RELINQUISHMENT REPORT EL 6431 FOR AREA RETAINED UNDER MINERAL CLAIM APPLICATIONS ACACIA GAP AREA

4 SEPTEMBER 1989 TO 3 SEPTEMBER 1992

BY

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OF

EUPENE EXPLORATION ENTERPRISES PTY LTD

FOR

NICRON RESOURCES LIMITED

CR92/642

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DARWIN SD52-4
Manton Dam 5172-3
Noonamah 5172

Darwin NT
November 1992

TABLE OF CONTENTS

1. INTRODUCTION

2. SUMMARY

3. CONCLUSIONS

4. PREVIOUS EXPLORATION

5. GEOLOGY AND MINERALISATION

6. WORK CARRIED OUT AND RESULTS

6.1 Geology
6.1.1 Geological Mapping
6.2 Geophysics
6.3 Geochemistry
6.4 Diamond Drilling
6.4.1 Results of Diamond Drilling Program
6.4.2 Conclusions of Diamond Drilling Program

7. EXPENDITURE

8. REFERENCES

FIGURES

1. EL 6431 Location Map
2. RAB Drill Hole Location Map - Acacia South
3. Diamond Drill Hole Location Map
4. Acacia South Prospect - Stratigraphic Correlation

ENCLOSURES

1. Acacia South Prospect - Geology Fact
2. Acacia South Prospect - Self Potential
3. Acacia South Prospect - Cross Section 9900N - DDH ASD1A
4. Acacia South Prospect - Cross Section 9700N - DDH ASD2A
5. Acacia South Prospect - Cross Section 9850N - DDH ASD3A
6. Acacia South Prospect - Cross Section 9600N - DDH ASD4A
7. Acacia South Prospect - Cross Section 9450N - DDH ASD5A

APPENDICES

1. RAB Drill Hole Data
2. Diamond Drill Hole Data

1. INTRODUCTION

Exploration Licence 6431 is located on the Manton Dam (5172-3) 1:50,000 sheet and the centre is approximately 55km south-southeast of Darwin (Figure 1). The area covered by this report is situated adjacent to the Stuart Highway and Byers Road, and covers less than half a graticular block.

Exploration Licence 6431 was granted to Nicron Resources Ltd on the 4th of September 1989 for a period of six (6) years. The licence originally comprised seventeen (17) blocks. A 50% reduction took place on the 3rd of September 1992 after being granted a deferral from the normal year two reduction.

This report covers all work carried out on the relinquished area that has been retained under mineral claim application No's 4441 to 4446.

2. SUMMARY

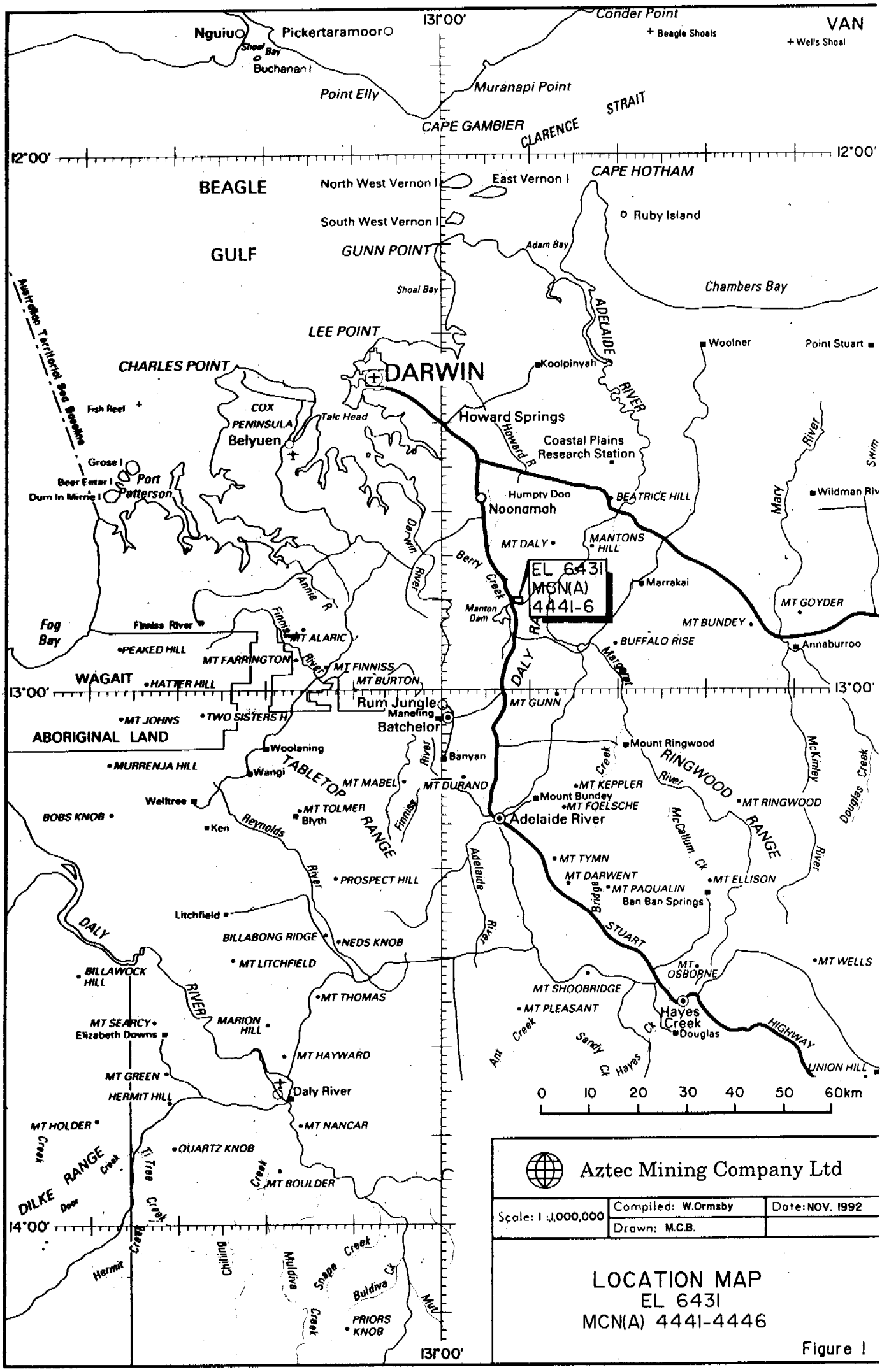
The relinquished area covered by mineral claim applications includes the Acacia South Prospect. Previously known as the L1 lead anomaly, the Acacia South Prospect was discovered by the BMR in the late 1960's and was later examined by Geopeko Ltd.

Work carried out by Nicron Resources Limited included geological mapping, an aeromagnetic/radiometric survey, RAB drilling, an SP survey, and diamond drilling.

The aeromagnetic/radiometric survey resulted in a re-interpretation of the major structural features of the area, particularly in the recognition of a major fault in the western portion of the mineral claim applications.

The Acacia South RAB drilling successfully confirmed the location of the BMR/Geopeko geochemical anomaly, and closed it off.

Previous BMR diamond drilling data from Acacia South was compiled, and five diamond drill holes totalling 2425.4m of NQ core were completed. Minor stringers of lead and zinc mineralisation were encountered in several drill holes, with the best intersection being 5m at 0.64% Zn between 234 and 239m in ASD3A. The drill holes intersected a 30 to 40m thick dololutite horizon which is interpreted to be an attenuated facies equivalent of the dololutite rich mine sequence. A north-south trending lamprophyre dyke was also intersected.


Nguiu
Pickertaramoor
Shoal Bay
Buchanan I
Point Elly
Conder Point
Beagle Shoals
VAN
Wells Shoal
Muranapi Point
CAPE GAMBIER
CLARENCE STRAIT
131°00'
12°00'
BEAGLE
GULF
North West Vernon I
East Vernon I
CAPE HOTHAM
South West Vernon I
Ruby Island
GUNN POINT
Adam Bay
Chambers Bay
Shoal Bay
LEE POINT
ADELAIDE RIVER
Woolner
Point Stuart
CHARLES POINT
DARWIN
Koolpinyah
Fish Reef
COX PENINSULA
Talc Head
Howard Springs
Howard R
Coastal Plains Research Station
Belyuen
Grose I
Beer Eater I
Dum In Mirrie I
Port Patterson
Humpty Doo
Noonamah
BEATRICE HILL
Wildman Riv
Mary River
Swim
MT DALY
MANTONS HILL
Berry Creek
EL 6431
MCN(A) 4441-6
Marrakai
Manton Dam
MT GOYDER
Fog Bay
Finniss River
Annie R
MT ALARIC
MT BUNDEY
BUFFALO RISE
Annaburroo
PEAKED HILL
MT FARRINGTON
MT FINNISS
WAGAIT
HATTER HILL
MT BURTON
DALY RIVER
Margent
13°00'
Rum Jungle
MT GUNN
MT JOHNS
TWO SISTERS H
Maneling
Batchelor
ABORIGINAL LAND
Woolaning
Banyan
Mount Ringwood
McKinley
Douglas Creek
MURRENJA HILL
Wangi
TABLETOP RANGE
MT MABEL
MT DURAND
MT KEPPLER
RINGWOOD RANGE
Welltree
Mount Bundey
MT FOELSCHE
MT RINGWOOD
BOBS KNOB
MT TOLMER
Blyth
Ken
Reynolds River
Finniss
Adelaide River
McCallum Ck
PROSPECT HILL
MT TYMN
MT DARWENT
MT ELLISON
MT PAQUALIN
Ban Ban Springs
Bridge
STUART
Litchfield
DALY RIVER
BILLABONG RIDGE
NEDS KNOB
MT LITCHFIELD
BILLAWOCK HILL
MT OSBORNE
MT WELLS
MT THOMAS
MT SHOOBRIDGE
MT PLEASANT
MT SEARCY
Elizabeth Downs
MARION HILL
Hayes Creek
Douglas
Ant Creek
Sandy Ck
Hayes Ck
HIGHWAY
UNION HILL
MT HAYWARD
MT GREEN
HERMIT HILL
Daly River
0 10 20 30 40 50 60km
MT HOLDER
MT NANCAR
QUARTZ KNOB
DILKE RANGE
Tea Tree Creek
MT BOULDER
14°00'
Hermit Creek
Chilling
Muldiva
Snake Creek
Buldiva Ck
Mud
PRIORS KNOB
Aztec Mining Company Ltd
Scale: 1 :1,000,000
Compiled: W.Ormsby
Date: NOV. 1992
Drawn: M.C.B.
LOCATION MAP
EL 6431
MCN(A) 4441-4446
Figure 1

3. CONCLUSIONS

- One of the most significant lead-zinc geochemical anomalies on EL 6431 occurs at Acacia South, in the area covered by mineral claim applications.

- Diamond drilling at Acacia South has identified the most likely source of the geochemical anomaly as being sub-economic base metal mineralisation along west dipping, north-south trending structures.

- Persuasive dilatant fracturing and veining in dololutite appears to be an important component for ore mineralisation at Woodcutters Mine. The lack of these features at Acacia South compared to Woodcutters could be due to less competency contrast at Acacia South where the dololutite unit may be too massive and/or the lack of tight anticlinal folding at Acacia South.

4. PREVIOUS EXPLORATION

The initial exploration efforts in the area were directed entirely towards uranium exploration.

The Frazer Prospect which is outside the tenement area, was located by an airborne radiometric survey in 1952 (Wood and McCarthy, 1952) and one costean was bulldozed in 1953. The radioactivity decreased rapidly with depth and no further testing was recommended.

An airborne radiometric survey in 1957 (Livingstone, 1959) indicated thirteen areas of above background radioactivity; these were subsequently investigated by ground parties. Ten of the anomalies were found to be associated with laterite, two were located on outcrops of conglomerate within the Crater Formation, and one coincided with the already known Frazer Prospect; no further work was recommended.

Reconnaissance geological, geochemical, and radiometric investigations of the Acacia Area, were carried out in 1967 by the BMR (Semple, 1968).

Geochemical sampling outlined four areas of anomalous lead values (L1 - L4), one zinc (Z1) and one cobalt anomaly (Co1), and two low valued copper anomalies (C1, C2). No significant radiometric anomalies were outlined. The L1 anomaly is situated within the area covered by this report, and is now known as the Acacia South Prospect.

Detailed geochemical investigation of the four lead anomalies were recommended.

Geopeko exploration was based on definition of BMR geochemical anomalies L1, L2, L3, L4 and Co1. C-horizon geochemical auger drilling was carried out over anomalies L1, L2, L3 and L4, and samples were analysed for Cu, Pb and Zn. In addition, samples from anomalies L1 and L2 were analysed for Co and Cd. Limited geochemical ratio sampling was carried out, and samples were analysed for Cu, Pb and Zn.

The L1 (Acacia South) anomaly was tested by three diamond drill holes but no significant mineralisation was discovered. Core recoveries were erratic and generally poor. Geological mapping was completed over anomalies L3, L4 and Co1. Petrographical descriptions from outcrop chip samples were made from anomalies L1, L4 and Co1.

Investigations by Geopeko were reported as being essentially negative and the EL was surrendered in February, 1978.

5. GEOLOGY AND MINERALISATION

EL 6431 lies on the north-eastern margin of the Archaean Rum Jungle and Waterhouse basement complexes. These are overlain by Lower Proterozoic clastic and dolomitic units of the Namoona Group, Crater Formation and Coomalie Dolomite; shales and calcareous shales of the Whites Formation and shales with interbedded quartzite of the Wildman Siltstone.

Uranium and base metal mineralisation at Rum Jungle and Woodcutters is concentrated in structural zones in the lower Whites Formation just above the Coomalie Dolomite. Gold mineralisation at Sundance, Batchelor, is within palaeokarst collapse breccias above the contact of the Coomalie Dolomite and Whites Formation.

The structure of the area is dominated by an early phase of N-S trending open folds and strike slip faulting consistent with extensional basinal development. A major arcuate fault has been identified in the western portion of the mineral claim applications from interpretation of aeromagnetic and radiometric data. These structures have been subsequently offset by a later phase of NE-SW trending structures, dominated by the Giants Reef Fault.

6. WORK CARRIED OUT AND RESULTS

6.1 Geology

In Year One, the main activity for the area under mineral claim applications comprised literature research as outlined in Section 4, and compilation of data from previous explorers.

Geological mapping in Year Two resulted in the map shown in Enclosure 1 and described in more detail in Section 6.1.1. One rock sample was collected from the eastern side of the mineral claim applications (Sample No. 26601, Appendix 1) and resulted in a moderately anomalous 610 ppm Pb.

6.1.1 Geological Mapping

Geological mapping of EL 6431 was undertaken using 1:18,000 colour infra red aerial photography and transferred to a 1:25,000 base plan (see Enclosure 3).

Outcrop occurrence throughout the area under mineral claim applications is poor, being restricted to low ridges of quartz conglomerates of the Crater formation, isolated rises of ferruginised and/or silicified Coomalie Dolomite and occasional resistant ridges of grey dolomitic argillite of the Whites Formation. Haematitic sandstones and well bedded quartzites of the Wildman siltstone outcrop as resistant ridges to the west of the area.

Extensive Cainozoic sediments comprising alluvial sands, silts, clays and black soil plains cover the majority of the area under mineral claim applications. Patchy laterite duricrust development occurs on topographic highs, along with isolated outcrops of Depot Creek Sandstone, further obscuring "bedrock" geology.

Crater Formation

The Crater Formation comprises dark brown cross bedded quartz rich meta conglomerate and grits outcropping in the west of the mineral claim applications representing the lowermost exposed lithologies in the core of the regional anticline that trends NNE through the area.

The lithologies exhibit a strong NNE (axial planar) foliation and are mapped as dipping both steeply east and west.

Coomalie Dolomite

Due to intensive karstification and deep weathering, the Coomalie Dolomite is very poorly exposed. The bulk of interpreted subcrop occupying areas of low relief are covered by alluvial (and residual ?) sands and clays, with areas of higher relief having sparse outcrops of pink massive sandstones interpreted as Depot Creek Sandstones of the Tolmer Group. Billabongs which occur in low lying areas are interpreted as sink holes due to dissolution of the bedrock.

Outcrop is invariably restricted to isolated low hills and short ridges of intensely ferruginised, gossanous coarse grained haematite-quartz-breccia closely associated with discontinuous lenses (boudins ?) of light grey silicified saccharoidal Dolomite. This horizon is interpreted to be close to the Coomalie/Whites Formation contract, and so is a useful marker "bed". Quartz and dolomite fragments within the gossanous, cavitated matrix vary from 0.5cm - 50cm, are very angular and exhibit chaotic brecciation textures.

Whites Formation

The Whites Formation underlies the majority of the area held under mineral claim applications, but is very poorly outcropping. This formation is mostly understood from diamond drilling and is described in section 6.4 and figure 4.

6.2 Geophysics

Aeromagnetic survey

A detailed airborne magnetic and radiometric survey was flown by Aerodata Holdings Limited in September 1991 and covered all of EL 6431. The survey specifications were as follows:-

Flight line spacing	50m
Flight line direction	east-west
Tie line spacing	500m
Tie line direction	north-south
Sensor height	60m
Magnetometer resolution	0.001 nanoTeslas
Magnetometer sample interval	7m
Magnetometer cycle rate	0.1 sec
Spectrometer sample interval	70m
Spectrometer cycle rate	1 sec

The magnetics data was presented as residual magnetic intensity contours and is included in Ormsby (1992) and has been image processed. The radiometric data was also image processed. The data was interpreted using criteria developed from similar work carried out over the Woodcutters Mine area.

Self Potential Survey

As SP survey was carried out over the Acacia South lead geochemical anomaly in Year Three to define lithostratigraphic conductors within the Whites Formation. Line spacing was 200m, and readings were taken at 25m intervals. The results are presented in Enclosure 2.

6.3 Geochemistry

Rotary Air Blast (RAB) drilling was utilised to obtain "C" horizon soil samples over one line on the Acacia South Prospect (Figure 2) within the area under mineral claim applications. Eleven holes were drilled totalling 76m. Bottom hole samples were assayed for Au (fire assay), Cu, Pb, Zn, Co (AAS) and As. The results are shown in Appendix 1. This drilling successfully confirmed the location of the BMR/Geopeko geochemical anomaly.

6.4 Diamond Drilling

Acacia South was selected for diamond drilling as it was considered to be the most prospective lead geochemical anomaly. The one remaining BMR hole (68/9) stored at the NT DME Core Yard was relogged (Appendix 2). Logging data from all three BMR holes on the Acacia South Prospect was then compiled and drawn onto cross sections.

The Acacia South "C" horizon soil geochemical anomaly was interpreted to be geochemical leakage along a Woodcutters-type north-south strike slip fault. The intersection of this fault and an anticlinal structure mapped to the south west, in Acacia Gap quartzite was chosen as the first drill target (ASD1A). Subsequently, four holes were targeted at the north-south strike slip structural zone beneath peaks in the soil geochemistry (Pevely, 1992).

Five holes totalling 2425.4m of NQ core were completed. Drill statistics are listed below, whilst hole locations are shown in Figure 2.

DRILL STATISTICS								
HOLE NO.	* NORTHING (m)	* EASTING (m)	DIP	GRID AZ	DEPTH OF PRECOLLAR	METRES DIAMOND	FINAL DEPTH	SIGNIFICANT INTERSECTIONS
ASD1A	10090	10012	-66	088	84	648.40	732.4	
ASD2A	9898	10154	-60	079	102	483.0	585.0	148.0-154.0 6m@ 0.30% Zn 0.40% Pb 256.0-261.0 5m @ 0.17% Zn
ASD3A	10048	10171	-62	094	66	390.0	456.0	234.0-239.0 5m @ 0.64% Zn 236.0-237.0 1m@ 2.00% Zn
ASD4	9800	10550	-68	290	110	550.0	660.0	
ASD5A	9680	10100	-56	097	90	354.0	444.0	174.0-182.0 8m @ 0.29% Zn 0.17% Pb
TOTALS					452	2425.4	2877.40	

* Local Grid

All diamond drill holes are plotted on cross-sections (see Enclosures 3 to 7).

Diamond drill hole logs and assay results are included in Appendix 2.

The stratigraphy at Acacia South is summarised in Figure 4.

6.4.1 Results of Diamond Drilling Program

Diamond drilling confirmed the following points:-

- Holes are collared in an equivalent facies of the upper Whites Formation - a predominantly moderate-steeply westerly dipping sequence of variably dolomitic/carbonaceous laminated slate.

- Hole ASD1A was collared the furthest west and intersected an amphibolite sill and a pyrrhotitic slate sequence, consistent with a stratigraphic position near the top of the Whites Formation/base of Wildman Siltstone.

- Confirmed the presence of a 30-40m thick massive dololutite horizon interpreted as an attenuated facies equivalent of the dololutite rich mine sequence.

- Confirmed the presence of a major N-S lamprophyre dyke filled steeply east dipping structural zone, 10-40m wide, and associated sub-parallel carbonate filled fault breccias and lamprophyre dykes to the west of this zone. This major structure was initially thought to be the source of the geochemical anomaly, being roughly coincident with it.

- Intersected base metal stringer mineralisation consisting of subhedral aggregates of sphalerite and subordinate galena in millimetric dilatant dolomite veinlets, in holes ASD2A, 3A and 5A to the west of the dyke filled structural zone. This zone of weak mineralisation extends for approximately 400m along strike and is 30-40m wide. Best intersection was in ASD3A - 5m @ 0.64% Zn (incl 1m @ 2% Zn) between 234.0 - 239.0m.

6.4.2 Conclusions of Diamond Drilling Program

- Drilling has enabled a reasonably consistent stratigraphy to be compiled west of the major dyke filled N-S fault.

  To the east of the fault, stratigraphic markers are few, but distinctive bedding textures intersected in thin dololutite beds near the end of ASD1A suggest a similar lithology to the C2 mine sequence member, giving an interpreted left-hand vertical throw across the fault of 80-100m.

- In light of the completed drilling program, the most likely source of the geochemical anomaly would be the sub-economic base metal mineralisation intersected in steeply dipping structures, though their surface projection still lies 70-100m west of the peaks in the main geochemical anomaly.

  The position of this anomaly has been confirmed by RAB drilling results, which, though of a lower order due to compositing of bottom hole samples, shows close correlation of high values in lead with the original results.

- Given that the original soil anomaly is correctly located, and some component of geochemical dispersion in the regolith, then leakage along west dipping structures must be responsible for the anomaly position east of the subcropping mineralisation.

- The drilling program tested the dyke filled strike-slip fault in a staggered pattern to avoid intersecting it at a consistent RL.

- ASD5A tested the intersection of dololutite and the strike-slip fault (a strong control on ore localisation at Woodcutters) at -500m where the dolutite was weakly fractured and carbonate veined adjacent to the fault, but unmineralised.

- The absence of pervasive dilatant fracturing and veining in the massive dololutite, compared to the Woodcutters situation could be due to lack of competency contrast in the former, with the dololutite unit being too "massive" to fracture effectively and/or the lack of tight anticlinal folding at Acacia South.

7. EXPENDITURE

Year One

Geological Consultants	$106
Drafting	16
Air Photographs	8
Consumables, Maps, Photocopying	10
Tenement Lease/Payments	10
Administration (15%)	23
Sub Total	$173

Year Two

Geological Consultants	$800
Field Assistant	44
Drafting	50
Air Photographs	6
Consumables, Maps, Photocopying	30
Analysis	10
Tenement Lease/Payments	15
Administration (15%)	143
Sub Total	$1,098

Year Three

Drilling Contractors	$211,894
Labour/Salaries	7,500
Consultants	20,000
Contract Services	3,533
Printing/Stationary	75
Chemical Assay	1,800
Car Hire	4,000
Airfares/Freight	60
Accommodation	19
Core Trays/Supplies/Spares	1,050
Equipment Hire	4,434
Rent/Leases	15
Administration 15%	38,157
Sub Total	$292,537
TOTAL	**$293,808**

Woodcutters Joint Venture

AZTEC MINING LIMITED

EL 4431 - ACACIA SOUTH PROJECT

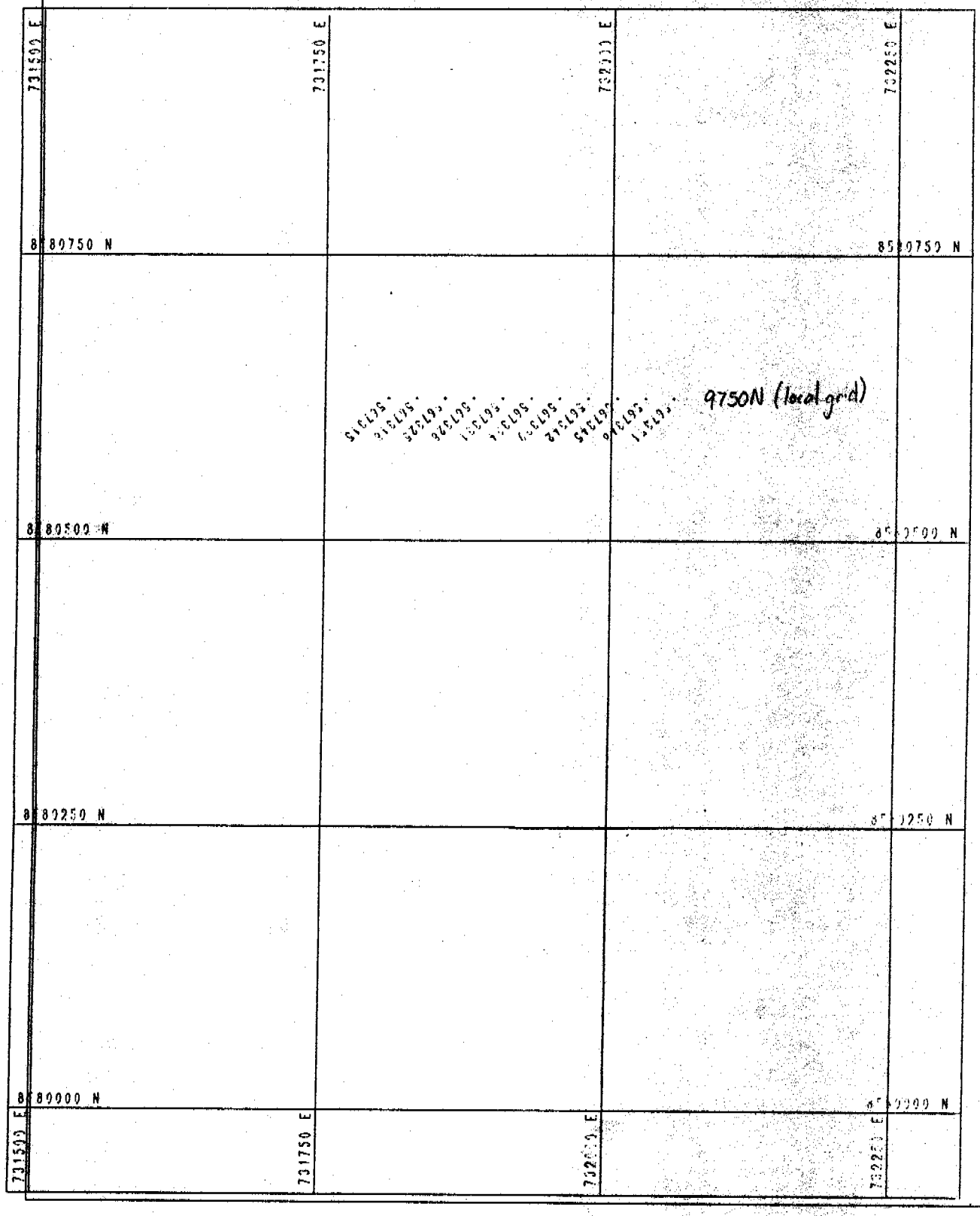
RAB DRILLHOLE LOCATION PLAN

File [illegible]

Date [illegible]

Date 17 Sep [illegible]

Figure 2



Woodcutters Joint Venture

Initials	Date
SGP	

Woodcutters Mine

ACACIA SOUTH PROSPECT - EL 6431

C HORIZON SOIL GEOCHEM - Pb ppm.

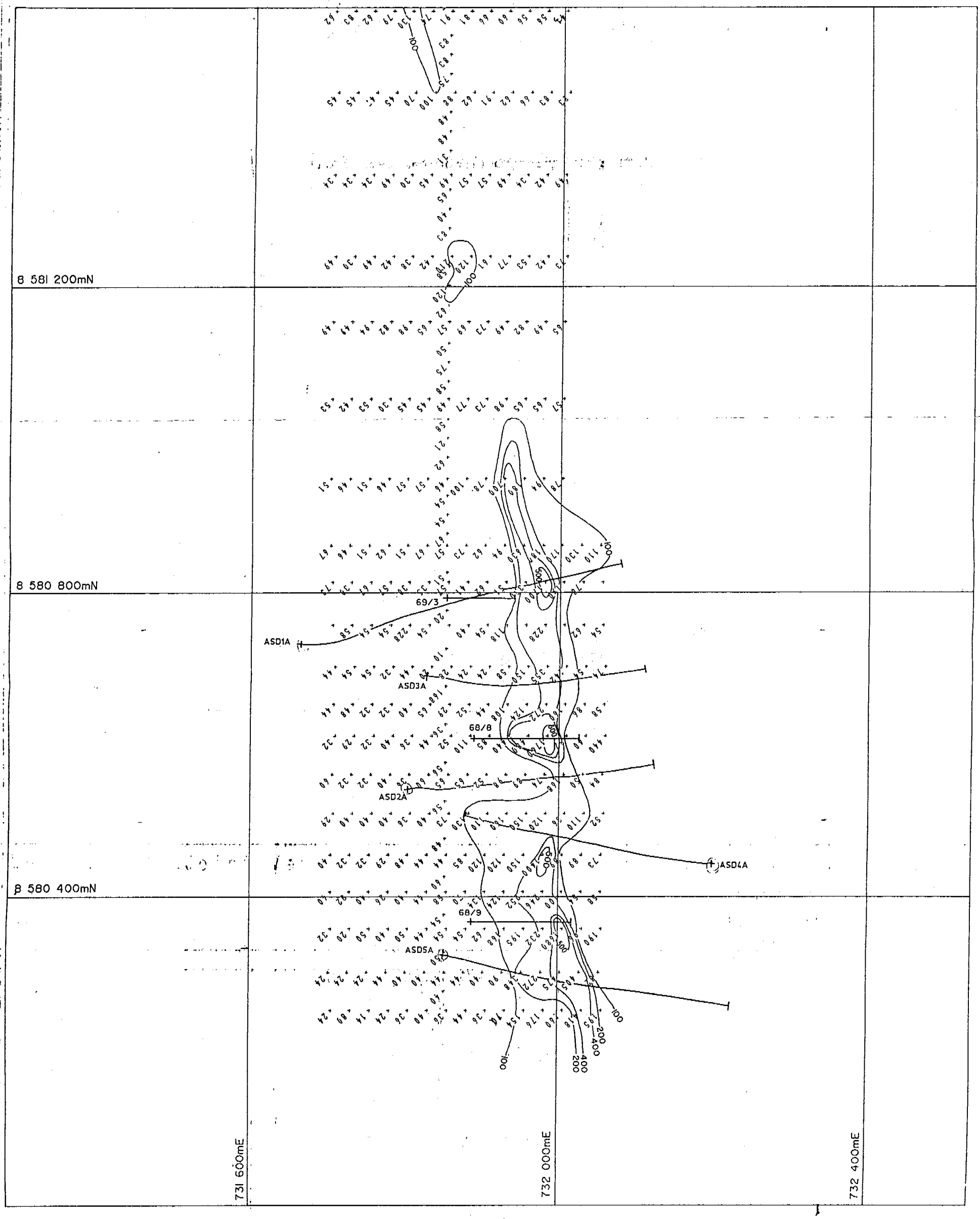
DRILL HOLE LOCATION PLAN

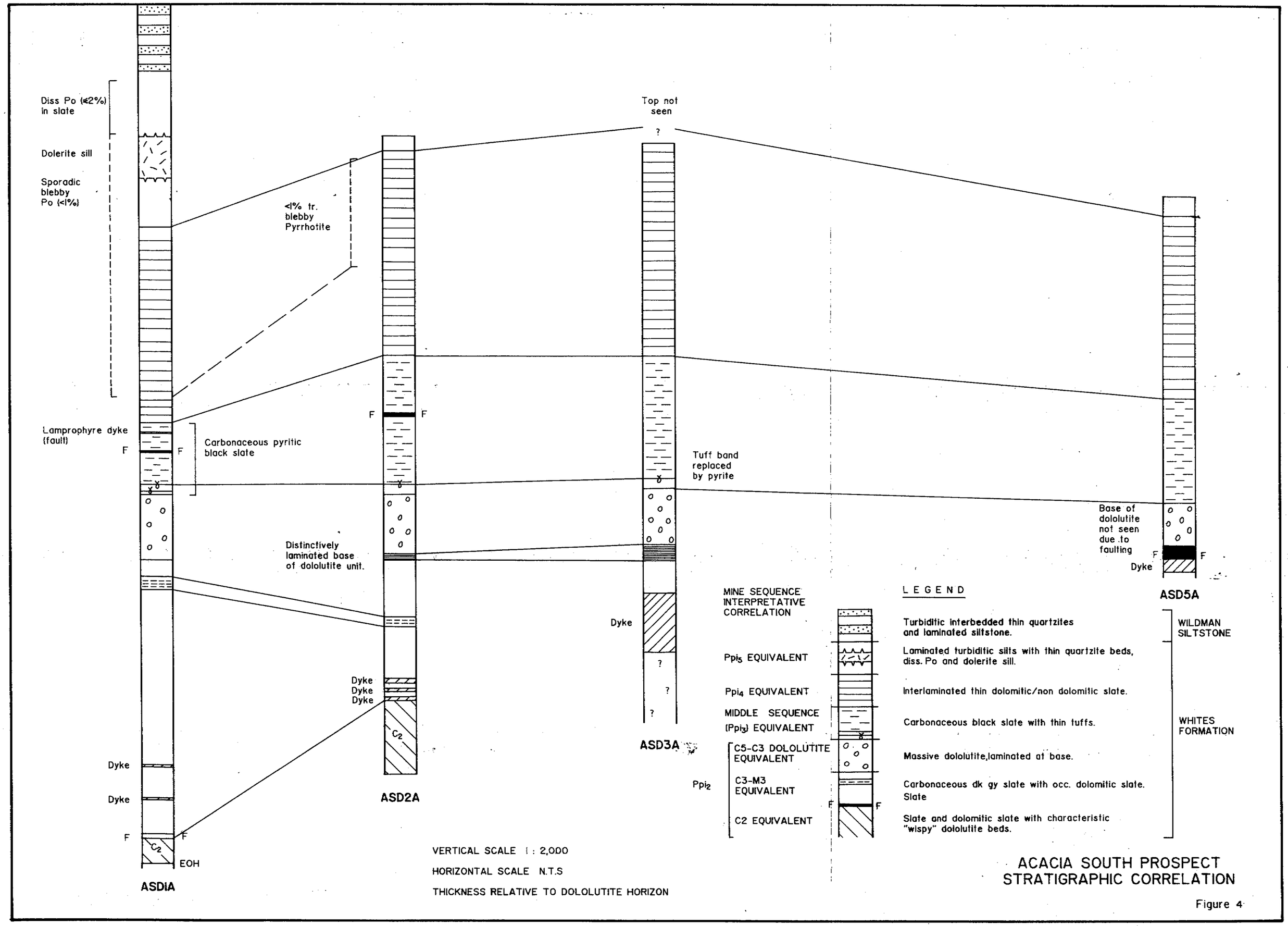
File :AS-SOILS

Scale :1 : 500

Date :25 May 1992

Figure 3





ACACIA SOUTH PROSPECT
STRATIGRAPHIC CORRELATION

Figure 4

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APPENDIX 1

RAB DRILL HOLE DATA

CLASSIC LABORATORIES LTD

Job: 1DN0962
O/N: 030503 D/S 11121

Final

ANALYTICAL REPORT

SAMPLE	Cu	Pb	Zn	As	Ag	Bi
82775	<20	<50	<20	<500	<2	<50
82776	<20	<50	<20	<500	2	<50
82784	<20	<50	<20	<500	<2	<50
26601	<20	610	110	580	<2	<50
26602	<20	100	1760	1100	<2	<50
26603	200	<50	280	1300	<2	<50
26604	<20	<50	220	<500	<2	<50
26606	<20	<50	900	1590	<2	<50
26607	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
26608	100	<50	1010	1570	<2	<50
26609	40	340	30	2270	<2	<50
26610	6080	<50	2110	3510	55	<50
26611	50	70	380	1610	<2	<50
26612	200	<50	890	1510	<2	<50
26613	170	<50	350	1600	<2	<50
26616	<20	100	20	<500	<2	<50
26617	<20	<50	140	780	<2	<50
26618	<20	<50	540	720	<2	<50
26619	<20	<50	140	890	<2	<50
26620	30	<50	440	870	<2	<50
26621	<20	<50	<20	<500	<2	<50
26622	100	<50	530	990	<2	<50
26623	<20	<50	<20	<500	<2	<50

Rock chip Sample

EL 6431

29 AUG '91 17:12 FROM CLASSIC LABS NT TO WOODCUTERS PAGE.002

CLASSIC LABORATORIES LTD

Job: 1DN1130
O/N: D/S 11124

Final

ANALYTICAL REPORT

SAMPLE	Cu	Pb	Zn	As	Au	AuDup1
26624	31	13	20	70	0.03	--
26625	14	7	14	70	0.06	0.03
26626	24	6	6	410	0.12	--
26627	72	106	580	70	<0.02	--

EL6431

UNITS	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	20	50	20	500	2	50
SCHEME	AAS2S	AAS2S	AAS2S	AAS2S	AAS2S	AAS2S

CLASSIC LABORATORIES LTD

Job: 1DN0962
O/N: 030503 D/S 11121

Final

ANALYTICAL REPORT

SAMPLE	Au	AuDupl	Sn	W
82775	0.04	--	4	<10
82776	<0.02	--	<4	<10
82784	<0.02	--	<4	<10
26601	<0.02	--	<4	<10
26602	0.04	--	<4	<10
26603	0.04	--	<4	<10
26604	<0.02	--	<4	<10
26606	<0.02	--	<4	15
26607	L.N.R.	L.N.R.	L.N.R.	L.N.R.
26608	<0.02	--	<4	<10
26609	0.22	--	<4	<10
26610	0.11	--	<4	<10
26611	<0.02	<0.02	<4	<10
26612	<0.02	--	6	<10
26613	<0.02	--	<4	<10
26616	0.09	--	6	<10
26617	<0.02	--	<4	<10
26618	<0.02	<0.02	<4	<10
26619	<0.02	--	<4	<10
26620	<0.02	--	<4	<10
26621	<0.02	--	<4	<10
26622	<0.02	--	<4	<10
26623	<0.02	--	<4	<10

EL 643)

UNITS	ppm	ppm	ppm	ppm
DET.LIM	0.02	0.02	4	10
SCHEME	AAS7	AAS7	XRF1	XRF1

Aztec Mining Company Limited

SAMPLE INFORMATION

ACACIA SOUTH EL ~~7064~~ 6431

Sheet 1 : 250,000 sheet

Record Type	Project Number	Project Name	Prospect Name	Prospect Code	Name	Number
		Acacia EL 6431	Acacia North/South			

10,000 metre AMG co-ord Northing	Easting	Aerial Photograph Film No.	Run No.	Photo No.	Analysical Lab	Job No.	Sample Type	Sampled By	Sample Date D D M M Y Y
							RAB	RRB	0 1 0 5 9

SAMPLE No.	NORTHING	EASTING	HOLE I.D.	FROM	TO	COMMENTS
567301	17900N	14125E	AN92	0	2	or clayey soil
				2	4	r clay
303				4	6	r clay fg w slst.
	17900N	14100E	AN93	0	2	ro clay/soil
567305				2	4	r clay.
306				4	6	ro clay c̄ rw fg slst.
	17900N	14600E	AN94	0	2	r clay/soil
				2	4	r w qtz rep bonat f/ CO_3 (AGS:
309				4	6	y pink fg slst. vw
567310	17900N	14575E	AN95	0	2	ro clay/soil
				2	4	green/grey ~~rw~~ fg slst.
312 Acacia N S				4	6	b grey w fg slst : fracture fillings
	9750N	10050E	AS 1	0	2	Surface alluvium - slst/~~slate~~
				2	4	yo slst/~~slate~~ shale w
567315				4	6	ro slst/shale w
	9750N	10075E	AS 2	0	2	RO Surface gravel / w slst / sh
				2	4	o w slst
~~318~~ 318				4	6	o w slst
				6	8	o w slst
567320				8	10	o w slst
				10	12	o w slst
322				12	15	o w slst.
	9750N	10100E	AS 3	0	2	Hy colluvium
				2	4	O w slst
567325				4	6	O w slst.

1st. Assay Ledger — 2nd. Project File — 3rd. Geologist.

...ng Company Limited

SAMPLE INFORMATION

Sheet
1 : 250,000 sheet

Type	Project Number	Project Name	Prospect Name	Prospect Code	Name	Number
		Acacia EL 6431	Acacia South			

10,000 metre AMG co-ord Northing	Easting	Aerial Photograph Film No.	Run No.	Photo No.	Analysical Lab	Job No.	Sample Type	Sampled By	Sample Date D D M M Y
							RAB	RRB	0 1 0 5 9

SAMPLE No.	NORTHING	EASTING	HOLE I.D.	FROM	TO	COMMENTS
567326	9750N	10125E	AS 4	0	2	ro w Slst/soil
				2	4	o w Slst
328				4	6	o w Slst.
	9750N	10150E	AS 5	0	2	or clay/soil
567330				2	4	lt or clay agglom/tuff.
331				4	5½	lt or clay agglom/tuff - s½ Q
	9750N	10175E	AS 6	0	2	lt or clay/mg qtz → sst/tuff
				2	4	lt or clay.
334				4	6	pink or clay/mg qtz → sst/tuff
567335	9750N	10200E	AS 7	0	2	RB soil/gravel/road
				2	4	o w clay.
				4	6	o w clay - qtz - tuff
				6	8	o w greny clay/tuff.
339				8	9	o w clay - greny tuff + q
567340	9750N	10225E	AS 8	0	2	R o gravel/soil
				2	4	lt o w sst/tuff - clayey
342				4	6	RO w sst/tuff - clayey.
	9750N	10250E	AS 9	0	2	ob soil/gravel.
				2	4	lt o w Slst/shale
567345				4	6	lt o w Slst/shale.
	9750N	10275E	AS 10	0	2	o o soil/w Slst.
				2	4	lt y grey w Slst
348				4	6	y grey w Slst.
	9750N	10300E	AS 11	0	2	rb Qtz hematite.
567350				2	4	ro dolomitic

1st. Assay Ledger — 2nd. Project File — 3rd. Geologist.

...ng Company Limited

SAMPLE INFORMATION

Sheet
1 : 250,000 sheet

Type	Project Number	Project Name	Prospect Name	Prospect Code	Name	Number
		Acacia EL 6431	Acacia Sandhills			

10,000 metre AMG co-ord Northing	Easting	Aerial Photograph Film No.	Run No.	Photo No.	Analysical Lab	Job No.	Sample Type	Sampled By	Sample Date D D M M Y
							RAB	RWD	0 1 0 5 9

SAMPLE No.	NORTHING	EASTING	HOLE I.D.	FROM	TO	COMMENTS
567351	9750N	10300E	AS11	4	4½	grey dolomite - hard.
	9200N	10050E	AS12	0	2	ob clay / soil
				2	4	ro clay w sst?
354				4	5	lt o w sst / Qtzite?
567355	9200N	10075E	AS13	0	2	o clay
				2	4	lt o clay w Qtzite?
357 1/5/92				4	5	lt clay w qtzite.
2/5/92	9200N	10100E	AS14	0	2	ro clay / soil
359				2	3	o w dark shale
567360	9200N	10125E	AS15	0	2	ro clay/soil qtz grains
361				2	4	o w sst/qtzite
	9200N	10150E	AS16	0	2	o w qtz/clay
363				2	3	o w qtzite
	9200N	10175E	AS17	0	2	o w qtz/ts/clay.
567365				2	3	o w qtzite.
366	9200N	10200E	AS18	0	2	o w qtzite - hard not bedded
367	9200N	10225E	AS19	0	2½	ro clay silicified sst - frag quartz
368	9200N	10250E	AS20	0	3	ro clay - qtz gravel.
369	9200N	10275E	AS21	0	3	→ unconsolidated qtz alluvial - grav
567370	9200N	10300E	AS22	0	2	clay - gravel w could not pan
371				2	5	gravel wash very coarse.
	9300N	10050E	AS23	0	2	ro clay soil.
				2	4	o w clay - claystone/tuff?
374				4	6	o w clay/tuff?
567375						

1st. Assay Ledger — 2nd. Project File — 3rd. Geologist.

ASSAYCORP PTY LTD
A.C.N. 052 982 911
174 Ward Street, Pine Creek, N.T. 0847
P.O. Box 41, Pine Creek, N.T. 0847
Telephone (089) 76 1262
Facsimile (089) 76 1310

ASSAY CODE: AC 02520

AAS/MA-3

15 MAY 1992

Sample RAB Results	Au (ppm)	FA/GC Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Co (ppm)	FA/GC As (ppm)
567315	0.07	0.08	51	19	122	16	5
567318	0.01		56	103	177	18	5
567322	0.02		57	226	234	21	12
567325	<0.01		62	44	238	15	4
567328	<0.01		44	284	446	17	15
567331	<0.01		16	51	51	<2	13
567334	<0.01		19	23	23	2	12
567339	<0.01		31	16	26	<2	12
567342	<0.01		28	20	21	2	20
567345	<0.01		22	18	28	<2	10
567348	<0.01	<0.01	32	20	27	<2	4
567351	<0.01		31	14	48	5	18
567354	<0.01		39	13	31	15	21
567357	<0.01	<0.01	38	12	24	12	24
567359	<0.01		33	10	23	9	18
567361	<0.01		27	8	22	11	27
567363	<0.01		31	13	33	8	33
567365	<0.01		32	13	32	9	30
567366	<0.01		29	11	18	10	22
567367	<0.01		33	12	18	12	29
567368	<0.01		29	11	22	11	32
567369	<0.01		24	11	19	10	31
567371	<0.01		28	13	33	8	48
Acacia South 567374	<0.01	<0.01	35	16	119	47	2

APPENDIX 2

DIAMOND DRILL HOLE DATA

WOODCUTTERS MINE - DRILLHOLE RECORD

HOLE NO: 58/9

PROPOSAL

LOCATION: ACACIA

PURPOSE: RELOCATING OF OLD BMR HOLE

PROPOSED BY: SP BET UP BY:

SET UP DETAILS: PEGGED AS STATION

9510 N 10070 E 900 RL 090 ° GRID AZIMUTH -50 °DIP

TARGET: (m depth) N E RL

PLANED DEPTH: (m)

DOWNHOLE SURVEY REQUIREMENTS:

OTHER SPECIFICATIONS (CORE SIZE, PERCUSSION DEPTH ETC.)

ATTC CO-ORDS REQUIRED

FINAL DATA

FINAL DEPTH: (m)

COMMENCED: COMPLETED: DRILLER:

COLLAR CURVEY: BY:

N E RL ° GRID AZIMUTH ° DIP

DOWNHOLE SURVEYS: See attached sheet

CORE SIZE:

OTHER DRILLING DETAILS: CORE LOGGED FROM 194' - 462'

ORIGINAL LOG SHOWS CORE TO 604' - NOT FOUND AT

NTDME CORE YARD

GEOLOGIST: SP

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: 68/9

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	*	*	0				
0.0	090	59					
60.98		45					
91.46		48					
121.95		50					
146.34	090	41					
182.92		39					
		EOH =					
		CHECK TOTAL =					

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 10/10/91
Logged by: SP

Hole: 68/9
Page No. 1 of 1

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
59.0	>95		8																					Core [illegible] e 194' (59.14 m)
194' 60.0	>95		8		20	60	VF		2															59.14 – 60.44 Lower silt intercalated with [illegible]
200' 61.0	>95		3						2															tenuous putty // to fine lamination. Lower mudst are interbedded with orbs.
62.0	10								2															ex-clastic with – tuff ?! 60.44 → 73.17 DK g-y mottled
63.0	10								2															slate – 1/10 – recovery – max 1.2m ~~recovery~~ 12.7m (10% recovery)
64.0	10								2															–
210' 65.0	10								2															
66.0	10								2															
220' 67.0	10								2															
68.0	10								2															
69.0	10								2															
70.0	10								2															
230' 71.0	10								2															
72.0	10								2															
73.0	10								2															
240' 74.0	50								2															73.17 – 73.69 broken dk ground g-y mottled slate
75.0	50								2															73.69 – 80.4 DK g-y – black, probably leached mottled (probably dolomitic) laminated slate – olive grey – dk g-y laminae
76.0	50					50			2															
250' 77.0	>95					50			2															
78.0	>95								2															
79.0	>95								2															80.0 Slate becomes less mottled + broken – mod – dk g-y with olive grn slightly pattern? interbeds
260' 80.0	>95				30	70	S		2															
81.0	>95			V	20	70	S		2			<1 TR												80.4 m millimetre calcite veins e 15° to CA with galena infill
82.0	>95								2															BASE OF OXIDATION AROUND 82.3
270' 83.0	>95								2															(270')
84.0	>95								2															84.4 – 84.7 millimetre calcite stringers e 15° to CA filled with tr galena + sphalerite
	>95			V					2			TR	TR											

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 10/10/91
Logged by: SR

Hole: 63/9
Page No. 2 of 4

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
79.0 85.0	95								2						<1									274' – 325' (85.1 – 99.1)
86.0	>95								2															Broken, probably within,
294 87.0	>95								2															laminated grey slate with pyrite blebs
88.0 281	80								2															
89.0 294' 90.0	80								2						1%									
91.0	>95								2						1%									
294' 301' 92.0	>95								2															
	70				35	75	S		2															
93.0 302' 94.0	70								2															
	98								2															
95.0 312'	31								2															
96.0	31								2															
97.0 320' 98.0	31								2															
	>95				40	70	S		2															
99.0 325	95								2															325' – 360' (99.1 – 109.8)
100.0	95								2															1% py probably within rocky laminated slates.
101.0 332'	95								2															
102.0	95				35	70	S		2															
103.0 338'	95								2															
104.0 344' 105.0	50								2															
106.0	70								2															
350' 6" 107.0	70								2															
108.0	70								2															
109.0	70								2															
360' 6" 110.0	70				35	70	S		2															
111.0	90								2															

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 10/10/91 Logged by: SR

Hole: 68/9 Page No. 3 of 4

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
111.0																								
326'2" 112.0	90								2						<1									Blebby pyrite
112.0	90				20	80	S		2						<1									360 - 385' DK gy/gn weakly (99.1 - 117.4) pyritic + carbonaceous laminated slate
116.0	95								2						<1									
376'6" 115.0	95								2						<1									
280' 116.0	95								2						<1									
117.0	95				75	70	S		2						<1									Abundant pyrite // to bedding + as diseam blebs. S
385'6" 118.0	95								2						<1									
119.0	95				30	70	S		2						<1									385' - 410' (117.4 - 125.0) Partly weathered, laminated
120.0	95								2						<1									weakly pyritic dk gy slate
394'5" 121.0	95								2															
400' 122.0	95								2															
123.0	95								2															
124.0	95								2															
410' 125.0	95								2															125.0 —
126.0	95								2															410' - 437' (125.0 - 133.2)
127.0	95								2															Grey green + weakly weathered
420' 128.0	95				50	75	0 IP		2															monotonous grey slate.
129.0	65								2															
437' 130.0	65								2															(134.9 - 140.9) 442' - 462 Distinctly
131.0	95								2															bombed dk gy weakly pyritic slate
132.0	95								2															
133.0	95								2															
134.0	95								2															134.8 - 141.8 weathered pyrite // to bedding indicates pockings in slate
442' 135.0	95								2															
136.0	70				30	65	S		2															
137.0	70																							

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 10/10/91
Logged by: CP.

Hole: 68/9
Page No. 4 of 4

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	Other	Sample Number	Comments
139.0																								
	70								2						1									
138.0																								
	70								2															
121.0																								
	70					65			2															
140.0																								
462'	70				50	70	5		2															Last bag to 462'
141.0																								
																								Original log shows hole end
																								@ 604'

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS MINE - DRILLHOLE RECORD

HOLE NO: ASDA 1A

PROPOSAL

LOCATION: EL 6431 - ACACIA SOUTH PROSPECT

PURPOSE: TO TEST INTERSECTION OF PREDICTED C5 (Pp12 SEQUENCE) WITH INTERPRETED ANTICLINAL STRUCTURE + L1 Pb SOIL ANOMALY

PROPOSED BY: SP SET UP BY: SP

SET UP DETAILS:

10090.0 N 10012 E ..... RL 0845 GRID AZIMUTH -66 DIP

TARGET: 600 (m depth) 10100 N 10320 E -500 RL

PLANED DEPTH: 700 (m)

DOWNHOLE SURVEY REQUIREMENTS: 50, 100 m IN PRECOLLAR
30m THEREAFTER

OTHER SPECIFICATIONS (CORE SIZE, PERCUSSION DEPTH ETC.)

NOTE: HOLE SET UP ON SP GRID CO-ORDS.

1ST PRECOLLAR DRILLED TO 30m AND ABANDONED DUE TO BAD GROUND

COLLAR MOVED m 1.5m EAST AND RE-COMMENCED

AMG

FINAL DATA

FINAL DEPTH: 732.4 (m)

COMMENCED: ..... COMPLETED: ..... DRILLER: .....

COLLAR CURVEY: BY: .....

.....N .....E .....RL ..... GRID AZIMUTH ..... DIP

DOWNHOLE SURVEYS: See attached sheet

CORE SIZE: .....

OTHER DRILLING DETAILS: .....

GEOLOGIST: .....

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: .....

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Point*	Interval	RL	N	E
Collar	*	*	0				
66		-68					
90.4	088	-69					
120.4	085	-70					
150.4	073	-70					
180.4	069	-69					
222.4	065	-66					
252.4	068	-66.5					
285.4	065	-64					
315.4	070	-62					
345.4	071	-60					
375.4	073	-56					
405.4	074	-52					
435	076	-48					
		EOH =					
		CHECK TOTAL =					

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: .....

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	*	*	0				
465	076	-45					
500	075.5	-43					
530	076	-42					
560	079	-39.5					
590	078	-36.5					
620	077	-34					
651.4	077	-31.5					
683.4	076	-30					
710	078	-29					
		EOH =					
		CHECK TOTAL =					

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 10/1/91
Logged by: AG

Hole: ~~AS~~D1A
Page No. 1 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
0-1		Int	W						Brown & white clay													Pre collar		Creamy Brown
1-2									" + Intw	SSm														minor Ferrug chips
2-3									Clays											2				Ferrug chips minor Qtz, Intw SSm
3-4																								Red Brown mod Intw SSm
4-5																								Creamy Brown minor rounded Qtzite
5-6																								Red Brown mod rounded Qtzite lot pesilites
6-7																				20				Creamy Brown mod Qtz & Intw SSm
7-8																				5				minor Qtz
8-9																				5				"
9-10																				1				Red Brown "
10-11									Clays															Brown (Pale) Clays
11-12																				Tr				Trace Qtzite
12-13																								Brown clays
13-14																								
14-15																								
15-16																								
16-17																								
17-18																								Grey Brown
18-19																								Brown
19-20																								
20-21																								
21-22																								
22-23																								
23-24																								
24-25																								
25-26																								

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 7/1/12
Logged by: SP

Hole: ~~W~~ ASD 1
Page No. 1 of 1

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Mineral Percentages: Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
0-1									LCZ															Lbr - lbrown clays
1-2									Mssh															lorbn carb. mottled silts + brn. shale orbn
2-3									Mssl															lorbn - lbrown clays with Mssl frags
3-4									"															" " " " " "
4-5									"															lorbn silts + frags within Slt frags
5-6									"															lgy-cergy clays with orbn siltstone
6-7									"															lorbn " " " " "
7-8									"															Red. clay " " " "
8-9									"															Red. lorbn clays. with sm. frags
9-10									"															lcergy-lorbn clays with v. mottled limonitic Mssl frags
10-11									"															" " " "
11-12									"															lorbn - orbn clays with some Slt frags
12-13									"															lbrown clays with brick red - dkgy Mssl - mostly weathered
13-14									"															" " " " "
14-15									"															" " " " " " brick red Mssl
15-16									"															" to "Slt" " " " "
16-17									"															Lorbn crushed clays + "dkorbn - brick red Mssl
17-18									"															" " " " "
18-19									"															" " " " "
19-20									"															" " " " "
20-21									"															" " " " "
21-22									"															Lorbn + lbrown clays — no frags
22-23									"											TR				~~Lorbn~~ Ditto, with orbn Mssl frags
23-24									"											TR				Orbn Mssh frags mixing for lorbn-crm clays
24-25																								
25-26																								

→ 30m Pre collar abandoned due to loss of air through bad ground

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

ASD 1 A collared 1.5 m E

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 9/1/12
Logged by: SP

Hole: ASD 1A
Page No. 2 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Mineral Percentages: Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
26-27									Clay													Pie		Brown Clay
27-28			W																			Collar		
28-29																								
29-30																								
30-31																								
31-32																								
32-33																								
33-34																								
34-35																								Green Brown
35-36																								
36-37																								
37-38																								
38-39																								rare Int w Dol.
39-40																								"
40-41																								"
41-42																								mod Int w Dol
42-43																								Water Table minor Int w Dol
43-44																								mod Int w Dol
44-45																								
45-46																								
46-47		mod	W																					
47-48																								high mod w Dol med gr
48-49																								
49-50									N															
50-51									Dolerite med gr (Blue green)															mod to slightly W med gr Dol
51-52		Partially + mod	Pit																					Blue Green

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date:

Logged by:

Hole: ASD 1A

Page No. 3 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
52-53		partially to mod							Dol													Pre collar		Blue green mod to slightly w Dol
53-54			W																					
54-55																								
55-56									Dol & Int w Shale														Blue green Brown	Dol + minor V Int w light Brown Sericite/Chlorite formally Shale?
56-57																								
57-58											NB Shale → Represents a light Brown Int w fine grained Rock w Fe stained joints & fractures & very little fabric left													
58-59																								
59-60																								
60-61											Now composed of Sericite chlorite + minor Silica													Int w Shale + mod Dol
61-62																								Blue green/Brown Dol w mod Int w Shale
62-63											Could be derived from Shale, Sam, Slst ?									1				50:50 Dol Shale
63-64																				1				
64-65																								
65-66																								
66-67																			1					
67-68																			1		1			Dol fine gr - all sulphides & Cb in Dol 30% Shale
68-69																				1	1			
69-70																				1	1			
70-71																				1	1			10% Shale
71-72																				1	1			
72-73																								70% Sericite/Chlorite Int w rock (Shale) 30% fine gr Dol
73-74																								
74-75																								
75-76																								
76-77																								Dol coarser gr (90%)
77-78																								

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date:
Logged by:

Hole: ASD1A
Page No. 4 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Mineral Percentages: Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
78-79									Dol													Pre Collar		Bluegreen Brown / V-fine slates Dol
79-80									Alt w slate															
80-81																								Brown
81-82																								
82-83						mod w Ssm			Qtzites, lats +		Qtz			+ mod	Dol					5				+ minor Blue green
83-84										minor lats										10				" "
84-85																								84.0 - EO PC.
85-86																								
86-87																								
87-88																								
88-89																								
89-90																								
90-91																								
91-92																								
92-93																								
93-94																								
94-95																								
95-96																								
96-97																								
97-98																								
98-99																								
99-100																								
100-101																								
101-102																								
102-103																								
103-104																								

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 13/1/91

Logged by: SP.

Hole: ASD 1A

Page No. 5 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Mineral Percentages: Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
84.4	95	4			80	35	5		MSS1/Sp						<1									84.4 – 91.4 Interbedded dkgy slate with
87.4		3							"						<1									dg. lgy laminated quartzite bed 2mm – 15cm wide Sed/dk ratio 50:50
90.4		4			90	75	5		"						<1									Lamination are faulted + crumpled – possibly sediment slumped in place
93.4		5	96.1	S_3					"						<1									90.4 – 96.0 Dm. dkgy cleaved slate with subord.
96.4		5							MSS1/Sp						<1									thin quartz interbeds
99.4		5			40	15	5		"						<1									96.0 – 108.4 Dm cleaved dkgy slate with
102.4		4							"						<1									regular interbeds of 1-5cm pyritic laminated dg. lgy quartzites
105.4		5							"						<1									108.4 – 126.4 Sequence settles down into
108.4		5			50	15	5	(So 70 ~ S_2)	"						<1									lighter, weathering, thicker turbidite units composed of 12mm – 2cm
111.4		5							"						<1									fine silt base fining upward with lgy laminated dk/lt silt → fining upward
114.4		5	114.7/114.9	S_2	35	15	5	(So 40 ~ S_2)							<1									into dominant dkgy massive slate. E unit, topped by 2-5mm thin
117.4		5						λ	"						<1					1				black slate bed
120.4		4			40	15	5	(So 40 ~ S_2)							<1					<1				Evidence suggests younging upholes
123.4		3	125.1/125.3	V_2					"						<1					<1				126.4 – 161.0 Sequence even more shale/slate dominant
126.4		4	127.3	V_2	50	10	5	(So 20 ~ S_2)	MSS1-lam						<1					2				with occ. fine lgy quartzite interbeds present – mostly 1mm laminations mainly 2?? slate with 0.5-2cm dkgy siltstone beds
129.4		5	127.5						"						<1					<1				127.2 – 129.5 millimetre calcite stringers dilate + brecciate e 15° to CA (striking 40° from CA)
132.4		5			40	15	5	(So <20 ~ S_2)	"						<1					<1				
135.4		5							MSS1-lam/Sqtz lam						<1					<1				
138.4		5			35	15	5	(So <20 ~ S_2)	MSS1-lam						<1					<1				
141.4		5							"						<1			TR		<1				147.0 – 147.8 lgy dolomitic slate interbed showing visible upholes fining
144.4		5			40	20	5	(So 25 ~ S_2)	"						<1					<1				direction (coming dolomitic ? + fining further!)
147.4		5							"	10					<1					TR				Po inclusions → likely + disseminated sulphides
150.4		4			40	15	5		"						<1			<1		TR				below approx 150 m
153.4		5							"						<1			<1		TR				Sequence contains → laminated minor turbidite units E
156.4		5							"						<1			<1		TR				(locally).
159.4		5			5	35	5/11	λ	.....	10					<1			<1		TR				161.0 – 161.5 – lgy fine dolomitic unit with conspicuous up hole fining
162.4																								and sharp base to unit e 161.5

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9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 13/1/91
Logged by: SP.

Hole: ASD 1A
Page No. 5 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
84.4	95	4			80	35	5		MSS1/Sgt-lam						<1									84.4 – 91.4 Interbedded dkgy slates with
87.4		3							"						<1									dg. lgy laminated quartzite beds 2mm – 15cm with Sed/dk ratio 50:50
90.4		4			40	35	5		"						<1									Laminae are contorted + overturned – possibly slumped in parts
92.4		5	96.1	S_2					"						<1									90.4 – 96.0 Dom. dkgy cleaved slate with subord. thin quartz interbeds
91.4		5							MSS1/Sgt-lam						<1									
99.4		5			40	15	5		"						<1									96.0 – 108.4 Dom cleaved dk gy slate with
102.4		4							"						<1									regular interbeds of 1-5cm pyritic laminated dg. pale gry quartzites
105.4		5							"						<1									108.4 – 126.4 Sequence settles down into
108.4		5			50	15	5	(So 70 to S_2)	"						<1									slightly more blocky turbidite quartzite comprised of 12mm – 2cm
111.4		5							"						<1									fine silt bm. fining upwd into lgy laminated dkgy/fine silt → fining upwd
114.4		5	114.7 114.9	S_2	35	15	5	(So 40 to S_2)							<1									into laminated dkgy mgm slate. E unit, topped by 2-5mm thin
117.4		5						λ	"						<1					1				dolomitic slate bed
120.4		4			40	15	5	(So 40 to S_2)							<1					<1				Evidence suggests younging upholes
123.4		3	125.1 125.3	V_2					"						<1					<1				126.4 – 161.5 Sequence now more shale/slate dominant with occ. fine lgy quartzite interbeds present – Mostly [illegible] slate with 0.5-2cm dkgy slate beds ???
126.4		4	127.1 127.5	V_2	50	10	5	(So 20 to S_2)	MSS1-lam						<1					2				127.2 – 128.5 millimetric calcite stringers dolomite + brownish e 15° to CA (strike 40° to CL)
129.4		5							"						<1					<1				
132.4		5			40	15	5	(So <20 to S_2)	"						<1					<1				
135.4		5							MSS1-lam/Sgt-lam						<1					<1				
138.4		5			35	15	5	(So <20 to S_2)	MSS1-lam						<1					<1				
141.4		5							"						<1			TR		<1				147.0 – 147.8 lgy dolomitic slate interbed showing pyritic cubic fining
144.4		5			40	20	5	(So 25 to S_2)	"						<1					<1				direction (coming dolomitic ↑ + fining footwall!)
147.4		5							"	10					<1					TR				Po intergr. → blebby + disc. sulphides below approx 150 m
150.4		4			40	15	5		"						<1					TR				
153.4		5							"						<1			<1		TR				Sequence continues → laminated mica turbidite unit E (lowly!)
156.4		5							"						<1			<1		TR				161.0 – 161.5 – lgy fine dolomitic unit with conspicuous up hole fining
159.4		5			5	35	5/1	λ		10					<1			<1		TR				ok sharp base to unit e 161.5
162.4																								

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12. Cream dololutite
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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 13/1/91
Logged by: SP.

Hole: ASDD A
Page No. 6 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
162.4	95	5							2						tr				<1					
165.4		5			40	20	5	(5, 20, 5)	2						TR				<1					1% inc. dominant sulphide → blebby + fine stringers + flecks // to S_2
168.4									2						TR				<1					Pyrite dominant → lots remain on fracture planes and in exch - rich bands
171.4					45	20	5	"	2						TR				<1					stuck in later carbonate veining
174.4									2						TR				<1					
177.4					40	25	5	"	2						TR				<1					
180.4									2						TR				<1					
183.4									2						TR				<1					
186.4			188.7 / 188.8	V	45	35	5	"	2						TR				≤1					188.7 - 188.8 10cm bldy qvn with minor Po.
189.4									2						TR				≤1					
192.4					35	35	5		2						TR				≤1					veinlet
195.4		3	198.1 / 199.1	V2 V2					2						TR				≤1					198.1 - 199.1 Broken, fractured & intensely chloritic
198.4		3			40	50	5		2						TR			1	TR	32				
201.4		5	202.7		20				Md						TR				TR		<1			202.7 Contact between laminated,
204.4		5			20										TR				TR		<1			intensely + chloritized slate w/ strongly foliated meta diabase - Amphibolite
207.4		5			20										TR				TR		≤1			202.7 - 223.8 Fg dkgn strongly cleaved /
210.4		5			30										TR				TR		≤1			foliated qualitative chloritized Dolerite with cleavage at a
213.4		5	217.0 / 217.7	V2	40										TR				TR		<1			constant 20 - 40° to CA. Abundant carbonate in the
216.4		5			40										TR				TR		<1			groundmass and in thin millimetric foliation // veinlets + stretched
219.4		5			30										TR				TR		<1			blebs 217.0 - 217.7 strongly cleaved
222.4		5													TR				TR		<1			dolerite with cm banding // to cly.
225.4		5													TR				TR					223.8 - 229.8 Dolerite less strong
228.4		5	230.6	V											TR	TR			TR					foliation + becomes massive; jj.
231.4		5													TR				TR					230.6 2cm qtz vein with minor Cpy 20° to CA
234.4		5													TR				TR					
237.4		5													TR				TR					
239.0		4													TR				TR					

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date:
Logged by:

Hole:

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
239.0	>95	2	239.8						2	5					TR				<1					239.8 – Concordant contact between pillowbrecciated chilled tholeiite &
240.8				S_2																				
243.4	"	2	246.0		20	50	5		2	20					TR				<1					Laminated dkgy grn chloritic slates
246.9	"	3							2	5					TR				1					Diss. Po. present from 234.0
248.4	"	4			70	50	5		2	<5					TR				1					239.0 – 242 Core intensely broken // to S_2
252.4	"	5							2	<5					TR				1					281.4 – 273.4 Dominantly dkgd grey slates interlaminated
255.4	"	5			65	50	5		2	<5					TR				1					with dkgy bands 2cm – 2cm. + less common lgy dolomitic slate
258.4	"	5							2	<5					TR				1					bands. Dominant sulphide = Po as fine diss // S_2 & thin
261.4	"	5			20	50	5		2	<5					TR				1					So // segregation Carbonate present as spaces & cutting
263.8	"	4							2	<5					TR				1					Veinlets throughout core esp. 273.4 – 281.4
267.4	"	5			21	45	5		2	<5					TR				1					269.5 Kinked bedding traces with ch. filled & assoc. dilation zones
270.4	"	5							2	<5					TR				1					in kink axes
273.4	"	5			30	45	5		2	<5					TR				1					
276.4	"	4							2	<5					TR				1					272.4 – 275.9 dkgy-black laminated slate
279.4	"	5			16	40	5		2	5					TR				<1					277.0 – Diss Po decreasing ??
282.4	"	5							2	10					TR				<1					lgy X bedded dolomitic slate interbeds 2-10cm thick within monotonous
285.4		5			25	40	5		2	<10					TR				<1					laminated medgy – dkgy – Interbeds become regular, and
288.4		5							2	<10					TR				<1					lighter w/in thicker occ (287.1–287.6) (314.2 – 314.6)
291.4		5			20	45	5		2	<10					TR				<1					
294.4		5							2	<10					TR				<1					
297.4		5	296.4		20	50	5		2	<10					TR				<1					Good Clg/Bd relationships observed. 296.4 1cm qtz-ch-py vein
300.4		5							2	15					TR				<1					
303.4		5			25	50	5		2	15					TR				<1					Sporadic Po slates typically along S_2 – less common below 300m
306.4		5							2	15					TR				TR					
309.4		5			25	45	5		2	15					TR				TR					
312.4		5							2	15					TR				TR		<1			308.7 – 309.1 Diluted v-ch zone with thin fractures
315.4		5			25	50	5		2	20					TR				TR		<1			

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 16-17/01/92
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Hole: ASD1A
Page No. 3 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
315.4	>95	S							2	10					TR				<1					Med - dk grey slate with carbonate lgy dolomitic slate
318.4		S			20	55	S		2	15					TR				<1					interbedded 1cm - 40cm thick
321.4		S							2	<10					TR				<1		TR			Diss Po throughout in clg seg.
324.4		S			26	45	S		2	15					TR				<1					327.4 - 362.4 Similarly mottled laminated
327.4		S							2	20					TR				<1					banded dk grey - med grey slates with light lgy dolomitic
330.4		S			30	50	S		2	20					TR				<1					slate interbeds — with more
333.4		S							2	20					TR				<1					in dolomitic/carbonate component in actual slate beds from 357.4
336.4		S			25	55	S		2	20					TR				<1		TR			330.5 blebby Po. present
339.4		S							2	20					TR				<1					
342.4		S			30	55	S		2	20					TR				<1					
345.4		S							2	20					TR				<1		<1			
348.4		S			35	20	0/1		2	20					TR				<1					
351.4		S							2	20					TR				<1					353.6 - Some blebby Po
354.4		S			30	20	S		2	30					TR				<1					Inc. dolomitic/calc. component within normally non dolomitic
357.4		S			30	60	S		2	30					TR				<1					grey slate.
360.4		S							2	30					TR				<1					365.5 Sigmoidal tension gashes - sets ∥ to clg filled with white Cb
363.4		S			30	60	S	S on 90	2	30					TR				<1		<1			
366.4		S							2	50					<1				<1					
369.4		S			35	60	S		2	20					<1				<1					
372.4		S							2	20					<1				<1		TR			
375.4		S			30	70	S		2	20					<1				<1		TR			376.8 <1cm ch vein tipping 60° - opp to Clg.
378.4		S							2	20					<1				<1					
381.4		S			35	35	0/1		2	30					<1				<1					384.6 - 387.4 Dom lgy slate with light dolomitic component
384.4		S							2.11	40					<1				<1		<1			
387.4		S			35	60	0/1		2	20					<1				<1					
390.4		S							2	20					<1				(1)		2			diffuse fractures with Cb infill
393.4																								

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

KMOWLEDGE
S/INCLINATION

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 17/01/92
Logged by: SP

Hole: ASDAA
Page No. 9 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
385.4	>95	5			35	70	S		2	30					<1				<1					
396.4	"	5							2.11	40					<1				<1					396.0 – 404.0; Lgy, highly dolomitic slate
399.4	"	5			35	70	S		2.11	30					<1				<1					- still dirty limited with alternating dol and hol pyr laminae,
402.4	"	5							2	70					<1				<1					
405.4	"	5			35	65	S		2	30					<1				<1		1			407.5, 407.8 1cm cb veinlets dipping c 50° opp to cly
408.4	"	5							2	20					<1				≥1					
411.4		5			35	65	S		2	20					<1									
414.4		5							2	20					<1									
417.4		5			35	65	S		2	20					<1									
420.4		5							2	20					1									421.5 – Inc. in pyrite
423.4		5			40	60	S		2	20					1									
426.4		4	423.4 / 428.3	S2				426.2		20					1						1			428.2 – 441.1 heavily increasingly dk gy + more pyrite
429.4		4			40	60	S		2	10					≥1						≥1			441.1 – Slates darker gy + increasing pyrite ...
432.4		5							2	10					≥1									+ 50// sig-grade with CO_3 veins ... slate less ...
435.4		4	436.0 / 437.7 / 438.0	S2	50	-			//8//						2						2			436.0 – 437.7. Strongly foliated light gy grey altered pyritic lamprophyre (dolomite) dyke.
438.4		5							2	<10					≥1									
441.4		5			50	70	S		2	<10					≥1									- Intended along S2// structure Both contacts show shear – esp. lower one ... 30cm
444.4		4	447.0 / 447.4	S1					2	<10					≥1									shear + veinl slate with
447.4		3	449.7 / 450.3	S1 V1	45	65	S		2.9	<10					≥1						20			graphitic broken surfaces
450.2		5							2	<10					2						2			449.0 – 450.2 Strongly sheared, graphitic veinl + broken fault zone
453.4		5			30	50	off		2	<10					2						1			
456.4		4	458.0 / 459.1		50	55	off		2	<10					2						5			
459.4		2	460.6	S1 V1 B1					9.2	<10					2						30			459.0 – 461.4 Strongly sheared, brecciated, graphitic + broken fault zone
462.4		4			40	65	S		2	<10					≥2						2			
465.4		3	467.0 / 467.7						2	<10					≤2					2	2			467.0 – 467.7 Silicified fault zone with infill
468.4					45	75	S		2.5	<10					≤2									pyrite vein 467.0 – 467.8
471.4			471.2																					471.2 1cm lgyn tuff

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9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 24/01/92
Logged by: SP

Hole: ASD1A
Page No. 10 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
471.4	>95	5							2	<10					<2									475.0 Two closely spaced lyg/gy carb tuff bands sep. by low blk slate
474.4		5	477.4 475.8		40	80	5		2.5	<10					<1					1	2			
477.4		5	478.7						2.11	<10 40					1									478.7 Transition over 30cm from carbonaceous pyritic laminated black
480.4		5							2.11	40					1									Slate to lgy laminated more dolomitic ?? slate with folds
483.4		5			70	70	5		2.11	40														decrease in pyrite content
486.4		5			25	35	0/11		2.11	40														487.0 - 495 - chaotic crenulated folding in core ??
489.4		5	491.1 491.6						2.11	40											2			491.1 - 495.0 Zone of stgy stained/mylonite laminated centimetric qtz - chl veins
492.4		5	493.9		40	60	0/11		2.11	40											2			strong stgy contacts, chlorite by penetrative cly. - pyr crenulated folding in core
495.4		5	496.7						2.11	40														
498.4		5							2.11	40														
501.4		5			20	50	5		2.11	40														
504.4		5							2.11	40														508.7 Contact lightness stgy dolomitic slate to increasingly
507.4		5	509.7		15	60	5		11.2	70														lighter gray (more dolomitic ??)
510.4		4							3.11.2	70														laminated & cleaved dolomitic slates, almost looking like dololutites
513.4		5			10	45	5		3.11.2	70														in places. These grade back into dolomitic slates
516.4		4			20	30	5		3.11.2	70														back into dk gy carbonaceous pyritic slates @ 518.0
519.4		4				55			3.11.2	70														
522.4		5	523.0						2	<10					<1									
525.4		5			20	45	5		2	<10					<1									
528.4		5	531.1						2	<10					<1									531.1 3cm low q-ch slate vein
531.4		5	531.7 531.9		40	60	5		2	<10					<1						5	2		531.7 - 531.9 20cm q-ch vein
534.4		5							2	<10					<1									
537.4		5	538.1 538.3		15	70	5	538.5	11.2	80					<1						5	1		538.5 - 542.4 Contact transition from dk gy blk slate to increasingly
540.4		5							11.2	80					<1									stgy dolomitic slate
543.4		5			25	70	0/11		2.11	20					<1									546.1 - 546.3 Low q-slate vein - particularly stained
546.4		5							2						<1									Core broken. Stg stained boundary vein @ 548.2
549.4																								

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13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 24/01/92
Logged by: SP

Hole: ALD 1A
Page No. 14 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
549.4	>85	5			35	65	0/1		2	<10					<1									544.4 — [illegible] of dkgy
552.4		5							2	<10					<1									hdy laminated carbonaceous slates with <10 carbonate content
555.4		5			25	70	0/1		2	<10					<1									diss + blebby pyrite throughout
558.4		5							2	<10					<1									- Occ. lighter grey pnl. more dolomitic
561.4		5			25	75	0/1		2	<10					≤1									horizon 605.7 – 606.0 635.5 – 649.1
564.4		5							2	<10					≤1									
567.4		5			20	80	0/1		2	<10					≤1									
570.4		5							2	<10					≤1									
573.4		5			60	80	0/1		2	<10					≤1									
576.4		5							2	<10					≤1									
579.4		5			50	60	0/1		2	<10					≤1									
582.4		5							2	<10					<1									
585.4		5			40	70	(S)		2	<10					≤1									
588.4		5							2	<10					≤1									
591.4		5							2	<10					≤1									
594.4		5			35	65	0/1		2	<10					≤1									
597.4		5							2	<10					≤1									
600.4		5			35	70	0/1		2	<10					≤1									
603.4		5							2	15					≤1									
606.4		5			35	70	0/1		2	<10					≤1									
609.4		5							2	<10					≤1									
612.4		5			70	65	0/1		2	<10					≥1						1			614.4 Cream pyrite vein in small fault closure.
615.4		5	607.5 618.0						2	<10					<1					2	5			617.8 – 618.0 Cream ab-qtz-[illegible]
618.4		5			95	55	0/1		2	<10					≤1									
621.4		5							2	<10					≤1									
624.4		5			40	65	0/1		2	<10					≤1									
627.4																								

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9. Breccia
10. Leached slate
11. Dolomitic slate
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13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 24/01/01
Logged by: SP

Hole: ASP1A
Page No. 12 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
637.4	98	5							2	15					<1									637.4 – Bedding sylst dol. with barite
620.4			636.6 635.7	S_1					2	15					<1									630.6 – 630.7 Sligly sheared + chl-slate vein
639.4			631.1	S_2					2	15					Tr						2			From 638.0 Pyrite decreases in abundance in slates
636.4					15	15	~pp		2	15					Tr						1			
639.4			637.4						2.8	15					<1									639.6 – 639.7 10cm lgn pyritic altered lamprophyre dyke
642.4		5			80	5	~pp		2	15					Tr									647.6 – Black slates sligly cleaved + stained
645.4		4	646.1	S_2	65	25	5		2	15					Tr									649.3 – 650.2 lgn pyritic, altered lamprophyre dyke
648.4		3	649.3 650.2						2.8						2		649.1 – 650.3 Same as 437664							Badly cracked + filled ~~sight~~ between dol / lamp dyke intrusion
651.4		5	654.3		90	50	~pp		2						Tr									
654.4		5	655.3	S_1V_1					2.9						Tr						10			654.3 – 655.3, 657.4, 659.4 Brecciated, sheared + chlorite veined zones.
657.4		3	658.4	S_1V_1	70	50	~pp		2.9						Tr						5			
660.4		5	663.2						2.						Tr						Tr			
663.4		5	665.8	S_1					8.2						3	663.2 – 664.2 664.2 – 665.2	664.2 – 665.2				437665 5 437666			663.2 – 665.9 Strongly sheared / mylonitized lgn lamprophyre (dolerite) dyke with chlorite veining
666.4		4	669.2		75	15	5		2.8						1					5				669.2 – 669.7 Sheared dyke + white quartz veining
669.4		4	669.7 671.5	V_1	75	75	~pp		2.8						<1					2				673.5 – 676. Sheared altered dyke + white quartz veining
672.8		5	674.4	V_1					2						<1					2				678.4 – 678.7 10cm gabbro sylst dol dyke
675.4		4			70	65	~pp		2						1									679.3 – 684.0 Lgy strongly dolomitic horizon composed of 10-20cm to
678.4		5						C2?	11.3,8	50	20				<1									wispy ~~C~~ lab – v. dolom to C2 horizon interbedded with dolomitic slate
681.4		5						C2?	11.3	50	20				<1									684.0 → Pyrite → disbanded when in black slate comm
684.4		4	686.1 687.4	S_1V_1					2.9						>1						10			
687.4		4	689.1 689.2	$S_1V_1B_1$					2.9						1	688.1 – 689.2					437668 20			688.1 – 689.2 Intensely veined, sheared + brecciated zone – silicified
690.4		4	690.9 692.1 692.5	V_1	60	60	~pp		2.9						≥1						15			693.5 – 696.7 Intensely veined, brecc. + sheared fault zone –
693.4		3		$S_1V_1B_1$					9.2						≥1	693.6 – 694.6 694.6 – 695.6		694.6 – 695.6		4 43	776 778 9			
696.4		2	696.4		70	65	~pp		2.9						≥1	695.6 – 696.6				43	771 15			Breccia + stained zone this int 697.2 with sporadic veins to 699.0
699.4		3							2.11	30					≥1						10			
702.4		3			70	70	~pp		2						≥1									
705.4																								

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 27/02/92
Logged by: SP

Hole: ASD1A
Page No. 13 of 13

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
709.4																								
	>95	5			75	55	opp		2	<10					≥1									701.0 — 721.1 DK gy weakly dolomitic slate
711.4																								
		4							2	<10					≥1									like above but py [illegible] as disseminated cubes with [illegible]
714.4																								
		5			90	50	opp		2	<10					≥1									pressure shadows + occ [illegible] r.l. [illegible] veins
717.4																								
		5							2	<10					≥2									714.4 — 717.0 Dolomitic slate strongly [illegible] // to CA.
720.4																								
		5			40	25	opp		11.2	50					≥1									721.1 — 722.9 Dolomitic slate horizon
721.4																								
		5							2	≥45					1									722.9 — 723.4 DK grey [illegible] - [illegible]
724.4																								
		5							2	≥15					≥1									dolomitic slate [illegible] with abundant pyrite.
729.4																								
		5			70	60	opp		2	≥8					≥1						2			
732.4																								
EOH																								

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10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

CLASSIC LABORATORIES

21 Marjorie Street, Berrimah, Northern Territory
Postal Address : P.O. Box 58, Berrimah, N.T. 0828
Telephone: (089) 322 637 Facsimile: (089) 323 531

RECEIVED
18 FEB 1992

Woodcutters Mine
P.M.B. 60
Winnellie

N.T. 0821

ANALYSIS REPORT :

Your Reference	: 034646 D/S 11789	Our Reference	: 2DN0118
Samples Received	: 10/02/92	Results Reported	: 12/02/92
Number of Samples	: 8	Report Pages	: 1 to 1

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

If you have any enquiries please contact the undersigned quoting our reference as above.

EL 6431
ASD1A
SPLIT CORE
FROM DYMES/ BATCHELOR ZONE 57

Report Codes:
N.A. -Not Analysed
L.N.R. -Listed But Not Received
I.S. -Insufficient Sample

Approved Signature:

for

ALAN CIPLYS
Manager - Darwin
CLASSIC LABORATORIES

CLASSIC LABORATORIES

Job: 2DN0118
O/N: 034646 D/S 11789

Final

ANALYTICAL REPORT

Depth (m)	SAMPLE	Cu	Pb	Zn
649.3-650.3	43764	110	13	40
663.2-664.2	43765	89	5	50
664.2-665.2	43766	57	4	63
665.2-665.8	43767	100	19	46
688.1-689.2	43768	10	2	12
693.6-694.6	43769	7	<2	9
694.6-695.6	43770	12	3	8
695.6-696.6	43771	27	<2	8
UNITS		ppm	ppm	ppm
DET.LIM		1	2	1
SCHEME		AAS2M	AAS2M	AAS2M

WOODCUTTERS MINE - DRILLHOLE RECORD

HOLE NO: ASD2A

PROPOSAL

LOCATION: ACACIA SOUTH PROSPECT

PURPOSE: TEST INTERSECTION OF MAJOR STRUCTURE AND POLOCHUTITE UNIT UNDER HIGH Pb GEOCHEM (SOIL)

PROPOSED BY: SP SET UP BY: SP

SET UP DETAILS:

9898 N 10154 E ..... RL 075 +4 ° GRID AZIMUTH -60 ° DIP

TARGET: ..... (m depth) ..... N ..... E ..... RL

PLANED DEPTH: ..... (m)

DOWNHOLE SURVEY REQUIREMENTS: .....

OTHER SPECIFICATIONS (CORE SIZE, PERCUSSION DEPTH ETC.) .....

FINAL DATA

FINAL DEPTH: 585 (m)

COMMENCED: ..... COMPLETED: 15/2/92 DRILLER: LOU

COLLAR CURVEY: BY: .....

..... N ..... E ..... RL ..... ° GRID AZIMUTH ..... ° DIP

DOWNHOLE SURVEYS: See attached sheet

CORE SIZE: NQ

OTHER DRILLING DETAILS: .....

GEOLOGIST: I.B/SP

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 4/02/91
Logged by: SP

Hole: ASD2A
Page No. 11 of 4

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
102.0																								
	95	4			15	60	S		2	20					<1									102.0 – 116.0 Numerous intensely broken, weathered, fractured sections in core – often broken // to penetrative cly.
105.9																								
		4							2						<1									
107.0																								
		3			20	60	S		2						<1									116.0 – Monotonous sequence of grey non calcareous slates with regular pale grey dolomitic/calc. slate interbeds 1/2m. 8mm – 2cm bands. Dolomitic horizons probably account for approx 20-25% of unit. Core characterised by regular (10-20cm) pale cream millimetre scale banding caused by dolomitic silty laminae. Rocks / cly relationship rly poorly constrained
110.5																								
		3							2						≤1									
111.6																								
		3.5			25	60	S		2						≤1									
114.0																								
		5							2	20					≤1									
123.0																								
		5			20	60	S		2	20					≤1									
126.0																								
		5			20	85	S	(40)	2	20					≤1									
132.0																								
		5							2	15					≤1									
133.0																								
		5			15	65	0/1		2	15					≤1									Slate has regular pyrite 'porphyroblasts' elongated // to S_2 with carbonate pressure shadows
140.0																								
146.0 →		5			15	60	0/1		2 / 2	20 / 15					≤1									
150.0																								
		5			15	50	0/1		2	15					≤1				TR					After 140.0 a dolomitic horizon 10-15cm with no flow
154.0																								
		5							2	20					≤1									157.4 Core strongly contorted + folded by penetrative Cly.
159.0																								
		5			15	60	0/1		2	15					1									
161.0																								
		4	161.3	V					2	15	TR	TR			<1									161.3 – 1cm (cly ||?) sph-cb-py veinlet in broken core
164.4																								
		5			15	45	0/1		2	20					≤1									
167.4																								
		5							2	15					≤1									
170.5																								
		3			15	45	0/1		2	10					≤1									170.5 – 172.5 Core broken by numerous drusy cb. veinlets
172.1																								
		4			15	65	0/1		2	20					<1									
177.0																								
		5			20	60	0/1		2	25					>1				TR					Sporadic pyrrhotite as 2-4mm blebs – subordinate to py but becoming more abundant after 198
183.0																								
		4			20	60	0/1		2	25					<1									
189.0																								
		4							2	30					<1				TR					190.0 – 191.0 Core fractured + broken by cb veinlets // & ⊥ CA.
195.0																								
		4	199.7	S.V.	15	80	S		2	30					<1			1	<1					199.1 – 199.7 Veined + fractured slate with grassy / graphitic cly surfaces
200.1																								
		5			20	70	S		2	25					<1				<1					Strongly laminated cb-qtz-slate veins @ 149.7
206.7																								
		5			20	75	S		2	30					<1				<1					
212.4																								
		5			20	80	S		2	25									<1					
213.5																								

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
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7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 4/02/92
Logged by: SP

Hole: ASD2A
Page No. 2 of 4

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
219.5	>95	5			15	70	5		2	20					<1				<1					Similarly monotonously grey slates
224.4		5							2	15					≤1				<1					laminated, with dolomitic intervals characterised by S0 // lay-slate
226.7		5			70	70	5		2	20					≤1				TR					dark dolomite rich horizons (10-15 per metre)
231.0		5			25	65	5		2	20					≤1				TR					
237.2		5							2	20					≤1				TR					
241.0		4			45	20	5		2	20					≤1				TR					
247.3		5			25	65	5		2	15					≤1				TR					256.9 – 260.0 Calcite filled fractures contain pyrite sphalerite xtals – med – dk
252.0		5			20	60	5		2	20			TR		≤1				TR		<1			brown subhedral sphalerite
255.0		4	260.4		70	65	5		2.11	40			TR		≤1				TR		≤1			260.4 – 264.7 Conductivity change from dk grey
261.1		4	264.7		25	40	S		112	>50					≥1						≤1			Dk grey laminated slate to more uniform lay dolomitic slate without dolomitic
267.0		5			25	61	5		2						≥1						<1			intervals – Pyrite massive as xtals + diss. 264.7 — 296.0
270.0		5			20	60	5		2						≥1						1			Slate is more finely laminated + pyritic, locking the dark centimetre
276.0		5			25	65	5		2						2						TR			dolomite rich intervals and characteristic white S0 // laminae
282.0		5			25	70	5		2						>2						TR			296.0 – 397.5 increasingly carbonaceous slate uniform laminated + pyritic
288.0		5			20	55	5		2						≥2						TR			slightly darker grey. Increasingly dark py as diss + seg. from 288.0
294.0		4	296.2 297.5	S,V,B	25	70	5		2.9						≥2					5	20			296.4 – 297.5 brecciated + cb-qtz vein fault zone with shear, graphite slickenslide
300.0		5			20	70	5		2	BLACK PYRITIC SLATE					>2						≤2			partings.
306.0		5			25	55	0/P		2						>2						≤2			
312.0		5	315.2	S,V	20	60	S		2						≥2						≤2			315.2 1cm breccia, sheared cb vein
318.0		5			30	70	S		2						2						≤2			324.9 2cm sheared, brecc. cb vein
324.0		5	324.9	S,V	20	65	S		2						2						<2			
330.0		5			20	70	S		2						3						2			Common py segregations // to S_2
336.0		5			35	50	0/P		2						3						2			" " " "
342.0		5	346.0 347.1	S,V,B					2						2					8	3			346.0 – 347.1 Strongly brecciated slate with extensive q-cb veining
348.0		2	348.1 351.1	V,S,B	30	70	0/P		2.9						2					5	20			348.0 – 351.1 V. strongly sheared, brecc. + veined
354.0		5	356.2 356.4	V	20	65	S								3					1	5			fault zone with abundant cb-q-py infill
360.0																								continue cb-py veining @ 356.2 – 356.4

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12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 8/02/92
Logged by: SP

Hole: ASD2A
Page No. 3 of 4

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
360.0		5			20	70	S		2						≥2						1			Fine laminate (dkgy - blue-gy) carbonaceous slate with
366.0		5			20	70	S		2						≥3						≤2			abundant disc py & blebby py; often in S2 // ch-py veinlets
372.0		5			15	70	S		2						≥3						≤2			379.2 2cm poorly developed lgy tuff marker horizon
378.0		5			40	60	°//		2						≥3						1			Abundant disc py hope // @ 387.0
384.0		5	387.2	8	40	50	°//		2.5		BLACK SLATE				≥3						2			389.2 5cm ch-py rehealed shear!
390.0		5			40	50	°//		2						2						<2			397.5 - Conductorand? change from carbonaceous black slate to med-light
396.0		5	397.2	5/V2	20	60	°//	399.5	2 / 11						2						2			grey dolomitic slate - grey bandd laminated with org matter
402.0		5			20	60	°//		11	DOLOMITIC SLATE					1						3			disem. pyrite & sparse white calcite veinlets
408.0		5			10	60	S		11						≤1						3			Carbonate in fracture fill
414.0		5	420	V2	10	60	S		11						1						5			carbonate veining in fracture fill
420.0	79.9	5	425	V3/S3	30	50	S		11						tr						5			carbonate veining in fracture fill. Narrow shear zones
426.6		5							3/11		10										1			Pale grey massive dololutite areas
431.7		5	431	V3	10	30	0		3/11		10										tr			
437.7		5							4/11		25										tr			Indistinct banding.
443.8		5							4/11		20										tr			444-447.5 Dk grey mass. dol slate amongst pale grey tr banding.
449.9		5						456	3/4		90				2						1			massive grey dololutite distinctive lamination in dololutite (455-456)
456.0		5	459	V3					2						1						1			
462.0		5			30	80	S		2						1						1			
468.5		5							2						2						1			
474.0		5							2						1+						1		1 / 2	Cu Pb Zn As 480.5 - 480.7 94 52 210 120 481.5 - 482 64 36 290 <50
480.0		4	480.5 / 480.6 / 480.5	V1 / V1 / V3	30	65	S		2				+r		2						5			480.5 - tr sphal in qtz-carb vein
486.0								487	11	20					1						2			Pale grey dolomitic slate. Fine grained
492.0					25	70	S	498	11	30	5				tr						1			
498.0																					1			
504.0															1						2			
510.0			491	S2																				
516.0					80	60	S								1+						1			

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 19/2/92
Logged by: IB

Hole: ASD2A
Page No. 4 of 4

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
516.0																								
522.0	95	5			70	40	S								tr						tr			Cu Pb Zn As
																								3 26 22 35 <50
527.0	"	5			20	40	S								1						tr			4 150 16 53 310
530.0	90	2	527	VISV dyke				528	7						3					30	3		3 4	Mass. qtz vein. on contact ? greenish grey dyke. Brecc. text common on contact.
536.0		3	533	8L				534							tr						1		5 6	533-534.2 Cu Pb Zn As 94 6 55 <50; 534.2-536.2 100 10 84 <50
540.0		5	540	V1	30	90	S	540	7						3						3			dyke material in V @ 539.1
546.0		4	543	dyke					7 11/3	5	2				4						2		7	540.5-543 Cu Pb Zn As 86 7 81 100
552.0		3	549	VISI	30	25	0		11/3b	10	10				1					10	5	550-552	8	Weakly laminated dololutite. Distinctive sugary text dolomitic slate Cu Pb Zn As 20 3 10 <50
558.0		3	556	V3	35	60	0		11	70					tr					5	10		9	Tr fluorite in qtz-carb vein 556.8-558.8 Cu Pb Zn As 8 2 10 <50
564.0		4	562	V3	25	80	0		11/2	10										2	5			
568.0		4			30	60	0	C2	11/2	50											2			
573.0		4	570 571.0	VL V3					11/2	50										1	5			Abundant qtz/carb veining
579.0		5	575		40	80	S		11/2	30	5										5			distinctive wispy dololutite beds
585.0		5	580	V2 V2	50	80	0		11/2	60											3			EOH

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11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: ASD2A

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	*	*	0				
24	84	62					
48	84	64					
107	89.5	69.5					
119	90	69.5					
131	90	69					
149	89	69					
176	88	68.5					
194	86	64					
225	79	62.5					
255	85	61.5					
270	85	59					
288	85	54					
318	84	52					
		EOH =					
		CHECK TOTAL =					

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: ASD2A

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	*	**	0				
348	84	52					
378	84	50.5					
408	84	48.5					
432	84	48					
462	84	49					
492	82	47					
527	81	46					
557	80	43					
585	80	40					
		EOH =					
		CHECK TOTAL =					

CLASSIC LABORATORIES

21 Marjorie Street, Berrimah, Northern Territory
Postal Address : P.O. Box 58, Berrimah, N.T. 0828
Telephone: (089) 322 637 Facsimile: (089) 323 531

RECEIVED
3 MAR 1992

Woodcutters Mine
P.M.B. 60
Winnellie

N.T. 0821

ANALYSIS REPORT :

Your Reference	: 034892 D/S 11791	Our Reference	: 2DN0159
Samples Received	: 21/02/92	Results Reported	: 27/02/92
Number of Samples	: 11	Report Pages	: 1 to 1

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

If you have any enquiries please contact the undersigned quoting our reference as above.

ACACIA ASD2A
DARWIN R EL7034 LATERITE

Report Codes:
N.A. -Not Analysed
L.N.R. -Listed But Not Received
I.S. -Insufficient Sample

Approved Signature:

for

ALAN CIPLYS
Manager - Darwin
CLASSIC LABORATORIES

CLASSIC LABORATORIES

Job: 2DN0159
O/N: 034892 D/S 11791

Final

ANALYTICAL REPORT

RECEIVED
3 MAR 1992

SAMPLE	Cu	Pb	Zn	As	Au	AuDpl
480.5→480.7 43772	94	52	210	120	--	--
481.5→482 43773	64	36	290	<50	--	--
528 →529.1 43774	26	<2	35	<50	--	--
→530.7 43775	150	16	53	310	--	--
533 →534.2 43776	94	6	55	<50	--	--
→536.2 43777	100	10	84	<50	--	--
540.5→543 43778	86	7	81	100	--	--
550 →552 43779	20	3	10	<50	--	--
556.8→558.8 43780	8	2	10	<50	--	--
89562	--	--	--	--	0.003	0.002
89567	--	--	--	--	0.005	0.004
UNITS	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	2	1	50	0.001	0.001
SCHEME	AAS2M	AAS2M	AAS2M	AAS2M	FA3	FA3

ASD2A.

CHECK LATERITE SAMPLES EL7034

CLASSIC LABORATORIES

Job: 2DN0349
O/N: D/S 11794

.nal

ANALYTICAL REPORT

	SAMPLE	Cu	Pb	Zn			
148.0	43866	40	2670	1280			
	43867	50	5100	3980		148.0 – 154.0	6m @ 0.3% Zn
	43868	73	3490	5200			6m @ 0.4% Pb
	43869	63	3290	4120			
	43870	39	6300	1630	ASDSA		
	43871	70	3050	1570			
	43872	49	240	310			
156.0	43873	47	48	78			
256.0	43874	55	520	2660			
	43875	46	680	2520			
	43876	73	320	570	ASD2A	256.0 – 261.0	5m @ 0.17% Zn.
	43877	61	490	1150			
	43878	28	800	1840			
262.0	43879	10	69	93			
174.0	43880	49	2680	4210			
	43881	26	2950	3540			
	43882	38	520	2490			
	43883	40	61	390	ASD5A		
	43884	32	33	82			
	43885	31	1060	2210			
	43886	75	6200	8800			
182.0	43887	31	290	1270			

UNITS	ppm	ppm	ppm
DET.LIM	1	2	1
SCHEME	AAS2M	AAS2M	AAS2M

SAMPLE DATA SHEET

Form ..0

DRILL HOLE DEPTH
FROM OR TO

SAMPLE CO-ORDINATE
N/S E/W

SAMPLE NUMBER	N/S	E/W	INT.	DESCRIPTION	Cu	Pb	Zn	As
EE 43772	480.5	480.7	0.2		94	52	210	120
73	481.5	482.0	0.5		64	36	290	<50
74	528.0	529.1	1.1		26	<2	35	<50
75	529.1	530.7	1.6		150	16	53	310
76	553.0	534.2	1.2		94	6	55	<50
77	534.2	536.2	2.0		100	10	84	<50
78	540.5	543.0	2.5		86	7	81	100
79	550.0	552.0	2.0		20	3	10	<50
80	556.8	558.8	2.0		8	2	10	<50
43874	256.0	257.0	1.0		55	520	2460	
75	257.0	258.0	1.0		46	610	2520	
76	258.0	259.0	1.0		73	320	570	
77	259.0	260.0	1.0		61	490	1150	
78	260.0	261.0	1.0		28	800	1940	
79	261.0	262.0	1.0		10	69	93	
8								

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

SAMPLING RECORD

Material: SPLIT CORE
Depth:
Sampled Logged By: SP
Map Ref:
Laboratory Request No.:
Date: 9/02/92
LINE No.:
FROM
TO
Photo No.
Bearing

PROJECT

Region: PINE CREEK G.
Project: ACACIA - EL 6431
Prospect: ACACIA SOUTH
Cost Code: 6431

DRILLING RECORD

Drill Type: W 1000
R.L. m Water Table At m
Dip Azm
Date:
CO-ORDINATES
m N/S
m E/W
HOLE No: ASD2A

WOODCUTTERS MINE - DRILLHOLE RECORD

HOLE NO: ASD3

PROPOSAL

LOCATION: ACACIA SOUTH PROSPECT

PURPOSE: TEST INTERSECTION OF MAJOR STRUCTURAL ZONE AND DOLOLUTITE UNDER SOIL GEOCHEM ANOMALY

PROPOSED BY: IB/PN SET UP BY: IB

SET UP DETAILS:

10048 N 10171 E ..... RL 90 +4 ° GRID AZIMUTH 62 °DIP

TARGET: 350 (m depth) ..... N ..... E .....RL

PLANED DEPTH: 450 (m)

DOWNHOLE SURVEY REQUIREMENTS: SURVEYS EVERY 30m

OTHER SPECIFICATIONS (CORE SIZE, PERCUSSION DEPTH ETC.) NQ

FINAL DATA

FINAL DEPTH: 451.0 (m)

COMMENCED: ..... COMPLETED: ..... DRILLER: .....

COLLAR CURVEY: BY: .....

.....N .....E .....RL .....° GRID AZIMUTH .....° DIP

DOWNHOLE SURVEYS: See attached sheet

CORE SIZE: .....

OTHER DRILLING DETAILS: .....

GEOLOGIST: .....

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: ASD 3A

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	94	62	0				
36	94	64					
72	102	65					
102	103	65.5					
132	99	65.5					
150	98	62.5					
168	96	59.5					
195	95	54.5					
228	90	50					
267	88	44					
291	84	42					
321	84	40					
351	82	39					
385	80	37					
		EOH =					
		CHECK TOTAL =					

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: ASD3A

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	*	*	0				
453	78	34.5					

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 25/2/92
Logged by: I. K. Butler

Hole: ASD 3A
Page No. 1 of 5

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
66.1																								Start NQ core 66.1
71.1	>95%	3							2						tr									BANDED CARBONACEOUS SHALE
73.0		3																						Soft to crushed. Weakly
74.5		2																						crushed along jt planes and
78.0		3			10	40	S	✓																structures (66-89) Distinctive
79.8		3																						banded carbonaceous
84.0		3	84.2	S2	30	50	S	✓													82.8			shale / siltstone. Bands /
																					2cm pyrite			thinnest comprised of dark
86.9		4																						grey carbonate rich beds)
																								(66.1 → 222)
90.0		4	89.2 90.8	S2	30	45	S	✓																88.2 pyrite (10-15cm)
93.3	70	2		V1S1					7/2 2															
96.0	>95%	3			10	50	S	✓	2															
99.7		3						98.5	2											10			98.2 98.5	
102.0		2							7/9											15				Zone of dyke, quartz veining
103.0		2		V1S1					7/9											30	5			breccia and carb. shale
108.0	40	1							7/9											20	5			Major structure. Graphitic
110.2	90	1							7/9											5	2			
112.9	60	1							7/9											10				
114.3	90	2						114.3	7/9											60	20		114.4	
117.1	70	2							2											10	5			
120.0	>95%	4	117.2 119	S3	20	50	S✓		2												tr			
126.0		4	123.7	S3	15	60	S✓	Not Iff													↓			
129.1		3	127.6 128.2 128.5	S3 S2	30	70	S✓													1	2			
132.0		4	129.7	V3	20	70	0	Not Iff												1	1			
138.0		5	133 136	V3 S3	25	35	0	"													1			Carbonate bands appear oolitic.
144.0		5	142	S2	20	50	0	✓													2			
150.0		5	150	S2	15	70	S	✓													tr			
156.0		5			20	75	S														tr			

1. Spotted slate
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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date:
Logged by: I. Butler

Hole: ASD3A
Page No. 2 of 5

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
156.0																								BANDED CARBONACEOUS SHALE
160.0	95%	5			20	75	S	✓	2						tr						tr			
168.0		5			20	90	S														1			
172.0		4	172	V3/S3	20	80	O	✓													tr			
174.9		4																			1			
180.0		5	180		20	90	S	✓																
181.6		3	181	S2/B																				
186.0		5	186		45	50	O	NOT 11	✓												1			185
187.9		3	188	V1/S1	✓																2			
192.0	✓	3	192		45	60	O	11	✓												2			
194.3	70	1																			1			Mod-strong qtz-carbonate
197.5	95%	2		V1/S1	20	40	S					tr	tr		1						1			veining. all sphal/gal in
203.6		5	198.5		20	55	S		✓			tr	tr		1						2			qtz carb. veins
206.6		4			30	50	O	NOT 11	✓						1						2			
210.0		5			25	15	O								1						1			
215.7		5	214	S3	20	60	S	✓				tr	tr	tr	1						1			
221.8		5			35	50	S	✓				tr	tr		2						tr			216 carb
227.9		5													1	py cubes					tr			220 CARBONACEOUS SHALE
233.4		4	232		40	60	S	✓							1	py cubes					tr			
237.0		3		V1/B1					2/3			1	2	tr	2					5	15			shale/ siltstone
243.0		5	237.5		50	15	S	✓	2/3			tr	tr		tr						tr			sphal - gal - sulphosalts in qtz-carb veins / breccia
248.0		3	244		50	85	S	✓	2												2			
251.8		3		V2/S1				249.2 250.8	3		50									1	2			Narrow dololutite and massive
256.8		2	255	V1/S1					2						1					2	8			
261.0			259												1					3	5			
265.1			264	V1/S1	30	50	S	✓							1					5	8			
269.7			266		15	50	S	✓							1					2	5			

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 3/3/92
Logged by: I. Butler

Hole: ASD3A
Page No. 3 of 5

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
269.7																								
271.8	>95	3													1						tr			
272.8	80	1		S1V2	20	35	S								1						1			Well sheared Good slickensides.
273.7	85	2													tr					1	2			
276.0	>95	3	275.2		10	45	S	✓												1	3			
279.0		5			15	55	S														tr			
282.0		4	280 ~~S1 V2~~ 281.7 ~~S1~~ 282.2																	1	3			
285.0		5	284 ~~S1~~																		tr			
288.0		5	287.7	S1																				
291.0		3	289 290.2		30	20	S	✓																
294.0		3			20	30	S	1							2					1	2			
296.3		3		V1S1											1					2	4			
297.3	80	1													1						2			
298.9	>95	1	299												1						tr			
302.0		5			55	40	S	✓							2									distinctive py cubes
305.3		5	301.3 ~~S1~~ 306.2 ~~S2~~												1									
307.7		5			60	20	S	✓							2									
310.4					60	10	S	309.2	~~5~~	~~8~~					3									309.2 Tuff marker. Replaced by pyrite.
312.0															1									
315.0															1						tr			
318.0			316	~~V3~~	60	10	S	317							1									
321.0									3/11	>50					tr									
324.0									11/4		10													323 banded
327.0			324.1	~~V3~~					3/11				tr	2	325.1									tr sphal? in vlt.
330.0		4	329.4	~~V2~~																				
333.0		3	331.3 ~~V2~~ 332.6																		1			
336.0		2	336	~~S2~~																				

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 3/3/92
Logged by: I. Butler

Hole: ASD3A
Page No. 4 of 5

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
336.0																								
342.0	>95	5							3/11	>50					tr						tr			
345.0																								
348.0					15	40	S																	
351.0																								
354.0									11/4		10													
357.0									11/4															
360.0									3/4		40													
363.0			361.5						11/4		30										tr			Quite strong qtz-carb veining on contact.
364.2			364.4	V2					11											1	3			
367.3					20	45	S		11/2											1	4			
370.4					50	35	S		2															
373.5									2															
376.6					50	20	S		2												2			-374 well developed foliation
379.7									2												5			with carbonate ± py
382.8									2/3		10				1						3			veining. Reflection of
385.9		4						385.5	2/3		40				1						1			structure
388.4		5						388 qtz 388.6	7						3						1			contact of dyke c. core axis at both sides is 90°
391.4									7						1									Dyke shows characteristics
393.8								393.6 qtz 394																of both calcareous and dolomite dykes.
396.0									7							tr								cpy in qtz
399.0				V1											1									
402.0															2									
405.0								403 qtz							2									
408.0									7						3									clotted appearance c. pyrite
411.0								410 qtz							3									
414.0									9/7						3									

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date:
Logged by:

Hole:
Page No. 5 of 5

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
416.0								415	~~9/2~~															
417.0	95%	5							9/7						2						tr			
420.0									9/7						2									
423.0				V1											3									
426.0															2									
429.0								428.8	9/2						1									
								429.3																
430.0									7						1									
435.0								433.8	9/2						1									
			435.0					435.0	7															
438.0															tr									
441.0					70	70	0														1			
444.0																					tr			
447.0			446.9	~~V3~~																	1			
450.0																					tr			Dk g y pyritic slate
453.0																								
456.0					35	50	S																	456.0 EOH.

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10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

CLASSIC LABORATORIES

21 Marjorie Street, Berrimah, Northern Territory
Postal Address : P.O. Box 58, Berrimah, N.T. 0828
Telephone: (089) 322 637 Facsimile: (089) 323 531

Geo

RECEIVED
20 MAR 1992

Woodcutters Mine
P.M.B. 60
Winnellie

N.T. 0821

ANALYSIS REPORT :

Your Reference	: D/S 11790	Our Reference	: 2DN0221
Samples Received	: 08/03/92	Results Reported	: 17/03/92
Number of Samples	: 23	Report Pages	: 1 to 1

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

If you have any enquiries please contact the undersigned quoting our reference as above.

EL 6431
ACRCIA [illegible] PROSPECT
ASD 3A

Report Codes:
N.A. -Not Analysed
L.N.R. -Listed But Not Received
I.S. -Insufficient Sample

Approved Signature:

for

ALAN CIPLYS
Manager - Darwin
CLASSIC LABORATORIES

CLASSIC LABORATORIES

Job: 2DN0221
O/N: D/S 11790

Final

ANALYTICAL REPORT

	SAMPLE	Cu	Pb	Zn	As	Au	AuDpl
	43781	54	5700	7000	80	--	--
	43782	51	340	1040	<50	--	--
	43783	83	420	1380	60	--	--
	43784	70	340	1630	<50	--	--
ACCSA	43785	105	1.24%	4870	110	--	--
	43786	57	930	4560	80	--	--
	43787	27	400	510	100	--	--
	43788	54	1650	3510	120	--	--
	43789	60	2760	2.00%	170	--	--
	43790	71	500	6800	<50	--	--
	43791	52	430	1340	<50	--	--
S195-03	43792	43	6400	3550	--	2.04	2.24
	43793	290	3.10%	4.50%	--	1.74	1.88
	43794	240	260	210	1.06%	0.04	--
	43795	370	480	490	1600	0.03	--
	43796	160	32	65	290	0.02	--
	43797	185	91	220	650	0.01	--
ACCSA	43798	125	15	90	60	0.01	--
	43799	105	39	125	410	<0.01	--
	43800	69	12	97	110	0.02	--
	43851	230	26	125	<50	<0.01	--
	43852	140	12	80	<50	<0.01	--
	43853	160	27	71	<50	<0.01	--
	UNITS	ppm	ppm	ppm	ppm	ppm	ppm
	DET.LIM	1	2	1	50	0.01	0.01
	SCHEME	AAS2M	AAS2M	AAS2M	AAS2M	FA1	FA1
	UPPER SCHEME		AAS2M	AAS2M			

CLASSIC LABORATORIES For INPUT

Job: 2DN0221
O/N: D/S 11790

ANALYTICAL REPORT

SAMPLE		Cu	Pb	Zn	As	Au	AuDpl
ASD 3A 197.5→198 43781	0.5	54	5700	7000	80	--	--
198→199 43782	0.5	51	340	1040	<50	--	--
199→199 43783	1	83	420	1380	60	--	--
214→215 43784	1.2	70	340	1630	<50	--	--
215→216 43785	1.2	105	1.24%	4870	110	--	--
216→217 43786	1.2	57	930	4560	80	--	--
234→235 43787	1	27	400	510	100	--	--
235→236 43788	1	54	1650	3510	120	--	--
236→237 43789	1	60	2760	2.00%	170	--	--
237→238 43790	1	71	500	6800	<50	--	--
238→239 43791	1	52	430	1340	<50	--	--
43792		43	6400	3550	--	2.04	2.24
43793		290	3.10%	4.50%	--	1.74	1.88
385.5→387 43794	1.5	240	260	210	1.06%	0.04	--
387→388 43795	1	370	480	490	1600	0.03	--
388→389 43796	1	160	32	65	290	0.02	--
389→410 43797	1	185	91	220	650	0.01	--
410→411 43798	1	125	15	90	60	0.01	--
411→412 43799	1	105	39	125	410	<0.01	--
412→413 43800	1	69	12	97	110	0.02	--
425→426 43851	1	230	26	125	<50	<0.01	--
426→427 43852	1	140	12	80	<50	<0.01	--
427→428 43853	1	160	27	71	<50	<0.01	--

ASD 3 A.

194.3 — 199.0 4.7 m @ 927 ppm Pb., 1746 ppm Zn

213.3 — 217.0 3.2 m @ 3218 ppm Pb, 3529 ppm Zn

234.0 — 237.0 5.0 m @ 1148 ppm Pb, 6432 ppm Zn (0.64%) incl. 1m @ 2% Zn.

385 — 388.0 2.5 m @ 348 ppm Pb., 322 ppm Zn, 7000 ppm As, 0.04 ppm Au.

UNITS	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	2	1	50	0.01	0.01
SCHEME	AAS2M	AAS2M	AAS2M	AAS2M	FA1	FA1
UPPER SCHEME		AAS2M	AAS2M			

WOODCUTTERS MINE - DRILLHOLE RECORD

HOLE NO: ASD4

PROPOSAL

LOCATION: ACACIA SOUTH

PURPOSE: TEST INTERSECTION OF MAJOR STRUCTURES WITH DOLOMITE BENEATH HIGH Pb SOIL ANOMALY

PROPOSED BY: IKB SET UP BY: IKB

SET UP DETAILS:

9800 N 10550 E ..... RL 270 ° GRID AZIMUTH 68° °DIP

TARGET: 250 (m depth) ..... N ..... E .....RL

PLANED DEPTH: 550 (m)

DOWNHOLE SURVEY REQUIREMENTS: Survey every 30 m

OTHER SPECIFICATIONS (CORE SIZE, PERCUSSION DEPTH ETC.) .....

FINAL DATA

FINAL DEPTH: 660 (m)

COMMENCED: 10/03/92 COMPLETED: 24/05/92 DRILLER: Lou

COLLAR CURVEY: BY: .....

.....N .....E .....RL .....° GRID AZIMUTH .....° DIP

DOWNHOLE SURVEYS: See attached sheet

CORE SIZE: NQ

OTHER DRILLING DETAILS: .....

GEOLOGIST: SP

WOODCUTTERS MINE

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: ADD4

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	*	*	0				
0	270	-68					
36	273	68					
78	274 (est)	68					
114	275	70					
144	277	70					
174	279	68					
204	280	66.5					
234	282	64					
270	282	65					
300	282	67.5					
330	282	62.5					
360	283	60					
390	283	58					
		EOH =					
		CHECK TOTAL =					

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: ASD4'

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	*	*	0				
423	283	56					
453	281	55.5					
486	283	53.5					
516	283	51.5					
546	284	50					
600	284	46					
630	284	44					
660	284	42.5					
		EOH =					
		CHECK TOTAL =					

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 16/03/12 Logged by: CY

Hole: ASD4 Page No. 1 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments 0.0 → 110.1 Preculler
110.8		3	W						10						<1						>10			110.8 – 127.0 Dominantly lay dololutite sequence
114.0																								
117.3		4	W		35	<3	s		3		>10				<1						5			with interbedded chalcite dolomite horizons. Paler dololutite has jointed
120.8		4	W	V_2					3		>10				<1						>10			+ pervasive dolomite rich veined
124.0		3	123.8 123.1		70	50	s		3.2		70				<1						>10			123.5 – 123.7 Small fine grain filled fault zone with 20cm comminuted gouge zone
129.0		4	W						3.2		50				<1						>10			
134.5		5	W 134.0		50	5	o/p		2						<1						>10			134.0 – 134.3 30cm comminuted fault zone
137.2		4	133.0 W						2						<1						7A			
139.1		4	137.1 W						2						<1						>10			137.9 – 142.7 Styl/ ch. veined slate
142		4	W 141.5	V_2					2						<1						>10			141.5 – 10cm crush/breccia/ fault zone
144		5	142.7 W		40	20	o/p		2						1									
147.4		5							2						1									
150.7		5			20	5	o/p		2						1									153.4 – 3.5cm stringed qtz breccia carbonate vein c 10° to CA.
156		5	155.7	V_2					2						1						2			
162.0		5			20	75	o/p		2						1									
167.5		5			20	20	opp		2						1									
172.0		5	171.0	V_2	45	15	s		2						1						3			172.0 2-7cm breccia ch-slate vein c 25° to CA.
176		5			40	15	s		2						1									
182.1		4							2						<1									
185.1		4			40	s	s		2						<1									
189.1		5	187.1	V_2					2						<1						2			189.1 3cm breccia ch-slate vein c 50° to CA.
192.4		5	192.1	V_2					2						<1									192.1 Ditto on 189.1
198		5	196.1	V_2	60	20	s		2						<1						3			
199.4		4			40	20	s		2						1									
204.0		5			60	30	opp		2						1									
210.0		5			65	20	o/p		2						1									214.3 – 216.5 Fine jointed, faulted + broken zone
216.0		5	212 214.1	V_2 V_2	55	25	opp		2						1						10			After 216.0 pyr veinlets increase markedly in slate.
222.0			216.5		50	25	opp																	

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 16/03/92 Hole: ASD4

Logged by: SP Page No. 2 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
228		5			70	15	°//		2						≥2									217.0 – 264.4 Change occurs fault / fracture zone
229.0		5			60	30	°//		2						≥2									from dkgy slate with spotted diam py to light laminated
239.0		5			60	10	°//		2						≥2									uniform dkgy slate with fine diam pyrite throughout. grey inclusions in pyrite content
245.5		5			60	25	°//		2						≥2									
247.0		4			55	20	5		2						≥2						2			
249.0		5			55	20	°//		2						≥2									
251.0		5			60	25	°//		2						3						≤1			Con slaty contacted for 10cm lyn dolomite dyke @ 264.7
261.0		5	249.7 244.7	V.	90	45	°//		2 / 8						3					20	5			264.4 – 265.1 40cm grey-dk py vein with 30cm dyke 264.4 – 264.7
265.0		5			75	70	°//		2						≥5						TR			265.1 – 274.0 V. slaty graphitic rich gy – dk gy lines
270.0		5			75	15	°//		2						≥5						TR			lam. slate with pyrite in fine veins leaves stretched // to S1
276.0		5			55	30	°//		2						≥5						TR			
272.0		5							2						≥5						TR	290.5 292.2	(7)	
289.0		5	291.5 292.0	V. / S1	75	47	°//	291.5 292.2	2.8.1	15					5					5		292.2 292.7	(5)		291.5 – 292.2 lyn, pyritic dolomite dyke with 15cm qtz vein on lower contact
294.0		5						297.1 297.6	2.8.1	20					5						1	297.1 297.6	(9)		292.4 Slaty graphitic rich fault zone
296.0		5		V.8	60	70	5		2						5						1	297.8 298.6	(10)	297.1 – 298.6 lyn pyritic dolomite dyke with S2// pyrrhotite fine veinlets
302.0		5			60	25	5		2						≥2						1	297.8 301.0	(11)	305.9 – 300.0 10cm crush zone
312.0		5			60	35	5		2						≥2						≤1	297.7 297.2	(12)	298.6 – red gy pyritic slate with and 10% dolomite contact
318.0		4	321.5 321.6	V.	60	20	5		2						≥2						2			321.5 – 321.6 10cm well defined breccia with ch. filled fault zone
324.0		4	324.7 324.1	2 V.	60	40	5		2						2						2			324.7 – 328.4 fractured zone
330.0		5	332.0 331.1	V.8					8 2						≥5					5	5	331.4 331.9	(1)	V. carbon-phy gouge zones @ 327.5 + 328.4
332.0		5	332.7	V.8		50			2						2						3	331.9 332.9	(2)	332.0 – 375.9 Slaty laminated, fractured dolomite dyke with lyn carbonate + py
334.0		5			60	20	5		2.2	50					≥2						TR	332.9 333.9	(3)	With 15cm g-py-ank vein @ 334.7 334.35
336.0		5			55	30	5		2						≥2						TR	333.9 334.9	(4)	339.5 2cm pink/ch vein
338.0		5			50	30	5		2						2						TR	334.7 335.9	(5)	335.9 – 338.9 Mod gy pyritic (slaty and dolomitic)
340.0		5			50	5	°//		2						2						TR	336.7 338.0	(6)	Slate; slaty dolomite + lyn 345.0 – 347.0
342.0		5			55	15	°//		2						1					<1	TR			

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 17/08/92
Logged by: SP

Hole: A1D44
Page No. 3 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
												Mineral Percentages												372.2 5cm grey chert vein.
372.0		5	372.2	V1	60	30	S		11.3.2	40	30				<1						TR			375.2 – 378.5 Med grey – light dolomitic slate/dololutite
374.0		5							11.3.2	40	10				<1						TR			weakly laminated + cleaved with thin horizons of intraclastic breccia. Bottom
376.0		5							11.3.2	40	30				<1						TR			375 – 378.0
378.0		5							2	<10					<1						<1			378.5 – 450.3 Med grey – dk. grey finely laminated pyritic
450.0		5			55	25	S		2	<10					≤1						TR			slate. Weakly dolomitic respond to acid etc
[illegible]		5	407.5	V1	50	15	S		2	<10					≤1						<1			
415.0		5	412.7	V1					2						<1						2			
417.0		5			15	50	0/1		2						<1						1			
423.0		5			15	45	0/1		2						1						TR			
425.0		5			20	50	0/1		2						1						<1			
435.0		5			60	15	0/1		2						<1						TR			
491.0		5			60	30	S		2						<1						TR			
447.0		5			60	35	S		2						<1						TR			
450.0		5	447.3 / 447.6	V1 / V2	60	40	S	453.3	4						<1					1	10			447.3 – 447.6 Sheared + brecciated, healed grey chert – slate fault zone
459.0		5	459.3 / 460.0 / 460.6	V1 / V2 / V3				456.3	4 / 2.3						≥1	≥1				2	1			450.3 – 456.8 Lgy med – slightly laminated weakly
463.0		5			35	45	0/1		3.2						<1	<1					10			fractured dololutite. Not veined with [illegible]
471.0		5			55	70	0/1		3.2						<1						TR			460.0 – 460.6 Veined + breccia fault zone 458.3 – 460.0 Sheared + veined slate
471.0		5			55	50	0/1		3						<1						<1			461.5 – Md. grey weakly laminated v. weakly
[illegible]		5				50	?		3						<1	<1								veined pinkish dololutite.
[illegible]		5			70	65	0/1		3						<1	<1								491.5 – 492.5 Faulted zone chert vein swarm in fractured dololutite. 25° to CA
[illegible]		5	492.1	V1		60			3						<1	<1				5	5			0/1 from cly direction
[illegible]		5	492.5 / 495.3	V1 / V2		45	?		3						<1	<1					<1			492.5 – 500.3, Dark, slightly dolomitic slate – some pyritic
500.0		5	500.0	V1 / V2	60	50	0/1		11.2.3						2						<1			500.0 – 500.5 Sheared + veined + silicified fault zone
500.0		5			45	50	0/1		3						<1	<1					<1			503.0 2cm breccia zone. 500.3 – Med – light grey finely laminated,
516.0		5			40	50	0/1		3						<1	<1				5	<1			(Weakly dolomitic 500.3 P.y. [illegible], 511.7 fractured)
522.0		5			50	55	0/1		11.2												5			498.0 5cm dolomitic grey chert – vein with breccia. Slate fragments

Comments (continued):

515.7 base (or top) of lgy med. laminated dololutite V1 and strongly veined into dolomitic slate @ 511.7 then gradational to med py + graphitic black slate @ 522.5

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2. Slate
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4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 23/03/92
Logged by: SR

Hole: ASD4
Page No. 4 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
522.0	95	S			15	60	S		2						≥1									522.5 m – 574.0 Uniform pyritic milky graphitic black slate
574.0		S			10	60	S		2						≥1									574.0 m
540.0		S		γ	10	10	S		2	≤10					≤2									536.0 0.1cm shear out right vuggy lgn trap marker horizon
546.0		S			10	65	S		2						≥1						2			534.0 – less pyritic + graphitic slate with 5% dolomite veg pyr laminae + nil. dolo (<1m) lg/
550.0		S			10	65	S/I		2	≥10					1						1			dolomitic slate / dololutite intercalated
558.0		S			10	55	S		11.2.3	>10	10				<1						>1			557.4
560.0		S	559.1 559.5		10	60	(S)		11.2.3	50	10				≥1	TR					3			559.1 – 559.5, light purple – light green carbonate xbolline anhydrite in veins
570.0		S			10	50	S/I		2.11	20					≥1						<1			with breccia slate fragments with py + more chalcopyrite
576.0		S			10	50	S		2.11	30					≥1						1			4% carbon coloring
582.0		S	580.5		10	45	S		2.11	30					≥1						10			580.5 – 581.7 Strongly sheared + veined slates (chloritoid ?)
588.0		S	581.7 583.6		50				8.2						3						<5			583.6 – 586.3 Leucolgn strongly sericitized sheared dyke with abundant sheared inclusions
594.0		S		γ	45				8						2						<5			γ slate
600.0		S	596.3		55	15	S		2.8						≥2						<2			
606.0		S	601.8 603.3		35				2.8						≥2						2			603.3 – 605.3 Lgn, sheared, foliated pyritic leucogranite dyke
612.0		S			55	20	S		2						2						2			596.3 – 603.3, 605.3 – 624.3 Dk gy mod pyritic calcareous
618.0		S			55	25	S		2						2						TR			uniform slate
624.0		S			45	10	S		2						<1						2			v. slaty / mylite
630.0		S			60	20	S		11.2	>70					<1						TR			624.3 – 634.5 Mdl gy strongly calcareous (dolomitic?) slate – smooth + nil veins.
636.0		S	634.4	S_2					11.2	>70					<1						2			lam. 634.4 – 1cm graphitic sheet 634.5 – 636.0 (EOH)
642.0		S			55	20	S		2						≥1						TR			Dk gy slate with lgy fine dolomitic laminae // to S_0 – mod py
648.0		S	644.0	S_0	50	20	S		2						≥1						2			644.0 5cm strongly sheared / sheared / brecc. 5cm @ 20° to CA
654.0		S	652.0	S_0	60	35	S		2						≥1	TR					2			652.0 2.5cm Cb – cgy vein mildly sheared + brec.
660.0		S			55	25	S		2						≥1						TR			
EOH																								

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

LAB

CLASSIC LABORATORIES

21 Marjorie Street, Berrimah, Northern Territory
Postal Address : P.O. Box 58, Berrimah, N.T. 0828
Telephone: (089) 322 637 Facsimile: (089) 323 531

Woodcutters Mine
P.M.B. 60
Winnellie

N.T. 0821

RECEIVED
31 MAR 1992

ANALYSIS REPORT :

Your Reference	: 035501 D/S 11792	Our Reference	: 2DN0275
Samples Received	: 23/03/92	Results Reported	: 24/03/92
Number of Samples	: 12	Report Pages	: 1 to 1

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

If you have any enquiries please contact the undersigned quoting our reference as above.

EL 6431 - Acacia Sml. Phosphate

ASD4

Report Codes:
N.A. -Not Analysed
L.N.R. -Listed But Not Received
I.S. -Insufficient Sample

Approved Signature:

for

ALAN CIPLYS
Manager - Darwin
CLASSIC LABORATORIES

CLASSIC LABORATORIES

Job: 2DN0275
O/N: D/S 11792

Final

ANALYTICAL REPORT

SAMPLE	Cu	Pb	Zn	Au	AuDpl
43854	64	5	81	<0.01	--
43855	25	6	195	<0.01	<0.01
43856	94	7	190	<0.01	--
43857	130	9	150	<0.01	--
43858	145	8	165	<0.01	--
43859	24	9	30	<0.01	--
43860	110	13	97	<0.01	--
43861	40	6	62	<0.01	--
43862	34	5	40	<0.01	--
43863	99	7	88	<0.01	--
43864	100	9	90	<0.01	--
43865	40	8	31	<0.01	<0.01
UNITS	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	2	1	0.01	0.01
SCHEME	AAS2M	AAS2M	AAS2M	FA1	FA1

WOODCUTTERS MINE - DRILLHOLE RECORD

HOLE NO: ASD5A

PROPOSAL

LOCATION: Acacia South Prospect Filed

PURPOSE: To test coincident Geochem / N-S dykes & stringers with and dololutite horizon

PROPOSED BY: SP SET UP BY: SP

SET UP DETAILS:

9680 N 10200 E ....., RL 097 ° GRID AZIMUTH -56 °DIP

TARGET: 360m (m depth) 9700 N 10410 E -280m RL

PLANED DEPTH: 500 (m)

DOWNHOLE SURVEY REQUIREMENTS: every 30m

OTHER SPECIFICATIONS (CORE SIZE, PERCUSSION DEPTH ETC.)

Allow for 1° drop per 30m in Percussion (90m)

Anticipate 1½/30 lift

FINAL DATA

FINAL DEPTH: 444.0 (m)

COMMENCED: ..... COMPLETED: ..... DRILLER: .....

COLLAR CURVEY: BY: .....

.....N .....E .....RL .....° GRID AZIMUTH .....° DIP

DOWNHOLE SURVEYS: See attached sheet

CORE SIZE: .....

OTHER DRILLING DETAILS: .....

GEOLOGIST: .....

[illegible] MINE

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: A5D5A'

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	*	*	0				
00	095	-50					
24	099	-53.5					
54	102	-59					
90	105	-62					
120	106	-63					
150	105	-59					
180	104	-56					
210	104	-54.5					
240	101	-51.5					
		EOH =					
		CHECK TOTAL =					

WOODCUTTERS MINE

CALCULATIONS FOR HOLE PLOTTING FROM DOWNHOLE SURVEYS

HOLE NUMBER: A3D5A

* Collar Azimuth and Dip not to be used for plotting

Survey Depth	(Grid)	Dip (I)	Mid-Points	Interval	RL	N	E
Collar	*	*	0				
270	97	+48					
300	98.5	+43					
332	99	+39					
372	99.5	+37					
402	98.5	+36					
432	97.5	+36					

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 30/05/92
Logged by: S.P.
Hole: ASDSA
Page No. 1 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
												Mineral Percentages												90.0 – 115.0
91.0	95	3	M						2	<10					TR									Mod weathered grey non-calcareous slate with carbonaceous interbeds
95.5		4	93.9	$S_3 \wedge S_1$	15	70	SS (10)		2	<10		TR	TR		TR						1			J dip long lamin. carbonate rich slate comprising 10-20% of unit.
96.0																								
98.5		5	M		70	60	S		2	20					TR									93.4 T-1.5 cm wide zone of carbonate veining in slate laminated
102.0			M		30	70	S		2	<10					TR									(S_2 //) shear with granular sphalerite + galena min2
108.0	90	1							2	<10					TR									Minor core loss @ 115.0 due to soft weathered zones (poor local calc. beds) in slate
112.0	90	5	M		50	60	S		2	<10					TR									
115.0	85		M						2	20					TR									115.0 – 216.0 Slate non conspic. laminated
118.5	95	5	116.0	$S_2 \wedge S_1$	20	25	SS		2	10					<1						1			with non chanl. 2-3 cm calcard rich bed carrying 5% of pyrite
120.5									2	10					<1									116.0 – S_2 // brec. cb. vein thin cb rich carg. [illegible]
125.5		5			20	40	SS		2	10					<1									with dkbrn gy slate interbeds
131.5		5			25	30	SS		2	10					<1									
137.5		5			25	50	SS		2	25					<1									
141.3		3			70	80	SS		2	15					≤1						3			Slate still carrying 0.5-2 cm intbeds of slightly laminated dolomitic slate
145.2		4	146.0		20	30	SS		2	15					≤1					1	2			with conspic. sporadic white dolomite (calcite) rich laminae
150.0		4							2	20					≤1						1			
154.0		5			25	50	SS		2	15		TR	TR		≤1						3			→ 154.0
155.5		4			25	50	S		2	20		TR	TR		≤1						3			149.7 – Thin (1-2 mm) dolomite cb variably opening along S_2 bed
155.3		4	155.3						2	40		TR	TR		≤1						1			patchy galena + sphalerite
160.5		5			40	50	SS		2	20					1						1			
164.5		4			70	60	SS		2	30					1						1			
168.5		5			30	70	SS		2	20					<1						<1			
172.4		4	170.0	$S_3 \wedge S_1$					2	15		TR	TR		1						3			3cm vein shear with cb-gr-sphal min2 – Appears // to S_2 @ 30°
176.0		5			40	80	S		2	10		TR	TR		1						2			to CA.
180.0		5	176.0	$S_2 \wedge S_1$	30	70	S		2	10		TR	TR		1						4			176.9 1cm cb filled shear fracture (S_2 //) with granular sphalerite in fr S_2 //
184.1		5	181.0	$S_2 \wedge S_1$	45	80	S		2	15		TR	TR		1						4			Fracture + within which fractures appear up @ 90° to Cly
189.2		5			45	50	S		2	15		TR	TR		1						4			178.5 – 194.0 Thin S_2 // + varied S_2 [illegible] cb veinlets carry [illegible] sphal + gn – patchy yet sporadic [illegible]

1. Spotted slate
2. Slate
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4. Laminated dololutite
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9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 1/04/92
Logged by: SP

Hole: ASD5A
Page No. 2 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate %	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
193.2																								193.8 – 194.3 Dikka cl. veins [illegible]
194.3	>95	5	193.5		45	85	0/1		2	<10		TR	TR		≥1						4			Laminated / banded / wkly dolomitic slate with [illegible] dolomite veinlets continues
200.0	"	5	194.3		40	80	0/1		2	<10		TR	TR		≥1						2			to 216.0, where it grades into
206.2	"	5			50	70	S		2	10		TR	TR		≥1						4			slightly lighter grey more banded, more uniformly dolomitic slate interbedded
210.0	"	5			50	65	0/1		2	<10		TR	TR		≥1						<2			lighter darker grey more pyritic slate – dol. slate occ. widely
216.0	"	5			40	65	S		2	<10					≥1						1			laminated / bedded, [illegible] qz-calc. veinlets, veinlets
222.0	"	5			25	60	0/1		11.2	[illegible]					≥1						1			200.0 – 204.0 Filamentous fgd carbonate
225.0	"	5							11.2	[illegible]					1						3			ladder vein zone predominantly over thin metavolc. with trace
234.0	"	5			35	65	S		2.11	50					2						3			rpbd + jm @ 234.0 to 237.5
241.0		5	234.1		60	70	S		2.11.7	40					2						15			239.1 – 240.1, 242.9 – 247.0 Strongly brecc. veined fault zone with
247.0		4	240.1 242.9 243.0		50	65	S		2.11.9	40					≥1						20			245.3 – 247.3 Slate veined with thin cl. stringers
251.0		4			50	55	S		2.11	30					≥1						<5			249.2 – 251.5 V. broken dark dolomitic slate.
255.0		3							2.11	50					<1						>1			257.1 – 258.0 Broken core occurs with early folded, stained qtz-cb.
262.0		4			30				2.11	3					<1						>1			
270.0		4	265.1		40	15	0/1		11.2	60					<1					1	2			255.1 10cm fault qtz-calc. veins widely interbedded
267.0		4			40	25	0/1		11.2	<50					1					1	1			Bedding with 1% to 5% or indiscernible
273.0		4			35	20	0/1		2.11	50					1					2	2			261.0 – 263.0 – End qtz stained interbedded qtz stringers cutting core
277.0		4	268.8			80			2.11	50					<1						<1			@ 5-10° 270.0 Broken grey core with thin dolomitic slate
275.0		4	270.2 271.5		40	35	0/1		11.2	50					<1						<1			271.5 – Rehealed thin shear.
279.0		4			50	10	S	S	11.2	50					<1						1			273 – 278.0 Crushed transition to increasingly dololutite / dolomitic slate with bomanite
280.0		4							3.11	50	30				<1						2			280.0 – 294 Cgl [illegible], widely limited
283.0		4			55	35	S	S	3.11	20	30				<1						<2			dololutite with relatively dense throughout
288.0		4							3		90				<1						1			
294.0		4			55	80	0/1		3		90				<1						4			294
300.0		5			50	60	0/1		3.11		70				<1					3	2			Dololutite (some stromatolitic) grades back into blocky dol. slate @ 299.0.
305.0		5			45	30	0/1		2.11						<1						2			
310.0		4	306.9 309.5		30	10	S		2.11						1						3			

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Dip angles measured with respect to long core axis, sense measured with respect to cleavage

WOODCUTTERS JOINT VENTURE
CORE LOGGING SHEET

Date: 6/04/92
Logged by: SY

Hole: ASDSA
Page No. 1 of

Distance from collar	Recovery %	RQD	Weathering	Structure	Cleavage	Bedding	Sense	Stratigraphy	Rock type	Dolomitic slate%	Dololutite %	Galena	Sphalerite	Sulphosalts	Pyrite	Chalcopyrite	Stibnite	Arsenopyrite	Pyrrhotite	Quartz	Carbonate	HMR	Sample Number	Comments
310.8		4	310.4	V_1					2		>1				>1					1	3			310.4 – 316.3 Broken, jointed core intersect not much (c1) slate + dol. slate
315.9		5	316.3		25				3.11		>60				<1						2			315.0 – 327.0 Lightly laminated slate / dolomite
321.0		5			40	35	°11		3.11		>60				<1					1	3			
327.0		4	328.3		30				9.2.8						2						<2			327.3 – 328.0 Lgn r/l dyke – sheared 328.0 – 339.7 [illegible] lam.
332.3		5		$S_1 B_1$	30				9.2.8						2						<2			Slightly brecciated + sheared slate / dol. slate + dyke.
339.1		5	339.7	S_1	25				8						5									339.7 – 350.5 Sheared, carbonated + altered pyritic lamprophyre dyke – slightly
344.3		5							8						5						2			+ [illegible] pyritic.
350.5		5	350.5		30	60	S		11	<50					<1					5	5			356.7 – 358.3 Slightly sheared + graphitic dol. mud slate
354.2		4	356.7						2.11	10					1						2			
361.1		4	358.3		45	13	S		2.11	20					1						5			364.7 – 366.0 Slightly veined + breccia, dol. slate
366.0		4	364.7	$V_1 B_1$	30	55	°11		2					>1							1			Slate mod. pyritic → EOH
372.0		5	366.0	V_1	35	55	°11		2					>1							2			372.6 Fault gouge [illegible]
373.9		5			35	60	°11		2					>1							2			
379.5		5	379.1 380.1	$V_1 B_2$	25	70	°11		2					>1							2			379.9 – 380.1 Laminated dl-slate vein 30° to ca.
384.9		5			25	60	°11		2					>1							2			386.0 [illegible] brecc. in slate, [illegible] vuggy dol. [illegible]
390.0		5			30	60	°11		2					>1							<1			
396.0		5			30	65	°11		2					>1							<1			408 – 414 DL gy. slate [illegible]
402.0		5			30	65	S		2					≥2							<1			
408.0		5			30	65	S		2					≥2										
414.0		5			30	65	S		2					≥1										
419.5		5	421.1 430	$V_1 B_1$	30	55	S		2					<1										421.1 – 423.0 [illegible] veined fault zone – mod. highly [illegible]
420		5			30	60	S		2.8.11	20	20			<1										430.0 – 438.0 Slate slightly [illegible] slightly [illegible] dol. [illegible] – [illegible]
430		5							3.12		>70			<1										
438		5							2.3					<1										438.0 – 444.0 Dololutite [illegible] back into slate with [illegible]
444																								
EOH.																								

1. Spotted slate
2. Slate
3. Dololutite
4. Laminated dololutite
5. Tuff marker bed
6. Massive sulphides
7. Calcareous dyke
8. Dolomite dyke
9. Breccia
10. Leached slate
11. Dolomitic slate
12. Cream dololutite
13. Stromatolitic dololutite

Dip angles measured with respect to long core axis, sense measured with respect to cleavage

SAMPLE DATA SHEET

Form ..0

SAMPLE NUMBER	DRILL HOLE DEPTH FROM	TO	SAMPLE CO-ORDINATE N/S	E/W	DESCRIPTION	Cu	Pb	Zn	As	Au
					ANALYTICAL DATA (Values in ppm unless otherwise stated)					
EE 4386 66			148.0	149.0	1.0	40	2670	1280		
67			149.0	150.0	1.0	50	5100	3490		
68			150.0	151.0	1.0	73	3490	5200		
69			151.0	152.0	1.0	63	3290	4120		
70			152.0	153.0	1.0	39	6300	1630		
71			153.0	154.0	1.0	70	3050	1570		
72			154.0	155.0	1.0	49	240	310		
73			155.0	156.0	1.0	47	49	79		
74										
75										
76										
77										
78										
79										
80			174.0	175.0	1.0	49	2680	4210		
81			175.0	176.0	1.0	26	2950	3540		
82			176.0	177.0	1.0	38	520	2490		
83			177.0	178.0	1.0	40	61	390		
84			178.0	179.0	1.0	22	33	82		
85			179.0	180.0	1.0	31	1060	2210		
86			180.0	181.0	1.0	75	6200	8800		
87			181.0	182.0	1.0	31	290	1270		
88			203.0	204.0	1.0	45	31	135	<50	<0.01
89			204.0	205.0	1.0	41	125	670	<50	"
90			205.0	206.0	1.0	57	81	440	<50	"
91			206.0	207.0	1.0	54	80	210	<50	"
92			207.0	208.0	1.0	44	105	460	<50	"
93			338.7	339.7	1.0	125	270	690	<50	"
94			339.7	340.7	1.0	92	34	110	<50	"
95			340.7	341.7	1.0	78	24	79	<50	"

SAMPLING RECORD			PROJECT	DRILLING RECORD	
Material: Split Core	Depth:	Sampled Logged By: SP	Region: Pine Creek	Drill Type:	CO-ORDINATES 8580761.6 m N/S
Map Ref:	Laboratory Request No.:	Date: 6/04/92	Project: Acacia - EL 6431	R.L. m Water Table At m	730798.8 m E/W
LINE No.	FROM	Photo No.	Prospect: Acacia South	Dip Azm	HOLE No: ASD5A
	TO	Bearing	Cost Code: 6431	Date:	

SAMPLE DATA SHEET

Form ... C

DRILL HOLE DEPTH — FROM ____ OR TO ____

SAMPLE CO-ORDINATE N/S ____ E/W ____

SAMPLE NUMBER	N/S	E/W	DESCRIPTION	Cu	Pb	Zn	As	Au
EE 43996	341.7	342.7	1.0	89	34	82	<50	<0.01
97	342.7	343.7	1.0	95	87	430	<50	"
98	343.7	344.7	1.0	115	25	105	<50	"
99	344.7	345.7	1.0	110	22	120	<50	"
43900	345.7	346.7	1.0	74	21	60	<50	"
26560	346.7	347.7	1.0	60	19	92	<50	"
61	347.7	348.7	1.0	67	19	79	<50	"
62	348.7	349.7	1.0	86	14	90	<50	"
63	349.7	350.7	1.0	81	17	51	<50	"
64	350.7	351.7	1.0	13	14	22	<50	"
65	245.0	246.0	1.0	64	11	89	<50	"
66	246.0	247.0	1.0	37	20	105	<50	"
67	247.0	248.0	1.0	37	22	115	<50	"
68								
69								
70								
71								
72								
73								

ANALYTICAL DATA (Values in ppm unless otherwise stated)

SAMPLING RECORD

Material: Split Core

Depth:

Sampled By: SP

Logged

Map Ref:

Laboratory Request No.:

Date:

LINE No.:

FROM

TO

Photo No

Bearing

PROJECT

Region: Pine Creek

Project: Acacia – EL6431

Prospect: Acacia South

Cost Code: 6431

DRILLING RECORD

Drill Type:

R.L. m Water Table At m

Dip Azm

Date:

CO-ORDINATES

8580761.6 m N/S

730998.8 m E/W

HOLE No: ASDSA

CLASSIC LABORATORIES

21 Marjorie Street, Berrimah, Northern Territory
Postal Address : P.O. Box 58, Berrimah, N.T. 0828
Telephone: (089) 322 637 Facsimile: (089) 323 531

Woodcutters Mine
P.M.B. 60
Winnellie

N.T. 0821

21 APR 1992

ANALYSIS REPORT :

Your Reference	: 035797 D/S 11794	Our Reference	: 2DN0349
Samples Received	: 08/04/92	Results Reported	: 10/04/92
Number of Samples	: 22	Report Pages	: 1 to 1

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

If you have any enquiries please contact the undersigned quoting our reference as above.

ACACIA STH DDH

ASD 5A
ASD 2A

Report Codes:
N.A. -Not Analysed
L.N.R. -Listed But Not Received
I.S. -Insufficient Sample

Approved Signature:

for

ALAN CIPLYS
Manager - Darwin
CLASSIC LABORATORIES

CLASSIC LABORATORIES

Job: 2DN0349
O/N: D/S 11794

Final

ANALYTICAL REPORT

	Depth (m)	SAMPLE	Cu	Pb	Zn
	148-149	43866	40	2670	1280
	149-150	43867	50	5100	3980
	150-151	43868	73	3490	5200
ASDSA	151-152	43869	63	3290	4120
	152-153	43870	39	6300	1630
	153-154	43871	70	3050	1570
	154-155	43872	49	240	310
	155-156	43873	47	48	78
		43874	55	520	2660
		43875	46	680	2520
		43876	73	320	570
		43877	61	490	1150
		43878	28	800	1840
		43879	10	69	93
	174-175	43880	49	2680	4210
	175-176	43881	26	2950	3540
	176-177	43882	38	520	2490
ASDSA	177-178	43883	40	61	390
	178-179	43884	32	33	82
	179-180	43885	31	1060	2210
	180-181	43886	75	6200	8800
	181-182	43887	31	290	1270

UNITS	ppm	ppm	ppm
DET.LIM	1	2	1
SCHEME	AAS2M	AAS2M	AAS2M

Final

CLASSIC LABORATORIES

Job: 2DN0488
O/N: 036197 D/S 11795

ANALYTICAL REPORT

	SAMPLE	Depth (m)	Cu	Pb	Zn	As	Au	AuDpl
	43888	203 - 204	45	31	135	<50	<0.01	--
	43889	204 - 205	41	125	670	<50	<0.01	--
	43890	205 - 206	57	81	440	<50	<0.01	<0.01
	43891	206 - 207	54	80	210	<50	<0.01	--
	43892	207 - 208	44	105	460	<50	<0.01	--
	43893	338.7 - 339.7	125	270	680	<50	<0.01	--
ASDSA	43894	339.7 - 340.7	92	34	110	<50	<0.01	--
	43895	340.7 - 341.7	78	24	79	<50	<0.01	<0.01
	43896	341.7 - 342.7	89	34	82	<50	<0.01	--
	43897	342.7 - 343.7	95	87	430	<50	<0.01	--
	43898	343.7 - 344.7	115	25	105	<50	<0.01	--
	43899	344.7 - 345.7	110	22	120	<50	<0.01	--
	43900	345.7 - 346.7	74	21	60	<50	<0.01	--
	26560	346.7 - 347.7	60	19	82	<50	<0.01	--
	26561	347.7 - 348.7	67	19	78	<50	<0.01	--
	26562	348.7 - 349.2	86	14	80	<50	<0.01	--
ASDSA	26563	349.2 - 350.7	81	17	51	<50	<0.01	--
	26564	350.7 - 351.7	13	14	22	<50	<0.01	--
	26565	245 - 246	64	11	89	<50	<0.01	--
	26566	246 - 247	37	20	105	<50	<0.01	--
	26567	247 - 248	37	22	115	<50	<0.01	<0.01
	26568	148.45 - 150	165	17	57	<50	--	--
	26569	250 - 252	110	15	92	<50	--	--
	26570	252 - 254	125	19	88	<50	--	--
S1210	26571	254 - 256	110	14	97	<50	--	--
	26572	256 - 258	99	15	78	<50	--	--
	26573	258 - 260	85	9	64	<50	--	--
	UNITS		ppm	ppm	ppm	ppm	ppm	ppm
	DET.LIM		1	2	1	50	0.01	0.01
	SCHEME		AAS2M	AAS2M	AAS2M	AAS2M	FA1	FA1

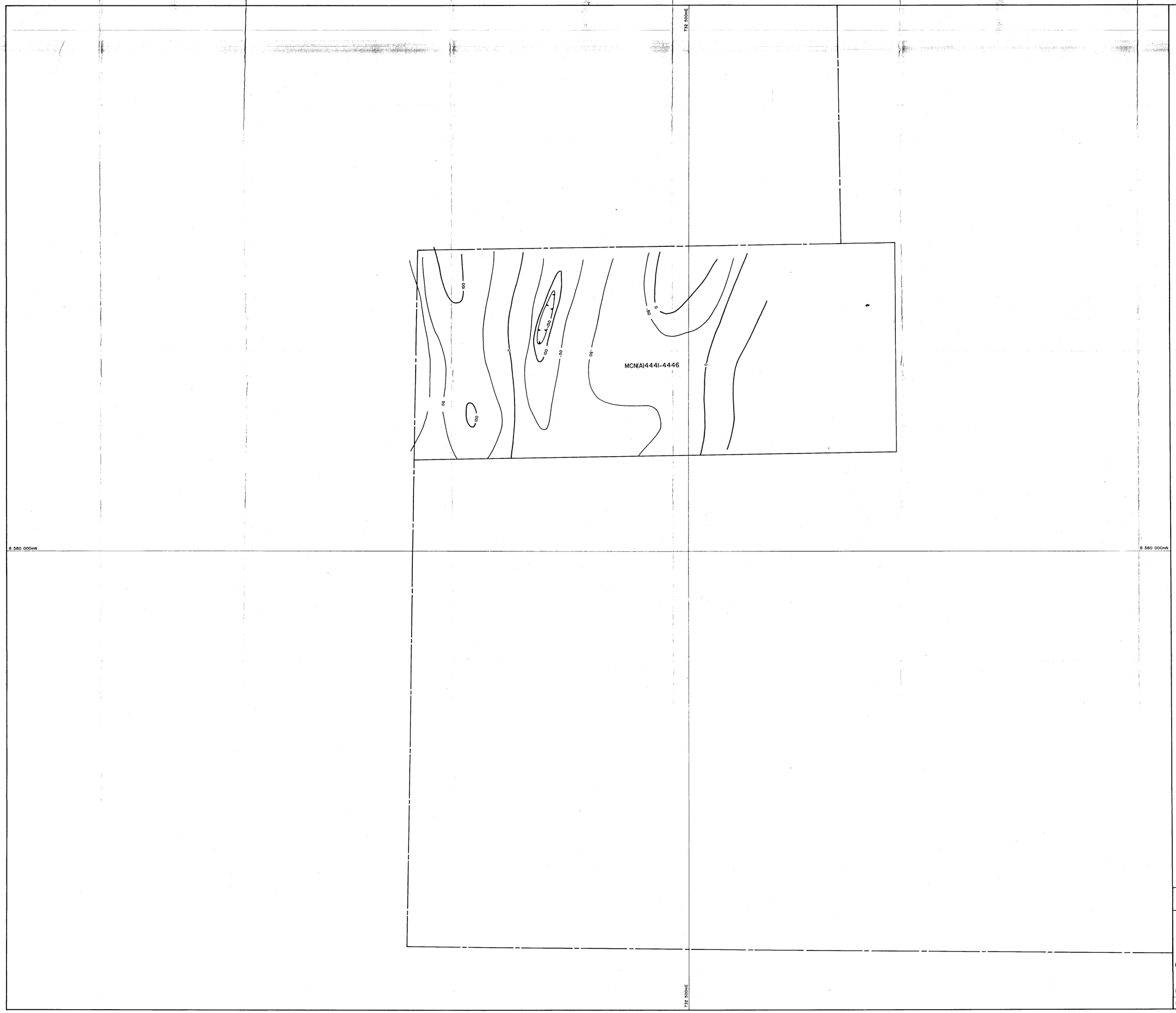
eupene exploration enterprises

Client : WOODCUTTERS JOINT VENTURE

Scale: 1 : 5000	Compiled: S.Pevely	Date: NOV 1991
	Drawn: C.S.D.S	

EL 6431
ACACIA SOUTH PROSPECT
GEOLOGY FACT MAP

CR 92/642



0 100 200 300 400 500 metres

SCALE: 1:5,000

Aztec Mining Company Ltd

EL 6431
ACACIA SOUTH PROSPECT
SELF POTENTIAL CONTOURS - MILLIVOLTS.

Enclosure 2

PROJ. NAME: ACACIA SOUTH

NO.

PREPARED BY: S.PEVELY

DATE OF SURVEY: FEB 1992

DRAWN BY: C.S.D.S

DRAWING NO.

CR 92/642

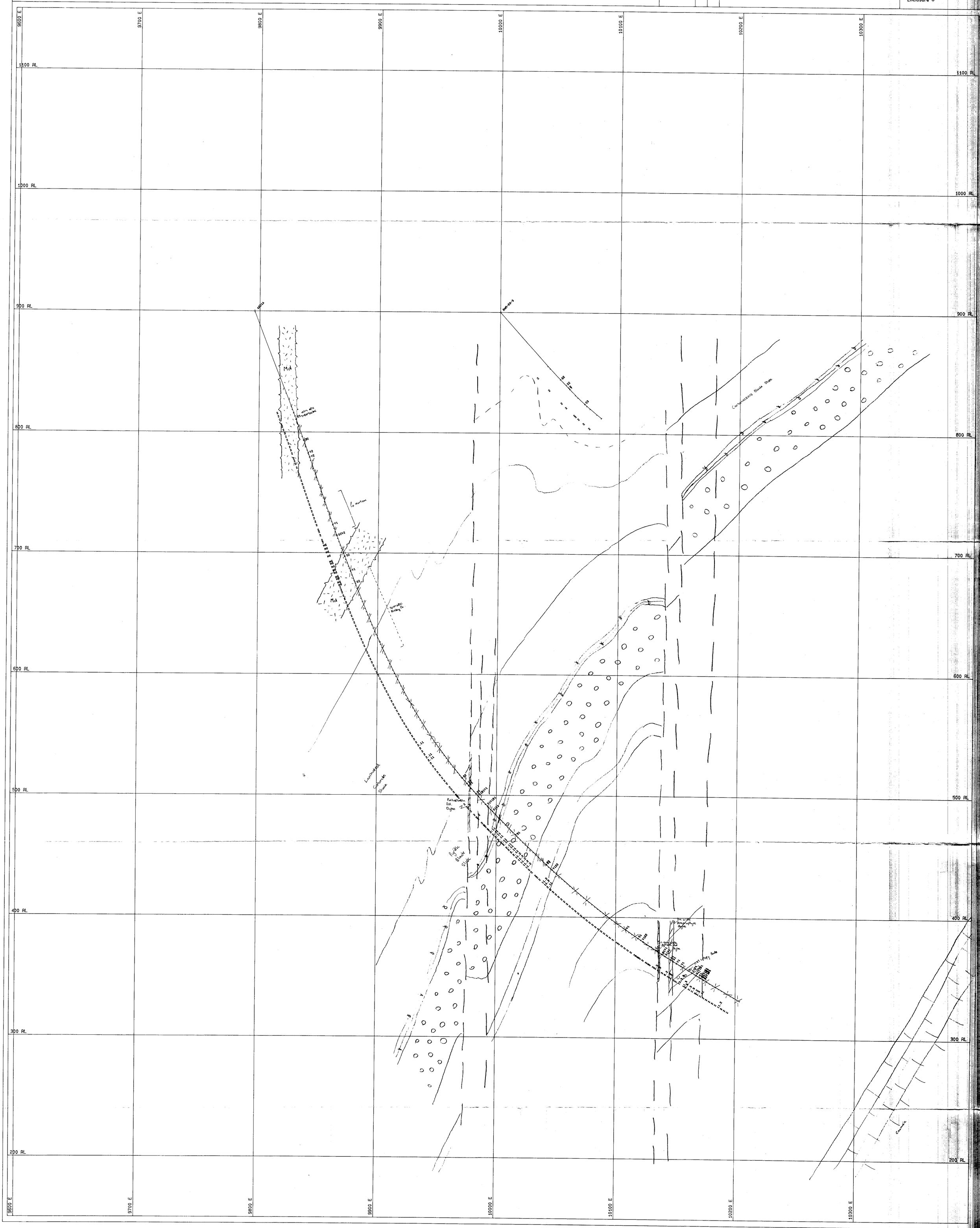
Woodcutters Joint Venture

	Init	Date
Surveyor	SGP	
Drawn		
Checked		
Approved		

SURFACE DRILL HOLES
ACACIA SOUTH PROSPECT - EL6431
CROSS SECTION 9900N - DDH ASD1A

File : ASD1A
Scale : 1 : 1000
Date : 24 Sep 1992
Enclosure 3

CE92/642

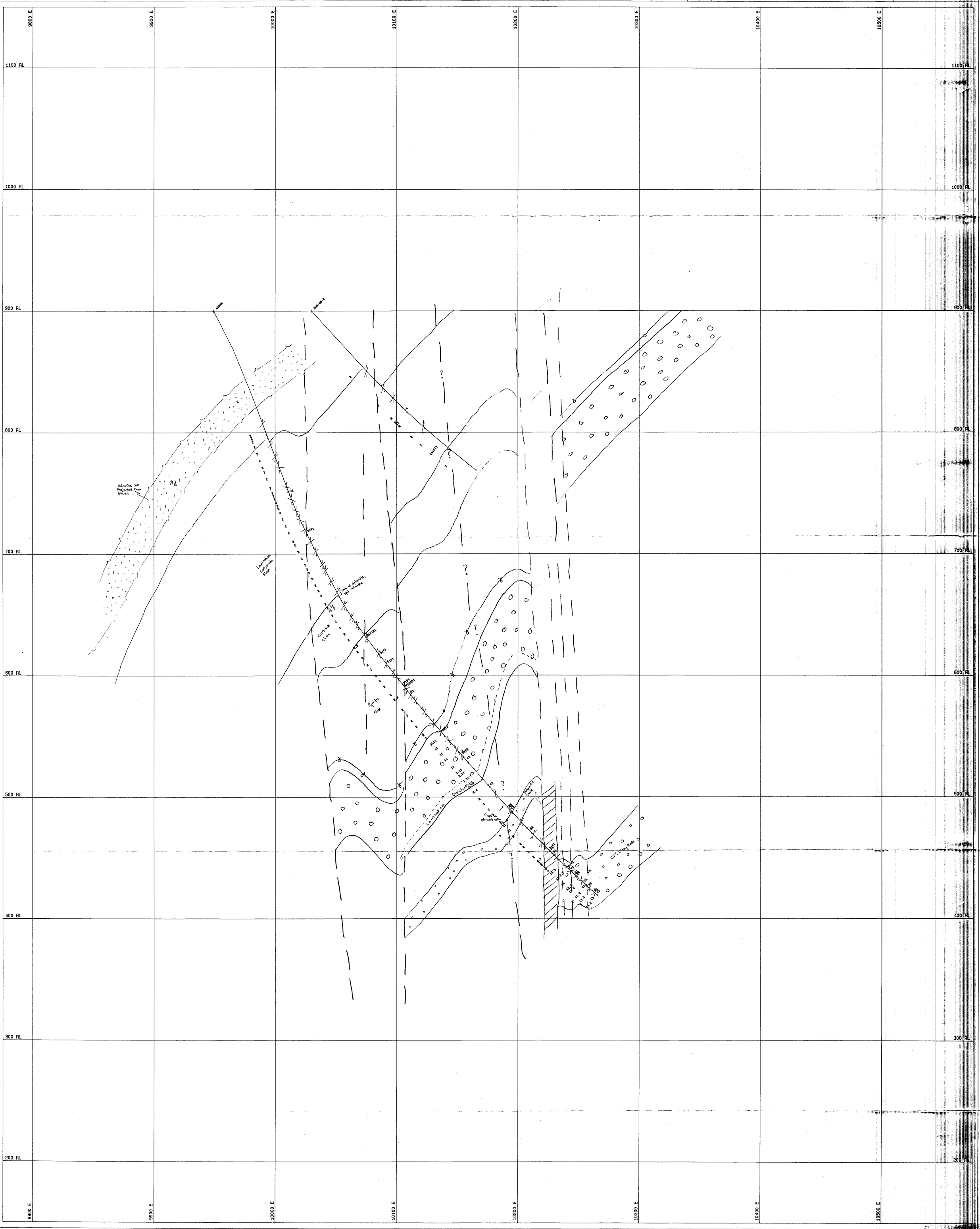


Woodcutters Joint Venture

	Init	Date
Surveyor	SGP	
Drawn		
Checked		
Approved		

SURFACE DRILL HOLES
ACACIA SOUTH PROSPECT - EL6431
CROSS SECTION 9700N - DDH ASD2A

File : ASD2A
Scale : 1 : 1000
Date : 24 Sep 1992
Enclosure 4



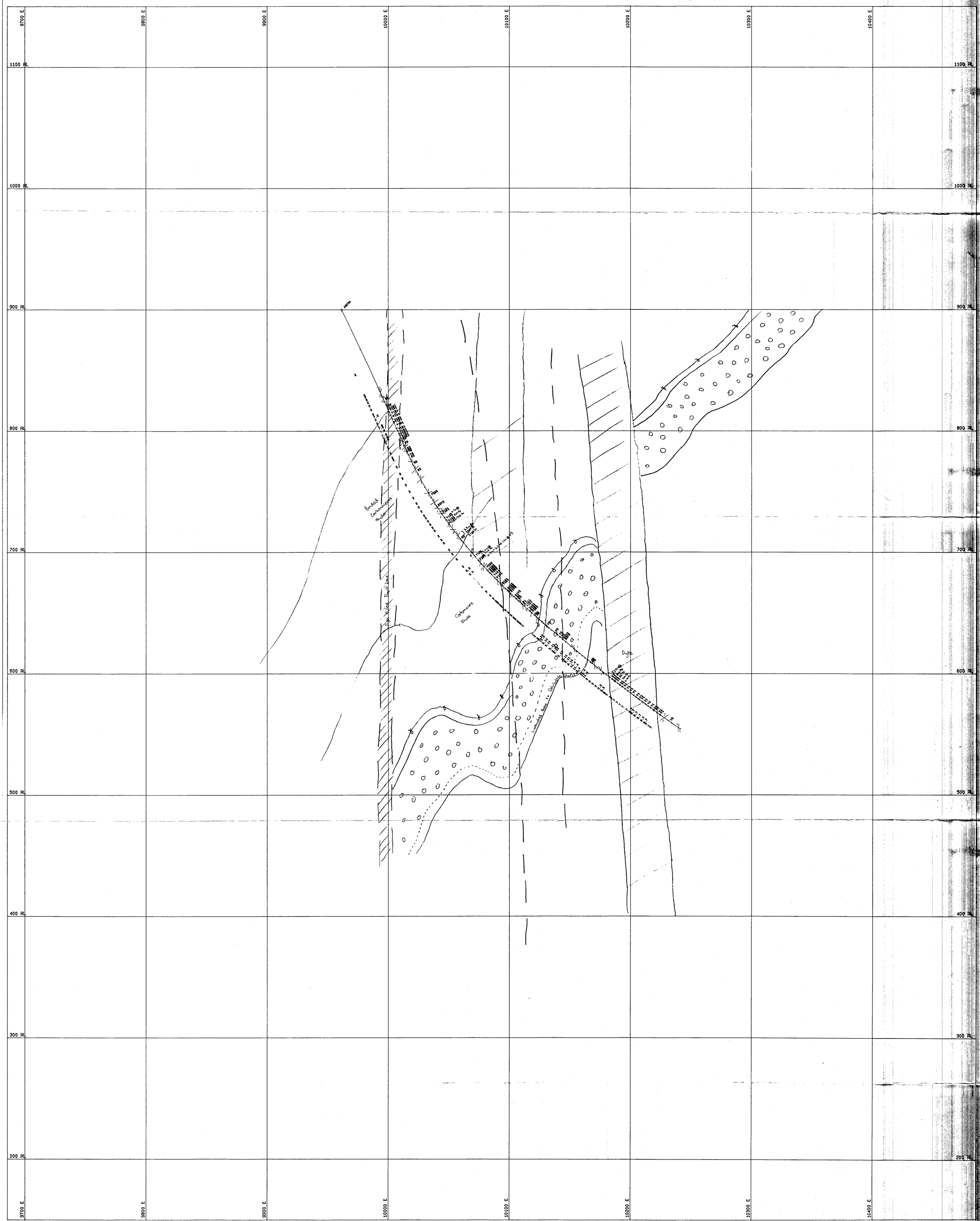
Woodcutters Joint Venture

	Init	Date
Surveyor	SGP	
Drawn		
Checked		
Approved		

SURFACE DRILL HOLES
ACACIA SOUTH PROSPECT - EL6431
CROSS SECTION 9850N - DDH ASD3A

File : ASD3A
Scale : 1 : 1000
Date : 24 Sep 1992

Enclosure 5



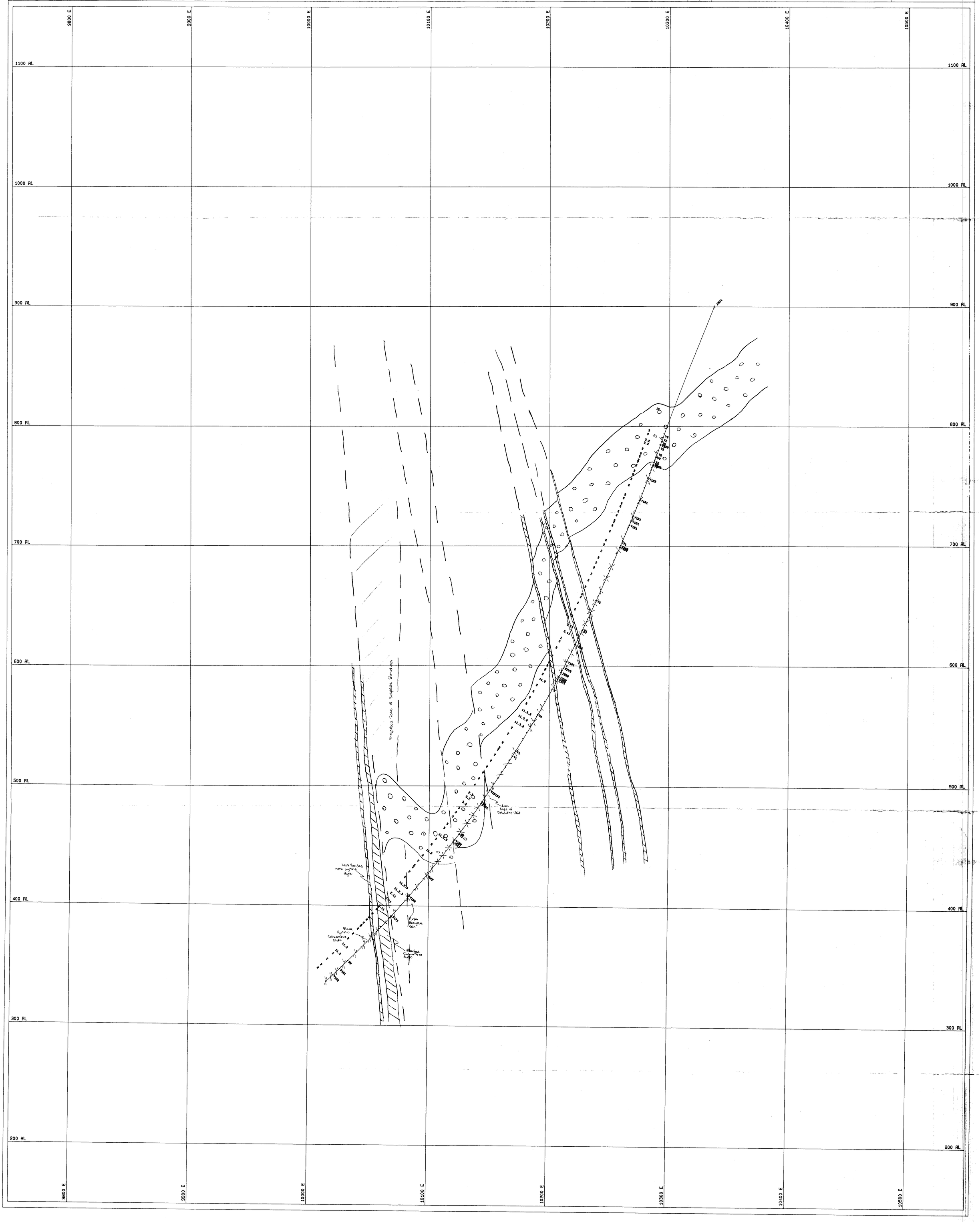
Woodcutters Joint Venture

	Init	Date
Surveyor	SGP	
Drawn		
Checked		
Approved		

SURFACE DRILL HOLES
ACACIA SOUTH PROSPECT - EL6431
CROSS SECTION 9600N - DDH ASD4

File : ASD4
Scale : 1 : 1000
Date : 24 Sep 1992
Enclosure 6

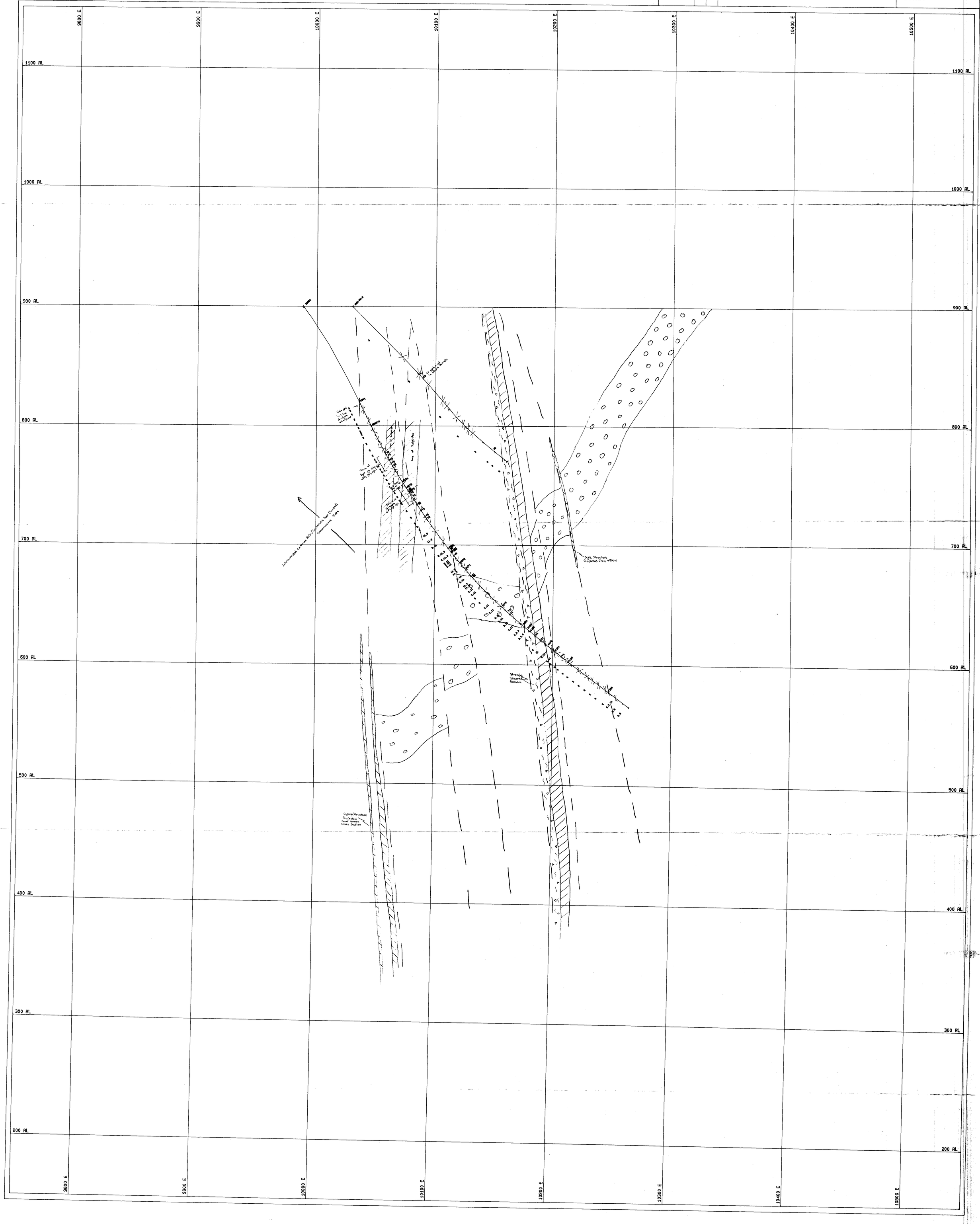
CR92/642



Woodcutters Joint Venture

	Init	Date
Surveyor	SGP	
Drawn		
Checked		
Approved		

SURFACE DRILL HOLES
ACACIA SOUTH PROSPECT - EL6431
CROSS SECTION 9450N - DDH ASD5A

File : ASD5A
Scale : 1 : 1000
Date : 25 Sep 1992
Enclosure 7

CR92/1642