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ASSESSMENT REPORT OF THE 1990 DIAMOND DRILL PROGRAM

ON THE GOLDEN CROWN GROUP

40°5' NORTH LATITUDE  
118°35' WEST LONGITUDE  
NTS 82E/2E  
GREENWOOD MINING DIVISION, B.C.

for

ATTWOOD GOLD CORPORATION

100-450 West Georgia Street  
Vancouver, BC  
V6B 1Z3

by Warren Robb Bsc.  
October 29, 1990

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

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PART  
3 of 3

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# ATTWOOD GOLD REPORT

## Golden Crown - 1990 Drill Report

### INTRODUCTION

Between July and August 1990, Attwood Gold Corporation undertook a surface diamond drill program on its Golden Crown Property near Greenwood, B.C. A total of 34 holes totalling 2,112 meters were drilled by Lone Ranger Drilling. The purpose of this drill program was two fold. The first phase was to intersect strike and dip extensions of structures defined by previous drilling, and the second was to test various geochemical and geophysical anomalies defined by the 1990 geochemical and geophysical surveys.

LOCATION & ACCESS

The Golden Crown Property is centered at 49°04' north latitude and 118°34' west longitude. The property lies between the city of Greenwood, B.C., 7.5 kilometers to the west, and the city of Grand Forks 13 kilometers to the south east. (Fig. 1)

The property is located in the Midway Range of the Monoshee Mountains and occupies a valley formed by Mt. Attwood to the south and Knob Hill to the north. The area is characterized by rolling hills, bluffs, and valleys with maximum elevations of 1,579 meters. The property is covered by stands of spruce, pine, larch, hemlock and cedar occurring on north facing slopes and in valleys with grassy meadows at higher elevations and south facing slopes. The topography is gentle with moderate relief of up to 300 meters. The region is semi-arid and is characterized by hot summers and cold winters.

Access to the property is excellent via Highway 3, to the Phoenix Ski Hill Road and then west 15 kilometers to the Hartford Junction. The property is crisscrossed by a series of old railway grades, logging and power line roads. A power and telephone line bisect the property from east to west.



ATTWOOD GOLD CORP.  
 GOLDEN CROWN PROJECT  
 LOCATION MAP  
 NTS 82E/2E

SCALE 1:2,000,000

FIG 1

PROPERTY

The Golden Crown Property consist of 2 Crown Granted, 12 Reverted Crown granted and 46 located mineral claims totalling 81 units. The claims are 100% owned by Attwood Gold Corporation and are registered in the Greenwood Mining Division, and are located on claim map 82E/2E. The claims encompass an area of 2,025 hectares. (Fig. 2) Related claim information below:

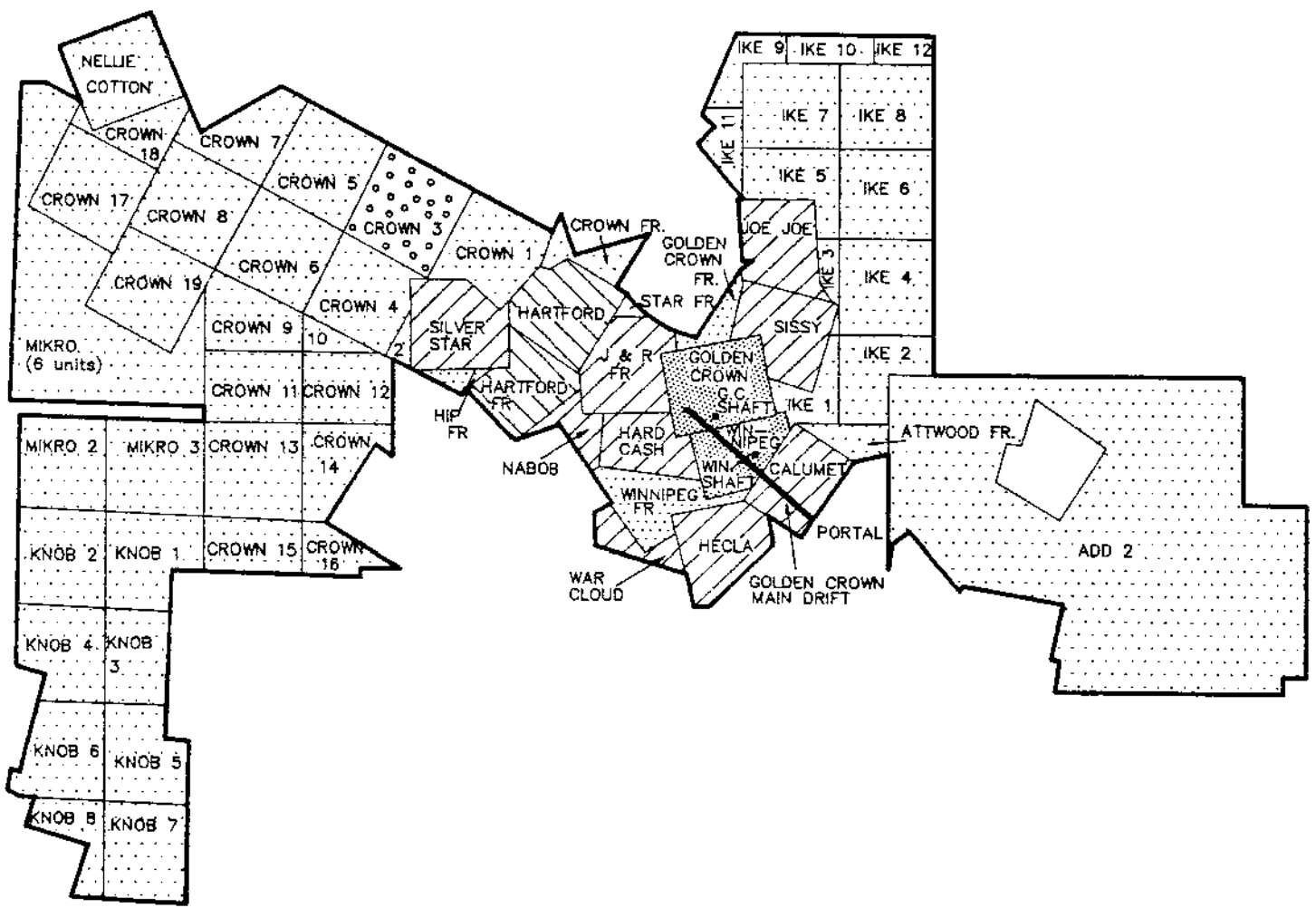
DESCRIPTION OF PROPERTIES

<u>Name</u>	<u>Lot No.</u>	<u>Record No.</u>	<u>Expiry Date</u>
<u>Crown Granted Mineral Claims</u>			
Golden Crown	600	N/A	N/A
Winnipeg	599	N/A	N/A
<u>Reverted Crown Granted Mineral Claims and Fractions</u>			
Hecla	859	1772	December 12, 1994
War Cloud Fr.	1316	1773	December 12, 1994
Hard Cash	1062	1774	December 12, 1994
Nabob Fr.	1063	1774	December 12, 1994
Joe Joe	7595	1775	December 12, 1994
Sissy	1068	1776	December 12, 1994
Calumet	1314	1777	December 12, 1994
J & R	(L.1059)	1865	November 8, 1991
Silver Star	(L.1550)	1926	December 21, 1991
Hartford	(L.1057)	1927	December 21, 1990
Hartford Fr.	(L.1061)	1928	December 21, 1990
Nellie Cotton	(L.1460)	2173	May 13, 1993
<u>Located Mineral Claims</u>			
Win Fr.		1784	September 24, 1994
Attwood No. 1 Fraction		4243	February 25, 1996
Add No. 2		4615	June 23, 1995
Ike 1		1972	January 23, 1994
Ike 2		1973	January 23, 1994
Ike 3		1974	January 23, 1994
Ike 4		1975	January 23, 1994

Ike 5	1976	January 23, 1994
Ike 6	1977	January 23, 1994
Ike 7	1978	January 23, 1994
Ike 8	1979	January 23, 1994
Ike 9	2023	February 6, 1994
Ike 10	2024	February 6, 1994
Ike 11	2025	February 6, 1994
Ike 12	2026	February 6, 1994

Mineral Claims

Crown 1	1986	January 28, 1993
Crown 2	1987	January 28, 1993
Crown 3	1988	January 28, 1993
Crown 4	1989	January 28, 1993
Crown 5	1990	January 28, 1993
Crown 6	1991	January 28, 1993
Crown 7	1992	January 28, 1993
Crown 8	1993	January 28, 1993
Crown 9	2015	February 6, 1993
Crown 10	2016	February 6, 1993
Crown 11	2017	February 6, 1993
Crown 12	2018	February 6, 1993
Crown 13	2019	February 6, 1993
Crown 14	2020	February 6, 1993
Crown 15	2021	February 6, 1993
Crown 16	2022	February 6, 1993
Crown 17	2202	May 28, 1993
Crown 18	2203	May 28, 1993
Crown 19	2204	May 28, 1993
Hip Fr.	2199	May 28, 1993
Golden Crown Fr.	2200	May 28, 1993
Star Fr.	2201	May 28, 1993
Crown Fr.	2027	February 6, 1993
Mikro	4426	November 1, 1990
Knob 1	4435	November 14, 1990
Knob 2	4436	November 14, 1990
Knob 3	4437	November 14, 1990
Knob 4	4438	November 14, 1990
Knob 5	4439	November 14, 1990
Knob 6	4440	November 14, 1990
Knob 7	4441	November 14, 1990
Knob 8	4442	November 14, 1990
Mikro 2	4536	March 12, 1993
Mikro 3	4537	March 12, 1993



**LEGEND**

- CROWN GRANTS  
Surface & mineral rights
- REVERTED CROWN GRANTS  
Surface by others
- REVERTED CROWN GRANTS  
Surface use
- 2 POST & 4 POST  
Mineral claims
- Reported overstaking  
of claims owned by others



<b>ATTWOOD GOLD CORP.</b>				
VANCOUVER, B.C.				
<b>GOLDEN CROWN PROPERTY</b>				
GREENWOOD M.D.				
<b>CLAIM MAP</b>				
SCALE: AS SHOWN	DATE: Aug. '90	N.T.S. 82E/2E	DRAWN BY: GEO-COMP	FIGURE: 2



PREVIOUS WORK

Work on the property dates back to 1891 when the Winnipeg and Golden Crown Claims were first staked. Between then and 1905, 2,438 meters of shafts, raises and drifts had taken place. Ore shipments from the Winnipeg and Golden Crown, from 1901 to 1902 and 1910 to 1912, were reported at:

	<u>Tonnes</u>	<u>Gold (oz)</u>	<u>Silver (oz)</u>	<u>Copper (lbs)</u>
Golden Crown	2,742	1,234	2,248	83,890
Winnipeg	58,772	11,675	36,550	190,617

The property was dormant until 1965 when Sabina Mines and Scurry Rainbow conducted geophysics and a 1,695 foot drill program.

In 1976, 317 meters of diamond drilling in 5 holes was conducted by the Golden Crown Syndicate.

In 1979 Boundary Exploration drilled 4 holes totalling 329 meters.

In 1980 the property was optioned to Munde Mines Limited. Dolmage Campbell, as contractor for Munde, carried out geological surface mapping, sampling of old workings, dewatering, and mapping of the Golden Crown 30 meter level drift. In addition, 16 surface diamond drill holes were drilled.

In 1983 Grand Forks Mines Ltd. optioned the property to earn a 50% interest. Since then, the property has been under continuous exploration. From 1983 to 1987, 2,234 meters of drilling in 49 holes, took place.

In 1986 Noranda Ltd. carried out an exploration and drill program on the Crown Group of claims.

In 1987, 2,456 feet of drifting and 936 feet of diamond drilling was carried out.

From 1988 to 1989, an additional 1,050 feet of tunnelling, 8,489 feet of underground drilling, and 4,262 feet of surface drilling took place.

REGIONAL GEOLOGY

The Phoenix Map Area consists of metamorphic, sedimentary, intrusive, and extrusive igneous rocks that range in age from late Proterozoic to Eocene. (Fig. 3)

The rocks have been divided into seven assemblages (Little GCS paper 79-29). The assemblages are separated by intervals of deformation and/or regional metamorphism. Three assemblages dominate the Phoenix Area. The cherts and Limestones of the Attwood Formation, greenstones of the Knob Hill formation, and sharpstone conglomerates of the Brooklyn Formation. These formations have been intruded by cultramafics and diorites of Triassic age.

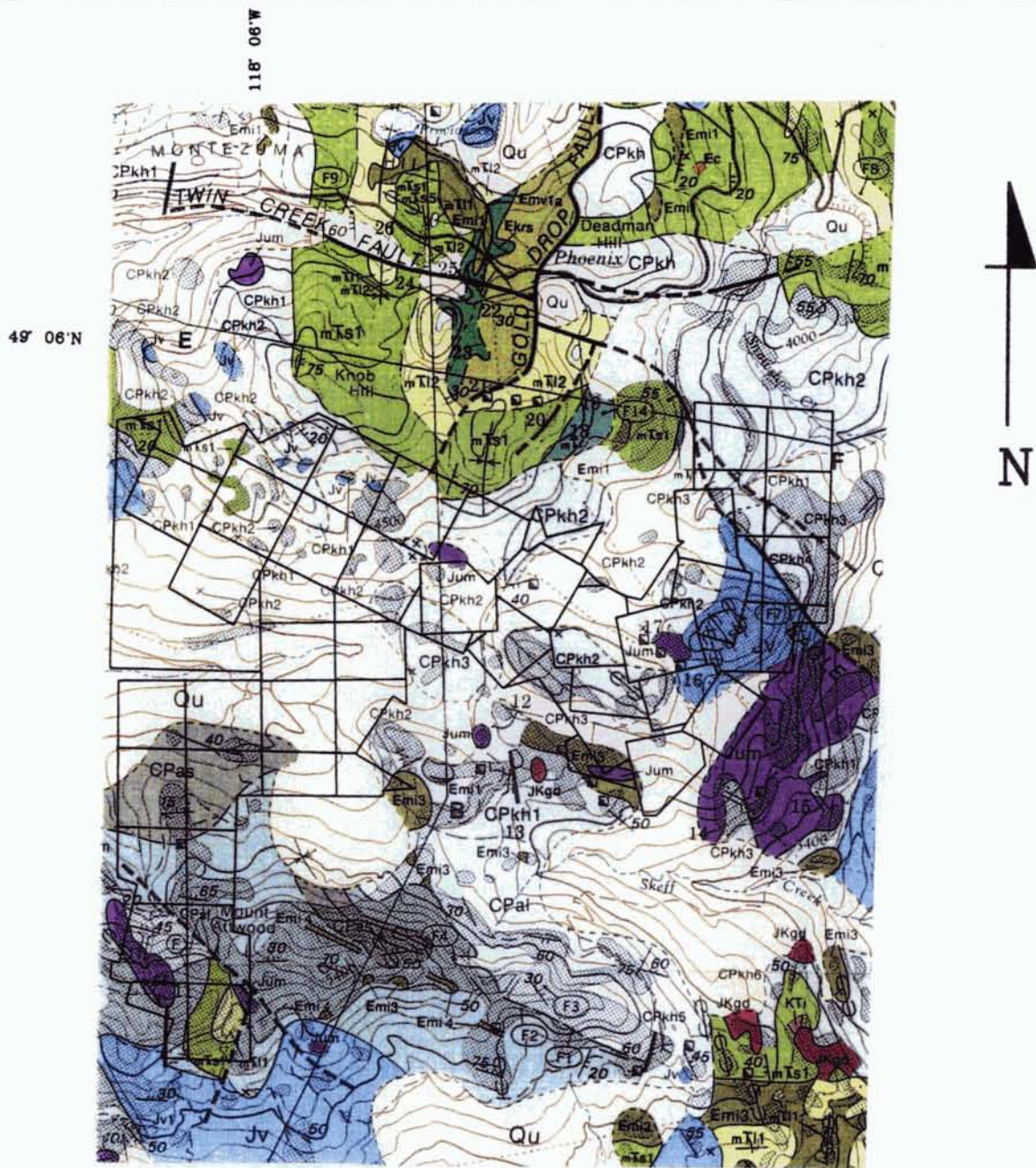
Structurally, the Eagle Mountain and Twin Creek faults trend northwesterly and are crosscut by the Gold drop fault trending northeasterly.

Regionally, the rocks have been metamorphosed to greenschist facies. Locally, some rocks have been metamorphosed to amphibolite grade due to contact metamorphism.

# LEGEND FOR FIGURE 3

CENOZOIC	QUATERNARY	Qu	Unconsolidated sediments, silt, sand, gravel and silt
	TERTIARY		
	Eocene		
	MIDDLE EOCENE	Em	
	Em	KLONDIKE MOUNTAIN FORMATION: heterogeneous non-volcanic epiclastic breccia	
	Em	CORVELL INTRUSIONS: syenite, quartz monzonite, minor granite and gabbro	
	Em	MARRON FORMATION INTRUSIVE ROCKS: Em4, undivided dykes, largely intrusive equivalents of divisions Emv1, 2 and 3 but some of unknown affinity; Em3, diorite and diorite porphyry (equivalent to lavas of division Emv1); Em2, syenite and diorite (equivalent to lavas of division Emv2); Em1, alkaline syenite, largely rhomb porphyry (equivalent to lavas of division Emv)	
	Emv	LAYERED ROCKS (largely extrusive) Division Emv3: Emv3a, andesite; Emv3b, tuff Division Emv2: Emv2a, andesite and trachyandesite; Emv2b, tuff Division Emv1: Emv1a, sodic trachyte in part undersaturated and minor phonolite; Emv1b related rocks characterized by flow breccias and intercalated pyroclastics; Emv1c, related (?) trachyte	
	Emr	KETTLE RIVER FORMATION: felspathic and siliceous sandstone and siltstone, shale and conglomerate, minor acidic and intermediate pyroclastic and flow rocks	
	CRETACEOUS OR TERTIARY	Kt	Quartz-felspar and quartz porphyry; minor porphyritic quartz diorite; Kt1, felsite
	CRETACEOUS (?)	Kv	VALHALLA INTRUSIONS: granite and quartz monzonite, mainly porphyritic some pegmatitic; Kvq1, mainly pegmatite
	JURASSIC AND/OR CRETACEOUS	Jk	NELSON INTRUSIONS: granodiorite, minor quartz diorite and diorite
	JURASSIC (?)	Jm	Peridotite, pyroxenite, dunite, serpentinite, Jm1, pyroxenite
	MESOZOIC	Js	Siltstone, minor phyllite, sandstone and conglomerate
		Jph	Black phyllite
Jv		Flow breccia and massive greenstone; Jv1, basal (?) conglomerate with limestone clasts; Jv2, flow breccia, locally with some interbedded limestone	
UPPER TRIASSIC		uTs	White limestone, black limestone, grey, black, and buff shale, limestone breccia, purple or maroon agglomerate, commonly with limestone clasts; uTs1, mainly limestone; uTs2, mainly agglomerate; uTs3, green cherty argillite
MIDDLE AND (?) LOWER TRIASSIC		mT	BROOKLYN FORMATION (mT1-mT2) mT1, limestone, mainly with some chert grains; siltstone, minor chert, sharpstone conglomerate, siltstone, and shale; mT2, mainly siltstone
mTs		mTs1, sharpstone conglomerate with mainly chert clasts, local chert sandstone and minor black argillite; mTs2, mainly buff chert sandstone with beds of sharpstone conglomerate and chert grit; mTs3, green argillite; mTs4, black argillite; mTs5, limestone conglomerate	
RAWHIDE FORMATION: black siltstone, minor black argillite and chert sharpstone conglomerate		mR	
CARBONIFEROUS OR PERMIAN		CPk	Knob Hill Group: massive chert, greenstone, and amphibolite; minor limestone or marble; locally tan or black argillite, fine-grained quartzite, conglomerate; CPk1, mainly chert; CPk2, mainly greenstone; CPk3, mainly amphibolite; CPk4, limestone or marble; CPk5, quartzite; CPk6, tan to green shale and meta-siltstone
CPa		Attwood Group (CPa1-CPa2) Limestone, some with thin chert interbeds	
CPs		Black to grey bedded argillite; locally some grey chert and cherty siltstone; minor chert sharpstone conglomerate	
PALEOZOIC	PRE-CARBONIFEROUS	Pm	Pm1, quartz-chlorite schist, quartz-biotite-muscovite schist, greenstone, bedded chert with argillaceous partings; minor limestone Pm2, quartz-biotite schist, hornfels, amphibolite, minor marble May not be equivalent to unit Pm1. Both Pm1 and Pm2 probably include some metamorphosed unit CPk
	Pp	Amphibolite, minor greenstone and bedded chert	
	PROTEROZOIC (?)		





ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
REGIONAL GEOLOGY  
NTS 82E/2E

SCALE 1:50,000

FIG 3

PROPERTY GEOLOGY

The Golden Crown Property is covered by Permo-Carboniferous Knob Hill greenstone. The greenstone is intruded by the Triassic Old diorite which outcrops from the east of the Winnipeg shaft to adit. The diorite in turn is intruded by a sill like serpentinite body. (Fig. 4 in Appendix II)

The greenstone on the property ranges from andesite to basalt in composition, and occurs as flows and tuffs. The rocks are locally metamorphosed to greenschist facies with only a weak fabric being developed. All the rocks have been weakly propylitically altered with chlorite being the predominate alteration product.

Mineralization occurs in veins. Three types of veins have been identified:

1. Quartz veins with disseminated pyrrhotite, pyrite, and chalcopryrite.
2. Massive sulfide veins of pyrrhotite with lesser amounts of pyrite, chalcopryrite, and quartz.
3. Quartz calcite veins containing massive pyrite and chalcopryrite.

The first type of veins occurs throughout the property but contains no significant gold values. The second type of vein generally occurs east of the Golden Crown shaft. This type of vein carries the best gold, silver, and copper values. No correlation was found to exist between the copper and gold values.

The third type of vein occurs west of the Golden Crown shaft. These veins have returned high copper values but generally low gold values. All the veins trend northwesterly and dip steeply north and south.

No visible structural features occur on surface, although geophysical interpretation suggests two parallel faults trending north bounding the area between the Winnipeg and Golden Crown Shaft. It should be noted that the best continuous gold values occur between these two interpreted faults and that the west of the faults, the veins, are of the quartz-calcite variety. No marker horizons have been identified so no offset could be measured.

### 1990 DRILL PROGRAM

The 1990 drill program was developed to meet two criteria. The first was to test strike and dip extensions of structures defined by previous diamond drill programs, and the second was to test exploration targets defined by the 1990 geochemical and geophysical surveys.

The program consisted of 2,112 meters of drilling in 34 NQ sized holes. Drill holes GCS 90-1 to GCS 90-15, GCS 90-18, GCS 90-19, GCS 90-28, GCS 90-30 were drilled to test previous data. Drill holes GCS 90-16, GCS 90-17, GCS 90-20 to GCS 90-28, GCS 90-31 to GCS 90-34 were drilled to test exploration targets (Fig. 5). A description of the target and drill hole follows, detailed logs and cross sections appear in the Appendix's I and II.

#### DDH GCS 90-1

Drill hole GCS 90-1 was collared at 4993.79N, 5379.45E and was drilled on a bearing of 082° at a dip of -58°. The hole was drilled to investigate the vein which outcrops near the portal and was intersected by drill holes GCS 88-3, GCS 88-4, and GCS 88-5.

The geology of the hole consists of greenstone underlain by serpentinite. The contact between these units is faulted. Three veins were intersected by this hole. The first, a quartz vein encountered from 9.35 to 9.45 meters carried no visible mineralization and returned assays of .002 oz Au/ton, 0.02 oz Ag/ton, 0.01% Cu. The second vein was a massive pyrrhotite vein that contained patches of pyrite. This vein was encountered from 38.42 to 38.52 meters.



The vein returned assays of 1.143 oz Au/ton, 0.24 oz Ag/ton, 0.11% Cu. The third vein was a massive pyrrhotite vein with patches of pyrite. This vein was encountered from 45.73 to 46.95 meters and returned assays of .166 oz Au/ton, 0.42 oz Ag/ton, 0.22% Cu.

DDH GCS 90-2

Drill hole GCS 90-2 was collared at 5047.71N, 5342.45E and was drilled on a bearing of 023° at a dip of -45°. The hole was drilled to test the extent of veins intersected in drill holes GCS 89-11, GCS 89-12, and GCS 89-13.

The hole was collared in greenstone and continued through greenstone for 31.27 meters, at this point dacite was intersected and cored up to 35.06 meters where the hole was stopped. Four veins were intersected in this hole.

The first vein was encountered from 29.67 to 29.97 meters and was composed of quartz (40%), massive pyrrhotite (50%), and pyrite (10%). The vein returned assays of .010 oz Au/ton, 0.02 oz Ag/ton, 0.14% Cu. The second vein was intersected from 31.17 to 31.27 meters and was composed of quartz (60%), banded pyrrhotite (30%), and pyrite (5%). The vein returned assays of 0.005 oz Au/ton, 0.01 oz Ag/ton, 0.03% Cu. The third vein encountered from 32.22 to 32.24 meters and was composed of massive pyrrhotite (80%), pyrite (10%), and returned assays of 2.441 oz Au/ton, 0.31 oz Ag/ton, 0.05% Cu. The fourth vein was encountered between 32.78 to 33.18 meters and was composed of massive pyrrhotite (80%), pyrite (10%), chalcopyrite (less than 1%). The vein returned assays of 0.030 oz Au/ton, 0.06 oz Ag/ton, 0.14% Cu. The zone between 32.24 to 32.78 meters was sampled to see if any gold had leaked into the host rock. This zone returned assays of 0.006 oz Au/ton, 0.03 oz Ag/ton, 0.07% Cu.

DDH GCS 90-3

Drill hole GCS 90-3 was collared at 5129.42N, 4981.03E and was drilled on a bearing of 023° at a dip of -45°. The hole was drilled to test extensions of the King and George Veins.

The hole was collared in diorite and continued through a succession of serpentinites and diorite. The drill did not intersect either the King or the George Vein. Several faults were encountered. The fault from 44.55 to 44.72 meters appears to be an extension of the King Vein. No visible mineralization was noted and no samples were taken from the drill core.

DDH GCS 90-4

Drill hole GCS 90-4 was collared at 5146.67N, 4943.75E and was drilled on a bearing of 023° at a dip of -45°. The hole was drilled to test the George and King Veins.

The hole was collared in greenstone and continued for 45.72 meters where it was stopped. Three veins were encountered. The first vein was intersected from 12.81 to 12.83 meters and was composed of primarily calcite. No visible mineralization was noted. The second vein was encountered from 26.31 to 27.61 meters. This vein contained massive pyrrhotite (60%), pyrite (5%), and chalcopyrite (10%). The vein returned assays of 1.604 oz Au/ton, 1.66 oz Ag/ton, 2.13% Cu. The third vein was encountered from 30.28 to 30.58 meters and contained pervasive pyrrhotite (60%), pyrite (5%), and chalcopyrite (10%). The vein returned assays of 0.141 oz Au/ton, 0.64 oz Ag/ton, 1.12% Cu.

DDH GCS 90-5

Drill hole GCS 90-5 was collared at 5126.84N, 4944.75E and was drilled on a bearing of 023° at a dip of -45°. The hole was drilled to test down dip extensions of the King and George Veins.

The hole was collared in greenstone and encountered serpentinite at 64.02 meters and was stopped in serpentinite at 70 meters. One vein was intersected from 53.77 to 54.33 meters. The vein was composed of massive pyrrhotite (60%), pyrite (15%), and chalcopyrite (5%). The vein returned assays of 1.037 oz Au/ton, 1.26 oz Ag/ton, 2.12% Cu. This vein, when plotted in sections, correlates with the vein encountered in diamond drill hole GCS 90-4 at an intercept of 26.31 to 27.61 meters.

DDH GCS 90-6

Drill hole GCS 90-6 was collared at 5144.13N, 4911.75E and was drilled on a bearing of 023° at a dip of -80°. This hole was drilled to test the down dip extension of the King Vein.

The hole was collared in greenstone and intersected serpentinite at 65.77 meters. The hole was stopped at 70.12 meters in serpentinite. One vein was intersected from 68.69 to 68.96 meters. The vein contained banded pyrrhotite (40%), pyrite (10%) and returned assays of .101 oz Au/ton, 0.06 oz Ag/ton, 0.12% Cu. The sample was taken in hanging wall from 66.79 to 68.29 meters, and consisted of highly sheared serpentinite that contained fault gouge with 10% disseminated pyrite. The sample returned assays of .122 oz Au/ton, 0.10 oz Ag/ton, 0.15% Cu.

DDH GCS 90-7

Drill hole GCS 90-7 was collared at 5145.40N, 4911.82E and was drilled on a bearing of 023° at a dip of -45°. The hole was drilled to test the up dip extension of the King Vein.

The hole was collared in greenstone and intersected diorite at 38.11 meters. It continued through the diorite and intersected greenstone at 53.6 meters. The hole was stopped at 60.0 meters in greenstone. Three veins were encountered in this hole. The first vein was intersected from 28.96 to 29.36 meters and was composed of massive pyrrhotite (35%), pyrite (10%), and chalcopyrite (less than 1%). The vein returned assays of .042 oz Au/ton, 0.19 oz Ag/ton, 0.32% Cu. The second vein was encountered from 50.60 to 50.80 meters. This vein was composed of massive banded pyrrhotite (45%) and pyrite (10%). The vein returned assays of .084 oz Au/ton, 0.23 oz Ag/ton, 0.64% Cu. The third vein was encountered from 55.80 to 56.00 meters. This vein was composed of banded pyrrhotite (40%), pyrite (10%), and chalcopyrite (less than 1%). The vein returned assays of .059 oz Au/ton, 0.37 oz Ag/ton, .76% Cu.

DDH GCS 90-8

Drill hole GCS 90-8 was collared at 5124.89N, 4859.05E and drilled on a bearing of 023° at a dip of -45°. The hole was drilled to test the MacArthur Vein.

The hole was collared in greenstone and continued for 54.86 meters in greenstone. Two veins were intersected.

The first vein was encountered from 14.02 to 14.28 meters and was composed of 50% calcite. It also contained disseminated pyrrhotite (5%) and pyrite (5%). Limonite and ankerite were present in trace amounts. The vein returned assays of .002 oz Au/ton, 0.01 oz Ag/ton, .04% Cu. The second vein was encountered from 27.48 to 27.90 meters and was composed of massive pyrrhotite (60%), pyrite (10%), chalcopyrite (less than 1%), and quartz (29%). The vein returned assays of .121 oz Au/ton, 0.20 oz Ag/ton, 0.47 Cu. The second vein encountered is the MacArthur Vein.

DDH GCS 90-9

Drill hole GCS 90-9 was collared at 5118.21N, 4814.80E and was drilled on a bearing of 023° at a dip of -87°. The hole was drilled to test the down dip extension of the MacArthur Vein.

The hole was collared in greenstone. It encountered diorite at 37.19 meters. Continued in diorite until 64.63 meters where greenstone was cored up to 84.15 meters where the hole was stopped. One vein was encountered from 58.23 to 58.50 meters. The vein was composed of massive pyrrhotite (85%), pyrite (10%), and chalcopyrite (5%). The vein returned assays of 2.495 oz Au/ton, 0.19 oz Ag/ton, 0.29% Cu. An extensive shear zone had developed from 55.33 to 64.63 meters in the diorite. Talc alteration was extensive, no visible mineralization was noted and no samples were taken for assay.

DDH GCS 90-10

Drill hole GCS 90-10 was collared at 5118.78N, 4814.72E and drilled on a bearing of 023° at a dip of -45. The hole was drilled to test the up dip extension of the MacArthur Vein.

The hole was collared in greestone and intersected diorite from 73.47 to 79.55 meters at which point the hole was stopped. Three veins were encountered in the hole. The first vein occurs between 8.08 and 8.84 meters. This vein is composed of quartz (95%) and with pyrite (less than 1%). It was also stained with limonite and malachite. The vein returned assays of 0.13 oz Au/ton, 0.01 oz Ag/ton, 0.08% Cu. The second vein was encountered between 11.98 to 12.26 meters and was composed of tightly spaced stringers of pyrrhotite and pyrite.

This vein returned assays of .001 oz Au/ton, 0.01 oz Ag/ton, 0.04% Cu. The third vein was encountered from 17.48 to 17.52 meters. This vein was a banded massive sulfide vein containing pyrrhotite (20%) and pyrite (5%). The vein returned assays of .004 oz Au/ton, 0.01 Ag/ton, 0.07% Cu.

#### DDH GCS 90-11

Drill hole GCS 90-11 was collared at 5139.18N, 4775.19E and was drilled on a bearing of 023° at a dip of -45°. The hole was drilled to test the up dip extension of the MacArthur Vein.

The hole was collared in greenstone and continued for 66.77 meters in greenstone where the hole broke into the old Golden Crown workings. The hole was stopped at this point. No veins were encountered in this hole and no samples were taken or assayed.

#### DDH GCS 90-12

Drill hole GCS 90-12 was collared 5128.82N, 4760.71E and was drilled on a bearing of 027° at a dip of -45°. The hole was drilled to test the MacArthur Vein.

The hole was collared in greenstone and continued for 71.03 meters in greenstone. The greenstone was generally weakly fractured up to 63.4 meters. From this point to the end of the hole, the rock was moderately sheared. Two zones were sampled. The first zone from 27.7 to 28.0 meters contained quartz stringers with limonite, and exhibited chlorite alteration. The zone returned assays of .003 oz Au/ton, 0.02 oz Ag/ton, 0.03 Cu. The second zone encountered was a bleached zone containing disseminated pyrite (2%) and pyrrhotite (2%). This zone returned assays of .002 oz Au/ton, 0.01 oz Ag/ton, 0.02 Cu.

DDH GCS 90-13

Drill hole GCS 90-13 was collared at 5127.41N, 4760.66E and drilled on a bearing of 023° at a dip of -90°. The hole was drilled to test the down dip extension of the MacArthur Vein.

The hole was collared in greenstone and continued through greenstone up to 79.66 meters where the hole was stopped. A quartz breccia was intersected from 9.60 to 10.07 meters. It contained blebs of pyrite (3%), pyrrhotite (1%), and limonite stain. It returned assays of .001 oz Au/ton, 0.01 oz Ag/ton, 0.03% Cu. A quartz vein was encountered from 18.42 to 18.78 meters. It contained pyrite (30%) and returned assays of .051 oz Au/ton, 0.13 oz Ag/ton, 0.01% Cu. From 51.4 to 79.66 meters, several bleached zones containing blebs of pyrite and pyrrhotite were encountered. No significant gold, silver or copper assays were returned from these zones.

DDH GCS 90-14

Drill hole GCS 90-14 was collared at 5118.04N, 4776.09E and was drilled on a bearing of 023° at a dip of -78°. The hole was drilled to test the down dip extension of the MacArthur Vein.

The hole was collared in greenstone and continued through greenstone to 84.60 meters where it was stopped. The hole intersected one quartz vein from 18.75 to 19.00 meters. No visible mineralization was noted and no sample was taken. A total of 15 other zones were sampled and assayed. No significant gold, silver or copper values were returned.

DDH GCS 90-15

Drill hole GCS 90-15 was collared at 5120.40N, 4796.14E and drilled on a bearing of 023° at a dip of -50°. The hole was drilled to test the up dip extension of the MacArthur Vein.

The hole was collared in greenstone and continued through greenstone up to 72.86 meters at which point the hole was stopped. No veins were encountered in this hole. A brecciated zone was encountered from 56.49 to 57.90 meters but returned insignificant assays of gold, silver and copper. Malachite was noted in an oxidized zone from 11.57 to 12.75 meters but, returned insignificant assays of gold, silver and copper.

DDH GCS 90-16

Drill hole GCS 90-16 was collared at 5407.64N, 4591.58E and drilled on a bearing of 045° at a dip of -45. The hole was drilled to test coincidental gold and copper soil anomalies.



The hole was collared in greenstone and was drilled 65.53 meters where it was stopped in greenstone. Four veins were intersected by the drill hole. The first vein was encountered from 9.45 to 9.85 meters. The vein was composed of quartz (90%) and wall rock (10%). No mineralization was noted. Assays returned values of .001 oz Au/ton, 0.06 oz Ag/ton, 0.01% Cu. The second vein encountered was also a quartz vein. It was intersected from 11.40 to 11.88 meters and contained massive pyrite (5%) with blebs of pyrrhotite (1%). The vein returned assays of .001 oz Au/ton, 0.04 oz Ag/ton, 0.03 Cu. The third vein encountered was a massive sulfide vein and was intersected from 17.80 to 18.34 meters. It was composed of pyrite (20%), pyrrhotite (60%), and chalcopyrite (20%). The vein returned assays of 0.084 oz Au/ton, 2.50 oz Ag/ton 6.23% Cu. The fourth vein encountered was a quartz vein intersected from 21.74 to 21.84 meters. No mineralization was noted and no samples or assays were taken. A zone of argillic alteration was sampled from 9.85 to 10.67 meters but returned insignificant assays in gold, silver, and copper. A bleached zone was noted from 33.88 to 36.75 meters. The zone contained disseminated pyrite (5%), pyrrhotite (5%), and chalcopyrite (less than 1%). No significant assays were returned.

DDH GCS 90-17

Drill hole GCS 90-17 was collared at 4982.74N, 5175.54E and was drilled on a bearing of 045° at a dip of -45°. The hole was drilled to investigate coincidental gold and copper soil anomalies, and a magnetic spike.

The hole was collared in serpentinite and continued through serpentinite up to 62.50 meters where it intersected diorite. The hole continued in diorite up to 67.19 meters where it re-entered serpentinite. The hole was stopped at 68.29 meters in serpentinite. The serpentinite was generally sheared with abundant epidote. No significant mineralization was noted or sampled.

DDH GCS 90-18

Drill hole GCS 90-18 was collared at 5092.01N, 5131.33E and was on a bearing of 023° at a dip of -50. The hole was drilled to investigate the up dip extension of mineralization occurring in drill holes GCS 87-21, GCS 87-22, and to investigate the unknown section of drill hole GCS 68-7.

The hole was collared in diorite and continued through diorite until it was stopped at 47.25 meters. The hole intersected three veins. The first vein encountered was a quartz vein intersected from 10.80 to 11.00 meters. This vein was composed of quartz (80%) and wall rock (20%). No visible mineralization was noted. Assays returned values of .001 oz Au/ton, 0.03 oz Ag/ton, 0.01% Cu. The second vein encountered was a quartz vein intersected from 30.42 to 30.73 meters. This vein contained quartz (30%), wall rock (20%), and limonite. The vein returned assays of .001 oz Au/ton, 0.01 oz Ag/ton, 0.01% Cu. The third vein was a sulfide vein intersected from 35.06 to 35.83 meters. The vein contained pervasive pyrite (10%), pyrrhotite (3%), chalcopyrite (less than 1%), quartz (10%), and wall rock and limonite (60%). The vein returned assays of .002 oz Au/ton, 0.03 oz Ag/ton, 0.03 Cu. The last vein intersected is the up dip extension of the mineralized zones in GCS 87-21.

DDH GCS 90-19

Drill hole GCS 90-19 was collared at 5037.71N, 5313.11E and was drilled on a bearing of 023° at a dip of -50°. The hole was drilled to test the strike extension of mineralization occurring in drill holes GCS 90-2, GCS 89-11, GCS 89-12 and GCS 89-13.

The hole was collared in greenstone and continued through greenstone up to 56.08 meters where it was stopped. A quartz vein was encountered from 15.45 to 15.72 meters. No visible mineralization was present. The vein returned assays of 0.010 oz Au/ton, 0.09 oz Ag/ton, 0.07% Cu. A sulfide vein was intercepted from 18.46 to 18.53 meters. The vein contained massive pyrite (15%) and pyrrhotite (3%). The vein returned assays of .002 oz Au/ton, 0.03 oz Ag/ton, 0.15% Cu. The vein was enveloped between sulfide rich zones. The hanging wall from 17.76 to 18.16 meters, and the footwall from 18.85 to 18.92 meters. Both zones were sampled but returned insignificant assay values. A final sulfide zone was intersected from 24.10 to 24.20 meters. This zone was sampled and returned insignificant assay values.

DDH GCS 90-20

Drill hole GCS 90-20 was collared at 5547.98N, 4003.03E and was drilled on a bearing of 045° at a dip of -45°. The hole was drilled to test a coincidental Mag Spike and VLF Conductor.

The hole was collared in greenstone and continued through greenstone up to 62.80 meters where it was stopped. The hole intersected three mineralized zones. The first was a calcite vein which extended from 15.87 to 16.33 meters. The vein was composed of calcite (40%), massive pyrite (55%), and pyrrhotite (5%). The vein returned assays of .007 oz Au/ton, 0.04 oz Ag/ton, 0.02% Cu. The second zone encountered was a sulfide rich zone extending from 51.68 to 51.93 meters. It contained pervassive pyrite (30%) and pyrrhotite (3%). The zone returned assays of .026 oz Au/ton, .26 oz Ag/ton, 0.23% Cu. The third zone encountered was similar to the second zone except it contained pervasive pyrite (60%), pyrrhotite (3%), and returned assays of .210 oz Au/ton, 0.07 oz Ag/ton, 0.05 Cu.

DDH GCS 90-21

Drill hole GCS 90-21 was collared at 5252.98N, 3844.52E and was drilled on a bearing of 215° at a dip of -45°. The hole was drilled to test the strike and down dip extension of the Hartford Vein.

The hole was collared in greenstone and continued through greenstone up to 64.02 meters where it was stopped. The hole intersected two mineralized veins. The first was encountered from 13.45 to 13.75 meters. The vein consisted of quartz (40%), banded pyrite (15%), and brecciated wall rock (40%). The vein returned assays of .001 oz Au/ton, 0.04 oz Ag/ton, 0.26% Cu. The second vein occurred between 28.90 to 29.15 meters and consisted of massive pyrite (95%) and quartz (5%). This vein is the extension of the Hartford Vein and returned assays of .030 oz Au/ton, .35 oz Ag/ton, .92% Cu. Two siliceously altered zones were intersected, one from 35.64 to 36.53 meters and the other from 36.98 to 37.39 meters.

These zones contained tightly spaced stringers of pyrite and quartz with traces of chalcopyrite. The zones returned assays of .001 oz Au/ton, 0.04 oz Ag/ton, 0.04% Cu for the first and .004 oz Au/ton, 0.27 oz Ag/ton, 0.76% Cu for the second.

DDH GCS 90-22

Drill hole GCS 90-22 was collared at 4937.64N, 3703.65E and was drilled on a bearing of 045° at a dip of -45°. The hole was drilled to investigate the coincidental May Spike, VLF Conductor and copper soil anomaly at 458+50N 459+00E of the exploration grid.

The hole first encountered diorite then continued through a succession of greenstones, and diorite up to 64.02 meters where the hole was stopped in greenstone. The hole encountered several quartz veins in the interval from 51.10 to 64.02 meters. One vein returned significant assays. A quartz vein encountered 54.30 to 54.54 meters returned assays of .002 oz Au/ton, 0.08 oz Ag/ton, 0.25% Cu. All veins encountered from 54.30 to 64.02 meters contained chalcopyrite in concentrations of up to 3%. This would explain the high copper soil anomaly. The section from 51.80 to 64.02 meters exhibits serpentinization which explains the magnetic spike. The zone contains up to 10% pyrite which would explain the VLF Conductor.

DDH GCS 90-23

Drill hole GCS 90-23 was collared at 4932.51N, 4288.34E and drilled on a bearing of 045° at a dip of -45°. The hole was drilled to investigate coincidental VLF Conductor, soil anomaly.

The first encountered greenstone until 6.55 meters where it intersected diorite. It continued in diorite until 39.63 meters where the hole was stopped. Two shears were intersected. The first from 25.10 to 25.30 meters showed intense argillic alteration. No visible mineralization was noted. The zone returned assays of .001 oz Au/ton, 0.02 oz Ag/ton, 0.01% Cu. The second shear occurred from 34.30 to 35.20 meters and again showed intense argillic alteration with mineralization consisting of sheared quartz (60%) and disseminated pyrite (10%). This zone returned assays of .001 oz Au/ton, 0.05 oz Ag/ton, 0.01% Cu.

DDH GCS 90-24

Drill hole GCS 90-24 was collared at 5261.43N, 3789.91E and was drilled on a bearing of 210° at a dip of -47°. The hole was drilled to test the western strike extension of the Hartford Vein.

The hole was collared in greenstone and continued through greenstone until 60.65 meters where it was stopped. Mineralization occurred throughout this hole, generally as sulfide stringers and as fracture filling. Pyrite and pyrrhotite predominated with traces of chalcopyrite. Eight samples were taken from 1.22 to 21.95 meters only one sample returned significant assay values. The sample from 5.79 to 6.23 meters returned assays of .004 oz Au/ton, 0.04 oz Ag/ton, 0.23% Cu. Three veins were encountered after 21.95 meters. The first was a quartz vein intersected from 29.27 to 29.60 meters composed of quartz (90%), chalcopyrite (8%), and pyrite (1%), returned assays of .001 oz Au/ton, 2.05 oz Ag/ton, .14% Cu.

The second vein was intersected from 44.21 to 44.45 meters and was composed of quartz (40%) and pyrite (15%). This vein returned assays of .004 oz Au/ton, 0.02 oz Ag/ton, .19% Cu. The third vein was intersected from 48.18 to 48.28 meters and was composed of massive pyrite (10%), pyrrhotite (7%), and chalcopyrite (less than 1%). The vein returned assays of .005 oz Au/ton, 0.05 oz Ag/ton, 0.28% Cu.

DDH GCS 90-25

Drill hole GCS 90-25 was collared at 5303.30N, 4350.08E and was drilled on a bearing of 045° at a dip of -50°. The hole was drilled to investigate a coincidental VLF Conductor and copper soil anomaly.

The hole began in diorite and continued in diorite until 23.53 meters where it intersected greenstone. It then continued in greenstone until 50.0 meters where the hole was stopped. Two veins were encountered in the drill hole. Both were massive sulfide veins. The first vein was intersected from 29.03 to 29.41 meters and was composed of massive pyrite (80%). The vein returned assays of .026 oz Au/ton, 0.35 oz Ag/ton, 0.33% Cu. The second vein was encountered from 39.36 to 41.86 meters and was composed of Massive pyrite (60%), pyrrhotite (20%), chalcopyrite (10%), and quartz (10%). The second vein was split into two samples. The first from 39.36 to 40.86 meters returned values of .353 oz Au/ton, 1.43 oz Ag/ton, 3.64% Cu. The second sample from 40.86 to 41.86 meters returned assays of .630 oz Au/ton, 1.64 oz Ag/ton, 1.54% Cu.

DDH GCS 90-26

Drill hole GCS 90-26 was collared at 5337.71N, 4349.77E and was drilled on a bearing of 045° at a dip of -50°. The hole was drilled to investigate a second VLF Conductor north of the conductor tested in GCS 90-25.

The hole was collared in greenstone and continued in greenstone until 49.60 meters where it was stopped. Only one vein was encountered. It was intersected from 31.10 to 31.55 meters and was composed of massive pyrite (60%), quartz, and wall rock (40%). The vein returned assays of .003 oz Au/ton, .62 oz Ag/ton, 0.09% Cu. Chalcopyrite occurred in several sections of this hole. Usually it was disseminated or in stringers. A sample from 19.10 to 20.37 meters returned assays of .008 oz Au/ton, 0.12 oz Ag/ton, 0.33% Cu.

DDH GCS 90-27

Drill hole GCS 90-27 was collared at 5287.23N, 4210.69E and was drilled on a bearing of 045° at a dip of -50°. The hole was drilled to investigate the extension of the VLF Conductor tested in GCS 90-25.

The hole was collared in greenstone and continued through greenstone up to 50.3 meters where it intersected diorite. It continued in diorite until 60.0 meters at which point the hole was stopped. Two quartz veins were encountered. The first vein was intersected from 5.56 to 5.84 meters and was composed of massive pyrite (60%) and quartz (30%). The vein returned assays of .009 oz Au/ton, 0.03 oz Ag/ton, 0.08% Cu. The second vein was intersected from 25.12 to 25.43 meters. The vein was composed of quartz (90%) with disseminated pyrite (3%), disseminated chalcopyrite (8%). The vein returned assays of .003 oz Au/ton, 0.06 oz Ag/ton, 0.30% Cu.



A bleached zone was encountered from 32.92 to 33.92 meters and contained patches of pyrite (10%), pyrrhotite (3%), and chalcopyrite (15%). The zone returned assays of .012 oz Au/ton, 0.29 oz Ag/ton, 1.20% Cu.

DDH GCS 90-28

Drill hole GCS 90-28 was collared at 5152.55N, 4865.50E and was drilled on a bearing of 023° at a dip of -50°. The hole was drilled to test the up dip extension of the George Vein.

The hole was collared in greenstone and continued through greenstone until it intersected diorite from 16.77 to 20.13 meters. It then re-entered greenstone from 20.13 to 23.50 meters where it re-entered diorite and continued in diorite until 48.47 meters at which point the hole was stopped. One vein was encountered from 20.13 to 21.60 meters. The vein was composed of calcite (10%), quartz (5%), blebs of pyrite (10%), pyrrhotite (8%), and chalcopyrite (3%). The vein returned assays of .022 oz Au/ton, 0.14 oz Ag/ton, 0.39% Cu.

DDH GCS 90-29

Drill hole GCS 90-29 was collared at 5414.83N, 4540.68E and drilled on a bearing of 045° at a dip of -50°. The hole was drilled to test the western strike extension of the sulfide vein intersected in GCS 90-16.

The hole was collared in greenstone and continued through greenstone until 60.97 meters at which point it was stopped. Three veins were encountered. The first vein was intersected from 20.88 to 21.49 meters and was composed of massive chalcopyrite (40%), pyrite (20%), and quartz (40%). The vein returned assays of .038 oz Au/ton, 1.01 oz Ag/ton, 2.80% Cu. The second vein was intersected from 27.20 to 28.08 meters and was composed of quartz (100%). No visible mineralization was noted. The vein returned assays of .003 oz Au/ton, 0.07 oz Ag/ton, 0.10% Cu. The third vein was intersected from 31.71 to 32.92 meters and was composed of massive chalcopyrite (50%), pyrrhotite (10%), pyrite (5%), and quartz (35%). This vein returned assays of 0.050 oz Au, 3.34 oz Ag/ton, 8.13% Cu.

The first vein encountered corresponds to the vein intersected in GCS 90-16. The third vein is a new structure that should be investigated further.

DDH GCS 90-30

Drill hole GCS 90-30 was collared at 5146.27N, 4845.73E and drilled on a bearing of 023° at a dip of -50°. The hole was drilled to test the extension of the MacArthur Vein.

The hole had to be cased 9.15 meters through the MacArthur stope. The hole continued through interfingering greenstone and diorite and was stopped at 50.3 meters in greenstone. Two veins were encountered in this hole. The first was intersected from 13.40 to 13.72 meters and was composed of massive pyrrhotite (70%), pyrite (5%), chalcopyrite (3%), and quartz (10%). The vein returned assays of .047 oz Au/ton, 0.20 oz Ag/ton, 0.41% Cu.

The second vein was intersected from 21.0 to 21.50 meters and was composed of quartz (95%) with finely disseminated pyrite (less than 1%). This vein returned assays of .003 oz Au/ton, 0.05 Ag/ton, 0.03% Cu. A mineralized shear zone was intersected from 36.39 to 37.34 meters. This zone contained blebs of pyrrhotite (8%), chalcopyrite (9%), and pyrite (1%). The zone returned assays of .096 oz Au/ton, .73 oz Ag/ton, .64% Cu.

DDH GCS 90-31

Drill hole GCS 90-31 was collared at 5302N, 4349.99E and was drilled at a bearing of 045° at a dip of -70°. The hole was drilled to test the down dip extension of massive sulfide vein intersected in GCS 90-25.

The hole was collared in greenstone and continued through greenstone until it was stopped at 89.94 meters. Three veins were encountered in this hole. The first was a quartz vein and was intersected from 42.8 to 43.06 meters. No visible mineralization was noted and no assays were taken from this vein. The second vein and was intersected from 44.88 to 45.00 meters, a calcite vein with blebs of pyrite (less than 1%). The vein returned assays of .001 oz Au/ton, 0.03 oz Ag/ton, 0.08% Cu. The third vein was encountered from 50.30 to 51.54 meters. The vein was composed of massive pyrite (60%) and quartz (30%). The vein returned assays of .004 oz Au/ton, 0.07 oz Ag/ton, 0.22% Cu.

It was concluded that the vein intersected from 50.30 to 51.54 meters was not the same structure as the vein in GCS 90-25, and that the structure was not dipping to the south, but to the north.

DDH GCS 90-32

Drill hole GCS 90-32 was collared at 5358.41N, 4366.13E and was drilled on a bearing of 215° at a dip of -50°. The hole was drilled to test the down dip extension of massive sulfide intersection from GCS 90-25.

The hole was collared in greenstone and continued through greenstone until 47.88 meters where it intersected a diorite dyke up to 56.00 meters where it returned to greenstone until 59.75 meters at which point the hole was stopped. Six veins were encountered in this hole. The first vein was intersected from 4.05 to 4.56 meters and was composed of blebs of pyrite (60%), chalcopyrite (5%), in a quartz matrix (30%). The vein returned assays of 0.066 oz Au/ton, 0.71 oz Ag/ton, 2.01% Cu. The second vein encountered was a quartz vein intersected from 4.76 to 5.4 meters and contained pyrite (30%) and chalcopyrite (3%). The vein returned assays of .008 oz Au/ton, .22 oz Ag/ton, 0.77% Cu. The third vein was also a quartz vein and was intersected from 6.06 to 6.64 meters and contained pyrite (30%) and chalcopyrite (3%). This vein returned assays of 0.014 oz Au/ton, 0.20 oz Ag/ton, 0.69% Cu. The fourth vein encountered was a quartz vein. It was intersected from 14.57 to 16.06 meters and contained massive pyrite (60%) and chalcopyrite (3%). The vein returned assays of .006 oz Au/ton, 0.37 oz Ag/ton, 1.13% Cu. The fifth vein encountered was a massive sulfide vein intersected from 19.54 to 19.95 and was composed of massive pyrite (60%) and chalcopyrite (20%). The vein returned assays of .063 oz Au/ton, 3.30 oz Ag/ton, 11.26% Cu. The sixth vein encountered was a quartz vein and was intersected from 44.90 to 45.50 meters. It contained massive pyrite (45%) and chalcopyrite (7%), and returned assays of .144 oz Au/ton, 0.81 oz Ag/ton, 1.37% Cu.

DDH GCS 90-33

Drill hole GCS 90-33 was collared at 5351.85N, 4390.35E and was drilled on a bearing of 225° at a dip of -50°. The hole was drilled to test the eastern strike extension of the sulfide vein encountered in GCS 90-25 to GCS 90-32.

The hole was collared in greenstone, continued through two diorite intersections and was stopped at 60.00 meters in greenstone. Two veins were encountered in this hole. The first vein was a massive sulfide vein and was intersected from 19.60 to 20.15 meters and was composed of massive pyrite (85%) chalcopyrite (less than 1%), and quartz (10%). The vein return assays of .073 oz Au/ton, .33 oz Ag/ton, 0.82% Cu. The second vein was encountered from 24.40 to 24.69 meters. It was a quartz vein and contained massive pyrite (80%). The vein returned assays of .059 oz Au/ton, .21 oz Ag/ton, 1.03% Cu.

DDH GCS 90-34

Drill hole GCS 90-34 was collared at 5364.37N, 4341.74E and was drilled on a bearing of 225° at a dip of -50°. The hole was drilled to test the eastern extension of the mineralized vein encountered in GCS 90-25 and GCS 90-32.

The hole was collared in greenstone and continued through interfingered greenstone and diorite until it was stopped at 59.75 meters in diorite. Four veins were encountered in this hole. The first vein encountered was a quartz vein and intersected from 7.42 to 7.48 meters. The vein contained blebs of pyrite (5%) and chalcopyrite (2%). The vein returned assays of .002 oz Au/ton, 0.05 oz Ag/ton, 0.20% Cu. The second vein encountered was a quartz vein and was intersected from 22.00 to 23.06 meters.

The vein contained blebs of pyrite (50%) and chalcopryrite (10%). The vein returned assays of .136 oz Au/ton, 0.47 oz Ag/ton, 1.10% Cu. The third vein encountered was a quartz vein and was intersected from 29.17 to 29.48 meters. The vein contained blebs of pyrite (10%). The vein returned assays of .003 oz Au/ton, 0.15 oz Ag/ton, 0.49% Cu. The fourth vein encountered was a quartz vein and was intersected from 44.1 to 44.12 meters. The vein contained blebs of pyrite (8%), and chalcopryrite (4%). A sample was taken from 44.00 to 44.20 meters and returned assays of .009 oz Au/ton, 0.11 oz Ag/ton, 0.27% Cu. In addition, two sulfide rich zones were encountered. The first zone was intersected from 48.4 to 48.92 meters and contained blebs of pyrite (50%), and chalcopryrite (10%). This zone returned assays of .002 oz Au/ton, 0.17 oz Ag/ton, 0.50% Cu. The second zone was intersected from 51.74 to 52.34 meters and contained blebs of pyrite (30%), and chalcopryrite (less than 1%). This zone returned assays of .014 oz Au/ton, 0.04 oz Ag/ton, 0.26% Cu.

CORE STORED ON SITE

CONCLUSION

The first phase of the drilling added valuable information to the strike length of the King Vein (intersected by GCS 90-3 to GCS 90-7), the holes drilled to intersect the MacArthur Vein were disappointing as the veins intercepted returned low assay values or no structure was identified at all. Intersection from GCS 90-1 gave strike extension to the listwanite vein but returned poor assays. The Calumet Veins were intercepted by GCS 90-2 but no strike extension was gained by drilling GCS 90-19.

The second phase of drilling to test the exploration targets met with moderate success. The Hartford Vein System was defined but returned low assays values from drill holes GCS 90-21 and GCS 90-24. The high copper soil values tested by GCS 90-22 were a result of the abundant chalcopyrite occurring from 54.30 to 64.02 meters. The conductor tested by GCS 90-25 offered a large intercept with encouraging assays but drill holes GCS 90-26, GCS 90-7, and 90-31-34 show the mineralization to be a localized lense that appears to be pinching to the east and west and at depth. The vein defined by drillholes GCS 90-16 and GCS 90-29 are very encouraging as the structure is open to the west and may possibly be related to the veins intercepted in GCS 90-20.

RECOMMENDATIONS

Further exploration of the Golden Crown Property should consist of extending geochemical and geophysical surveys between drill holes GCS 90-29 and GCS 90-20 if a conductor and soil anomalies are defined. Then, the zone should be drilled to try to extend the strike length and depth of the structure. No further work is recommended.



STATEMENT OF COST

Geochemical Survey \$ 10,096.14

Geophysical Survey 11,850.00

Drilling

Mob/demo 2,000.00

Casing  
68.89 meters at \$46.00/meter 3,168.94  
49.99 meters at \$66.00/meter 3,299.34

Coring  
1,356.67 meters at \$41.80/meter 56,708.81  
637.34 meters at \$47.80/meter 30,464.85

Acid Tests  
30 at \$60.00/test 1,800.00

Standby  
8.5 hours at \$80.00/hour 680.00

Cat Time  
22 hours at \$75.00/hour 1,650.00

Personnel

Project Supervisor  
260.5 hours at \$37.50/hour 9,768.75

Geologist  
72 days at \$150.00/day 10,800.00

Accomodations

Lodging and Meals  
72 days at \$65.00/day 4,680.00

Assays

214 samples at \$22.00/sample 4,708.00

Equipment Rentals

Theodolite Rental 2 weeks at \$371.00/week	742.00
Truck 2 months at \$1,000.00/month	2,000.00
Gas & Oil	1,000.00
Computer Rental 6.5 weeks at \$50.00/week	325.00

Report Preparations

Report Writing	2,255.43
Drafting	<u>1,120.00</u>
	<u>\$159,117.26</u> =====

STATEMENT OF QUALIFICATIONS

I Warren Robb of the city of Vancouver in the Province of British Columbia, hereby certify that:

1. I am a geologist residing at 101 - 1221 Burnaby Street, Vancouver, British Columbia.
2. I worked as a Survey Technician with Hargraves and Associates of Vancouver from August 1980 - March 1981 and British Columbia Railways from March 1981 to June 1982.
3. I have graduated from the University of British Columbia in 1987 with a B.Sc. in geology.
4. I have worked in mineral exploration continuously since 1987.
5. I was on the Golden Crown Property for the duration of the 1990 field and drill program.



Warren Robb

A P P E N D I X I

Drill Log Code Descriptions  
Drill Logs  
Assay Logs  
Assay Results

## EXPLANATION OF DRILL LOG CODES

### COLUMNS

FROM TO = Distance down hole  
LENGTH = Length of down hole Interval  
REC = Core Recovery in Percent  
ROCK = Rock Type  
COLOR = Color of Rock  
IC = Initial Contact measure of angle to Core  
STRT = Structure, Grainsize  
AD = Apparent Dip, measure angle to core  
IN = Intensity of Alteration (0=very little 10=completely altered)  
= Intensity of Structure  
ALT = Alteration  
MINH = Mineralization Habit

PY = amount pyrite in percent  
PQ = amount pyrhotite in percent  
CP = amount chalcopyrite in percent  
QZ = amount quartz in percent  
CC = amount calcite in percent  
TR = less than one percent

Other (other minerals present)

LIM = Limonite  
EP = Epidote  
Mn Stain = Manganese stain  
Mal = Malachite  
TC or TA = Talc  
ANK = Ankerite  
CH = Chlorite  
BN = Bornite  
HB = Hornblende

### EXPLANATION OF SPECIFIC CODES

Rock Codes

SHZN = Shear zone  
QZXX = Quartz zone  
HYPH = Hybrid rock  
GSTN = Greenstone  
ANDS = Andesite  
DIOR = Diorite  
SERP = Serpentine  
FAUL = Fault  
SLXX = Sulfide zone  
QZUN = Quartz vein  
SLVN = Sulfide vein  
CAVN = Calcite vein  
BRXX = Breccia zone  
TAS\$ = Talc Schist

Color (1 darkest 10 palest)

G = Green  
N = Black  
U = Brown  
P = Purple  
W = White  
A = Grey

STRT Structure 2 letter Code:

BR = Brecciated  
MA = Mass  
SH = Sheared  
BK = Blocky Broken  
JT = Jointed

Grainsize 2 letter Code:

1G = Aphanitic  
3G = Fine  
5G = Medium  
7G = Coarse  
10G = Extremely coarse

3GJT = Fine Grained Jointed

ALTERATION

SILI = Silicious  
PROP = Propylitic  
PLOT = Potassic  
TALC = Talc  
SERP = Serpentine  
OXID = Oxidized  
QZCB = Quartz Carb  
EPID = Epidote & Silica  
ARGL = Argillic

MINH

MASS = Massive  
DISS = Disseminated  
MIVN = Microvein less than 1 cm  
MAVN = Macrovein greater than 1 cm  
PATC = Patches  
BLEB = Bleb  
BAND = Banded  
PERV = Pervasive  
GOUG = gouge  
STWK = Stockwork  
BLCH = Bleached



ASSAY RECORD

PROPERTY GOLDEN CROWN HOLE NO. 16CS 90-1 DATE JUL/90 SAMPLER W. ROBB PAGE 1 OF

Table with columns: I, FROM, TO, SAMP. NO, OZ AU/ TON, OZ AG/ TON, CU, ZN, ZOM, ZOM, GM. AU/ TON, GM. AG/ TON. Data rows include sample numbers 89051, 89052, 89053 with assay values for Au, Ag, and Cu.























DRILL LOG

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=====
PROPERTY      HOLE NO.      SIZE      START      FINISH      GEOLOGIST
GOLDEN CROWN   SCS 90-7     NG        JULY 21/90  JULY 21/90  W.ROBB W.ROBB
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```

LAT.   DEP.   ELEV.  TRUE AZ  GRID AZ  DIP  END      NORTHING    EASTING    PAGE
C1 5145.40 4911.82 1354.45 023     -45 160.00    5145         4910         1
    
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DEPTH  TRUE AZ  DIP      OF
-----
S1 60.96  023    -48.00
    
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=====
FROM  TO      LENGTH  REC  ROCK  COLR  IC  STGS  AD  IN  ALT  IN  MINH  PY  PO  CP  QZ  CC  OTHER
-----
P1 0.00  3.05   3.05   OVER
P1 3.05 28.96  25.91  GSTN 4AG  36
P1 28.96 29.36  0.40  SLXX
P1 29.36 38.11  8.75  GSTN 4AG  38
P1 38.11 53.60  15.49  DIOR 5AG  56
IN 50.60 50.80  0.20  SLXX
P1 53.60 60.00  6.40  GSTN 46  36
IN 54.80 55.00  0.20  SLXX
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ASSAY RECORD

PROPERTY: GOLDEN CROWN | HOLE NO.: GCS 90-8 | DATE: JUL/90 | SAMPLER: W. ROBB | PAGE: *W. Robb* | OF: 1

Table with columns: I, FROM, TO, SAMP. NO, OZAU, OZAG, % CU, % ZN, %OM, %XOM, GM. AU, GM. AG. Data rows include sample numbers 89066 and 89067 with corresponding assay values for Au, Ag, Cu, and Zn.



















ASSAY RECORD

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PROPERTY      HOLE NO.   DATE    SAMPLER     PAGE
GOLDEN CROWN  GCS 90-13 JUL/90  W. ROBB     10F
  
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I	FROM	TO	SAMP. NO	OZ AU / OZ AG /		% CU	% ZN	% ON	% OM	GM. AU / GM. AG /
				TON	TON					
A	9.60	10.07	89084	1.001	0.01	0.03				
A	11.43	11.87	89085	1.001	0.01	0.28				
A	18.42	18.78	89086	1.051	0.13	0.01				
A	26.12	26.70	89087	1.001	0.01	0.01				
A	56.59	56.92	89088	1.001	0.01	0.01				
A	70.94	72.56	89089	1.001	0.01	0.01				
A	72.56	72.99	89090	1.001	0.01	0.01				
A	78.15	78.48	89091	1.002	0.05	0.02				
A	79.46	79.66	89092	1.001	0.01	0.04				
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ASSAY RECORD

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PROPERTY HOLE NO. DATE SAMPLER PAGE  
 GOLDEN CROWN GCS 90-24 AUG/90 W. ROBB 10F

I	FROM	TO	SAMP.ND	0ZAU/0ZAG/ TON	% CU %ZN	%ZOM	GM.AU/6M.AG/
A	5.79	6.23	89165	.004	0.04	0.23	
A	9.23	10.15	89166	.001	0.02	0.02	
A	10.98	11.31	89167	.001	0.01	0.02	
A	11.92	12.42	89168	.001	0.02	0.05	
A	14.28	15.24	89169	.001	0.01	0.01	
A	15.57	16.25	89170	.001	0.02	0.01	
A	19.48	19.82	89171	.001	0.02	0.05	
A	21.32	21.95	89172	.001	0.02	0.04	
A	28.45	29.27	89173	.001	0.02	0.01	
A	29.27	29.60	89174	.001	2.05	0.14	
A	44.21	44.45	89175	.004	0.02	0.19	
A	45.02	45.52	89176	.007	0.08	0.14	
A	48.18	48.28	89177	.005	0.05	0.28	
A	60.50	60.65	89178	.001	0.02	0.06	
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ASSAY RECORD



PROPERTY	HOLE NO.	DATE	SAMPLER	PAGE
GOLDEN CROWN	6CS 90-28	AUG/90	W. ROBB	OF

I	FROM	TO	SAMP. NO	GRAV. TON	GRAV. TON	% CU	ZIN	ZIN	ZIN	GM. AU	GM. AG
A	7.62	9.15	89046	1.001	0.01	10.01					
A	9.15	10.67	89047	1.001	0.02	10.02					
A	20.13	21.60	89048	1.022	0.14	10.39					
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DRILL LOG

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PROPERTY          HOLE NO.      SIZE      START      FINISH      GEOLOGIST
GOLDEN CROWN     6CS 90-34    INQ       AUG 21/90   AUG 22/90   W. ROBB
    
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*W. Robb*

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=====
LAT.    DEP.    ELEV.    TRUE AZ  GRID AZ  DIP  END      NORTHING    EASTING    PAGE
C) 5364.37 4341.74 1324.01 225      |      | -50 159.75 | 46475      | 46475      | 1
    
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=====
DEPTH    TRUE AZ  DIP      IOF
-----
S) 59.74  225    -53.00
    
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=====
FROM    TO      LENGTH  REC  ROCK  COLR  IC  STGS  AD  IN  ALT  IN  MINH  PY  PD  CP  QZ  CC  OTHER
-----
P) 0.00  1.22  1.22  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
P) 1.22  9.15  7.93  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
IN) 7.42  7.48  0.06  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
P) 9.15  9.67  0.52  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
P) 9.67  12.65  2.98  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
P) 12.65 12.82  0.17  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
P) 12.82 13.77  0.95  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
P) 13.77 15.00  1.23  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
P) 15.00 52.42 37.42  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
IN) 20.58 21.25  0.67  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
IN) 22.00 23.06  1.06  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
IN) 29.17 29.48  0.31  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
IN) 41.87 43.20  1.33  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
IN) 44.10 44.12  0.02  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
IN) 48.40 48.92  0.52  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
IN) 51.74 52.34  0.60  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
P) 52.42 59.75  7.33  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
    
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ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: JUL 23 1990

DATE RECEIVED AT MAILED: *July 27/90*

### ASSAY CERTIFICATE

Attwood Gold Corp. PROJECT ATTWOOD GOLD CORP. FILE # 90-2738  
100 - 450 W. Georgia St., Vancouver BC V6B 1Z3 Attn: U. ROBB

SAMPLE#	Cu %	Ag** oz/t	Au** oz/t
A 89051	.01	.02	.002
A 89052	.11	.24	1.143
A 89053	.22	.42	.166
A 89054	.14	.02	.010
A 89055	.03	.01	.005
A 89056	.05	.31	2.441
A 89057	.14	.06	.030
A 89058	2.13	1.66	1.604
A 89059	1.12	.64	.141
A 89060	2.12	1.26	1.037
A 89061	.15	.10	.122
A 89062	.12	.06	.101
A 89063	.32	.19	.042
A 89064	.64	.23	.084
A 89065	.76	.37	.059
STANDARD R-1/AG-1/AU-1	.82	.94	.104

AG\*\* AND AU\*\* BY FIRE ASSAY FROM 1 A.T.  
- SAMPLE TYPE: Core

SIGNED BY *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE(604)253-3158 FAX(604)253-1716

DATE REPORT MAILED:

Aug. 6/90

### ASSAY CERTIFICATE

Attwood Gold Corp. FILE # 90-2951  
100 - 450 W. Georgia St., Vancouver BC V6B 1Z3 Attn: M. ROBB

SAMPLE#	Cu %	Ag** oz/t	Au** oz/t
A 89066	.04	.01	.002
A 89067	.47	.20	.121
A 89068	.08	.01	.013
A 89069	.04	.01	.001
A 89070	.07	.01	.004
A 89071	.01	.01	.002
A 89072	.01	.01	.006
A 89073	.01	.01	.023
A 89074	.01	.01	.004
A 89075	.29	.19	2.495
A 89076	.05	.01	.005
A 89077	.08	.01	.016
A 89078	.03	.01	.001
A 89079	.03	.01	.002
A 89080	.03	.03	.007
A 89081	.08	.03	.001
STANDARD R-1/AG-1/AU-1	.91	.97	.103

AG\*\* AND AU\*\* BY FIRE ASSAY FROM 1 A.T.  
- SAMPLE TYPE: Core

SIGNED BY..... *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: AUG 1 1990

DATE REPORT MAILED:

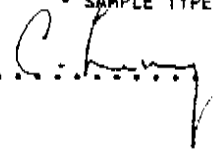
Aug. 10/90..

### ASSAY CERTIFICATE

Attwood Gold Corp. FILE # 90-3081  
100 - 450 W. Georgia St., Vancouver BC V6B 1Z3 Attn: W. ROBB

SAMPLE#	Cu %	Ag** oz/t	Au** oz/t
A 89082	.03	.02	.003
A 89083	.02	.01	.002
A 89084	.01	.01	.001
A 89085	.03	.01	.001
A 89086	.28	.13	.051
A 89087	.01	.01	.001
A 89088	.01	.01	.001
A 89089	.01	.01	.001
A 89090	.01	.01	.001
A 89091	.10	.05	.002
A 89092	.02	.01	.001
A 89093	.04	.02	.061
A 89094	.01	.01	.006
A 89095	.07	.03	.006
A 89096	.15	.06	.003
A 89097	.12	.04	.003
A 89098	.25	.10	.026
STANDARD R-1/AG-1/AU-1	.80	1.02	.098

AG\*\* AND AU\*\* BY FIRE ASSAY FROM 1 A.T.  
- SAMPLE TYPE: Core

SIGNED BY:  D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

**ASSAY CERTIFICATE**

Attwood Gold Corp. FILE # 90-3196  
 100 - 450 W. Georgia St., Vancouver BC V6B 1Z3

SAMPLE#	Cu %	Ag** oz/t	Au** oz/t
A 89099	.06	.10	.016
A 89100	.03	.10	.001
A 89101	.02	.08	.001
A 89102	.03	.04	.001
A 89103	.02	.08	.003
A 89104	.08	.12	.001
A 89105	.02	.05	.001
A 89106	.10	.09	.001
A 89107	.02	.07	.001
A 89108	.02	.06	.001
A 89109	.03	.07	.001
A 89110	.11	.11	.002
A 89111	.02	.05	.001
A 89112	.02	.06	.001
A 89113	.02	.08	.001
A 89114	.02	.04	.001
A 89115	.03	.02	.002
A 89116	.05	.06	.001
A 89117	.06	.07	.001
A 89118	.03	.04	.001
A 89119	.02	.04	.001
A 89120	.02	.07	.001
A 89121	.01	.06	.001
A 89122	.03	.03	.001
A 89123	.03	.04	.001
A 89124	6.23	2.50	.084
A 89125	.02	.06	.001
A 89126	.08	.07	.001
STANDARD R-1/AG-1/AU-1	.85	1.01	.097

AG\*\* AND AU\*\* BY FIRE ASSAY FROM 1 A.T.  
 - SAMPLE TYPE: Core

SIGNED BY *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

**ASSAY CERTIFICATE**

Attwood Gold Corp. FILE # 90-3367  
 100 - 450 W. Georgia St., Vancouver BC V6B 1Z3 Attn: W.ROBB

SAMPLE#	Cu %	Ag** oz/t	Au** oz/t
A 89127	.01	.03	.001
A 89128	.01	.01	.001
A 89129	.03	.03	.002
A 89130	.07	.09	.010
A 89131	.04	.03	.005
A 89132	.15	.03	.002
A 89133	.04	.04	.002
A 89134	.20	.05	.002
A 89135	.07	.08	.004
A 89136	.02	.04	.007
A 89137	.23	.26	.026
A 89138	.05	.07	.201
A 89139	.02	.13	.001
A 89140	.06	.03	.002
A 89141	.10	.04	.001
A 89142	.26	.04	.001
A 89143	.03	.25	.001
A 89144	.01	.01	.001
A 89145	.92	.35	.030
A 89146	.12	.06	.002
A 89147	.04	.04	.001
A 89148	.76	.27	.004
A 89149	.01	.02	.001
A 89150	.04	.03	.002
A 89151	.07	.01	.001
A 89152	.01	.02	.001
A 89153	.03	.01	.001
A 89154	.02	.01	.001
A 89155	.01	.01	.001
A 89157	.25	.08	.002
A 89158	.05	.02	.001
A 89159	.05	.02	.001
A 89160	.04	.03	.001
A 89161	.05	.02	.001
A 89162	.21	.08	.002
STANDARD R-1/AG-1/AU-1	.81	1.01	.095

AG\*\* AND AU\*\* BY FIRE ASSAY FROM 1 A.T.  
 - SAMPLE TYPE: Core

SIGNED BY *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

**ASSAY CERTIFICATE**

Attwood Gold Corp. FILE # 90-3492 Page 1  
 100 - 450 W. Georgia St., Vancouver BC V6B 1Z3

SAMPLE#	Cu %	Ag** oz/t	Au** oz/t
A 89029	.08	.03	.009
A 89030	.03	.01	.001
A 89031	.03	.02	.001
A 89032	.02	.01	.001
A 89156	.03	.02	.001
A 89163	.01	.02	.001
A 89164	.01	.05	.001
A 89165	.23	.04	.004
A 89166	.02	.02	.001
A 89167	.02	.01	.001
A 89168	.05	.02	.001
A 89169	.01	.01	.001
A 89170	.01	.02	.001
A 89171	.05	.02	.001
A 89172	.04	.02	.001
A 89173	.01	.02	.001
A 89174	.14	2.05	.001
A 89175	.19	.20	.004
A 89176	.14	.08	.007
A 89177	.28	.05	.005
A 89178	.06	.02	.001
A 89179	.22	6.86	.027
A 89180	.06	.93	.002
A 89181	.71	1.17	.014
A 89182	.33	.35	.026
A 89183	3.64	1.43	.353
A 89184	1.54	1.64	.630
A 89185	.05	.06	.002
A 89186	.05	.04	.002
A 89187	.33	.12	.008
A 89188	.06	.08	.001
A 89189	.09	.04	.001
A 89190	.17	.05	.004
A 89191	.09	.02	.003
A 89192	.12	.03	.002
A 89193	.11	.02	.001
STANDARD R-1/AG-1/AU-1	.86	1.02	.097

AG\*\* AND AU\*\* BY FIRE ASSAY FROM 1 A.T.  
 - SAMPLE TYPE: Core

SIGNED BY..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Cu %	Ag** oz/t	Au** oz/t
A 89194	.01	.01	.002
A 89195	.03	.01	.001
A 89196	.01	.01	.001
A 89197	.01	.01	.001

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE (604) 253-3158 FAX (604) 253-1716

DATE RECEIVED: AUG 24 1990

DATE RECEIVED & MAILED: Aug. 30/90

### ASSAY CERTIFICATE

Attwood Gold Corp. FILE # 90-3811  
100 - 450 W. Georgia St., Vancouver BC V6B 1Z3 Attn: W. ROBB

SAMPLE#	Cu %	Ag** oz/t	Au** oz/t
A 89034	.02	.01	.001
A 89035	.30	.06	.003
A 89036	.39	.09	.003
A 89037	1.20	.29	.012
A 89038	.06	.02	.001
A 89039	.22	.05	.002
A 89040	.07	.01	.001
A 89041	.04	.01	.001
A 89042	.06	.01	.001
A 89043	.05	.02	.001
A 89044	.06	.02	.001
A 89045	.04	.01	.001
A 89046	.01	.01	.001
A 89047	.02	.02	.001
A 89048	.39	.14	.022
A 89198	.30	.10	.004
A 89199	2.80	1.01	.038
A 89200	.10	.07	.003
A 89201	8.13	3.34	.050
A 89202	.41	.20	.047
A 89204	.03	.05	.003
A 89205	.64	.73	.096
A 89206	.11	.06	.013
A 89207	.08	.03	.001
A 89208	.02	.01	.004
A 89209	.22	.07	.004
A 89210	.08	.05	.002

AG\*\* & AU\*\* BY FIRE ASSAY FROM 1 A.T.  
- SAMPLE TYPE: CORE

SIGNED BY *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

## GEOCHEMICAL ANALYSIS CERTIFICATE

Attwood Gold Corp. File # 90-4041 Page 1  
100 - 450 W. Georgia St., Vancouver BC V6B 1Z3

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L465E 467+00N	1	94	15	60	.4	42	12	165	2.42	14	5	ND	3	15	.2	2	3	36	.19	.061	8	23	.29	65	.12	5	2.40	.02	.04	2	16
L465E 466+75N	1	49	14	45	.4	38	13	209	2.34	14	5	ND	2	18	.2	2	2	35	.20	.058	6	21	.22	75	.13	3	3.02	.02	.04	4	13
L465E 466+50N	2	266	13	51	.2	86	14	264	2.97	15	5	ND	3	22	.2	2	2	40	.39	.025	12	38	.49	84	.12	2	2.73	.03	.06	2	40
L465E 466+25N	1	195	16	63	.5	71	14	201	2.63	16	5	ND	3	29	.2	2	2	37	.23	.068	8	28	.36	152	.12	3	3.36	.03	.06	4	49
L466E 467+00M	1	31	8	45	.2	19	7	198	1.76	12	5	ND	2	12	.2	2	5	29	.13	.115	4	14	.15	81	.10	6	2.09	.02	.04	3	15
L466E 466+75N	2	125	9	37	.3	42	15	190	2.69	14	8	ND	2	12	.2	2	4	37	.18	.041	6	32	.52	79	.06	5	1.53	.01	.03	5	81
L466E 466+25N	1	161	16	43	.4	59	14	210	2.46	15	5	ND	3	24	.3	2	2	31	.27	.035	11	22	.27	79	.14	2	3.37	.04	.04	4	8
L466E 464+50M	1	233	17	33	.9	73	12	224	2.51	21	5	ND	2	22	.3	2	2	32	.39	.026	12	23	.30	67	.14	2	2.97	.04	.04	3	36
STANDARD C	19	60	42	133	7.2	72	31	1053	3.98	41	16	7	39	52	18.9	15	21	56	.51	.094	39	60	.91	182	.07	34	1.88	.06	.14	11	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: P1 SOIL GEO P2 CORE ASSAY AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

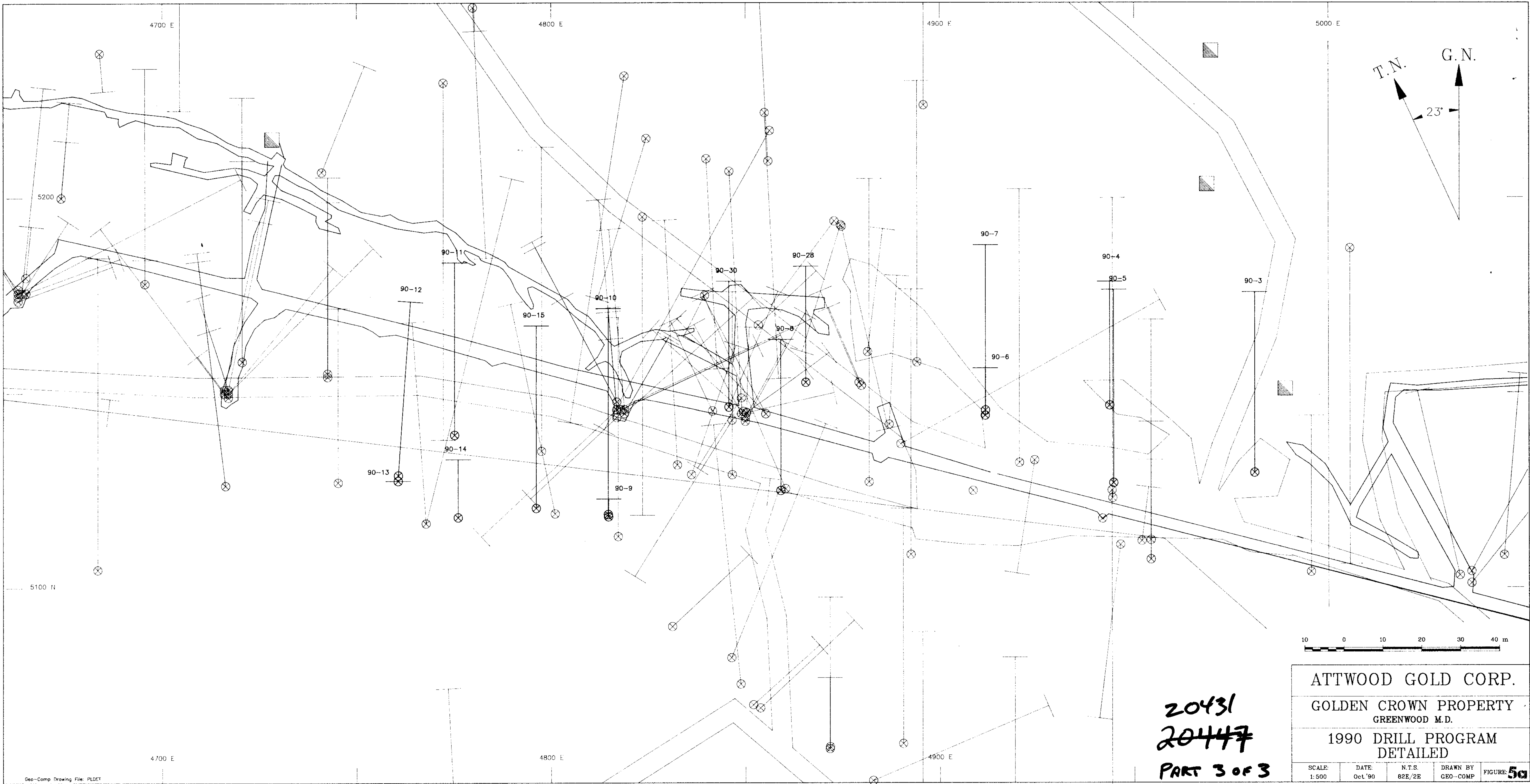
DATE RECEIVED: AUG 31 1990 DATE REPORT MAILED: *Sept 10/90* SIGNED BY: *C. Leung* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



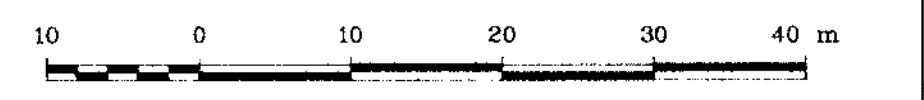
SAMPLE#	Cu %	Ag** oz/t	Au** oz/t
A 89033	.02	.04	.001
A 89049	.19	.09	.002
A 89203	.01	.04	.001
A 89211	2.01	.71	.066
A 89212	.77	.22	.008
A 89213	.69	.20	.014
A 89214	.08	.08	.002
A 89215	2.14	.69	.019
A 89216	1.13	.37	.006
A 89217	11.16	3.30	.063
A 89218	1.39	.39	.021
A 89219	1.37	.81	.144
A 89220	.52	.26	.065
A 89221	.11	.07	.005
A 89222	.11	.08	.008
A 89223	.63	.21	.007
A 89224	.62	.28	.096
A 89225	.82	.33	.073
A 89226	.16	.09	.012
A 89227	.20	.08	.017
A 89228	1.03	.21	.059
A 89229	.04	.04	.050
A 89230	.23	.12	.058
A 89231	.18	.08	.016
A 89232	.10	.10	.003
A 89233	.03	.03	.001
A 89234	.02	.06	.001
A 89235	.02	.05	.001
A 89236	.02	.04	.001
A 89237	.17	.07	.005
A 89238	1.10	.47	.136
A 89239	.49	.15	.003
A 89240	.20	.05	.002
A 89241	.27	.11	.009
A 89242	.50	.17	.007
A 89243	.26	.04	.014

A P P E N D I X I I

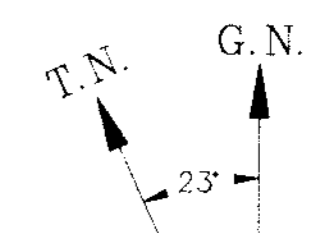
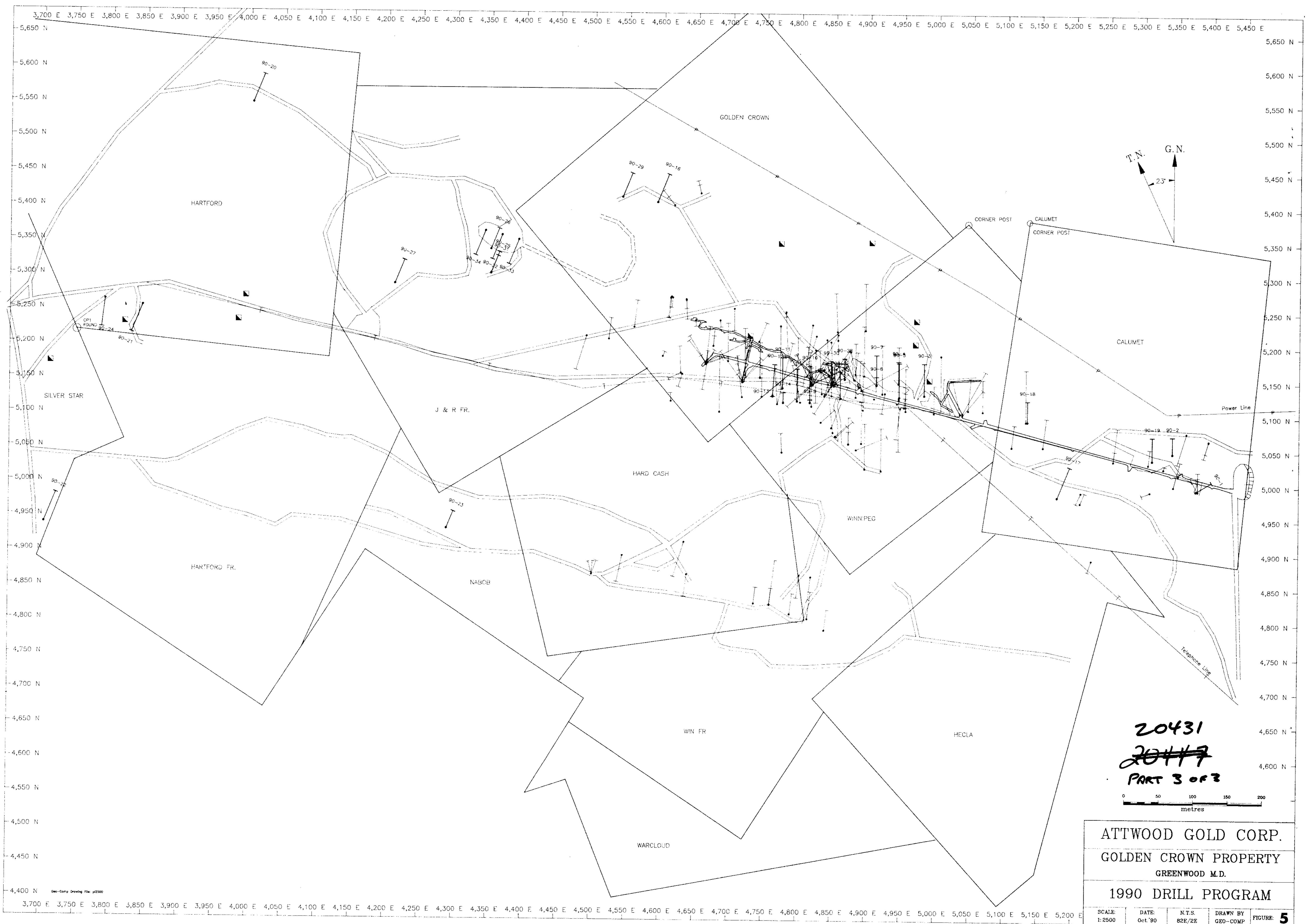
Geology Map  
Drill Hole Plan  
Detail Drill Hole Plan  
Drill Sections



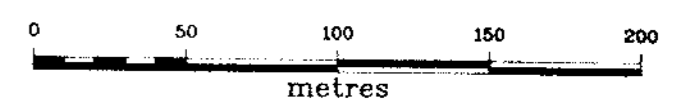
20431  
 20447  
 PART 3 OF 3



ATTWOOD GOLD CORP.				
GOLDEN CROWN PROPERTY GREENWOOD M.D.				
1990 DRILL PROGRAM DETAILED				
SCALE: 1:500	DATE: Oct '90	N.T.S. 82E/2E	DRAWN BY GEO-COMP	FIGURE: <b>5a</b>

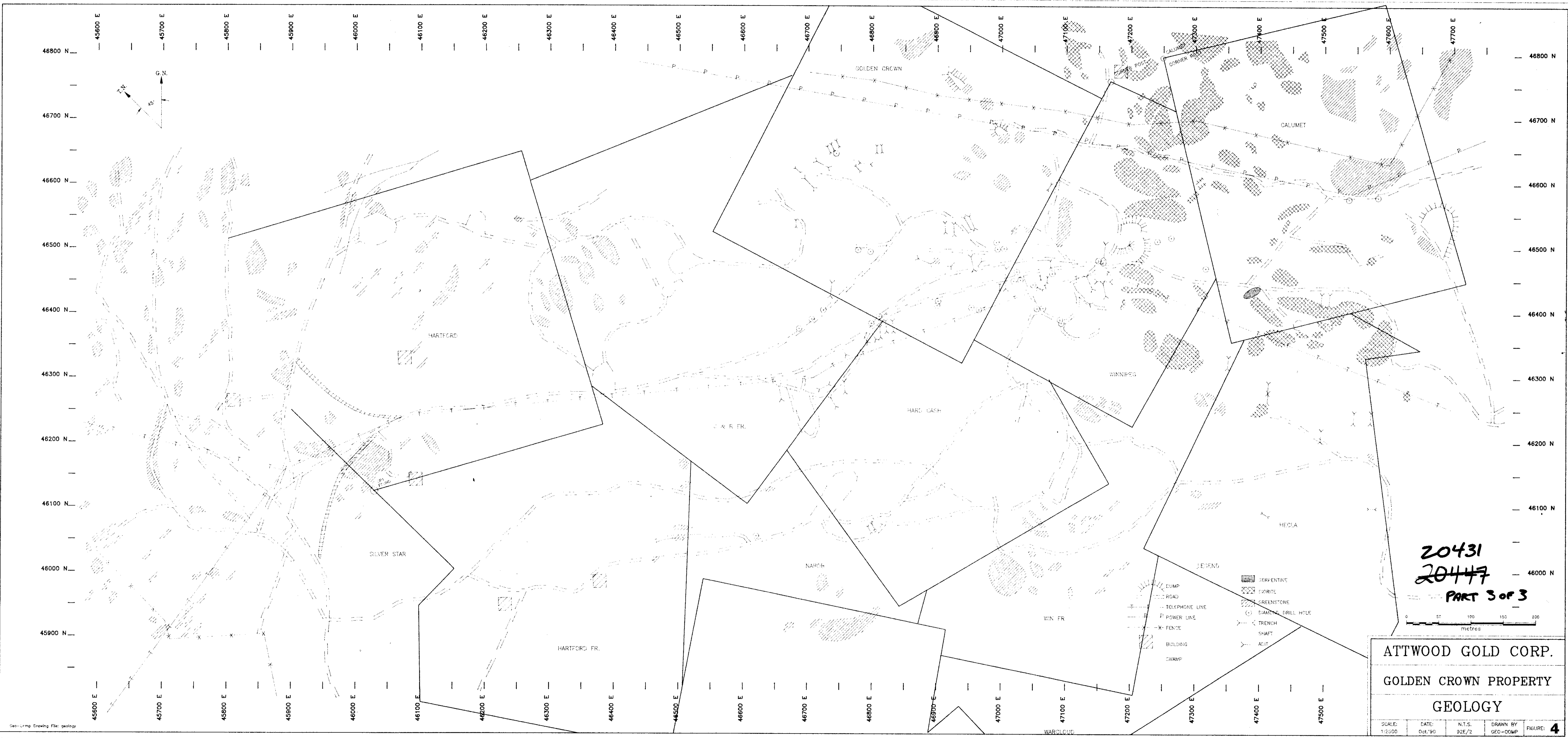


20431  
~~20417~~  
 PART 3 OF 3



ATTWOOD GOLD CORP.				
GOLDEN CROWN PROPERTY				
GREENWOOD M.D.				
1990 DRILL PROGRAM				
SCALE: 1:2500	DATE: Oct '90	N.T.S. 82E/2E	DRAWN BY GEO-COMP	FIGURE: <b>5</b>

Geo-Comp Drawing File: p12500

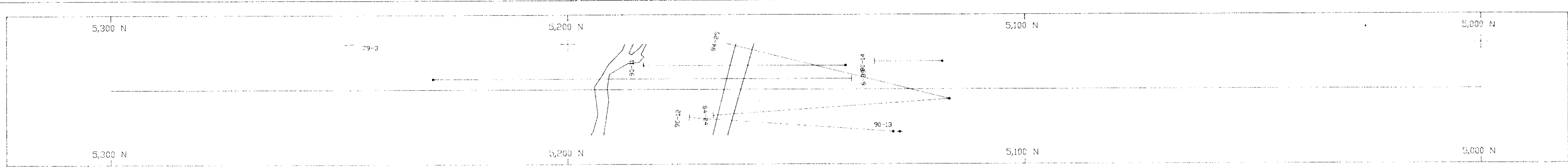


20431  
20447  
PART 3 OF 3

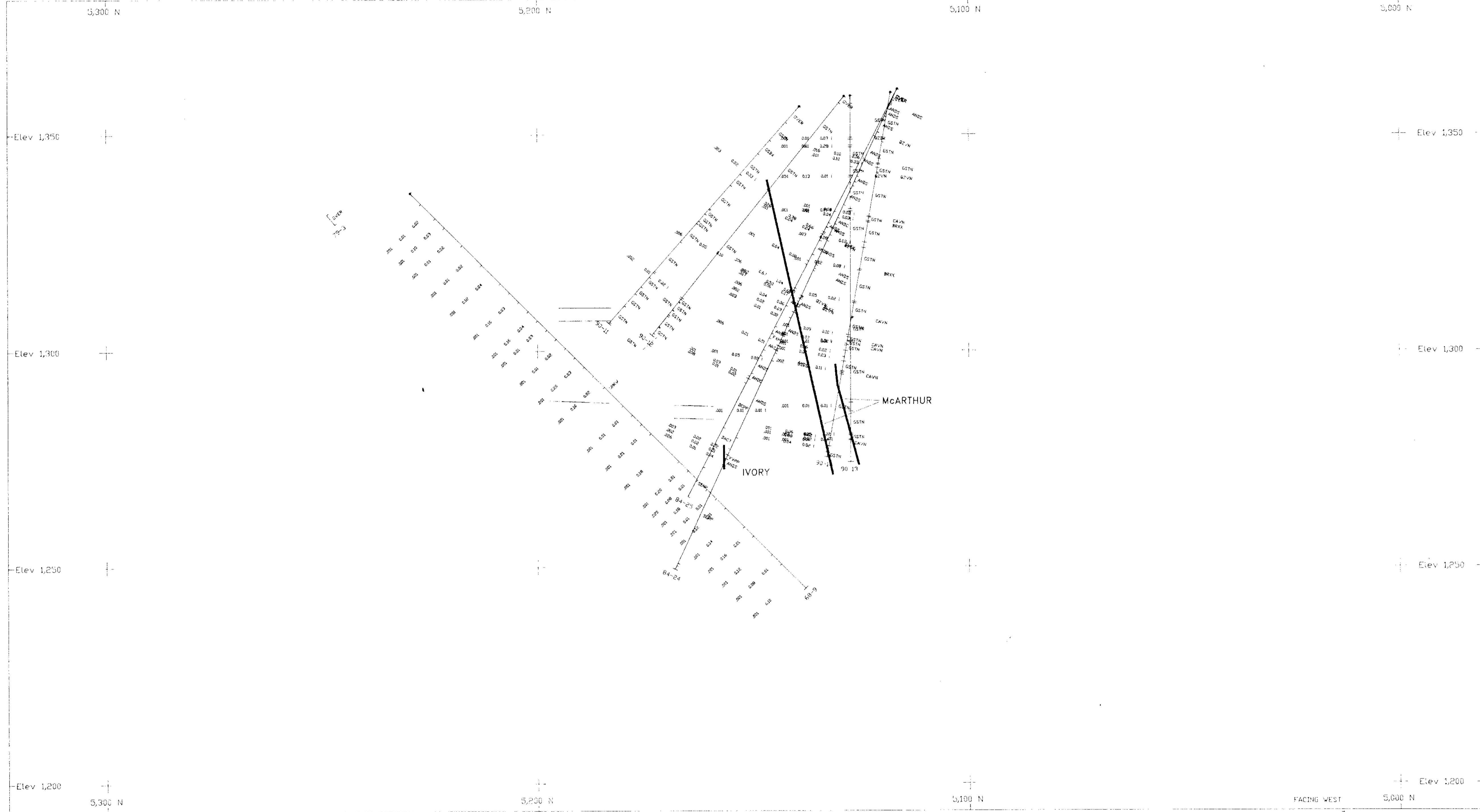


ATTWOOD GOLD CORP.  
GOLDEN CROWN PROPERTY  
GEOLOGY

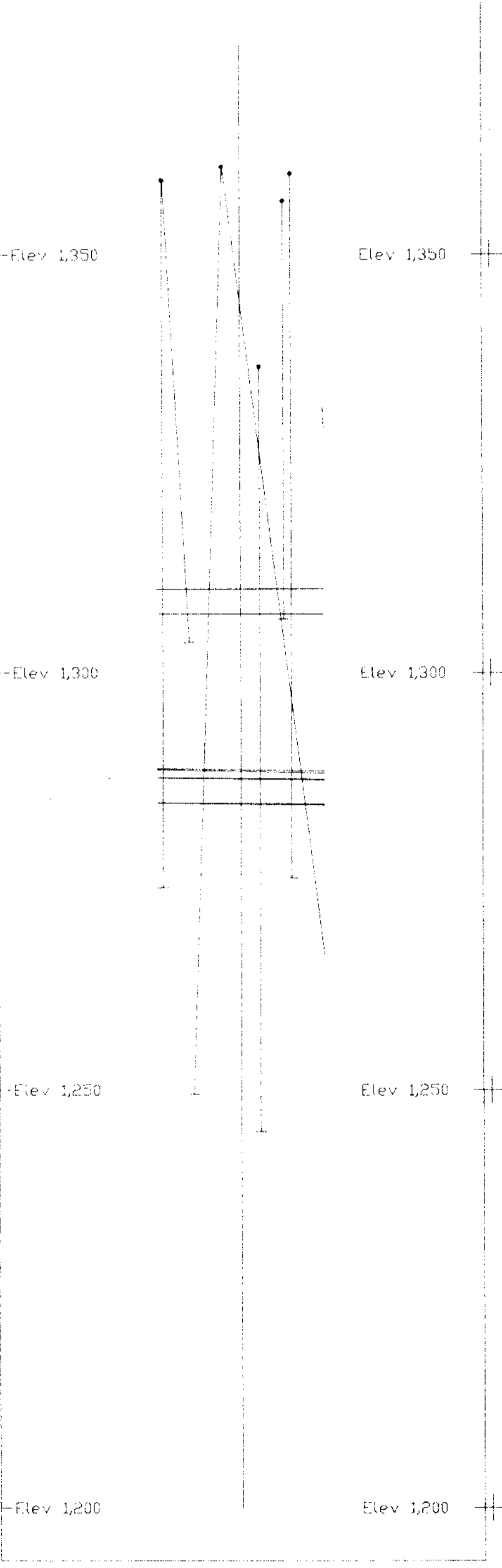
SCALE: 1:2000	DATE: Oct '90	N.T.S. 32E/2	DRAWN BY: GEO-DOMP	FIGURE: <b>4</b>
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PLAN



FACING NORTH



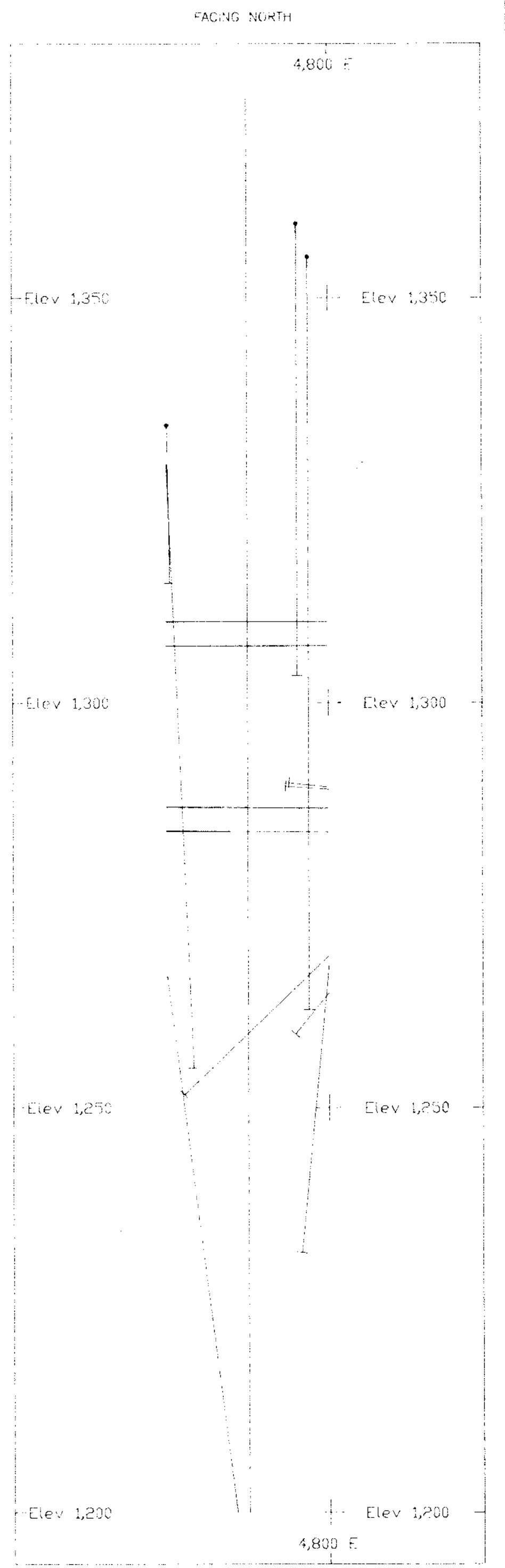
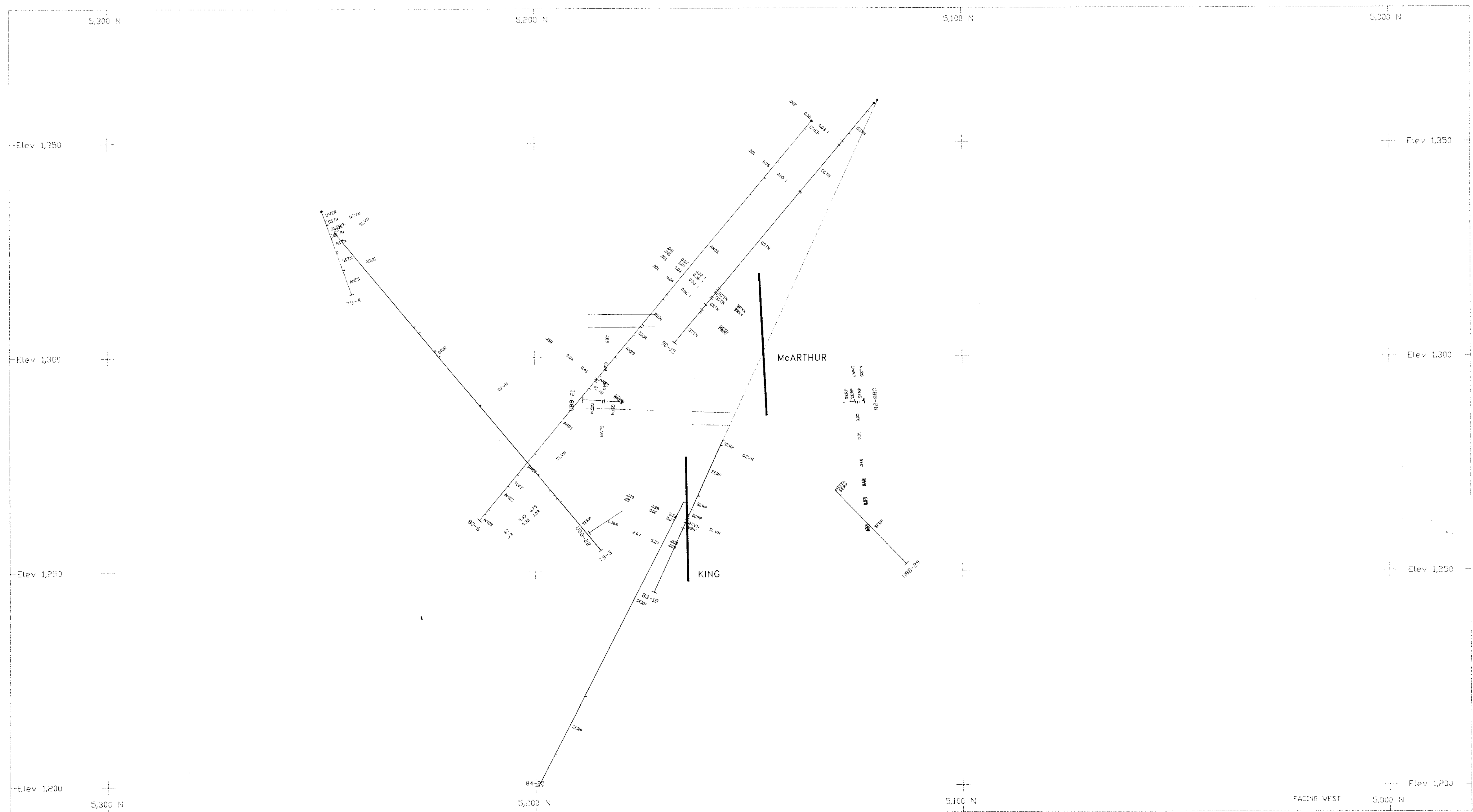
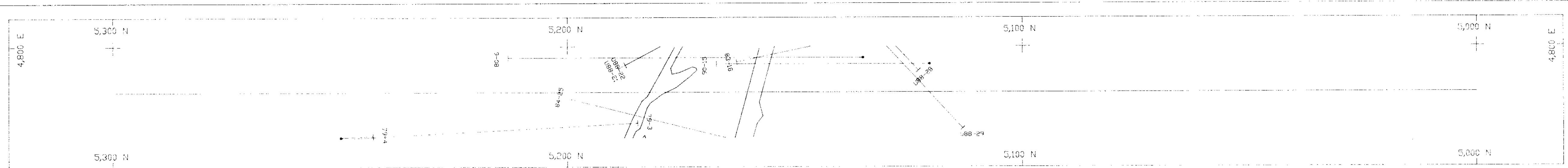
FACING WEST

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 4770 E  
SHOWING 10m FRONT AND BACK

20, ~~447~~  
431  
PART 3 OF 3

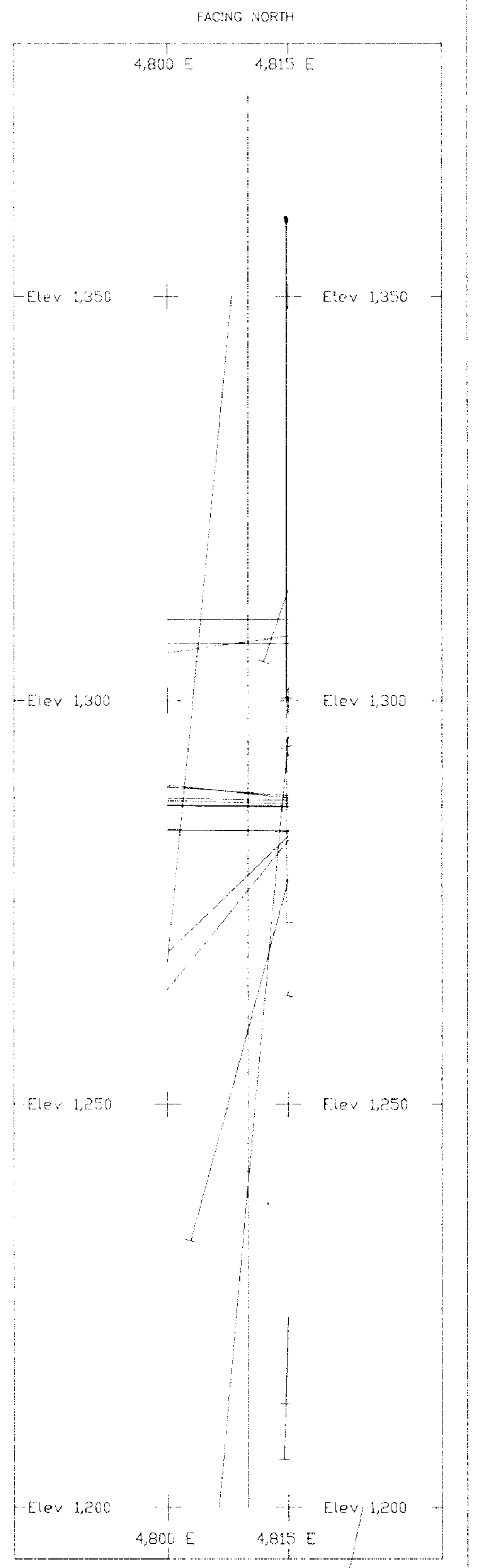
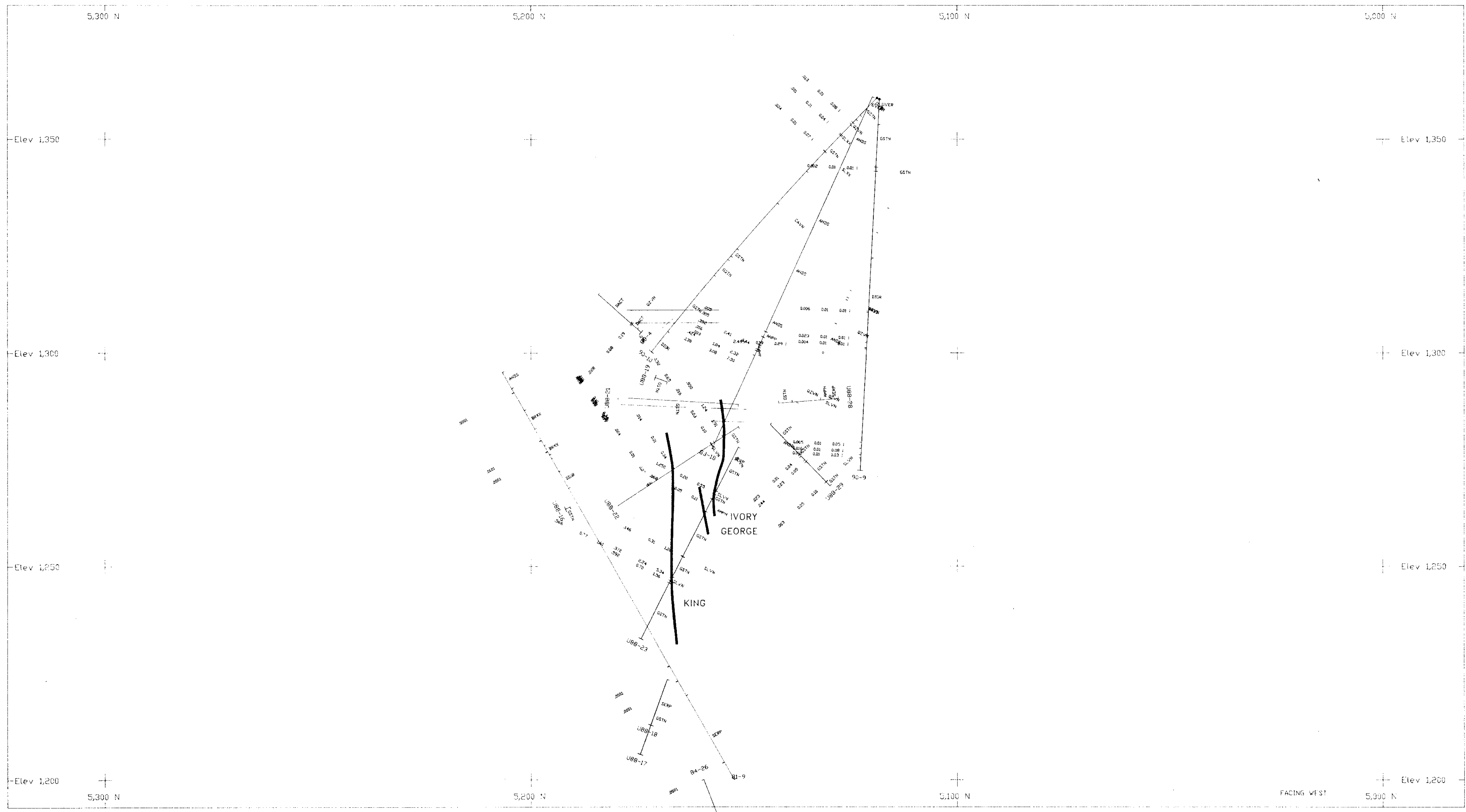
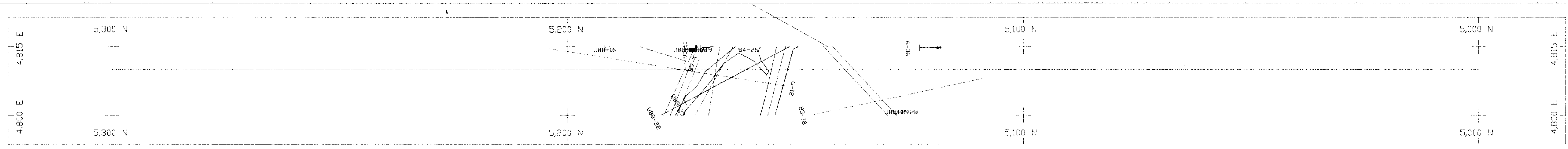




GEOLOGICAL BRANCH  
ASSESSMENT REPORT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 4790 E  
SHOWING 10m FRONT AND BACK

20 447  
431  
PART 3 OF 3

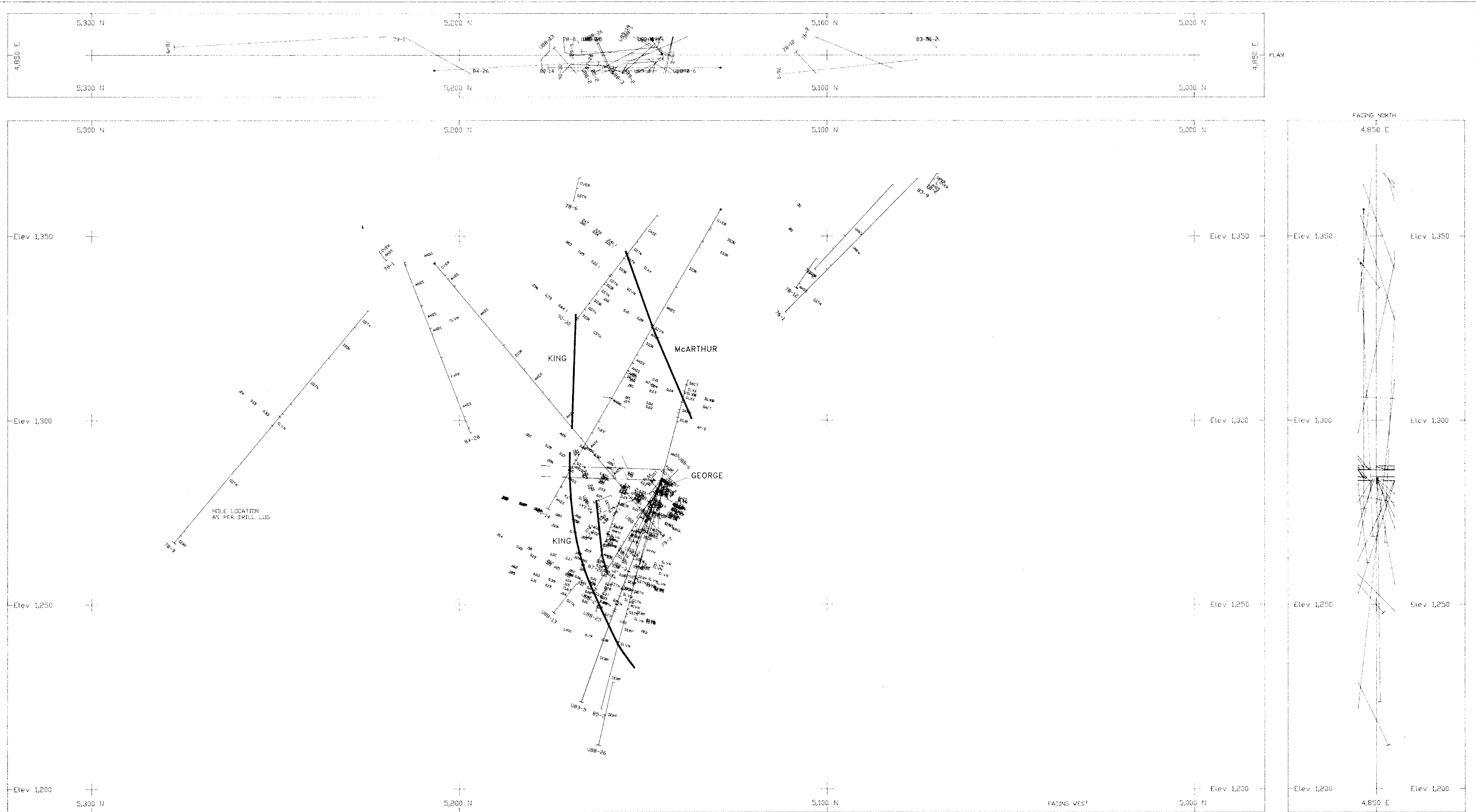


ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 4810 E  
SHOWING 10m FRONT AND BACK

20,447  
431



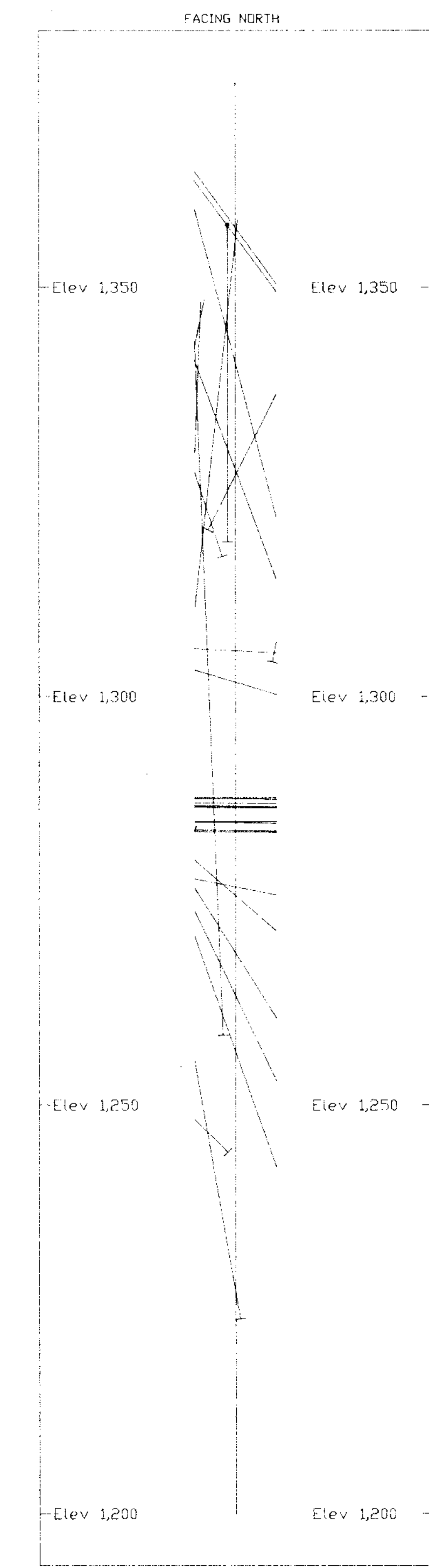
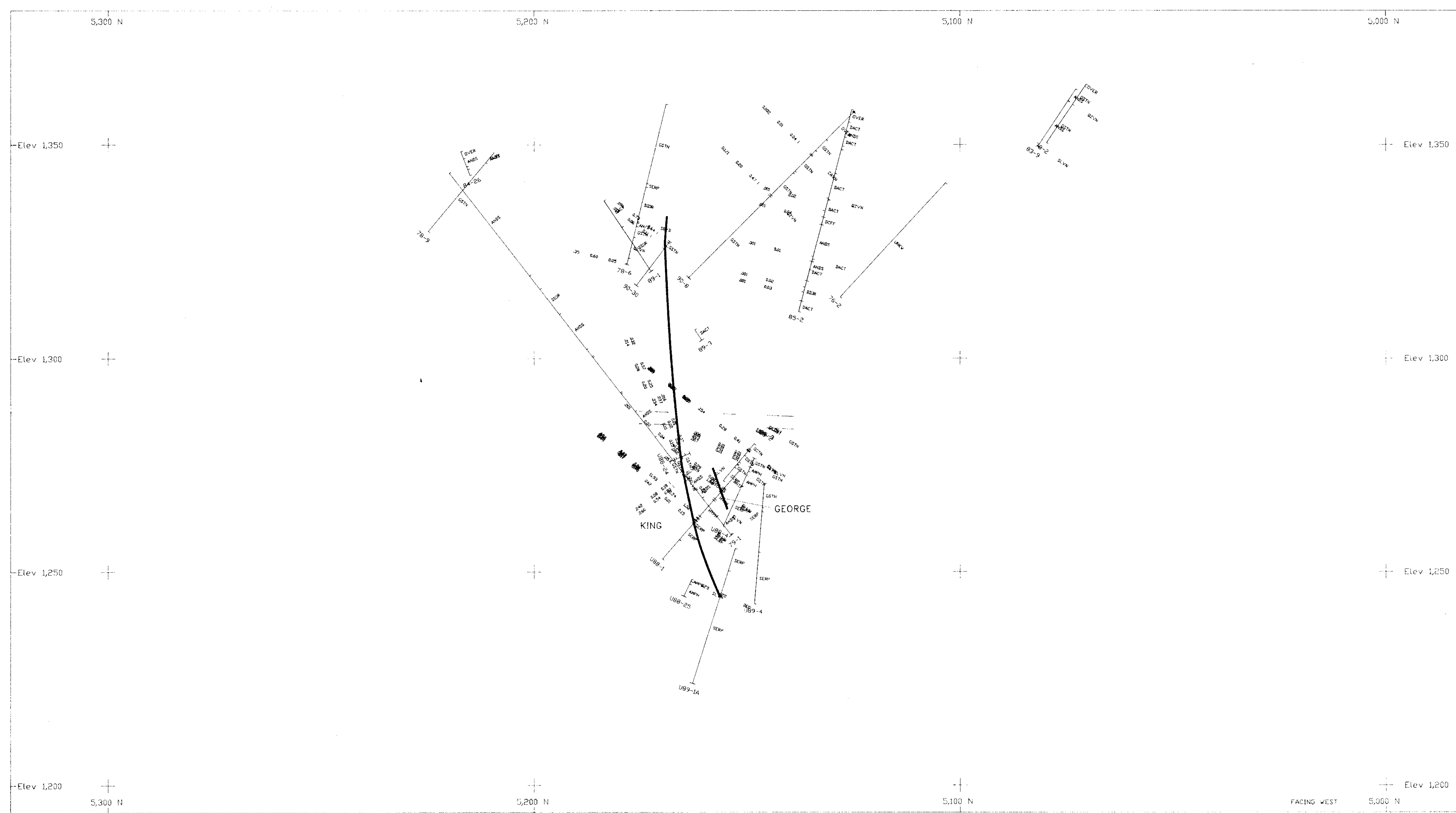
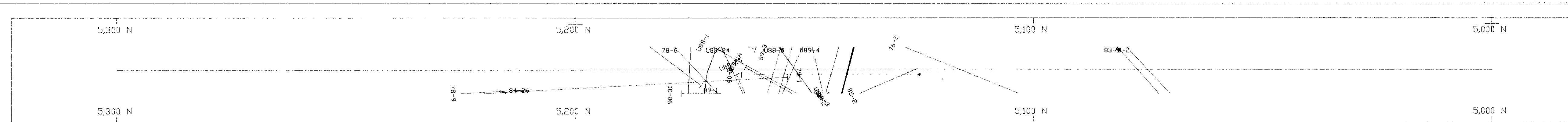


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 4850 E  
SHOWING 5m FRONT AND BACK

20, ~~447~~  
431

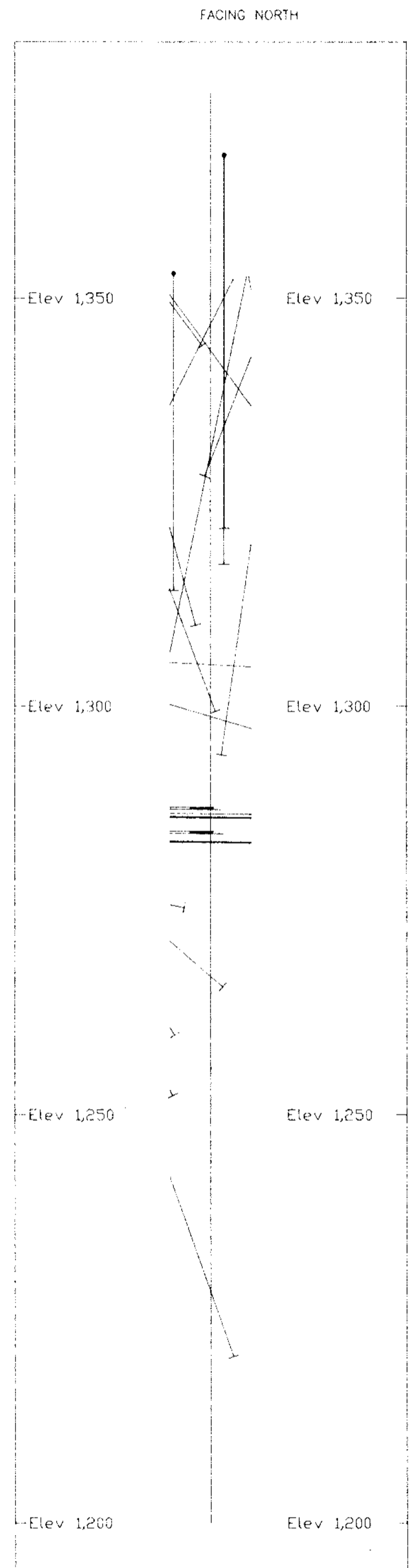
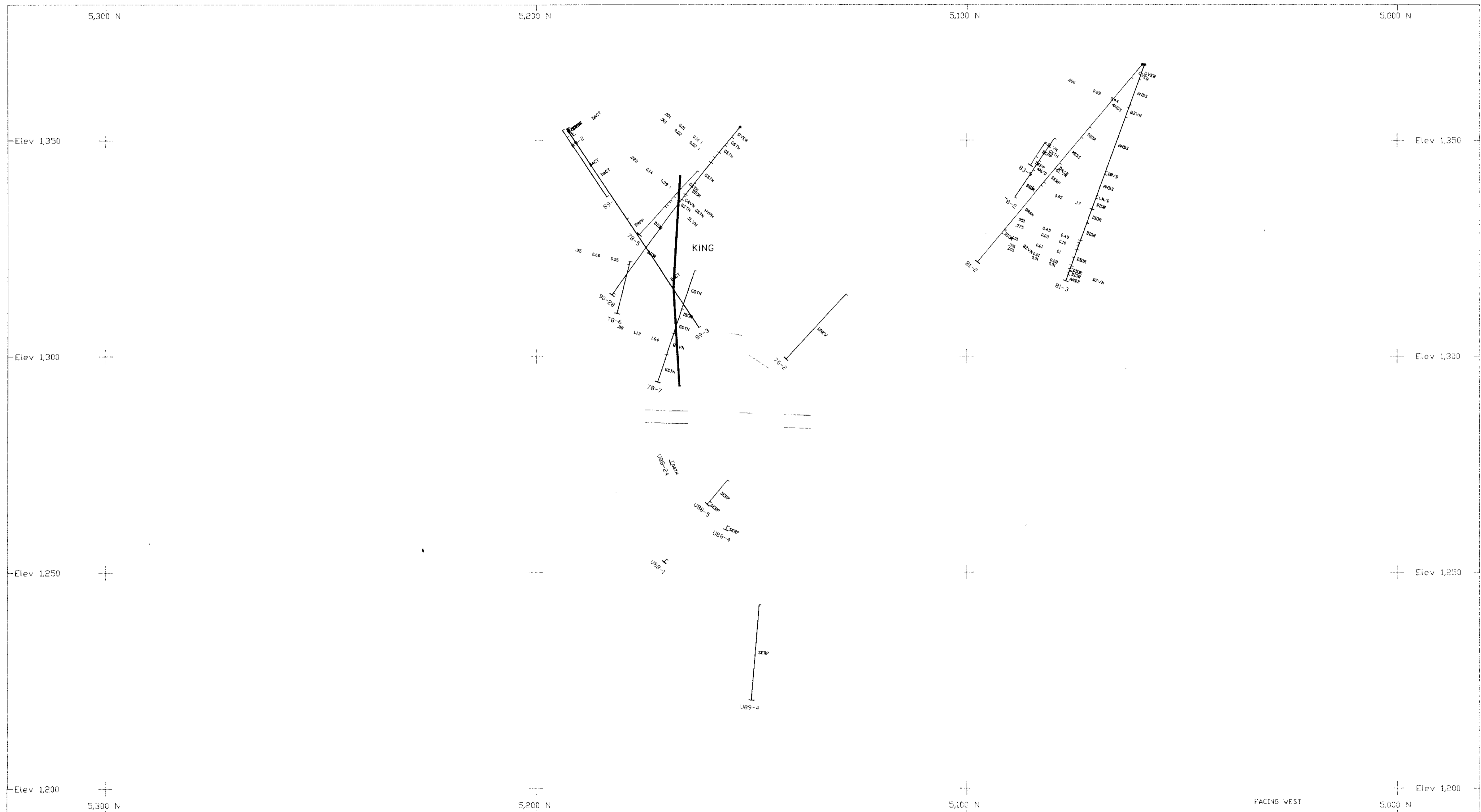
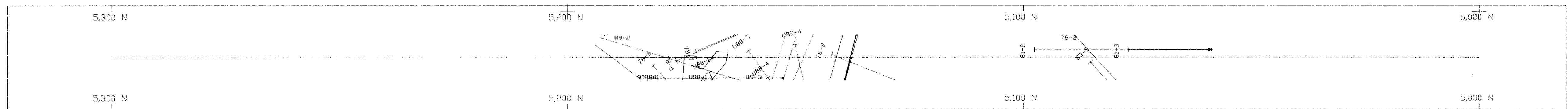
PART 3 OF 3



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 4860 E  
SHOWING 5m FRONT AND BACK

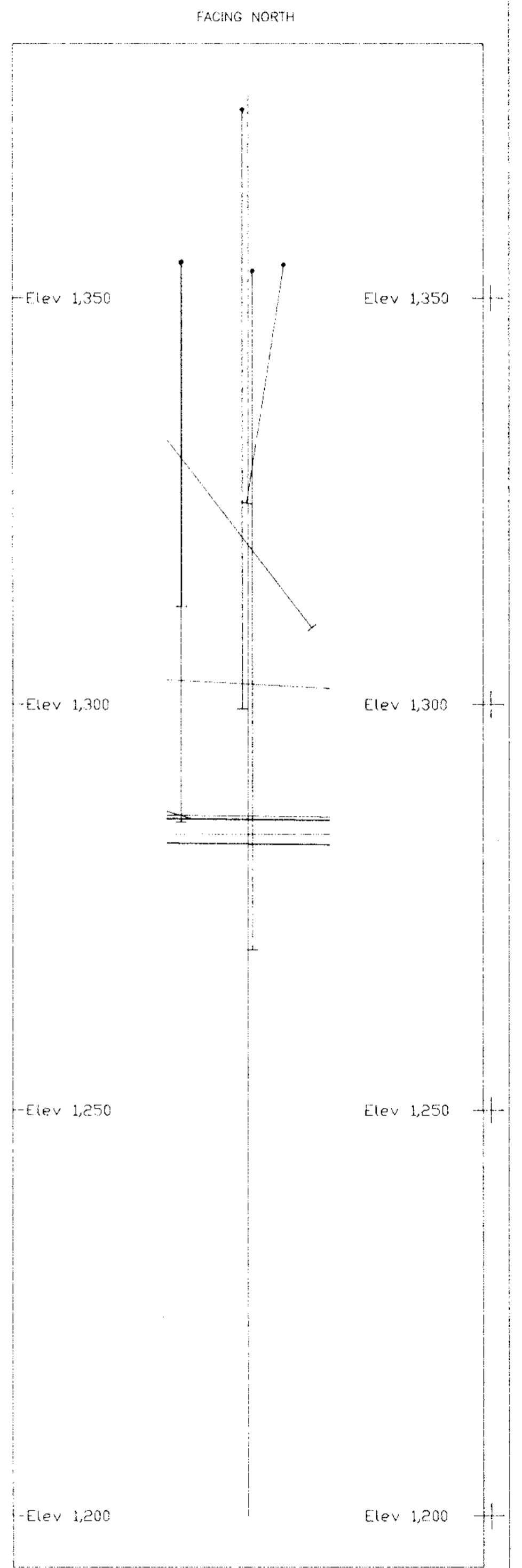
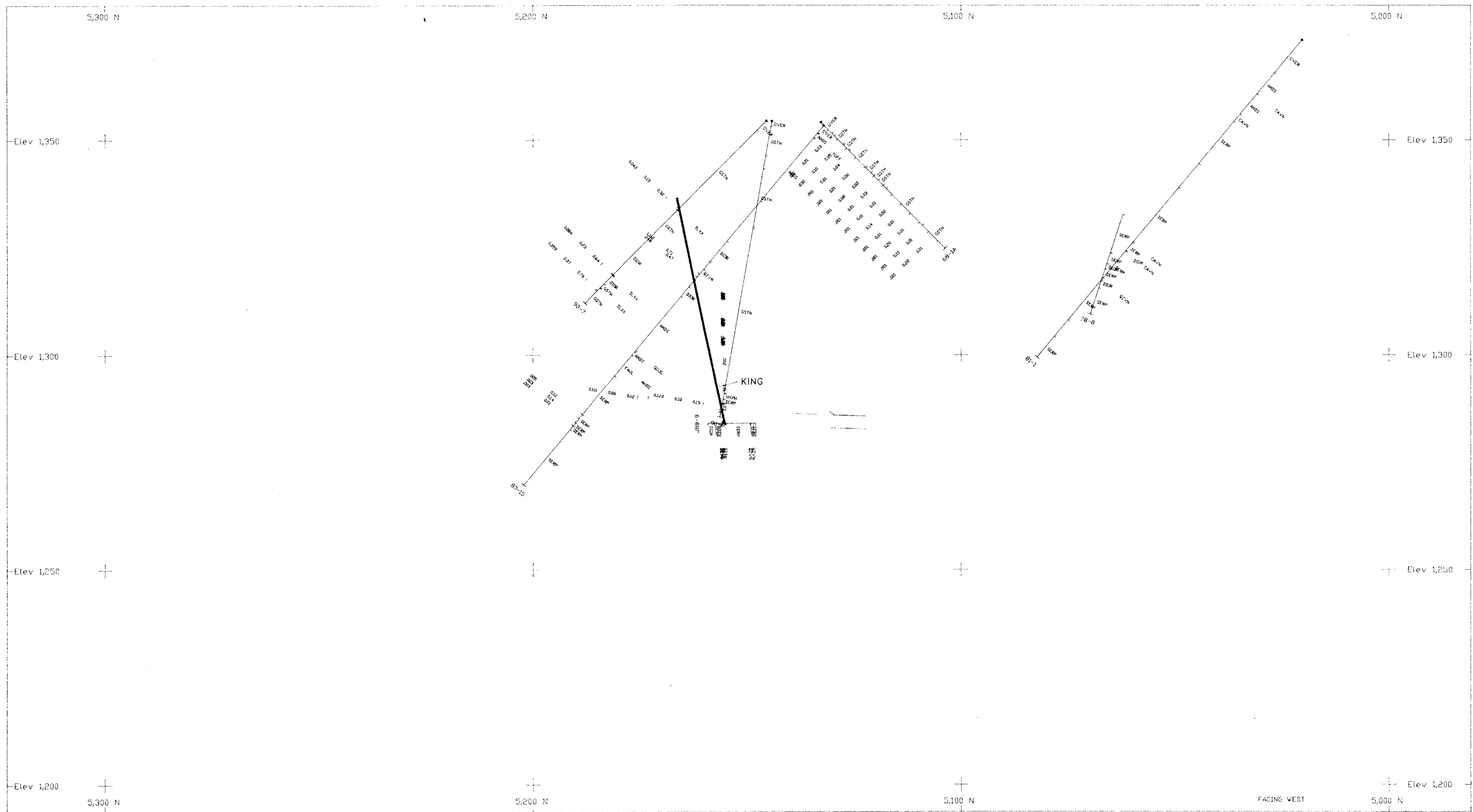
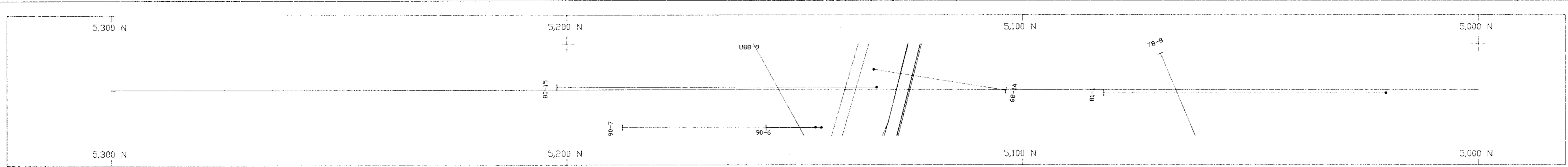
20,447  
431  
PART 3 OF 3



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 4870 E  
SHOWING 5m FRONT AND BACK

20.417  
431  
PART 3 OF 3



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,447  
31  
PART 3 of 3

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 4920 E  
SHOWING 10m FRONT AND BACK

4350 E 5300 N

100

Elev 1,300

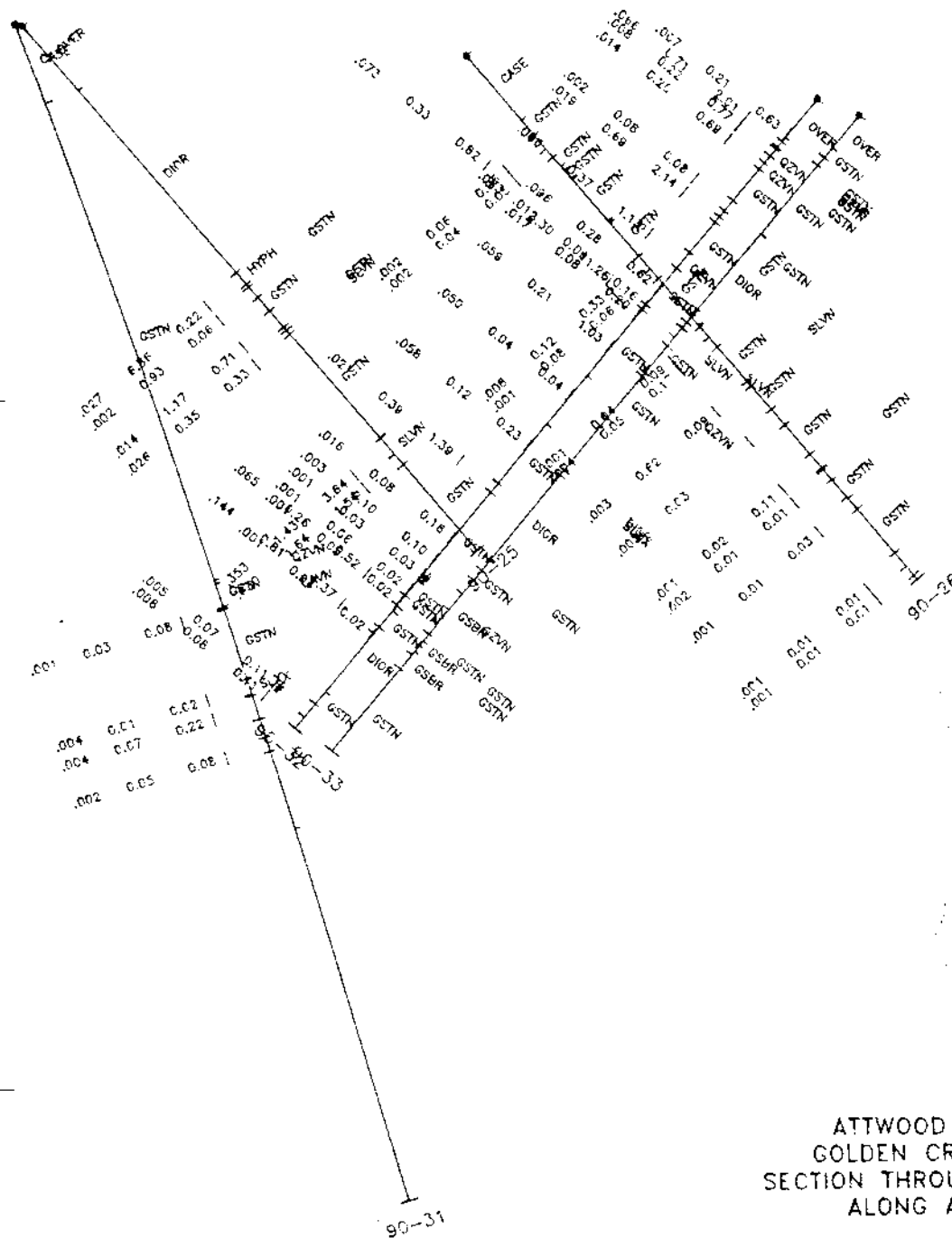
Elev 1,300

Elev 1,250

Elev 1,250

4350 E 5300 N

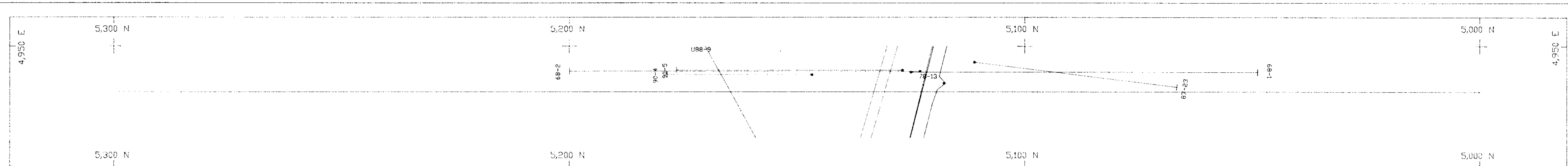
100



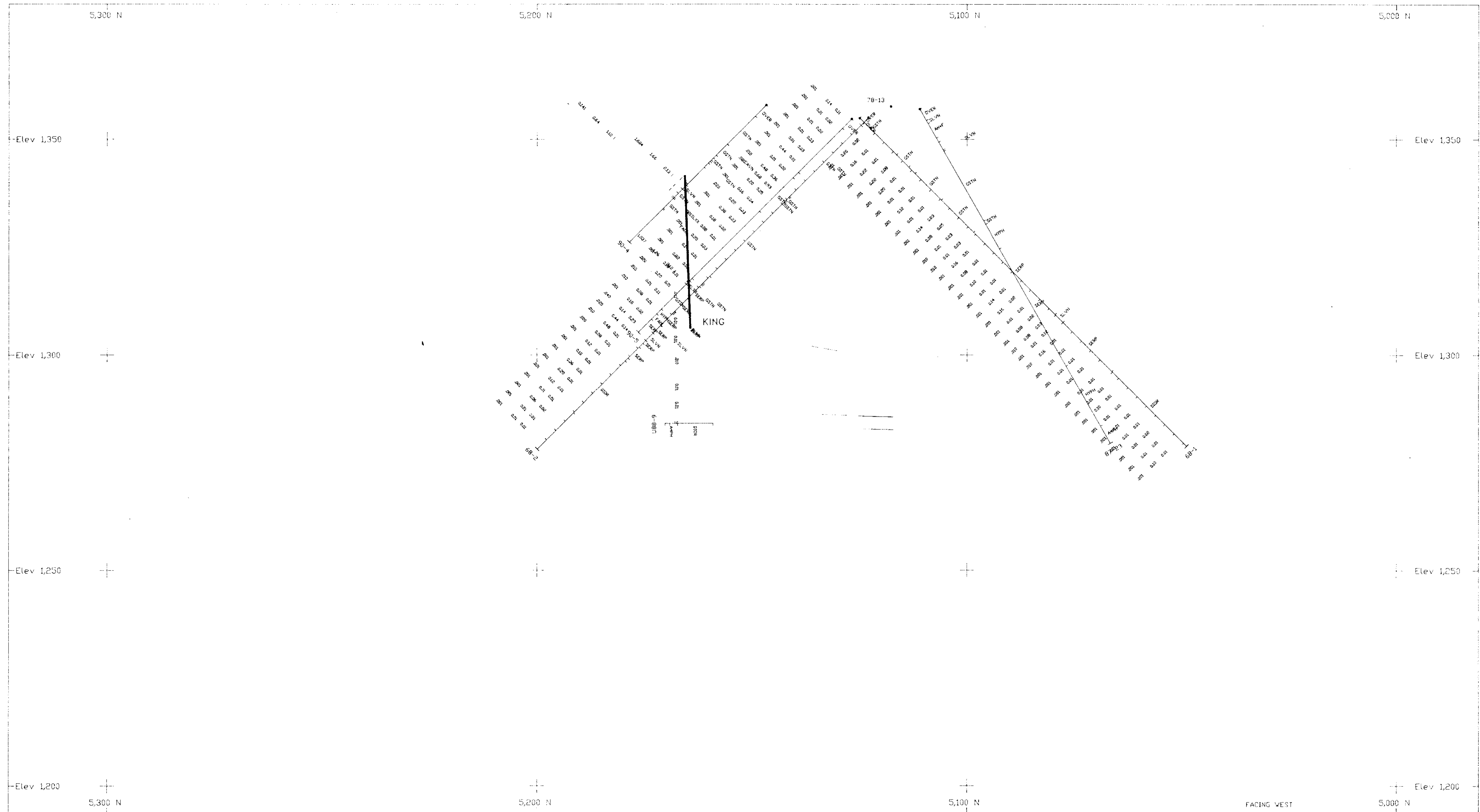
ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION THROUGH 4350E 5300N  
ALONG AZIMUTH 22°

~~431~~  
431

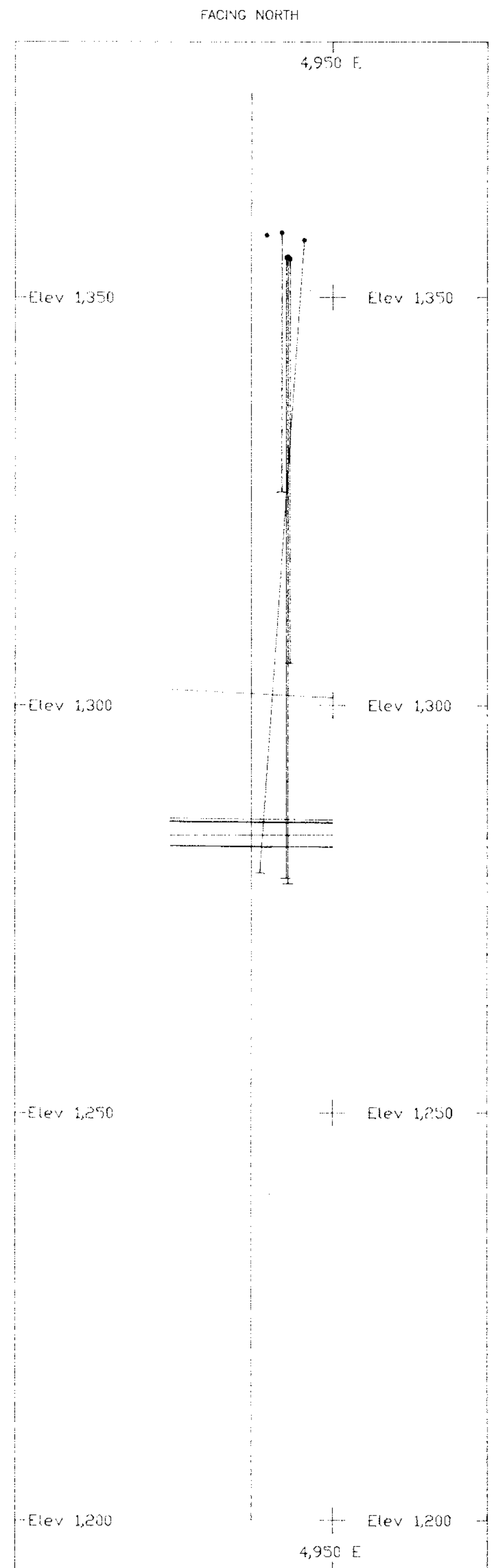
PART 3 OF 3



PLAN



FACING WEST



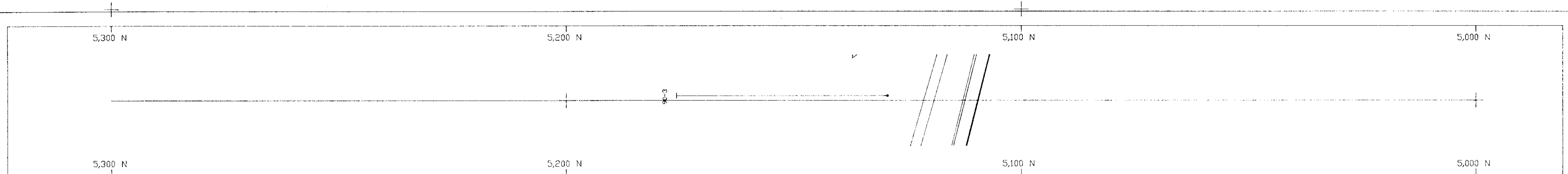
FACING NORTH

GEOLOGICAL SEARCH  
ASSESSMENT REPORT

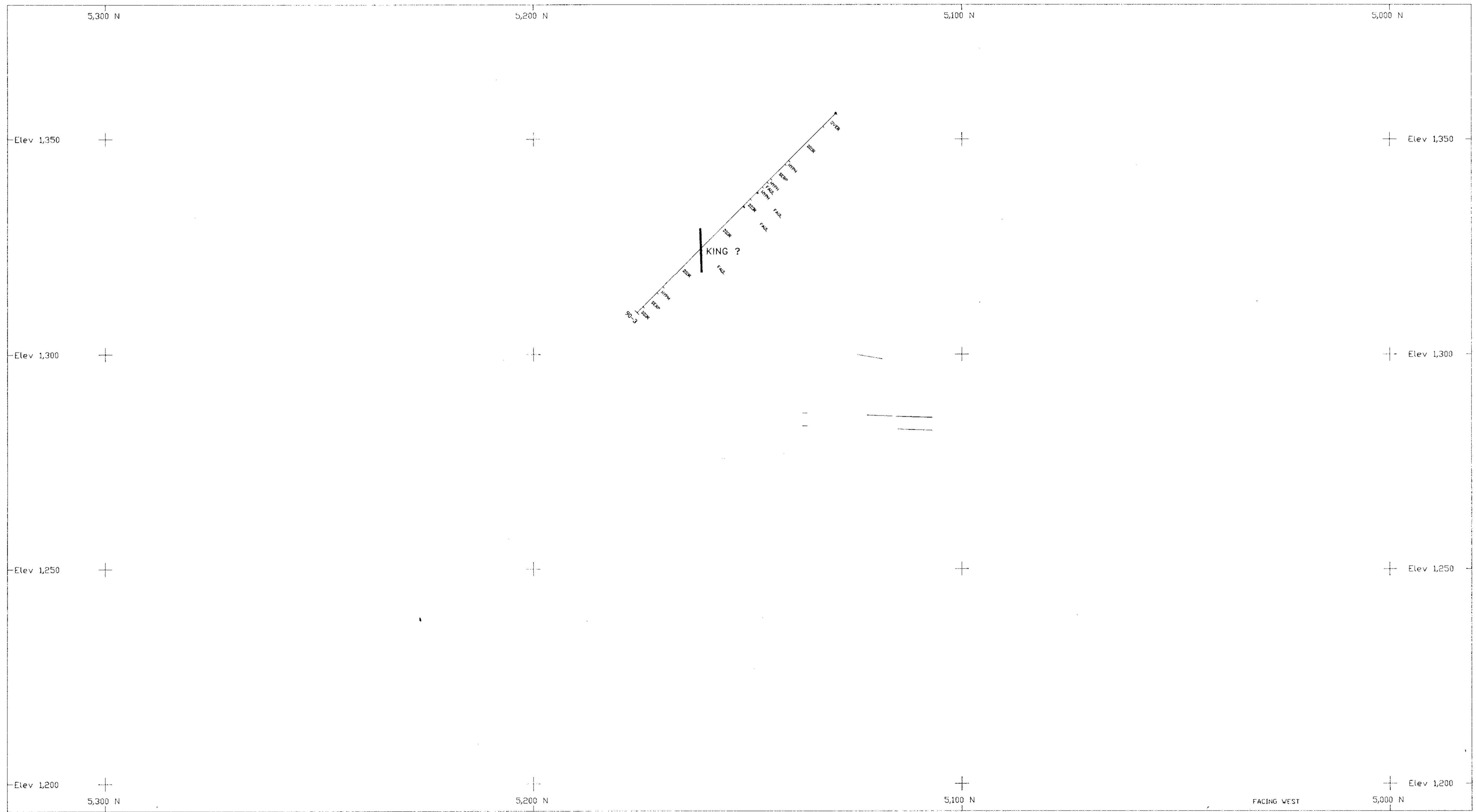
ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 4940 E  
SHOWING 10m FRONT AND BACK

20,447  
31

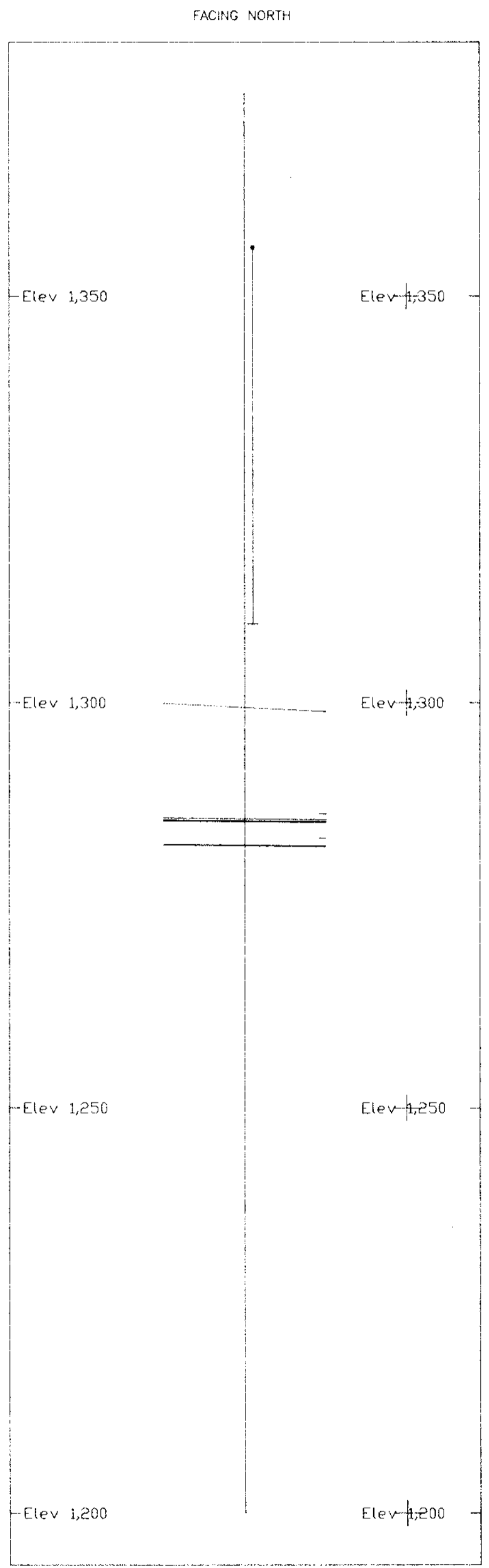
PART 3 OF 3



PLAN



FACING WEST

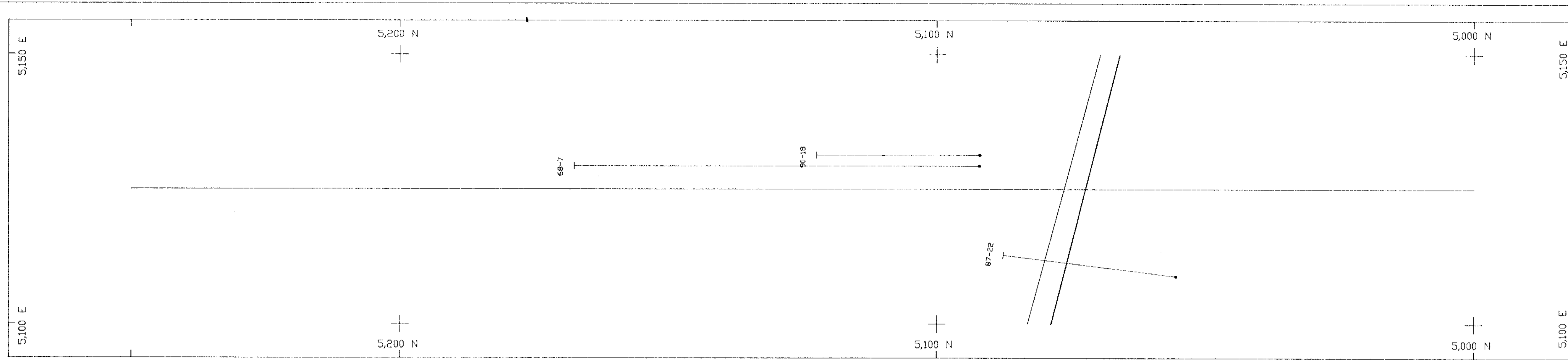


FACING NORTH

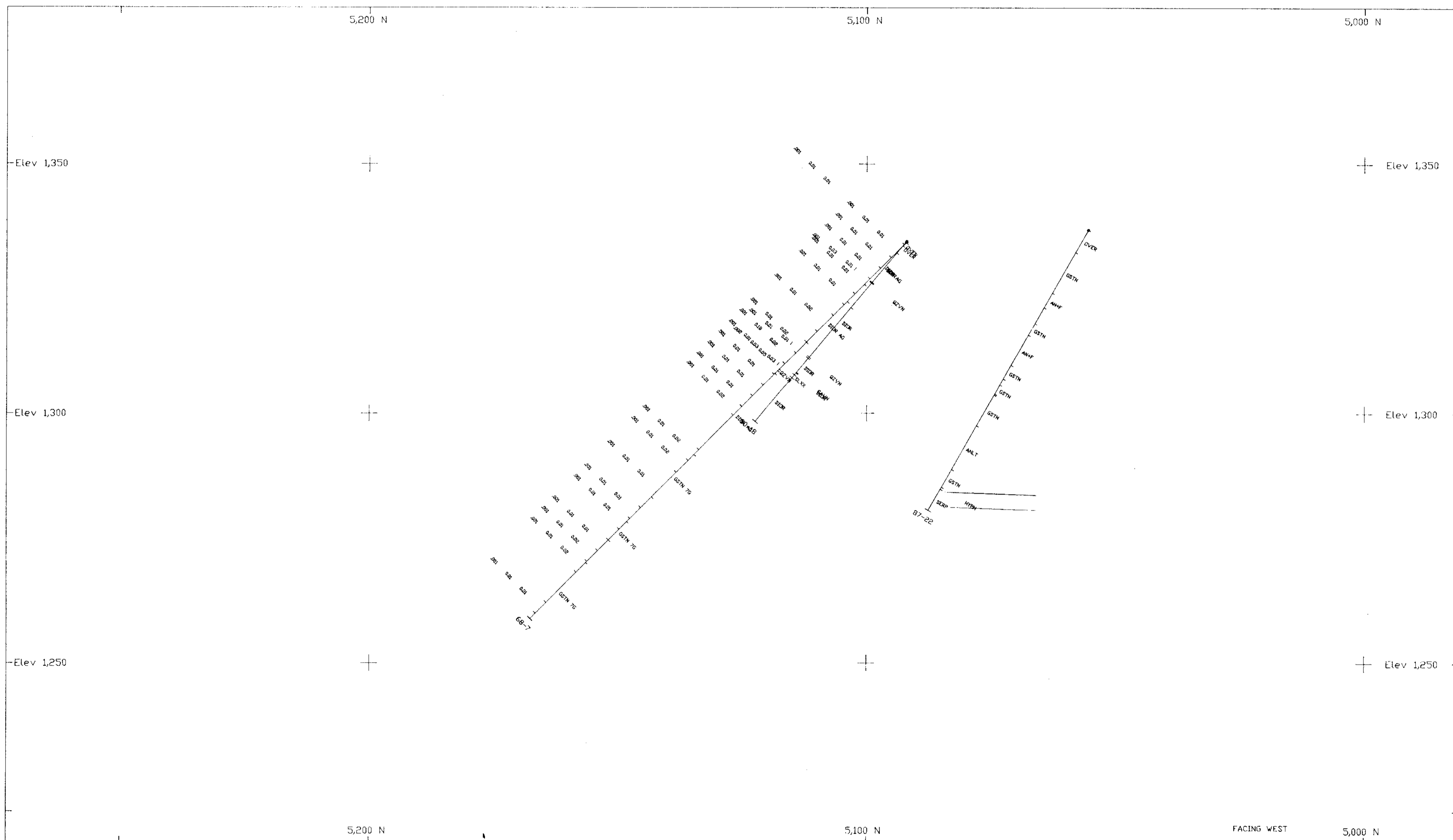
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 4980 E  
SHOWING 10m FRONT AND BACK

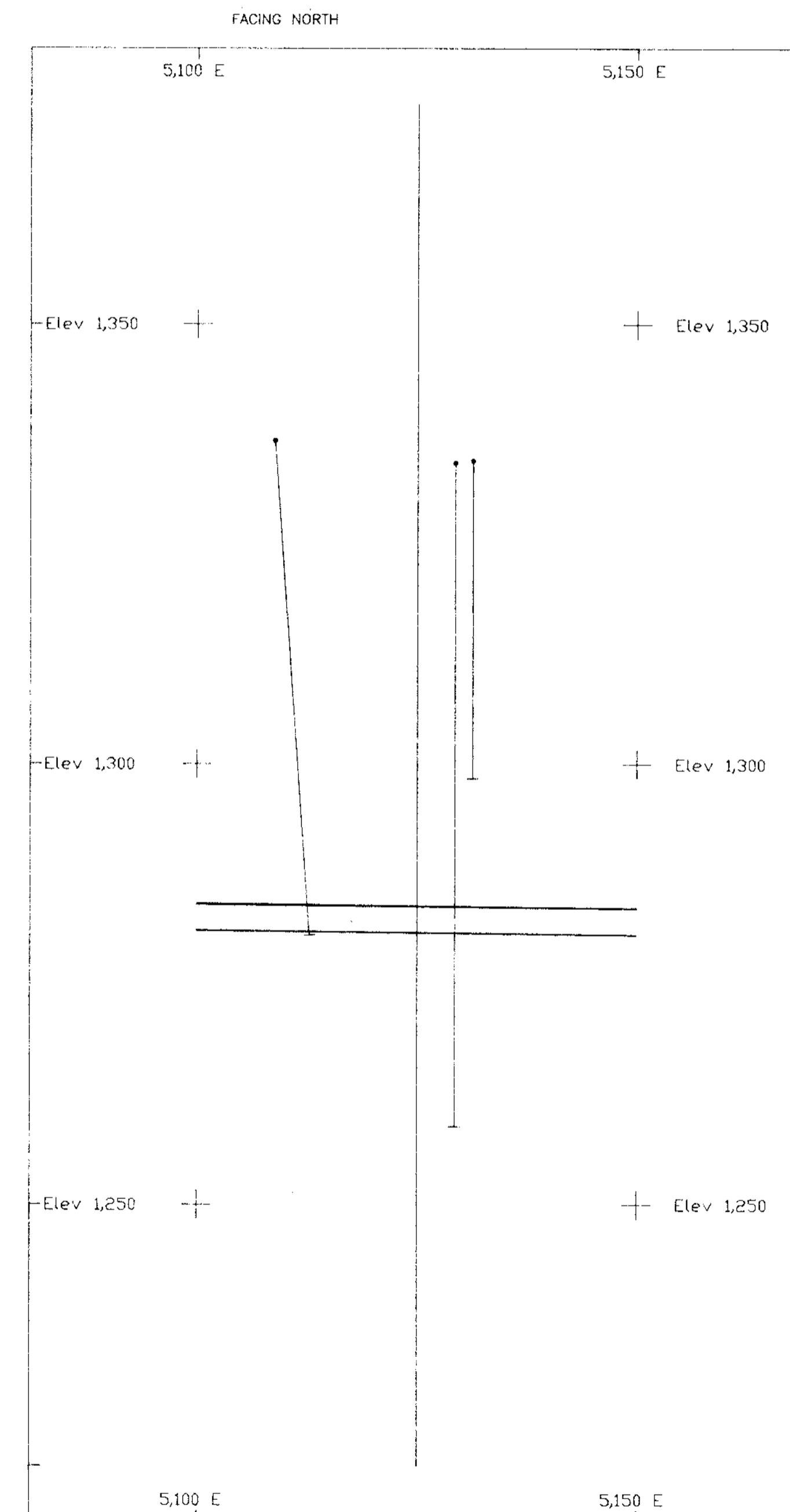
20,447  
31  
PART 3 of 3



PLAN



FACING WEST



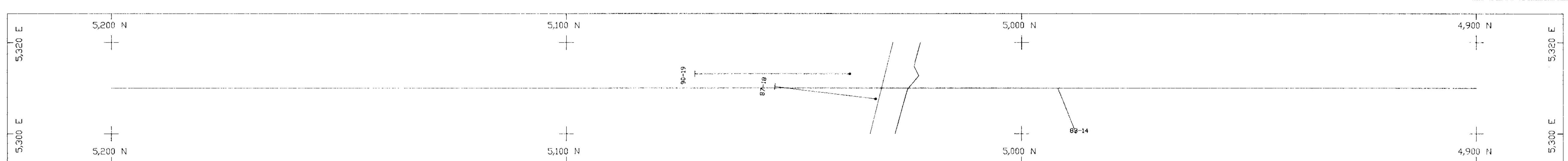
FACING NORTH

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

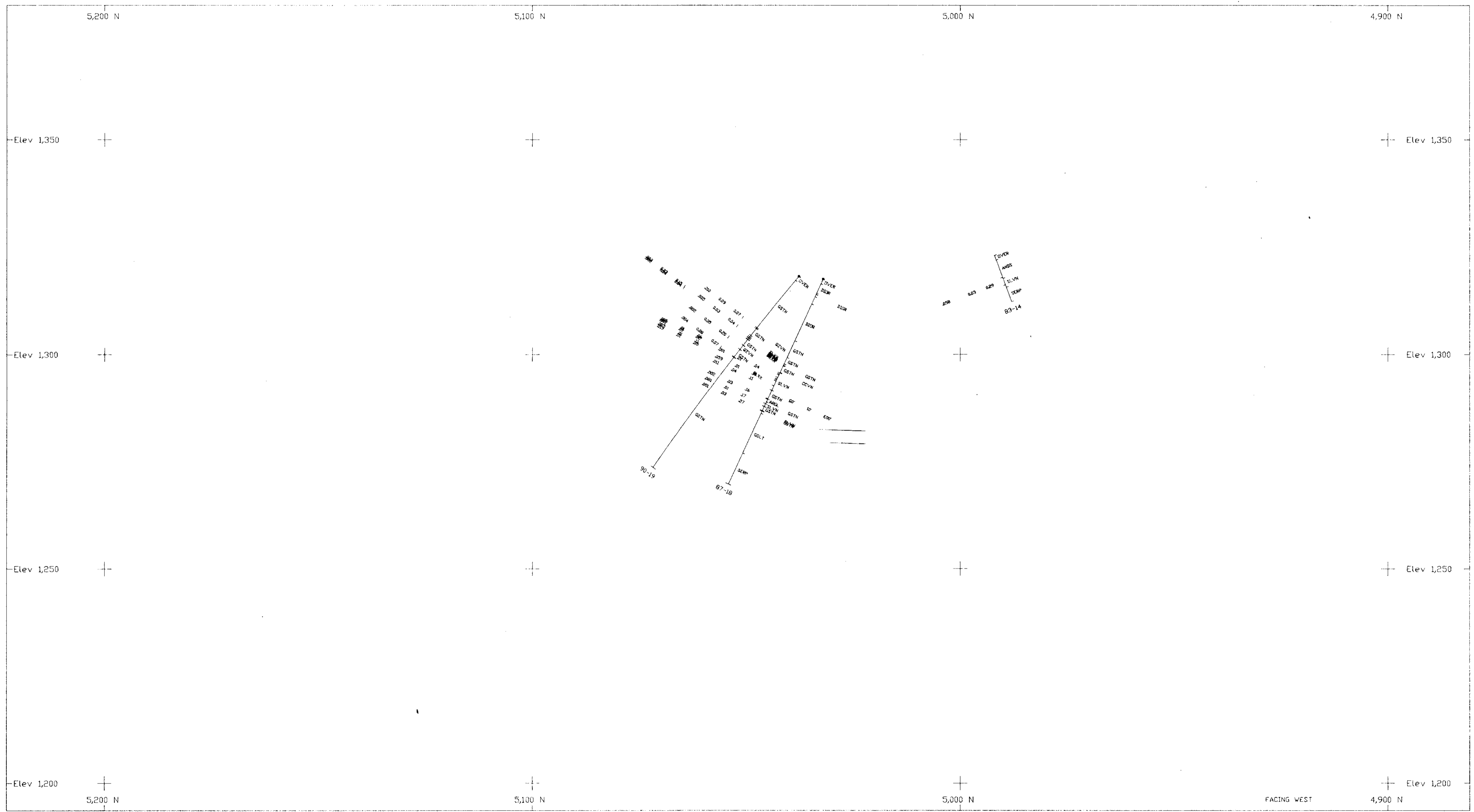
ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 5125 E  
SHOWING 25m FRONT AND BACK

20, ~~447~~  
431  
PART 3 OF 3

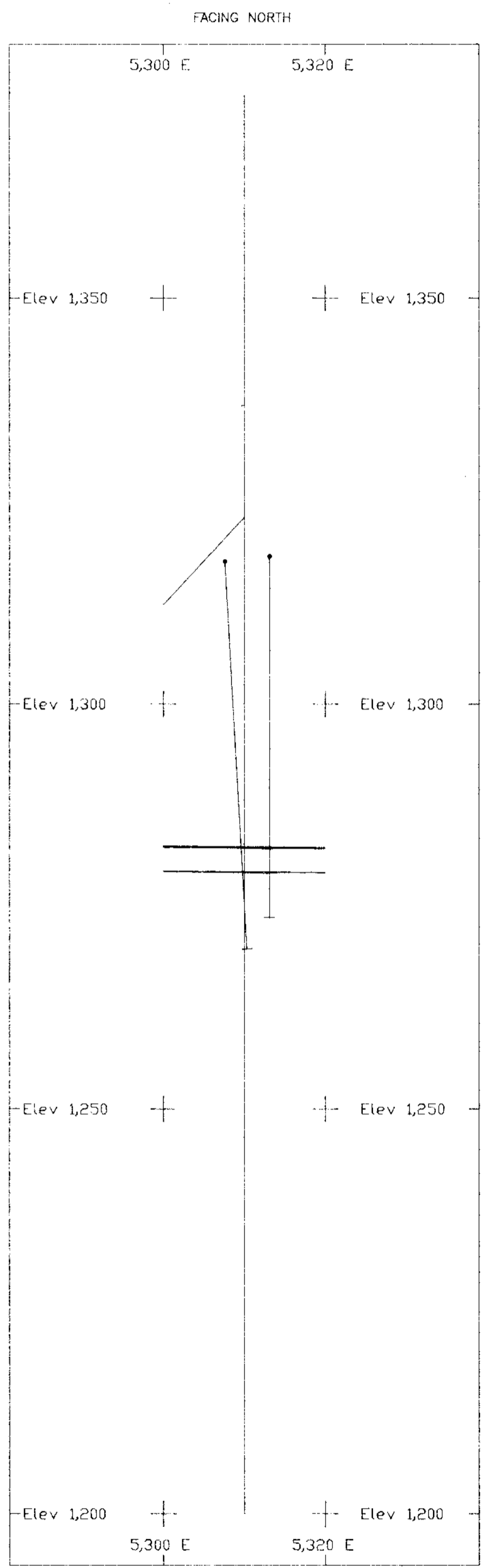




PLAN



FACING WEST

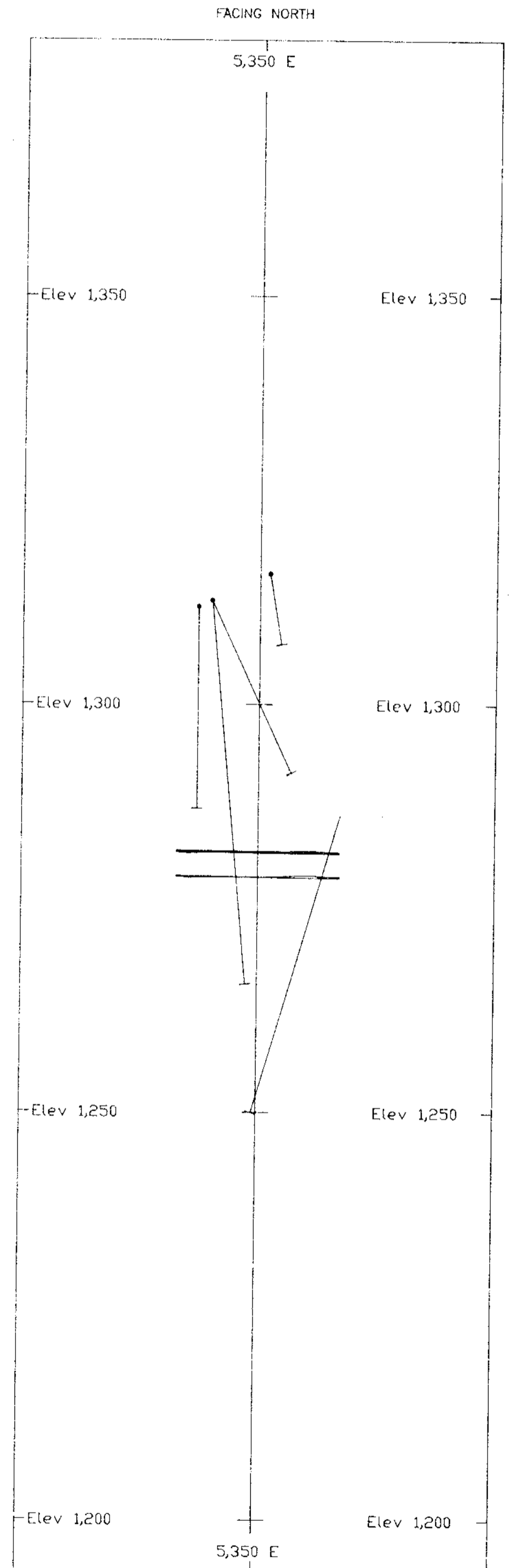
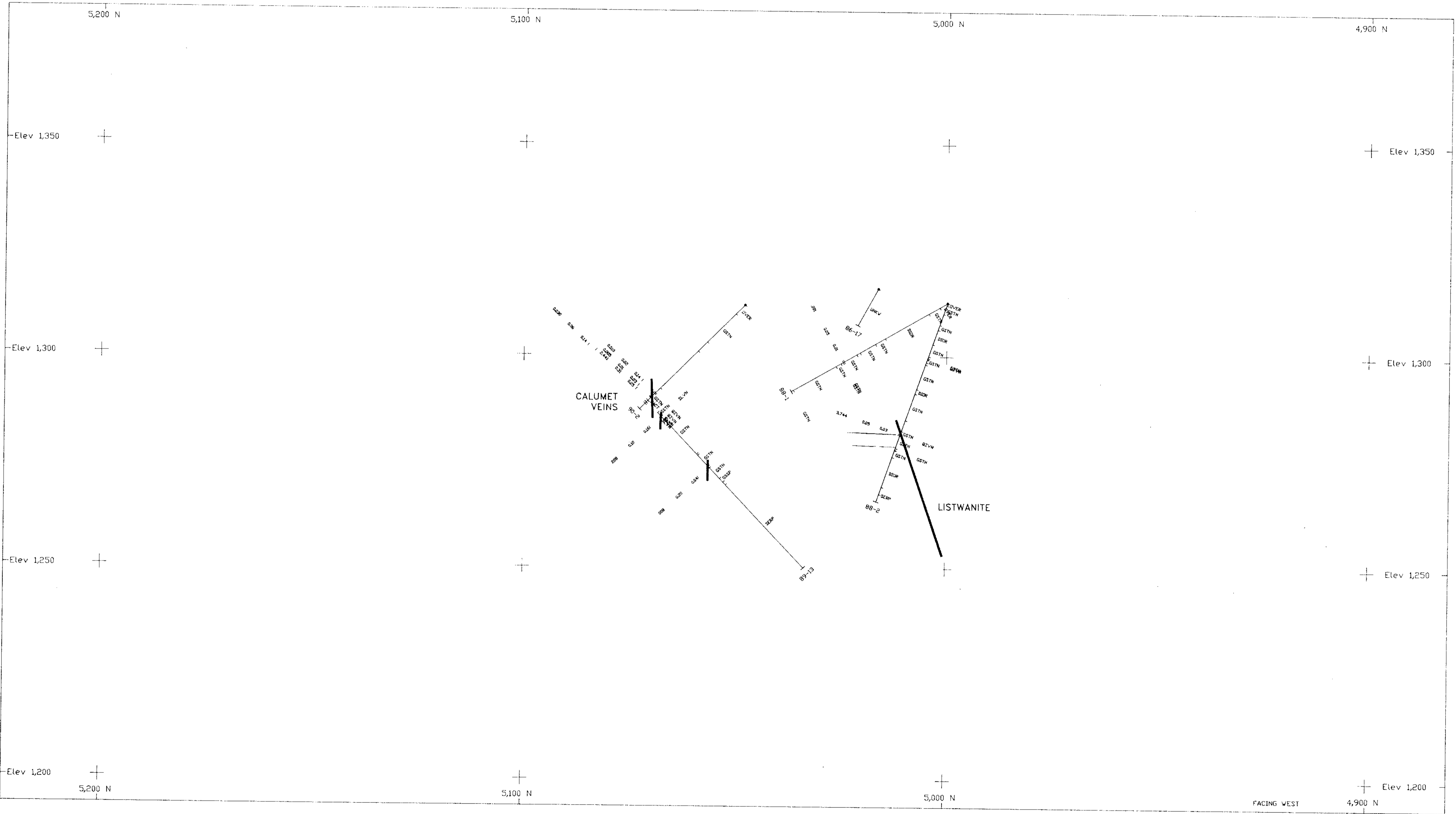
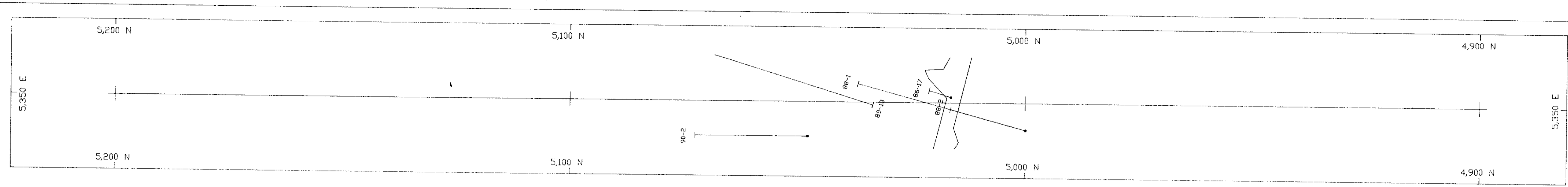


FACING NORTH

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 5310 E  
SHOWING 10m FRONT AND BACK

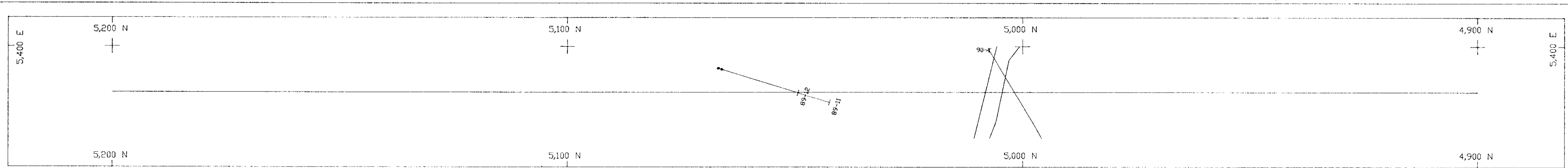
20,447  
431  
PART 3 OF 3



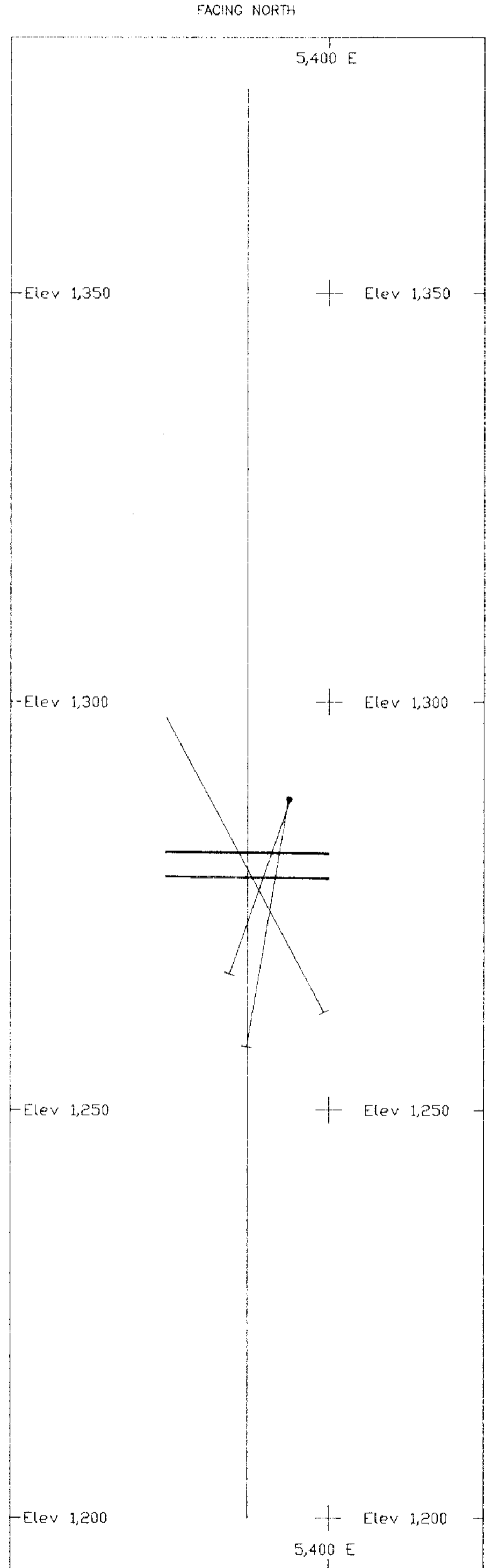
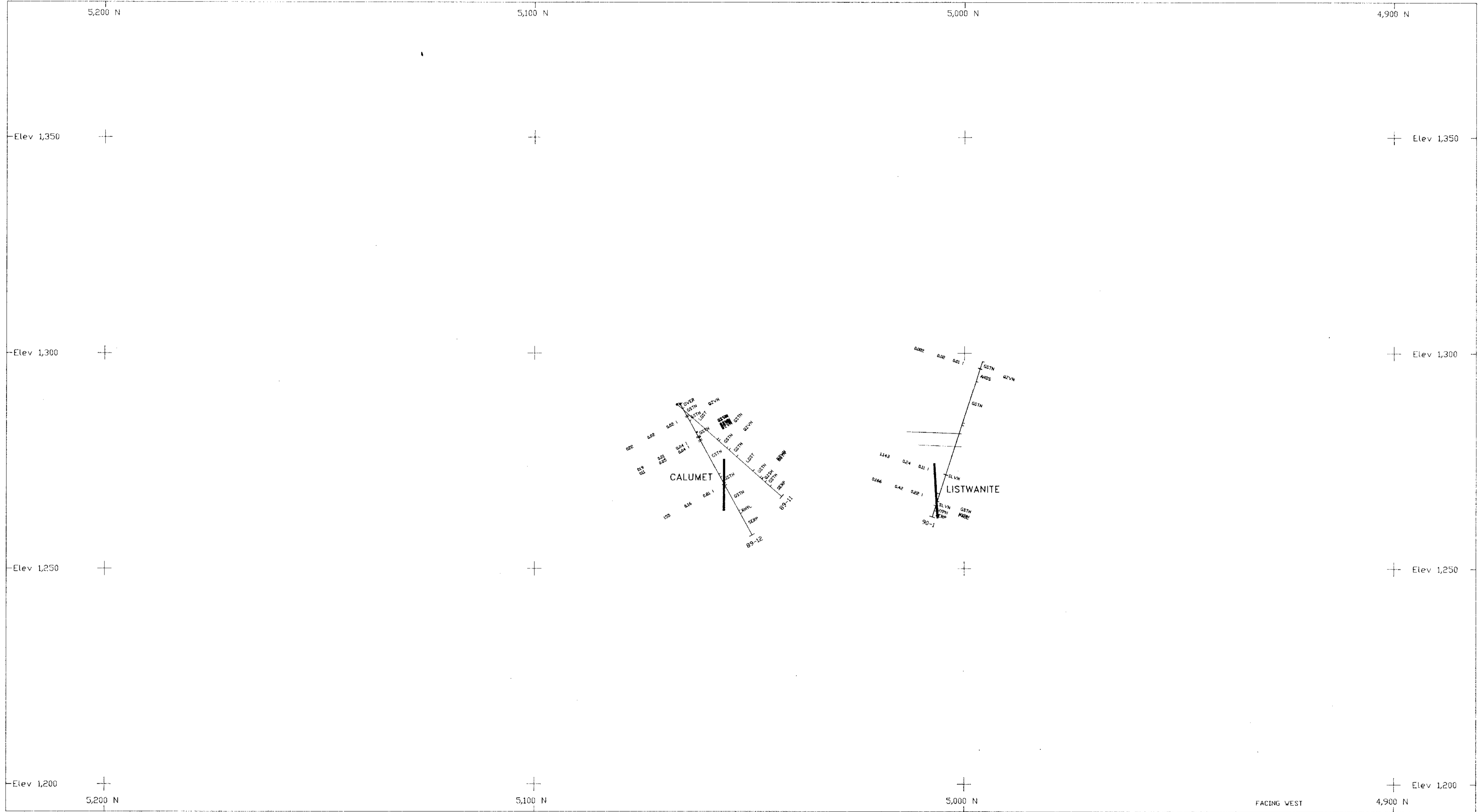
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 5350 E  
SHOWING 10m FRONT AND BACK

20,447  
431  
PART 3 OF 3



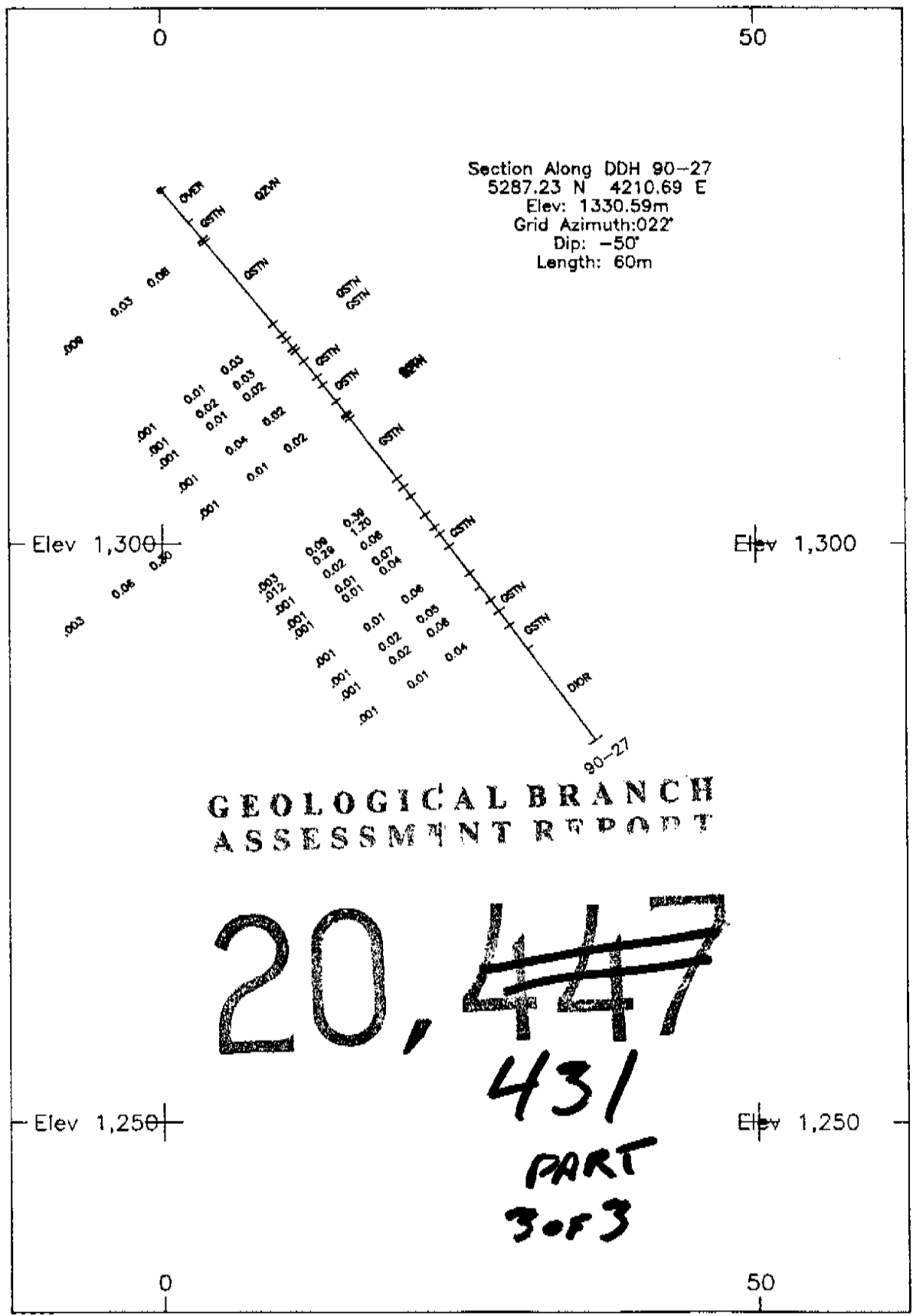
PLAN

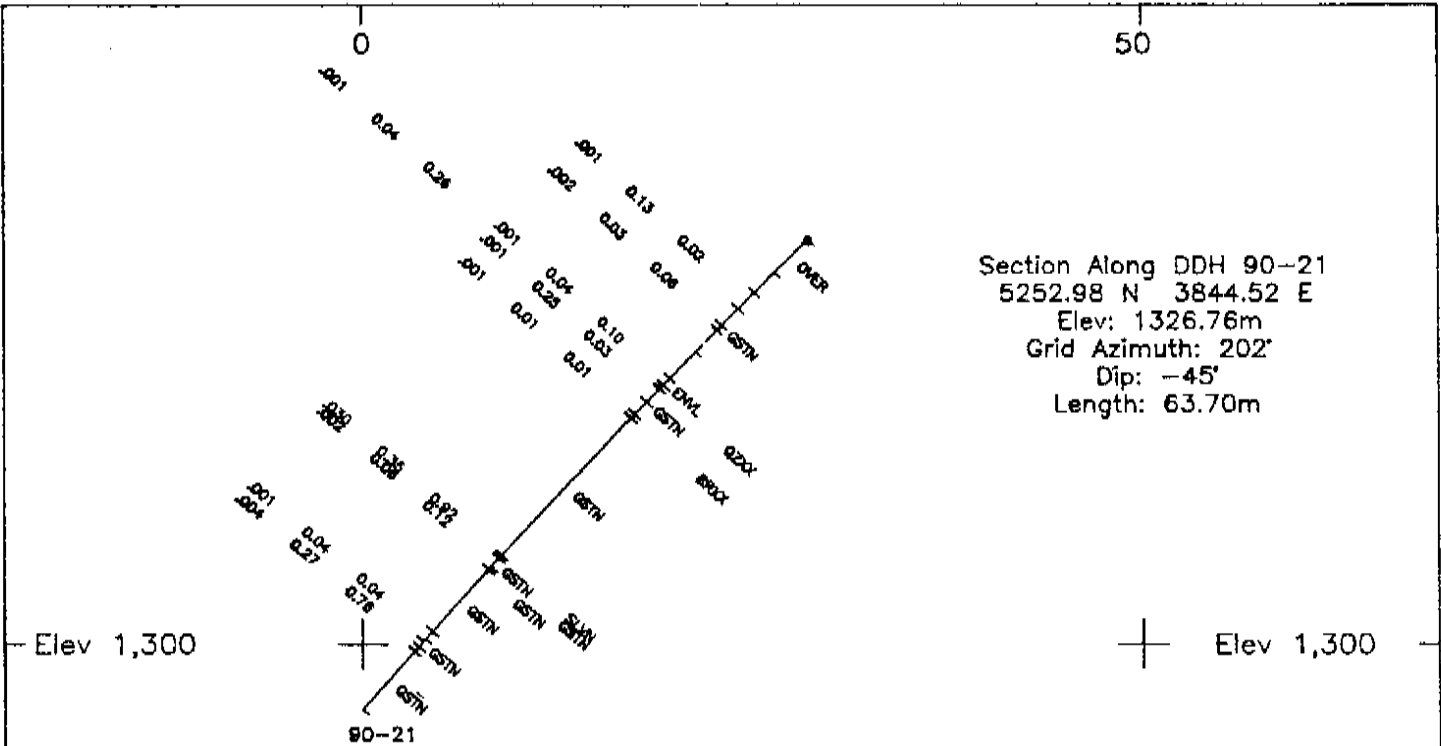


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT  
SECTION 5390 E  
SHOWING 10m FRONT AND BACK

20, ~~447~~  
431  
PART 3 OF 3





GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

20, ~~447~~  
 431

Elev 1,250

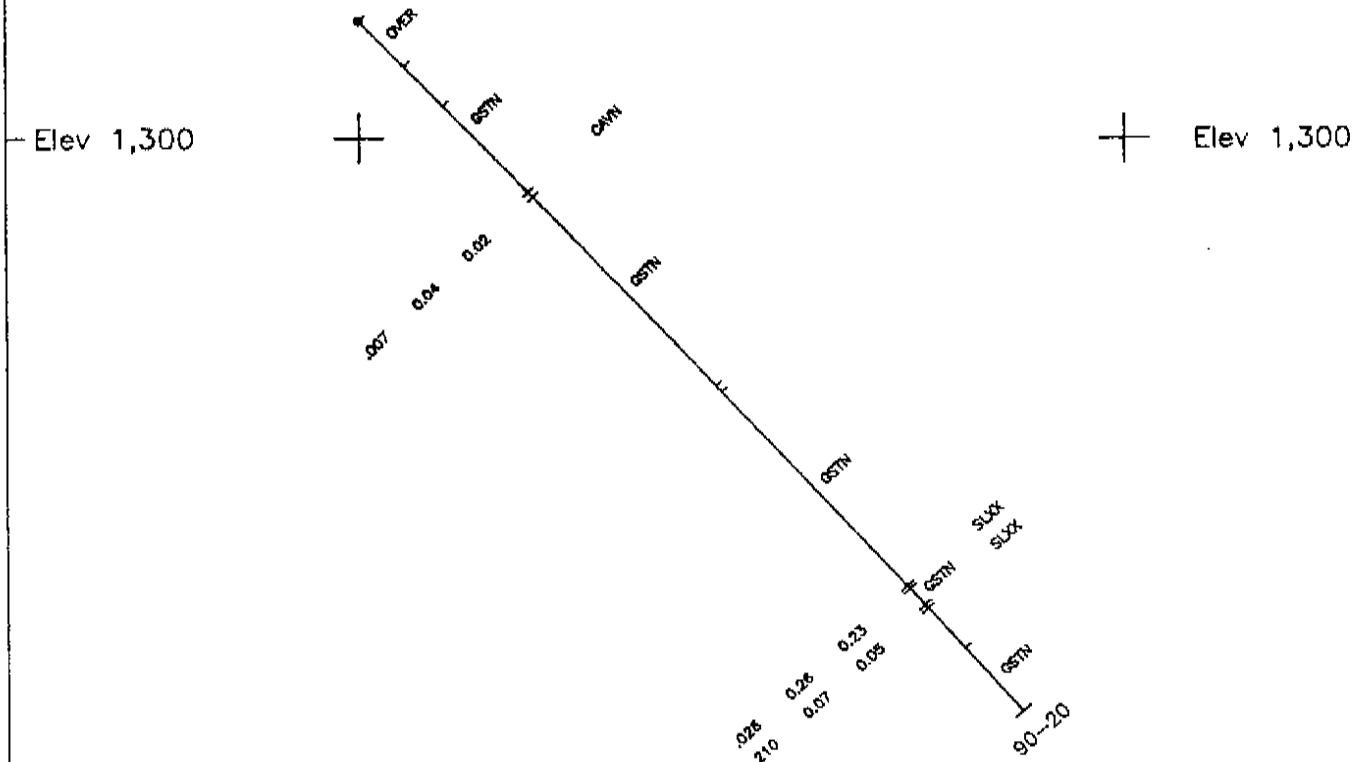
Elev 1,250

PART 3 OF 3

0

50

Section Along DDH 90-20  
5547.98 N 4003.03 E  
Elev: 1307.75m  
Grid Azimuth: 022°  
Dip: -45°  
Length: 62.80m

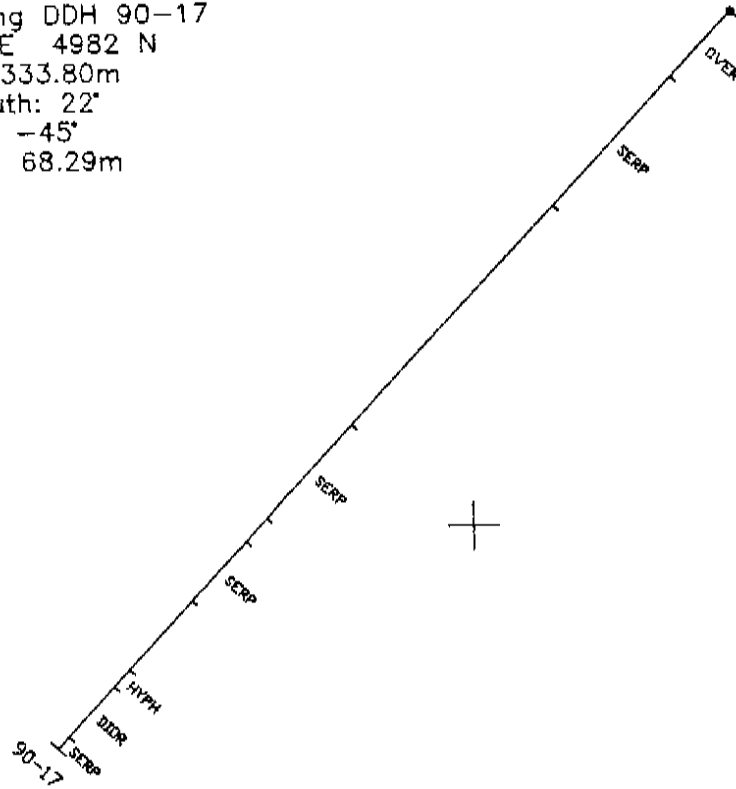


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20, ~~447~~  
431

5,000 N

Section Along DDH 90-17  
5175.54 E 4982 N  
Elev: 1333.80m  
Azimuth: 22°  
Dip: -45°  
Length: 68.29m



Elev 1,300

Elev 1,300

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

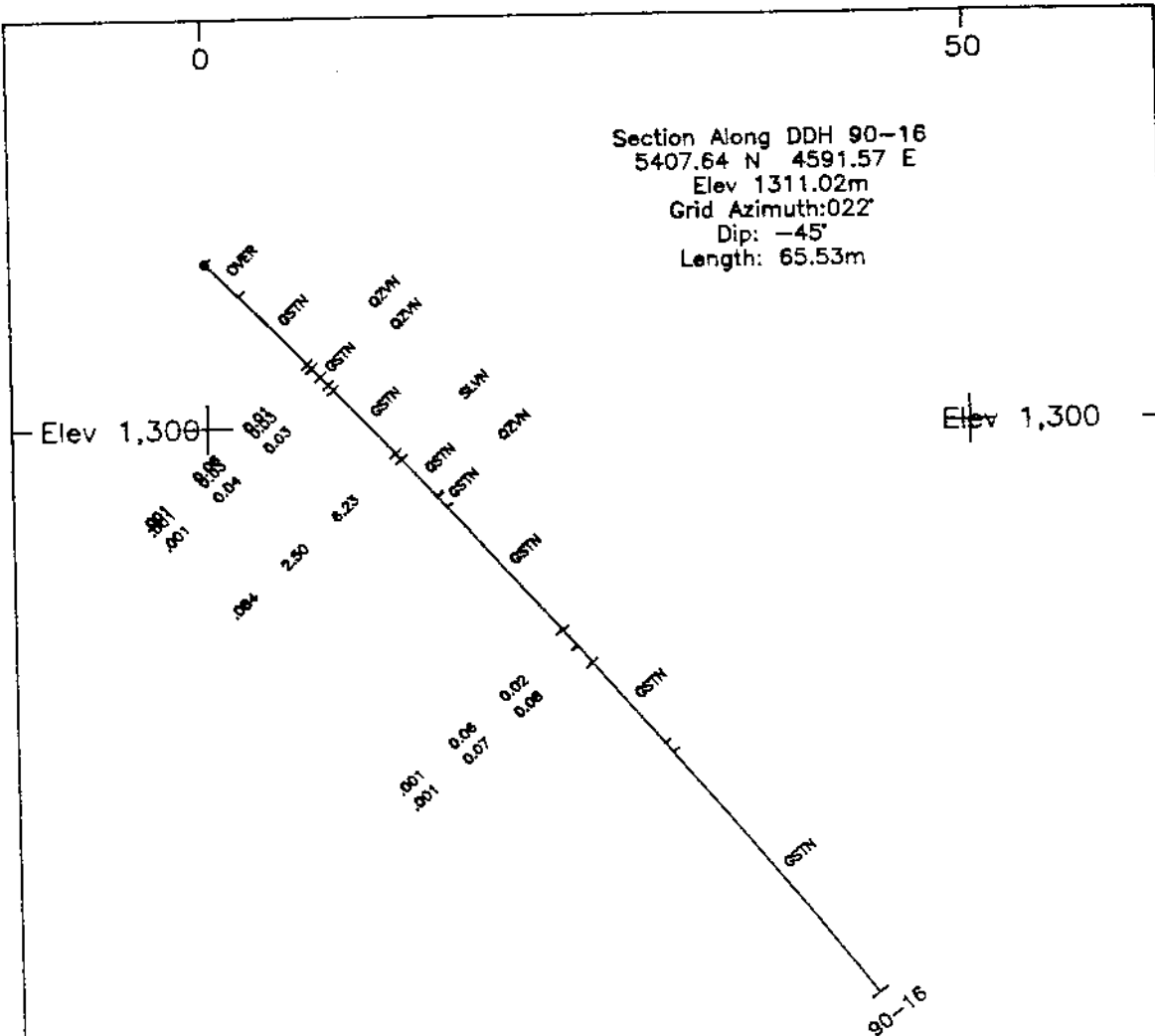
**20,447**  
~~447~~  
**431**

Elev 1,250

Elev 1,250

5,000 N

ATTWOOD GOLD CORP.  
GOLDEN CROWN PROJECT



Elev 1,300

Elev 1,300

Elev 1,250

Elev 1,250

**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

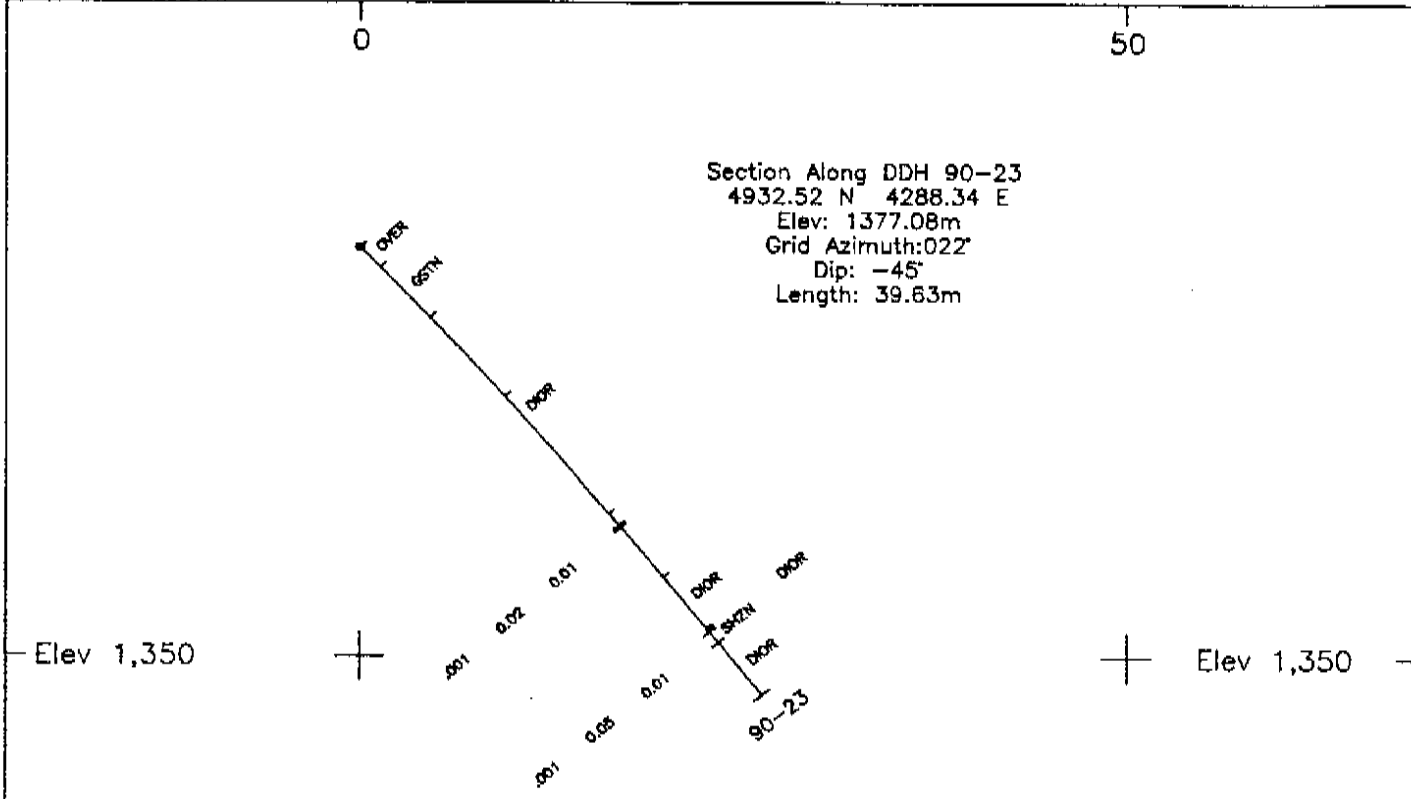
**20,447**  
~~447~~  
 431

0

50



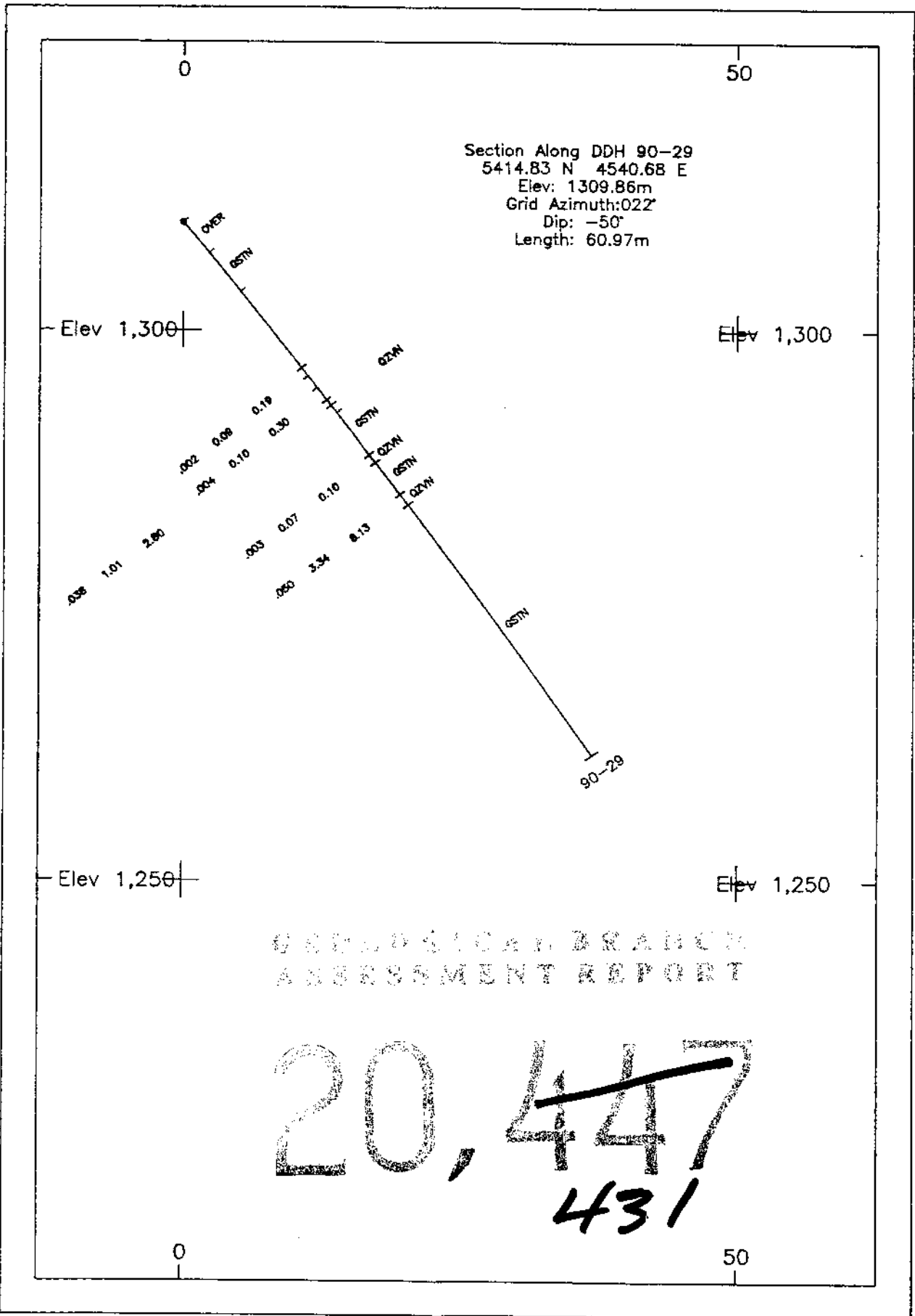
Section Along DDH 90-23  
4932.52 N 4288.34 E  
Elev: 1377.08m  
Grid Azimuth: 022°  
Dip: -45°  
Length: 39.63m



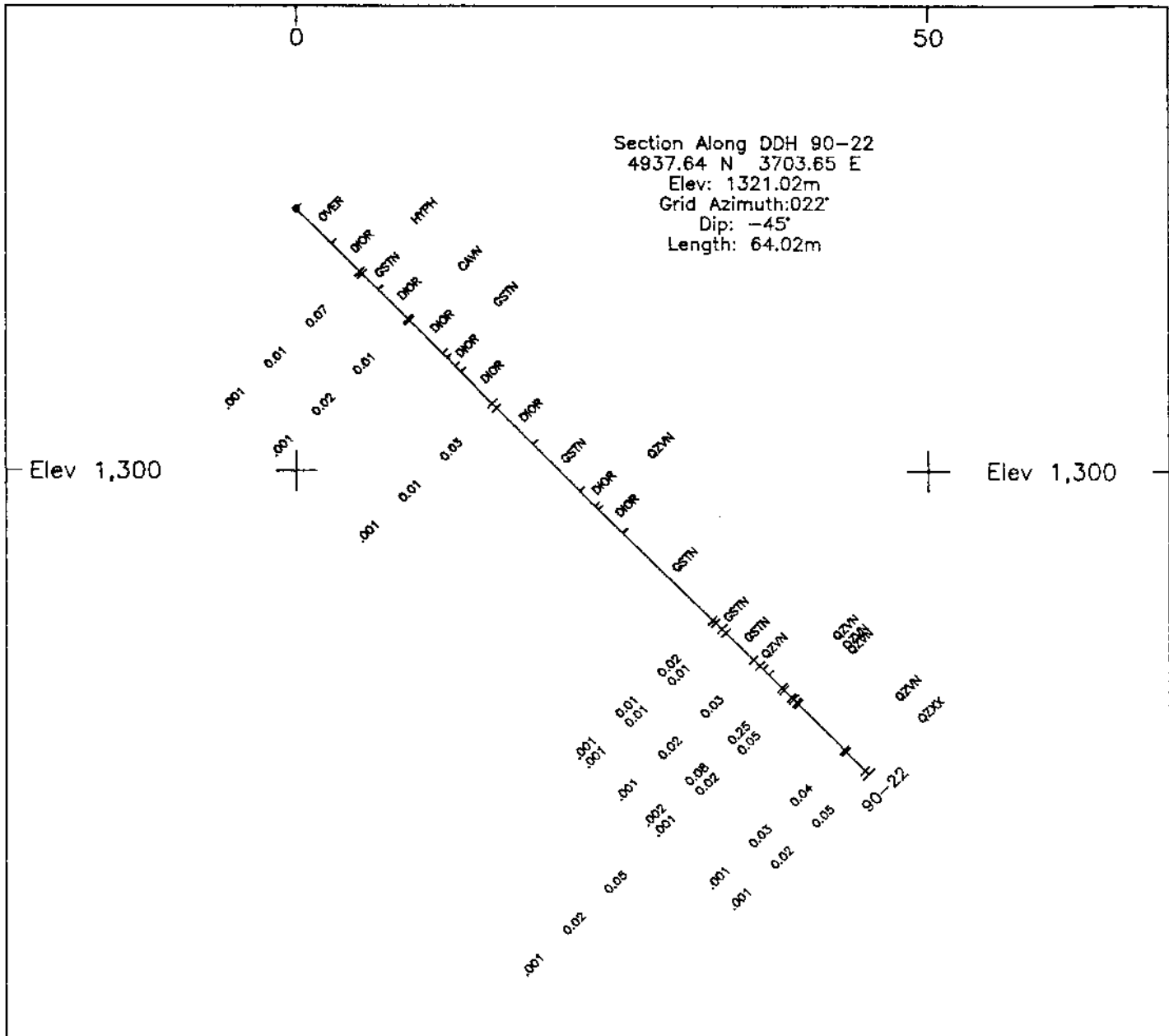
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20, ~~447~~  
431

PART 3 OF 3



Section Along DDH 90-22  
 4937.64 N 3703.65 E  
 Elev: 1321.02m  
 Grid Azimuth: 022°  
 Dip: -45°  
 Length: 64.02m



**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

20, ~~447~~  
 431