ANNUAL REPORT

FOR

E.L. 1420


NORTHERN TERRITORY
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PLAN ACCOMPANYING REPORT

<table>
<thead>
<tr>
<th>Plan No.</th>
<th>Title</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>2341001-8</td>
<td>Percussion and Vacuum Drill Hole Locations</td>
<td>1:50,000</td>
</tr>
</tbody>
</table>
1. SUMMARY

Sixteen vacuum drill holes for a total of 262.3m were drilled and logged for gamma ray responses.

The drilling was designed to test the geochemical and lithological facies distribution and to ascertain dip and strike of the prospective Devonian-Carboniferous Brewer Conglomerate.

The generalised geological section in the E.L. 1420 area consists of Cainozoic sand and sandy clay overlying the Devonian-Carboniferous Brewer Conglomerate. The Brewer Conglomerate consists of reddish-brown and greyish-brown siltstone, fine micaceous sandstone and coarse conglomeratic sandstone.

No anomalous radioactivity was encountered and all holes except for ALV10, which had to be abandoned, were terminated in the Brewer Conglomerate.
2. **INTRODUCTION**

Following the 1977 percussion drilling programme a series of shallow vacuum holes was proposed for drilling on E.L. 1420 during 1978.

The holes are located at 120m intervals along a single traverse extended northeast from hole ALP4. All holes were logged using an S.I.E. T450 logging unit, over a total of 261.2m.

2.1 **Location and Access**

E.L. 1420 is located in the Alice Springs 1:250,000 Sheet area in the southern portion of the Northern Territory. The E.L. area is 15–20 km south of Alice Springs. It is bounded to the west by the Alice Springs–Tarcoola Railway Reserve (Ref. Fig. 1).

Access to the E.L. is via the sealed Stuart Highway, or via the "Old South Road" and then via station tracks.

2.2 **Physiography and Climate**

The physiography of the region is dominated by the east-west strike ridges of the MacDonnell Ranges, which attain heights of nearly 1200m above sea level. These ranges are drained to the south by the Todd River, and Roe and Laura Creeks. The streams traverse over plains of low relief. None of these drainage systems has a permanent surface flow, but most are subject to flooding during periods of heavy rainfall.

The climate is semi-arid to sub-tropical and the area lies within the savannah zone of natural vegetation. Average annual rainfall in Alice Springs is approximately 300mm, most of which is associated with thunderstorm activity.
SCALE 1:250,000

NORTHERN TERRITORY
E.L.1241 & E.L.1420

LOCATION PLAN
SHOWING MAJOR ACCESS

FIGURE 1
2.3 Tenement Status
E.L. 1420 originally covered an area of 31.1 sq km (12 sq mi) and was granted on March 16, 1977 for a period of 1 year. The area was renewed on March 16, 1978 for a further 12 months. Relinquishment of 50% of the area took place at the end of this second term, leaving the present area at 15.54 sq km (6 sq mi).

2.4 Work Completed
The principal activity during 1978 was the vacuum drilling programme. All holes were geophysically logged. Samples from the holes were submitted to the Northern Territory Mines Branch.
3. PREVIOUS WORK

Exploration by early field parties commenced in 1889 and sporadic work continued in the area until 1956. In 1956 the Amadeus Basin became an active area in the search for oil and gas. Numerous seismic, gravity and aeromagnetic surveys were carried out at this time.

A large number of water bores have been drilled in the area. These were generally targeted to the Mereenie Sandstone, which is the aquifer for the Alice Springs water supply.

In 1972, Uranerz Australia Pty. Ltd. began prospecting for uranium in the area of the Missionary Plains Syncline. Exploration is still continuing. E.L. 1420 is part of the original Uranerz tenements.

The 1977 Agip programme consisted of:-
1) Regional mapping at air photo scale of 1:80,000.
2) Ground radiometrics - 2.7 km of traverses.
3) Contract percussion drilling (Rockdril Contractors Pty. Ltd.) with 7 holes completed for 1245m.
4) Downhole logging (Geoscience Associates Australia Pty. Ltd.), for a total of 1223.5m for gamma, resistivity and S.P. responses.
5. Downhole logging using an S.I.E. T450 logging unit - for a total of 1223m, for gamma, resistivity and S.P. responses.
6) Downhole logging using an S.I.E. T450 of Water Resources Branch Hole Number 4466 to a depth of 84.4m.
7) Assaying of 59 samples of drill cuttings for U & Th by AMDEL.
4. REGIONAL GEOLOGY

E.L. 1420 lies on the northern margin of the Amadeus Basin. The regional geology is well described by Wells, A.T., and Foreman, D.J. (1970).

The Pertnjara Group unconformably overlies the Mereenie Sandstone. The basal Parke Siltstone of the Pertnjara Group is overlain by the 650m thick Hermansburg Sandstone unit. The overlying Brewer Conglomerate of the Pertnjara Group was divided into 2 units by Jones (1972).

The 2 units are:-

a) Basal Brewer Conglomerate (Pzb)

This consists of up to 1000m of conglomerate, sandstone and minor siltstone. Phenoclasts are of quartzite and Palaeozoic rocks. It is usually devoid of material derived from the Arunta Complex.

b) Undandita Member (Pzu)

This forms the upper part of the Brewer Conglomerate. It includes sequences of pebbly sandstone, sandstone and siltstone and is typified by an abundance of Arunta Complex material. A cyclic nature of sedimentation is shown with upwards fining cycles 1 - 20m thick. Breaks in sedimentation are represented by calcareous soil profiles in overbank siltstone units.

4.1 Structure

Prior to Pertnjara time, orogenic movements had strongly deformed the older basement and sediments.

Major movement in Devonian - early Carboniferous times caused thrusting, folding and décollement of sedimentary
rocks along the northern margin of the Amadeus Basin. The Brewer Conglomerate is a synorogenic deposit.

The Basal Brewer Conglomerate forms a southward thinning, wedge-shaped deposit which accumulated in the down-warping Missionary Plains Syncline.

The Undandita Member was deposited from a large stream system running sub-parallel to the rising east-west mountain chain.
5. **EXPLORATION ACTIVITIES**

5.1 **Geology**

The oldest rocks exposed belong to the Basal Brewer Conglomerate sequence. Older rocks, the Hermannsburg and Mereenie Sandstones, are known to occur in the northeast corner of the E.L. below Cainozoic cover. The sediments dip to the southwest at a maximum measured inclination of 10°.

5.2 **Vacuum Drilling**

Fifteen holes totalling 237.3m were drilled between 28.2.78 and 4.3.78 by Vacuum Drilling Specialists Pty. Ltd. of Kalamunda, Western Australia. The rig used was a privately built unit, mounted on a Fiat 650 tractor.

Holes were drilled with blade bits with hole diameters varying from 48 to 60mm.

The holes were drilled in a single traverse at 120m spacing.

The holes intersected Cainozoic sediments consisting of red-brown aeolian sand, white and cream clay, sandy clay and thin calcareous seams. The thickness of the Cainozoic cover varies from 7 – 13m.

Below the Cainozoic cover, rocks of the Undandita Member were intersected. These comprised reddish-brown siltstone, sandy siltstone, reddish-brown, fawn and white fine quartz sandstone and medium to coarse pebbly sandstone.

A single hole, 1610V28, was drilled at a later date in conjunction with the vacuum drilling programme on E.L. 1610. Following survey of the hole, its position was determined as 45m inside E.L. 1420.

Detailed lithological logs of the vacuum holes are contained in Appendix I.
5.3 Downhole Geophysical Logging
All holes were logged for gamma responses, using an S.I.E. T450 logging unit, for a total of 261.2m. Downhole geophysical analogs are included in Appendix II.

No radiometric anomalies were recorded.

5.4 Levelling
All vacuum drill holes were levelled with respect to the known level of the Mines Branch drill hole R/N 4466.

Refer Table 1 below –

Table 1 Drill Hole Levels

<table>
<thead>
<tr>
<th>Hole No.</th>
<th>Level (m)</th>
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<tbody>
<tr>
<td>R/N 4466</td>
<td>536.75</td>
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<tr>
<td>ALV 1</td>
<td>540.05</td>
</tr>
<tr>
<td>ALV 2</td>
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</tr>
<tr>
<td>ALV 3</td>
<td>539.83</td>
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<tr>
<td>ALV 4</td>
<td>539.11</td>
</tr>
<tr>
<td>ALV 5</td>
<td>538.05</td>
</tr>
<tr>
<td>ALV 6</td>
<td>538.03</td>
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<td>ALV 7</td>
<td>538.03</td>
</tr>
<tr>
<td>ALV 8</td>
<td>537.58</td>
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<tr>
<td>ALV 9</td>
<td>537.47</td>
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<td>ALV 10</td>
<td>536.09</td>
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<td>ALV 11</td>
<td>535.86</td>
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<tr>
<td>ALV 14</td>
<td>534.94</td>
</tr>
<tr>
<td>ALV 15</td>
<td>534.91</td>
</tr>
<tr>
<td>1610 V 28</td>
<td>543.79</td>
</tr>
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</table>
6. **EXPENDITURE**

A statement of the expenditure on E.L. 1420 in the 12 months' period from March 1978 - February 1979 inclusive, follows:-

<table>
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<tr>
<th>Category</th>
<th>Amount</th>
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<td>DRILLING AND LOGGING</td>
<td>1,122</td>
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<td>LABORATORY COSTS, ANALYSES</td>
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<tr>
<td>MISCELLANEOUS</td>
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<tr>
<td>ALICE SPRINGS OFFICE COSTS (Pro rata)</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$6,067</strong></td>
</tr>
</tbody>
</table>
7. REFERENCES

Jones, B.G., 1972
Upper Devonian to Lower
Carboniferous Stratigraphy
Of The Pertnjara Group,
Amadeus Basin, Central
Australia. Jour., Geol. Soc.
Aust. Vol. 19, Pt. 2

Wells, A.T., Foreman, D.J.,
Geology of the Amadeus Basin,
Resour. Aust. Bull. 100
APPENDIX I

LITHOLOGICAL LOGS

ALV1–ALV15 & 1610V28
Shale/Clay
Silt
Fine
Medium
Coarse
Lobules
Calcrete
Silcrete
Feldspars
Pyrite
Carbonaceous Matter
Calcite/Dolomite Cement
Gypsum
Mica
Limonite (Yellow/Brown)
Hematite (Red, Purple, Grey/Red)
Magnetite
Logs, Plant fossils
Fossils (Non-Plant)
Black U Mins
Surface secondary U mins
Clay pellets
Calcite Veins
Kaolin
Scree
Convolute Bedding
STANDARD FACIES CHART

RED (OXIDISED) FACIES - reddish brown and greyish/brown sediments

WHITE (REDUZATE) FACIES - grey, grey-white and greyish/green sediments with carbon and pyrite

TRANSITIONAL FACIES - brownish/grey sediments partially reduzate

MOTTLED FACIES - reddish/brown and grey/white mottled sediments, partly reduzate

TRANSITIONAL ZONE - thin alternating bands (less than 1m thick) of oxidised and reduzate facies

N.B. o - Refers to the surface oxidisation and weathering of the appropriate facies.
BOREHOLE No. **ALV-1** Type **VACUUM**

Region: **Amadeus Basin**  
Project: **EZ 1420**  
Comenced: **28-2-78**  
Completed: **28-2-78**  
Co-ord:  
Total Depth: **19.5 m**  
Logged by: **A. Mason**  
Operator: **D. Edgecombe**  
Inclination: **VERTICAL**  
Sampled by: **A. Mason**  
Contractor: **Vacuum Drilling**  
Probed by: **A. G. LA**  
Probed depth: **19.4 m**  
Elevation: **540.05 m**  
Scale: **1:100**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Radon</th>
<th>Sample No.</th>
<th>Uppm</th>
<th>1thppm</th>
<th>1vppm</th>
<th>ASSAYS</th>
<th>DESCRIPTION</th>
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<tr>
<td>0-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Canarinae - Red-brown sands with minor gravel s</td>
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<tr>
<td>5-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10-15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cream and fawn clays with fine red-brown sandstone</td>
</tr>
<tr>
<td>15-20</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Red-brown fine-grained sands with minor white clays</td>
</tr>
<tr>
<td>20-25</td>
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<td></td>
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<td>BREWER CONGLOMERATE - UNDATEDA</td>
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<td></td>
<td></td>
<td></td>
<td>Alternating fine bands of red-brown and cream siltstone and fine sandy siltstone</td>
</tr>
<tr>
<td>25-30</td>
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<tr>
<td>30-35</td>
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<td></td>
<td></td>
<td>Red-brown siltstone / shale</td>
</tr>
</tbody>
</table>
| 35-40     |       |            |      |        |       |        | Alternating bands of red-brown and cream - white siltstone  
|           |       |            |      |        |       |        | Red-brown siltstone |
| 40-45     |       |            |      |        |       |        |            |
| 45-50     |       |            |      |        |       |        | White siltstone |

REMARKS: Hole terminated in gravel band - drill couldn't penetrate.
### BOREHOLE Details

- **Region**: Amadeus Basin
- **Project**: EL. 1420
- **Commenced**: 28.2.78
- **Completed**: 28.2.78
- **Total Depth**: 13.2 m
- **Logged by**: A. Mason
- **Sampled by**: A. Mason
- **Probed by**: A.C.N.A.
- **Operator**: D. Edgecombe
- **Scale**: 1:100

### Assays

<table>
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<th>Count</th>
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<th>Graphic Line</th>
<th>Radium</th>
<th>Sample No</th>
<th>Uppm</th>
<th>Toppm</th>
<th>Vppm</th>
<th>Notes</th>
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<td></td>
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<tr>
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<td></td>
<td>58</td>
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</tr>
<tr>
<td>15</td>
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<td></td>
<td>55.5</td>
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<td>58.5</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### Description

- **Callozoic**: Red-brown sandstone with minor white clay bands.
- **Brewer Conglomerate**: Undated. Red-brown siltstone/shale sandstone.
- **White and light green siltstone**: Fine red brown sandstone.

**Remarks**: Hole terminated in sandstone - drill could not penetrate.
<table>
<thead>
<tr>
<th>Depth</th>
<th>Assay</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
<td>CAIMO 2016. Red-brown sand with minor white and cream clays.</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>BREWER CONGLOMERATE UNLADURRA. Red-brown silt stone and sandy silt stone with minor greyish brown silt stones.</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Red-brown fine grained quartz sandstone with pebbles of quartz.</td>
</tr>
</tbody>
</table>

REMARKS: Sandstone and pebbles too hard to penetrate.
Region: Amadeus Basin
Project: E. L. 1420
Co-ord: 
Azimuth: 
Inclination: Vertical
Elevation: 539.1 m

BoREHOLE No. ALV-4 TYPE VACUUM Page: 1
Commenced: 1.3.78
Completed: 1.3.78
Total Depth: 13.5 m
Probed by: A. C. N. A.
Logged by: A. Mason
Sampled by: A. Mason
Probed depth: 13.7 m

Contractor: Vacuum Drilling
Scale: 1:100

<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Radion</th>
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<th>Up,ppm</th>
<th>T,ppm</th>
<th>V,ppm</th>
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<td>10</td>
<td>55</td>
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<td>20</td>
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</tr>
</tbody>
</table>

DESCRIPTION

Cainozoic:
Red-brown sands with minor white and cream plays

Brewer Conglomerate - Undaundita:
Red-brown siltstone and sandy siltstone

White cream fine grained sandstone

REMARKS
Sandstone too hard for drill to penetrate.
<table>
<thead>
<tr>
<th>Level</th>
<th>Depth</th>
<th>Sample No.</th>
<th>Uppm</th>
<th>Toppm</th>
<th>Vppm</th>
<th>Description</th>
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<tbody>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CAIN2016. Red-brown sands with minor white clay seams.</td>
</tr>
<tr>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td>BREWER CONGLOMERATE. - UNDANDITA? Red-brown siltstone and sandy siltstone.</td>
</tr>
</tbody>
</table>

**Remarks**
Region

Project

Co-ord

Azimuth

Inclination

Elevation

Commenced

Completed

Total Depth

Logged by

Sampled by

ASSAYS

Sample No.

Radion

Uppm

Thppm

Vppm

Meters

DESCRIPTION

Attracting bands of red-brown and gray-white siltstone, and sandy siltstone.

REMARKS
BOREHOLE No. ALV-6 TYPE VACUUM Page: 1

Region Amadeus Basin
Project EL. 1420
Co-ord
Azimuth
Inclination VERTICAL
Elevation 538.05m

Commenced 1/3/78
Completed 1/3/78
Total Depth 11.8 m
Logged by A. MASON
Sampled by A. MASON
Probed by AGWA
Operator D. EDGECOMBE
Driller H. PARKINSON
Machine FIAT 650
Contractor VACUUM DRILLING

ASSAYS

<table>
<thead>
<tr>
<th>Metre</th>
</tr>
</thead>
</table>

DESCRIPTION

CAlPO2SIC
Red-brown sands with white and cream clays.

BREWER CONGLOMERATE UNCONFORMED
Red-brown and fawn siltstone

Fawn and cream white fine grained sandstone with quartz pebbles.

REMARKS Sandstone too hard to penetrate.
BOREHOLE No. ALV-7  TYPE VACUUM  Page: 1

Region MADENS BASIN
Project E.L. 1420
Co-ord
Azimuth
Inclination VERTICAL
Elevation 538.03 m

Commenced 2.3.78
Completed 2.3.78
Total Depth 13.5 m
Logged by A. Mason
Sampled by A. Mason

Machine FIAT 650
Driller W. Parkinson
Probed by AGA
Operator D. Edgecombe
Probed depth 13.1 m

Contractor VACUUM DRILLING
Scale 1:100

<table>
<thead>
<tr>
<th>Scale Depth</th>
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<th>ASSAYS</th>
<th>DESCRIPTION</th>
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<td></td>
<td></td>
<td>Uppm</td>
<td>CAPEBREEIC</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Thppm</td>
<td>Red-brown sand and white clay seams</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>10</td>
<td>Uppm</td>
<td>BREWER CONGLOMERATE - CLAYANDER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Thppm</td>
<td>Red-brown sand and brown siltstone</td>
</tr>
<tr>
<td>15.5</td>
<td>15.5</td>
<td>15.5</td>
<td>Uppm</td>
<td>Alternating bands of brown-white sandstone and red-brown siltstone</td>
</tr>
</tbody>
</table>

REMARKS Hole terminated in sandstone - too hard to penetrate.
<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Grade</th>
<th>Log</th>
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<th>Thppm</th>
<th>Vppm</th>
<th>Metres</th>
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</tr>
</tbody>
</table>

**DESCRIPTION**

- **CAINO2106.**
  - Red-brown sands and white clay bands.

- **BREWER CONCRETE - UMDANDITA.**
  - Alternating bands of red-brown siltstone and white to cream fine sandstones with minor gravels.

- 12-15: Predominantly red-brown siltstone.


**REMARKS**

Sandstone too hard to penetrate further.
BOREHOLE No. ALV-9, TYPE VACUUM

Region: AMADEUS BASIN
Project: E.L. 1420
Commedence: 2-3-78
Completed: 2-3-78
Machine: FIAT 650
Driller: D. PARKINSON
Total Depth: 182m Probed by AGDA
Logged by: A. MASON
Operator: D. EDGECOMBE
Sampled by: A. MASON
Probed depth: 13m
Contractor: VACUUM DRILLING
Elevation: 537.47m
Scale: 1:100

SAMPLES

<table>
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DESCRIPTION

1. Red-brown sands.
2. Red-brown sand and white clay seams.
11. BREWER CONGLOMERATE - Undandita Alternating bands of red-brown sandstone and cream-white sandstone. 18-19.2 White sandstone and gravel.

REMARKS Sandstone too hard to penetrate.
<table>
<thead>
<tr>
<th>Depth</th>
<th>Scale</th>
<th>Graphic Line</th>
<th>Radion</th>
<th>Sample No.</th>
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</table>

**DESCRIPTION**

- Camden\[sic\].
- Red-brown sand and white clay with gravel band at bottom of hole.

**REMARKS**

Drill could not penetrate gravel band.
<table>
<thead>
<tr>
<th>Cast</th>
<th>Scale</th>
<th>Graphic</th>
<th>Log</th>
<th>Sample No.</th>
<th>ASSAYS</th>
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**DESCRIPTION**

**CAINOZOIC**

Red-brown sand, and white clay seams.

**BREWER CONGLOMERATE - UNDANDITH?**

Red-brown siltstone and sandy siltstone.

**Alternating bands of fine white and red-brown sandstone and red-brown siltstone.**

**REMARKS**

Sandstone too hard to penetrate.
BOREHOLE No. ALV-12 TYPE VACUUM Page: 1

Region Amadeus Basin
Project E.C. 1420
Comenced 3.3.78
Completed 3.3.78
Machine Fiat 650
Driller W. Parkinson
Total Depth 14.5 m
Probed by AGWA
Logged by A. Mason
Sampled by A. Mason
Operator D. Edgcombe
Probed depth 14.6 m
Elevation 535.74 m
Contractor Vacuum Drilling
Scale 1:100

<table>
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<th>Sample No.</th>
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<th>Tppm</th>
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<td>7.5</td>
<td>Brewer Conglomerate</td>
<td>Reddish brown and pink sandstone with conglomerated bands.</td>
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CAIN0216
Red-brown sand and cream-white clay seams.

REMARKS Sandstone too hard to penetrate.
Region: Amadeus Basin
Project: E.L. 1420.
Commenced: 3.3.78
Completed: 3.3.78
Co-ord:
Total Depth: 20 m.
Logged by: A. Mason
Inclination: Vertical
Sampled by: A. Mason
Elevation: 535.56 m
Contractor: Vacuum Drilling

<table>
<thead>
<tr>
<th>Layer Depth</th>
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<th>Uppm</th>
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</table>

**ASSAYS**

**DESCRIPTION**

- CAI NO 201C.
  - Red-brown sand and cream-white clay seams.

- BREWER CONGLOMERATE.
  - Red-brown sand with minor pebbles.

- Red-brown and fawn siltstone and sandy siltstone.
<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Sample No.</th>
<th>description</th>
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<tbody>
<tr>
<td>5</td>
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<td>CAPEBOWIE: Red-brown sand and white clay.</td>
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<tr>
<td>9</td>
<td>55</td>
<td>BURGER CONGLOMERATE: Fine to medium-grained red-brown sandstone with minor gravel seams.</td>
</tr>
<tr>
<td>13</td>
<td>55</td>
<td>Red-brown and purple-grey siltstone.</td>
</tr>
<tr>
<td>40</td>
<td>55</td>
<td>Red-brown and purple-grey fine-grained sandstone and silty sandstone.</td>
</tr>
</tbody>
</table>
Region  Amadeus Basin
Commenced  4-3-78
Completed  4-3-78
Co-ord
Azimuth
Inclination VERTICAL
Total Depth  20m
Logged by A. Mason
Sampled by A. Mason
Probed by AGWA
Operator D. Edscombe
Probed depth  19.9m
Elevation 534.9m
Contractor VACUUM DRILLING

ASSAYS

<table>
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DESCRIPTION

5 - CAUDEZITE, Red sand and white - cream clay seams.
13 - BREWER CONGLOMERATE, White and yellow siltstone.
15 - Red-brown and green siltstone with muriate.

REMARKS
## BOREHOLE No. 1610VP

**Type:** Vacuum

**Region:** Amadeus Basin

**Commenced:** 16.7.1978

**Completed:** 16.7.1978

**Machine:** FIAT 650

**Driller:** L. McGregor

**Co-ord:** 15574, 341/33730.04E

**Total Depth:** 25 m

**Probed by:** AGNA

**Azimuth:**

**Logged by:** R. McKinnis

**Operator:** W.A.

**Inclination:** Vertical

**Sampled by:** P. Holmes

**Probed depth:** 24.9 m

**Elevation:** 543.79 m

**Contractor:** Vacuum Drilling

**Scale:** 1:100

### ASSAYS

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<tr>
<th>Radom</th>
<th>Sample No.</th>
<th>Uppm</th>
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</table>

### DESCRIPTION

0-8 m: Cambco Clay

Red clayey sand 0-3 m.

Calcrete, calce, sand 3-8 m.

12.5-16 m: Brown clay, silty sandstone

Some green sandstone (mm)

Rare pebbles.

16-19 m: Light grey-brown fine sandstone

Biothic possibly argillite

Some silty sandstone.

19-25 m: Light brown fine sandstone

3 m drilled using 2 3/8" auger
<table>
<thead>
<tr>
<th>Sample</th>
<th>Radon</th>
<th>Sample No.</th>
<th>Uppm</th>
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**DESCRIPTION**

Grading to brown fine silty sandstone

**REMARKS**

Very Slow Drilling
APPENDIX II

DOWNHOLE GEOPHYSICAL ANALOGS

ALV1–ALV15 & 1610V28
T.D 19.9 metres