

GAM 1 AND GAM 2  
MINERAL CLAIMS  
SLOCAN MINING DIVISION  
SOIL GEOCHEMISTRY  
OF THE

FILMED

ARLINGTON SHEAR HANGING WALL, GAM 1, 2 CLAIMS

N.T.S. 8ZF/14W

Lat. 49°47.5' Long. 117°21.5'

Owner: Sueinson Way Mineral Services Ltd.

Operator: Western Arlington Resources

SUB-RECORDED

AUG 29 1986

MLR #  
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

June 22, 1986

T. Tim Henryberry, FGAC

15,053

R. T. Henryberry

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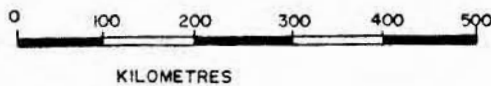
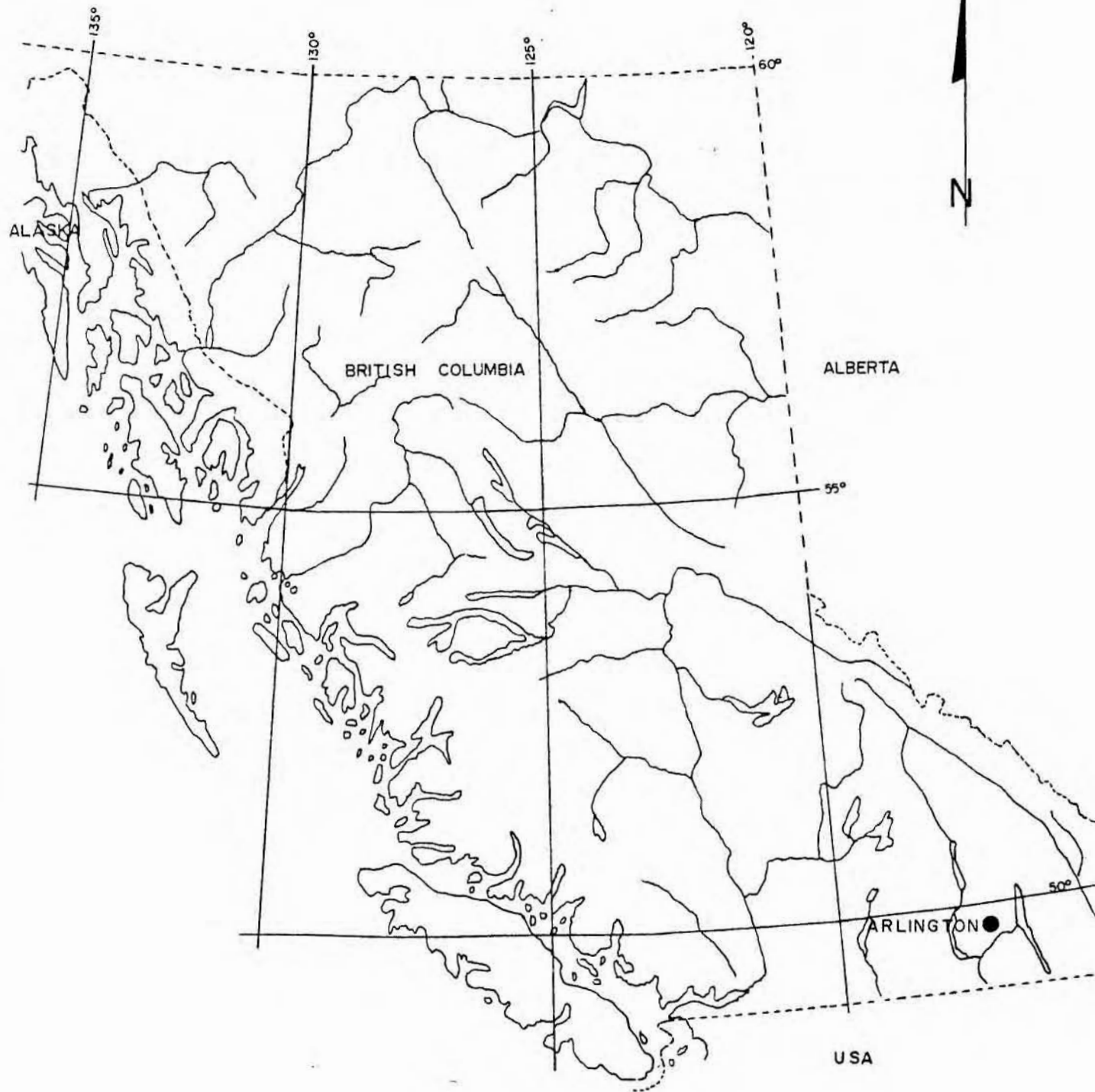
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## SUMMARY

The GAM 1 and GAM 2 mineral claims cover a large part of the old Arlington and Speculator properties in the Slocan Mining Division. A short program of soil geochemical sampling was carried out over the hanging wall of the Arlington Shear to test for possible parallel and/or splay structure. Weak coincidental silver and lead anomalies were detected suggesting such structure does exist. A follow-up mapping program with contingent diamond drilling is recommended.

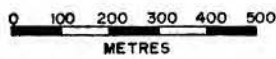
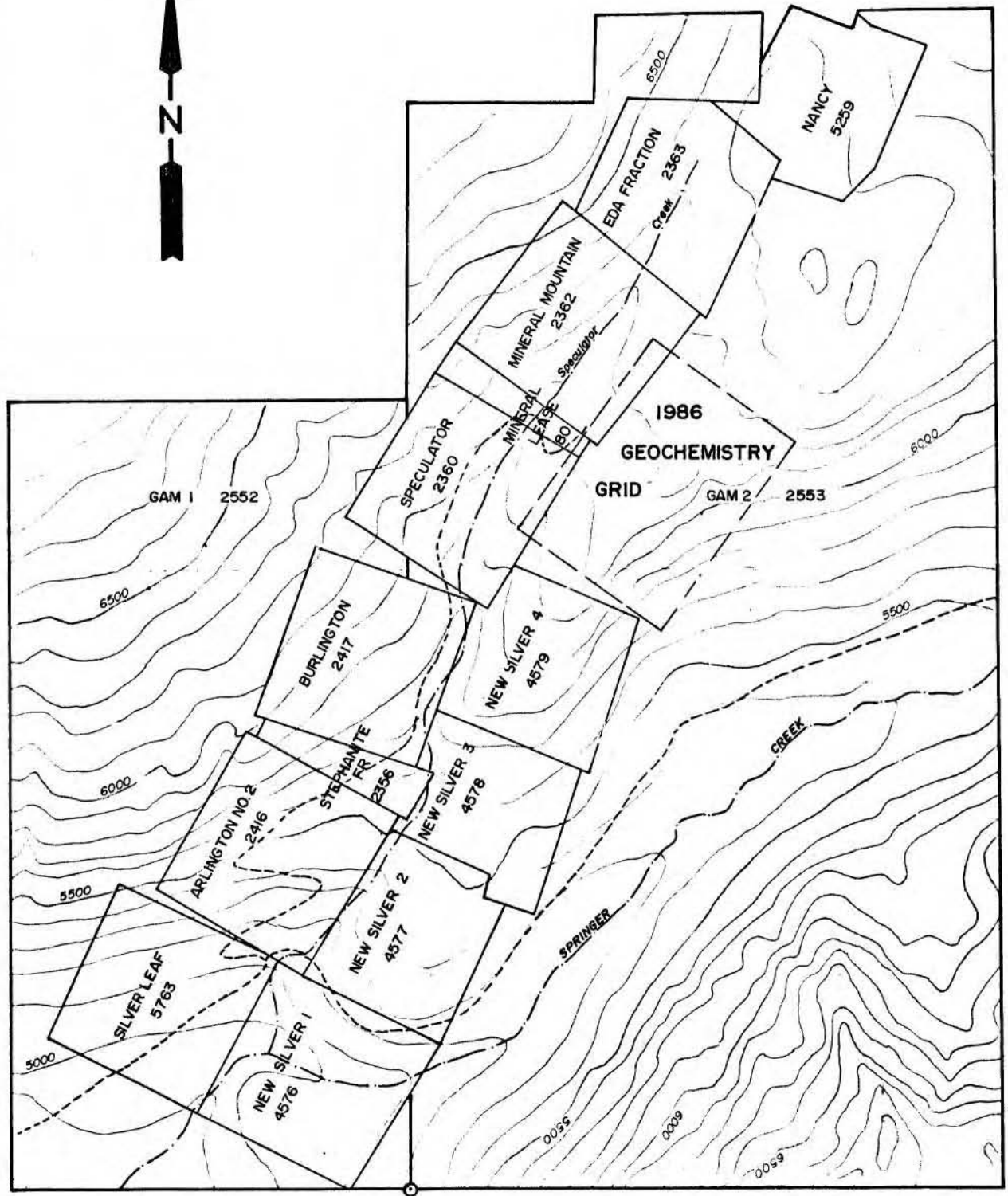


S W RESOURCES	
ARLINGTON PROPERTY LOCATION MAP	
DR. BY: RT HENNEBERRY	SCALE:
DATE: JUNE, 1985	APPRD. BY:
CHK'D. BY:	REV.:
DWG. NO. R.T.H.	FIGURE 1

### ACCESS LOCATION

The Gam 1 and 2 mineral claims are located in the Slocan Mining District on NTS map sheet 82F 14W at latitude 49 degrees 48 minutes and at longitude 117 degrees 21 minutes. The property lies 11 kilometres east of Slocan City near the junction of Springer and Speculator Creeks.

Topography is steep but not overly rugged. Elevations range from 1430 to 2070 metres above sea level. Vegetation comprises alders and jackpine in the lower elevations to semi-alpine above 1900 metres. The property is drained by Springer Creek running southwest and Speculator Creek running south. The climate is typical of the Southern Interior. Snow conditions allow property work from late May to early June to mid October.



CONTOUR INTERVAL IS 100 FEET  
CLAIM SHEET IS 82F 14W

**SW RESOURCES**  
**ARLINGTON CLAIM HOLDINGS**  
DRAWN BY: RTHENNEBERRY SCALE: 1:10000  
DATE: JUNE, 1986  
*R.T.H.* **FIGURE 2**

### OWNERSHIP

The Gam 1 and 2 mineral claims are presently held by location by Sveinson Way Mineral Services of Edmonton, Alberta. Together with 4 other claims and 10 crown grants they form the Arlington Property. The 4 claims are also held by location by Sveinson Way Mineral Services, while the crown grants are 50% owned by Sveinson Way Mineral Services and 50% owned by Western Arlington Resources of Vancouver.

The complete list of record numbers is tabulated below:

<i>Mineral Claim</i>	<i>Record Number</i>	<i>Size</i>
<i>GAM 1</i>	<i>2552</i>	<i>8 units</i>
<i>GAM 2</i>	<i>2553</i>	<i>18 units</i>
<i>New Silver 1</i>	<i>4576</i>	<i>1 unit</i>
<i>New Silver 2</i>	<i>4577</i>	<i>1 unit</i>
<i>New Silver 3</i>	<i>4578</i>	<i>1 unit</i>
<i>New Silver 4</i>	<i>4579</i>	<i>1 unit</i>
<i>Crown Grant</i>	<i>Record Number</i>	
<i>Silver Leaf</i>	<i>5763</i>	
<i>Arlington No. 2</i>	<i>2416</i>	
<i>Stephanite Fraction</i>	<i>2356</i>	
<i>Burlington</i>	<i>2417</i>	
<i>Speculator</i>	<i>2360</i>	
<i>Speculator Fraction</i>	<i>2361</i>	
<i>Mineral Mountain</i>	<i>2362</i>	
<i>Eda Fraction</i>	<i>2363</i>	
<i>Nancy</i>	<i>5259</i>	
<i>?</i>	<i>5260</i>	

The GAM 1 and GAM 2 claims have been grouped with the crown grants for the purpose of filing the assessment.

## REGIONAL HISTORY

The Slocan Mining area covers approximately 700 square kilometres in extent between Slocan Lake and Kootenay Lake. Slocan City, Silverton, New Denver, Kaslo and Ainsworth are within the mining area. Silver, lead, zinc, with minor gold and cadmium, are the important metals, with silver outranking the rest in importance. Mineralization was first discovered in the area in 1891.

The Slocan area has produced just over 74 million ounces of silver from four major districts: Ainsworth, Sandon-Silverton-New Denver, Slocan City and Zincton. The deposits occur as veins, shears, and replacements, and are usually associated with lead and/or zinc (Cairnes, 1935). Total lead production amounts to 32 million tons; zinc production amounts to 27.4 million tons. All deposits appear to show a definite affinity to the Nelson Batholith, a predominantly granodioritic intrusive emplaced during middle Jurassic time (Nguyen et al, 1968). Deposits occur either completely within the intrusive, or in the intruded Slocan Group. The Ainsworth and Zincton deposits occur as replacements or veins in the Slocan, Milford and Kaslo Groups (Fyles, 1967). Veins have been traced to a maximum of a few thousands of metres and have been worked vertically to a depth of 500 metres.



## PROPERTY HISTORY

The Arlington Property was originally staked by C.E. Feilding in 1894. Peak production was during the period of 1898-1902 during which time just under three quarters of a million ounces of silver was mined. Final production for the mine to 1980 is 1,010,606 ounces of silver from 22,643 tons of ore for an average grade of 44.6 ounces of silver per ton. Production was obtained from both the hanging wall and the footwall of the Arlington Shear (the structure that hosts the deposit). A large shallow dipping ore pod, dipping 5 to 10 degrees to the northeast, and having horizontal dimensions in the order of 400 metres and vertical dimensions in the order of 100 metres, provided the bulk of the production.

The last major pulse of activity at Arlington was 1981. During this time Sveinson Way Mineral Services acquired a 50% option on the property. They carried out a detailed surface and underground evaluation of the potential of the property including : surface and underground drilling and mapping, and soil and geophysical grids. This program was cut short due to lack of funds before the evaluation was complete. The soil and geophysics indicated the possible existence of a hanging wall structure either parallel to or splaying from the Arlington Shear.

The purpose of the 1986 program was to test for the possible existence of these structures. The area to the north of the Speculator workings was chosen for two reasons : 1) because the Arlington Shear starts to widen considerably in this area, and 2) because the geophysics indicated a structure may exist.

## 1986 PROGRAM

The 1986 Arlington program was centred on the GAM 2 mineral claim. Due to heavy snow conditions the program was considerably shortened and consisted of four 450 metre lines spaced 200 metres apart. The sample interval was 25 metres. Samples were for the most part taken in the melted wells associated with the trees, as the snow was better than 1 metre deep throughout. Only two samples were missed, both due to the absence of trees in the sample area.

A total of 88 samples were taken. All were analyzed for silver, lead and zinc. The results are plotted at 1 : 2500 on Figures 3, 4 and 5. Suspected strike of structure should be mine north for parallel structure and mine north east for splay structure, as the grid is well into the hanging wall of the Arlington Shear.

**SILVER.** Although six anomalous zones were identified from the silver geochemistry, all anomalies are weak as no values over 0.9 ppm were recorded. By comparison, values as high as 2 ppm were recorded during the 1981 soil survey over the Arlington Shear (Way, 1981).

Anomalies A, B, and C are linear in nature, with the strikes of anomalies B and C being somewhat skewed to what would be expected. Anomaly B may carry through to connect with anomaly D or E with line 2900N representing a low on the possible structure. Anomaly F represents a spot anomaly and has no coincident lead or zinc anomaly.

**LEAD.** Lead values in the anomalous range of plus 40 ppm were contoured. These values correspond to the lower end anomalies of the 1981 soil program.

Although six distinct anomalies were identified by the lead geochemistry, they are more likely three linear anomalies. Anomaly A on line 3100N and anomaly B on line 2700N may represent a linear anomaly with a low under line 2900N. Anomaly C on line 2700N and anomaly D on line 3100N may also represent a linear anomaly with a low under line 2900N. Anomalies E and F along the 1100E crossing lines may also represent the western extreme of an anomaly immediately to the east of the grid.

**ZINC.** Zinc was not analyzed in the 1981 survey, hence no comparison can be made.

The large zinc anomaly (A) through much of the eastern half of the grid is hard to explain. Although the NE trend is approximate to the suspected strike of splay structure, the size of the anomaly does not correspond to the silver or lead surveys. The anomaly does cover the linear anomalies from the silver and lead geochemistry, with the highest zinc values loosely coincidental with the silver and lead anomalies. Spot anomaly B may be coincidental with a linear lead and silver anomaly as well.

### Soil Geochemistry Discussion

The purpose of the 1986 soil geochemistry was to uncover possible hanging wall structures of the Arlington Shear, either splay structure or parallel structure. Coincident silver and lead anomalies were uncovered, though the lead anomalies seem to be shifted to the east (downhill) with respect to the silver anomalies. The weakness of these anomalies is puzzling ! With different labs performing the two surveys, discrepancies may be expected. Another explanation may be the strength of the Arlington Shear with respect to hanging wall structure, suggesting the silver bearing potential of these structures is not as great as that of the Arlington Shear. Finally, the widely dispersed nature of the zinc survey suggests that zinc may not be a good indicator element for structure, further suggesting that zinc be excluded from future soil geochemical surveys.

## TOPOGRAPHIC MAP

As part of the required assessment for the Gam 1 and Gam 2 mineral claims a detailed blowup of the complete claim area was commissioned. This work was performed by Pacific International Mapping Corporation of Victoria. The purpose of this project was two-fold. First to provide an accurate topographic base from which to do a detailed structural analysis of the Arlington Shear through the complete claim area. The second is to build a computer base onto which past and future plans and sections can be included to enable three dimensional views of Arlington Shear to be made to guide future drilling and development of the Shear. A longitudinal surface profile of the Arlington Shear is also included in this package, in preparation for the computer plotting of the Shear showing all workings and drill intersections.

## CONCLUSIONS

The following conclusions can be reached from the recently completed assessment work on the Gam 1 and Gam 2 mineral claims :

1) Silver - lead - zinc soil geochemistry of the hanging wall area of the Arlington Shear indicates the presence of parallel and splaying structures in the area tested.

2) These anomalies are considerably weaker than anomalies over the main Arlington Shear, suggesting these structures may be more weakly mineralized compared to the main Arlington Shear.

3) Heavy snow conditions did not allow mapping of the grid area so follow up mapping will be required to evaluate these structures.

### RECOMMENDATIONS

1) The silver - lead - zinc anomalies should be investigated by surface mapping in an effort to explain them.

2) If mapping does not adequately explain the anomalies then a short drilling program should be initiated over coincidental Ag and Pb anomalies, remembering that these drill holes should cut the suspected structures at the same elevation as the ore zone of the main Arlington Shear.

3) A successful drill program would necessitate detailed soil geochemistry over much of the adjacent hanging wall area of the main Arlington Shear.

#### REFERENCES CITED

Cairnes, C.E. (1935). *Description of Properties, Slocan Mining Camp*. Geological Survey of Canada Memoir 184.

Fyles, J.T. (1967). *Geology of the Ainsworth - Kaslo Area, British Columbia*. British Columbia Department of Mines Bulletin 53.

Nguyen, K.K; Sinclair, A.J. and Libby, W.G. (1968). *Age of the northern part of the Nelson Batholith*. Canadian Journal of Earth Sciences, Volume 5, pp.955-957.

Way, B.C. (1981). *Arlington Project, Slocan Mining Division*. Sveinson Way Mineral Services Company Report. See also British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report 10172.

*STATEMENT OF QUALIFICATIONS*

*I, R.Tim Henneberry, am a consulting geologist residing at 4054 Dundas Street, Burnaby, British Columbia.*

*I am a graduate of Dalhousie University (1980) with a Bachelor of Science Degree majoring in geology and have practiced my profession continuously since graduation.*

*I am a fellow of the Geological Association of Canada.*

*I have no interest, either direct or indirect, in the Arlington Property of which S.W.Resources is 50 percent owner.*

*R.Tim Henneberry, FGAC  
June 12, 1986*

*R. F. Henneberry*



STATEMENT OF COSTS

PERSONNEL

Geologist	4 days @ \$200.00 per day	800.00
Assistant	4 days @ \$150.00 per day	600.00
Accommodation	3 nights	98.44
Food	10 meals	149.34
Travel	1515.6 kms @ \$.30 per km	454.68

ANALYSIS

88 samples for Pb, Zn, Ag		396.00
90 sample bags @ \$.10 per bag		9.00

DOCUMENTATION

Geologist	3.5 days @ \$200.00 per day	700.00
Blueprint		15.47
Photocopy		12.75
Report Covers		8.75

TOPOGRAPHIC MAP AND PROFILE

2100.00

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TOTAL COST

\$5344.41



# RESOURCE LABORATORIES LTD.

#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

## \* GEOCHEMICAL REPORT \*

To: Western Arlington Resources  
4054 Dundas Street  
Vancouver, B.C.  
V5C 1A7

Number: 86163  
Date: June 5, 1986  
Proj.: Arlington

Attn: Tim Henneberry

		Ag ppm	Pb ppm	Zn ppm
Line 2500N	650E	<0.1	21	29
	675E	0.3	23	60
	700E	0.3	27	36
	725E	0.1	23	43
	750E	<0.1	26	85
	775E	<0.1	21	87
	800E	0.3	19	55
	825E	0.2	30	90
	850E	0.1	20	129
	875E	0.1	24	97
	900E	0.4	25	88
	925E	0.1	27	118
	950E	0.2	28	155
	975E	0.2	24	198
	1000E	0.5	32	196
	1025E	0.2	18	83
1050E	0.2	27	139	
1075E	0.4	28	73	
1100E	0.5	17	59	
Line 2700N	650E	0.3	25	34
	675E	0.4	24	68
	700E	0.5	24	78
	725E	0.2	11	33
	750E	0.3	24	60
	775E	<0.1	29	74
	800E	0.1	13	41
	825E	<0.1	53	64
	850E	<0.1	26	143
	875E	<0.1	27	133
	900E	0.3	34	152
	925E	0.3	39	220
	950E	0.5	42	250
975E	0.9	27	72	
1000E	0.4	31	164	
1025E	0.4	36	178	
1050E	0.3	20	144	
1075E	0.2	24	235	
1100E	0.2	9	54	
Line 2900N	650E	0.7	18	46

*Duncan Sanderson*



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		Ag ppm	Pb ppm	Zn ppm
Line 2900N	675E	0.4	13	30
	700E	0.4	27	31
	725E	0.6	16	40
	775E	0.4	19	56
	800E	0.3	17	47
	825E	0.2	17	94
	850E	0.1	18	45
	875E	<0.1	19	77
	900E	<0.1	17	39
	925E	0.2	23	130
	950E	<0.1	24	140
	975E	0.4	24	135
	1000E	<0.1	16	93
	1025E	0.1	25	126
	1050E	0.1	17	118
1075E	<0.1	22	112	
1100E	<0.1	48	123	
Line 3100N	650E	0.2	16	27
	675E	<0.1	5	17
	700E	0.2	26	114
	725E	0.5	16	69
	750E	0.2	90	93
	800E	0.9	23	80
	825E	0.7	17	23
	850E	0.4	14	27
	875E	0.8	24	69
	900E	0.8	42	78
	925E	0.3	20	46
	950E	<0.1	33	50
	975E	<0.1	18	36
	1000E	0.1	17	100
	1025E	0.1	20	71
1050E	0.1	19	65	
1075E	0.1	22	76	
1100E	0.2	21	99	
Line 1100E	2525N	0.2	26	76
	2550N	0.1	26	60
	2575N	0.6	26	115

*Duncan Sanderson*



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\* GEOCHEMICAL REPORT \*

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4054 Dundas Street  
Vancouver, B.C.  
V5C 1A7

Number: 86163  
Date: June 5, 1986  
Proj.: Arlington

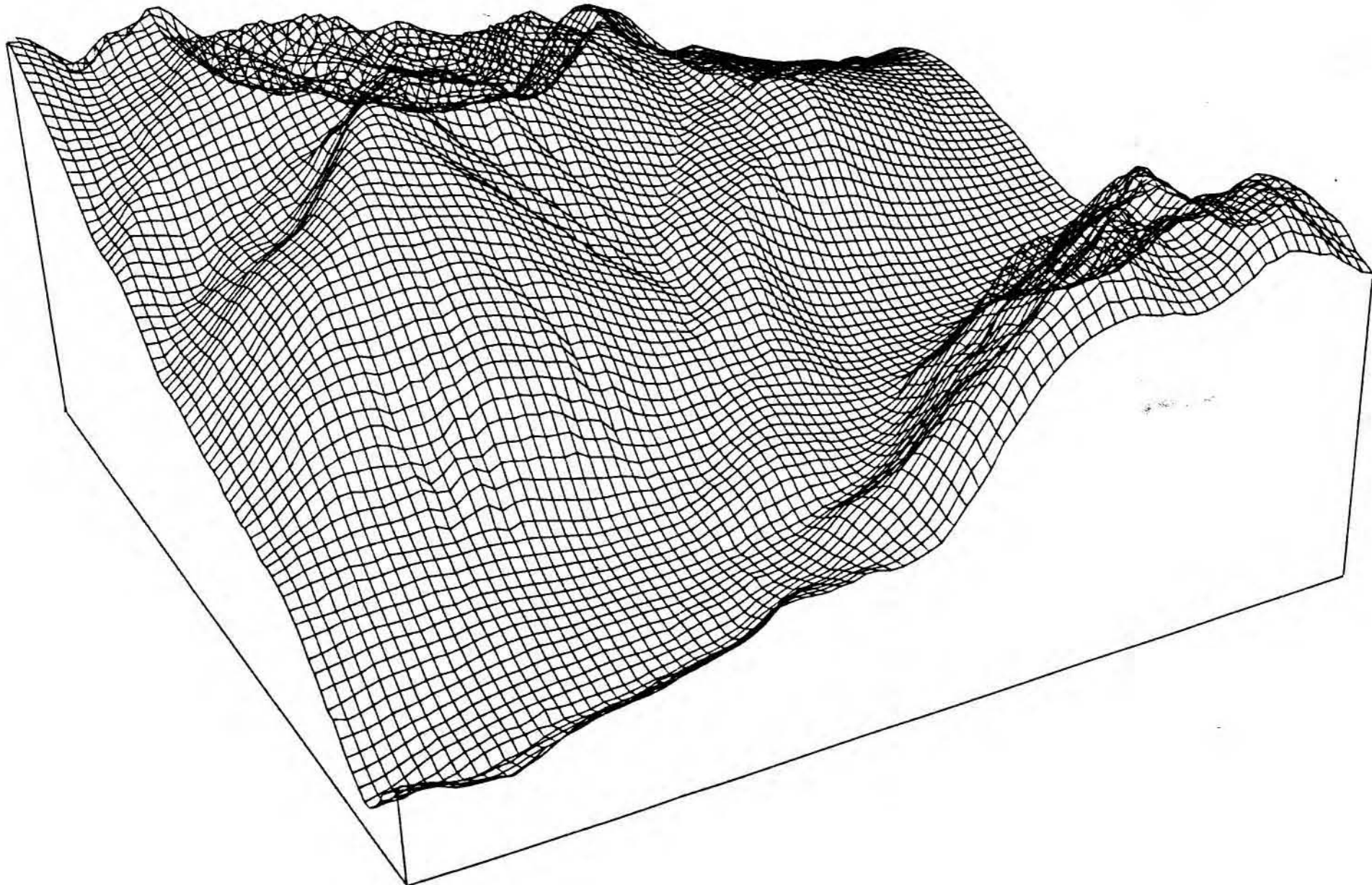
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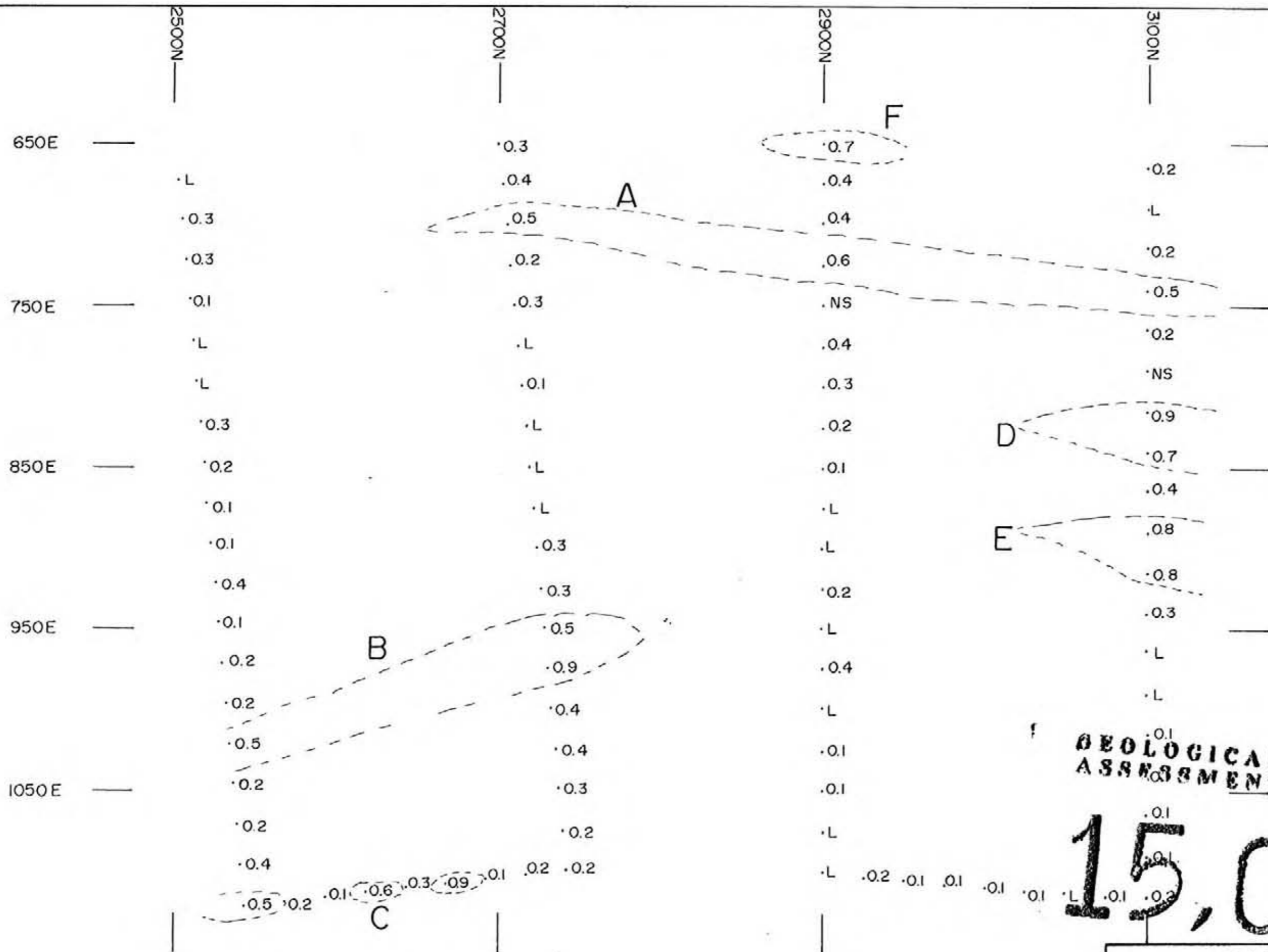
		Ag ppm	Pb ppm	Zn ppm
Line 1100E	2600N	0.3	27	79
	2625N	0.9	58	178
	2650N	0.1	28	185
	2675N	0.2	48	190
Line 1100E	2925N	0.2	21	143
	2950N	0.1	16	99
	2975N	0.1	19	120
	3000N	0.1	22	108
	3025N	0.1	35	112
	3050N	<0.1	21	98
	3075N	0.1	21	85

Procedure: 0.5g of sample is digested in 3ml aqua regia at 90°C for one and one-half hours, bulked to 10ml with distilled water and then presented to AA.

*Duncan Sanders*

Sample Perspective View  
GAM1 & GAM2 from the Southwest





LEGEND

CONTOURED VALUES ARE 0.5 PPM  
LETTERS DESIGNATE ANOMALIES  
(see text)

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,053**

S W RESOURCES

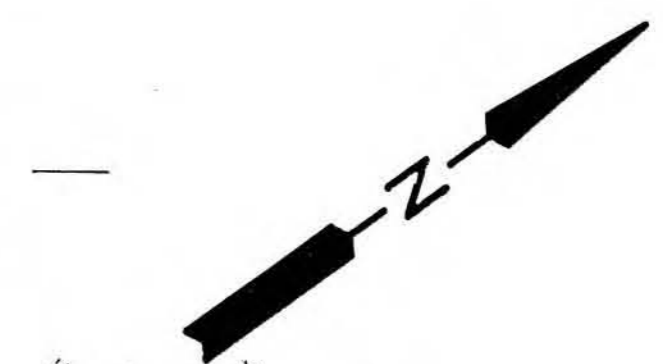
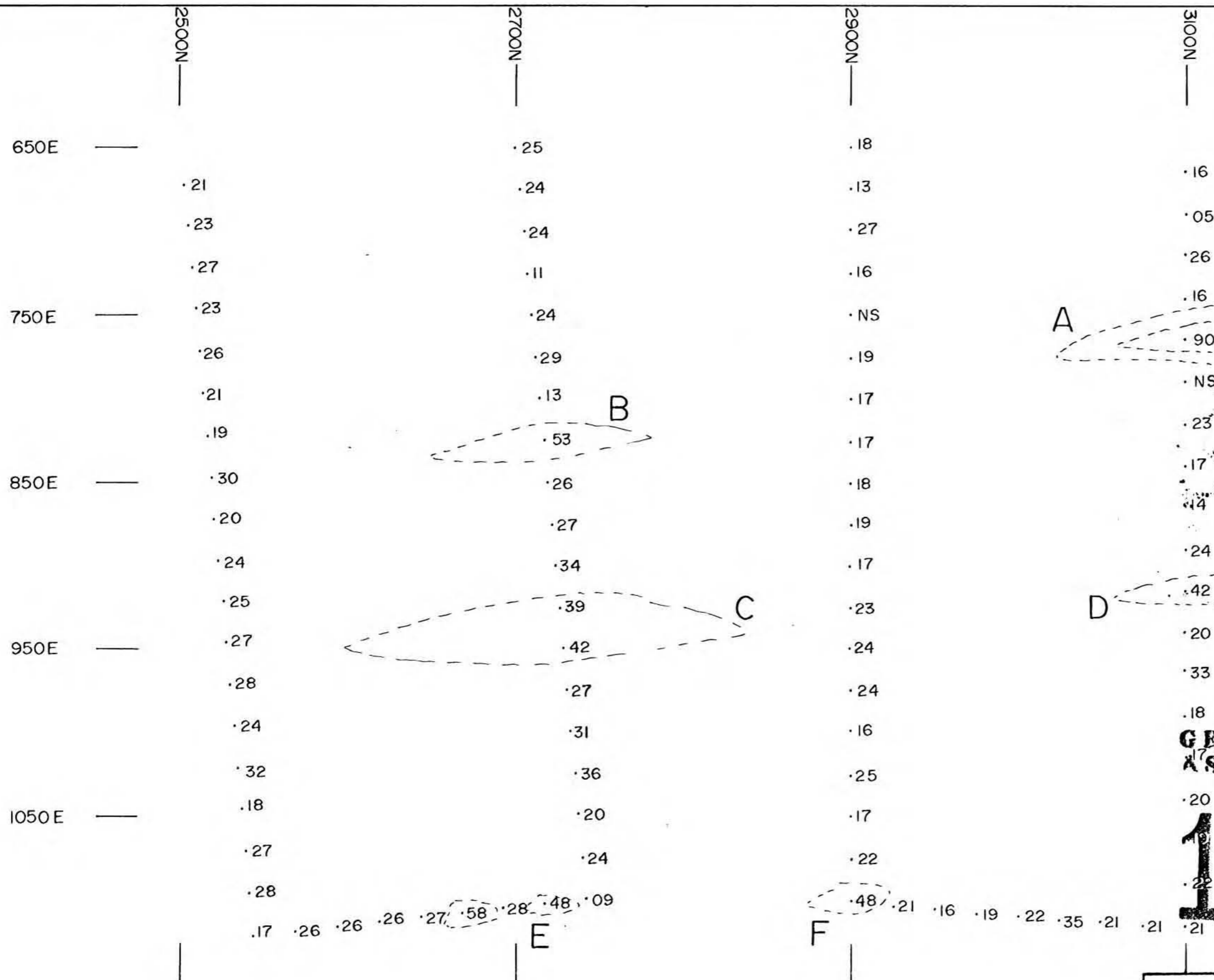
ARLINGTON PROPERTY

GAM 2 SOIL GEOCHEM

PPM Ag

*R.T. Henneberry*

DR. BY: R T HENNEBERRY	SCALE: 1: 2500
DATE: JUNE 05, 1986	APPRD. BY: [ ]
CHK'D. BY:	REV:
DWG. NO.:	FIGURE 3



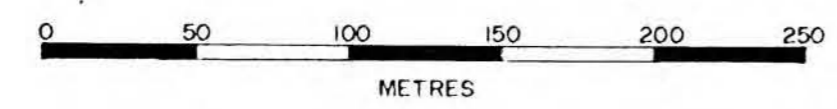
LEGEND

CONTOURED VALUES  
Greater Than 70 PPM  
40 to 70 PPM

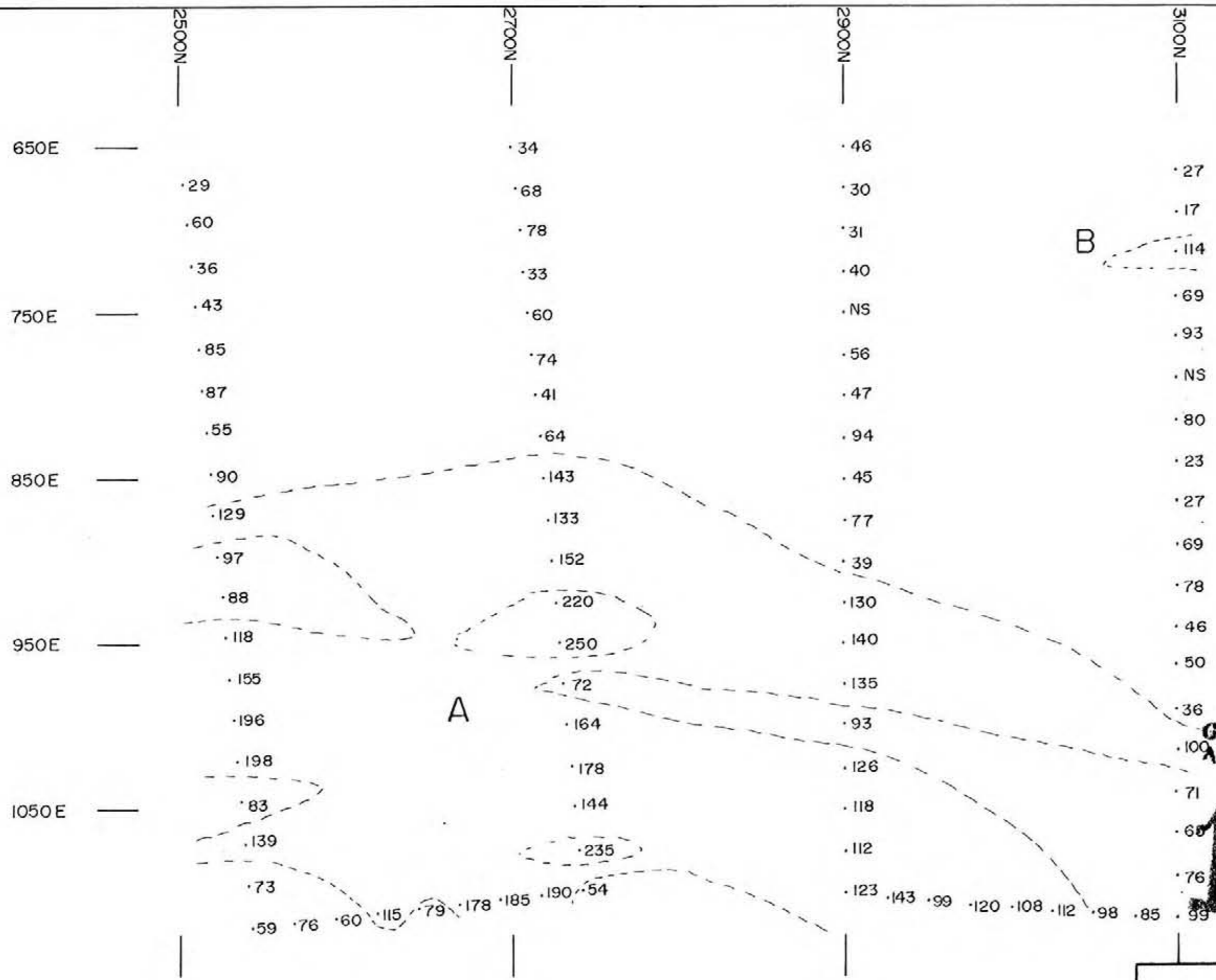
LETTERS DESIGNATE ANOMALIES  
(See Text)

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

15,053



S W RESOURCES	
ARLINGTON PROPERTY	
GAM 2 SOIL GEOCHEM	
PPM - Pb	
DR. BY: RT HENNEBERRY	SCALE: 1: 2500
DATE: JUNE 05, 1986	APPRD. BY: _____
CHK'D BY: _____	REV: _____
DWG NO: _____	FIGURE 4



CONTOURED VALUES  
 Greater Than 200 PPM  
 100 to 200 PPM

LETTERS DESIGNATE ANOMALIES  
 (See Text)

**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

**15,053**

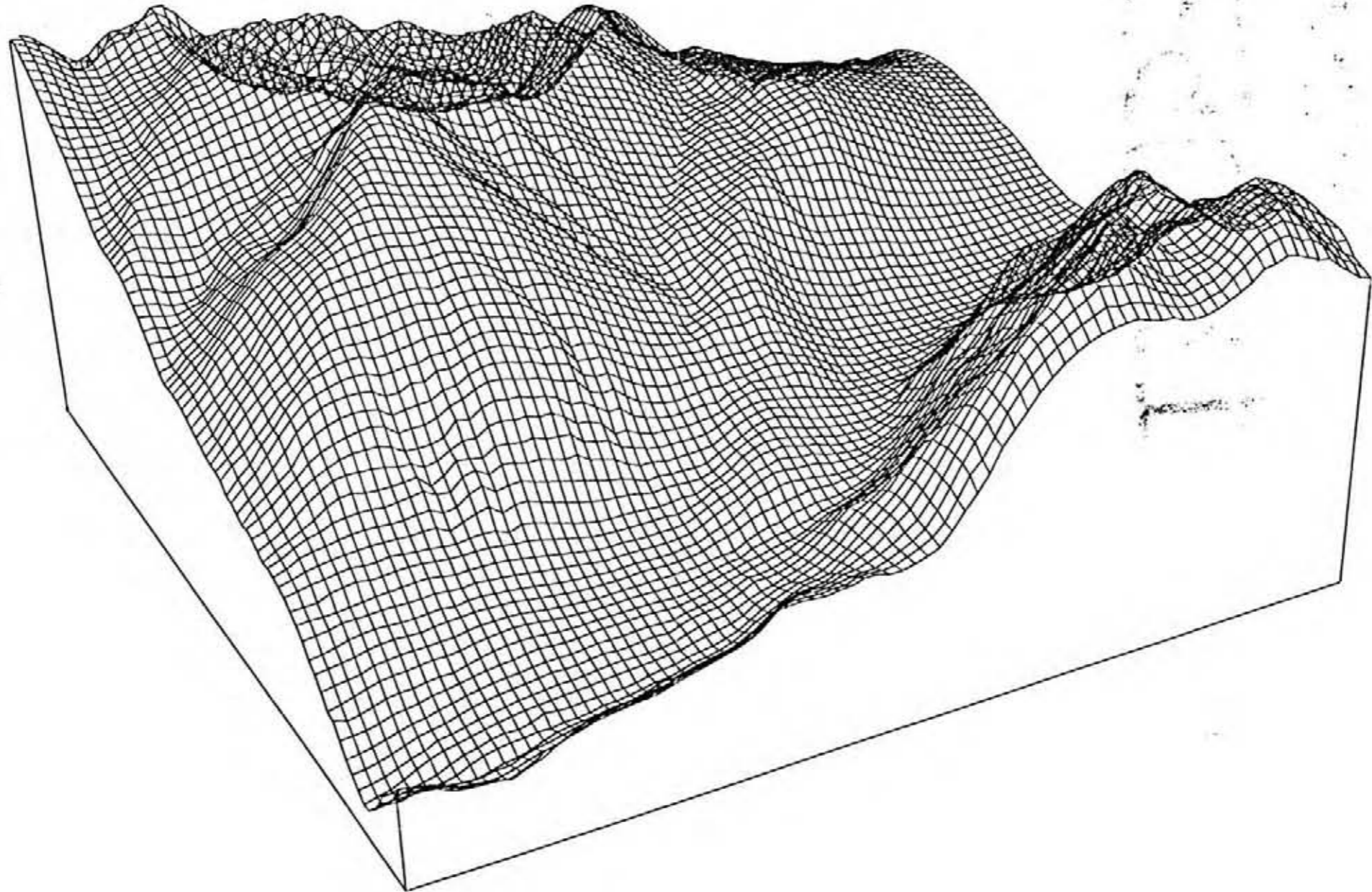


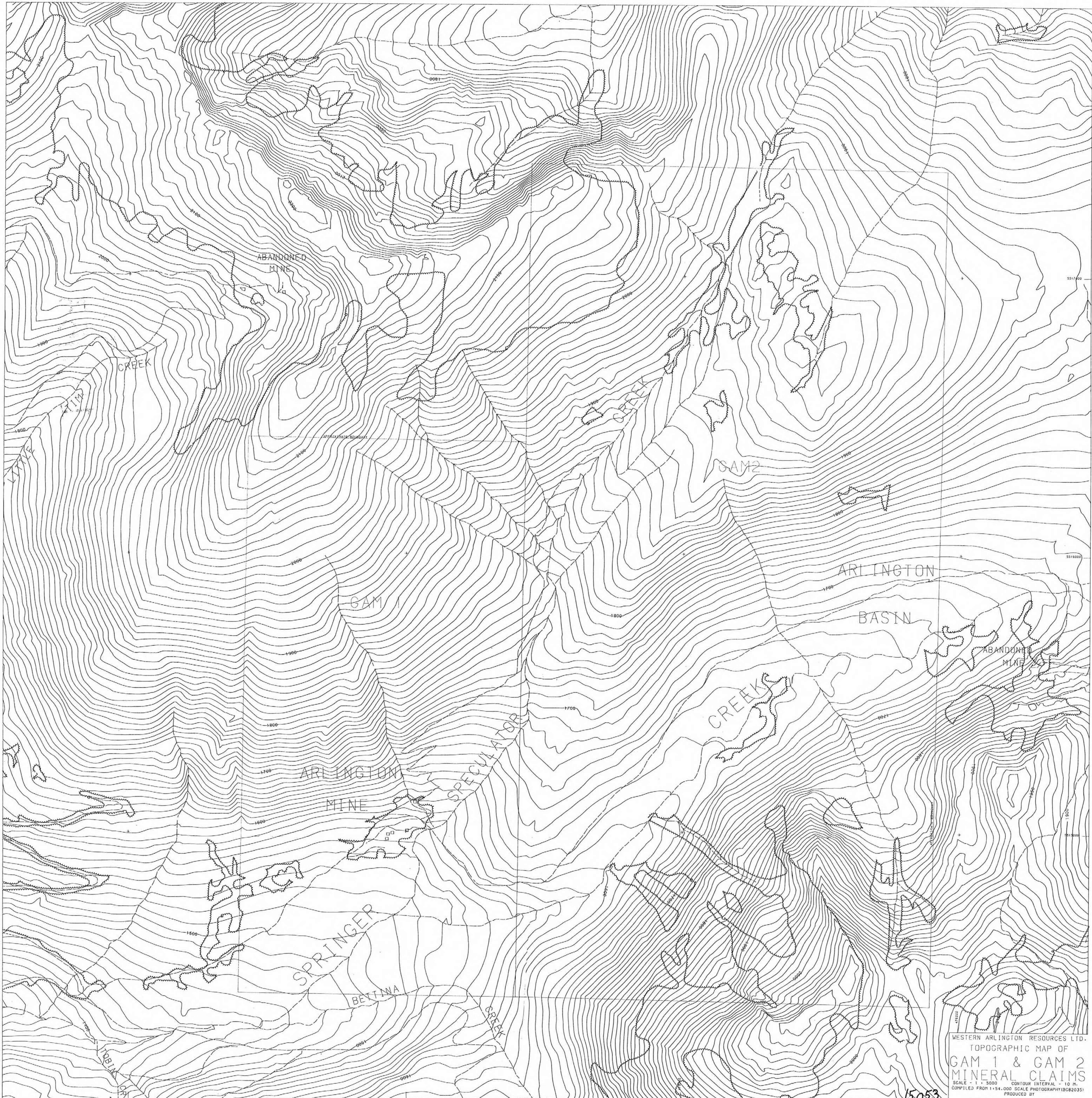
S W RESOURCES	
ARLINGTON PROPERTY	
GAM 2 SOIL GEOCHEM	
PPM Zn	
DR. BY: R T HENNEBERRY	SCALE: 1: 2500
DATE: JUNE 05, 1986	APPRD. BY:
CHK'D. BY:	REV:
DWG. NO.:	FIGURE 5



Sample Perspective View  
GAT1 & GAT2 from the Southwest

15,053





WESTERN ARLINGTON RESOURCES LTD.  
TOPOGRAPHIC MAP OF  
GAM 1 & GAM 2  
MINERAL CLAIMS  
SCALE - 1 : 5000 CONTOUR INTERVAL - 10 M  
COMPILED FROM 1:54,000 SCALE PHOTOGRAPHY (682035)  
PRODUCED BY  
PACIFIC INTERNATIONAL MAPPING CORP.

15,053