

# **BARRICK GOLD OF AUSTRALIA LIMITED**

(ABN 008 143 137)

**PROJECT 8440  
TANAMI (NT) JV**

**BIRRINDUDU**

**EL 5889, EL 23472**

**ANNUAL REPORT**

Period 1 January 2003 – 31 December 2003

**TECHNICAL REPORT No. 1118**

MAP SHEET: SE52-11 (Birrindudu)

## **DISTRIBUTION:**

1. BGAL – Perth 8440.328
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6. NT DBIRD

Graeme Purcell

February 2004

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## 1.0 SUMMARY

The Birrindudu Project comprises Exploration Licences (EL) 5889 and 23472 and forms part of the Tanami (NT) JV, a Joint Venture agreement between Tanami Gold NL (TGNL) and Barrick Gold of Australia Limited (BGAL). The tenements were granted during 2002-2003 for a period of six years.

Work conducted on EL 5889 includes detailed airborne magnetic, radiometric and digital elevation survey, detailed data compilation and interpretation, geological field mapping, rock-chip sampling and lag sampling. These activities are summarised in Table 1 and illustrated in [Figure 1](#). Field work on EL 23472 was not able to be commenced as the access agreement with the Central Land Council is still pending.

Tenement	Aboriginal Heritage Survey	Airborne Geophysical Survey	Rock Chips	Lags	Drill BLEG	Vacuum Drilling	
						Holes	Metres
EL 5889	632.4	632.3	152	230	-	-	-
EL 23472	199	199		-	-	-	-
<b>Totals</b>	<b>831.4km<sup>2</sup></b>	<b>831.4 km<sup>2</sup></b>	<b>152</b>	<b>230</b>	<b>-</b>	<b>-</b>	<b>-</b>

## 2.0 LOCATION AND ACCESS

The Birrindudu Project is located approximately 250km east-southeast of Halls Creek, in the northwestern region of the Tanami Desert. The tenement group lies on the Birrindudu (SE52-11) 1:250,000 geological map sheet. Access from Halls Creek is southeast via the unsealed Tanami Highway for approximately 320km to the Tanami Mine, then 80km north along the Lajamanu (Hooker Creek) Road to the Supplejack Downs homestead, then 40km northwest using station tracks to a base camp, then 30km through trackless scrub. Access from Alice Springs is northwest via the Tanami Highway for approximately 700km until the Lajamanu turnoff ([Figure 2](#)).

When conducting exploration activities, a temporary fly-camp was used as the exploration base. The tenement group contains no historical tracks ([Figure 2](#)). The Lajamanu community is the nearest established town and is approximately 190km by road to the northeast.

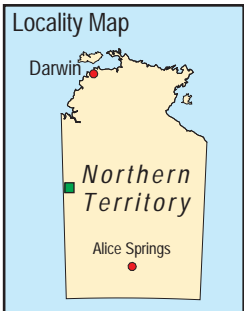
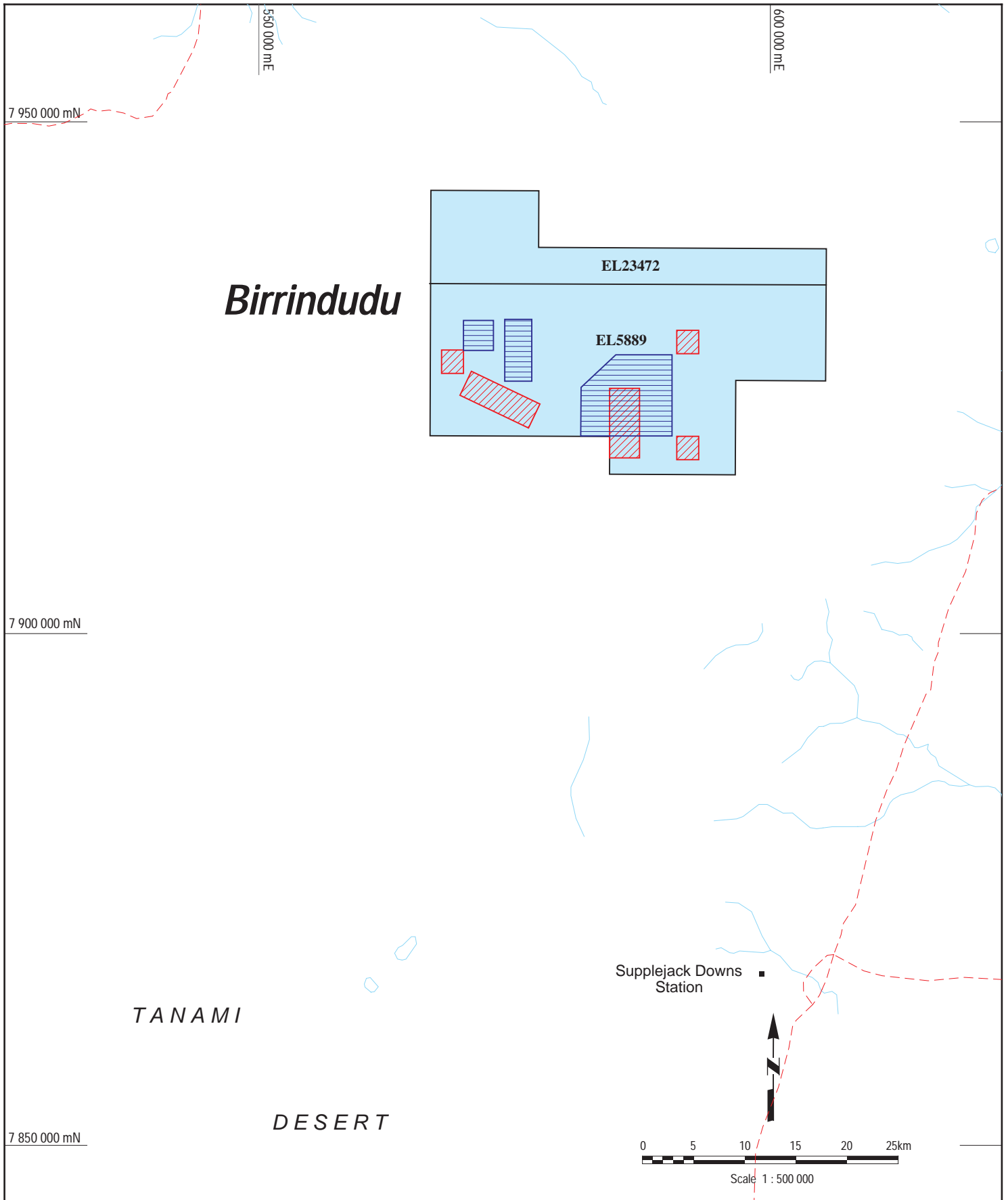
The area is affected annually by high temperatures and seasonal rainfall associated with the northern monsoon, which generally extends from November to April. During this time access via road may be restricted due to wet conditions.

The project covers an area of gently undulating hills and aeolian sand plains, dominated by spinifex, acacia thickets and sparse stands of eucalypts. Scarps of flat lying Proterozoic sandstones (20-50m) surround the plains to the east, south and west of the project, and support little but spinifex and sparse acacia scrub. Occasional springs and ephemeral waterholes occur close to these scarps.




## 3.0 TENURE

The Birrindudu Project comprises two Exploration Licences, and forms part of the Tanami (NT) JV project. Details are listed in Table 2 and illustrated in [Figure 3](#).


Tanami Exploration NL, a wholly owned subsidiary of Tanami Gold NL (TGNL), is the registered title-holder of this tenement. Barrick Gold of Australia Limited (BGAL) are managers of exploration through the Tanami (NT) JV agreement with TGNL, commencing 13 December 2000.

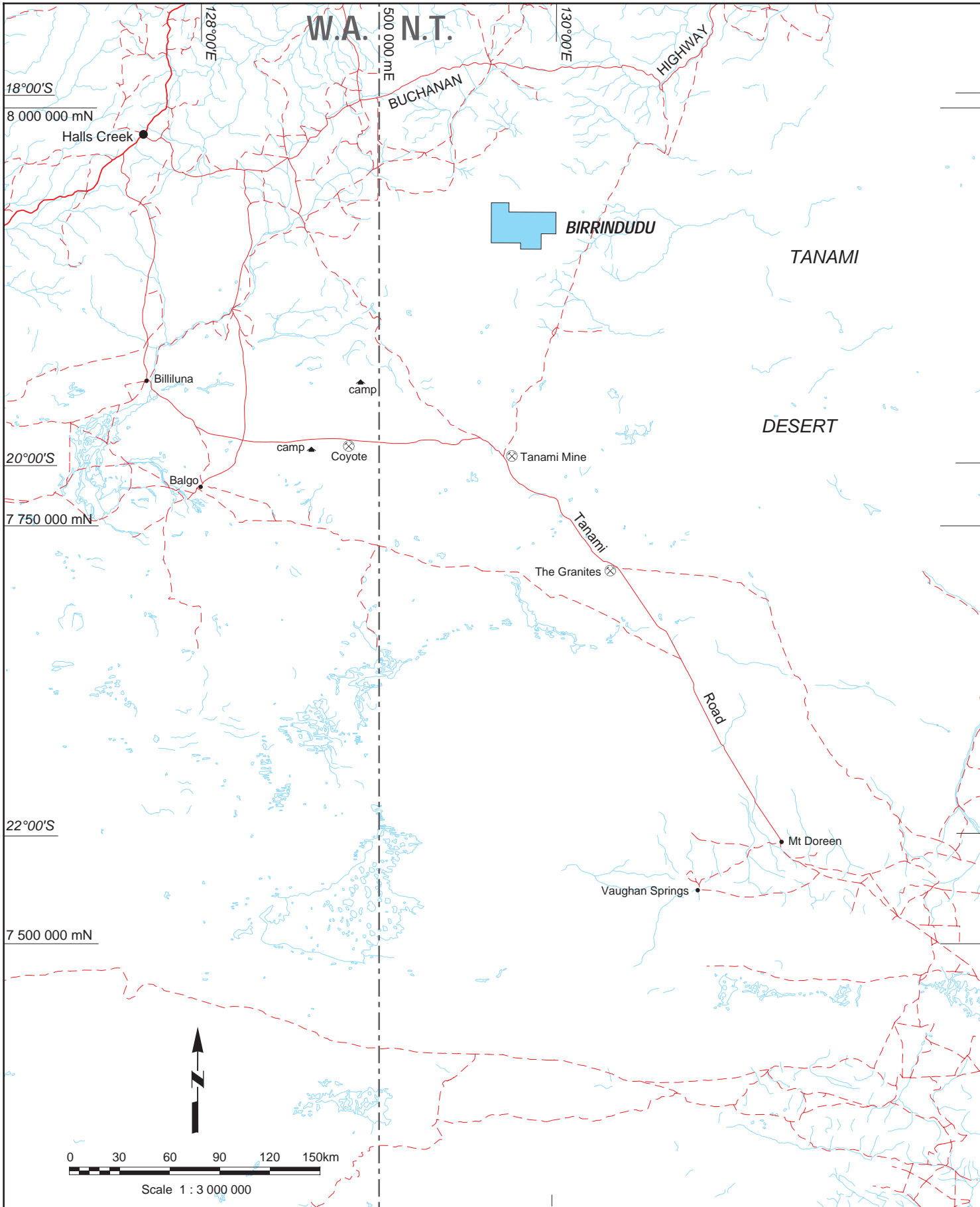


**Legend**

-  Airborne Geophysical Survey
-  Area of LAG sampling
-  Area of Rock Chip sampling

*Projection Based on AGD84 (Zone 52)*


		<b>BIRRINDUDU EXPLORATION INDEX MAP</b>	
		<b>Project: 8440 - TANAMI (NT) JV</b>	
Originator: G.P.	Date Drawn: Feb 2004	Scale: 1 : 500 000	Technical Report No. 1118
Drawn By: D.F.B.	Revised:		
Ref : FILE: K:\drafting\tanamitaten022.dgn DATE: 20-Feb-02 09:03			<b>Figure No.: 1</b>

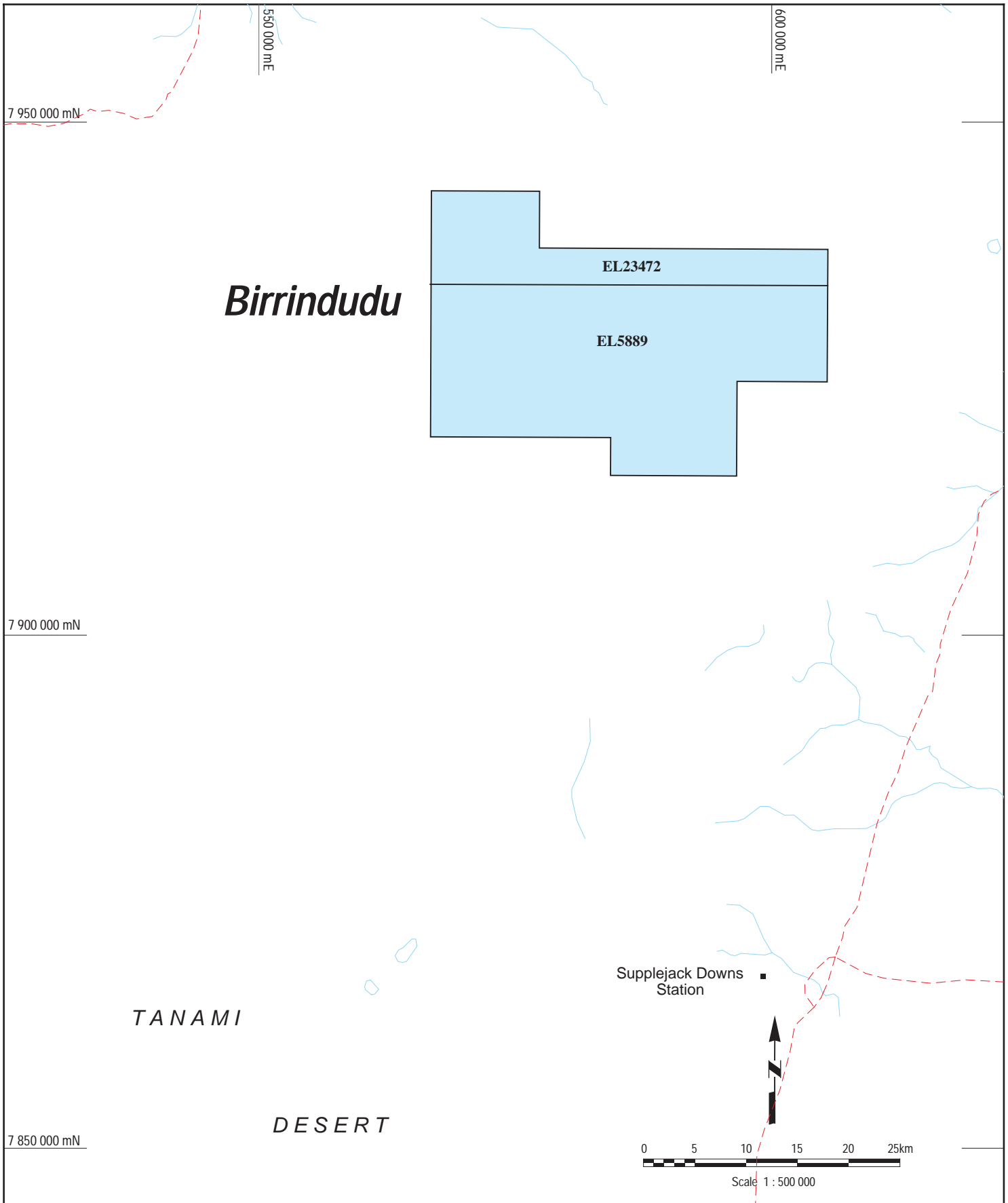


**Legend**

Barrick Tenements

*Projection Based on AGD84 (Zone 52)*


		<h2 style="margin: 0;">BIRRINDUDU LOCATION</h2>	
<b>Project:</b> 8440 - TANAMI (NT) JV			
Originator: G.P.	Date Drawn: Dec 2000	Scale	Technical Report No.
Drawn By: D.F.B.	Revised: Jan 2004	1 : 3 000 000	1118
Ref : FILE: k:\Drafting\tanami\ntloc001.dgn DATE: 10-Feb-04 08:44			<h3 style="margin: 0;">Figure No.: 2</h3>



**Legend**

Barrick Tenements

*Projection Based on AGD84 (Zone 52)*

		<b>BIRRINDUDU TENEMENTS</b>	
Project:		8440 - TANAMI (NT) JV	
Originator: G.P.	Date Drawn: Feb 2004	Scale: 1 : 500 000	Technical Report No. 1118
Drawn By: D.F.B.	Revised:		
Ref : FILE: K:\Barrick Formats\Barrick Sheet Layouts.dgn DATE: 20-Feb-02 09:03			<b>Figure No.: 3</b>

<b>Table 2</b>					
<b>Tenement Register (as at 31 Dec 03)</b>					
<b>Tenement</b>	<b>Area</b>	<b>Commences</b>	<b>Expires</b>	<b>Req. Exp.</b>	<b>Comments</b>
EL 5889	197 blocks (632.4km <sup>2</sup> )	22/08/2002	21/08/2008	\$30,000	
EL 23472	62 blocks (199km <sup>2</sup> )	28/01/2003	27/01/2009	\$35,000	Access agreement pending
<b>Totals</b>	<b>259 blocks (831.4km<sup>2</sup>)</b>			<b>\$65,000</b>	

## 4.0 GEOLOGY

### 4.1 Regional Geology

Basement is rarely exposed and is composed of Archaean granites and gneisses. Basement rocks have SHRIMP U-Pb zircon dates of  $2504 \pm 4\text{Ma}$  and  $2514 \pm 3\text{Ma}$ . The basement was subjected to the Barramundi Orogeny ( $1882 \pm 14\text{Ma}$ ), prior to the deposition of the overlying sediments.

Post-Barramundi rifting led to deposition of mafic volcanics, volcanoclastics and subordinate clastics and calc-silicates of the McFarlane Peak Group. This was succeeded by the deposition of the Tanami Group in a passive margin environment. These rocks include carbonaceous siltstone, minor banded ironstone and calc-silicates of the Dead Bullock Formation, which is conformably overlain by several thousand metres of turbiditic sandstones of the Killi-Killi Formation.

The sedimentary pile was later intruded by doleritic sills, prior to and during the subsequent deformation of the Tanami Orogenic Event. The Tanami Orogenic Event occurred between 1830-1845Ma and was a period of regional deformation and metamorphism across the Tanami Inlier. The Pargee Sandstone, a thick molasse of interbedded conglomerate, sands and minor silts, was deposited unconformably on the Tanami Group in a sub-basin created during the Tanami Orogenic Event.

Local intracontinental rifting (1825 to 1815Ma), led to subaqueous and subaerial sedimentation and felsic to mafic volcanism forming the Mount Charles Formation, Mount Winnecke Group and the Nanny Goat Volcanics.

Three overlapping periods of I-type granitic plutonism occurred at this time producing the Winnecke Suite (1830-1820Ma), the Inningarra-Coomarie Suites (1820-1810Ma) and the Granites-Frederick Suites (1810-1790Ma). The Palaeoproterozoic basement was then exhumed, eroded and covered by the Neoproterozoic Birrindudu Group sediments comprising the Gardiner Sandstone, Talbot Well Formation and Coomarie Sandstone.

The region has been cut by large west-northwest trending faults. These structures manifest themselves as large prominent quartz ridges or as drainages. Recent field mapping indicates that these structures were long lived with various episodes and orientations of movement.

Gold mineralisation in the Tanami is extensive. The endowment of the region exceeds 13Moz of gold with the Callie system being the largest single deposit, which contains more than 6Moz of gold. Mineralisation in the Tanami region is diverse, ranging from epithermal styles at the Tanami group of mines, to the deeper lode gold deposit at Groundrush. Locally some deposits favour certain lithologies, however it is clear that gold mineralisation is lithologically indiscriminate and occurs in almost all rock types across the Tanami region.



## 4.2 Local Geology

The bulk of the Project comprises deformed and metamorphosed sediments of the Tanami Complex. Lithologies include shale, siltstone, carbonaceous shale, ferruginous shale, chert, cherty BIF, dolerite, fine to medium-grained greywacke and volcanics. Massive granitic stocks intrude the sediments. The Brown's Range Dome comprises uplifted Archaean basement and outcrops 30km to the southwest of the Project. Surrounding the tenement group are thick sequences of flat lying Birrindudu Group sediments. The sandstone forms elevated plateaus, which unconformably overlie Tanami Complex rocks, and rise from 20 - 50m above the surrounding topography. Cambrian flood basalts cover the northern portion of the Project.

Aeromagnetic interpretation suggests numerous structures traverse the tenement, dominated by north-south trending shear corridor in the western portion of the Project area. Weakly developed WNW trending Trans-Tanami Style Fault Zones, and smaller-scale brittle faults transect the area. The package has been multiply deformed giving rise to a well-developed fold interference pattern. Evidence suggests that thrusting has occurred within the package, giving rise to stratigraphic thickening and repetition.

Outcrop of Tanami Complex lithologies is sparse. Sporadic highly weathered subcrop is more common throughout the Project and limited to slight topographic rises where deflationary lag is well developed. Elsewhere, stratigraphy is commonly overlain by a transported horizon of variable thickness, with localised palaeochannel development. A veneer of aeolian sand from 1-3m thick covers the majority of the tenement.

## 5.0 PREVIOUS EXPLORATION

There is no record of historical exploration within the Birrindudu tenement group.

Early explorers Davidson and Talbot passed through the region in 1901 and 1909 respectively, where they recorded the presence of gold at a number of locations, including The Granites, Tanami and Larranganni Bluff (Kookaburra/Sandpiper mineralised system). More recent activities by the NTGS within the Tanami region have been extensive. A mapping project of the Birrindudu (SE52-11) 1:250,000 geological map sheet is in progress.

## 6.0 EXPLORATION ACTIVITIES AND RESULTS

All exploration activities were carried out on the Australian Map Grid (AMG84) in Zone 52.

### 6.1 Aboriginal Heritage Survey

The Project lies within the Birrindudu Pastoral Lease and the Central Desert Aboriginal Lands Trust. An aboriginal heritage survey was conducted during May-June 2003 and clearance was then given to proceed with exploration activities

### 6.2 Surface Geochemistry

A total of 152 rock chip samples (TA75308-TA75320, TA75336-TA75345, TA75361-TA75385, TA75391-TA75494), and 230 Lag samples (TA44285-TA44514), were collected. The surface geochemistry data files are listed in [Appendix 1](#).

#### 6.2.1 Lag Sampling

The lag samples were taken as part of a regional reconnaissance programme in previously unsampled areas of good lag development ([Plate 1](#)).

Samples were taken from an area of approximately five metres in diameter. Sample material was scraped/broomed from the surface and sieved (-6mm+2mm) to remove

aeolian sand and organic contamination. A nominal weight of 500g of lag was collected and stored in snap-lock plastic bags within numbered calico bags. The samples were dispatched to Ultra Trace Laboratories Perth for preparation and analysis. The samples were digested by aqua regia and analysed for Au by AR002 (ICP-MS) to a 0.1ppb lower detection limit. The analytical method AR102 (ICP-MS) was used for the following elements; Ag (0.05ppm), As (0.2ppm), Ba (0.5ppm), Be (0.1ppm), Bi (0.02ppm), Cd (0.1ppm), Ce (0.1ppm), Co (0.2ppm), Cu (0.5ppm), Ga (0.2ppm), Hf (0.01ppm), Hg (0.01ppm), La (0.01ppm), Mo (0.1ppm), Nb (0.1ppm), Pb (1ppm), Pt (5ppb), Sb (0.02ppm), Sr (0.1ppm), Te (0.1ppm), Th (0.1ppm), Tl (10ppb), U (10ppb), W (0.1ppm), Zn (1ppm), Zr (0.5ppm). The analytical method AR101 (ICP-OES) was used for the following elements; Al (10ppm), B (5ppm), Ca (10ppm), Cr (5ppm), Cu (0.5ppm), Fe (0.01%), K (20ppm), Mg (10ppm), Mn (1ppm), Na (50ppm), Ni (1ppm), P (10ppm), S (10ppm), Sc (0.5ppm), Ti (50ppm), V (2ppm), Zn (1ppm), and Zr (0.5ppm).

No significant gold anomalism was identified throughout the Birrindudu Project, with the best value peaking at 2.5ppb Au. However As anomalism was broadly elevated, generally at 20-40ppm, and peaking at 85ppm.

### **6.2.2 Rock Chip Sampling**

The rockchip samples were taken in conjunction with regional reconnaissance and targeted mapping programmes, undertaken to validate geophysical interpretation ([Plate 2](#)).

A nominal 2kg sample was obtained by rock chipping over an area of approximately 2m in diameter. The samples were dispatched to Ultra Trace Laboratories Perth for preparation and analysis. The samples were fire assayed and analysed for Au by method FA002 (ICP-OES) to a 1ppb lower detection limit, along with elements Pd (5ppb) and Pt (5ppb). The samples were also digested by aqua regia and the following multi elements analysed. The analytical method AR102 (ICP-MS) was used for elements; Ag (0.05ppm), As (0.2ppm), Ba (0.5ppm), Be (0.1ppm), Bi (0.02ppm), Cd (0.1ppm), Ce (0.1ppm), Co (0.2ppm), Ga (0.2ppm), Hf (0.01ppm), Hg (0.01ppm), La (0.01ppm), Mo (0.1ppm), Nb (0.1ppm), Pb (1ppm), Pt (5ppb), Sb (0.02ppm), Sr (0.1ppm), Te (0.1ppm), Th (0.1ppm), Tl (10ppb), U (10ppb), W (0.1ppm), Zn (1ppm), Zr (0.5ppm). The analytical method AR101 (ICP-OES) was used for the following elements; Al (10ppm), B (5ppm), Ca (10ppm), Cr (5ppm), Cu (0.5ppm), Fe (0.01%), K (20ppm), Mg (10ppm), Mn (1ppm), Na (50ppm), Ni (1ppm), P (10ppm), S (10ppm), Sc (0.5ppm), Ti (50ppm), V (2ppm), Zn (1ppm), and Zr (0.5ppm).

No significant gold anomalism was noted from the rockchip sampling programme. The highest value of 347ppb Au was associated with quartz veining within sandstones of the Birrindudu Group. However As anomalism was again broadly elevated, peaking at 152ppm.

A broad Trans-Tanami style (300-330° trending) vein corridor in the SE portion of the project was specifically targeted for mapping and rockchip sampling. Lithologies encountered included dominantly fine to medium-grained clastic sediments with lesser shale, chert, and cherty BIF. A dominant steep, NNW trending foliation was identified throughout all lithologies with a weak patchy, variable overprint. Three quartz vein sets were recognized trending 090°, 180° and 130-150°. Veining was variably ferruginous to bucky, and undeformed to locally folded. No significant gold or arsenic anomalism was noted.

### **6.3 Airborne Magnetic, Radiometric and Digital Elevation Survey**

UTS Geophysics was contracted to conduct a low-level detailed airborne magnetic, radiometric and digital elevation survey across the Supplejack Project. The survey was flown at 75m line spacing, in a 090°-270° orientation with a mean sensor height of 20m. Detailed survey specifications are included as [Appendix 2](#).

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

A series of surface geochemical programmes were conducted during the reporting period. The programmes were designed to complete first pass reconnaissance of previously unexplored areas. No specific targets were generated from this work.

The geochemical screening programme requires completion with further targeted mapping and rockchip sampling. Vacuum drilling will be utilised in areas of aeolian sand cover to adequately screen litho-structural targets.

## 8.0 REFERENCES

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## **APPENDIX 1**

### **VERIFICATION LISTING FORM**

## TEMPLATE 7 - VERIFICATION LISTING FORM

Exploration Work Type	File Name	Format
<b>Office Studies</b>		
Literature search		
Database compilation		
Computer modelling		
Reprocessing of data		
Report	tr1118_A_2004	pdf
<b>Airborne Exploration Surveys</b>		
Aeromagnetics		
Radiometrics		
Electromagnetics		
Gravity		
Digital terrain modelling		
Other (specify)		
<b>Remote Sensing</b>		
Aerial photography		
LANDSAT		
SPOT		
MSS		
Radar		
Other (specify)		
<b>Ground Exploration Surveys</b>		
<b>Geological Mapping</b>		
Regional		
Reconnaissance		
Prospect		
Underground		
Costean		
<b>Ground geophysics</b>		
Radiometrics		
Magnetics		
Gravity		
Digital terrain modelling		
Electromagnetics		
SP/AP/EP		
IP		
AMT		
Resistivity		
Complex resistivity		
Seismic reflection		
Seismic refraction		
Well logging		
Geophysical interpretation		
Other (specify)		
<b>Geochemical Surveying</b>		
Surface Geochemistry	Tr1118geochem	WA SG2
Stream sediment		
Soil		
Rock chip		
Laterite		
Water		
Biogeochemistry		
Isotope		
Whole rock		
Mineral analysis		
Other (specify)		
<b>Drilling</b>		
Data Dictionary		
Collar		
Assay		
Survey		
Lithology		
Events		
Recovery		
Magnetic Susceptibility		
Quartz		
Water		
Translation		
Alteration		
Vein		
Structure		
Drill		

## **APPENDIX 2**

### **Airborne Magnetic, Radiometric and Digital Elevation Survey**

**Logistics Report**

for a

**DETAILED AIRBORNE  
MAGNETIC, RADIOMETRIC AND  
DIGITAL ELEVATION SURVEY**

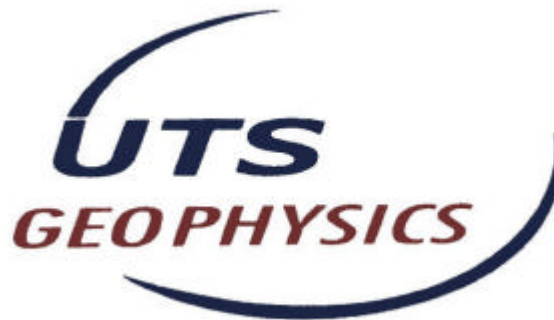
for the

**SUPPLEJACK AND BIRRINDUDU PROJECTS**

carried out on behalf of

**BARRICK GOLD OF AUSTRALIA LTD**

by



(UTS Job #A536)

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## 1 GENERAL SURVEY INFORMATION

In January and February of 2003, UTS Geophysics conducted a low level airborne geophysical survey approximately 120km north of Tanami Mine for Barrick Gold of Australia Limited.

This report summarises the logistics, survey parameters and processing details of the survey.

The survey commenced on the 22<sup>nd</sup> January 2003 and was completed on the 26<sup>th</sup> February 2003.

UTS Geophysics provided the described survey for the following company:

Barrick Gold of Australia Limited  
Level 10  
2 Mill Street  
PERTH, WA 6000

## 2 SURVEY LOCATION

The area surveyed was approximately 120km north of Tanami Mine in the Northern Territory. Survey boundary coordinates are provided in Appendix C of this report.

The survey was flown using the AMG84 coordinate system (a Universal Transverse Mercator projection) derived from the Australian Geodetic Datum and was contained within zone 52 with a central meridian of 129 degrees. Details of the datum and projection system are provided in Appendix B of this report.

### 3 AIRCRAFT AND SURVEY EQUIPMENT

The UTS navigation flight control computer, data acquisition system and geophysical sensors were installed into a specialised geophysical survey aircraft.

The list of geophysical and navigation equipment used for the survey is as follows:

#### **General Survey Equipment**

- FU24-954 fixed wing survey aircraft.
- UTS proprietary flight planning and survey navigation system.
- UTS proprietary high speed digital data acquisition system.
- Novatel 3951R, 12 channel precision navigation GPS.
- Satellite transmitted differential GPS correction receiver.
- UTS LCD pilot navigation display and external track guidance display.
- UTS post mission data verification and processing system.
- Bendix King KRA-405 radar altimeter.

#### **Magnetic Data Acquisition Equipment**

- UTS tail stinger magnetometer installation.
- Scintrex Cesium Vapour CS-2 total field magnetometer.
- Fluxgate three component vector magnetometer.
- RMS Aeromagnetic Automatic Digital Compensator (AADC II).
- Diurnal monitoring magnetometer (Scintrex Envimag).

#### **Radiometric Data Acquisition Equipment**

- Exploranium GR-820 gamma ray spectrometer.
- Exploranium gamma ray detectors.
- Barometric altimeter (height and pressure measurements).
- Temperature and humidity sensor.

### 3.1 **Survey Aircraft**

The aircraft used was a FU24-954 fixed wing survey aircraft owned by UTS Geophysics, registrations VH-HVP.

#### **Power Plant**

- Engine Type                      Single engine, Lycoming, IO-720
- Brake Horse Power              400 bhp
- Fuel Type                          AV-GAS

#### **Performance**

- Cruise speed                      105 Kn
- Survey speed                      100 Kn
- Stall speed                        45 Kn
- Range                                970 Km
- Endurance (no reserves)       5.6 hours
- Fuel tank capacity               490 litres



### 3.2 **Data Positioning and Flight Navigation**

Survey data positioning and flight line navigation was derived using real-time differential GPS (Global Positioning System).

Navigation was provided through a UTS designed and built electronic pilot navigation system providing computer controlled digital navigation instrumentation mounted in the cockpit as well as an externally mounted track guidance system.

GPS derived positions were used to provide both aircraft navigation and survey data location information.

The GPS systems used for the survey were:

- Aircraft GPS Model                      Novatel 3951R
- GPS satellite tracking channels        12 parallel
- Typical differentially corrected accuracy    2-3 metres (horizontal)  
5-7 metres (vertical)
- Real-time differential service              RACAL Landstar

### 3.3 *UTS Data Acquisition System and Digital Recording*

All geophysical sensor data and positional information measured during the survey was recorded using a UTS developed, high speed, precision data acquisition system. Survey data was downloaded onto magnetic tape on completion of each survey flight.

Instrument synchronisation times were measured and removed in real-time by the UTS data acquisition system.

### 3.4 *Altitude Readings*

Accurate survey heights above the terrain were measured using a King radar altimeter installed in the aircraft. The height of each survey data point was measured by the radar altimeter and stored by the UTS data acquisition system.

- Radar altimeter model                      King KRA-405, twin antenna altimeter
- Accuracy                                        0.3 metres
- Resolution                                      0.1 metres
- Range    0 - 500 metres
- Sample rate                                    0.1 Seconds (10Hz)

The digital terrain model is calculated by subtracting the terrain clearance (radar altimeter) from the GPS height, and as such the accuracy is constrained by the differentially corrected GPS position.

### 3.5 *UTS Stinger Mounted Magnetometer System*

The installation platform used for the acquisition of magnetic data was a tail mounted stinger. This proprietary stinger system was constructed of carbon fibre and designed for maximum rigidity and stability.

Both the total field magnetometer and three component vector magnetometer were located within the tail stinger.



### 3.6 *Total Field Magnetometer*

Total field magnetic data readings for the survey were made using a Scintrex Cesium Vapour CS-2 Magnetometer. This precision sensor has the following specifications:



- Model Scintrex Cesium Vapour CS-2 Magnetometer
- Sample Rate 0.1 seconds (10Hz)
- Resolution 0.001nT
- Operating Range 15,000nT to 100,000nT
- Temperature Range -20°C to +50°C

### 3.7 *Aircraft Magnetic Compensation*

At the start of the survey, the system was calibrated for reduction of magnetic heading error. The heading and manoeuvre effects of the aircraft on the magnetic data was removed using an RMS Automatic Airborne Digital Compensator (AADC II).

Calibration of the aircraft heading effects were measured by flying a series of pitch, roll and yaw manoeuvres at high altitude while monitoring changes in the three axis magnetometer and the effect on total field readings. A 26 term model of the aircraft magnetic noise covering permanent, induced and eddy current fields was determined. These coefficients were then applied to the data collected during the survey in real-time.

UTS static compensation techniques were also employed to reduce the initial magnetic effects of the aircraft upon the survey data.

### 3.8 *Diurnal Monitoring Magnetometer*

A base station magnetometer was located in a low gradient area beyond the region of influence by any man made interference to monitor diurnal variations during the survey.

The specifications for the magnetometer used are as follows:

- Model                    Scintrex Envimag
- Resolution             0.1 nT
- Sample interval       5 seconds (0.2Hz)
- Operating range       20,000nT to 90,000nT
- Temperature           -20°C to +50°C



### 3.9 *Barometric Altitude*

An Air DB barometric altimeter was installed in the aircraft so as to record and monitor barometric height and pressure. The data was recorded at 0.10 second intervals and is used for the reduction of the radiometric data.

- Model                                    Air DB barometric altimeter
- Accuracy                                2 metres
- Height resolution                      0.1 metres
- Height range                            0 - 3500 metres
- Maximum operating pressure:       1,300 mb
- Pressure resolution:                  0.01 mb
- Sample rate                              10 Hz

### 3.10 *Temperature and Humidity*

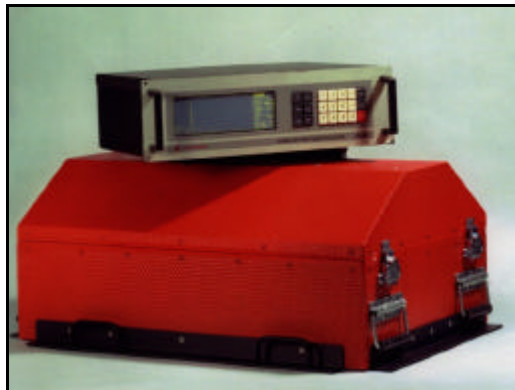
Temperature and humidity measurements were made during the survey at a sample rate of 10Hz. Ambient temperature was measured with a resolution of 0.1 degree Celsius and ambient humidity to a resolution of 0.1 percent.

### 3.11 *Radiometric Data Acquisition*

The gamma ray spectrometer used for the survey was capable of recording 256 channels and was self stabilising in order to minimise spectral drift. The detectors used contain thallium activated sodium iodide crystals.

Thorium, cesium and uranium source measurements were made each survey day to monitor system resolution and sensitivity. A calibration line was also flown at the start and end of each survey day to monitor ground moisture levels and system performance.

- Spectrometer model                      Exploranium GR820
- Detector volume                          32 litres
- Sample rate                                1 Hz



## 4 PERSONNEL

### 4.1 *Field Operations*

UTS Geophysics operator and data processor	Jody Cutler
UTS Geophysics Survey Pilots	Mike Smith Peter Williams

### 4.2 Project Management

Barrick Gold of Australia Limited	Barry Bourne
UTS Geophysics Perth Office	Nino Tuffili



## 5 SURVEY PARAMETERS

The survey data acquisition specifications for each area flown are specified in the following table:

<b>PROJECT NAME</b>	<b>LINE SPACING</b>	<b>LINE DIRECTION</b>	<b>TIE LINE SPACING</b>	<b>TIE LINE DIRECTION</b>	<b>SENSOR HEIGHT</b>	<b>TOTAL LINE KM</b>
Area 01	75m	090-270	750	000-180	20m	10,948
Area 02	75m	090-270	750	000-180	20m	12,301
<b>TOTAL</b>						<b>23,249</b>

The total number of line kilometres of survey data collected over the survey areas specified in the above table was 23,249.

The specified sensor height for the magnetic samples is as stated in the above table. This sensor height may be varied where topographic relief or laws pertaining to built up areas do not allow this altitude to be maintained, or where the safety of the aircraft and equipment is endangered.

The coordinate boundaries for the survey areas flown are detailed in Appendix C.

## 6 SURVEY LOGISTICS

The base location used for operating the aircraft and performing in-field quality control and data processing of the survey data was Tanami Mine in the Northern Territory. The aircraft was operated from the Tanami Mine aerodrome.

### 6.1 Survey Flight Summary

The following table summarises the flight logs for the survey area flown:

Flight Date	Area No	Flight No	Area Name / Survey Details	Lines Flown	Line Km Flown
24/01/03	01	01	Area 1 Traverse Lines: 100010 – 100420	42	585
26/01/03	01	02	Area 1 Traverse Lines: 100430 – 100790	37	625
	01	03	Area 1 Traverse Lines: 100800 – 100960	17	603
27/01/03	01	04	Area 1 Traverse Lines: 100970 – 101020	6	214
	01	05	Area 1 Traverse Lines: 101030 – 101110	9	319
28/01/03	01	06	Area 1 Traverse Lines: 101120 – 101300	19	675
	01	07	Area 1 Traverse Lines: 101310 – 101350	5	178
	01	T1	Area 1 Tie Lines: 190150, Area 1 Tie Lines: 190200 – 190340	16	376
29/01/03	01	08	Area 1 Traverse Lines: 101360 – 101540	19	673
	01	09	Area 1 Traverse Lines: 101550 – 101670, Area 1 Traverse Lines: 102200 – 102250	19	629
30/01/03	01	10			
01/02/03	01	11	Area 1 Traverse Lines: 101870 – 102040	18	577
	01	12	Area 1 Traverse Lines: 102050 – 102190, Area 1 Traverse Lines: 102260 – 102300	20	611
02/02/03	01	13	Area 1 Traverse Lines: 102310 – 102520	22	631
	01	14	Area 1 Traverse Lines: 102530 – 102750	23	622
03/02/03	01	15	Area 1 Traverse Lines: 102760 – 102980	23	584
06/02/03	01	16	Area 1 Traverse Lines: 102990 – 103260	28	639
	01	17	Area 1 Traverse Lines: 103270 – 103600	34	591
07/02/03	01	18	Area 1 Traverse Lines: 103610 – 103830	22	282
	01	T2	Area 1 Tie Lines: 190340 – 190470	14	234
	01	19	Area 1 Traverse Lines: 103840 – 104390	56	286
	01	T3	Area 1 Tie Lines: 190080 – 190140, Area 1 Tie Lines: 190160 – 190190	11	266
08/02/03	02	01	Area 1 Traverse Lines: 103390 – 103820	43	521
	02	02	Area 1 Traverse Lines: 103120 – 103380	27	536
09/02/03	02	03	Area 1 Traverse Lines: 102950 – 103110	17	598
	02	04	Area 1 Traverse Lines: 102800 – 102940	15	580
10/02/03	02	05	Area 1 Traverse Lines: 102640 – 102790	16	619
	02	06	Area 1 Traverse Lines: 102480 – 102630	16	619

11/02/03	02	07	Area 1 Traverse Lines: 102320 – 102470	16	619
	02	08			
12/02/03	02	09	Area 1 Traverse Lines: 102010 – 102160	16	619
13/02/03	01	20	Area 1 Traverse Lines: 101770 – 101860	10	330
	01	T4	Area 1 Tie Lines: 190010 – 190070	7	135
	02	10	Area 1 Traverse Lines: 101870 – 102000	14	541
15/02/03	02	T1	Area 1 Tie Lines: 190300 – 190520	23	524
17/02/03	02	11	Area 1 Traverse Lines: 101720 – 101860	15	580
	02	12	Area 1 Traverse Lines: 101580 – 101710	14	541
	02	T2	Area 1 Tie Lines: 190010 – 190060	6	78
22/02/03	02	13	Area 1 Traverse Lines: 101440 – 101570	14	541
	02	T3	Area 1 Tie Lines: 190070 – 190100	4	52
	02	14	Area 1 Traverse Lines: 101270 – 101430	17	607
23/02/03	02	15	Area 1 Traverse Lines: 101070 – 101260	20	628
	02	16	Area 1 Traverse Lines: 100870 – 101060	20	628
25/02/03	02	17	Area 1 Traverse Lines: 100660 – 100860	21	660
	02	18	Area 1 Traverse Lines: 100380 – 100650	28	582
26/02/03	02	19	Area 1 Traverse Lines: 100060 – 100370	32	523
	02	20	Area 1 Traverse Lines: 100010 – 100050	5	71
	02	T4	Area 1 Tie Lines: 190110 – 190290	19	454
<b>TOTAL</b>					

A complete survey kilometre report is contained in Appendix G of this report.

## 6.2 *Diurnal Magnetometer Locations*

The following table contains the approximate locations where the diurnal base station magnetometer was located for each survey area.

Area Name	Period	Base Station ID	Location
Area 1: Supplejack	22/01/03-13/02/03	41	900m east of Tanami aerodrome
Area 2: Birrindudu	08/02/03-26/02/03	41	900m east of Tanami aerodrome

## 6.3 *Spectrometer Calibration Results*

Appendix E of this report contains the results of the daily spectrometer resolution and sensitivity tests performed during the survey.

## 7 DATA PROCESSING PROCEDURES

### 7.1 *Magnetic Data Processing*

The raw magnetic survey data was loaded from the field tapes and the recorded data trimmed to the correct survey boundary extents. Lines subsequently reflight were removed from the data. System parallax was removed from the raw data using corrections measured by the acquisition system.

The diurnal base station data was loaded, checked and suitably filtered for correction of the aircraft magnetic data. The filtered diurnal measurements were subtracted from the diurnal base field and the residual corrections applied to the survey data by synchronising the diurnal data time and the aircraft survey time.

The regional magnetic gradient was subtracted from the survey data by application of the IGRF model extrapolated to the date of the survey and interpolated on the survey position.

The data was then corrected to remove any residual parallax errors. Tie line levelling was applied to the parallax corrected data by measuring tie line crossover points with the survey traverse line data.

Final microlevelling techniques were then applied to the tie line leveled data to remove minor residual variations in profile intensities.

Located and gridded data were generated from the final processed magnetic data.

### 7.2 *Radiometric Data Processing*

The raw radiometric survey data was loaded from the field tapes and the recorded data trimmed to the correct survey boundary extents. Lines subsequently reflight were removed from the data. System parallax was removed from the raw data using corrections measured by the acquisition system.

Statistical noise reduction of the 256 channel data was performed using the Noise Adjusted Singular Variable Decomposition (NASVD) method described by Hovgaard and Grasty (1997).

A noise-adjusted singular value decomposition is performed, and the number of components to be used is determined by inspection of plots of the spectral components and by a statistical analysis of the contributions of the components.

If the spectral shapes show any unusual characteristics, further analysis of the concentrations of the spectral components in the line data is performed in order to identify

and eliminate any corrupt spectra. If such spectra were eliminated, the NASVD process is re-performed, in order to obtain spectral components free of any bias from corrupt spectra. Only the dominant spectral shapes (identified as described above) were used in the spectral reconstruction process.

The 256 channel data was then windowed to the 5 primary channels of total count, potassium, uranium, thorium and low-energy uranium. Dead time corrections were then applied to the data.

Cosmic and aircraft background corrections were applied. Radon background removal was performed using the Minty Spectral Ratio method (1992). Spectral stripping was then applied to the windowed data.

The radar altimeter data was corrected to standard temperature and pressure. Height corrections based on the STP radar altimeter were then performed to remove any altitude variation effects from the data. The corrected count rate data was then converted to ground concentrations for potassium, uranium and thorium. Final microlevelling of the total count, potassium, uranium and thorium data was then applied to remove minor residual variations in profile intensities.

**For further information concerning the survey flown, please contact the following office:**

**Head Office Address:**

UTS Geophysics  
Fauntleroy Avenue, Perth Airport  
REDCLIFFE WA 6104

Tel: +61 8 9479 4232  
Fax: +61 8 9479 7361

**Postal Address:**

UTS Geophysics  
P.O. Box 126  
BELMONT WA 6984

**Quoting reference number: A536**

## APPENDIX A - LOCATED DATA FORMATS

### MAGNETIC LOCATED DATA

FIELD	FORMAT	DESCRIPTION	UNITS
1	I6	LINE NUMBER	
2	I5	FLIGHT/AREA NUMBER	AAFF (Area/Flight)
3	I8	DATE	YYMMDD
4	F11.1	TIME	sec
5	I8	FIDUCIAL NUMBER	
6	I3	UTM/AMG ZONE	
7	F10.2	EASTING (AMG84)	metres
8	F11.2	NORTHING (AMG84)	metres
9	F13.7	LATITUDE (WGS84)	degrees
10	F13.7	LONGITUDE (WGS84)	degrees
11	F10.2	EASTING (MGA94)	metres
12	F11.2	NORTHING (MGA94)	metres
13	F7.1	RADAR ALTIMETER HEIGHT	metres
14	F7.1	GPS HEIGHT (WGS84)	metres
15	F7.1	TERRAIN HEIGHT (WGS84)	metres
16	F10.2	RAW MAGNETIC INTENSITY	nT
17	F10.2	DIURNAL CORRECTION	nT
18	F10.2	LEVELLED MAGNETIC INTENSITY	nT
19	F10.2	IGRF CORRECTION	nT
20	F10.2	LEVELLED, IGRF CORRECTED	nT

### DIGITAL TERRAIN MODEL LOCATED DATA

FIELD	FORMAT	DESCRIPTION	UNITS
1	I6	LINE NUMBER	
2	I8	FIDUCIAL NUMBER	
3	I3	UTM/AMG ZONE	
4	F10.2	EASTING (AMG84)	metres
5	F11.2	NORTHING (AMG84)	metres
6	F13.7	LATITUDE (WGS84)	degrees
7	F13.7	LONGITUDE (WGS84)	degrees
8	F10.2	EASTING (MGA94)	metres
9	F11.2	NORTHING (MGA94)	metres
10	F7.1	RADAR ALTIMETER HEIGHT	metres
11	F7.1	GPS HEIGHT (WGS84)	metres
12	F7.1	TERRAIN HEIGHT (WGS84)	metres

**RADIOMETRIC LOCATED DATA**

FIELD	FORMAT	DESCRIPTION	UNITS
1	I6	LINE NUMBER	
2	I5	FLIGHT/AREA NUMBER	AAFF (Area/Flight)
3	I8	DATE	YYMMDD
4	F11.1	TIME	sec
5	I8	FIDUCIAL NUMBER	
6	I3	UTM/AMG ZONE	
7	F10.2	EASTING (AMG84)	metres
8	F11.2	NORTHING (AMG84)	metres
9	F13.7	LATITUDE (WGS84)	degrees
10	F13.7	LONGITUDE (WGS84)	degrees
11	F10.2	EASTING (MGA94)	metres
12	F11.2	NORTHING (MGA94)	metres
13	F7.1	RADAR ALTIMETER HEIGHT	metres
14	F7.1	GPS HEIGHT (WGS84)	metres
15	I5	LIVE TIME	milli sec
16	F7.1	PRESSURE	hPa
17	F5.1	TEMPERATURE	Degrees Celcius
18	F8.1	TOTAL COUNT (RAW)	Counts/sec
19	F7.1	POTASSIUM (RAW)	Counts/sec
20	F7.1	URANIUM (RAW)	Counts/sec
21	F7.1	THORIUM (RAW)	Counts/sec
22	F7.1	COSMIC (RAW)	Counts/sec
23	F7.1	URANIUM LOW (RAW)	Counts/sec
24	F7.1	URANIUM UP (RAW)	Counts/sec
25	F8.1	TOTAL COUNT (CORRECTED)	Counts/sec
26	F7.1	POTASSIUM (CORRECTED)	Counts/sec
27	F7.1	URANIUM (CORRECTED)	Counts/sec
28	F7.1	THORIUM (CORRECTED)	Counts/sec
29	F7.3	POTASSIUM GRND CONCENTRATION	%
30	F7.3	URANIUM GRND CONCENTRATION	ppm
31	F7.3	THORIUM GRND CONCENTRATION	ppm

**GRIDDED DATASET FORMATS**

Gridding was performed using a bicubic spline algorithm.

The following grid formats have been provided:

- ER-Mapper format



## LINE NUMBER FORMATS

Line numbers are identified with a six digit composite line number and have the following format - ALLLLB, where:

A	Survey area number
LLLL	Survey line number 0001-8999 reserved for traverse lines 9001-9999 reserved for tie lines
B	Line attempt number, 0 is attempt 1, 1 is attempt 2 etc..

## UTS FILE NAMING FORMATS

Located and gridded data provided by UTS Geophysics uses the following 8 character file naming convention to be compatible with PC DOS based systems.

File names have the following general format - JJJAABB.EEE, where:

JJJJ	UTS Job number
AA	Area number if the survey is broken into blocks
BB	M     Magnetic data R     Radiometric data TC    Total count data K     Potassium counts U     Uranium counts Th    Thorium counts KC    Potassium concentration UC    Uranium concentration ThC   Thorium concentration DT    Digital terrain data
EEE	File name extension LDT   Located digital data file FMT   Located data format definition file ERS   Ermapper gridded data header file Ermapper data portion has no extension GRD   Geosoft gridded data file

## APPENDIX B - COORDINATE SYSTEM DETAILS

Locations for the survey data are provided in both geographical latitude and longitude and Universal Transverse Mercator metric projection coordinate systems.

<b>WGS84</b>	World Geodetic System 1984
Coordinate Type	Geographical
Semi Major Axis	6378137m
Flattening	1/298.257223563
<b>AMG84</b>	Australian Map Grid 1984
Coordinate Type	Universal Transverse Mercator Projection Grid
Geodetic datum	Australian Geodetic Datum
Semi Major Axis	6378160m
Flattening	1/298.25
<b>MGA94</b>	Map Grid of Australia 1994
Coordinate type	Universal Transverse Mercator Projection Grid
Geodetic datum	Geodetic Datum of Australia
Semi major axis	6378137m
Flattening	1/298.257222101

## APPENDIX C - SURVEY BOUNDARY DETAILS

Job ID code: A35601

Client: Barrick Gold of Australia Ltd.

Job: Supplejack

Coordinate System AMG84, Grid Zone: 52

541977.000	7891003.000
542048.000	7879951.000
555961.000	7880022.000
556010.000	7885500.000
577490.000	7885541.000
577531.000	7903011.000
563275.000	7912936.000
541977.000	7891003.000

Job ID code: A35602

Client: Barrick Gold of Australia Ltd.

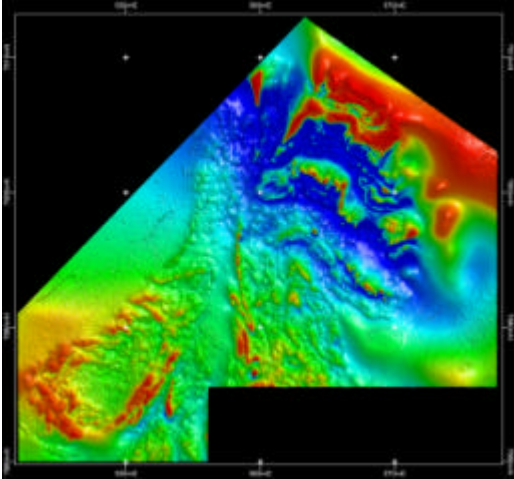
Job: Birrindudu

Coordinate System AMG84, Grid Zone: 52

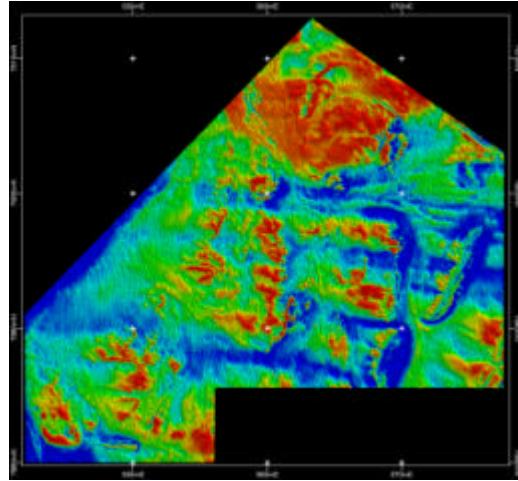
566707.000	7943134.000
566594.000	7919185.000
577032.000	7919117.000
584029.000	7914466.000
597984.000	7914487.000
598026.000	7924511.000
605298.000	7924469.000
605340.000	7937436.000
592015.000	7937520.000
592015.000	7938991.000
578535.000	7938990.000
578535.000	7943139.000
566707.000	7943134.000

## APPENDIX D - PROJECT DATA OVERVIEW

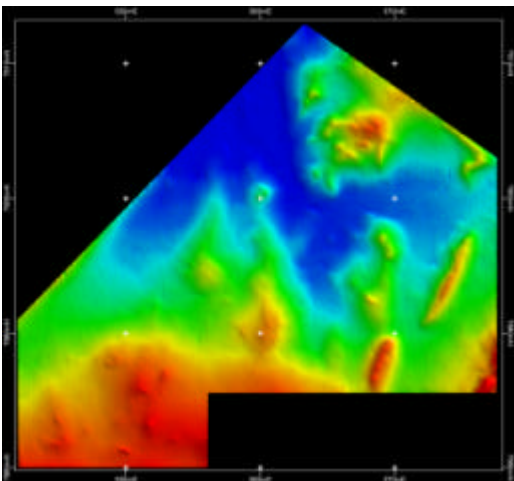
### Supplejack



Total Magnetic Intensity

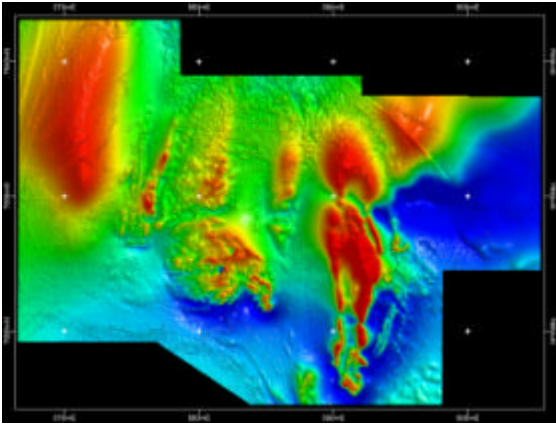


Radiometric Total Count

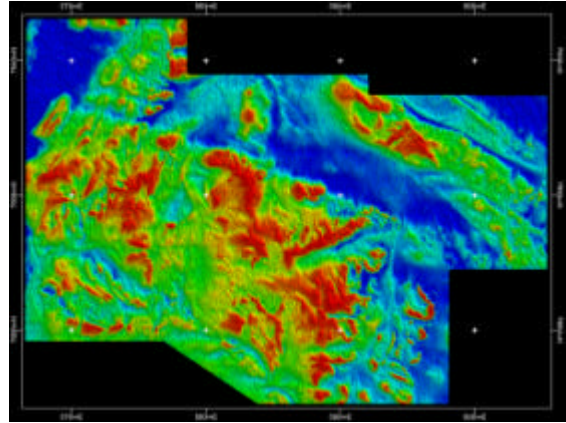


Digital Terrain Model

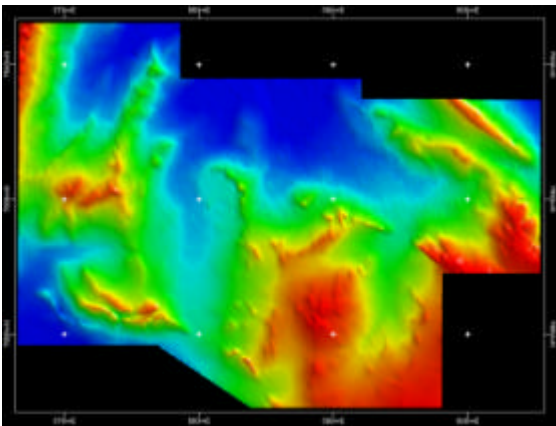
### Birindudu



Total Magnetic Intensity



Radiometric Total Count

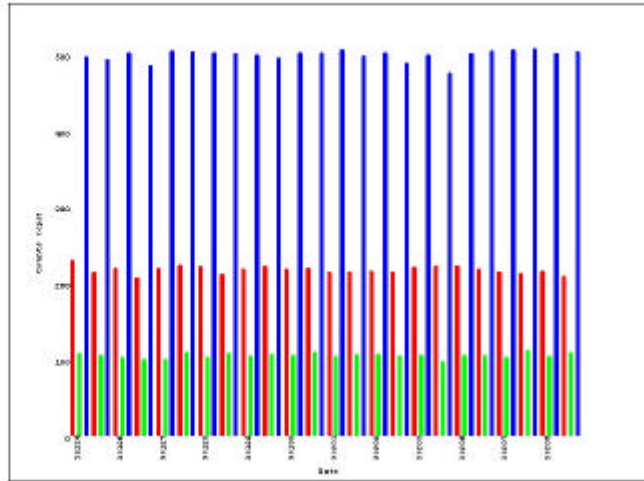


Digital Terrain Model

# APPENDIX E – RADIOMETRIC CALIBRATION RESULTS

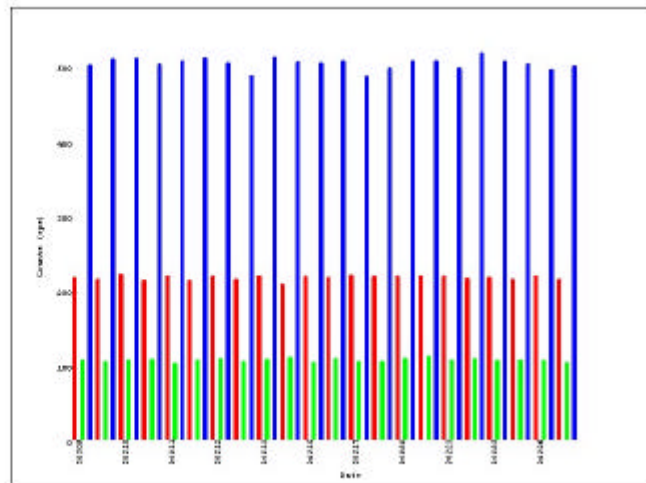
Date	K	U	Th	% Error
10124	214.7	103.2	491.3	1.1
10124	209.9	100.6	488.9	-1.4
10124	215.0	97.2	497.8	-0.2
10124	202.9	95.7	480.6	-2.9
10127	215.5	94.8	499.2	-0.2
10127	219.4	103.7	488.9	1.4
10128	217.3	97.3	498.0	0.3
10128	207.3	103.6	496.9	-0.3
10129	214.5	99.9	494.0	-0.3
10129	217.4	102.1	490.9	-0.1
10130	214.4	101.1	497.4	0.3
10130	215.2	104.5	488.0	0.8
10201	209.4	98.0	500.7	-0.3
10201	210.5	101.9	492.9	-0.7
10202	211.2	101.9	497.9	0.0
10202	211.0	90.2	484.2	-2.0
10203	216.6	101.2	494.1	0.1
10203	216.9	93.0	470.8	-3.7
10204	216.0	101.3	498.3	0.6
10204	214.1	100.4	499.4	0.4
10207	210.2	97.2	501.2	-0.2
10207	208.6	106.6	501.9	0.8
10208	211.7	98.6	494.4	-0.5
10208	203.4	103.7	498.2	-0.4

Thorium Source Test (Ground)



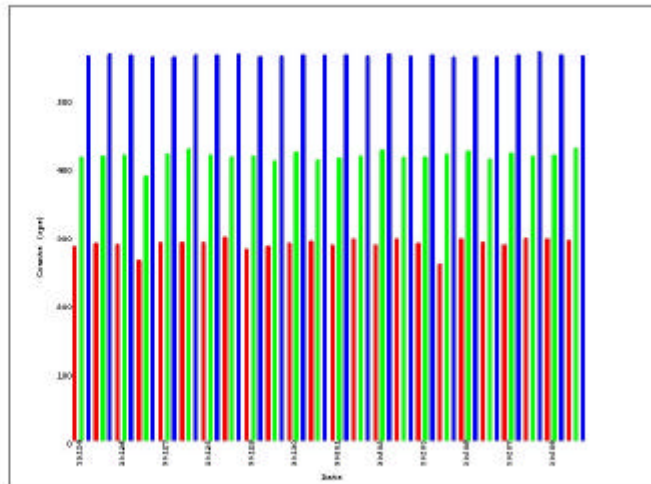
Date	K	U	Th	% Error
10209	211.6	102.5	497.1	0.2
10209	210.8	99.4	503.0	0.3
10210	217.2	101.5	506.9	1.8
10210	209.4	102.6	499.2	-0.1
10211	214.9	97.5	502.4	0.5
10211	209.9	102.1	506.4	1.0
10212	213.9	103.8	499.9	0.5
10212	211.0	99.4	482.9	-2.1
10213	214.9	103.4	509.0	1.8
10213	202.9	102.8	501.6	0.1
10215	214.0	99.7	500.4	0.3
10215	212.4	104.4	501.2	1.1
10217	213.9	99.8	481.8	-1.6
10217	214.5	99.3	499.8	-0.4
10222	214.4	104.0	502.2	1.2
10222	214.8	106.8	502.4	1.6
10223	214.3	101.8	493.1	-0.2
10223	211.7	104.3	513.0	2.2
10223	212.8	101.2	502.1	0.7
10225	210.9	101.8	497.9	-0.0
10226	215.0	100.4	491.1	-0.3
10226	211.2	98.8	496.1	-0.6
Avg	213.8	101.0	496.7	0.0

Thorium Source Test (Ground)



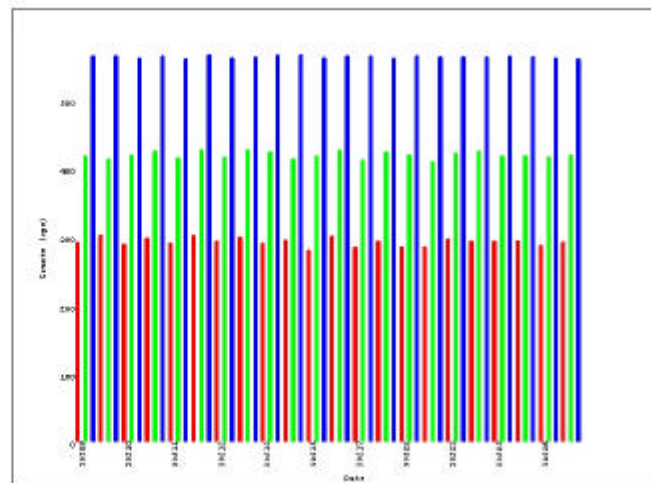
Date	K	U	Th	% Error
10214	279.3	410.1	338.1	-0.9
10214	284.6	411.0	340.7	-0.2
10214	283.7	412.8	340.1	-0.1
10214	259.9	382.9	354.7	-4.8
10217	285.3	414.4	354.1	-0.2
10217	285.4	421.0	339.6	0.8
10218	286.1	412.5	340.2	0.0
10218	292.8	410.2	341.0	0.4
10219	275.7	411.7	357.0	-1.1
10219	279.4	402.5	350.5	-1.4
10219	284.4	417.6	359.5	0.2
10219	297.0	405.5	359.6	-0.5
10201	280.0	409.3	339.9	-0.8
10201	290.4	411.6	358.1	0.1
10202	282.3	420.0	341.1	0.4
10202	290.0	400.6	358.5	-0.0
10203	284.0	400.8	340.2	-0.4
10203	232.4	414.0	338.0	-2.9
10204	290.1	418.5	357.9	0.6
10204	286.0	407.3	357.3	-0.4
10207	281.6	416.6	359.8	-0.0
10207	281.8	411.4	342.4	0.7
10209	290.8	413.1	340.3	0.3
10209	284.5	413.2	358.9	1.0

Uranium Source Test (Ground)



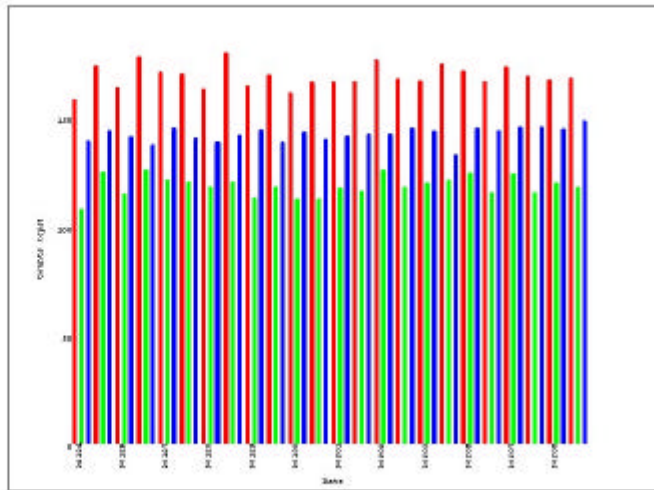
Date	K	U	Th	% Error
10209	287.4	412.8	340.8	0.2
10209	297.6	409.3	341.0	0.7
10210	285.1	416.2	338.2	0.1
10210	293.4	400.7	340.8	1.9
10211	296.4	410.8	354.1	-0.2
10211	297.4	423.2	342.4	2.0
10212	288.1	412.3	339.2	0.1
10212	294.3	423.2	340.5	1.6
10213	286.2	419.0	342.6	0.7
10213	291.4	409.8	342.4	0.3
10215	276.6	415.0	358.5	-0.7
10215	296.4	423.8	341.5	1.7
10217	290.6	408.4	341.4	-0.6
10217	288.6	418.8	338.2	0.6
10222	281.7	415.5	340.9	-0.0
10222	280.7	405.8	340.0	-0.8
10223	292.3	418.2	359.7	0.9
10223	289.1	421.3	359.6	0.9
10223	288.7	412.9	340.9	0.3
10225	289.9	414.0	340.0	0.4
10224	284.1	411.6	358.3	-0.4
10224	287.9	415.1	357.2	0.1
<b>Avg</b>	<b>285.4</b>	<b>413.3</b>	<b>359.6</b>	<b>0.0</b>

Uranium Source Test (Ground)



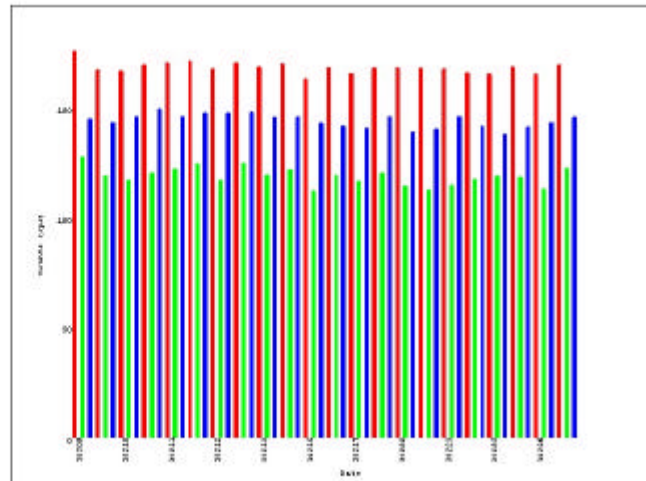
Background Source Test: (Round)

Date	K	U	W	% Error
10124	357.1	106.8	137.6	-5.8
10124	372.4	123.2	142.4	2.9
10124	362.5	119.4	139.6	-2.5
10124	374.9	124.3	135.9	2.3
10127	369.4	119.8	143.8	1.4
10127	369.0	119.1	139.2	0.2
10128	361.9	116.9	137.4	-2.4
10128	378.4	119.0	140.4	2.7
10129	363.2	113.9	143.1	-1.9
10129	368.2	116.9	137.5	-0.9
10190	369.2	111.3	141.7	-3.2
10120	364.9	112.2	138.8	-2.7
10201	363.0	116.3	140.0	-1.1
10201	365.4	115.2	140.9	-1.1
10202	373.2	124.4	141.2	1.4
10202	364.9	116.9	143.0	0.2
10203	365.7	119.7	143.2	0.0
10203	373.2	119.9	131.6	-0.4
10204	370.1	123.3	144.0	2.4
10204	365.1	114.3	142.5	-1.1
10207	372.2	123.2	144.2	3.1
10207	367.4	114.3	144.3	-0.0
10208	364.2	118.9	141.4	0.3
10208	364.6	116.9	147.1	1.0



Background Source Test: (Round)

Date	K	U	W	% Error
10209	374.3	126.4	145.6	4.2
10209	363.4	117.3	142.0	-0.3
10210	365.4	115.7	144.8	-0.1
10210	367.9	119.5	140.1	1.8
10211	368.8	120.7	144.8	1.0
10211	369.9	122.2	144.2	3.8
10212	368.1	115.3	143.3	0.4
10212	368.9	123.4	144.6	3.0
10213	367.4	118.0	144.3	0.8
10213	368.4	120.1	144.2	1.5
10215	361.9	110.5	141.5	-2.0
10215	364.8	118.0	140.5	-0.2
10217	364.1	113.0	139.8	-1.7
10217	364.4	118.5	144.8	0.8
10222	364.4	112.7	137.9	-2.2
10222	364.5	110.8	138.9	-2.4
10223	364.3	113.2	144.9	-0.5
10223	364.4	115.8	140.4	-1.3
10223	363.7	117.1	138.9	-2.0
10225	367.1	116.6	140.2	-0.6
10224	363.7	111.4	141.9	-2.2
10224	368.2	120.8	144.3	1.7
Avg	367.2	117.3	141.9	0.0





## APPENDIX F – DATA PROCESSING PARAMETERS

### Magnetic Data

#### Supplejack

Model : IGRF 2003.12  
 Declination : 3.80 degrees  
 Inclination : -50.02 degrees  
 Field strength : 50764.64 nT  
 Average diurnal : 51196.32 nT

#### Birindudu

Model : IGRF 2003.14  
 Declination : 3.83 degrees  
 Inclination : -49.58 degrees  
 Field strength : 50554.65 nT  
 Average diurnal : 51197.46 nT

### Radiometric Data

#### Stripping Ratios

$\alpha$  0.231  
 $\beta$  0.400  
 $\gamma$  0.748  
 a 0.028  
 b 0.0035  
 c 0.000

#### Height Attenuation Coefficients

Total Count -0.0064  
 Potassium -0.0077  
 Uranium -0.0075  
 Thorium -0.0064

**Final Reduction** - All data reduced to STP height datum 20m

#### Conversion to Concentrations

Total Count: 46.172 cps/dose rate  
 Potassium: 188.102 cps/%k  
 Uranium: 18.726 cps/ppm  
 THorium: 9.227 cps/ppm

## APPENDIX G – SURVEY KILOMETRE REPORT

LINE KM REPORT FOR a53601m.ldt

LINE	FLT	DATE	START COORDINATE	END COORDINATE	LINE KM
100020	101	030124	556044	7880026	541975 7880025 14.1
100030	101	030124	541972	7880098	556054 7880097 14.1
100040	101	030124	556051	7880181	541963 7880179 14.1
100050	101	030124	541974	7880246	556043 7880247 14.1
100060	101	030124	556052	7880312	541948 7880328 14.1
100070	101	030124	541969	7880397	556062 7880398 14.1
100080	101	030124	556051	7880496	541954 7880475 14.1
100090	101	030124	541953	7880575	556056 7880546 14.1
100100	101	030124	556060	7880624	541947 7880623 14.1
100110	101	030124	541952	7880699	556039 7880701 14.1
100120	101	030124	556052	7880772	541961 7880776 14.1
100130	101	030124	541956	7880851	556045 7880847 14.1
100140	101	030124	556055	7880918	541954 7880926 14.1
100150	101	030124	541963	7880997	556057 7881000 14.1
100160	101	030124	556057	7881072	541955 7881076 14.1
100170	101	030124	541960	7881148	556058 7881145 14.1
100180	101	030124	556064	7881215	541963 7881224 14.1
100190	101	030124	541950	7881298	556053 7881296 14.1
100200	101	030124	556050	7881359	541962 7881373 14.1
100210	101	030124	541964	7881452	556061 7881448 14.1
100220	101	030124	556046	7881524	541944 7881528 14.1
100230	101	030124	541942	7881598	556070 7881602 14.1
100240	101	030124	556073	7881676	541949 7881677 14.1
100250	101	030124	541947	7881745	556053 7881749 14.1
100260	101	030124	556062	7881828	541953 7881828 14.1
100270	101	030124	541945	7881891	556074 7881899 14.1
100280	101	030124	556055	7881964	541948 7881975 14.1
100290	101	030124	541950	7882053	556069 7882050 14.1
100300	101	030124	556058	7882121	541938 7882125 14.1
100310	101	030124	541956	7882177	556064 7882201 14.1
100320	101	030124	556058	7882257	541961 7882273 14.1
100330	101	030124	541944	7882348	556059 7882350 14.1
100340	101	030124	556072	7882425	541935 7882425 14.1
100350	101	030124	541938	7882498	556062 7882498 14.1
100360	101	030124	556057	7882571	541960 7882573 14.1
100370	101	030124	541935	7882651	556073 7882650 14.1
100380	101	030124	556064	7882684	541958 7882726 14.1
100390	101	030124	541952	7882795	556062 7882800 14.1
100400	101	030124	556073	7882850	541949 7882881 14.1
100410	101	030124	541944	7882947	556080 7882947 14.1
100420	101	030124	556064	7883021	541958 7883027 14.1
100430	102	030126	541950	7883097	556074 7883098 14.1
100440	102	030126	556085	7883180	541931 7883179 14.2
100450	102	030126	541949	7883253	556079 7883249 14.1
100460	102	030126	556069	7883335	541930 7883327 14.1
100470	102	030126	541936	7883403	556082 7883402 14.1
100480	102	030126	556082	7883475	541945 7883475 14.1
100490	104	030127	541940	7883546	556064 7883553 14.1
100500	102	030126	556076	7883625	541937 7883626 14.1
100510	102	030126	541934	7883698	556064 7883701 14.1
100520	102	030126	556092	7883773	541929 7883772 14.2
100530	104	030127	541932	7883841	556088 7883851 14.2
100540	104	030127	541933	7883923	556089 7883928 14.2
100550	102	030126	556076	7884000	541944 7884003 14.1
100560	102	030126	556088	7884087	541936 7884075 14.2
100570	102	030126	541926	7884154	556083 7884156 14.2
100580	102	030126	556075	7884227	541941 7884223 14.1

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100590	102	030126	541931	7884296	556077	7884299	14.1
100600	102	030126	556078	7884386	541938	7884377	14.1
100610	102	030126	541937	7884453	556080	7884450	14.1
100620	102	030126	556087	7884528	541933	7884524	14.2
100630	102	030126	541921	7884606	556084	7884595	14.2
100640	102	030126	556085	7884675	541941	7884677	14.1
100650	102	030126	541934	7884798	556092	7884749	14.2
100660	102	030126	556092	7884839	541943	7884826	14.2
100670	102	030126	541929	7884915	556094	7884901	14.2
100680	102	030126	556100	7884983	541921	7884975	14.2
100690	102	030126	541940	7885041	556094	7885049	14.2
100700	102	030126	556080	7885125	541923	7885125	14.2
100710	102	030126	541929	7885210	556094	7885200	14.2
100720	102	030126	556090	7885274	541922	7885277	14.2
100730	102	030126	541937	7885352	556085	7885350	14.2
100740	102	030126	556085	7885420	541940	7885424	14.2
100750	104	030127	541915	7885502	556144	7885501	14.2
100760	102	030126	541927	7885578	577568	7885574	35.7
100770	102	030126	577566	7885647	541936	7885647	35.6
100780	104	030127	541919	7885726	577562	7885727	35.7
100790	104	030127	577566	7885806	541922	7885801	35.7
100800	103	030126	541917	7885882	577568	7885872	35.7
100810	103	030126	577575	7885951	541924	7885950	35.7
100820	103	030126	541932	7886036	577587	7886023	35.7
100830	103	030126	577565	7886099	541919	7886101	35.7
100840	103	030126	541925	7886172	577573	7886175	35.7
100850	103	030126	577585	7886252	541926	7886249	35.7
100860	103	030126	541923	7886332	577577	7886326	35.7
100870	103	030126	577577	7886399	541927	7886401	35.7
100880	103	030126	541919	7886475	577582	7886476	35.7
100890	103	030126	577588	7886540	541928	7886550	35.7
100900	103	030126	541915	7886620	577584	7886627	35.7
100910	103	030126	577587	7886699	541919	7886697	35.7
100920	103	030126	541923	7886784	577575	7886774	35.7
100930	103	030126	577571	7886853	541907	7886847	35.7
100940	103	030126	541921	7886925	577579	7886924	35.7
100950	103	030126	577580	7886998	541916	7886995	35.7
100960	103	030126	541928	7887070	577573	7887075	35.7
100970	104	030127	577584	7887145	541907	7887148	35.7
100980	104	030127	577583	7887223	541912	7887229	35.7
100990	104	030127	541912	7887320	577584	7887302	35.7
101000	104	030127	577574	7887376	541916	7887372	35.7
101010	104	030127	541902	7887450	577588	7887447	35.7
101020	104	030127	577580	7887524	541913	7887528	35.7
101030	105	030127	541908	7887604	577589	7887598	35.7
101040	105	030127	577568	7887675	541912	7887674	35.7
101050	105	030127	541917	7887752	577591	7887751	35.7
101060	105	030127	577575	7887825	541928	7887821	35.7
101070	105	030127	541920	7887901	577583	7887905	35.7
101080	105	030127	577587	7887977	541928	7887976	35.7
101090	105	030127	541914	7888051	577581	7888054	35.7
101100	105	030127	577583	7888130	541907	7888127	35.7
101110	105	030127	541917	7888198	577576	7888199	35.7
101120	106	030128	577589	7888279	541907	7888276	35.7
101130	106	030128	577592	7888350	541910	7888348	35.7
101140	106	030128	541901	7888423	577590	7888425	35.7
101150	106	030128	577593	7888503	541900	7888501	35.7
101160	106	030128	541920	7888570	577592	7888577	35.7
101170	106	030128	577591	7888654	541900	7888652	35.7
101180	106	030128	541911	7888737	577580	7888726	35.7
101190	106	030128	577589	7888805	541903	7888800	35.7
101200	106	030128	541913	7888879	577571	7888873	35.7
101210	106	030128	577590	7888956	541915	7888950	35.7
101220	106	030128	541968	7889085	577576	7889029	35.6
101230	106	030128	577583	7889104	541901	7889099	35.7
101240	106	030128	541897	7889173	577575	7889176	35.7

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101250	106	030128	577583	7889257	541901	7889250	35.7
101260	106	030128	541892	7889327	577573	7889325	35.7
101270	106	030128	577587	7889406	541897	7889402	35.7
101280	106	030128	541910	7889485	577574	7889478	35.7
101290	106	030128	577595	7889595	541906	7889550	35.7
101300	106	030128	541911	7889623	577580	7889626	35.7
101310	107	030128	577573	7889714	541906	7889701	35.7
101320	107	030128	577591	7889780	541901	7889776	35.7
101330	107	030128	541908	7889861	577574	7889853	35.7
101340	107	030128	577594	7889927	541897	7889925	35.7
101350	107	030128	541898	7890008	577589	7890003	35.7
101360	108	030129	577596	7890075	541903	7890078	35.7
101370	108	030129	577584	7890152	541910	7890153	35.7
101380	108	030129	541889	7890221	577574	7890225	35.7
101390	108	030129	577584	7890304	541905	7890300	35.7
101400	108	030129	541887	7890372	577582	7890377	35.7
101410	108	030129	577597	7890451	541908	7890451	35.7
101420	108	030129	541884	7890519	577588	7890519	35.7
101430	108	030129	577579	7890604	541901	7890600	35.7
101440	108	030129	541885	7890674	577584	7890674	35.7
101450	108	030129	577577	7890746	541898	7890750	35.7
101460	108	030129	541892	7890819	577599	7890830	35.7
101470	108	030129	577596	7890904	541900	7890897	35.7
101480	108	030129	541879	7890973	577595	7890972	35.7
101490	108	030129	577585	7891047	541903	7891048	35.7
101500	108	030129	541980	7891142	577585	7891125	35.6
101510	108	030129	577591	7891198	542048	7891200	35.6
101520	108	030129	542125	7891274	577576	7891273	35.5
101530	108	030129	577598	7891348	542187	7891348	35.4
101540	108	030129	542255	7891414	577599	7891422	35.4
101550	109	030129	577593	7891501	542330	7891497	35.3
101560	109	030129	577596	7891578	542404	7891574	35.2
101570	109	030129	542486	7891646	577591	7891647	35.1
101580	109	030129	577578	7891725	542548	7891724	35.0
101590	109	030129	542629	7891797	577591	7891803	35.0
101600	109	030129	577577	7891873	542706	7891874	34.9
101610	109	030129	542768	7891947	577584	7891951	34.8
101620	109	030129	577588	7892037	542834	7892025	34.8
101630	109	030129	542915	7892098	577604	7892102	34.7
101640	109	030129	577582	7892192	542979	7892176	34.6
101650	109	030129	543077	7892253	577598	7892249	34.5
101660	109	030129	577588	7892327	543131	7892323	34.5
101670	109	030129	543210	7892410	577590	7892400	34.4
101680	110	030130	577586	7892472	543266	7892472	34.3
101690	110	030130	577592	7892553	543352	7892550	34.2
101700	110	030130	543445	7892630	577586	7892626	34.1
101710	110	030130	577602	7892698	543496	7892697	34.1
101720	110	030130	543571	7892774	577597	7892778	34.0
101730	110	030130	577605	7892851	543650	7892853	34.0
101740	110	030130	543716	7892927	577580	7892926	33.9
101750	110	030130	577589	7892999	543799	7893000	33.8
101760	110	030130	543855	7893076	577587	7893075	33.7
101770	120	030213	577594	7893154	543943	7893155	33.7
101780	120	030213	577591	7893231	544018	7893223	33.6
101790	120	030213	544099	7893306	577591	7893297	33.5
101800	120	030213	577597	7893379	544158	7893373	33.4
101810	120	030213	544235	7893454	577605	7893446	33.4
101820	120	030213	577596	7893528	544315	7893530	33.3
101830	120	030213	544384	7893600	577590	7893599	33.2
101840	120	030213	577581	7893681	544451	7893676	33.1
101850	120	030213	544523	7893757	577597	7893750	33.1
101860	120	030213	577583	7893831	544589	7893825	33.0
101870	111	030201	544655	7893895	577603	7893901	33.0
101880	111	030201	577584	7893987	544734	7893978	32.9
101890	111	030201	544802	7894046	577590	7894053	32.8
101900	111	030201	577607	7894169	544880	7894125	32.7

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101910	111	030201	544963	7894202	577591	7894203	32.6
101920	111	030201	577609	7894280	545022	7894273	32.6
101930	111	030201	545099	7894345	577587	7894346	32.5
101940	111	030201	577592	7894440	545192	7894428	32.4
101950	111	030201	545242	7894498	577606	7894500	32.4
101960	111	030201	577596	7894572	545313	7894575	32.3
101970	111	030201	545395	7894643	577606	7894652	32.2
101980	111	030201	577588	7894746	545475	7894721	32.1
101990	111	030201	545536	7894799	577590	7894802	32.1
102000	111	030201	577606	7894874	545621	7894881	32.0
102010	115	030203	545681	7894949	577606	7894953	31.9
102020	111	030201	577596	7895024	545750	7895024	31.9
102030	111	030201	545837	7895103	577607	7895100	31.8
102040	111	030201	577610	7895181	545952	7895175	31.7
102050	112	030201	545963	7895247	577591	7895249	31.6
102060	112	030201	577594	7895326	546050	7895327	31.6
102070	112	030201	546122	7895398	577589	7895404	31.5
102080	112	030201	577609	7895480	546195	7895474	31.4
102090	112	030201	546259	7895547	577589	7895550	31.3
102100	112	030201	577606	7895632	546328	7895623	31.3
102110	112	030201	546413	7895696	577587	7895701	31.2
102120	112	030201	577606	7895776	546483	7895769	31.1
102130	112	030201	546549	7895847	577592	7895851	31.1
102140	112	030201	577606	7895923	546627	7895924	31.0
102150	112	030201	546693	7895997	577586	7895997	30.9
102160	112	030201	577600	7896076	546775	7896075	30.8
102170	112	030201	546854	7896149	577601	7896151	30.8
102180	112	030201	577610	7896223	546931	7896218	30.7
102190	112	030201	547008	7896303	577601	7896301	30.6
102200	109	030129	577597	7896375	547066	7896377	30.5
102210	109	030129	577595	7896451	547150	7896450	30.5
102220	109	030129	547218	7896533	577595	7896532	30.4
102230	109	030129	577596	7896601	547282	7896608	30.3
102240	109	030129	547369	7896672	577604	7896677	30.2
102250	109	030129	577588	7896739	547434	7896750	30.2
102260	112	030201	547484	7896813	577598	7896822	30.1
102270	112	030201	547580	7896910	577599	7896902	30.0
102280	112	030201	577599	7896978	547658	7896979	30.0
102290	112	030201	547713	7897049	577605	7897047	29.9
102300	112	030201	577602	7897134	547812	7897128	29.8
102310	113	030202	547858	7897201	577592	7897198	29.7
102320	113	030202	577602	7897274	547934	7897274	29.7
102330	113	030202	548013	7897347	577593	7897351	29.6
102340	113	030202	577599	7897439	548094	7897427	29.5
102350	113	030202	548158	7897499	577603	7897500	29.5
102360	113	030202	577611	7897592	548226	7897572	29.4
102370	113	030202	548311	7897652	577602	7897645	29.3
102380	113	030202	577607	7897716	548392	7897726	29.2
102390	113	030202	577600	7897796	548460	7897802	29.1
102400	113	030202	548513	7897875	577603	7897873	29.1
102410	113	030202	577596	7897947	548598	7897952	29.0
102420	113	030202	548660	7898017	577592	7898023	28.9
102430	113	030202	577614	7898103	548754	7898103	28.9
102440	113	030202	548811	7898174	577613	7898173	28.8
102450	113	030202	577618	7898258	548905	7898248	28.7
102460	113	030202	548950	7898323	577610	7898325	28.7
102470	113	030202	577608	7898406	549045	7898399	28.6
102480	113	030202	549092	7898470	577596	7898476	28.5
102490	113	030202	577611	7898555	549192	7898548	28.4
102500	113	030202	549242	7898624	577597	7898625	28.4
102510	113	030202	577612	7898695	549325	7898700	28.3
102520	113	030202	549396	7898774	577606	7898778	28.2
102530	114	030202	577611	7898844	549472	7898849	28.1
102540	114	030202	577584	7898924	549547	7898924	28.0
102550	114	030202	549608	7899000	577603	7898997	28.0
102560	114	030202	577599	7899079	549695	7899078	27.9

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102570	114	030202	549761	7899151	577603	7899149	27.9
102580	114	030202	577602	7899225	549837	7899223	27.8
102590	114	030202	549910	7899304	577608	7899298	27.7
102600	114	030202	577602	7899384	549977	7899373	27.6
102610	114	030202	550064	7899450	577602	7899453	27.5
102620	114	030202	577616	7899522	550121	7899526	27.5
102630	114	030202	550213	7899606	577616	7899598	27.4
102640	114	030202	577602	7899676	550277	7899672	27.3
102650	114	030202	550350	7899748	577599	7899748	27.3
102660	114	030202	577615	7899827	550422	7899827	27.2
102670	114	030202	550487	7899903	577612	7899896	27.1
102680	114	030202	577607	7899971	550554	7899974	27.1
102690	114	030202	550648	7900054	577596	7900051	27.0
102700	114	030202	577612	7900107	550726	7900126	26.9
102710	114	030202	550788	7900199	577602	7900201	26.8
102720	114	030202	577599	7900288	550862	7900279	26.7
102730	114	030202	550924	7900347	577622	7900351	26.7
102740	114	030202	577621	7900431	551015	7900425	26.6
102750	114	030202	551072	7900493	577622	7900503	26.6
102760	115	030203	577599	7900576	551155	7900579	26.5
102770	115	030203	551213	7900649	577602	7900650	26.4
102780	115	030203	577602	7900729	551286	7900722	26.3
102790	115	030203	551410	7900833	577609	7900800	26.2
102800	115	030203	577611	7900869	551448	7900873	26.2
102810	115	030203	551501	7900940	577608	7900947	26.1
102820	115	030203	577614	7901028	551574	7901023	26.0
102830	115	030203	551675	7901118	577602	7901100	25.9
102840	115	030203	577600	7901175	551734	7901176	25.9
102850	115	030203	551807	7901245	577598	7901250	25.8
102860	115	030203	577609	7901324	551876	7901325	25.7
102870	115	030203	551918	7901379	577617	7901399	25.7
102880	115	030203	577624	7901474	552011	7901476	25.6
102890	115	030203	552097	7901548	577611	7901553	25.5
102900	115	030203	577622	7901645	552161	7901629	25.5
102910	115	030203	552247	7901700	577619	7901703	25.4
102920	115	030203	577616	7901788	552307	7901774	25.3
102930	116	030206	552387	7901849	577616	7901852	25.2
102940	115	030203	577617	7901924	552462	7901925	25.2
102950	115	030203	552519	7902000	577606	7902001	25.1
102960	115	030203	577613	7902079	552595	7902077	25.0
102970	115	030203	552693	7902153	577602	7902149	24.9
102980	115	030203	577600	7902214	552741	7902226	24.9
102990	116	030206	552824	7902307	577606	7902300	24.8
103000	116	030206	552885	7902373	577613	7902375	24.7
103010	116	030206	577622	7902454	552965	7902450	24.7
103020	116	030206	553046	7902524	577604	7902528	24.6
103030	116	030206	577623	7902600	553124	7902598	24.5
103040	116	030206	553172	7902672	577607	7902674	24.4
103050	116	030206	577624	7902750	553249	7902749	24.4
103060	116	030206	553333	7902825	577625	7902826	24.3
103070	116	030206	577604	7902903	553420	7902901	24.2
103080	116	030206	553489	7902975	577609	7902978	24.1
103090	116	030206	577605	7903051	553554	7903051	24.1
103100	116	030206	553614	7903120	577526	7903122	23.9
103110	116	030206	577423	7903201	553687	7903198	23.7
103120	116	030206	553770	7903273	577322	7903273	23.6
103130	116	030206	577206	7903347	553844	7903353	23.4
103140	116	030206	553910	7903427	577098	7903423	23.2
103150	116	030206	576984	7903505	553987	7903499	23.0
103160	116	030206	554057	7903578	576886	7903577	22.8
103170	116	030206	576779	7903650	554130	7903651	22.7
103180	116	030206	554214	7903727	576673	7903721	22.5
103190	116	030206	576566	7903802	554265	7903794	22.3
103200	116	030206	554355	7903875	576464	7903871	22.1
103210	116	030206	576352	7903942	554423	7903952	21.9
103220	116	030206	554490	7904023	576247	7904022	21.8

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103230	116	030206	576126	7904103	554564	7904097	21.6
103240	116	030206	554649	7904171	576035	7904169	21.4
103250	116	030206	575917	7904254	554725	7904253	21.2
103260	116	030206	554795	7904321	575809	7904320	21.0
103270	117	030206	575705	7904402	554859	7904395	20.9
103280	117	030206	575576	7904474	554937	7904475	20.6
103290	117	030206	555002	7904551	575495	7904548	20.5
103300	117	030206	575380	7904621	555088	7904624	20.3
103310	117	030206	555166	7904705	575215	7904700	20.1
103320	117	030206	575158	7904773	555280	7904771	19.9
103330	117	030206	555303	7904852	574955	7904851	19.7
103340	117	030206	574952	7904922	555421	7904924	19.5
103350	117	030206	555455	7905002	574770	7904999	19.3
103360	117	030206	574712	7905078	555530	7905074	19.2
103370	117	030206	555595	7905163	574565	7905153	19.0
103380	117	030206	574512	7905224	555671	7905225	18.8
103390	117	030206	555736	7905299	574335	7905300	18.6
103400	117	030206	574307	7905371	555816	7905372	18.5
103410	117	030206	555884	7905452	574100	7905449	18.2
103420	117	030206	574074	7905527	555967	7905525	18.1
103430	117	030206	556015	7905591	573902	7905600	17.9
103440	117	030206	573868	7905679	556149	7905676	17.7
103450	117	030206	556173	7905749	573677	7905750	17.5
103460	117	030206	573640	7905831	556255	7905826	17.4
103470	117	030206	556301	7905894	573480	7905903	17.2
103480	117	030206	573437	7905971	556430	7905971	17.0
103490	117	030206	556464	7906048	573253	7906047	16.8
103500	117	030206	573225	7906118	556584	7906124	16.6
103510	117	030206	556597	7906197	573050	7906196	16.5
103520	117	030206	573003	7906279	556690	7906276	16.3
103530	117	030206	556754	7906353	572892	7906351	16.1
103540	117	030206	572787	7906424	556868	7906423	15.9
103550	117	030206	556905	7906511	572594	7906498	15.7
103560	117	030206	572575	7906581	556977	7906574	15.6
103570	117	030206	557050	7906653	572389	7906649	15.3
103580	117	030206	572364	7906723	557184	7906727	15.2
103590	117	030206	557199	7906795	572159	7906800	15.0
103600	117	030206	572145	7906872	557281	7906877	14.9
103610	118	030207	557330	7906942	571924	7906950	14.6
103620	118	030207	571936	7907025	557413	7907033	14.5
103630	118	030207	557472	7907099	571827	7907099	14.4
103640	118	030207	571678	7907181	557555	7907176	14.1
103650	118	030207	557631	7907246	571566	7907251	13.9
103660	118	030207	571484	7907329	557704	7907324	13.8
103670	118	030207	557756	7907389	571378	7907398	13.6
103680	118	030207	571266	7907479	557858	7907476	13.4
103690	118	030207	557916	7907554	571177	7907550	13.3
103700	118	030207	571071	7907628	558002	7907625	13.1
103710	118	030207	558052	7907695	570962	7907702	12.9
103720	118	030207	570862	7907771	558136	7907774	12.7
103730	118	030207	558209	7907854	570734	7907850	12.5
103740	118	030207	570629	7907923	558301	7907926	12.3
103750	118	030207	558343	7907996	570525	7908001	12.2
103760	118	030207	570402	7908091	558426	7908077	12.0
103770	118	030207	558506	7908149	570313	7908149	11.8
103780	118	030207	570204	7908223	558571	7908226	11.6
103790	118	030207	558654	7908299	570094	7908302	11.4
103800	118	030207	570005	7908367	558717	7908371	11.3
103810	118	030207	558793	7908448	569844	7908449	11.1
103820	118	030207	569754	7908534	558858	7908518	10.9
103830	118	030207	558916	7908589	569672	7908601	10.8
103840	119	030207	569562	7908670	559002	7908673	10.6
103850	119	030207	569453	7908748	559091	7908748	10.4
103860	119	030207	559149	7908824	569361	7908817	10.2
103870	119	030207	569217	7908897	559223	7908897	10.0
103880	119	030207	559307	7908970	569153	7908960	9.9

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103890	119	030207	569010	7909060	559383	7909053	9.6
103900	119	030207	559442	7909125	568924	7909123	9.5
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103920	119	030207	559596	7909274	568719	7909267	9.1
103930	119	030207	568598	7909341	559676	7909352	8.9
103940	119	030207	559739	7909423	568483	7909422	8.7
103950	119	030207	568354	7909502	559820	7909496	8.5
103960	119	030207	559873	7909572	568220	7909569	8.4
103970	119	030207	568172	7909636	559966	7909650	8.2
103980	119	030207	560036	7909721	568069	7909718	8.0
103990	119	030207	567944	7909803	560094	7909792	7.9
104000	119	030207	560167	7909874	567750	7909873	7.6
104010	119	030207	567710	7909955	560235	7909947	7.5
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104040	119	030207	560483	7910178	567425	7910168	6.9
104050	119	030207	567253	7910283	560553	7910250	6.7
104060	119	030207	560610	7910323	567093	7910319	6.5
104070	119	030207	567081	7910396	560681	7910386	6.4
104080	119	030207	560762	7910475	566977	7910469	6.2
104090	119	030207	566858	7910559	560843	7910549	6.0
104100	119	030207	560891	7910620	566726	7910620	5.8
104110	119	030207	566638	7910704	560964	7910695	5.7
104120	119	030207	561045	7910774	566566	7910765	5.5
104130	119	030207	566458	7910835	561112	7910837	5.3
104140	119	030207	561191	7910925	566319	7910925	5.1
104150	119	030207	566208	7910998	561284	7911001	4.9
104160	119	030207	561341	7911073	566130	7911067	4.8
104170	119	030207	565988	7911161	561421	7911148	4.6
104180	119	030207	561482	7911223	565917	7911217	4.4
104190	119	030207	565757	7911310	561554	7911296	4.2
104200	119	030207	561629	7911376	565676	7911373	4.0
104210	119	030207	565553	7911462	561717	7911450	3.8
104220	119	030207	561771	7911522	565393	7911525	3.6
104230	119	030207	565338	7911600	561841	7911597	3.5
104240	119	030207	561932	7911676	565173	7911677	3.2
104250	119	030207	565113	7911760	561988	7911744	3.1
104260	119	030207	562076	7911822	565042	7911825	3.0
104270	119	030207	564878	7911924	562125	7911895	2.8
104280	119	030207	562207	7911974	564851	7911957	2.6
104290	119	030207	564701	7912052	562297	7912049	2.4
104300	119	030207	562355	7912121	564588	7912110	2.2
104310	119	030207	564499	7912195	562426	7912201	2.1
104320	119	030207	562500	7912273	564389	7912274	1.9
104330	119	030207	564292	7912343	562580	7912345	1.7
104340	119	030207	562643	7912419	564128	7912424	1.5
104350	119	030207	564023	7912508	562711	7912498	1.3
104360	119	030207	562784	7912568	563967	7912575	1.2
104370	119	030207	563848	7912652	562858	7912649	1.0
104380	119	030207	562956	7912723	563752	7912724	0.8
104390	119	030207	563617	7912808	563022	7912802	0.6
190010	194	030213	563096	7912874	563527	7912875	0.4
190020	194	030213	577119	7885445	577129	7903406	18.0
190030	194	030213	576370	7903919	576378	7885455	18.5
190040	194	030213	575639	7885440	575631	7904438	19.0
190050	194	030213	574877	7904964	574875	7885444	19.5
190060	194	030213	574131	7885437	574130	7905495	20.1
190070	194	030213	573370	7906025	573375	7885441	20.6
190080	193	030207	572621	7885444	572627	7906522	21.1
190090	193	030207	571874	7907071	571880	7885439	21.6
190100	193	030207	571130	7885436	571125	7907562	22.1
190110	193	030207	570371	7908108	570378	7885451	22.7
190120	193	030207	569630	7885428	569628	7908624	23.2
190130	193	030207	568877	7909140	568874	7885451	23.7
190140	193	030207	568125	7885439	568128	7909659	24.2
190150	191	030128	567388	7910178	567377	7885445	24.7

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190160	193	030207	566622	7885437	566626	7910703	25.3
190170	193	030207	565865	7885427	565873	7911222	25.8
190180	193	030207	565133	7911757	565123	7885431	26.3
190190	193	030207	564366	7885424	564372	7912281	26.9
190200	191	030128	563621	7912806	563623	7885436	27.4
190210	191	030128	562879	7912657	562872	7885439	27.2
190220	191	030128	562111	7885420	562123	7911866	26.4
190230	191	030128	561377	7911119	561372	7885432	25.7
190240	191	030128	560580	7885413	560622	7910320	24.9
190250	191	030128	559874	7909564	559873	7885434	24.1
190260	191	030128	559137	7885409	559128	7908803	23.4
190270	191	030128	558374	7908008	558374	7885430	22.6
190280	191	030128	557654	7885427	557625	7907237	21.8
190290	191	030128	556878	7906465	556876	7885430	21.0
190300	191	030128	556121	7885409	556124	7905676	20.3
190310	191	030128	555381	7904932	555377	7879939	25.0
190320	191	030128	554547	7879929	554631	7904166	24.2
190330	191	030128	553876	7903378	553875	7879937	23.4
190341	192	030207	553143	7879919	553126	7902597	22.7
190350	192	030207	552377	7901839	552374	7879927	21.9
190360	192	030207	551620	7879918	551623	7901051	21.1
190370	192	030207	550874	7900285	550875	7879918	20.4
190380	192	030207	550128	7879893	550127	7899528	19.6
190390	192	030207	549381	7898759	549379	7879914	18.8
190400	192	030207	548671	7879898	548624	7897969	18.1
190410	192	030207	547877	7897202	547888	7879902	17.3
190420	192	030207	547132	7879897	547124	7896437	16.6
190430	192	030207	546377	7895717	546374	7879737	16.0
190440	192	030207	545623	7879877	545624	7894882	15.0
190450	192	030207	544875	7894120	544881	7879884	14.2
190460	192	030207	544160	7879873	544128	7893354	13.5
190470	192	030207	543383	7892589	543374	7879872	12.7
190470	192	030207	542627	7879876	542627	7891796	11.9

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TOTALS BY FLIGHT

FLIGHT	LINE KM
1	592.6
2	481.9
3	606.4
4	363.5
5	321.1
6	678.0
7	178.5
8	676.8
9	633.6
10	305.6
11	548.8
12	615.2
13	636.0
14	627.2
15	595.4
16	672.0
17	599.6
18	288.3
19	302.3
20	332.6
91	358.1
92	237.2
93	268.6
94	136.7
TOTAL	11056.1

LINE KM REPORT FOR a53602m.ldt

LINE	FLT	DATE	START	COORDINATE	END	COORDINATE	LINE KM
200020	220	030226	583786	7914523	598072	7914527	14.3
200030	220	030226	598065	7914597	583628	7914619	14.4
200040	220	030226	583558	7914665	598062	7914679	14.5
200050	220	030226	598071	7914760	583428	7914756	14.6
200060	219	030226	583312	7914823	598076	7914828	14.8
200070	219	030226	583211	7914898	598068	7914902	14.9
200080	219	030226	598068	7914976	583142	7914981	14.9
200090	219	030226	582986	7915046	598058	7915049	15.1
200100	219	030226	598065	7915125	582811	7915158	15.3
200110	219	030226	582794	7915182	598076	7915201	15.3
200120	219	030226	598065	7915272	582616	7915288	15.5
200130	219	030226	582526	7915355	598075	7915350	15.6
200140	219	030226	598070	7915425	582382	7915445	15.7
200150	219	030226	582323	7915497	598068	7915497	15.7
200160	219	030226	598079	7915566	582173	7915584	15.9
200170	219	030226	582109	7915643	598076	7915648	16.0
200180	219	030226	598066	7915722	581955	7915737	16.1
200190	219	030226	581837	7915807	598070	7915801	16.2
200200	219	030226	598069	7915871	581741	7915878	16.3
200210	219	030226	581626	7915953	598080	7915951	16.5
200220	219	030226	598071	7916023	581493	7916036	16.6
200230	219	030226	581415	7916090	598081	7916101	16.7
200240	219	030226	598087	7916181	581303	7916177	16.8
200250	219	030226	581184	7916250	598070	7916249	16.9
200260	219	030226	598084	7916324	581062	7916329	17.0
200270	219	030226	580995	7916383	598073	7916403	17.1
200280	219	030226	598084	7916471	580841	7916475	17.2
200290	219	030226	580749	7916542	598085	7916553	17.3
200300	219	030226	598076	7916629	580609	7916628	17.5
200310	219	030226	580514	7916691	598070	7916700	17.6
200320	219	030226	598077	7916777	580462	7916776	17.6
200330	219	030226	580274	7916847	598080	7916849	17.8
200340	219	030226	598083	7916938	580148	7916930	17.9
200350	219	030226	580087	7916977	598079	7916999	18.0
200360	219	030226	598073	7917071	579911	7917089	18.2
200370	219	030226	579821	7917145	598080	7917152	18.3
200380	218	030225	598091	7917226	579703	7917227	18.4
200390	218	030225	598074	7917281	579610	7917296	18.5
200400	218	030225	579480	7917373	598080	7917375	18.6
200410	218	030225	598082	7917447	579420	7917459	18.7
200420	218	030225	579266	7917520	598076	7917530	18.8
200430	218	030225	598091	7917609	579124	7917614	19.0
200440	218	030225	579038	7917679	598077	7917677	19.0
200450	218	030225	598087	7917748	578937	7917749	19.2
200460	218	030225	578815	7917823	598078	7917826	19.3
200470	218	030225	598078	7917906	578691	7917904	19.4
200480	218	030225	578582	7917977	598092	7917976	19.5
200490	218	030225	598088	7918056	578468	7918053	19.6
200500	218	030225	578373	7918120	598091	7918126	19.7
200510	218	030225	598093	7918196	578228	7918205	19.9
200520	218	030225	578132	7918275	598082	7918285	20.0
200530	218	030225	598099	7918336	577999	7918361	20.1
200540	218	030225	577916	7918423	598089	7918430	20.2
200550	218	030225	598073	7918510	577791	7918501	20.3
200560	218	030225	577684	7918576	598083	7918572	20.4
200570	218	030225	598076	7918647	577561	7918654	20.5
200580	218	030225	577454	7918725	598087	7918726	20.6
200590	218	030225	598087	7918809	577334	7918803	20.8
200600	218	030225	577234	7918870	598093	7918872	20.9
200610	218	030225	598094	7918946	577092	7918965	21.0
200620	218	030225	577056	7919028	598099	7919025	21.1
200630	218	030225	598081	7919117	576980	7919099	21.1
200640	218	030225	566505	7919191	598096	7919175	31.6

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200650	218	030225	598094	7919230	566517	7919251	31.6
200660	217	030225	566507	7919322	598081	7919324	31.6
200670	217	030225	566517	7919398	598099	7919397	31.6
200680	217	030225	598085	7919473	566506	7919479	31.6
200690	217	030225	566511	7919553	598087	7919548	31.6
200700	217	030225	598084	7919629	566520	7919627	31.6
200710	217	030225	566514	7919701	598081	7919700	31.6
200720	217	030225	598096	7919779	566526	7919774	31.6
200730	217	030225	566520	7919843	598085	7919848	31.6
200740	217	030225	598095	7919921	566521	7919926	31.6
200750	217	030225	566519	7919995	598099	7920002	31.6
200760	217	030225	598101	7920075	566507	7920073	31.6
200770	217	030225	566517	7920151	598102	7920153	31.6
200780	217	030225	598090	7920226	566514	7920225	31.6
200790	217	030225	566507	7920295	598082	7920298	31.6
200800	217	030225	598087	7920374	566518	7920373	31.6
200810	217	030225	566526	7920453	598087	7920453	31.6
200820	217	030225	598104	7920527	566528	7920524	31.6
200830	217	030225	566519	7920599	598086	7920599	31.6
200840	217	030225	598098	7920678	566519	7920671	31.6
200850	217	030225	566515	7920751	598086	7920750	31.6
200860	217	030225	598101	7920827	566506	7920823	31.6
200870	216	030223	566506	7920900	598082	7920899	31.6
200880	216	030223	598102	7920968	566521	7920974	31.6
200890	216	030223	566504	7921042	598106	7921049	31.6
200900	216	030223	598095	7921115	566529	7921124	31.6
200910	216	030223	566505	7921194	598098	7921197	31.6
200920	216	030223	598107	7921280	566510	7921274	31.6
200930	216	030223	566507	7921352	598092	7921349	31.6
200940	216	030223	598110	7921434	566538	7921428	31.6
200950	216	030223	566507	7921498	598100	7921501	31.6
200960	216	030223	598090	7921573	566530	7921574	31.6
200970	216	030223	566516	7921654	598095	7921652	31.6
200980	216	030223	598090	7921721	566528	7921725	31.6
200990	216	030223	566531	7921810	598100	7921799	31.6
201000	216	030223	598098	7921878	566524	7921876	31.6
201010	216	030223	566528	7921950	598093	7921957	31.6
201020	216	030223	598099	7922025	566519	7922024	31.6
201030	216	030223	566514	7922097	598109	7922099	31.6
201040	216	030223	598100	7922160	566532	7922174	31.6
201050	216	030223	566521	7922250	598103	7922251	31.6
201060	216	030223	598094	7922313	566520	7922326	31.6
201070	215	030223	566516	7922399	598105	7922399	31.6
201080	215	030223	598093	7922471	566512	7922473	31.6
201090	215	030223	566538	7922553	598094	7922556	31.6
201100	215	030223	598114	7922624	566525	7922626	31.6
201110	215	030223	566534	7922708	598091	7922701	31.6
201120	215	030223	598104	7922768	566524	7922774	31.6
201130	215	030223	566518	7922852	598100	7922856	31.6
201140	215	030223	598098	7922927	566522	7922929	31.6
201150	215	030223	566538	7922994	598094	7922998	31.6
201160	215	030223	598102	7923080	566532	7923073	31.6
201170	215	030223	566531	7923138	598105	7923152	31.6
201180	215	030223	598115	7923228	566524	7923226	31.6
201190	215	030223	566524	7923292	598100	7923300	31.6
201200	215	030223	598094	7923369	566535	7923373	31.6
201210	215	030223	566538	7923443	598106	7923448	31.6
201220	215	030223	598105	7923520	566538	7923523	31.6
201230	215	030223	566518	7923569	598111	7923603	31.6
201240	215	030223	598113	7923671	566534	7923675	31.6
201250	215	030223	566543	7923748	598097	7923746	31.6
201260	215	030223	598111	7923822	566538	7923828	31.6
201270	214	030222	566544	7923897	598102	7923896	31.6
201280	214	030222	566543	7923966	598097	7923974	31.6
201290	214	030222	598107	7924039	566549	7924054	31.6
201300	214	030222	566526	7924124	598111	7924124	31.6

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201310	214	030222	598108	7924196	566538	7924199	31.6
201320	214	030222	566537	7924271	598101	7924273	31.6
201330	214	030222	598100	7924348	566527	7924350	31.6
201340	214	030222	566544	7924425	598118	7924429	31.6
201350	214	030222	605370	7924496	566542	7924501	38.8
201360	214	030222	566544	7924576	605385	7924571	38.9
201370	214	030222	605389	7924651	566543	7924652	38.9
201380	214	030222	566523	7924739	605392	7924724	38.9
201390	214	030222	605371	7924797	566530	7924797	38.9
201400	214	030222	566525	7924869	605383	7924874	38.9
201410	214	030222	605394	7924944	566554	7924950	38.9
201420	214	030222	566534	7925025	605375	7925028	38.9
201430	214	030222	605393	7925101	566529	7925099	38.9
201440	213	030222	566535	7925176	605386	7925172	38.9
201450	213	030222	605377	7925248	566530	7925248	38.9
201460	213	030222	566527	7925326	605383	7925324	38.9
201470	213	030222	605375	7925393	566553	7925400	38.8
201480	213	030222	566527	7925473	605394	7925478	38.9
201490	213	030222	605399	7925563	566533	7925546	38.9
201500	213	030222	566544	7925622	605390	7925626	38.9
201510	213	030222	605375	7925692	566549	7925696	38.8
201520	213	030222	566543	7925768	605381	7925778	38.9
201530	213	030222	605386	7925848	566557	7925851	38.8
201540	213	030222	566538	7925923	605389	7925927	38.9
201550	213	030222	605382	7925991	566547	7925998	38.8
201560	213	030222	566534	7926075	605393	7926078	38.9
201570	213	030222	605373	7926150	566555	7926151	38.8
201580	212	030217	566532	7926223	605383	7926226	38.9
201590	212	030217	605399	7926280	566547	7926300	38.9
201600	212	030217	566541	7926369	605399	7926378	38.9
201610	212	030217	605379	7926436	566541	7926450	38.9
201620	212	030217	566538	7926524	605382	7926526	38.9
201630	212	030217	605381	7926579	566553	7926601	38.8
201640	212	030217	566538	7926677	605400	7926675	38.9
201650	212	030217	605381	7926748	566556	7926750	38.8
201660	212	030217	566543	7926817	605394	7926828	38.9
201670	212	030217	605387	7926900	566537	7926901	38.9
201680	212	030217	566550	7926974	605383	7926981	38.8
201690	212	030217	605390	7927049	566537	7927050	38.9
201700	212	030217	566546	7927137	605394	7927124	38.9
201710	212	030217	605390	7927192	566540	7927201	38.9
201720	211	030217	566553	7927273	605381	7927277	38.8
201730	211	030217	605394	7927346	566538	7927347	38.9
201740	211	030217	566558	7927415	605379	7927426	38.8
201750	211	030217	605400	7927499	566556	7927499	38.9
201760	211	030217	566553	7927565	605380	7927576	38.8
201770	211	030217	605392	7927644	566548	7927652	38.9
201780	211	030217	566553	7927721	605380	7927725	38.8
201790	211	030217	605392	7927800	566550	7927802	38.9
201800	211	030217	566551	7927868	605390	7927874	38.9
201810	211	030217	605396	7927953	566555	7927952	38.9
201820	211	030217	566544	7928034	605403	7928025	38.9
201830	211	030217	605386	7928101	566545	7928103	38.9
201840	211	030217	566539	7928168	605382	7928173	38.9
201850	211	030217	605392	7928246	566556	7928251	38.8
201860	211	030217	566541	7928314	605381	7928327	38.8
201870	210	030213	605401	7928399	566557	7928398	38.9
201880	210	030213	605395	7928481	566562	7928470	38.8
201890	210	030213	566550	7928549	605397	7928548	38.9
201900	210	030213	605406	7928623	566550	7928624	38.9
201910	210	030213	566542	7928695	605391	7928699	38.9
201920	210	030213	605408	7928775	566542	7928781	38.9
201930	210	030213	566551	7928854	605398	7928852	38.9
201940	210	030213	605403	7928927	566562	7928923	38.9
201950	210	030213	566544	7928997	605388	7929000	38.9
201960	210	030213	605408	7929080	566545	7929076	38.9

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201970	210	030213	566564	7929141	605394	7929151	38.8
201980	210	030213	605399	7929230	566567	7929228	38.8
201990	210	030213	566550	7929292	605390	7929300	38.9
202000	210	030213	605391	7929383	566557	7929377	38.8
202010	209	030212	566567	7929450	605411	7929454	38.9
202020	209	030212	605402	7929528	566563	7929526	38.9
202030	209	030212	566554	7929602	605411	7929600	38.9
202040	209	030212	605399	7929677	566560	7929674	38.9
202050	209	030212	566567	7929740	605398	7929749	38.8
202060	209	030212	605405	7929823	566547	7929827	38.9
202070	209	030212	566565	7929898	605405	7929901	38.9
202080	209	030212	605396	7929976	566547	7929975	38.9
202090	209	030212	566560	7930054	605396	7930052	38.9
202100	209	030212	605393	7930127	566562	7930134	38.9
202110	209	030212	566560	7930190	605393	7930199	38.8
202120	209	030212	605396	7930275	566551	7930274	38.9
202130	209	030212	566568	7930348	605408	7930350	38.8
202140	209	030212	605391	7930428	566570	7930426	38.8
202150	209	030212	566562	7930499	605400	7930501	38.8
202160	209	030212	605403	7930580	566561	7930572	38.9
202170	219	030226	566571	7930649	605399	7930650	38.8
202180	219	030226	566556	7930739	605408	7930727	38.9
202190	208	030211	605398	7930796	566560	7930802	38.8
202200	208	030211	566568	7930873	605407	7930883	38.9
202210	208	030211	605403	7930949	566553	7930949	38.9
202221	208	030211	566571	7931027	605398	7931033	38.8
202230	208	030211	605396	7931105	566557	7931103	38.9
202241	208	030211	566560	7931178	605416	7931175	38.9
202250	208	030211	605389	7931250	566568	7931254	38.8
202260	208	030211	566576	7931332	605403	7931327	38.8
202270	208	030211	605388	7931390	566568	7931400	38.8
202280	208	030211	566572	7931472	605410	7931480	38.9
202290	208	030211	605408	7931541	566577	7931549	38.8
202300	208	030211	566582	7931627	605419	7931627	38.9
202312	219	030226	605409	7931687	566571	7931700	38.9
202320	207	030211	566572	7931774	605406	7931776	38.8
202330	207	030211	605412	7931856	566559	7931851	38.9
202340	207	030211	566565	7931939	605408	7931927	38.9
202350	207	030211	605400	7932002	566556	7932000	38.9
202360	207	030211	566573	7932081	605414	7932076	38.9
202370	207	030211	605399	7932157	566558	7932150	38.9
202380	207	030211	566570	7932227	605419	7932227	38.9
202390	207	030211	605407	7932311	566572	7932301	38.8
202400	207	030211	566587	7932372	605401	7932376	38.8
202410	207	030211	605415	7932469	566571	7932449	38.9
202420	207	030211	566582	7932527	605400	7932522	38.8
202430	207	030211	605394	7932582	566583	7932601	38.8
202440	207	030211	566573	7932672	605408	7932673	38.8
202450	207	030211	605417	7932756	566573	7932750	38.9
202460	207	030211	566585	7932830	605411	7932826	38.8
202470	207	030211	605397	7932900	566580	7932897	38.8
202480	206	030210	566577	7932976	605424	7932975	38.9
202490	206	030210	605409	7933045	566580	7933050	38.8
202500	206	030210	566586	7933127	605421	7933127	38.9
202510	206	030210	605416	7933221	566587	7933199	38.8
202520	206	030210	566568	7933276	605415	7933276	38.9
202530	206	030210	605403	7933350	566575	7933350	38.8
202540	206	030210	566583	7933425	605420	7933424	38.9
202550	206	030210	605399	7933502	566582	7933501	38.8
202560	206	030210	566575	7933575	605411	7933576	38.9
202570	206	030210	605416	7933669	566568	7933650	38.9
202580	206	030210	566567	7933722	605410	7933725	38.9
202590	206	030210	605422	7933800	566568	7933801	38.9
202600	206	030210	566571	7933859	605421	7933873	38.9
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202620	206	030210	566571	7934024	605403	7934022	38.8

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202630	206	030210	605409	7934103	566575	7934099	38.8
202640	205	030210	566583	7934178	605409	7934175	38.8
202650	205	030210	605411	7934251	566590	7934248	38.8
202660	205	030210	566582	7934326	605423	7934324	38.9
202670	205	030210	605425	7934408	566586	7934402	38.9
202680	205	030210	566590	7934486	605410	7934481	38.8
202690	205	030210	605405	7934551	566571	7934553	38.8
202700	205	030210	566572	7934601	605427	7934626	38.9
202710	205	030210	605421	7934705	566588	7934698	38.8
202720	205	030210	566580	7934762	605402	7934777	38.8
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202780	205	030210	566595	7935222	605426	7935226	38.8
202790	205	030210	605415	7935307	566585	7935299	38.8
202800	204	030209	566594	7935374	605419	7935377	38.8
202810	204	030209	605419	7935435	566602	7935451	38.8
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202830	204	030209	605419	7935601	566599	7935599	38.8
202840	204	030209	566583	7935675	605416	7935673	38.9
202850	204	030209	605413	7935721	566600	7935750	38.8
202860	204	030209	566595	7935823	605405	7935821	38.8
202870	204	030209	605418	7935898	566589	7935901	38.8
202880	204	030209	566577	7935971	605425	7935972	38.9
202890	204	030209	605409	7936043	566599	7936050	38.8
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202960	203	030209	566582	7936575	605416	7936575	38.8
202970	203	030209	605427	7936653	566594	7936651	38.8
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203000	203	030209	566595	7936877	605436	7936878	38.9
203010	203	030209	605412	7936954	566604	7936951	38.8
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203120	202	030208	566597	7937772	592090	7937776	25.5
203130	202	030208	566595	7937849	592100	7937848	25.5
203140	202	030208	592109	7937924	566588	7937927	25.5
203150	202	030208	566594	7938000	592110	7937999	25.5
203160	202	030208	592108	7938078	566598	7938076	25.5
203170	202	030208	566603	7938151	592113	7938149	25.5
203180	202	030208	592097	7938229	566597	7938227	25.5
203190	202	030208	566605	7938302	592095	7938301	25.5
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203260	202	030208	592104	7938821	566600	7938824	25.5
203270	202	030208	566598	7938901	592096	7938901	25.5
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203290	202	030208	566596	7939056	578596	7939052	12.0
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203310	202	030208	566602	7939192	578611	7939199	12.0
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203340	202	030208	578620	7939418	566609	7939426	12.0
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203710	201	030208	578619	7942209	566635	7942198	12.0
203720	201	030208	566617	7942261	578624	7942274	12.0
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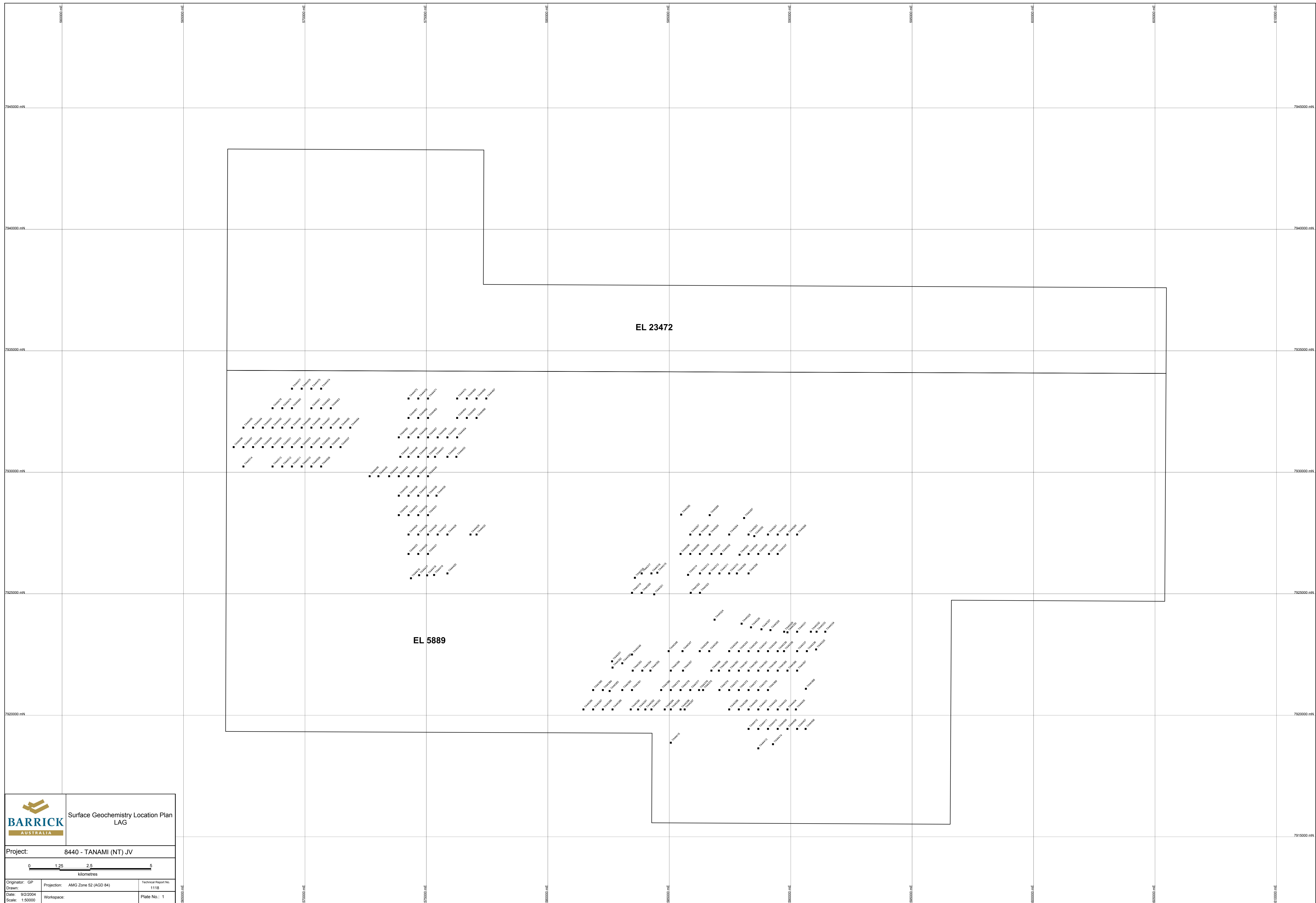
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290270	294	030226	586121	7939084	586124	7914380	24.7
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290300	291	030215	583875	7914452	583876	7939061	24.6
290310	291	030215	583069	7939066	583123	7914980	24.1
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290330	291	030215	581628	7939062	581626	7915972	23.1
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290390	291	030215	577133	7943216	577125	7918941	24.3
290400	291	030215	576373	7919043	576376	7943226	24.2
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290440	291	030215	573372	7919049	573377	7943228	24.2
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290460	291	030215	571890	7919067	571880	7943229	24.2
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290500	291	030215	568876	7919081	568876	7943230	24.2
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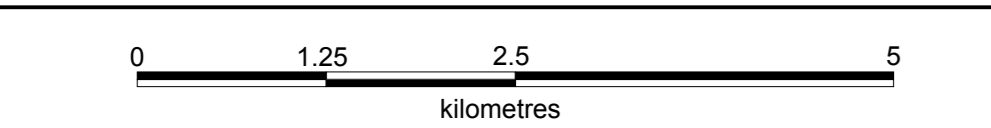
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TOTALS BY FLIGHT

FLIGHT	LINE KM
1	528.3
2	540.4
3	601.4
4	582.6
5	621.5
6	621.6
7	621.6
8	466.2
9	621.6
10	544.0
11	582.8
12	544.0
13	544.0
14	609.7
15	631.6
16	631.8
17	663.3
18	590.9
19	648.3
20	72.7


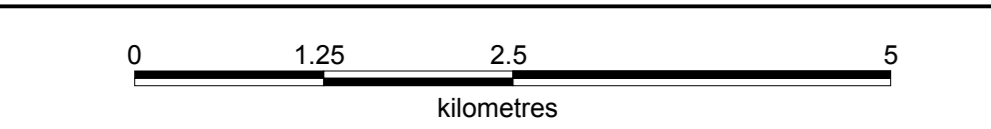


91	521.4
92	78.8
93	52.6
94	457.0
TOTAL	12378.0



		Surface Geochemistry Location Plan LAG
Project: 8440 - TANAMI (NT) JV		
		
Originator: GP Drawn:	Projection: AMG Zone 52 (AGD 64)	Technical Report No. 1118
Date: 9/2/2004 Scale: 1:50000	Workspace:	Plate No.: 1



		Surface Geochemistry Location Plan Rockchip
Project: 8440 - TANAMI (NT) JV		
		
Originator: GP Drawn: 9/2/2004 Scale: 1:50000	Projection: AMG Zone 52 (AGD 84) Workspace:	Technical Report No. 1118 Plate No.: 2