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Joint Venture Annual Report - Burns Peak EL 44/88 -  
1/11/99-31/10/2000  
PasmaInco Australia Limited (Exploration)\*; Plutonic Op  
Denwer, K.; Edwards, P.W. EL44/1988

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# Pasminco Rosebery Mine

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**BURNS PEAK EL 44/88**  
**JOINT VENTURE ANNUAL REPORT**  
**1<sup>ST</sup> NOVEMBER 1999 - 31<sup>ST</sup> OCTOBER 2000**

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MINERAL RESOURCES		
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**Date:**

December 2000

**PASMINCO ROSEBERY MINE  
JOINT VENTURE ANNUAL REPORT  
1<sup>ST</sup> NOVEMBER 1999 TO 31<sup>ST</sup> OCTOBER 2000**

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**EXECUTIVE SUMMARY**

Exploration on EL44/88 during the period from 1<sup>st</sup> November 1999 to 31<sup>st</sup> October 2000 was focussed in the Southern Trenches area and comprised MMI soil sampling, one exploration hole and 5 resource infill holes.

Total expenditure on exploration for the period 1<sup>st</sup> November 1999 to 31<sup>st</sup> October 2000, including the work done by Hercules Resources, was \$145,571.

On the 31<sup>st</sup> October 2000 Hercules Resources Pty Limited ("Hercules") was granted Mining Lease 20M/2000 covering 135 hectares of EL 44/88 including the known base/precious metal resources at Browns Tunnel and Southern Trenches under an agreement with the Burns Peak Joint Venture. Mining at Southern Trenches commenced in November 2000.

Exploration in the remaining 7 month tenure of the licence will comprise additional MMI soil sampling in the northern part of the licence and a review of past exploration in the area to see if worthwhile exploration targets can be generated. Provision has been made for 400m of diamond drilling to follow-up any targets. A budget of \$60,000 has been proposed for this work.

**PASMINCO ROSEBERY MINE  
BURNS PEAK EL 44/88  
JOINT VENTURE ANNUAL REPORT  
1<sup>st</sup> NOVEMBER 1999 TO 31<sup>ST</sup> OCTOBER 2000**

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**PASMINCO ROSEBERY MINE  
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## **1. INTRODUCTION**

EL 44/88 covers 6 km<sup>2</sup> of Cambrian Mount Read Volcanics and lies 6 km northwest of the Tullah Township and north of Lake Rosebery (Figure 1). The principal target on the licence is volcanic hosted auriferous base metal massive sulphide deposits similar to mineralisation at Rosebery and Hercules. The EL includes old workings at the Pinnacles (including Browns Tunnel and Southern Trenches).

The licence has been in force since 1988 and statutory reductions had been progressively reduced the area to 34 sq kms by the 10<sup>th</sup> year of tenure (1998). An 18 months extension over 12 sq kms was granted at the end of 1998 to the 9<sup>th</sup> June 2000. The area was further reduced to 6 km<sup>2</sup> and the term extended to the 9<sup>th</sup> June 2001.

On the 31<sup>st</sup> October 2000 Hercules Resources Pty Limited ("Hercules") was granted Mining Lease 20M/2000 (see Figure2) covering 138 hectares of EL 44/88 including the known base/precious metal resources at Browns Tunnel and Southern Trenches (see Figure 2).

Details of the work completed on the latest relinquished portion of the licence to November 1997 are contained in the Annual Reports on Burns Peak EL44/88, now on open file. A relinquishment report covering the work carried out since then (soil sampling and IP surveys) is in preparation.

This report documents work undertaken on EL44/88 Burns Peak in the period 1<sup>st</sup> November 1999 to 31<sup>st</sup> October 2000. The work was focussed in the Southern Trenches area and comprised MMI soil sampling, one exploration hole and 5 resource infill holes.

## **2. TENURE**

EL 44/88 was initially granted for a renewable one year term on the 9<sup>th</sup> December 1988 to Noranda Pty Limited. Following the successful tender Noranda Pty Ltd and Pasminco Limited formed a Joint Venture involving EL44/88. Pioneer Minerals Australia Limited became a third member of the joint venture upon granting of the EL.

The Burns Peak Joint Venture was executed on the 6<sup>th</sup> March 1990, between the three companies, having been effectively in place since granting of the EL. The licence was reduced to 50% of the original area at the end of the 5<sup>th</sup> year of tenure. The 10<sup>th</sup> and final year of tenure ended on the 9<sup>th</sup> December 1998. An application for an 18 months extension over a 12 sq km area covering Browns Tunnel, Southern Trenches and the

North Kershaw-Chester area was lodged in November 1998 and formally granted on the 22<sup>nd</sup> February 1999.

The area was further reduced to 6 km<sup>2</sup> and the term extended to 9<sup>th</sup> June 2001.

Permission was given to Hercules Resources Pty Limited to peg a depth limited (to 150 metres) mining lease over part of the EL covering the Browns Tunnel and Southern Trenches resources. The ML was granted on the 31<sup>st</sup> October 2000 over 138 hectares and mining commenced at Southern Trenches in November 2000.

Until the 1<sup>st</sup> July 1990, Geopeko, the exploration division of North Broken Hill Peko Ltd managed the EL under contract to Pasminco. From that time until end June 1997 Pasminco Exploration has managed the project. From the 1<sup>st</sup> July 1997 Pasminco Rosebery Mine has managed the project.

Exploration expenditure was shared equally between the joint venture partners until June 1993, when Noranda elected not to contribute to the July -December 1993 programme. Pioneer Minerals Australia was renamed Plutonic Resources Limited and "Pasminco Australia limited" has been substituted on all licence documents in place of "Pasminco Limited".

At the end of August 1997 Plutonic signified their intention to withdraw from the joint venture and commenced negotiations with Pasminco on a suitable price and format for Pasminco to acquire Plutonic's share. Work on the EL was deferred whilst the negotiations were underway.

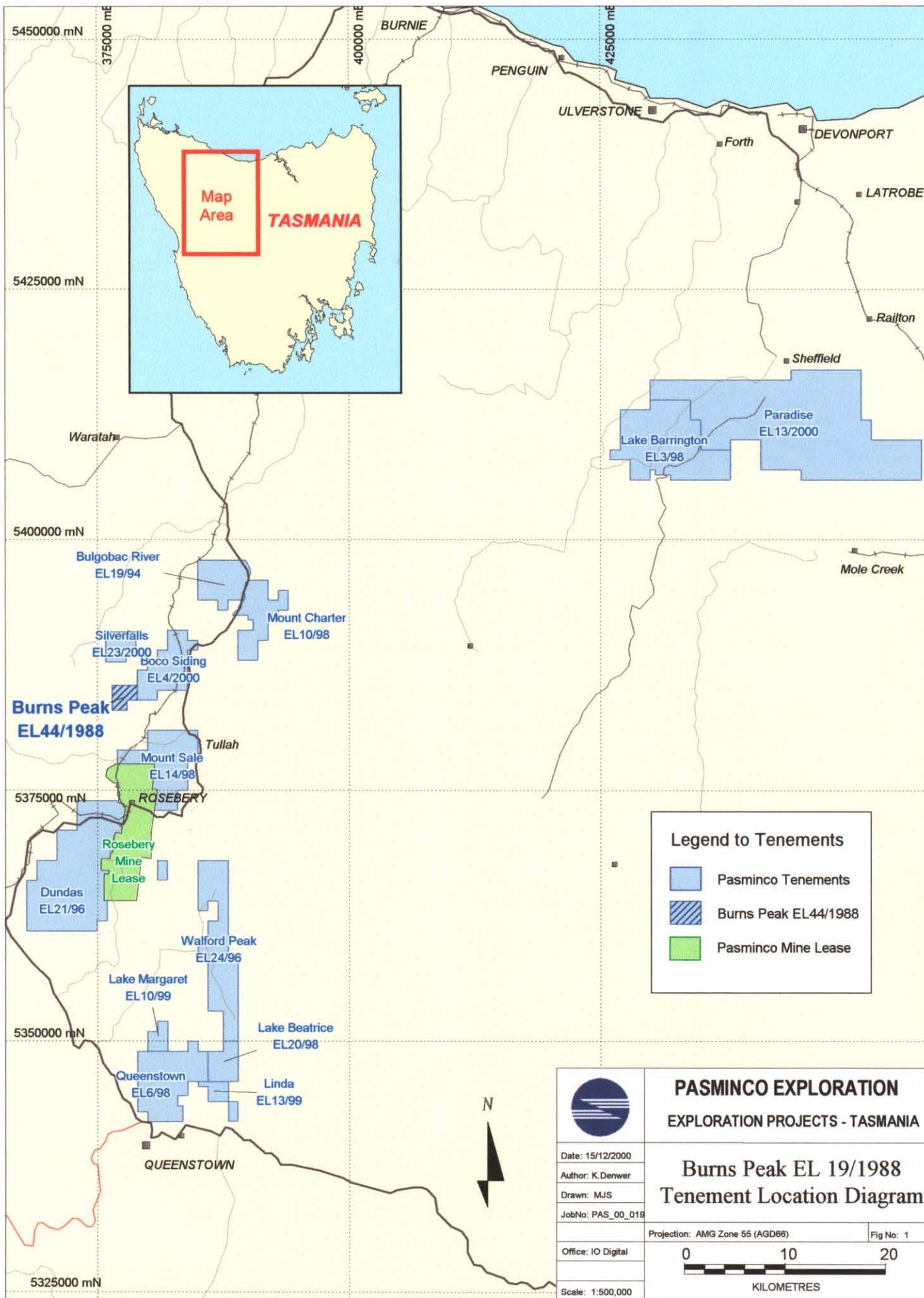
In December 1997 Homestake Australia launched a takeover bid for Plutonic Resources. The takeover was successfully concluded in April 1998 with the Plutonic name still being retained for pre-existing licences.

At the end of January 1998 Pasminco and Plutonic completed the purchase of Noranda's share of the joint venture with each remaining partner taking 50%, concluding approximately 2 years of negotiations. At that point interests in the joint venture were 50% Pasminco and 50% Plutonic.

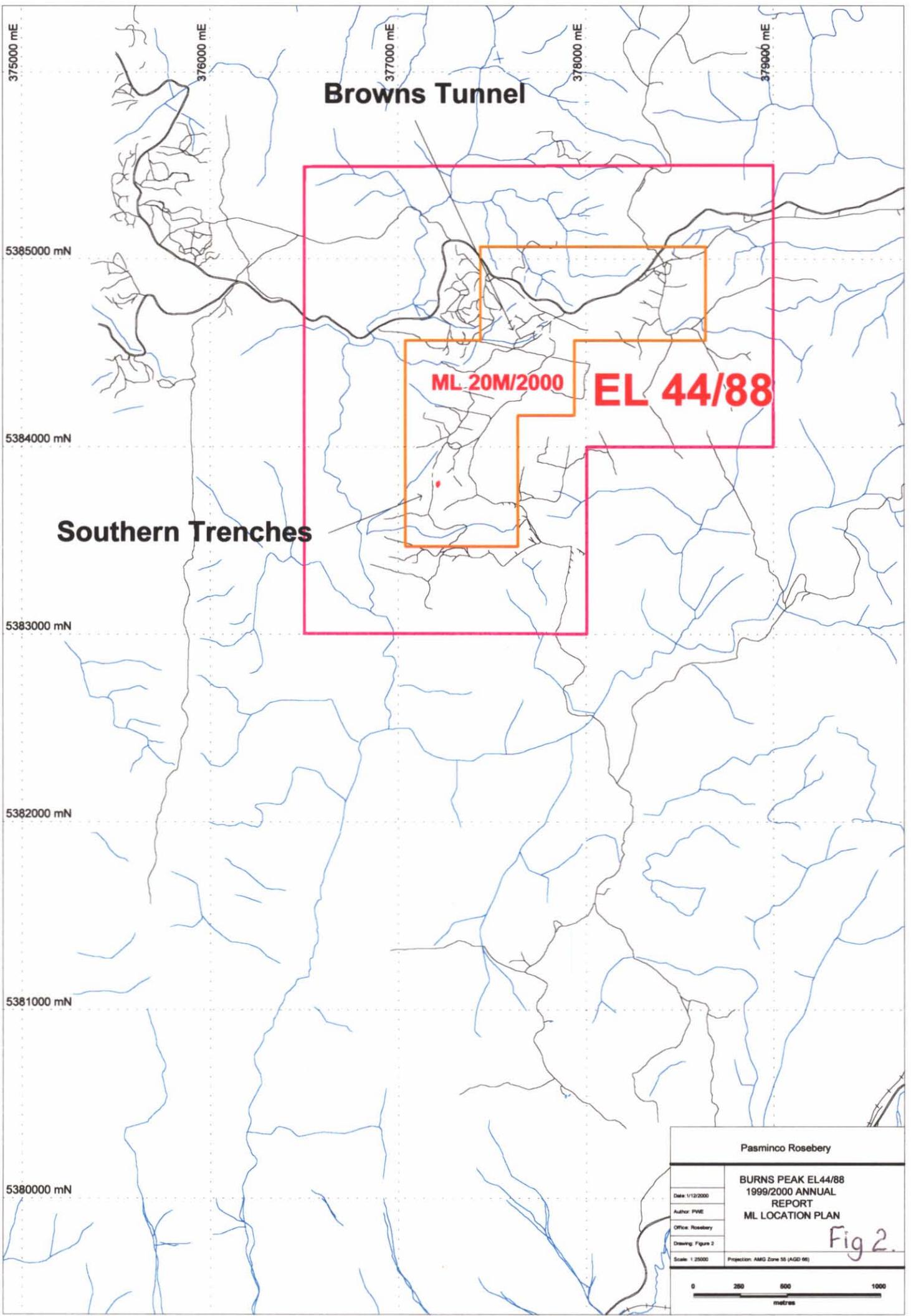
Permission to commence work at Browns Tunnel - Southern Trenches was granted in May 1998 whilst Plutonic (Homestake) reviewed the Burns Peak data.

In July 1998 Plutonic indicated that they would not be contributing to past expenditure accrued from the 1<sup>st</sup> January 1998 or to any further expenditure until further notice. Interests in the joint venture as at the 31<sup>st</sup> October 2000 are Pasminco 56.72% and Plutonic 43.28%.

The EL is subject to a number of land classifications which were revised in May 1993. The current land tenure includes land vested in the Hydro-Electric Commission in the area immediately surrounding Lake Rosebery and the Transmission Lines, Multiple Use



5 cm



Pasmenco Rosebery	
<b>BURNS PEAK EL44/88</b>	
1999/2000 ANNUAL	
REPORT	
ML LOCATION PLAN	
Date: 1/12/2000	<i>Fig 2.</i>
Author: PWE	
Office: Rosebery	
Drawing: Figure 2	
Scale: 1:25000	
Projection: AMG Zone 55 (AGD 86)	

Forest Land and RFA CAR reserve. Most of the tenement is Unallocated Crown land designated as Multiple Use Forest.

### 3. REGIONAL GEOLOGY

The regional geology is as described in the 1998 annual report and will not be repeated here.

### 4. PREVIOUS WORK

The extensive history of exploration and mining in the area covered by the current Burns Peak EL 44/88 was summarised by Rosenhain and Mathison (1989) and this has been modified below.

EL 44/88 is currently at the end of the 10<sup>th</sup> year of tenure. Details of these activities are documented in the past ten annual reports (Rosenhain and Mathison, 1989; Lorrigan, 1990; Kirsner, Lorrigan and Rae 1991; Kirsner 1992; Poltock, Kirsner and Saxon 1993; Poltock and Saxon 1994; Saxon 1995, Quayle and Dibben 1996, Dibben 1997 and Webber, Dibben and Murphy 1997, and Edwards, Murphy and Whitbread 1999) and in the 1998 Relinquishment Report (Murphy and Denver 1998).

**Table 1 History of Exploration on EL44/88**

1899	Discovery of alluvial gold in Marionoak River by Tom Strong. (Strong's Alluvial Workings)
1896	Discovery of Pinnacles Lodes by McGuinness Bros.
1899	Discovery of Chester by F Kershaw and H Sanderson (Kershaw's Iron Blow)
1899	Brown's Tunnel driven (Brown's Tunnel) est. production 300t @ 2%Zn, 2g/t Au, 44g/t Ag.
1899	Southern Trenches est. Production 55t @ +10%Zn, +8%Pb, 8g/t Au, 38g/t Ag.
1899	Thomas' Tunnel driven (Thomas' workings) est. production 50t @ 4%Zn, 7%Pb, 1g/t Au, 240g/t Ag.
1908	Mt Lyell Mining and Railway Co Ltd secured Chester Leases
1908-1913	Intensive exploration and mining development at Chester. Production 36 000t @ 37% S.
1918-1929	Minor production from Chester by Cuming Smith & Co. Production 700t @ +25% S.
1947-1959	Electrolytic Zinc Company created foot and vehicle access to the Pinnacles area. 14 small diameter diamond drill holes (PP31, 34, 36,

- 39, 40, 41, 42, 45, 46, 48, 50, 51, 52, 59) completed and workings and topography surveyed. Geophysical test surveys at the Pinnacles (SP, ground magnetics and resistivity)
- 1959-1960 Geochemical, geological and geophysical surveys over Pinnacles and Chester. Techniques included Sharp vertical loop EM, Turam, ground magnetics (vertical field), gravity. "The significant feature of this coverage is that Pinnacles Mine Mineralisation is non-conducting"
- 1968-1972 Initial phase of gridding, geochemical sampling, geophysics (IP and EM), mapping and 3DDH at Chester (CH1-3) by Comstaff
- 1973-1976 Second phase of gridding, geochemical sampling, etc. 10 DDH drilled (plus CP2 redrilled) at Pinnacles and 13 DDH at Chester (CP1-23). (New metric grid, new soil sampling, new IP). Airborne EM
- 1976-1979 Preussag entered into Joint Venture with Comstaff. Detailed mapping and structural synthesis completed. C horizon soil geochemistry, 2 DDH, (PIM1 & 2) trial PEM and IP over Leo's Find
- 1980-1983 Exploration of East Chester area. New grid, grid extensions, C horizon soil geochemistry, ground magnetics. OP, DIGHEM. DDH (EAB1-4) drilled at East Chester
- 1984-1985 New grid at Pinnacles (EAF) mapped, C horizon soil sampling, ground magnetics and UTEM. 19 DDH (ESB1 & EAF 1-18) with the discovery of small lenses of massive sulphides and patchy gold mineralisation. New geological interpretation
- 1986-1988 BHP entered Joint Venture. Reinterpretation and compilation of exploration results. "Blanket" UTEM and downhole SIROTEM. New geological interpretation. Petrological studies. Wacker sampling
- 1988-1991 Pasminco-Noranda-Plutonic Joint Venture on new EL 44/88. Extensive geological mapping, re-appraisal of previous data, Wacker sampling, geochemistry, petrology, DHEM, CSAMT, DH-SIROTEM, Mise-a-la-Masse, aeromagnetic survey, regional and local gravity surveys, drilling of 12 DDH (BPD62-73). Rehabilitation of old tracks, costeans and workings
- 1991-1992 Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included drilling BPD74, 75, 76 geological mapping and re-logging drill core at Holloway and Summit, gravity infill and interpretation, ore/pathfinder/whole rock geochemistry, down hole EM in BPD69,71,75 and compilation/computerisation of historic geochemical data
- 1992-1993 Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included drilling holes BPD77-79 geological mapping and gridding at South Kershaw-Holloway, review and compilation of previous exploration, Dipole-dipole IP at South Kershaw-Holloway,

- soil geochemistry at South Kershaw and ore/pathfinder/whole rock geochemistry
- 1993-1994 Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included drill holes BPD80, BPD81 and EAF2, gridding, soil/rock geochemistry, DHEM, Mise-a-la-masse, ground magnetics and mapping
- 1994-1995 Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included drill holes BPD82 to 86 and extension of CP7, DHEM, gridding and geological mapping in the Holloway area
- 1995-1996 Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included diamond drill holes BPD 87 at East Holloway, BT1-4 at Browns Tunnel and RC holes STRC1-7 at Southern Trenches (reported in 1997 report); DHEM, geological mapping, ground magnetics and IP in the Holloway area; gridding, ground magnetics, soil sampling and trenching in Browns Tunnel-Southern Trenches area.
- 1996-1997 Compilation of previous work and entry of data into GIS format as part of the Western Tasmania prospectivity review.
- 1997-1998 MMI soil sampling and IP surveys at North Kershaw-Chester, resource definition drilling at Browns Tunnel and Southern Trenches followed by preliminary mining and metallurgical studies.
- 1998-1999 Mining and metallurgical studies on the known resources at Browns Tunnel and Southern Trenches.

## 5. WORK COMPLETED

Work completed on the retained area of Burns Peak EL 44/88 from 1<sup>st</sup> November 1999 to 31<sup>st</sup> October 2000 was focussed in the Southern Trenches area. It comprised

- A 538 sample partial leach survey,
- Drilling of a 101m diamond drill hole to follow-up a partial leach anomaly,
- Drilling of five closely spaced drill holes to test the poddy but very high-grade mineralisation at Southern Trenches, and
- Completion of an honours degree at the University of Tasmania investigating the isotopic signature of the mineralisation.

Agreement was reached to allow Hercules Resources to apply for a mining lease over the Browns Tunnel and Southern Trenches resources after some 10 months of negotiations.

## 5.1 PARTIAL LEACH SAMPLING

A 5.8 line km, 538 sample partial leach programme was completed to test for southern extensions of the Southern Trenches mineralisation. Given the poddy nature and the restricted partial leach signature over this mineralisation (from orientation surveys-eg Edwards & Parfrey 1999) sample were collected at 10m intervals on 50m spaced lines over the main area of interest and at 20m spacing on 200m spaced lines outside of this area.

Samples were collected at or near the peg and involved digging a hole with a pick, removing the organic rich A-horizon and collecting approximately 500g of sample. A small additional amount of soil was collected at each sample site and placed in a chip tray for reference and to allow colour assignment. The samples were placed in clip lock plastic bags and once returned to the field office the bags were opened to prohibit anaerobic reduction reactions. The bags were left opened until a batch of 300 samples was collected and then they were closed for dispatch.

Three duplicate samples were collected for every 100 samples and these duplicate samples were replicated at the lab. The duplicate field sample enabled evaluation of the site variability and the replicate sample enabled evaluation of the laboratory variability.

A total of 538 samples were collected and were despatched to Amdel in South Australia as 2 batches. The samples were analysed using partial leach technique DL42 followed by ICP. Elements analysed were Ag, As, Au, Ba, Bi, Cd, Co, Cu, Mo, Ni, Pb, Y, Zn, Zr and the rare earth elements Ce, Eu, Gd, La and Sm.

The raw assay results are contained in Appendix 1.

It is difficult to assess the raw partial leach data as the background partial leach response changes significantly with soil colour. To rectify this soil colour was assigned using Munsell Colour chart with 19 colours used. The colours were 10R2/2, 5YR2/2, 5YR2/1, 3/0, 2/0, 10YR4/2, 5YR5/2, 5YR4/1, 10R4/2, 10R3/4, 10YR 7/4, 10YR 6/6, 5YR5/6, 5YR 7/2, 10YR 8/2, 5YR 8/1 8/0, 6/0 and 5/0 (see Appendix 1). At the interpretation stage 19 colours was too difficult to interpret and these 19 colours were simplified to 6 colours. The 6 colours used were black, brown, red-brown, orange, cream and grey. The original 19 Munsell colours were grouped viz:

<b>Black:</b>	10R2/2, 5YR2/2, 5YR2/1, 3/0 and 2/0
<b>Brown:</b>	10YR4/2, 5YR4/1
<b>Red-Brown:</b>	5YR5/2, 10R4/2 and 10R3/4
<b>Orange:</b>	10YR 7/4, 10YR 6/6 and 5YR5/6
<b>Cream:</b>	5YR 7/2, 10YR 8/2, 5YR 8/1 and 8/0
<b>Grey:</b>	6/0 and 5/0

The data was then levelled to soil colour using XQ levelling software. This data is represented as a function of the median. The levelled partial leach data is contained in Appendix 1.

Images were produced for each element using XQ level software. Figures are produced of Ag, Au, Cd, Cu, Mo, Pb and Zn (see Figures 3- 9)

There are nine zinc anomalies recognised. The northern most anomaly (1) corresponds to the known mineralisation at Southern Trenches. It is strongly anomalous in Zn, Ag, Pb, Cu, Cd and Au. Anomaly 2 occurs along strike from the Southern Trenches workings and is anomalous in Zn, Ag, Pb and minor Cd. Anomalies 3, 4 are associated with old tracks and are interpreted to be contamination. Anomalies 5,6, 7 and 8 are anomalous in Zn, minor Cu and minor Cd (7 and 8 only). The lack of association with the elemental suite that fingerprints Southern Trenches downgrades these anomalies.

Anomaly 9 is a significant Zn, Cd and Cu anomaly, which are flanked by a major Mo and Pb anomaly. This anomaly occurs on the western side of the Rosebery fault within the Dundas group sediments. This anomaly is a large coherent anomaly and deserves follow-up.

## 5.2 GEOLOGY

The grid lines were mapped however there was only limited outcrop and this did not alter previous geological interpretation. An interpretation map is presented as Figure 10.

## 5.3 DRILLING

### 5.3.1 Exploration

Anomaly 2 was followed up with a shallow drill hole as the anomaly is not associated with anomalous total digest soils and could be the signature of a high-grade massive sulphide lens similar to those exposed in the trenches and intersected in shallow drilling. There was some debate as to whether this was a legitimate Pasmenco target and it was decided to drill a shallow hole to:

- Check the validity of a subtle partial leach anomaly. If mineralisation is intersected it would be considered as the source for the PL anomaly and could indicate the size and distance the PL anomaly is from the actual mineralisation.
- To intersect mineralisation (pod?) and gain an indication of how the pods are changing in size/mineralisation south of the trenches area.

Drill hole STD1 was drilled to 101m to test partial leach anomaly 2. The hole was collared at 5383735N 377190E and aligned at  $-50^\circ$  to 110 AMG. Assay results and a drill log from this hole are contained in Appendix 2.

The entire hole is within a coarse pumiceous mass flow with minor base metal replacements and veinlets intersected throughout the hole. From 51.4-56.8m fine to coarse sphalerite/galena occurs as blebs and veinlets. It is probable that the partial leach response is reflecting this mineralisation. The finer grained sediment that hosts the mineralisation at Southern trenches was not intersected.

Assay results from hole STD1 at a 0.1% Zn cut-off are:

50-56m, 6.0m @ 261 ppm Pb, 0.16% Zn and 1.0 g/t Ag

69-70m, 1.0m @ 0.2% Zn

71-72m, 1.0m @ 970 ppm Pb, 0.37% Zn and 2 g/t Ag

76-77m, 1.0m @ 0.17% Pb, 1.99% Zn and 2 g/t Ag

These results are as expected, with the 6m zone occurring stratigraphically beneath the partial leach anomaly (note the low Pb in drill hole intersections correlates to the low Pb in the PL anomaly).

### 5.3.2 Resource Infill Drilling

Hercules Resources completed five short, closely spaced diamond holes, for 204.5m to confirm the existence of the high grade pod (10,000t @ 14.7% Pb, 19.9% Zn, 1.6% Cu, 77 g/t Ag, 11.3 g/t Au at a \$40 TMU cut-off) previously defined at Southern Trenches (Edwards et al, 1999). The holes were drilled from the same drill pad used for drilling STRC5, 009B, 010B, 014B and 015B (see Figure 11). All of the holes intersected intervals of base metal mineralisation (see Table 2).

All of the intersections occur within strongly silicified fine-grained sediment within a thick sequence of pumice breccia. The mineralisation occurs with decreasing significance as:

- Banded ore with sphalerite, galena and pyrite/chalcopyrite rich bands, (eg. 016B 28.2-30.6m).

- Matrix to a silicified chert breccia (eg 018B 32-32.8m).
- Coarse galena and sphalerite veining (eg 018B 33.6-34.6m).

Table 2: Assay results from the Hercules Resources holes at Southern Trenches.

Hole	Line	From	To	Int	Pb	Zn	Cu	Ag	Au	Fe	\$
	(m)	(m)	(m)	(m)	(%)	(%)	(%)	(g/t)	(g/t)	(%)	TMU
016B	4410	26.0	31.7	5.7	18.3	26.0	1.87	96	1.9	NA	463
017B	4420	18.2	19.5	1.3	3.8	7.3	0.44	27	0.3	NA	121
		27.4	27.7	0.3	8.5	14.4	1.25	39	0.5	NA	243
		32.3	32.6	0.3	4.5	8.3	1.14	71	4.3	NA	184
018B	4420	30.3	43.1	12.8	7.4	14.5	1.11	49	1.9	NA	251
Incl.		31.8	36	4.2	15.3	22.9	2.10	87	3.1	NA	421
019B	4410	28.3	33.4	5.2	23.3	33.3	2.46	108	6.9	NA	629
020B	4400	27.7	29.7	2.0	11.6	15.5	1.48	82	1.2	NA	288

Note: that the Hercules Resources holes named STM-1 to 5 have been re-named 016B to 020B to conform to Pasminco Rosebery Mine nomenclature.

The results confirmed the existence of the previously defined pod and gave Hercules Resources sufficient confidence to proceed. Mining commenced in November 2000.

#### 5.4 RESEARCH PROJECT

A CODES (Mount Read Volcanics Isotope Project) funded Honours project on geology and isotopic systematics of the Southern Trenches area was completed by Adrian Woolford.

The results suggest that the hydrothermal alteration is more widespread and intense than previously thought. Isotopic signatures are similar to those recorded at the Rosebery and Hercules deposits.

### 6. ENVIRONMENTAL DISTURBANCE AND REHABILITATION

A final clean up of the Browns Tunnel area was completed in April 2000 in consultation with David gatehouse of Mineral Resources Tasmania.

Grid line cutting was carried out over a small area just to the south of Southern Trenches. One small grid pad was cleared approximately 100m south of Southern Trenches.

## 7. PROPOSED PROGRAMME FOR NOVEMBER 2000 TO JUNE 2001

The following programme is proposed for the period to June 2001:

- A partial leach soil sampling programme over the northern part of the EL.
- A review of all the past work in the Browns Tunnel - Southern Trenches area to determine if worthwhile exploration targets can be generated.
- Provision has been made for 400m of diamond drilling pending the results of the partial leach survey and the data review.

The proposed budget for this work is \$60,000.

## 8. 2000 EXPLORATION EXPENDITURE

Total exploration expenditure by the BPJV from 1<sup>st</sup> November 1999 to end October 2000 was \$112,005 as shown on Table 3.

Hercules Resources spent an additional \$33,566 drilling the known resource at Southern Trenches.

The combined total expenditure is \$145,571.

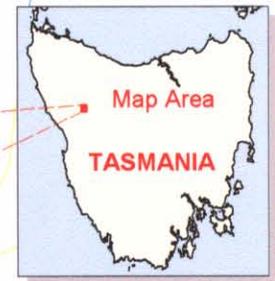
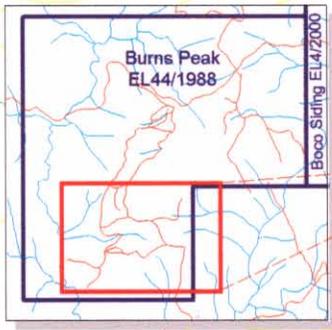
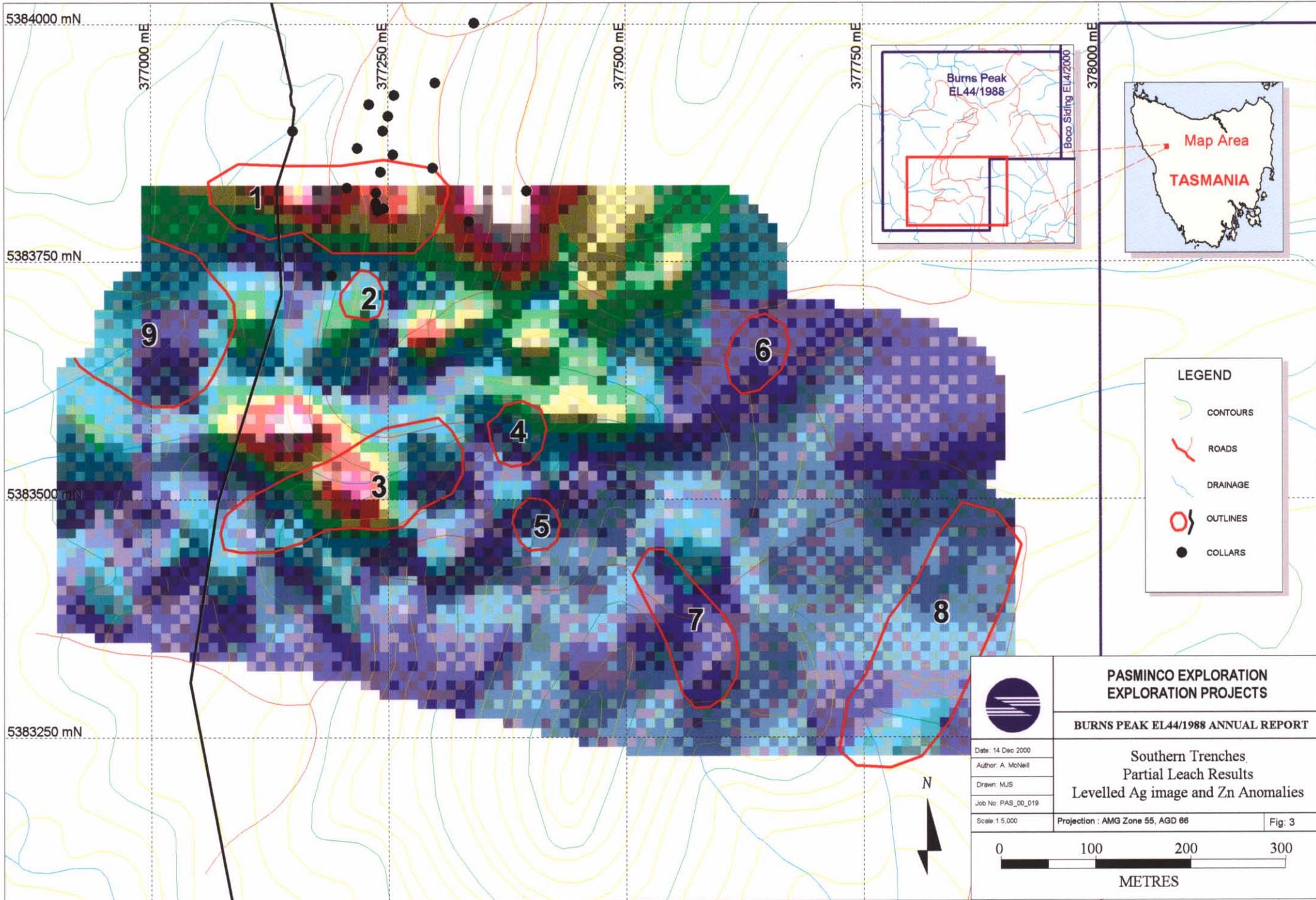
Table 3: Exploration Expenditure, EL 44/88 Nov 1999-Oct 2000

ITEM	BPJV	Hercules	TOTALS
Personnel	\$52,028	\$11,920	\$63,948
Geochemistry	\$11,170	\$1,832	\$13,002
Geophysical Surveys and Consultants	0		\$0
Geological Contractors	\$5,333		\$5,333
Drilling Contractors	\$11,202	\$19,814	\$31,016
Other Contractors	\$7,960		\$7,960
Misc Supplies	\$86		\$86
Office	\$9,821		\$9,821
Travel and Accommodation	\$2,156		\$2,156
Rentals, tenement administration, land	\$3,072		\$3,072
Vehicles, plant & equipment	\$599		\$599
Administration	\$8,578		\$8,578
<b>TOTAL</b>	<b>\$112,005</b>	<b>\$33,566</b>	<b>\$145,571</b>

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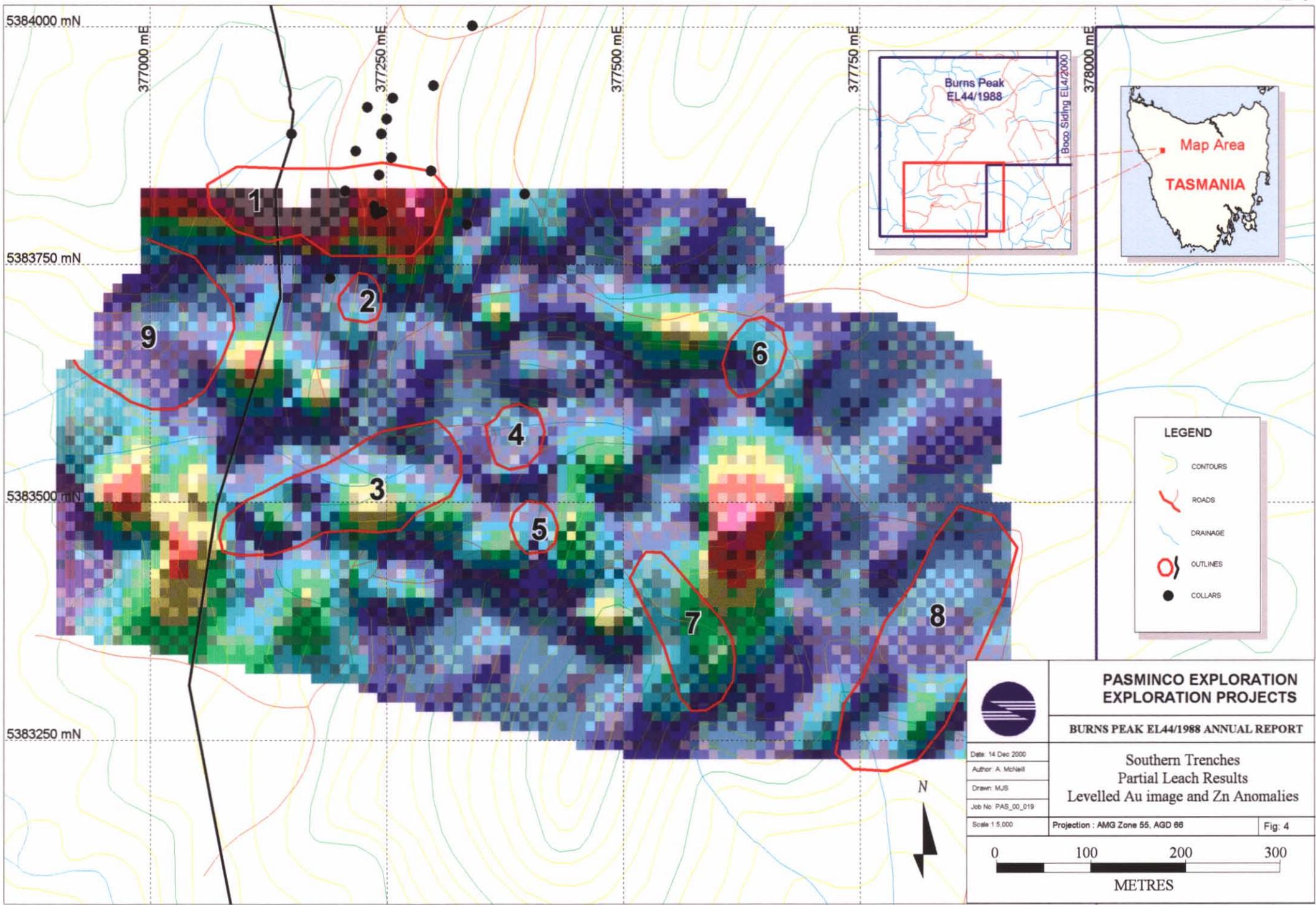


**LEGEND**

- CONTOURS
- ROADS
- DRAINAGE
- OUTLINES
- COLLARS

	<b>PASMINCO EXPLORATION EXPLORATION PROJECTS</b>	
	<b>BURNS PEAK EL44/1988 ANNUAL REPORT</b>	
Date: 14 Dec 2000	<b>Southern Trenches Partial Leach Results Levelled Ag image and Zn Anomalies</b>	
Author: A. McNeill		
Drawn: MJS		
Job No: PAS_00_019	Projection: AMG Zone 55, AGD 66	Fig: 3

5 cm

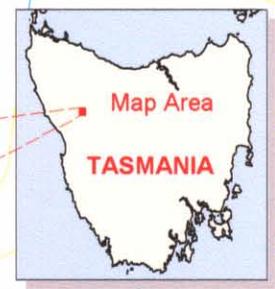
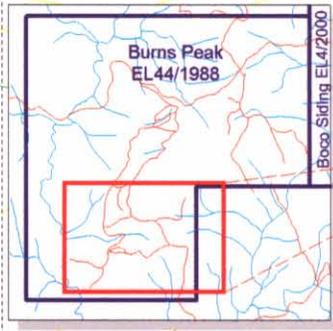
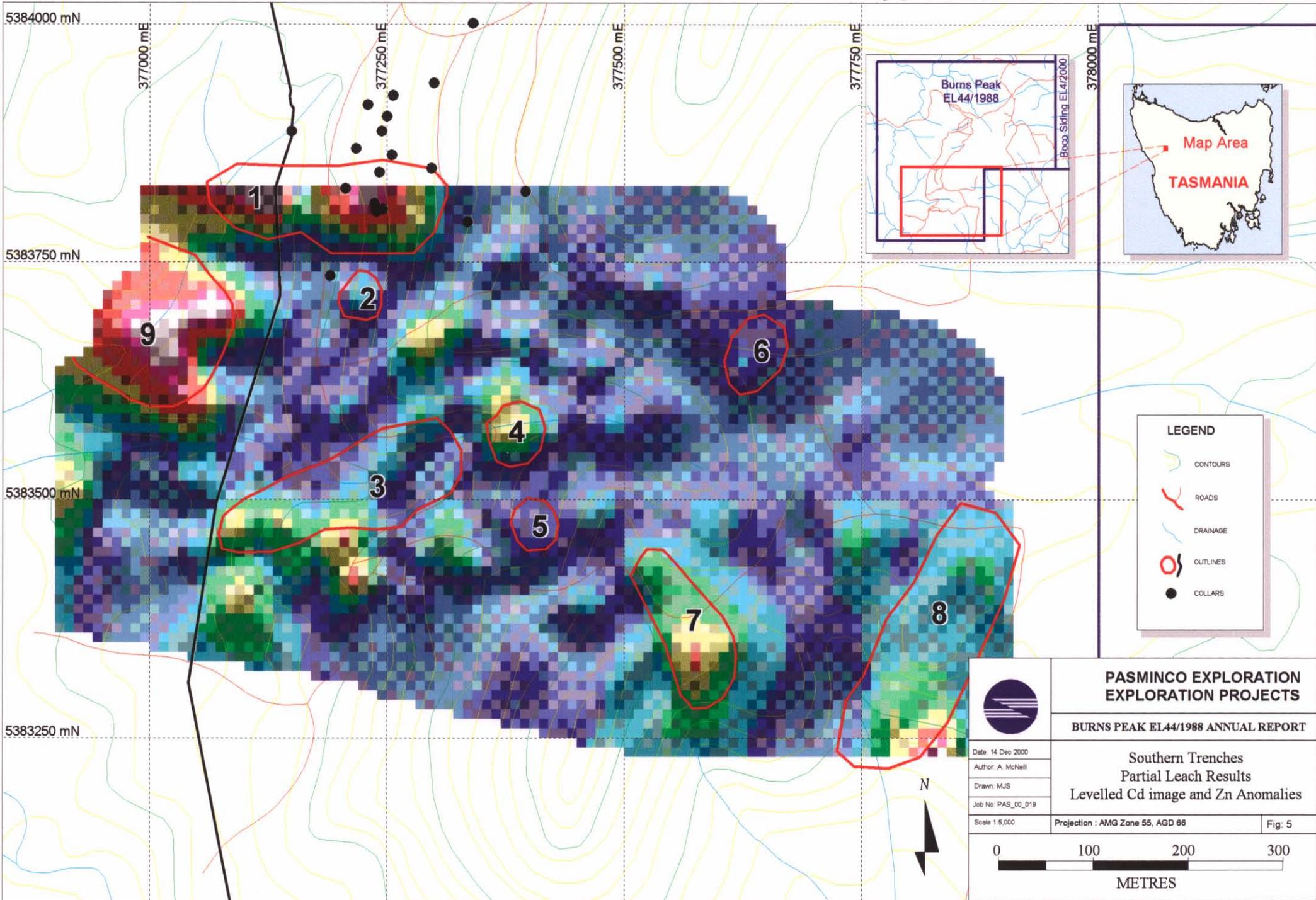


5 cm

	<b>PASMINGO EXPLORATION EXPLORATION PROJECTS</b>	
	<b>BURNS PEAK EL44/1988 ANNUAL REPORT</b>	
Date: 14 Dec 2000	Southern Trenches	
Author: A. McNeill	Partial Leach Results	
Drawn: MJS	Levelled Au image and Zn Anomalies	
Job No: PAS_00_019	Projection: AMG Zone 55, AGD 86	Fig: 4
Scale: 1:5,000		
	METRES	

817021

TCR: 01-4515



**LEGEND**

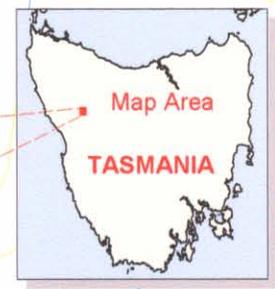
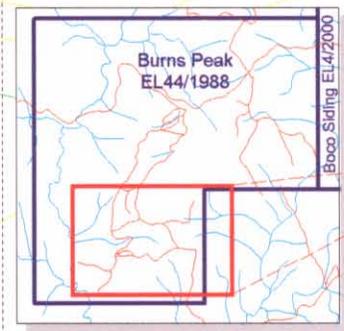
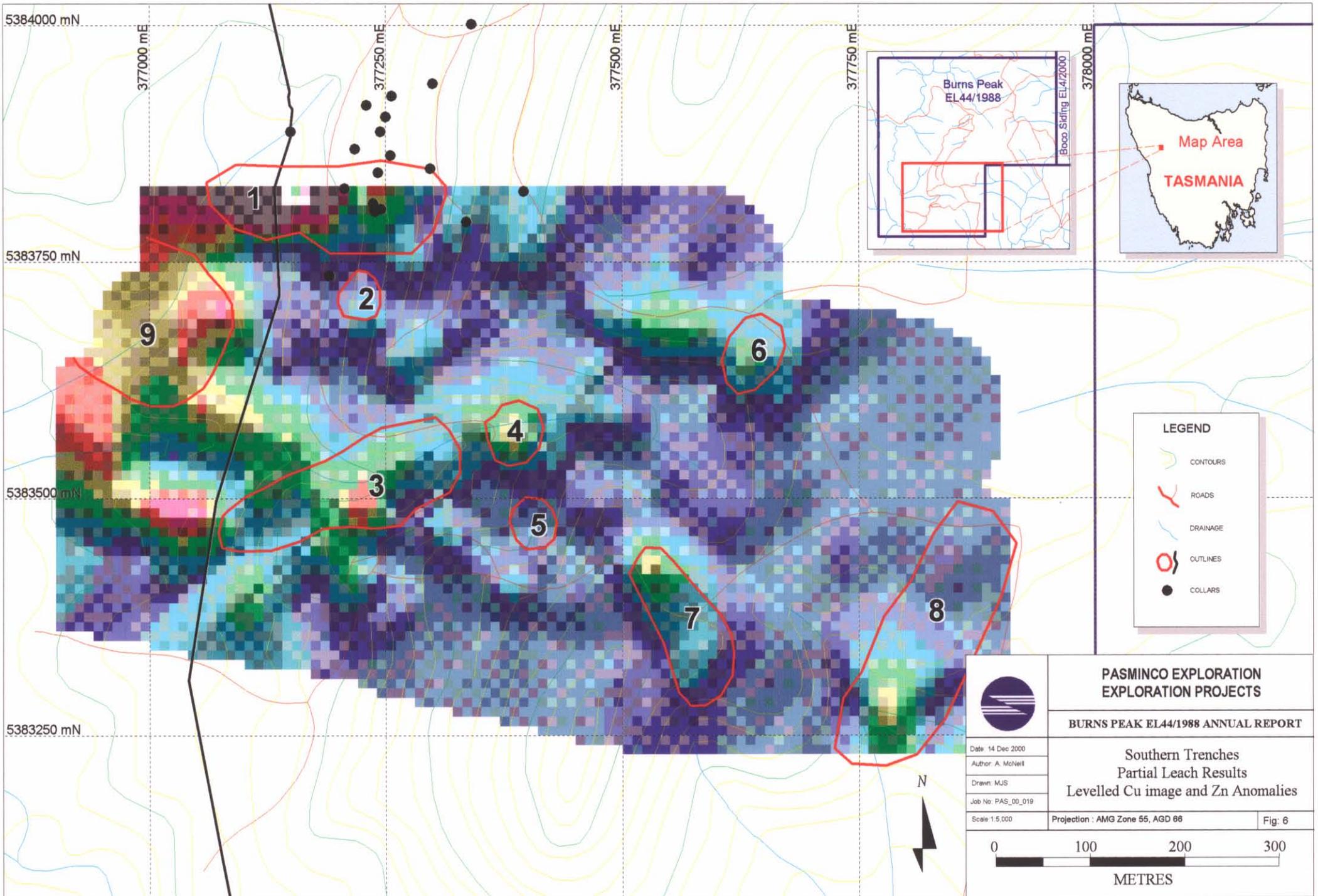
- CONTOURS
- ROADS
- DRAINAGE
- OUTLINES
- COLLARS

	<b>PASMINGO EXPLORATION</b>	
	<b>EXPLORATION PROJECTS</b>	
<b>BURNS PEAK EL44/1988 ANNUAL REPORT</b>		
Southern Trenches Partial Leach Results Levelled Cd image and Zn Anomalies		
Date: 14 Dec 2000 Author: A. McNeill Drawn: MJS Job No: PAS_00_019 Scale: 1:5,000	Projection: AMG Zone 55, AGD 66	Fig: 5
		

5 cm

817022

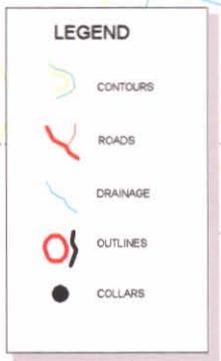
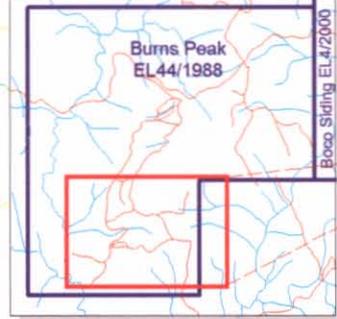
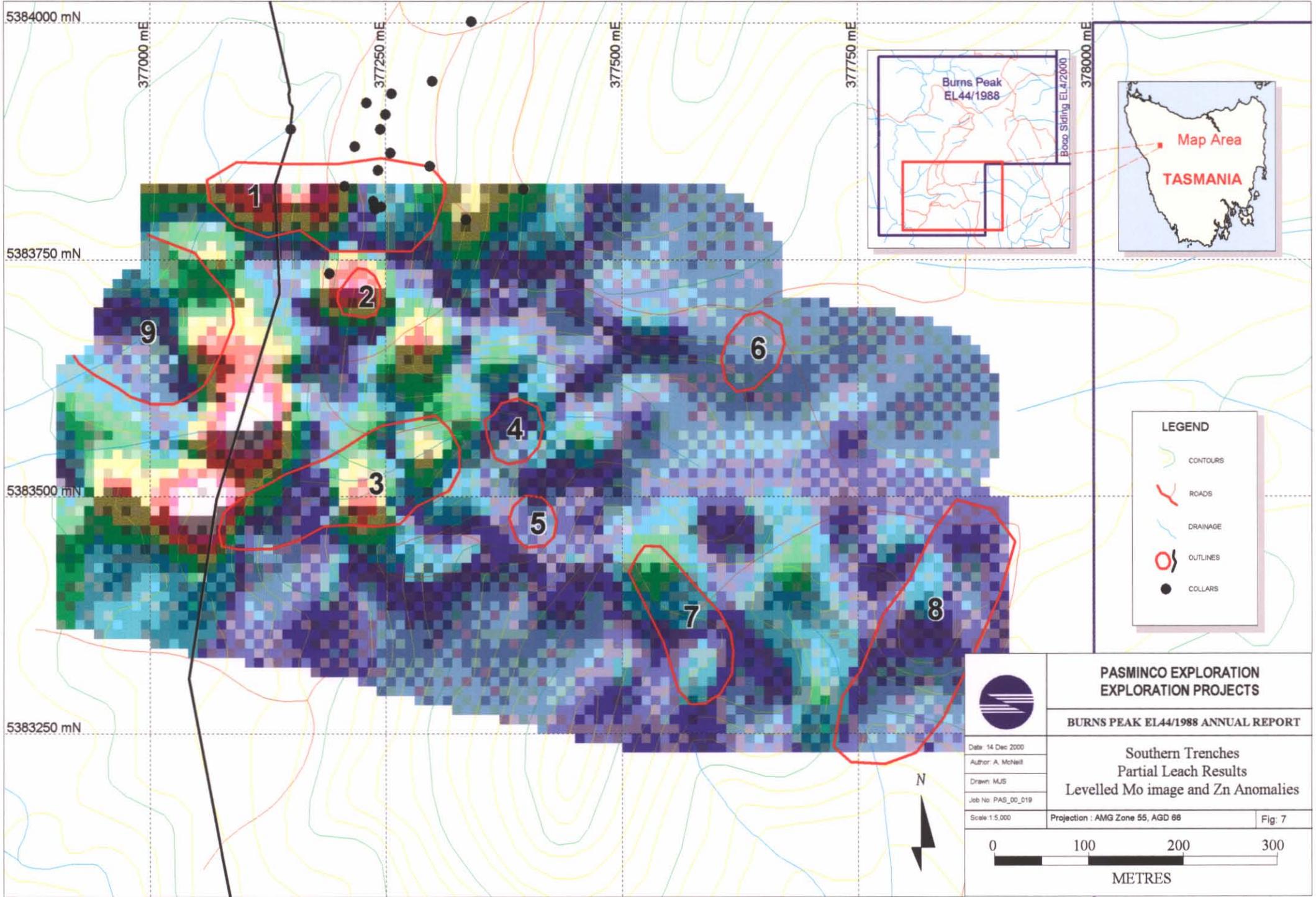
TCR: 01-4515



LEGEND	
	CONTOURS
	ROADS
	DRAINAGE
	OUTLINES
	COLLARS

	<b>PAMINCO EXPLORATION EXPLORATION PROJECTS</b>	
	<b>BURNS PEAK EL44/1988 ANNUAL REPORT</b>	
Date: 14 Dec 2000	Southern Trenches Partial Leach Results Levelled Cu image and Zn Anomalies	
Author: A. McNeill	Scale 1:5,000	
Drawn: MJS	Projection: AMG Zone 55, AGD 86	Fig: 6
Job No: PAS_00_019	0 100 200 300 METRES	

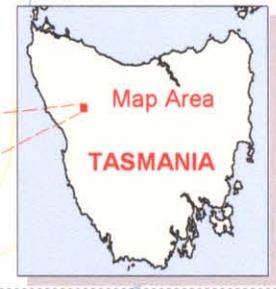
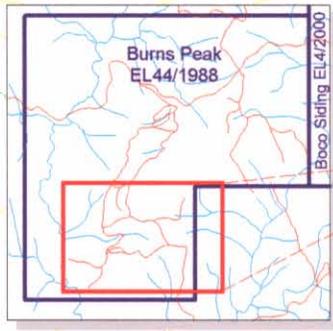
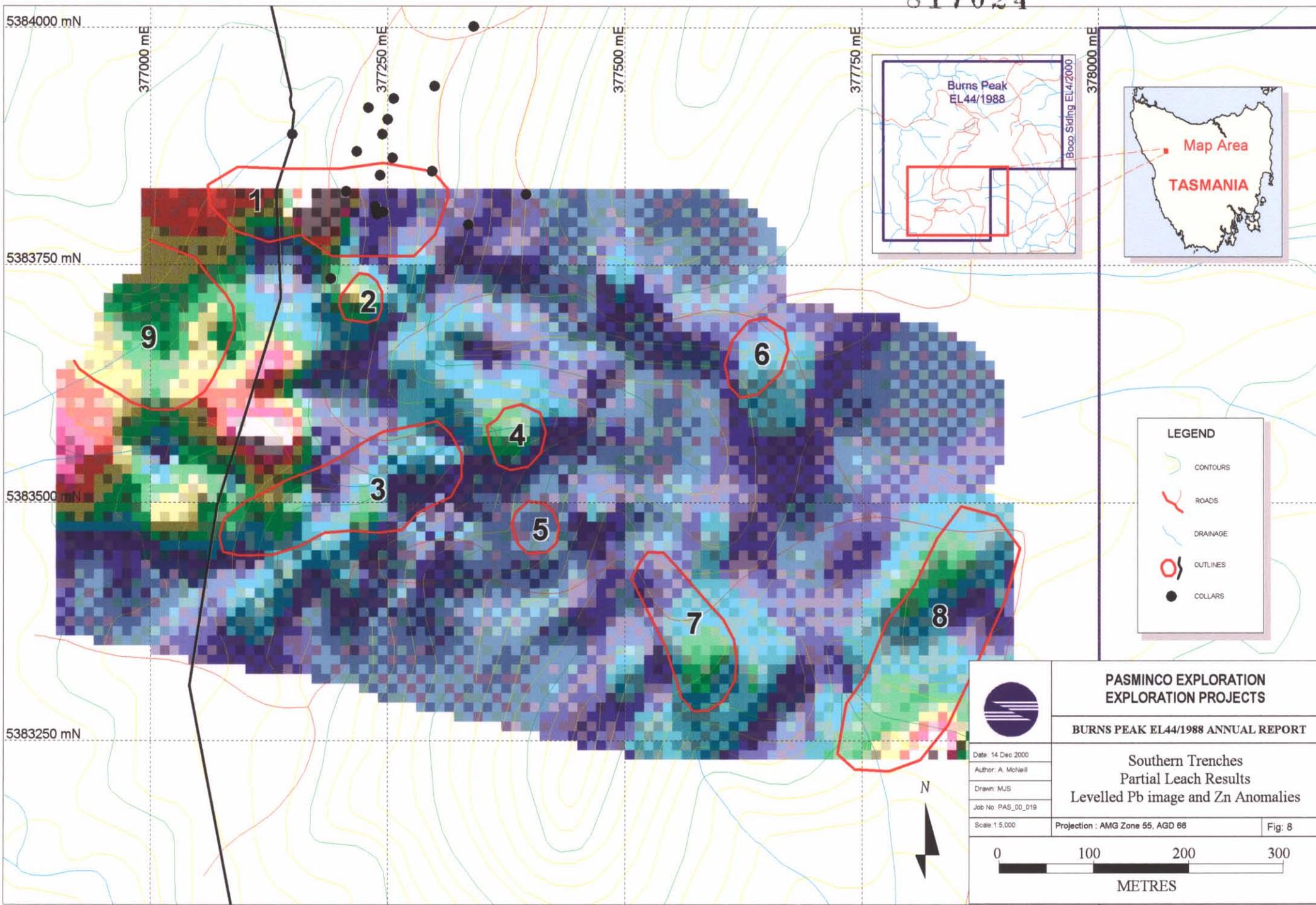
5 cm



	<b>PASMINGO EXPLORATION</b>	
	<b>EXPLORATION PROJECTS</b>	
<b>BURNS PEAK EL44/1988 ANNUAL REPORT</b>		
Southern Trenches		
Partial Leach Results		
Levelled Mo image and Zn Anomalies		
Date: 14 Dec 2000	Author: A. McNeill	Fig: 7
Drawn: MUS	Job No: PAS_00_019	
Scale: 1:5,000	Projection: AMG Zone 55, AGD 88	
		
METRES		

5 cm

817024 TOR: 01-4515

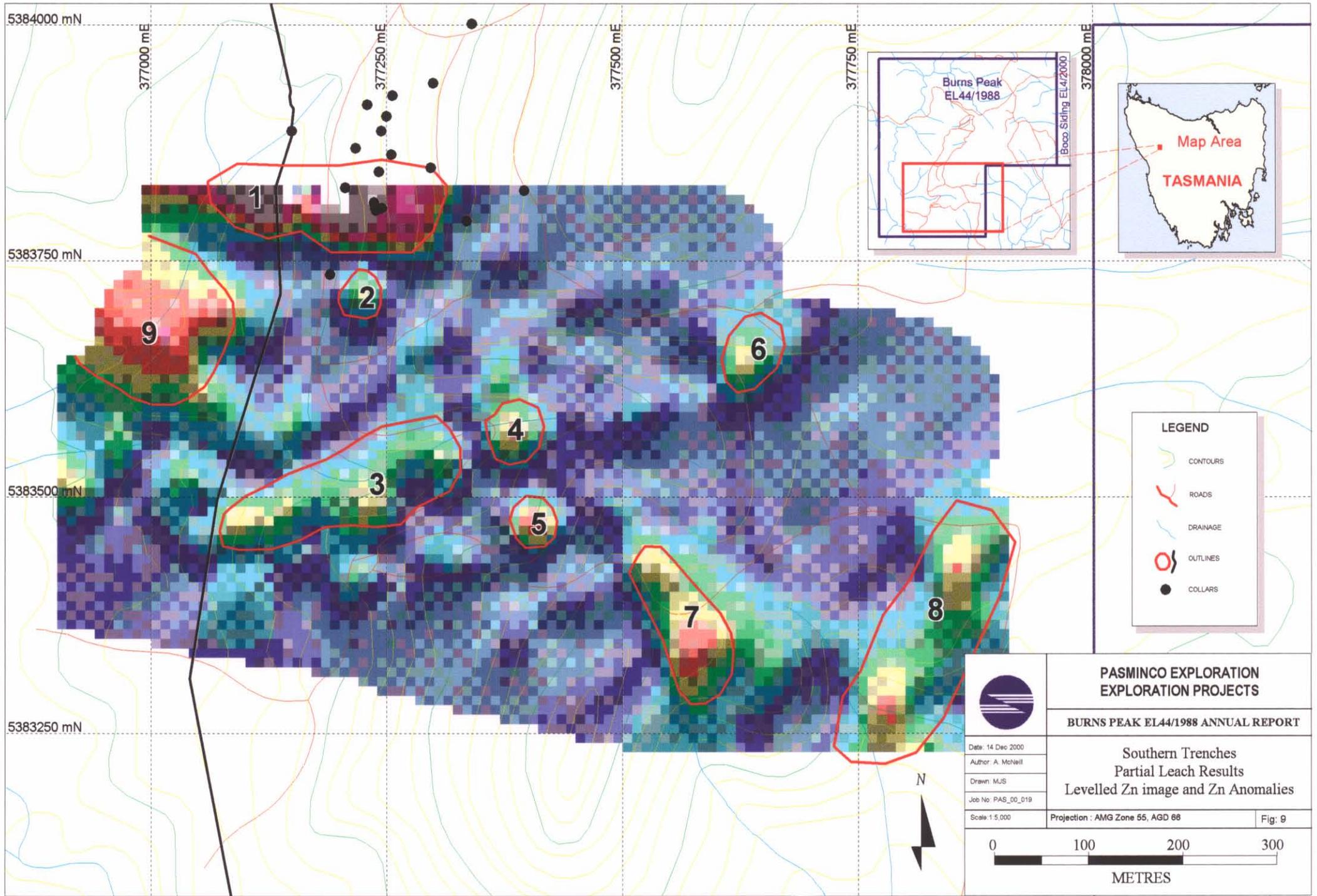


**LEGEND**

- CONTOURS
- ROADS
- DRAINAGE
- OUTLINES
- COLLARS

	<b>PASMINGO EXPLORATION EXPLORATION PROJECTS</b>	
	<b>BURNS PEAK EL44/1988 ANNUAL REPORT</b>	
Southern Trenches Partial Leach Results Levelled Pb image and Zn Anomalies		
Date: 14 Dec 2000	Author: A. McNeill	Fig: 8
Drawn: MJS	Job No: PAS_00_019	
Scale: 1:5,000	Projection: AMG Zone 55, AGD 68	
 0      100      200      300 METRES		

5 cm



5 cm



**Legend**

Siltstone	Black Shale Dundas
Pumice Breccia	Rhyolite
Andesite	Porphyry
Q+Fx1 sandstone	Burns Peak Tenement El 44/1988
Thrust Fault	Interpreted Fault
Normal Fault	Shear Zone

Rosebery Fault

Burns Peak EL44/1988

01\_4515

Joint Venture Annual Report - Burns Peak EL 44/88 - 1/11/99-31/10/2000  
 Pasmenco Australia Limited (Exploration)\*; Plutonic Op  
 Denver, K.; Edwards, P.W. EL44/1988

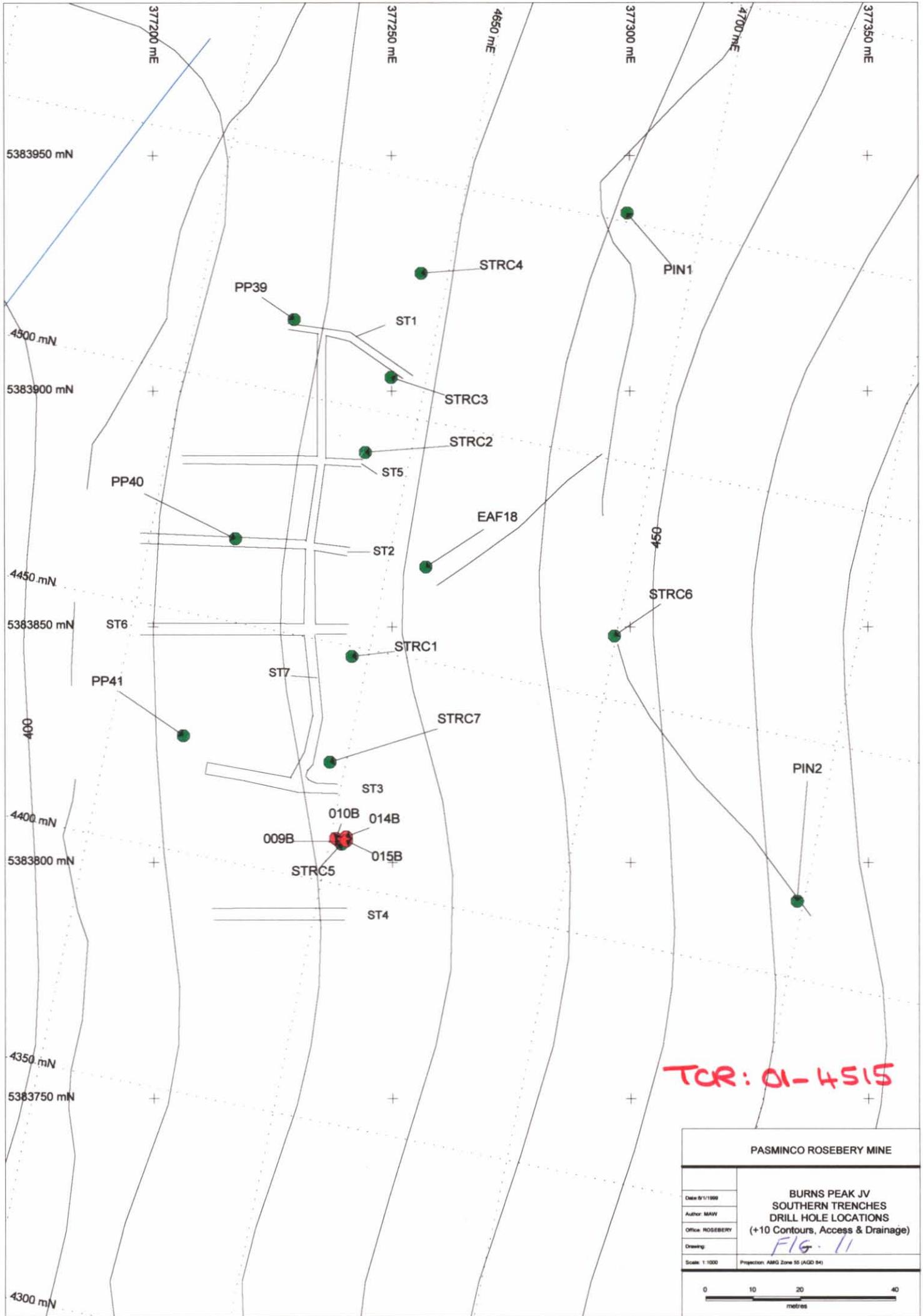
	PASMENCO EXPLORATION TASMANIA	
	<b>BURNS PEAK ANNUAL REPORT</b>	
Date: 14 Dec 2000	Burns Peak EL44/1988 Geology Map	
Author:		
Drawn: IO Dgital - MJS		
Job No: PAS_00_049		
Scale: 1:5,000	Projection: AMG Zone 55, AGD 66	Fig: 10
<p>METRES</p>		

5 cm

817026

5 cm

817027



TCR: 01-4515

<b>PASMINCO ROSEBERY MINE</b>	
Date: 5/11/99	<b>BURNS PEAK JV SOUTHERN TRENCHES DRILL HOLE LOCATIONS (+10 Contours, Access &amp; Drainage)</b>  <i>FIG. 11</i>
Author: MAW	
Office: ROSEBERY	
Drawing:	
Scale: 1:1000	
Projection: AMG Zone 55 (AGD 84)	

**BURNS PEAK EL 44/88**

**JOINT VENTURE ANNUAL REPORT**

**1<sup>ST</sup> NOVEMBER 1999 - 31<sup>ST</sup> OCTOBER 2000**

**APPENDIX 1**

**LEVELLED AND RAW PARTIAL LEACH SAMPLING DATA**

## BURNS PEAK EL 44/88 - RAW PARTIAL LEACH DATA

Note: All assay values in parts per million

Sample ID	Orig Sample ID	UTM_East	UTM_North	Local East	Local North	soil groups	Digest pH	Ag																				
								Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr		
73529		376924.8	5383468.2	4420	4000	orange	9.25	2.50E-05	0.16	6.00E-04	2.9	8.50E-03	0.06	0.32	0.03	0.71	3.00E-03	0.01	0.19	0.06	0.18	2.6	0.02	0.03	2.5	0.1		
73590		376934.01	5383466.37	4430	4000	orange	9.75	8.50E-03	0.1	5.00E-06	3.5	2.80E-03	0.01	0.11	0.02	0.54	3.00E-03	0.01	0.07	0.03	0.15	2.4	0.01	0.02	0.94	0.1		
73552	73558	376943.23	5383464.55	4440	4000	grey	10.5	2.50E-05	0.07	5.20E-04	1.3	5.00E-05	0.01	0.21	9.00E-03	0.77	7.00E-03	0.04	0.13	0.02	0.08	1.2	0.03	0.08	1.6	0.18		
73558		376943.23	5383464.55	4440	4000	grey	10	0.02	0.07	4.90E-04	1.4	9.00E-03	2.00E-03	0.07	0.01	0.33	6.00E-03	0.02	0.04	0.02	0.06	1.2	0.02	0.05	0.5	0.09		
73545		376952.45	5383462.72	4450	4000	grey	9.6	2.50E-05	0.12	1.06E-03	1.6	5.00E-05	0.03	0.31	0.02	0.54	3.00E-03	0.01	0.19	0.04	0.1	1.6	0.01	0.03	1.3	0.1		
73504		376961.67	5383460.9	4460	4000	grey	9.05	0.01	0.27	6.20E-04	2.7	2.90E-03	0.04	0.51	0.07	0.76	3.00E-03	0.02	0.35	0.04	0.16	3.8	0.03	0.04	3.8	0.13		
73515		376970.89	5383459.07	4470	4000	cream	9.3	0.01	0.2	1.78E-03	6	2.90E-03	0.01	0.16	0.01	0.45	5.00E-04	9.00E-03	0.1	0.03	0.04	2.4	0.01	0.02	1.1	0.14		
73560		376980.11	5383457.25	4480	4000	grey	9.1	0.01	0.09	7.10E-04	3.1	0.01	0.02	0.36	0.06	0.59	7.00E-03	0.02	0.23	0.04	0.13	2.9	0.03	0.04	2	0.12		
73585		376989.33	5383455.42	4490	4000	red-brown	9.75	3.00E-03	0.04	5.00E-06	1.8	0.01	0.01	0.12	0.02	0.29	2.00E-03	0.01	0.08	0.02	0.04	1.2	0.01	0.01	0.93	0.05		
73598		376998.55	5383453.6	4500	4000	red-brown	9.55	0.01	0.05	1.98E-03	2	5.00E-05	0.01	0.21	0.01	0.6	4.00E-03	0.01	0.13	0.01	0.04	1.6	0.02	0.02	1.8	0.03		
73579		377007.76	5383451.77	4510	4000	cream	9.55	8.50E-03	8.00E-03	1.64E-03	1.3	5.00E-05	0.03	0.15	0.02	0.49	3.00E-03	0.01	0.1	0.03	0.05	0.94	0.01	0.02	2.5	5.00E-04		
73533		377016.98	5383449.95	4520	4000	cream	9.55	0.02	0.05	4.57E-03	1.3	2.00E-03	0.02	0.24	0.02	3	2.00E-03	0.01	0.17	0.04	0.24	2.1	0.01	0.02	1.6	0.07		
73576		377026.2	5383448.12	4530	4000	red-brown	9.3	0.01	0.02	3.22E-03	1.9	5.00E-05	0.03	0.23	0.02	0.47	4.00E-03	0.01	0.14	0.04	0.05	1.2	0.02	0.02	0.98	5.00E-04		
73586		377035.42	5383446.3	4540	4000	brown	8.45	0.01	0.16	2.94E-03	5.8	0.01	0.05	0.21	0.04	2.3	6.00E-03	0.01	0.12	4.00E-03	0.18	6.4	0.02	0.04	6.4	0.05		
73581		377044.64	5383444.47	4550	4000	cream	9.6	3.80E-03	0.01	2.96E-03	1.6	5.00E-05	0.01	0.16	0.02	0.45	3.00E-03	0.01	0.1	0.03	0.04	0.88	0.01	0.01	1.2	5.00E-04		
73573		377053.86	5383442.65	4560	4000	cream	9.7	0.01	0.08	1.04E-03	1.6	5.00E-05	0.02	0.16	0.02	0.43	3.00E-03	0.01	0.08	0.06	0.03	1.1	0.01	0.01	2	0.11		
73537		377063.08	5383440.82	4570	4000	red-brown	8.9	0.01	0.09	1.64E-03	3.9	1.00E-04	0.08	0.48	0.03	0.99	2.00E-03	0.01	0.29	0.02	0.1	2.3	0.02	0.02	2.7	0.04		
73568		377072.3	5383439	4580	4000	red-brown	9.35	0.02	0.04	2.70E-03	2.8	5.00E-05	0.02	0.28	0.01	0.5	5.00E-03	0.01	0.17	0.06	0.06	1.8	0.02	0.02	4	0.04		
73563		377081.99	5383437.6	4590	4000	red-brown	9.25	0.03	0.02	1.17E-03	2.9	2.90E-03	0.02	0.16	0.02	0.56	3.00E-03	0.01	0.1	0.02	0.07	0.91	0.01	0.01	1.6	0.02		
73525		377091.68	5383436.2	4600	4000	cream	9.2	7.70E-03	0.1	4.30E-04	2.5	5.00E-05	0.04	0.47	0.01	1.1	5.00E-03	0.02	0.27	0.02	0.1	1.1	0.03	0.03	1.9	0.05		
73528		377101.37	5383434.8	4610	4000	red-brown	8.3	9.90E-03	0.11	6.60E-04	14	8.00E-04	0.11	0.92	0.04	2.3	5.00E-03	0.03	0.51	3.00E-03	0.31	6	0.04	0.06	6.8	0.06		
73538		377111.07	5383433.4	4620	4000	grey	9.8	3.20E-03	0.02	9.90E-04	1.3	5.00E-05	8.00E-03	0.23	6.00E-03	0.28	2.00E-03	0.01	0.13	7.00E-03	0.02	0.47	0.01	0.01	0.67	0.1		
73553		377120.76	5383432	4630	4000	brown	8.75	2.50E-05	0.09	8.50E-04	2.2	5.00E-05	0.04	0.28	0.01	1.5	7.00E-03	0.02	0.17	0.01	0.1	4.1	0.03	0.04	3.8	0.04		
73578		377130.45	5383430.6	4640	4000	brown	8.55	0.01	0.05	9.10E-04	4.4	5.00E-05	0.05	0.13	0.02	1.4	4.00E-03	0.01	0.07	0.01	0.09	6.9	0.01	0.03	2.5	5.00E-04		
73510		377140.15	5383429.2	4650	4000	brown	8.5	9.70E-03	0.06	9.10E-04	3.6	1.20E-03	0.05	0.14	0.01	0.94	5.00E-04	8.00E-03	0.09	3.00E-03	0.07	4.1	9.00E-03	0.02	3.3	0.03		
73594		377149.84	5383427.8	4660	4000	brown	8.75	0.01	0.08	2.15E-03	5.4	1.00E-03	0.05	0.47	0.02	0.95	8.00E-03	0.03	0.28	0.01	0.17	4.3	0.04	0.05	2.3	0.04		
73577		377159.53	5383426.4	4670	4000	brown	8.5	0.01	0.01	1.58E-03	4.7	5.00E-05	0.05	0.14	0.02	0.84	3.00E-03	0.01	0.08	0.01	0.09	3.6	0.01	0.02	3.9	3.00E-03		
73550		377169.22	5383425	4680	4000	grey	9.95	2.50E-05	0.02	2.80E-03	1.4	5.00E-05	0.01	0.15	6.00E-03	0.2	5.00E-04	7.00E-03	0.09	0.02	0.05	0.39	9.00E-03	0.01	0.52	0.07		
73596		377178.92	5383423.6	4690	4000	grey	9.2	0.03	0.04	5.10E-04	2.4	5.00E-05	0.02	0.12	0.01	0.24	2.00E-03	9.00E-03	0.07	0.02	0.06	1.2	0.01	0.01	1.5	0.03		
73520	73596	377178.92	5383423.6	4690	4000	grey	8.85	2.70E-03	0.05	5.20E-04	2	7.00E-04	0.02	0.29	0.01	0.18	3.00E-03	0.01	0.16	0.02	0.06	1.4	0.02	0.02	1.8	0.03		
73530		377188.61	5383422.2	4700	4000	grey	8.8	0.01	0.05	1.03E-03	3.8	4.30E-03	0.05	0.3	0.01	0.65	3.00E-03	0.01	0.17	0.03	0.09	2.7	0.02	0.03	2.7	0.07		
73593		377198.3	5383420.8	4710	4000	brown	8.4	0.01	0.08	1.80E-03	4.6	1.00E-03	0.08	0.13	0.02	2	3.00E-03	0.01	0.07	0.02	0.11	6	0.01	0.04	5	0.04		
73561		377217.51	5383416.23	4730	4000	black	6.9	0.01	0.14	1.38E-03	2.3	2.30E-03	0.15	0.13	0.04	1.8	4.00E-03	0.01	0.06	3.00E-03	0.13	3.2	0.01	0.04	9.1	0.03		
73526		377227.02	5383413.07	4740	4000	orange	10	0.01	0.02	8.50E-04	1	0.01	5.00E-03	0.34	7.00E-03	0.18	7.00E-03	0.02	0.2	0.01	0.07	0.35	0.03	0.24	0.61	2.9		
73583		377236.53	5383409.91	4750	4000	grey	9.35	5.00E-05	5.00E-04	1.06E-03	2.2	5.00E-05	0.02	0.17	0.01	0.33	4.00E-03	0.01	0.11	0.01	0.03	0.91	0.01	0.02	0.91	0.02		
73551		377246.05	5383406.75	4760	4000	grey	9.4	2.50E-05	0.03	1.17E-03	1.5	5.00E-05	0.02	0.38	9.00E-03	0.2	2.00E-03	0.01	0.26	0.02	0.05	0.55	0.02	0.03	1.1	0.15		
73511		377255.56	5383403.58	4770	4000	grey	9	0.01	0.04	1.30E-04	1.5	9.00E-04	0.01	0.56	0.01	0.89	5.00E-03	0.02	0.36	0.01	0.12	1.1	0.02	0.04	2.3	0.14		
73523		377265.07	5383400.42	4780	4000	grey	8.85	0.01	0.04	1.96E-03	2.2	8.00E-04	0.02	0.53	0.01	0.15	5.00E-03	0.02	0.34	0.01	0.05	1.1	0.02	0.05	1.2	0.18		
73539		377274.58	5383397.26	4790	4000	black	8.85	2.50E-05	0.11	3.96E-03	3.5	1.40E-03	0.05	0.97	0.02	0.48	8.00E-03	0.04	0.64	0.02	0.08	3	0.05	0.06	2.8	0.09		
73566		377284.1	5383394.1	4800	4000	brown	9.15	0.01	0.01	7.10E-04	3.4	3.00E-04	0.02	0.52	0.01	0.19	7.00E-03	0.02	0.33	0.01	0.07	0.68	0.04	0.04	0.54	0.08		
164955		377303.64	5383389.36	4820	4000	black	8.8	2.50E-03	0.06	5.00E-06	2.5	2.00E-04	0.02	1.1	0.02	0.31	8.00E-03	0.04	0.84	0.02	0.06	2.2	0.05	0.07	1.2	0.08		
164952		377313.41	5383386.99	4830	4000	black	9.3	3.70E-03	0.03	4.00E-04	2.4	5.00E-05	0.01	0.69	0.01	0.21	9.00E-03	0.03	0.5	7.00E-03	0.04	1.2	0.04	0.04	0.99	0.07		
164997		377323.18	5383384.62	4840	4000	black	9.4	0.01	0.01	4.20E-04	1.9	5.00E-05	0.01	0.54	7.00E-03	0.18	8.00E-03	0.02	0.51	5.00E-04	0.02	0.78	0.04	0.04	0.53	0.11		
164957		377332.95	5383382.25	4850	4000	black	9.3	2.40E-03	0.03	5.30E-04	2	5.00E-05	0.02	0.66	0.01	0.22	7.00E-03	0.03	0.52	0.01	0.05	1.2	0.05	0.06	1.7	0.07		
164964		377342.72	5383379.88	4860	4000	black	9.3	5.00E-03	0.04	5.00E-06	2	5.00E-05	0.01	0.61	8.00E-03	0.1	4.00E-03	0.03	0.61	0.01	0.07	0.85	0.04	0.05	0.29	0.08		
164968		377352.49	5383377.51	4870	4000	black	9.25	5.10E-03	0.04																			

Sample ID	Orig Sample ID	UTM_East	UTM_North	Local East	Local North	soil groups	Digest pH	Elements																				
								Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr		
164966	377430.7	5383358.55	4950	4000	black	9.2	5.40E-03	0.04	5.00E-06	1.7	5.00E-05	0.01	0.74	0.01	0.15	7.00E-03	0.03	0.63	0.01	0.05	1.1	0.05	0.07	0.44	0.08			
164981	377440.48	5383356.18	4960	4000	black	9.25	8.60E-03	0.04	5.00E-06	1.4	5.00E-05	0.01	0.76	0.01	0.15	7.00E-03	0.03	0.64	8.00E-03	0.05	1.5	0.05	0.07	0.31	0.08			
164951	377450.26	5383353.81	4970	4000	black	9.3	8.70E-03	0.07	5.80E-04	2.6	2.20E-03	0.02	0.57	0.01	0.25	6.00E-03	0.03	0.56	0.01	0.07	2.3	0.05	0.07	2	0.11			
164993	377460.04	5383351.44	4980	4000	black	9.35	5.30E-03	0.03	1.70E-04	2	7.00E-04	9.00E-03	0.53	9.00E-03	0.1	5.00E-03	0.02	0.44	5.00E-04	0.03	1.3	0.04	0.05	0.64	0.17			
164959	377469.82	5383349.07	4990	4000	black	9.4	9.80E-03	0.04	5.00E-04	3.3	5.00E-05	0.02	0.56	0.01	0.4	7.00E-03	0.02	0.45	0.01	0.06	2.6	0.04	0.06	1.7	0.13			
164967	377479.6	5383346.7	5000	4000	black	8.9	6.70E-03	0.06	5.00E-06	2.8	5.00E-05	0.02	0.56	0.01	0.17	4.00E-03	0.03	0.58	0.01	0.08	2.7	0.05	0.06	0.47	0.07			
164953	377498.74	5383342.12	5020	4000	black	8.6	5.80E-03	0.1	6.00E-05	5.6	4.00E-04	0.05	0.93	0.03	0.51	9.00E-03	0.05	0.69	0.03	0.12	4.4	0.06	0.14	3.6	0.13			
164962	377517.88	5383337.54	5040	4000	black	9	8.00E-03	0.06	1.10E-03	4.9	5.30E-03	0.05	0.98	0.03	0.45	0.01	0.05	0.67	0.01	0.1	3.1	0.07	0.12	2.5	0.11			
73666	377537.02	5383332.96	5060	4000	black	9.45	2.00E-04	0.07	1.66E-03	2.2	2.00E-04	0.02	0.66	0.01	0.43	9.00E-03	0.03	0.46	0.01	0.05	1.6	0.04	0.08	0.72	0.16			
73639	377556.16	5383328.38	5080	4000	black	8.05	0.01	0.08	1.24E-03	7.1	5.00E-05	0.11	0.94	0.04	1.2	0.01	0.06	0.65	0.02	0.15	6.2	0.07	0.16	15.5	0.06			
73623	377575.3	5383323.8	5100	4000	black	8.65	0.01	0.05	5.80E-04	3.5	8.00E-04	0.07	0.97	0.03	0.68	0.01	0.05	0.64	0.03	0.1	5.1	0.07	0.13	7	0.07			
73611	377594.52	5383319.24	5120	4000	black	8.5	0.01	0.11	2.88E-03	4.6	5.00E-05	0.06	1.3	0.03	0.65	0.02	0.07	0.72	0.02	0.16	4.6	0.11	0.12	6.9	0.16			
73651	377613.74	5383314.68	5140	4000	black	8.8	4.30E-03	0.06	5.00E-06	4	5.00E-04	0.04	1.6	0.02	0.33	0.01	0.07	1.1	0.01	0.09	3.1	0.11	0.14	2.5	0.12			
73683	377632.96	5383310.12	5160	4000	black	7.25	5.00E-03	0.14	6.10E-04	2.7	5.00E-05	0.04	0.63	0.04	0.38	0.01	0.05	0.51	8.00E-03	0.06	5.5	0.08	0.13	3.8	0.23			
73626	377652.18	5383305.56	5180	4000	black	7.6	2.10E-03	0.1	1.11E-03	4.6	5.00E-05	0.04	0.52	0.03	0.39	8.00E-03	0.04	0.34	0.02	0.07	4	0.04	0.12	7.2	0.01			
73661	377671.4	5383301	5200	4000	black	8.4	2.50E-05	0.02	5.60E-04	1.4	5.00E-05	0.01	0.41	0.04	0.12	4.00E-03	0.02	0.3	5.00E-04	0.26	0.29	0.02	0.04	0.47	0.07			
73693	377690.7	5383296.53	5220	4000	grey	9	8.50E-03	0.05	4.10E-04	3.5	1.00E-04	0.02	0.77	0.01	0.38	9.00E-03	0.04	0.67	0.04	0.04	3	0.06	0.11	2.3	0.28			
73630	377710.3	5383292.06	5240	4000	brown	8.8	0.01	0.02	1.63E-03	4.2	5.00E-05	0.01	3.7	0.01	0.4	0.03	0.19	2.5	0.04	0.07	4.5	0.22	0.58	1.1	0.09			
73620	377729.3	5383287.6	5260	4000	brown	10	8.70E-03	3.00E-03	1.10E-03	1.8	1.00E-03	9.00E-03	0.51	0.01	0.2	7.00E-03	0.03	0.34	0.02	0.04	1.2	0.03	0.07	0.86	0.08			
73696	377729.3	5383287.6	5260	4000	brown	9.7	1.00E-03	0.01	4.10E-04	2.3	5.00E-05	0.01	0.36	0.01	0.43	6.00E-03	0.02	0.29	0.01	0.05	2.3	0.04	0.07	2.8	4.00E-03			
73650	377748.6	5383283.13	5280	4000	red-brown	9	0.01	0.07	5.00E-06	4	3.20E-03	0.03	1.3	0.03	0.32	0.01	0.06	0.81	0.01	0.05	6.3	0.08	0.13	4.3	0.27			
73677	377767.9	5383278.66	5300	4000	black	7.35	5.00E-03	0.11	5.00E-06	5.4	1.80E-03	0.07	0.29	0.02	3.2	4.00E-03	0.02	0.24	1.00E-03	0.19	5.8	0.02	0.07	11	0.02			
73694	377787.2	5383274.2	5320	4000	black	8.55	0.02	0.09	1.18E-03	8.2	5.00E-05	0.07	0.4	0.03	2.3	7.00E-03	0.02	0.33	0.01	0.11	7.8	0.03	0.06	8.7	0.03			
73610	377806.26	5383268.5	5340	4000	red-brown	9.85	0.01	0.05	2.43E-03	1.7	5.00E-05	0.04	0.4	0.03	0.17	9.00E-03	0.03	0.24	0.01	0.05	2.4	0.03	0.06	2.7	0.12			
73678	377825.32	5383262.8	5360	4000	red-brown	9.1	0.01	0.08	3.90E-04	4	1.90E-03	0.17	2.1	0.1	0.64	0.02	0.11	1.7	0.02	0.04	37	0.15	0.24	6.8	0.16			
73653	377844.38	5383257.1	5380	4000	red-brown	9.45	0.01	0.04	2.00E-05	3.5	5.00E-05	0.03	0.8	0.01	0.26	0.01	0.04	0.57	3.00E-03	0.04	3.1	0.06	0.11	2.3	0.06			
73638	377863.44	5383251.4	5400	4000	red-brown	8.95	0.01	0.08	1.45E-03	7.4	5.00E-04	0.05	1.2	0.06	1.6	0.01	0.07	0.73	0.02	0.36	6.9	0.08	0.18	4.7	0.04			
73628	377882.5	5383245.7	5420	4000	red-brown	9.1	9.20E-03	0.01	1.68E-03	3.3	5.00E-05	0.03	0.95	0.02	0.48	0.01	0.05	0.61	0.01	0.04	4.6	0.06	0.12	2.3	0.07			
73695	376934.1	5383514.2	4420	4050	brown	7.5	9.80E-03	0.25	6.00E-04	9.4	5.00E-05	0.08	0.45	0.05	2	6.00E-03	0.04	0.35	7.00E-03	0.3	14.5	0.04	0.13	8.6	0.07			
73662	376943.33	5383511.78	4430	4050	orange	10.5	8.30E-03	1.5	3.04E-03	2.1	0.06	0.01	0.66	0.01	1.7	0.03	0.15	0.44	0.16	0.16	4	0.12	0.24	0.79	3			
73669	376952.57	5383509.37	4440	4050	orange	10.5	5.50E-04	1.2	1.75E-03	1.5	0.04	3.00E-03	0.68	0.01	3.9	0.02	0.12	0.47	0.14	0.19	4.4	0.12	0.19	1.3	4.1			
73632	376961.81	5383506.96	4450	4050	orange	10.5	0.01	1.2	5.86E-03	1.6	0.06	5.00E-03	0.98	0.01	2	0.04	0.18	0.63	0.38	0.15	5.9	0.19	0.29	1.1	3.6			
73640	376971.05	5383504.55	4460	4050	orange	10.5	0.01	0.93	3.37E-03	1.7	0.03	3.00E-03	1.1	0.02	2.4	0.03	0.11	0.64	0.09	0.19	4.9	0.12	0.2	1.3	3.8			
73616	376980.28	5383502.13	4470	4050	orange	10.5	0.01	1.2	3.31E-03	1.7	0.03	7.00E-03	1.4	0.05	2.9	0.03	0.12	0.66	0.13	0.16	4.4	0.14	0.23	1.9	4.5			
73674	376989.52	5383499.72	4480	4050	orange	10.5	5.50E-03	0.92	1.45E-03	1.3	0.03	6.00E-03	0.77	0.04	2.4	0.01	0.07	0.5	0.1	0.1	3.9	0.09	0.15	2.2	3.9			
73631	376998.76	5383497.31	4490	4050	orange	10.5	0.01	0.85	1.51E-03	1.6	0.02	8.00E-03	2.6	0.04	4	0.06	0.22	1.3	0.24	0.44	8.1	0.29	0.35	3.6	5			
73670	377008	5383494.9	4500	4050	orange	10.5	5.10E-03	1.2	0.04	1.5	0.04	0.01	2.7	0.03	4.8	0.06	0.24	1.9	0.41	0.3	13.5	0.31	0.37	3.3	7.4			
73692	377017.75	5383493.11	4510	4050	orange	10.5	0.01	1.4	2.83E-03	1	0.03	0.01	1.4	0.02	3.5	0.03	0.14	1	0.83	0.42	8.9	0.18	0.21	6.5	5.4			
73662	377027.5	5383491.33	4520	4050	orange	10.5	0.01	3.2	2.39E-03	0.83	0.03	8.00E-03	0.68	0.05	4.9	0.02	0.07	0.51	0.4	0.08	8.3	0.1	0.13	3.1	6.4			
73601	377037.25	5383489.55	4530	4050	orange	10.5	0.02	2.7	2.02E-03	1.1	0.03	0.01	0.48	0.03	3.7	0.02	0.07	0.26	2.4	0.15	6.9	0.08	0.13	1.4	4.9			
73643	377047	5383487.76	4540	4050	orange	10	0.02	3.2	3.32E-03	1.1	0.09	0.01	1.3	0.02	5.8	0.04	0.17	0.78	4.2	0.15	6.8	0.18	0.25	2.1	5.6			
73656	377056.75	5383485.98	4550	4050	cream	9.75	1.50E-03	0.48	5.60E-04	2.1	6.00E-03	8.00E-03	0.46	0.03	1.3	0.02	0.12	0.32	2.2	0.14	4.3	0.09	0.18	0.51	0.76			
73609	377066.5	5383484.2	4560	4050	grey	8.6	0.01	0.17	2.48E-03	11.5	5.00E-05	0.07	0.2	0.06	1.6	6.00E-03	0.01	0.12	0.11	0.4	5.3	0.01	0.03	6.5	0.09			
73617	377076.25	5383482.41	4570	4050	brown	7.25	3.80E-03	0.28	1.46E-03	6.4	2.00E-03	0.12	0.3	0.08	0.48	5.00E-03	0.02	0.16	0.02	0.07	5.6	0.02	0.11	14	0.45			
73665	377086	5383480.63	4580	4050	brown	8.3	3.20E-03	0.2	7.00E-05	6.8	9.00E-04	0.1	0.29	0.03	2	3.00E-03	0.02	0.17	0.01	0.24	3.5	0.02	0.05	4.5	0.09			
73603	377095.75	5383478.85	4590	4050	black	7.6	0.01	0.11	1.50E-04	6.7	5.00E-05	0.04	0.31	0.04	1.3	7.00E-03	0.02	0.16	0.01	0.18	6.9	0.02	0.05	14.5	0.14			
73697	377105.5	5383477.06	4600	4050	grey	9.65	2.50E-05	0.02	8.00E-05	1.9	7.50E-03	0.01	0.08	6.00E-03	0.15	1.00E-03	6.00E-03	0.07	7.00E-03	0.04	0.44	0.01	0.01	0.96	0.06			
73612	377115.25	5383475.28	4610	4050	brown	7.15	1.90E-																					

Sample ID	Orig Sample ID	UTM_East	UTM_North	Local East	Local North	soil groups	Digest pH	Elements																				
								Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr		
73648		377229.06	5383451.3	4730	4050	grey	9.3	0.01	0.05	3.50E-04	3.6	2.50E-03	0.02	0.39	0.01	0.55	4.00E-03	0.02	0.28	0.02	0.07	2	0.03	0.05	1.9	0.09		
73644		377238.17	5383449	4740	4050	grey	9.15	5.20E-03	0.05	2.00E-05	3.2	3.00E-03	0.04	0.16	0.01	0.32	3.00E-03	0.01	0.11	0.05	0.04	2.3	0.01	0.03	1.4	0.38		
73641		377256.4	5383444.4	4760	4050	orange	10.5	2.50E-05	0.02	4.80E-04	0.69	5.00E-05	4.00E-03	0.09	2.00E-03	0.04	1.00E-03	7.00E-03	0.08	0.01	0.01	0.05	9.00E-03	0.04	0.26	0.55		
73629		377266.17	5383441.82	4770	4050	brown	8.95	8.60E-03	3.00E-03	1.45E-03	4.1	5.00E-05	0.02	0.77	0.01	0.27	7.00E-03	0.03	0.56	0.03	0.05	1.3	0.04	0.07	1.8	0.02		
73690		377275.95	5383439.24	4780	4050	brown	8.5	7.70E-03	0.09	1.90E-04	27	5.00E-05	0.04	0.39	0.02	0.4	5.00E-04	0.02	0.33	0.02	0.07	3	0.03	0.04	4.1	5.00E-04		
73658		377285.73	5383436.66	4790	4050	black	8.6	8.60E-03	0.11	1.60E-04	3.4	5.00E-05	0.04	0.26	0.01	0.3	4.00E-03	0.01	0.18	0.02	0.09	1.9	0.02	0.04	2.9	0.04		
73652	73658	377285.73	5383436.66	4790	4050	black	8.5	0.02	0.14	5.00E-06	3.6	8.00E-04	0.06	0.37	0.03	0.59	4.00E-03	0.02	0.25	0.02	0.12	4.3	0.03	0.07	4.3	0.08		
73645		377295.51	5383434.08	4800	4050	grey	9.25	7.30E-03	0.27	8.80E-04	6.9	8.00E-03	0.01	0.28	0.01	0.2	2.00E-03	0.01	0.19	0.03	0.05	2.2	0.02	0.05	1.2	0.17		
73604		377305.29	5383431.5	4810	4050	grey	9.45	9.60E-03	0.03	2.50E-04	2.1	5.00E-05	0.01	0.27	0.01	0.31	5.00E-03	0.01	0.16	0.01	0.06	0.76	0.02	0.03	2.7	0.12		
73615		377315.07	5383428.92	4820	4050	brown	8.85	9.10E-03	0.04	1.54E-03	3	6.10E-03	0.02	1.2	0.03	0.64	0.01	0.04	0.87	0.04	0.15	1.5	0.06	0.09	3.8	0.1		
73660		377324.85	5383426.35	4830	4050	brown	9.5	5.10E-03	0.08	1.80E-04	5.1	5.00E-05	0.1	0.91	0.02	0.71	9.00E-03	0.05	0.65	0.01	0.11	2.2	0.06	0.13	6.4	0.05		
73685		377334.62	5383423.77	4840	4050	brown	9.2	2.50E-05	5.00E-04	5.00E-06	0.55	5.00E-05	7.00E-03	0.88	5.00E-03	0.25	8.00E-03	0.03	0.53	0.01	5.00E-04	0.17	0.04	0.04	0.6	0.01		
73698		377393.3	5383408.3	4900	4050	red-brown	10	3.40E-03	0.01	8.90E-04	0.61	9.80E-03	3.00E-03	0.2	6.00E-03	1.2	3.00E-03	0.01	0.14	7.00E-03	0.09	0.64	0.01	0.05	0.23	0.63		
73679		377403.26	5383406.79	4910	4050	brown	9.5	4.00E-03	0.01	1.80E-04	1.7	5.00E-05	6.00E-03	0.63	6.00E-03	0.17	7.00E-03	0.03	0.45	7.00E-03	5.00E-03	1.2	0.05	0.06	0.53	1.00E-03		
73633		377413.22	5383405.28	4920	4050	grey	9.95	2.50E-05	5.00E-04	7.80E-04	0.65	2.00E-03	5.00E-04	0.21	5.00E-03	0.2	5.00E-03	0.02	0.14	0.02	0.02	0.29	0.02	0.03	0.51	0.26		
73676		377423.18	5383403.77	4930	4050	black	7.95	4.70E-03	0.08	5.00E-04	2.2	5.00E-05	0.03	0.86	0.02	0.31	9.00E-03	0.04	0.64	0.02	0.14	1.9	0.06	0.12	2.3	0.06		
73686		377433.14	5383402.26	4940	4050	black	7.95	2.50E-05	0.08	3.90E-04	2.8	5.00E-05	0.04	0.74	0.02	0.55	7.00E-03	0.04	0.63	0.02	0.09	1.9	0.05	0.12	4.5	5.00E-04		
73681		377443.1	5383400.75	4950	4050	black	8.75	0.01	0.07	1.00E-03	2.6	5.00E-05	0.04	0.73	0.03	0.47	9.00E-03	0.04	0.54	0.02	0.06	3.1	0.06	0.12	2.1	0.01		
73673		377453.06	5383399.24	4960	4050	black	7.85	5.60E-03	0.19	4.70E-04	1.9	2.90E-03	0.04	0.65	0.04	0.28	8.00E-03	0.03	0.45	0.01	0.06	1.9	0.04	0.1	2.1	0.24		
73637		377463.02	5383397.73	4970	4050	black	8.3	5.60E-03	0.06	9.90E-04	2.5	5.00E-05	0.04	0.9	0.03	0.47	0.01	0.04	0.59	0.01	0.08	3.1	0.06	0.12	3.5	0.01		
73668		377472.98	5383396.22	4980	4050	black	8.75	2.50E-05	0.06	8.50E-04	2.4	5.00E-05	0.03	0.93	0.02	0.34	0.01	0.05	0.63	0.01	0.18	2.2	0.06	0.11	1.6	0.06		
73663		377482.94	5383394.71	4990	4050	black	8.45	2.50E-05	0.09	6.75E-03	2.9	5.10E-03	0.03	0.97	0.02	0.28	0.01	0.06	0.68	7.00E-03	0.1	2	0.08	0.13	0.81	0.25		
73625		377492.9	5383393.2	5000	4050	black	8.75	9.70E-03	0.02	1.22E-03	18.5	5.00E-05	0.02	0.37	0.03	0.41	1.00E-03	0.02	0.27	0.02	0.15	1.6	0.02	0.07	1.7	0.02		
73588		376953.5	5383562.4	4440	4100	orange	9.45	0.02	1.6	1.41E-03	9.2	0.09	0.04	0.43	0.11	3.3	0.01	0.05	0.24	0.04	0.65	13.5	0.04	0.1	2.8	0.42		
73564		376962.94	5383559.77	4450	4100	brown	8.7	0.02	0.34	1.60E-04	7.1	9.80E-03	0.06	0.55	0.23	2.6	0.01	0.06	0.32	0.04	0.83	8	0.07	0.11	15	0.1		
73505		376972.38	5383557.14	4460	4100	brown	9.65	0.01	0.43	1.68E-03	2.8	7.60E-03	0.01	0.71	0.33	2	0.01	0.1	0.36	0.05	0.67	4.2	0.09	0.22	1.6	0.24		
73584		376981.82	5383554.51	4470	4100	orange	9.6	0.01	1.3	3.12E-03	4.5	0.05	0.02	0.53	0.06	1.5	0.01	0.06	0.31	0.07	0.34	8.2	0.07	0.1	1.8	0.29		
73502		376991.27	5383551.88	4480	4100	brown	9.4	0.01	0.08	3.34E-03	2	2.70E-03	0.01	0.26	0.02	0.79	4.00E-03	0.02	0.17	0.02	0.13	2.9	0.02	0.03	1.4	0.04		
73587	73547	377010.15	5383546.62	4490	4100	grey	9.7	0.01	0.06	3.20E-04	3	7.00E-03	0.01	0.05	0.02	0.61	1.00E-03	6.00E-03	0.03	7.00E-03	0.08	1.8	7.00E-03	0.01	0.52	0.02		
73547		377000.71	5383549.25	4490	4100	grey	9.35	2.50E-05	0.08	1.58E-03	1.8	5.00E-05	0.03	0.18	0.03	0.89	1.00E-03	0.01	0.11	0.02	0.16	2	0.01	0.02	2.3	0.04		
73507		377019.6	5383544	4500	4100	grey	8.85	4.10E-03	0.07	8.50E-04	3.7	1.50E-03	0.02	0.24	0.03	0.24	5.00E-04	0.01	0.15	0.02	0.13	2.5	0.01	0.02	5.9	0.03		
73589		377029.04	5383541.37	4510	4100	brown	7.9	4.60E-03	0.4	1.19E-03	9.1	7.80E-03	0.05	0.21	0.08	0.84	8.00E-03	0.02	0.1	0.03	0.1	10.5	0.02	0.07	11	0.1		
73555		377038.48	5383538.74	4520	4100	grey	9.3	4.00E-04	0.53	5.09E-03	2.1	4.30E-03	0.03	0.24	0.03	0.91	3.00E-03	0.01	0.15	0.14	0.17	4.5	0.01	0.03	1.4	0.12		
73514		377047.92	5383536.11	4530	4100	grey	9.05	0.01	0.14	3.30E-04	4.7	1.30E-03	0.03	0.12	0.03	0.79	5.00E-04	7.00E-03	0.07	0.02	0.08	3.2	6.00E-03	0.01	1.3	0.03		
73518		377057.37	5383533.48	4540	4100	brown	7.7	3.70E-03	0.3	2.22E-03	7.4	1.50E-03	0.09	0.5	0.07	1.1	5.00E-03	0.03	0.25	3.00E-03	0.23	11.5	0.03	0.08	9.9	0.09		
73599		377066.81	5383530.85	4550	4100	orange	9.6	0.02	0.86	6.30E-04	2.8	0.01	0.01	0.18	0.06	0.76	3.00E-03	0.01	0.09	0.55	0.17	2.8	0.01	0.03	1.8	0.57		
73527		377076.25	5383528.22	4560	4100	brown	9.4	1.00E-04	0.13	4.20E-04	1.4	1.10E-03	0.01	0.35	0.02	0.7	4.00E-03	0.01	0.2	0.3	0.19	2.9	0.02	0.02	2.4	0.19		
73549		377085.7	5383525.6	4570	4100	brown	9.25	2.50E-05	0.1	2.00E-05	1.9	5.00E-05	0.03	0.31	0.02	0.88	2.00E-03	0.01	0.18	0.31	0.19	2.7	0.01	0.02	1.4	0.05		
73554		377095.5	5383523.9	4580	4100	black	9	2.50E-05	0.13	2.07E-03	1.8	5.00E-05	0.02	0.19	0.02	0.92	2.00E-03	0.01	0.12	0.1	0.23	4.9	0.01	0.02	1.8	0.03		
73522		377105.3	5383522.2	4590	4100	black	7.75	5.10E-03	0.3	5.00E-06	7.6	1.20E-03	0.07	0.57	0.03	2.6	5.00E-03	0.03	0.29	0.01	0.49	12.5	0.04	0.08	3.8	0.09		
73567		377115.1	5383520.5	4600	4100	orange	9.45	0.03	1.8	2.18E-03	7.1	0.01	0.01	0.19	0.02	1.7	5.00E-03	0.01	0.11	0.15	0.13	12	0.01	0.05	1.8	0.52		
73591		377124.87	5383518.78	4610	4100	cream	10	0.01	0.37	3.00E-05	3.5	2.70E-03	0.01	0.03	0.01	2.2	2.00E-03	5.00E-03	0.02	0.06	0.12	2.4	6.00E-03	0.01	1.3	0.08		
73513		377134.65	5383517.07	4620	4100	orange	9	9.90E-03	0.03	4.70E-04	7.8	8.00E-04	0.01	0.24	0.01	0.67	5.00E-04	0.01	0.15	0.01	0.08	1.7	0.01	0.02	2.1	0.06		
73571		377144.42	5383515.35	4630	4100	brown	8.25	0.03	0.06	1.90E-03	5.7	5.00E-05	0.04	0.2	0.04	2.1	4.00E-03	0.01	0.11	0.01	0.19	5.4	0.02	0.03	3.5	0.01		
73521		377154.2	5383513.64	4640	4100	red-brown	6.9	5.30E-03	0.24	1.50E-04	4	1.70E-03	0.05	0.62	0.04	1.2	9.00E-03	0.04	0.3	5.00E-04	0.16	10.5	0.05	0.12	13.5	0.15		
73600		377163.97	5383511.92	4650	4100	grey	10	0.03	0.02	5.00E-06	3.3	5.00E-05	7.00E-03	0.05	4.00E-03	0.67	5.00E-04											

Sample ID	Orig Sample ID	UTM_East	UTM_North	Local East	Local North	soil groups	Digest pH	Elements																				
								Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr		
73543		377300.82	5383487.91	4790	4100	brown	7.65	2.50E-05	0.14	3.00E-03	3.8	2.00E-03	0.08	0.42	0.03	1.5	5.00E-03	0.02	0.22	0.02	0.16	6.9	0.02	0.06	5	0.11		
73556		377310.6	5383486.2	4800	4100	brown	9	2.50E-05	0.07	2.23E-03	0.93	5.00E-05	0.03	0.29	0.01	0.3	2.00E-03	0.01	0.18	0.08	0.08	0.82	0.01	0.02	1	0.04		
73509		377320.47	5383483.93	4810	4100	brown	7.95	0.01	0.12	1.08E-03	1.3	1.20E-03	0.09	0.4	0.02	1.3	3.00E-03	0.01	0.24	1.00E-03	0.13	2.4	0.02	0.04	2.5	0.05		
73517		377330.34	5383481.66	4820	4100	brown	9.75	0.01	0.01	4.60E-04	0.83	5.00E-04	0.01	0.12	0.01	0.03	1.00E-03	7.00E-03	0.07	4.00E-03	0.02	0.29	8.00E-03	0.01	0.76	0.08		
73585		377340.21	5383479.39	4830	4100	black	9	0.01	0.02	1.30E-03	3	1.00E-04	0.01	0.22	0.01	0.24	5.00E-03	0.01	0.13	0.04	0.09	0.78	0.02	0.03	1.3	0.03		
73503		377350.08	5383477.12	4840	4100	brown	8.3	0.01	0.08	2.90E-04	2.6	5.00E-04	0.03	0.16	0.01	0.39	2.00E-03	0.01	0.1	0.02	0.11	1.3	0.01	0.03	2.6	0.07		
73597		377359.95	5383474.85	4850	4100	black	9.35	0.01	0.03	2.51E-03	1.4	5.00E-05	3.00E-03	0.19	0.01	0.14	3.00E-03	0.01	0.11	9.00E-03	0.05	0.48	0.02	0.02	0.51	0.03		
73512		377369.82	5383472.58	4860	4100	brown	8.5	5.90E-03	0.07	1.09E-03	1.8	8.00E-04	0.03	0.34	0.01	0.19	3.00E-03	0.01	0.2	0.02	0.08	1.2	0.02	0.04	1.6	0.09		
73559		377379.69	5383470.31	4870	4100	black	8.7	0.01	0.02	2.26E-03	2.3	0.01	0.02	0.13	0.02	0.37	5.00E-03	0.01	0.07	0.01	0.07	1.1	0.01	0.04	2.6	0.12		
73542		377389.56	5383468.04	4880	4100	black	7.35	2.50E-05	0.13	1.28E-03	2.2	1.30E-03	0.04	0.75	0.02	0.34	7.00E-03	0.03	0.41	0.03	0.07	1.9	0.04	0.1	2.3	0.13		
73524		377399.43	5383465.77	4890	4100	black	6.95	2.50E-05	0.1	6.30E-04	1.6	5.00E-05	0.03	0.58	0.03	0.22	7.00E-03	0.02	0.3	5.00E-04	0.09	1.1	0.04	0.06	30	0.05		
73580		377409.3	5383463.5	4900	4100	black	8.8	5.00E-03	0.01	4.80E-04	2.4	5.00E-05	0.03	0.44	0.01	0.61	7.00E-03	0.02	0.26	0.02	0.09	2.1	0.04	0.06	1.3	9.00E-03		
73508		377419.01	5383461.43	4910	4100	black	8.6	5.00E-05	0.07	5.00E-06	2.8	9.00E-04	0.03	0.92	0.01	0.17	7.00E-03	0.03	0.56	0.01	0.11	1.8	0.05	0.09	0.92	0.07		
73546		377428.72	5383459.36	4920	4100	black	9.7	2.50E-05	0.06	4.70E-06	1.5	5.00E-05	0.02	0.59	0.01	0.38	5.00E-03	0.02	0.34	0.02	0.07	1.7	0.03	0.05	1.1	0.07		
73506		377438.43	5383457.29	4930	4100	black	9.05	8.20E-03	0.05	4.40E-04	1.9	1.50E-03	0.02	0.73	0.01	0.19	6.00E-03	0.03	0.43	0.02	0.09	1.4	0.04	0.06	1.1	0.08		
73534		377448.14	5383455.22	4940	4100	black	9.05	3.90E-03	0.04	2.01E-03	2	8.00E-04	0.03	0.67	0.01	0.29	5.00E-03	0.03	0.4	6.00E-03	0.05	1.2	0.03	0.06	1.3	0.08		
73575		377457.85	5383453.15	4950	4100	black	9.25	0.01	0.01	1.69E-03	3	5.00E-05	0.02	0.36	0.01	0.4	6.00E-03	0.02	0.21	0.03	0.05	1.2	0.03	0.05	0.9	0.04		
73519		377467.56	5383451.08	4960	4100	black	9.15	1.00E-03	0.05	5.00E-06	1.9	4.00E-04	0.02	0.33	7.00E-03	0.18	2.00E-03	0.01	0.19	0.01	0.06	5.1	0.01	0.04	0.79	0.07		
73535		377477.27	5383449.01	4970	4100	black	8.8	2.50E-05	0.06	3.09E-03	2.6	5.00E-05	0.02	0.77	0.01	0.57	6.00E-03	0.03	0.44	0.01	0.08	1.4	0.04	0.06	1.1	0.09		
73548		377486.98	5383446.94	4980	4100	black	8.7	2.50E-05	0.07	1.10E-04	3.4	5.00E-05	0.03	0.6	0.01	0.36	5.00E-03	0.02	0.36	0.02	0.18	1.4	0.03	0.06	1.5	0.09		
73544		377496.69	5383444.87	4990	4100	black	8.2	2.50E-05	0.12	4.40E-04	2.3	5.00E-05	0.03	0.74	0.02	0.28	5.00E-03	0.03	0.43	0.02	0.11	1.8	0.04	0.09	1.8	0.11		
73541		377506.4	5383442.8	5000	4100	black	7.4	5.80E-03	0.11	1.38E-03	1.3	7.30E-03	0.06	0.26	0.04	2.9	4.00E-03	0.02	0.11	0.07	0.16	2.5	0.02	0.05	9.9	0.29		
73434		377028.73	5383612.33	4460	4150	black	7.45	2.50E-05	0.13	8.00E-04	3.1	5.00E-05	0.11	0.37	0.04	1.9	6.00E-03	0.02	0.27	5.00E-04	0.22	7	0.03	0.07	4.9	0.01		
73475		377037.72	5383609.82	4470	4150	black	7.2	2.50E-05	0.14	5.00E-06	2.3	0.01	0.11	0.21	0.05	2.9	6.00E-03	0.02	0.13	5.00E-04	0.32	9.5	0.03	0.08	7.5	0.09		
73419		377046.71	5383607.31	4480	4150	black	7.45	0.02	0.64	2.10E-04	4.2	5.00E-05	0.12	0.42	0.06	3.4	6.00E-03	0.02	0.21	5.00E-04	0.31	14	0.03	0.09	10.5	0.11		
73435		377055.7	5383604.8	4490	4150	grey	8.95	0.01	0.1	5.90E-04	5.1	5.00E-05	0.05	0.13	0.04	1.7	2.00E-03	9.00E-03	0.1	0.01	0.14	4.7	0.01	0.02	5	5.00E-04		
73448		377064.7	5383602.3	4500	4150	grey	8.7	8.00E-03	0.24	7.00E-05	6.3	0.01	0.08	0.17	0.02	2.9	2.00E-03	0.01	0.16	0.02	0.22	7	0.01	0.03	2.4	0.06		
73444		377073.69	5383599.79	4510	4150	orange	9.65	0.04	3	1.13E-03	4.2	0.03	0.01	0.86	0.13	1.9	0.02	0.09	0.43	0.31	0.35	15	0.1	0.22	3.3	2		
73441		377082.68	5383597.28	4520	4150	red-brown	7.95	0.01	1.3	9.20E-04	4.2	5.40E-03	0.04	0.2	0.1	2.8	3.00E-03	0.01	0.15	0.11	0.93	7	0.02	0.05	5.2	0.08		
73429		377091.67	5383594.77	4530	4150	orange	9.6	0.07	4.3	1.18E-03	6.5	0.07	0.01	1.4	0.19	2.7	0.03	0.11	0.86	2	0.42	21	0.12	0.35	6.4	2.2		
73490		377100.66	5383592.26	4540	4150	orange	9.3	0.07	2.9	4.00E-04	11.5	0.04	0.01	0.72	0.12	2.1	0.01	0.06	0.47	1.7	0.39	21	0.08	0.15	3.9	1.9		
73452	73458	377109.65	5383589.75	4550	4150	brown	9.75	0.03	8.6	6.80E-04	3.9	0.03	0.01	0.26	0.02	2.6	6.00E-03	0.02	0.2	2.5	0.05	11.5	0.02	0.04	1.9	0.61		
73458		377109.65	5383589.75	4550	4150	brown	9.55	0.05	10.5	9.20E-04	4.6	0.02	0.02	0.3	0.03	2.3	7.00E-03	0.02	0.24	4.1	0.09	15	0.02	0.04	1.9	0.61		
73445		377118.65	5383587.25	4560	4150	brown	9.65	0.04	4	1.42E-03	3.4	0.02	0.01	0.39	0.05	1.9	9.00E-03	0.03	0.24	0.25	0.07	13.5	0.04	0.07	1.8	0.37		
73404		377127.64	5383584.74	4570	4150	black	9.7	0.11	1.1	2.70E-04	3.2	0.01	0.04	0.55	0.02	2.2	8.00E-03	0.04	0.3	0.21	0.08	30.5	0.04	0.17	7.2	0.4		
73415		377136.63	5383582.23	4580	4150	red-brown	9.25	0.25	0.24	3.70E-04	8.1	1.40E-03	0.02	0.6	0.02	2.1	5.00E-03	0.03	0.37	0.09	0.06	23.5	0.03	0.08	3.3	0.2		
73460		377145.62	5383579.72	4590	4150	brown	9.15	0.21	0.09	2.00E-04	4.3	5.00E-05	0.02	0.16	0.01	1.4	5.00E-04	0.01	0.15	0.06	0.09	3.8	0.01	0.02	4	0.05		
73485		377154.61	5383577.21	4600	4150	black	6.9	0.01	0.18	5.00E-06	12.5	5.00E-05	0.04	0.33	0.03	2.5	3.00E-03	0.02	0.23	5.00E-04	0.15	7.5	0.03	0.07	10	0.12		
73498		377163.6	5383574.7	4610	4150	black	8.6	0.03	0.07	1.40E-04	11	5.00E-05	0.03	0.27	0.01	2.5	2.00E-03	0.02	0.23	0.01	0.1	6	0.02	0.04	2.5	0.05		
73479		377172.6	5383572.2	4620	4150	grey	9.7	0.02	0.01	5.00E-06	2.5	3.40E-03	0.01	0.14	6.00E-03	0.45	2.00E-03	0.01	0.11	7.00E-03	0.03	0.91	0.01	0.02	0.66	0.22		
73433		377181.37	5383570.41	4630	4150	grey	9.45	2.10E-03	9.00E-03	5.50E-04	2.4	4.00E-04	0.01	0.36	8.00E-03	0.39	4.00E-03	0.02	0.26	0.01	0.02	1.2	0.02	0.05	0.84	0.08		
73476		377190.15	5383568.62	4640	4150	black	8.85	0.14	0.06	2.00E-04	4.8	0.01	0.06	0.16	0.02	1.2	2.00E-03	0.01	0.11	0.01	0.09	3.5	0.01	0.04	3.4	0.07		
73486		377198.92	5383566.83	4650	4150	grey	9.5	0.02	0.03	3.90E-04	3.1	0.01	9.00E-03	0.17	0.01	0.61	4.00E-03	0.01	0.12	0.06	0.04	2.4	0.02	0.05	1.4	0.34		
73481		377260.73	5383553.22	4720	4150	brown	8.2	0.02	0.04	5.00E-06	6.4	1.50E-03	0.05	0.12	0.02	2.2	5.00E-04	0.01	0.1	4.00E-03	0.12	3.6	0.01	0.02	6.3	0.05		
73473		377269.69	5383550.88	4730	4150	grey	9.25	6.00E-03	0.09	2.30E-04	3.9	5.00E-05	0.02	0.14	0.02	0.91	2.00E-03	0.01	0.06	0.01	0.05	2.5	0.01	0.03	4.5	0.27		
73437		377278.66	5383548.54	4740	4150	grey	9.7	0.01	0.06	7.30E-04	2.1	5.00E-05	0.01	0.25	0.01	1.1	3.00E-03	0.02	0.21	0.18	0.02	8.1	0.02	0.07	3.7	0.36		
73468		377287.62	5383546.2																									

Sample ID	Orig Sample ID	UTM East	UTM North	Local East	Local North	soil groups	Digest pH	Elements																				
								Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr		
73430		377404.17	5383515.78	4880	4150	black	8.5	8.20E-03	0.07	9.30E-04	6.3	8.00E-04	0.03	0.66	0.02	0.51	9.00E-03	0.03	0.53	0.03	0.06	1.9	0.05	0.08	1.9	0.13		
73493		377413.13	5383513.44	4890	4150	black	7.6	2.40E-03	0.09	4.40E-04	14	5.00E-05	0.03	0.86	0.03	0.43	9.00E-03	0.05	0.65	3.00E-03	0.13	2.7	0.07	0.12	2.7	0.16		
73461		377422.1	5383511.1	4900	4150	black	8.8	0.02	0.02	5.00E-06	3.3	5.00E-05	9.00E-03	0.39	0.01	0.33	4.00E-03	0.02	0.34	0.01	0.06	1.1	0.03	0.05	0.98	0.08		
73426		377431.29	5383509.03	4910	4150	black	8.85	3.20E-03	0.05	1.30E-03	4.4	4.20E-03	0.03	0.48	0.02	0.49	5.00E-03	0.02	0.36	0.01	0.07	1.9	0.03	0.07	3.4	0.09		
73483		377440.48	5383506.96	4920	4150	black	8.8	0.01	0.03	1.94E-03	5.2	5.00E-05	0.01	0.48	0.01	0.43	5.00E-03	0.02	0.4	8.00E-03	0.06	1.4	0.03	0.06	1.3	0.07		
73451		377449.67	5383504.89	4930	4150	grey	9	4.60E-03	0.05	3.63E-03	5.3	6.80E-03	0.03	0.27	0.01	0.38	2.00E-03	0.01	0.22	0.02	0.08	1.8	0.02	0.04	1.1	0.08		
73411		377458.86	5383502.82	4940	4150	brown	8.75	0.01	0.06	3.20E-04	6.7	5.00E-05	0.06	0.56	0.02	1.1	9.00E-03	0.03	0.3	0.02	0.13	6.5	0.04	0.09	4.3	0.09		
73423		377468.05	5383500.75	4950	4150	brown	8.6	0.01	0.1	6.80E-04	4.6	5.60E-03	0.04	0.61	0.02	0.71	8.00E-03	0.03	0.49	0.02	0.12	3.9	0.04	0.11	3.9	0.17		
73439		377477.24	5383498.68	4960	4150	brown	7.45	4.00E-04	0.01	7.80E-04	1.5	5.00E-05	0.02	0.41	0.01	0.3	5.00E-03	0.02	0.31	5.00E-04	0.06	0.83	0.04	0.08	0.85	4.00E-03		
73466		377488.43	5383496.61	4970	4150	brown	7.95	1.20E-03	0.07	1.80E-04	3.6	5.00E-05	0.04	0.3	0.02	0.68	5.00E-03	0.02	0.23	5.00E-04	0.17	3.4	0.03	0.09	4.6	0.11		
73688		377495.62	5383494.54	4980	4150	black	6.95	2.50E-05	0.08	5.10E-04	1.1	5.00E-05	0.02	0.36	0.04	0.27	7.00E-03	0.03	0.23	5.00E-04	0.08	2.2	0.04	0.09	3.6	5.00E-04		
73664		377504.81	5383492.47	4990	4150	black	7	2.50E-05	0.12	5.00E-05	1.5	5.00E-05	0.03	0.35	0.03	0.25	6.00E-03	0.02	0.22	5.00E-04	0.09	1.3	0.03	0.09	2.7	0.04		
73605		377514	5383490.4	5000	4150	black	8.3	4.10E-03	0.07	5.00E-06	1.5	5.00E-05	0.02	0.31	0.02	0.29	5.00E-03	0.02	0.17	0.01	0.07	1	0.03	0.05	3.5	0.09		
73684		377533.42	5383485.8	5020	4150	black	9.1	3.50E-03	0.05	3.80E-04	1.8	5.00E-05	0.02	0.69	0.01	0.36	0.01	0.03	0.55	0.02	0.06	1.5	0.06	0.07	1.6	0.21		
73602		377552.85	5383481.2	5040	4150	black	9.65	0.02	0.06	8.70E-04	1.4	2.50E-03	0.02	0.5	0.01	0.38	0.01	0.03	0.28	0.04	0.05	1.3	0.04	0.05	0.82	0.46		
73647		377572.27	5383476.6	5060	4150	black	9.05	0.01	0.07	5.00E-06	3.2	2.30E-03	0.02	0.59	0.01	0.27	6.00E-03	0.03	0.42	0.01	0.09	2.9	0.04	0.09	1.5	0.1		
73687	73647	377572.27	5383476.6	5060	4150	black	8.8	3.90E-03	0.07	5.20E-04	3.4	5.00E-05	0.04	0.78	0.03	0.58	0.01	0.05	0.56	0.02	0.08	3.4	0.05	0.09	2.9	0.05		
73607		377591.7	5383472	5080	4150	black	7.8	0.02	0.1	1.51E-03	6.5	5.00E-05	0.04	0.31	0.03	0.45	8.00E-03	0.02	0.18	0.01	0.12	4	0.03	0.06	4.8	0.05		
73689		377611	5383468.42	5100	4150	black	9.05	2.50E-05	0.06	0.01	3.4	5.00E-05	0.03	1	0.01	0.59	0.01	0.05	0.86	0.02	0.08	2.9	0.07	0.11	1.1	0.03		
73655		377630.3	5383464.84	5120	4150	black	9	2.50E-05	0.06	3.34E-03	3.1	5.00E-05	0.02	1.4	0.01	0.21	0.01	0.07	0.96	3.00E-03	0.09	2	0.09	0.14	1.5	0.1		
73614		377649.6	5383461.26	5140	4150	black	8.8	8.20E-03	0.07	1.49E-03	2.9	5.00E-03	0.04	2.1	0.02	0.28	0.02	0.09	1.4	0.04	0.09	2.8	0.12	0.2	4.6	0.17		
73618		377668.9	5383457.68	5160	4150	brown	9.45	6.20E-03	1.00E-03	1.45E-03	2.5	3.60E-03	0.01	1.5	0.01	0.11	0.01	0.07	1.1	0.02	0.05	0.93	0.1	0.17	0.42	0.32		
73699		377688.2	5383454.1	5180	4150	brown	8.8	4.60E-03	0.07	5.00E-06	3.5	7.40E-03	0.02	1.5	0.02	0.3	0.01	0.07	1.2	0.06	0.14	1.8	0.09	0.17	2.4	0.26		
73627		377707.72	5383449.7	5200	4150	brown	9.15	6.70E-03	0.01	1.22E-03	2.6	5.00E-05	0.02	1.6	0.01	0.41	0.01	0.07	1.1	0.01	0.06	2	0.11	0.23	1.4	0.27		
73649		377727.24	5383445.3	5220	4150	brown	8.55	7.00E-03	0.06	5.00E-06	4	9.00E-04	0.06	1.1	0.02	0.44	0.01	0.05	0.76	9.00E-03	0.11	2.3	0.07	0.15	2.4	0.12		
73654		377746.76	5383440.9	5240	4150	brown	9	4.50E-03	0.06	2.90E-04	4.7	5.00E-05	0.04	1.1	0.01	0.39	0.01	0.06	0.75	0.01	0.08	2	0.08	0.16	3.2	0.08		
73622		377766.28	5383436.5	5260	4150	brown	8.85	6.00E-04	0.03	1.25E-03	5	2.00E-04	0.03	1.6	0.02	0.27	0.01	0.09	1.2	0.03	0.07	2.8	0.12	0.21	2.1	0.09		
73667		377785.8	5383432.1	5280	4150	brown	8.75	2.50E-05	0.07	4.10E-04	5.3	5.00E-05	0.03	1.5	0.02	0.24	0.02	0.09	1.1	0.01	0.1	6	0.11	0.2	1.2	0.08		
73691		377805.44	5383427.58	5300	4150	brown	8.8	6.40E-03	0.06	9.00E-05	5.4	5.00E-05	0.03	1.8	0.02	0.37	0.01	0.1	1.5	0.02	0.11	4.6	0.13	0.23	3	0.04		
73613		377825.08	5383423.06	5320	4150	black	8.25	2.60E-03	0.08	6.10E-04	5.4	4.00E-03	0.05	2.9	0.03	0.35	0.03	0.15	1.9	0.04	0.09	4.1	0.19	0.25	3.8	0.08		
73671		377844.72	5383418.54	5340	4150	black	7.1	2.10E-03	0.17	1.40E-04	3.5	3.10E-03	0.05	0.46	0.07	0.48	0.01	0.05	0.31	7.00E-03	0.1	6.5	0.05	0.15	11.5	0.35		
73621		377864.36	5383414.02	5360	4150	black	6.85	1.70E-03	0.15	7.70E-04	3.4	5.00E-05	0.03	0.34	0.04	0.18	5.00E-03	0.02	0.19	8.00E-03	0.05	1.4	0.03	0.08	8	0.02		
73700		377884	5383409.5	5380	4150	black	8.1	3.50E-03	0.09	5.00E-06	3.5	3.40E-03	0.06	1.2	0.04	0.26	0.01	0.07	0.85	0.01	0.11	4.2	0.12	0.16	3.7	0.17		
73657		377896.03	5383407.46	5400	4150	brown	8.8	2.50E-05	0.05	3.50E-04	4.4	5.00E-05	0.03	0.99	0.01	0.38	0.01	0.07	0.68	0.02	0.09	2.6	0.08	0.12	3.9	0.1		
73380		377030.68	5383662.7	4480	4200	cream	8.15	0.01	0.06	6.00E-04	4	5.00E-05	0.13	0.31	0.06	2.4	4.00E-03	0.01	0.16	3.00E-03	0.17	5	0.02	0.05	12.5	5.00E-04		
73308		377040.1	5383660.05	4490	4200	black	7.5	0.01	0.2	3.70E-04	4.1	5.00E-05	0.12	0.37	0.1	4.4	6.00E-03	0.03	0.26	5.00E-04	0.4	10.5	0.04	0.09	10.5	0.1		
73346		377049.52	5383657.4	4500	4200	orange	10	0.01	1.6	9.40E-04	2.3	9.00E-03	0.02	1.7	3.1	1.6	0.01	0.09	0.3	0.4	0.21	6.5	0.07	0.24	2.1	3.9		
73306		377058.94	5383654.75	4510	4200	brown	9.4	0.01	0.32	7.10E-04	2	5.00E-05	0.01	1.9	2.9	1.3	9.00E-03	0.05	0.3	0.13	0.13	11	0.06	0.11	2.3	1.2		
73334		377068.36	5383652.1	4520	4200	orange	9.95	7.00E-03	0.25	6.80E-04	1.3	5.00E-05	0.01	6.1	2.1	1.3	4.00E-03	0.02	0.16	0.27	0.28	0.97	0.02	0.06	1.3	1.3		
73375		377077.78	5383649.45	4530	4200	orange	10	0.03	1.9	1.82E-03	5.3	0.01	0.01	5.7	2.1	2.3	0.04	0.14	0.26	0.38	0.62	8.9	0.13	0.49	7.4	7.2		
73319		377087.2	5383646.8	4540	4200	orange	10	0.02	0.45	4.20E-03	0.9	1.10E-03	8.00E-03	0.37	0.31	0.84	8.00E-03	0.04	0.17	0.22	0.03	2.9	0.03	0.15	1	1		
73335		377096.78	5383643.82	4550	4200	orange	9.6	0.01	0.39	2.56E-03	1.2	5.00E-05	7.00E-03	0.68	0.05	1	0.01	0.07	0.2	0.26	0.02	13	0.06	0.16	1.2	0.91		
73348		377106.36	5383640.84	4560	4200	orange	10	0.01	1.4	3.19E-03	1.1	6.00E-03	0.01	0.53	0.11	1.3	0.02	0.14	0.35	0.27	0.06	11	0.12	0.27	2.2	4.1		
73344		377115.94	5383637.86	4570	4200	orange	9.75	0.01	1.9	2.81E-03	1.4	0.01	0.01	0.8	0.01	0.82	0.03	0.25	0.58	0.21	0.07	29.5	0.16	0.41	1.1	2.2		
73341		377125.52	5383634.88	4580	4200	grey	9.9	2.50E-05	0.19	8.40E-04	0.56	4.50E-03	0.01	0.17	9.00E-03	0.04	2.00E-03	0.01	0.15	0.04	0.04	1.9	0.01	0.02	0.47	0.16		
73329		377135.1	5383631.9	4590	4200	black	7.3	0.01	0.09	9.00E-05	1.6	5.00E-05	0.04	0.25	0.03	0.32	5.00E-03	0.02	0.19	7.00E-03	0.14	4	0.03	0.04	5.5	0.06		
73390		377144.88	5383628.92	4600	4200	black	8.3	0.03	0.01	8.80E-04	4.8	5.00E-0																

Sample ID	Orig Sample ID	UTM East	UTM North	Local East	Local North	soil groups	Digest pH	Elements																				
								Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr		
73381		377257.13	5383599	4720	4200	black	7.35	0.01	0.16	8.10E-04	11.5	5.00E-05	0.06	0.28	0.03	0.31	2.00E-03	0.02	0.13	3.00E-03	0.11	4.8	0.02	0.08	6.8	0.01		
73373		377266.4	5383596.75	4730	4200	brown	9.05	0.01	0.12	1.06E-03	3.2	9.00E-04	0.03	0.52	0.02	0.75	7.00E-03	0.02	0.25	0.05	0.06	3.7	0.03	0.06	3.6	0.24		
73337		377275.66	5383594.5	4740	4200	grey	9.6	4.70E-03	0.02	1.40E-04	1.4	5.00E-05	0.01	0.21	7.00E-03	0.11	4.00E-03	0.01	0.18	0.03	0.01	1.4	0.02	0.02	0.48	0.15		
73368		377284.93	5383592.25	4750	4200	black	9	0.03	0.05	6.80E-04	4.9	5.60E-03	0.05	1.3	0.02	0.83	0.01	0.08	0.66	0.02	0.07	3.4	0.08	0.11	4	0.16		
73363		377294.2	5383590	4760	4200	black	8.55	9.20E-03	0.05	5.20E-04	7	5.00E-05	0.07	0.16	0.02	1.4	5.00E-04	0.01	0.13	0.04	0.1	2.5	0.01	0.02	5.5	0.04		
73325		377303.1	5383587.41	4770	4200	grey	8.8	0.01	0.09	5.00E-06	4.3	5.00E-05	0.04	0.24	0.03	0.65	3.00E-03	0.01	0.18	0.05	0.11	4.6	0.02	0.03	2.9	0.07		
73328		377312	5383584.82	4780	4200	grey	9.85	0.02	0.02	6.70E-04	1.3	5.00E-05	0.01	0.13	6.00E-03	0.17	2.00E-03	0.01	0.1	0.02	5.00E-04	1.1	0.01	0.02	0.83	0.1		
73338		377320.9	5383582.23	4790	4200	brown	10	0.01	0.07	7.70E-04	1.8	5.00E-05	8.00E-03	0.37	8.00E-03	1.7	6.00E-03	0.03	0.24	0.06	0.01	3.7	0.04	0.11	0.9	4.8		
73353		377365.4	5383569.3	4840	4200	red-brown	8.3	4.50E-03	0.1	5.40E-04	7.2	5.00E-05	0.08	0.9	0.05	1.3	0.01	0.07	0.72	5.00E-04	0.14	6.2	0.09	0.16	6.5	0.23		
73378		377375.71	5383567.67	4850	4200	red-brown	7.3	0.01	0.08	5.00E-04	12.5	5.00E-05	0.09	0.4	0.03	6.3	2.00E-03	0.02	0.22	5.00E-03	0.24	7.6	0.02	0.07	18	0.05		
73310		377386.02	5383566.05	4860	4200	red-brown	8.45	0.02	0.1	5.00E-06	4.6	5.00E-05	0.09	0.25	0.05	1	2.00E-03	0.01	0.22	0.01	0.18	5.1	0.02	0.06	6.9	0.1		
73394		377396.33	5383564.42	4870	4200	brown	9.05	7.00E-03	0.07	5.00E-06	4	8.80E-03	0.01	0.82	0.01	0.36	8.00E-03	0.04	0.55	0.02	0.06	1.4	0.05	0.06	1.5	0.18		
73377		377406.65	5383562.8	4880	4200	grey	9.45	0.01	0.02	2.61E-03	2.9	2.00E-04	0.01	0.73	0.01	0.39	6.00E-03	0.03	0.48	0.05	0.03	0.86	0.04	0.06	0.98	0.15		
73350		377416.96	5383561.17	4890	4200	brown	7.15	0.02	0.06	5.00E-06	0.13	5.00E-05	0.06	0.08	0.03	2	2.00E-03	0.01	0.04	5.00E-04	0.16	1.3	0.01	0.03	7.3	0.07		
73396		377427.27	5383559.55	4900	4200	grey	9.75	0.01	0.02	1.70E-04	2.1	1.70E-03	8.00E-03	0.14	7.00E-03	0.3	1.00E-03	6.00E-03	0.1	9.00E-03	0.03	0.86	0.01	0.03	0.74	0.19		
73320	73396	377427.27	5383559.55	4900	4200	brown	9.4	0.01	0.04	4.00E-05	3.2	5.00E-05	0.01	0.12	0.01	0.64	2.00E-03	0.01	0.08	0.02	0.07	3.5	0.01	0.03	1.4	0.08		
73330		377437.58	5383557.92	4910	4200	grey	9.45	5.00E-03	0.03	2.27E-03	2.1	5.00E-05	0.01	0.41	0.01	0.17	5.00E-03	0.03	0.35	0.03	0.18	1.3	0.03	0.06	0.72	0.07		
73393		377447.9	5383556.3	4920	4200	black	9.05	0.01	0.06	1.62E-03	3.9	9.00E-03	0.03	0.71	0.04	0.42	8.00E-03	0.04	0.48	0.08	0.07	1.7	0.05	0.09	3	0.18		
73361		377457.66	5383554.02	4930	4200	black	9.15	7.90E-03	0.04	1.57E-03	2.1	5.00E-05	0.02	0.58	0.04	0.16	6.00E-03	0.04	0.46	0.01	0.06	1.4	0.04	0.07	2.2	0.11		
73326		377467.42	5383551.75	4940	4200	black	9.15	5.80E-03	0.04	5.40E-04	1.9	5.00E-05	0.01	0.52	0.01	0.15	7.00E-03	0.03	0.42	0.02	0.03	1.6	0.05	0.06	1.4	0.08		
73383		377477.18	5383549.47	4950	4200	black	8.8	0.01	0.01	4.16E-03	4.7	5.00E-05	0.03	0.77	0.02	0.6	0.01	0.05	0.44	0.03	0.05	2.1	0.06	0.13	2.1	0.19		
73351		377486.95	5383547.2	4960	4200	black	8.8	4.10E-03	0.04	1.73E-03	2.5	5.00E-05	0.03	0.25	0.01	0.26	3.00E-03	0.02	0.21	8.00E-03	0.05	2.1	0.02	0.05	1.8	0.08		
73311		377496.71	5383544.92	4970	4200	black	9.1	6.60E-03	0.04	1.22E-03	1.4	5.00E-05	0.02	0.29	0.01	0.08	3.00E-03	0.02	0.24	7.00E-03	0.07	1.5	0.02	0.05	1.2	0.06		
73323		377506.47	5383542.65	4980	4200	black	8.15	0.01	0.05	1.40E-04	1.7	5.00E-05	0.02	0.44	0.02	0.13	6.00E-03	0.03	0.34	3.00E-03	0.09	1.9	0.04	0.08	2	0.09		
73339		377516.23	5383540.37	4990	4200	black	9.15	2.50E-05	0.03	6.20E-04	1.2	5.00E-03	0.01	0.29	0.01	0.11	3.00E-03	0.02	0.22	0.01	0.05	0.99	0.02	0.03	0.48	0.07		
73366		377526	5383538.1	5000	4200	black	9.6	2.50E-05	0.05	5.00E-06	1.1	5.60E-03	0.01	0.42	0.01	0.53	4.00E-03	0.01	0.26	8.00E-03	0.02	0.83	0.01	0.05	1.1	0.21		
73406		377079.2	5383701.75	4500	4200	black	6.85	0.01	0.26	5.00E-06	12	5.00E-05	0.17	0.46	0.43	3.7	4.00E-03	0.02	0.24	5.00E-04	1.5	6.8	0.03	0.09	11.5	0.13		
73446		377088.7	5383701.17	4510	4250	orange	9.75	0.04	1.4	9.50E-04	6.8	0.02	0.05	0.38	0.35	3.1	0.01	0.04	0.27	0.23	0.28	6	0.05	0.1	6.3	1.6		
73408		377098.2	5383700.6	4520	4250	grey	8.95	0.05	0.12	5.00E-06	6.5	5.00E-05	0.05	0.45	0.04	1.1	3.00E-03	0.02	0.29	0.03	0.32	5	0.02	0.05	2.7	0.04		
73480		377107.7	5383700.02	4530	4250	cream	9.8	0.02	0.14	1.24E-03	1.8	2.10E-03	0.01	0.1	0.01	0.43	1.00E-03	8.00E-03	0.08	0.06	0.04	2.3	0.01	0.02	1.9	0.12		
73424		377117.2	5383699.45	4540	4250	grey	8.7	0.02	0.08	2.35E-03	5.6	0.01	0.1	0.6	0.08	0.81	0.01	0.03	0.47	0.02	0.13	5.9	0.05	0.09	8.1	0.09		
73442		377126.7	5383698.87	4550	4250	grey	9.45	7.30E-03	5.00E-04	1.70E-03	2.3	5.00E-05	0.02	0.15	0.01	0.42	2.00E-03	0.01	0.12	0.01	0.01	2.3	0.01	0.03	1.3	0.02		
73459		377136.2	5383698.3	4560	4250	grey	9.5	7.00E-03	0.07	5.00E-06	2.6	5.00E-05	0.02	0.29	0.01	0.48	4.00E-03	0.02	0.23	0.04	0.03	3.7	0.02	0.06	1.7	0.16		
73412		377145.87	5383698.02	4570	4250	grey	9.15	0.01	0.04	5.00E-06	3.7	5.00E-05	0.03	0.31	0.01	0.85	6.00E-03	0.01	0.16	0.02	0.05	5	0.02	0.05	2.9	0.08		
73497		377155.55	5383697.75	4580	4250	grey	9.55	5.00E-03	0.02	2.80E-04	1.6	5.00E-05	0.02	0.21	0.01	0.38	4.00E-03	0.01	0.17	0.01	0.03	2.5	0.01	0.04	0.81	0.13		
73403		377165.22	5383697.47	4590	4250	grey	9.55	0.01	0.02	9.20E-04	1.9	5.00E-05	0.01	0.26	0.01	0.52	5.00E-03	0.01	0.16	0.01	0.02	3.7	0.01	0.05	1.3	0.14		
73465		377174.9	5383697.2	4600	4250	grey	10	2.40E-03	5.00E-04	2.70E-04	1.3	5.00E-05	3.00E-03	0.23	0.01	0.76	4.00E-03	0.01	0.17	0.01	0.01	4.9	0.02	0.06	0.54	0.35		
73417		377184.2	5383695.1	4610	4250	grey	9.45	0.03	0.02	2.90E-04	2.4	5.00E-05	0.01	0.2	0.01	0.22	2.00E-03	0.01	0.13	0.01	0.04	1.7	0.01	0.05	1.2	0.15		
73409		377193.5	5383693	4620	4250	grey	9.55	0.03	0.04	5.00E-06	2.3	5.00E-05	0.02	0.27	0.01	0.43	4.00E-03	0.01	0.17	0.02	0.07	3.5	0.01	0.06	1.6	0.17		
73456		377202.8	5383690.9	4630	4250	grey	9.55	0.03	0.05	1.30E-04	2.6	3.00E-04	0.03	0.17	0.01	0.59	1.00E-03	0.01	0.17	0.03	0.05	4.5	0.01	0.03	1.7	0.15		
73443		377212.1	5383688.8	4640	4250	grey	9.55	0.02	0.04	4.31E-03	1.7	5.00E-05	0.02	0.16	8.00E-03	0.69	3.00E-03	0.01	0.12	0.01	5.00E-04	5.1	0.02	0.03	1.8	0.05		
73401		377220.71	5383686.06	4650	4250	grey	9.2	0.03	0.03	2.00E-05	4.8	5.00E-05	0.03	0.57	0.01	2	6.00E-03	0.03	0.34	0.01	0.06	4.1	0.03	0.07	5.3	0.1		
73482		377229.32	5383683.32	4660	4250	grey	9.3	0.01	0.03	5.00E-06	3.7	8.00E-04	0.02	0.25	0.01	0.32	4.00E-03	0.02	0.21	4.00E-03	0.04	1.7	0.02	0.04	0.97	0.08		
73492		377237.93	5383680.58	4670	4250	grey	9.35	8.00E-03	0.03	2.20E-04	2.6	5.00E-05	0.01	0.26	0.01	0.63	5.00E-03	0.01	0.19	0.01	0.04	2.2	0.02	0.04	1.2	0.11		
73470		377246.55	5383677.85	4680	4250	grey	9.35	8.00E-03	0.01	1.90E-04	2.9	5.00E-05	0.03	0.44	0.01	0.33	5.00E-03	0.02	0.33	0.02	0.05	2.7	0.04	0.06	2.1	0.12		
73431		377255.16	5383675.11	4690	4250	brown	9.3	3.50E-03	0.05	7.90E-04	3.2	7.00E-04	0.03	0.71	0.01	0.51	7.00E-03	0.03	0.52	0.03	0.04	3	0.05	0.09	2.1	0.12		

Sample ID	Orig Sample ID	Local		soil groups	Digest pH	Elements																				
		UTM_East	UTM_North			East	North	Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr
73467		377385.78	5383627.56	4840	4250	grey	9.45	0.02	0.03	2.12E-03	17.5	2.80E-03	0.02	0.17	0.01	0.66	5.00E-04	0.01	0.16	0.01	0.01	3.4	0.01	0.04	0.96	0.12
73422		377394.65	5383624.7	4850	4250	grey	9.55	0.03	0.01	2.60E-04	4.9	2.40E-03	0.04	0.14	0.01	0.54	5.00E-04	5.00E-03	0.11	0.02	0.04	3.4	9.00E-03	0.01	2.2	0.15
73454		377403.52	5383621.84	4860	4250	grey	9.3	0.03	0.05	5.00E-06	7.2	2.50E-03	0.04	0.15	0.02	2.6	5.00E-04	8.00E-03	0.13	0.03	0.14	5.3	0.01	0.02	3.8	0.12
73449		377412.39	5383618.98	4870	4250	grey	9.45	0.02	0.12	5.00E-06	4.7	0.01	8.00E-03	0.92	0.02	0.69	0.01	0.05	0.8	0.08	0.03	4.3	0.09	0.13	2.1	0.21
73427		377421.26	5383616.12	4880	4250	grey	9.95	0.01	0.01	4.40E-04	2	9.00E-04	0.01	0.1	5.00E-03	0.46	5.00E-04	8.00E-03	0.09	0.01	8.00E-03	1.2	6.00E-03	0.03	1.1	0.36
73499		377430.13	5383613.26	4890	4250	orange	9.35	0.06	0.03	8.20E-04	2.5	5.00E-05	0.03	0.15	0.01	0.88	3.00E-03	0.01	0.14	0.01	0.05	3.1	0.01	0.03	2.2	0.07
73418		377439	5383610.4	4900	4250	orange	9.2	0.05	0.06	1.80E-04	5.3	5.00E-05	0.04	0.31	0.01	0.99	1.00E-03	8.00E-03	0.22	0.01	0.08	5.4	0.01	0.04	5	0.03
73414		377449.13	5383608.66	4910	4250	grey	9.2	0.05	0.05	5.00E-06	6.8	5.00E-05	0.03	1.4	0.03	0.76	0.01	0.06	0.75	0.02	0.13	2.4	0.09	0.12	2.6	0.25
73455		377459.27	5383606.92	4920	4250	grey	9.8	0.02	3.00E-03	1.25E-03	2.4	5.00E-05	0.02	0.08	0.01	1	1.00E-03	5.00E-03	0.07	8.00E-03	0.02	1.5	6.00E-03	0.02	1.5	0.07
73489		377469.41	5383605.18	4930	4250	grey	9.8	0.01	0.01	5.00E-06	1.8	5.00E-05	0.01	0.08	7.00E-03	0.44	5.00E-04	5.00E-03	0.07	5.00E-04	0.02	1.4	8.00E-03	0.01	0.96	0.05
73407		377479.55	5383603.45	4940	4250	grey	9.2	0.06	0.03	7.40E-04	4.1	5.00E-05	0.04	0.77	0.01	0.95	7.00E-03	0.03	0.47	6.00E-03	0.05	2	0.04	0.04	3.8	0.03
73447		377489.68	5383601.71	4950	4250	grey	9.5	0.02	9.00E-03	1.45E-03	2.2	5.00E-05	0.04	0.3	0.02	0.65	4.00E-03	0.01	0.23	0.02	0.01	1	0.02	0.02	2	0.1
73487	73447	377489.68	5383601.71	4950	4250	grey	9.85	0.02	0.01	5.80E-04	3	5.00E-05	0.03	0.1	0.01	0.47	1.00E-03	8.00E-03	0.08	5.00E-04	0.02	2.2	9.00E-03	0.01	1.1	0.07
73402		377499.82	5383599.97	4960	4250	cream	9.4	0.04	0.03	6.20E-04	1.8	5.00E-05	0.03	0.17	0.01	0.95	2.00E-03	7.00E-03	0.1	8.00E-03	0.05	2.7	9.00E-03	0.02	2.5	0.01
73484		377509.96	5383598.23	4970	4250	grey	9.5	0.01	0.03	2.40E-04	1.8	5.00E-05	0.02	0.46	0.03	0.39	6.00E-03	0.02	0.36	5.00E-03	0.04	0.75	0.04	0.04	6.4	0.08
73405		377520.1	5383596.5	4980	4250	grey	9.15	0.03	0.03	7.50E-04	3.4	5.00E-05	0.03	0.33	0.01	0.37	3.00E-03	0.01	0.21	0.03	0.05	1.6	0.02	0.04	1.6	0.22
73464		377529.45	5383595.25	4990	4250	grey	9.55	3.00E-03	0.01	5.00E-06	1.9	5.00E-05	0.04	0.64	0.01	0.27	7.00E-03	0.04	0.51	5.00E-03	0.02	1	0.05	0.05	4.6	0.1
73488		377538.8	5383594	5000	4250	grey	9.85	0.01	0.02	6.70E-04	1.5	5.00E-05	0.02	0.15	0.01	0.38	2.00E-03	0.01	0.13	5.00E-03	0.03	1.1	0.01	0.02	1.5	0.09
73324		377080.5	5383774	4500	4300	black	8.95	0.01	0.27	1.20E-04	3	3.00E-03	0.02	0.88	0.1	1.7	0.01	0.07	0.62	0.1	0.3	6.1	0.09	0.11	2.3	0.24
73342		377090	5383770.9	4510	4300	red-brown	8.25	2.50E-05	0.09	2.20E-04	2.4	3.50E-03	0.04	0.24	0.04	1.8	3.00E-03	0.01	0.19	0.01	0.28	8.2	0.02	0.04	2.7	0.05
73359		377099.5	5383767.8	4520	4300	black	8.85	0.01	0.04	5.00E-06	2.2	5.00E-05	0.02	0.52	0.02	0.18	6.00E-03	0.03	0.48	5.00E-04	0.14	2	0.05	0.06	3	0.05
73312		377109	5383764.7	4530	4300	black	9	2.50E-05	0.04	1.07E-03	1.7	5.00E-03	0.01	0.22	0.01	0.14	4.00E-03	0.01	0.16	2.00E-03	0.05	1.7	0.02	0.02	1	0.05
73397		377118.5	5383761.6	4540	4300	brown	9.2	0.01	0.02	4.00E-05	1.9	6.00E-04	0.02	0.29	0.01	0.19	3.00E-03	0.01	0.21	9.00E-03	0.07	1	0.02	0.03	0.84	0.06
73303		377126.51	5383758.4	4550	4300	grey	9.3	0.01	0.02	2.50E-04	1.6	5.00E-05	0.01	0.16	0.01	0.07	2.00E-03	0.01	0.13	3.00E-03	0.04	1.1	0.01	0.02	1.5	0.04
73365		377134.53	5383755.2	4560	4300	grey	9.2	3.70E-03	0.04	4.00E-05	0.67	5.00E-05	0.03	0.28	0.03	0.35	2.00E-03	0.01	0.24	5.00E-04	0.09	1.9	0.02	0.03	2.1	0.14
73317		377142.55	5383752	4570	4300	grey	9.7	0.01	0.01	1.31E-03	1.3	5.00E-05	0.01	0.12	0.01	0.21	2.00E-03	9.00E-03	0.11	4.00E-03	0.04	1	0.01	0.02	0.95	0.15
73309		377150.56	5383748.8	4580	4300	grey	9.95	8.20E-03	0.01	4.00E-04	3.4	5.00E-05	8.00E-03	0.18	0.01	0.34	3.00E-03	0.01	0.12	0.01	0.01	2.5	0.01	0.06	0.66	0.15
73356		377158.58	5383745.6	4590	4300	grey	9.25	0.01	0.01	4.20E-04	3	5.00E-05	0.02	0.16	0.01	0.48	5.00E-04	9.00E-03	0.13	5.00E-04	0.05	2.1	0.01	0.02	1.7	0.02
73343		377166.6	5383742.4	4600	4300	grey	9.75	2.50E-05	5.00E-03	5.00E-06	5	5.00E-05	0.02	0.16	0.01	0.51	2.00E-03	0.02	0.13	9.00E-03	0.05	2.2	0.02	0.06	1.3	0.08
73301		377184.9	5383737.8	4620	4300	cream	10	0.01	0.04	3.40E-04	6.1	5.00E-05	6.00E-03	0.16	0.08	0.03	3.00E-03	0.02	0.14	0.03	0.01	2.9	0.02	0.12	0.63	0.32
73382		377196.35	5383734.1	4630	4300	orange	9.95	0.01	0.72	7.00E-04	13	9.00E-03	0.02	0.68	1.8	0.52	0.02	0.09	0.31	0.61	0.05	11	0.08	0.58	3.8	3.8
73392		377207.8	5383730.4	4640	4300	orange	9.95	0.02	1	7.20E-04	20	0.01	0.05	3.5	0.34	0.61	0.11	0.58	2	0.95	0.17	7	0.56	3.6	10	7.4
73370		377217.47	5383729.17	4650	4300	brown	9.75	0.04	0.94	6.60E-04	32	0.02	0.07	6.5	0.96	0.42	0.12	0.51	1.6	0.72	0.25	6.8	0.45	2.4	11.5	11
73331		377227.15	5383727.95	4660	4300	red-brown	9.95	0.01	0.33	1.20E-04	31.5	1.80E-03	0.04	1.5	0.22	0.81	0.05	0.34	0.93	0.43	0.14	11	0.27	1.8	8.3	2.2
73374		377236.82	5383726.72	4670	4300	grey	9.7	7.10E-03	0.01	5.00E-06	6.1	5.00E-05	0.01	0.2	6.00E-03	0.29	1.00E-03	0.01	0.13	0.05	0.01	1.4	0.01	0.02	0.66	0.1
73316		377246.5	5383725.5	4680	4300	grey	9.5	0.01	0.03	2.10E-04	2.1	1.20E-03	0.02	0.37	0.01	0.18	5.00E-03	0.02	0.28	7.00E-03	0.03	2.4	0.03	0.04	1.6	0.05
73340		377255.8	5383722.95	4690	4300	brown	9.3	2.50E-05	0.02	5.00E-06	2.1	7.10E-03	0.02	0.66	0.01	0.35	6.00E-03	0.03	0.58	5.00E-04	0.03	3.3	0.04	0.06	1.1	0.08
73332		377265.1	5383720.4	4700	4300	brown	9.15	0.02	0.04	5.80E-04	2.8	5.00E-05	0.02	0.96	0.01	0.41	0.01	0.06	0.78	0.06	0.06	3.7	0.08	0.15	2.4	0.22
73369		377275.2	5383717.5	4710	4300	black	9.2	0.02	0.05	6.10E-04	3.8	4.60E-03	0.02	1.5	0.01	0.42	0.01	0.06	0.91	0.02	0.06	3.9	0.08	0.13	0.88	0.15
73362		377285.3	5383714.6	4720	4300	brown	9.5	5.50E-03	0.02	6.80E-04	1.5	5.00E-05	0.01	0.54	6.00E-03	0.07	6.00E-03	0.03	0.47	5.00E-04	0.04	3	0.05	0.06	0.65	0.09
73395		377294.8	5383712	4730	4300	brown	9.2	0.01	0.04	5.00E-06	3.9	5.30E-03	0.02	1	0.01	0.48	9.00E-03	0.04	0.68	0.02	0.08	3	0.06	0.1	1.7	0.16
73357		377304.3	5383709.4	4740	4300	brown	9.6	0.01	0.02	2.60E-04	2	5.00E-05	0.03	0.28	6.00E-03	0.21	2.00E-03	0.01	0.25	5.00E-04	0.08	2.1	0.02	0.04	1.4	0.15
73400		377323	5383705	4760	4300	black	7.85	0.04	0.09	5.00E-06	8.8	5.00E-05	0.11	1.6	0.02	0.98	0.01	0.07	0.93	5.00E-03	0.12	5.3	0.1	0.16	4.4	0.11
73321		377332.95	5383702.7	4770	4300	brown	8.85	0.05	0.07	1.30E-04	3.5	5.00E-05	0.03	0.69	0.02	0.32	6.00E-03	0.04	0.65	0.01	0.12	5.2	0.05	0.08	1.1	0.13
73371		377342.9	5383700.4	4780	4300	brown	9	0.05	0.02	8.60E-04	5.1	3.00E-04	0.01	1.2	0.01	0.3	0.01	0.04	0.65	0.04	0.07	3	0.06	0.12	0.75	0.47
73313		377352	5383697.8	4790	4300	black	9.05	3.90E-03	0.02	5.00E-06	1.8	3.40E-03	0.02	0.48	0.01	0.66	5.00E-03	0.02	0.34	6.00E-03	0.04	2.1	0.03	0.03	0.46	0.06
73391		377361.1																								

Sample ID	Orig Sample ID	UTM_East	UTM_North	Local East	Local North	soil groups	Digest pH	Digest																				
								Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr		
73347		377474.46	5383662.76	4920	4300	black	8.5	5.00E-03	0.05	9.10E-04	2.6	5.00E-05	0.06	0.44	0.03	1.5	4.00E-03	0.03	0.3	0.04	0.1	4.1	0.03	0.06	3.1	0.23		
73302		377483.85	5383660.05	4930	4300	brown	9.7	0.01	9.00E-03	8.00E-05	2.1	5.00E-05	0.01	0.51	6.00E-03	0.21	7.00E-03	0.03	0.45	5.00E-04	0.01	1.1	0.05	0.05	0.44	0.11		
73384		377493.23	5383657.33	4940	4300	brown	9.6	0.01	5.00E-04	9.80E-04	3	5.00E-05	0.01	0.39	9.00E-03	0.52	3.00E-03	0.02	0.22	0.02	0.01	1.6	0.02	0.04	0.98	0.11		
73305		377502.61	5383654.61	4950	4300	black	9.45	0.01	0.01	7.00E-04	1.8	5.00E-05	8.00E-03	0.46	0.01	0.23	4.00E-03	0.02	0.36	5.00E-04	0.03	0.89	0.03	0.03	1.2	0.07		
73364		377512	5383651.9	4960	4300	black	9.4	0.01	0.03	8.40E-04	2.4	5.00E-05	0.01	0.7	0.01	0.45	7.00E-03	0.03	0.51	5.00E-04	0.06	1.4	0.05	0.06	1.1	0.31		
73388		377521.55	5383649.15	4970	4300	black	9.5	0.02	5.00E-04	8.10E-04	3.1	5.00E-05	0.02	0.63	0.01	0.55	7.00E-03	0.02	0.34	0.01	0.07	0.92	0.04	0.05	1.3	0.05		
73266		377531.1	5383646.4	4980	4300	grey	9.55	7.50E-03	5.00E-04	1.64E-03	1.7	5.00E-05	9.00E-03	0.44	0.01	0.4	4.00E-03	0.02	0.34	5.00E-04	0.01	0.83	0.03	0.04	1.1	0.12		
73239		377541.55	5383643.95	4990	4300	grey	9.65	7.90E-03	0.02	1.50E-04	1.5	5.00E-05	0.02	0.48	0.01	0.15	4.00E-03	0.02	0.34	5.00E-04	0.04	1.9	0.03	0.05	1.2	0.09		
73223		377552	5383641.5	5000	4300	grey	9.7	7.60E-03	5.00E-04	6.70E-04	1.8	5.00E-05	0.01	0.66	9.00E-03	0.44	8.00E-03	0.03	0.45	5.00E-04	0.05	0.69	0.05	0.05	0.85	0.07		
164954		377569.8	5383635.8	5020	4300	black	9.55	0.01	0.04	6.60E-04	2.2	5.00E-05	0.02	0.66	0.01	0.2	7.00E-03	0.03	0.56	0.01	0.03	0.9	0.05	0.06	0.24	0.1		
164995		377586.2	5383633.3	5040	4300	black	9.35	0.01	0.02	1.44E-03	2.4	5.00E-05	0.01	0.86	0.01	0.3	0.01	0.04	0.64	2.00E-03	0.02	1.4	0.07	0.06	1.9	0.11		
164979		377603.8	5383629.9	5060	4300	black	9	0.01	0.05	5.00E-06	3.5	5.00E-05	0.02	1.1	0.02	0.22	0.01	0.06	0.98	7.00E-03	0.07	1.6	0.09	0.09	0.99	0.1		
164991		377621.8	5383626.8	5080	4300	black	9.05	0.01	0.05	7.60E-04	3	3.20E-03	0.04	1.2	0.03	1.9	0.01	0.07	0.9	0.01	0.14	4.5	0.09	0.1	11	0.25		
164994		377638.8	5383624.2	5100	4300	black	9.35	5.80E-03	0.01	7.50E-04	1.8	5.00E-05	6.00E-03	0.8	9.00E-03	0.15	0.01	0.04	0.65	5.00E-04	0.02	3.3	0.06	0.07	0.66	0.11		
164998		377656.5	5383620.3	5120	4300	black	9.65	0.01	0.13	1.73E-03	2.1	3.00E-04	0.02	1.1	0.02	1.1	0.01	0.06	0.83	0.01	0.07	4.3	0.08	0.13	3.4	0.59		
164985		377694.9	5383612.6	5160	4300	orange	10	2.40E-03	0.03	6.00E-04	1.9	6.60E-03	5.00E-04	2.7	0.01	0.22	0.04	0.13	1.6	5.00E-04	0.04	3.4	0.22	0.16	1.6	3.2		
164969		377709.2	5383608.5	5180	4300	brown	9.15	8.00E-03	0.06	2.90E-04	4.5	5.00E-05	0.02	0.61	0.02	0.17	9.00E-03	0.04	0.51	0.01	0.25	1.7	0.05	0.12	0.59	0.53		
164984		377726.6	5383605.2	5200	4300	orange	10.5	5.40E-03	0.05	5.70E-04	3.1	0.01	5.00E-03	7.8	0.01	0.12	0.04	0.19	2.5	5.00E-04	0.01	2.1	0.29	0.25	0.3	5.8		
164956		377744	5383602.1	5220	4300	black	9.25	8.90E-03	0.05	5.00E-06	2.7	5.00E-05	0.03	0.48	0.02	0.31	8.00E-03	0.02	0.38	0.02	0.08	1.1	0.04	0.1	2.3	0.32		
164996		377761.3	5383598.9	5240	4300	black	9.15	0.01	0.03	5.00E-06	11	5.00E-05	0.02	0.95	0.01	0.2	0.01	0.05	0.84	6.00E-03	0.07	1.5	0.06	0.15	1.2	0.31		
164958		377778.8	5383595.8	5260	4300	black	9.15	7.30E-03	0.05	5.00E-06	4.4	5.00E-05	0.01	1.2	0.01	0.18	0.01	0.07	0.89	0.01	0.08	1.9	0.1	0.13	0.63	0.26		
164992		377796.5	5383592	5280	4300	black	9.05	0.01	0.07	6.90E-04	3.7	2.10E-03	0.01	1.3	0.01	0.23	0.01	0.06	1.1	7.00E-03	0.09	1.9	0.08	0.16	1.6	0.53		
73288		377078.1	5383790.4	4500	4350	red-brown	8	0.03	0.29	2.47E-03	3.5	1.20E-03	0.09	0.37	0.03	3.8	6.00E-03	0.03	0.21	4.00E-03	0.29	13	0.03	0.07	5.6	0.11		
73264		377088.75	5383786.15	4510	4350	brown	9.15	0.01	0.25	1.08E-03	5.2	8.30E-03	0.01	0.36	0.04	0.95	4.00E-03	0.03	0.32	0.08	0.13	4.4	0.03	0.06	1.7	0.11		
73205		377099.4	5383781.9	4520	4350	brown	7.7	0.01	0.17	6.30E-04	1.6	1.10E-03	0.04	0.2	0.03	0.73	2.00E-03	0.01	0.13	0.01	0.26	3.7	0.01	0.03	3.7	0.03		
73284		377107	5383779.35	4530	4350	brown	7.3	9.40E-03	0.09	1.08E-03	2	5.00E-05	0.09	0.16	0.03	0.41	2.00E-03	0.01	0.12	5.00E-04	0.12	3.2	0.01	0.03	6.1	5.00E-04		
73202		377114.6	5383776.8	4540	4350	grey	8.95	0.01	0.15	5.20E-04	2.4	4.20E-03	0.05	0.12	0.01	0.48	5.00E-04	9.00E-03	0.09	0.02	0.09	2.1	0.01	0.02	2.4	0.04		
73287	73247	377124.15	5383773.8	4550	4350	grey	9.05	0.03	0.01	5.00E-06	0.57	5.00E-05	0.03	0.3	8.00E-03	0.2	3.00E-03	0.01	0.24	5.00E-03	0.04	0.48	0.01	0.03	0.79	0.15		
73247		377124.15	5383773.8	4550	4350	grey	9.1	0.01	0.02	9.00E-05	1.1	5.00E-05	0.03	0.46	0.01	0.18	6.00E-03	0.02	0.34	5.00E-04	0.05	0.93	0.03	0.04	1.1	0.06		
73207		377133.7	5383770.8	4560	4350	grey	8.5	0.01	0.08	3.80E-04	1.9	7.00E-04	0.03	0.45	0.02	0.57	5.00E-03	0.02	0.32	5.00E-03	0.14	1.1	0.03	0.04	3.1	0.02		
73289		377142.95	5383769.45	4570	4350	grey	9.5	0.01	0.02	3.00E-04	0.94	5.00E-05	7.00E-03	0.04	5.00E-03	0.01	5.00E-04	6.00E-03	0.03	5.00E-04	0.03	0.81	6.00E-03	0.01	1	0.04		
73255		377152.2	5383768.1	4580	4350	grey	9.5	2.50E-05	0.06	5.00E-06	1.5	5.00E-05	0.01	0.15	0.01	0.27	2.00E-03	8.00E-03	0.11	3.00E-03	0.07	1.6	0.01	0.02	1.5	0.03		
73214		377162.05	5383765.4	4590	4350	grey	9.5	0.01	5.00E-03	1.42E-03	2.5	4.00E-04	0.02	0.29	0.01	0.63	3.00E-03	0.01	0.21	5.00E-03	0.06	2.5	0.02	0.05	1.2	0.14		
73218		377171.9	5383762.7	4600	4350	grey	9.75	0.01	5.00E-04	9.70E-04	5.9	3.00E-04	0.01	0.3	0.01	0.86	2.00E-03	0.02	0.23	5.00E-04	0.05	4.4	0.02	0.08	1.7	0.24		
73299		377190.5	5383759.3	4620	4350	grey	9.85	0.03	0.02	5.00E-06	2.9	5.00E-05	8.00E-03	0.18	0.01	1	2.00E-03	0.01	0.14	0.01	0.01	9.1	0.02	0.05	0.78	0.18		
73227		377201.6	5383757.8	4630	4350	grey	9.8	0.01	0.07	4.00E-04	3.8	5.00E-05	0.01	0.13	7.00E-03	0.62	1.00E-03	0.01	0.11	0.02	0.05	2	0.01	0.03	0.84	0.12		
73249		377212.7	5383756.3	4640	4350	grey	9.4	0.02	0.04	1.43E-03	4.3	5.00E-05	0.01	0.35	0.01	0.46	3.00E-03	0.01	0.25	0.02	0.03	3.4	0.02	0.05	0.98	0.19		
73254		377222.37	5383754.82	4650	4350	grey	9.85	4.20E-03	0.01	5.00E-06	2	5.00E-05	0.02	0.24	8.00E-03	0.24	3.00E-03	0.01	0.19	5.00E-03	0.04	1.3	0.01	0.03	0.66	0.11		
73222		377232.05	5383753.35	4660	4350	grey	9.5	0.01	5.00E-04	3.90E-04	4.7	5.00E-05	0.02	0.42	0.01	0.48	5.00E-03	0.02	0.31	3.00E-03	0.05	1.6	0.03	0.06	1.5	0.08		
73267		377241.72	5383751.87	4670	4350	black	9.3	7.70E-03	0.02	1.02E-03	2.4	5.00E-05	0.02	0.36	0.01	0.54	3.00E-03	0.02	0.31	8.00E-03	0.04	2.6	0.03	0.04	1.3	0.03		
73291		377251.4	5383750.4	4680	4350	black	9.25	0.02	0.04	6.50E-04	4.7	5.00E-05	0.03	0.43	0.01	0.89	3.00E-03	0.02	0.33	0.05	0.06	2.5	0.03	0.05	1.9	0.11		
73213		377261.3	5383748.2	4690	4350	black	8.95	0.02	0.03	5.96E-03	4.4	2.00E-03	0.03	1.1	0.01	0.72	0.01	0.05	0.85	1.00E-03	0.11	4.1	0.07	0.12	2.6	0.19		
73271		377271.2	5383746	4700	4350	black	8.95	0.01	0.01	1.31E-03	4.4	3.00E-04	0.03	0.65	0.01	1.1	6.00E-03	0.03	0.48	5.00E-04	0.08	5.8	0.04	0.08	2.1	0.04		
73221		377281.3	5383744.25	4710	4350	grey	9.3	0.02	7.00E-03	8.60E-04	8.3	5.00E-05	0.02	0.79	0.01	0.7	6.00E-03	0.03	0.58	0.01	0.08	2.7	0.04	0.08	1.4	0.17		
73300		377291.4	5383742.5	4720	4350	black	9.3	0.03	0.03	4.40E-04	6.5	5.00E-05	0.01	0.68	0.01	0.51	0.01	0.03	0.48	0.01	0.12	3.8	0.06	0.09	0.91	0.18		
73257		377301.2	5383740.8	4730	4350	black	9.45	0.01	0.03	8.30E-04	11	5.00E-03	0.01	0.51	9.00E-03	0.34	4.00E-03	0										

Sample ID	Orig Sample ID	Local		soil groups	Digest pH	Digest																				
		East	North			Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr		
73256	377444.54	5383708.34	4880	4350	black	9.2	0.01	0.05	8.00E-05	1.4	5.70E-03	0.02	1.1	0.01	0.23	8.00E-03	0.04	0.97	0.01	0.04	1.5	0.07	0.07	1.4	0.19	
73209	377453.77	5383708.32	4890	4350	black	9.5	0.04	0.03	9.90E-04	2.2	1.20E-03	0.02	1.1	0.02	0.58	0.01	0.05	0.83	0.01	0.07	1.1	0.07	0.07	4.3	0.34	
73217	377463	5383704.3	4900	4350	black	9.15	0.02	0.02	4.90E-04	2.2	8.00E-04	0.02	1.4	0.01	0.37	0.01	0.05	1	5.00E-04	0.08	2.1	0.08	0.09	1.6	0.14	
73265	377472.83	5383702.38	4910	4350	grey	9.45	0.03	0.27	1.54E-03	1.7	1.70E-03	0.01	0.86	0.01	1.1	8.00E-03	0.04	0.71	0.02	0.05	2.8	0.06	0.06	1.2	0.69	
73203	377531.81	5383690.86	4970	4350	grey	9.75	0.01	0.09	2.23E-03	1.2	7.10E-03	0.01	0.59	9.00E-03	1.8	5.00E-03	0.03	0.39	0.03	0.06	1.2	0.04	0.11	0.48	2.7	
73297	377541.64	5383688.94	4980	4350	grey	9.95	0.03	0.02	1.97E-03	1.6	2.30E-03	0.02	0.34	0.01	2.8	5.00E-03	0.02	0.25	0.03	0.02	4.5	0.03	0.1	2.1	1.3	
73212	377551.47	5383687.02	4990	4350	orange	9.95	0.02	5.00E-04	1.79E-03	1.1	0.01	0.01	0.3	7.00E-03	1.9	4.00E-03	0.02	0.21	0.02	0.05	1.8	0.02	0.18	0.61	3.7	
73259	377561.3	5383685.1	5000	4350	brown	9.45	0.01	0.07	3.19E-03	2.9	3.30E-03	0.03	0.82	0.03	1.8	7.00E-03	0.04	0.69	0.01	0.07	2.6	0.06	0.08	2.5	0.16	
73226	377127.23	5383829.23	4530	4400	black	8.65	0.07	127.5	0.07	3.7	4.70E-03	0.26	0.19	0.04	80	0.01	0.05	0.1	0.8	0.16	13.5	0.04	0.14	90.5	0.37	
73281	377136.8	5383827.9	4540	4400	orange	9.1	0.05	0.02	4.80E-04	1.2	7.00E-04	0.02	0.14	0.01	0.51	1.00E-03	9.00E-03	0.12	3.00E-03	0.05	1.6	0.01	0.02	1.9	0.06	
73293	377146.27	5383825.22	4550	4400	brown	9.8	0.01	0.01	9.80E-04	0.73	5.00E-05	0.01	0.09	6.00E-03	0.25	1.00E-03	6.00E-03	0.07	8.00E-03	0.01	0.69	6.00E-03	0.01	1.5	0.11	
73230	377155.75	5383822.55	4560	4400	red-brown	9	0.07	0.08	2.00E-05	2.9	4.10E-03	0.04	1.9	0.02	0.53	0.01	0.07	1.4	0.05	0.07	2.3	0.12	0.12	1.8	0.32	
73296	377165.22	5383819.87	4570	4400	orange	10	0.05	0.1	7.99E-03	0.83	5.00E-05	0.03	0.14	0.01	5.9	2.00E-03	0.01	0.09	0.06	0.01	25.5	0.01	0.04	5.3	0.53	
73220	377165.22	5383819.87	4570	4400	red-brown	10	0.19	0.51	0.24	1.6	8.40E-03	0.09	0.35	0.01	23.5	5.00E-03	0.03	0.23	1	0.05	201.5	0.03	0.11	19	0.72	
73250	377174.7	5383817.2	4580	4400	brown	9.75	8.40E-03	0.01	5.00E-06	1.2	5.00E-05	0.01	0.46	8.00E-03	0.5	6.00E-03	0.02	0.33	5.00E-04	0.03	3.6	0.03	0.05	4.6	0.17	
166822	377190.87	5383814	4600	4400	grey	8.20E-03	0.03	5.00E-06	0.56	1.00E-04	0.03	4.00E-03	0.09	0.01	0.21	0.01	0.01	4.00E-03	0.02	0.85	0.03	0.03	0.05	15	0.04	
166822	377190.87	5383814	4600	4400	grey	8.20E-03	0.01	0.03	2.50E-04	0.91	3.00E-04	0.03	0.01	0.01	0.21	0.01	0.01	4.00E-03	0.02	0.85	0.03	0.03	0.05	15	0.04	
73277	377193.77	5383813.77	4600	4400	brown	9.55	0.01	7.00E-03	1.16E-03	1.2	5.00E-05	0.02	0.5	0.01	0.42	4.00E-03	0.03	0.42	5.00E-04	0.05	2.5	0.03	0.05	7.4	0.04	
166821	377195.87	5383813	4605	4400	grey	8.80E-03	0.03	1.30E-04	0.52	5.00E-05	0.02	3.00E-03	0.09	0.01	0.11	0.01	0.01	6.00E-03	0.03	0.87	0.03	0.03	0.03	9.9	0.04	
166821	377195.87	5383813	4605	4400	grey	8.80E-03	0.01	0.03	5.00E-06	0.71	1.00E-04	0.04	0.01	0.01	0.21	0.01	0.01	9.00E-03	0.04	2.4	0.03	0.03	0.03	11	0.04	
166820	377200.87	5383812	4610	4400	grey	9.90E-03	0.01	0.02	5.00E-06	0.43	5.00E-05	0.03	7.00E-03	0.23	0.01	0.01	0.01	2.00E-03	0.04	1.1	0.03	0.03	0.03	6.3	0.04	
166820	377200.87	5383812	4610	4400	grey	9.90E-03	0.02	6.00E-05	0.58	1.00E-04	0.04	9.00E-03	0.41	0.01	0.01	0.01	0.01	0.01	2.00E-03	0.04	1.1	0.03	0.03	6.3	0.04	
73294	377203.31	5383812.06	4610	4400	brown	9.6	0.01	2.00E-03	2.04E-03	0.6	5.00E-05	0.01	0.37	3.00E-03	0.17	5.00E-03	0.02	0.25	5.00E-04	5.00E-04	2.4	0.03	0.03	0.8	0.05	
166819	377205.87	5383811	4615	4400	grey	8.30E-03	0.02	5.00E-06	0.47	5.00E-05	0.02	0.01	0.11	0.01	0.11	0.01	0.01	3.00E-03	0.03	0.8	0.03	0.03	0.03	7.3	0.04	
166819	377205.87	5383811	4615	4400	grey	8.30E-03	0.01	0.02	1.60E-04	0.68	5.00E-05	0.03	7.00E-03	0.19	0.01	0.01	0.01	5.00E-03	0.03	2.3	0.03	0.03	0.03	6.7	0.04	
166818	377210.87	5383810	4620	4400	grey	7.60E-03	0.03	7.00E-05	0.54	5.00E-05	0.02	3.00E-03	0.09	0.01	0.01	0.01	0.01	6.00E-03	0.02	1.1	0.03	0.03	0.03	6.9	0.04	
73210	377212.85	5383810.35	4620	4400	brown	9.6	0.01	0.02	5.50E-04	1.6	5.00E-05	0.02	0.57	9.00E-03	0.38	7.00E-03	0.03	0.38	5.00E-04	0.06	2.9	0.04	0.05	1.5	0.02	
166817	377212.87	5383809.5	4622	4400	grey	6.85E-03	0.03	8.00E-05	0.59	5.00E-05	0.03	4.00E-03	0.09	0.01	0.01	0.01	0.01	8.00E-03	0.04	1.2	0.03	0.03	0.03	19.5	0.04	
166817	377212.87	5383809.5	4622	4400	grey	6.85E-03	0.01	0.03	3.90E-04	0.95	4.00E-04	0.03	0.01	0.01	0.21	0.01	0.01	0.01	0.01	0.05	3.4	0.03	0.03	20	0.04	
166816	377214.87	5383809	4624	4400	grey	8.50E-03	0.04	3.80E-04	0.48	5.00E-05	0.02	1.00E-03	0.08	0.01	0.01	0.01	0.01	8.00E-03	0.02	0.93	0.03	0.03	0.03	6.9	0.04	
166816	377214.87	5383809	4624	4400	grey	8.50E-03	0.01	0.03	2.80E-04	0.7	1.00E-04	0.02	7.00E-03	0.17	0.01	0.01	0.01	0.01	0.01	0.03	2.3	0.03	0.03	6.2	0.04	
166815	377216.43	5383809	4626	4400	grey	6.35E-03	0.03	1.40E-04	0.47	5.00E-05	0.02	3.00E-03	0.28	0.01	0.01	0.01	0.01	4.00E-03	0.03	0.86	0.03	0.03	0.03	7	0.04	
166815	377216.43	5383809	4626	4400	grey	6.35E-03	0.01	0.03	1.00E-05	0.9	1.00E-04	0.03	0.01	0.01	0.25	0.01	0.01	0.01	0.01	0.05	2.8	0.03	0.03	8.3	0.04	
166814	377218.09	5383808.5	4628	4400	grey	7.45E-03	0.02	2.00E-04	0.43	5.00E-05	0.01	1.00E-03	0.04	0.01	0.01	0.01	0.01	6.00E-03	0.03	0.87	0.03	0.03	0.03	16.5	0.04	
166814	377218.09	5383808.5	4628	4400	grey	7.45E-03	0.01	0.02	1.20E-04	0.75	4.00E-04	0.01	8.00E-03	0.13	0.01	0.01	0.01	0.01	0.01	0.04	2.1	0.03	0.03	17	0.04	
166813	377219.59	5383808.5	4630	4400	grey	8.60E-03	0.05	1.10E-04	0.36	5.00E-05	0.06	0.03	0.2	0.01	0.01	0.01	0.01	5.00E-03	0.03	1.1	0.03	0.03	0.03	18	0.04	
166813	377219.59	5383808.5	4630	4400	grey	8.60E-03	0.01	0.04	3.30E-04	0.66	4.00E-04	0.06	0.01	0.01	0.42	0.01	0.01	0.01	0.01	0.06	3.2	0.03	0.03	18	0.04	
73278	377222.38	5383808.63	4630	4400	brown	9.4	0.01	5.00E-04	5.03E-03	0.74	5.00E-05	9.00E-03	0.41	0.01	0.41	6.00E-03	0.02	0.33	5.00E-04	0.02	2.3	0.03	0.05	1.3	1.00E-03	
166812	377221.68	5383807.5	4632	4400	grey	9.80E-03	0.05	1.60E-04	0.54	5.00E-05	0.05	0.01	0.16	0.01	0.16	0.01	0.01	7.00E-03	0.02	1.1	0.03	0.03	0.03	18	0.04	
166812	377221.68	5383807.5	4632	4400	grey	9.80E-03	0.01	0.05	7.60E-04	0.82	2.00E-04	0.05	0.01	0.01	0.26	0.01	0.01	0.01	0.01	0.06	3.2	0.03	0.03	18	0.04	
166811	377223.87	5383807	4634	4400	grey	8.00E-03	0.01	0.03	3.40E-04	0.5	5.00E-05	0.04	0.01	0.01	0.48	0.01	0.01	0.01	0.01	0.06	1.1	0.03	0.03	12	0.04	
166811	377223.87	5383807	4634	4400	grey	8.00E-03	0.01	0.04	1.12E-03	0.84	5.00E-04	0.04	0.01	0.01	0.39	0.01	0.01	0.01	0.01	0.06	2.7	0.03	0.03	13	0.04	
166810	377225.75	5383807	4636	4400	grey	8.00E-03	0.01	0.03	7.40E-04	0.54	5.00E-05	0.04	5.00E-03	1.4	0.01	0.01	0.01	4.00E-03	0.02	0.76	0.03	0.03	0.03	9.4	0.04	
166810	377225.75	5383807	4636	4400	grey	8.00E-03	0.01	0.02	4.80E-04	0.83	1.00E-04	0.03	0.01	0.01	0.21	0.01	0.01	0.01	0.01	0.04	2.2	0.03	0.03	9	0.04	
166809	377227.78	5383806.5	4638	4400	grey	8.00E-03	0.01	0.01	4.50E-04	0.43	5.00E-05	0.01	5.00E-04	0.28	0.01	0.01	0.01	6.00E-03	0.01	0.71	0.03	0.03	0.03	6.4	0.04	
166809	377227.78	5383806.5	4638	4400	grey	8.00E-03	0.01	0.01	1.98E-03	0.64	2.00E-04	0.01	6.00E-03	0.2	0.01	0.01	0.01	0.01	0.01	0.04	1.7	0.03	0.03	6.6	0.04	
166808	377229.87	5383806	4640	4400	grey	8.10E-03	0.02	3.30E-04	0.52																	

Orig		Local		soil	Digest	Ag As Au Ba Bi Cd Ce Co Cu Eu Gd La Mo Ni Pb Sm Y Zn Zr																					
Sample ID	Sample ID	UTM_East	UTM_North	East	North	groups	pH	Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cu	Eu	Gd	La	Mo	Ni	Pb	Sm	Y	Zn	Zr	
166803	377268.87	5383798	4680	4400	grey			0.01	0.01	6.00E-04	0.61	1.00E-04	0.02		5.00E-03	0.28				0.01	0.02	0.63				9.6	
166803	377268.87	5383798	4680	4400	grey			6.15E-03	0.02	4.28E-03	0.99	3.00E-04	0.01		8.00E-03	0.27				0.01	0.03	1.3				9.5	
73225	377270.2	5383798.8	4680	4400	grey		9.7	0.02	5.00E-04	2.16E-03	2	5.00E-05	0.01	0.38	0.01	0.45	3.00E-03	0.02	0.29	5.00E-04	0.05	1.3	0.02	0.05	0.82	0.15	
166802	377278.87	5383795	4690	4400	grey			8.10E-03	0.01	7.00E-05	0.7	2.00E-04	0.02		4.00E-03	0.21				0.02	0.03	0.64				11	
73263	377279.8	5383796.45	4690	4400	grey		9.5	0.02	0.01	7.50E-03	3.1	5.00E-05	0.02	0.25	0.01	0.53	1.00E-03	0.01	0.23	0.01	0.04	1.5	0.01	0.04	1.9	0.1	
166801	377288.87	5383793	4700	4400	grey			2.85E-03	0.02	1.02E-03	0.71	3.00E-04	0.02		9.00E-03	0.28				8.00E-03	0.06	0.91				5.3	
166801	377288.87	5383793	4700	4400	grey			0.01	0.03	6.00E-04	1.1	4.00E-04	0.01		9.00E-03	0.17				9.00E-03	0.04	2.3				5.5	
73268	377289.4	5383794.1	4700	4400	brown		9.55	9.00E-03	4.00E-03	1.50E-03	1.5	5.00E-05	0.01	0.54	9.00E-03	0.44	7.00E-03	0.03	0.43	5.00E-04	0.04	2.9	0.04	0.06	1.2	0.04	
73237	377298.95	5383792.11	4710	4400	grey		9.55	0.03	0.06	8.10E-04	14.5	5.00E-05	0.04	0.69	0.01	0.61	7.00E-03	0.02	0.45	0.03	0.06	1.9	0.03	0.06	1.6	0.47	
73273	377308.5	5383790.13	4720	4400	grey		9.65	0.01	0.08	1.19E-03	2.1	5.00E-05	0.01	0.34	0.01	0.79	3.00E-03	0.01	0.25	0.02	0.01	2.9	0.02	0.04	1.2	0.25	
73281	377318.05	5383788.15	4730	4400	orange		9.95	0.08	5.00E-04	1.36E-03	1.2	8.70E-03	0.01	0.41	4.00E-03	1.1	6.00E-03	0.02	0.37	0.1	0.05	2.8	0.04	0.1	0.42	2.3	
73286	377327.6	5383786.16	4740	4400	orange		10	0.12	0.09	9.00E-05	1.2	2.10E-03	0.01	0.32	7.00E-03	0.66	4.00E-03	0.02	0.25	0.2	0.02	2.8	0.02	0.08	1	1.9	
73276	377346.7	5383782.2	4760	4400	brown		9.15	0.04	0.03	1.10E-03	6.4	5.00E-05	0.01	0.56	0.01	0.34	5.00E-03	0.02	0.51	4.00E-03	0.07	2.2	0.03	0.05	0.72	0.2	
73233	377355.75	5383779.15	4770	4400	grey		9.4	0.04	0.04	9.00E-05	4	8.00E-04	0.01	0.85	7.00E-03	0.37	7.00E-03	0.03	0.64	0.01	0.04	1.3	0.05	0.06	0.58	0.23	
73279	377364.8	5383776.1	4780	4400	grey		9.1	0.17	0.05	1.54E-03	2.6	2.00E-04	0.01	1.7	0.01	1	0.01	0.07	1.4	0.03	0.08	1.7	0.1	0.1	1.3	0.29	
73298	377374.42	5383774.25	4790	4400	black		8.7	0.1	0.08	7.00E-04	4.7	5.00E-05	0.05	0.26	0.03	1.2	2.00E-03	0.02	0.23	0.03	0.17	3.7	0.01	0.07	5.2	0.1	
73285	377384.05	5383772.4	4800	4400	black		8.55	0.12	0.09	5.00E-06	2.2	1.50E-03	0.05	0.16	0.01	0.66	2.00E-03	0.01	0.14	0.01	0.08	2.5	0.01	0.03	2.9	0.03	
73260	377393.67	5383770.55	4810	4400	black		8.75	0.1	0.07	4.80E-04	2.5	1.90E-03	0.02	0.29	0.01	0.73	2.00E-03	0.01	0.22	0.01	0.11	2.4	0.02	0.04	2.4	0.06	
73215	377403.3	5383768.7	4820	4400	brown		9	0.1	0.05	1.29E-03	4.1	1.80E-03	0.02	1.8	0.02	2.1	0.01	0.07	1.2	0.04	0.12	3.5	0.1	0.1	1.9	0.31	
73204	377412.45	5383766.7	4830	4400	brown		9.25	0.03	0.09	1.41E-03	2.7	3.20E-03	0.01	0.96	0.01	0.63	6.00E-03	0.03	0.74	0.04	0.07	1.3	0.04	0.06	1	0.38	
73245	377421.6	5383764.7	4840	4400	brown		9.4	0.03	0.04	2.00E-04	2.2	5.00E-05	0.01	1.2	9.00E-03	0.33	0.01	0.04	0.93	2.00E-03	0.04	1.4	0.06	0.07	0.89	0.25	
73258	377430.6	5383762.85	4850	4400	brown		9.35	0.01	0.03	1.00E-03	2	4.50E-03	8.00E-03	1	8.00E-03	0.23	8.00E-03	0.03	0.85	7.00E-03	0.04	1.4	0.06	0.06	0.57	0.24	
73252	73258 377430.6	5383762.85	4850	4400	brown		9.4	9.50E-03	0.04	9.00E-05	2.2	5.00E-05	0.01	1.1	6.00E-03	0.29	9.00E-03	0.04	0.8	0.01	0.04	1.6	0.06	0.06	0.56	0.25	
73290	377439.6	5383761	4860	4400	black		9.25	0.03	0.03	5.00E-06	1.9	5.00E-05	0.02	1.1	0.01	0.4	8.00E-03	0.04	0.95	0.02	0.07	1.9	0.06	0.09	1.1	0.21	
73229	377449.35	5383759.55	4870	4400	black		9.85	0.05	0.15	9.40E-04	3.1	5.10E-03	0.06	2.2	0.02	1.1	0.01	0.07	1.6	0.04	0.07	2.2	0.13	0.11	2.5	0.32	
73241	377459.1	5383758.1	4880	4400	black		9.3	0.02	0.05	4.20E-04	2.2	5.00E-05	0.01	1.4	0.01	0.23	0.01	0.04	0.97	5.00E-04	0.05	1.3	0.06	0.08	0.91	0.36	
73244	377468.5	5383755.65	4890	4400	black		9.05	0.05	0.05	3.00E-04	2.3	5.00E-05	0.02	1.7	0.01	0.23	0.01	0.06	1.2	5.00E-04	0.05	2	0.1	0.09	0.92	0.22	
73248	377477.9	5383753.2	4900	4400	black		9.35	0.03	0.05	5.00E-06	4.1	5.00E-05	0.03	0.72	0.01	0.45	6.00E-03	0.03	0.52	5.00E-04	0.06	2	0.04	0.05	2	0.1	
73235	377487.45	5383750.95	4910	4400	black		9.55	0.04	0.03	2.60E-04	2.3	5.00E-04	0.02	0.66	0.01	0.61	6.00E-03	0.02	0.5	5.00E-03	0.03	10.5	0.04	0.05	1.3	0.18	
73219	377497	5383748.7	4920	4400	black		9.35	0.02	5.00E-04	2.80E-04	2.6	2.00E-04	0.02	1	0.01	0.51	9.00E-03	0.04	0.76	5.00E-04	0.08	1.2	0.06	0.07	1.4	0.05	
73275	377506.7	5383746.65	4930	4400	black		9.65	0.02	4.00E-03	1.33E-03	1.6	5.00E-05	0.01	0.35	8.00E-03	0.41	3.00E-03	0.02	0.33	5.00E-04	0.05	0.95	0.02	0.03	0.58	0.14	
73234	377516.4	5383744.6	4940	4400	black		9.3	0.03	0.03	8.00E-04	4.6	7.00E-04	0.04	0.59	0.01	0.57	6.00E-03	0.02	0.43	9.00E-03	0.04	2.8	0.04	0.05	1.8	0.11	
73206	377525.8	5383742.25	4950	4400	brown		8.95	0.02	0.09	1.27E-03	4.8	2.10E-03	0.05	0.59	0.01	1.1	4.00E-03	0.02	0.44	0.01	0.09	2.8	0.03	0.06	2.9	0.01	
73246	377535.2	5383739.9	4960	4400	brown		9.2	0.04	0.05	1.00E-04	4.4	5.00E-05	0.03	0.68	0.01	1.1	5.00E-03	0.03	0.46	0.02	0.04	1.7	0.05	0.05	2.1	0.07	
73208	377544.95	5383738.6	4970	4400	brown		9.4	0.03	0.04	4.70E-04	5	2.10E-03	0.02	0.81	0.01	0.42	7.00E-03	0.04	0.56	6.00E-03	0.06	1.7	0.05	0.06	1.4	0.1	
73280	377554.7	5383737.3	4980	4400	grey		9.2	0.05	6.00E-03	7.50E-04	2.3	5.00E-05	0.02	1.1	0.01	0.5	7.00E-03	0.04	0.97	5.00E-04	0.06	1.7	0.07	0.09	1.3	0.08	
73224	377564.25	5383735.2	4990	4400	brown		9.6	0.02	5.00E-04	9.90E-04	2.7	5.00E-05	0.01	0.58	0.01	0.47	6.00E-03	0.03	0.42	5.00E-04	0.06	0.93	0.05	0.05	0.98	0.05	
73242	377573.8	5383733.1	5000	4400	brown		9.35	0.01	0.02	3.00E-05	2.7	5.00E-05	0.03	0.65	0.01	0.4	6.00E-03	0.03	0.46	4.00E-03	0.04	1.1	0.04	0.04	1.8	0.11	

BURNS PEAK EL 44/88 - LEVELLED PARTIAL LEACH DATA

Note: All values in parts per million

Sample ID	Orig Sample ID	UTM_East	UTM_North	Local East	Local North	soil groups	Digest pH	AgLMethCol	AsLMethCol	AuLMethCol	BaLMethCol	BiLMethCol	CdLMethCol	CeLMethCol	CoLMethCol	CuLMethCol	EuLMethCol	GdLMethCol	LaLMethCol	MnLMethCol	NiLMethCol	PbLMethCol	SmLMethCol	YLMethCol	ZnLMethCol	ZrLMethCol	
73529		376924.8	5383468.2	4420	4000	orange	9.25	0.0025	0.1066667	0.6976745	0.4915254	0.425	2	0.2285714	0.2142857	0.3380952	0.15	0.1111111	0.3015873	0.75	0.7500001	0.3880597	0.2	0.1111111	0.8865249	4.76E-02	
73590		376934.01	5383466.37	4430	4000	orange	9.75	0.8500001	0.67E-02	5.81E-03	0.5922204	0.14	0.3333333	7.86E-02	0.1428571	0.2571429	0.15	0.1111111	0.1111111	0.375	0.6250001	0.3582099	1.00E-01	7.41E-02	0.3333333	4.76E-02	
73552	73558	376943.23	5383484.55	4440	4000	grey	10.5	0.0025	0.6363636	1.181818	0.3178484	1	0.3333333	0.5384616	0.45	1.184615	1.029412	2	0.5	2	0.7272727	0.4395604	1	1.142857	0.7619048	1.125	
73558		376943.23	5383484.55	4440	4000	grey	10	2	0.6363636	1.136363	0.3422983	180	6.67E-02	0.1794872	0.5	0.5076923	0.8823529	1	0.1538462	2	0.5454546	0.4395604	0.6666667	0.7142857	0.2380953	0.5825001	
73545		376952.45	5383462.72	4450	4000	grey	9.8	0.0025	1.090909	2.409091	0.391198	1	1	0.7948718	1	0.8307693	0.4411765	0.5	0.7307693	4	0.9090909	0.5860806	0.3333333	0.4285714	0.6180476	0.625	
73504		376961.67	5383460.9	4460	4000	grey	9.05	1	2.454545	1.409091	0.6601467	58	1.333333	1.307892	3.5	1.189231	0.4411765	1	1.346154	4	1.454545	1.391941	1	0.5714285	1.809524	0.8125	
73515		376970.89	5383459.07	4470	4000	cream	9.3	1.098901	1.25	0.404545	1.808579	58	0.5	0.6153846	0.5	0.45	0.1	0.9	0.625	1.5	0.4444444	0.75	0.5	0.4	0.5789474	0.9333333	
73560		376980.11	5383457.25	4480	4000	grey	9.1	1	0.8181819	1.613636	0.7579461	200	0.6666667	0.923077	3	0.9076923	1.029412	1	0.8846154	4	1.181818	1.062271	1	0.5714285	0.952381	0.75	
73585		376989.33	5383455.42	4490	4000	red-brown	9.75	0.3	0.137931	0.43E-03	0.2647059	9.090909	0.2	8.57E-02	0.1111111	0.1132813	0.67E-02	0.1111111	0.1052632	0.5	9.76E-02	0.3053435	0.90E-02	3.70E-02	0.2066667	3.57E-02	
73598		376998.55	5383453.8	4500	4000	red-brown	9.55	1	0.1724138	3.735849	0.2941176	4.55E-02	0.2	0.15	5.56E-02	0.234375	0.1333333	0.1111111	0.1710526	0.25	9.76E-02	0.4071247	0.1818182	7.41E-02	0.4	2.14E-02	
73579		377007.78	5383451.77	4510	4000	cream	9.55	0.9340659	0.05	3.727273	0.3485255	1	1.5	0.5789231	1	0.49	0.6	1	0.625	1.5	0.5555555	0.29375	0.5	0.4	1.315789	3.33E-03	
73533		377016.98	5383449.95	4520	4000	cream	9.55	2.197802	0.3125	10.38636	0.3485255	40	1	0.9230769	1	3	0.4	1	1.0625	2	2.666667	0.6562499	0.5	0.4	0.8421053	0.4666667	
73576		377026.2	5383448.12	4530	4000	red-brown	9.3	1	6.90E-02	6.075471	0.2794118	4.55E-02	0.6	0.1642857	0.1111111	0.1835638	0.1333333	0.1111111	0.1842105	1	0.1219512	0.3053435	0.1818182	7.41E-02	0.2177778	3.57E-04	
73586		377035.42	5383446.3	4540	4000	brown	8.45	1	0.7272727	5.157895	1.054546	20	1.25	0.3134238	0.8	1.352941	0.8	0.25	0.2790898	0.2	0.8571429	1.391304	0.4	0.3076923	1.572482	0.25	
73591		377044.64	5383444.47	4550	4000	cream	9.6	0.4175624	0.0625	6.727273	0.4289544	1	0.5	0.6153846	1	0.45	0.8	1	0.625	1.5	0.4444444	0.275	0.5	0.2	0.6351579	3.33E-03	
73573		377053.86	5383442.05	4560	4000	cream	9.7	1.098901	0.5	2.363636	0.4289544	1	1	0.6153846	1	0.43	0.6	1	0.5	3	0.3333333	0.34375	0.5	0.2	1.052632	0.7333333	
73537		377063.08	5383440.82	4570	4000	red-brown	8.9	1	0.3103448	3.09434	0.5735294	9.09E-02	1.6	0.3428572	0.1666667	0.3867188	6.67E-02	0.1111111	0.381579	0.5	0.2439024	0.5852417	0.1818182	7.41E-02	0.6	2.86E-02	
73598		377072.3	5383439	4580	4000	red-brown	9.35	2	0.137931	5.094339	0.4117647	4.55E-02	0.4	0.2	5.56E-02	0.1953126	0.1666667	0.1111111	0.2239842	1.5	0.1463415	0.4590152	0.1818182	7.41E-02	0.8888889	2.86E-02	
73593		377081.99	5383437.6	4590	4000	red-brown	9.25	3	6.90E-02	2.207547	0.4264706	2.636364	0.4	0.1142857	0.1111111	0.21875	0.1	0.1111111	0.131579	2	9.09E-02	0.2315522	3.70E-02	3.70E-02	0.3555556	1.43E-02	
73525		377091.68	5383436.2	4600	4000	cream	9.2	0.8461538	0.625	0.9772727	0.6702413	2	1	1.807692	0.5	1.1	1	2	1.6875	1	1.1111111	0.34375	1.5	0.6	1	0.3333333	
73528		377101.37	5383434.8	4610	4000	red-brown	8.3	0.99	0.3793103	1.245283	0.2508824	0.7272727	2.2	0.6571429	0.2222222	0.6984375	0.1666667	0.3333333	0.6710526	0.075	0.7660978	1.528718	0.3636363	0.2222222	1.511111	4.29E-02	
73538		377111.07	5383433.4	4620	4000	grey	9.8	0.32	0.1818182	2.25	0.3178484	1	0.2666667	0.5897438	0.3	0.4307692	0.2941177	0.5	0.5	0.7	0.1818182	0.1721612	0.3333333	0.1428571	0.3190476	0.625	
73553		377120.76	5383432	4630	4000	brown	8.75	0.0025	0.4090909	1.491228	0.4	1.00E-01	1	0.4179104	0.2	0.8823529	0.7	0.5	0.3953488	0.5	0.4761905	0.8913044	0.6	0.3076923	0.9336009	0.8	
73578		377130.45	5383430.6	4640	4000	brown	8.55	1	0.2272727	1.598491	0.8	1.00E-01	1.25	0.1940298	0.4	0.8235294	0.4	0.25	0.1627907	0.5	0.4265715	1.5	0.2	0.2307692	0.6142506	0.0025	
73510		377140.15	5383429.2	4650	4000	brown	8.5	0.97	0.2727273	1.598491	0.8545454	2.4	1.25	0.2098552	0.2	0.6529411	0.6	0.2	0.2093023	0.15	0.3333333	0.8913044	0.18	0.1538462	0.8108107	0.15	
73594		377149.84	5383427.8	4660	4000	brown	8.75	1	0.3636363	3.71793	0.9818182	2	1.25	0.7014925	0.4	0.5588235	0.8000001	0.75	0.6511628	0.5	0.8095238	0.9347827	0.8	0.3846154	0.5651105	0.015	
73577		377158.53	5383426.4	4670	4000	brown	8.5	1	4.55E-02	2.77193	0.8545454	1.00E-01	1	1.25	0.2098552	0.4	0.4941178	0.3	0.25	0.1800465	0.5	0.4265715	0.7829067	0.2	0.1538462	0.9562309	0.02
73550		377169.22	5383425	4680	4000	grey	9.95	0.0025	0.1818182	6.383636	0.3422983	1	0.3333333	0.3846154	0.3	0.3076923	7.35E-02	0.25	0.1800465	2	0.4545455	0.4285714	0.3	0.1428571	0.247619	0.4375	
73560		377178.52	5383423.6	4690	4000	grey	9.2	3	0.3636363	1.59891	0.5879711	1	0.6666667	0.3076923	0.5	0.3692308	0.2941177	0.45	0.2892308	2	0.5454546	0.4285714	0.3333333	0.1428571	0.7142857	0.1875	
73520	73596	377178.52	5383423.6	4690	4000	grey	8.85	0.27	0.4545455	1.181818	0.4889075	14	0.6666667	0.7435968	0.5	0.2769231	0.4411765	0.5	0.6153846	2	0.5454546	0.6666667	0.2857143	0.8571429	0.1875		
73530		377188.61	5383422.2	4700	4000	grey	8.8	1	0.4545455	2.340909	0.9290653	86.00001	1.666667	0.7692308	0.5	1	0.4411765	0.5	0.6538462	3	0.8181912	0.989011	0.6666667	0.4285714	1.285714	0.4375	
73593		377198.3	5383420.8	4710	4000	brown	8.4	1	0.3636363	1.57895	0.8363636	2	2	0.1940298	0.4	1.176471	0.3	0.25	0.1627907	1	0.5238096	1.304348	0.2	0.3076923	1.229501	0.2	
73561		377217.51	5383416.23	4730	4000	black	6.9	1.315789	0.3333333	0.631579	0.6628242	46	5	0.1884058	1.333333	3.103448	0.4	0.25	0.1333333	0.3333333	0.7222221	0.9142857	0.2	0.3333333	2.116279	0.2307692	
73526		377227.02	5383413.07	4740	4000	orange	10	1	1.93E-02	0.868371	0.1694915	0.5	0.1666667	0.2428571	0.05	0.0857143	0.35	0.2222222	0.3174603	0.125	0.2816667	5.22E-02	0.2	0.3333333	2.116279	0.8	
73583		377236.53	5383408.91	4750	4000	grey	9.35	0.005	4.55E-03	2.240909	0.5378973	1	0.6666667	0.4358975	0.5	0.5076923	0.5882353	0.5	0.4230769	1	0.7272727	0.3333333	0.3333333	0.2857143	1.380952		
73551		377246.05	5383406.75	4760	4000	grey	9.4	0.0025	0.2727273	2.658091	0.3667482	1	0.6666667	0.974359	0.45	0.3076923	0.2941177	0.5	1	2	0.4545455	0.2014662	0.2014662	0.4285714	0.5238096	0.9376001	
73511		377255.56	5383403.58	4770	4000	grey	9	1	0.3636363	0.2954545	0.3667482	18	0.3333333	1.43													

Sample ID	Orig ID	UTM East	UTM North	Local East	Local North	soil groups	Digest pH	AgL_MethCol																	
								AgL_MethCol	AsL_MethCol	AuL_MethCol	BaL_MethCol	BIL_MethCol	CdL_MethCol	CoL_MethCol	CrL_MethCol	CuL_MethCol	EuL_MethCol	GdL_MethCol	LaL_MethCol	MoL_MethCol	NiL_MethCol	PbL_MethCol	SmL_MethCol	YL_MethCol	ZnL_MethCol
73626	377652.18	5383305.56	5180	4000	black	7.6	0.2763158	0.6666666	2.921052	1.325648	1	1.333333	0.7536232	1	0.6724138	0.8000001	1	0.7555556	2.222222	0.3888889	1.142857	0.8	1	1.674418	7.69E-02
73681	377671.4	5383031	5200	4000	black	8.4	3.29E-03	0.1333333	1.472684	0.4094582	1	0.333333	0.2068996	1.333333	0.2068996	0.4	0.5	0.6666667	5.56E-02	1.444444	8.29E-02	0.4	0.333333	0.103023	0.6384618
73693	377690.7	5383296.53	5220	4000	grey	9	0.8500001	0.4545455	0.931812	0.8557457	2	0.6666667	1.974359	0.5	0.5846154	1.323529	2	2.576923	4	0.3636363	1.098901	2	1.571429	1.095238	1.75
73630	377710	5383292.06	5240	4000	brown	8.8	1	9.09E-02	2.859649	0.7636364	1.00E-01	0.25	5.522388	0.2	0.2352891	3	4.75	5.813953	4	0.3333333	0.9782609	4.4	4.461538	0.272073	0.45
73620	377729.3	5383287.6	5260	4000	brown	10	0.87	1.39E-02	1.929285	0.3272727	2	0.225	0.761194	0.2	0.1176471	0.7	0.75	0.7906977	1	1.904762	0.2608966	1	0.1904762	0.2113022	0.4
73696	377729.3	5383287.6	5260	4000	brown	9.7	0.1	4.55E-02	0.7192983	0.4181818	1.00E-01	0.25	0.5373135	0.2	0.2529412	0.6	0.5	0.6744186	0.5	0.2380953	0.5	0.6	0.5384616	0.6879606	0.02
73650	377748.6	5383283.13	5280	4000	red-brown	9	1	0.2413793	9.43E-03	0.5882353	2.909091	0.6	0.9285714	0.1666667	0.125	0.3333333	0.6666666	1.065789	0.25	0.1219512	1.603053	0.7272727	0.4814814	0.9555556	0.1028572
73677	377729.3	5383287.6	5260	4000	black	7.35	0.6578947	0.7333333	1.32E-02	1.558196	36	2.333333	0.4202898	0.6666667	5.517241	0.4	0.5	0.5333334	0.1111111	1.055555	1.657143	0.4	0.5833334	2.558139	0.1538462
73694	377787.2	5383274.2	5320	4000	black	8.55	2.631579	0.6	3.105263	2.363112	1	2.333333	0.5797101	1	3.965517	0.7	0.5	0.7333334	1.111111	0.8111111	2.228571	0.6	0.5	2.023256	0.2307692
73610	377806.26	5383268.5	5340	4000	red-brown	9.85	1	0.1724138	4.584906	0.25	4.55E-02	0.8	0.2857143	0.1666667	6.64E-02	0.3	0.3333333	0.3157895	0.25	0.1219512	0.610887	0.2727273	0.2222222	0.5	6.87E-02
73678	377825.32	5383262.8	5360	4000	red-brown	9.1	1	0.2758621	0.735849	0.5882353	1.727273	3.4	1.5	0.5555555	0.25	0.6666667	1.222222	2.236842	0.5	0.976E-02	9.414758	1.363636	0.8888888	1.511111	0.1142857
73653	377844.38	5383257.1	5380	4000	red-brown	9.45	1	0.137931	3.77E-02	0.5147059	4.55E-02	0.8	0.5714286	5.59E-02	0.1015625	0.3333333	0.4444444	0.75	0.075	0.976E-02	0.7888041	0.5454546	0.4074074	0.5111111	4.29E-02
73638	377863.44	5383251.4	5400	4000	red-brown	8.95	1	0.2758621	2.735849	1.088235	0.4545455	1	0.8571429	0.3333333	0.625	0.3333333	0.7777777	0.9605263	0.5	0.8780488	1.755725	0.7272727	0.6666667	1.044444	2.85E-02
73628	377882.5	5383245.7	5420	4000	red-brown	9.1	0.92	3.45E-02	3.169811	0.4852941	4.55E-02	0.6	0.6785714	0.1111111	0.1875	0.3333333	0.5555555	0.8026316	0.25	0.976E-02	1.170483	0.5454546	0.4444444	0.5111111	0.05
73695	376934.1	5383514.2	4420	4050	brown	7.5	0.98	1.136364	0.052632	1.709091	1.00E-01	2	0.6716418	1	1.176471	0.6	1	0.8139535	0.35	1.428572	3.152174	0.8	1	2.113022	0.35
73682	376943.33	5383511.78	4430	4050	orange	10.5	0.83	1	3.534884	0.3559322	3	0.3333333	0.4714286	7.14E-02	0.8095239	1.5	1.6666667	0.6984127	2	0.6666667	0.597015	1.2	0.8888888	0.2801419	1.428571
73669	376952.57	5383509.37	4440	4050	orange	10.5	0.055	0.8	2.034884	0.2542373	2	0.1	0.4857143	7.14E-02	1.857143	1	1.3333333	0.7460318	1.75	0.7916667	0.6567165	1.2	0.7037036	0.4609929	1.952381
73632	376961.81	5383506.96	4450	4050	orange	10.5	1	0.8	6.813953	0.2711864	3	0.1666667	0.7	7.14E-02	0.952381	2	2	1	4.75	0.6250001	0.8805971	1.9	1.074074	0.3900799	1.714286
73640	376971.05	5383504.55	4460	4050	orange	10.5	1	0.62	3.918605	0.2881356	1.5	0.1	0.7857143	0.1428571	1.142857	1.5	1.222222	1.015873	1.125	0.7916667	0.7313433	1.2	1.7407407	0.4609929	1.809524
73616	376980.28	5383502.13	4470	4050	orange	10.5	1	0.8	3.848837	0.2881356	1.5	0.2333333	1	0.3571429	1.380952	1.5	1.3333333	1.047619	1.625	0.6666667	0.6567165	1.4	0.8516518	0.6737589	1.242857
73674	376988.52	5383499.72	4480	4050	orange	10.5	0.55	0.6133333	1.686047	0.220339	1.5	0.2	0.55	0.2857143	1.142857	0.5	0.7777777	0.7936508	1.25	0.4166667	0.5820896	0.9	0.5555556	0.7801419	1.857143
73631	376998.76	5383497.31	4490	4050	orange	10.5	1	0.5666667	1.755814	0.2711864	1	0.2666667	1.857143	0.2857143	1.040762	3	2.444444	0.283492	3	1.8333333	1.280955	2.9	1.290296	1.276566	2.380953
73670	377008	5383494.9	4500	4050	orange	10.5	0.5100001	0.6666667	4.188047	0.2033898	2	0.3333333	1.928571	1.042857	2.285714	3	2.6666667	3.015873	5.125	1.25	2.014925	3.1	1.37037	1.170213	3.52381
73682	377017.75	5383493.11	4510	4050	orange	10.5	1	0.9333333	3.290698	0.1694915	1.5	0.3333333	1	0.1428571	1.686667	1.5	1.5555555	1.587302	10.375	1.75	1.328358	1.8	0.7777777	2.304965	2.571429
73682	377027.5	5383491.33	4520	4050	orange	10.5	1	2.133333	2.77907	0.140678	1.5	0.2666667	0.4857143	0.3571429	2.333333	1	0.7777777	0.8095238	5	0.3333333	1.238806	1	0.4814814	1.099291	3.047619
73601	377037.25	5383489.55	4530	4050	orange	10.5	2	1.8	2.348837	0.1864407	1.5	0.3333333	0.3428572	0.2142857	1.781905	1	0.7777777	0.4126984	30	0.6250001	1.029651	0.8	0.4814814	0.4984539	2.333333
73643	377047	5383487.76	4540	4050	orange	10	2	2.133333	3.860465	0.1864407	4.5	0.3333333	0.9285714	0.1428571	2.781905	2	1.8888889	1.238095	52.5	0.6250001	1.014925	1.8	0.9259259	0.7448088	2.666667
73656	377056.75	5383485.98	4550	4050	cream	9.75	0.1648352	3	1.272727	0.5930026	12	0.4	1.769231	1.5	1.3	4	12	2	110	1.5555555	1.94375	4.5	3.8	0.2684211	5.066667
73609	377066.5	5383484.2	4560	4050	grey	8.6	1	1.5454545	5.636864	2.811736	1	2.3333333	0.5128205	3	2.461539	0.8823529	0.5	0.4615385	11	3.836364	1.941392	0.3333333	0.4285714	3.095238	0.5625001
73617	377076.25	5383482.41	4570	4050	brown	7.25	0.38	1.272727	5.261404	1.163636	4	3	0.4477612	1.6	0.2823529	0.5	0.5	0.372093	1	0.3333333	1.217391	0.4	0.8461539	3.439803	2.25
73665	377086	5383480.63	4580	4050	brown	8.3	0.32	0.9009009	0.122807	1.236364	1.8	2.5	0.4328358	0.6	1.176471	0.3	0.5	0.3953488	0.5	1.142857	0.7808966	0.4	0.3846154	1.105651	0.45
73603	377095.75	5383478.85	4590	4050	black	7.6	1.315789	0.3333333	0.3947369	1.930836	1	1.3333333	2.241379	0.7	0.3	0.5555556	1.111111	1	1.971429	0.4	0.4166667	3.372093	0.6737589	1.076923	
73697	377105.5	5383477.06	4600	4050	grey	9.65	0.0025	0.1818182	0.1818182	0.4645477	150	0.3333333	0.2051282	0.3	0.2307692	0.1470588	0.3	0.2692308	0.7	0.3836363	0.1811722	0.3333333	0.1428571	0.4571429	0.375
73612	377115.25	5383475.26	4610	4050	brown	7.15	0.19	1	8.578948	0.8181818	1.00E-01	3	0.477619	0.8	0.4623529	0.8000001	0.5	0.372093	0.5	0.6666667	1.391304	0.6	0.4815385	2.579853	0.45
73659	377125	5383473.5	4620	4050	brown	8.9	0.67	0.3181818	0.461404	0.7454545	1.00E-01	0.75	0.1940298	0.2	0.2058623	0.1	0.2	0.1660465	0.15	0.4285715	0.7808966	0.2	0.1538462	0.6382606	0.335
73642	377134.75	5383471.71	4630	4050	brown	8.15	0.29	0.6818182	0.7017544	0.9818182	18	2	0.2686567	0.6	0.8235294	0.3	0.25	0.2790698	0.1	0.9047619	1.108996	0.4	0.5846154	2.063882	0.036
73624	377144.5	5383469.93	4640	4050	brown	8.5	3	9.09E-02	1	1.018182	1.4	1.5	0.3713433	0.4	0.8235294	0.2	0.25	0.3953488	0.5	0.6666667	1	0.4	0.3076923	1.228501	0.0025
73680	377154.25	5383468.15	4650	4050																					

Sample ID	Orig ID	UTM_East	UTM_North	Local East	Local North	soil groups	Digest pH	AgLMethCol	AsLMethCol	AuLMethCol	BaLMethCol	BiLMethCol	CdLMethCol	CeLMethCol	CoLMethCol	CuLMethCol	EuLMethCol	GdLMethCol	LaLMethCol	MoLMethCol	NiLMethCol	PbLMethCol	SmLMethCol	YLMethCol	ZnLMethCol	ZrLMethCol	
73587	73547	377010.15	5383546.82	4480	4100	grey	9.7	1	0.5454548	0.7272727	0.7334983	140	0.3333333	0.1282051	1	0.9384616	0.1470588	0.3	0.1153846	0.7	0.2727272	0.6593406	0.2333333	0.1428571	0.247619	0.125	
73587		377000.71	5383549.25	4480	4100	grey	9.35	0.0025	0.7272727	3.590090	0.4400878	1	1	0.4575385	1.5	1.369231	0.1470588	0.5	0.4230769	2	1.454545	0.3333333	0.2857143	0.192528	0.025		
73587		377019.6	5383544.37	4500	4100	grey	8.85	0.41	0.6363636	1.931818	0.8048454	30	0.6666667	0.6153846	1.5	0.3692308	7.35E-02	0.5	0.5769231	2	1.181818	0.9157500	0.3333333	0.2857143	2.809524	0.1875	
73589		377028.04	5383541.37	4510	4100	brown	7.9	0.46	1.818182	2.087719	1.654546	15.8	1.25	0.3134328	1.6	0.4941176	0.8000001	0.5	0.2325581	1.5	0.4761905	2.282609	0.4	0.5384616	2.702703	0.075	
73555		377038.48	5383538.74	4520	4100	grey	9.3	0.04	4.818182	11.56818	0.5134474	86.00001	1	0.6153846	1.5	1.4	0.4411765	0.5	0.5769231	14	1.545455	1.648352	0.3333333	0.4285714	0.6666667	0.75	
73514		377047.92	5383536.11	4530	4100	grey	9.05	1	1.272727	0.75	1.149144	26	1	0.3078923	1.5	1.215385	7.35E-02	0.35	0.2692308	2	0.7272727	1.172161	0.2	0.1428571	0.8190476	0.1875	
73518		377057.37	5383533.48	4540	4100	grey	7.7	0.37	1.363636	3.894737	1.345455	3	2.25	0.7462686	1.4	0.6470588	0.5	0.75	0.5813953	0.15	1.095238	2.5	0.6	0.6153846	2.432432	0.45	
73599		377066.81	5383530.49	4550	4100	orange	9.6	2	0.5733333	0.7325582	0.4745763	0.5	0.3333333	0.1285714	0.4285714	0.3619048	0.15	0.1111111	0.1428571	6.875	0.7083334	0.4179105	1.00E-01	0.1111111	0.6382979	0.2714286	
73527		377076.25	5383528.22	4560	4100	brown	9.4	0.01	0.5900901	0.7368422	0.2545455	2.2	0.25	0.522388	0.4	0.4117647	0.4	0.25	0.4651163	15	0.9047619	0.6304348	0.4	0.1538462	0.5896806	0.95	
73549		377085.7	5383525.6	4570	4100	brown	9.25	0.0025	0.4545455	3.51E-02	0.3454545	1.00E-01	0.75	0.4626866	0.4	0.517647	0.2	0.25	0.4186047	15.5	0.9047619	0.5896566	0.2	0.1538462	0.3439803	0.25	
73554		377095.3	5383523.9	4580	4100	black	9	3.29E-03	0.8666666	5.447368	0.518732	1	0.6666667	0.2756232	0.6666667	1.586207	0.2	0.25	0.2666667	11.11111	1.277778	1.4	0.2	0.1866667	0.4186046	0.2307692	
73522		377105.3	5383522.2	4590	4100	black	7.75	0.6710526	2	1.32E-02	2.192022	24	2	0.3333333	0.8260869	1	4.482759	0.5	0.75	0.6444445	11.11111	2.722222	3.571429	0.6	0.6666667	0.8837209	0.6923078
73567		377115.1	5383520.5	4600	4100	orange	9.45	3	1.2	2.534884	1.20339	5	0.3333333	0.1357143	0.1428571	0.8095239	0.25	0.1111111	0.1746032	1.875	0.5416667	1.791045	1.00E-01	0.1851852	0.6382979	0.27619	
73591		377124.87	5383518.78	4610	4100	cream	10	1.098901	2.3125	6.82E-02	0.9383378	54	0.5	0.1153846	0.5	2.2	0.4	0.5	0.125	3	1.333333	0.75	0.3	0.2	0.6842105	0.5433333	
73513		377134.65	5383517.07	4620	4100	orange	9	0.99	0.02	0.5465117	1.322034	0.04	0.3333333	0.1714286	7.14E-02	0.3190476	0.025	0.1111111	0.2380953	0.125	0.3333333	0.2537314	1.00E-01	7.41E-02	0.7448808	2.86E-02	
73571		377144.42	5383515.35	4630	4100	brown	8.25	3	0.2727273	3.333333	1.036384	1.00E-01	1	0.2985075	0.8	1.235294	0.4	0.25	0.255814	1.73913	0.4	0.2307692	0.8599508	0.8	0.8959508	0.05	
73521		377154.2	5383513.64	4640	4100	red-brown	6.9	0.53	0.8275862	0.2830189	0.5882353	1.545455	1	0.4428571	0.2222222	0.46875	0.3	0.4444444	0.3947369	0.0125	0.3902439	2.671756	0.4545455	0.4444444	3	0.1071429	
73600		377163.97	5383512.92	4650	4100	grey	10	3	0.181818	1.14E-02	0.8088459	1	0.2333333	0.1282051	0.2	1.037089	7.35E-02	0.1	0.1153846	3	0.2727273	0.1721612	0.1	0.1142857	0.3238095	0.4375	
73557		377173.75	5383510.21	4660	4100	grey	9.1	2	0.1363636	8.77E-03	1.089090	20	0.75	5.97E-02	0.2	0.6470588	0.1	0.075	0.465E-02	1	0.3333333	0.4347826	0.12	7.69E-02	1.425061	0.6	
73595		377183.52	5383508.49	4670	4100	brown	7.9	6	0.2272727	2.83158	1.163636	1.00E-01	0.5	0.238906	0.4	2.235294	0.4	0.25	0.1860465	0.025	0.3333333	0.3043478	0.2	0.1538462	0.9321204	0.2	
73562		377193.3	5383506.78	4680	4100	grey	8.4	5	0.1818182	1.590909	3.545232	1	0.3333333	0.1794872	2.5	0.376923	0.4411765	0.4	0.1538462	1	1.181818	0.989011	0.3333333	0.1428571	5.238095	0.375	
73569		377203.07	5383505.06	4690	4100	orange	9.1	12	0.02	2.27907	1.237288	0.0025	1	0.1142857	0.2142857	0.5238096	0.25	0.1111111	0.1746032	0.875	0.25	0.3432836	1.00E-01	7.41E-02	1.382979	2.86E-03	
73532		377212.85	5383503.35	4700	4100	grey	9.5	6	0.1818182	5.681818	0.9779951	68	2	0.3333333	0.3333333	0.5	1.692308	7.35E-02	0.4	0.3076923	3	0.6363636	0.9157500	0.3333333	0.1428571	1.380952	0.25
73540		377222.62	5383501.63	4710	4100	orange	9.9	10	0.7333333	4.287442	1.661017	10.5	2	2.142857	6.5	4.142857	2	2.111111	1.904762	9.75	0.6666667	1.641791	2.1	2.111111	5.319149	3.142857	
73518		377232.4	5383499.92	4720	4100	grey	9.5	7	0.3636363	4.909091	1.344743	26	1	0.3333333	2	0.8461539	7.35E-02	0.3	0.3461539	4	0.4545455	0.8791209	0.3333333	0.2857143	1.380952	0.375	
73574		377242.17	5383498.2	4730	4100	black	9.15	3.947368	0.3333333	7.796842	1.984743	22	0.6666667	1.072464	3	3.448276	1	1.75	0.886889	8.888889	0.3888889	1.4	1.6	1.583333	3.604651	0.6923078	
73531		377251.85	5383496.49	4740	4100	grey	9.5	0.56	0.1818182	7.363636	0.5378973	74	0.6666667	0.6153846	0.5	0.6153846	0.2941177	0.45	0.4615385	1	0.3636363	0.2380952	0.3333333	0.2857143	0.928606	0.6875	
73570		377261.72	5383494.77	4750	4100	brown	9.35	3	1.82E-02	3.052632	0.6181818	1.00E-01	0.75	0.6286866	0.6	2.325294	1	0.8000001	0.5	0.627907	0.5	0.2857143	0.1913044	0.6	0.2307692	0.2948003	0.15
73592		377271.5	5383493.06	4760	4100	red-brown	9.4	1	0.137931	0.5660377	0.2058223	0.5454546	0.4	2.86E-02	5.59E-02	0.1523438	1.67E-02	5.59E-02	2.63E-02	0.5	0.76E-02	0.5089058	4.55E-02	3.70E-02	0.4666666	3.57E-02	
73582		377281.27	5383491.34	4770	4100	red-brown	9.7	0.19	1.72E-03	2.528302	0.1764706	4.55E-02	0.2	9.29E-02	3.89E-02	0.125	6.67E-02	0.1111111	0.1052632	0.25	7.32E-02	8.40E-02	9.09E-02	3.70E-02	0.1022222	7.14E-03	
73501		377291.05	5383489.83	4780	4100	grey	8.95	6.50E-02	0.3636363	2.568182	0.6601467	40	0.6666667	1.25641	0.5	0.6923077	0.4411765	0.5	1.230769	3	0.8181819	0.3478953	0.6666667	0.5714285	1.8095239	0.25	
73543		377300.82	5383487.91	4790	4100	grey	7.85	0.0025	0.6363636	2.653158	0.6909091	4	2	0.6286866	0.6	0.823529	0.5	0.5116279	1	0.7619048	1.5	0.4	0.4615385	1.8265291	0.55		
73556		377310.6	5383486.2	4800	4100	brown	9	0.0025	0.3181818	3.912281	1.1690909	1.00E-01	0.75	0.4328358	0.2	0.1764706	0.2	0.25	0.4186047	3	0.3809524	0.1782609	0.2	0.1538462	0.2457002	0.2	
73509		377320.47	5383483.93	4810	4100	brown	7.95	1	0.5454546	1.894737	0.2363636	2.4	2.25	0.5970149	0.4	0.7647058	0.3	0.25	0.5581395	0.05	0.6190476	0.5217392	0.4	0.3076923	0.6142506	0.2	
73517		377330.34	5383486.86	4820	4100	brown	9.75	1	4.55E-02	0.8070176	0.1509091	1	0.25	0.1791405	0.2	1.76E-02	0.1	0.175	0.1627907	0.02	0.0952381	6.30E-02	0.16	7.69E-02	0.1867322	0.4	
73565		377340.21	5383479.39	4830	4100	black	9	1.315789	0.1333333	3.421052	0.8645533	2	0.3333333	0.3188406	0.3333333	0.4137931	0.5	0.25	0.2888889	4.444445	0.2228571	0.4	0.25	0.3023255	0.2307692		
73503		377350.08	5383477.12	4840	4100	brown	8.3	1	0.3636363	0.508772	0.4727273	1	0.75	0.238906	0.2	0.2294118	0.2	0.25									

Sample ID	Orig ID	UTM East	UTM North	Local East	Local North	soil groups	Digest pH	AgLMethCol	AsLMethCol	AuLMethCol	BaLMethCol	BiLMethCol	CdLMethCol	CoLMethCol	CoLMethCol	CuLMethCol	EuLMethCol	GdLMethCol	LaLMethCol	MoLMethCol	NiLMethCol	PbLMethCol	SmlMethCol	YLMethCol	ZnLMethCol	ZrLMethCol	
																											200
73486		377198.92	5383586.83	4650	4150	grey	9.5	2	0.2727273	0.886336	0.7579461	200	0.3	0.4358975	0.5	0.9384618	0.5882353	0.5	0.4615385	6	0.3636363	0.8791209	0.6666667	0.7142857	0.6666667	2.125	
73481		377260.73	5383553.22	4720	4150	brown	8.2	2	0.1818182	0.772703	1.163636	3	1.25	0.1791045	0.4	1.2941177	0.05	0.25	0.2325561	0.2	0.5714288	0.7826087	0.2	0.1538462	1.547912	0.25	
73473		377269.69	5383550.88	4730	4150	grey	9.25	0.6	0.8181819	0.5227273	0.9535452	1	0.6666667	0.3589744	1	1.4	0.2941177	0.5	0.2307692	1	0.4545455	0.9157509	0.3333333	0.4285714	2.142857	1.6875	
73437		377278.66	5383548.54	4740	4150	grey	9.7	1	0.5454546	1.659091	0.5134474	1	0.3333333	0.6410257	0.5	1.692308	0.4411765	1	0.8076923	18	0.1818182	2.967033	0.6666667	1	1.761905	2.25	
73468		377287.62	5383546.2	4750	4150	grey	9.7	2	0.5454546	1.14E-02	2.420538	14	0.3333333	0.7435898	2	2.461539	0.7352941	1.5	0.8461539	14	0.3636363	1.391941	1	2.285714	5.714286	2.975	
73463		377296.59	5383543.86	4760	4150	grey	10	0.94	0.1818182	1.14E-02	0.2444988	1	0.1	0.3076923	0.5	0.5692308	0.2941177	0.5	0.4230769	3	6.36E-02	0.2673993	0.3333333	0.4285714	3.095238	1.3125	
73425		377305.55	5383541.52	4770	4150	grey	9.3	1	0.5454546	0.6818182	1.295843	136	1	0.4358975	1	1.692308	0.1470588	0.5	0.5	2	0.5454546	1.135531	0.3333333	0.4285714	1.809524	0.725	
73428		377314.52	5383539.18	4780	4150	red-brown	7.05	0.62	0.5172414	2.188679	1.411765	2.363636	1.8	0.2571429	0.2777778	0.5859375	0.1666667	0.2222222	0.3157895	0.0125	0.4878049	1.348601	0.2727273	0.2592593	3.222222	2.86E-02	
73438		377323.48	5383536.84	4790	4150	grey	9.15	1	0.3636363	2.181818	0.7090464	10	0.6666667	0.6666667	1	1.692308	0.7352941	0.5	0.7307693	1	0.3636363	1.348601	0.6666667	0.4285714	1.095238	1.3125	
73453		377341.41	5383532.16	4810	4150	grey	9.4	1	0.3636363	1.545455	0.6356968	38	0.3333333	0.2307692	0.5	0.6692308	0.735E-02	0.35	0.3461539	4	0.3636363	0.4395604	0.2666667	0.4285714	0.5238096	1.9375	
73478		377350.38	5383529.82	4820	4150	grey	9.1	0.78	0.3636363	2.25E-05	1.1491444	92.00001	1	1.025641	1	0.8307693	0.5882353	1	1.153846	0.5	0.4545455	0.6959707	1	0.7142857	0.9047619	1.4375	
73410		377359.34	5383527.48	4830	4150	grey	9.15	1	0.3636363	2.909091	0.8312958	1	0.3333333	1.153846	0.35	0.3538462	1.029412	0.5	0.9615385	0.2	0.2727273	0.3693004	1	0.5714285	0.3380952	0.25	
73494		377368.31	5383525.14	4840	4150	grey	9.1	0.17	0.5454546	4.840909	2.420538	1	0.3333333	1	0.5	0.6307693	0.5882353	1	1.153846	0.5	0.6363636	0.5808006	1	0.7142857	0.8666667	0.5	
73477		377377.27	5383522.8	4850	4150	black	8.8	2.631579	0.2666667	1.32E-02	1.729107	154	0.6666667	0.7971015	0.5	0.6696667	0.5896566	0.6	0.75	1.022222	0.3333333	0.2777778	0.2571428	0.8	0.5	0.5116279	0.7692308
73450		377386.24	5383520.46	4860	4150	black	8.75	1.315789	0.2	0.1315789	2.539023	128	1	1	0.6666667	0.9655173	0.7	1	1.266667	1.111111	0.4444444	0.3714285	1.2	0.6666667	0.9534883	1.076923	
73420	73496	377395.2	5383518.12	4870	4150	black	8.85	1.236842	0.3333333	2.105266	1.498559	1	0.6666667	0.7246377	0.3333333	0.8034483	0.6	0.5	0.7111111	0.222222	0.4444444	0.4	0.6	0.6666667	0.2790898	1.538461	
73496		377395.2	5383518.12	4870	4150	black	8.75	0.3026316	0.3333333	2.710526	1.613833	1	1	0.850724	0.3333333	0.8275862	0.7	0.75	1.111111	1.111111	0.5	0.4	0.6	0.6666667	0.372093	1.154646	
73430		377404.17	5383515.78	4880	4150	black	8.5	1.078947	0.4666666	2.447368	1.815562	16	1	0.9565218	0.6666667	0.8793104	0.9	0.75	1.177778	3.333333	0.3333333	0.5428571	1	0.6666667	0.4418004	1	
73493		377413.13	5383513.44	4890	4150	black	7.6	0.3157895	0.6	1.57895	4.034582	1	1	1.246377	1	0.7413793	0.9	1.25	1.444444	0.722222	0.7714286	1.4	1	0.627907	1.239769		
73461		377422.1	5383511.1	4900	4150	black	8.8	2.631579	0.1333333	1.32E-02	0.8510086	1	0.3	0.5652174	0.3333333	0.5896566	0.4	0.5	0.7555556	1.111111	0.3333333	0.3142857	0.6	0.4166667	0.227907	0.6153846	
73426		377431.29	5383509.03	4910	4150	black	8.85	0.4210526	0.3333333	3.421052	1.268012	84	1	0.9655212	0.6666667	0.8448277	0.5	0.5	0.8000001	1.111111	0.3888889	0.5428571	0.8	0.5933334	0.7906978	0.6923078	
73483		377440.48	5383506.96	4920	4150	black	8.8	1.315789	0.2	0.1052632	1.498559	1	0.3333333	0.9655212	0.3333333	0.7413793	0.5	0.5	0.8888889	0.8888889	0.3333333	0.4	0.6	0.5	0.302355	0.5384615	
73451		377449.67	5383504.89	4930	4150	grey	9	0.46	0.4545455	8.25	1.295843	136	1	0.6923078	0.5	0.5846154	0.2941177	0.5	0.8461539	2	0.7272727	0.6593406	0.6666667	0.5714285	0.5238096	0.5	
73411		377458.86	5383502.82	4940	4150	brown	8.75	1	0.2727273	0.5914033	1.218182	1.00E-01	1.5	0.8356209	0.4	0.6470588	0.9	0.75	0.6976745	1	0.6190476	1.413043	0.8	0.6923078	1.056511	0.46	
73423		377468.05	5383500.75	4950	4150	brown	8.6	1	0.4545455	1.192983	0.8363636	11.2	1	0.9104478	0.4	0.417647	0.8000001	0.75	1.139353	1	0.5714286	0.8478261	0.8	0.8461539	0.982309	0.85	
73439		377477.24	5383498.68	4960	4150	brown	7.45	0.04	4.55E-02	1.368421	0.2727273	1.00E-01	0.5	0.6118403	0.2	0.1764706	0.5	0.5	0.7209302	0.025	0.2857143	0.1369565	0.8	0.6153846	0.208452	0.02	
73466		377486.43	5383496.61	4970	4150	brown	7.95	0.12	0.3181818	0.517895	0.6545454	1.00E-01	1	0.4477812	0.4	0.4	0.5	0.5	0.5348937	0.025	0.8095238	0.7391305	0.6	0.9123078	1.130221	0.55	
73688		377495.62	5383494.54	4980	4150	black	6.95	3.29E-03	0.5333333	1.342105	0.3170029	1	0.6666667	0.5217391	1.333333	0.4655173	0.7	0.75	0.5111111	5.56E-02	0.4444444	0.6285714	0.8	0.7500001	0.8372092	3.85E-03	
73664		377504.81	5383492.47	4990	4150	black	7	3.29E-03	0.8	0.1315789	0.4322767	1	1	0.5072464	1	0.4310345	0.6	0.5	0.4888889	5.56E-02	0.5	0.3714285	0.6	0.7500001	0.627907	0.3076923	
73605		377514	5383490.4	5000	4150	black	8.3	0.594737	0.4666666	1.32E-02	0.4322767	1	0.6666667	0.4492754	0.6666667	0.5	0.5	0.5	0.3777778	1.111111	0.3888889	0.2857143	0.6	0.4166667	0.8193535	0.6923078	
73684		377533.42	5383485.8	5020	4150	black	9.1	0.4605263	0.3333333	1	0.518732	1	0.6666667	1	0.6666667	0.6208997	1	0.75	1.222222	2.222222	0.3333333	0.4285714	1.2	0.5933334	0.372093	1.615385	
73602		377552.85	5383481.2	5040	4150	black	9.05	2.631579	0.4	2.289474	0.4034582	50	0.6666667	0.7246377	0.3333333	0.8551724	1	0.75	0.6222222	4.444444	0.2777778	0.3714285	0.8	0.4166667	0.1906977	3.538462	
73647		377572.27	5383478.6	5060	4150	black	9.65	1.315789	0.4666666	1.32E-02	0.9221902	46	0.6666667	0.8550724	0.3333333	0.4655173	0.6	0.75	0.8333333	1.111111	0.5	0.8285714	0.8	0.7500001	0.3488372	0.7692308	
73687		377572.27	5383478.6	5060	4150	black	8.8	0.5131578	0.4666666	1.368421	0.9798271	1	1	1.330435	1	1	1.25	1.244444	2.222222	0.4444444	0.9714286	1	0.7500001	0.6744186	0.3846154		
73607		377591.7	5383476.6	5080	4150	black	7.8	2.631579	0.6666666	3.973684	1.873199	1	0.3333333	0.4482754	1	0.7758621	0.8000001	0.5	0.4	1.111111	0.6666666	1.142857	0.6	0.5	1.16279	0.3846154	
73689		377611	5383468.42	5100	4150	black	9.05	3.29E-03	0.4	26.31579	0.9798271	1	1	1.449275	0.3333333	0.1072441	1	1.25	1.911111	2.222222	0.4444444	0.8285714	1.4				

Sample ID	Orig ID	UTM_East	UTM_North	Local East	Local North	soil groups	Digest	AgLMethCol	AsLMethCol	AuLMethCol	BaLMethCol	BiLMethCol	CdLMethCol	CeLMethCol	CoLMethCol	CuLMethCol	EuLMethCol	GdLMethCol	LaLMethCol	MoLMethCol	NiLMethCol	PbLMethCol	SmLMethCol	YLMethCol	ZnLMethCol	ZrLMethCol	
73333		377229.33	5383608.75	4690	4200	black	8.0	1.085789	0.3333333	1.32E-02	0.9221902	1	0.6666667	1.15942	0.3333333	0.276921	0.9	1	4.222222	3.333333	0.3888889	0.5142857	1.4	0.6666667	0.4651163	0.6923078	
73376		377238.6	5383603.5	4700	4200	black	9.25	1.315789	0.6666667	0.6578947	1.354467	1	0.6666667	1.246377	0.3333333	0.775821	0.8000001	0.75	0.9777778	7.777778	0.6111111	0.6	0.8	0.5833334	0.3953488	2.615385	
73386		377247.96	5383601.25	4710	4200	black	9.15	1.315789	0.3333333	0.33E-03	0.8947368	0.778098	1	0.3333333	1.257362	0.3	0.637931	1	1	1.066667	0.6666667	0.4444444	0.5142857	1	0.6666667	0.270898	0.2307892
73381		377257.13	5383599	4720	4200	black	7.35	1.315789	1.066667	2.131579	3.14121	1	2	0.454828	1	0.5344828	0.2	0.5	0.2888889	0.3333333	0.6111111	1.371429	0.4	0.6666667	1.581395	7.69E-02	
73373		377286.4	5383596.75	4730	4200	brown	9.05	1	0.5454546	1.859649	0.5818182	1.8	0.75	0.7761194	0.4	0.4411764	0.7	0.5	0.5813953	2.5	0.2857143	0.8043479	0.6	0.4615385	0.8845208	1.2	
73337		377275.96	5383594.5	4740	4200	grey	9.6	0.47	0.1818182	0.3818181	0.3422983	1	0.3333333	0.5394166	0.35	0.1692308	0.5823253	0.5	0.6153846	3	0.90E-02	0.5128205	0.6666667	0.2857143	0.1475001	0.9375001	
73368		377284.93	5383592.25	4750	4200	black	9	3.947368	0.3333333	1.789474	1.412104	112	1.6666667	1.884058	0.6666667	1.431034	1	1.5	1.466667	2.222222	0.3888889	0.9714286	1.6	0.1666667	0.9302325	1.230789	
73363		377294.2	5383590	4760	4200	black	8.55	1.210526	0.3333333	1.398421	2.017291	1	2.333333	0.231884	0.6666667	2.413793	0.05	0.25	0.2888889	4.444445	0.5555555	0.7142857	0.2	0.1666667	1.27007	0.3076923	
73325		377303.1	5383587.41	4770	4200	grey	8.8	1	0.8181818	1.14E-02	1.051345	1	1.333333	0.6153846	1.5	1	0.4411765	0.5	0.6923078	5	1	1.684982	0.6666667	0.4285714	1.380952	0.4375	
73328		377312	5383584.82	4780	4200	grey	9.85	2	0.1818182	1.522727	0.3178494	1	0.3333333	0.3333333	0.3	0.2615385	0.2941177	0.5	0.3846154	2	4.66E-03	0.4029304	0.3333333	0.2857143	0.3952381	0.625	
73338		377320.9	5383582.23	4790	4200	brown	10	1	0.3181818	1.350877	0.3272727	1.00E-01	0.2	0.5522388	0.16	1	0.6	0.75	0.5581395	3	4.76E-02	0.8043479	0.8	0.8461539	0.2211302	24	
73353		377365.4	5383569.3	4840	4200	red-brown	8.3	0.45	0.3448276	1.018868	1.058823	4.55E-02	1.6	0.6428571	0.2777778	0.5078125	0.3333333	0.7777778	0.9473684	0.0125	0.3414634	1.577608	0.8181819	0.5925925	1.444444	0.1642857	
73378		377375.71	5383567.67	4850	4200	red-brown	7.3	1	0.278621	0.9433962	1.892335	4.55E-02	1.8	0.2857143	0.1866667	2.469938	6.67E-02	0.2222222	0.2894737	0.125	0.5853656	1.933842	0.1818182	0.2592593	4	3.57E-02	
73310		377388.02	5383568.05	4860	4200	red-brown	8.45	2	0.3448276	0.43E-03	0.6784706	4.55E-02	1.8	0.1785714	0.2777778	0.390625	6.67E-02	0.1111111	0.2894737	0.25	0.4302044	1.29771	0.1818182	0.2522222	1.533333	7.14E-02	
73394		377396.33	5383564.42	4870	4200	brown	9.05	0.7	0.3181818	8.77E-03	0.7272727	17.6	0.25	1.223881	0.2	0.2117647	0.8000001	1	1	1.27907	1	0.2857143	0.3043476	1	0.4615385	0.3685504	0.9
73377		377406.65	5383562.8	4880	4200	grey	9.45	1	0.1818182	5.931818	0.7090464	4	0.3333333	1.871795	0.5	0.6	0.8823529	1.5	1.846154	5	0.2727273	0.3150183	1.333333	0.8517428	0.4696667	0.9375001	
73350		377416.96	5383561.17	4890	4200	grey	7.15	2	0.2727273	8.77E-03	2.36E-02	1.00E-01	1.5	0.119403	0.6	1.176471	0.2	0.25	9.30E-02	0.025	0.7619048	0.2826807	0.2	0.2307892	1.793612	0.35	
73396		377427.27	5383559.55	4900	4200	grey	9.47	1	0.1818182	0.3863636	0.5134474	34	0.2666667	0.3589744	0.35	0.4615385	0.1470588	0.3	0.3846154	0.9	0.2727273	0.2417582	0.3333333	0.4285714	0.352381	1.1875	
73320	73396	377427.27	5383559.55	4900	4200	brown	9.4	1	0.1818182	7.02E-02	0.5818182	1.00E-01	0.25	0.1791045	0.2	0.3764706	0.2	0.25	0.1804655	1	0.3333333	0.7608966	0.2	0.2307892	0.3438903	0.4375	
73330		377437.58	5383557.92	4910	4200	grey	9.45	0.5	0.2727273	5.159091	0.5134474	1	0.3333333	1.051282	0.5	0.2615385	0.7352941	1.5	1.346154	3	1.836384	0.4761904	1	0.8571428	0.2428572	0.4	
73393		377447.9	5383558.3	4920	4200	black	9.05	1.315789	0.4	4.263158	1.123919	180	1	1.028986	1.333333	0.7241379	0.8000001	1	1.066667	8.888889	0.3888889	0.4857143	1	0.7500001	0.6976474	1.384616	
73361		377457.66	5383554.02	4930	4200	black	9.15	1.039474	0.2666667	4.131579	0.6051873	1	0.6666667	0.8405797	0.3333333	0.2758621	0.6	1	1.022222	1.111111	0.3333333	0.4	0.8	0.5833334	0.516279	0.8461539	
73326		377467.42	5383551.75	4940	4200	black	9.15	0.7631578	0.2666667	1.421053	0.5475504	1	0.3333333	0.7536232	0.3333333	0.2586207	0.7	0.75	0.9333333	2.222222	0.1666667	0.4571429	1	0.5	0.3255814	0.6153846	
73383		377477.18	5383549.47	4950	4200	black	8.8	1.315789	6.67E-02	1.094737	1.354467	1	1	1.115942	0.6666667	1.034463	1	1.25	0.9777778	3.333333	0.2777778	0.6	1.2	1.093333	0.4883721	1.461539	
73351		377488.95	5383547.2	4960	4200	black	8.8	0.5394737	0.2666667	4.552831	0.7204611	1	1	0.3623188	0.3333333	0.4482759	0.3	0.5	0.4666667	0.888889	0.2777778	0.6	0.4	0.4166667	0.4166046	0.6153846	
73311		377496.71	5383544.92	4970	4200	black	9.1	0.968421	0.2666667	3.210526	0.4034582	1	0.6666667	0.4202898	0.3333333	0.137931	0.3	0.5	0.5333334	0.7777778	0.3888889	0.4285714	0.4	0.4166667	0.2709098	0.6153846	
73323		377506.47	5383542.05	4980	4200	black	9.15	1.315789	0.3333333	0.388421	0.4899136	1	0.6666667	0.6376812	0.6666667	0.2241379	0.6	0.75	0.7555556	0.3333333	0.5	0.5428571	0.8	0.6666667	0.4651163	0.6923078	
73339		377516.23	5383540.37	4990	4200	black	9.15	3.29E-03	0.2	1.631579	0.3458214	100	0.3333333	0.4202898	0.3333333	0.1896552	0.3	0.5	0.4888889	1.111111	0.2777778	0.2828571	0.4	0.25	0.1116279	0.5384616	
73368		377526	5383538.1	5000	4200	black	9.6	3.29E-03	0.3333333	1.32E-02	0.3170029	112	0.3333333	0.6089566	0.3333333	0.9137931	0.4	0.25	0.5777778	0.888889	0.1111111	0.2371428	0.2	0.4166667	0.255614	1.615385	
73406		377079.2	5383701.75	4500	4250	black	6.85	1.315789	1.733333	1.32E-02	0.468213	1	5.666667	0.6866667	14.33333	0.379311	0.4	0.5	0.5333334	5.56E-02	8.333333	1.942857	0.6	0.7500001	2.674418	1	
73446		377088.7	5383701.17	4510	4250	orange	9.75	4	0.9333333	1.104951	1.152542	1	1.666667	0.2714286	2.5	1.47619	0.5	0.4444444	0.4285715	2.875	1.166667	0.8955224	0.5	0.3703704	2.23403	0.7619048	
73408		377098.2	5383700.6	4520	4250	grey	8.95	5	1.090909	1.14E-02	1.589242	1	1.666667	1.153946	2	1.692308	0.4411765	1	1.115385	3	2.909091	1.831502	0.6666667	0.7142857	1.285714	0.25	
73480		377107.7	5383700.02	4530	4250	cream	9.8	2.197802	0.875	2.818182	0.4625737	42	0.5	0.3846154	0.5	0.43	0.2	0.8000001	0.5	3	0.4444444	0.71875	0.5	0.4	1	0.8	
73424		377117.2	5383699.45	4540	4250	grey	8.7	2	0.7272727	5.340099	1.369193	200	3.333333	1.538462	4	1.246154	1.470588	1.5	1.807692	2	1.818182	1.666667	1.285714	3.857143	0.5825001		
73442		377126.7	5383698.87	4550	4250	grey	9.45	0.73	4.55E-03	3.863636	0.5623472	1	0.6666667	0.3846154	0.5	0.6461539	0.2941177	0.5	0.4615385	1	0.90E-02	0.8424908	0.3333333	0.4285714	0.6190476	0.125	
73459		377136.2	5383696.3	4560	4250	grey	9.5	0.7	0.6363636	1.14E-02	0.6356968	1	0.6666667	0.7435998	0.5	0.6546154	1	0.8846154	4	0.2727273	1.355311	0.6666667	0.8571428	0.8095239	1		
73412		377145.87	5383696.02	4570	4250	grey	9.15	1</																			

Sample ID	Orig ID	UTM East	UTM North	Local East	Local North	soil groups	Digest pH	AgLMethCol	AsLMethCol	AuLMethCol	BaLMethCol	BiLMethCol	CdLMethCol	CeLMethCol	CoLMethCol	CuLMethCol	EuLMethCol	GdLMethCol	LaLMethCol	MoLMethCol	NiLMethCol	PbLMethCol	SrLMethCol	YLMethCol	ZnLMethCol	ZrLMethCol
73447		377489.68	5383601.71	4950	4250	grey	9.5	2	8.18E-02	3.295455	0.5379783	1	1.333333	0.7692308	1	1	0.5682353	0.5	0.8846154	2	9.09E-02	0.3693004	0.6666667	0.2857143	0.9523811	0.625
73487	73447	377489.68	5383601.71	4950	4250	grey	9.85	2	9.09E-02	1.818182	0.7334963	1	1	0.2564103	0.5	0.7230769	0.1470588	0.4	0.3076923	0.05	0.1818182	0.8058908	0.3	0.1428571	0.5238098	0.4375
73402		377499.82	5383598.97	4960	4250	cream	9.4	4.395604	0.1875	1.409091	0.4825737	1	1.5	0.6538462	0.5	0.95	0.4	0.7	0.625	0.4	0.5555555	0.84375	0.45	0.4	1.315789	0.67E-02
73484		377509.96	5383598.23	4970	4250	grey	9.5	1	0.2727273	0.5454545	0.4400978	1	0.6666667	1.179487	1.5	0.6	0.8825529	1	1.384615	0.5	0.3636363	0.2742753	1.333333	0.5714285	0.347819	0.5
73405		377520.1	5383596.5	4980	4250	grey	9.15	3	0.2727273	1.704545	0.8312958	1	1	0.8461539	0.5	0.5692308	0.4411765	0.5	0.8076923	3	0.4545455	0.5680806	0.6666667	0.5714285	0.7619048	1.375
73464		377529.45	5383595.25	4990	4250	grey	9.55	0.3	9.09E-02	1.14E-02	0.4645477	1	1.333333	1.641029	0.5	0.4153847	1.029412	2	1.981539	0.5	0.1818182	0.3663004	1.696667	0.7142857	2.190476	0.625
73488		377538.8	5383594	5000	4250	grey	9.65	1	0.1818182	1.522727	0.3667482	1	0.6666667	0.3846154	0.5	0.5846154	0.2941177	0.5	0.5	0.5	0.2727273	0.4029304	0.3333333	0.2857143	0.7142857	0.5625001
73324		377090.5	5383771.4	4500	4300	black	8.95	1.315789	0.81357895	0.8645533	0.4400978	72	0.6666667	1.275362	3.333333	2.931035	1	1.75	1.377778	11.11111	1.666667	1.742857	1.8	0.9166667	0.5428571	1.846154
73342		377090	5383770.9	4510	4300	red-brown	8.25	0.0025	0.3103448	0.4150943	0.3529412	3.181618	0.8	0.1714286	0.2222222	0.703125	0.1	0.1111111	0.25	0.25	0.6829268	2.086514	0.1818182	0.1481481	0.6	3.57E-02
73359		377099.5	5383767.8	4520	4300	black	8.85	1.315789	0.2696667	1.32E-02	0.6340058	1	0.6666667	0.7536232	0.6966667	0.3103448	0.6	0.75	1.066667	5.56E-02	0.7777777	0.5714286	1	0.5	0.6976744	0.3846154
73312		377109	5383764.7	4530	4300	black	8.9	3.29E-03	0.2696667	2.815789	0.4899136	100	0.3333333	0.3188406	0.3333333	0.2413793	0.4	0.25	0.3555556	0.2222222	0.2777778	0.4857143	0.4	0.1666667	0.2325581	0.3846154
73397		377118.5	5383761.6	4540	4300	brown	9.2	1	9.09E-02	7.02E-02	0.3454545	1.2	0.5	0.4328358	0.2	0.1117647	0.3	0.25	0.4883721	0.45	0.3333333	0.2173913	0.4	0.2307892	0.2063882	0.3
73303		377126.51	5383758.4	4550	4300	grey	9.3	1	0.1818182	0.5681818	0.391198	1	0.3333333	0.4102564	0.5	0.1076923	0.2941177	0.5	0.5	0.3	0.3636363	0.4029304	0.3333333	0.2857143	0.7142857	0.25
73985		377134.53	5383755.2	4560	4300	grey	9.2	0.37	0.3636363	9.09E-02	0.2127139	1	1	0.7179487	1.5	0.5384618	0.2941177	0.5	0.9230769	0.05	0.8181818	0.6959707	0.6666667	0.4285714	1	0.875
73317		377142.55	5383752	4570	4300	grey	9.7	1	9.09E-02	0.977273	0.3178484	1	0.3333333	0.3076923	0.5	0.3230769	0.2941177	0.45	0.4230769	0.4	0.3636363	0.3663004	0.3333333	0.2857143	0.452381	0.9375001
73309		377150.56	5383748.8	4580	4300	grey	9.95	0.82	9.09E-02	0.9090909	0.8312958	1	0.2666667	0.4615385	0.5	0.523077	0.4411765	0.5	0.4615385	1	9.09E-02	0.9157509	0.3333333	0.8571428	0.3142858	0.9375001
73356		377158.58	5383745.6	4590	4300	grey	9.25	1	9.09E-02	0.9545454	0.7334963	1	0.6666667	0.4102564	0.5	0.7384618	7.35E-02	0.45	0.5	0.05	0.4545455	0.7892307	0.3333333	0.2857143	0.8095239	0.125
73343		377166.6	5383742.4	4600	4300	grey	9.75	0.0025	4.55E-02	1.14E-02	1.222494	1	0.6666667	0.4102564	0.5	0.7846154	0.2941177	1	0.5	0.9	0.4545455	0.8058908	0.6666667	0.8571428	0.6196276	0.5
73301		377184.9	5383737.8	4620	4300	cream	10	1.098901	0.25	0.7727273	1.635389	1	0.3	0.6153846	4	0.03	0.6	2	0.875	1.5	0.1111111	0.90625	1	2.4	0.3357189	2.133333
73382		377198.35	5383734.1	4630	4300	orange	9.2	1	0.48	0.8135935	2.20339	0.45	0.6666667	0.4857143	12.85714	0.247619	1	1	0.4920635	7.825	0.2083333	1.647191	0.8	2.148148	1.347518	1.890524
73392		377207.8	5383730.4	4640	4300	orange	9.95	2	0.6666667	0.8372093	3.38983	0.5	1.666667	0.25	2.428571	0.2904762	5.5	0.444444	11.875	0.7083334	1.044776	5.6	13.33333	3.546099	3.52381	
73370		377217.47	5383729.17	4650	4300	brown	9.75	4	4.272727	1.157895	5.818182	40	1.75	9.701492	19.2	0.2470588	12	12.75	3.72093	36	1.190476	1.478261	9	18.46154	2.255563	55
73331		377227.15	5383727.95	4660	4300	red-brown	9.95	1	1.137931	0.2284151	4.632353	1.636364	0.8	1.071429	1.222222	0.3164063	1.666667	3.777778	1.223684	10.75	0.3414634	2.789892	2.454455	6.666666	1.844445	1.571429
73374		377236.82	5383726.72	4670	4300	grey	9.7	0.71	9.09E-02	1.14E-02	1.491442	1	0.3333333	0.5128205	0.3	0.4461538	0.1470588	0.5	0.5	5	9.09E-02	0.5128205	0.3333333	0.2857143	0.3142858	0.625
73316		377246.5	5383725.5	4680	4300	grey	9.5	1	0.2727273	0.4772727	1.5134474	24	0.6666667	0.948718	0.5	0.2769231	0.7352941	1	1.076923	0.7	0.2727273	0.8791209	1	0.5714285	0.7619048	0.3125
73340		377255.8	5383722.95	4690	4300	brown	9.3	0.0025	9.09E-02	8.77E-03	0.3818182	14.2	0.5	0.9850746	0.2	0.2058823	0.6	0.75	1.302326	0.025	0.1428571	0.7173913	0.8	0.4615385	0.202703	0.4
73332		377265.1	5383720.4	4700	4300	brown	9.15	2	0.1818182	1.035088	0.5090909	1.00E-01	0.5	1.432836	0.2	0.2411765	1	1.5	0.813953	3	0.2857143	0.8043749	1.6	1.153846	0.586988	1.1
73369		377275.2	5383717.5	4710	4300	black	9.2	2.631579	0.3333333	1.605263	1.085101	92.00001	0.6666667	0.127913	0.3333333	0.7241379	1	1.5	2.022222	2.222222	0.3333333	1.114286	1.6	1.083333	0.2333333	1.153846
73362		377285.3	5383714.8	4720	4300	brown	9.5	0.55	9.09E-02	1.192983	0.2727273	1.00E-01	0.25	0.8059701	0.12	4.12E-02	0.6	0.75	1.093023	0.025	0.1904762	0.6521739	1	0.4615385	0.1597051	0.45
73395		377294.8	5383712	4730	4300	brown	9.2	1	0.1818182	8.77E-03	0.7090909	10.6	0.5	1.492537	0.2	0.2823529	0.9	1	1.581395	1	0.3809524	0.6521739	1.2	0.7692308	0.4176904	0.8
73357		377304.3	5383708.4	4740	4300	brown	9.8	1	9.09E-02	0.4561404	0.3639634	1.00E-01	0.75	0.4179104	0.12	0.1235294	0.2	0.25	0.5813953	0.025	0.3809524	0.4565217	0.4	0.3076923	0.3439983	0.75
73400		377323	5383705	4760	4300	black	7.85	5.263158	0.6	1.32E-02	2.539023	1	3.666667	2.318841	0.6666667	1.689955	1.75	2.066667	0.5555556	0.6666666	1.514286	2	1.333333	1.032256	0.8461539	
73321		377332.95	5383702.7	4770	4300	brown	8.85	5	0.3181818	0.2280702	0.6363636	1.00E-01	0.75	1.029851	0.4	0.1882353	0.6	1	1.511628	0.5	0.5714286	1.130435	1	0.6153846	0.2702703	0.85
73371		377342.9	5383700.4	4780	4300	brown	9	5	9.09E-02	1.580772	0.9272727	0.8	0.25	1.791045	0.2	0.1764706	1	1	1.511628	2	0.3333333	0.6521739	1.2	0.9230769	0.1842752	2.35
73313		377352	5383697.8	4790	4300	black	9.05	0.5131578	0.3333333	1.32E-02	0.518732	68	0.6666667	0.6965522	0.3333333	1.137931	0.5	0.5	0.7555556	0.6666667	0.2222222	0.6	0.6	0.25	1.098977	0.4615385
73391		377361.1	5383695.2	4800	4300	black	9	2.631579	3.33E-03	1.789474	0.5475504	1	0.3333333	1.304348	0.3333333	0.862089	1	0.75	1.133333	0.3333333	0.3333333	0.4	1	0.5833334	0.3023255	0.7692308
73367		377370.65	5383691.95	4810	4300	black	8.55	1.315789	0.9333333	1.605263	0.9510086	84	1.333333	2.028968	0.3333333	0.5	1	1.888889	2.222222	0.6111111	0.9714286	1.2	0.8333334	0.5116279		

Sample ID	Orig ID	UTM		Local East	Local North	soil groups	Digest pH	AgLMethCol	AsLMethCol	AuLMethCol	BaLMethCol	BiLMethCol	CdLMethCol	CeLMethCol	CoLMethCol	CuLMethCol	EuLMethCol	GdLMethCol	LaLMethCol	MoLMethCol	NiLMethCol	PbLMethCol	SmLMethCol	YLMethCol	ZnLMethCol	ZrLMethCol	
		East	North																								
73284		377107	5383779.35	4530	4350	brown	7.3	0.94	0.4090909	1.894737	0.3630634	1.00E-01		2.25	0.238906	0.6	0.2411765	0.2	0.25	0.2790698	0.025	0.5714286	0.6959522	0.2	0.2307692	1.498771	0.0025
73202		377114.6	5383776.8	4540	4350	grey	8.95	1	1.383636	1.181818	0.5869791	84	1.666667	0.3076923	0.5	0.7384616	7.35E-02	0.45	0.3461539	2	0.8181818	0.7692307	0.3333333	0.2857143	1.142857	0.025	
73287	73247	377124.15	5383773.8	4550	4350	grey	9.05	3	9.09E-02	1.14E-02	0.1393643	1	1	0.7892308	0.4	0.3076923	0.4411765	0.5	0.9230769	0.5	0.3636363	0.1758242	0.3333333	0.4285714	0.3761905	0.9375000	
73247		377124.15	5383773.8	4550	4350	grey	9.1	1	0.1818182	0.2045455	0.2689486	1	1	1.179487	0.5	0.2769231	0.8823529	1	1.307692	0.05	0.4545455	0.3406594	0.1	0.5714285	0.6238096	0.375	
73207		377133.7	5383770.8	4560	4350	grey	8.5	1	0.7272727	0.8636364	0.4645477	14	1	1.153846	1	0.8769231	0.7352941	1	1.230769	0.5	1.272727	0.4029304	1	0.5714285	1.47619	0.125	
73289		377142.95	5383769.45	4570	4350	grey	9.5	1	0.1818182	0.6818182	0.2298288	1	0.2333333	0.1025641	0.25	1.54E-02	7.35E-02	0.3	0.1153846	0.05	0.2727273	0.2967033	0.2	0.1428571	0.4781905	0.25	
73255		377152.2	5383768.1	4580	4350	grey	9.5	0.0025	0.5454546	1.14E-02	0.3667482	1	0.3333333	0.3846154	0.5	0.4153847	0.2941177	0.4	0.4230769	0.3	0.6363636	0.5860806	0.3333333	0.2857143	0.7142857	0.8125	
73214		377162.05	5383765.4	4590	4350	grey	9.5	1	4.55E-02	3.227273	0.6112469	8	0.6666667	0.7435898	0.5	0.9692308	0.4411765	0.5	0.8076923	0.5	0.5454546	0.9157509	0.6666667	0.7142857	0.5714286	0.875	
73218		377171.9	5383762.7	4600	4350	grey	9.75	1	4.55E-03	2.204545	1.442543	6	0.3333333	0.7892308	0.5	1.323077	0.2941177	1	0.8846154	0.05	0.4545455	1.611722	0.6666667	1.142857	0.8095239	1.5	
73299		377190.5	5383759.3	4620	4350	grey	9.85	3	0.1818182	1.14E-02	0.7090464	1	0.2666667	0.4615385	0.5	1.538462	0.2941177	0.5	0.5384616	1	9.09E-02	3.333333	0.6666667	0.7142857	0.3714286	1.125	
73227		377201.6	5383757.8	4630	4350	grey	9.8	1	0.6363636	0.9090909	0.9290953	1	0.3333333	0.3333333	0.35	0.9538462	0.1470588	0.5	0.4230769	2	0.4545455	0.7328007	0.3333333	0.4285714	0.4	0.75	
73249		377212.7	5383753.35	4640	4350	grey	9.4	2	0.3636363	3.25	1.051345	1	0.3333333	0.8974359	0.5	0.7076923	0.4411765	0.5	0.9615385	2	0.2727273	1.245421	0.6666667	0.7142857	0.4666667	1.1875	
73254		377222.37	5383754.82	4650	4350	grey	9.85	0.42	9.09E-02	1.14E-02	0.4889975	1	0.6666667	0.6153846	0.4	0.3692308	0.4411765	0.5	0.7307693	0.5	0.3636363	0.4761904	0.3333333	0.4285714	0.3142858	0.6875	
73222		377232.05	5383753.35	4660	4350	grey	9.5	1	4.55E-03	0.8863636	1.149144	1	0.6666667	1.076923	0.5	0.7384616	0.7352941	1	1.192308	0.3	0.4545455	0.5860806	1	0.8571428	0.7142857	0.5	
73267		377241.72	5383751.87	4670	4350	black	9.3	1.013158	0.1333333	2.69421	0.6916427	1	0.6666667	0.5217391	0.3333333	0.9310346	0.3	0.5	0.6888889	0.888889	0.2222222	0.7428571	0.6	0.3333333	0.3023255	0.2307692	
73291		377251.4	5383750.4	4680	4350	black	9.25	2.631579	0.2666667	1.710526	1.354467	1	1	0.6231884	0.3333333	1.534483	0.3	0.5	0.7333334	5.555556	0.3333333	0.7142857	0.6	0.4166667	0.4418604	0.8461539	
73213		377261.3	5383748.2	4690	4350	black	8.95	2.631579	0.2	15.69421	1.268012	40	1	1.594203	0.3333333	1.241379	1	1.25	1.888889	0.1111111	0.6111111	1.171429	1.4	1	0.604511	1.461539	
73271		377271.2	5383746	4700	4350	black	8.95	1.315789	6.67E-02	3.447368	1.268012	6	1	0.9420289	0.3333333	1.896552	0.6	0.75	1.066667	5.50E-02	0.4444444	1.657143	0.8	0.6666667	0.4487221	0.3076923	
73221		377281.3	5383744.25	4710	4350	grey	9.3	2	6.39E-02	1.954545	2.02934	1	0.6666667	2.025641	0.5	1.076923	0.8823529	1.5	2.230769	1	0.7272727	0.989011	1.333333	0.6666667	1.0625		
73300		377291.4	5383742.5	4720	4350	black	9.3	3.947368	0.2	1.57895	1.873199	1	0.3333333	0.9855072	0.3333333	0.8793104	1	0.75	1.066667	1.111111	0.6666667	1.085714	1.2	0.7500001	0.216279	1.384616	
73257		377301.2	5383740.6	4730	4350	black	9.45	1.315789	0.2	2.18421	3.170029	110	0.3333333	0.7391304	0.3	0.5862099	0.4	0.5	1	1.111111	0.1666667	0.4857143	0.6	0.4166667	0.1930232	1.923077	
73295		377311	5383738.7	4740	4350	black	9.25	2.631579	0.2	2.289474	5.263023	1	0.3333333	0.6724138	0.7	0.5	1	2.222222	1.066667	0.4285714	0.6	0.3333333	0.1209302	0.3023255	1.846154		
73262		377320.8	5383736.5	4750	4350	black	9.4	2.631579	0.2666667	4.315789	2.305475	32	0.6666667	0.7101449	0.3333333	1.12069	0.4	0.5	0.888889	3.333333	0.3333333	0.5142857	0.4	0.4166667	0.4186064	1.615385	
73269		377330.6	5383734.3	4760	4350	brown	9.35	1	0.1363636	2.666667	2.090909	1.00E-01	0.1	0.25	0.7164178	0.2	0.4058823	0.5	0.5	1	1	0.2857143	0.4782806	0.6	0.3846154	0.2702703	1.45
73232		377340.55	5383732.5	4770	4350	brown	9.4	3	0.2727273	0.4736842	2.636364	5.8	0.75	1.089552	0.2	0.3352941	0.8000001	0.75	1.180046	2	0.2857143	0.4130435	0.8	0.4615385	0.3931204	0.3	
73240		377350.5	5383730.7	4780	4350	brown	9.35	0.6	8.09E-02	0.1929825	0.4	1.00E-01	0.1	0.5	0.8059701	0.14	0.1647059	0.5	0.5	0.8837209	0.5	0.1428571	0.4347826	0.6	0.3076923	0.2702703	0.65
73216		377360.6	5383727.6	4790	4350	brown	9.35	3	2.73E-02	1.596491	1.472727	1	0.25	0.9850746	0.2	0.1588235	0.6	0.5	1.093023	0.025	0.3333333	0.1478281	0.6	0.3846154	8.85E-02	2	
73274		377370.7	5383724.5	4800	4350	grey	9.9	4	0.3636363	4.318182	0.8312958	8	0.3333333	2.820513	0.5	0.7892308	0.8823529	1.5	1.807692	3	0.2727273	0.4395604	0.1	0.8571428	0.2428571	10.625	
73231		377379.93	5383722.48	4810	4350	brown	9.85	2	0.1363636	0.5789474	0.7639634	7	0.225	2.835821	0.2	3.53E-02	1	1.75	3.023256	1	0.2380953	0.15	2.4	0.6923078	9.83E-02	5.5	
73270		377398.39	5383718.44	4830	4350	black	9.2	1.315789	6.67E-02	3	0.4610951	1	0.3333333	0.9710145	0.3333333	1.275862	0.5	0.75	1.288889	5.50E-02	0.4444444	0.5142857	0.8	0.4166667	0.2	1.769231	
73292		377407.62	5383716.42	4840	4350	black	9.2	1.315789	0.2	0.8884211	3.458214	1	0.6666667	0.8404058	0.3333333	1.020897	0.6	0.75	1.377778	1	0.2222222	0.4571429	0.8	0.5	0.2302326	2.230769	
73282		377416.85	5383714.4	4850	4350	black	9.35	2.631579	4.67E-02	3.342105	5.5475504	1	0.3333333	1.043478	0.3333333	0.5517241	0.5	0.75	1.533333	5.50E-02	0.3888889	0.2514286	1	0.5	0.3255814	1.384616	
73201		377426.08	5383712.38	4860	4350	black	9.3	1.315789	1	3.052631	3.458214	124	0.6666667	1.73913	0.6666667	0.5689556	0.9	1	1.933333	3.333333	0.3333333	0.3428572	1.2	0.5833334	0.2162791	2.307693	
73243		377435.31	5383710.36	4870	4350	black	9.2	5.263158	0.4666666	0.8884211	0.6828242	1	1	2.753623	0.6666667	0.6724138	1	1.75	2.888889	1	0.3333333	0.5428571	2.2	0.9166667	0.5581395	4.307693	
73256		377444.54	5383708.34	4880	4350	black	9.2	1.315789	0.3333333	0.2105263	0.4034582	114	0.6666667	1.594203	0.3333333	0.3965517	0.8000001	1	2.155556	1.111111	0.2222222	0.4285714	1.4	0.5833334	0.3255814	1.461539	
73209		377453.77	5383706.32	4890	4350	black	9.5	5.263158	0.2	6.052631	0.6340058	24	0.6666667	1.594203	0.6666667	1	1	1.25	1.844445	1.111111	0.3888889	0.3142857	1.4	0.5833334	1	2.615385	
73217		377463	5383704.3	4900	4350	black	9.15	2.631579	0.1333333	1.289474	0.6340058	16</															



**BURNS PEAK EL 44/88**

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**1<sup>ST</sup> NOVEMBER 1999 - 31<sup>ST</sup> OCTOBER 2000**

**APPENDIX 2**

**DRILL LOGS AND ASSAYS – DIAMOND HOLE STD1**



<b>Hole Id</b> STD1	<b>Project</b> Burns Peak	<b>EOH</b> 101.00
<b>Type</b> DD	<b>Prospect</b> Southern Trenches	<b>Commenced</b> 24/06/00
<b>Year</b> 2000	<b>Tenement No.</b> EL 44/88	<b>Completed</b> 6/07/00

<b>Wedge / Extension</b>	<b>Parent Hole ID</b>	<b>Wedge Depth</b>
<b>UTM East</b> 377190.20	<b>Local East</b> 4830.00 467	<b>Dip</b> -50.00
<b>UTM North</b> 5383735.30	<b>Local North</b> -4400.00 430	<b>True Az (UTM)</b>
<b>UTM RL</b> 429.60	<b>Local RL</b>	<b>Mag Az</b> 110.00
<b>UTM Grid</b> AMG66_55	<b>Local Grid</b>	<b>Local Az</b> 98.00
<b>UTM Datum</b>		

<b>From</b>	<b>To</b>	<b>DH Type</b>
0.00	6.00	DD
6.00	101.00	DD

**Logged by** KPD  
**Sampled by** AA  
**Exploration Co.** Pasminco  
**Drilling Contractor** LIDDS  
**Drill Rig** Gopher

**Casing Type** Class 9  
**Depth From** 0.00  
**Depth To** 101.00  
**Casing Diam.** 40mm

**Downhole Geophysics**

**Reason for hole / Target** Test Partial leach soil anomaly

**Visible Mineralisation**

**Best Intersection(s)**

#### Summary Geology

<b>From</b>	<b>To</b>	<b>Lithology</b>	<b>Description</b>
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**Comments**

<i>Hole Id</i>	<i>Depth</i>	<i>Dip</i>	<i>Azimuth (True)</i>	<i>Azimuth (Mag)</i>
STD1	0	-50	110	98
STD1	50	-53	107	95
STD1	101	-53	108	96

<i>Hole Id</i>	<i>Depth</i>	<i>Dip</i>	<i>Azimuth (True)</i>	<i>Azimuth (Mag)</i>
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<i>Hole Id</i>	<i>Depth From</i>	<i>Depth To</i>	<i>Mag Susc.</i>	<i>Hole Id</i>	<i>Depth From</i>	<i>Depth To</i>	<i>Mag Sus</i>
STD1	3.3	3.3	0.01				
STD1	4.8	4.8	0.05				
STD1	6.3	6.3	0.04				
STD1	8.3	8.3	0.06				
STD1	10.8	10.8	0.03				
STD1	13.8	13.8	0.09				
STD1	16.8	16.8	0.08				
STD1	19.4	19.4	0.06				
STD1	21.3	21.3	0.1				
STD1	23.4	23.4	0.02				
STD1	25.8	25.8	0.25				
STD1	28.8	28.8	0.08				
STD1	31.8	31.8	0.51				
STD1	34.8	34.8	0.06				
STD1	37.8	37.8	0.02				
STD1	40.8	40.8	0.06				
STD1	43.8	43.8	0.05				
STD1	46.8	46.8	0.02				
STD1	47.6	47.6	0.04				
STD1	49.8	49.8	0.09				
STD1	52.8	52.8	0.09				
STD1	55.8	55.8	0.07				
STD1	58.8	58.8	0.04				
STD1	61.8	61.8	0.1				
STD1	64.3	64.3	0.1				
STD1	66.3	66.3	0.12				
STD1	68.3	68.3	0.06				
STD1	70.8	70.8	0.09				
STD1	73.8	73.8	0.07				
STD1	76.8	76.8	0.06				
STD1	79.8	79.8	0.06				
STD1	82.8	82.8	0.11				
STD1	85.8	85.8	0.01				
STD1	88.8	88.8	0.04				
STD1	91.9	91.9	0.05				
STD1	95	95	0.03				
STD1	98	98	0.05				
STD1	101	101	0.11				

817051

DIAMOND DRILL HOLE LOG

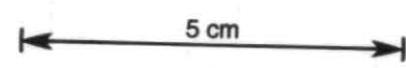
COLLAR: 5383735N 377190E

PASMINCO EXPLORATION

Az: 110 Dip -50

Hole ID	STD 1	Project	Burns Peak
Hole Type	DIAMOND	Tenement No	
Year	2000	Prospect	Southern Trenches
Geologist	KPD	Date	7/7/2000

Depth	Lithology		Cu	Pb	Zn	Graphic Log	Comments	Alteration	Mineralisation
	Code	Colour							
							0-3.6m collar.		
5							3.6-36m. Mottled grey/gale quartz and green <sup>porphyry</sup> breccia. The unit is differentially altered with dominantly hard silicified patches with remnant feldspars and subordinate soft dark green sericitic patches to 60x30mm. Locally the sericitic patches are mineralised with py at 9.3m, partially replaced with massive sulphide at 27.3m and totally replaced at 25.6m (30x10mm)	Si <sub>3</sub> Se <sub>4</sub> Cb <sub>3</sub>	
10									
15							The unit is cut by numerous thin 5-10mm py zones. Rock breccias in a sericite matrix to 30mm are intersucked at 14.3m, 21m & 30.7m. The base of this unit from 24.8-36m is broken & faulted with a significant py zone at 35.4m. Etched starts to 10mm maybe carbonate altered		
20									



817052

DIAMOND DRILL HOLE LOG

2/c

PASMINCO EXPLORATION

Hole ID	STD 1	Project	Burns Peak
Hole Type	DIAMOND	Tenement No	
Year	2000	Prospect	
Geologist	KPP	Date	7/7/2000

Depth	Lithology		Cu	Pb	Zn	Graphic Log	Comments	Alteration	Mineralisation	
	Code	Colour								
20	Sand #									
	163									
	854									
25	855								Sil Ser	mf
	856									
	857									
30										
35										
40							- 36.0 - 45.6m. Similar to the above unit but much finer grained. This may be the fine grained top to the psammitic mass flow which implies an uphole facies. Only minor sericite patches.		Sil Ser.	

5 cm

817053

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

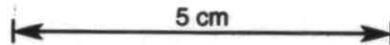
Hole ID	STD1	Project	BURNS PEAK
Hole Type	DIAMOND	Tenement No	
Year	2000	Prospect	SOUTHERN TRENCH
Geologist	KPD	Date	7/7/2000

Depth	Lithology		Cu	Pb	Zn	Graphic Log	Comments	Alteration	Mineralisation
	Code	Colour							
40							Minor disseminated massive sulfide at 43.5m.		
45							45.6 - 62.2m Pale pink porphyry breccia. White feldspar physis silicified rock clasts (to 15mm but typically 3-5mm) 20% ropy elongate sericite patches to 30mm in a silicified matrix.	Sis Ser.	
50	858						Fine - coarse grained galena / sphalerite occurs as blebs to 20x5mm and lesser veinlets throughout the unit but are particularly common (3-5% combined sulfides) from 51.4 - 56.8m. At 51.4 - 51.8 52.2 - 52.4 and 54.1 - 54.4m the mineralisation is best developed.		ms ms Sample 16/92
55	863						Minor carbonate / quartz ± basomelal veinlets cut thin unit.		ms ms Fracture
	864								
	865								
	866								
60									

5 cm

Hole ID	STD 7	Project	Burns Peak
Hole Type	DIAMOND	Tenement No	
Year	2000	Prospect	Southern Trenches
Geologist	KPD	Date	7/7/2000

Depth	Lithology		Cu	Pb	Zn	Graphic Log	Comments	Alteration	Mineralisation
	Code	Colour							
60									
65							62.2-67.3m. Fault zone, Brecciated unit as above with abundant crush zones and peg developed. From 64.5-65.1- a large rock fragment within the fault is 'stock-worked' with 5-10um carbonate venalets.	Se4	
70	867						67.3-101.0m (EDH) Pale green-grey pumice breccia. White rock fragments to 3mm, elongate sericite patches (fracture?) to 15mm in a hard schistoid matrix.	Si2	5um 040 sph, ga, ch 931
	868						The unit is cut by coarse red- brown sphalerite, quartz carbonate venalets to 15mm at 69.8m, 71.5m, 76.4m	Se4	045 5um sph, ch, 931
	869						The unit is cut by K1 of minor galena venalets at 80m, 81.7, 82.7m.		020 15um sph, ch, 95
75									
	870								
80									



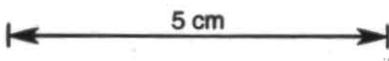
817055

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

Hole ID	STD 1	Project	Burns Peak
Hole Type	DIAMOND	Tenement No	
Year	2000	Prospect	Southern Trend
Geologist	KPD	Date	7/7/2000

Depth	Lithology		Cu	Pb	Zn	Graphic Log					Comments	Alteration	Mineralisation
	Code	Colour				mm							
80						8	8	8	8	8			
85													vs. ch. ga
90											common of - carbonate veining from 90.5 - 92m is probably indicative of a fault.		92.8m
95											ch.		93.0m
100													





817057

DataSet	Hole_ID	SampleID	epth Fro	Depth To	Ca ppm	Cd ppm	Cu ppm	Fe ppm	K ppm	Mg ppm	Mn ppm	Na ppm	Pb ppm	Sb ppm	Sn ppm	Zn ppm
BURNSPEAK	STD1	163854	23	24	1840	0.05	8	32000	42000	4700	8320	405	17	3.8	2	94
BURNSPEAK	STD1	163855	24	25	2100	0.2	14	32000	39000	4400	9360	365	22	3.3	1.8	125
BURNSPEAK	STD1	163856	25	26	3490	0.8	20	35000	37500	4290	12000	405	30	3.1	1.6	298
BURNSPEAK	STD1	163857	26	27	2870	0.2	16	33500	38500	4630	10400	365	25	3.2	1.7	159
BURNSPEAK	STD1	163858	50	51	11900	2.7	85	16000	47000	6170	2300	440	91	29.4	1.9	954
BURNSPEAK	STD1	163859	51	52	9870	8	177	14900	42250	5285	2045	412.5	217.5	56.6	1.7	2640
BURNSPEAK	STD1	163861	52	53	14200	4.5	40	17600	45500	5650	2780	415	178	11.8	1.8	1505
BURNSPEAK	STD1	163862	53	54	12700	2.3	56	17900	42500	4220	2780	400	203	20.6	1.7	739
BURNSPEAK	STD1	163863	54	55	4640	7.6	37	14200	41500	4420	1830	375	446	9.1	1.8	2350
BURNSPEAK	STD1	163864	55	56	5730	3.7	25	18400	43000	4820	2730	380	432	6.7	1.7	1230
BURNSPEAK	STD1	163865	56	57	10800	1.6	29	18700	42500	5980	2280	375	340	12.5	1.6	511
BURNSPEAK	STD1	163866	57	58	8350	1	27	16100	43500	5310	1840	395	305	13.7	1.7	354
BURNSPEAK	STD1	163867	69	70	14400	6.3	21	20500	36500	6030	4390	340	129	3.4	1.6	2070
BURNSPEAK	STD1	163868	70	71	4570	1	10	12500	42500	4110	845	385	131	6.4	1.9	364
BURNSPEAK	STD1	163869	71	72	7170	11.8	33	14700	40500	4600	1960	360	963	5.9	1.8	3660
BURNSPEAK	STD1	163870	76	77	15100	57	96	23000	36000	6150	3510	365	1700	8	1.6	19900

**BURNS PEAK EL 44/88**

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**APPENDIX 3**

**DRILL LOGS FOR DIAMOND HOLES 016B-020B**



# PASMINCO ROSEBERY

A.C.N. 004 074 962

# 817059

<b>Hole No:</b> 016B <b>Objective:</b> Drilled by Mancala to confirm resource - formerly STM1. <b>Result:</b> 26-31.7m: 5.7m @ 18.3% Pb, 26.0%Zn, 1.87% Cu, 96 g/t Ag, 1.9 g/t Au, \$463TMU.	<b>Location:</b> Southern Trenches			<b>Depth</b>	<b>Direct</b>	<b>Dip</b>										
				0.0	270.0	-65.0										
				34.5	271.0	-65.5										
			40.5	271.0	-65.5											
<b>Planned Direction:</b> 270° <b>Planned Dip:</b> -65° <b>Planned Depth:</b> 40.0 m <b>Planned Northing:</b> 4410 m N <b>Planned Easting:</b> 4650 m E <b>Planned Collar R.L.:</b> 422 m RL		<b>Drilling Commenced:</b> 01/06/00 <b>Drilling Completed:</b> 01/06/00 <b>Actual Depth:</b> 40.5 m <b>Surveyed Northing:</b> 4409.70 m N <b>Surveyed Easting:</b> 4652.20 m E <b>Surveyed Collar R.L.:</b> 421.80 m RL														
<b>Date Logged:</b> 20-Sep-2000 <b>Logged By:</b> Kim Denwar <b>Hole Size:</b> NQ <b>Hole Category:</b> Other <b>Grouted:</b> No <b>Grout Comment:</b> <b>Date Log Verified:</b> 21-Sep-2000 <b>Verified By:</b> Peter Edwards		<b>Summary Log:</b> 0-0.5m: No core 0.5-11.0m: FW pumice breccia 11-20.8m: FW 20.8-26.0m: HODS 26-30.9m: HOMS 30.9-31.7m: HODS 31.7-40.5m: HOTS														

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$	
0.0	0.5	NC			n	NO CORE				40.5	NA	116717	20.8	21.8	1.0	1.5	3.1	0.22	19	0.2		53	
0.0	0.5	NC			n	No Core						116718	21.8	22.8	1.0	0.9	1.6	0.14	7	0.1		27	
												116719	22.8	23.8	1.0	1.4	2.4	0.28	16	0.4		45	
												116720	23.8	24.8	1.0	0.7	1.7	0.11	8	0.1		27	
												116721	24.8	26.0	1.2	1.3	2.6	0.29	13	0.1		45	
												116722	26.0	27.0	1.0	17.4	28.0	1.19	105	3.7		491	
												116723	27.0	28.0	1.0	19.6	29.6	1.71	93	0.7		500	
												116724	28.0	29.0	1.0	19.1	21.6	2.34	103	1.7		418	
												116725	29.0	30.0	1.0	26.5	33.1	2.59	112	2.6		607	
												116726	30.0	30.9	0.9	21.2	33.2	2.58	136	2.0		580	
												116727	30.9	31.7	0.8	3.5	7.7	0.61	14	0.4		124	
													Total Length:		10.9								
<b>Weighted Averages</b>																							
26.0	31.7												26.0	31.7	5.7	18.3	26.0	1.87	96	1.9		463	
<b>TMU Parameters</b>																							
<b>Date of Parameters:</b> 16/03/00											<b>Aust-US Exch. Rate:</b> 0.7500												
<b>Pb Metal Price (US\$/t):</b> \$550											<b>Pb Recovery (%):</b> 70.00%												
<b>Zn Metal Price (US\$/t):</b> \$1,200											<b>Zn Recovery (%):</b> 76.00%												
<b>Cu Metal Price (US\$/t):</b> \$1,800											<b>Cu Recovery (%):</b> 48.00%												
<b>Ag Metal Price (US\$/oz):</b> \$5											<b>Ag Recovery (%):</b> 72.00%												
<b>Au Metal Price (US\$/oz):</b> \$300											<b>Au Recovery (%):</b> 65.00%												
20.8	26.0	HODS				HOST - DISSEMINATED SULPHIDES																	
20.8	26.0	ST	si		a	Fine grained finely bedded, folded siltstone. Blebs and veinlets of pyrite+/-red sphalerite, particularly at 20.8-21.8m. Strongly silicified.																	
26.0	30.9	HOMS				HOST - MASSIVE SULPHIDES																	
26.0	26.4	SP ST	py		a	Clasts of massive sulphide to 10 cm in a matrix of pyrite veined fine grained sediment.																	

Hole No: 016B

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$	
26.4	28.2		GA SP		a	Massive galena and sphalerite clasts? surrounded by coarse pyrite with minor sediment clasts. Breccia matrix is supported by rotation of banding in clasts.																	
28.2	30.6		GA SP		a	Banded zinc rich massive sulphide with pale brown 4-5mm bands of sphalerite and 1mm bands of galena. Pyrite-chalcocopyrite rich bands/veins particularly at 28.2-28.3m and at 30m.																	
30.6	30.9		GA SP ST		a	Sphalerite-galena-pyrite-chalcocopyrite veined fined grained sediment.																	
<b>30.9</b>	<b>31.7</b>	<b>HODS</b>				<b>HOST - DISSEMINATED SULPHIDES</b>																	
30.9	31.7		ST		a	Weakly veined fine grained sediment.																	
<b>31.7</b>	<b>40.5</b>	<b>HOTS</b>				<b>HOST - TRACE SULPHIDES</b>																	
31.7	40.0		PU	qs	b	Feldspar lithic pumice breccia. Sericite altered and silicified angular clasts to 6mm, feldspar phenos to 2mm in a sericitic pumiceous matrix. 30mm base metal clast at 32.6m. Facing downhole.																	
40.0	40.5		ST	si	b	Siliceous sediment with pyrite-sphalerite veinlets. The alteration is the same as in the main mineralised zone.																	



# PASMINCO ROSEBERY

A.C.N. 004 074 962

# 817061

<b>Hole No:</b> 017B		<b>Location:</b> Southern Trenches		<b>Depth</b>	<b>Direct</b>	<b>Dip</b>									
<b>Objective:</b> Confirm resource -drilled by Mancala(STM2), logged by Pasex.				0.0	270.0	-63.0									
<b>Result:</b> No significant mineralisation intersected.				9.0	272.0	-61.0									
				31.5	273.0	-60.3									
				37.5	273.0	-60.3									
<b>Planned Direction:</b> 270°		<b>Drilling Commenced:</b> 01/06/00													
<b>Planned Dip:</b> -63°		<b>Drilling Completed:</b> 01/06/00													
<b>Planned Depth:</b> 37.5 m		<b>Actual Depth:</b> 37.5 m													
<b>Planned Northing:</b> 4415 m N		<b>Surveyed Northing:</b> 4415.10 m N													
<b>Planned Easting:</b> 4648 m E		<b>Surveyed Easting:</b> 4648.30 m E													
<b>Planned Collar R.L.:</b> 422 m RL		<b>Surveyed Collar R.L.:</b> 421.90 m RL													
<b>Date Logged:</b> 21-Sep-2000		<b>Summary Log:</b>													
<b>Logged By:</b> Kim Denwar		0-18.2m: FW													
<b>Hole Size:</b> NQ		18.2-24.4m: HODS (ore position)													
<b>Hole Category:</b> Other		24.4-31.5m: HOTS													
<b>Grouted:</b> No		31.5-33.0m: HODS													
<b>Grout Comment:</b>		33.0-37.5m: HOTS													
<b>Date Log Verified:</b> 21-Sep-2000															
<b>Verified By:</b> Peter Edwards															

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$	
0.0	6.1	FW				<b>FOOTWALL SEQUENCE</b>				37.5	NA	116728	18.2	19.5	1.3	3.8	7.3	0.44	27	0.3		121	
0.0	6.1	PU			t	Grey green pocked pumice breccia.						116729	19.5	19.6	0.1	1.6	3.3	0.45	20	0.3		60	
												116730	19.6	20.6	1.0	0.5	1.8	0.09	5	0.1		26	
6.1	18.2	FWTS				<b>FOOTWALL - TRACE SULPHIDES</b>						116731	20.6	21.6	1.0	0.3	1.4	0.06	5	0.0		20	
6.1	18.2	PU	se		c	Felsic pumice breccia with rafts of breccia. Sericite altered. trace sphalerite and pyrite. 5cm pug fault at 12.8m. 30mm granular silica-basmetal clot at 17.5m. Siliceous alteration from 8-11.5m						116732	27.4	27.7	0.3	8.5	14.4	1.25	39	0.5		243	
												116733	27.7	28.0	0.3	0.4	1.5	0.08	6	0.1		24	
												116734	32.3	32.6	0.3	4.5	8.3	1.14	71	4.3		184	
															<b>Total Length:</b>		4.3						
18.2	24.4	HODS				<b>HOST - DISSEMINATED SULPHIDES</b>																	
18.2	24.4	ST	si		a	Basemetal veined fine grained sediment, locally brecciated. Similar to the interval intersected in 016B from 20.8m-31.7m which hosted the massive basemetal mineralisation.																	
24.4	31.5	HOTS				<b>HOST - TRACE SULPHIDES</b>																	
24.4	31.5	VC	se		b	Sericite altered lithic pumice breccia. Lithic clasts are silicified?, up to 4mm. Flattened pumice in pale green matrix. From 25.2-25.65m silicification of the breccia give it a fine grained appearance.																	
31.5	33.0	HODS				<b>HOST - DISSEMINATED SULPHIDES</b>																	

### TMU Parameters

<b>Date of Parameters:</b>	16/03/00	<b>Aust-US Exch. Rate:</b>	0.7500
<b>Pb Metal Price (US\$/t):</b>	\$550	<b>Pb Recovery (%):</b>	70.00%
<b>Zn Metal Price (US\$/t):</b>	\$1,200	<b>Zn Recovery (%):</b>	76.00%
<b>Cu Metal Price (US\$/t):</b>	\$1,800	<b>Cu Recovery (%):</b>	48.00%
<b>Ag Metal Price (US\$/oz):</b>	\$5	<b>Ag Recovery (%):</b>	72.00%
<b>Au Metal Price (US\$/oz):</b>	\$300	<b>Au Recovery (%):</b>	65.00%

Hole No: 017B

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$
31.5	33.0		VC	si	a	Strongly silicified breccias above with zones of disseminated massive sulphides.																
<b>33.0 37.5 HOTS</b>						<b>HOST - TRACE SULPHIDES</b>																
33.0	37.5		VC	se	b	Lithic pumice breccia with large 20-40mm rounded lithic clasts. Lithic clasts include massive sulphide and pyrite-sphalerite veined, silicified breccia as above. The clasts must have been in a alluvial environment.																



# PAMINCO ROSEBERY

A.C.N. 004 074 962

817063

<b>Hole No:</b> 018B	<b>Location:</b> Southern Trenches	<b>Depth</b>	<b>Direct</b>	<b>Dip</b>									
<b>Objective:</b> Confirm resource -drilled by Mancala(STM3), logged by Pasex		0.0	270.0	-78.0									
<b>Result:</b> 30.3-43.1m: 12.8m @ 7.4%Pb, 14.5% Zn, 1.11% Cu, 49 g/t Ag, 1.9 g/t Au		9.0	286.0	-76.5									
\$251TMU incl. 31.8-36.0m: 4.2m @ 15.3% Pb, 22.9% Zn.		45.0	286.0	-76.0									
		51.0	286.0	-76.0									
<b>Planned Direction:</b> 270°	<b>Drilling Commenced:</b> 01/06/00												
<b>Planned Dip:</b> -78°	<b>Drilling Completed:</b> 01/06/00												
<b>Planned Depth:</b> 50.0 m	<b>Actual Depth:</b> 51.0 m												
<b>Planned Northing:</b> 4415 m N	<b>Surveyed Northing:</b> 4415.10 m N												
<b>Planned Easting:</b> 4648 m E	<b>Surveyed Easting:</b> 4648.50 m E												
<b>Planned Collar R.L.:</b> 422 m RL	<b>Surveyed Collar R.L.:</b> 421.90 m RL												
<b>Date Logged:</b> 21-Sep-2000	<b>Summary Log:</b>												
<b>Logged By:</b> Kim Denwar	0-0.5m: No core												
<b>Hole Size:</b> NQ	0.5-22.2m: FW												
<b>Hole Category:</b> Other	22.2-28.3m: HOTS												
<b>Grouted:</b> No	28.3m-31.8m: HODS												
<b>Grout Comment:</b>	31.8-36m: HOMS												
<b>Date Log Verified:</b> 21-Sep-2000	36-45.6m: HODS												
<b>Verified By:</b> Peter Edwards	45.6-51m: HOTS												

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$
0.0	0.5	NC				NO CORE	51.0	NA				116735	22.2	23.2	1.0	1.3	2.5	0.21	13	0.1		42
0.0	0.5	NC			n	No Core						116736	23.2	24.2	1.0	0.3	0.9	0.07	5	0.1		15
												116737	24.2	25.2	1.0	0.7	1.3	0.16	5	0.0		22
0.5	22.2	FW				FOOTWALL SEQUENCE						116738	25.2	26.2	1.0	0.5	1.4	0.04	5	0.1		21
0.5	9.8	PU	se	b		Sericitised and moderately silicified feldspar pumice breccia. No lithics.						116739	26.2	27.2	1.0	0.5	1.7	0.18	9	0.1		28
												116740	27.2	28.3	1.1	0.6	2.8	0.44	13	0.2		45
9.8	13.0	PU	si	a		Strongly silicified and variably silicified fine ashy sediment? and pumice breccia. Is the silicification totally texture destructive?						116741	28.3	29.3	1.0	0.3	1.6	0.51	9	0.3		31
												116742	29.3	30.3	1.0	0.4	1.3	0.25	6	0.1		22
13.0	22.2	PU	se	a		Strongly sericite altered feldspar pumice breccia. Lithics are prominent in the basal part of the unit.						116743	30.3	31.4	1.1	1.8	4.3	0.67	23	0.3		75
												116744	31.4	31.8	0.4	6.5	10.3	1.16	49	0.9		187
												116745	31.8	33.0	1.2	10.7	15.4	1.24	64	1.4		278
22.2	28.3	HOTS				HOST - TRACE SULPHIDES						116746	33.0	34.0	1.0	17.1	29.2	2.27	118	7.2		547
22.2	28.3	SS		a		Sphalerite veined (2-3mm), strongly silicified finely bedded fine-medium grained ashy volcanoclastic.						116747	34.0	35.0	1.0	16.0	19.3	1.78	71	2.0		365
		VC	si									116748	35.0	36.0	1.0	18.3	29.3	3.30	100	2.3		522
												116749	36.0	37.4	1.4	5.1	11.3	0.43	40	6.7		231
												116750	37.4	38.4	1.0	1.9	2.9	0.34	10	0.1		52
28.3	31.8	HODS				HOST - DISSEMINATED SULPHIDES						116751	38.4	39.6	1.2	2.1	6.1	0.39	26	0.2		95
28.3	31.4	BR	si	b		Mottled green-grey breccia. Green sericite altered clasts and grey silicified clasts in a grey silicified matrix. Sphalerite-chalcocopyrite veinlets.						116752	39.6	40.6	1.0	11.1	31.4	1.46	77	0.6		472
		VC	se									116753	40.6	41.7	1.1	0.7	10.0	0.75	19	0.1		138
31.4	31.8	VC	si	a		Strongly silicified ashy volcanoclastic with massive sulphide veinlets.						116754	41.7	42.9	1.2	0.2	5.6	0.11	9	0.1		73
												116755	42.9	43.1	0.2	8.6	27.8	1.54	50	0.6		412
												116756	43.1	44.1	1.0	1.8	2.2	0.11	28	0.1		42

Hole No: 018B

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$
<b>HOST - MASSIVE SULPHIDES</b>													Total Length: 21.9									
31.8	32.5		SP		a	Volcaniclastic with massive sulphide veinlets.																
			VC	si																		
32.5	32.8		GA		a	Sphalerite-galena cemented silicified chert clasts.																
			SP																			
32.8	33.6		GA		a	Banded massive sulphide with cpy, sphalerite, galena bands cut by coarse zones of light brown sphalerite at 45 degrees to core.	33.0	VN	45°													
			SP																			
33.6	34.6		CH		a	Coarse galena-sphalerite veined and silicified chert.																
			GA																			
			SP																			
34.6	35.5		GA		a	Banded massive sulphide as before.																
			SP																			
35.5	36.0		CH		a	Coarse banded ore with silicified chert. 20mm cpy veinlet at 35.6m.																
			GA																			
			SP																			
<b>HOST - DISSEMINATED SULPHIDES</b>																						
36.0	45.6		PU	si	a	Strongly silicified and variably sericite altered lithic pumice breccia with massive sulphide at 36.7-36.8m, 40.1-40.3m, 42.95-43.1m and coarse sphalerite, galena blebs throughout. Veinlets/stockworks give the unit a brecciated appearance.																
			VC	se																		
<b>HOST - TRACE SULPHIDES</b>																						
45.6	51.0		PU	qs	b	Medium to coarse grained sericitic, silicified pumice lithic breccia. Trace sphalerite veinlets.																



# PASMINCO ROSEBERY

A.C.N. 004 074 962

817065

<b>Hole No:</b> 019B <b>Objective:</b> Confirm resource. Drilled by Mancala (STM4), logged y Pasex <b>Result:</b> 28.2-33.4m: 5.2m @ 23.3% Pb, 33.3% Zn, 2.46% Cu, 108 g/t Ag, 6.9 g/t Au \$627TMU.	<b>Location:</b> Southern Trenches	<b>Depth</b> <b>Direct</b> <b>Dip</b> 0.0   270.0   -72.0 9.0   267.0   -76.0 40.5   266.0   -77.5	<b>Depth</b> <b>Direct</b> <b>Dip</b> (Empty)	<b>Depth</b> <b>Direct</b> <b>Dip</b> (Empty)	<b>Depth</b> <b>Direct</b> <b>Dip</b> (Empty)	
	<b>Planned Direction:</b> 270° <b>Planned Dip:</b> -72° <b>Planned Depth:</b> 40.0 m <b>Planned Northing:</b> 4410 m N <b>Planned Easting:</b> 4652 m E <b>Planned Collar R.L.:</b> 422 m RL	<b>Drilling Commenced:</b> 01/06/00 <b>Drilling Completed:</b> 01/06/00 <b>Actual Depth:</b> 40.5 m <b>Surveyed Northing:</b> 4409.70 m N <b>Surveyed Easting:</b> 4652.50 m E <b>Surveyed Collar R.L.:</b> 421.80 m RL				
	<b>Date Logged:</b> 21-Sep-2000 <b>Logged By:</b> Test Geologist <b>Hole Size:</b> NQ <b>Hole Category:</b> Other <b>Grouted:</b> No <b>Grout Comment:</b> <b>Date Log Verified:</b> 21-Sep-2000 <b>Verified By:</b> Peter Edwards	<b>Summary Log:</b> 0-24.2m: FWTS 24.2-28.2m: HODS 28.2-33.4m: HOMS 33.4-40.5m: HODS				

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$		
0.0	24.2		FWTS			<b>FOOTWALL - TRACE SULPHIDES</b>	40.5	NA				116757	24.2	25.2	1.0	0.9	1.4	0.16	13	0.1		27		
0.0	24.2	PU	qs	b		Sericitic and variably silicified feldspar pumice breccia. Lithics become important in the lower part of the unit. Cavities/pocks from 0-11m. Minor basemetal blebs and veinlets.						116758	25.2	26.2	1.0	0.6	2.1	0.06	13	0.2		33		
												116759	26.2	27.2	1.0	0.5	1.1	0.05	8	0.1		19		
												116760	27.2	28.2	1.0	2.3	3.3	0.43	20	0.5		64		
												116761	28.2	29.2	1.0	18.6	21.7	1.36	76	1.8		402		
24.2	28.2		HODS			<b>HOST - DISSEMINATED SULPHIDES</b>						116762	29.2	30.2	1.0	26.3	38.3	1.91	110	1.8		655		
24.2	28.2	ST	si	a		Finely banded silicified ashy volcanoclastic. From 26.8-28.2m the unit is stockworked with BM veinlets giving unit brecciated appearance.						116763	30.2	31.2	1.0	25.3	39.5	2.15	114	3.9		685		
												116764	31.2	32.2	1.0	21.8	34.5	3.31	103	6.3		639		
												116765	32.2	33.4	1.2	24.3	32.5	3.39	132	18.4		734		
												116766	33.4	34.4	1.0	0.4	1.7	0.08	6	0.2		27		
28.2	33.4		HOMS			<b>HOST - MASSIVE SULPHIDES</b>						116767	34.4	35.4	1.0	0.1	0.8	0.06	8	0.2		14		
28.2	33.4	GA SP		a		Coarsely banded light brown sphalerite with bands and patches to 25mm separated by 2-5mm dark fine grained (galena?) bands. Localised patches eg at 29.45-29.55m of coarse galena/cpy/pyrite.						116768	35.4	36.6	1.2	0.1	0.3	0.02	5	0.1		5		
												116769	36.6	37.6	1.0	4.4	8.4	0.77	32	0.3		142		
												116770	37.6	38.3	0.7	0.7	1.6	0.28	6	0.1		27		
															Total Length:									
															Weighted Averages									
33.4	40.5		HOTS			<b>HOST - TRACE SULPHIDES</b>							28.2	33.4	5.2	23.3	33.3	2.46	108	6.9		627		
33.4	40.5	PU VC	qs	b		Variably silicified and sericitised feldspar pumice lithic breccia. Minor sphalerite veinlets. Massive pyrite (pyrrhotite?) 34.25-34.45m.																		

### TMU Parameters

Date of Parameters: 16/03/00    Aust-US Exch. Rate: 0.7500

Hole No: 019B

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$		



# PAMINCO ROSEBERY

A.C.N. 004 074 962

817067

<b>Hole No:</b> 020B <b>Objective:</b> Confirm resource. Drilled by Mancala(STM5), logged by Pasex <b>Result:</b> 27.7-29.7m: 2m @ 11.6%Pb, 15.5%Zn, 1.48% Cu, 82 g/t Ag, 1.2 g/t Au.	<b>Location:</b> Southern Trenches	<b>Depth</b> <b>Direct</b> <b>Dip</b> 0.0      226.9      -64.0 9.0      220.0      -62.0 35.0     221.0      -61.5	<b>Depth</b> <b>Direct</b> <b>Dip</b>    	<b>Depth</b> <b>Direct</b> <b>Dip</b>    	<b>Depth</b> <b>Direct</b> <b>Dip</b>    	
	<b>Planned Direction:</b> 227° <b>Planned Dip:</b> -64° <b>Planned Depth:</b> 35.0 m <b>Planned Northing:</b> 4407 m N <b>Planned Easting:</b> 4652 m E <b>Planned Collar R.L.:</b> 422 m RL	<b>Drilling Commenced:</b> 01/06/00 <b>Drilling Completed:</b> 01/06/00 <b>Actual Depth:</b> 35.0 m <b>Surveyed Northing:</b> 4407.50 m N <b>Surveyed Easting:</b> 4652.00 m E <b>Surveyed Collar R.L.:</b> 421.80 m RL				
	<b>Date Logged:</b> 21-Sep-2000 <b>Logged By:</b> Kim Denwar <b>Hole Size:</b> NQ <b>Hole Category:</b> Other <b>Grouted:</b> No <b>Grout Comment:</b> <b>Date Log Verified:</b> 21-Sep-2000 <b>Verified By:</b> Peter Edwards	<b>Summary Log:</b> 0-21.4m: FWTS 21.4-26.7m: HODS 26.7-30.75m: HOSM 30.75-35m: HOTS				

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$
0.0	21.4	FWTS				<b>FOOTWALL - TRACE SULPHIDES</b>	35.0	NA				116771	26.0	26.7	0.7	0.4	0.8	0.05	5	0.1		13
0.0	8.1	PU	cy	c		Grey-green pocked pumice breccia. Soft white clays remain in some clots.						116772	26.7	27.7	1.0	1.4	2.7	0.25	11	0.2		46
8.1	10.5	VC	si	a		Strongly silicified ashy volcanoclastic, minor 2-4mm sphalerite clots.						116773	27.7	28.7	1.0	10.1	13.5	1.61	72	0.5		250
												116774	28.7	29.7	1.0	13.2	17.5	1.34	92	1.9		326
												116775	29.7	30.8	1.1	0.3	1.2	0.10	7	0.9		25
10.5	21.4	PU	qs	a		Strongly silicified and variably sericite altered pumice breccia. Quartz clots (possibly clasts) to 25-30mm common throughout.						116776	30.8	30.9	0.1	4.8	0.1	0.19	221	0.2		63
<b>Total Length:</b>																4.9						
<b>Weighted Averages</b>																						
27.7	29.7	2.0	11.6	15.5	1.48	82	1.2					288										
<b>TMU Parameters</b>																						
<b>Date of Parameters:</b>												16/03/00			<b>Aust-US Exch. Rate:</b> 0.7500							
<b>Pb Metal Price (US\$/t):</b> \$550												<b>Pb Recovery (%):</b> 70.00%										
<b>Zn Metal Price (US\$/t):</b> \$1,200												<b>Zn Recovery (%):</b> 76.00%										
<b>Cu Metal Price (US\$/t):</b> \$1,800												<b>Cu Recovery (%):</b> 48.00%										
<b>Ag Metal Price (US\$/oz):</b> \$5												<b>Ag Recovery (%):</b> 72.00%										
<b>Au Metal Price (US\$/oz):</b> \$300												<b>Au Recovery (%):</b> 65.00%										
26.7	30.8	HOSM				<b>HOST - SEMI-MASSIVE SULPHIDES</b>																
26.7	28.3	CH	si	a		Grey strongly silicified pyrite, galena, sphalerite veined chert.																
28.3	29.6	GA		a		Semi-massive sphalerite, galena pyrite and chalcopyrite.																
		SP																				
29.6	30.8	CH	si	a		Silicified mineralised chert as before.																

Hole No: 020B

From (m)	To (m)	Model Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$
30.8	35.0		HOTS			HOST - TRACE SULPHIDES																
30.8	35.0	PU	qs	b		Variably silicified and sericitised pumice breccia.																