft. to 196' 6"	0.4 lbs U308/ton over 1 ft. 6 ins.

A programme of shallow core drilling was commenced on the western hill with the object of assessing the mean grade and reserves of the lode material.

D.D.H. 34 — No. 2 Exposure

Location on local grid 220S. 432E.
Inclination - vertical
Hole advanced 13 feet from 0 feet to 13 feet. In progress.

Operations at Turnoff Creek

Gridding: A survey grid was established over an area of 160,000 square feet. Radiometric traversing within this area on 10 feet by 5 feet centres was completed.

The results of this show the western side of the prospect ridge to be slightly more encouraging than the eastern side.

Bulldozed Costeans: 3 costeans have been completed for a total length of 600 feet. Radiometric traverses along the costeans record the highest significant count to date in the No.3 costean on the western side of the ridge.

Operations at the Alligator Project

General

Road and Airstrip Construction: A total of 4 miles of access roads have been formed around the prospects. The airstrip now comprises 800 yards of strip with 200 yards of clearing on the north end and 400 yards of clearing on the south end.

Camp Construction: 2 double-hut units are completed and a tent camp is erected. A 2000 gallon tank and pipe lines has been installed and now provides the camp with running water.

Exploration

Operations have been confined to Scintos I, V, and VI.

Gridding: Scinto V - 30,000 square feet of survey grid is established and radiometric gridding on 5 feet centres over this area is completed.

Scinto VI - 30,000 square feet of survey grid is established.

Bulldozed Costeans: Scinto V - 4 costeans and 2 drilling benches were completed for a total length of 900 feet.

Scinto VI - The surface was stripped over an area of 7,500 square feet. 2 costeans and 2 drilling benches were completed for a total length of 800 feet.

Hand Dug Costeans: Scinto V. - 7 costeans and 4 pits were dug to a maximum depth of 17 feet and for a otal length of 196 ft. 4 costeans showed mineral over a strike length of 180 feet.

Scinto Vi - 7 costeans were dug to a maximum depth of 17 feet and for a total length of 196 feet. 4 costeans showed mineral over a strike length of 180 feet.

Scinto Vi - 7 costeans were dug to a maximum depth of 15 ft and for a total length of 184 feet. 4 costeans showed mineral over a strike length of 65 feet.

Sampling: Scinto V - 5 costeans were channel sampled. The assay returns indicate reserves of 1087.0 lbs U308 per vertical ft at an average grade of 5.3 lbs U308/ton.

Diamond Drilling: Scinto V - 3 diamond drill holes were completed for a total footage of 804 feet 6 inches.

D.D.1 - Location on local grid 50S.69W.
Azimuth on local grid 90 degrees
Inclination - depressed - 30 degrees.

Hole advanced 140 feet from 0 feet to 140 feet. Stopped. Hole was probed to 134 feet 6 inches, the results obtained being as follows:

Depth in Hole	Assay Equivalent of Probe Results
82 feet to 87 feet	1.1 lbs U308/ton over 5 feet
95 feet to 113 feet	1.1 lbs U308/ton over 18 feet
113 feet to 130 feet	5.1 " 17 feet

D.D. 3 - Location on local grid 50N.75W.
Azimuth on local grid 90 degrees
Inclination - depressed - 40 degrees.

Hole advanced 239 feet from 0 feet to 239 feet, the probe results being as follows:

Depth in Hole	Assay Equivalent of Probe Result
3 feet to 10 feet	1.5 lbs U308/ton over 7 feet
10 " 14 feet	4.4 " 4 "
14 " 33 feet	1.4 " 19 "
88.6" to 94'6"	1.5 " 6 "
149' to 157'6"	1.1 " 8 " 6 ins

D.D.5 - Location on Local grid 150S 36W
Azimuth on local grid 90 degrees
Inclination - depressed 50 degrees

Hole advanced 202 feet 6 inches from 0 feet to 202 feet 6 inches. Stopped. Hole was probed to 199 feet. The results obtained were uniformly low, being slightly higher at the collar of the hole.

Scinto VI - 2 diamond drill holes were completed for a total footage of 223 feet.

Azimuth on drilling section 180 degrees
Inclination - depressed - 65 degrees.
Hole advanced 129 feet from 0 feet to 129 feet. In progress.

Signed: H.J. Newton
27.7.55.

D.D.2 Location on local grid 75N 77E
Azimuth on local grid 270 degrees
Inclination - depressed - 40 degrees.

Hole advanced 143 feet from 0 feet to 143 feet. Stopped. Hole was probed to 143 feet. The results obtained being as follows:

Depth in Hole	Assay Equivalent of Probe Result
19 feet to 23 feet	1.4 lbs U308/ton over 4 feet.

D.D.4 Location on local grid 75N 28E
Azimuth on local grid 270 degrees
Inclination - depressed - 45 degrees.

Hole advanced 80 feet from 0 feet to 80 feet. Stopped. Hole was probed to 80 feet. The results obtained are listed as follows:

Depth in Hole	Assay Equivalent of Probe Result		
0 feet to 2 feet	4.0 lbs U308/ton	over	2 feet
15 ft to 19 ft 6 ins	1.2	"	4 feet 6 inches
19 ft 6" to 34ft 6"	4.7	"	15 feet
34 ft 6" to 43ft 6"	1.6	"	9 feet
43 ft 6" to 50ft 6"	3.0	"	7 feet
50 ft 6" to 64ft 6"	2.1	"	14 feet

These probe results from DD.2 and D.D.4 must be considered quite inconclusive, as the core recovery was good in each hole and the core consists mostly of non-radioactive igneous rock.

Mining Operations: Scinto I - A stripping cut was taken on the face exposure. This revealed the lode as a vertical seam 12 to 24 inches wide which is making obliquely into the face at an angle approximating 20 degrees.

Operations at Coronation Hill

Diamond Drilling: Operations have been confined to diamond drilling the E-W trending copper lode on one N-S section. One hole is completed and one is in progress, for a total progressive footage of 294 feet.

D.D.1 Location on drilling section 59'N.
Azimuth on drilling section 180 degrees
Inclination - depressed - 45 degrees.

Hole advanced 165 feet from 0 feet to 165 feet. Stopped. Copper sulphides are showing in the core over 68 feet 6 inches from 43 feet to 111 feet 6 inches. Hole was probed to 165 feet. The results obtained were uniformly low with the exception of the following intersection:

Depth in Hole	Assay Equivalent of Probe Result
58' 6" to 66'	2.2.1bs U308/ton over 7 feet 6 inches

This intersection is considered inconclusive of uranium as full core was recovered over this section and radioactivity is not discernibl in the core.

D.D.2 Location on drilling section 59N

COPY.

REPORT on OPERATIONS for the period 24/7/55 to 3/9/55.

STAFF:

A. H. McKENZIE, Geologist started.

S. CHADWICK, " "

TURNOFF CREEK PROSPECT:

BULLDOZED COSTEANS.

One more costean was completed over a length of 200 feet on the western side of the ridge. The results were not encouraging.

No further work has been attempted but it is intended to commence detailed geological mapping of the area.

CORONATION HILL:

DIAMOND DRILLING.

D.D. 2. Refer previous report.

Hole advanced 121 feet from 129 feet to 250 feet. Stopped.

Copper sulphides are showing over 128 feet from 50 feet to 178 feet in the core. Hole was probed to a depth of 249 feet. The results obtained were uniformly low. Complete split samples of those sections of the core in D.D.1 and D.D.2 showing copper were forwarded to Rum Jungle for copper and uranium determinations.

D.D.3.

Location 68 N. 100 W.
Azimuth - 180 degrees.
Inclination - depressed 50 degrees.

Hole advanced 129 feet from 0 feet to 129 feet. Stopped.

Copper mineral was showing over a length of 34 feet - from 85 feet to 119 feet - in the core. Hole was probed to a depth of 128 feet. The results obtained were uniformly low.

D.D.4.

Location 60 N. 100 E.
Azimuth - 180 degrees.
Inclination - depressed 60 degrees.

Hole advanced 164 feet, from 0 feet to 164 feet. Stopped.

Very weak copper mineral was showing in the core over 24 feet from 130 feet to 154 feet. Hole was probed to a depth of 163 feet. Results obtained were uniformly low.

D.D. 5.

Location 63 N 200 W
Azimuth - 180 degrees.
Inclination - depressed - 45 degrees.

Hole advanced 142 feet 6 inches from 0 feet to 142 feet 6 inches. Stopped. Weak copper mineralisation is showing in the core over 5 feet from 128 feet to 133 feet. Negative probe result.

/2.

D.D. 6.

Location 68 N. 100 W.
Azimuth - 180 degrees.
Inclination - depressed 70 degrees.
Hole advanced 40 feet from 0 feet to 40 feet. In progress.

ALLIGATOR PROJECT:

Underground Exploration.

Scinto V1 - South Shaft.

Sinking advanced 25 feet from 0 feet to 25 feet. Stopped.

An east cross-cut at the 25 feet level advanced 18 feet 6 inches. Stopped. Work on this shaft is completed. Low-grade lode material averaging 1.5 lbs. U_3O_8/ton over a width of 5 feet 6 inches is showing from 3 feet to 8 feet 6 inches in the backs of the cross-cut.

Scinto V1 North Shaft.

Sinking advanced 49 feet from 0 feet to 49 feet. Stopped.

An east cross-cut at the 49 feet level advanced 21 feet. Stopped.

6 feet width of lode material was exposed from 11 feet to 17 feet in the cross-cut. The values were extremely low and 2 rise cuts were taken in the lode. Samples taken at the top of the rise averaged 1.7 lbs. U_3O_8/ton over 5 feet. Work on this shaft is complete.

Ore Reserves - Scinto V1

On the results of this testing, accepting the surface length of 80 feet, an average width of 9 feet and an average depth of 30 feet gives a reserve of 1,760 tons of ore available at an estimated grade of 0.25%. This is readily available, but t ere is no prospect of any increase.

Scinto V. No. 1 Shaft.

Benching for the shaft plat was completed. The shaft has been commenced and stands at 7 feet, where ore estimated to average 4.5 lbs U_3O_8/ ton is showing over a width of 7 feet. Timbering of the collar is in progress.

Scinto 1 Face Exposure.

A second stripping cut was taken in the face. The ore pinche out suddenly and no further stripping is intended. It is proposed instead to sink a shaft against the ore in the hope of striking ore bearing shales against the face at depth.

SLEISBECK:

General.

Exploration has been seriously handicapped by equipment failures and the utilization of heavy machinery on construction.

Bulldozed Costeans.

A further 5 costeans - Nos. 51 to 55 - were completed, for a total length of 900 feet. Negative radiometric results.

/3.

SLEISBECK (contd):

Trench Digging.

The back actor was assembled on the B.B. 19 and a total of 10 trenches averaging approximately 15 feet in depth were completed for a total length of 865 feet. Showed negative radiometric results but very helpful geological information.

Waggon Drilling.

A further 46 holes - Nos. 92A to 121A and 93 B to 108B - were drilled for a total footage of 3,315 feet. All holes were probed with negative results.

Diamond Drilling.

D.D. 34 No. 2 Exposure. Refer previous report.

Hole advanced 47 feet, from 13 feet to 60 feet. Stopped.

Drilling was in quartzite throughout. Hole was probed to 59 feet. The one intersection obtained being as follows -

Depth in Hole	Assay Equivalent.
33 ft to 36 ft.	1.0 lbs U_3O_8/ton over 1 foot.

D.D. 35 No. 2 Exposure.

Location on local grid - 208S. 385E.

Inclination - vertical.

Hole advanced 60 feet, from 0 feet to 60 feet. Stopped.

Drilling was in quartzite throughout. Hole was probed to a depth of 49 feet. Mineral is showing in the core corresponding to the following intersections:

Depth in Hole	Assay Equivalent.
0 feet to 15' 6"	1.8 lbs U_3O_8/ton over 15' 6"
22 " to 47' 6"	1.3 lbs " " 25' 6"
0 " " 47' 6" averages	1.5 lbs " " 41 feet.

Core was sampled over this section. The radiometric assays returned an average grade of 0.7 lbs U_3O_8/ton over 48 feet from 0 feet to 48 feet.

D.D. 36 No. 2 Exposure.

Location on local grid - 205 S. 375 E.

Inclination - vertical.

Hole advanced 81 feet 6 inches from 0 feet to 81 feet 6 ins. Stopped.

Drilling was in quartzite throughout. Hole was probed to a depth of 76 feet 6 inches. Mineral is showing in the core corresponding to the following intersections.

/4.

Depth in Hole	Assay Equivalent.
5 feet to 18 feet	1.2 lbs U_3O_8/ton over 13 feet
23 feet to 76 feet	1.8 " " " 53 feet

Core was sampled over this section. The radiometric assays returns are as follows :-

Depth in Hole	Assay.
5 feet to 17 feet	1.1 lbs U_3O_8/ton over 12 feet
23 feet to 80 feet	1.0 " " " 57 feet.

D. D. 37 No. 2 Exposure.

Location on local grid 202S. 365 E.

Inclination - vertical

Hole advanced 100 feet from 0 feet to 100 feet. Stopped.

Drilling was in quartzite to 98 feet and thereafter in brocciated red mudstone. Hole was probed to 97' 6". Mineral was showing in the core corresponding to the following intersections:-

Depth in Hole	Assay Equivalent.
16 feet to 77 feet	1.5 lbs U_3O_8/ton over 62 feet.

Core was sampled over this section. The radiometric assays are as follows:-

Depth in Hole	Assay.
15 feet to 78 feet	0.8 lbs U_3O_8/ton over 62 feet.

The discrepancy between the assay and probe results in D.D.H.'S 36,37 and 38 may be partly attributed to the accentuation of instrument errors in low grade material. Selected samples from these cores are bding sent south for chemical determination.

D.D. 38 No. 2 Exposure.

Location - on local grid 196S. 353E.

Inclination - vertical.

Hole advanced 33' 6" from 0 feet to 33' 6". In progress.

Drilling was in quartzite throughout.

Total footage diamond drilled for the period was 918 feet 6 ins.

UPPER GIMBAT CREEK PROSPECT:

On 1.9.55 uranium mineral was discovered in the valley of Gimbat Creek approximately ½ mile east of the western border of Arnhem Land.

The mineral occurs on a well-defined fracture and consists of uranium ochres and micas in a red phosphatic rock which registers 1,000 to 2,000 c/m in situ. This rock has a very similar appearance to certain material in the Sleisbeck No. 2 Exposure, but is only showing occasionally as small boulder like outcrops through the soil flats. This host rock forms part of the Upper Proterozoic cover in which it appears to be lying between grits and sandstones. The prospect is quite unimpressive, but is worthy of detailed investigation and some testing.

(Sgd) H. J. NEWTON.

COPY.

REPORT ON OPERATIONS for the FORTNIGHT ENDING 17/9/55.

STAFF:

A. Brooks started.

PROSPECTING:

All airborne scintillometer anomalies occurring in the Lower Gimbat Creek area were investigated and abandoned.

OUTSIDE PROSPECTS:

Upper Gimbat Prospect.

Initial investigations which included detailed prospecting of the area, surface radiometric gridding and geological mapping and testing by costeaning with the Cat D.4 bulldozer were completed. See attached plan.

The host rock or lode material appears to be in the nature of a patchy soil horizon or laterite overlying a white grit. As the host rock has nowhere proved extensive the prospect has been temporarily abandoned. A permit to enter of 9 square miles has been applied for.

Two pick samples taken from separate occurrences 570 feet apart each assayed 3.0 lbs U_3O_8/ton. These samples have been forwarded to the South Australian Mines Department for chemical determinations.

Turnoff Creek Prospect.

Detailed geological mapping of this prospect is in progress. No uranium mineral has yet been discovered and from the results to hand it seems likely that the slight radiometric highs may be attributable to the mass effect of igneous material.

There now seems little prospect of finding mineral at the original site, but investigations are being extended northwards where the rock types more closely resemble those at Sleisbeck.

Coronation Hill.

Diamond Drilling.

D.D. 6 Refer previous report.

Hole advanced 172 feet from 40 feet to 212 feet. Stopped.

Hole was probed to a depth of 210 feet with negative results. The testing by diamond drilling is now considered completed and no further testing at depth is contemplated.

Of the 6 holes drilled for a total footage of 1,063 feet 6 inches two were negative. The positive holes indicate a vertical parallel sided lode 200 feet long by 40 feet wide and extending to a depth of at least 200 feet. However, the assay returns on the 66 samples of the core from D.D.1 and D.D.2 which may be regarded as quite representative of the lode averaged only 0.49% copper and 0.09 lbs U_3O_8/ton (i.e.0.005%)

Further surface work will be carried out in the form of channel sampling but it is not expected that any part of this deposit will be an economic proposition.

/2.

Alligator Project:
Underground Exploration.
Scinto V No. 1 Shaft.

Sinking advanced 36 feet from 6 feet to 42 feet. In progress. Shaft was in ore to 30 feet where it averaged 2.0 lbs U_3O_8/ton over 6 feet and thereafter in low values. Sinking is continuing in barren material with the intention of testing out in the east wall for the intersection in D.D.1 - at greater depth.

Ore Reserves - Scinto V.

Accepting the strike length of 70 feet of the surface showing of ore to the prove depth of 30 feet over an average width of 15 feet this testing indicates 2,560 tons of ore of an estimated grade of 0.25%. There is some prospect of an appreciable increase in these reserves.

SLEISBECK PROSPECT:
General.

General testing of the field by waggon drilling continued. No further costeaning was carried out. Diamond drilling of the low grade lode material at Exposure 2 continued.

Officers of National Mapping, Department of the Interior, carried out an astro fix of a concrete block which was set up in the camp area. They submitted the provisional coordinates:-

Latitude 13° 47'33" S.
Longtitude 132 51' 08" E.

This establishes the concrete block as being 9 miles, 74 chains, 22 links west of the Arnhem Land boundary - the 133° east longtitude - which means that this boundary as depicted on the mosaics, is acceptable.

Detailed geological mapping of the field is in progress.

Waggon Drilling.

A further 38 holes - Nos 122A to 142 A and 109 B to 125 B were completed for a total footage drilled of 2,020 feet. 35 of these holes were probed over a total footage of 1,615 feet. The ore intersection obtained was as follows:

Hole No.	Coordinates	Depth Drilled	Depth Probed	Assay Equivalent.
126A	700S.4925W	45	28	0.6 lbs U_3O_8/ton over 2 ft.

Diamond Drilling.

D.D. 38 No. 2 Exposure Refer previous report.

Hole advanced 41 feet 6 inches from 33 feet 6 inches to 75 feet. Stopped. Drilling was in quartzite throughout. Hole was probed to a depth of 74 feet. The intersection obtained was as follows:

/3.

Depth in Hole	Assay equivalent of Probe Result.
17 feet 6 ins. - 74 feet	1.7 lbs U_3O_8/ton over 56 feet 6 ins.

Mineral was showing in the core over this section. The corresponding radiometric assays of the core average.

Depth in Hole	Assay.
15 feet to 74 feet	1.0 lbs U_3O_8/ton over 59 feet.

Discrepancies again attributed to core loss and instrument errors. Selected samples have been sent south for chemical checks.

(Sgd) H. J. NEWTON.

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 1.10.55.

Staff A. Brooks left.

Prospecting

The airborne scintillometer anomalies occurring in the Upper Katherine River area (in P.E.7) are at present being thoroughly prospected.

Outside Prospects

Turnoff Creek Prospect

Detailed geological mapping of the area is in progress.

Alligator Project

One prospector is being employed continuously on the detailed prospecting of the Scinto claims. Nothing more substantial than further occurrences of mineral in floating material have been discovered to date.

Scinto V No. 1 Shaft

Sinking advanced 29 feet from 42 feet to 71 feet. No values. An east cross-cut at the 51 feet level advanced 15 feet in no values. Stopped. A west cross-cut at the 51 feet level advanced 17 feet in no values. Stopped. Sinking is being continued with a view to crosscutting east at about the 90 feet level, in order to test the probe intersection in D.D.1.

Sleisbeck

General: General testing of the field by waggon drilling continued. Further trouble was experienced with ground water and probe instrument failures some low grade intersections were obtained in waggon drilling at the extreme eastern end of the Central Hill and at No. 1 Exposure.

Diamond drill testing of low grade lode material at Exposure 2 was discontinued when it became evident that the average grade was well below the required 2.0 lbs U308/ton. Detailed geological mapping of the field continued. No further costeaning was carried out.

Waggon Drilling: A further 103 holes - Nos. 143A, to 176A and 126B to 194B - were completed for a total footage drilled of 5,839 feet. 100 holes were probed for a total footage probed of 4,445 feet. 8 holes resulted in slight positive intersections the results of which are as follows:-

Hole No.	Coords	Depth Drilled	Depth Probed	Assay Equivalent
151A	801S.75W	75	66	0.6 lbs U308/ton over 7 ft.
161A	107S.44W(exl)	40	38	1.2 " 16' 6"
162A	105S.35W	15	10	0.5 " 2'
165A	96S.35W	10	6	0.5 " 3' 6"
166A	98S.45W	10	6	0.5 " 2' 6"
168A	87S.46W	3	1	0.5 " 1'
153B	744S.725W	28	22	0.6 " 4' 6"
159B	744S.75W	9	4	0.5 " 2'

Diamond Drilling

D.D.39 No.2 Exposure

Location - local grid - 1928. 341E.

Inclination - vertical

Hole advanced 50 feet from 0 feet to 50 feet. Stopped. Drilling was in quartzite throughout. Hole was probed to a depth of 49 feet. The intersection obtained was as follows:

Depth in Hole	Assay Equivalent of Probe Result
12' 6" - 49'	1.9 lbs U308/ton over 36'6"

The average radiometric assay of the core split over this section was as follows:

Depth in Hole	Assay
12' - 50'	0.9 lbs U308/ton over 38'

Mineral was showing throughout this section of the core.

D.D. 40 No. 2 Exposure

Location - local grid - 1958. 326E.

Inclination - vertical

Hole advanced 60 feet from 0 feetto 60 feet. Stopped.

Drilling was in quarzite throughout. Hole was probed to a depth of 59 feet. The intersection obtained was as follows:

Depth in Hole	Assay Equivalent
13' 6" - 59'	1.1 lbs U308/ton over 45' 6".

The average radiometric assay of the core split over this section.

Depth in Hole	Assay
15' 6" - 59'	0.4 lbs U308/ton over 43' 6"

Mineral was showing in the core throughout this section.

Because of the large discrepancies between probe and assay results selected samples are being sent south for chemical determination.

D.D.41

Location - field grid - 1225S. 700E.

Inclination - vertical

Hole intended to test indications of mineral obtained by waggon drilling on the flats. Hole advanced 92 feet from from 0 feet to 92 feet. Stopped. No recovery to 36 feet. Drilling was in schists to 86 feet and thereafter in quartzite showing shearing from 86 feet to 89 feet 6 inches. Hole was probed to a depth of 89 feet 6 inches. The results obtained are: 85' 6" - 89' 1.8 lbs. U308/ton over 3' 6".

The radiometric assays of the core split over this section are:

Depth of Hole	Assay Equivalent
86' - 89'	1.2 lbs U308/ton over 3 ft.

D.D.42 Location on field grid - 1190S. 1200W.

Inclination - vertical

Hole intended to test for geological information - namely to intersect limestone at depth and to test for the position of the

quartzite south of No. 4 Exposure. Hole advanced 173 feet from 0 feet to 173 feet. In progress. Drilling was in soil to 10 feet, in schist to 88 feet, in limestone to 100 feet and thereafter in schists. Not yet probed.

D.D. 43 Location on field grid - 12258. 750E.
Inclination vertical.

Hole intended to test indications of mineral obtained by waggon drilling on the flats. Hole advanced 53 feet 6 ins. from 0 feet to 53 feet 6 inches. Stopped. No recovery to 28' 6". Drilling was in schists to 40 feet and thereafter in quartzite which showed shearing from 43 feet to 45 feet. Hole was probed to a depth of 49 feet. The one weak intersection obtained was:

Depth of Hole	Assay Equivalent
23' to 25' 6 "	0.8 lbs U308/ton over 2'6".

D.D.44 Location - field grid - 12258. 800E.
Inclination - vertical.

Hole intended to test waggon drill results. Hole advanced 50 feet 6 inches from 0 feet to 50' 6". In progress. No core recovery to 24 feet. Drilling was in limestone to 30' 6" in oxidised schists to 36 feet in fresh schists to 40 feet, in quartzite to 41 feet, in schists to 41' 6", in quartzite to 42' 6", in schists to 46' /and thereafter in sheared quartzite. The drilling from 40 feet to 50 feet was through a zone of strong shearing on the contact. Not yet probed.

The total footage diamond drilled for the period was 479 feet.

Other Testing

No. 3 Exposure

A second opening was completed through the lode material at No. 3 Exposure in order to better expose the schist - quartzite contact revealed by costeaning. This exposed a sheared contact striking due N-S which it is proposed to test at depth by diamond drilling.

signed H.J. Newton

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 15.10.55

Staff L.G. Turner - Surveyor - left.

Prospecting

Detailed prospecting of the Upper Katherine area continued. The same black mud flats which last year were registering an average of 300 c/m are now registering an average of 100 c.m. Several occurrences of radioactive humus were discovered in the vicinity of the most sifnificant anomalies. One particular small patch of humus ash in a creek just east of the main anomaly registered up to 2000 c/m in places. A sample of this material has been sent south for chemical determination. It is considered that this area has now been covered thoroughly and it has therefore been temporarily abandoned.

Outside Prospects

Turnoff Creek Prospect Detailed geological mapping of the area is in progress.

Alligator Project

Prospecting

Detailed prospecting of the Scinto claims continues. Further occurrences of mineral in floating material have been discovered in Scinto II. These occurrences are quite concentrated in one particular area where, although it cannot be established from whence they came, it is nevertheless intended to diamond drill below them.

Scinto V. No. 1 Shaft - Underground Exploration

Sinking advanced 23 feet from 71 feet to 94 feet. No values. Sinking was discontinued at this depth. An oblique east cross-cut from the 94 feet level advanced 10 feet. In progress.

Gleisbeck

General: General testing of the field by waggon drilling continued but was handicapped for want of costeans. Selective testing by diamond drilling continued. Detailed geological mapping of the field continued.

Waggon Drilling: A further 74 holes - Nos. 177A to 210A and 195B to 234B - were completed for a total footage drilled of 4,336 feet. Only 4 holes were probed for a total footage probed of 177 feet. The results obtained were negative. The remainder of the holes were not probed due to instrument failures and awaiting replacement parts.

Diamond Drilling: D.D.42 Refer previous report. Hole advanced 69 feet from 173 feet to 242 feet. Collapsed and abandoned. Drilling was in schists interbedded with silicified and barbonaceous material. Hole was probed to a depth of 193 feet, the results obtained were negative.

D.D.44. refer previous report. Hole advanced 36 ft from 50' 6" to 86' 6". Stopped.

Drilling was in sheared quartzite to 55 feet, in quartzite to

57 feet, in brescciated quartzite and schist to 60 feet, in schists to 63 feet, in quartzite to 72 feet, in schists to 77 feet and thereafter in quartzite. The core from 40 feet to 82 feet represented a strongly sheared contact zone but showed no mineral. Hole was probed to a depth of 84 feet. The weak intersection obtained was 61' - 63'. 0.6 lbs U308/ton over 2' and 73'6" 0.7 lb.

D.D.45 Location on field grid 1142S.800E. Azimuth - 180°
Inclination - depressed 58 degrees.

Hole intended to test the shear intersected in D.D.44 at greater depth. Hole advanced 149 ft. from 0 ft. to 149 ft. Stopped. No core was recovered to 25 ft. Drilling was in shéists to 143 ft - which showed strong shearing and brecciation from 82' to 143' and thereafter in quartzite. Hole was probed to a depth of 148 ' with negative results.

D.D.46 No. 4 Exposure: Location - local grid - 402N. 150E. Inclination vertical. Speculative hole, testing a likely position for another deposit on the north side of the central hill. Hole advanced 65 ft. In progress. Drilling was in soil to 5 ft. and thereafter in schists. Not yet probed. Total footage diamond drilled for the period was 319 feet.

Signed H.J. Newton
14.10.55

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 29.10.55

Prospecting

Prospecting during this period was confined to the Upper Turn-Off Creek area.

On the 21st October, 1955, M. Madigan discovered an occurrence of uranium mineral approximately 7 miles W.S.W. of Sleisbeck camp. Rain delayed the investigation of this until 27 October, 1955.

Upper Turn-Off Creek Prospect

The prospect is situated in an area composed predominantly of siltstone and metamorphics occurring between the escarpment of Cover Rocks to the East, and massive porphyries to the West. See attached sketch.

The uranium mineral occurs on a hill of metamorphics surrounded by siltstone flats. The metamorphics are mainly of the porphoroid type containing, in places, appreciable quantities of what, in the hand specimen, appears to be typical of the piebald red mudstone found in drilling Sleisbeck Exposure 4. The metamorphics are strongly sheared and the shearing coincides with the development of red mudstone.

The mineral is restricted to a well defined N-S striking shear zone, characteristically whitened by mineralization. The most heavily mineralized shear zone averages some 10 feet in width ever a strike length of 100 feet, which is seen on the side of the hill to extend to depth of at least 30 feet below the highest outcrop. This material registers 10 to 16 times background, and one random sample assayed 1.0 lbs U308/ton. Other shears occur to the East giving a composite width of shearing of some 50 feet. In all an area of some 300 feet by 50 feet registers greater than 6 times background.

This prospect, although close, would be inaccessible after heavy rain. As it is considered a good diamond drilling proposition it is proposed to commence drilling a 300 feet inclined hole early next week.

Alligator Project

Prospecting

Detailed prospecting of the Scinto claims continued and the source of the recently discovered floating mineral on Scinto 2. was finally revealed as a very restricted mineralized fracture occurring some 60 feet below the top of the hill. The seam averages 1 foot in width over a length of 7 feet. As seen in section on the cliff face, the seam dips at 35 degrees and pinches out at a vertical depth of 20 feet.

A total of 30 feet of hand dug costeans was completed around the original floating material. This exposed barren shales in places.

Scinto 5. No. 1 Shaft

Underground Exploration: The east cross-cut at the 94 feet level advanced 48 feet from 10 feet to 58 feet in no values. As it is no considered that the supposed probe intersection in D.D.H. 1 has been thoroughly covered, all operations have ceased.

Diamond Drilling

D.D.7 South End Scinto 5

Hole intended to test possible source of floating mineral. Drilling commenced.

Scinto 1. Face Exposure No. 1 Shaft

All equipment for the shaft is on site. Sinking will commence next week.

Sleisbeck

General: Owing to probe instrument failures, the advent of rain and the lack of bulldozed costeans, all waggon drilling was discontinued. Selective testing by diamond drilling continued.

Waggon Drilling

A further 10 holes - Nos. 211A to 213A and 235B to 241B - were completed for a total footage drilled of 646 feet. No holes were probed due to instrument failures. It is feared these holes are now lost. All waggon drilling was discontinued.

Diamond Drilling

D.D.46 - Ref. previous report.

Hole advanced 96 feet 6 inches from 65 feet to 161 feet 6 ins. Stopped.

Drilling was in schist to 148 feet and thereafter in red mudstone.

Hole was probed to a depth of 155 feet with negative results.

D.D. 47 No. 3 Exposure

Location - field grid - 289½S. 3807½W

Azimuth - field grid - 232½ degrees

Inclination - depressed - 40 degrees.

Hole advanced 148 feet from 0 feet to 148 feet. Stopped.

Drilling was in soil to 5 feet, in schist to 118 feet, in quartzite to 120 feet, in schist to 123 feet 6 inches, in quartzite to 128 feet, in schist to 130 feet, in quartzite to 135 feet, in red mudstone to 136 feet, in quartzite to 138 feet and thereafter in schist. The core from 118 feet to 138 feet represents the intersection of the contact shear.

Hole wasprobed to a depth of 146 feet. The weak probe intersections obtained represented assay equivalents of 0.6 lbs U308/ton over the following sections:--

11 feet from 4' 6" to 15' 6"

12 feet from 18' 6" to 30'

13 feet from 38' 6" to 51' 6"

33 feet from 83' 6" to 116' 6"

D.D.48

Speculative hole intended mainly for geological information.

Location - field grid - 1030S, 2700E.

Azimuth field grid 180 degrees

Inclination - depressed - 40 degrees.

Hole advanced 55 feet from 0 feet to 55 feet. Stopped. Drilling was in mudstone and schist to 43 feet and thereafter in quartzite.

Hole was probed to 55 feet. One weak probe intersection equivalent to 0.5 lbs U308/ per ton was obtained over 7 feet from 41' 6" to 48' 6".

D.D.49 No. 3 Exposure

Location - field grid - 318½S. 3845W.

Azimuth field grid 232½ degrees

Inclination - depressed - 40 degrees.

Hole advanced 52 feet from 0 feet to 52 feet. Stopped.

Drilling was in soil to 8 feet, in quartzite to 10 feet, in schists to 15 feet, in quartzite to 20 feet, in schist to 23 feet and thereafter in quartzite.

Hole was collared on the shear. The core to a depth of 23 ft represents the intersection of the sheared contact.

A little mineral is showing in the core at 36 feet 6 inches.

Hole was probed to a depth of 49 feet. The assay equivalents of the results averaged 0.9 lbs U308 per ton over 29 feet from 14' 6" to 43' 6" which included the following intersections:

Depth in Hole	Assay Equivalents
22' 6" - 23' 6"	1.0 lbs U308 per ton over 1 ft
25' 6" - 27' 6"	1.0 " 2 ft
32' 6" - 36' 6"	1.1 " 4 ft

West Sleisbeck

Boxwork Anomaly (See attached plan)

Initial testing was carried out on the laterite boxworks associated with silicified slate and gossan limestone.

Bulldozed Costeans

Three costeans were completed over a total length of 410 ft. Radiometric traverses registered a slight general increase in counts with depth.

Diamond Drilling

D.D.50

Location - local grid - 130N 25E

Azimuth - local grid - 180 degrees

Inclination - depressed - 45 degrees.

Hole advanced 42 feet from 0 feet to 42 feet. In progress. No recovery to 25 feet. Drilling was in schists to this depth.

Signed: H.J. Newton
20.11.55

A.P. 364 SLEISBECK

SUMMARY OF OPERATIONS

FOR THE PERIOD 1ST MAY, 1954, TO 10TH DECEMBER, 1955

Sleisbeck:

Costeans: 77 bulldozed costeans and 4 benches were completed over a total lenth of 18,461 feet.

17 hand-dug costeans and 4 pits were completed over a total length of 410 ft.

Waggon Drilling: 654 holes were drilled to a total depth of 33,549 ft.

Diamond Drilling: 67 holes were drilled to a total depth of 10,419 ft. 6 ins.

Gridding: An area of 3,750,000 square feet was radiometrically traversed at varying intervals.

Mining Exploration: 194 ft of 6 x 4 costeans were mined at Exposures 3 and 5.

West Sleisbeck:

Costeans: 3 costeans were completed over a total length of 410'

Diamond Drilling: 1 hole was drilled to 182 ft.

Gridding: An area of 80,000 sq. ft. was traversed at 25 ft. intervals.

Turn-Off Creek:

Costeans: 3 costeans were completed over a total length of 600'

Gridding: An area of 160,000 sq. ft. was traversed at 10 feet intervals.

Upper Turn-Off Creek:

Costeans: 3 costeans were completed over a total length of 500'

Diamond Drilling: 1 hole was drilled to a depth of 204 ft.

Gridding: An area of 30,000 sq. ft. was traversed at 25 ft. intervals.

Upper Gimbat Creek:

Costeans: 3 costeans were completed over a total length of 390'

Summary of areas outside Sleisbeck mapped during the period June 5 to November 26, 1955.

A total area of 334.2 acres was mapped showing geology and workings.

Sleisbeck, N.T.
15 December, 1955.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 12-11-55

Staff: W.R. Jones - Geologist - Left.

Prospecting

Prospecting during this period was confined to the areas surrounding the Upper Turn-Off Prospect and, to a limited extent, the north western corner of the Sleisbeck Reservation. This latter area proved to be almost entirely composed of igneous material and is considered to offer little possibility of a strike.

Some interesting boxworks after sulphide, occurring east of the Upper Turn-Off Creek Prospect were investigated. These boxworks occur in laterite intimately associated with a similar rock type to the Sleisbeck quartzite. The area is not radioactive and investigations have failed to show sufficient reason for testing.

A small area of radioactivity was located some three miles north of the Upper Turn-Off Creek Prospect. This occurs on a small hill some 500 feet long by 150 feet wide which is composed of similar material to that prospect and which may be regarded as a northern extension of the same. Subsequent investigation showed the activity to be associated with minor shearing, but failed to reveal any counts higher than 400 c/m. This counting rate was restricted to an area of a few square feet and samples of this material showed no flourescence. It is considered that this area has been thoroughly inspected and that no further work is warranted.

Upper Turn-Off Creek Prospect

Radiometric Gridding

Instrument gridding is completed and an isorad plan prepared over an area of 30,000 square feet. The highest readings obtained were equivalent to 16 times background.

Bulldozed Costeans: Three costeans were completed over a total length of 500 feet. Each costean was traversed with instruments, but no significant increase in counts with depth was obtained.

Channel Sampling: That portion of the outcrop exhibiting the strongest radioactivity was stripped with the bulldozer and channel samples were taken every two feet over a total width of 32 feet across the lode.

The best of these assays averaged 0.9 lbs U308 per ton over a total width of 10 feet.

Diamond Drilling D.D. 1 : Inclination 45 degrees

The drilling section crossed the richest surface showing. Hole advanced 204 feet, from 0 feet to 204 feet. Rods jammed - hole stopped.

Drilling was in white fragmental rock to 104 feet - with bleached zones from 55 feet to 66 feet and from 74 feet 6 inches to 104 feet, - in green fragmental rock to 197 feet - with a bleached zone carrying visible pyrite from 182 feet to 196 feet, - and thereafter in hard fragmental metamorphic - with a pug seam from 196 feet to

197 feet.

The bleached zones are associated with weak shearing which it is considered represent intersections of the shears appearing on the surface.

Hole was probed to a depth of 184 feet. The results obtained were uniformly low, being slightly higher from 50 feet to 55 feet than elsewhere. The highest probe result at 53 feet represented an assay equivalent of 0.2 lbs U3O' per ton. There is no evidence of uranium mineral in the core.

As it is considered that this hole has tested the best of the lode at depth with negative results, this prospect has been abandoned.

Alligator Project

General:

In the absence of contract miners, operations over this period were restricted to diamond drilling the south end of Scinto 5.

D.D.7: Hole advanced 13 feet, from 9 feet to 13 ft on a false start.

Hole was stopped and restarted on a different bearing and advanced 40 feet from 0 feet to 40 feet. Stopped.

Drilling was in barren very siliceous banded ironstone and jasper to this depth. This rock is extremely hard and 38 bits were used in drilling 40 feet. As the results of this drilling also indicated that the original objective might not be attainable, the hole was abandoned and the rig moved to a site further north.

Sleisbeck

General

Operations were confined to diamond drilling D.D.50 on the box-work anomaly - West Sleisbeck.

The core from D.D.49 was radiometrically assayed, over the sections listed under probe results in the previous report, with identical results.

Round timber shelte s were constructed for the core depots at Exposures 2 and 4.

Detailed geological mapping of this field continues, but is hampered by the lack of a surveyor.

West Sleisbeck

D.D.50 - refer previous report.

Hole advanced 140 feet, from 42 feet to 182 feet. Collapsed and abandoned.

Drilling was in schists to 94 feet, in brecciated schists to 99 feet 6 inches, in silicified schist to 157 feet and thereafter in chloritic schists with a lot of quartz - carbonate veining and a little visible pyrite.

Hole was probed to 156 feet with negative results.

It appears that the gossany limestone and laterite boxworks, are the surface representation of the vein altered schists which carry sparce sulphide mineralization.

The results of this testing are regarded as conclusive and operations have been discontinued.

Signed H.J. NEWTON

Sleisbeck N.T.
17 November, 1955.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 26.11.55

Prospecting

General

On the information provided by those prospects occurring towards the northern end of the South Alligator mineral belt, it has recently been established - particularly by Mr. R.C. Sprigg - that the unconformable contact of the Basement and Cover Rocks is a major control of ore deposition; especially when the unconformity shows evidence of considerable disturbance. And, it seems generally the case, that the further a prospect is removed from the unconformity, the weaker is the mineralization.

For this reason our prospecting methods have been revised so as to ensure that all probable exposures of the unconformity receive attention.

With an improvement in the weather towards the end of the peric prospecting was intensified both in the air and on the ground. Airborne scintillometer work was carried out under contract by Geosurveys of Australia. Flying commenced on 18th November and a total of 15½ hours of aerial surveying was completed. The work yielded many positive results but, considerable difficulty was experienced in recognizing the boundaries of the various Authorities to prospect.

Ground prospecting was concentrated initially upon combing the unconformity along the local escarpments. This work is incomplete. Later in the period two parties of three left to investigate the most interesting of the aerial anomalies obtained in the fairly inaccessible Jim Jim Creek area.

Aerial Prospecting

The Authorities to Prospect 346 to 352 were subjected to intense reconnaissance flying, followed by close gridding of those areas showing marked radioactivity. The possible unconformity occurring along the escarpments received particular attention.

In the course of this work, 4 anomalies were recorded within these areas and, as far as can be judged, a further 4 anomalies were marginal to these areas. In addition 5 anomalies were recorded west of these areas, 4 of which appear to fall within the Authority to Prospect 392.

Those areas on the lower Gimbat Creek and upper Bamboo Creek falling within the Authority to Prospect 364 were similarly flown en route to and from the Jim Jim Creek areas. This work resulted in 5 anomalies, 2 of which were known previously.

All the escarpment country within the Sleisbeck Reservation was tightly flown. A total of 13 anomalies were recorded, most of which are doubtful, but some 5 of which - occurring 2 to 3 miles east of the camp - are thought to be significant. Also 2 anomalies were recorded on the northern escarpment of the South Alligator Valley, east of Scinto 6.

Aerial prospecting of all these areas continues.

Ground Prospecting

Those anomalies falling within or marginal to the Authorities to Prospect 346 and 352 are at present under ground investigation. The results of these investigations will be mentioned in the next progress report.

Outside Prospects

Coronation Hill

With the purpose of appraising the near surface copper carbonate lode, channel samples were taken in sections across the full width of the strongest development of surface mineral and sent to Rum Jungle for chemical determination.

Although carbonate staining is showing in places throughout the length of 200 feet which was tested at depth by diamond drilling the area of mineral amenable to representative sampling in width is comparatively small. For this reason the richest mineral was sampled and therefore is not representative of the whole. However it is confidently stated that the assay results, when available, will not enahcne the prospects.

Alligator Project

General: Operations were confined to diamond drilling at the south end of Scinto 5 and sahft sinking on the Face Exposure of Scinto 1.

Scinto 5: D.D.8 was collared north of D.D.7 and directed towards the quartzite wall under the most strongly mineralized floating material at an inclination of 45 degrees.

Hole advanced 104 feet from 0 feet to 104 feet. Stopped.

Drilling was in quartzite to 43 feet, in mudstone to 56 feet, in schist to 60½ feet, in mudstone to 63 feet, in schist to 68 feet, in mudstone to 70 feet, in quartzite to 92 feet, in schist to 99 ft, and thereafter in quartzite.

Hole was probed to the depth of 102 feet. The two weak intersections obtained were as follows:-

Depth in Hole	Assay Equivalent of Probe Results
1½' to 5½'	0.8 lbs U308 per ton over 4 feet
26½' to 28½'	0.5 " 2 feet

There was no evidence of mineral in the core.

The intersections of quartzite are suggestive of another through structure of wall rock but, in the absence of values, it is considered that no further drilling in this locality is justified.

All drilling operations on the Scinto claims have therefore temporarily ceased.

Scinto 1 - Faced Exposure - Shaft

Sinking advanced 20 feet from 0 feet to 20 feet. In progress. Shales were encountered beneath the scree at a depth of 10 feet and [illegible] Sinking is continuing

to the proposed depth of 30 feet.

Sleisbeck

General: Operations were confined to bulldozing costeans and diamond drilling.

Bulldozed Costeans: Three costeans were completed around rock outcrops south of the Western Hill and one costean was completed west of Exposure 5 for a total length of 1,235 feet. In addition, the unconformity showing at the gravel pits was better exposed by bulldozing.

Diamond Drilling:

D.D. 51 No. 2 Exposure

Location on local grid 350S. 400E.

Inclination - vertical.

Hole advanced 108 feet from 0 feet to 107 feet. Rods jammed. Drilling temporarily suspended.

Drilling was in quartzite throughout. Not yet probed.

D.D. 52

Location - field grid - 300S. 3500W.

Inclination - vertical.

Because waggon drilling, in the vicinity of this hole failed to hit quartzite, core drilling was undertaken to test the possibilitie of an ore deposit coinciding with severe changes in pitch.

Hole advanced 45 feet from 0 feet to 45 feet. In progress.

Drilling was in soil to 7 feet and thereafter in oxidized schists.

Not yet probed.

Signed H.J NEWTON

Fourth December, 1955.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 10.12.55

Prospecting

General: Aerial prospecting continued until 1st December and a further 18½ hours of flying was completed, making a total of 34 hours of survey flying time since flying commenced on 18th November, for an estimated total cost of 1,200. 11½ hours were spent on further prospecting within the company's areas and 7 hours were spent on a reconnaissance survey of the old copper and tin workings in the Mt. Diamond - Coronet Hill district, and the extension of the South Alligator line northwards to the coast.

With the continuance of favourable weather conditions, ground prospecting was very active and all the areas of interest were, to some extent, investigated. Ground inspection of the Jim Jim Creek area succeeded in locating the best of the anomalies with disappointing results. Further investigation of this area has been postponed until next "dry season".

Aerial Prospecting: see attached report.

Further prospecting in the Authorities to Prospect 346 to 352 recorded 2 more anomalies within these areas, also 1 anomaly marginal to the areas and an area of fluctuating intensity some 2 miles westwest of 347 on upper Bamboo Creek.

In the Sleisbeck Reservation, grid flying the upper Bamboo Creek region recorded 3 doubtful anomalies and the gridding of Top Spring's sands recorded 3 anomalies which are clearly attributable to porphyry and laterites. The Snake Creek area was also gridded but no anomalies were recorded. A resurvey of Upper Gimbat Creek recorded 2 anomalies which were previously investigated on the ground. Also a resurvey of the Upper Katherine River recorded only 3 anomalies over swamps which had already been investigated on the ground. Three additional, but doubtful, anomalies were recorded on the local escarpments. Another 4 weak anomalies were recorded high on the Cover Rocks, some 4 to 8 miles East of the camp. A resurvey of Upper Birdie Creek recorded only 3 previously known anomalies over swamps.

It is considered that all the Company's areas have not been adequately covered by aerial prospecting and that no further airborne scintillometer work is required within these areas.

On 30 November a reconnaissance survey was carried out over the Mt. Diamond - Coronet Hill district to check for a possible uranium association with the copper lodes. The only significant results obtained were obviously due to the mass effect of the granite rocks in which some of the lodes occur.

On 1st December a reconnaissance survey was carried out over the northern extension of the South Alligator line. The unconformity was followed north from El Sharana to the end of the valley, but

no unknown anomalies were recorded. Several low intensity anomalies associated with outcrops, were obtained out on the coastal plains, far removed from established roads. Most of that part of the north coast extending from the South Alligator River to Darwin Harbour - consists entirely of tidal flats, the persistent rumours of granite outcrops and suggestions of uranium minerals were refuted. The coast in the vicinity of Nightcliff recorded some anomalies due to laterites and grits overlying cretaceous marls.

Ground Prospecting: Refer to attached report for Anomaly Nos. Investigations were completed on all the most significant anomalies during this period and all the recorded anomalies received sufficient attention to be explained tentatively.

The anomalies A3, B6, B7, B1, B3 and E2, occurring in the Jim Jim Creek area were located and investigated. A3, B6 and B7 were found to represent outcrops of granite. The sharpness of these anomalies is probably due to the shielding of the bulk of the granite by remnants of cover sandstone. The strong anomaly B1 was found to be a line of laterite over cover sandstone which registered counts up to 20 times background in places, and had an average counting rate of 2 to 4 times background over all. Specularite is present in the laterite which has formed in cracks in the sandstone and on the sandstone. In places the sandstone has been lateritised in mass. No uranium mineralization was seen, but specimens have been collected for chemical assay. B3 was also found to be an area of laterite over sandstone, but in this case the laterite is thinner but scattered over a wider area. The maximum counting rate was 4 time background. Numerous irregular cracks in the sandstone have been partly filled with quartz crystals. Similarly, the strong anomaly E2, was found to be due to heavy laterite over sandstone which registered an average counting rate of 2 times background.

These observations of B1, B3 and E2 agree with the types of anomalies recorded.

The anomalies B11, C11 and C12, occurring in the lower Gimbat Creek area had previously been investigated but were checked with greater emphasis on the unconformity. B11 was identified as a saddle shaped structure composed of a remnant of cover sandstone overlying massive siltstone schists and hornfels unconformably. The lower member of the cover rocks here is a dense conglomerate having a counting rate of 2 times background and this is overlain by sandstone. The sandstone is inactive and would act as a shield to radioactivity only exposing the conglomerates along the northern side of the saddle. C11 and C12 were located along a ridge of massive siltstone schists and hornfels trending westward from the saddle. The Hornfels gave a counting rate of 3 times background in places and occur marginal to outcrops of granodiorite south of the saddle. These rocks show little evidence of shearing and do not seem likely host

rocks for ore deposition.

The area to the east of Sleisbeck camp over which the anomalies C13, C15, C16 and C17 were recorded, shows a few outcrops of cover sandstone over an otherwise sand covered area. Laterites are widespread and in places give a count of 2 times background. It seems that where the laterites form small ridges, the mass effect is responsible for these low intensity anomalies.

The doubtful anomalies C18 and C19 occurring in an area of considerable intensity fluctuation, east of Scinto 6, along the eastern escarpment of the South Alligator River Valley were investigated on the ground. Where the unconformity is exposed in places the basal conglomerates of the cover rocks registered slight relative highs. No significant radioactivity was located, but, here again, the anomalies recorded are attributable to the mass effect of the conglomerates.

The northern contact of the Middle Creek Granite Massive is at present under ground investigation.

The attached diagrammatic section may help to explain the anomalies due to extraneous causes, by indicating the manner in whic the various rock types commonly outcrop and their average intensity of radiation.

Although further ground prospecting is recommended, it is considered that all the anomalies of any consequence have been located and inspected on the ground and that in all cases ✱ other than those prospects already established - the anomalies are attributable to causes other than observable uranium mineralization.

Alligator Project

General: Operations were confined to shaft sinking on Scinto 1. All testing operations temporarily ceased on 29th November.

Scinto 1 - Face Exposure - Shaft

Sinking advanced 10 feet from 20 ft to 30 ft. Stopped.

Sinking was in a strongly sheared zone of jasper and shales. Very little mineral was showing and the last few feet had no values. Shaft abandoned.

Sleisbeck

General: Operations were confined to diamond drilling. All testing operations temporarily ceased on 6th December.

Diamond Drilling: D.D.51 - reference previous report.

Hole advanced 80 feet from 108 feet to 188 ft. Stopped. Drilling was in quartzite to 131½ feet, in oxidised schists to 171½' in siliceous carbonaceous schists to 172½ feet and thereafter in fresh schists.

The one foot intersection of barren siliceous carbonaceous material probably represents the target.

Hole was probed to a depth of 187 feet with negative results.

D.D. 52: Reference previous report.

Hole advanced 161 feet from 45 feet to 206 feet. Stopped.

Drilling was in schists to 62 ft, in quartzite to 64 feet, in schists to 131½ feet, in quartzite to 133½ feet, in sheared mudstone to 135 feet, in quartzite to 136 feet, in sheared mudstone to 179½ feet, in quartzite to 173 feet, in sheared mudstone to 176½ feet, in quartzite to 184½ feet, in schists to 200 feet, in quartzite to 201 feet, in brecciated quartzite and schist to 206 feet.

Hole was probed to a depth of 204 feet with negative results.

Total footage drilled for period was 241 feet.

Assay Results:

Results are to hand of the last batch of selected samples which were sent to the South Australian Mines Department for radiometric checks and chemical assay.

Most of these samples were selected f rom the core obtained in diamond drilling the low grade lode material at Sleisbeck Exposure No.2.

The chemical and radiometric assay results of the Mines Department compare very well, thereby showing this material to be almost in equilibrium. However the radiometric assay results obtained at Sleisbeck and the radiometric results of the Mines Department, compare very unfavourably. With material approaching ore grade the comparison is reasonable, but these results indicate that the lower the grade of the material assayed, the more is the true assay value exaggerated by local assaying.

Signed H.J. NEWTON

December 9, 1955.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OOERATIONS FOR THE PERIOD 11.12.55 TO 17.3.56.

General

The period 11.12.55 to 24.12.55 was largely devoted to cleaning up operations which included storage of equipment for the oncoming "wet", bringing office records up to date and the evacuation of leave personnel and specified equipment. Three huts were shifted so as to consolidate time-keeping and stores supervision and some progress was made on the construction of the workshop.

Callanan's Lead Zinc Prospect was located and McKenzie carried out a brief inspection of same on 12.12.55. See attached report. Dr. Wimber, accompanied by Newton, visited U.D.P's South Alligator prospect, A.U.C's Adelaide River prospect and N.A.U.C8s Stapleton Creek and Edith River workings, thereby completing the inspection of all areas of interest in the Darwin-Katherine-Sleisbeck region.

From 25.12.55 to 31.1.56 was a general stand down period, during which all personnel - with the exception of one prospecting tema and camp maintenance staff - were encouraged to take leave. Most personnel were returned to the field before 31.1.56. Messrs. Wimber, Munn and Newton inspected the Crocker's Well and Mt. Victoria prospects in South Australia, the Thackaringa prospect in N.S.W., the Astrolabe mineral field in Papua and carried out aerial reconnaissance surveys of the Gilgandra, Cunnamulla and Brisbane River areas of Queensland and the beach sand deposits of the east coast.

Operations since 1.2.56 have largely been in the vicinity of Sleisbeck camp and prospect. Efforts were concentrated on the maintenance and overhall of equipment for the forthcoming "dry" season programme, and the completion of the workshop. Geological mapping of the prospect and environs, and detailed prospecting along the escarpment continued. The prospecting team arrived on location on 3.1.56 where they have remained ever since. McKenzie carried out a geological survey of U.D.P'S South Alligator workings, both individually and in collaboration with Mr. R.C. Sprigg. Fine weather was experienced over the last week of this period.

Attached to this report are inventories of capital items, equipment and stores on hand at Sleisbeck on 17.3.56, and a list of duties performed by personnel other than senior staff. Inventories covering items outside Sleisbeck will be forwarded as available.

Administration

Company Employees:

Darwin account employees on 11.12.55 numbered 37
Darwin account employees on 17.3.56 numbered 23
L. Christopher, Geologist/Surveyor started (1.3.56)
E. Becker, H. Truesdale, J. Smith, S. Chadwick,
R. Dawes, J. O'Connor, U. Giacon, B. Barnes, L. Mthews,
S. Scarpa, A. Vanderslik, A. Spies, A. Watson, C. Smith,
J. Kent - left.

Wages

Hardy B.G. Mechanic

Wages (cont'd)

O'Connor, J.W.	Field Assistant
Phillips S.	Electrician
Romanini A.	Truckdriver
Giacon U.	Labourer
Woerle F.	Prospector
Zordan N.	Labourer
Barnes B.	Field Assistant
Mathews L.	Plant Operator
Scarpa S.	Labourer
Vanderslik A.J.	Labourer/Carpenter
Spies A.D.	Labourer
Smith C.	Mechanic
Currey C.	Plant Operator
Drury D.	Miner
Kent J.	Plant Operator
Lister G.D.	Plant Operator

Total 17

Salary

Bednar Z.	Kitchen hand
Leudar G.V.	Gen½Maint. Fitter
Madigan M.	Prospector
Woodcock H.	Stores Clerk/Timekeeper
Whalan E.	Cleaner/Gardener
Watson A.	Cooks Offsider
Parker N.	Stores Clerk/Timekeeper
Hejl M.	Cooks Offsider

Total 8

Annual Salary

Becker E.	Field Operations Manager
Chadwick S.	Geologist
Cole R.	Chief Field Accnt.
Dawes R.	Pilot
McKenzie A.	Geologist
Newton H.	Senior Geologist
Smith Mrs. J.	(Darwin) Accounts Clerk
Truesdale H. [illegible]	(Darwin) Purchasing Off.
Novotny M.	Laboratory Assayer
O'Keefe R.D.	Stenographer/Clerk
Purnell R.D.	Accounts Clerk
Toy R.G.	Field Geol. Assist.

Total 12

37

Personnel on Strength 17.3.56

Wages

Romanini A.	Truckdriver
Zordan N.	Labourer
Currey C.	Plant Operator
Drury D.	Miner
Hardy B.	Mechanic
Phillips S.	Electrician
Lister G.	Plant Operator

Total 7

Salary

Leudar G.V.	Gen/Maint. Fitter
Madigan M.	Prospector
Woerle F.	Prospector
Woodcock H.	Stores Clerk/Timekeeper
Whalan E.	Cleaner/Gardener
Bednar Z.	Cook
Hejl M.	Cook's Offsider

Parker N.	Stores Clerk/Timekeeper

Total 8

Annual Salary

Cole R.	Chief Field Accnt.
McKenzie A.	Geologist
O'Keefe R.D.	Stenographer/Clerk
Purnell R.D.	Accounts Clerk
Toy R.G.	Geol. Assist.
Novotny M.	Laboratory Assayer
Christopher L.	Geologist/Surveyor
Newton H.	Senior Geologist

Total 8

23

Contractors

No mining or drilling contracts were let during this period.

Building Construction and Camp Maintenance

Erection of the workshop was completed, the workshop floor gravelled and the building wired for electricity. Two work benches were constructed. Concrete forms were poured for the benches and all units.

The following units were installed:-

1 Hawk 60 ton press

1 Power Grinder

L Valve Refacer and Vibro Centre Unit

1 Compressor Unit

1 Electric Stand Drill

1 Electric Testing Panel

Concrete floors were poured and 1 double hut and 1 single hut unit were moved to a new site. Spare parts stores were transferred to one of these huts and an inventory taken.

The water cooler was installed on a concrete block.

A concrete step was poured for the kitchen door. Drill core storage sheds were erected at Exposures 2 and 4.

All furniture in the mess was painted. Dead timber was removed from the camp and the clearing of grass from around the buildings is in progress. Repairs were effected on the septic system. Fire breaks were cleared around fuel dumps. An extension ladder and steel tow bar constructed.

Road Maintenance

The low level crossing was repaired and surface conditioning of the airstrip road continued. The airstrip was cleared of saplings.

Plant Operation

Units Operating at or From Sleisbeck

Petrol driven - 3 landrovers (Nos. 5 and 52 and new Madigans)

International Utility (No.11), International tipper (No.10), Brigg's & Stratton water pump, Holden Utility (No.54), Auster DYY (No.53), White engine for waggon drill.

Diesel - Deutz 35 KVA (No.18), Deutz 20 KVA (No.26), Enfield pump (No.15), Bucyrus shovel (No.27), D-7 Bulldozer (No.25) D-4 Bulldozer (No.20).

Fuel Consumption Sleisbeck

Total Motor Spirit consumed	340 gallons
Distillate consumed	528 gallons
Aviation Spirit consumed	250 gallons
Lubricants consumed	171 gallons

Maintenance: Additional to general servicing.

Deutz 20 KVA (No.26) - completely overhauled, decarbonised, valve grind, new rings, rewired alternator.
Deutz 35 KVA (No.18) - water pump and fan assembly repaired.
Caterpillar D-7 (No.25)- magneto repaired.
Land Rover (No.2) - made serviceable for camp use.
Land Rover (No.5) - engine stripped.
Land Rover (No.8) - engine stripped.
Land Rover (NT.1525) - chassis repaired, complete engine and transmission check.
International Tipper (NO.10) - complete overhaul.
International Tipper (No.12) - engine stripped.
Electric Stand Drill - motor axle straightened.
Electric Welder (No.34) - V8. engine overhauled.
Enfield Drill Pump (No.15) - complete overhaul.
Hawk Press - repaired and assembled.
Camp Water Pump - ratio altered by fitting new pulley.
Assay Laboratory Jaw Crusher & Pulveriser - cleaned, painted, and rewired.

Field Operations

Sleisbeck Prospect

Surveying - Area of 1863.5 acres, within field coordinates 00 E to 10,000E and 3,000 N to 5,000 S, covered by closed traverse theodolite survey, including instrument pick up of outcrops. Base plan (scale 1" 100') prepared for geological mapping.

Geology - Above area mapped in detail, plotted on 100 feet scale and reduced to 400 feet scale. B.M.R. Geological maps to hand, coloured and mounted.

Prospecting - detailed prospecting along the escarpment south of Sleisbeck prospect continued. Prospecting for the probable unconformity has now been completed over a distance of 8 miles.

Callaman-Roberts Lead-Zinc Prospect: A preliminary inspection made by McKenzie on 12.12.55 and a report submitted.

U.D.P. Goodparla Prospect: Two inspections made by McKenzie and reports submitted. The purpose of the first being to assess the

potential of the area. The purpose of the second to report on progress of operations.

Pandanus Creek Area: Madigan and Woerle have remained in this area since 3.1.56. Their instructions were to reconnoitre the area with respect to persons and/or companies present, location and ownership of leases pegged, selection of future camp sites dependent on accessibility, water and proximity to airstrips and prospects. Also to prospect independently. No reports covering these instructions are yet to hand.

Remarks:

The results now to hand of boxwork study and spectrographic examination of samples of gossan from the Upper Turn-Off Creek prospect show traces of copper and chromium.

Signed: H.J. NEWTON
Senior Geologist

Sleisbeck, N.T.
20 March, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 31.3.56

General

Up to the 27th March, operations at Sleisbeck continued normally with reorganization of the geological offices, sorting and listing of all maps and air photo mosaics, and similar activities designed as preparation for an intensified dry season field campaign.

Maintenance and overhaul of equipment continued.

Landrover trips were made to the Scinto camp on 21st and 26th of March, returning to Sleisbeck with spares stores.

Sleisbeck camp was severely flooded during the last week of this period. Flooding followed continuous rain for 42 hours from 6 p.m. 26th March, to 12 p.m. 28th March, during which an estimated 8 inches was received. Day break on 28th March showed flood waters from the Katherine River already backed up along Cockatoo Creek, with the Accounts Office, the Timekeeper's Office and the Spares Store already underwater. Flood waters continued rising at 8 inches per hour until 5. p.m. on 28th when a signal was sent to Sydney and the camp was abandoned. The waters continued rising at a decreasing rate until 8 a.m. on 29th when the flood reached a peak of about 26 feet above normal stillwater level. Thereafter the waters subsided slowly and the camp was re-occupied during the afternoon of 30th March.

Flood waters started encroaching on the airstrip on the evening of the 27th and later covered up to two thirds of the strip. By mid-day on the 30th the airstrip was dry and safe, not damaged in anyway by the flooding. The plane arrived from Darwin at 1.00 p.m. on the 31st March with essential supplies.

All records, plans and electronic equipment were well preserved. All heavy plant with the exception of 3 landrovers, 1 International tip truck and the 2 alte nators was submerged but salvaged. All equipment covered by the flood waters is being overhauled. The greatest losses sustained were lubricants and aviation spirit washed downstream. Some of this will be recoverable later when the ground permits scouting by landrover.

Inventories of fuel and lubricants and spares stocks on hand at Scinto camp on 17.3.56 and of fuels and lubricants on hand at Sleisbeck camp on 17.3.56 are attached to this report.

Administration

Company Employees

Darwin Account Employees on 18.3.56 numbered 23
Darwin Account Employees on 31.3.56 numbered 23
No men started. No men left.

Personnel On Strength 31.3.56

Wages:	Romanini A.	Truckdriver	
	Zordan N.	Labourer	
	Currey C.	Plant Operator	
	Drury D.	Miner	
	Hardy B.	Mechanic	
	Phillips S.	Electrician	
	Lister G.	Plant Operator	Total 7
Salary:	Leudar G.V.	Gen/Maint. Fitter	
	Madigan M.	Prospector	
	Woerle F.	Prospector	
	Woodcock H.	Stores Clerk/Timekeeper	
	Whalan E.	Cleaner/Gardener	
	Bednar Z.	Cook	
	Hejl M.	Cooks Offsider	
	Parker N.	Stores Clerk/Timekeeper	Total 8
Annual Salary:			
	Cole R.	Chief Field Accnt.	
	McKenzie A.	Geologist	
	O'Keefe R.D.	Stenographer/Clerk	
	Purnell R.D.	Accounts Clerk	
	Toy R.G.	Geol. Assist.	
	Novotny M.	Laboratory Assayer	
	Christopher L.	Geologist/Surveyor	
	Newton H.	Senior Geologist	Total 8
			Grand Total 23

On the 21st March Mr. Novotny was sent on loan to El Sharana to assist them in setting up assay equipment.

Contractors

No contracts were let during this period

BUILDING CONSTRUCTION AND CAMP MAINTENANCE

A temporary battery charging unit was improvised.

Benches were constructed in the office now set aside for assay work.

ROAD MAINTENANCE

No work was done on the roads during this period. The low level crossing on the airstrip road will now require gravelling but was not seriously effected by the flooding.

PLANT OPERATION

Units Operating at Sleisbeck

The D-7 Bulldozer was used for costeaning, clearing behind the workshop, clearing an area for a garden and cutting a crossing of the Katherine River.

Fuel Consumption Sleisbeck

Total Motor Spirit Consumed	33 gallons
Total Distillate consumed	264 gallons
Total Aviation Spirit consumed	50 gallons
Total lubricants consumed	7 gallons

Maintenance: Additional to general servicing.
Overhauling of the Rotary Hoe and petrol driven hand saw.
No.6 Landrover was fitted with new front and back universals and brake linings.
The fuel tank was repaired and body work done.
Repairs to the two caravans commenced.
Chev 4x4 (Scinto Camp) Clutch plate replaced. Vehicle in good running order.

Field Operations

Sleisbeck Prospect: Surveying and Geology - Surveying and mapping of the cover escarpment has progressed and the Eastern Hill of the prospect proper has been picked up.

Costeaning - C63. was cut with the D-7 bulldozer for a length of 180 feet and to an average depth of 2 feet. End co-ordinates are 2100S, 8025E and 2000S, 8148E. This costean exposed the unconformity and the schist lying beneath the cover. No significant changes in radioactivity were recorded.

Pandanus Creek Area: Madigan and Werle abandoned camp at Pandanus Creek on 21st March and arrived at Doomagee Mission, after 4 days walking and 1 day horse riding, on 26th March. They returned to Darwin by air on 1st April.

Aerial photographs of the Calvert Hills area are to hand.

Remarks

The flooding of the Sleisbeck camp will, to some extent, delay preparations for the dry season but the soaking of the ground has also put forward the date on which ground prospecting within AP.430 and AP.415 can commence. No estimate of the effects of the flood can be given in this report, however direct losses were not severe and it is expected that most of the costs will involve wages on overhaul of damaged equipment.

signed. H.J. Newton
Senior Geologist

Sleisbeck, N.T.
3rd April, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 14.4.56

General

No further rain was recorded during this period. On 8th April a landrover trip was made to the Scinto Camp.

Preparations are in hand to abandon the Scinto Camp. The camp caretaker has been withdrawn and all this company's equipment and stores are being transferred to Sleisbeck.

The majority of vehicles and items of equipment affected by flooding have been pulled down and overhauled.

The application for an Authority to Prospect an area of some 2,000 square miles in the Calvert River area was approved officially on 6th April. A.P. 438 consists of approximately 2,000 square miles, less a total of 16 square miles at present held under Authority to Prospect and about sixteen 40 acre leases.

The budget estimates for operations during the next four weeks period, ending 12th May, 1956, are attached to this report.

Prospecting:

Excessive rainfall during the previous period further delayed prospecting operations. An access track into the Bamboo Creek area and the Callanan Lead-Zinc Prospect was inspected and found to be negotiable by landrover.

Administration

Company Employees:

Darwin account employees on 31.3.56 numbered 23

Darwin account employees on 14th April, 1956 numbered24

No men left. P. Allard - clerk - started 9.4.56.

Personnel on Strength 14.4.56

Wages

Romanini A.	Truckdriver	
Zordan N.	Labourer	
Currey C.	Plant Operator	
Drury D.	Miner	
Hardy B.	Mechanic	
Phillips S.	Electrician	
Lister G.	Plant Operator - Total 7.	
Salary		
Leudar G.V.	Gen/Maint. Fitter	
Madigan M.	prospector	
Woerle F.	Prospector	
Woodcock H.	Stores Clerk/Timekeeper	
Whalan E.	Cleaner/Gardener	
Bednar Z.	Cook	
Hejl M.	Cooks Offsider	
Parker N.	Prospector	Total 8

Annual Staff

Colè R.	Chief Field Accnt.
McKenzie A.	Geologist
O'Keefe R.D.	Stenographer/Clerk
Allard P.	Clerk
Purnell R.D.	Accounts Clerk
Toy R.G.	Geologist Assistant
Novotny M.	Laboratory Assayer
Christopher L.	Geologist/Surveyor
Newton H.	Senior Geologist -Total 9

Grand Total - 24.

M. Novotny returned to company duties on 31st March, 1956.
M. Madigan and F. Woerle were repatriated in Darwin for the entire period.

Contractors: No contracts were let during the period.

Building Construction and Camp Maintenance: Nil.

Road Maintenance: Nil

Plant Operation:

Units Operating at Sleisbeck:

Petrol Driven:

Landrovers Nos. 6, 52 (1559), (1525).
International Tip Truck No.10
Chevrolet 4 x 4 truck, transferred from Scinto Camp
Auster Aircraft DYY ferried to Sydney
32 Volt Generator, used for battery charging
Diesel:
Cat. D-7 No.25, used for towing plant.
Deutz 35 KVA and Deutz 20 KVA - Camp power supply.
Enfield Pump, camp water supply.

Units Operating at Darwin:

2 Holden utilities - general running
1 Landrover No.3 - general running.

Fuel Consumption Sleisbeck:

Total Motor Spirit Consumed	100 gallons
Distillate consumed	308 gallons
Aviation Spirit consumed	Nil
Lubricants consumed	14 gallons

One drum of aviation spirit has been allocated to Muir Aviation

Maintenance : additional to general servicing.

Vehicles

Landrover No.1	Portable compressor and power take-off assembly dismantled.
Landrover No.3	Repaired by Allen Bros., Darwin.
Landrover No.5	Submerged - overhauled.
Landrover No.6	Submerged - overhauled. New fuel pump fitted.
Landrover (NT.1559)	Power take-off assembly fitted. Waiting on repairs to electric welder to lengthen shaft. Waiting on steel plate to assembl

compressor.

International (flat top) No.9	Submerged - overhaul in progress
International utility No.11	Submerged - overhaul in progress
Chevrolet 4x4 Pole Waggon No.31	Submerged - overhaul in progress
Chevrolet 4z4 flat top No. ?	Transferred to Sleisbeck.
Holden Utility No.54	Completely serviced.
2 Caravans	Repainted and repairs completed
Heavy Equipment	
Cat.D-7 No.25	submerged - overhauled.
Half track waggon drill No.32	Submerged - overhaul of white engine complete. Overhaul of compressor unit in progress.
Atlas Waggon Drill No.21	Submerged - overhauled.
Air Units	
Air compressor No.19	Submerged - overhauled.
Servex compressor No.36	Submerged - overhauled.
Power Units	
Deutz Alternator 35 KVA No.18	Valve grind and top overhaul. Waiting on valves and guides.
Deutz Alternator	V-8 motor removed and transferred to Sleisbeck.
32 V. Generator Unit	Submerged - overhauled.
Pump Units	
Enfield Diesel Pump No.15	Submerged - overhauled.
Novo Pump on hire B.M.R. No.16	Submerged - overhauled.
Brigg's Pump No.50	Submerged - overhauled.
Rex Pump	Checked - not satisfactory. Returned to Tutt Bryant.
Diamond Drills	
Mindrill E-1000 No.51	Submerged - overhauled.
Sullivan 22 on hire B.M.R. No.14	" overhauled.
Miscellaneous	
Rotary Hoe No.33	Submerged - overhauled.
B& D Valvemaster No.45	Submerged - overhauled. New switch fitted to vibro centre.
Grinder Head No.37	Submerged - overhauled.
Stand drill No.38	Submerged - overhauled.
Hydraulic press No.39	Submerged - overhauled.
Jaw crusher No.40	Submerged - overhauled.
Pulveriser No.41	Submerged - overhauled.
Electric Welder 34	Submerged - complete overhaul in progress.
2 washing machines	Submerged - overhauled.
Chain saw	Submerged - overhauled.
Mess refrigerator	Submerged - overhauled.
Mess depp freeze	Submerged - overhauled. Fan motor burnt out.
Water cooler	Submerged - overhauled.
Electronic Instruments	
Traeger Transceiver	Submerged - dismantled. Waiting on replacement parts.

Traeger Transceiver (In use)	Dismantled. 3 new valves fitted and reassembled.
P.R.M. Austronic Geiger Ser.166	Completely overhauled. Waiting on batteries.
P.R.M. Austronic Geiger Ser.168	Overhauled. New meter and battery fitted.
H.B. Selby Geiger Ser. 24	Overhauled. Waiting on batteries.

Field Operations

AP. 430

Sleisbeck Prospect: Surveying and geology - surveying and mapping continued and the area to be plotted on Sheet 1, covering from 00 to 10,000E and from 3,000N to 5,000S, has been almost completed.

East Sleisbeck: Surveying and Geology - Survey lines have been extended across the Katherine River in readiness to extend along the escarpment, in conjunction with prospecting in this area. It is hoped that this area will be accessible to landrovers within two weeks. A further reconnaissance of the area has been made.

Middle Creek Area: Geology - Preliminary inspection shows this area to be accessible and a party of two prospectors have prepared to set up camp.

Prospecting for uranium will commence along the escarpment to the north of the area.

As soon as the matter of the Callanan-Roberts Leases has been settled, such prospecting as does not encroach on leases granted, will be done. It may be necessary to obtain free testing options, if possible, over areas held by Callanan and Roberts, to complete testing on the lead-zinc lodes.

signed H.J. Newton
Senior Geologist

Sleisbeck N.T.
17th April, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 28 APRIL,1956.

General

Two inches of rain were recorded at Sleisbeck between 18th and 21st April. This rain has not greatly affected the Sleisbeck - South Alligator road, but it is expected to delay transport to the bitumen through Goodparla which received considerably more rain. General storm conditions throughout the Gulf of Carpentaria on 18th, 19th and 20th April delayed the departure of aircraft for AP.438.

All intended stores and equipment have now been transferred from the Scinto Camp to Sleisbeck. Agreement has been reached with United Uranium to take over the Scinto fuel stocks. The electric refrigerator from Sleisbeck canteen was transferred to the Wood Street house, Darwin.

Official notification was received that the surrender was accepted of AP.430 of a proximately 651 square miles, and that AP.440, consisting of 2 areas formerly contained within AP.430 and totalling 155 square miles approximately, was granted on 12th April, 1956.

Preparations for the operation of AP.438 are underway. Personnel and equipment started moving from Darwin to the area on 18th April. A base camp is at present being established at Turn-Off Lagoon, 1 mile past Corinda Station homestead.

The second N.A.U.C.-U.U.N.L. meeting of the field committee was held at El Sharana on 25th April and the planning of the initial investigation of AP.442 was finalised.

PROSPECTING:

A.P.440 and A.P.415

Prospecting of these areas was delayed by rain.

A.P.438

Wet conditions did not permit ground prospecting, but 2 hours of aerial spotting were completed over this area on 23rd April. Scintillometer work was impeded both by poor weather conditions and instrument failure of the airborne scintillometer. Some ineffectual runs were taken using the Halross field scintillometer. The most important workings were located on the aerial mosaic. The structures associated with these workings were studied with respect to ground prospecting.

ADMINISTRATION

Company Employees

Darwin Account Employees on 14.4.56 numbered 24.
" " " " 28.4.56 numbered 28

M.F. Conway - pilot - started 5.4.56
G. Cox - aircraft engineer - started 16.4.56
B.Day - cook - started 23.4.56
B. Beyer - general hand - started 28.4.56

Personnel on Strength 28.4.56

Wages Employees

Drury D.	Miner	
Romanini A.	Truckdriver	
Zordan N.	Labourer	
Currey C.	Plant Operator	
Lister G.	Plant Operator	
Hardy B.	Mechanic	
Phillips S.	Electrician	
Beyer B.	General Hand	Total 8

Salaried Staff

Hejl M.	Cooks offsider	
Leudar G.V.	Gen/maintenance. Fitter	
Madigan M.	Prospector	
Parker N.	Prospector	
Whalan E.	Cleaner/Gardener	
Woodcock H.	Storeman/Timekeeper	
Woerle F.	Prospector	
Bednar Z.	Cook	
Cox G.	Aircraft mechanic	
Day B.	Cook	Total 10

Annual Salaried Staff

Cole R.	Accountant	
McKenzie A.	Geologist	
Newton H.	Senior Geologist	
O'Keefe R.	Stenographer/Clerk	
Purnell R.D.	Accounts Clerk	
Toy R.	Assist. Geologist	
Novotny M.	Laboratory Assayer	
Christopher L.	Geologist/Surveyor	
Allard P.	Clerk	
Conway N.F.	Pilot	Total 10

Grand total 28

M. Novotny (appendicitis) and H. Woodcock (injured back), were in hospital for the entire period. S. Phillips and M. Hejl were absent for part of the period undergoing dermatitis treatment.

Contractors.

No contracts were let during the period.

CAMP CONSTRUCTION & MAINTENANCE:

Sleisbeck: Minor repairs were effecte on buildings damaged by flooding.

Turn-off Lagoon: A tent camp is under construction at Turn-off Lagoon, 1 mile west of Corinda Station homestead.

ROAD MAINTENANCE:

Creek crossings on the Sleisbeck - South Alligator road were cut in transferring the grader to Sleisbeck. The Sleisbeck airstrip road was graded.

AIRSTRIP CONSTRUCTION: Bracken was cleared by hand from a flat area conveniently situated to the Gregory Downs Hotel. This will enable quick refuelling during the early stages of operations while it is considered necessary to use this locality as an air terminus.

PLANT OPERATION

Units Operating at Sleisbeck

Petrol Driven:

Dragon VH-AFH - transport (aerial survey and scintillometer flying AP.438).

Landrovers Nos. 5, 6, 52 (1559), (1525) - General running.

International Tip Truck No.10 - hauling from Scinto Camp and Fisher Strip.

G.M.C. 6 x 6 truck - transfered from Scinto Camp.

Diesel Driven:

D-4 tractor - transferred from Scinto camp and used for towing

Cat. D-7 No.25 - Towing plant.

Deutz 35 KVA and Deutz 20 KVA - Camp power supply.

Enfield Pump - camp water supply.

Units Operating at Darwin: Holden Utility - general running

Units Operating in Queensland:

Holden Utility No.54 - hauling stores from Mt. Isa to Turn-off Lagoon Camp.
Landrover No.3 - "

Maintenance - additional to general servicing.

Landrover No.8 - repairs to auxillary fuel and water tanks and fitting them to landrover. Overhaul in progress.

Landrover No.3 - repairs to fuel and water tanks. Breast plate fitted and tyres changed in Darwin.

Caravans - minor repairs.

Heavy Equipment

Grader - gear box assembled and checked.

Miscellaneous

Electric welder - complete overhaul in progress.

FIELD OPERATIONS

A.P. 440 - Sleisbeck Prospect

Surveying and Geology - surveying and mapping continued. Sheet 1 will be issued on return of M. Novotny to complete the draughting.

A.P. 438

Aerial investigations, with reference to the accessibility of this area, were carried out on 22nd and 23rd April. Landings were made and information was sought at Gregory Downs station, Doomadgee Mission, Burketown and Wollogorang station. In addition

existing workings, roads and stations were inspected from the air.

Due to the high escarpment country extending across the centre of A.P.438, it was recognized as impractical to expect direct contact between the northern and southern portions of this authority to prospect. The southern portion is accessible through Corinda Station along the Nicholson River Valley. The northern portion is accessible through Corinda Station and Westmoreland Station along the valley of Lagoon Creek.

A convenient camp site was located on Turn-Off Lagoon - 1 mile west of Corinda Station - where it was decided to construct a base camp to be used as a feeder to Fly Camp on Pandanus Creek in the south, and a camp - yet to be determined - west of Westmoreland Station in the north.

Supplies, camping and prospecting equipment were therefore hauled in stages from Mt. Isa to Gregory Downs Hotel, then from Gregory Downs to Turn-Off Lagoon.

H.J. NEWTON

Sleisbeck N.T.
28th April, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 12.5.56

General

Storm conditions prevailed over the northern part of the Territory in the middle of this period. Two inches of rain was received at Sleisbeck over 5th and 6th May, and an estimated 3 inches of rain was received at Corinda on 8th and 9th May.

This unseasonable rain will further delay access to prospecting areas and access to the bitumen through Goodparla.

Repair and maintenance is still continuing at Sleisbeck, as is the carting of stores and equipment into Corinda Camp but the main effort is now being directed to getting the ground prospecting underway.

Prospecting

A.P. 415 Jim Jim Creek Area: Wet conditions have further delayed the prospecting of this area.

A.P.440 Sleisbeck: The Katherine River is still too high to cross, rendering it impossible to resume investigations at East Sleisbeck.

A party of two commenced prospecting along the escarpment north of Bamboo Creek. The volcanic rock types in this area give a high background count, but no radioactive anomalies have yet been found.

A.P. 442 South Alligator: Prospecting in this area has commenced. Two and a half hours scintillometer flying was completed on 11th May. United Uranium have dozed a track in the Bamboo Creek area from Scinto No.6 Prospect to the escarpment and will continue along the escarpment to the southern boundary of this area.

On Monday 7th May L. Christopher was transferred from Sleisbeck to Scinto Camp to be under the control of United Uranium and work in A.P. 442. Landrover No.6 has been made available for work in the joint area.

A.P.438 Milestone: Continuing wet conditions rendered the area still inaccessible for ground prospecting. Three hours of aerial prospecting with the scintillometer were completed on 9th May and a further half hour on 10th May.

Flying was restricted to the dominant linear features viz shear lines and escarpments in the eastern part of the area. Flying was carried out in stormy weather so that the results are inconclusive and time did not allow for repeated runs. This prospecting must therefore be regarded as of a very cursory nature only, to be repeated in greater detail in the future.

Several weak anomalies were recorded along the flight lines Surprisingly weak anomalies were recorded over the known occurrences of uranium - copper mineralization in the south eastern part of the area. An extremely good point source anomaly was obtained over Hackwell's pitchblende find which bears little relationship to the

rest of the field so far as can be judged from the air. It is obvious that in this particular case too little is known of the environment to expect good results from the air. Every effort is therefore being made to study this prospect on the ground before continuing with scintillometer surveys.

Administration

Company Employees

Darwin Account employees on 28.4.56 numbered 28

Darwin Account Employees on 12.5.56 numbered 29

R. Cole - accountant - left

N. Parker - prospector - left

F. Mueller - accountant - started

J. McCory Prospector started

H. Rhode - labourer - started.

Personnel on Strength 12.5.56

Wages Employees

Drury D.	Miner/prospector	
Romanini A.	Truckdriver	
Zordan N.	Labourer	
Currey C.	Plant operator	
Lister G.	Plant operator	
Hardy B.	Mechanic	
Phillips S.	ELectrician	
Beyer B.	General hand	
Rhode H.	Labourer	
McCory J.	Prospector	Total 10

Fortnightly Salaried Staff

Hejl M.	Cooks offsider	
Leudar G.V.	Gen/Maint. fitter	
Madigan M.	Prospector	
Woerle F.	Prospector	
Whalan E.	Cleaner/gardener	
Woodcock H.	Storeman/timekeeper	
Bednar Z.	Cook	
Cox G.	Aircraft mechanic	
Day B.	Cook	Total 9

Annual Salaried Staff

Mueller F.	Accountant	
Newton H.	Senior Geologist	
McKenzie A.	Geologist	
O'Keefe R.	Stenographer/Clerk	
Purnell R.D.	Accounts Clerk	
Toy R.	Assist. Geologist	
Novotny M.	Laboratory Assayer	
Christopher L.	Geologist/Surveyer	
Allard P.	Clerk	
Conway N.F.	Pilot	Total 10
		Grand Total 29

H. Novotny returned to duty on the 8th May, 1956.
H. Woodcock remained absent sick for the entire period.

Contractors: No contracts were let during the period

CAMP CONSTRUCTION:

Corinda Camp (Queensland). Three sleeping tents and a bow shed kitchen were erected. A ramp was constructed over the lagoon for water supply.

ROAD MAINTENANCE:

The Sleisbeck-South Alligator and the Sleisbeck airstrip roads were graded. The Sleisbeck low level crossing and the portal to the workshop were gravelled and graded.

AIRSTRIP CONSTRUCTION:

Work was suspended on the extra strip at Gregory when it was realised that the large amount of ground required to fill holes was not warranted by its anticipated use. It is intended instead to proceed with the clearing of an airstrip at Corinda Station which is situated much closer to the base camp and the Milestone area.

PLANT OPERATION:

Units Operating at Sleisbeck

Petrol driven:

Dragon VH-AFH freighting to and from Darwin - aerial spotting of lost fuel.

Landrovers 5, 6, 52 (1559), (1525). General running.

No.5 - prospecting Bamboo Creek area A.P.440

No.6 - prospecting Bamboo Creek area A.P.442

No.1525 - geological supervision of prospecting.

Handsaw - camp firewood supply.

Diesel driven:

Cat-D.7 No.25 - clearing in front of workshop.

Deutz 35 KVA and Deutz 20 KVA - camp power supply.

Enfield pump - camp water supply.

Cat-D.12 grader improving Sleisbeck - South Alligator road.

Units Operating at Darwin: Holden utility - general running.

Units Operating in Queensland and Milestone

Dragon VH-AFH - 3 days aerial reconnaissance of A.P.438.

Holden Utility No.54 - hauling stores and equipment from Mt. Isa to Corinda camp.

Landrover No.3 - hauling stores and equipment from Mt. Isa to Corinda camp.

Landrover No.? - temporarily unserviceable Fly Camp.

Cat. D-4 Bulldozer - hauled from Pine Creek to Mt. Isa.

Units Hired Out

Cat. D.12 grader and operator on hire U.U.N.L. for 19 hours.

Fuel consumption Sleisbeck: Total motor spirit consumed 64 gallons
" Distillate " 264 "
" Aviation Spirit " 20 "
" Lubricants " 32 "

Maintenance - additional to general servicing

Vehicles:

Landrover No.5	Minor repairs completed.
Landrove No.6	Minor repairs to steering.
Landrover No.8	Complete overhaul still in progress. New rings and bearings fitted. Starter motor, generator and other electrical components overhauled.
International Utility	No.11 - completely overhauled.
Gardener Denver Waggon Drill Compressor.	Complete overhaul in progress. Valve grinding completed and unit assembled. Waiting on repairs to magneto.

Heavy Equipment:

R.B. Power Shovel	Overhaul completed. Minor panel beating still required.
Atlas Compressor	Head gaskets exchanged.

Miscellaneous

Electric welder	Overhaul almost complete. Wating on bearing.
Deppfreeze Unit	Cooling fan repaired.
Pulverizer	Overhauled, rewired and reassembled.
Jaw crusher	Overhauled and reassembled.

FIELD OPERATIONS:

A.P.440 Sleisbeck Prospect: Surveying and geology - survey lines were extended west along the escarpment as a base line for further geological mapping.

A.P. 438 Milestone: Operations were restricted, by the weather, to hauling stores and equipment from Mt. Isa. to Corinda camp. Arrangements are now in hand fro transferring the Cat-D.4 bulldozer together with fuel stocks from Mt. Isa to Corinda camp.

H.J. Newton

Sleisbeck N.T.
12th May, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.

REPORT ON OPERATIONS FOR THE FORTNIGHT ENDING 26.5.56

GENERAL:

Sleisbeck: No rain fell in the area during this period and tracks are rapidly drying out.

The B.M.R. Sullivan Diamond Drill excluding the pump, rods, etc., was transported to Darwin. This truck will return with the Deutz 35 KVA Alternator and then transport the remaining B.M.R. equipment to Darwin.

Vehicle repair and maintenance is continuing and essential rewiring in the camp is in progress.

Mr. D. Ostle, Senior Geologist U.K. Geological Survey, attached to U.K.A.E.C. visited Sleisbeck on 23rd May.

Mr. K. Beatson the Government Mines Inspector visited Sleisbeck on 24th May, staying overnight.

Milestone: Further rain was received early in the period. Some showers extended well inland and affected the Camooweal-Gregory road to some extent. The weather has since cleared and the tracks are rapidly drying out.

In view of the earlier bad weather conditions, the only serviceable landrover was despatched to Camooweal for some urgently required repairs. These repairs took one week. The Holden was simultaneously despatched to Mt. Isa for stores and also to arrange trucking of the Cat. D-4 bulldozer and 6 tons of fuel to Cordina camp. These efforts proved ineffectual, but the loading has since been arranged from Darwin end and the carting is scheduled for next Monday.

Access has recently been obtained to Fly Camp and the disabled landrover, which has remained there through the "Wet" season, is in the process of being repaired.

Meanwhile a further two landrovers, each towing a caravan have arrived in Pine Creek en route to Corinda where they are expected to arrive next Wednesday.

Mr. J. Lord, Chief Geologist of B.M.R. Darwin, visited the area about the middle of this period and made a brief inspection of Mr. Blackwell's prospect.

ADMINISTRATION:

Company Employees.

Darwin account employees on 12.5.56 numbered 29.
" " " " 26.5.56 numbered 29.

P. allard - Clerk Sleisbeck - left.
H. Woodcock - storeman Sleisbeck - left.
J. Mueller - part-time stenographer Darwin - started.
J. Rosenweig - prospector Sleisbeck - started.

Darwin Personnel

H. NEwton - operations manager
F. Mueller - field accountant
J. Mueller - stenographer (part time)
N. Conway - Pilot
G. Cox - aircraft engineer
D. Purnell - accounts clerk.

Sleisbeck Personnel

Z. Bednar	Cook
B. Beyer	Storeman
C. Currey	Plant operator
D. Drury	Prospector/miner
B. Hardy	Mechanic
M. Hedjl	Cooks offsider
G.V. Leudar	Plant Engineer
G. Lister	Plant operator
J. McCory	Prospector
A. McKenzie	Resident Geologist
M. Novotny	Assayer/Draftsman
R. O'Keefe	Bookkeeper/typist
S. Phillips	Electrician
H. Rhode	General hand
E. Whalan	Cleaner/gardener
J. Rosenweig	Prospector

Milestone Personnel

R. Toy	Field foreman
M. Madigan	Senior prospector
F. Woerle	Prospector
N. Zordan	General hand
A. Romanini	General hand
B. Day	Cook.

Sarco Personnel

L. Christopher - Assistant Geologist

Contracts: No contracts were let.

CAMP CONSTRUCTION: Shelves constructed in spares store.

ROAD MAINTENANCE: The Sleisbeck Camp - airstrip road was graded. The sides of the airstrip were graded to clear saplings.

PLANT OPERATION:

Units Operating at Sleisbeck:

Petrol driven

Landrovers No.9 and 11 towing caravans to Pine Creek.
Landrovers No.8 and 10 general running.
Landrover No.5 prospecting Bamboo Creek area.
International utility - general running.
Powersaw - camp firewood supply.

Diesel driven

Cat. D-7 - dozing access track Bamboo Area A.P.440.
Deutz 35 KVA and Deutz 20 KVA - camp power supply.
Enfield Pump - camp water supply.
Grader - improving airstrip road and clearing sides of airstrip.

Fuel Consumption Sleisbeck

Total motor spirit consumed 80 gallons
Total distillate consumed 250 gallons
Total aviation spirit consumed Nil.
Total lubricants consumed 30 gallons

Units Operating at Milestone

Petrol driven

Landrover No. ? - temporarily unserviceable Fly Camp.
Landrover No.3 - general running.
Landrover Nos. 9 and 11 - en route to Corinda.
Caravans Nos. 1 and 2 - en route to Corinda.
Holden Utility (Cream) - general running Gregory to Mt. Isa.

Diesel

Cat. D-4 bulldozer - awaiting haulage Mt. Isa to Corinda.

Units Operating Darwin

Dragon A.F.H. - transport Darwin - Sleisbeck.
Holden Utility - general running
(Blue)

Maintenance - additional to general servicing.

Repairs tto No.8 Landrover.
Repairs Pilot Motor Gardner Denver Waggon Drill.
Repairs No.9 and 11 Landrovers fitting protection plates.
Repairs and overhaul electric welder in progress.
Cleaning and sorting of spare parts in store effected by flooding.
No. 6 Landrover sustained damage while being used on prospecting in AP.442. It has been towed to Sleisbeck and is undergoing overhaul and repair.

PROSPECTING:

A.P.415: Jim Jim Area. This area is still inaccessible.

A.P. 440: Sleisbeck. The party of two are continuing to prospect the escarpment north of Bamboo Creek.

A.P.438: Milestone. No aerial or ground prospecting was attempted. Dragon E.F.H. was grounded for 6 days with faulty brakes during the period.

FIELD OPERATIONS: A.P. 440

Six miles of track has been cut with the Cat.D-7 from Fisher strip along the Bamboo Creek as access track for the prospectors. This track will be continued to gain access to AP.415.

REMARKS:

The most recent interpretations of the South Alligator uranium deposits disclose that in each case the richest ore is localised along shears between rocks of very different competency (hardness). The hard jasper or quartzite is much fractured near the contact and these fractures carry pitchblende. The soft incompetent schists adjoining the quartzite, carry the secondary minerals derived from the oxidation of the pitchblende

These conditions are well developed at Sleisbeck Exposure 4, and in respect to these interpretations, the hard gractured quartzite has been scarcely tested.

It was therefore considered prudent to sink a shallow shaft in the quartzite near where the pitchblende specimen specimens occurred on the contact.

A contract has been let for a guaranteed 50 feet of development and sinking is scheduled to commence next Tuesday.

H.J. NEWTON

Sleisbeck, N.T.
26 May, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.

REPORT ON OPERATIONS FOR THE MONTH ENDING 30TH JUNE, 1956.

GENERAL:

Operations for this period were seriously handicapped by the prolonged delay of the delivery of the Miles Gemini aircraft which necessitated the absence of the pilot for a period of five weeks. Further unavoidable delays were experienced in the repair and registration of trucks intended to haul stores and equipment to Milestone. Also current activities are hampered due to minor defects in the bulldozer at Bamboo Creek and the bulldozer at Corinda Camp.

Considerable maintenance was completed this period when the badly damaged Landrover, No.6 was completely overhauled and returned to U.U.N.L. for use on Sarco. The G.M.C. 6 x 6 truck was overhauled and registered, and the Deutz 20 KVA alternator was fitted with new axle bearings and rubber coupling.

A major effort was made with the electrical rewiring of Sleisbeck camp which is now nearing completion. The radiometric assaying laboratory was transferred to the survey office. All electrical fittings were completed and the instruments recallibrated with standard samples recently received from the South Australian Mines Department. Assays are again being run locally.

Ground prospecting is proceeding very satisfactorily. A mineral discovery was made at Milestone on 9th June. Another discovery was made at Sleisbeck on 19th June, and another discovery was made at Milestone on 28th June.

The new river prospect at Sleisbeck though showing only sparse and weak mineralization, is considered most encouraging dur to the nature of the occurrence. The two new prospects at Milestone are fissure lodes, very similar in nature to Blackwell's original prospect. These again are most encouraging as they enhance the prospect of finding many occurrences of uranium mineralization within an area of a few square miles.

H.J. NEWTON

Sleisbeck N.T.
July 5, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT OPERATIONS FOR MONTH ENDING 30TH JUNE, 1956.
MILESTONE AREA

GENERAL:

Field prospecting was active in the Westmoreland Valley and two new occurrences of secondary uranium mineralization were discovered. In addition, two other areas of shearing registering counts of up to 10 times background, were tested unsuccessfully for mineral to shallow depths. It is expected that further testing of these areas will reveal secondary uranium mineralization.

A new camp was established at Waterfall Gorge, some 2 miles west of Blackwell's Gorge.

Repairs to the landrover at Fly Camp proved ineffectual so that this vehicle was transported to Burketown where it is now undergoing a major overhaul.

Haulage of bulk stores and equipment from Sleisbeck and Darwin to Milestone suffered considerable initial delay due to the replacements required for registration of the trucks. One unit subsequently broke down at Tennant Creek and the transference of this loading to another unit is now in hand.

ADMINISTRATION:

Company Employees - Milestone

R. Toy	Field foreman
M. Madigan	Senior Prospector
F. Woerle	Prospector
N. Zordan	General hand/prospector
A. Romanini	"
C. Currey	Plant operator
G. Lister	"
H. Hoosen	Prospector/Guide
A. Day	Cook - left.

Contracts: Small contracts were let for carting stores from Burketown to Waterfall Camp and Fly Camp.

PLANT OPERATION:

Units Operating at Milestone

Petrol Driven

Landrover No.?	Undergoing repairs Burketown.
Landrover No.3	Awaiting parts Corinda.
Landrover No.9	Engaged in prospecting.
Landrover No.11	General running.
G.M.C. 6 x 6	En route to Milestone - awaiting parts Tennant Creek.

International Utility en route to Milestone.

Diesel: Cat. D-4 bulldozer awaiting parts Corinda.

PROSPECTING:

Intense detailed prospecting is in progress in the Westmoreland Valley. No communication can be made with the horse plant which is somewhere between Fly Camp and Waterfall Camp.

PROSPECTS:

The two recent discoveries are markedly similar in nature to Blackwell's prospect. One occurrence is located on top of a

high hill west of Waterfall camp and the other about 50 chains south of Blackwell's prospect.

Neither prospect has been opened sufficiently to establish the lode dimensions, but each is a fissure lode in sheared basalt. The shears strike due north and dip vertically. The mineralization appears identical to Blackwell's material, but has different flourescent properties. As with Blackwell's prospect neither occurrence showed mineral near the surface and as the existing openings are shallow and obviously within the walls of the lode, no estimation of the grade is given here.

These discoveries are most encouraging and from what is now known of the field many more may be expected. However, as very little testing has been carried out in this area it is important to know the behaviour or depth of one deposit as soon as possible in order to roughly assess the potential of the field. It is therefore proposed to sink a shaft on one prospect and it is considered that a total of 200 feet of development would be required.

H.J. NEWTON

Sleisbeck N.T.
5th July, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR MONTH ENDING 30TH JUNE, 1956.

SLEISBECK AREA

GENERAL:

A few spots of rain fell on Saturday 23rd and this, with the presence of clouds on several days during the month, is most unseasonable.

Access has been gained to the Jim Jim area and a team of two prospectors will start work in that area.

A shaft has been sunk at No.4 Exposure, Sleisbeck prospect to test the quartzite wall rock.

A small pit has exposed secondary uranium mineralization in the bed of the Katherine River, south of Sleisbeck camp.

Other radioactivity anomalies located by prospectors have yet to be inspected.

Vehicle repair and essential rewiring in the camp are continuing.

On the 16th a party from South Australian Department of Mines, E.S. O'Driscoll, L.W. Parkin, W.C. Woodmousee, F.R. Peterson, accompanied by J. Lord and K. Summers of the Bureau of Mineral Resources Darwin, visited Sleisbeck.

Mr. W. Porter, assayer for N.U.D., visited Sleisbeck on 26th and 27th to study the assay layout and methods used.

Mr. H. Munn arrived at Sleisbeck on the 27th and inspected the shaft and river prospect. On the 28th a visit was made to El Sharana and the Callanan Lead Zinc Prospect.

ADMINISTRATION:

Company Employees:

	Sleisbeck Personnel
Bednar Z.	Cook
Beyer B.	Storeman
Drury D.	Prospector/Miner
Hardy B.	Mechanic
Hejl M.	Cooks offsider
Leudar G.V.	Plant Engineer
McCorry J.	Prospector
McKenzie A.	Resident Geologist
Novotny M.	Assayer/Draftsman
O'ConnorP.	Plant operator
O'Keefe R.	Book-keeper/typist
Phillips S.	Electrician
Rhode H.	General hand
Rosenzweig	Prospector
Whalan E.	Cleaner/gardener

P. O'Connor arrived Sleisbeck on 30th to work for a period of approximately two months operating the D-7 dozer.

Contracts: Contracts were let to W. Hampton for shaft sinking and development work at No.4 Exposure, Sleisbeck prospect and also for opening up a small pit on the river prospect.

PLANT OPERATION:

Petrol Driven

Landrover No. 8 - general running.
Landrovers No.7 and No.5 - prospecting.
Landrover No.12 - supervision prospecting. Geological mapping.
International Utility - to Darwin then transferred to Milestone.
G.M.C. 6 x 6 truck - to Darwin then transferred to Milestone.
International Tip Truck - general running. Trip to Pine Creek for supplied.
Powersaw - camp firewood supply.

Diesel Driven

Deutz 35 KVA and Deutz 20 KVA Alternators - Camp Power Supply.
Enfield Pump - camp water supply.

Fuel Consumption: Total Motor Spirit consumed 267 gallons
" Distillate " 264 gallons
" Aviation " 49 gallons
" Lubricants " 43 gallons

Maintenance - Additional to general servicing.

Repairs to: No.5 Landrover, G.M.C. 6 x 6 truck, No.10 Landrover, Jackhammers, No. Landrover, Deutz 20 KVA, International Water Tanker, No.7 Landrover.
Pleuger Pump installed but burnt out after one week. Rex Pump installed burnt out.

PROSPECTING:

A.P. 415, Jim Jim Area. This area was accessible at the end of the month and prospectors are working near the southern boundary.

A.P. 440, Sleisbeck Prospect.

No. 1 Shaft: The shaft was sunk to a depth of 30 feet in the quartzite wall rock. Good secondary mineralization is showing in the south wall to a depth of 12 feet. The quartzite is well fractured with gouge filling the cracks.

At the 30 ft level a total of 31 ft of development was carried out.

A 6 ft crosscut to the north failed to reveal any mineralization. A 14 ft cross cut to the south was in quartzite for 6 ft then in red mudstone. The quartzite was barren but the mudstone showed disseminated mineralization. The west wall was sampled.

A drive west along the contact of the quartzite and mudstone was continued for 11 ft where the face exposed 2nd grade ore.

Attached to this report are a level plan showing assays and two cross-sections.

No further development is contemplated at present.

RIVER PROSPECT:

Prospecting between Sleisbeck camp and the Lagoon east of the Katherine River in the hope of locating uranium mineralizat-

ion where it was considered the Sleisbeck prospect shear should be close to the unconformable cover sandstones, D. Drury located a small area having a radioactivity up to 12 times background intensity. This is located on the bar of pink sandstone forming the bed of the Katherine River about 400 ft. south of the camp.

Opening a small pit on the anomaly revealed secondary uranium minerals in cracks in the sandstone.

Radiometric assay of a specimen of the sandstone gave 0.009 per cent U308 (0.2 lb. per ton U308).

An attempt was made to waggon drill along side the pit but at 2 ft. an extremely hard band of quartzite made further waggon drilling impossible.

It is hoped to diamond drill this prospect.

Attached to this report are a geological map showing the location of the prospect and a radiometric contour plan.

REMARKS:

Prospecting has been intensified in the Sleisbeck area and all places showing anomalous radioactivity will be investigated.

It now appears that all occurrences of uranium in the area are associated with faults or shears and further prospecting will be directed with this in mind.

The new find coupled with the payment of the £100 reward bonus has greatly stimulated the morale of all company employees here. It has demonstrated that even though most of the area has been prospected, there are still occurrences to be found by dilligent prospecting.

A.M. McKenzie
Resident Geologist

Sleisbeck, N.T.
30th June, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR THE MONTH ENDING 31ST JULY, 1956
MILESTONE AREA

GENERAL:

Field operations were severely handicapped due to the non-availability of aircraft for the entire month.

Further general rains were received early in the month which helped Milestone operations by filling some of the water holes but caused 3 trucks - with some perishables aboard - to be bogged down for 8 days south of Gregory Downs.

There was little prospecting activity in Westmoreland Valley because Madigan was laid up for three weeks with a badly ulcerated leg. However, Woerle's horse plant returned after 6 weeks prospecting with news of many discoveries.

With the completion of Carolina airstrip and the installation of 9YN portable transceiver at Waterfall Camp, Milestone operations will be more easily handled in the future. All camping equipment, stores and fuel stocks are now being transferred from the Corinda Camp to Waterfall Camp.

ADMINISTRATION:

Company Employees

Madigan M.	Senior prospector
Woerle F.	Prospector
Hoosen H.	Prospector/Guide
Zordan N.	General Hand/prospector
Romanini A.	General Hand/prospector
Currey C.	Plant operator
Lister G.	Plant operator
Borek E.	Truck Driver.

Contracts

A contract was let but has not yet been exercised to W. Hampton for 200 ft of shaft sinking. Hampton is at presene en rou to the area.

PLANT OPERATION: Units Operating

Petrol Driven

Landrover No. ?	Undergoing repairs Burketown
Landrover No.3	General running Milestone
Landrover No.9	Prospecting
Landrover No.11	Prospecting
G.M.C. 6 x 6	Awaiting parts Waterfall Camp
Inter Tip Truck	" " " "
Inter Utility	General running Burketown to Westmoreland.

Diesel

Cat. D-4 Bulldozer	Road and airstrip construction Waterfall Area.
C.P. Compressor	On site Blackwell's Prospect for shaft sinking.

ROAD AND AIRSTRIP CONSTRUCTION:

In transporting the bulldozer from Westmoreland to Waterfall Camp, all the creek crossings were cut and the worst sections

of the road were built up.

The construction of Carolina airstrip situated in the Westmoreland Valley, some 2 miles north of Waterfall Camp is nearing completion. Clearing commenced on 30th July and the first landing was made on 5th August.

PROSPECTING:

Due to labour requirements on the roads and airstrip, and Madigan's disability, little prospecting was carried out in the Westmoreland Valley. Woerle and Hoosen arrived at Waterfall Camp after 6 weeks prospecting on horse back in the Pandanus Creek, Fish River and Calvert River Valleys. This party covered large areas very thoroughly and claim to have discovered eight copper prospects and a possible 5 uranium prospects in the Calvert River Valley.

PROSPECTS:

The remoteness of most of the reputed discoveries has not allowed inspection to date. One occurrence of uranium and one probable uranium occurrence associated with copper and both in the Fata Morgana area (see plan) were inspected. Also copper samples from Calf Creek Reef - reputedly registering 500 counts per minute - show uranium fluorescence.

Fata Morgana - Visible uranium mineralisation occurs towards the western end of a strong vertical quartz filled shear striking 112 degrees magnetic. The shear outcrops as high rugged reef over a length of some 1,500 feet and runs up a steep hillside. Counts between 200 and 400 per minute are obtained throughout the length of this shear, but the only uranium mineral observed to date occurs against the northern side of the fissure. The country rock is again basalt and further comment must await testing by blasting.

Similarly another basaltic area approximately 1 mile north west of Fata Morgana shows radioactivity of up to 1,000 counts per minute associated with weak fissures or cracks. Small specimens knapped from the surface show uranium fluorescence but do not show mineral.

H.J. NEWTON
Operations Manager

Sleisbeck N.T.
9th August, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR MONTH ENDING 31ST JULY, 1956.
SLEISBECK AREA.

GENERAL:

Ninety-six points of rain were recorded at Sleisbeck on the 11th.

During the month prospecting has been done in the Jim Jim area, East Sleisbeck area, along the escarpment south of Turn-Off Creek and to the north west of Sleisbeck.

An anomaly located 8 miles north east of Sleisbeck camp has revealed secondary uranium mineralization on opening.

The limited number of employees at Sleisbeck makes it impossible to carry out initial testing on prospects without diverting prospectors to this work. In order to keep one team actively engaged in prospecting at all times, it is not possible to carry out initial testing on more than one prospect at a time.

With the return of R. Toy from Milestone it has been possible to extend survey lines for local mapping.

Repair of vehicles and plant has continued and with the increased general activity, maintenance and repair on landrovers alone is now sufficient to keep two men fully employed.

On the fourteenth, Sleisbeck was inspected by Mr. Beale and party.

Mr. Beatson, Inspector of Mines, visited Sleisbeck on the 17th.

Accomapnied by Mr. J. Lord, visitors from Tasmania, Mr. J. Symons, Director of Mines, and Mr. T. Hughes, Geologist, were at Sleisbeck on the 20th, staying overnight.

Mr. L. Christopher returned to Sleisbeck on the 21st and on Sunday 22, No.6 landrover was returned.

ADMINISTRATION

Company Employees:

	Sleisbeck Personnel
Z. Bednar	cook
L. Christopher	Geologist
D. Drury	Prospector/Miner
B. Hardy	Mechanic
M. Hejl	Cooks Offsider
G.V. Leudar	Plant Engineer
J. McCorry	Prospector
A. McKenzie	Resident Geologist
M. Novotny	Assayer/Draftsman/Prospector
P. O'Connor	Plant Operator
R. O'Keefe	Book-keeping/typist
S. Phillips	Electrician/Mechanic
J. Rosenzweig	Prospector
R. Toy	Assistant Geologist/Surveyor
E. Whalan	Cleaner/Gardener

B. Beyer and H. Rhode, left.

Contracts: W.Hampton was employed for three days work on the River Prospect.

J. Hill was employed on wages for seventeen days to open up prospects and for general work.

A contract was let to W. Burrows for diamond drilling the River Prospect.

will be tested by waggon drilling.

The rocks are altered rocks of the "porphyry" type.

When this initial testing is completed, attention will be turned to other areas of anomalous radioactivity located by prospectors.

REMARKS:

Initial testing of prospects at Sleisbeck is hampered at present by having no usable portable compressor, but it is hoped this will be rectified in the near future.

The inch of rain in the first half of the month made some areas unsafe for a few days but all dried out rapidly. Some more work has been done to determine the economic significance of certain geological features from a regional point of view.

A.M. McKenzie
Resident Geologist.

Sleisbeck N.T.
31st July, 1956.

PLANT OPERATION:

Units Operating at Sleisbeck

Landrover Nos. 8,7, 5 and 6 on prospecting and general running.
Landrover No. 12 - geological supervision and mapping.
4 x 4 reuxk - Darwin for supplies.
Powersaw - camp firewood supply.
Mindrill E-1000 - diamond drilling.

Diesel Driven

Deutz 3 KVA and Deutz 20 KVA Alternators - camp power supply
Gardner Denver Waggon Drill - as compressor for jack hammers
D-7 Bulldozer - access track; towing gardner Denver.

Fuel Consumption: Total Motor Spirit Consumed 552 gallons
Total Distillate consumed 352 gallons
Total aviation consumed 18 gallons
Total lubricants consumed 110 gallons.

Maintenance - additional to general servicing.
Repairs to: International Tip Truck, D-7 Bulldozer, Kelly Water Pump, 4 x 4 truck, 20 KVA Diesel, Centrifugal Pump, Gardner Denver White Motor, Cletrac, Landrovers Nos. 1, 5, 6, 7, 8, 12. Rewiring Mess.

PROSPECTING:

A.P.415 Jim Jim Area: A prospecting team of two have spent two weeks in the area this month. A geological inspection of the area will be made next month.

A.P. 440 Sleisbeck Area:

River Prospect: The opening on this prospect was continued down for a depth of six feet. The radioactivity decreased with depth but was still present as traces at this depth.

From a contoured map of the area it has been estimated that the unconformity should be approximately 54 ft below the surface at this point. The projections required to arrive at this figure were over long distances and a vertical drill hole has been designed to test the depth of the quartzite. Later it may be necessary to drill an angle hole to test the strata below the sandstone.

Diamond drill hole No.1 is at 2 ft. in quartzite. This quartzite is extremely hard and drilling has been delayed waiting on new bits.

Upper Katherine Prospect: Located at a distance of 6 miles on a bearing of 59° true from Sleisbeck camp.

An anomaly discovered by M. Novotny and J. Rosenzweig on opening revealed secondary uranium minerals in cracks in the rock. A small pit two feet deep has been sunk on the original anomaly and radioactivity increases slightly with depth. It is estimated that the pit would average 0.022% U308 (0.5 lb. U308 per ton). An area has been cleared with the bulldozer and after radiometric gridding

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR THE MONTH ENDING 31ST AUGUST, 1956.

SLEISBECK AREA

GENERAL

The weather has been fine for except for light rain on the 10th August.

Prospecting was to some extent limited due to the preparation of equipment for transfer to Milestone.

Landrovers and plant are constantly being serviced and repaired. A great deal of work is required on the older landrovers to keep them mobile.

The Inspector of Mines, Mr. K. Beatson, visited the area on the 14th August.

Mr. and Mrs. C.N. Chauvel with two cameramen arrived by Dragon on the 13th to photograph the area for the British Television Industry. They returned to Darwin on the 18th by landrover.

Mr. J. Lord and Mr. G. Clarke of the B.M.R. Darwin visited the camp on the 23rd August.

Mr. I. Gregory visited the camp from the 25th to 26th and all aspects of the work in hand were reviewed and future plans discussed in preparation for his taking charge of this area on the 1st September.

ADMINISTRATION:

Company Employees

Sleisbeck Personnel

L. Christopher	Geologist
D. Drury	Prospector/Miner
B. Hardy	Mechanic
M. Hejl	Cook
G.V. Leudar	Plant Engineer
J. McCorry	Prospector
A. McKenzie	Resident Geologist
M. Novotny	Assayer/Draughtsman/Prospector
P. O'Connor	Plant Operator
R. O'Keefe	Book-keeper/Typist
S. Phillips	Electrician/Mechanic
J. Rosenzweig	Prospector
R. Toy	Assistant Geologist/Surveyor
E Whalan	Cleaner/Gardener

L. Bogo - started 23rd August

Contracts: A total of 236 feet of diamond drilling was completed.

PLANT OPERATION:

Petrol Driven:

Landrovers Nos. 8, 7, 5 and 6 - prospecting and general running.

Landrover No.12 - geological supervision and mapping.

4 x 4 truck - to Pine Creek and Darwin for supplies.

Mindrill E-1000 - diamond drilling.

Diesel Driven:
Deutz 35 KVA and Deutz 20 KVA alternators - Camp power supply.

D-7 Bulldozer - access track to Jim Jim area.

Fuel Consumption

Total motor spirit consumed	308 gallons
Total distillate consumed	352 gallons
Total aviation consumed	44 gallons
Total lubricants consumed	43 gallons

Maintenance - additional to general servicing.

Repairs to: Landrovers Nos. 6, 5, 7, 8.
4 x 4 truck
20 KVA Deutz
Water Tanker - international
International tip truck - new motor fitted.

Constructing saw bench.
Removed 20KVA from powerhouse - replaced by new 35KVA
Gardner Denver Waggon Drill returned to Sleisbeck from PineCk.

The deepfreeze unit from the Scinto camp was taken to Darwin for repair but subsequently disposed of.

PROSPECTING:

A.P.477 Jim Jim Area
The prospectors have located four (4) anomalies on the ground. They are all in lateritised sandstones giving up to 1,000 counts per minute, (20 times normal background) and located in valleys forming the headwaters of the Jim Jim Creek. It is suspected that these sandstones are the same as the U.D.P. and El Sharana "whitestones" and that uranium may be concentrated below them.

An access track is being cut into the area and equipment will be taken in to open up pits on these anomalies.

A.P.440 Sleisbeck Area
D.D.H. 53 was stopped at 193 ft. The hole penetrated a sequence of sandstones and conglomerates with the indications of uranium mineralization as traces near the top. The hole has confirmed the existence of a fault and further costeaning has been carried out to assist in positioning it. The accompanying map and diagramatic cross section show the geological interpretation based on the information gained from the drill hole and the costeans. Further drilling is under consideration.

Upper Katherine Prospect
D.D.H. 1 was drilled to 45 ft. in porphyry. Stopped. No increase in radioactivity could be detected from the core but slight fluorescence was showing in places. Hole was probed to a depth of 45 ft with negative results.

ATTACHED PLANS
Upper Katherine Prospect: Locality Map; Radiometric Grid of Stripped Area; and Section of Diamond Drill Hole No.1.
River Prospect: Geological Map; Stratigraphic Column Correlation; Diagramatic Cross Section.

H.J. NEWTON
Operations Manager

Darwin N.T.
10th September, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.
REPORT ON OPERATIONS FOR THE MONTH ENDING 31ST AUGUST, 1956.
MILESTONE

GENERAL:

Field operations were again handicapped due to aircraft misfortunes. A propellor on Dragon AFH loosened and split across the boss during flight from Sleisbeck to Carolina on 16 August, causing some delay in replacing. Upon returning to Darwin on 21st August, pilot Conway was admitted to hospital where he is still confined with hepatitis. A replacement pilot, Pedersen, was obtained who lost control of the Dragon during take-off from Sleisbeck for Carolina on 31st August. The aircraft hit a drainage channel to the side of the airstrip and considerable damage was incurred.

The Miles-Gemini aircraft AAS is finally airworthy and was used for the first time in a return trip to Sleisbeck on Sept 7.

The underground development on Blackwell's Prospect is well advanced and several more discoveries of secondary uranium mineralization were recorded. The most recent discovery by Woerle in the Fata Morgana area is reported to be the most promising occurrence found to date, but has not yet been inspected.

ADMINISTRATION: Company Employees

M. Madigan, Senior Prospector; F. Woerle, Prospector; H. Hoosen, Prospector/Horse Plant; N. Zordan, General Hand/prospector; A. Romanini, General Hand/Prospector; C. Currey, Plant Operator; G. Lister, Plant Operator; E. Borek, Truck Driver; J. Gordan, Prospector; J. Bednar, Cook; J. Shadford, Horse Plant.

Contracts: A total of 110½ feet of underground development was completed gy W. Hampton. Development is proceeding.

A contract for a minimum of 500 feet of diamond drilling was let to W. Burrows. The drilling equipment is now being transported to Waterfall Camp.

PLANT OPERATION:

Units Operating:

Petrol Driven

Landrover No. ? - still awaiting parts Burketown.
Landrover No.3 - general running Milestone
Landrover No.9 - prospecting.
Landrover No.11 - awaiting parts Milestone.
Landrover No. ? - purchased second hand. Being transported Darwin to Milestone.
GMC 6 x 6 - Awaiting parts Milestone.
Inter Tipper No.1 - " " "
" " " 2 - " " Renner Springs.
Inter Utility - general running.
Chevrolet 4 x 4 - hauling Sleisbeck to Milestone.

Diesel Driven

Cat. D-4 Bulldozer - road and airstrip construction Milestone.
C.P. Compressor - in use W. Hampston.

ROAD AND AIRSTRIP CONSTRUCTION:

The airstrip was lengthened a further 500 ft by clearing and dragging, making it now 4,000 ft in all.

Access roads were cut to the shaft collar and adit portal on Blackwell's Prospect. The bulldozer is presently employed in cutting tracks into the Fata Morgana area.

PROSPECTING:

A total of 15 uranium prospects and 6 copper prospects have now been discovered. Nine of these uranium prospects show secondary uranium mineralization, but only 6 of these 9 prospects have been inspected.

Samples from the most recent discovery in the Fata Morgana

area show extremely rich mineralization which is reported to be consistent over a length of 3/4 mile, but awaits inspection.

Most prospects are associated with very strong structures rendering very rugged topography and thus defy proper description at this stage.

UNDERGROUND DEVELOPMENT:

Blackwell's Prospect:

Shaft Sinking: The northern half of the shaft was advanced 57 feet as a 5 x 3 from 17 feet 6 inches to 74 feet 6 inches. The last 15 feet should not have been attempted had it been possible to supervise this work. A flat head-representing either bedding or shearing - was intersected at a depth of 48 feet. This feature persisted to a depth of 53 feet after which sinking was entirely in massive barren basalt. The lode shear persists to the flat head at 48 feet, but the values depreciate on approaching the flat head. At this depth the shear either keels or is displaced. Further information will be obtained from the adit which is approaching the shaft position and which must intersect the same feature.

Driving: The Adit was advanced a total of 53 feet 6 inches from 0 feet at the intersection with the hill side to 53 feet 6 inches. The adit portal was timbered at 25 feet 6 inches from the measuring point.

Secondary uranium mineralization is seen from the portal to the face and the counting rate of the lode material has improved with advance. The face is now in ore.

Such descriptions are as a result of extremely brief inspection. More details will be provided as early as possible.

H.J. NEWTON
Operations Manager

Darwin N.T.
September 10, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.

REPORT ON OPERATIONS FOR THE MONTH ENDING 31ST OCTOBER, 1956.

MILESTONE AREA A.P. 488

GENERAL:

The feeder spring for Blackwell's Creek started running early in the period and thus enabled testing to continue on this prospect.

An estimated 2 to 3 inches of rain was received in the Westmoreland Valley on 29th and 30th October.

An access road was constructed between Waterfall Camp and the El Hussen Prospect.

The underground development and diamond drilling of Blackwell's Prospect advanced considerably, but following the completion of the El Hussen road this equipment is now being transferred to that prospect.

Seven uranium mining claims, comprising a total area of 230 acres and two copper mining claims comprising a total area of 40 acres were pegged over known occurrences of mineral.

In a polished section examination of a surface sample from the El Hussen prospect, the B.M.R. identified a pitchblende content of 20-25% of the material submitted.

The initial regional and mine surveying was completed with most disappointing results.

The Miles Gemini aircraft completed 40 hours of transportation and 3 hours of reconnaissance flying.

Stores and equipment was transported by sea from Cairns and by road from Mt. Isa, Burketown and Darwin. The Blitz 4 x 4 arrived from Cairns on 15th October. The reconditioned TD 18A bulldozer arrived from Brisbane on 22nd October. The Cat. D-7 bulldozer arrived from Sleisbeck on 23rd October. Six reconditioned jeeps and a new Willys utility arrived from Brisbane on 30th October.

Dr. Wimber and Mr. McGrath commenced an inspection of the area on 24th October.

ADMINISTRATION:

Company Employees

J. Bednar	-	Cook
E. Borek	-	Truck Driver
D. Campi	-	Resident Geologist
C. Currey	-	Plant Operator - Transferred 22nd October.
I. Gregory	-	Geologist
J. Gordan	-	Prospector - Left 16th October.
B. Hardy	-	Mechanic
H. Hoosin	-	Prospector/Horse Plant
W. Kuhn	-	" " "
W. Kuschel	-	General Hand
G. Lister	-	Plant Operator
M. Novotny	-	Assayer/Draughtsman
S. Phillips	-	Electrician - Transferred 3rd October.
A. Romanini	-	General Hand

J. Rosenzweig	-	Prospector
J. Shadford	-	Horse Plant
C. Turvey	-	Carpenter - Started 15th October
F. Woerle	-	Prospector
L. Wright	-	Camp Foreman
N. Zordan	-	General Hand

Contractors

Mining

W. Hampton - 1 crew of 2 men

Drilling

W. Burrows - 2 crews of 2 men

Surveying

G. Zimmer - completed initial programme on 20th October. Results of particularly poor quality and of little use.

PLANT OPERATION:

Units Operating

Petrol Driven

Landrover No. ?	-	Still awaiting parts Burketown.
" No. 3	-	On hire Hampton
" No. 9	-	General running
" No.11	-	" "
" No. ?	-	" "
G.M.C. 6 x 6	-	Unserviceable Milestone
International Tipper No.1	-	Awaiting parts Milestone
" " No.2	-	General carting
" Utility	-	" "
Chevrolet 4 x 4	-	" "
Ford 4 x 4	-	" "
Mindrill E-1000	-	On hire Burrows
Mindrill Pump	-	" " "

Diesel Driven

Cat. D-4 bulldozer	-	Road construction
" D-7 "	-	" "
Inter. T.D.18	-	" "
CPT Compressor	-	On hire Hampton
Mindrill E-1000	-	" " Burrows
" Pump	-	" " "

ROAD & AIRSTRIP CONSTRUCTION:

Nine miles of road making over rough terrain between Waterfall Camp and the El Hussen Prospect was completed.

Carolina airstrip was extended a further 500 feet.

CAMP CONSTRUCTION:

A camp site on high ground at Waterfall has been cleared and

levelled and the erection has commenced of a combined round timber iron store, mess and kitchen. It is intended to transfer the canvas camp and workshop to this site.

PROSPECTING:

The Bureau of Mineral Resources airborne scintillometer party completed the survey programme of A.P. 488. This programme consisted of a grid survey of most of the eastern half of the A.P. with some reconnaissance runs over the western half.

One point source anomaly and 7 areas of pronounced radioactivity were detected. These are now being investigated on the ground.

Ground prospecting was handicapped through the diversion of prospecting personnel to other work. No further prospects were discovered, but several areas of relatively high radioactivity were located.

UNDERGROUND DEVELOPMENT:

Blackwell's Prospect:

A total of 116 feet of underground development was completed.

Driving:

The adit advanced 96 feet 6 inches from 164 feet to 260 feet 6 inches. Stopped temporarily. This drive broke into the shaft at 222 feet. The shaft was sunk 2 feet 6 inches to the adit level by benching from the drive.

Driving continued along barren lode shear to 178 feet. Readings averaging 10 counts per second (Phillips) were recorded over this section with one point registering 50 counts per second, but not showing mineral at 174 feet. At 178 feet the lode shear split and driving was continued along the eastern shear. This section registered an average of 10 counts per second to 182 feet. From 182 feet to 184 feet 6 inches sooty pitchblende, which registered 100 counts per second, was present near the backs along the Eastern wall. Driving thereafter was along barren lode shear which registered 5-10 counts per second with the exception of weak showings of secondary uranium minerals registering 10-15 counts per second at 189 feet and 194 feet. Also one strongly hematised hot spot not showing mineral registered 50 counts per second at 198 feet.

Channel samples were taken across the back at 5 feet intervals throughout the development of primary ore in the adit. The radiometric assay returns of these samples indicate an average grade of 0.565% or 12.65 lbs U308 per ton over an average width of 42 inches for a total length of 75 feet. These results are considered conservative as primary ore is not showing continuously in the back over this section, whereas it was present consistently in the development spoil.

These pulverized samples will be sent for chemical assay.

Selected samples of the primary ore exposed in the adit (refer previous report), returned 19.8% U308 on chemical assay. Chosen samples within this selected ore returned 44.1% U308 on chemical assay.

Cross - Cutting:-

A west cross-cut from the shaft position advanced [illegible] feet from 0 feet to 17 feet. Stopped. A 7 foot probe hole was bored into this face.

This development was testing for the lode shear which made into the West wall of the adit at 184 feet.

Several narrow barren shears were exposed in otherwise fresh massive basalt.

Further underground development of this prospect has been suspended to allow completion of the initial testing of the El Hussen prospect.

DIAMOND DRILLING:

Blackwell's Prospect

Three holes were completed and two holes are in progress for a total of 711 feet drilled.

D.D. 1. - Befer September Report

Location:- Coords 0174S. 0058E.

Azimuth:- 262 degrees

Inclination:- 50 "

Reduced Level:- 9,929 feet

D.D. 2.

Location:- Coords 0347E. 0110E.

Azimuth:- 273 degrees

Inclination:- 50 "

Reduced Level:- 9,993 feet

Testing for shallow intersection of lode shear north of shaft.

Hole advanced 60 feet from 0' to 60'. Stopped.

Core Recovery - 40%

Drilling was in broken oxidised basalt throughout with some sections rich in quartz.

Hole was probed to a depth of 56 feet. The two probe intersections recorded were as follows:-

Depth in Hole	Assay Equivalent of Probe Results
28' - 46'	2.0 lbs U308 per ton over 18 ft.
51' - 56'	2.0 " " " " " 5 "

D.D. 3.

Location:- Coords 0153N. 0183 E.

Azimuth:- 263 degrees

Inclination:- 50 "

R.L. :- 10,023 feet

Testing for intersection of lode shear approximately 50 feet below the adit level on a section midway along the development of primary ore in the adit drive.

Hole advanced 211 feet from 0' to 211'. Stopped.

Core Recovery - 95%

Drilling was in oxidised basalt to 34 feet 6 inches, in partly oxidised basalt to 142 feet 6 inches - with some irregular quartz stringers from 110' - 111', in radioactive hematised lode shear - not showing uranium minerals - to 150', in massive basalt - hematised and radioactive in places - to 161 feet, in radioactive hematised lode shear - not showing uranium minerals - to 171 feet, in massive basalt - hematised and radioactive in places - to 190 feet, in radioactive hematised lode shear - not showing uranium minerals - to 192 feet and thereafter in fresh massive barren fresh basalt.

Hole was probed to a depth of 210 feet. The probe results being as follows:-

Depth in Hole	Assay Equivalent of Probe Results
27' - 34'	1.2 lbs U308 per ton over 7 feet
140' -165'	12.5 " " " " " 25 "
165' -168'6"	2.2 " " " " " 3 " 6 inch.
168'6" - 170'6"	10. 0 " " " " " 2 "
170'6" - 173'	1.3 " " " " " 2 " 6 "
183' - 189'	1.5 " " " " " 6 "
194'6" - 199'	1.5 " " " " " 4 " 6 "
(143' - 148'6"	24.0 " " " " " 5 " 6 ")
(156' 6" - 161'	22.4 " " " " " 4' " 6 ")

These results are questionable and it is intended to re-probe the hole.

Those radioactive sections of core corresponding to the probe intersections have been split and the samples despatched for chemical assay.

D.D. 4.

Location:- Coords 0041N. 0144E.

Azimuth :- 282.5 degrees

Inclination:- 50 "

R.L. :- 9,964 feet

Testing for intersection of lode shear approximately 50 feet vertically below the adit portal.

Hole advanced 101 feet from 0' to 101'. Stopped.

Core Recovery - 95%

Drilling was in oxidised basalt to 44' 6", in massive partly oxidised basalt to 53', in barren weak shear to 60' 6", in fresh massive basalt to 72' 6", in barren weak shear to 77 ft, in fresh massive basalt to 86 feet, in radioactive hematised lode shear - not showing uranium mineral to 87' 6" and thereafter in fresh massive basalt.

Hole was probed to a depth of 100 feet. The probe results being as follows:-

Depth in Hole	Assay Equivalent of Probe Results
85'6" - 89'	4.8 lbs U308 per ton over 3'6"
89' - 91'	1.6 " " " " " 2'

As with D.D. 3 sections of the split core have been despatched for chemical assay.

D.D. 5.

Location:- Coords 0153N. 0184E.

Azimuth :- 263 degrees

Inclination:- 65 "

R.L. :- 10,023 feet

Testing for intersection of lode shear 50 - 100' below the intersection in D.D. 3.

Hole advanced 244' 6" from 0' to 244' 6". In progress.

Core Recovery - 95%

Drilling was in oxidised basalt to 29' 6", thereafter in partly oxidised and fresh massive basalt with barren weak shears from 223' to 224', from 226' to 228' and from 235' to 240'.

Not yet probed.

D.D. 6.

Location:- Coords 0240N. 0170E.

Azimuth :- 274 degrees

Inclination:- 49.5 "

R.L. :- 10,018 feet

Testing for intersection of lode shear approximately 50 feet below the adit level on the shaft cross-section.

Hole advanced 94' 6" from 0' to 94' 6". In progress.

Core Recovery - 60%

Drilling was in broken oxidised basalt to 46' and thereafter in partly oxidised and fresh massive basalt showing fractures and quartz stringers in places.

Not yet probed.

SLEISBECK AREA A.P. 487

GENERAL:

Two inches of rain fell on 11th October.

Prospecting and testing operations were restricted due to the transfer of personnel and equipment to Milestone.

Operations were directed to the surveying and geological mapping of the more recent discoveries and the completion of outstanding equipment maintenance.

All empty drums and other items carried downstream by the floodwaters last March were salvaged and measures were taken to store the plant safely for the ensuing wet season.

Four uranium mining claims comprising a total area of 195½ acres and 1 residential lease containing 8½ acres were pegged.

ADMINISTRATION:

Company Employees:-

L. Bogo	-	General Hand
L. Christopher	-	Geologist
D. Drury	-	Miner/Prospector
M. Hejl	-	Cook
V. Leudar	-	Plant Engineer
M. Madigan	-	Prospector - Started recreational leave 24th Oct.
J. McCorry	-	Prospector
R. Toy	-	Assistant Geologist

PLANT OPERATION:

Petrol Driven:-

Landrovers Nos 4, 5, 6, 8	-	Prospecting and general running.
" No. 12	-	Darwin - Sleisbeck running.
International Water Waggon	-	Sleisbeck to Darwin en-route Milestone.

Diesel Driven:-

Cat. D-4 Tractor	-	Returning equipment from Upper Katherine Prospect to Sleisbeck.
Cat. D-7 Bulldozer	-	Road making and costeaning Jim Jim Creek Area A.P. 477. Walked to Pine Creek for transport to Milestone.

Deutz 20KVA. Alternator - Camp power supply

" 35 " " - " " "

Fuel Consumption:-

Total motor spirit	-	440 gallons
" distillate	-	660 "
" aviation spirit	-	132 "
" lubricants	-	24 "

Maintenance:- Additional to routine servicing

Landrover No.5 - Motor reconditioned and installed.
4 - Competely rebuilt from cannibalised Nos. 1 and 2.

Deutz 35KVA. - Fuel pump and governor replaced.

Cat. D-12 Grader- Clutch assembly replaced.

PROSPECTING:

Coronation Hill A.P. 461

Prospecting was limited to 2 days geological investigation.

Jim Jim Creek A.P. 477

Some bulldozing of costeans was carried out on 2 laterite prospects with negative results.

Sleisbeck A.P. 487

No further ground investigation was attempted.

Upper Katherine East Prospect:-

A geological survey of this prospect was completed. The prospect occurs in porphyritised sediments approximately 4 miles due east of the Upper Katherine Prospect.

As with the Upper Katherine Prospect, a hematised massive porphyry "bed" overlain by silicified boulder conglomerates registering a counting rate of up to 12 times background, but is not showing mineral.

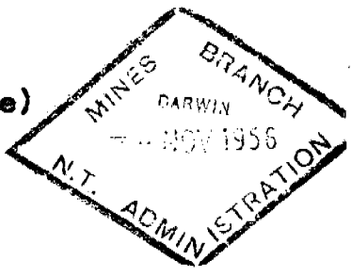
Further investigations have ceased temporarily.

DARWIN. N.T.

Darwin Company Employees:

N. Conway	-	Pilot
G. Cox	-	Aircraft Engineer (part time)

P. Neehouse - Housekeeper (part time)
H. Newton - Operations Manager
R. O'Keefe - Book-keeper/Typist
D. Purnell - Field Accountant
W. Sitzwohl - Office Manager



H. J. NEWTON

Operations Manager

DARWIN. N.T.

6th November, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.

REPORT ON OPERATIONS FOR THE MONTH ENDING 30TH NOVEMBER 1956.

GENERAL:

No rain fell during the period.

Testing operations on the El Hussen Prospect are well advanced and have revealed an extremely strong and extensive and very altered lode shear in basalt against a quartzite footwall.

Three more occurrences of secondary uranium minerals were discovered.

Testing has commenced on two new prospects - McGuinness and White Horse - and also on the Kings Ransom Prospect.

In order to intensify the effort at Milestone all but three men were withdrawn from Sleisbeck.

Waterfall camp has been transferred to the new site.

With further construction Carolina airstrip was approaching registration standard, but this now awaits repairs to the TD18A bulldozer.

Stores and equipment was transported from Darwin, Sleisbeck, Mt. Isa and Burketown.

Dr Wimber and Mr. McGrath inspected Sleisbeck, leaving there on 10th November. Mr McGrath made a further inspection of Milestone from the 17th to the 22nd November.

Mr. Webb, Principal Field Engineer A.E.C., inspected Sleisbeck and Milestone from the 8th to the 14th November.

ADMINISTRATION:

Darwin Employees

N. Conway	-	Pilot
G. Cox	-	Aircraft Engineer (part time)
D. Gray	-	Typiste
P. Neehouse	-	Housekeeper (part time)
H. Newton	-	Operations Manager
R. O'Keefe	-	Bookkeeper/Typist - started rec leave 17th November.
L. Oldberg	-	Bookkeeper/Stenographer
D. Purnell	-	Field Accountant
W. Sitzwohl	-	Office Manager

Milestone Employees

J. Bednar	-	Cook
E. Borek	-	Truck Driver
D. Campi	-	Resident Geologist
D. Currey	-	Plant Operator
D. Drury	-	Miner/Prospector - transferred from Sleisbeck 15th November
I. Gregory	-	Geologist - transferredto Sleisbeck 2nd November, started compassionate leave 30th November.

B. Hardy	-	Mechanic
M. Hammersley	-	Driller - employed as general hand from 14th November.
M. Heijl	-	Cook - transferred from Sleisbeck 15th November.
H. Hoosan	-	Prospector/Horse Plant.
S. Jones	-	Driller - employed as Carpenter from 14th November.
W. Kuhn	-	Prospector/Horse Plant.
W. Kuschel	-	General Hand.
G. Lister	-	Plant Operator
M. Notovny	-	Assayer/Draughtsman
S. Phillips	-	Electrician/Radio Operator
A. Romanini	-	General Hand - 1 weeks sick leave
J. Rosenzweig	-	Prospector - left 22nd November
J. Shadford	-	Horse Plant
R. Toy	-	Assistant Geologist - transferred from Sleisbeck 14th November.
C. Turvey	-	Carpenter
F. Woerle	-	Prospector
L. Wright	-	Camp Foreman
N. Zordan	-	General Hand

Sleisbeck Employees

L. Bogo	-	General Hand - retrenched 10th November.
L. Christopher	-	Geologist - retrenched 15th November.
D. Drury	-	Miner/Prospector - transferred to Milestone 15th November.
M. Heijl	-	Cook - transferred to Milestone 15th November.
V. Leudar	-	Plant Engineer
J. McCorry	-	Prospector - retrenched 3rd November.
R. Toy	-	Assistant Geologist - transferred to Milestone 14th November.
E. Whalan	-	Gardener/Cleaner

Contractors

Mining	-	W. Hampton -	1 crew of 3 men Milestone
		A. McDonald -	independent - started Milestone 24th November
Drilling	-	W. Burrows -	1 crew of 2 men for entire period Milestone.
		-	1 crew of 2 men for half the period Milestone.
Cartage	-	R. Joiner -	6½ tons Burketown to Waterfall
	-	S. Hogan -	15 tons Mt. Isa to Waterfall
	-	E. Stiles -	9 tons Darwin to Camooweal
	-	L. Thompson -	21 tons Darwin to Sleisbeck
	-		4 tons Sleisbeck to Darwin

PLANT OPERATION:

Units Operating

Petrol Driven

Landrover No. 6	-	undergoing repairs Darwin
No.12	-	undergoing repairs Darwin
Nos. 4,5 & 8	-	General running Sleisbeck
No. ?	-	Undergoing repairs Burketown
No. 3	-	On hire Hampton
Nos. 9 & 13	-	General running Milestone
No. 11	-	Power take-off compressor

GMC	6 x 6	-	Unserviceable Milestone
International Tipper	No. 1	-	Undergoing repairs Milestone
International Tipper	No. 2	-	General carting Milestone
International Utility		-	General carting Milestone
Chevrolet	4 x 4	-	General carting Milestone
Ford	4 x 4	-	General carting Milestone
Mindril	E1000	-	On hire Burrows Milestone
Mindril Pump		-	On hire Burrows Milestone
Holden Utility	(Blue)	-	General running Darwin
Holden Utility	(Yellow)	-	General running Milestone
Willys utility		-	General running Milestone
Jeep	Nos. 3 & 4	-	General running Milestone
Jeep	Nos.1,2,5 & 6	-	Being overhauled Milestone
International Water Waggon		-	Undergoing repairs Darwin

Diesel Driver

Cat D-4 Tractor	-	Towing equipment	-Sleisbeck
Cat D4 Dozer	-	Miscellaneous	-Milestone
Cat D-7 Dozer	-	Road construction & stripping	-Milestone
Inter TD18 Dozer	-	Road construction & stripping now awaiting parts	-Milestone -Milestone
Deutz 20KVA altermotor	-	Camp power supply	-Milestone
Deutz 35KVA altermotor	-	Camp power supply not in use at present	-Sleisbeck
CPT Compressor	-	On hire Hampton	
Mindril E-1000	-	On hire Burrows	
Mindril Pump	-	On hire Burrows	

Fuel Consumption

Total Motor Spirit consumed	-	1000 gallons approx.
Total Distillate consumed	-	800 gallons approx.
Total Aviation Spirit "	-	700 gallons approx.
Total Lubricants "	-	24 gallons approx.

ROAD AND AIRSTRIP CONSTRUCTION:

Milestone

Four miles of road making was completed, providing access to timber and water from the El Hussen Prospect.

Further lengthening and widening of Carolina strip was undertaken with a view to registration. This work was well advanced when the TD18., bulldozer broke down on 20th November.

CAMP CONSTRUCTION:

The construction and electrical wiring of the combined store, kitchen and mess building was completed.

The construction of a small shed housing the 20 KVA altermotor was completed and the construction of a workshop is in progress.

The canvas camp was transferred to the new site and the electrical wiring of this is in progress.

The dissolvenator and septic, 20 KVA alternator, washing machine, water cooler and deep freeze unit (transferred from Sleisbeck) were installed, but the deep freeze was found to have leaked gas en route.

PROSPECTING:

Three occurrences of secondary uranium mineralisation were discovered in the vicinity of Chinamans Garden.

The McGuinness Prospect - discovered by W. Kuhn - consists of uranium ochres and micas associated with silicification in basalt close to the contact with the underlying quartzite.

The Whote Horse Prospect - discovered by W. Kuhn - consists of uranium ochres in quartzite on the contact with the overlying basalt.

The Black and White Prospect - discovered by Hoosan and Kuhn - consists of uranium ochres in quartzite, several feet from the projected contact with the overlying basalt.

Both the McGuinness and White Horse prospects have much in common with the El Hussen prospect. The Black and White Prospect does not warrant testing.

GRIDDING:

Milestone A total of 35,000 square feet of radiometric gridding was completed on the undisturbed surface of the El Hussen Prospect. This area was also mapped in detail.

A total of 7,500 square feet of gridding was completed on the McGuinness Prospect.

A total of 2,000 square feet of gridding was completed on the White Horse Prospect.

White Heather (1,500 square feet), Kings Ransom (2,000 square feet) and Old Parr (1,000 square feet) were also radiometrically gridded.

BULLDOZING:

El Hussen Prospect - Milestone

A total of 10 costeans for a total length of 600 feet were bulldozed at irregular intervals along the line of mineralised outcrops.

Difficulty was experienced in exposing the bedrock and no evidence was revealed of continuity between outcrops.

It is now intended to expose the quartzite - basalt contact throughout the length of this prospect by stripping. A total of 500 feet of such stripping was completed - progressing south from just north of the underground workings.

This revealed an extremely strong lode shear against the quartzite footwall throughout and showing secondary uranium minerals in several places.

Further stripping in the vicinity of the outcropping pitch-blende - hematite material exposed another strong lode shear containing an abundance of uranium ochres.

This shear parallels the contact shear, but is separated from this by 30 feet of barren massive basalt.

McGuinness and White Horse Prospects

Initial stripping in the basalt, along the quartzite contact on these prospects has revealed a similar contact lode shear to that of the El Hussen Prospect.

This shear contains secondary uranium minerals in places on the White Horse Prospect.

MINING COSTEANING.

Kings Ransom Prospect - Milestone

A programme of mining costeans 3 feet wide and 10 feet deep across the lode has commenced.

This work is intended to prove the width of the lode and - in stages - the length.

It is also intended to continue sinking on the best mineral showing in these costeans.

UNDERGROUND DEVELOPMENT - Milestone

A total of 155 feet of underground development was completed on the El Hussen Prospect, Milestone.

Cross-cutting

An adit cross-cut advanced 72 feet from 0 feet to 72 feet stopped.

Crosscutting was in barren massive basalt to 64 feet, in very altered lode shear containing uranium ochres in places to the contact at 69 feet and thereafter in quartzite.

Driving

A North Drive advanced 40 feet from the cross-cut. Temporarily suspended.

Driving continued along strong lode shear throughout. This shear contained uranium ochres to 10 feet, but thereafter was slightly radio active.

A South Drive advanced 33 feet from the cross-cut. In progress.

Driving continued along strong lode shear throughout. This shear contained uranium ochres to 18 feet, but thereafter was only slightly radioactive.

Rising

Two rising cuts were taken on the best of the mineral showing in the north drive. Rising was suspended at 10 feet.

From 7 feet to 10 feet in the Rise and over a width of up to 2 feet, oxidised pitchblende - hematite ore was showing against the quartzite footwall in the south wall. This position is 42 feet - slope distance - below the exposed lode shear on the surface.

DIAMOND DRILLING - Milestone.

Five holes were completed and 1 hole is in progress for a total of 505 feet drilled.

Blackwall's Prospect

DD3 - Refer October Report

Hole was reprobed to a depth of 210 feet. The results obtained agreed entirely with those reported previously.

DD5 - Refer October Report

Hole advanced 92'6" from 244'6" to 337' stopped

Core Recovery - 90%

Drilling continued in fresh massive basalt to 315' - showing weak shearing from 282' to 283' 6" -, in strong lode shear, with considerable core loss, to 331' in oxidised basalt to 333', in strong lode shear to 334' and thereafter in quartzite.

The core indicates that the 16' intersection from 315' to 331' was in vertical shearing. The core recovered over this section is incomplete and slightly radioactive, but still awaits probing as the cable on hand proved insufficient.

Hole was probed to a depth of 240 feet . The results obtained were uniformly low.

DD6 - Refer October Report

Hole advanced 80' 6" from 94' 6" to 175'. Stopped.

Core Recovery 95%

Drilling was in oxidised and partly oxidised basalt to 140', in slightly radioactive wear lode shear to 143' and thereafter in fresh basalt.

Hole was probed to a depth of 175'. The results obtained being as follows -

Depth in Hole			Assay Equivalent of Probe Result					
44'	to	46'	1.1	lbs	U308/	ton	over	2'
137' 6"	to	139' 6"	2.7	"	"	"	"	2'
139' 6"	to	143'	4.9	"	"	"	"	3' 6"
143'	to	144' 6"	1.5	"	"	"	"	1' 6"

El Hussen Prospect

DD1

Location: - 74' bearing 235° from station E.6
Azimuth: - 56 degrees
Inclination: - 45 degrees
R.L. : - 680 degrees

Testing for intersection of lode below the adit cross-cut level.

Hole advanced 72' from 0' to 72'. Stopped.

Core Recovery - 95%

Drilling was in oxidised and partly oxidised basalt - slightly radioactive in places - to 54', in bleached and altered basalt to 59', in very strong, but slightly radioactive lode shear to 68 feet and thereafter in quartzite.

Hole was probed to a depth of 72'. The results obtained being as follows -

Depth in Hole	Assay Equivalent of Probe Result
46' to 53'	1.5 lbs U_3O_8/ton over 7'
53' to 69'	0.8 " " " " 16'
(64' to 65'	1.0 " " " " 1')

DD2

Location: - 77' bearing 235° from station E6
Inclination: - Vertical
R.L. - 680

Testing for further intersection of lode shear down the dip slope on same section as DD1.

Hole advanced 92' from 0' to 92' . Stopped.

Core Recovery - 95%

Drilling was in oxidised basalt to 69', in altered massive basalt to 78', in very strong but non-radioactive lode shear to 89' thereafter in quartzite.

Hole was probed to a depth of 92'. The results obtained being as follows -

Depth in Hole	Assay Equivalent of Probe Results
80' to 90'	0.7 lbs U_3O_8/ton over 10'

DD3

Location: - 99' bearing 274° from station E6
Inclination: - Vertical
R.L. : - ?

Testing for intersection in similar structural position to DD2, approximately 58 feet from DD1 - DD2 drill section.

Hole advanced 91' from 0' to 91'. Stopped

Core Recovery - 80%

Drilling was in oxidised basalt to 76', in highly altered massive basalt to 81' 6", in very strong but non-radioactive lode shear to 87' 6" and thereafter in quartzite.

Hole was probed to a depth of 90'. The highest readings obtained being as follows -

Depth in Hole	Assay Equivalent of Probe Result
87' 6" to 89'	1.2 lbs U_3O_8/ton over 1' 6"

DD4

Location: - 147' bearing 238° from station E6
Inclination: - Vertical
R.L. - 641

Testing for deeper intersection of lode shear on same sections as DD1 and DD2.

Hole advanced 77' from 0' to 77'. In Progress.

Core Recovery - 95%.

Drilling was in oxidised and partly oxidised basalt to this depth.

Not yet probed.

H.J. NEWTON
Operations Manager.

DARWIN N.T.

3rd December, 1956.

NORTH AUSTRALIAN URANIUM CORPORATION N.L.

REPORT ON OPERATIONS FOR THE MONTH ENDING 31st DECEMBER 1956

GENERAL:

Sleisbeck was manned by a caretaker staff of two, who now have the storage precautions against flooding well in hand.

Milestone suffered an acute water shortage in the first half of the period and consequently no further drilling was attempted. Also, as both the Cat. D-7 and the Inter. T.D.18A were unserviceable due to breakdown, no further bulldozing was attempted.

In the Milestone area and the Gulf country generally heavy rain commenced on 13th December and was followed by cyclonic storms from 19th to 21st December. This caused the temporary cessation of all activities and affected the transportation of stores into Waterfall Camp and of leave personnel and the channel samples to Darwin.

Another occurrence of secondary uranium mineralisation was discovered at Milestone.

A further 4 uranium mining claims were pegged over a total area of 109 acres at Milestone.

The construction of the workshop was completed at Waterfall Camp. Attempts to repair the deep freeze unit were unsuccessful.

Recent interpretation of testing results at Milestone has revealed a common structural relationship to all the prospects.

ADMINISTRATION:

Darwin Employees

N. Conway	-	Pilot
G. Cox	-	Aircraft Engineer - retrenched
D. Gray	-	Typist
P. Neehouse	-	Housekeeper (part time)
H. Newton	-	Operations Manager
N. Norquay	-	Aircraft Engineer - started 10th December.
R. O'Keefe	-	Bookkeeper/Typist - Rec. leave
L. Ohlberg	-	Bookkeeper/Stenographer
D. Purnell	-	Field Accountant
W. Sitzwohl	-	Office Manager

Milestone Employees

J. Bednar	-	Rec. leave
E. Borek	-	Truck driver
D. Campi	-	Resident geologist
D. Currey	-	Plant operator - transferred to Sleisbeck 28.12.56
D. Drury	-	Started Rec. leave 20th December
I. Gregory	-	Resigned 7th December
B. Hardy	-	Mechanic - left 20th December
D. Harris	-	Fitter - started Rec. leave 20th December
M. Hammersley	-	Driller - employed as general hand until 8th December
M. Heijl	-	Cook
H. Hoosan	-	Prospector/Horse Plant
S. Jones	-	Driller - employed as carpenter until 8 December
W. Kuhn	-	Prospector/Horse Plant
W. Kuschel	-	General hand - retrenched 15th December
G. Lister	-	Plant Operator - started Rec. leave 20th Dec.

M. Novotny - Assayer/Draughtsman - left 20th December
S. Phillips - Electrician/Radio Operator
A. Romanini - - General hand
J. Shadford - Horse Plant
R. Toy - Assistant Geologist
C. Turvey - Carpenter
F. Woerle - Prospector
L. Wright - Camp Foreman
N. Zordan - General Hand

Sleisbeck Employees

C. Currey - Plant Operator - transferred from Sleisbeck 28th December
V. Leudar - Plant Engineer
E. Whalan - Gardener/Cleaner - retrenched 28th December

Contractors

Mining - W. Hampton - 1 crew of 3 men
- A. McDonald - independent contract till 9th December
Drilling - W. Burrows - Nil
Cartage - E. Stiles - 4 tons Darwin to Camooweal
- S. Hogan - 7 tons Mt. Isa to Waterfall Camp

PLANT OPERATION:

Units Operating

Petrol Driven:

Landrover	No. 6	- General running Darwin
	No.12	- " " "
Nos.4, 5 & 8		- " " Sleisbeck
	No. 3	- On hire Hampton - awaiting parts Milestone
Nos. 9 & 13		- General running Milestone
	No. 11	- Power take-off compressor
International Tipper	No. 1	- General carting Milestone
"	No. 2	- Awaiting parts Gregory
International Utility		- General carting Milestone
Chevrolet 4x4		- " " "
Ford 4x4		- " " "
Holden Utility (Blue)		- General running Darwin
Holden Utility (Yellow)		- " " "
Willys Utility		- " " Milestone
Jeep 3 & 4		- " " "

Diesel Driven:

Cat. D.4 Dozer - Miscellaneous Milestone
Deutz 20 KVA Alternator - Camp power supply Milestone
C.P.T. Compressor - On hire Hampton

CAMP CONSTRUCTION

The construction of a workshop and toilet block at Waterfall Camp was completed.

PROSPECTING - (Milestone (A.P.488))

Another occurrence of secondary uranium mineralisation was discovered by Novotny approximately 1 mile east of the McGuinness Prospect.

This Corio Prospect occurs on an E-W striking quartz healed fracture and is not considered significant.

MINING COSTEANING - (Milestone (A.P.488))

One costean 10 feet deep and 3 feet wide was completed over a length of 22 feet. This costean was mined across the poorly outcropping lode shear 30 feet north of the discovery pit and exposed very strong vertical fissure 22 feet wide. This fissure has three silicified zones and is similar in nature to Blackwell's Prospect. Low grade secondary uranium minerals are showing throughout the shear and the values are increasing steadily with depth.

Further costeaning is in progress.

UNDERGROUND DEVELOPMENT (Milestone - A.P.488)

A total of 58 feet 6 inches of underground development was completed on the El Hussen Prospect, Milestone.

Driving - The South Drive advanced 13 feet from 33 feet to 46 feet. Suspended.

Driving continued along strong but barren lode shear.

Rising - The Rise advanced 11 feet 6 inches from 10 feet to 21 feet 6 inches. Stopped.

Secondary uranium minerals are showing on the south wall throughout and on the north wall in places. From 10 feet to 17 feet strong mineral registering 100 - 200 c.p.s. is showing on the south wall which from 17 feet to 21 feet shows weak mineral registering 50 c.p.s. Strong mineral registering 100 c.p.s. is showing on the north wall from 15 feet to 18 feet. Otherwise this wall shows weak mineral registering 50 c.p.s.

Winze - A Winze was collared directly below the Rise and advanced 34 feet from 0 feet to 34 feet. Stopped.

This development was in strong lode shear showing secondary uranium minerals in places on the north wall. From 10 feet to 15 feet and from 28 feet to 32 feet strong secondary minerals - registering 100 c.p.s. - are present on the north wall on which weak mineral - registering 30 c.p.s.-is showing from 21 feet to 24 feet.

Complete channel samples were taken over all this development, but the delivery of these to Darwin was delayed through rain.

Further underground development has been suspended for the duration of the wet season.

DIAMOND DRILLING (Milestone - A.P.488)

One hole was completed for a total of 6 feet drilled.

Blackwell's Prospect

D.D.5 - Refer November Report.

Hole was probed to a depth of 334 feet. The one intersection obtained being as follows:

Depth in Hole	Assay Equivalent of Probe Result
311' to 334'	1.2 lbs. U_3O_8/ ton over 23'

This intersection is now accepted as representing a similar contact lode shear to that revealed at the McGuinness, White Horse and El Hussen Prospects.

El Hussen Prospect

D.D.4 - Refer November Report.

Hole advanced 6' from 77' to 83'. Stopped.

Drilling was in fresh basalt from 77' to 78', in highly altered lode shear - not showing mineral - to 80'6" and thereafter in quartzite.

Hole was probed to a depth of 80'. The one intersection obtained being as follows:

Depth in Hole	Assay Equivalent of Probe Result
73' to 77'	0.95 lbs. U_3O_8/ ton over 5'

H.J. NEWTON
Operations Manager

4th January 1957

Addendum:

All the selected ore from Blackwell's Prospect which was not previously bagged was drummed and is now stored under cover with the bagged ore.

A.P.'s 477 and 487 were relinquished and Sleisbeck A.P.516 of 5 square miles was granted on 21st December.

A.P.461 expired on 28th December. Renewal was applied for but refused.