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**CRA EXPLORATION PTY. LIMITED**  
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**EL 34/88 ZEEHAN NO. 2, TASMANIA**

**REPORT ON EXPLORATION FOR THE FOURTH YEAR OF TENURE**

**9/11/91 TO 9/10/92**

92-3399

<p><b>MICROFILMED</b> <b>FICHE No. 012622-24</b></p>
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**AUTHOR: R.G. PARKINSON**

**DATE: OCTOBER, 1992**

**LICENCE HOLDER: MAJOR MINING LIMITED**

**SUBMITTED TO: T.W. DICKSON**

**ACCEPTED BY:**

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**CRAE REPORT NO. 18359**

CONTENTS

	<u>PAGE NO.</u>
1. SUMMARY	1
2. INTRODUCTION	1
3. CONCLUSIONS	2
4. RECOMMENDATIONS	2
5. REGIONAL GEOLOGY	2
6. MINERALISATION	4
7. PREVIOUS EXPLORATION BY COMPETITORS	6
8. EXPLORATION BY MAJOR MINING LTD/CRAE PRIOR TO 9/11/91	6
9. EXPLORATION ACTIVITIES FOR THE PERIOD 9/11/91 TO 9/11/92	7
9.1 Exploration Philosophy	7
9.2 Badger River Prospect	7
9.2.1 Introduction	7
9.2.2 Dipole-Dipole IP Surveys	7
9.2.3 Ground Magnetometer Surveys	8
9.2.4 Reinterpretation of Gravity Surveys	8
9.2.5 Bedrock Wacker Geochemistry	8
9.2.6 Proposed Exploration During 1993	9
REFERENCES	10
KEYWORDS	11
LOCATION	11
LIST OF DPOS	11
LIST OF PLANS	11
LIST OF APPENDICES	12

## 1. SUMMARY

CRA Exploration Pty. Limited (CRAE) is exploring EL 34/88 for stratiform/stratabound carbonate-hosted Zn-Pb and surficial secondary Zn-Pb deposits derived from the decomposition of Ordovician Gordon Limestone.

One primary carbonate-hosted Zn-Pb target was selected for work during 1992; Badger River. Within this grid two anomalies require follow-up. A resistive gravity anomaly is not satisfactorily explained, and requires drill-testing. An area of anomalous wacker geochemistry, up to 1.45% Zn warrants additional sampling to focus an exploratory hole.

Decarbonatisation of Ordovician Gordon Limestone has produced significant surface enrichment of Zn-Pb within residual black pug. This style of mineralisation, not previously evaluated, is perceived to be a more desirable target than a primary carbonate-hosted Zn-Pb deposit. Prime prospects with potential for grade, thickness and areal extent to conceal a substantial base-metal accumulation lie outside EL 34/88, however the bulk of strike extent for this deposit style lies within this EL. The 1993 field program will reflect this change of strategy toward surficial secondary Zn-Pb deposits.

## 2. INTRODUCTION

EL 34/88 was granted to "His Grace, The Most Noble, The Duke of Avram" on 9th December 1988, and transferred to Major Mining Ltd on the 23rd November 1989. CRA Exploration Pty. Limited entered into a joint venture agreement with Major to explore EL 34/88, commencing on 23rd April 1991.

EL 34/88 covers 68<sup>2</sup> km located S of Zeehan on the Tasmanian W coast (Plan Tv 431). During the period under review, the fourth year of tenure, CRAE has a statutory obligation to expend \$34000, plus a shortfall in expenditure from year three of \$29400, totalling \$63400. This report details all exploration activities conducted within EL 28/88 by CRAE during 1992.

CRAE's principal commodity of interest in the Zeehan area is Zn-Pb. CRAE's initial interest focussed on potential for carbonate-hosted Zn-Pb deposits within Ordovician Gordon Limestone. One target was selected for fieldwork during 1992; Badger River. Activities included literature studies and open-file data compilation, ground wacker geochemical sampling, and magnetic and IP surveys.

An exhaustive review of Amoco-EZ open-file data for the Myrtle to Rose Valley areas highlighted the importance of secondary surficial mineralisation derived from the decomposition of the carbonate.

### 3. CONCLUSIONS

Investigations for a primary carbonate-hosted Zn-Pb deposit on the Badger River grid delineated two anomalies requiring follow-up. A resistive gravity anomaly is not satisfactorily explained by simple topographic effects, and may alternatively be caused by a pipe-like dewatering/mineralising structure.

An area of anomalous wacker geochemistry, up to 1.45% Zn, has been identified near the contact between Gordon Limestone and overlying Crotty Quartzite, within close proximity to the Firewood Siding Fault. This may be an important stratigraphic trap for mineralising fluids dispersing through the limestone from the fault.

Following an exhaustive review of Amoco-EZ open-file data for the Myrtle to Rose Valley areas, secondary surficial deposits derived from the decomposition of the carbonate is perceived to be a more desirable target. The 1993 field program will reflect this change of strategy.

### 4. RECOMMENDATIONS

Follow-up wacker sampling of the area around the Zn anomalies on Line 9600E is required, with particular emphasis on determining whether the anomaly intensifies toward the Firewood Siding Fault. In this position, a metal trapping mechanism of favourable stratigraphy capped by Crotty Quartzite will be in contact with the plumbing system.

The gravity feature should be probed by a shallow drill-hole to test for a Tsumeb-type target.

Continued exploration within EL 34/88 should diversify toward evaluating the potential for secondary surficial Zn-Pb deposits. Since the best prospects of this deposit type with potential for grade, thickness and areal extent to conceal a substantial base-metal accumulation lie outside EL 34/88, activities will hinge largely on the results of programs in these EL's. However as the bulk of strike extent lies within this EL, limited air-core drilling traverses across prospective black pug areas should be trialled.

### 5. REGIONAL GEOLOGY

Zeehan and it's surrounding districts have seen almost continuous sedimentation, igneous activity and deformation from the Late Proterozoic to the Quaternary. Consequently the picture of geological evolution is a complex one. Recent mapping by the Tas Dept of Mines is helping to solve old puzzles, but also continues to open new cans of worms. Corbett (1989) gives a good summary of possible tectonic models to account for the early palaeozoic geology of NW Tasmania. Some interesting new concepts are summarised informally in Turner (1992). For CRAE staff, Parkinson (1992) attempts to pull together a few loose threads.

The Rocky Cape Association forms basement in NW Tasmania. This association is not represented on the Zeehan 1:63360 sheet. In the late Precambrian, around 700Ma, a shallow basin was forming in the stretched intracratonic area between the Rocky Cape and Tyennan Regions. Coarse clastic sediments (conglomerates and sandstones) of the Forest Conglomerate, Donaldson Fm and base of the Timbs Gp were deposited.

Turbidite sequences of interbedded sands and silts of upper Donaldson Fm, Timbs Gp and Oonah Fm were laid down as the intracratonic basin deepened.

As the rift phase drew to a close, sag phase Black River Dolomite, Savage Dolomite, ?Timbs Gp magnesite horizons, and Success Creek Gp limestones were deposited. Rift tholeiites and associated sediments of the Smithton Volcanics, Bernafai Volcanics, Timbs Gp and Crimson Creek Fm erupted over the now filled basin.

During the mid to late Cambrian, an arc-continent collision caused overthrusting of ultramafic-mafic rocks and related sediments, possibly from a subduction complex some distance E of the Tyennan Block. The gabbros and basalts between Trial Harbour and Zeehan are of Boninitic composition - present understandings of basalt chemistry require that these Boninites derive from a fore-arc wedge (Brown and Jenner, 1989).

Post-collision extension tectonics then produced troughs into which the Dundas Gp sediments and Mount Read Volcanics were deposited. A local metamorphic event dated at 500Ma (Penguin Orogeny), possibly contemporaneous with eruption of the MRV, affected the rift sediments in the area of the present-day Arthur Lineament. This event probably affected the formations over a broader area than seen today.

Latest Cambrian to Ordovician times saw tectonic uplift of the Tyennan Block. Rapid stripping of this nucleus produced the coarse clastics of the Owen Conglomerate and correlates. As the rate of erosion slowed, sequences became finer (e.g. Moina Sandstone). Finally, in a short period of quiescence, limestones of the Gordon Group were deposited.

A second phase of uplift introduced sands and silts into a shallow marine environment to form the Eldon Group. This event took place from the early Silurian until the early Devonian, when the first rumblings of the Tabberabberan Orogeny were being felt.

Earliest of events forming part of the Tabberabberan Orogeny was a period of thrusting, possibly induced by compressive stresses caused by the rising plutons of the Heemskirk, Meredith and Husetop Granites.

To the NW of the granites, this compression thrust imbricate slices of the Timbs Gp over one another to produce the rapid, apparently quantum jumps in metamorphic grade seen in the Arthur Lineament. To the S, the Tenth Legion Thrust within the EL area is the clearest evidence of the early Devonian thrust event (Findlay and Brown, 1992). Other thrusts are likely to have developed, perhaps along the Little Henty and Firewood Siding Faults, to "poke the tongue" of Zeehan area geology southward into the Henty Basin.

Continued Tabberabberan deformation folded the Zeehan Basin formations about NNW-trending axes.

Geological events subsequent to the Tabberabberan Orogeny do not capture the imagination of mineral explorers. Terrestrial sedimentation continued in the Permian. Jurassic dolerite sills intruded the Zeehan area. Tertiary basalts flooded much of NW Tasmania, with remnants preserved near Granville Harbour.

Tertiary and Quaternary erosion and deposition continue to modify the ancient landsurface.

## 6. MINERALISATION

Several periods, styles and commodities of mineralisation are recognised in the Zeehan area. In summary these are:-

PERIOD	STYLE	EXAMPLE
Proterozoic	Stratiform syn-depositional pyrite in black shale.	Oonah Fm
Cambrian	Stratiform? magmatic Ni-sulphides in ultramafics	Cuni
Ordovician	Stratabound sphalerite-galena in limestone.	Oceana
Devonian	Stratabound replacement cassiterite-pyrrhotite in carbonates	Renison Bell
Devonian	Discordant lode-style pyrite-galena-sphalerite	Spray,
Comstock		
Devonian	Discordant vein-style pyrite-galena-sphalerite	Comet
Devonian	Skarn magnetite (+sphalerite-cassiterite)	Saint Dizier
Quaternary	Residual Pb-Zn in surficial decarbonated limestone	Myrtle, Grieves

Historically it has been the lode and vein-style Pb-Ag mineralisation of the Zeehan and Dundas fields that have dominated interest. Lode-style mineralisation at Zeehan is usually hosted within graphitic shears in Oonah or Crimson Creek Fms. These deposits are high grade, but narrow (typically 0.3m) and with short strike and depth extent (usually less than 100m). In the context of modern large-scale mining practises, it is unlikely that such a target could be of economic interest on its own.

In the last 20 years or so, replacement-style Sn deposits have been given considerable attention. West Tasmania is well endowed with these deposits, which include Renison Bell, Queen Hill, Mt Bischoff and Cleveland. At Renison Bell, most ore occurs as massive pyrrhotite replacement of carbonate horizons, although a substantial quantity of ore occurs within the Federal-Bassett feeder zone. Source of the mineralisation is believed to be from Sn-rich fluids emanating from the underlying Devonian granite. A pre-mining resource is estimated at 42 Mt @ 1.1% Sn (Collins, 1989).

Queen Hill is similar in style to Renison Bell, with a resource of 4 Mt @ 1% Sn. Given the world oversupply of Sn, and the inherent low grade and metallurgical difficulties of these deposits, a replacement style Sn deposit is probably not a valid exploration target for a company without an existing Sn portfolio.

Magnetite skarn deposits such as Saint Dizier and Tenth legion have formed in carbonate lithologies adjacent to the Heemskirk Granite. St Dizier contains 5 Mt @ 0.5% Sn, whilst the skarn at Tenth Legion contains low percent levels of Zn as sphalerite. These deposits are possibly of interest due to their multi-commodity nature and simple metallurgy.

Nickel mineralisation as magmatic segregations *within the ultramafics* appears to be insignificant in quantity, although the grade of individual occurrences sounds impressive. Deposits are generally less than 50m long and of the order of 1m wide, with several percent of Ni and Cu (Blissett, 1962). Although some drilling has been carried out, there is no clear understanding of the geometry of the deposits with depth. This style of mineralisation should be considered incompletely explored.

Stratabound Pb-Zn in limestone is exemplified by the Oceana deposit where Amoco outlined a resource of 4 Mt @ 19.4% Pb, 4% Zn and 106 ppm Ag (Taylor and Mathison, 1990). Mineralisation is described as syndiagenetic replacement, broadly equivalent to Irish-type deposits. Indications of other stratabound carbonate-hosted Pb-Zn mineralisation is recorded in Amoco-EZ diamond drilling from Myrtle and Grieves prospects. Despite intensive but fruitless exploration by Amoco-EZ, the Gordon Limestone still holds excellent potential for significant base-metal discoveries.

Perhaps more significant than potential within the limestone is near-surface enrichment of Pb-Zn by the dissolution of the carbonate. This decarbonatisation has left a layer of black sulphidic pug sitting above fresh limestone, beneath a veneer of glacial gravels. Zinc and Pb have been retained and concentrated in this pug layer. The black pug is extensively developed over virtually all areas of near-surface Gordon Limestone. Potential of this target is untested to date, but will be evaluated by CRAE in the course of these investigations.

*Stratiform syngenetic pyrite* is present in Proterozoic black shale in the Zeehan area. To date however, no economic occurrences of Proterozoic black shale-hosted base-metal deposits are known in Tasmania. Clear similarities can be drawn between Zeehan and the Mt Isa and Lawn Hill areas, and on that basis the potential for discovery of another Century-type deposit is high.

The best reference for brief descriptions of all deposits on the Zeehan field, although somewhat dated now, is Blissett (1962). Early Geological Survey bulletins from between 1890 and 1910 are important historical references.

## 7. PREVIOUS EXPLORATION BY COMPETITORS

Relevant exploration activities by competitors prior to the granting of EL 34/88 are summarised in Kratochvil (1991). Of particular significance to CRAE's activities is the exploration program on EL 4/78 by Amoco, followed by EZ in joint venture, best summarised by Mathison and Taylor (1987).

During the period 1978-1987, Amoco-EZ, collected a large body of data over the Gordon Limestone as part of their Zn-Pb exploration activities on EL 4/78. Amoco-EZ focussed on an Irish-type exploration model, based on their success in delineating the sub-economic Oceana deposit. Data amassed by the joint venture includes:-

- geological mapping
- wacker geochemistry
- ground magnetics
- gravity
- IP and EM surveys
- drilling logs and assays

Although the program was unsuccessful in delineating a bedrock carbonate-hosted resource (apart from the sub-economic Oceana deposit), numerous drill-holes intercepted sub-economic and patchy Zn-Pb mineralisation.

It also became clear that significant enrichment of Pb and Zn was occurring in the decarbonated black pug developing in the weathering profile above the limestone. After so many frustrating years of searching for the hardrock source to these anomalies, Amoco-EZ failed to perceive the black pug as a target in itself.

## 8. EXPLORATION BY MAJOR MINING LTD / CRAE PRIOR TO 9/11/91

Activities by Major Mining prior to CRAE's involvement are detailed in the relevant statutory reports. Field activities included a gradient array IP survey covering a small part of the Badger River area targeted by CRAE this year.

Exploration by CRAE on EL 34/88 prior to 9/11/91 focussed on a compilation and review of existing open-file data (Kratochvil, 1991). Emphasis was placed on identifying areas of limestone not explored in detail by Amoco-EZ.

CRAE's initial exploration strategy aimed to test two underexplored blocks of Ordovician limestone, the Fen Creek and Mclean Creek areas. This approach was abandoned this year when it was realised there were more prospective targets with considerably easier access in the Badger River valley.

## 9. EXPLORATION ACTIVITIES FOR THE PERIOD 9/11/91 TO 9/11/92

### 9.1 Exploration Philosophy

CRAE's principal commodity of interest in the Zeehan area is Zn-Pb. CRAE's initial interest focussed on potential for carbonate-hosted Zn-Pb deposits within Ordovician Gordon Limestone. One target was selected for fieldwork during 1992; Badger River. Activities included literature studies and open-file data compilation, wacker geochemical sampling, and magnetic and IP surveys.

Following an exhaustive review of Amoco-EZ open-file data for the Myrtle to Rose Valley areas, secondary surficial deposits derived from the decomposition of the carbonate was perceived to be a more desirable target. The 1993 field program will reflect this change of strategy.

### 9.2 Badger River Prospect

#### 9.2.1 Introduction

Badger River prospect is 12 km S of Zeehan, straddling the Zeehan-Strahan road (Plan Tv 443). The prospect sits in an antiform of Gordon Limestone, faulted by the Firewood Siding Fault. Quaternary gravels obscure the limestone, which has eroded to form the Badger River valley between ridges of Moina Sandstone and Crotty Quartzite.

The target was selected based on the presence of a major plumbing system, the Firewood Siding Fault, intersecting the limestone. The Firewood Siding Fault is a major NW-trending structure, parallel to the Tenth Legion, Balstrup and Pyramid Faults - all spatially related to the historical Zeehan mineralisation. Incomplete Amoco-EZ bedrock sampling returned up to 1.45% Zn, but no follow-up was initiated. CRAE considered the Firewood Siding Fault may have been a conduit for metal-rich fluids passing into the limestone, and as such the area of the fault/limestone contact was a prime focus for exploration.

Bedrock wacker sampling, dipole-dipole IP surveys, ground magnetometer traverses and reinterpretation of existing gravity data were completed in an effort to identify primary carbonate-hosted mineralisation. The locations of CRAE and competitor grids over the prospect are shown on plan Tv 449.

#### 9.2.2 Dipole-Dipole IP Surveys

CRAE commissioned a dipole-dipole IP survey to test for the presence of sulphide mineralisation within the Gordon Limestone where the formation was disrupted by the Firewood Siding Fault.

Scintrex Ltd completed a total of five 1 km lines of dipole-dipole IP surveys on the prospect. Dipole spacing used was 50m. One line, 10000E, was repeated with a 100m dipole spacing. A full interpretation of results and all IP data are given in Appendix 1. An IP interpretation is presented on plan Tv 504, and pseudo-sections are plotted on plans Tv 462 to Tv 467.

### 9.2.3 Ground Magnetometer Surveys

Ground magnetometer traverses were completed along all grid lines using a 10m station spacing. Results are featureless and offer no lithological, structural nor mineralisation discrimination. Magnetic stacked profiles are presented on plan Tv 502.

### 9.2.4 Reinterpretation of Gravity Surveys

A review of Amoco-EZ gravity data revealed a 400m x 200m x 0.5 mgal anomaly within apparently uniform Gordon Limestone within the Badger River grid. IP lines 10400E and 10600E crossed the feature, detecting a strongly resistive and non-chargeable body. Mapping by Amoco-EZ depicted a zone of silicified limestone breccia rimming the gravity feature.

One possible (if optimistic) explanation for such a feature would be a Tsumeb-type breccia pipe containing sphalerite mineralisation. This would account for the observed geology, density contrast and IP response.

Wacker sampling across the feature failed to detect any anomalous geochemistry. Gravity modelling using the depth to bedrock profile showed the anomaly could be explained by a block of fresh limestone persisting to the surface (Plan Tv 501).

Several questions remain unanswered by this explanation. Firstly, why do the IP data indicate a body persisting at depth, and secondly, for what reason does this limestone block exist so close to surface in preference to adjacent limestone areas? Also, why aren't other bedrock highs accompanied by such profound gravity features?

A shallow drill-hole is warranted to test for a Tsumeb-type target.

### 9.2.5 Bedrock Wacker Geochemistry

Bedrock wacker sampling was completed at 50m spacing on all grid lines, closing down to 25m across the Firewood Siding Fault. In all, 180 samples were collected during 1992. Samples were submitted to Analabs, Burnie for aqua regia - perchloric acid digest followed by AAS analysis of Ag-As-Cu-Pb-Zn. A batch of 30 samples were submitted for Au by fire assay. Results for CRAE sampling are listed in Appendix 2, whilst Amoco-EZ data converted to AMG coordinates are presented as Appendix 3. Sample locations, Pb and Zn geochemistry and depth to sample plans for CRAE and Amoco-EZ data are presented on plans Tv 494 to Tv 497.

Results are patchy. Maximum values are 0.75% Pb and 0.35% Zn at 10600E 5400N. Infill sampling around this point failed to upgrade this anomaly.

Line 9600E, between 5225N and 5400N showed over 0.1% Zn, up to 0.47% Pb and 0.32% Zn. Pyrite and rare galena were noted in the cuttings. Amoco-EZ produced 1.45% Zn from sampling in this vicinity. This anomaly is at the contact between Gordon Limestone and overlying Crotty Quartzite, within close proximity to the Firewood Siding Fault. This may be an important stratigraphic trap for mineralising fluids dispersing through the limestone from the fault. Further wacker sampling to provide targeting for an exploratory hole is required.

#### 9.2.6 Proposed Exploration During 1993

A summary of significant geological, geochemical and geophysical results is presented on plan Tv 499.

Follow-up wacker sampling of the area around the Zn anomalies on Line 9600E is required, with particular emphasis on determining whether the anomaly intensifies toward the Firewood Siding Fault. In this position, a metal trapping mechanism of favourable stratigraphy capped by Crotty Quartzite will be in contact with the plumbing system.

A second target of similar geometry is present 700m further N, in the closure of an antiform breached by the Eden Fault. No work has been completed on this target. As both these targets are breached by erosion but obscured by recent cover, close-spaced (25m x 25m) wacker bedrock sampling should locate any significant mineralisation.

The gravity feature should be probed by a shallow drill-hole to test for a Tsumeb-type target.

R.G. PARKINSON

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KEYWORDS

Tasmania, Proterozoic, Ordovician, Oonah Formation, Gordon Limestone, Literature Review, Soil Sampling, Wacker Sampling, Ground IP Survey, Ground Magnetic Survey, Isotope Analysis, Zinc, Lead.

LOCATION

Queenstown	1:250000	SK55-5
Pieman	1:100000	7914
Zeehan	1:50000	7914-S

LIST OF DPO'S

71501-71503, 71505-71509.

LIST OF PLANS

<u>Plan No.</u>	<u>Title</u>	<u>Scale</u>
Tv 431	Zeehan Area West Tas, Zeehan J.V. Tenement Plan	1:10,000
Tv 443	Zeehan Area Grid and Prospect Location Plan	1:50,000
Tv 449	Zeehan No. 2 EL 34/88 Badger River Prospect Grid Locations	1:10,000
Tv 462	Zeehan No. 2 EL 34/88 Badger River Prospect Line 9600 IP Survey	1:2,500
Tv 463	Zeehan No. 2 EL 34/88 Badger River Prospect 50m Line 10000 IP Survey	1:2,500
Tv 464	Zeehan No. 2 EL 34/88 Badger River Prospect 100m Line 10000 IP Survey	1:2,500

Tv 465	Zeehan No. 2 EL 34/88 Badger River Prospect Line 10400 IP Survey	1:2,500
Tv 466	Zeehan No. 2 EL 34/88 Badger River Prospect Line 10600 IP Survey	1:2,500
Tv 467	Zeehan No. 2 EL 34/88 Badger River Prospect Line 10800 IP Survey	1:2,500
Tv 504	Zeehan No. 2 EL 34/88 Badger River Prospect IP and Magnetic Interpretation	1:5,000
Tv 502	Zeehan No. 2 EL 34/88 Badger River Prospect Ground Magnetic Stacked Profiles	1:5,000
Tv 501	Zeehan No. 2 EL 34/88 Badger River Prospect Gravity Interpretation Amoco Line 44400N	1:25,000
Tv 494	Zeehan No. 2 EL 34/88 Badger River Prospect Wacker Sample Locations	1:10,000
Tv 496	Zeehan No. 2 EL 34/88 Badger River Prospect Wacker Geochemistry - Zinc ppm	1:10,000
Tv 497	Zeehan No. 2 EL 34/88 Badger River Prospect Wacker Geochemistry - Lead ppm	1:10,000
Tv 495	Zeehan No. 2 EL 34/88 Badger River Prospect Wacker Geochemistry - Depth m	1:10,000
Tv 499	Zeehan No. 2 EL 34/88 Badger River Prospect Summary Plan	1:10,000

27

### LIST OF APPENDICES

- APPENDIX 1: IP survey interpretation and data sheets
- APPENDIX 2: CRAE Wacker sampling ledgers and geochemistry
- APPENDIX 3: Amoco-EZ Wacker sampling ledgers and geochemistry

046015

370 000mN

340 000mN

340 000mE

370 000mE

5 cm

92-3399.



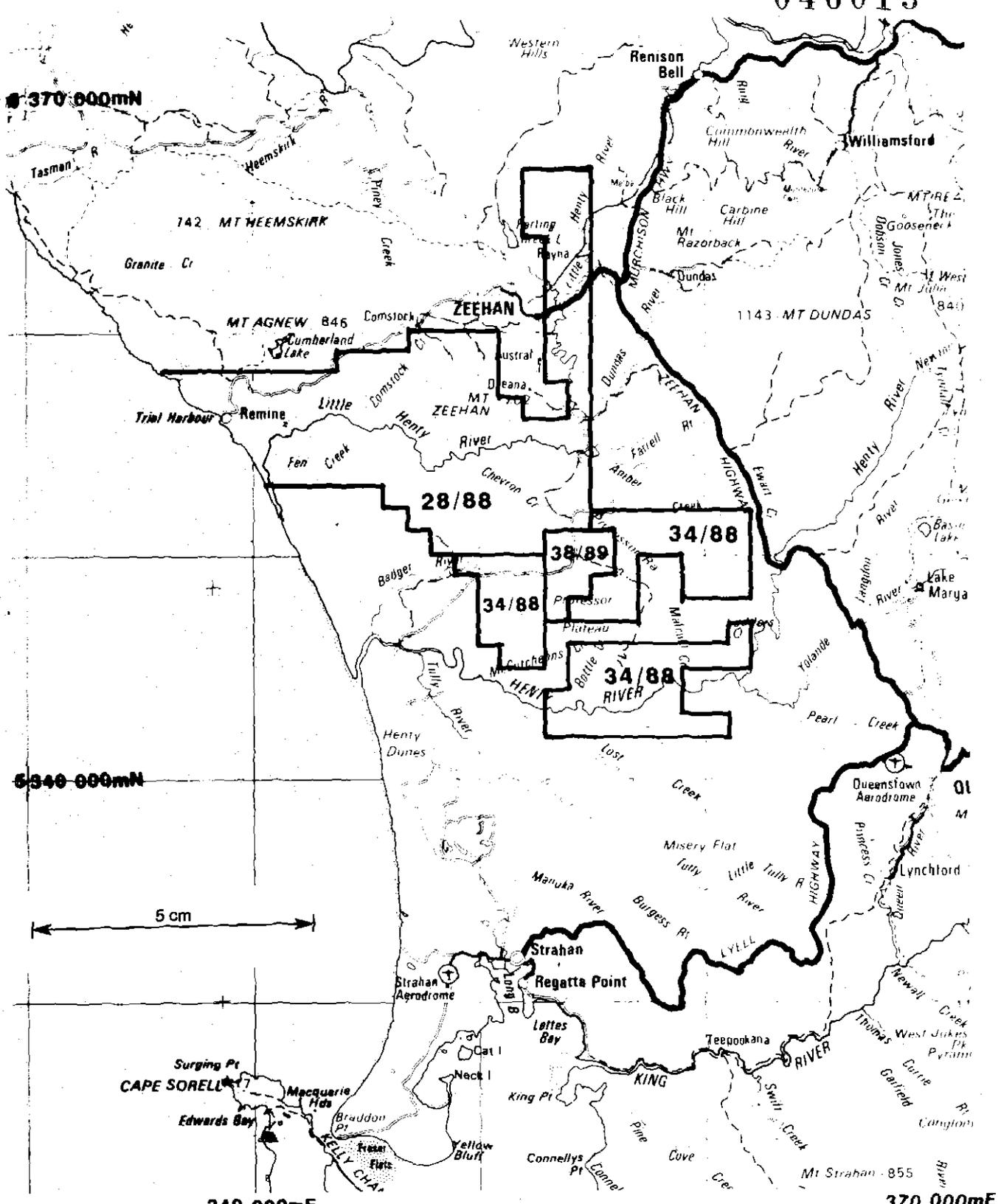
CRA EXPLORATION PTY. LIMITED

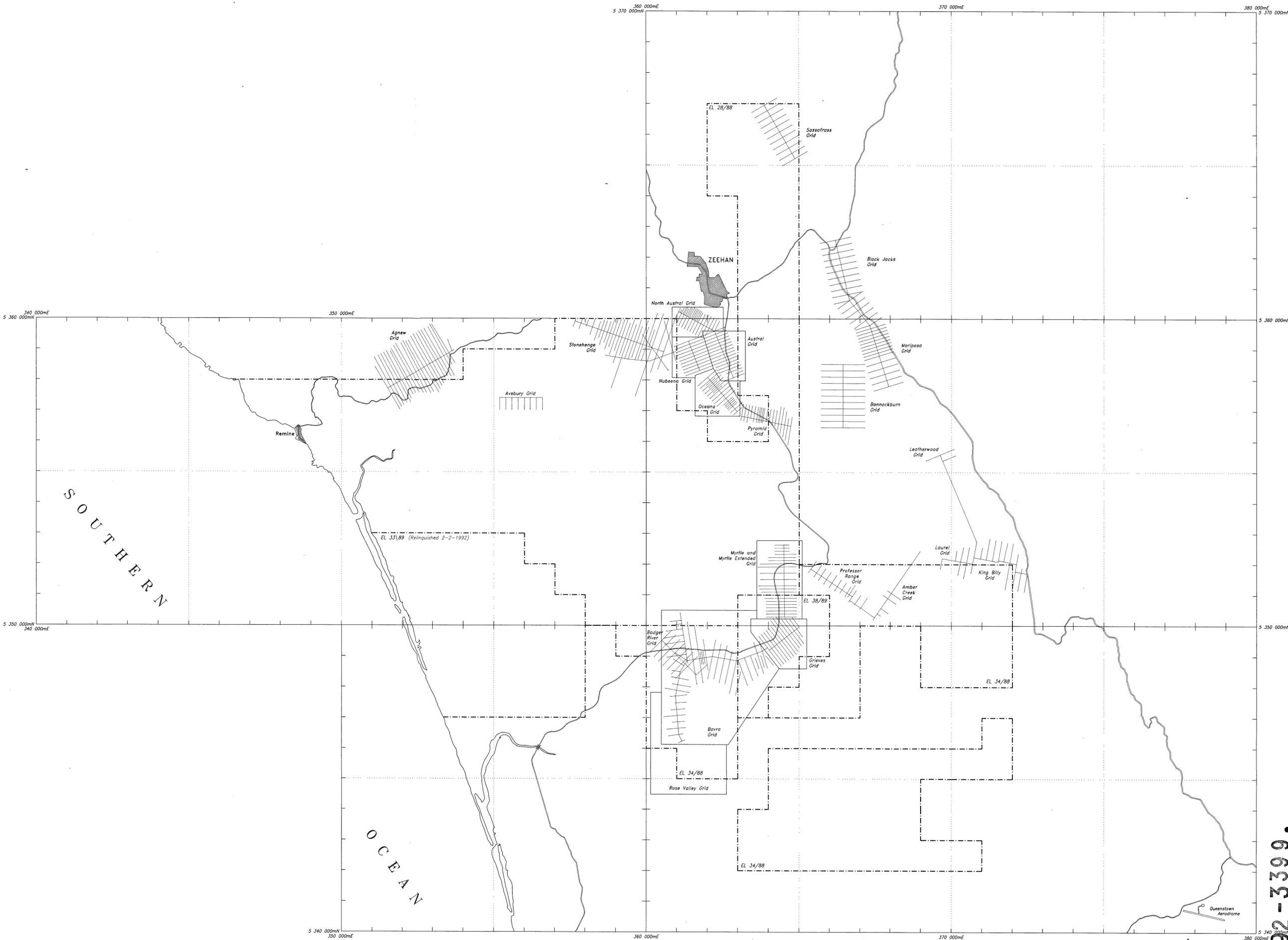
ZEEHAN JOINT VENTURES

LOCALITY DIAGRAM

Ref.: SK 55 - 5	Scale: 1:250 000
Author: T. Summons	Report No.: 18359
Drawn: R. Traverso	Plan No.: TV 431

Nov 1991





S O U T H E R N

O C E A N

92-3399.

046016

\*\* NOTE \*\*  
Contiguous grids are internally consistent, however the relative position of groups of grids may vary.



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**ZEEHAN AREA**  
**Western Tasmania**  
**Grid & Prospect Location Plan**

Ref.: SK55 - 5	File: ZEEHAN_50000
Scale: 1 : 50000	Date: August 1992
Author: T.W. Dickson	Report No.: 18359
Drawn: R. Trovierso	Plan No.: Tv 443

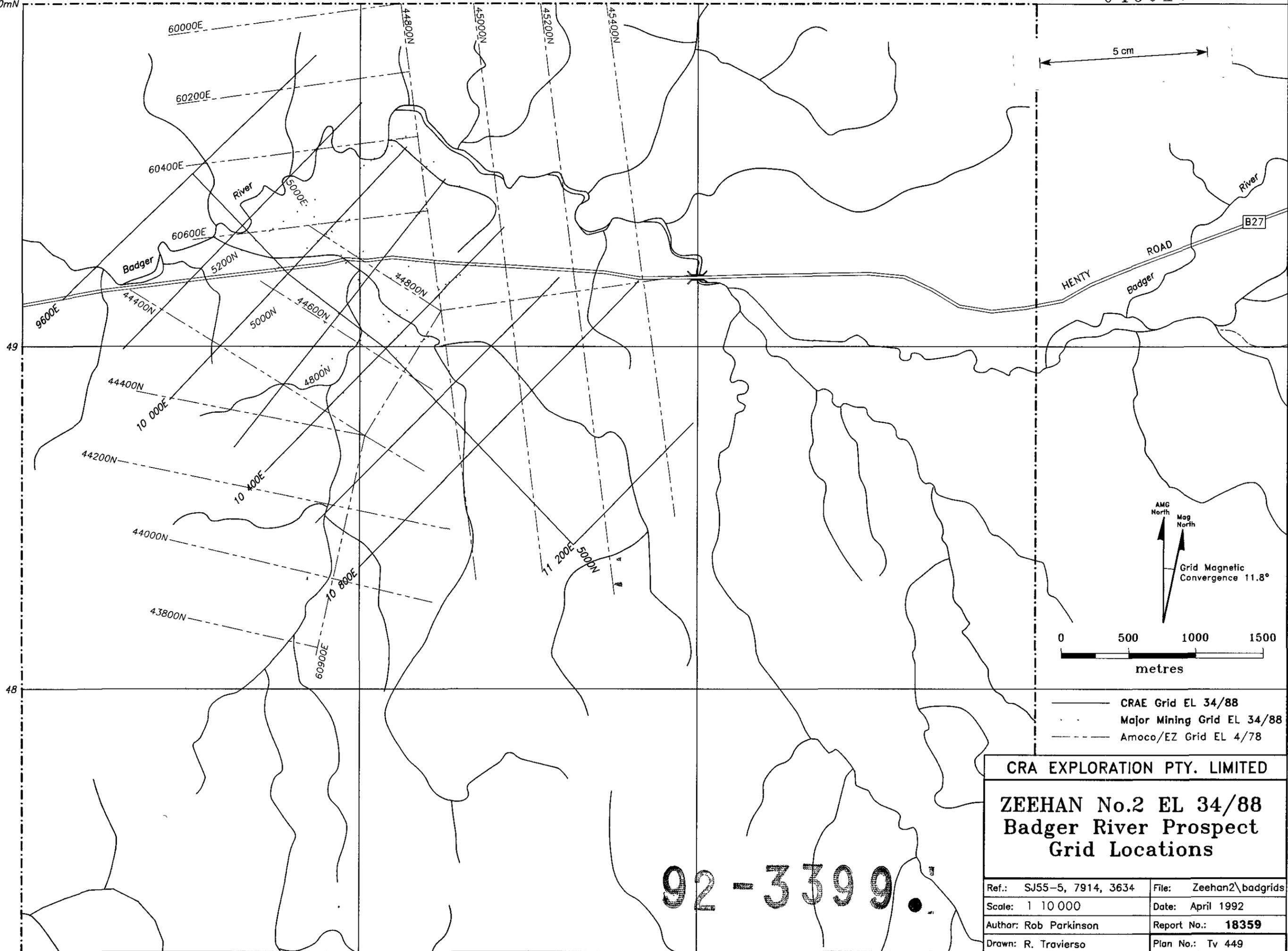
360 000mE  
5350 000mN

61

62

63

046017



5 cm

0 500 1000 1500  
metres

AMG North  
Mag North  
Grid Magnetic Convergence 11.8°

- CRAE Grid EL 34/88
- - - Major Mining Grid EL 34/88
- ..... Amoco/EZ Grid EL 4/78

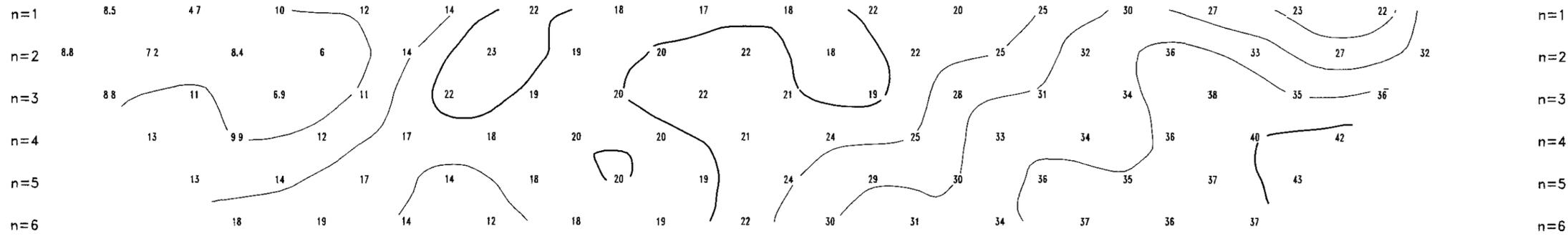
CRA EXPLORATION PTY. LIMITED

**ZEEHAN No.2 EL 34/88  
Badger River Prospect  
Grid Locations**

92-3399

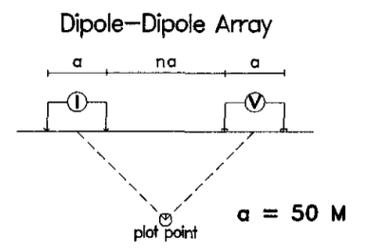
Ref.: SJ55-5, 7914, 3634	File: Zeehan2\badgrids
Scale: 1 10 000	Date: April 1992
Author: Rob Parkinson	Report No.: 18359
Drawn: R. Traverso	Plan No.: Tv 449

46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N

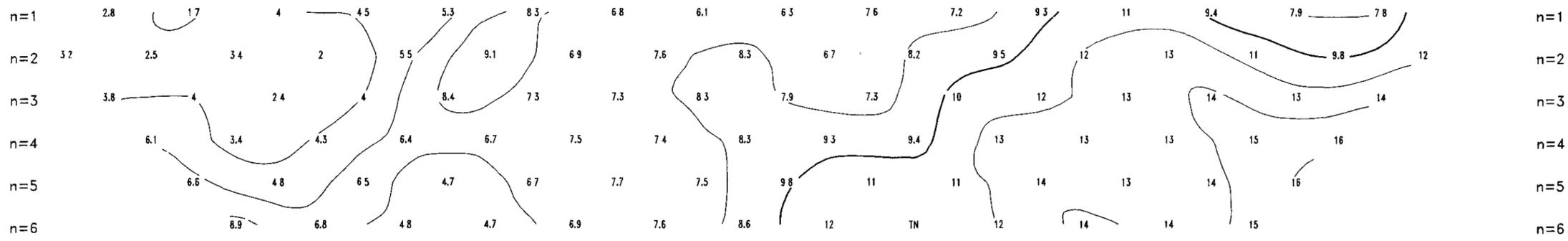


n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
CHARGEABILITY M3 (mV/V)

Line 9600 E

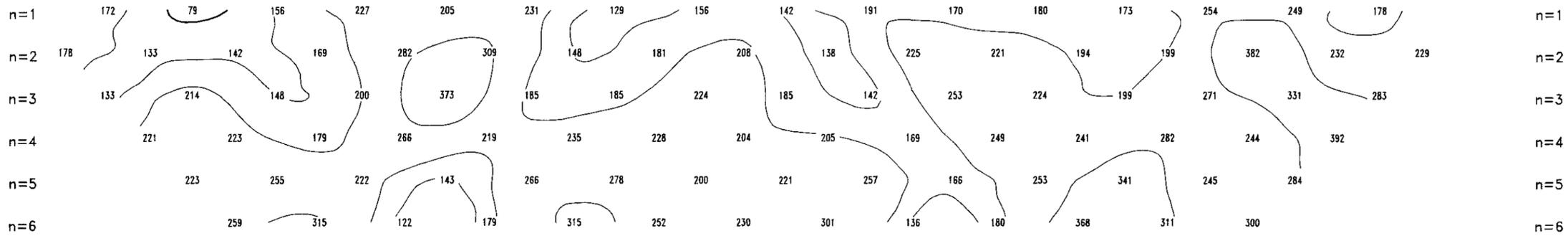


46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N



n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
CHARGEABILITY M7 (mV/V)

46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N



n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
APP. RESISTIVITY (ohm m)

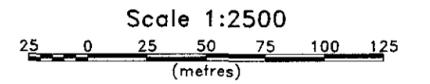
5 cm

DATA ACQUISITION

Contractor: SCINTREX P.T. LTD.  
Transmitter type: TSQ-4  
Timing: 2s ON/2s OFF  
Receiver type: IPR-11  
Survey date: FEBRUARY 1992

DATA PROCESSING

Chargeability contour interval: 2 & 5 mV/V  
Apparent Resistivity contour interval: LOGARITHMIC  
Logarithmic Contours: 1, 1.5, 2, 3, 5, 7.5, 10,...



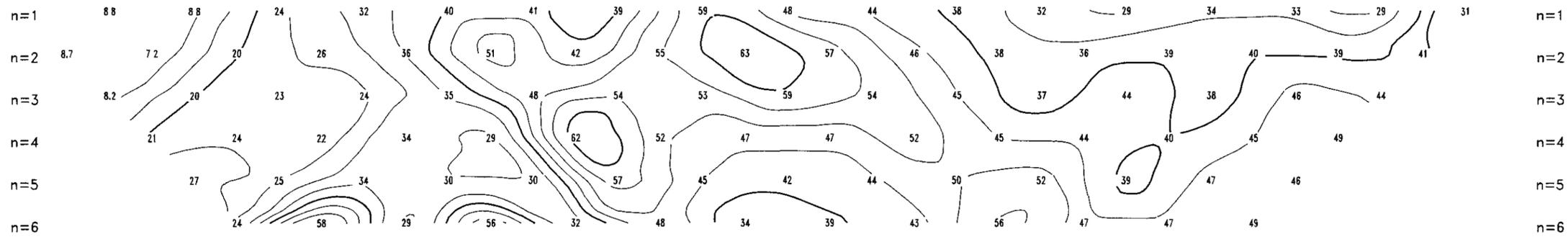
046018

CRA EXPLORATION PTY. LIMITED  
ZEEHAN No.2 EL 34/88  
BADGER RIVER  
Line 9600 E  
INDUCED POLARISATION SURVEY

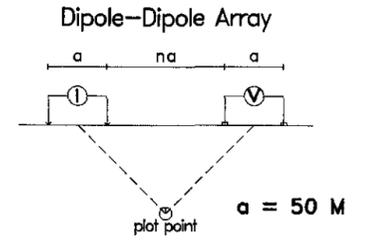
REF: QUEENSTOWN SK55-05	FILE: Zeehan2\462
GEO: TA	SCALE: 1:2500
DRAWN: TA	REPORT: 18359
	DATE: 92/03/04
	PLAN: Tv 462

66399  
92

46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N

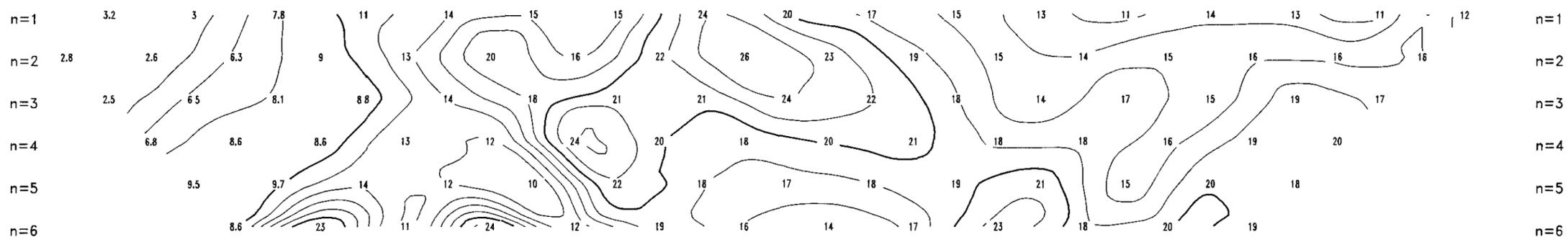


Line 10000 E



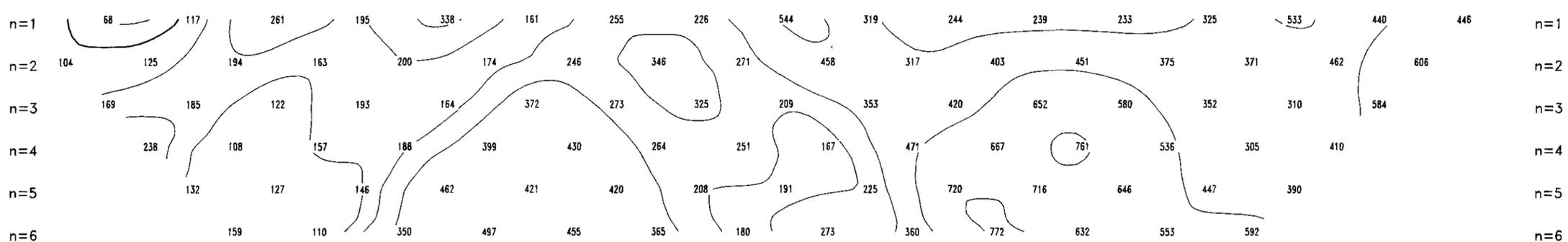
n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
CHARGEABILITY M3 (mV/V)

46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N



n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
CHARGEABILITY M7 (mV/V)

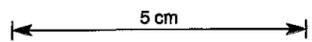
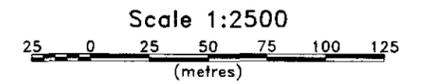
46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N



n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
APP. RESISTIVITY (ohm m)

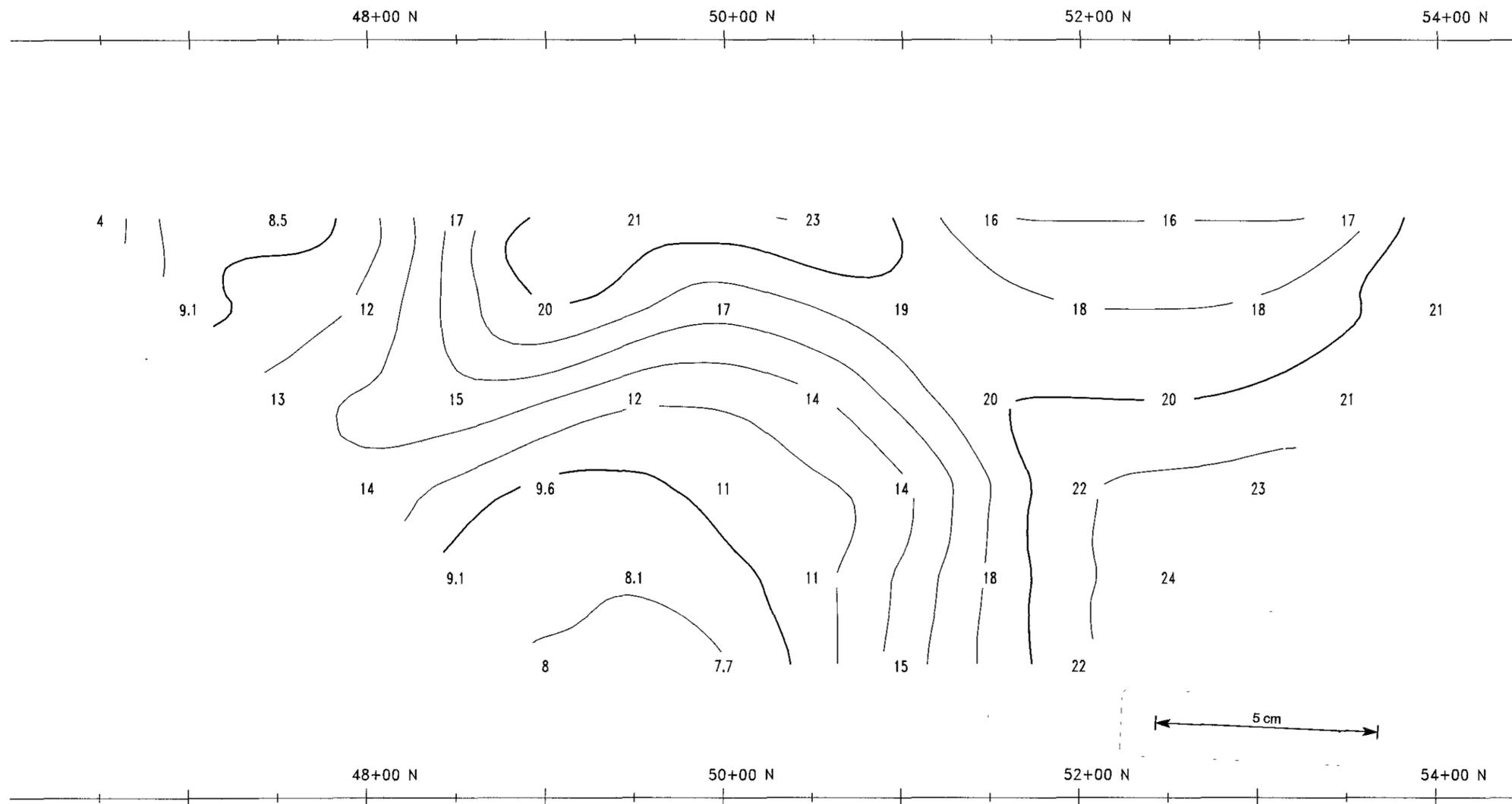
**DATA ACQUISITION**  
 Contractor: SCINTREX PTY. LTD.  
 Transmitter type: TSQ-4  
 Timing: 2s ON/2s OFF  
 Receiver type: IPR-11  
 Survey date: FEBRUARY 1992

**DATA PROCESSING**  
 Chargeability contour interval: 2 & 5 mV/V  
 Apparent Resistivity contour interval: LOGARITHMIC  
 Logarithmic Contours: 1, 1.5, 2, 3, 5, 7.5, 10,...

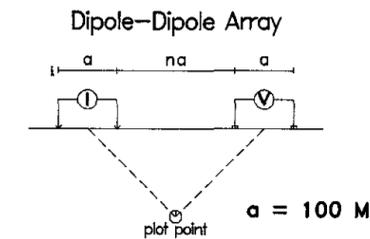


046019

CRA EXPLORATION PTY. LIMITED		
ZEEHAN No.2 EL 34/88		
BADGER RIVER		
Line 10000 E		
INDUCED POLARISATION SURVEY		
REF: QUEENSTOWN SK55-05	FILE: Zeehan2\463	
GEO: TA	SCALE: 1:2500	REPORT: 18359
DRAWN: TA	DATE: 92/03/03	PLAN: Tv 463



Line 10000 E



DATA ACQUISITION

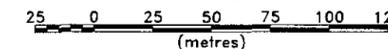
Contractor: SCINTREX PTY. LTD.  
 Transmitter type: TSQ-4  
 Timing: 2s ON/2s OFF  
 Receiver type: IPR-11  
 Survey date: FEBRUARY 1992

DATA PROCESSING

Chargeability contour Interval: 2 & 5 mV/V  
 Apparent Resistivity contour Interval: LOGARITHMIC

Logarithmic Contours: 1, 1.5, 2, 3, 5, 7.5, 10, ...

Scale 1:2500



046020

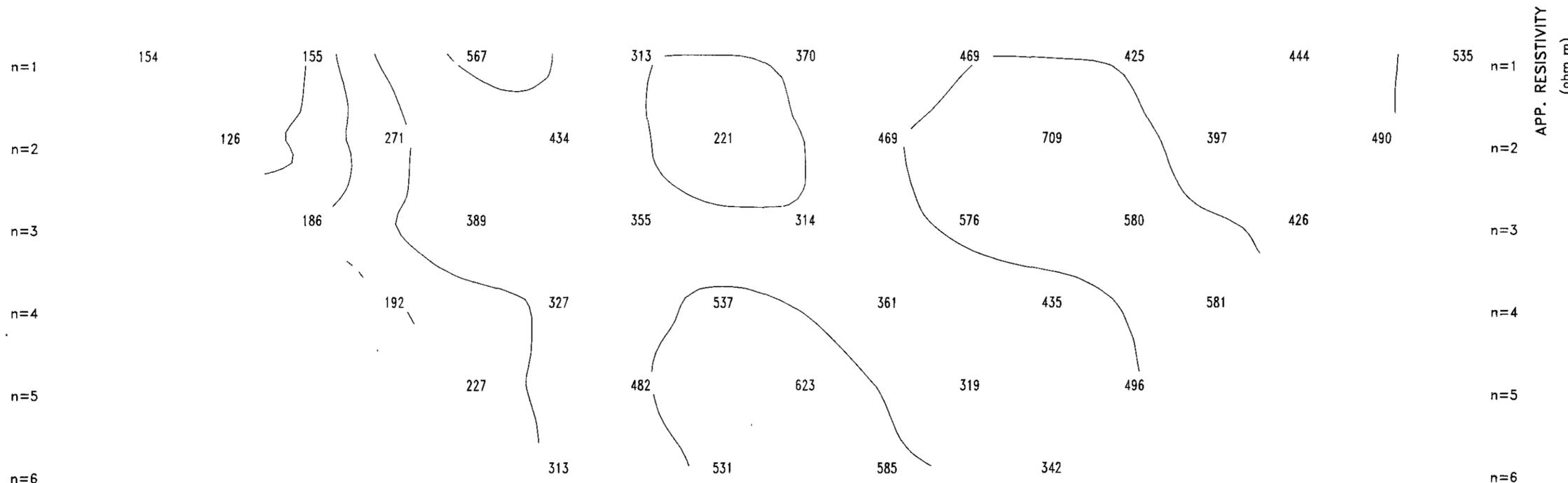
CRA EXPLORATION PTY. LIMITED

ZEEHAN No.2 EL 34/88

**BADGER RIVER**  
 Line 10000 E

INDUCED POLARISATION SURVEY

REF: QUEENSTOWN SK55-05	FILE: Zeehan2\464
GEO: TA	SCALE: 1:2500 REPORT: 18359
DRAWN: TA	DATE: 92/03/03 PLAN: Tv 464



9600 E

9800 E

10000 E

10200 E

10400 E

10600 E

10800 E

5600 N

5600 N

5400 N

5400 N

5200 N

5200 N

5000 N

5000 N

4800 N

4800 N

4600 N

4600 N

9600 E

9800 E

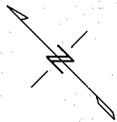
10000 E

10200 E

10400 E

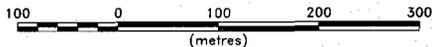
10600 E

10800 E



Grid north bearing 045° AMG  
5000E 10000N = 360800E 5349210N  
Diurnally corrected magnetic data

Scale 1:5000



- Surficial locally low resistivity zone (possibly related to drainage)
- Locally high resistivity zone (bedrock unit?)
- Surficial depressed chargeabilities (thick peat)
- Weak chargeable zone
- Anomalous chargeability zone

- Interpreted Fault
- Drainage

- Resistivity feature extends beyond the survey.
- IP feature extends beyond the survey.
- ? Possible dip direction.

046021

CRA EXPLORATION PTY. LIMITED

ZEEHAN No.2 EL 34/88

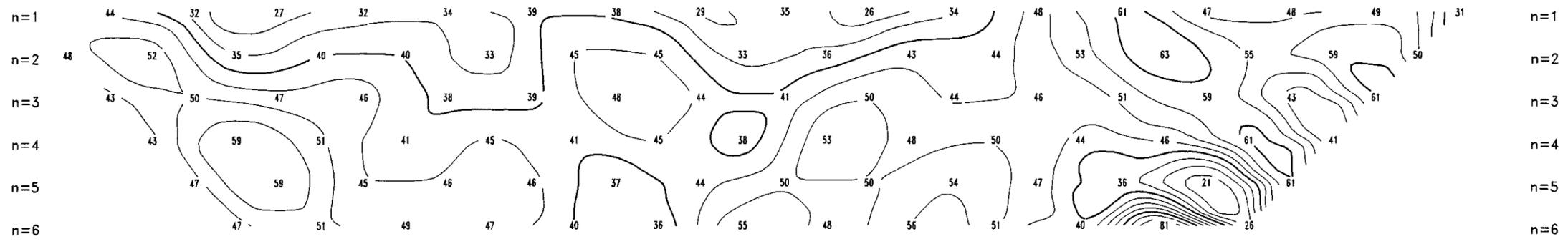
**BADGER RIVER**  
IP AND MAGNETIC INTERPRETATION

QUEENSTOWN SK55-05

GEO:	TA	SCALE: 1:5000	REPORT: 18359
DRAWN:	TA	DATE: 19/10/92	PLAN: Tv 504

92-3399

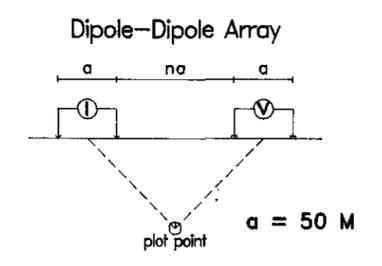
46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N



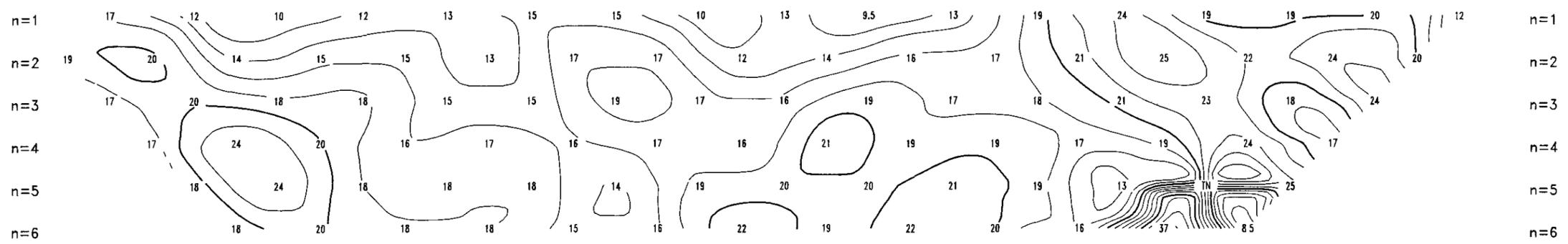
n=1  
n=2  
n=3  
n=4  
n=5  
n=6

CHARGEABILITY M3  
(mV/V)

Line 10400 E

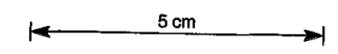


46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N



n=1  
n=2  
n=3  
n=4  
n=5  
n=6

CHARGEABILITY M7  
(mV/V)



DATA ACQUISITION

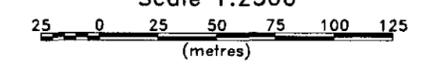
Contractor: SCINTREX PTY. LTD.  
Transmitter type: TSQ-4  
Timing: 2s ON/2s OFF  
Receiver type: IPR-11  
Survey date: FEBRUARY 1992

DATA PROCESSING

Chargeability contour Interval 2 & 5 mV/V  
Apparent Resistivity contour Interval LOGARITHMIC

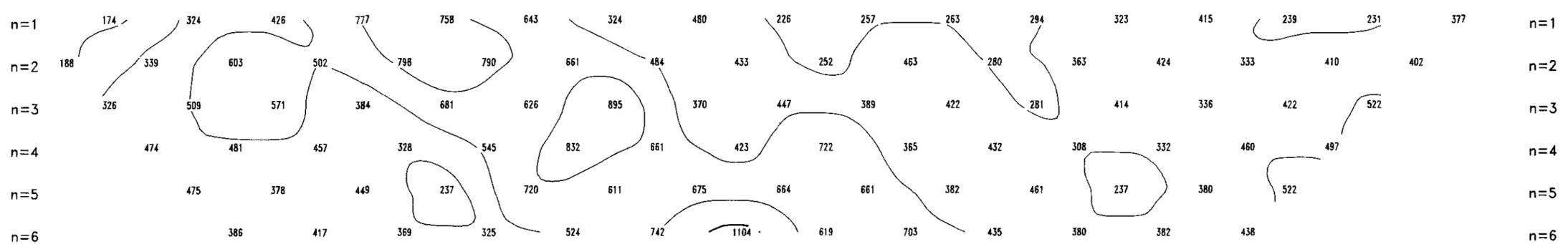
Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Scale 1:2500



046022

46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N



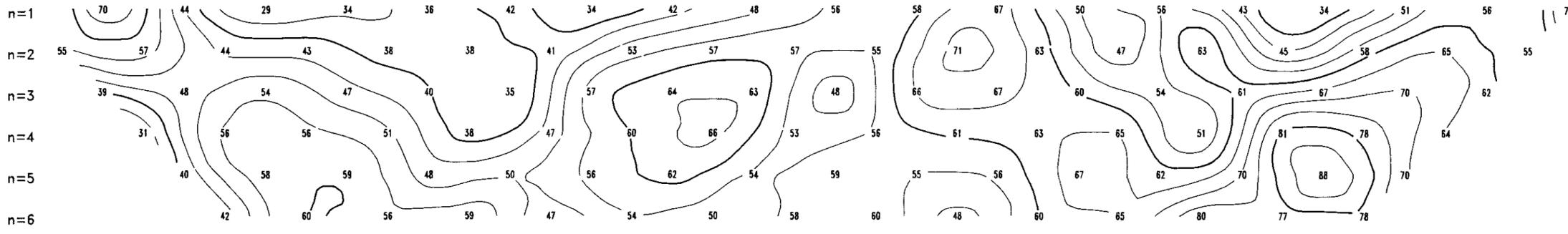
n=1  
n=2  
n=3  
n=4  
n=5  
n=6

APP. RESISTIVITY  
(ohm m)

CRA EXPLORATION PTY. LIMITED  
ZEEHAN No.2 EL 34/88  
BADGER RIVER  
Line 10400 E  
INDUCED POLARISATION SURVEY

REF:	QUEENSTOWN SK55-05	FILE:	Zeehan2\465
GEO:	TA	SCALE:	1:2500
DRAWN:	TA	DATE:	92/03/03
		REPORT:	18359
		PLAN:	Tv 465

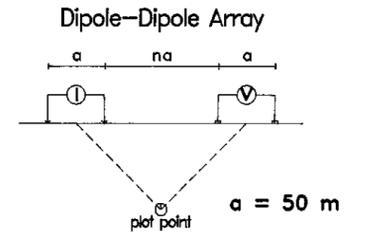
46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N 55+00 N



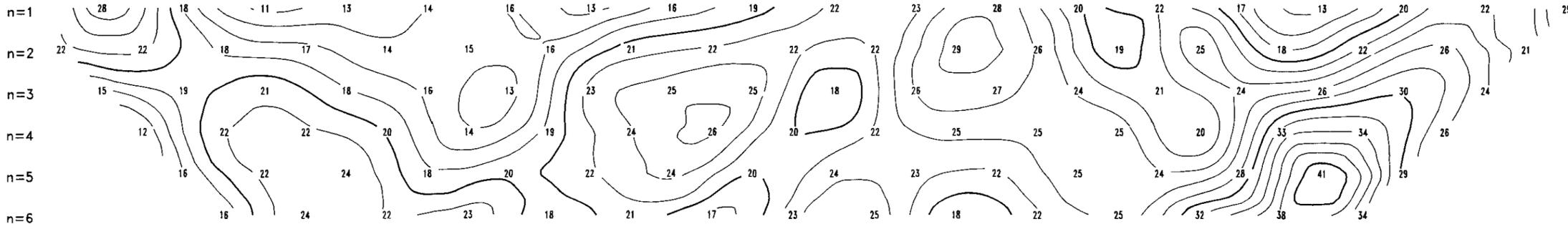
n=1  
n=2  
n=3  
n=4  
n=5  
n=6

CHARGEABILITY M3  
(mV/V)

Line 10600 E



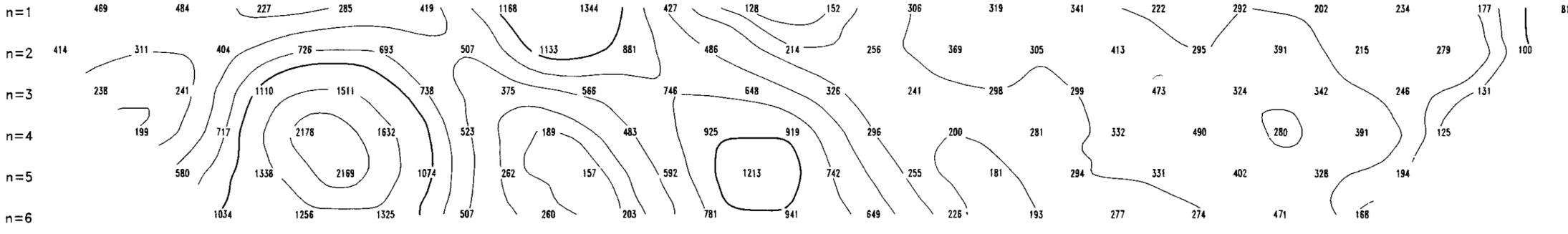
46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N 55+00 N



n=1  
n=2  
n=3  
n=4  
n=5  
n=6

CHARGEABILITY M7  
(mV/V)

46+00 N 47+00 N 48+00 N 49+00 N 50+00 N 51+00 N 52+00 N 53+00 N 54+00 N 55+00 N



n=1  
n=2  
n=3  
n=4  
n=5  
n=6

APP. RESISTIVITY  
(ohm m)

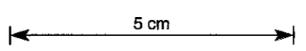
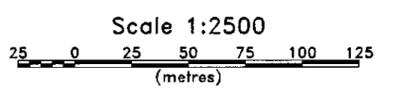
DATA ACQUISITION

Contractor: SCINTREX PTY. LTD.  
 Transmitter type: TSQ-4  
 Timing: 2s ON/2s OFF  
 Receiver type: IPR-11  
 Survey date: MARCH 1992

DATA PROCESSING

Chargeability contour interval 2 & 5 mV/V  
 Apparent Resistivity contour interval LOGARITHMIC

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...



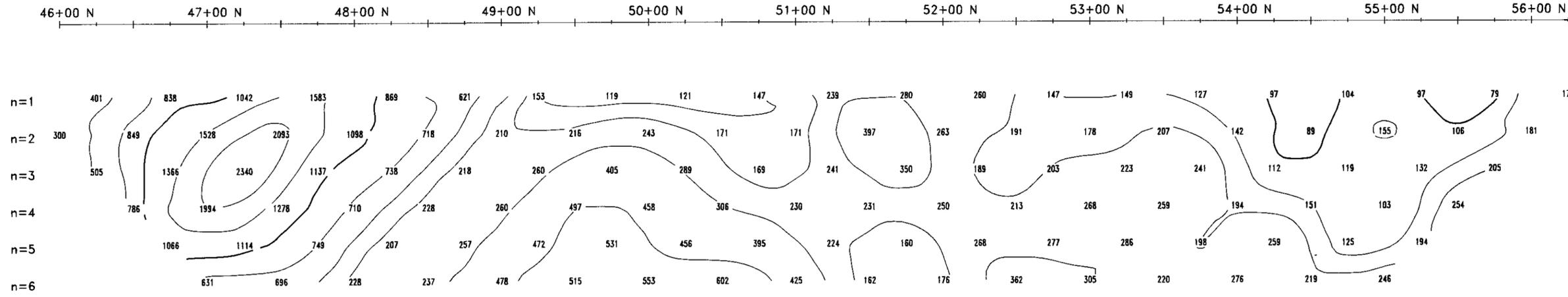
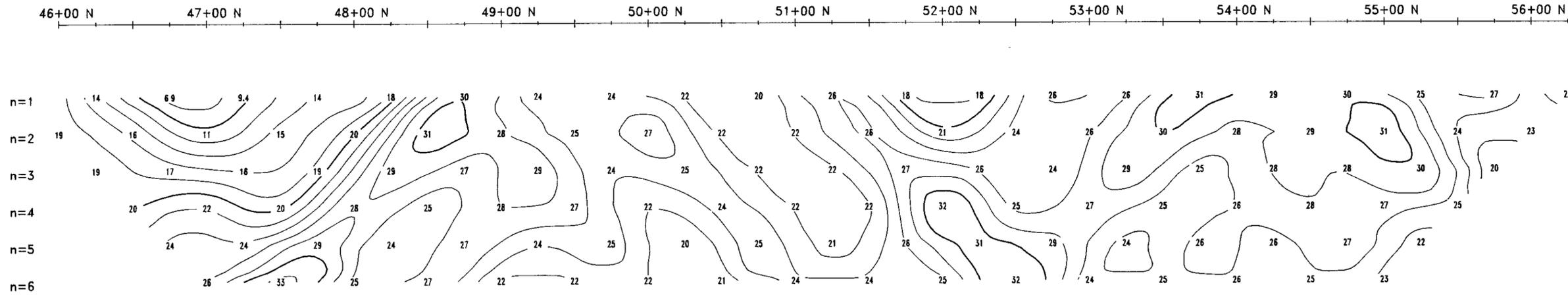
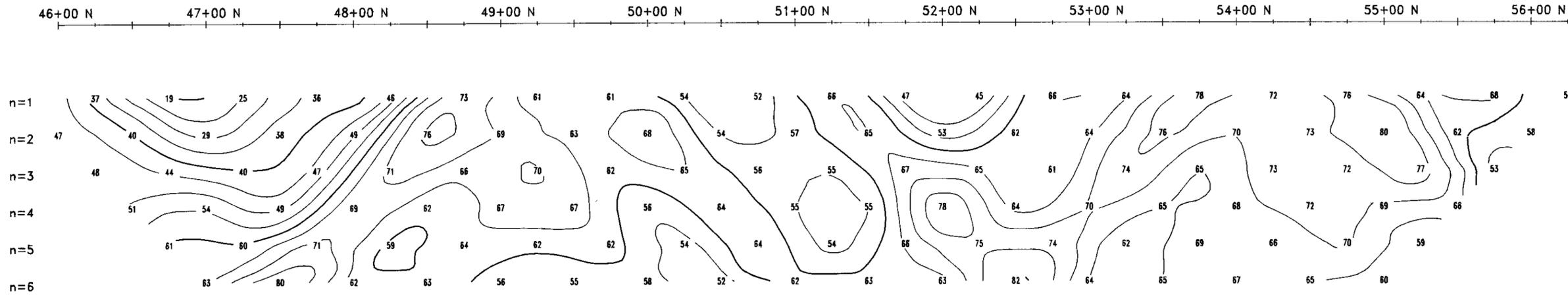
CRA

ZEEHAN No. 2 EL 34/88  
**BADGER RIVER**  
 Line 10600 E  
 INDUCED POLARISATION SURVEY

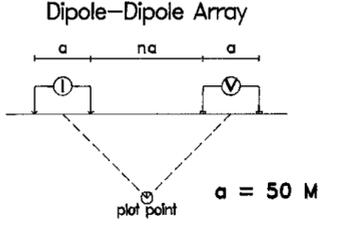
REF: QUEENSTOWN SK55-05	FILE: Zeehan2\466
GEO: TA	SCALE: 1:2500
DRAWN: TA	REPORT: 18359
	DATE: 92/08/10
	PLAN: Tv 466

046023

92-3399-1



Line 10800 E



CHARGEABILITY M3  
(mV/V)

CHARGEABILITY M7  
(mV/V)

APP. RESISTIVITY  
(ohm m)

046024

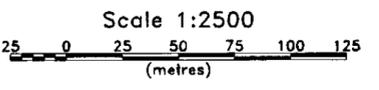
DATA ACQUISITION

Contractor: SCINTREX PTY. LTD.  
 Transmitter type: TSQ-4  
 Timing: 2s ON/2s OFF  
 Receiver type: IPR-11  
 Survey date: FEBRUARY 1992

DATA PROCESSING

Chargeability contour Interval 2 & 5 mV/V  
 Apparent Resistivity contour Interval LOGARITHMIC

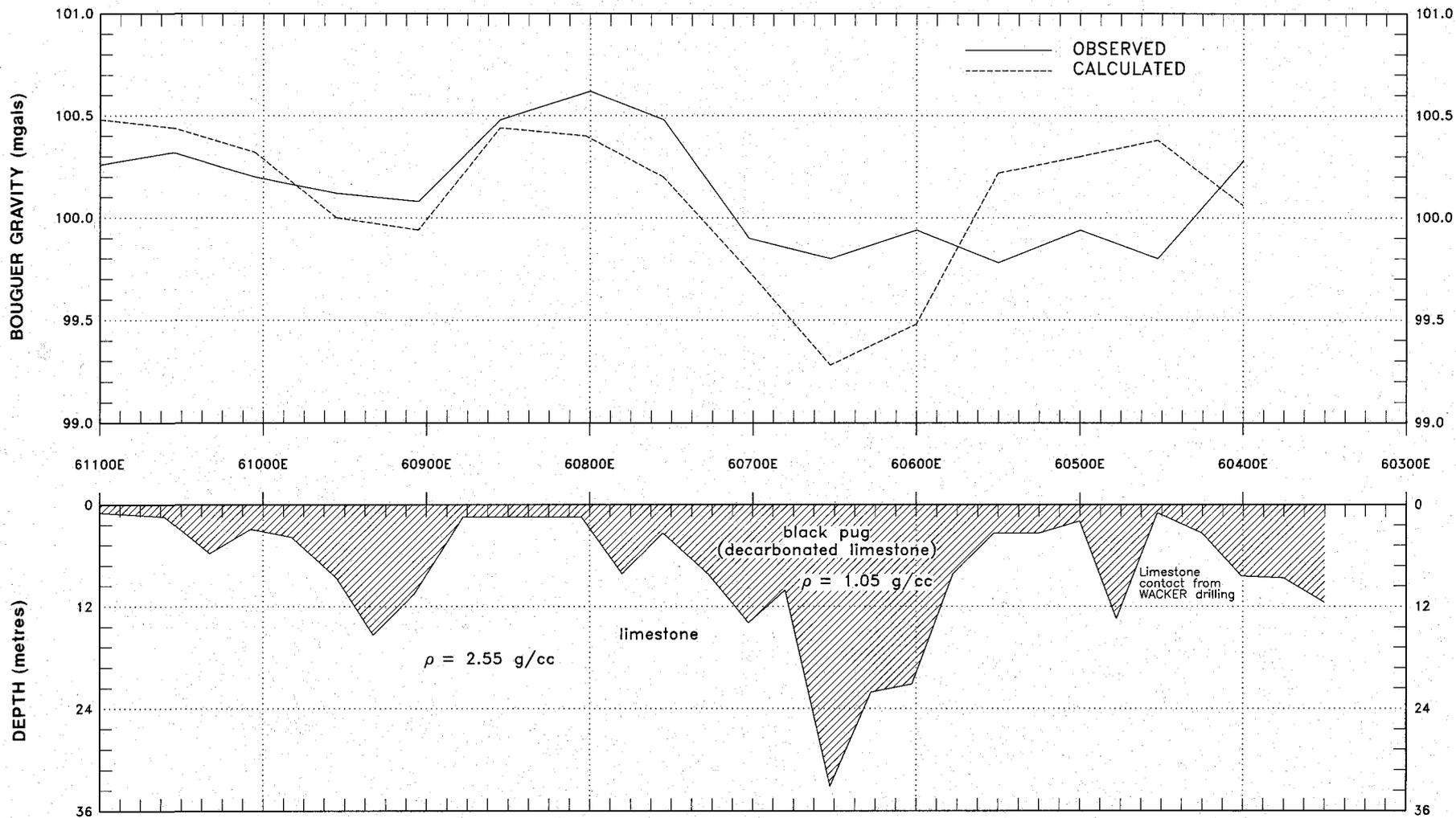
Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...



5 cm

CRA  
 ZEEHAN No.2 EL 34/88  
**BADGER RIVER**  
 Line 10800 E  
 INDUCED POLARISATION SURVEY

REF: QUEENSTOWN SK55-05	FILE: Zeehan2\467
GEO: TA	SCALE: 1:2500
DRAWN: TA	REPORT: 18359
	DATE: 92/03/04
	PLAN: Tv 467



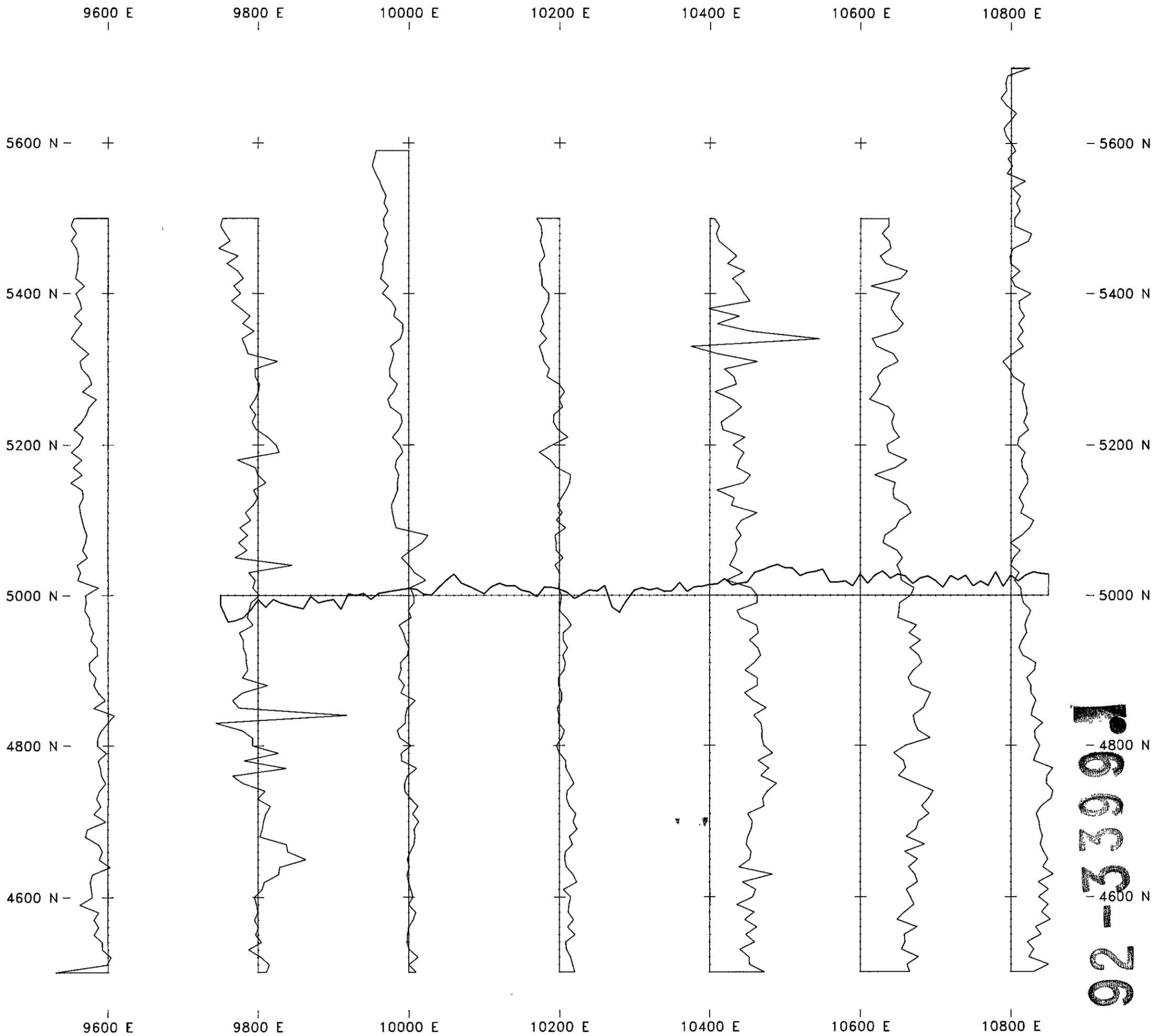
046025

CRA EXPLORATION PTY. LIMITED

ZEEHAN No.2 EL 34/88  
 Badger River Prospect  
 GRAVITY INTERPRETATION  
 AMOCO Line 44400N

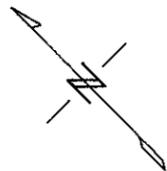
Ref.: SK55 - 5	File: ZEEHAN\501
Scale: 1 : 2500	Date: October 1992
Author: T. Aravanis	Report No.: 18359
Drawn: R. Travieso	Plan No.: Tv 501

92-3399



92-3399.1

Vertical scale 10 nT/cm  
Base level 62500 nT



5 cm

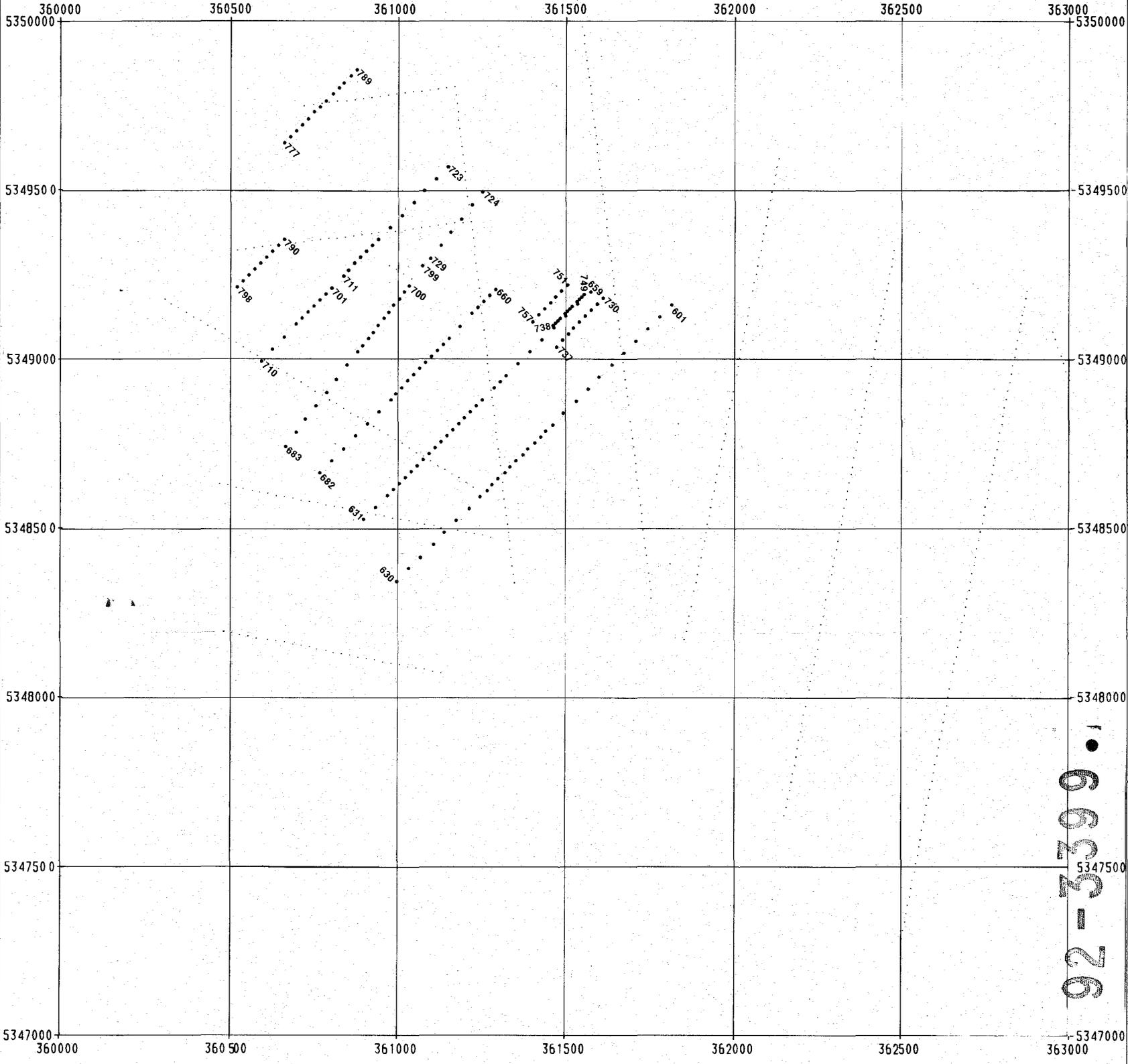
Grid north bearing 045° AMG  
5000E 10000N = 360800E 5349210N

Scale 1:5000  
100 0 100 200 300  
(metres)

Diurnally corrected magnetic data

046026

CRA EXPLORATION PTY. LIMITED		
ZEEHAN No.2 EL 34/88		
<b>BADGER RIVER</b>		
<b>GROUND MAGNETIC STACKED PROFILES</b>		
QUEENSTOWN SK55-05		
GEO: TA	SCALE: 1:5000	REPORT: 18359
DRAWN: TA	DATE: 19/10/92	PLAN: Tv 502



92-3399

LARGE DOTS = CRAE SAMPLES. SMALL DOTS = AMOCO-EZ SAMPLES

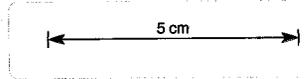


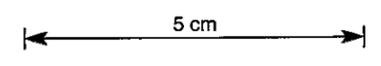
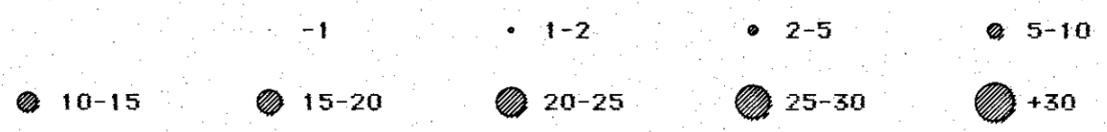
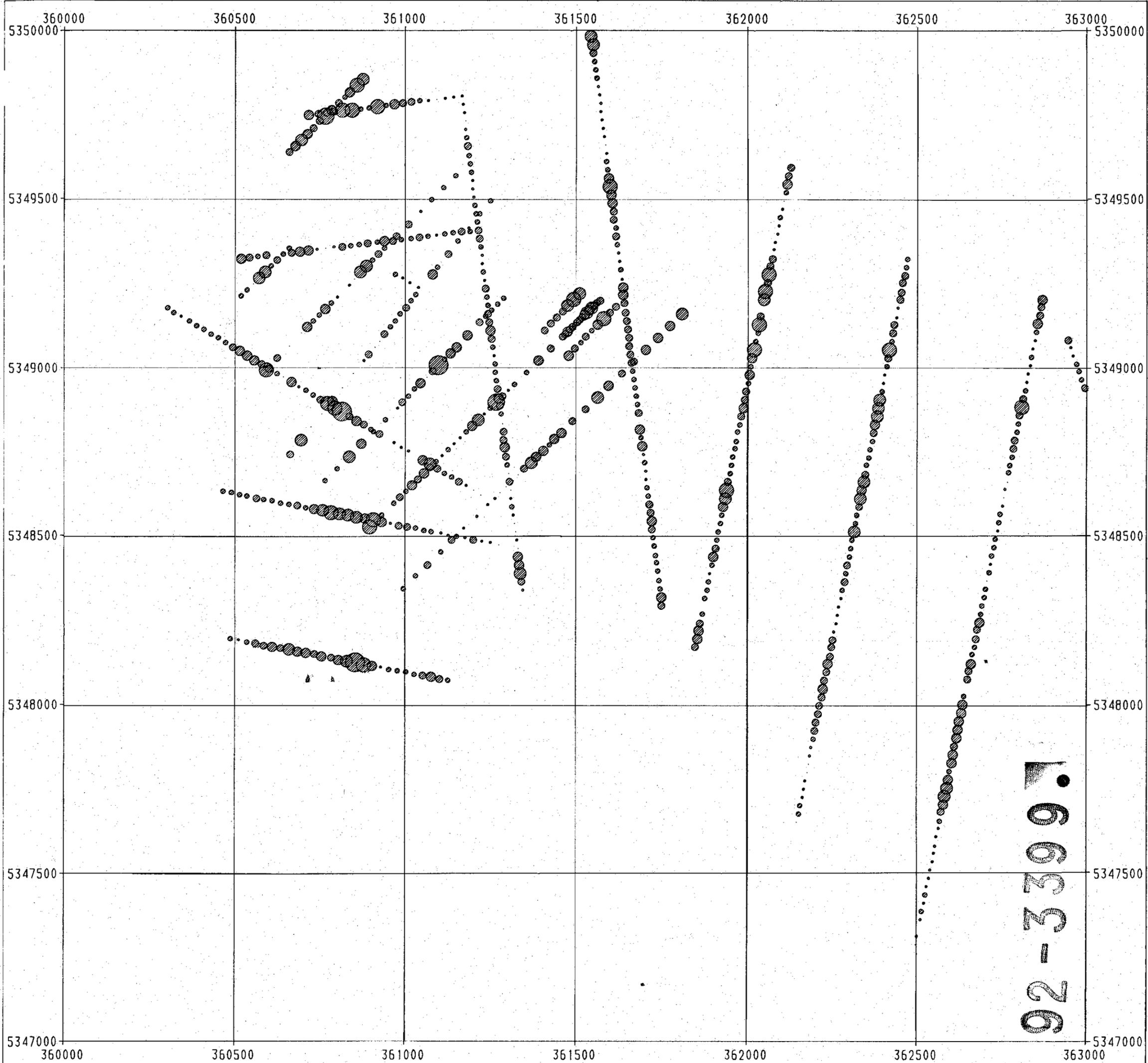
100m

046027

"CRA EXPLORATION PTY. LIMITED"		
ZEEHAN 2 EL34/88 - BADGER RIV. PROSPECT		
WACKER SAMPLE LOCATIONS		
Geol: RGP	Scale: 1:10000	Report: 18359
Drawn: RGP	Date: 5/10/92	Plan: Tv 494

Sample number prefix 3307



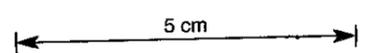
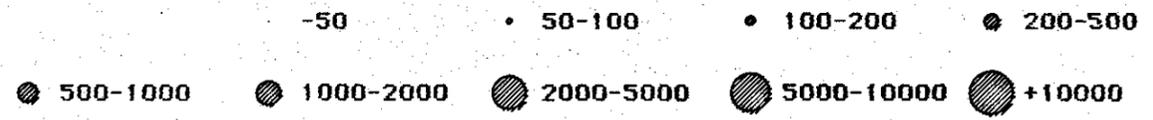
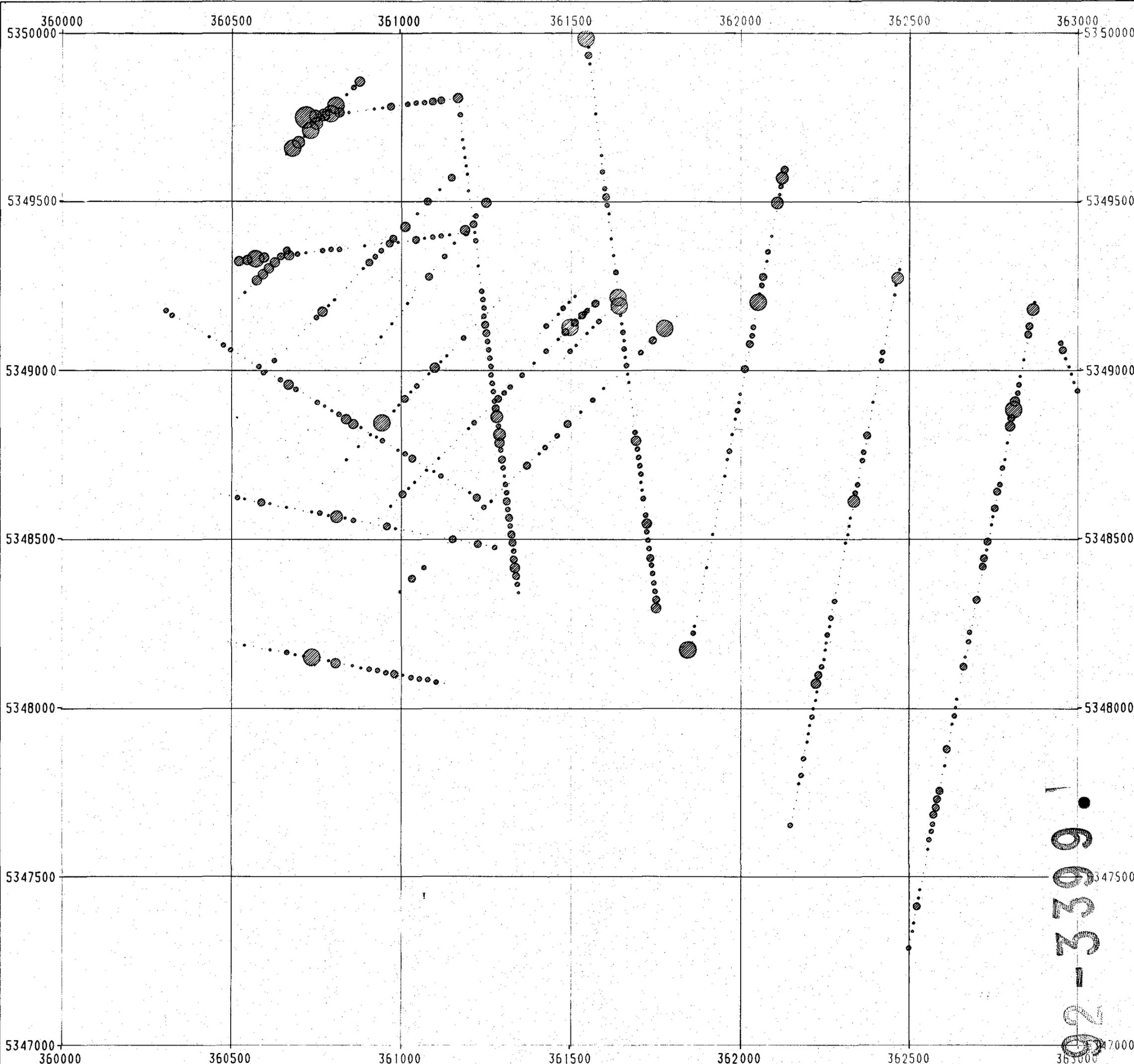


ALL CRAE AND AMOCO-EZ SAMPLES

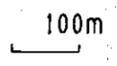


046028

"CRA EXPLORATION PTY. LIMITED"		
ZEEHAN 2 EL34/88 - BADGER RIV. PROSPECT		
WACKER GEOCHEMISTRY - DEPTH m		
Geol: RGP	Scale: 1:10000	Report: 18359
Drawn: RGP	Date: 5/10/92	Plan: Tv495



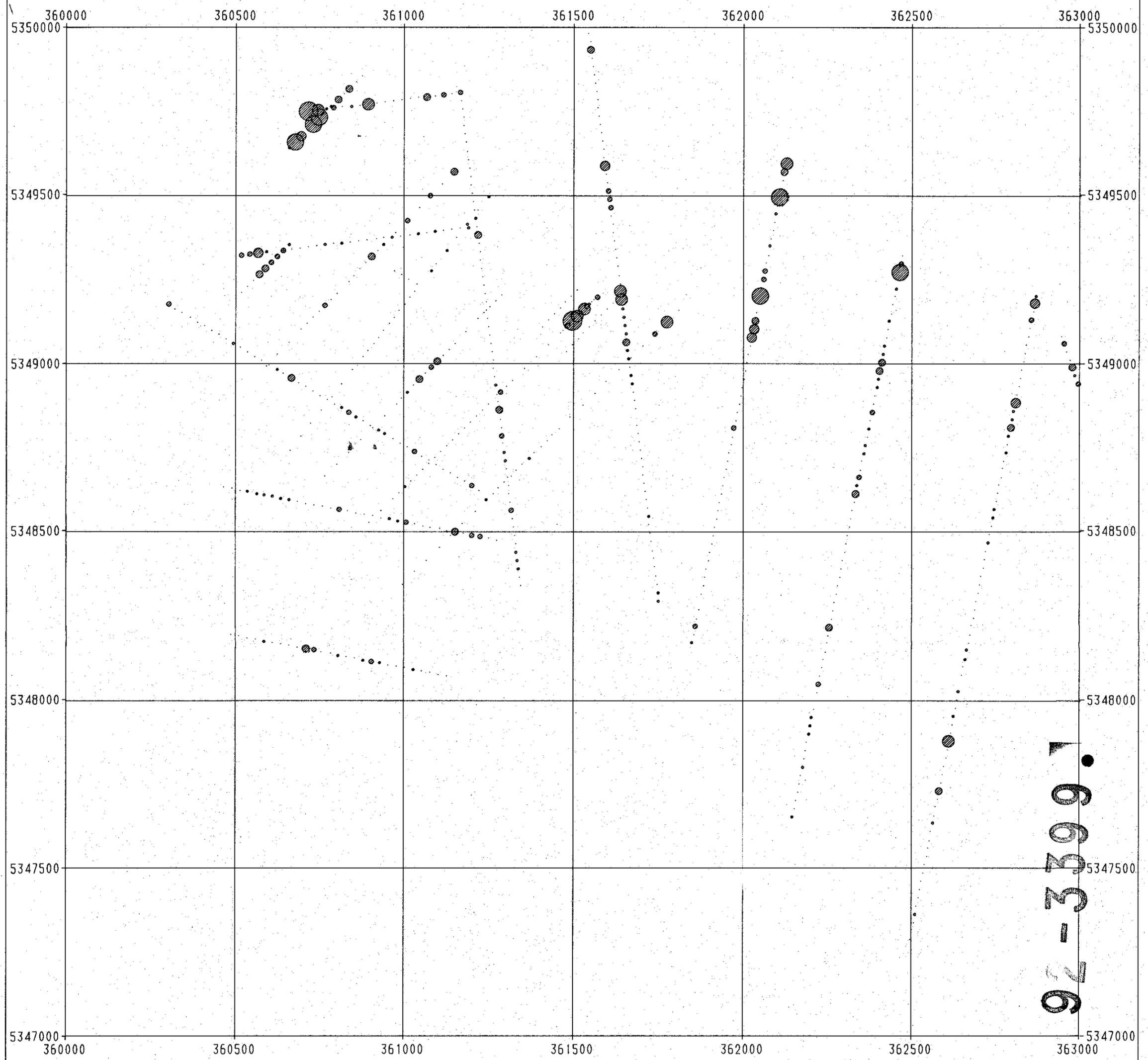
ALL CRAE AND AMOCO-EZ SAMPLES



046029

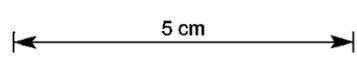
"CRA EXPLORATION PTY. LIMITED"		
ZEEHAN 2 EL34/88 - BADGER RIV. PROSPECT		
WACKER GEOCHEMISTRY - ZINC ppm		
Geol: RGP	Scale: 1:10000	Report: 18359
Drawn: RGP	Date: 5/10/92	Plan: Tv496

92-3399.1



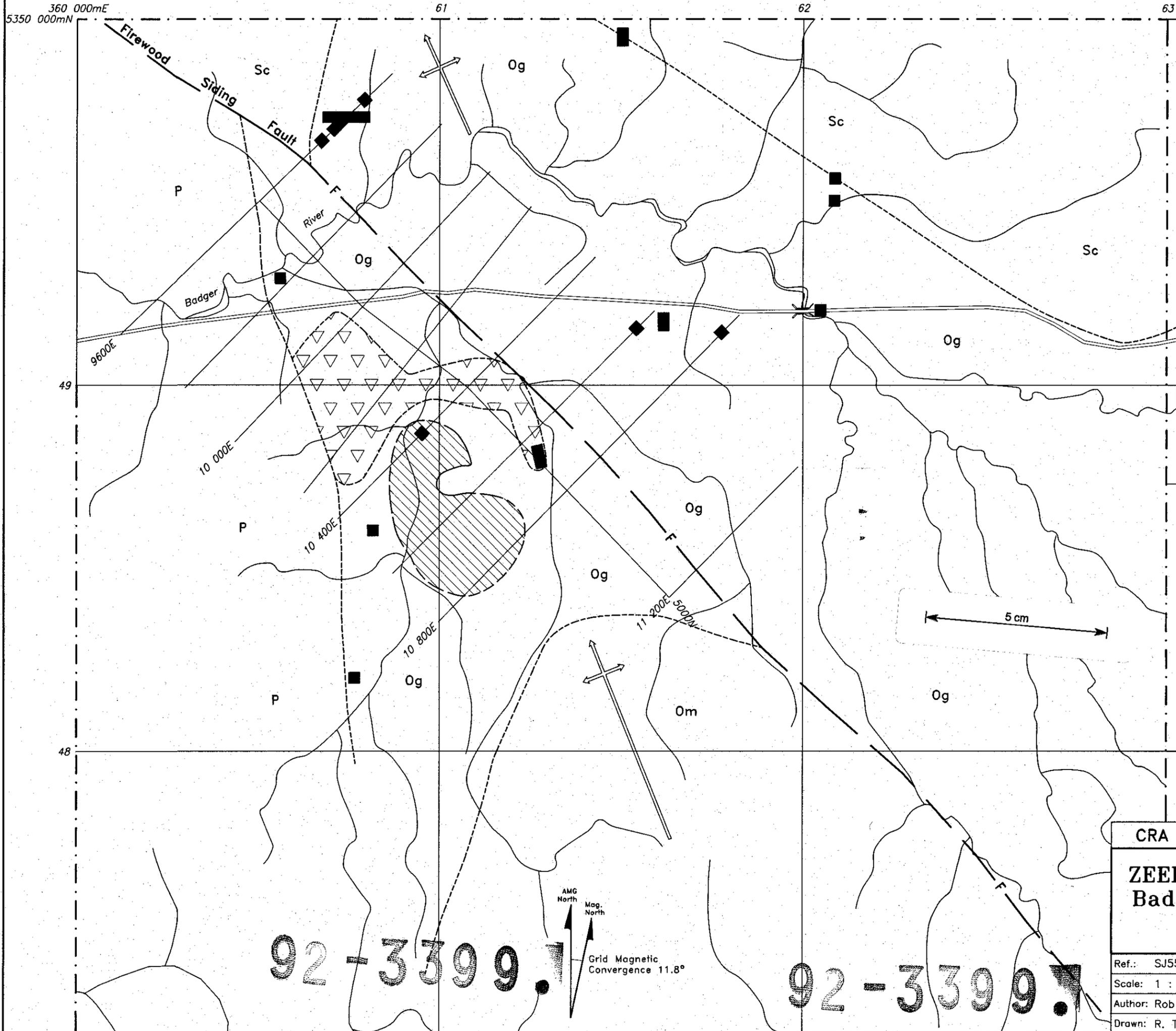
- -50
- 50-100
- 100-200
- 200-500
- 500-1000
- 1000-2000
- 2000-5000
- 5000-10000
- +10000

ALL CRAE AND AMOCO-EZ SAMPLES



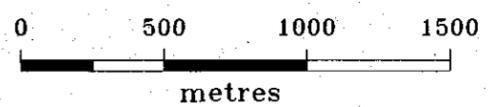
046030

"CRA EXPLORATION PTY. LIMITED"		
ZEEHAN 2 EL34/88 - BADGER RIV. PROSPECT		
WACKER GEOCHEMISTRY - LEAD ppm		
Geol: RGP	Scale: 1:10000	Report: 18359
Drawn: RGP	Date: 5/10/92	Plan: Tv 497



-  Wacker Zn anomaly >1000 ppm
-  Gravity High
-  Permian Cover
-  Crotty Quartzite
-  Gordon Limestone
-  ?Limestone Breccia
-  Moina Sandstone

046031



CRA EXPLORATION PTY. LIMITED

**ZEEHAN No.2 EL 34/88  
Badger River Prospect  
SUMMARY PLAN**

Ref.: SJ55-5, 7914, 3634	File: ZEEHAN2\499
Scale: 1 : 10 000	Date: October 1992
Author: Rob Parkinson	Report No.: 18359
Drawn: R. Travieso	Plan No.: Tv 499

APPENDIX 1

IP SURVEY INTERPRETATION AND DATA SHEETS



## CRA EXPLORATION PTY. LIMITED

ACN 000 057 125

UNIT 1/23 BELL STREET, PRESTON, VICTORIA 3072, AUSTRALIA

P.O. BOX 8093

NORTHLAND CENTRE 3072

TELEPHONE: (03) 480 1866

FAX: (03) 484 1375

30th October 1992

Memo to: R G Parkinson

From: T Aravanis

Re: Geophysical activity in the Badger River prospect**Ground magnetic survey**

A total of 8.4 line km of ground magnetic data were collected over the Badger River grid (Plan Tv 502). The data is relatively quiet reflecting the non-magnetic Gordon Limestone underlying most of the prospect (refer to Plan Tv 499). The moderately magnetic "road metal" in the Henty Road, (which passes through the prospect), is responsible for the high frequency features seen in the stacked profiles.

The Firewood Siding Fault, which is reported to pass through the prospect (around 5200N), does not appear to have a magnetic expression. Gridded images suggest that the magnetics are disrupted by a AMG north trending linear, coincident with a drainage feature in the south of the prospect. This linear may perhaps be related to the Eden Fault mapped to the north.

The apparent base level shift in lines 10400E and 10600E, (with respect to the base line - 5000N), is thought to be due to slight variations of the location of the base station during the two days the magnetic data were collected.

**Gravity Modelling**

A review of previous geophysical activity in the Badger River area revealed a 0.5 mgal Bouguer gravity anomaly in AMOCO data acquired over their Rose Valley prospect (Jones, 1982; Plan M82-1852). Modelling of the gravity data on AMOCO's line 44400N showed that the Bouguer anomaly was adequately resolved by recorded variations in the thickness of peat, from wacker sampling collected along the same line (Plan Tv 501). Discrepancies between the observed and theoretical gravity profiles may be attributed to variations of the limestone surface off line.

### Induced Polarisation & Resistivity surveys

During February 1992, Scintrex Pty. Limited were contracted to perform the time domain IP work at Badger River using a IPR-11 receiver and TSQ-4 transmitter. Five lines of 50 m dipole-dipole IP (5.3 line km) and one line of 100 m dipole-dipole IP (1.1 line km) were completed (Plans Tv 462-67). In general, the data was of good quality.

A summary of the interpretation of the IP and resistivity data has been prepared (Plan Tv 504). Although many of the features are thought to have widths less than the dipole length, interpreted features are shown to have a minimum width of 50 m due to the uncertainty of their position. The main points of the interpretation are;

- i) The IP pseudosections are complicated by surficial zones of depressed chargeabilities, possibly indicating thicker portions of the black peat. Similarly, surficial (relatively) low resistivity zones possibly related to drainage, complicate the resistivity pseudosections.
- ii) The very low chargeabilities and relatively low resistivities observed at the southern end of lines 9600E and 10000E are thought to represent the background within the Permian cover.
- iii) Background chargeabilities within the Gordon Limestone are in the order of 15 mV/V in slice 8 (M7; 690 - 1050 ms).
- iv) Apparent chargeability features on line 9600E between 4900 - 4950N and 5200 - 5250N are thought to be due to variations in overburden (black peat) conditions and do not reflect genuine anomalies. The thickness of the black peat above the northern IP feature appears to decrease and is coincident with a series Wacker Zn anomalies between 5200 - 5400N. It is postulated here that, the Gordon Limestone may be generally anomalous in Zn in this area and the observed Zn anomalies are the result of thin overburden which has not impeded the Wacker sampling. Drill testing of these Zn anomalies is warranted.
- v) A discrete chargeability anomaly close to surface on line 10000E at 4950 - 5050E has been interpreted. The 100 m dipole data suggests that the anomaly may be depth limited. Although the IP feature is not coincident with any Zn anomalous zone, the Wacker sampling data in this area should be reviewed.
- vi) The incomplete IP zone on the northern margin of line 10600E is probably the strike continuation of an anomalous feature at 5400 - 5450N on line 10800E. This interpreted IP unit is coincident with Wacker Zn anomalies on line 10600E and as such warrant further work.

- vii) Two parallel anomalous chargeability zones coming close to surface are observed on lines 10400E, 10600E and 10800E. The interpreted strike direction is concordant with the axial plane of the regional folding. The asymmetric nature of the observed IP anomalies, (particularly on 10400E), suggests a grid north dip. Drill testing of these IP features is recommended.
- viii) A moderately anomalous IP feature is observed to occur near the southern margins of lines 10400E, 10600E and 10800E. A review of Wacker sampling in this area is warranted.
- iv) A 200m wide zone of locally higher resistivities on 10400E, 10600E and 10800E is interpreted to represent a lithological unit parallel to the IP chargeable zone detailed above (viii). It is not clear how this resistive unit is related to a similar unit on 10000E, although both features abut the linear observed in the magnetic data.

T Aravanis

#### References

- Jones, P.A., 1982. Zeehan Project EL 4/78, Progress report July 1981 to January 1982. AMOCO Minerals Australia Co., Report 279, TCR 82-1708.

APPENDIX 2

CRAE WACKER SAMPLING LEDGERS AND GEOCHEMISTRY

APPENDIX 2 - CRAE WACKER SAMPLING GEOCHEMISTRY

CRAE WACKER SAMPLING DATABASE													
Database last updated 8/7/92													
Results in ppm													
SAMPNO	DPO	LOCALE	LOCALN	AMGE	AMGN	DEPTH	BEDROCK?	COLOUR	Ag	As	Cu	Pb	Zn
3307601	71504	10800	5650	361810	5349160	18	Y		-0.5		7	12	48
3307602	71504	10800	5600	361774	5349124	12	N	N	-0.5		26	1580	2150
3307603	71504	10800	5550	361739	5349089	10	N	LG	-0.5		9	190	275
3307604	71504	10800	5500	361704	5349054	11	Y	DG	-0.5		8	8	105
3307605	71504	10800	5450	361668	5349018	5.25	Y	G	-0.5		8	-5	24
3307606	71504	10800	5400	361633	5348983	5	Y	G	-0.5		7	-5	26
3307607	71504	10800	5350	361597	5348947	13	Y	LG	-0.5		5	7	72
3307608	71504	10800	5300	361562	5348912	16	Y	WLG	-0.5		5	24	190
3307609	71504	10800	5250	361527	5348877	6	Y	LG	-0.5		4	-5	60
3307610	71504	10800	5200	361491	5348841	6	Y	WDG	-0.5		7	28	225
3307611	71504	10800	5150	361456	5348806	12	Y	G	-0.5		5	7	105
3307612	71504	10800	5125	361438	5348788	14.5	Y	G	-0.5		7	9	29
3307613	71504	10800	5100	361421	5348771	2.5	Y	G	-0.5		6	19	110
3307614	71504	10800	5075	361403	5348753	12.5	Y	G	-0.5		10	8	90
3307615	71504	10800	5050	361385	5348735	14	Y	G	-0.5		5	4	32
3307616	71504	10800	5025	361368	5348718	18	N	DBN	-0.5		46	62	215
3307617	71504	10800	5000	361350	5348700	5	Y	LB	-0.5		7	16	12
3307618	71504	10800	4975	361332	5348682	0.5	Y	LBG	-0.5		4	5	12
3307619	71504	10800	4950	361315	5348665	0	Y	WLBG	-0.5		4	4	12
3307620	71504	10800	4925	361297	5348647	0	Y	LG	-0.5		9	6	23
3307621	71504	10800	4900	361279	5348629	0.7	Y	G	-0.5		8	6	39
3307622	71504	10800	4875	361262	5348612	1.2	Y	DG	-0.5		6	15	83
3307623	71504	10800	4850	361244	5348594	1.5	Y	G	-0.5		8	54	125
3307624	71504	10800	4800	361209	5348559	1.2	Y	G	-0.5		6	9	34
3307625	71504	10800	4750	361173	5348523	1.4	Y	G	-0.5		11	8	49
3307626	71504	10800	4700	361138	5348488	5	Y	G	-0.5		10	6	27
3307627	71504	10800	4650	361103	5348453	4	Y	G	-0.5		6	4	48
3307628	71504	10800	4600	361067	5348417	9	Y	G	-0.5		7	10	165
3307629	71504	10800	4550	361032	5348382	4	Y	G	-0.5		5	33	325

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APPENDIX 2 - CRAE WACKER SAMPLING GEOCHEMISTRY

3307630	71504	10800	4500	360996	5348346	4.5	Y	G	-0.5		7	5	70
3307631	71504	10600	4550	360897	5348527	22	Y	DG	-0.5		8	4	36
3307632	71504	10600	4600	360932	5348562	2.5	Y	G	-0.5		6	17	36
3307633	71504	10600	4650	360968	5348598	2	Y	G	-0.5		10	16	75
3307634	71504	10600	4675	360985	5348615	9.5	Y	DG	-0.5		7	7	33
3307635	71504	10600	4700	361003	5348633	2	Y	N	-0.5		14	72	255
3307636	71504	10600	4725	361021	5348651	12.5	Y	G	-0.5		7	8	84
3307637	71504	10600	4750	361038	5348668	6.7	Y	G	-0.5		9	5	58
3307638	71504	10600	4775	361056	5348686	12.7	Y	N	-0.5		11	8	34
3307639	71504	10600	4800	361074	5348704	5.2	Y	DG	-0.5		5	7	56
3307640	71504	10600	4825	361091	5348721	2	Y	G	-0.5		10	4	30
3307641	71504	10600	4850	361109	5348739	1	Y	LG	-0.5		8	-5	53
3307642	71504	10600	4875	361127	5348757	4.7	Y	G	-0.5		8	3	45
3307643	71504	10600	4900	361144	5348774	1.5	Y	G	-0.5		6	5	31
3307644	71504	10600	4925	361162	5348792	1	Y	DG	-0.5		6	12	41
3307645	71504	10600	4950	361180	5348810	3.75	Y	G	-0.5		8	6	33
3307646	71504	10600	4975	361197	5348827	14.5	Y	WDG	-0.5		5	-5	70
3307647	71504	10600	5000	361215	5348845	19.75	Y	DG	-0.5		8	15	110
3307648	71504	10600	5025	361233	5348863	1.5	Y	LGB	-0.5		4	-5	15
3307649	71504	10600	5050	361250	5348880	2.5	Y	LB	-0.5		3	-5	23
3307650	71504	10600	5100	361286	5348916	5	N	DG	-0.5		30	110	400
3307651	71504	10600	5125	361303	5348933	1.2	Y	G	-0.5		5	14	105
3307652	71504	10600	5150	361321	5348951	2	Y	G	-0.5		9	36	165
3307653	71504	10600	5200	361356	5348986	2	N	G	-0.5		5	13	105
3307654	71504	10600	5250	361392	5349022	11.8	Y	LG	-0.5		10	17	97
3307655	71504	10600	5300	361427	5349057	8.4	Y	DLG	-0.5		13	22	135
3307656	71504	10600	5350	361462	5349092	9.5	Y	G	-0.5		6	17	74
3307657	71504	10600	5400	361498	5349128	4.8	Y	DG	4		49	7500	3500
3307658	71504	10600	5450	361533	5349163	17.2	Y	G	-0.5		12	1900	450
3307659	71504	10600	5500	361569	5349199	5.2	Y	DG	-0.5		11	190	480
3307660	71504	10400	5300	361288	5349206	4.5	Y	DG	-0.5		13	3	40
3307661	71504	10400	5250	361254	5349170	3.5	Y	LG	-0.5		15	-5	33
3307662	71504	10400	5275	361271	5349188	4.5	Y	G	-0.5		8	7	34
3307663	71504	10400	5225	361236	5349152	2.2	Y	LG	-0.5		15	8	32
3307664	71504	10400	5200	361219	5349134	5	Y	DG	-0.5		9	-5	36

APPENDIX 2 - CRAE WACKER SAMPLING GEOCHEMISTRY

3307665	71504	10400	5150	361184	5349098	10.5	Y	LG	-0.5		6	24	115
3307666	71504	10400	5100	361149	5349062	11.9	Y	G	-0.5		10	3	48
3307667	71504	10400	5075	361132	5349044	11	Y	LG	-0.5		13	3	51
3307668	71504	10400	5050	361115	5349026	3.5	Y	DG	-0.5		11	14	79
3307669	71504	10400	5025	361097	5349008	30	Y	DG	-0.5		39	215	630
3307670	71504	10400	5000	361080	5348990	7	N	N	-0.5		51	145	74
3307671	71504	10400	4975	361063	5348972	0	Y	W	-0.5		4	-5	15
3307672	71504	10400	4950	361045	5348954	11	Y	DGN	-0.5		35	210	145
3307673	71504	10400	4925	361028	5348936	3	Y	LG	-0.5		6	16	95
3307674	71504	10400	4900	361011	5348918	3	Y	DG	-0.5		33	90	220
3307675	71504	10400	4875	360993	5348900	5.5	Y	G	-0.5		6	7	70
3307676	71504	10400	4850	360976	5348882	1.5	Y	G	-0.5		8	14	91
3307677	71504	10400	4800	360941	5348846	2	Y	W	-0.5		8	15	2100
3307678	71504	10400	4750	360906	5348810	2	Y	G	-0.5		5	-5	54
3307679	71504	10400	4700	360872	5348774	13.5	Y	G	-0.5		10	-5	60
3307680	71504	10400	4650	360837	5348738	18	Y	G	-0.5		5	9	77
3307681	71504	10400	4600	360802	5348702	2	Y	BG	-0.5		4	3	16
3307682	71504	10400	4550	360767	5348666	3.5	Y	LG	-0.5		3	-5	19
3307683	71504	10200	4550	360663	5348745	6	Y	DGW	-0.5		33	41	39
3307684	71504	10200	4600	360694	5348785	16	N	Y	-0.5		24	25	35
3307685	71504	10200	4660	360725	5348824	0	Y	W	-0.5		3	-5	15
3307686	71504	10200	4690	360755	5348864	0	Y	W	-0.5		4	-5	14
3307687	71504	10200	4750	360786	5348903	13.5	Y	DG	-0.5		6	-5	38
3307688	71504	10200	4800	360817	5348942	0	Y	W	-0.5		3	-5	15
3307689	71504	10200	4850	360848	5348982	0	Y	LG	-0.5		3	9	15
3307690	71504	10200	4900	360878	5349021	1	Y	LG	-0.5		3	-5	15
3307691	71504	10200	4925	360894	5349041	5.5	N	DGB	-0.5		7	7	28
3307692	71504	10200	4950	360909	5349061	0	Y	WLG	-0.5		4	-5	5
3307693	71504	10200	4975	360925	5349080	0	Y	WLG	-0.5		6	-5	8
3307694	71504	10200	5000	360940	5349100	7.4	Y	DG	-0.5		13	4	56
3307695	71504	10200	5025	360955	5349120	3.7	Y	DG	-0.5		6	-5	46
3307696	71504	10200	5050	360971	5349139	3.7	Y	DG	-0.5		11	8	50
3307697	71504	10200	5075	360986	5349159	4.5	Y	G	-0.5		7	3	29
3307698	71504	10200	5100	361002	5349179	5.5	Y	G	-0.5		7	-5	31
3307699	71504	10200	5125	361017	5349199	2	Y	LG	-0.5		34	17	60

APPENDIX 2 - CRAE WACKER SAMPLING GEOCHEMISTRY

3307700	71504	10200	5150	361032	5349218	4 Y	LG	-0.5		8	-5	25
3307701	71504	10000	5000	360800	5349210	1.2 Y	LG	-0.5		9	12	65
3307702	71504	10000	4975	360783	5349192	4 Y	G	-0.5		6	10	68
3307703	71504	10000	4950	360765	5349174	13.8 Y	LO	-0.5		9	165	895
3307704	71504	10000	4925	360748	5349156	3.8 Y	LG	-0.5		7	49	165
3307705	71504	10000	4900	360731	5349138	2.8 N	DB	-0.5		5	22	14
3307706	71504	10000	4875	360713	5349120	11.5 N	YB	-0.5		22	45	23
3307707	71504	10000	4850	360696	5349102	0 Y	LG	-0.5		5	-5	8
3307708	71504	10000	4800	360661	5349066	0 Y	LG	-0.5		4	-5	11
3307709	71504	10000	4750	360626	5349030	7.9 Y	GB	-0.5		37	24	150
3307710	71504	10000	4700	360592	5348994	22.4 Y		-0.5		33	25	125
3307711	71504	10000	5050	360835	5349246	1 Y	DG	-0.5		7	-5	44
3307712	71504	10000	5075	360852	5349264	0 Y	WLG	-0.5		4	-5	9
3307713	71504	10000	5100	360869	5349282	19.4 Y	DG	-0.5		7	9	46
3307714	71504	10000	5125	360887	5349300	16.8 N	G	-0.5		5	20	92
3307715	71504	10000	5150	360904	5349318	3.7 Y	G	-0.5		15	230	225
3307716	71504	10000	5175	360922	5349336	6 Y	DG	-0.5		11	36	175
3307717	71504	10000	5200	360939	5349354	3 Y	LG	-0.5		6	66	150
3307718	71504	10000	5250	360974	5349390	7.3 Y	DG	-0.5		7	10	240
3307719	71504	10000	5300	361008	5349426	5 N	CG	-0.5		11	175	815
3307720	71504	10000	5350	361043	5349462	1.5 Y	G	-0.5		9	10	69
3307721	71504	10000	5400	361078	5349498	2.4 Y	CB	-0.5		8	125	325
3307722	71504	10000	5450	361113	5349534	2 Y	LG	-0.5		7	7	88
3307723	71504	10000	5500	361147	5349570	2.5 Y	LG	-0.5		11	240	385
3307724	71504	10200	5500	361248	5349494	2 Y	DG	-0.5		10	76	585
3307725	71504	10200	5450	361217	5349455	2 Y	G	-0.5		7	11	100
3307726	71504	10200	5400	361186	5349415	1.8 Y	DG	-0.5		14	95	595
3307727	71504	10200	5350	361155	5349376	4.6 Y		-0.5		7	31	97
3307728	71504	10200	5300	361125	5349336	7.5 Y		-0.5		8	69	125
3307729	71504	10200	5250	361094	5349297	2.5 N		-0.5		19	29	19
3307730	71508	10650	5500	361598	5349164	9.4 Y		-1		6	14	20
3307731	71508	10650	5475	361581	5349146	22.7 Y		-1		4	32	135
3307732	71508	10650	5450	361564	5349128	11.5 Y		-1		12	20	77
3307733	71508	10650	5425	361547	5349110	4.6 Y		-1		9	14	90
3307734	71508	10650	5400	361530	5349092	9.6 Y		-1		6	16	34

APPENDIX 2 - CRAE WACKER SAMPLING GEOCHEMISTRY

3307735	71508	10650	5375	361513	5349074	3.5	Y			-1		10	20	64
3307736	71508	10650	5350	361496	5349056	8	Y			-1		5	38	105
3307737	71508	10650	5325	361479	5349038	11.5	Y			-1		3	9	17
3307738	71508	10600	5360	361469	5349099	8.7	Y			-1		6	5	21
3307739	71508	10600	5370	361476	5349106	10.5	Y			-1		7	20	23
3307740	71508	10600	5380	361483	5349113	7	Y			-1		8	180	370
3307741	71508	10600	5390	361490	5349120	6.2	Y			-1		5	5	33
3307742	71508	10600	5410	361505	5349135	8.5	Y			-1		9	13	57
3307743	71508	10600	5420	361512	5349142	6.5	Y			1		37	1300	340
3307744	71508	10600	5430	361519	5349149	6.5	Y			-1		6	10	15
3307745	71508	10600	5440	361526	5349156	10.5	Y			-1		6	14	55
3307746	71508	10600	5460	361540	5349170	12.6	Y			-1		6	135	150
3307747	71508	10600	5470	361547	5349177	16	Y			-1		4	80	180
3307748	71508	10600	5480	361554	5349184	8.9	Y			-1		2	-3	13
3307749	71508	10600	5490	361561	5349191	7.3	Y			-1		6	3	14
3307750	71508	10650	5525	361615	5349182	5	Y			-1		7	7	37
3307751	71508	10550	5325	361409	5349112	9.7	Y			-1		5	5	16
3307752	71508	10550	5350	361426	5349130	5	Y			-1		3	39	140
3307753	71508	10550	5375	361443	5349148	6.1	Y			-1		4	9	38
3307754	71508	10550	5400	361460	5349166	9	Y			-1		5	26	54
3307755	71508	10550	5425	361477	5349184	16	Y			-1		7	41	125
3307756	71508	10550	5450	361494	5349202	20	Y			-1		4	46	97
3307757	71508	10550	5475	361511	5349220	17.1	Y			-1		2	12	60
3307777	71508	9600	5200	360661	5349641	6	N			-1		7	65	76
3307778	71508	9600	5225	360679	5349659	10	Y			7		80	4750	2300
3307779	71508	9600	5250	360697	5349677	16.7	Y			1		24	695	1800
3307780	71508	9600	5275	360714	5349694	11.7	Y			-1		4	38	92
3307781	71508	9600	5300	360732	5349712	6.7	Y			-1		94	4700	2700
3307782	71508	9600	5325	360750	5349730	5	Y			1		22	2500	1800
3307783	71508	9600	5350	360767	5349747	29	Y			-1		17	48	170
3307784	71508	9600	5375	360785	5349765	14	Y			-1		6	74	280
3307785	71508	9600	5400	360803	5349783	7	N			-1		16	350	3250
3307786	71508	9600	5425	360821	5349801	3	Y			-1		3	15	6
3307787	71508	9600	5450	360838	5349818	11	Y			-1		43	360	95
3307788	71508	9600	5475	360856	5349836	21	Y			-1		9	36	100

APPENDIX 2 - CRAE WACKER SAMPLING GEOCHEMISTRY

3307789	71508	9600	5500	360874	5349854	15	Y		-1	21	48	805
3307790	71508	9800	5000	360660	5349355	2.4	Y		-1	2	54	200
3307791	71508	9800	4975	360642	5349337	3.2	Y		-1	2	120	260
3307792	71508	9800	4950	360625	5349320	7	Y		-1	4	190	540
3307793	71508	9800	4925	360607	5349302	2.7	Y		-1	3	145	625
3307794	71508	9800	4900	360589	5349284	15.7	Y		-1	3	315	580
3307795	71508	9800	4875	360572	5349267	16.5	Y		-1	2	380	890
3307796	71508	9800	4850	360554	5349249	0.5	Y		-1	8	20	14
3307797	71508	9800	4825	360536	5349231	3.3	Y		-1	33	33	54
3307798	71508	9800	4800	360519	5349214	2.5	Y		-1	10	30	14
3307799	71504	10200	5225	361079	5349277	12.8	Y		-0.5	10	94	220
		10600	5075	361268	5348898	28	Y					

BADGER WACKER LEDGER

Sample No.	Local E	Local N	Depth (m)	Rock Type	Color	Veining?	Sulfides?	Comment
Sample No.	Local E	Local N	Depth (m)	Rock Type	Color	Veining?	Sulfides?	Comment
3307601	10800	5650	18	Lst		Cc	tr py	
3307602	10800	5600	12	Pug	Blk			Edge of costean.
3307603	10800	5550	10	Lst & pug	Lt gy			Bedrock lst with some transported junk.
3307604	10800	5500	11	Lst	Dk gy	Cc		
3307605	10800	5450	5.25	Lst	Md gy	Cc		
3307606	10800	5400	5	Lst	Md gy	Min cc		
3307607	10800	5350	13	Lst	Lt gy	CO3 (Fe?)		Saw bedding at 60 to C.A. (30 deg. dip).
3307608	10800	5300	16	Lst	Wh/lt gy			
3307609	10800	5250	6	Lst	Lt gy			
3307610	10800	5200	6	Lst breccia	Wh->dk gy			Coarse grained.
3307611	10800	5150	12	Lst	Md->dk gy	Cc		
3307612	10800	5125	14.5	Lst	Md gy	Cc (thick)	Rare py	
3307613	10800	5100	2.5	Lst	Gy		Rare py	
3307614	10800	5075	12.5	Lst	Gy	Cc		
3307615	10800	5050	14	Lst	Gy		0.1% py	
3307616	10800	5025	18	Clay	Dk br->blk			Firewood Siding Fault??
3307617	10800	5000	5	Lst	Lt br			
3307618	10800	4975	0.5	Lst	Lt br/gy			O/c of silicified grey limestone.
3307619	10800	4950	Rock Chip	Lst	W-Lt br/gy			
3307620	10800	4925	Rock Chip	Lst	Lt gy			O/c of silicified limestone
3307621	10800	4900	0.7	Lst	Md gy			
3307622	10800	4875	1.2	Lst	Dk gy	Cc		RF's & mud in sample (breccia?).
3307623	10800	4850	1.5	Lst	Md gy	Cc		Veining is rel. intense.
3307624	10800	4800	1.2	Lst	Md gy	Cc (one)		
3307625	10800	4750	1.4	Lst	Md gy	Cc (min)		
3307626	10800	4700	5	Lst	Md gy	Dk stull		
3307627	10800	4650	4	Lst	Md gy			Some voids (cubic ones alter py??)
3307628	10800	4600	9	Lst	Gy	Dk stull		Broke the cutter head!
3307629	10800	4550	4	Lst (silty?)	Gy			
3307630	10800	4500	4.5	Lst	Gy			
3307631	10600	4550	22	Lime mud	Dk gy	Cc		
3307632	10600	4600	2.5	Lst	Gy	Cc		Filled costean at 4580-4595.
3307633	10600	4650	2	Lst	Gy	Blk sh & cc		
3307634	10600	4675	9.5	CO3 mudst.	Dk gy	Cc (min)		AMOCO peg, 60900E 44275N.
3307635	10600	4700	2	Lime mudst.	Blk		0.5% py	Py is vlg & dissem.
3307636	10600	4725	12.5	Lst	Gy	Shale	Rare py	
3307637	10600	4750	6.7	Lst	Md gy	Cc (min)	Rare py	
3307638	10600	4775	12.7	Lst mud	Blk (ish)	Cc(min)	Dissem. py	Some softer material also present (pug??)
3307639	10600	4800	5.2	Lst	Dk->md gy	Cc	Py (min)	
3307640	10600	4825	2@2	Lst	Md gy	Cc (min)	Py	Some py is visible to naked eye (mm size)
3307641	10600	4850	4@1	Lst	Md-Lt gy	Cc (v. min)	Py (min)	
3307642	10600	4875	4.7	Lst	Md gy	Cc (min)	Py (rare)	
3307643	10600	4900	1.5	Lst	Md gy	Cc	Py (min)	
3307644	10600	4925	4@1	Lime mud	Md->dk gy		Py & ga(?)	

046043

## BADGER WACKER LEDGER

Sample No.	Local E	Local N	Depth (m)	Rock Type	Color	Veining?	Sulfides?	Comment
3307645	10600	4950	3.75	Lst	Gy	Sh		
3307646	10600	4975	14.5	Lime mudst	Wh->dk gy	Sh		
3307647	10600	5000	19.75	Lime mudst	Dk gy	Sh		
3307648	10600	5025	1.5	Lst breccia	Lt gy-br			Partly silicified, some organics.
3307649	10600	5050	2.5	Lst	Lt br			Coarse-grained, maybe a breccia?
	10600	5075	28	No sample				Firewood Siding Fault?
3307650	10600	5100	5	Clay	Dk gy			Recognizable limestone textures.
3307651	10600	5125	1.2	Lst	Gy	Cc (min)		
3307652	10600	5150	2	Lst	Md gy	Blk sh & cc		
3307653	10600	5200	2	Clay	Md gy	Blk sh & cc		
3307654	10600	5250	11.8	Lst	Lt gy	Blk sh	Py in veins	Black veins have common py, also qtz frags
3307655	10600	5300	8.4	Lst	Dk->lt gy	Blk sh & cc		Cc veins up to 0.5cm are Fe-stained.
3307656	10600	5350	9.5	Lst	Md gy	Cc	Rare py	Siliceous frags in some cc veins.
3307657	10600	5400	4.8	Lst	Dk gy	Cc		
3307658	10600	5450	17.2	Lst	Gy			
3307659	10600	5500	5.2	Lime mudst	Dk gy	Cc (coarse)		
3307660	10400	5300	4.5	Lst	Dk gy			
3307661	10400	5250	3.5	Lst	Lt->md gy		2% ga & sp	Limestone is granular.
3307662	10400	5275	4.5	Lst mud	Md gy	Cc (v. min)		
3307663	10400	5225	2.2	Lst	Lt->md gy	Cc (min) & sh	Py	Py is more common in blk sh.
3307664	10400	5200	5	Lst	Md->dk gy	Blk sh	Py (min)	AMOCO peg 44800E 60850N=10390E, 5225N
3307665	10400	5150	10.5	Lst (greasy)	Lt gy	Cc (min)	Dissem py	
3307666	10400	5100	11.9	Lst mud & Rfs	Md gy	Cc (v. min)		
3307667	10400	5075	11	Lst	Lt->md gy	Cc & blk sh	Dissem py	
3307668	10400	5050	3.5	Mud & lst Rfs	Dk gy			O/c of silicified lst is 2m away. Not certain sample is lst
3307669	10400	5025	30	Lime mud (?)	Dk gy, or bits			Ran out of rods, could have gone deeper!
3307670	10400	5000	7	Pug	Blk			Couldn't get through gravels
3307671	10400	4975	Rock Chip	Lst	Wh	SiO2		Veins generally cavity filling.
3307672	10400	4950	11	Mud	Dk gy->blk			Not sure that this is limestone.
3307673	10400	4925	3	Lst	Lt->md gy	Blk sh & cc	Py (rare)	
3307674	10400	4900	3	Lime mud	Md->dk gy	Cc (min)		
3307675	10400	4875	5.5	Lst	Md gy		0.5% py&ga?	Not sure whether sulfide or just cc reflections.
3307676	10400	4850	1.5	Lst	Md gy	Blk mud	Tr sp(?)	Old track at 4860N.
3307677	10400	4800	2	CaCO3	Wh			Massive cc vein
3307678	10400	4750	2	Lst	Md gy		0.1% sp(?)	
3307679	10400	4700	13.5	Lst	Md gy	Blk sh		
3307680	10400	4650	18	Lst	Md gy		Rare sp(?)	
3307681	10400	4600	2	Sst	Br->gy			Calcareous sandstone (Permian??).
3307682	10400	4550	3.5	Sst	Lt gy			Calcareous sst or sandy lst (?). Permian or Ordovician?
3307683	10200	4550	6	Greywacke	Dk gy->wh			Permian?
3307684	10200	4600	16	Clay	Yellow			O/c of limestone is 10m GN.
3307685	10200	4660	Rock Chip	Lst breccia	Wh			Silicified lst breccia (not tectonic?). Foreeet facies?
3307686	10200	4690	Rock Chip	Lst breccia	Wh			Vuggy (30%) reef breccia. Excellent sulfide host!
3307687	10200	4750	13.5	Lst	Dk gy			
3307688	10200	4800	Rock Chip	Lst	Wh			Silicified reef breccia (<10% vughs).

BADGER WACKER LEDGER

Sample No.	Local E	Local N	Depth (m)	Rock Type	Color	Veining?	Sulfides?	Comment
3307689	10200	4850		Rock Chip	Lst	Lt gy		Partly silicified breccia, tightly packed. <5% vughs.
3307690	10200	4900	1	Lst breccia	Lt gy			
3307691	10200	4925	5.5	Clay	Dk gy/br			Not bedrock, probably sitting on lst breccia.
3307692	10200	4950		Rock Chip	Lst breccia	Wh->lt gy		AMOCO peg 44600N 60650E = 10220E 4950N
3307693	10200	4975		Rock Chip	Lst breccia	Wh->lt gy		Locally vuggy.
3307694	10200	5000	7.4	Lst	Md->dk gy		Cc (min)	
3307695	10200	5025	3.7	Lst	Dk gy			
3307696	10200	5050	3.7	Lst	Md->dk gy		Cc	Py & ga(?)
3307697	10200	5075	4.5	Lst	Md gy		Cc	Py (rare)
3307698	10200	5100	5.5	Lst	Md gy		Cc	Py (rare)
3307699	10200	5125	2	Lst	Lt->md gy		Cc & blk sh	Py (rare)
3307700	10200	5150	4	Lst	Lt gy		Blk sh	Dissem py.
3307701	10000	5000	1.2	Lst	Lt->md gy		Blk sh	Py (rare)
3307702	10000	4975	4	Lst	Md gy		Blk sh?	Py
3307703	10000	4950	13.8	Sst	Lt or		Blk sh?&cc?	Gravels or Permian, not lst anyway!
3307704	10000	4925	3.8	Lst	Lt gy		Cc	Py (with cc)
3307705	10000	4900	2.8	Gravel/clay	Dk br			Py
3307706	10000	4875	11.5	Clay	Tan			Py (min)
3307707	10000	4850		Rock Chip	Silic. lst	Lt gy		
3307708	10000	4800		Rock Chip	Silic lst	Lt gy		
3307709	10000	4750	7.9	Greywacke	Gy/br			
3307710	10000	4700	22.4	Greywacke				
3307711	10000	5050	1	Lst	Dk gy		Cc (min)	
3307712	10000	5075		Rock Chip	Silic. lst	Wh->lt gy		
3307713	10000	5100	19.4	Lime mudst	Dk gy			
3307714	10000	5125	16.8	Gravel+CO3	Gy			Poor sample, too small.
3307715	10000	5150	3.7	Lst	Md gy			Some bedding visible, steep dips (W limb of antiform)
3307716	10000	5175	6	Lst	Dk gy		Cc	A dk br clay interbed present
3307717	10000	5200	3	Lst	Lt->md gy		Cc (common)	Py (rare)
3307718	10000	5250	7.3	Lst	Dk gy		Cc (rare)	Py
3307719	10000	5300	5	Gravel	Or/gy			One large cc pebble (?)
3307720	10000	5350	1.5	Lst	Md gy		Cc (min)	
3307721	10000	5400	2.4	Greywacke?	Or/br			Gravels of Permian?
3307722	10000	5450	2	Lst	Lt->md gy			Py
3307723	10000	5500	2.5	Lst	Lt gy			Py (rare)
3307724	10200	5500	2	Lst	Dk gy		Cc (rare)	Py (rare)
3307725	10200	4450	2	Lst	Md gy		Cc (rare)	Py (rare)
3307726	10200	4400	1.8	Lst	Dk->md gy		Cc (varies)	Py (dissem)
3307727	10200	4350	4.6	Lst				Cc vv common in lt gy lst, minor in dk gy lst.
3307728	10200	4300	7.5	Lst				Sampled by Nick Poltock.
3307729	10200	4250	2.5	Gravels				Sampled by Nick Poltock.
3307799	10200	4225	12.8	Lst				Sampled by Nick Poltock. Shouldn't have sampled this!
3307730	10650	5500	9.4	Lst				
3307731	10650	5475	22.7	Lst				
3307732	10650	5450	2 @ 11.5	Lst				

046045

## BADGER WACKER LEDGER

Sample No.	Local E	Local N	Depth (m)	Rock Type	Color	Veining?	Sulfides?	Comment
3307733	10650	5425	4.6	Lst				
3307734	10650	5400	9.6	Lst				
3307735	10650	5375	3.5	Lst				
3307736	10650	5350	8	Lst				
3307737	10650	5325	11.5	Lst				
3307738	10600	5360	8.7	Lst				
3307739	10600	5370	10.5	Lst				
3307740	10600	5380	7	Lst				
3307741	10600	5390	6.2	Lst				
3307742	10600	5410	8.5	Lst				
3307743	10600	5420	6.5	Lst				
3307744	10600	5430	6.5	Lst				
3307745	10600	5440	10.5	Lst				
3307746	10600	5460	12.6	Lst				
3307747	10600	5470	16	Lst				
3307748	10600	5480	8.9	Lst				
3307749	10600	5490	7.3	Lst				
3307750	10650	5525	5	Lst				
3307751	10550	5325	9.7	Lst				
3307752	10550	5350	5	Lst				
3307753	10550	5375	6.1	Lst				
3307754	10550	5400	9	Lst				
3307755	10550	5425	16	Lst				
3307756	10550	5450	20	Lst				
3307757	10550	5475	17.1	Lst				
3307777	9600	5200	6	Gravels				
3307778	9600	5225	10	Lst				
3307779	9600	5250	16.7	Lst				
3307780	9600	5275	11.7	Lst				
3307781	9600	5300	6.7	Mudstone?				
3307782	9600	5325	5	Lst				
3307783	9600	5350	29	Lst				
3307784	9600	5375	14	Lst				
3307785	9600	5400	7	Fault pug?				
3307786	9600	5425	3	Sst				
3307787	9600	5450	11	Shaley				
3307788	9600	5475	21	Mudst/clayst				
3307789	9600	5500	15	Lst mud?				
3307790	9800	5000	2.4	Lst				
3307791	9800	4975	3.2	Lst				
3307792	9800	4950	7	Lst				
3307793	9800	4925	2.7	Lst				
3307794	9800	4900	15.7	Lst				
3307795	9800	4875	16.5	Lst				
3307796	9800	4850	0.5	Conglomerate				

046046

BADGER WACKER LEDGER

Sample No.	Local E	Local N	Depth (m)	Rock Type	Color	Veining?	Sulfides?	Comment
3307797	9800	4825	3.3	Tillite?				
3307798	9800	4800	2.5	Shale & sst				
3307799	10200	4225	12.8	Lst				

046047

APPENDIX 3

AMOCO - EZ WACKER SAMPLING LEDGERS WITH GEOCHEMISTRY

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

APPENDIX 3 - AMOCO/EZ WACKER SAMPLING LEDGERS AND GEOCHEMISTRY																
Results in ppm (Fe in %)																
SAMPNO	GRID	LOCALE	LOCALN	AMGE	AMGN	DEPTH	BEDROCK?	COLOR	Cu	Pb	Zn	Ag	Fe	Mn	Ba	
67263	ROSE VALLEY	60500	43800	360487	5348196	2.5	Y	DG	15	30	35		2.09	65	653	
67262	ROSE VALLEY	60525	43800	360512	5348192	1.4	Y	DG	10	35	25		1.34	35	666	
67261	ROSE VALLEY	60550	43800	360536	5348187	2.8	Y	DG	15	40	90		3.24	135	769	
67260	ROSE VALLEY	60575	43800	360561	5348182	7.0	Y	BN	10	10	5		1.14	10	379	
67258	ROSE VALLEY	60600	43800	360586	5348177	9.0	Y	LBG	10	75	25		0.86	30	838	
67257	ROSE VALLEY	60625	43800	360610	5348172	11.7	?	LG	-5	25	60		1.29	260	34	
67256	ROSE VALLEY	60650	43800	360635	5348168	8.0	N	B	5	-5	10		0.11	10	72	
67254	ROSE VALLEY	60675	43800	360659	5348163	17.4	Y	GW	10	30	110		0.38	100	142	
67253	ROSE VALLEY	60700	43800	360684	5348158	13.0	Y	LGW	-5	25	95		0.07	40		
67252	ROSE VALLEY	60725	43800	360708	5348153	12.4	N	LBG	35	275	90		0.31	10	478	
67251	ROSE VALLEY	60750	43800	360733	5348149	9.5	?	DG	25	175	4100		1.84	10	469	
67250	ROSE VALLEY	60775	43800	360757	5348144	12.0	?	LG	10	30	20		0.36	20	522	
67249	ROSE VALLEY	60800	43800	360782	5348139	9.4		GW	5	35	75		0.84	160	123	
67248	ROSE VALLEY	60825	43800	360806	5348134	10.6	N	DG	35	70	550		2.14	40	499	
67247	ROSE VALLEY	60850	43800	360831	5348130	16.9	Y	DG	10	25	30		0.93	110	122	
67293	ROSE VALLEY	60875	43800	360855	5348125	40.8	Y	G	5	10	85		1.39	10	158	
67244	ROSE VALLEY	60900	43800	360880	5348120	20.2	Y	GW	10	60	70		1.14	145	57	
67264	ROSE VALLEY	60925	43800	360905	5348115	10.7	Y	GW	-5	130	125		0.36	225	68	
67265	ROSE VALLEY	60950	43800	360929	5348110	1.6	Y	DG	10	50	195		2.34	350	153	
67266	ROSE VALLEY	60975	43800	360954	5348106	2.6	Y	GW	5	25	160		1.39	300	77	
67267	ROSE VALLEY	61000	43800	360978	5348101	3.0	Y	GW	5	35	360		0.55	100	31	
67268	ROSE VALLEY	61025	43800	361003	5348096	2.2	Y	GW	5	30	60		0.81	135	65	
67269	ROSE VALLEY	61050	43800	361027	5348091	4.0	Y	GW	-5	50	145		1.24	195	30	
67270	ROSE VALLEY	61075	43800	361052	5348087	8.6	Y	G	10	40	125		1.99	265	230	
67271	ROSE VALLEY	61100	43800	361076	5348082	14.3	Y	GB	-5	30	115		0.29	230		
67272	ROSE VALLEY	61125	43800	361101	5348077	8.3	N	LG	5	40	145		0.20	365	34	
67273	ROSE VALLEY	61150	43800	361125	5348072	2.5		DB	5	40	20		0.12	10	328	
67243	ROSE VALLEY	60375	44200	360465	5348634	3.0	Y	GB	10	25	20		1.49	15	581	
67242	ROSE VALLEY	60400	44200	360489	5348629	3.4	Y	GB	30	35	30		0.88	35	651	
67241	ROSE VALLEY	60425	44200	360514	5348624	4.7	Y	GB	15	35	140		2.44	110	630	
67240	ROSE VALLEY	60450	44200	360538	5348619	2.2	Y	GB	20	65	70		1.64	55	844	
67239	ROSE VALLEY	60475	44200	360563	5348614	5.8	Y	LG	30	55	40		1.09	30	1280	

046049

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

67238	ROSE VALLEY	60500	44200	360587	5348610	2.2	Y	DG	40	65	300		2.19	110	776
67237	ROSE VALLEY	60525	44200	360612	5348605	2.3	Y	WNB	35	60	55		11.44	40	730
67236	ROSE VALLEY	60550	44200	360636	5348600	3.2	Y	NB	45	70	30		6.09	20	759
67235	ROSE VALLEY	60575	44200	360661	5348595	4.8	Y	LG	25	55	50		1.75	75	821
67234	ROSE VALLEY	60600	44200	360686	5348591	6.2	Y	DG	20	40	35		1.54	75	702
67300	ROSE VALLEY	60625	44200	360710	5348586	2.0	N	W	15	-5	-5		0.05		320
67299	ROSE VALLEY	60650	44200	360735	5348581	12.0	Y	G	5	20	60		0.35	90	
67298	ROSE VALLEY	60675	44200	360759	5348576	18.8	Y	GW	20	30	130		0.90	165	25
67297	ROSE VALLEY	60700	44200	360784	5348571	20.2	Y	LGW	10	40	85		0.28	250	
67296	ROSE VALLEY	60725	44200	360808	5348567	19.8	Y	G	50	135	1050		1.93	5	260
67295	ROSE VALLEY	60750	44200	360833	5348562	19.4	Y	LGW	5	25	90		0.28	130	97
67231	ROSE VALLEY	60775	44200	360857	5348557	19.2	Y	GW	10	40	195		0.34	115	101
67228	ROSE VALLEY	60800	44200	360882	5348552	12.7	Y	G	5	25	20		0.65	110	71
67227	ROSE VALLEY	60825	44200	360906	5348548	20.8	Y	GW	5	20	30		1.04	190	91
67226	ROSE VALLEY	60850	44200	360931	5348543	11.2	Y	GW	-5	15	30		0.27	40	16
67225	ROSE VALLEY	60875	44200	360955	5348538	1.6	Y	GW	5	55	260		0.88	385	59
67224	ROSE VALLEY	60900	44200	360980	5348533	6.1	Y	GW	-5	55	75		0.87	315	76
67223	ROSE VALLEY	60925	44200	361005	5348529	5.6	Y	GW	10	105	40		1.04	160	110
67222	ROSE VALLEY	60950	44200	361029	5348524	2.2	Y	G	-5	30	35		0.28	65	
67221	ROSE VALLEY	60975	44200	361054	5348519	2.2	Y	G	-5	35	40		0.63	145	11
67220	ROSE VALLEY	61000	44200	361078	5348514	3.2	Y	G	5	40	25		0.83	90	71
67219	ROSE VALLEY	61025	44200	361103	5348509	1.0	Y	GW	5	20	20		0.53	105	139
67218	ROSE VALLEY	61050	44200	361127	5348505	1.8	Y	GW	5	25	30		0.73	100	115
67217	ROSE VALLEY	61075	44200	361152	5348500	2.0	Y	G	-5	285	250		0.65	110	69
67216	ROSE VALLEY	61100	44200	361176	5348495	1.6	Y	G	5	25	15		0.30	70	88
67215	ROSE VALLEY	61125	44200	361201	5348490	6.5	Y	DG	15	130	25		1.49	150	353
67214	ROSE VALLEY	61150	44200	361225	5348486	1.6	Y	LG	5	145	290		0.42	100	42
67213	ROSE VALLEY	61175	44200	361250	5348481	1.4	Y	GW	-5	40	40		0.38	115	29
67212	ROSE VALLEY	61200	44200	361274	5348476	0.9	Y	GW	10	40	100		0.34	95	20
67181	ROSE VALLEY	60050	44400	360303	5349178	3.8	Y	G	20	160	150		2.09	90	512
67182	ROSE VALLEY	60075	44400	360322	5349165	4.8	Y	G	15	30	100		1.34	55	457
67183	ROSE VALLEY	60100	44400	360344	5349152	1.8	Y	LBG	15	30	30		2.69	15	493
67184	ROSE VALLEY	60125	44400	360366	5349139	2.2	Y	LBG	10	15	30		1.44	20	494
67185	ROSE VALLEY	60150	44400	360387	5349126	2.4	Y	EG	15	30	35		2.84	20	524
67186	ROSE VALLEY	60175	44400	360409	5349113	3.5	Y	EG	15	30	25		1.59	15	498
67187	ROSE VALLEY	60200	44400	360430	5349101	4.7	Y	EG	15	30	50		1.19	40	500
67188	ROSE VALLEY	60225	44400	360451	5349088	3.3	Y	EG	15	30	40		2.04	55	562

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

67189	ROSE VALLEY	60250	44400	360473	5349075	2.7	Y	G	15	35	105		2.29	110	618
67190	ROSE VALLEY	60275	44400	360494	5349062	6.8	N	GB	25	80	145		0.92	35	576
67292	ROSE VALLEY	60300	44400	360516	5349049	12.6	Y	G	15	25	40		0.86	25	242
67291	ROSE VALLEY	60325	44400	360537	5349036	13.2	Y	G	20	40	40		0.87	35	719
67290	ROSE VALLEY	60350	44400	360559	5349023	11.6	Y	VARIED	15	35	35		3.49	25	779
67289	ROSE VALLEY	60375	44400	360580	5349010	8.3	Y	PUB	20	45	140		3.99	55	703
67287	ROSE VALLEY	60400	44400	360601	5348998	8.2	Y	LBG	25	25	60		2.14	25	648
67286	ROSE VALLEY	60425	44400	360623	5348985	3.2	Y	LW	25	60	40		0.41	10	461
67285	ROSE VALLEY	60450	44400	360644	5348972	0.6	Y	G	5	25	170		0.08		381
67284	ROSE VALLEY	60475	44400	360666	5348959	13.4	?	L	20	405	615		2.59	35	752
67283	ROSE VALLEY	60500	44400	360687	5348946	1.8	Y	GB	5	30	130		0.18	5	377
67282	ROSE VALLEY	60525	44400	360709	5348933	3.4	Y	B	-5	5	5		0.07	5	288
67281	ROSE VALLEY	60550	44400	360730	5348920	3.4	Y	LB	-5	10	25		0.21	5	344
67280	ROSE VALLEY	60575	44400	360751	5348907	7.8	Y	GW	5	35	100		2.54	225	108
67279	ROSE VALLEY	60600	44400	360773	5348895	21.2	Y	DGW	5	30	50		0.60	65	104
67278	ROSE VALLEY	60625	44400	360794	5348882	22.0	Y	GW	-5	40	65		0.24	75	25
67277	ROSE VALLEY	60650	44400	360816	5348869	33.6	Y	DGW	-5	60	140		0.87	65	35
67276	ROSE VALLEY	60675	44400	360837	5348856	9.8	Y	DG	10	120	550		0.62	5	294
67275	ROSE VALLEY	60700	44400	360859	5348843	13.8	N	B	30	85	595		0.52	5	230
67198	ROSE VALLEY	60725	44400	360880	5348830	8.0	Y	GW	5	30	50		0.43	80	73
67197	ROSE VALLEY	60750	44400	360901	5348817	3.4	Y	G	5	20	35		0.32	55	43
67196	ROSE VALLEY	60775	44400	360923	5348804	8.2	?	LG	10	55	75		1.44	240	141
67195	ROSE VALLEY	60800	44400	360944	5348792		Y	GW	15	85	125		1.14	140	72
67199	ROSE VALLEY	60825	44400	360966	5348779	1.0	Y	G	10	25	35		0.35	40	37
67200	ROSE VALLEY	60850	44400	360987	5348766	1.0	Y	LG	20	35	70		0.91	90	167
67201	ROSE VALLEY	60875	44400	361009	5348753	1.5	Y	GW	5	35	155		0.43	310	37
67202	ROSE VALLEY	60900	44400	361030	5348740		Y		5	130	370		0.63	375	105
67203	ROSE VALLEY	60925	44400	361051	5348727	10.7	Y	GWC	10	35	40		1.24	140	91
67204	ROSE VALLEY	60950	44400	361073	5348714	15.3	Y	GW	5	25	45		0.24	170	23
67205	ROSE VALLEY	60975	44400	361094	5348701	8.4	Y	GW	5	20	50		0.42	225	30
67206	ROSE VALLEY	61000	44400	361116	5348688	3.5	Y	VW	10	30	120		0.37	520	
67207	ROSE VALLEY	61025	44400	361137	5348676	2.8	Y	DGW	5	20	20		0.79	150	68
67208	ROSE VALLEY	61050	44400	361159	5348663	5.6	Y	DGW	5	20	45		0.22	50	13
67209	ROSE VALLEY	61075	44400	361180	5348650	1.2	Y	G	25	25	30		0.41	85	37
67210	ROSE VALLEY	61100	44400	361201	5348637	0.8	Y	GW	5	100	65		0.79	175	52
67211	ROSE VALLEY	61125	44400	361222	5348624	0.6	Y	G	-5	30	255		0.57	170	57
61873	BAURA	60600	44100	360519	5349322	14.3	?	DG	-5	150	765		0.55	175	29

046051

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

61874	BAURA	60600	44125	360543	5349326	9.0 Y	DG	5	115	625		0.53	185	65
61875	BAURA	60600	44150	360568	5349329	3.8 Y	DG	-5	675	2285		1.67	355	27
61876	BAURA	60600	44175	360593	5349332	5.0 Y	LG	-5	80	520		1.27	265	19
	BAURA	60600	44200	360618	5349335									
61878	BAURA	60600	44225	360643	5349338	2.0 ?	G	-5	-5	35		0.49	275	21
61879	BAURA	60600	44250	360668	5349341	9.0 ?	GLB	-5	15	530		0.65	240	53
61880	BAURA	60600	44275	360692	5349344	11.5 Y	LGB	5	30	145		0.50	110	52
61811	BAURA	60600	44300	360717	5349347	11.7 Y	DGW	20	30	50		1.80	230	176
61810	BAURA	60600	44325	360742	5349350	1.2 Y	LG	-5	40	45		0.37	235	
61734	BAURA	60200	44350	360718	5349750	11.2 N	DG	60	7900	14500	1.5	3.42	900	284
61809	BAURA	60600	44350	360767	5349353	0.8 ?	LGB	10	80	120		0.47	205	16
61733	BAURA	60200	44375	360743	5349753	9.8 N	DG	20	1220	1120		2.17	25	280
61808	BAURA	60600	44375	360792	5349356	1.0 Y	LG	5	45	110		0.64	165	27
61732	BAURA	60200	44400	360768	5349756	8.6 N	GB	15	80	1335		2.07	30	417
61807	BAURA	60600	44400	360816	5349359	7.0 Y	LGB	10	55	185		0.44	335	
61731	BAURA	60200	44425	360792	5349759	9.8 N	GB	10	190	2435		3.42	5	309
61806	BAURA	60600	44425	360841	5349362	4.7 Y	G	10	20	40		0.60	240	39
61730	BAURA	60200	44450	360817	5349762	20.0 N	GDB	10	-5	545		1.92	15	337
61805	BAURA	60600	44450	360866	5349365	4.0 Y	G	20	25	35		1.25	205	90
61729	BAURA	60200	44475	360842	5349765	22.6 N	G	5	50	80	0.5	0.36	15	85
61804	BAURA	60600	44475	360891	5349368	9.6 Y	DG	10	30	50		0.46	145	18
61728	BAURA	60200	44500	360867	5349768	3.6 N	B	5	-5	-5		0.10	5	212
61803	BAURA	60600	44500	360916	5349371	4.0 Y	G	15	20	35		2.45	560	22
61727	BAURA	60200	44525	360892	5349771	4.2 ?	BDG	70	1220	-5		0.11		189
61802	BAURA	60600	44525	360940	5349374	10.6 Y	LGW	10	20	65		0.18	60	15
61726	BAURA	60200	44550	360917	5349774	20.0 Y	G	5	-5	55		1.27	210	45
61700	BAURA	60600	44550	360965	5349377	7.2 Y	LGB	5	80	435		0.12	110	14
61725	BAURA	60200	44575	360941	5349777	3.2 Y	G	5	-5	65		0.12	75	18
61699	BAURA	60600	44575	360990	5349380	3.3 Y	GW	10	15	80		0.59	125	39
61724	BAURA	60200	44600	360966	5349780	10.2 Y	DG	5	30	220		0.59	85	47
61698	BAURA	60600	44600	361015	5349383	2.6 Y	G	15	20	35		1.35	195	48
61723	BAURA	60200	44625	360991	5349783	8.7 ?	DG	5	-5	-5		0.66	100	61
61697	BAURA	60600	44625	361040	5349386	9.8 Y	GW	15	90	335		0.37	100	58
61722	BAURA	60200	44650	361016	5349787	7.2 Y	G	5	-5	100		0.85	250	43
61696	BAURA	60600	44650	361065	5349389	4.6 N	LGB	5	25	70		0.24	140	
61721	BAURA	60200	44675	361041	5349790	2.3 Y	G	10	-5	120		0.66	170	94
61695	BAURA	60600	44675	361089	5349393	1.8 Y	LG	5	55	120		0.15	80	12

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

61720	BAURA	60200	44700	361065	5349793	1.8	Y	LGW	-5	205	135		0.24	300	13
61694	BAURA	60600	44700	361114	5349396	2.3	Y	LGW	10	45	190		0.28	100	37
61900	BAURA	60200	44725	361090	5349796	0.8	Y	LG	5	15	350		0.85	160	65
61693	BAURA	60600	44725	361139	5349399	3.5	Y	LGW	20	30	50		0.20	105	20
61899	BAURA	60200	44750	361115	5349799	1.0	Y	GW	5	115	245		0.56	95	37
61692	BAURA	60600	44750	361164	5349402	5.0	Y	DG	5	25	35		0.35	80	20
61898	BAURA	60200	44775	361140	5349802	1.4	Y	DG	5	-5	35		1.57	170	112
61691	BAURA	60600	44775	361189	5349405	2.4	Y	LGW	5	75	170		0.46	100	
61897	BAURA	60200	44800	361165	5349805	1.2	Y	DG	5	115	710		1.82	250	52
61896	BAURA	60225	44800	361168	5349780	1.2	Y	G	5	-5	15		0.49	135	25
61895	BAURA	60250	44800	361171	5349755	1.4	Y	DG	5	-5	155		0.58	110	50
61894	BAURA	60275	44800	361174	5349730	0.8	Y	G	5	-5	40		0.17	45	19
61892	BAURA	60300	44800	361177	5349706	1.8	?	DG	-5	-5	10		0.19	60	64
61891	BAURA	60325	44800	361180	5349681	2.7	Y	DGW	5	-5	95		0.30	115	12
61889	BAURA	60350	44800	361183	5349656	6.0	Y	DG	-5	-5	80		0.50	230	14
61888	BAURA	60375	44800	361186	5349631	2.2	Y	DG	5	-5	60		0.28	80	19
61887	BAURA	60400	44800	361189	5349606	2.8	Y	LG	-5	-5	85		0.08	120	16
61886	BAURA	60425	44800	361192	5349581	2.0	?	LG	5	-5	95		0.14	65	13
61885	BAURA	60450	44800	361195	5349557	1.8	Y	DGW	5	-5	45		0.53	75	28
61884	BAURA	60475	44800	361198	5349532	1.6	Y	GW	5	-5	60		0.34	135	16
61883	BAURA	60500	44800	361201	5349507	1.8	Y	G	5	-5	15		0.55	95	39
61882	BAURA	60525	44800	361204	5349482	2.8	Y	DG	-5	-5	40		0.60	205	12
61881	BAURA	60550	44800	361207	5349457	4.2	Y	DG	5	-5	10		0.71	60	24
61690	BAURA	60575	44800	361210	5349433	3.4	Y	GW	10	70	200		0.28	150	32
61688	BAURA	60600	44800	361213	5349408	6.8	Y	DG	5	25	70		0.20	115	26
61687	BAURA	60625	44800	361216	5349383	5.3	Y	LGB	10	265	160		0.31	130	29
61686	BAURA	60650	44800	361220	5349358	3.2	Y	G	5	15	35		0.37	80	16
61685	BAURA	60675	44800	361223	5349333	1.8	Y	G	10	20	40		0.89	155	68
61684	BAURA	60700	44800	361226	5349309	1.2	Y	DG	5	30	50		0.65	120	31
61683	BAURA	60725	44800	361229	5349284	2.4	Y	G	5	15	20		1.25	170	58
61682	BAURA	60750	44800	361232	5349259	1.6	Y	G	5	15	35		0.36	75	20
61812	BAURA	60775	44800	361235	5349234	5.7	Y	LGW	5	20	135		0.81	175	60
61813	BAURA	60800	44800	361238	5349209	2.2	Y	LGW	5	15	150		0.27	65	18
61814	BAURA	60825	44800	361241	5349184	2.0	Y	G	5	25	140		0.74	100	43
61815	BAURA	60850	44800	361244	5349160	6.3	Y	LG	5	15	145		0.33	80	25
61816	BAURA	60875	44800	361247	5349135	7.4	Y	LG	10	40	205		0.72	135	17
61817	BAURA	60900	44800	361250	5349110	10.2	Y	LG	15	30	240		0.55	115	38

046053

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

61818	BAURA	60925	44800	361253	5349085	5.6	Y	LG	5	20	170	0.37	80	
61819	BAURA	60950	44800	361256	5349060	2.0	Y	LG	5	20	145	0.25	50	
61820	BAURA	60975	44800	361259	5349036	1.7	Y	G	15	30	175	0.79	110	21
61821	BAURA	61000	44800	361262	5349011	4.2	Y	GW	15	30	180	0.72	85	10
61822	BAURA	61025	44800	361265	5348986	3.7	Y	LG	10	20	145	0.54	85	23
61823	BAURA	61050	44800	361268	5348961	2.4	Y	WLG	10	20	145	0.20	60	12
61824	BAURA	61075	44800	361271	5348936	7.5	Y	WLG	10	60	185	0.42	90	16
61825	BAURA	61100	44800	361274	5348911	13.9	Y	GW	15	15	140	0.41	95	17
61826	BAURA	61125	44800	361277	5348887	5.0	Y	DBU	15	40	310	0.77	10	190
61827	BAURA	61150	44800	361280	5348862	2.6	Y	DGB	25	300	1090	0.40	5	263
61828	BAURA	61175	44800	361284	5348837	0.8	Y	GW	5	10	105	0.15	5	263
61829	BAURA	61200	44800	361287	5348812	9.8	N	DG	20	45	1190	2.90	5	239
61830	BAURA	61225	44800	361290	5348787	5.8	Y	DG	10	110	540	0.72	400	196
61832	BAURA	61250	44800	361293	5348763	14.8	Y	LGW	5	30	165	0.77	390	30
61833	BAURA	61275	44800	361296	5348738	9.0	Y	LG	10	50	215	0.50	135	27
61834	BAURA	61300	44800	361299	5348713	3.4	?	LB	5	50	150	0.82	5	231
61835	BAURA	61325	44800	361302	5348688	0.7	?	LB	-5	5	95	0.07	5	129
61836	BAURA	61350	44800	361305	5348663	9.2	Y	G	5	20	180	0.71	135	20
61837	BAURA	61375	44800	361308	5348639	0.6	Y	DG	-5	20	125	0.83	150	43
61838	BAURA	61400	44800	361311	5348614	1.2	Y	GW	5	25	210	1.30	310	28
61839	BAURA	61425	44800	361314	5348589	4.2	Y	G	5	25	175	0.74	180	
61840	BAURA	61450	44800	361317	5348564	1.2	Y	WLG	-5	190	240	0.52	160	
62589	BAURA	61475	44800	361320	5348539	0.6	Y	G	5	35	115	0.82	115	24
61842	BAURA	61500	44800	361323	5348514	0.6	Y	DG	15	25	220	2.20	190	101
61843	BAURA	61525	44800	361326	5348490	1.2	Y	LGLR	10	40	300	0.52	240	
62587	BAURA	61550	44800	361329	5348465	0.6	Y	BG	10	45	195	0.63	310	
61845	BAURA	61575	44800	361332	5348440	11.2	Y	G	-5	85	250	0.56	230	
61846	BAURA	61600	44800	361335	5348415	10.8	Y	BG	5	75	555	1.40	410	
61847	BAURA	61625	44800	361338	5348390	17.2	Y	DG	15	55	310	1.20	320	73
61848	BAURA	61650	44800	361341	5348366	6.3	N	GB	115	10	155	0.14	15	22
61849	BAURA	61675	44800	361344	5348341	1.5	N	W	10	-5	80	0.07	5	
61681	BAURA	60575	44801	360971	5349277	2.8	Y	DG	5	5	20	0.90	130	54
61680	BAURA	60600	44801	360993	5349265	1.4	Y	LG	5	15	20	0.53	110	30
61679	BAURA	60625	44801	361014	5349252	1.2	Y	LG	5	15	25	0.30	90	19
61678	BAURA	60650	44801	361036	5349239	1.0	Y	LG	5	25	20	0.42	75	12
61675	BAURA	60075	45200	361544	5349984	18.6	Y	DG	10	30	2700	1.65	190	100
61674	BAURA	60100	45200	361548	5349959	15.2	?	DG	5	20	50	0.65	200	33

046054

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

61673	BAURA	60125	45200	361551	5349934	9.6 Y	DG	45	425	260		1.80	45	336
61672	BAURA	60150	45200	361554	5349909	4.6 Y	DG	5	30	60		1.50	95	61
61671	BAURA	60175	45200	361557	5349885	2.0 Y	DG	5	30	40		0.43	150	33
61670	BAURA	60200	45200	361560	5349860	4.8 Y	G	5	20	30		0.58	160	12
61669	BAURA	60225	45200	361563	5349835	1.8 Y	DG	5	35	30		0.48	85	15
61668	BAURA	60250	45200	361566	5349810	1.7 Y	G	5	15	35		0.34	80	
61667	BAURA	60275	45200	361569	5349785	1.7 Y	G	5	15	40		0.17	60	
61666	BAURA	60300	45200	361572	5349761	1.4 Y	DG	5	20	50		0.31	45	10
61665	BAURA	60325	45200	361575	5349736	1.5 Y	G	5	20	35		0.75	130	20
61664	BAURA	60350	45200	361578	5349711	1.6 Y	G	5	15	25		1.25	95	27
61663	BAURA	60375	45200	361581	5349686	1.5 Y	DG	5	15	20		0.62	100	34
61662	BAURA	60400	45200	361584	5349661	0.8 Y	G	5	20	35		0.56	130	17
61661	BAURA	60425	45200	361587	5349636	1.3 Y	G	5	25	65		0.28	75	29
61660	BAURA	60450	45200	361590	5349612	2.8 Y	G	5	20	35		0.55	115	55
61659	BAURA	60475	45200	361593	5349587	3.4 Y	G	5	585	190		0.65	245	45
61658	BAURA	60500	45200	361596	5349562	10.3 Y	DG	15	15	35		1.65	35	459
61657	BAURA	60525	45200	361599	5349537	20.6 ?	DG	20	25	120		1.60	40	501
61655	BAURA	60550	45200	361602	5349512	14.3 Y	G	15	135	325		2.25	350	210
61654	BAURA	60575	45200	361605	5349488	11.3 Y	DG	5	125	140		0.46	190	30
61653	BAURA	60600	45200	361608	5349463	8.6 Y	DG	10	105	85		0.45	170	90
61652	BAURA	60625	45200	361611	5349438	6.8 Y	DG	5	20	35		0.58	95	58
61651	BAURA	60650	45200	361615	5349413	3.3 Y	LGB	5	25	45		0.25	90	
61650	BAURA	60675	45200	361618	5349388	7.0 Y	LG	5	40	70		0.19	105	
61649	BAURA	60700	45200	361621	5349364	3.7 Y	DG	5	15	35		0.20	55	
61648	BAURA	60725	45200	361624	5349339	1.0 Y	G	5	10	85		0.64	140	40
61647	BAURA	60750	45200	361627	5349314	1.5 Y	G	5	15	25		0.84	200	46
61646	BAURA	60775	45200	361630	5349289	3.7 Y	DG	15	20	130		2.15	315	102
61645	BAURA	60800	45200	361633	5349264	1.8 Y	BLG	10	20	25		0.68	115	65
61719	BAURA	60825	45200	361636	5349239	10.6 Y	DG	10	25	35		0.94	200	27
60429	BAURA	60850	45200	361639	5349215	12.8 ?		25	1925	4575		3.39	125	202
60430	BAURA	60875	45200	361642	5349190	9.6 ?	N	25	1575	3900		2.06	50	253
60431	BAURA	60900	45200	361645	5349165	6.2 Y		-5	50	50		0.23	50	14
60432	BAURA	60925	45200	361648	5349140	7.8 Y	GW	-5	50	50		0.44	125	27
60433	BAURA	60950	45200	361651	5349115	9.4 Y	GW	-5	50	150		0.32	75	22
60434	BAURA	60975	45200	361654	5349091	7.8 Y	GW	75	50	75		0.27	50	10
60435	BAURA	61000	45200	361657	5349066	5.6 Y	GLW	-5	225	150		0.67	150	23
60436	BAURA	61025	45200	361660	5349041	7.2 Y	GW	-5	50	50		0.61	125	27

046055

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

60437	BAURA	61050	45200	361663	5349016	7.2 Y	LGW	-5	50	100		0.26	50	19
60438	BAURA	61075	45200	361666	5348991	2.5 Y		-5	25	75		1.84	175	99
60439	BAURA	61100	45200	361669	5348966	2.5 Y	G	-5	50	75		0.99	125	59
60440	BAURA	61125	45200	361672	5348942	3.0 Y	GW	-5	50	25		0.64	150	33
60441	BAURA	61150	45200	361675	5348917	4.0 Y	DGW	-5	25	25		1.01	300	36
60442	BAURA	61175	45200	361679	5348892	4.3 Y	DGW	-5	25	25		0.12	25	10
60443	BAURA	61200	45200	361682	5348867	6.0 Y	LG	-5	25	25		0.36	75	18
61872	BAURA	61250	45200	361688	5348818	10.0 Y	LG	-5	15	160		0.55	135	13
61871	BAURA	61275	45200	361691	5348793	2.2 Y	GW	5	25	570		1.25	235	45
61870	BAURA	61300	45200	361694	5348768	11.2 Y	G	5	10	120		1.85	445	101
61869	BAURA	61325	45200	361697	5348743	1.1 Y	WDG	5	20	155		0.34	215	34
61868	BAURA	61350	45200	361700	5348718	2.0 Y	DG	-5	20	195		0.40	125	34
61867	BAURA	61375	45200	361703	5348694	1.5 Y	DG	5	10	170		0.63	220	31
61866	BAURA	61400	45200	361706	5348669	1.3 Y	DG	-5	15	85		0.35	90	
61865	BAURA	61425	45200	361709	5348644	2.0 Y	G	5	5	95		0.77	255	27
61864	BAURA	61450	45200	361712	5348619	2.1 Y	G	10	25	145		0.31	90	33
61863	BAURA	61475	45200	361715	5348594	5.0 Y	DG	5	10	25		0.55	80	23
61862	BAURA	61500	45200	361718	5348569	8.7 Y	DG	15	15	145		2.10	555	46
61860	BAURA	61525	45200	361721	5348545	13.6 N	N	45	65	635		2.90	20	261
61850	BAURA	61550	45200	361724	5348520	7.2 Y	DG	15	20	145		0.74	190	18
61851	BAURA	61575	45200	361727	5348495	4.3 Y	DG	20	15	120		2.10	120	63
61852	BAURA	61600	45200	361730	5348470	3.2 Y	DG	15	10	125		1.40	295	39
61853	BAURA	61625	45200	361733	5348445	3.6 Y	DG	5	10	310		0.36	85	24
61854	BAURA	61650	45200	361736	5348421	2.7 Y	G	10	15	155		0.43	100	12
61855	BAURA	61675	45200	361739	5348396	3.1 Y	LG	15	10	125		0.61	120	66
61856	BAURA	61700	45200	361742	5348371	3.4 Y	G	10	15	165		0.88	180	26
61857	BAURA	61725	45200	361746	5348346	4.2 Y	G	15	20	160		1.45	355	46
61858	BAURA	61750	45200	361749	5348321	12.6 ?	LGB	25	65	470		2.10	835	67
61859	BAURA	61775	45200	361752	5348297	6.2 ?	LGB	10	90	705		2.90	350	
61717	BAURA	60500	45600	362127	5349594	8.9 Y	LGB	85	1750	250		3.50	5	619
61716	BAURA	60525	45600	362122	5349570	7.8 Y	LBG	15	250	1450		1.90	195	183
61715	BAURA	60550	45600	362117	5349545	12.4 Y	DG	10	20	160		1.10	265	33
61714	BAURA	60575	45600	362113	5349520	2.2 Y	GW	5	25	90		0.45	215	
62590	BAURA	60600	45600	362108	5349496	0.7 N	GN	10	3690	1850		1.54	45	132
61712	BAURA	60625	45600	362103	5349471	1.0 Y	DGW	5	25	30		0.68	220	61
61711	BAURA	60650	45600	362098	5349447	2.6 Y	LG	-5	55	40		0.50	235	
61710	BAURA	60675	45600	362094	5349422	1.5 Y	G	-5	15	35		0.44	130	14

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

61709	BAURA	60700	45600	362089	5349398	1.6	Y	LGW	5	25	80		0.46	225	21
61708	BAURA	60725	45600	362084	5349373	1.2	Y	G	5	15	20		0.57	70	87
61707	BAURA	60750	45600	362079	5349349	1.7	Y	DGW	10	50	140		0.63	105	37
61706	BAURA	60775	45600	362075	5349324	6.6	Y	DG	20	25	55		1.60	40	459
61705	BAURA	60800	45600	362070	5349300	6.7	Y	B	5	30	20		0.37	15	390
61704	BAURA	60825	45600	362065	5349275	23.3	Y	G	-5	190	235		0.53	245	18
61703	BAURA	60850	45600	362060	5349250	9.0	Y	DG	5	140	145		1.55	330	14
61702	BAURA	60875	45600	362055	5349226	24.8	Y	DG	10	40	75		0.36	75	27
61701	BAURA	60900	45600	362051	5349201	15.6	N	DG	35	4150	3100	2.0	6.70	20	409
67303	BAURA	60950	45600	362041	5349152	8.2	Y	LGW	5	35	40		0.38	40	
67304	BAURA	60975	45600	362036	5349128	23.0	Y	GW	5	220	180		0.39	85	
67305	BAURA	61000	45600	362032	5349103	3.8	Y	G	5	665	135		0.23	120	
67306	BAURA	61025	45600	362027	5349079	4.2	Y	G	5	545	450		0.25	95	
67308	BAURA	61050	45600	362022	5349054	21.2	Y	G	5	15	-5		0.89	260	25
67309	BAURA	61075	45600	362017	5349030	10.8	Y	G	5	10	15		0.30	105	
67310	BAURA	61100	45600	362013	5349005	4.6	Y	GW	10	30	250		0.60	220	25
67311	BAURA	61125	45600	362008	5348981	13.0	Y	GW	10	25	15		0.91	125	20
67312	BAURA	61150	45600	362003	5348956	3.4	Y	G	5	15	5		0.57	110	
67313	BAURA	61175	45600	361998	5348931	5.0	Y	G	5	15	90		0.85	180	
67314	BAURA	61200	45600	361993	5348907	7.0	Y	GW	15	25	70		1.03	180	45
67315	BAURA	61225	45600	361989	5348882	12.6	Y	GW	10	35	130		1.08	210	20
67316	BAURA	61250	45600	361984	5348858	9.2	Y	GW	15	20	80		1.53	220	290
67317	BAURA	61275	45600	361979	5348833	2.8	Y	LG	5	10	45		0.46	175	
67318	BAURA	61300	45600	361974	5348809	2.0	Y	GW	10	180	75		0.59	150	50
67319	BAURA	61325	45600	361970	5348784	3.2	Y	GW	10	10	30		1.83	425	45
67320	BAURA	61350	45600	361965	5348760	2.0	Y	LG	10	40	100		0.45	150	24
67321	BAURA	61375	45600	361960	5348735	2.1	Y	GW	10	10	50		0.44	85	
67322	BAURA	61400	45600	361955	5348711	2.6	Y	GW	5	5	30		0.32	80	
67323	BAURA	61425	45600	361951	5348686	2.0	Y	GW	10	20	90		0.40	95	
67324	BAURA	61450	45600	361946	5348662	7.0	Y	DG	5	15	20		0.50	95	
67325	BAURA	61475	45600	361941	5348637	23.2	Y	G	10	10	40		0.98	105	60
67326	BAURA	61500	45600	361936	5348612	18.4	Y	G	10	10	30		1.48	225	190
67327	BAURA	61525	45600	361931	5348588	13.0	Y	GW	10	20	25		0.61	160	
67328	BAURA	61550	45600	361927	5348563	4.8	Y	GW	10	15	15		0.77	120	30
67329	BAURA	61575	45600	361922	5348539	4.6	Y	GW	5	5	-5		0.38	85	
67330	BAURA	61600	45600	361917	5348514	4.0	Y	GW	10	15	55		0.21	80	
67331	BAURA	61625	45600	361912	5348490	3.1	Y	LG	10	10	15		0.37	75	

046057

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

67332	BAURA	61650	45600	361908	5348465	5.7	Y	GW	5	5	20		0.13	40	
67333	BAURA	61675	45600	361903	5348441	10.3	Y	GW	5	5	20		0.39	110	
67334	BAURA	61700	45600	361898	5348416	2.9	Y	GW	5	5	60		0.32	75	
67336	BAURA	61725	45600	361893	5348392	1.2	Y	G	5	15	-5		0.68	140	30
67337	BAURA	61750	45600	361889	5348367	4.5	Y	GW	5	10	-5		1.13	260	30
67338	BAURA	61775	45600	361884	5348342	2.7	Y	GW	5	15	-5		0.72	160	
67339	BAURA	61800	45600	361879	5348318	2.5	Y	GW	5	20	40		0.64	210	
67340	BAURA	61850	45600	361869	5348269	3.0	Y	LGW	10	10	20		0.60	130	
67341	BAURA	61875	45600	361865	5348244	5.7	Y	LGW	15	10	85		2.38	590	
67342	BAURA	61900	45600	361860	5348220	11.7	Y	LWG	10	145	195		2.13	580	
67343	BAURA	61925	45600	361855	5348195	11.4	Y	GW	10	10	40		0.55	115	
67344	BAURA	61950	45600	361850	5348171	5.8	N	GB	15	95	3150		2.73	5	140
61642	BAURA	60700	46000	362472	5349324	3.2	Y	B	10	40	-5	0.5	0.18	20	58
61641	BAURA	60725	46000	362467	5349299	3.6	Y	DG	15	190	60		19.50	80	182
61640	BAURA	60750	46000	362462	5349274	6.2	Y	DG	10	2600	1885		1.70	335	54
61639	BAURA	60775	46000	362457	5349250	6.9	Y	DG	15	40	50		1.75	235	159
61638	BAURA	60800	46000	362453	5349225	5.6	Y	DG	15	55	50		1.50	225	132
61637	BAURA	60825	46000	362448	5349201	7.3	Y	DGW	5	40	10		0.30	85	14
61636	BAURA	60850	46000	362443	5349176	1.4	Y	G	15	25	-5		0.69	115	75
61635	BAURA	60875	46000	362438	5349151	1.3	Y	DGW	10	40	35		0.63	140	40
61634	BAURA	60900	46000	362433	5349127	6.0	Y	GW	10	55	20		0.33	235	13
61633	BAURA	60925	46000	362429	5349102	5.7	Y	GW	15	45	35		0.34	130	23
61632	BAURA	60950	46000	362424	5349078	4.5	Y	DG	15	30	-5		0.68	145	51
61631	BAURA	60975	46000	362419	5349053	21.0	Y	DG	25	75	160		1.75	50	435
61630	BAURA	61000	46000	362414	5349029	8.0	Y	G	35	85	155		1.95	60	465
61628	BAURA	61025	46000	362410	5349004	2.9	Y	LB	5	320	-5	0.5	0.40	25	300
61627	BAURA	61050	46000	362405	5348980	1.0	Y	LB	5	200	-5	0.5	0.40	25	325
61626	BAURA	61075	46000	362400	5348955	1.7	Y	GB	20	55	-5		0.77	40	409
61625	BAURA	61100	46000	362395	5348931	2.3	Y	GLB	10	90	-5		0.89	45	357
61624	BAURA	61125	46000	362391	5348906	17.3	Y	GW	10	35	60		0.43	150	21
61623	BAURA	61150	46000	362386	5348882	16.8	Y	DGW	10	35	15		0.55	130	23
61622	BAURA	61175	46000	362381	5348857	18.2	Y	BGN	25	180	10		0.56	35	443
61621	BAURA	61200	46000	362376	5348832	14.2	Y	LG	15	35	5		0.57	110	38
61620	BAURA	61225	46000	362371	5348808	9.7	Y	LGW	10	60	240		0.58	90	23
61619	BAURA	61250	46000	362367	5348783	2.8	Y	G	10	40	35		0.36	60	
61618	BAURA	61275	46000	362362	5348759	3.2	Y	GW	10	95	120		0.46	320	
61617	BAURA	61300	46000	362357	5348734	2.0	Y	G	5	50	100		0.62	180	10

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

61616	BAURA	61325	46000	362352	5348710	3.0	Y	LGB	5	40	-5		0.33	25	190
61615	BAURA	61350	46000	362348	5348685	7.0	Y	DGW	15	35	40		3.20	300	189
61614	BAURA	61375	46000	362343	5348661	16.0	Y	LGW	15	130	115		0.43	225	15
61613	BAURA	61400	46000	362338	5348636	12.9	Y	DG	10	60	105		0.90	155	38
61612	BAURA	61425	46000	362333	5348612	16.0	Y	SKG	30	275	1085		10.50	50	307
61611	BAURA	61450	46000	362329	5348587	8.0	Y	DG	10	30	30		0.65	115	25
61610	BAURA	61475	46000	362324	5348562	4.6	Y	LGW	10	35	65		0.65	145	26
61609	BAURA	61500	46000	362319	5348538	2.8	Y	DGW	10	30	70		0.53	105	15
61608	BAURA	61525	46000	362314	5348513	16.2	Y	DG	15	35	55		0.97	190	42
61607	BAURA	61550	46000	362309	5348489	4.8	Y	DGW	15	30	90		0.46	155	21
61606	BAURA	61575	46000	362305	5348464	4.8	Y	DG	10	25	30		0.32	105	13
61605	BAURA	61600	46000	362300	5348440	3.6	Y	GW	10	25	40		0.52	120	21
61604	BAURA	61625	46000	362295	5348415	5.2	Y	G	15	40	35		0.82	110	36
61601	BAURA	61650	46000	362290	5348391	2.6	Y	GW	5	20	-5		0.49	100	15
61600	BAURA	61675	46000	362286	5348366	5.6	Y	G	10	25	40		0.48	130	
61599	BAURA	61700	46000	362281	5348342	2.8	Y	GW	10	30	15		0.87	145	29
61598	BAURA	61725	46000	362276	5348317	1.5	Y	GW	20	40	115		1.20	250	51
61597	BAURA	61750	46000	362271	5348293	1.6	Y	G	15	30	40		1.70	285	72
61596	BAURA	61775	46000	362266	5348268	1.2	Y	GN	25	35	185		2.50	130	514
61571	BAURA	61800	46000	362262	5348243	1.7	Y	G	5	40	65		1.20	225	59
61572	BAURA	61825	46000	362257	5348219	1.4	Y	GW	20	280	130		2.05	230	102
61573	BAURA	61850	46000	362252	5348194	7.8	Y	GW	5	40	80		0.50	160	17
61574	BAURA	61875	46000	362247	5348170	7.0	Y	LGW	5	45	65		0.49	115	39
61575	BAURA	61900	46000	362243	5348145	5.0	Y	LGW	10	45	85		0.65	105	33
61576	BAURA	61925	46000	362238	5348121	10.4	Y	GW	5	45	100		0.89	110	231
61577	BAURA	61950	46000	362233	5348096	8.8	Y	G	10	35	245		0.59	130	11
61578	BAURA	61975	46000	362228	5348072	9.7	Y	LG	5	45	950		17.50	3500	37
61579	BAURA	62000	46000	362224	5348047	12.3	N	LGB	45	100	60		1.35	20	576
61580	BAURA	62025	46000	362219	5348023	7.2	Y	GGN	25	30	75		3.05	120	541
61581	BAURA	62050	46000	362214	5347998	8.7	Y	LG	40	45	85		0.97	45	620
61582	BAURA	62075	46000	362209	5347974	5.6	Y	KTB	35	40	170		2.05	40	567
61583	BAURA	62100	46000	362204	5347949	6.8	Y	GB	20	55	50	0.5	2.00	35	497
61584	BAURA	62125	46000	362200	5347924	5.2	Y	LGGN	20	70	65		2.15	110	548
61585	BAURA	62150	46000	362195	5347900	4.8	Y	BG	45	50	65		1.75	75	577
61586	BAURA	62175	46000	362190	5347875	1.6	Y	B	20	40	15		3.60	110	601
61587	BAURA	62200	46000	362185	5347851	1.6	Y	GN	25	45	170		2.75	140	442
61588	BAURA	62225	46000	362181	5347826	0.8	Y	BG	20	45	35		2.55	115	435

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

61589	BAURA	62250	46000	362176	5347802	0.8	Y		35	50	150		2.95	140	458
61590	BAURA	62275	46000	362171	5347777	1.2	Y	GN	25	30	75		2.50	115	437
61591	BAURA	62300	46000	362166	5347753	1.3	Y		15	30	45	0.5	1.70	45	487
61592	BAURA	62325	46000	362162	5347728	1.0	Y	GB	20	30	25		2.35	55	425
61593	BAURA	62350	46000	362157	5347704	2.0	Y	GB	20	35	30	0.5	3.60	60	424
61594	BAURA	62375	46000	362152	5347679	2.2	Y	GN	15	25	-5		2.35	90	354
61595	BAURA	62400	46000	362147	5347654	0.6	Y	GN	45	65	130		1.90	85	397
61644	BAURA	60745	46400	362867	5349204	10.2	N	BG	45	65	85		3.15	25	274
61643	BAURA	60775	46400	362862	5349180	5.8	Y	DGB	640	570	1135		2.15	25	366
61521	BAURA	60795	46400	362858	5349155	5.2	Y	DG	5	25	30		0.58	190	57
61522	BAURA	60825	46400	362853	5349131	10.3	N	DG	5	145	260		0.50	225	16
61523	BAURA	60850	46400	362848	5349106	3.7	Y	DG	5	40	330		1.70	205	87
61524	BAURA	60875	46400	362843	5349081	1.8	Y	DG	10	35	45		0.54	90	66
61525	BAURA	60900	46400	362838	5349057	1.8	Y	DG	5	35	25		0.74	175	29
61526	BAURA	60925	46400	362834	5349032	2.0	Y	G	10	25	65		1.30	195	193
61527	BAURA	60950	46400	362829	5349008	1.0	Y	DGW	5	25	30		0.40	80	29
61528	BAURA	60975	46400	362824	5348983	1.3	Y	DGW	5	45	55		0.63	150	72
61529	BAURA	61000	46400	362819	5348959	1.8	Y	DG	20	40	120		2.40	140	82
61530	BAURA	61025	46400	362815	5348934	3.2	Y	DG	20	40	125		2.20	75	397
61531	BAURA	61050	46400	362810	5348910	8.8	Y	DG	20	45	555		2.70	230	294
61533	BAURA	61075	46400	362805	5348885	24.0	Y	GW	10	670	2300		0.65	195	92
61534	BAURA	61100	46400	362800	5348861	8.8	Y	GW	20	90	470		2.25	345	175
61535	BAURA	61125	46400	362796	5348836	4.3	Y	DGW	20	95	970		1.80	585	79
61536	BAURA	61150	46400	362791	5348812	3.7	N	GB	5	230	35	0.5	0.32	15	195
61537	BAURA	61175	46400	362786	5348787	8.3	Y	GL	10	50	75		4.45	1350	38
61538	BAURA	61200	46400	362781	5348762	6.2	Y	G	5	40	30		0.55	145	14
61539	BAURA	61225	46400	362776	5348738	4.6	Y	W	5	55	80		0.75	315	
61540	BAURA	61250	46400	362772	5348713	2.8	Y	G	5	45	140		0.38	90	18
61541	BAURA	61275	46400	362767	5348689	3.2	Y	DGW	5	30	40		0.32	70	
61542	BAURA	61300	46400	362762	5348664	0.8	Y	G	10	25	160		1.45	175	111
61543	BAURA	61325	46400	362757	5348640	1.0	Y	DG	10	35	240		0.69	170	62
61544	BAURA	61350	46400	362753	5348615	0.8	Y	DGW	5	20	40		0.38	105	21
61545	BAURA	61375	46400	362748	5348591	1.0	Y	DG	10	40	260		1.35	190	33
61546	BAURA	61400	46400	362743	5348566	4.5	Y	DGW	5	80	95		0.30	85	31
61547	BAURA	61425	46400	362738	5348542	3.0	Y	DGW	5	55	55		0.60	140	15
61548	BAURA	61450	46400	362734	5348517	1.2	Y	DG	10	25	25		1.45	225	67
61549	BAURA	61475	46400	362729	5348492	2.5	Y	DGW	10	30	215		0.52	105	23

046060

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

61550	BAURA	61500	46400	362724	5348468	2.5	Y	DG	5	50	60		0.33	120	35
61552	BAURA	61525	46400	362719	5348443	3.6	Y	DGW	10	30	205		0.44	95	20
61553	BAURA	61550	46400	362714	5348419	1.3	Y	G	15	35	200		0.52	110	27
61554	BAURA	61575	46400	362710	5348394	2.5	Y	DG	5	35	45		2.35	75	12
61555	BAURA	61600	46400	362705	5348370	0.8	Y	GW	5	35	30		0.50	90	26
61556	BAURA	61625	46400	362700	5348345	3.7	Y	G	5	25	25		0.85	130	56
61557	BAURA	61650	46400	362695	5348321	2.2	Y	G	20	35	230		0.92	165	71
61558	BAURA	61675	46400	362691	5348296	2.7	Y	DG	10	35	35		1.55	190	70
61559	BAURA	61700	46400	362686	5348272	3.6	Y	G	5	35	30		0.46	165	20
61560	BAURA	61725	46400	362681	5348247	10.0	Y	GW	5	25	20		0.38	120	
61561	BAURA	61750	46400	362676	5348223	5.2	Y	G	15	30	175		0.98	125	51
61562	BAURA	61775	46400	362671	5348198	8.0	Y	G	5	30	180		0.60	90	
61563	BAURA	61800	46400	362667	5348173	3.0	Y	G	5	30	25		0.62	125	11
61564	BAURA	61825	46400	362662	5348149	2.6	Y	GW	5	55	90		0.55	115	26
61565	BAURA	61850	46400	362657	5348124	12.5	Y	DGW	10	55	230		0.58	205	26
61566	BAURA	61875	46400	362652	5348100	7.8	Y	LDG	5	25	30		1.30	175	51
61567	BAURA	61900	46400	362648	5348075	6.3	Y	G	5	30	30		1.30	220	64
61568	BAURA	61950	46400	362638	5348026	3.0	Y	GW	5	60	85		1.70	180	20
61569	BAURA	61975	46400	362633	5348002	10.0	Y	GW	5	40	75		0.66	80	23
67345	BAURA	62000	46400	362629	5347977	12.6	Y	GW	60	20	120		0.58	135	
67346	BAURA	62025	46400	362624	5347953	12.4	Y	LGW	10	50	60		0.35	105	
67347	BAURA	62050	46400	362619	5347928	13.8	Y	GW	5	30	-5		0.20	105	
67348	BAURA	62075	46400	362614	5347904	11.7	Y	LGW	10	35	45		0.24	110	
67349	BAURA	62100	46400	362609	5347879	7.4	Y	LG	30	1525	200		2.38	120	130
67350	BAURA	62125	46400	362605	5347854	14.3	Y	LGW	5	20	15		0.29	90	
67351	BAURA	62150	46400	362600	5347830	13.8	Y	G	5	20	50		0.25	150	
67352	BAURA	62175	46400	362595	5347805	2.8	N		5	10	20		0.10	5	
67353	BAURA	62200	46400	362590	5347781	11.7	Y	DGW	10	30	30		0.45	105	
67354	BAURA	62225	46400	362586	5347756	17.4	Y	DGW	15	45	320		1.48	240	120
67355	BAURA	62250	46400	362581	5347732	18.2	Y	DGW	10	205	340		9.93	3790	65
67356	BAURA	62275	46400	362576	5347707	10.7	Y	DGW	10	40	380		1.68	345	110
67357	BAURA	62300	46400	362571	5347683	7.9	Y	GCN	35	40	425		1.78	115	410
67358	BAURA	62325	46400	362567	5347658	3.8	Y	GB	25	45	110		2.73	135	510
67359	BAURA	62350	46400	362562	5347634	1.8	Y	GB	35	90	170		1.53	50	420
67360	BAURA	62375	46400	362557	5347609	1.7	Y	GB	15	25	175		1.83	95	420
67361	BAURA	62400	46400	362552	5347584	1.1	Y	GB	20	40	85		1.88	80	430
67362	BAURA	62425	46400	362547	5347560	1.8	Y	GB	15	20	15		1.83	45	410

046061

APPENDIX 3 - AMOCO-EZ WACKER SAMPLING LEDGERS

67363	BAURA	62450	46400	362543	5347535	1.7	Y	NGB	15	30	20		2.08	55	420
67364	BAURA	62475	46400	362538	5347511	1.2	Y	NGB	15	20	30		2.43	75	430
67365	BAURA	62500	46400	362533	5347486	1.4	Y	BDG	20	30	25		2.63	45	400
67366	BAURA	62525	46400	362528	5347462	1.2	Y	BGN	15	30	65		2.83	30	380
67367	BAURA	62550	46400	362524	5347437	2.8	Y	G	15	30	75		1.58	35	370
67368	BAURA	62575	46400	362519	5347413	1.9	Y	G	15	30	205		1.73	70	360
67369	BAURA	62600	46400	362514	5347388	2.4	Y	NGB	15	30	-5		1.38	30	380
67370	BAURA	62625	46400	362509	5347364	1.2	Y	GB	20	50	85		1.83	70	430
67371	BAURA	62650	46400	362505	5347339		Y		15	25	85		1.73	70	350
67372	BAURA	62675	46400	362500	5347315	1.4	Y	G	15	25	35		1.73	50	360
67373	BAURA	62700	46400	362495	5347290	0.6	Y	G	15	25	120		2.18	85	360
62654	GRIEVES	60900	46500	362943	5349084	5.6		G	10	35	130		0.35	60	
62655	GRIEVES	60925	46500	362951	5349060	1.3		G	15	135	420		0.40	75	33
62656	GRIEVES	60950	46500	362959	5349037	1.8		GN	15	30	75		1.35	270	140
62657	GRIEVES	60975	46500	362968	5349013	3.0		G	20	35	95		0.70	155	41
62658	GRIEVES	61000	46500	362976	5348990	3.6		LG	10	340	85		0.19	150	
62659	GRIEVES	61025	46500	362984	5348966	3.0		BG	15	55	75		0.60	45	193
62660	GRIEVES	61050	46500	362992	5348942	5.6		G	15	150	190		1.20	70	224
62661	GRIEVES	61075	46500	363000	5348919	4.8		DG	25	40	70		2.10	180	372