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ASARCO EXPLORATION COMPANY OF CANADA, LTD.

EUREKA RESOURCES, INC.

FRASERGOLD PROPERTY
Cariboo Mining Division, B.C.

ASSESSMENT REPORT
1990 DRILL PROGRAM
November, 1990

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,547
Part 1 of 2

ASSESSMENT REPORT ON THE FRASERGOLD 1990 DRILL PROGRAMME

MacKay River Area

Cariboo Mining Division, British Columbia

N.T.S. Map Area 93A/7E

Latitude 52° 19'N Longitude 120° 37'W

Claims: Mac 1-14, Kay 1-12, Alpha 2, Archimedes 1 Fr. & 2 Fr.,
Kusk A, Muck B, Kusk 1-7, Gina Fr.

Owner: Eureka Resources, Inc.
837 East Cordova St.
Vancouver, B.C.
V6A 3R2

Operator: Eureka Resources, Inc.

Joint Venture Partner: Asarco Exploration Company of Canada,
Ltd.

Consultant Geologist: K.V. Campbell, Ph.D.

by

M. Schatten, B.Sc.
November 26, 1990

Reviewed & Approved by
J. Kerr, P.Eng.

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1. INTRODUCTION

1.1 Location, Access, and Terrain

The Frasergold property lies in the Cariboo region of central British Columbia, approximately 100km east of Williams Lake in the Cariboo Mining Division. The claims straddle the MacKay River valley and are centred approximately at 52° 19' N and 120° 37' W within National Topographic System area 93A/7E, Figures 1 and 2.

Road access to the property is east for 55km along paved Highway 97 from 150 Mile House to Horsefly, then northeasterly along an all-weather logging road following the Horsefly River for 55km, past the Crooked Lake road junction to a branch road to the southeast which enters the MacKay River valley.

The MacKay River road bears east upon crossing Carlson Bridge over the Horsefly River, then extends 7km to the north side of Hawkley Creek where the camp facility is located. The logging road which branches southwest across the MacKay River near the mouth of Hawkley Creek continues southeasterly within the central portion of the property for about 10km to the 1988 adit.

The property occurs on the west flank of the Cariboo Mountain Range. Topography is moderately steep in the northwest portion of the claims and steeper in the southeast portion. Elevation on the property ranges from approximately 1,200 to 2,425m. Most recent work on the property has been on the northeasterly facing slopes of the MacKay River valley between elevations of 1,200 and 1,550m (Figures 2,3,4).

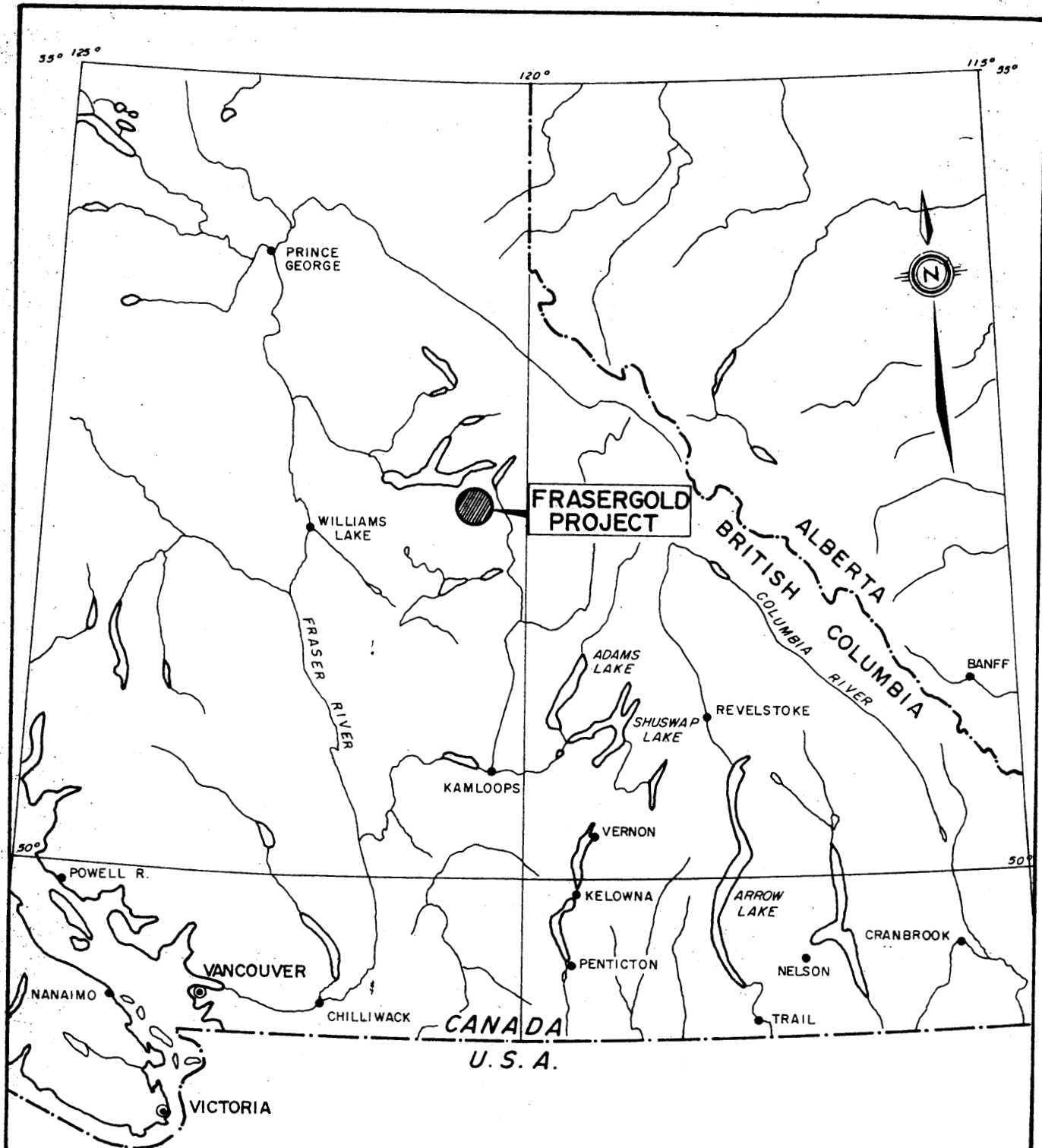
The vegetation along the MacKay River valley consists of stands of commercial spruce and balsam with thick underbrush. Forest cover is lighter above 1,600m and alpine vegetation is encountered at approximately 1,800m elevation. Large areas of the claims have been logged and there is a good network of access trails.

1.2 Claim Status

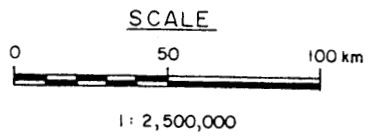
The Frasergold property (see Figure 3) consists of 41 mineral claims (362 units) all recorded in the name of Eureka Resources Inc. and Asarco Inc.. All claims are in good standing until 1993-2000 (see Table 1). The expiry dates reflect the dates that will be in effect upon acceptance of this report.

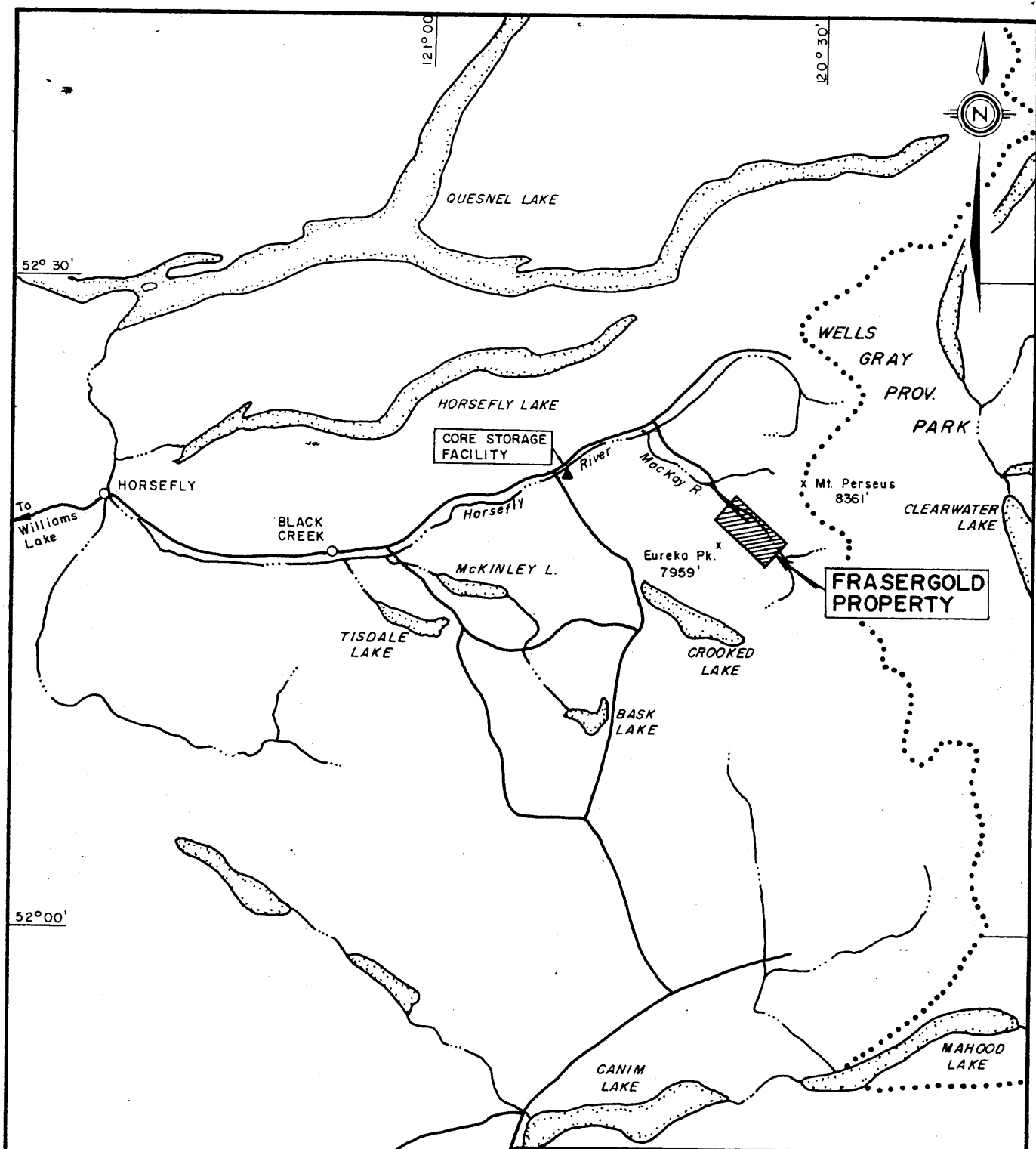
Table 1. Summary of Claim Particulars

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Group I Mac Northwest Group			
Mac 8	16	6250	07/27/96
Mac 9	20	6251	07/27/96
Mac 10	20	7838	07/31/96
Mac 13	20	10671	06/29/94
Group II Mac Main Group			
Mac	9	1286	10/19/97
Mac 2	20	2078	10/22/96
Mac 7	8	6249	07/27/96
Alpha 2	9	5159	09/23/96
Mac 14	20	10672	07/27/94
Mac 12 Fr.	1	6253	12/23/96
Mac 6	9	3077	12/23/96
Mac 3	6	3074	12/23/96
Mac 4	2	3075	07/19/96
Mac 5	4	6248	07/27/96
Mac 10 Fr.	1	6231	11/22/96
Archimedes 1 Fr.	1	5477	11/22/96
Archimedes 2 Fr.	1	5429	07/22/96
Group III Kay Group			
Kay 10	6	1961	09/25/97
Mac 9 Fr.	1	6204	07/16/96
Mac 11 Fr.	1	6252	07/21/96
Kay 12	20	4631	01/22/96
Kusk A	18	8698	10/05/93
Muck B	12	8829	11/05/93
Kusk 6	20	4146	11/20/93
Kusk 7	20	4147	11/20/93
Group IV Kusk/Kay Group			
Kay 1-8	8	1182-89	09/04/96
Kay 9	20	1810	08/11/96
Gina Fr.	1	9296	08/19/95
Kusk 3	20	4143	11/20/93
Kusk 4	16	4144	11/20/93
Kusk 5	9	4145	11/20/93
Kusk 1	9	4141	11/20/93
Kusk 2	12	4142	11/20/93
Kay 11	<u>2</u>	1962	09/25/2000
Total Units	362		

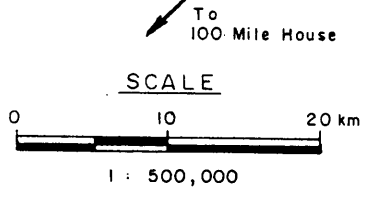


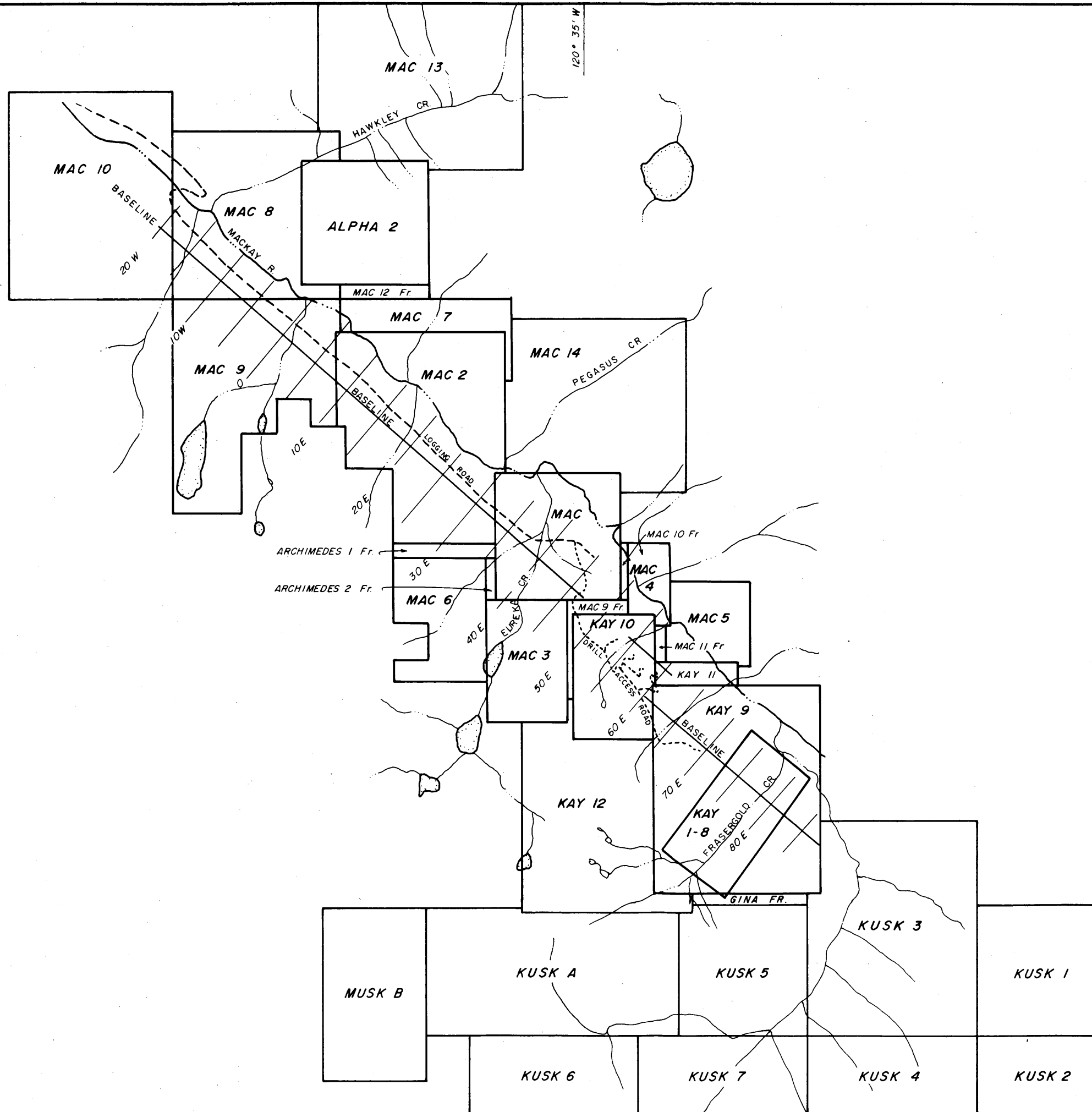
EUREKA RESOURCES, INC.			
FRASERGOLD PROJECT			
LOCATION MAP			
PROJECT 84 - 72	DRAWN B. McLeod	DATE Nov. 1989	FIGURE 1
Revised		N.T.S.	
K.V. CAMPBELL & ASSOCIATES LTD.			





EUREKA RESOURCES, INC.			
FRASERGOLD PROJECT CARIBOO MINING DIVISION, B.C.			
REGIONAL LOCATION MAP			
PROJECT 84-72	DRAWN B. McLeod	DATE Nov. 1989	FIGURE 2
Revised		N.T.S. 93A	
K.V. CAMPBELL & ASSOCIATES LTD.			





ASARCO INC.
EUREKA RESOURCES, INC.
FRASERGOLD PROJECT
CARIBOO MINING DIVISION, B.C.

CLAIM PLAN

PROJECT 84 - 72	DRAWN B. McLEOD	DATE NOV. 1989	FIGURE: 3
REVISED NOV. 1990		N.T.S. 93A / 7E	

K.V. CAMPBELL & ASSOCIATES LTD.

52° 20' N.

1.3 History

1.3.1 Keron Holdings (1979-1982)

In the late 1970's Mr. Clifford E. Gunn staked the original ground; the Alpha, Mac, and Kay 1-9 mineral claims. Keron Resources (1979-1982) expanded the property to include the Kay 9-12 and Mac 2-9 claims. 3,000 soil samples and 150 rock chip samples were collected which revealed a 10km long zone of soils with anomalous gold values. Expenditures for this period were \$160,000.

1.3.2 Amoco Canada Petroleum Ltd. (1983-1984)

Amoco Canada Petroleum Ltd in 1983 completed seven kilometres of drill access roads and 1.2km of hand trenches, collecting 1,070 samples. An additional 820 soil samples were collected over the anomalous section of the original geochemical survey. Limited electromagnetic and magnetic surveys were also completed. A five hole diamond drill program totalling 1,644m was completed over an 800m strike length of the geochemical anomaly.

In 1984 Amoco collected 1,959 soil samples and 190 chip samples. Radem-Electromagnetic and magnetometer surveys were performed over the main portion of the gold anomaly. A legal survey was made of the claim posts. Nine holes (NQ) size, totalling 2,875m, were drilled along the trace of the soil geochemical anomaly. Amoco expenditures for this period were \$950,000.

1.3.3 Eureka Resources, Inc. (1985-1987)

Eureka Resources continued surface exploration in 1985, at a cost of \$60,000. A total of 1,020 soil samples were collected over the northwest part of the claim. A metallurgical study was also done in 1985. A six line kilometre test I.P. survey was completed on very widely spaced lines over the mineralized horizon and its projected extension.

In 1986 230 rock chip samples from 14 trenches were taken. Bulk samples, 150 to 500kg in size, were taken from eight sites for metallurgical testing. Four reverse circulation holes, with a diameter of 4.5", were attempted but only one hole reached the desired depth. Eighteen HQ holes, totalling 2,021m, were diamond drilled. Expenditures of the 1986 program were \$320,000.

The property was optioned to Southlands Mining Corporation in 1987, with Eureka as operator. The program consisted of bulldozing 2km of drill access roads, 660m of trenching from which 95 samples were channel chipped, and preparation of 16

drill sites. The (then) proposed adit portal site and work/storage area were also prepared. 21 4.5" reverse circulation holes totalling 1,710m were completed in the Main Zone bounded by Sections 50+00E and 60+00E. Expenditures for the 1987 work was \$410,000.

1.3.4 Sirius Resource Corporation and Southlands Mining Corporation (1987-1988)

Southlands Mining Corp. resumed the program in late 1987, optioning a portion of their interest in the project to Sirius Resource Corp. Sirius completed at a cost of \$1,500,000 184m of underground adit and 17 HQ diamond drill holes, totalling 1,536m, drilled over a strike length of 450m of the Frasergold Main Zone. 160 chip samples were collected from underground and 524 tonnes of bulk samples were processed through a mill in North Vancouver.

In the spring of 1988 Sirius, at a cost of \$520,000, completed 35 closely spaced vertical reverse circulation drill holes, totalling 2,288m over a 300m strike length of the Frasergold Main Zone and 2 angled reverse circulation drill holes, totalling 168m, were drilled 1km north of the adit, on the Mac claim.

In the fall of 1988 Sirius performed the following work in the Eureka Peak Zone at a cost of \$380,000; 478 soil samples were collected on a geochemical anomaly, a series of hand trenches were dug on the anomaly with 27 rock chip samples collected, and six NQ diamond drill holes, totalling 862m, were completed.

1.3.5 Eureka Resources, Inc. (1989)

In the fall of 1989 Eureka Resources collected 284 channel samples from the underground adit, 74 muck samples from 37 rounds of unanalyzed, stock-piled bulk samples that remained on site, and collected 297 samples of split core from previously unsampled drill core. All diamond drill core was relogged. Expenditures for 1989 were \$60,000.

1.4 1990 Work Summary

Preparation of 2.9km of drill access roads and drilling comprised much of the work programme. Diamond drilling consisted of 25 holes totalling 4684.2m of HQ size core. 43, 4.25", reverse circulation holes were drilled for a total of 4261.9m. The work area is shown in Figure 4.

1.5 Claims Work Performed On

Group I Mac Northwest Group

Mac 9 952.3m diamond drilling reflected as 11% of overall costs
Mac 8 construction of 18' x 48' core storage facility reflected as 1% of overall costs

Group II Mac Main Group

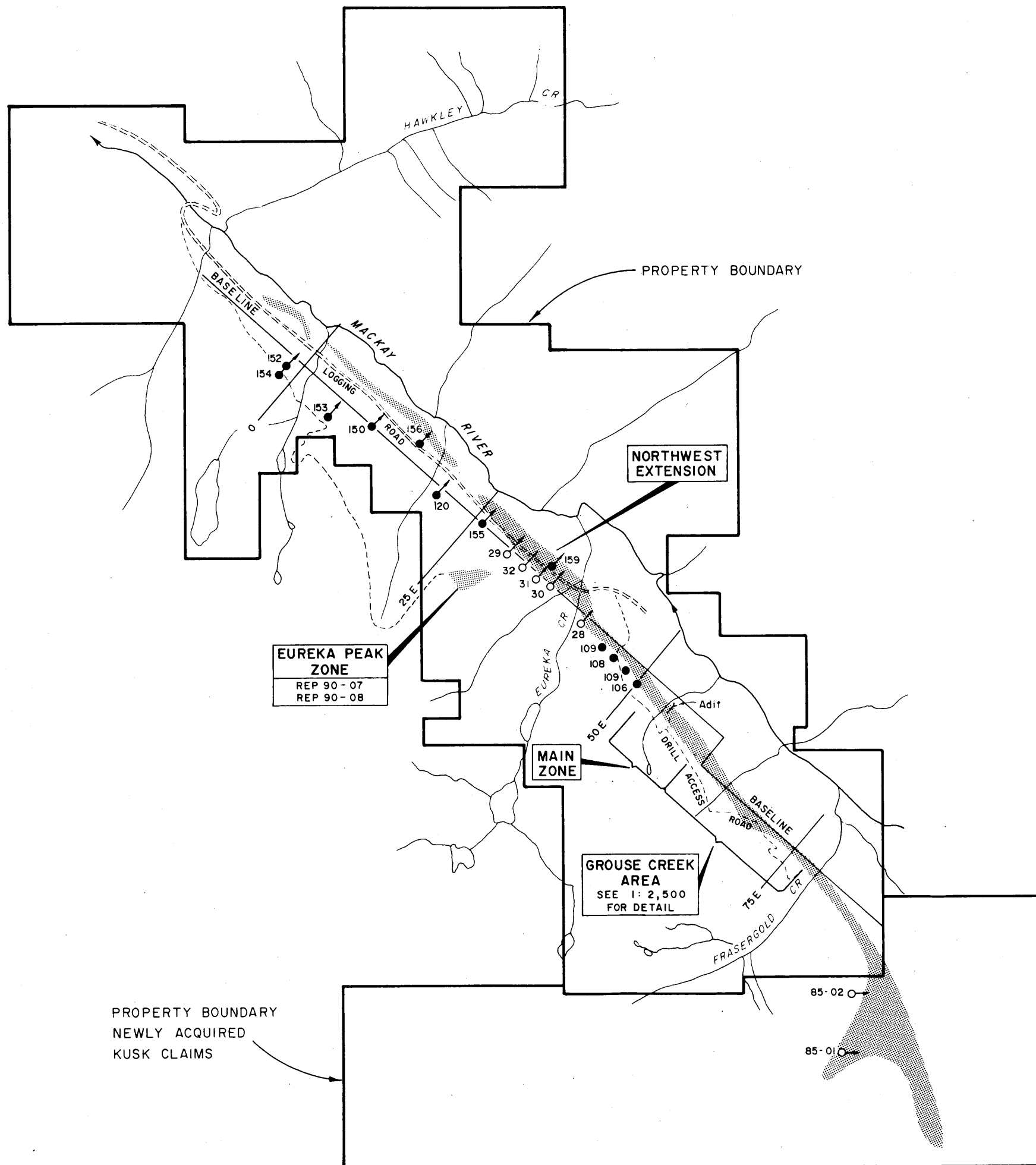
Mac 196.6m diamond drilling reflected as 2.5% of overall costs
Mac 2 883.8m diamond drilling reflected as 14.5% of overall costs
Archimedes 1Fr 238.6m reverse circulation drilling reflected as 1% of overall costs

Group III Kay Group

Kay 10 178.0m diamond drilling reflected as 4% of overall costs
457.5m reverse circulation drilling reflected as 4% of overall costs
Mac 9 Fr. 593.6m diamond drilling reflected as 11.5% of overall costs
501.3m reverse circulation drilling reflected as 5% of overall costs

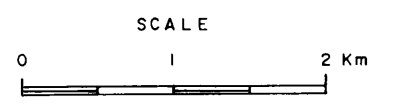
Group IV Kusk/Kay Group

Kay 1-9 1879.7m diamond drilling reflected as 30.5% of overall costs
3064.5m reverse circulation drilling reflected as 15% of overall costs



LEGEND

- Gold Bearing Zone, defined by geochemically anomalous soils.
- 1985 & 1986 Diamond Drill Holes
- 1990 Diamond Drill Holes



**ASARCO INC.
EUREKA RESOURCES, INC.**

FRASERGOLD PROJECT

WORK AREAS

SCALE	1:50,000	DATE	Oct. 1990	FIGURE	4
Revised		N.T.S.	93A/7E		

K.V. CAMPBELL & ASSOCIATES LTD.

2. 1990 DRILL PROGRAMME

Eureka Resources Inc. and Asarco Exploration Company of Canada, Ltd. formed a joint venture partnership in April, 1990 with Asarco Ltd. to fund the 1990 programme.

The main thrust of the 1990 programme was geared towards drilling. The objective was to drill along a 3km strike length of the geochemical anomaly to try to extend known reserves. This was accomplished with HQ diamond drill holes spaced at 200m intervals within the main zone and infilled with 4.25" reverse circulation drill holes spaced at 50m. Diamond drill holes along the northwest end of the anomaly were spaced at approximately 500m intervals.

Eureka Resources, as operator, commenced the 1990 field programme in June.

Drill access roads were established prior to drilling. The existing drill access road ending just to the southeast of Grouse Creek was extended another 1.4km to the southeast. 850m of road for reverse circulation drill holes were established northwest of the adit. As well three spur roads, 150m each, were required in the main zone and 150m of road were added in the Eureka Peak zone. In all 2.9km of road were added. The roads were 3-4m wide with the right ways being 5m wide. A D8H Caterpillar tractor and a John Deere 690 excavator were utilized to build the roads, with blasting being required at a few locations. Figures 5 and 6 show the location of the roads.

25 angled(50-65°) diamond drill holes were completed and 1 was abandoned for a total of 4684.2m.

1. Of these, 17 (2651m) were development holes drilled from L44+00E-L76+00E. A further breakdown of development drilling is:
 - i. 4 holes to the northwest of the main zone from L44+00E-L50+00E
 - ii. 8 holes in the Grouse Creek area from L60+00E-L68+00E
 - iii. 5 holes to the southeast (Frasergold Creek area) from L70+00E-L76+00E
2. The remaining 8 HQ drill holes, totalling 2033m, were exploration holes to test the geochemical anomaly of the northwest extension. These holes were drilled from L1+00W-L35+00E.

Table 2 shows the date started and completed, bearing, angle, elevation, and depth of all diamond drill holes. Refer to

Appendices V and VI for collar plans and drill sections.

41 angled (50-65°) reverse circulation holes were drilled. Of these 37 were completed (4 redrilled) and 4 were abandoned for a total of 4156.9m drilled. All of these were development holes and located as follows:

- i. 10 holes to the northwest of the main zone from L45+00E-L52+00E
- ii. 14 holes in the Grouse Creek area from L60+00E-L68+00E
- iii. 17 holes to the southeast (Frasergold Creek area) from L69+00E-L76+00E

2 angled (60°) reverse circulation holes were drilled in the Eureka Peak zone on L27+00E, totalling 105m.

Table 3 shows the date started and completed, bearing, angle, elevation, and depth of each 1990 reverse circulation hole. Collar plans and drill sections are displayed in Appendices V and VI.

The voluminous number of handwritten drill logs are not appended to this report, however are summarized on the drill sections in Appendix 5. One copy of the drill logs have been submitted to the Ministry, under separate cover.

Backup samples from the reverse circulation drill holes are stored in a shed at base camp on Mac 8. All 1990 diamond drill core is stored in an 18'x48' open air core storage shed, located at base camp, which Mr. Dave Barrett of Horsefly, British Columbia constructed in August, 1990.

Surveying, on Frasersgold, was done periodically throughout the field programme. All previous diamond and reverse circulation drill holes as well as the portal were resurveyed to be brought to a common topographic base. In addition, all 1990 diamond and reverse circulation drill holes were surveyed. Surveying was done by Whyte and Rathbone of Williams Lake, B.C..

Drill hole and survey coordinates are expressed both as UTM coordinates and as arbitrary Mine Grid coordinates (Tables 2 & 3, collar plans, and drill sections).

Table 2. Diamond Drill Holes 1990

Hole No	Date Started/Completed	Mine Coordinates			Bearing	Angle	Dip Tests	Hole Depth(m)
		Northing	Easting	Elevation(m)				
90106	Jul 05/Jul 08, 1990	-89.68	5015.36	1522.40	045	-50	178m -44°	178.0
90107	Jul 08/Jul 11, 1990	-105.02	4821.89	1514.90	045	-50	210m -47.5	225.0
90108	Jul 11/Jul 18, 1990	-65.01	4638.67	1486.20	045	-50	127m -43	190.2
90109	Jul 13/Jul 16, 1990	-63.84	4440.66	1452.90	045	-55	178m -51	178.4
90110A	Jul 18/Jul 19, 1990	-347.31	6053.07	1538.21	045	-55		16.8
90110	Jul 19/Jul 22, 1990	-347.31	6053.07	1538.21	045	-60	146m -54	149.7
90111	Jul 23/Jul 25, 1990	-371.69	6239.71	1521.60	045	-55	133m -53.5	150.6
90112	Jul 25/Jul 27, 1990	-442.74	6815.10	1531.80	045	-55	98m -54	102.1
90113	Jul 27/Jul 29, 1990	-522.41	7023.79	1570.80	041	-55		55.1
90114	Jul 29/Aug 02, 1990	-616.10	7227.10	1595.40	045	-55	136m -51.5	180.7
90115	Aug 02/Aug 04, 1990	-666.00	7422.00	1571.00	045	-55	146m -54	149.0
90116	Aug 04/Aug 05, 1990	-698.40	7585.10	1520.20	045	-55	105m -54	108.2
90117	Aug 06/Aug 08, 1990	-549.30	7088.00	1583.50	040	-55	150m -53	161.5
90118	Aug 09/Aug 11, 1990	-456.80	6462.20	1502.40	042	-60	127m -57	130.5
90119	Aug 11/Aug 13, 1990	-470.17	6597.58	1526.80	045	-60	151m -57	150.9
90119T	Sep 13/Sep 15, 1990	-468.28	6600.74	1526.50	045	-60	139m -54	141.8
90120	Aug 14/Aug 18, 1990	10.92	2003.67	1361.10	048	-60	166m -54 232m -55	236.2
90151	Aug 18/Aug 21, 1990	51.61	1116.20	1388.60	045	-60	136m -60	186.3
90152	Aug 21/Aug 26, 1990	138.86	-117.36	1360.80	045	-60	123m -57 343m -48.5	352.4
90153	Aug 26/Aug 31, 1990	-3.00	665.57	1433.50	045	-50	248m -41	336.6
90154	Sep 01/Sep 04, 1990	8.57	-98.44	1381.70	045	-55	191m -49	263.3
90155	Sep 04/Sep 08, 1990	110.67	2578.45	1344.30	045	-60	210m -55	242.7
90156	Sep 09/Sep 13, 1990	294.91	1464.93	1291.60	045	-60	216m -57	218.6
90157	Sep 15/Sep 19, 1990	-536.05	6321.89	1543.00	055	-55	209m -52	237.7
90158	Sep 19/Sep 20, 1990	-357.97	6183.98	1529.20	045	-50	139m -41	144.8
90159	Sep 21/Sep 22, 1990	327.32	3549.04	1316.30	045	-55	196m -46	196.6

Table 3. Reverse Circulation Drill Holes 1990

Main Zone	Date	Mine Coordinates		Elevation(m)	Bearing	Angle	Hole Depth(m)	
		Hole No	Started/Completed					Northing
	Aug 02/Aug 03,1990	90121	-40.00	4562.50	1472.90	045	-50	120.3
	Aug 03/Aug 04,1990	90122	-76.77	4719.00	1499.80	045	-50	150.0
	Aug 05/Aug 05,1990	90123	21.20	4670.50	1465.30	045	-50	75.0
	Aug 06/Aug 07,1990	90124	-3.80	4771.90	1481.80	045	-50	75.0
	Aug 07/Aug 08,1990	90125	-15.50	4828.20	1488.50	045	-50	81.0
	Aug 08/Aug 09,1990	90126	-32.30	4915.10	1499.60	045	-50	81.0
	Aug 09/Aug 09,1990	90127A	-31.80	5028.45	1505.10	045	-50	22.5
	Aug 10/Aug 11,1990	90127	-31.70	5037.76	1504.90	045	-50	81.0
	Aug 12/Aug 13,1990	90128	-81.40	5113.00	1522.00	045	-50	124.5
	Aug 14/Aug 15,1990	90129	-132.52	5228.71	1533.60	045	-50	148.5
	Aug 15/Aug 16,1990	90130	-291.24	6069.71	1510.90	045	-55	90.0
	Aug 16/Aug 17,1990	90131	-308.71	6125.35	1514.70	045	-55	52.0
	Aug 17/Aug 18,1990	90132	-335.75	6226.83	1512.40	045	-50	75.0
	Aug 18/Aug 21,1990	90133	-374.44	6298.65	1504.60	045	-50	100.5
	Aug 21/Aug 22,1990	90134	-381.36	6349.41	1496.10	045	-55	109.5
	Aug 23/Aug 24,1990	90135	-381.77	6352.27	1496.00	075	-55	136.5
	Aug 24/Aug 25,1990	90136	-352.49	6172.34	1529.20	045	-55	85.5
	Aug 25/Aug 26,1990	90137	-460.68	6669.21	1529.90	045	-55	120.0
	Aug 27/Aug 28,1990	90138	-417.83	6758.44	1517.90	039	-55	64.5
	Aug 28/Aug 29,1990	90139	-452.71	6877.07	1539.10	045	-65	89.5
	Aug 30/Aug 31,1990	90140	-496.06	7112.06	1555.90	045	-65	89.0
	Sep 03/Sep 04,1990	90141	-505.85	6959.64	1567.20	045	-60	127.5
	Sep 04/Sep 05,1990	90142	-506.65	6958.90	1567.30	025	-60	139.5
	Sep 05/Sep 06,1990	90143	-508.10	6957.64	1567.50	335	-55	151.5
	Sep 07/Sep 07,1990	90144	518.84	7022.69	1571.30	045	-60	126.0
	Sep 08/Sep 08,1990	90145	-574.83	7131.41	1592.30	045	-55	76.5
	Sep 08/Sep 09,1990	90146	-587.18	7168.98	1594.50	050	-55	121.5
	Sep 09/Sep 09,1990	90147A	-623.45	7275.67	1589.80	045	-55	30.0
	Sep 11/Sep 11,1990	90147	-624.31	7275.52	1589.70	045	-65	121.5
	Sep 11/Sep 12,1990	90148	-642.60	7362.43	1580.00	045	-60	130.5
	Sep 13/Sep 13,1990	90149	-628.70	7311.47	1585.40	045	-60	123.0
	Sep 14/Sep 14,1990	90150	-701.92	7482.55	1561.70	045	-55	130.5
	Sep 15/Sep 16,1990	90160	-701.57	7483.20	1561.70	063	-60	118.5
	Sep 16/Sep 16,1990	90161A	-744.30	7593.85	1520.50	205	-55	34.5
	Sep 16/Sep 17,1990	90161	-739.90	7592.40	1520.40	025	-55	130.5
	Sep 17/Sep 18,1990	90162	-700.65	7586.34	1520.50	070	-55	90.0
	Sep 22/Sep 24,1990	90118T	-454.38	6464.60	1502.40	042	-60	133.5
	Sep 25/Sep 26,1990	90163	-457.97	6493.95	1509.40	045	-55	88.5
	Sep 26/Sep 27,1990	90164	-462.53	6540.09	1520.40	045	-55	141.0
	Sep 27/Sep 27,1990	90165A	-467.39	6573.87	1524.70	045	-55	30.0
	Sep 28/Sep 28,1990	90165	-468.81	6624.34	1530.30	045	-50	141.5
<u>Eureka Peak</u>								
	Sep 30/Oct 01,1990	9007	-751.77	2722.52	1679.50	070	-60	58.5
	Oct 01/Oct 01,1990	9008	-796.58	2708.91	1695.60	045	-60	46.5

3. GEOLOGY

3.1 Regional

The claims straddle the boundary between two major tectonic belts of the Canadian Cordillera: the Omineca Tectonic Belt on the east and the Quesnel Trough of the Intermontane Belt on the west and central portions of the property. Three regional tectonostratigraphic sequences or terranes are present.

- i. Snowshoe Group - Hadrynian to early Paleozoic quartz-mica schists and gneisses.
- ii. Crooked Amphibolite - Pennsylvanian and Permian amphibolite, chlorite schist, and chlorite-epidote schist.
- iii. Quesnel River Group & Takla Group - Middle to Late Triassic sediments and Late to Middle Triassic volcanics.

Bloodgood(1987a) has subdivided the Quesnel River Group in the Eureka Peak area into 7 units. Bloodgood's Unit 4, laminated, porphyroblastic phyllite, is the unit which hosts the Frasergold Main Zone of mineralization and which is locally referred to as the 'knotted phyllite' (kp).

The dominant structures in the region are the northwest trending Eureka Syncline and Perseus Anticline (Campbell, 1971). South of the Eureka Syncline lies the Boss Mountain Anticline. Northeast of the MacKay River, the intervening limb of the Eureka Syncline and Perseus Anticline is overturned to the southwest and incorporates the contact between the Quesnel Trough and the Omineca Belt. These large folds display a change in attitude along their trend.

Regional dynamothermal metamorphism affected all the pre-Tertiary rocks in the area. In the Eureka syncline the metamorphic grade of all units increases towards the Perseus and Boss Mountain Anticlines. The age of metamorphism is considered to be Late Jurassic to early Cretaceous.

The MacKay River valley marks a major zone of vertical or near vertical fracturing. Here the Upper Triassic Quesnel River Group is between two (more) competent units; younger intrusives and volcanoclastics to the south; and older amphibolite, schists, and gneisses to the north and east. In order to change from upright to overturned limb, shearing and faulting have been concentrated in the incompetent phyllite units striking along the valley (Campbell, 1989).

3.2 Main Zone

The Frasergold Main Zone refers to the 3.2km portion of a longer zone of geochemically anomalous, gold-bearing soils. It lies on the upright limb of the Eureka Syncline which here dips: 50-55° to the southwest.

3.2.1 Lithology

A thick sequence of dark gray to black lustrous phyllite with Fe-bearing carbonate porphyroblasts (**kp**) underlies most of the property and is at least 200m thick. Minor intercalations of dark gray to black phyllite without porphyroblasts (**gp**), thin layers and lenses of light gray massive to phyllitic siltstone (**slst**), and thin lenses of black lmst (**lmst**) occur within the knotted phyllite unit. Underlying this is a thick sequence of silty and locally calcareous phyllite (125m with no base exposed) referred to as the black banded phyllite (**bbp**). The black banded phyllite is the lowest unit exposed and drilled on the property. At or near the base of the knotted phyllite unit is a pale carbonate-quartz-sericite-schist which is possibly metavolcaniclastic and referred to here as a **tuff** (Campbell, 1989).

At the northwest end of the geochemical anomaly the knotted phyllite is relatively thin (apparent thickness < 81m) or absent as evidenced in drill core. The predominant unit is gray phyllite (**gp**) that is locally siliceous and calcareous with minor interbedded black limestone. A thin unit of **tuff** was intersected in two diamond drill holes.

3.2.2 Structure

Both cross faults and faults sub-parallel to the regional strike have been seen on surface and underground. Cross faults truncate and disrupt quartz veins, particularly the wider ones, but are not thought to be very significant. Steep, southwesterly dipping faults and shear zones occupy the hinge zone and lower limb region of asymmetric folds (Campbell, 1989).

See Table 4 for deformational history.

Table 4. Deformational History by Read (1988) and Campbell (1984,1986,1987)


READ	CAMPBELL
Identified:	Identified:
First Phase Deformation: intense transposition of bedding to 1st phase foliation. Grouped and called bedding - S0.	Bedding - S0, transposed to and mostly obliterated by S1.
Second Phase Deformation: produced Z folds with axial plane schistosity - S1 = 57°SW+/-05°/132°. Dip ranges from 50-75°SW. Fold axes plunge 0° to 300°. Minor folds show no change in vergence; ie. no S-shaped folds recognized.	S1 - axial plane schistosity of F1 or main phase folds. These are equivalent to Read's regional Phase II folds. These folds have a Z-shape, with steep overturned limb which is locally faulted and closely approximates later crenulation cleavage (S2). S1 = 55-60°SW/130°, dip ranges from about 30 to 80°. Fold axes plunge 10-20° to 310°. Wavelength about 10m.
Wavelength of 10-30m, amplitude 5-50m.	
Third Phase Deformation: sporadically developed mesoscopic folds with a  profile, as viewed to northwest. No map scale folds.	S2 - finely spaced crenulation cleavage, 68-85° SW/130°. Seen in a few places clearly crenulating S1 (1987, Figure 2), parallel to later faults. Crenulations of S1 by S2 plunge 10° towards 290-300°, as do some quartz mullions and folded quartz veins.
-----	S3 - coarse crenulation cleavage = 60-70° SW/160-170°.
-----	Kink folds, plunge 40° to southwest.
Concluded:	Concluded:
A) Preferred model requires a duplication by large overturned fold(s).	A) Main phase folds (F1, plunge 10° to 310°) and their axial plane schistosity (S1, dip 55-60° SW) have been crenulated rotated by a steeper crenulation cleavage. (S2, dip 68-85° SW) which is well developed in zones of deformation.
B) Gold-bearing zones plunge about 10° to about 310°.	B) The fold axes of quartz veins and quartz mullions which have been rotated by S2 plunge 10° to 300°, slightly west of the fold axes of F1 folds. Gold-enriched values are associated with this slightly younger phase of deformation.

Table 4. Continued Deformational History

READ

CAMPBELL

- C) S₂ has arisen in axial plane of F₁ folds, subparallel to the overturned limbs of F₁ folds and has been a locus of cleavage, shearing, quartz emplacement, faulting and possibly gold-enrichment.
- D) The controls on gold mineralization are firstly stratigraphic (within the knotted phyllite unit) and secondly structural; being concentrated in quartz-rich movement zones dipping 68-85 °SW. Within these zones additional gold-enrichment is localized in quartz vein fold hinges and in other quartz tectonites. These plunge 10° to about 300°.

3.2.3 Mineralization

Particulate gold mineralization occurs primarily in quartz segregations such as stringers, veins, boudins, and mullions. Visible gold has been seen in many samples, commonly fine anhedral grains set in quartz often near the margins of veins. Gold smears are found on phyllites in minor fold hinges, leading to the speculation that gold continued to migrate throughout the stages of main phase folding.

Pyrite and pyrrhotite occur in medium to coarse grained clots within veins and along the margins. It is often closely associated with coarse-grained, creamy white dolomite-siderite which weathers orange-brown. In many places finer grained sulphides are intercrystalline to the tightly packed carbonate grains.

Quartz originated through secretions or mobilized 'sweats' and metamorphic differentiation. The quartz in the metasediments is considered to have a sedimentary origin. Source rocks were probably the Hadrynian and Paleozoic sediments and volcanics of the Omineca Crystalline Belt that lies immediately east of the property (Campbell, 1989).

Appendix I summarizes all significant gold intersections of the 1990 drill programme while Figures 5 and 6 show the updip projection of the gold bearing zone on the surface.

3.3 Eureka Peak Zone

3.3.1 History

The Eureka Peak Zone is located on the Mac 2 and Archimedes 1 and 2 Fractions, 2.5-3km northwest of the Frasersgold Main Zone. In 1985, geochemical soil sampling indicated anomalous gold values up to 730ppb Au (Kerr, 1985). In 1988, more detailed soil sampling outlined an anomaly over an area 450 by 225m, with values up to 1,650 ppb Au (Rowan, 1989).

Hand-dug trenches provided 27 chip samples over 1m intervals on the highly anomalous soils. Following this, 6 NQ diamond drill holes were drilled at 3 sites (Campbell, 1989). In 1990 2 reverse circulation holes were drilled at 2 sites (see Appendix II).

3.3.2 Geology

The rocks underlying the Eureka Peak Zone belong to the Late Triassic to Early Jurassic Takla Group. These volcanic rocks are a succession of metabasalt, augite porphyry flows, tuffs, and

volcanic breccias (Bloodgood, 1987a). Low-grade metamorphism has affected the entire unit, resulting in the growth of chlorite, tremolite-actinolite, and rarely biotite. These rocks have also been folded by the Eureka Syncline and dip at moderate angles to the northwest (Bloodgood, 1987b).

The predominant rock types encountered in drill core are coarse pyroxenite partially replaced by metamorphic tremolite and calcite, coarse amphibolite completely pseudomorphed by an assemblage of tremolite, actinolite, epidote, calcite, and chlorite, and a calcareous meta-tuff.

Mineralization occurs in the meta-tuffs and consists of fine to coarse-grained pyrite and pyrrhotite disseminations, laminations, and clots over a core length of approximately 15m. Laminae and thin beds of fine-grained light limestone, parallel to foliation of the chlorite schist and sulphide laminae, are often found within drill core that showed significant values. Locally sulphides comprise half the rock.

The structural geology is not known at the Eureka Peak Zone but bedding is shown to be quite irregular with dips to the northwest, west, and south (Bloodgood, 1987b).

4. CONCLUSIONS AND RECOMMENDATIONS

Historical development of the property (1983-1988); and the results of the 1990 drill programme have indicated the presence of economic deposits of gold that may be amenable to open-pit mining within a 3.2km strike length of the favourable lithology. Previous drilling, soil geochemistry and geological mapping have indicated the existence of the favourable lithology over an additional 1.5km to the northwest and 2.5km to the southeast. The open-pit potential is currently being developed to 100m depths. Below this depth, reserve potential may be amenable to mass underground mining methods.

Given the coarse particulate nature of the gold there is a large variation in grade from drill section to drill section along the strike length of the geochemical anomaly. It has also given rise to a "nuggetting" effect. However the overall grade of mineralization along strike is such that a large open pit base could be established.

Bulk sampling at regular intervals along strike length is strongly recommended. In conjunction with bulk sampling, a higher density of infill reverse circulation and diamond drill holes is required to provide for a detailed structural and lithological interpretation of mineralized horizons, and a sufficient assay data base for detailed reserve calculations.

5. COST STATEMENT

WAGES

Project Supervisor - J. Kerr	127.25 days @ 350.0/day	44,537.50
Project Geologist - C. Ditson	49 days @ 186.0/day	9,114.00
Junior Geologists - M. Schatten	29 days @ 161.2/day	4,674.80
	81.5 days @ 173.6/day	14,148.40
	- R. Montgomery	61 days @ 148.8/day
	- J. Kerr	84 days @ 167.4/day
Cook	39.5 days @ 179.8/day	7,102.10
Assistants - G. Payne	116.5 days @ 136.4/day	15,898.60
	- M. Tschetter	9 days @ 99.2/day
		90 days @ 111.6/day
	- P. Webster	18 days @ 111.6/day
	- D. Williams	50 days @ 124.0/day
		2 days @ 12.4/day
	- J. Gruhs	55 days @ 80.6/day
		30 days @ 93.0/day
	- G. Kerr	50 days @ 80.6/day
	- B. Fisher	33 days @ 80.6/day
	- J. Myra	17 days @ 93.0/day
	- K. Goodrich	7.5 days @ 80.6/day
	- S. Kerr	25 days @ 99.2/day
	- H. Hurst	22 days @ 80.6/day

TOTAL WAGES 158,126.90

CONSULTANTS

K.V. Campbell	24,898.24
Surveying - Whyte & Rathbone	<u>12,173.25</u>

TOTAL CONSULTANTS 37,071.49

CONTRACTS

HQ Diamond Drilling - J.T. Thomas Diamond Drilling Ltd.	
0-150m 3548.3m @ 73.8/m	261,864.54
150-300m 1135.9m @ 78.2/m	88,827.38
Cost Plus	<u>71,324.60</u>
	422,016.52

Reverse Circulation Drilling - Northspan Explorations Ltd.	
0-150m 4261.9m @ 32.8/m	139,790.32
Cost Plus	<u>20,448.86</u>
	160,239.18

Bulldozer 41,219.79

TOTAL CONTRACTS 623,475.49

ASSAYS & ANALYTICAL	
Assays & analytical	99,980.28

CAMP COSTS	
Camp Equipment Rental	28,015.04
Camp Installation/Tearout	29,633.25
Fuels	11,839.61
Food & Supplies	26,795.18
Winter Maintenance	<u>2,860.00</u>

TOTAL CAMP COSTS	99,143.08
(1900-2000 man days which approximates \$50-55/man/day)	

MISCELLANEOUS	
Travel	11,504.63
Misc. Supplies	18,069.97
Equipment Rentals	11,054.41
Vehicle Rentals	16,633.86
Freight	9,387.05
Computer Expenses	19,302.22
Misc. Expenses	<u>2,863.42</u>

TOTAL MISC. EXPENSES	88,815.56
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TOTAL DRILLING COSTS	----- 1,106,612.78
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CONSTRUCTION OF CORE STORAGE	
18' x 48' core storage shed constructed by D. Barrett (applied only to Mac 8)	12,362.12

TOTAL EXPENSES	----- 1,118,974.90
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PRORATE AS TO AMOUNT OF DRILLING TO VARIOUS CLAIM GROUPS

18% applies to Mac Main Group	199,190.00
drilling	132,793.00
plus core storage	<u>12,362.00</u>
12% applies to Mac Northwest Group	145,155.12
24.5% applies to Kay Group	271,120.00
45.5% applies to Kusk/Kay Group	504,615.00

6. BIBLIOGRAPHY

- Bloodgood, M., 1987a; 'Geology of the Triassic black phyllite in the Eureka Peak area, central British Columbia', B.C. Ministry Energy, Mines & Petroleum Resources, Geological Fieldwork 1986, Paper 197-1, pp. 135-142.
- Bloodgood, M., 1987b; 'Geology of Eureka Peak - MacKay River (93A/7)', B.C. Ministry Energy, Mines & Petroleum Resources, Open File 1987-9.
- Campbell, K.V., 1971; 'Metamorphic petrology and structural geology of the Crooked Lake area, Cariboo Mountains, B.C.', unpublished Ph.D. thesis, University of Washington.
- Campbell, K.V., 1984; 'Brief report on the structural geology at the Frasergold project, MacKay River area, central British Columbia', for Amoco Canada Petroleum Co. Ltd..
- Campbell, K.V., MacKean, B.E., and Leishman, D.A., 1987; 'Report on the geology and results of the 1987 exploration program on the Frasergold property' for Eureka Resources, Inc..
- Campbell, K.V., 1989; 'Project review and proposal for further exploration and development', for Eureka Resources, Inc..
- Kerr, J.R., 1985; Summary report on the Frasergold property' for Eureka Resources, Inc..
- Leishman, D.A. and Campbell, K.V., 1986; 'Results of 1986 trenching and drilling program on the Frasergold property' for Eureka Resources, Inc..
- Read, P.B., 1988; 'Aspects of structure and stratigraphy relevant to gold mineralization, Frasergold property' for 1257 Geological Ltd..
- Rowan, L.G., 1989; 'Geological report on the 1988 exploration program for the Eureka Peak prospect' for Sirius Resource Corporation.

7. STATEMENT OF QUALIFICATIONS

I, MYRA G. SCHATTEN, resident of Calgary, Province of Alberta, hereby certify as follows:

1. I am a contract geologist currently employed by Eureka Resources, Inc. at 837 East Cordova, Vancouver, B.C..
2. I was actively involved as a field geologist on the Frasergold property during the 1990 drill programme and assisted in the collection of the data referred to in this report.
3. I graduated from the University of Alberta, Edmonton, Alberta, B.Sc. Geology, 1987. I have been actively involved in mineral exploration since 1987.

DATED at Vancouver, Province of British Columbia this 26th day of November, 1990.

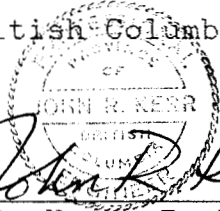


M.G. Schatten, B.Sc.
Geologist

I, JOHN R. KERR, of Vancouver, British Columbia, do hereby certify that:

1. I am a member of the Association of Professional Engineers of British Columbia and a Fellow of the Geological Association of Canada.
2. I am a geologist employed by Eureka Resources Inc. of 837 East Cordova Street, Vancouver, B.C..
3. I am a graduate of the University of British Columbia (1964) with a B.A.Sc. degree in Geological Engineering.
4. I have practised my profession continuously since graduation.
5. I supervised and assisted in the collection of the data as compiled in this report. I have reviewed the contents of this report which is based on the aforementioned data, and supervised the compilation and authorship by M. Schatten. I verify the costs as reported to be true.
6. I am an officer and director of Eureka Resources Inc. and hold a direct and indirect interest in the securities of this company.

DATED at Vancouver, Province of British Columbia this 26th day of November, 1990.


J.R. Kerr, P. Eng.

APPENDIX I
SIGNIFICANT DRILL HOLE INTERSECTIONS

DRILL HOLE SUMMARY

GROUSE CREEK AREA

HOLE NO.	INTERVAL (METRES)	WIDTH (METRES)	GRADE OZ/T Au
Diamond Drill Holes			
84-6	54.0- 55.0	1.5	.155
D84-6A	48.0- 49.5	1.5	.098
	91.5-102.0	10.5	.014
	136.5-139.5	3.0	.025
D84-10	70.5- 72.0	1.5	.122
	85.5- 99.0	13.5	.032
	114.0-117.0	3.0	.037
D84-12	30.0- 33.0	3.0	.030
	76.5- 91.5	15.0	.033
	129.0-136.5	7.5	.023
D84-13	141.0-142.5	1.5	.258
	187.5-190.5	3.0	.033
	138.0-147.0	9.0	.022
D84-14	94.5-106.5	12.0	.052
	141.0-149.7	8.7	.037
	NO SIGNIFICANT INTERSECTIONS		
D90-110	35.0- 37.5	2.5	.033
D90-111	51.0- 54.0	3.0	.027
	58.5- 67.5	9.0	.030
	4.0- 10.5	6.5	.026
D90-112	48.0- 55.1	7.1	.010
	21.0- 25.5	4.5	.011
	105.0-112.5	7.5	.012
D90-113	148.5-160.5	12.0	.031
	97.5-102.0	4.5	.013
	105.0-117.0	12.0	.017
D90-114	NO SIGNIFICANT INTERSECTIONS		
D90-115	NO SIGNIFICANT INTERSECTIONS		
D90-116	61.5- 73.5	12.0	.024
	88.0- 91.0	3.0	.057
	121.5-129.0	7.5	.026
D90-117	45.0- 49.5	4.5	.013
	73.5- 78.0	4.5	.027
	120.3-133.5	13.2	.065
D90-118	43.5- 46.5	3.0	.021
	52.5- 58.5	6.0	.023
	117.0-132.0	15.0	ANOMALOUS
D90-119	171.0-187.5	16.5	ANOMALOUS
	202.1-203.9	1.8	.031
	64.5-70.5	6.0	ANOMALOUS
D90-119T	124.5-127.5	3.0	.035
	138.0-144.0	6.0	.024

Reverse circulation Holes

R90-130	54.0- 66.0	12.0m	.029
R90-131	28.5- 36.0	7.5m	.038
R90-132	55.5- 61.5	6.0m	.018
R90-133	55.5- 58.5	3.0m	.029
R90-134	61.5- 66.0	4.5m	.017
R90-135	27.0- 40.5	13.5m	.034
	54.0- 70.5	16.5m	.126
R90-136	72.0- 78.0	6.0m	.014
R90-137	9.2- 37.5	28.5m	.052
	49.5- 52.5	3.0m	.035
	61.5- 67.5	6.0m	.059
	99.0-111.0	12.0m	.016
R90-138	13.5- 16.5	3.0m	.015
	36.0- 49.5	13.5m	.021
R90-139	22.0- 26.5	4.5m	.057
	49.0- 58.0	9.0m	.036
	67.0- 74.5	7.5m	.033
R90-140	17.0- 33.5	16.5m	.151*(.324)
	*(3.409 oz./T Au cut to 1.5 oz./T Au)		
	59.0- 75.5	16.5m	.045
R90-141	55.5- 64.5	9.0m	.040
	91.5- 97.5	6.0m	.013
	106.5-111.0	4.5m	.019
90-142	7.5- 15.0	7.5m	.050
	58.5- 66.0	7.5m	.025
	75.0- 78.0	3.0m	.036
	96.0- 99.0	3.0m	.045
	109.5-114.0	4.5m	.029
R90-143	10.5- 22.5	12.0m	.022
	138.0-141.0	3.0m	.030
R90-144	9.0-16.5	7.5m	.030
	52.5-55.5	3.0m	.022
	96.0-102.0	6.0m	.023
	109.5-112.5	3.0m	.029
R90-145	6.0- 10.5	4.5m	.017
R90-146	NO SIGNIFICANT INTERSECTIONS		
R90-147	NO SIGNIFICANT INTERSECTIONS		
R90-148	NO SIGNIFICANT INTERSECTIONS		
R90-149	NO SIGNIFICANT INTERSECTIONS		
R90-150	64.5- 75.0	10.5m	.025
	75.0- 91.5	16.5m	.064
	99.0-111.0	12.0m	.022
	126.0-130.5	4.5m	.042
R90-160	73.5- 79.5	6.0m	.048
	105.0-112.5	7.5m	.026
R90-161	40.5- 52.5	12.0m	.059
	63.0- 67.5	4.5m	.053
R90-162	9.0- 13.5	4.5m	.010
	78.0- 82.5	4.5m	.016
R90-118T	27.0- 31.4	4.5m	.018

	52.5- 64.5	12.0m	.029
	72.0- 82.5	10.5m	.083
R90-163	55.5- 70.5	15.0m	.026
	78.0- 87.0	9.0m	.056
R90-164	66.0- 79.5	13.5m	.020
	112.5-127.5	15.0m	.099
R90-165	52.5- 55.5	3.0m	.034
	67.5- 81.0	13.5m	.045
	111.0-132.0	21.0m	.021

APPENDIX II

DIAMOND DRILL PROGRAMME 1990
Logging and Sampling Procedures

Diamond drilling, totalling 4684.2m, commenced July 5, 1990 and was completed September 22, 1990. J.T. Thomas Diamond Drilling Limited of Smithers, British Columbia was awarded the contract. Prior to drilling all site pads were prepared using a D8H Caterpillar tractor and a John Deere 690 excavator. Blasting was required at 4 sites.

A Longyear 44 diamond drill with HQ size rods and a 10 foot core barrel was used for all 1990 diamond drill holes.

Sample Preparation

Core was placed in 10 foot core boxes at the drill site and brought down to base camp. Once there, depths on all chips were converted from feet to metres and theoretical 1.5m sample intervals were measured using the chips as reference points. Quartz veins greater than or equal to 50cm wide were extracted as separate sample intervals for assaying. The top and bottom of each core box was measured. Dymo tape with the hole number, box number, and box meterage was stapled to the front of all core boxes.

Percent recovery and rock quality determination (RQD) were calculated for each interval. The RQD was computed as a percentage of the accumulative length of core greater than or equal to 10cm wide in a given interval divided by the total length of core in that sample interval.

Logging Procedure

Firstly, lithologic units were determined. The core was then logged on 1.5m sample intervals with the percentage of quartz and sulphides being noted. Particular attention was paid to structure (ie. folding, shearing, foliations) and the nature of veining. Alteration products such as sericite and chlorite were noted as were other lithologic variations.

Sampling Procedure

All core was cut using a diamond rock saw or a hand splitter (used mainly for quartz veins). Half of each cut sample was placed in a plastic sample bag with an assay tag and stored in 100lb rice bags for transport. Samples were shipped weekly in a 5 ton truck, owned by Jackass Junction Trucking Ltd. of Horsefly, British Columbia, to Bondar-Clegg & Co. Ltd. in North Vancouver for assay.

Core boxes, with the remaining half of cut core, were stored in an open air storage shed located at base camp.

APPENDIX III

REVERSE CIRCULATION DRILL PROGRAMME 1990
Drilling, Logging, and Sampling Procedures

Reverse circulation drilling in the main zone, totalling 4156.9m, commenced August 2, 1990 and was completed on September 29, 1990. Drilling in the Eureka Peak Zone began September 30, 1990 and was completed October 1, 1990 with 105.0m being drilled.

Drill Description

All reverse circulation drilling was completed with a custom built track-mounted drill. The drill (designed and operated by Pat Mooney of Northspan Explorations Ltd. of Kelowna, B.C.) is completely hydraulic and utilizes a 350 PSI (650 CFM) screw type compressor. Rotation speed is approximately 25 RPM with drilling pressure averaging 270-320 PSI. The drill utilizes 3.5" dual wall pipe above a down the hole hammer and crossover adapter. Holes were drilled with a 4.25" drill bit. The majority of reverse circulation drilling was conducted with a Mission Silverdril SD-4 hammer.

On site diesel fuel and water were supplied by a one-ton flat bed truck.

Drill site pads were prepared with a D8H Caterpillar tractor owned by Gruhs Bulldozing of Horsefly, B.C. and with a John Deere 690 excavator owned by KR Excavating Ltd. of 100 Mile House, B.C.. A blasting crew was utilized to improve sections of the road, and enlarge some of the drill pads. Leaverite Blasting Ltd. of Cache Creek, B.C., completed the blasting.

Drilling and Sampling Procedure

Compressed air is directed down the hole through the outside circumference of the drill pipe. This air drives the downhole hammer and forces the drill cuttings away from the drill bit face. The cuttings are directed up the hole between the drill pipe and surrounding rock and then pass through slots in the cross-over adapter and are channelled up the hole through the inner diameter of the drill rods. Subsequently the drill cuttings pass through the top drive and into the cyclone hose. From here the compressed air and cuttings enter the cyclone. At this point air is ejected through the top of the cyclone allowing the drill cuttings to spiral downwards through the cyclone and enter the sample splitter. A Jones air-motor riffle splitter was used to obtain two representative samples of the drilled interval. A 1.5m sample interval was used.

Three-quarters of the sample interval is rejects. The remaining one-quarter is split to obtain 2 samples. These are collected in plastic buckets. One sample is collected in a rice bag and shipped for assay. The other sample is placed in a plastic bag and retained for backup and future reference. These samples are

kept in a storage shed at Eureka's Hawkley Creek base camp. A small portion of the cuttings from each interval is washed, sieved, and placed in a plastic vial for logging purposes.

The total theoretical weight of 1.5m of hole length, 11cm (4.25") in diameter is 80-90lbs. As one-eighth of the total is collected for assay, the theoretical sample weight should be 10-12lbs. However, sample loss may occur during drilling. Loose overburden may result in sample loss near the surface. Fractured rock and shear zones may also reduce recovery. Blow-by around the cross-over adapter also results in sample loss. Water injection as well as the use of various drilling additives were utilized to help reduce sample loss.

To ensure clean samples, at the end of every drill rod (10'), the hole was flushed out by "spudding" the rods over a 20' (6.2m) length of the hole. Samples were not collected during this process.

Logging Procedure

Reverse circulation drill cuttings were logged using a Bausch and Lomb stereoscopic microscope. Due to the small grain size and homogeneous nature of the sample it was difficult to discern minor changes in lithology. The lithology of adjacent diamond drill holes were used as a guide to the geology of reverse circulation holes. Quartz content was noted in volume percent, as well as associated alteration products were noted (ie. sericite, chlorite, Fe-oxidation). The percentage of sulphides was also noted.

All vials as well as corresponding sample tags for each hole were placed in plastic sample bags. The vials are stored in a storage shed situated at Eureka's Hawkley Creek base camp.

All samples were placed in 100lb rice bags and shipped weekly in a 5 ton truck to the laboratory of Bondar-Clegg & Co. Ltd. in North Vancouver, British Columbia.

APPENDIX IV
ASSAY PROCEDURES



Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667

PROCEDURE FOR ASSAY Au ANALYSIS

FIRE ASSAY PROCEDURE:

A prepared sample of one assay ton (29.166 grams) is mixed with a flux which is composed mainly of lead oxide. The proportions of the flux components (the litharge, soda, silica, borax glass, and flour) are adjusted depending upon the nature of the sample. Silver is added to help collect the gold. The samples are fused at 1950 F until a clear melt is obtained. The 30-40 gram lead button that is produced contains the precious metals. It is then separated from the slag. Heating in the cupellation furnace separates the lead from the noble metals. The normal-sized precious metal beads that are produced are transferred to test tubes and dissolved with aqua-regia. This solution is analyzed using Atomic Absorption by comparing the absorbance of these solutions with that of standard solutions. In the case of high grade samples, greater than 0.200 OPT, the precious metal bead is parted in dilute HNO₃ acid to dissolve the silver and the remaining gold is weighed.

COMMENTS:

As part of our routine quality control we run a duplicate analysis for 2 out of each batch of 24 as well as a standard. These total about 12% of the samples. Also, all samples which are over 0.20 OPT on the original fusion are run again to verify the results. If a sample gives erratic results, such as 0.10, 0.020, 0.30, we will indicate this on the report. We suggest that a new split should be taken from the reject for preparation and analysis by our metallics sieve procedure. Certified standards and in house pulp standards as well as synthetic solution standards are run with each report or batch of samples.

PROCEDURE FOR FIRE ASSAY SILVER

- 1) One assay ton (29.16 grams) of homogeneous pulp is weighed into a fireclay crucible and fluxed appropriately with litharge, borax, soda ash and silica.
- 2) No inquant is added, only flour or niter to control button size.
- 3) Fusion takes place in a furnace of about 1900 degrees F. The same procedure is used for fusing gold.
- 4) A standard for silver is run with each silver fusion.
- 5) All buttons are made up to the same weight with silver-free lead foil.
- 6) Controlled temperatures and a watchful cupeller ensure minimal silver losses in cupellation.
- 7) Corrections are applied to final results based on checks and standards.



Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667

METALLICS SIEVE ANALYSIS

PURPOSE:

To produce a representative gold concentration for samples containing, or thought to contain, coarse particulate gold.

METHODOLOGY:

(A) Preparation:

- 1) The entire sample is crushed to 10 mesh.
- 2) A representative split of the -10 mesh material is taken using a Jones Riffle Splitter. This split is approx. 200 to 300 grams in size.
- 3) The -10 mesh split is pulverized using a ring puck type pulverizer. The normal pulverizing time reduced by 15%.
- 4) The entire sample is classified using a 150 mesh screen.

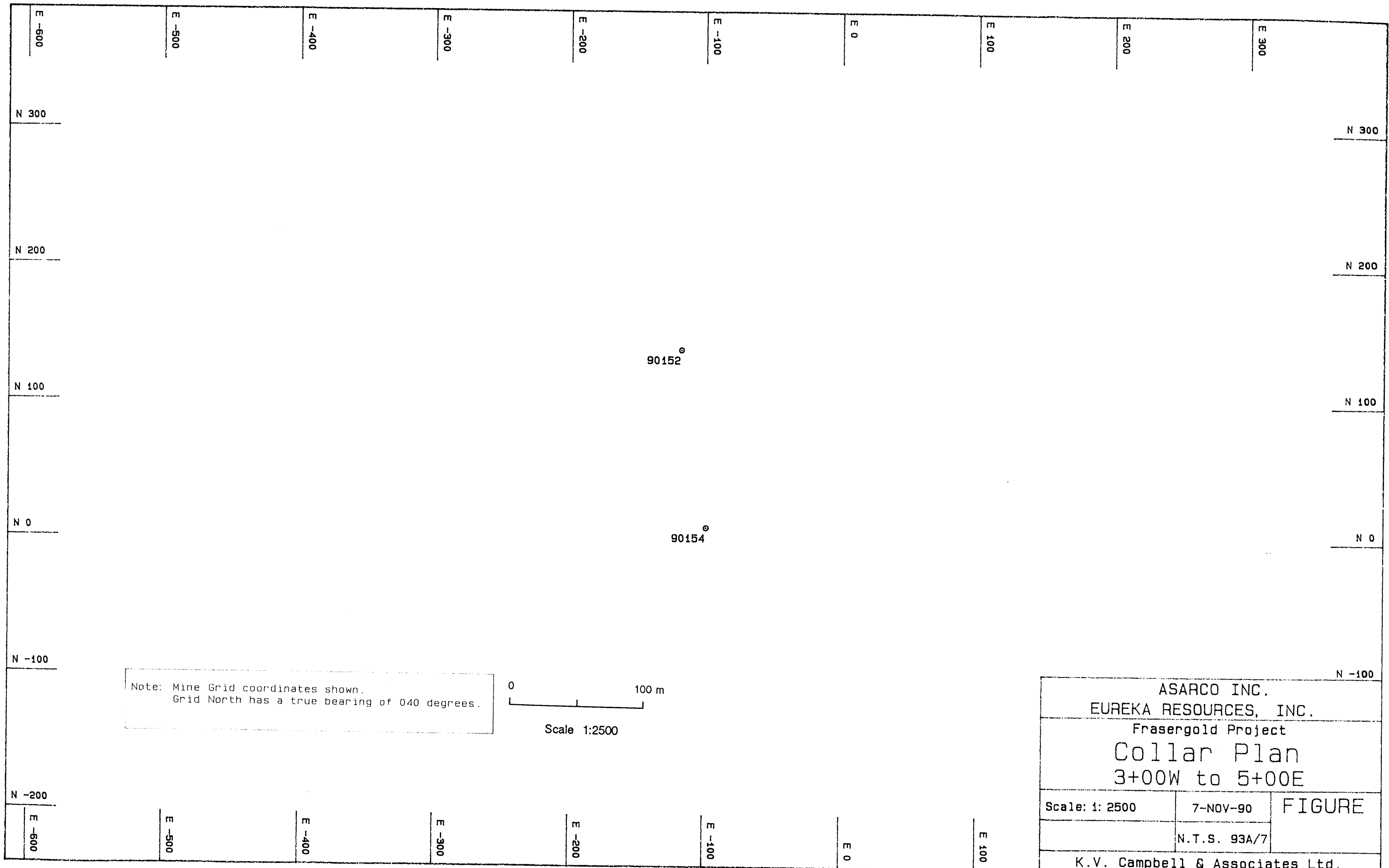
The sieve analysis procedure succeeds because the coarse particulate gold from a sample is physically concentrated into ONE size fraction, the +150 mesh fraction. The remaining sample material, the -150 mesh fraction, will only contain fine gold particulates. This separation is achieved due to the behavior of the ring and puck type pulverizer. Unlike the disc pulverizer, the ring and puck pulverizer does not cut, or smear gold particulates. Rather, it acts like a "rolling pin" and flattens the grains, thereby increasing their surface area. However, development work has shown that extended pulverization will cause the gold grains to break up, reducing the effectiveness of the separation. In order to prevent this from happening the pulverizing time is shortened. By using this procedure we are in effect attempting to enlarge the surface area of all the gold particulates in a sample in order to facilitate the concentration of the gold in the fraction.

(B) Analysis:

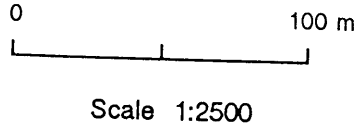
The gold content of the entire +150 mesh fraction is determined using Fire Assay Lead Collection. The gold content of the -150 mesh material is determined employing the routine analytical sub sample weight. (1 A.T.) The gold content of the +150 mesh fraction is then mathematically redistributed over the original sample using a weighted average calculation.

The weighted average figure represents the true gold content of the original sample.

APPENDIX V
DRILL COLLAR PLANS

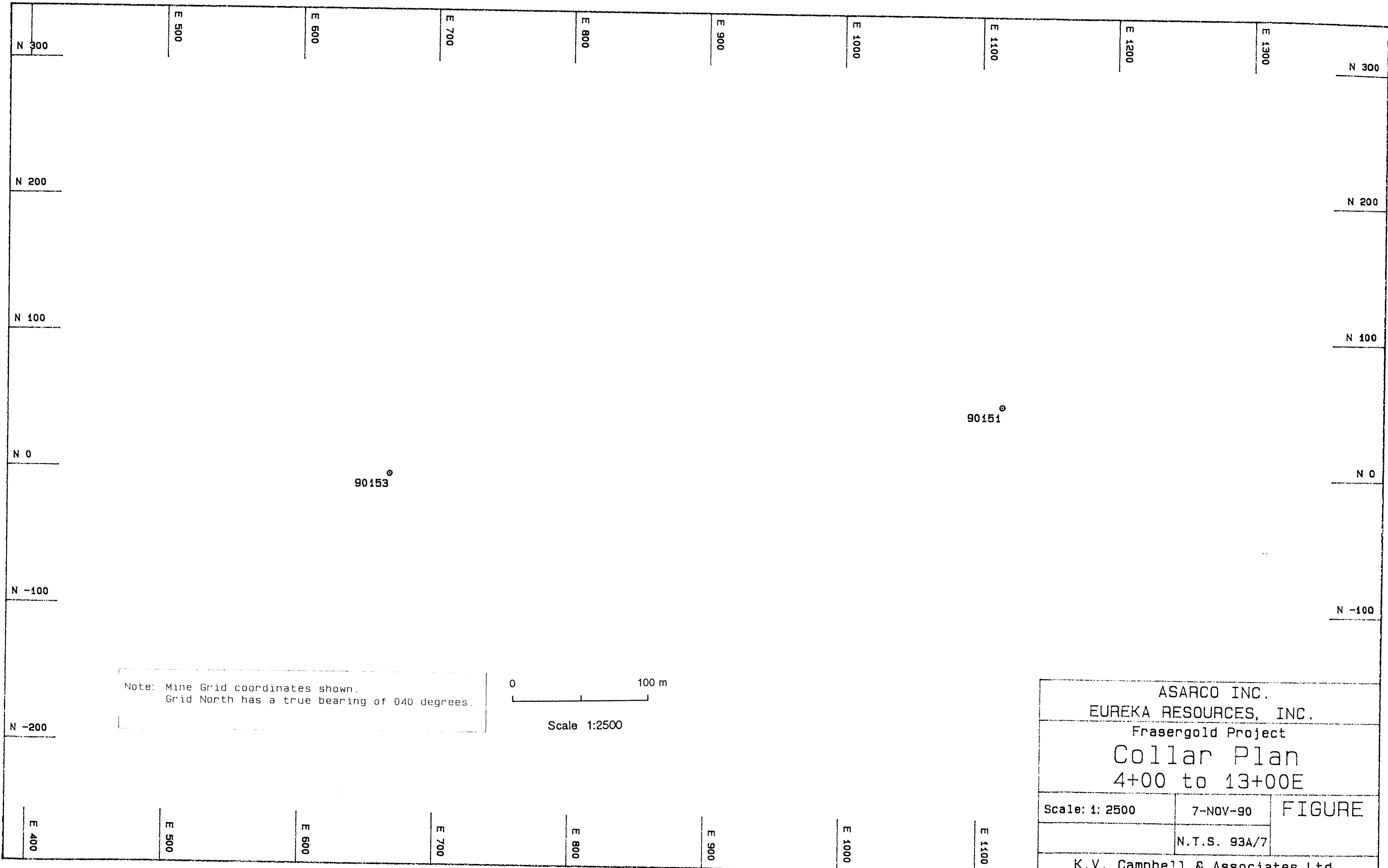


Note: Mine Grid coordinates shown.
 Grid North has a true bearing of 040 degrees.

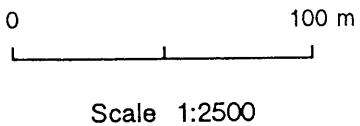


ASARCO INC. EUREKA RESOURCES, INC.		
Frasergold Project Collar Plan 3+00W to 5+00E		
Scale: 1: 2500	7-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		

K

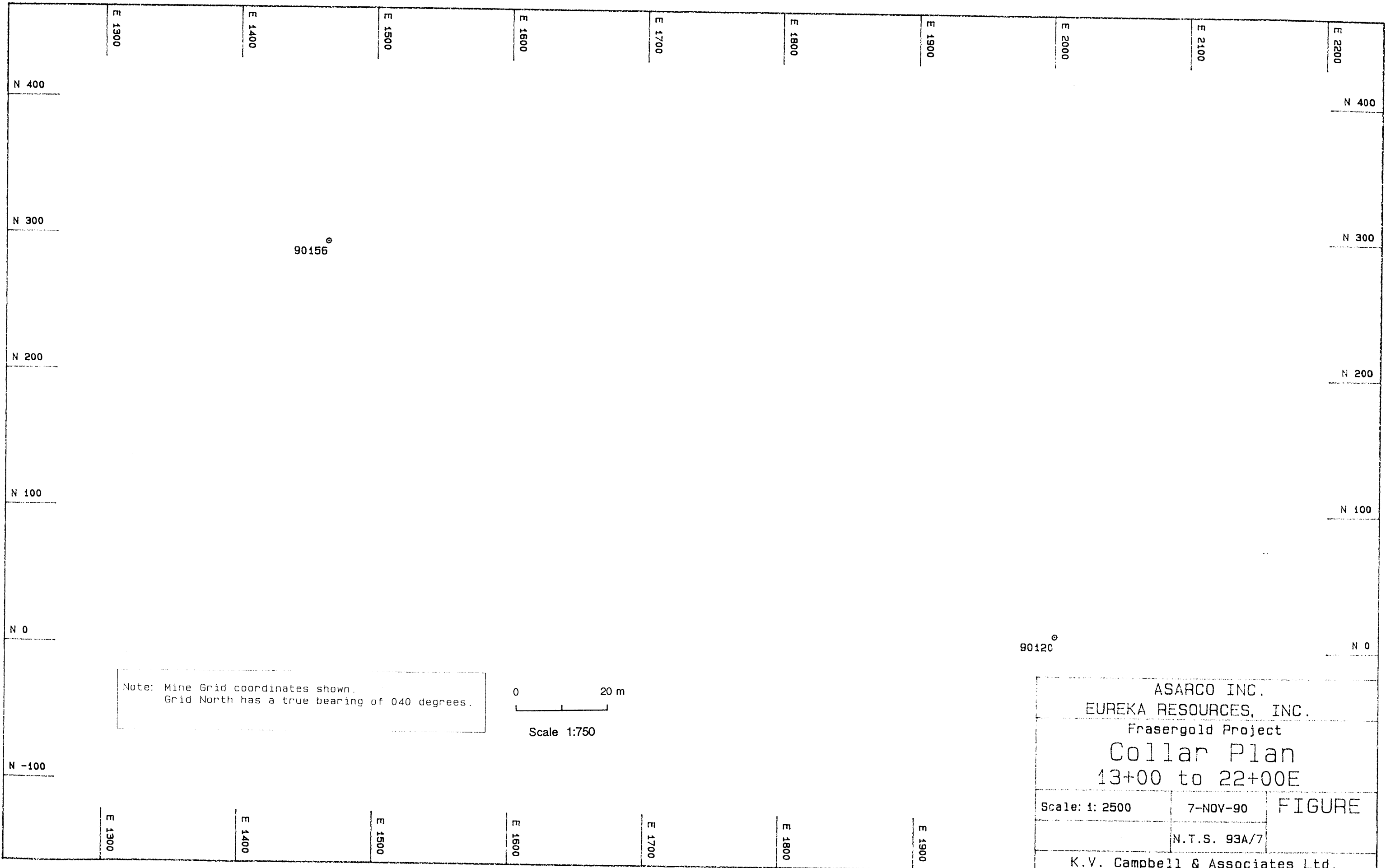


Note: Mine Grid coordinates shown.
 Grid North has a true bearing of 040 degrees.

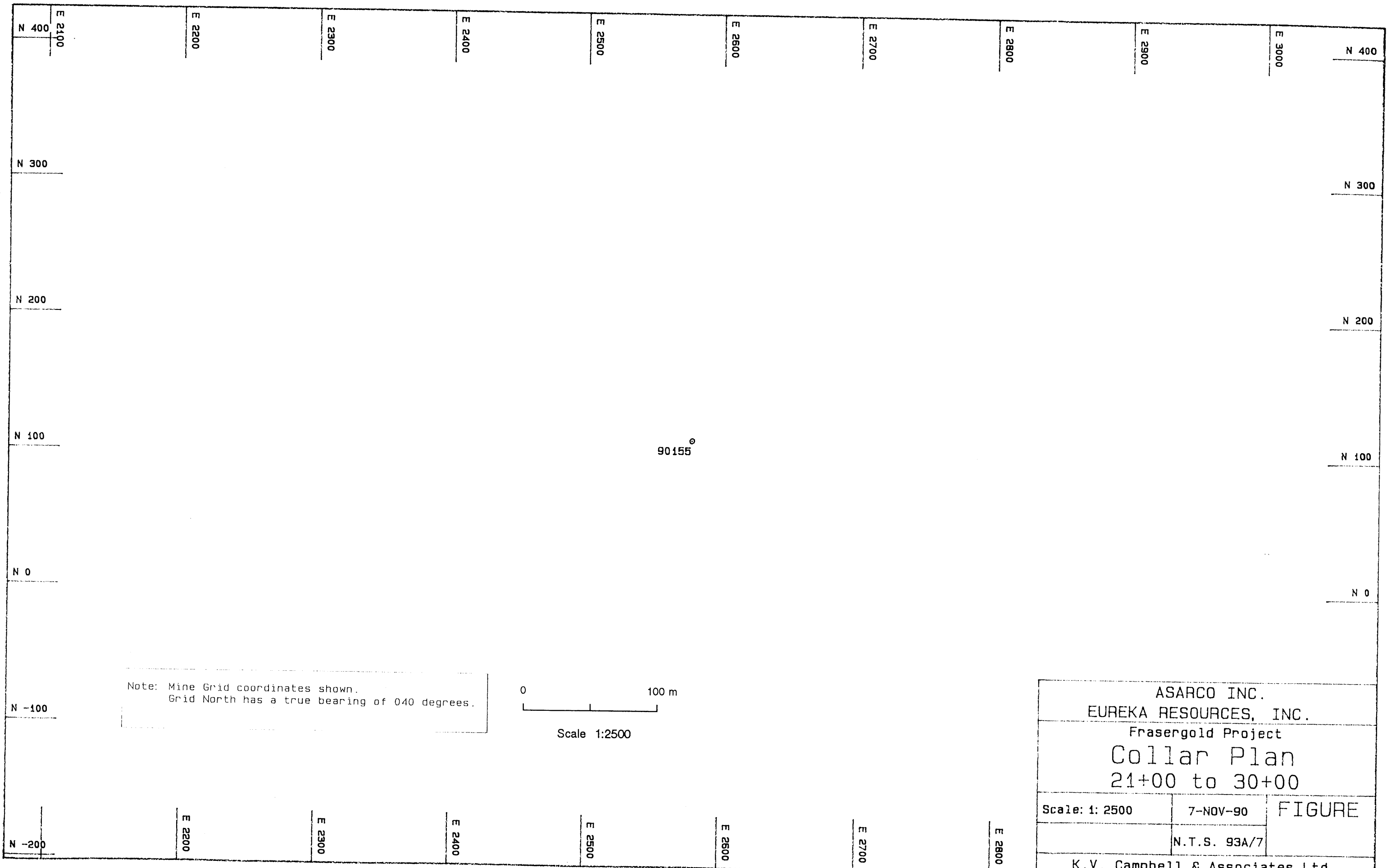


ASARCO INC. EUREKA RESOURCES, INC.		
Frasergold Project Collar Plan 4+00 to 13+00E		
Scale: 1: 2500	7-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		

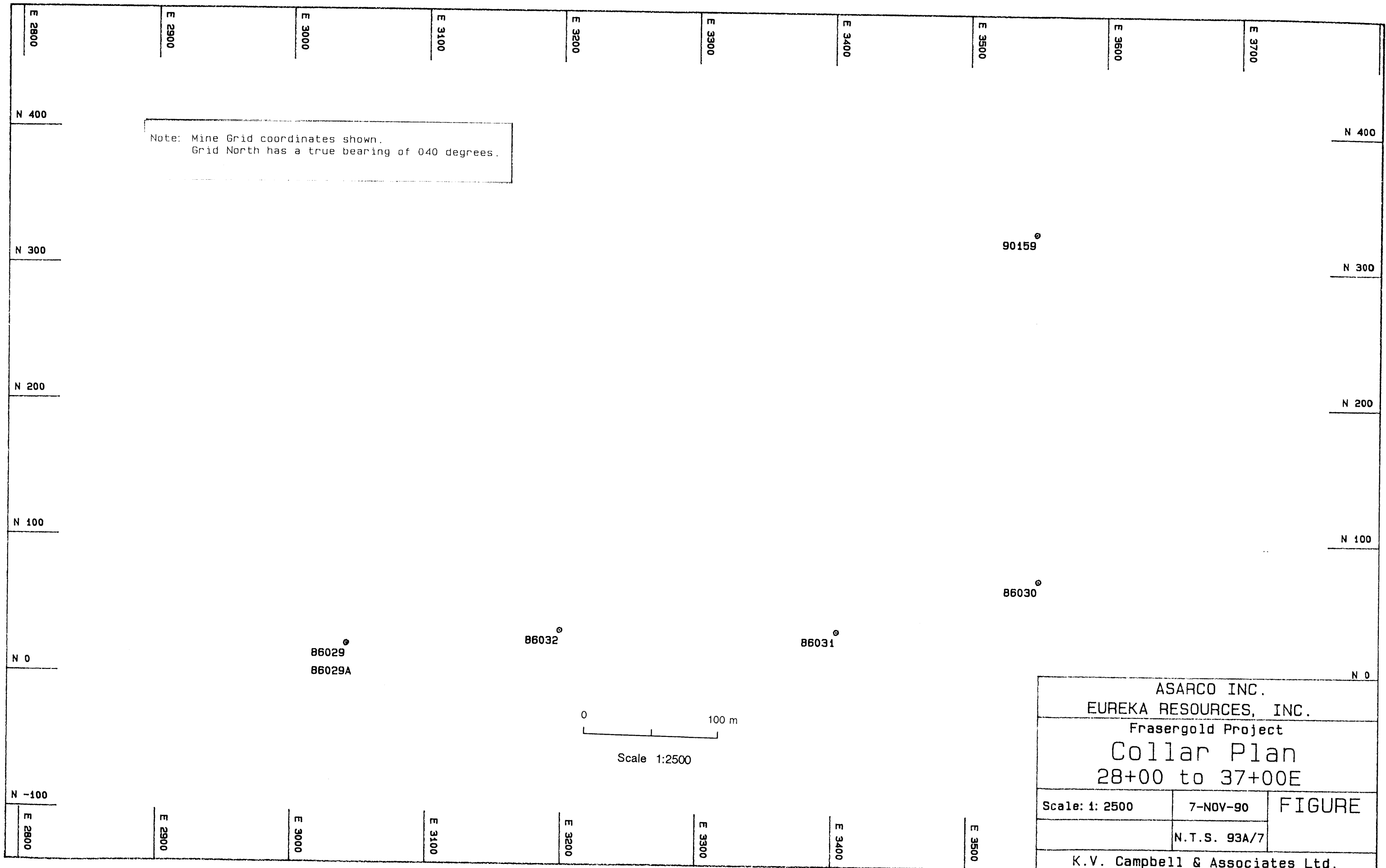
X

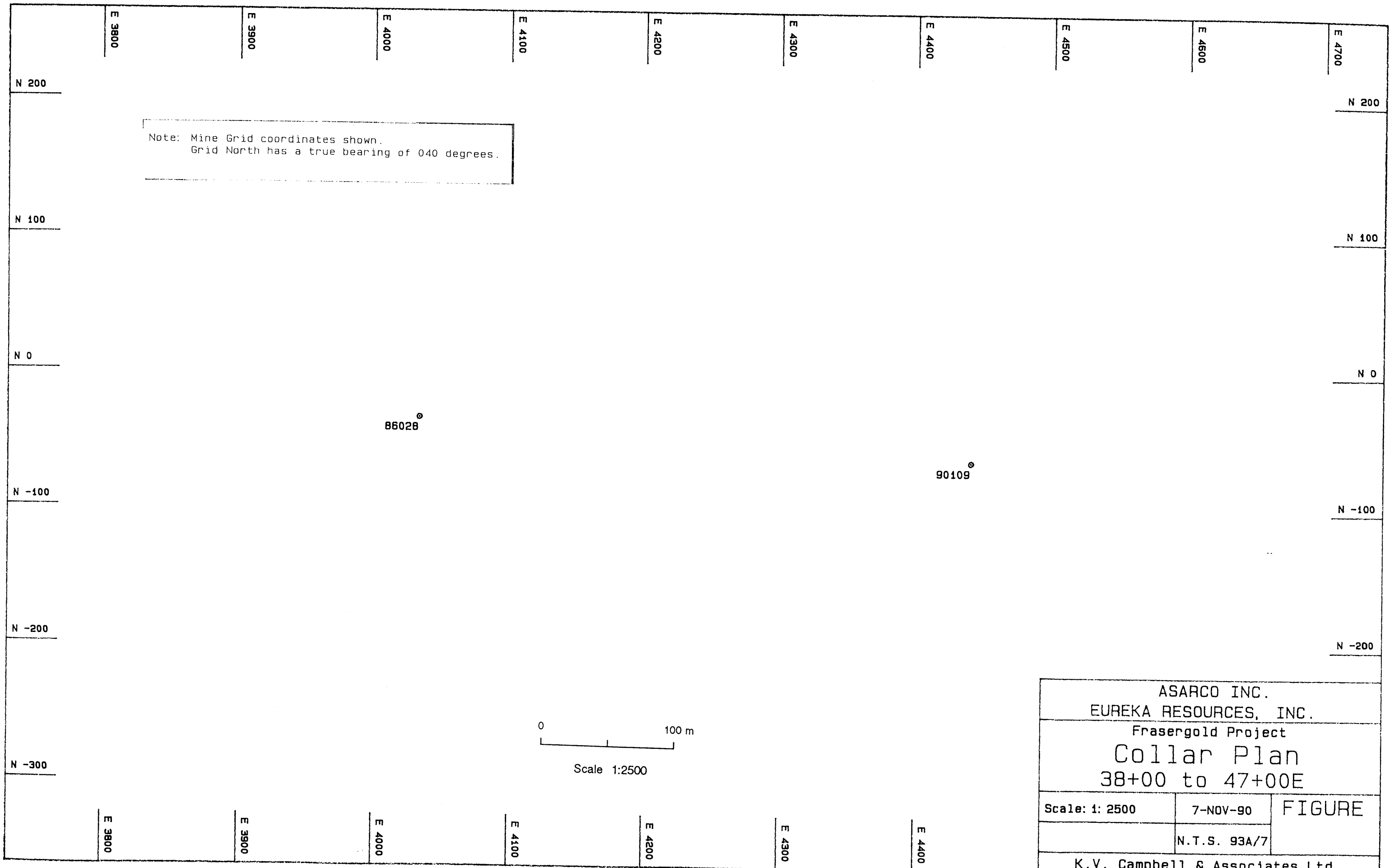


X



X



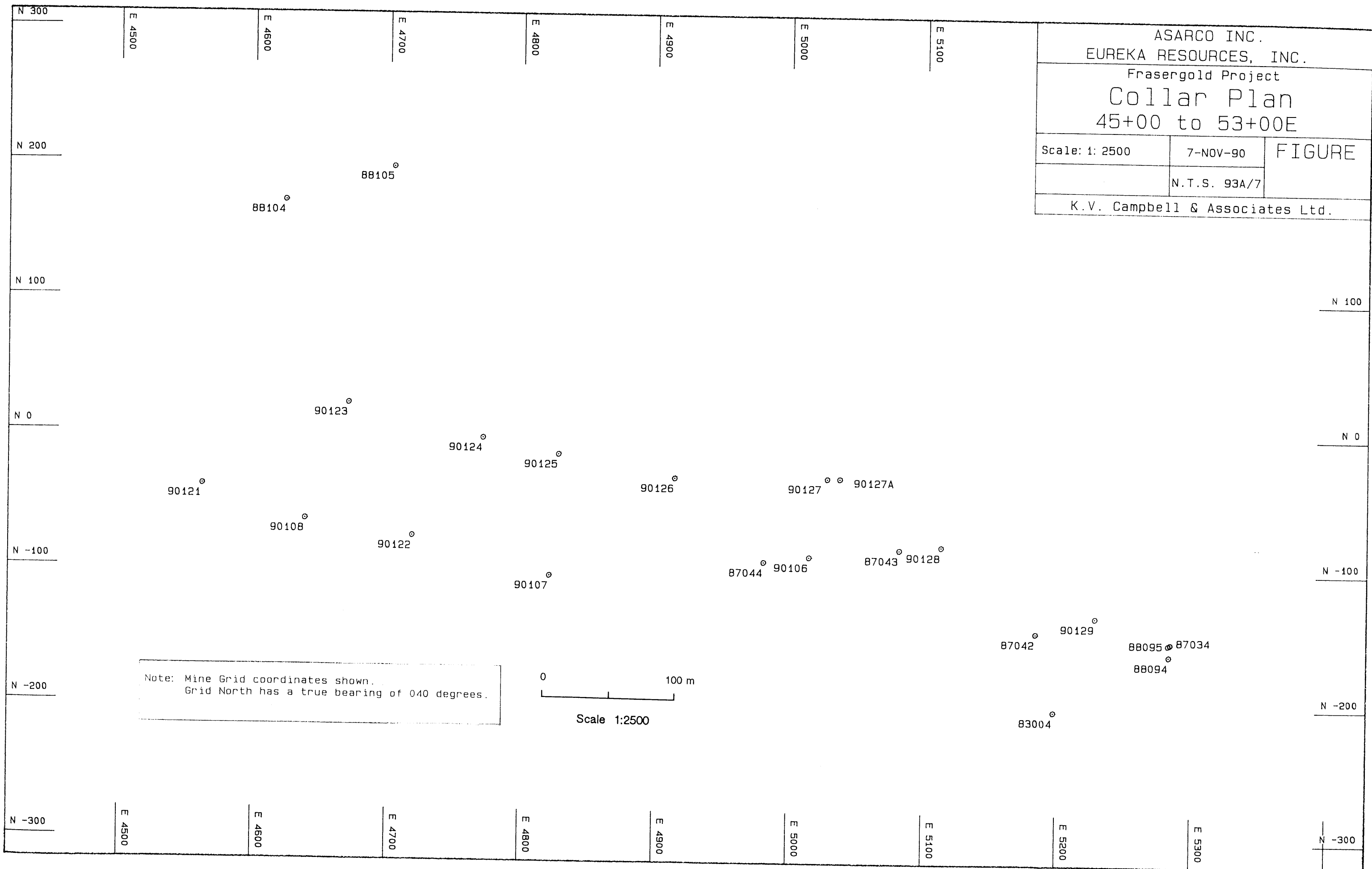


X

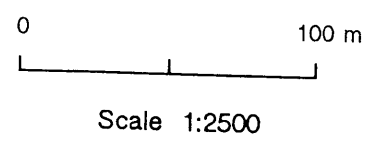
ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
Collar Plan
45+00 to 53+00E

Scale: 1: 2500	7-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



Note: Mine Grid coordinates shown.
Grid North has a true bearing of 040 degrees.



X

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
Collar Plan
51+00 to 60+00E

Scale: 1: 2500

8-NOV-90

FIGURE

N.T.S. 93A/7

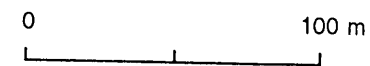
K.V. Campbell & Associates Ltd.

1990 Drilling

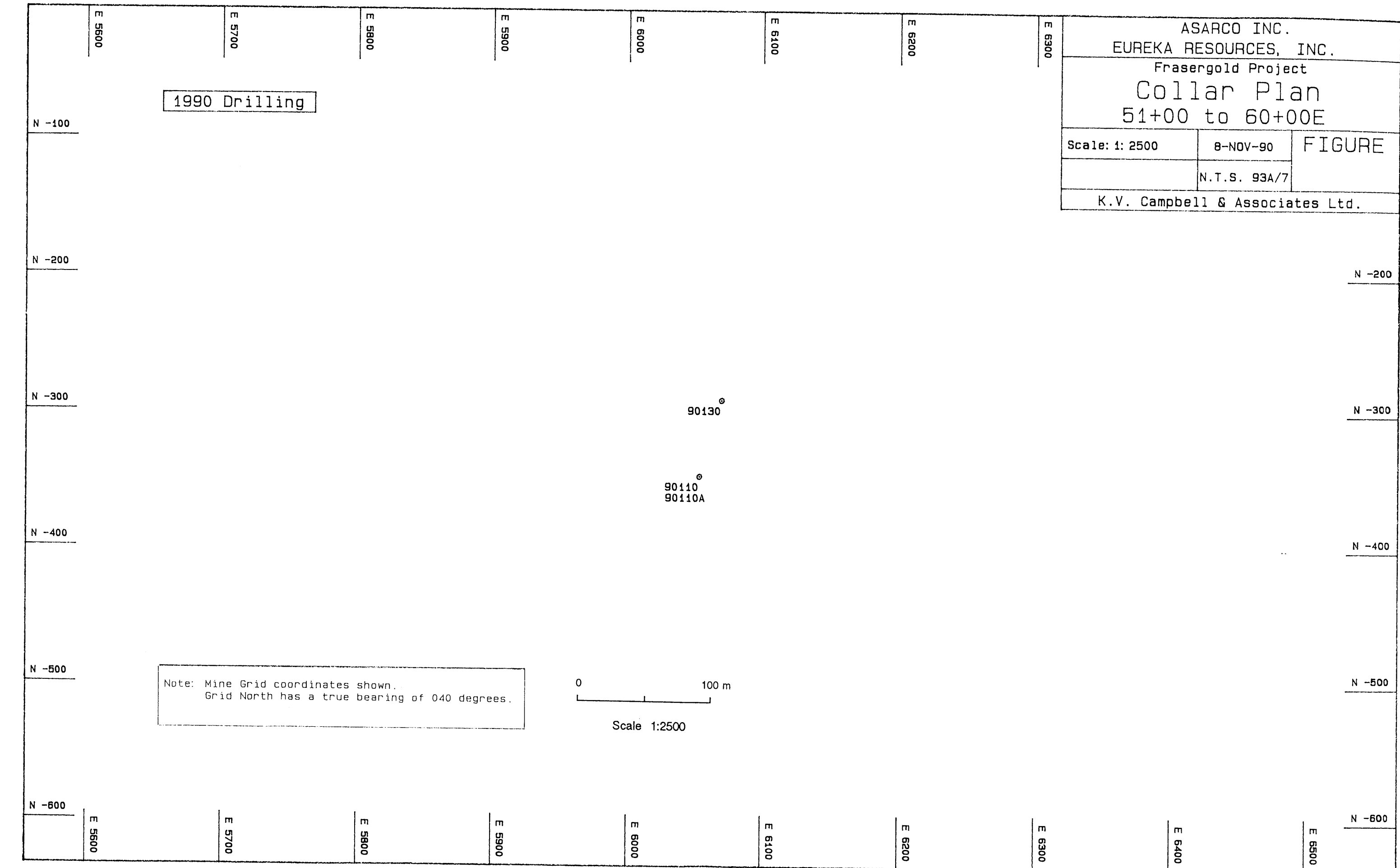
90130^o

90110^o
90110A

Note: Mine Grid coordinates shown.
Grid North has a true bearing of 040 degrees.



Scale 1:2500



X

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
Collar Plan
61+00 to 69+00E

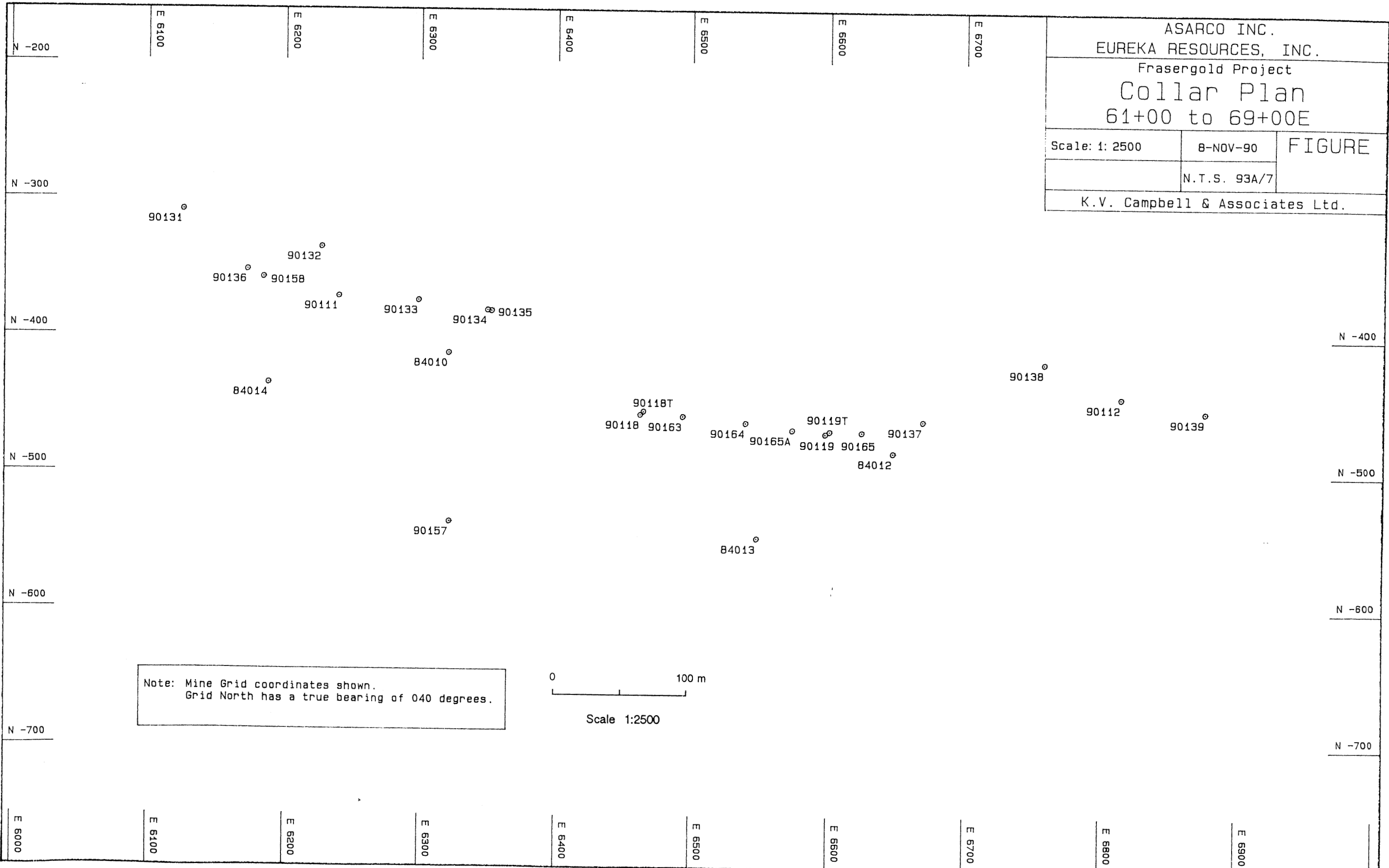
Scale: 1: 2500

8-NOV-90

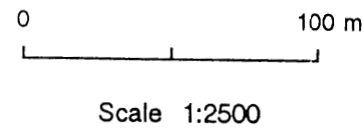
FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: Mine Grid coordinates shown.
Grid North has a true bearing of 040 degrees.



ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
Collar Plan
69+00 to 77+00E

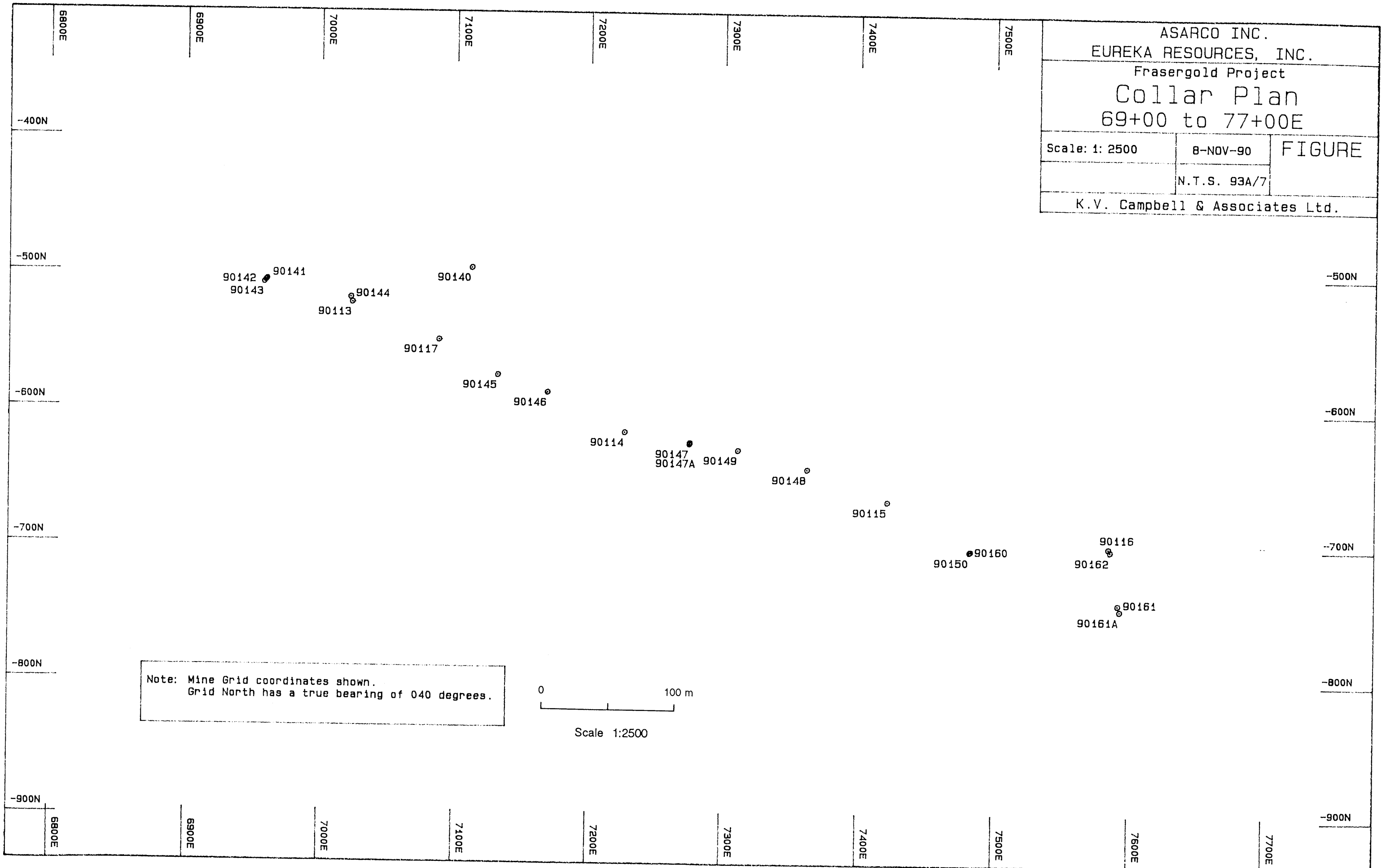
Scale: 1: 2500

8-NOV-90

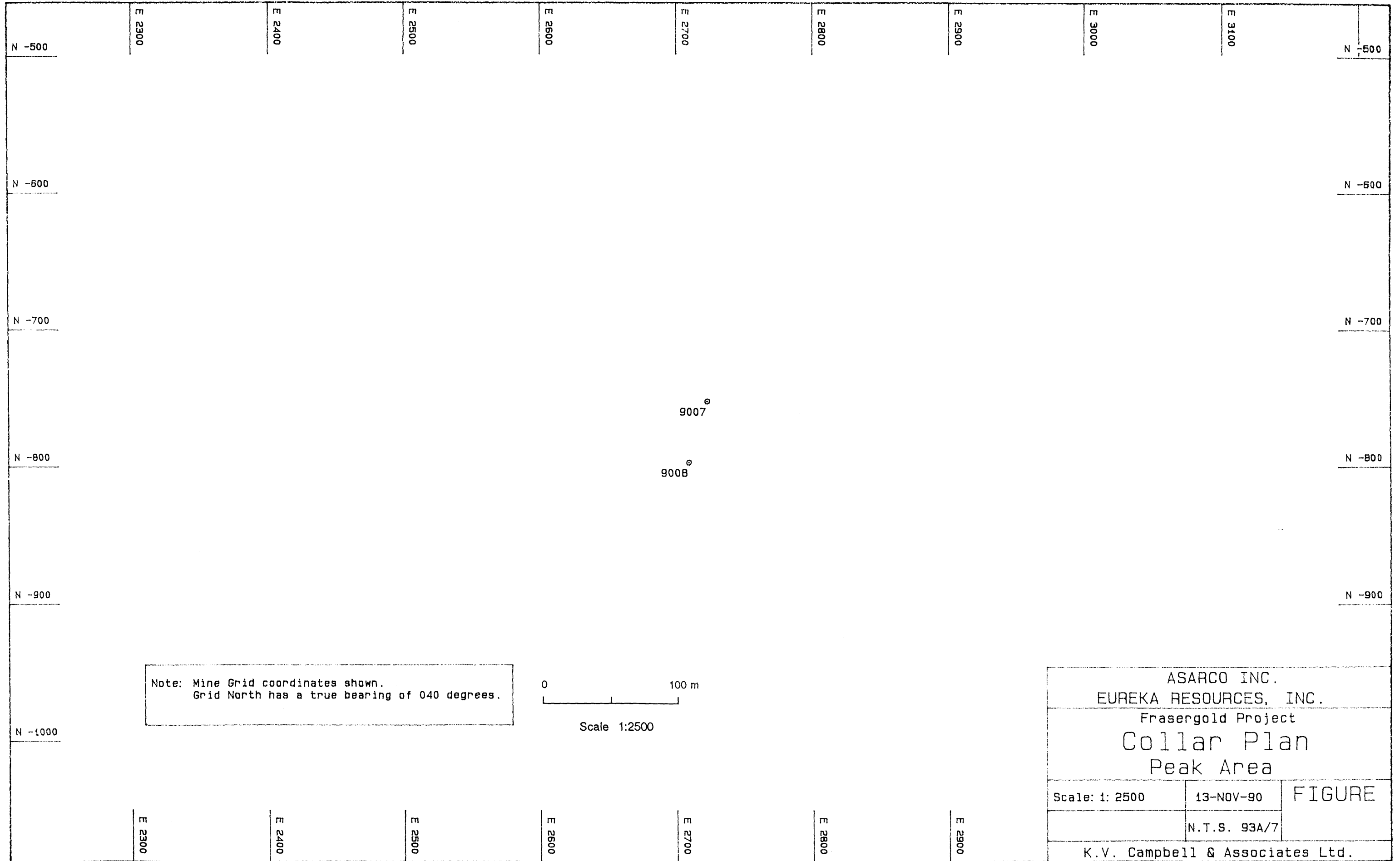
FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



X



Note: Mine Grid coordinates shown.
Grid North has a true bearing of 040 degrees.

0 100 m
Scale 1:2500

ASARCO INC. EUREKA RESOURCES, INC. Frasergold Project Collar Plan Peak Area		
Scale: 1: 2500	13-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		

APPENDIX VI
DRILL SECTIONS

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
R-90-07
Drill Section

Scale: 1: 250

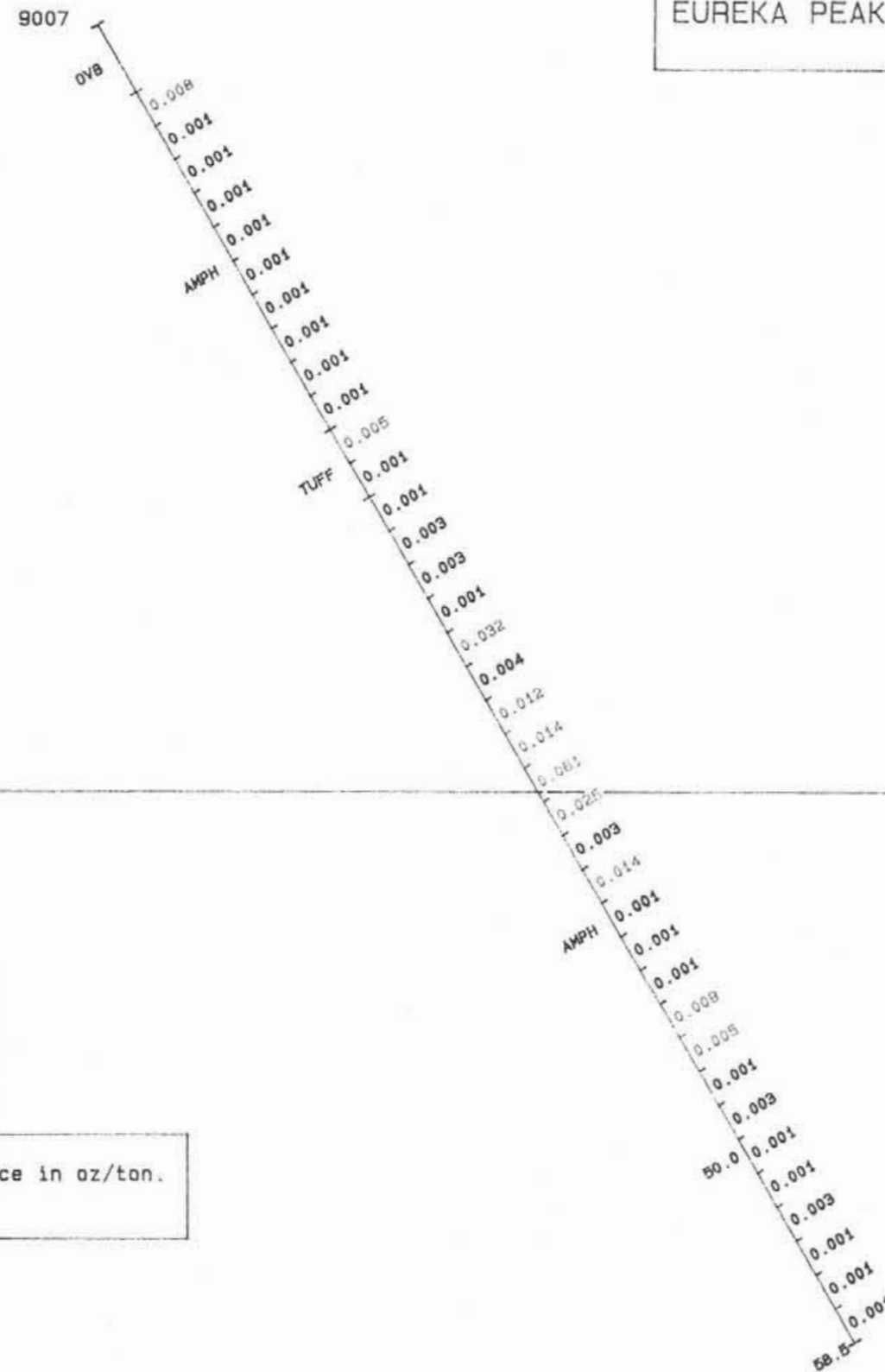
20-NOV-90

FIGURE

N.T.S. 93A/7

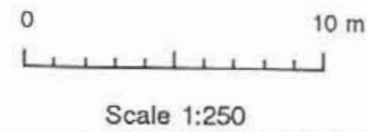
K.V. Campbell & Associates Ltd.

EUREKA PEAK AREA



Section along drill hole plunge direction
on grid azimuth of 030 degrees, facing
grid northwest.

Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) Metric units.



1700mRL

N008

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project

R-90-08

Section 27+08E

Scale: 1: 250

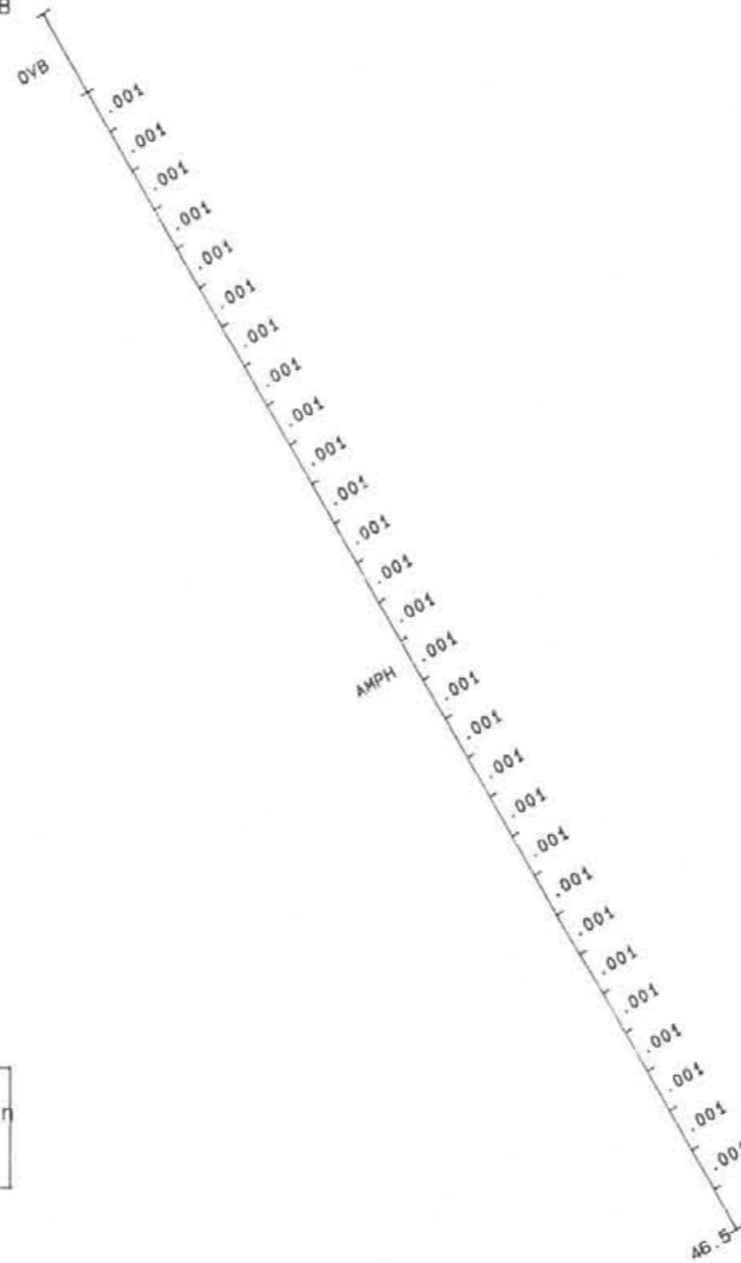
15-NOV-90

FIGURE

N.T.S. 93A/7

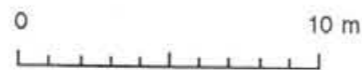
K.V. Campbell & Associates Ltd.

9008



Note: (1) Gold values adjacent to hole trace in oz/ton
(2) Metric units.

1650mRL



Scale 1:250

N008

-750N

1650mRL

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-106
 Section 50+15E

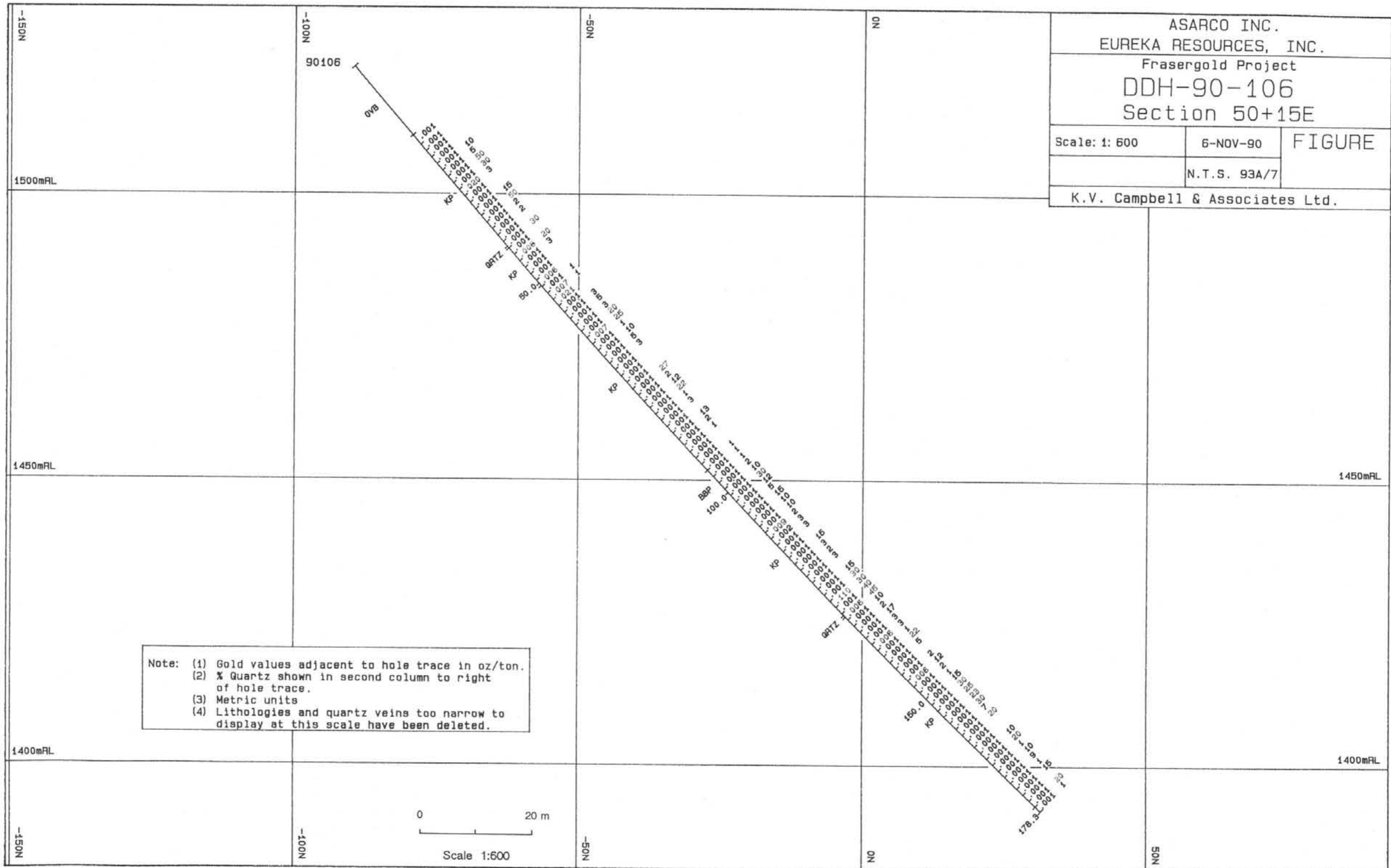
Scale: 1: 600

6-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 20 m
 Scale 1:600

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-107
 Section 48+25E

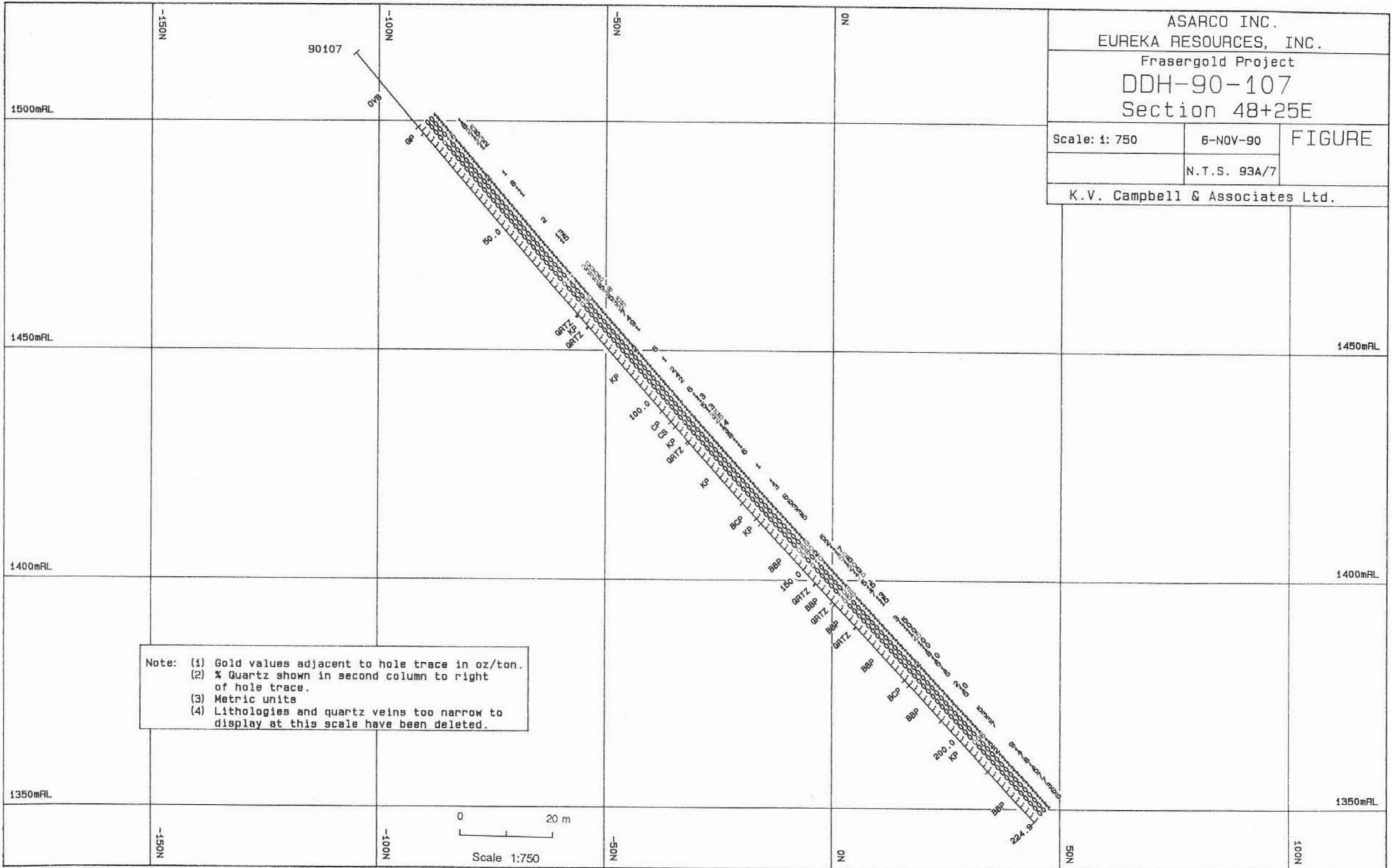
Scale: 1: 750

6-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
DDH-90-108
Section 48+50E

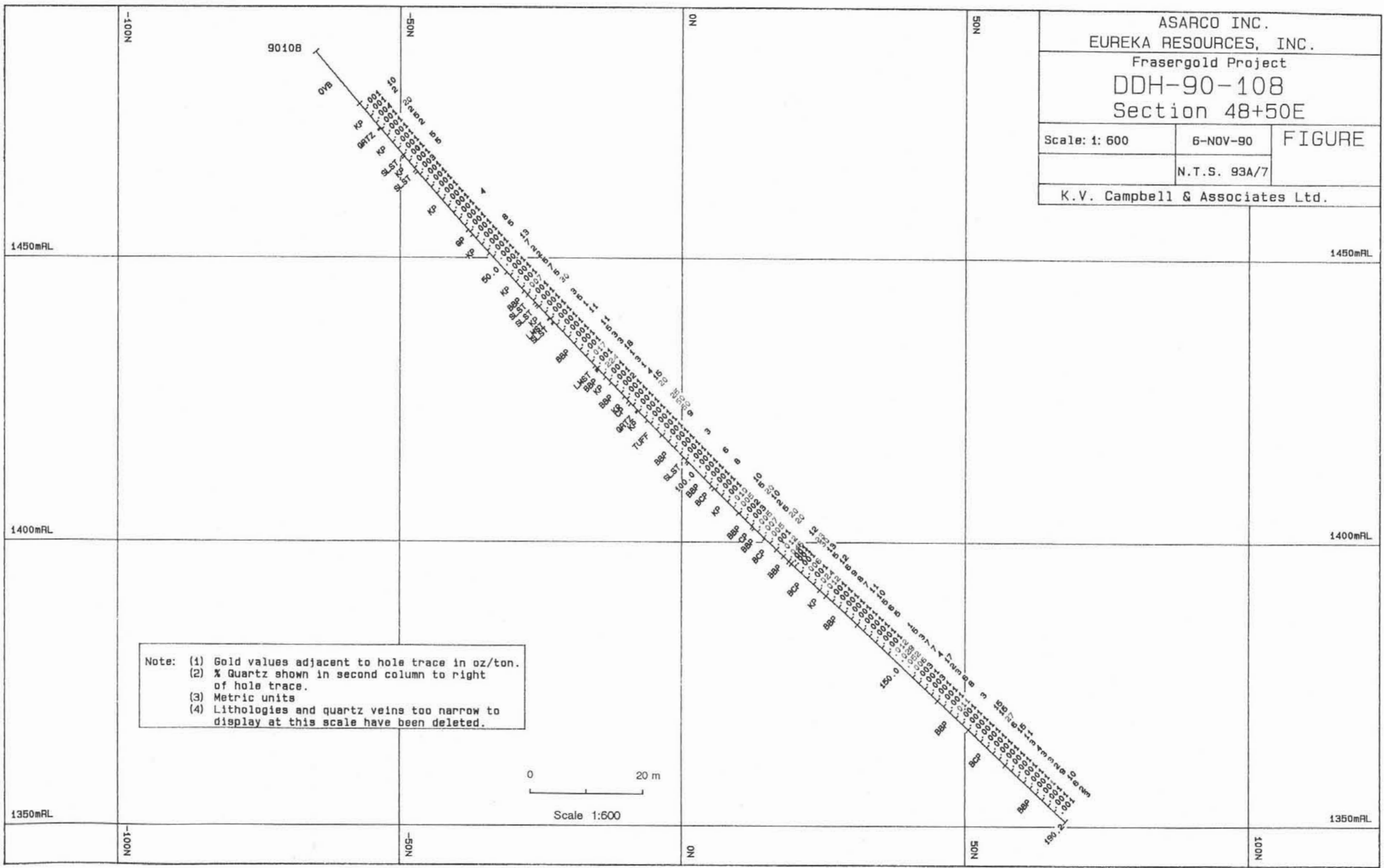
Scale: 1:600

6-NOV-90

FIGURE

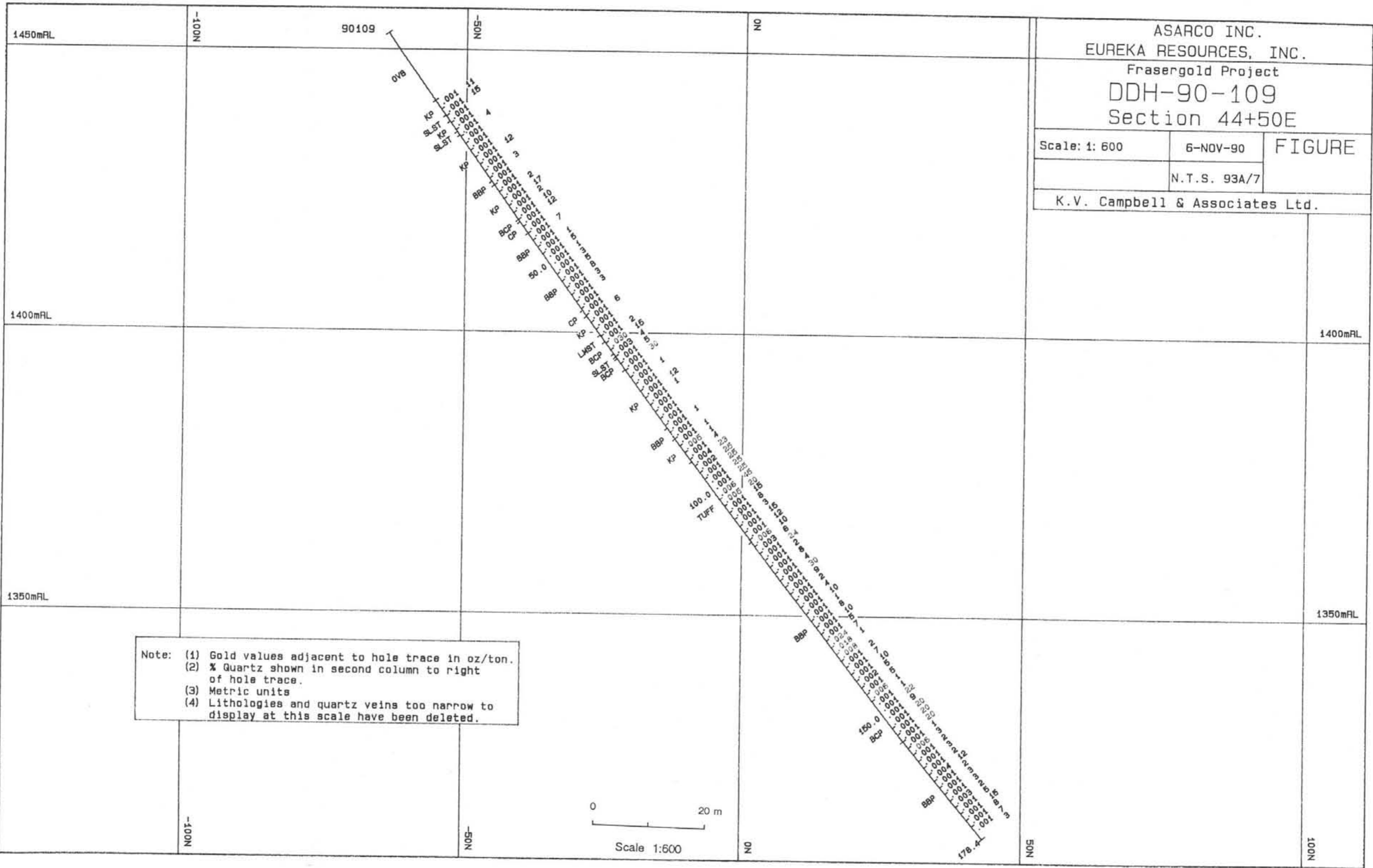
N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

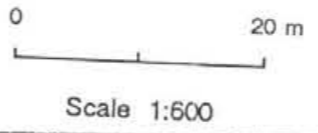
0 20 m
Scale 1:600



ASARCO INC.
EUREKA RESOURCES, INC.
Frasergold Project
DDH-90-109
Section 44+50E

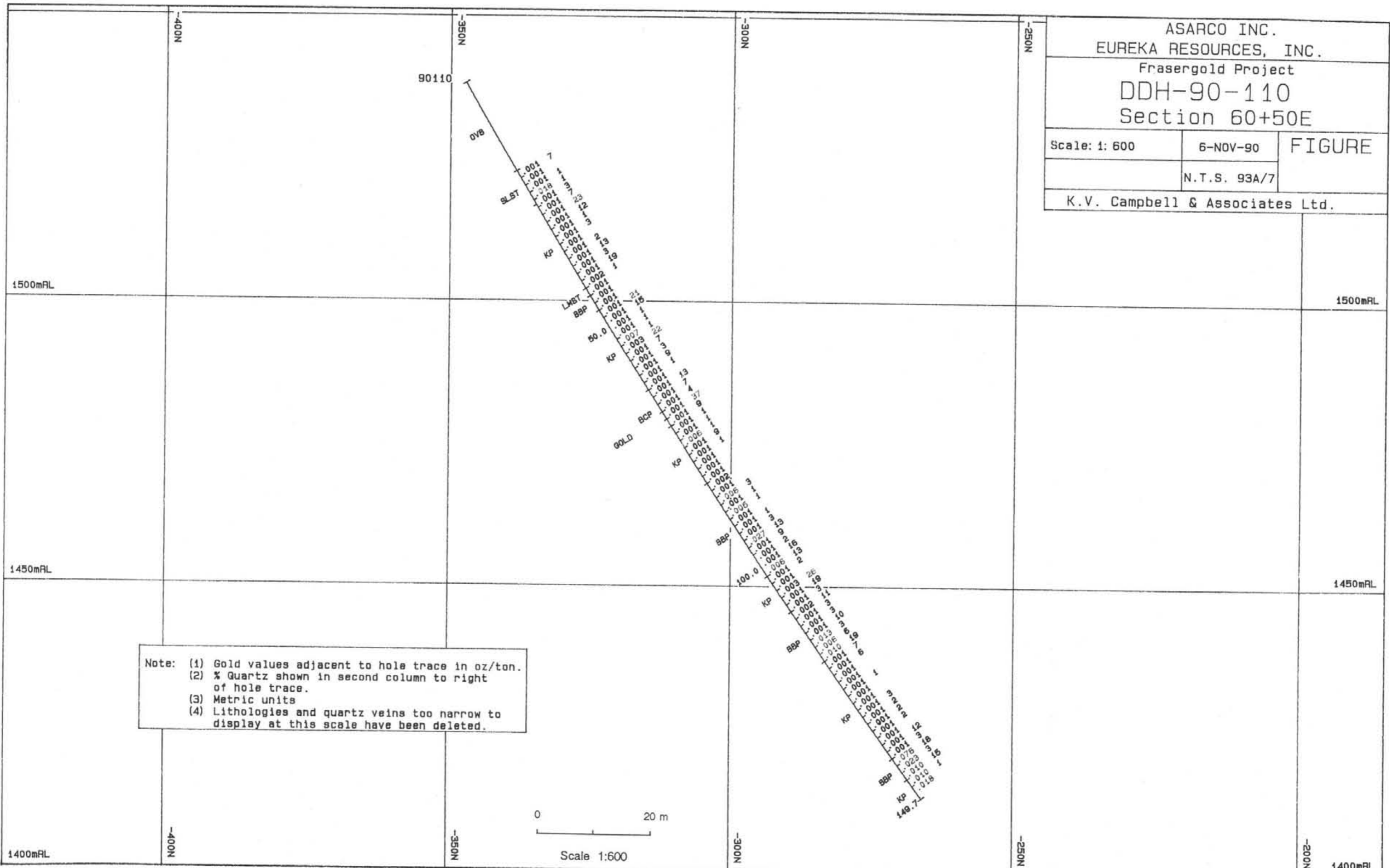
Scale: 1: 600	6-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		

Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
EUREKA RESOURCES, INC.
Frasergold Project
DDH-90-110
Section 60+50E

Scale: 1: 600	6-NOV-90	FIGURE
N.T.S. 93A/7		
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
DDH-90-111
Section 62+50E

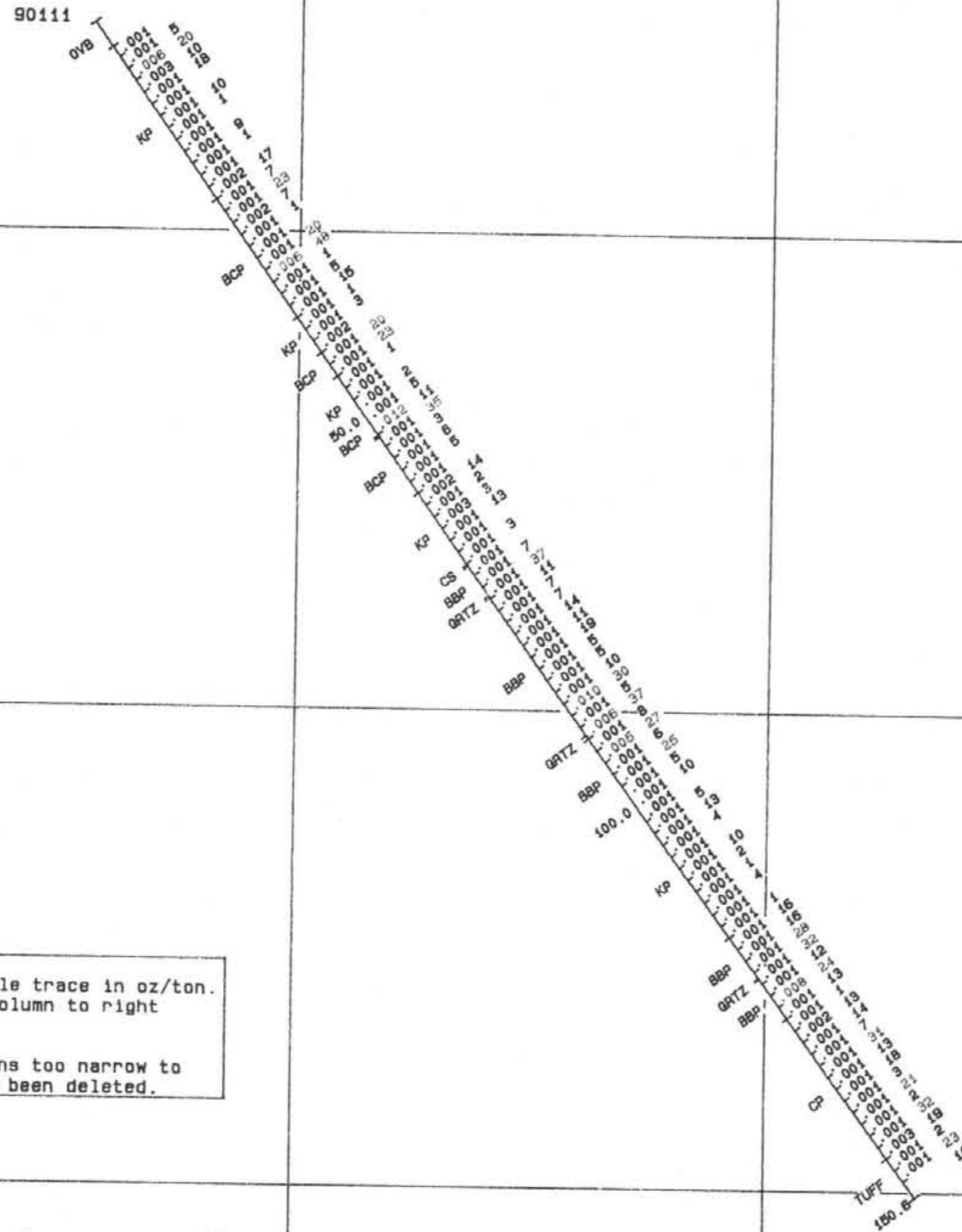
Scale: 1: 600

6-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

1550mRL

-500N

-450N

-400N

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-112
 Section 68+25E

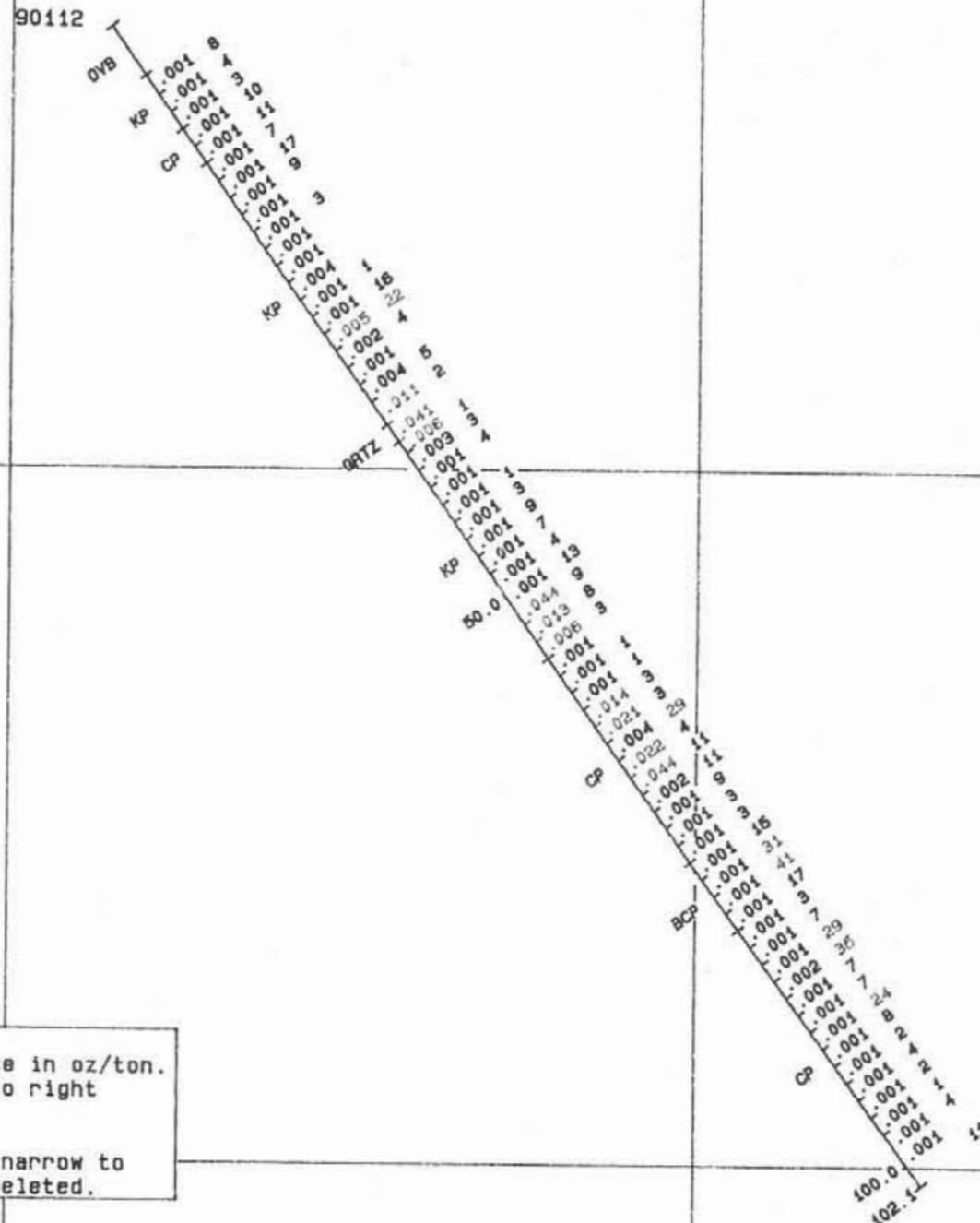
Scale: 1: 500

6-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



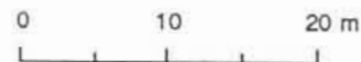
1500mRL

1500mRL

1450mRL

1450mRL

Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



Scale 1:500

-500N

-450N

-400N

-350N

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
DDH-90-114
Section 72+25E

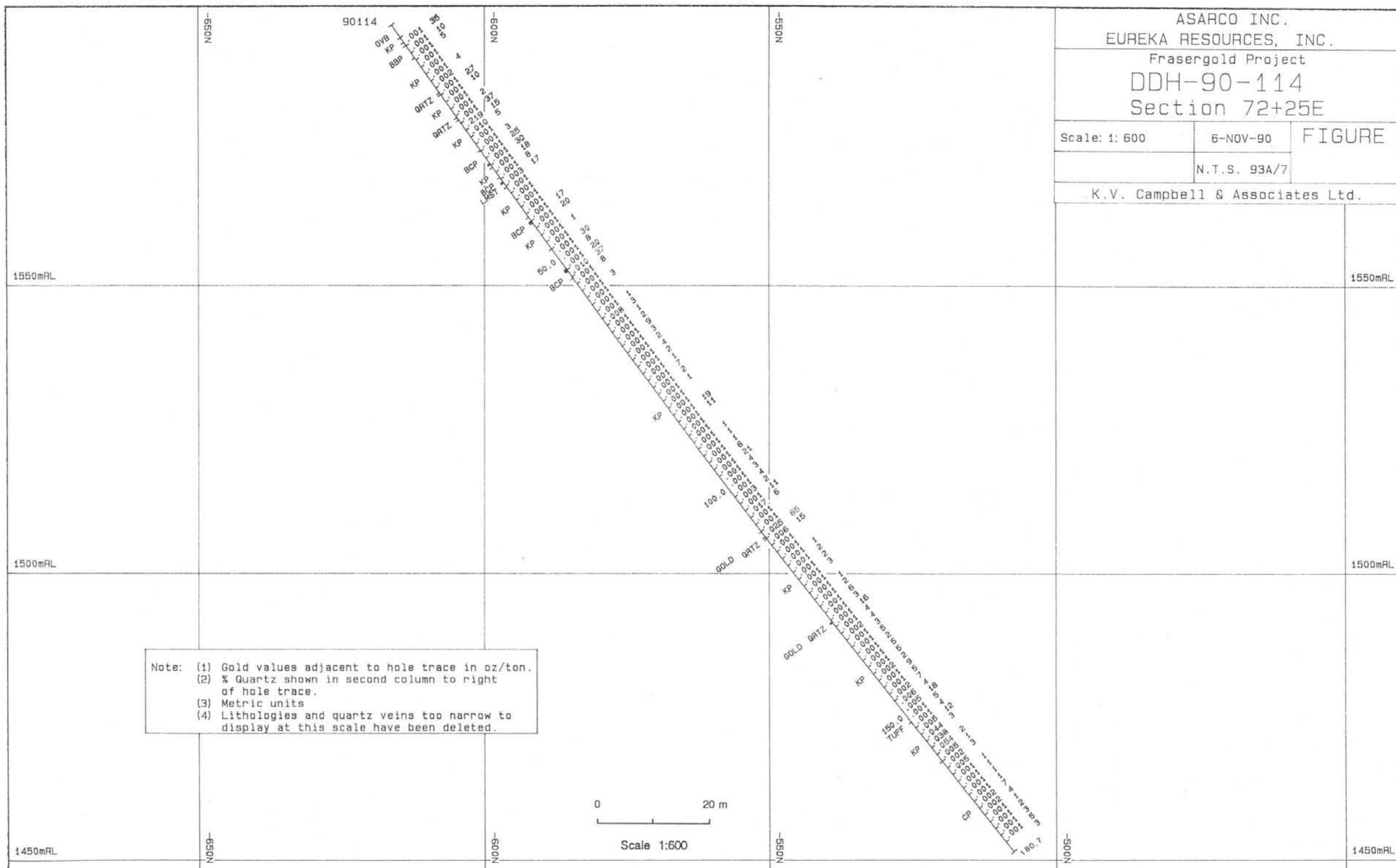
Scale: 1: 600

6-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
DDH-90-115
Section 74+25E

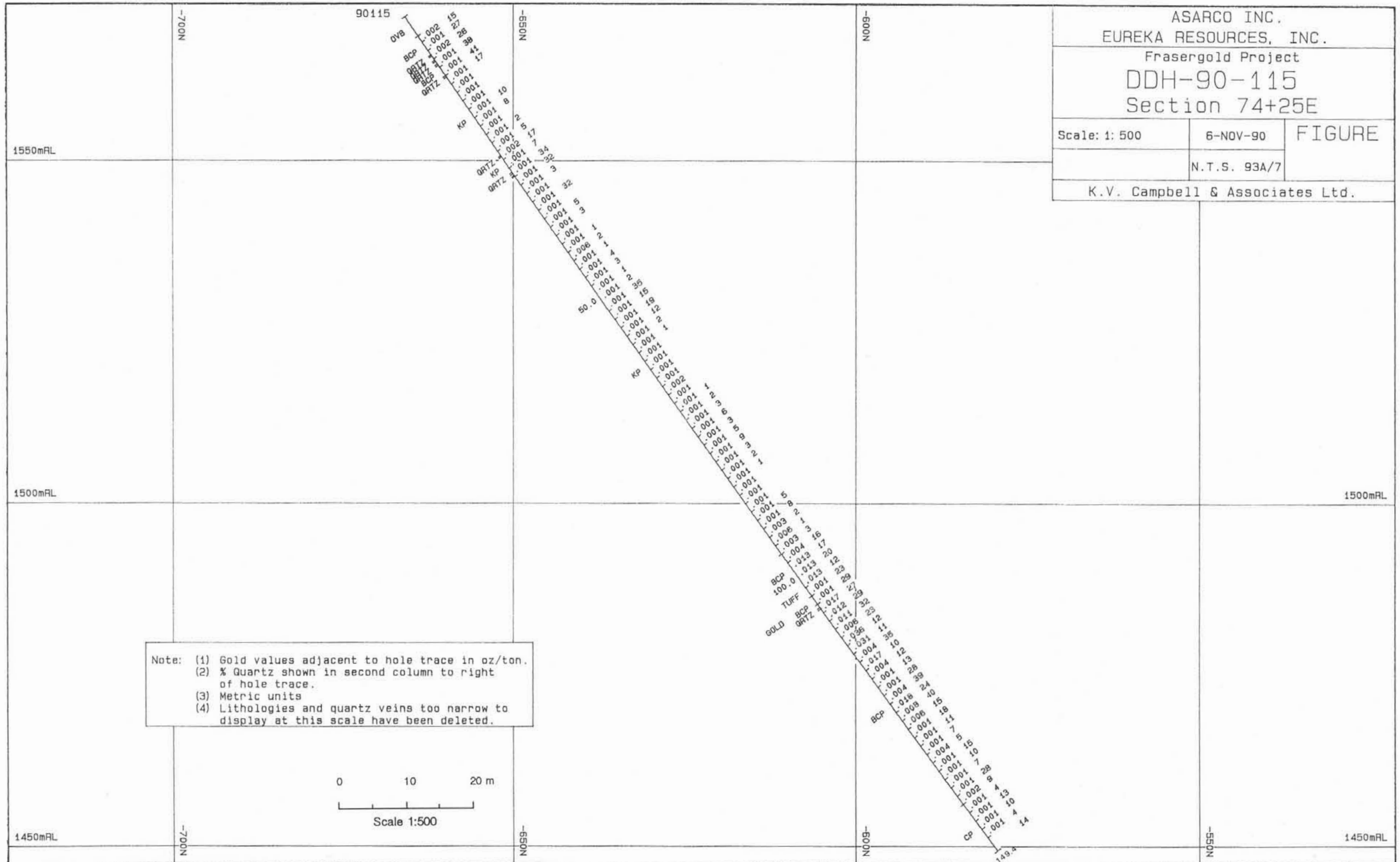
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6-NOV-90

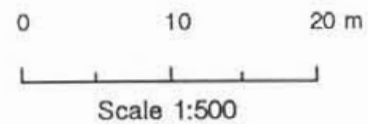
FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



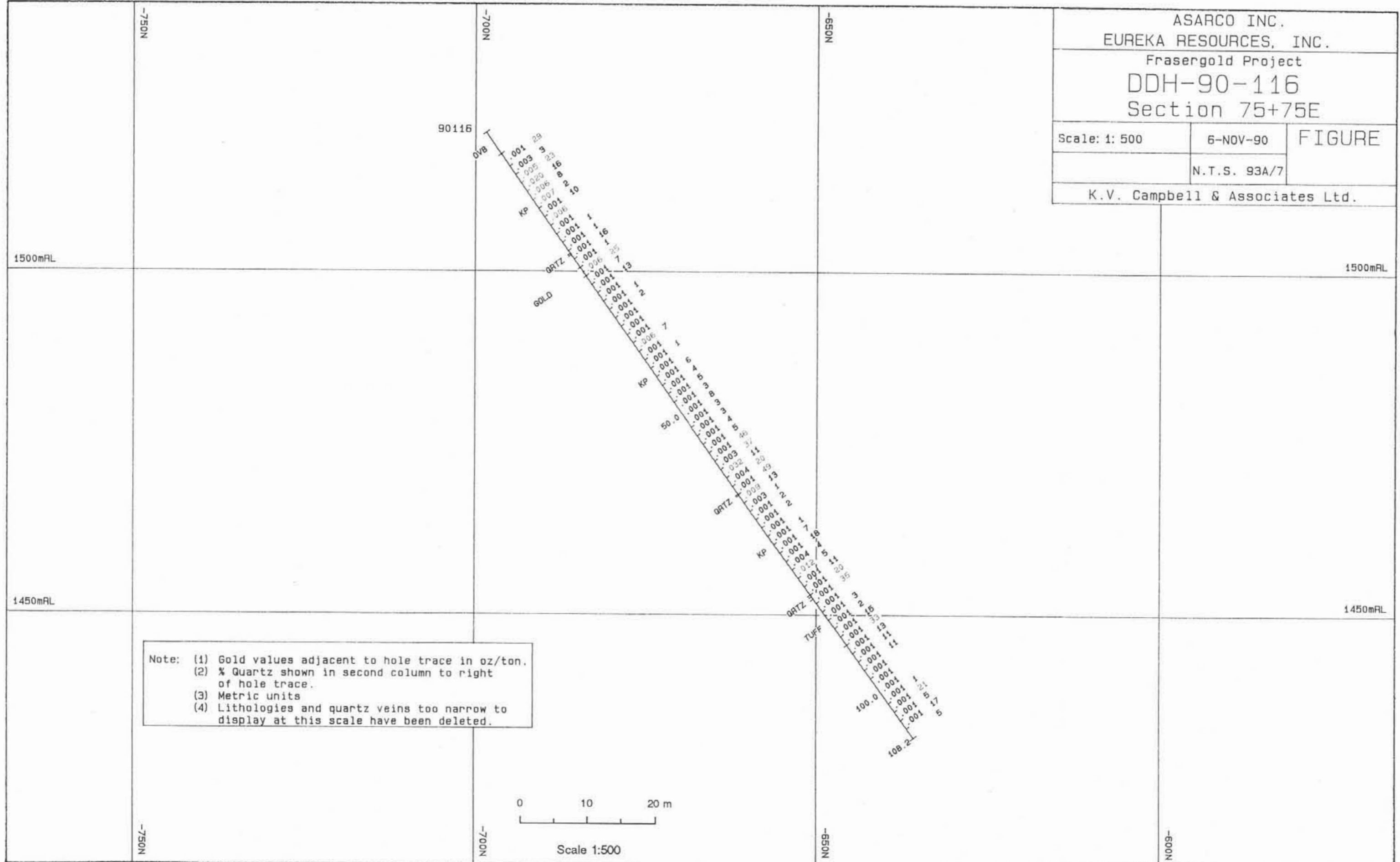
Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
DDH-90-116
Section 75+75E

Scale: 1:500	6-NOV-90	FIGURE
N.T.S. 93A/7		
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 10 20 m
Scale 1:500

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-117
 Section 71+00E

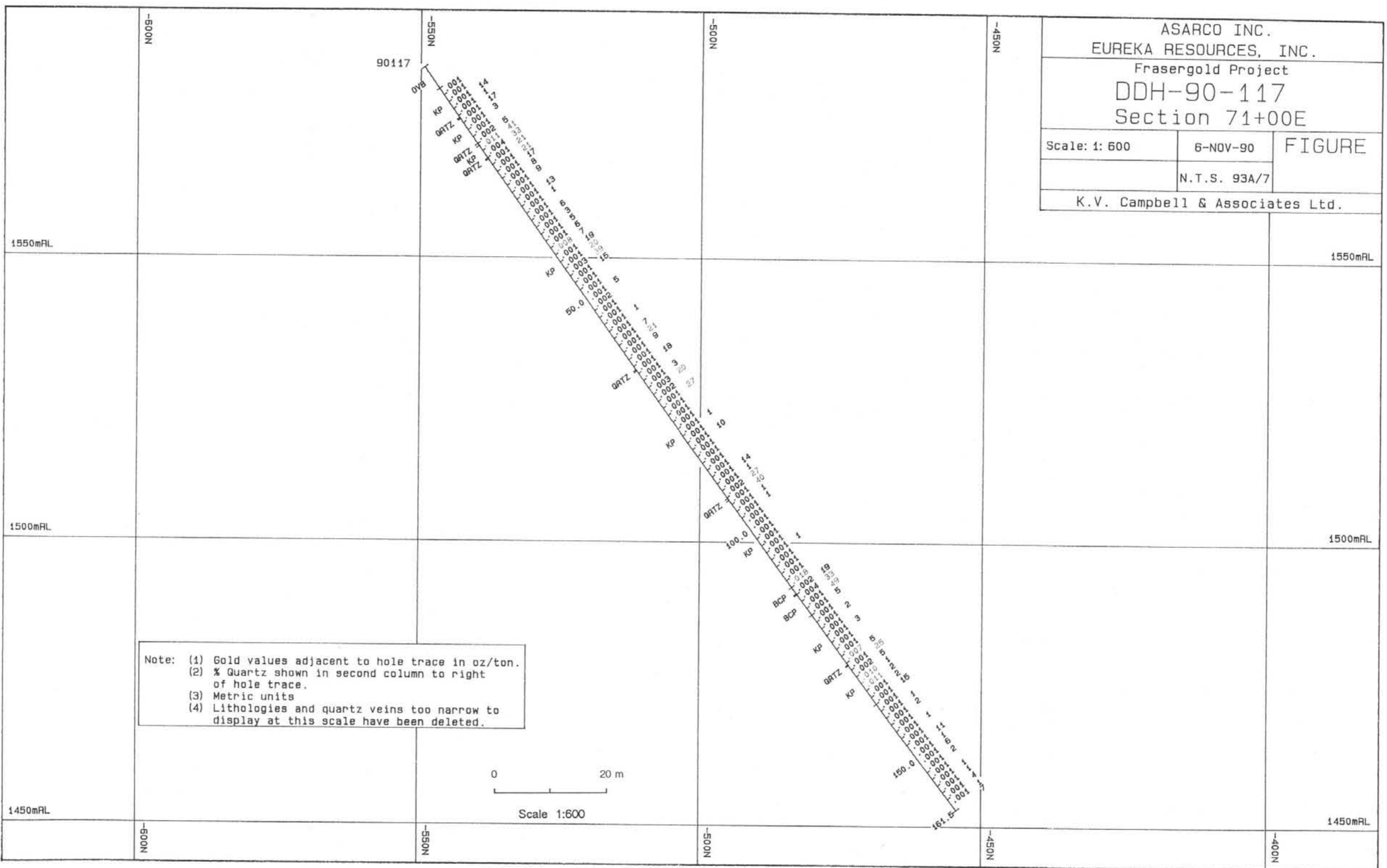
Scale: 1: 600

6-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 20 m
 Scale 1:600

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-118
 Section 64+62E

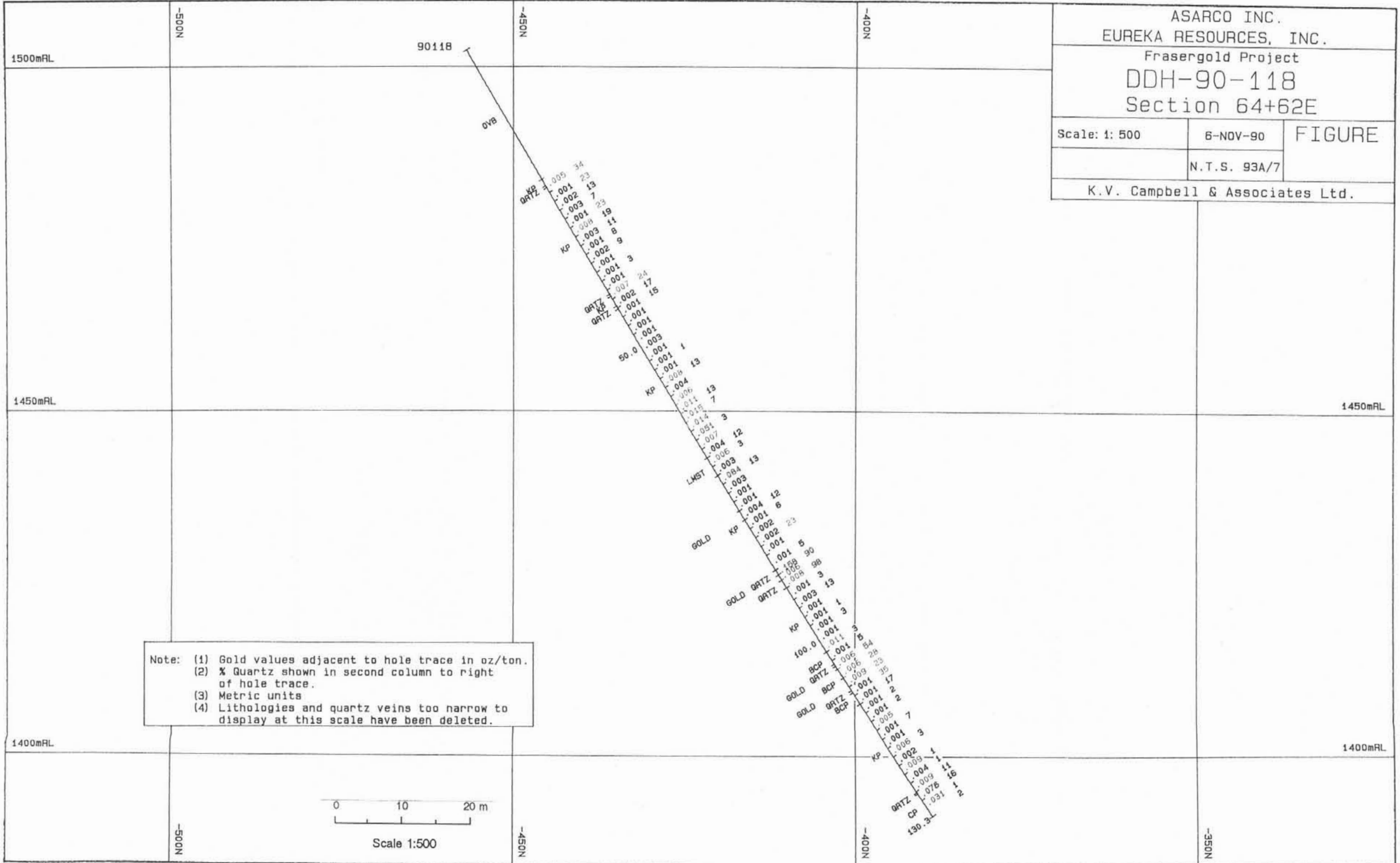
Scale: 1: 500

6-NOV-90

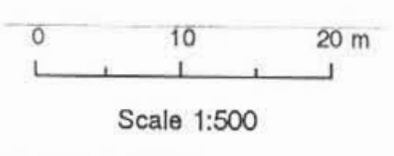
FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
R-90-118T
Section 64+64E

Scale: 1: 500

9-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

90118T

078

Note: (1) Gold values adjacent to hole trace in oz/ton
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 10 20 m

Scale 1:500

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-119
 Section 65+97E

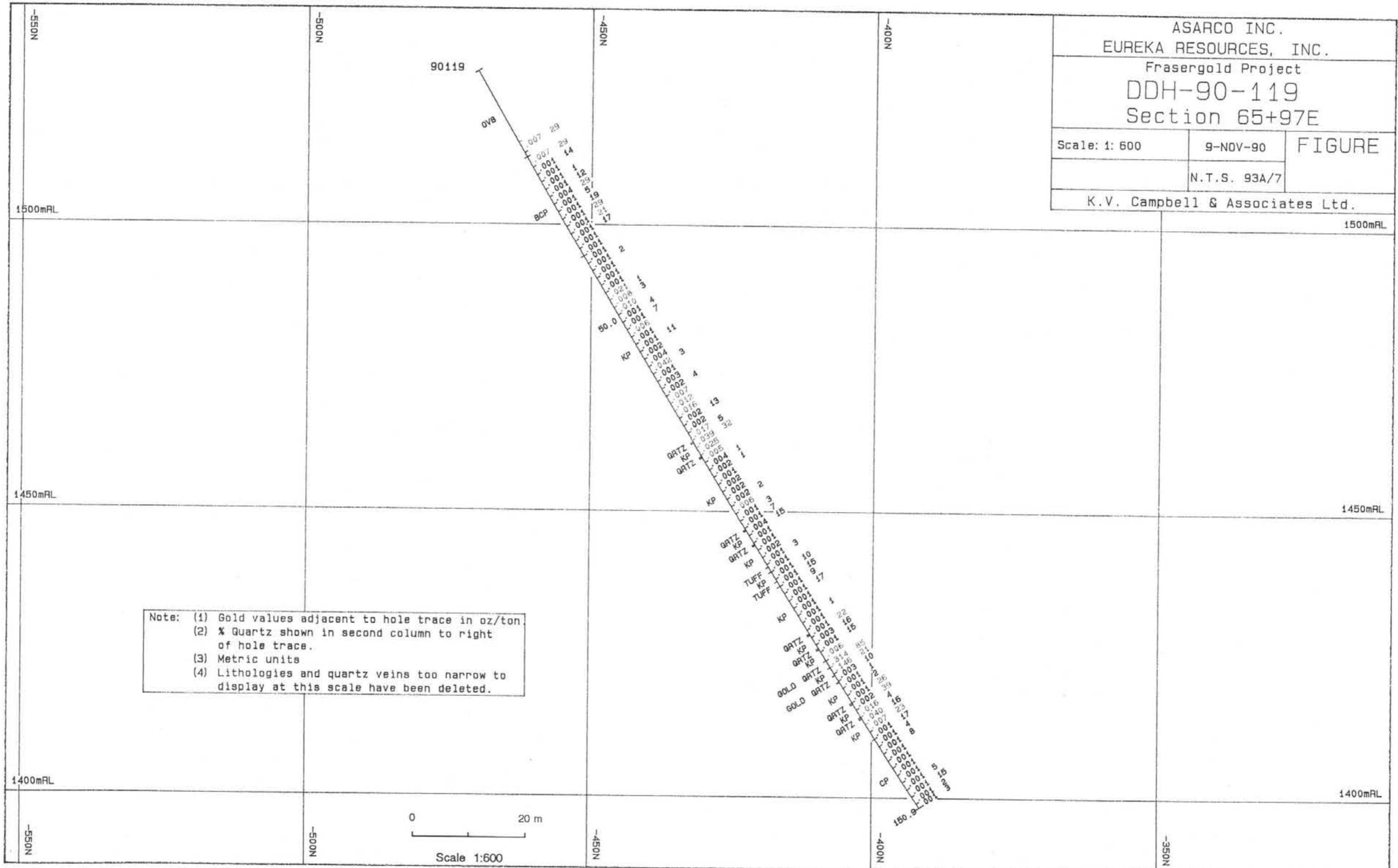
Scale: 1: 600

9-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-119T
 Section 66+00E

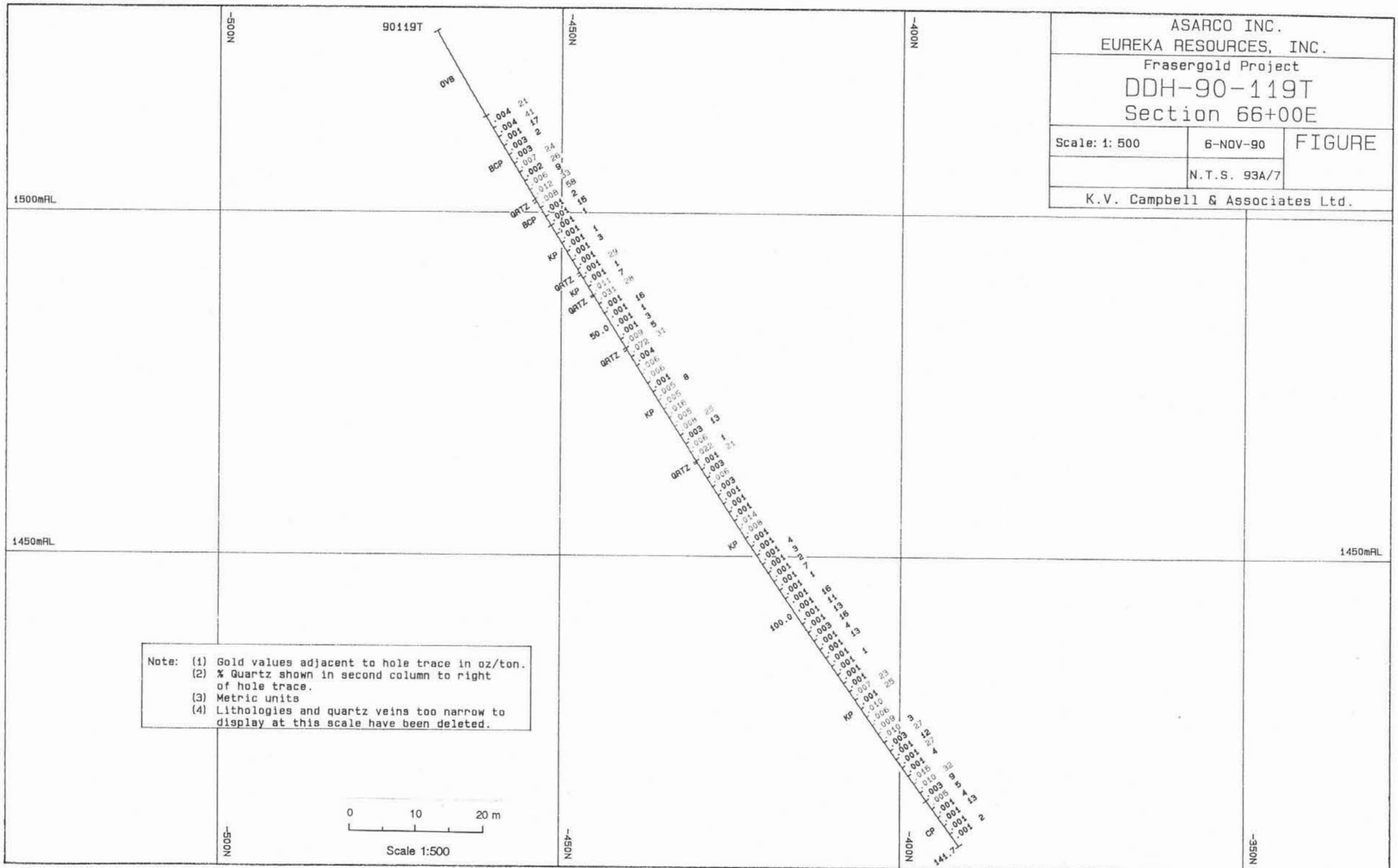
Scale: 1: 500

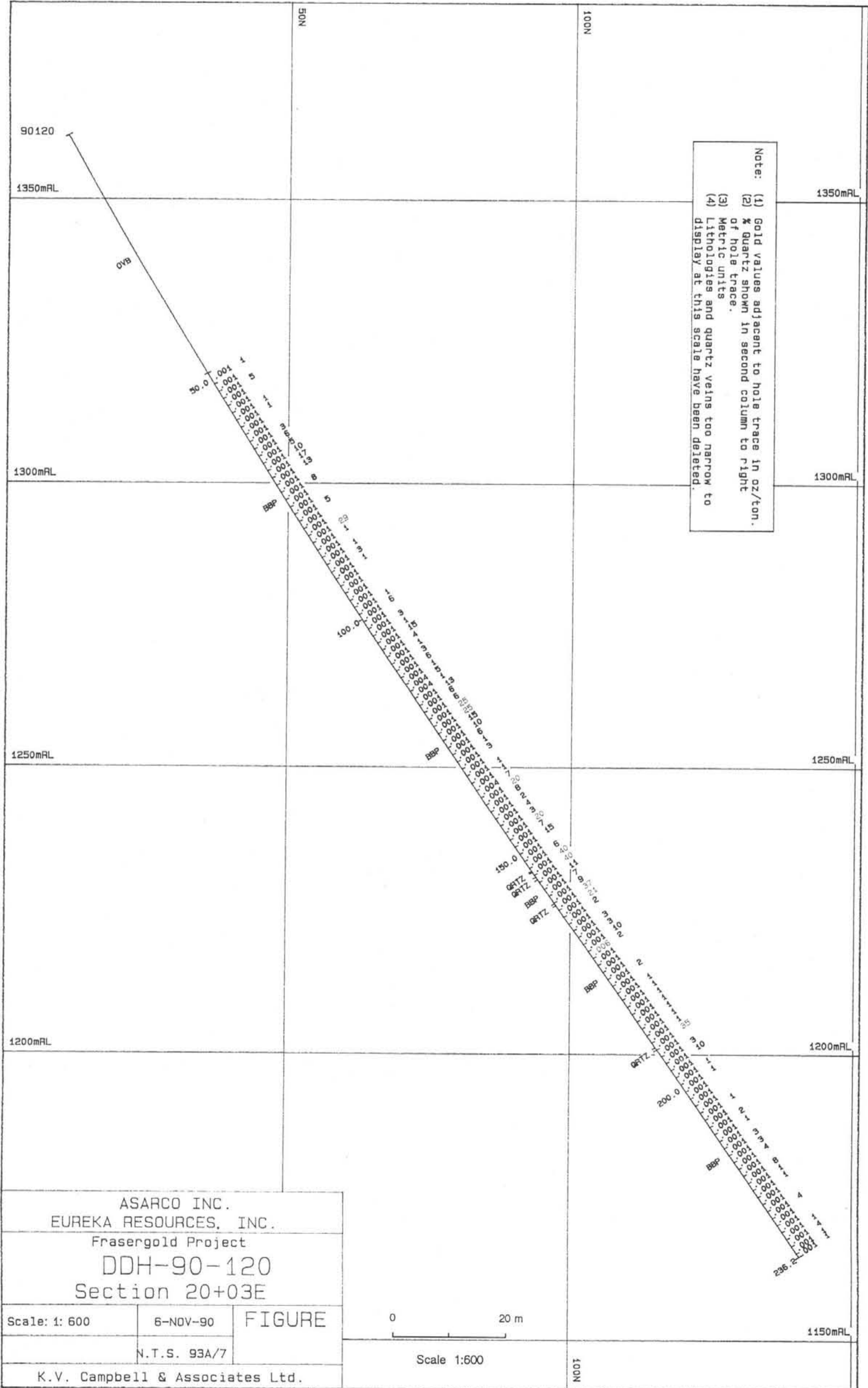
6-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.





Note:

- (1) Gold values adjacent to hole trace in oz/ton.
- (2) % Quartz shown in second column to right of hole trace.
- (3) Metric units
- (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

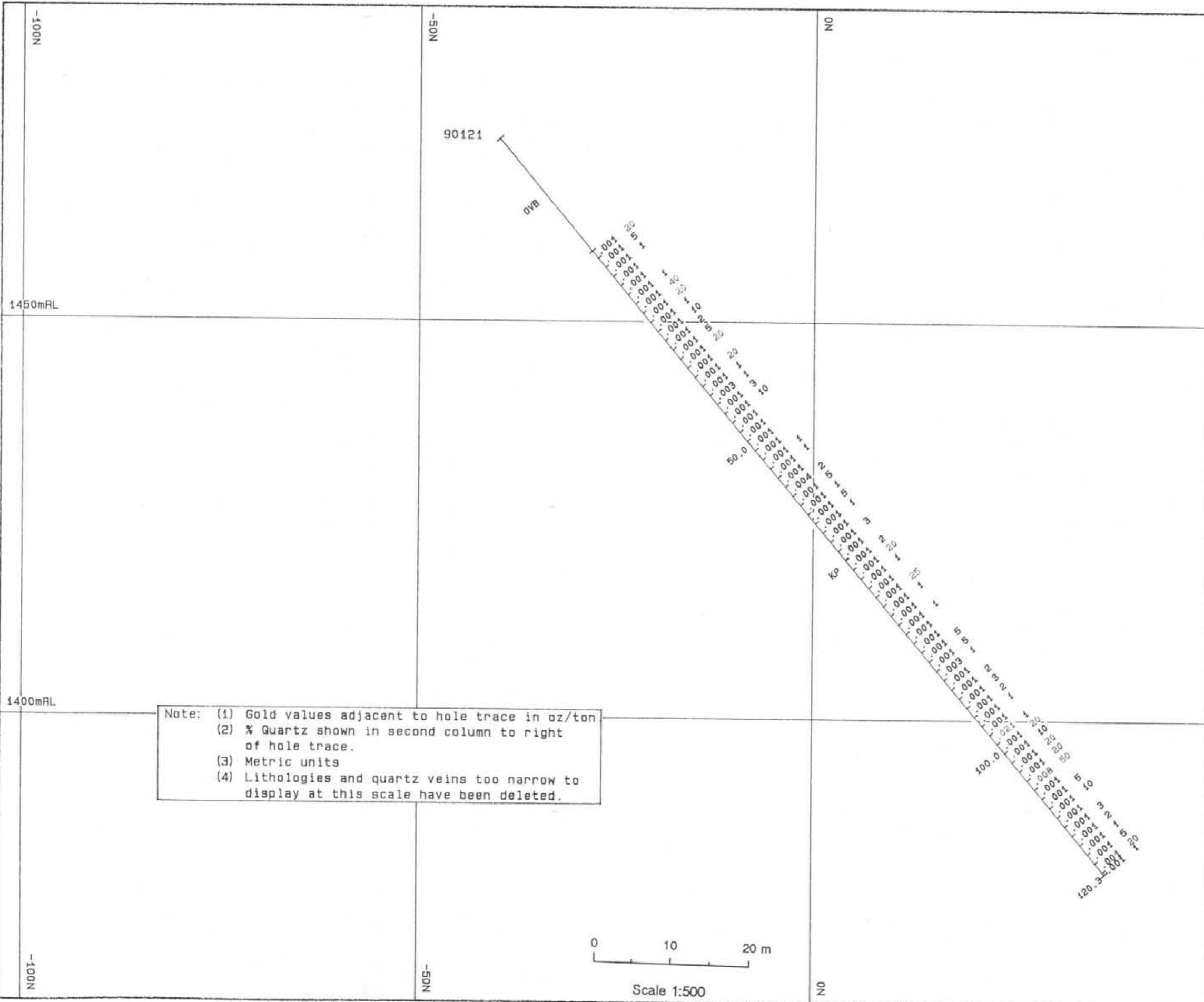
ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-120
 Section 20+03E

Scale: 1: 600	6-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		

0 20 m
 Scale 1:600

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-121
 Section 45+62E

Scale: 1: 500	13-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 10 20 m
 Scale 1:500

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
R-90-122
Section 47+19E

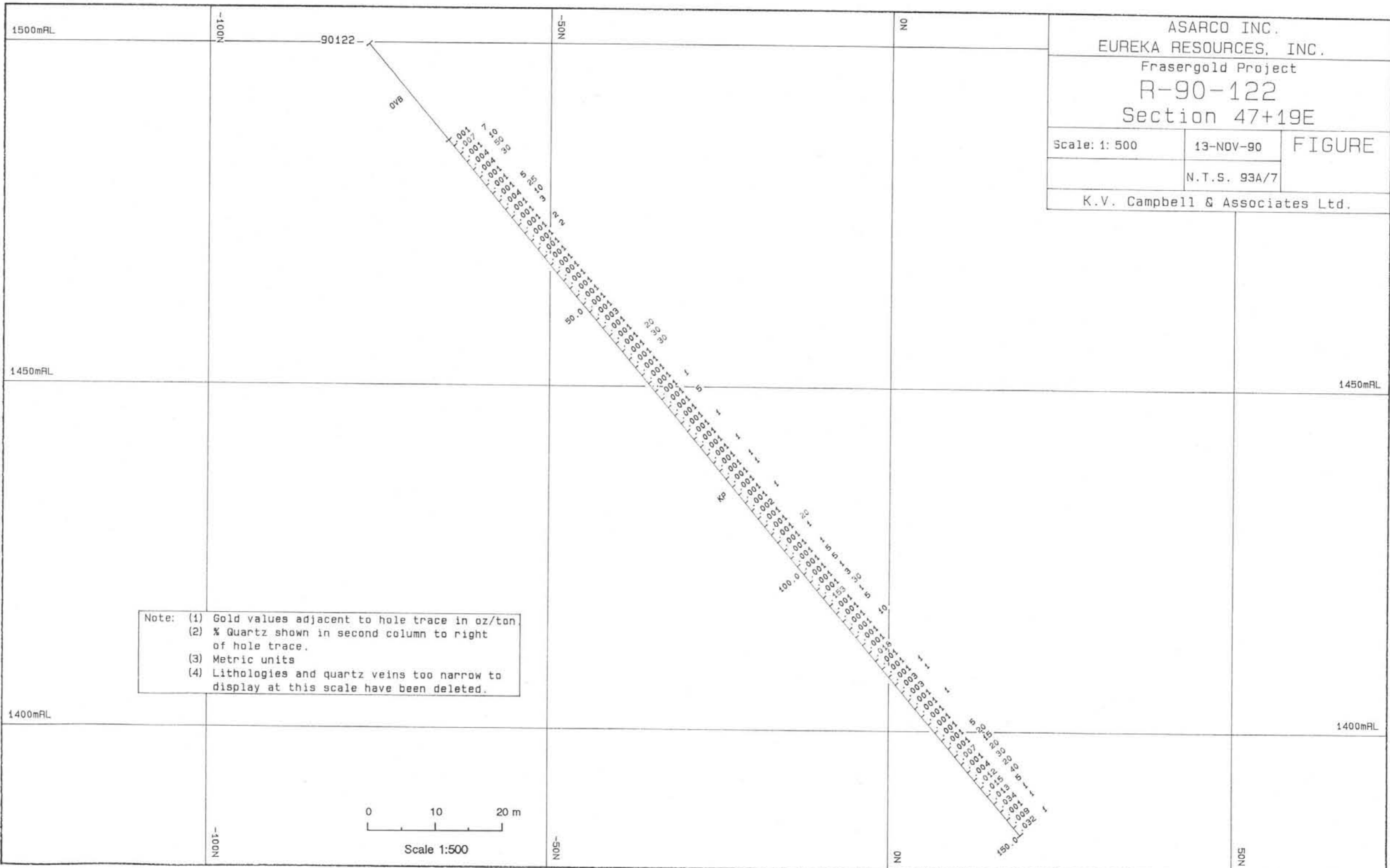
Scale: 1: 500

13-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



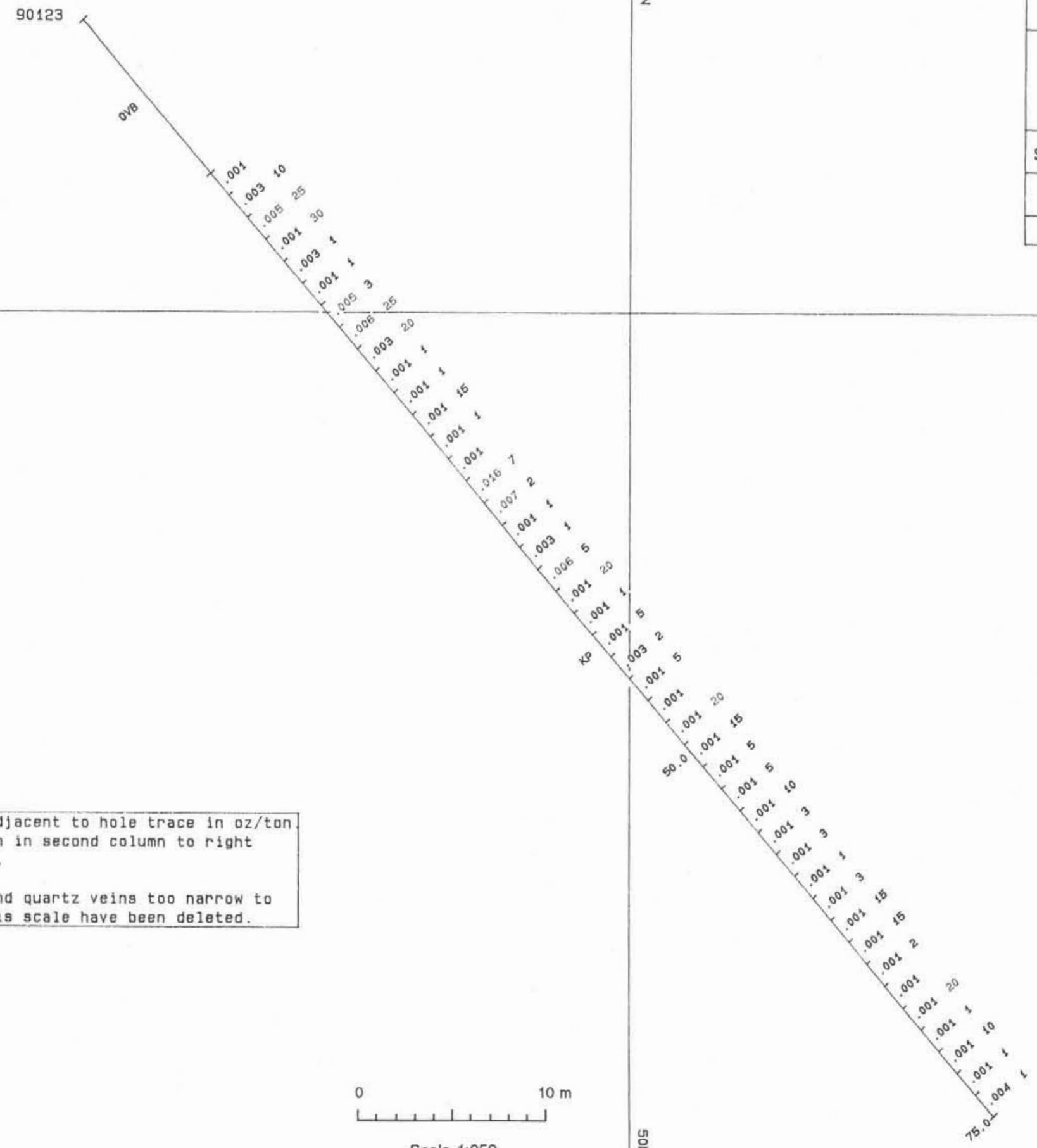
X

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-123
 Section 46+70E

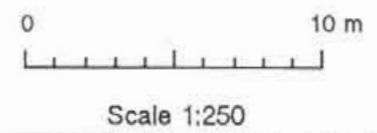
Scale: 1: 250	13-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		

1450mRL

1450mRL



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-124
 Section 47+71E

Scale: 1: 250

13-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

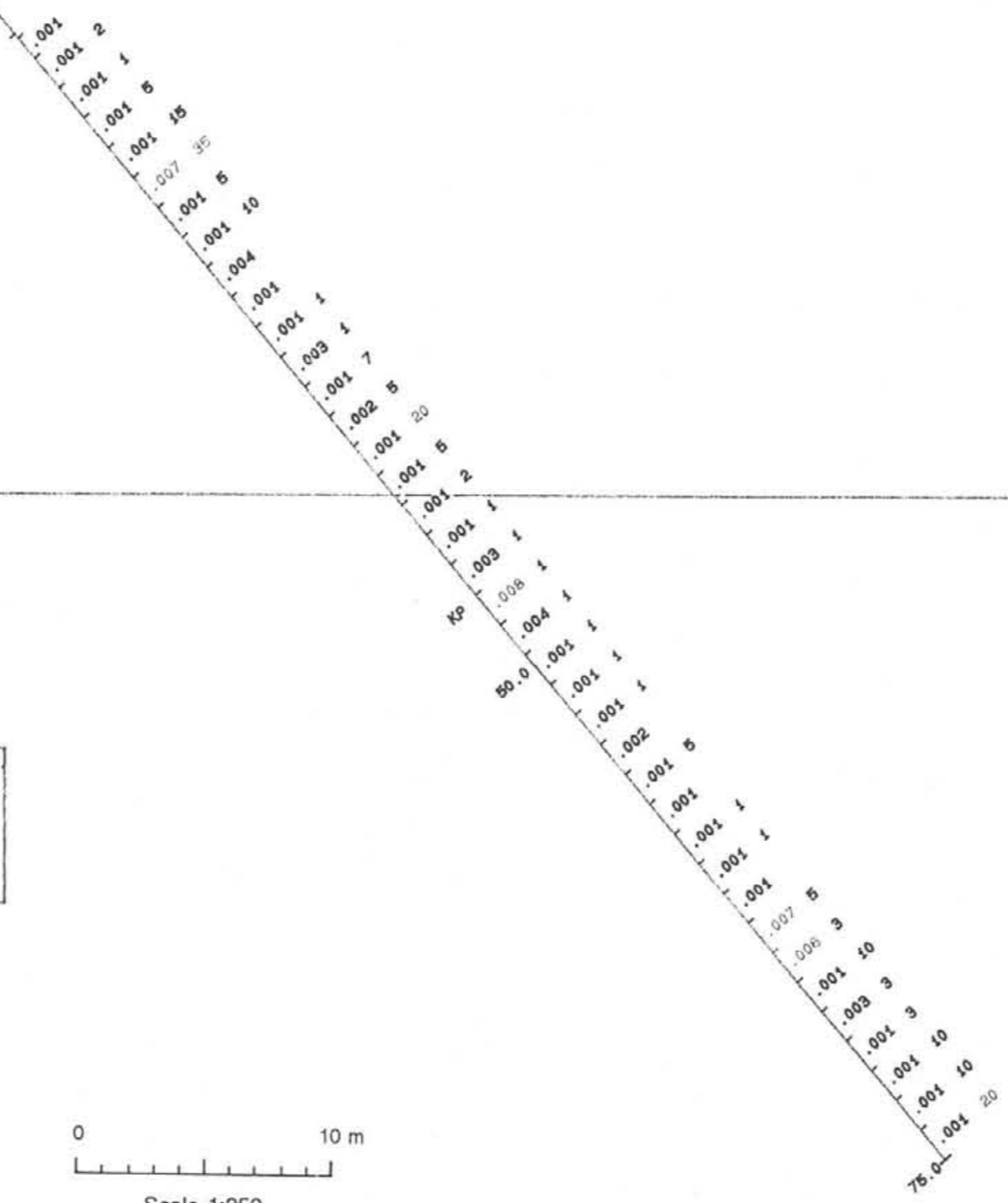
90124

NO

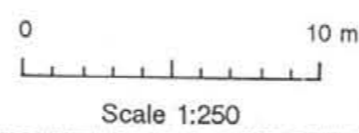
078

NO

NO5



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

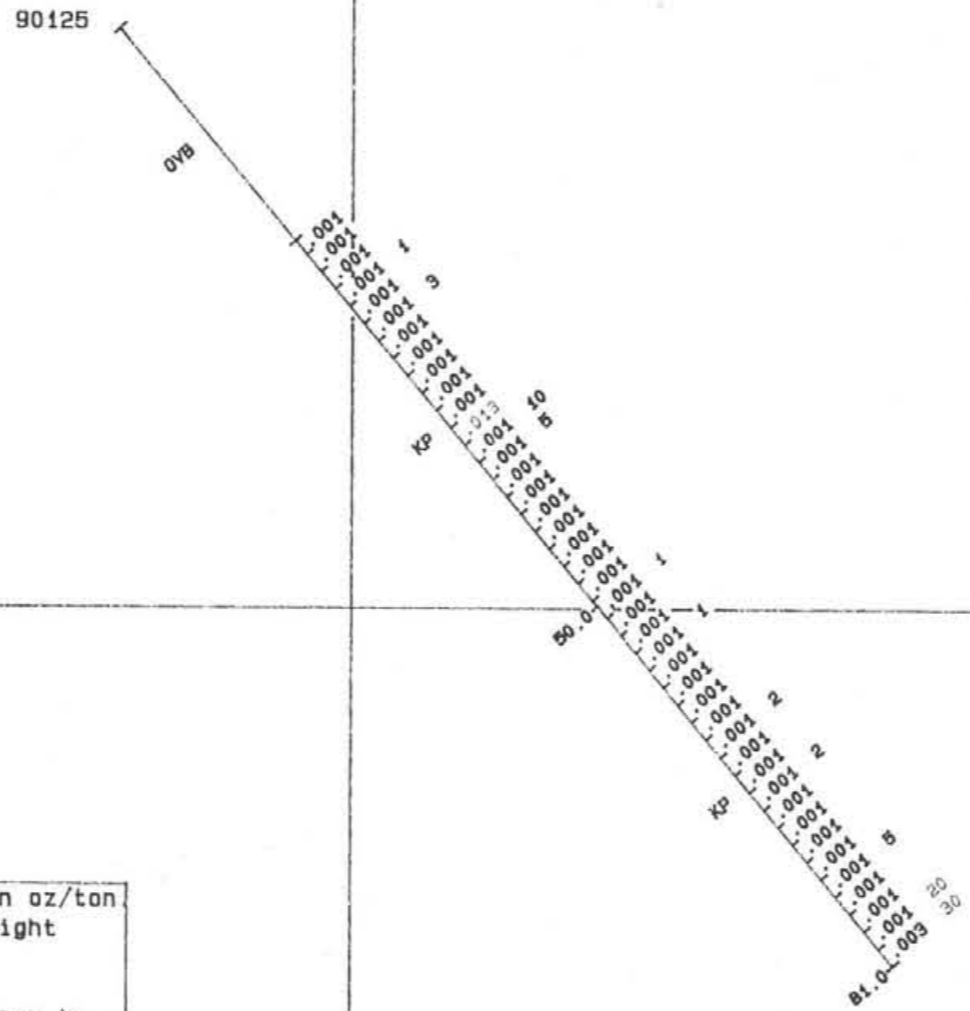


1450mRL

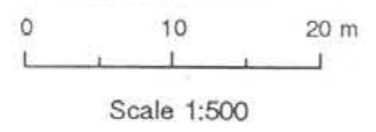
1450mRL

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-125
 Section 48+28E

Scale: 1: 500	13-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
R-90-126
Section 49+15E

Scale: 1: 500

13-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

1500mRL

1500mRL

90126

DVB

1450mRL

1450mRL

Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right
of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to
display at this scale have been deleted.

0 10 20 m

Scale 1:500

-100N

-50N

N0

-100N

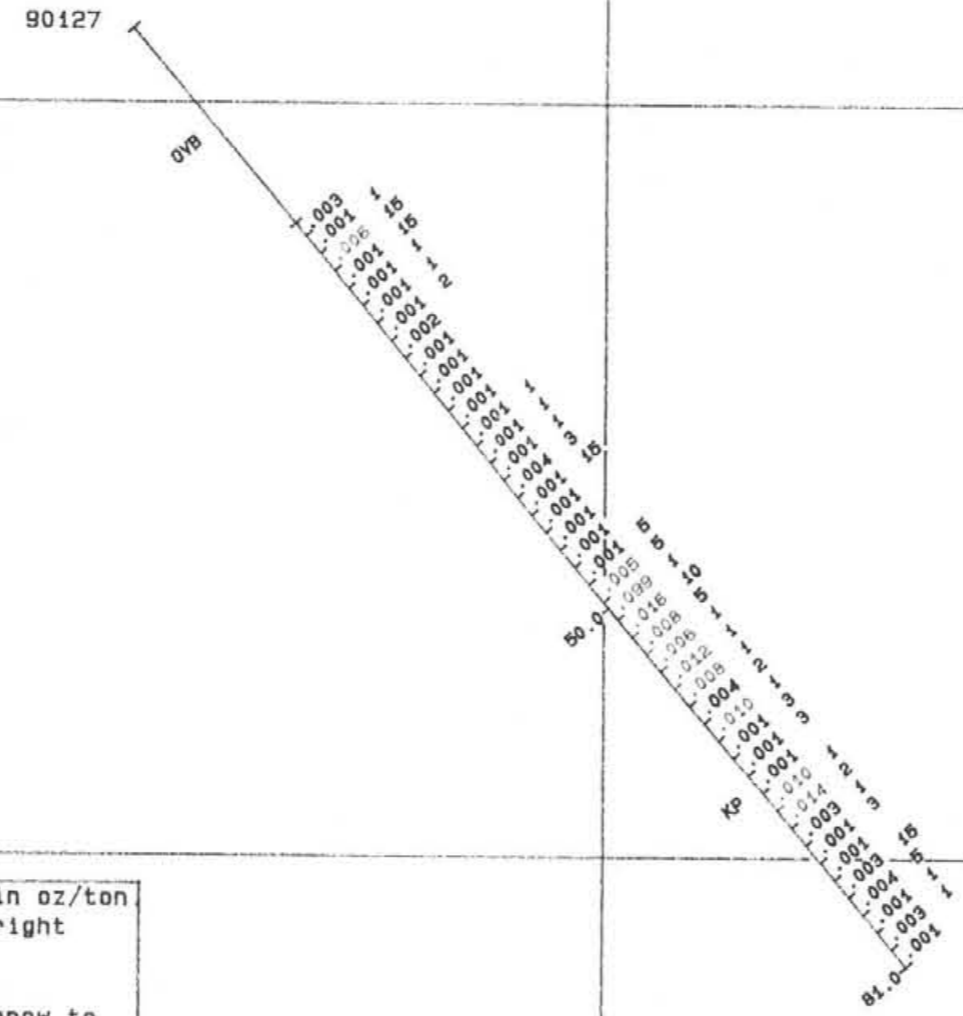
-50N

N0

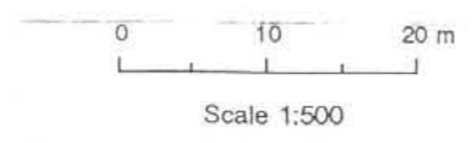
50N

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-127
 Section 50+37E

Scale: 1: 500	13-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-128
 Section 50+28E

Scale: 1: 500

13-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

90128

078

1 2 3 4 5 6

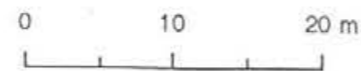
80.0

100

100.0

124.5

Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right
 of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to
 display at this scale have been deleted.



Scale 1:500

1500mRL

1500mRL

1450mRL

1450mRL

N007-

-50N

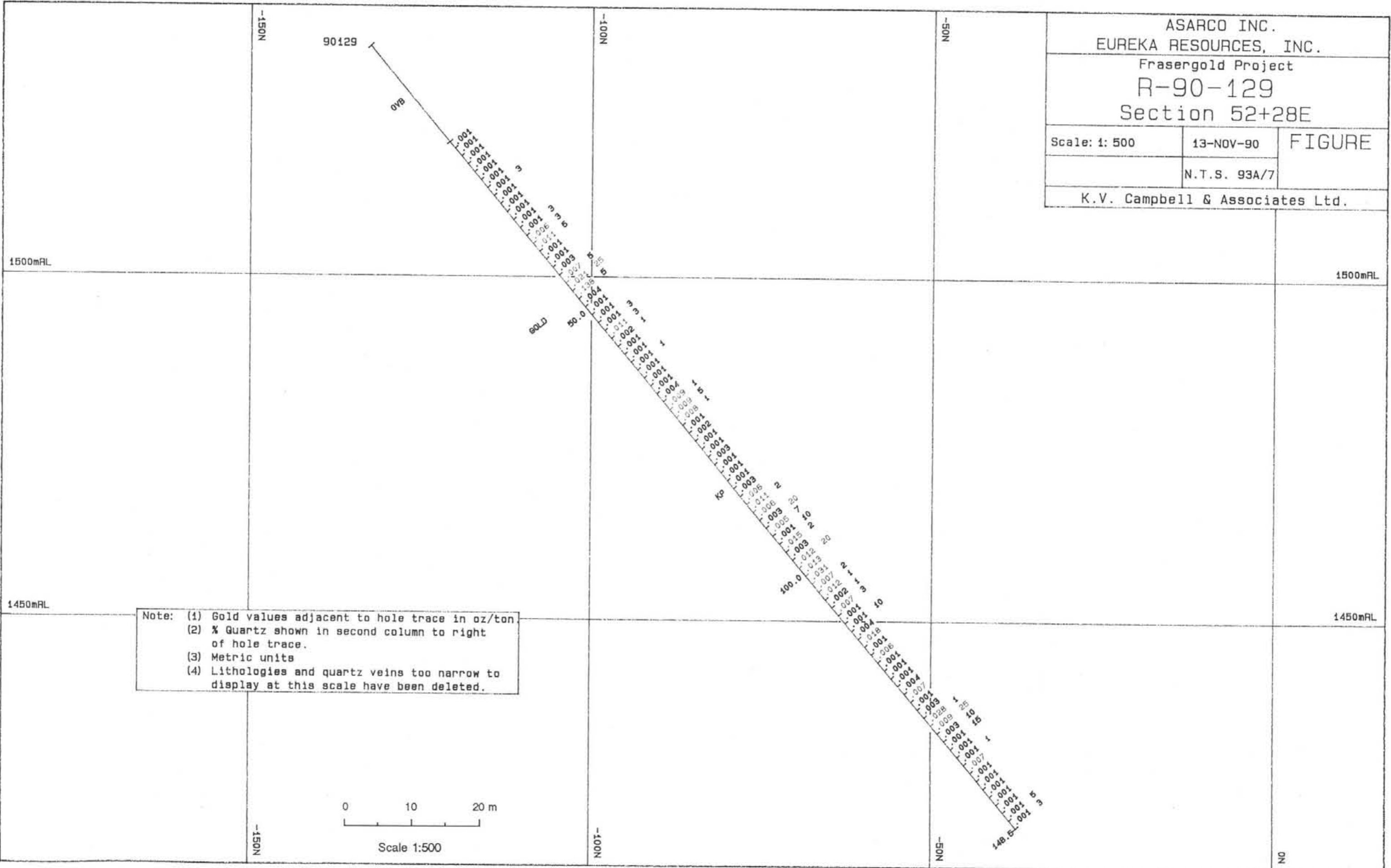
N0

N007-

-50N

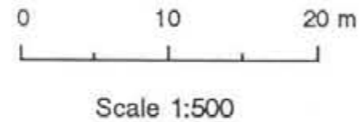
N0

N05



ASARCO INC. EUREKA RESOURCES, INC. Frasergold Project R-90-129 Section 52+28E		
Scale: 1: 500	13-NOV-90	FIGURE
N.T.S. 93A/7		
K.V. Campbell & Associates Ltd.		

Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasersgold Project
 R-90-130
 Section 6069E

Scale: 1: 500

13-NOV-90

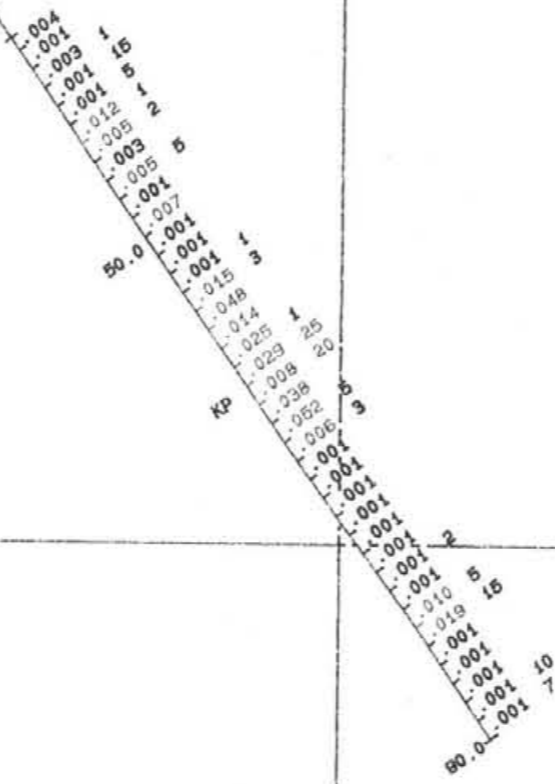
FIGURE

N.T.S. 93A/7

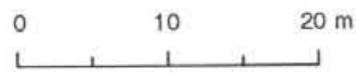
K.V. Campbell & Associates Ltd.

90130

0V8



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



Scale 1:500

1500mRL

1500mRL

1450mRL

1450mRL

-350N

-300N

-250N

-350N

-300N

-250N

-200N

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
R-90-131
Section 61+25E

Scale: 1: 250

13-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

90131

0.08

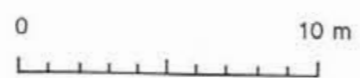
N00E-

N00E-

1500mRL

1500mRL

Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

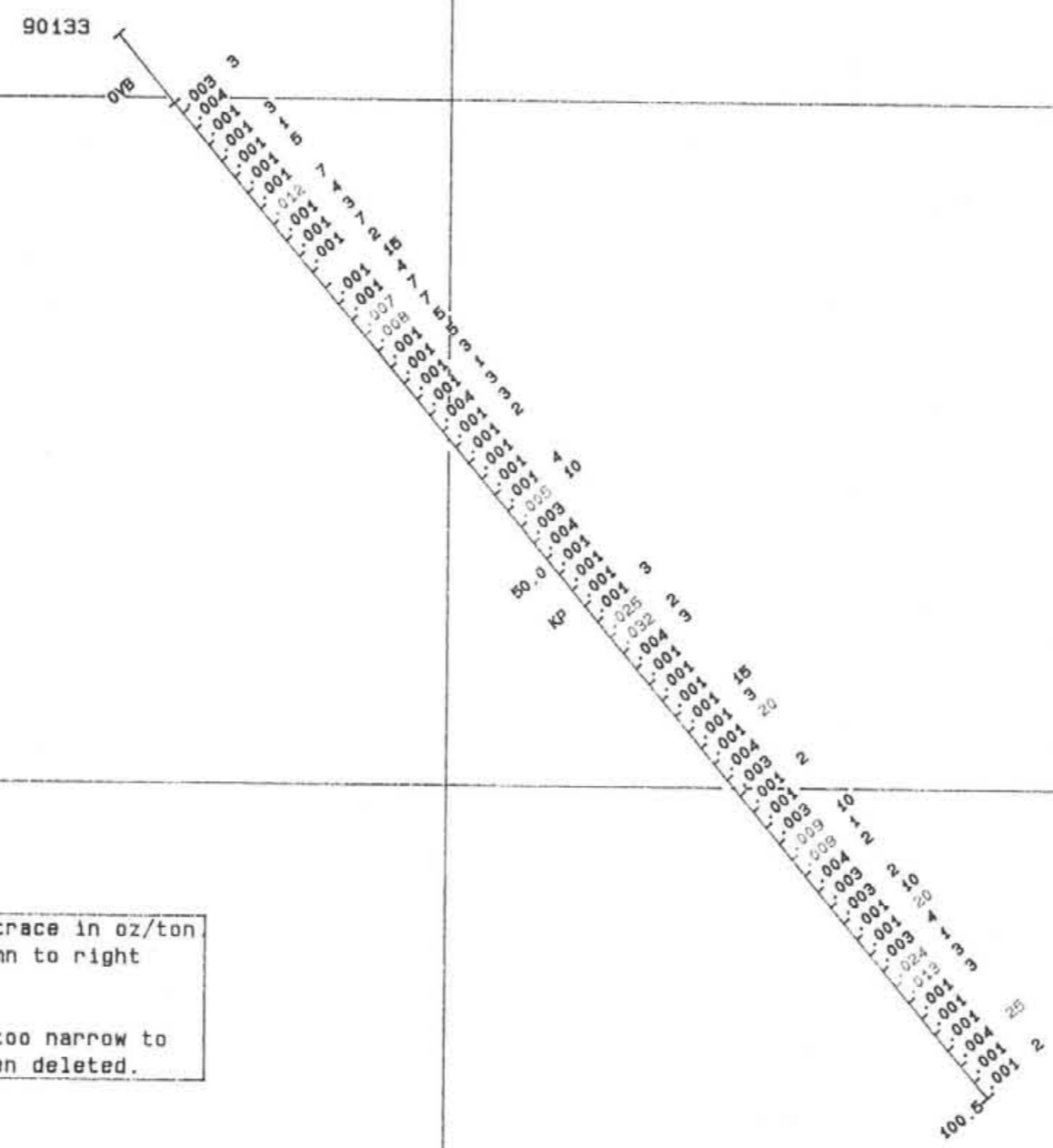


Scale 1:250

-250N

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-132
 Section 62+26E

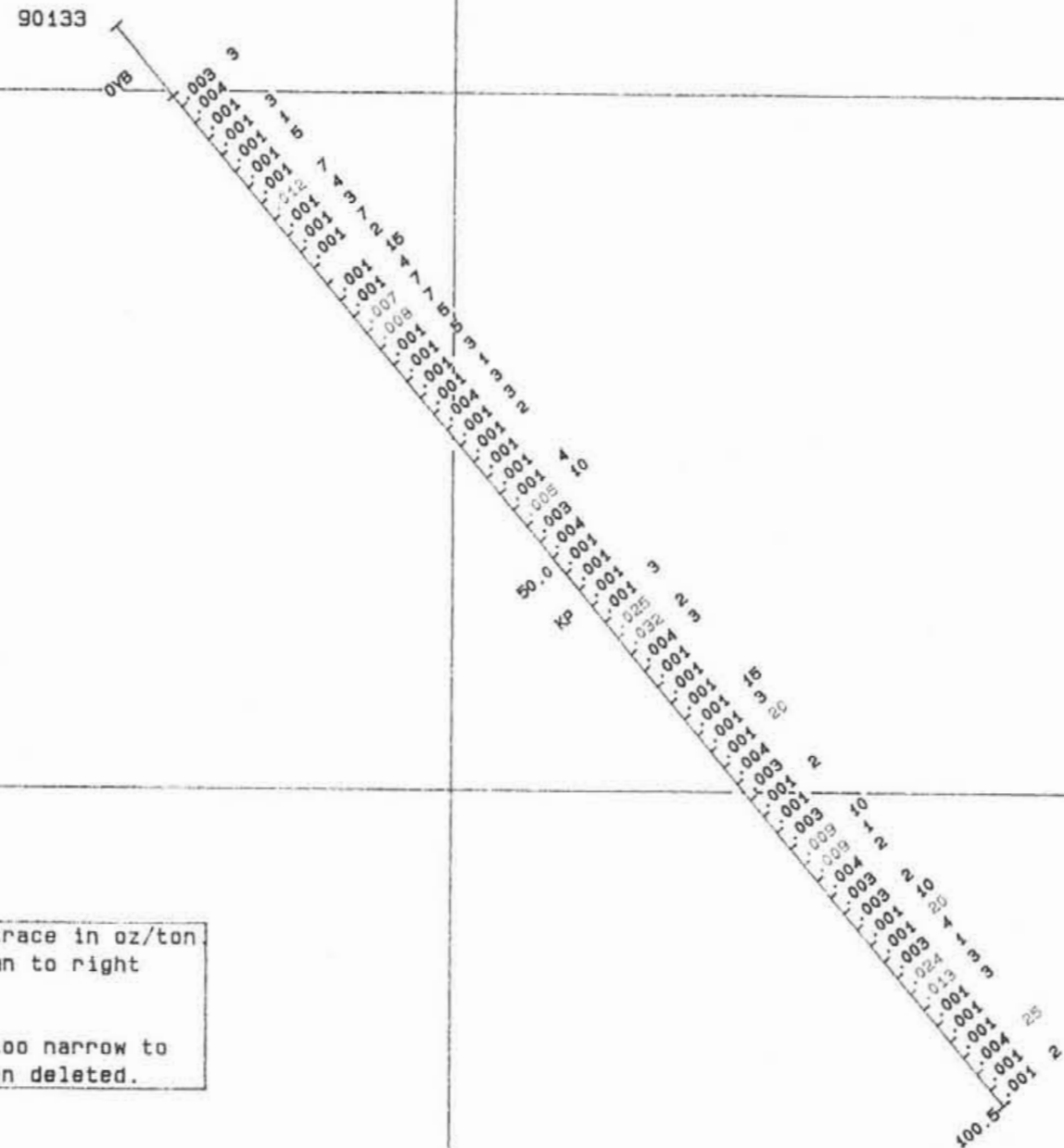
Scale: 1: 500	13-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



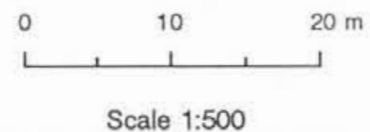
Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 10 20 m
 Scale 1:500

ASARCO INC. EUREKA RESOURCES, INC.		
Frasergold Project R-90-133 Section 62+98E		
Scale: 1: 500	13-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		

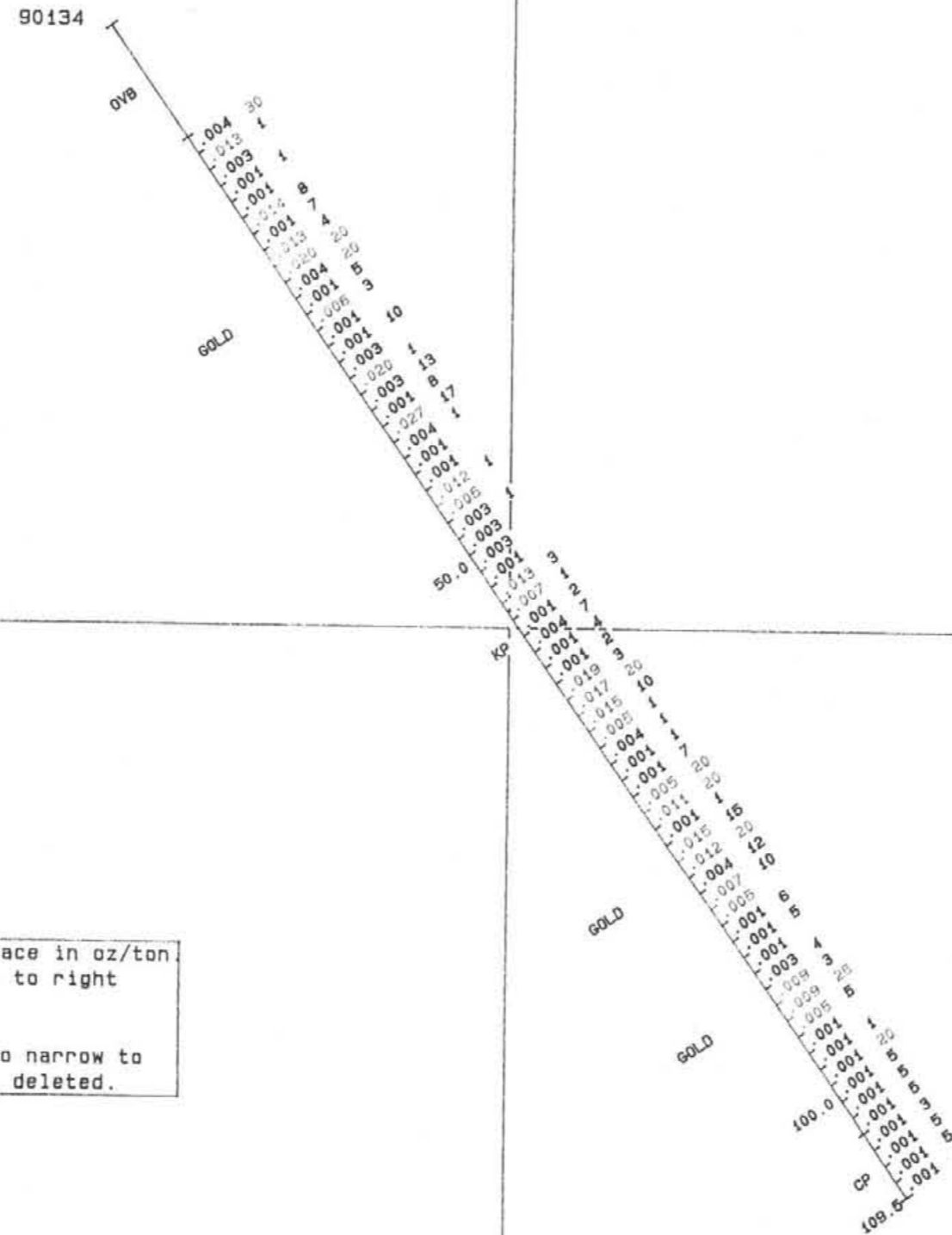


Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-134
 Section 63+49E

Scale: 1: 500	13-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



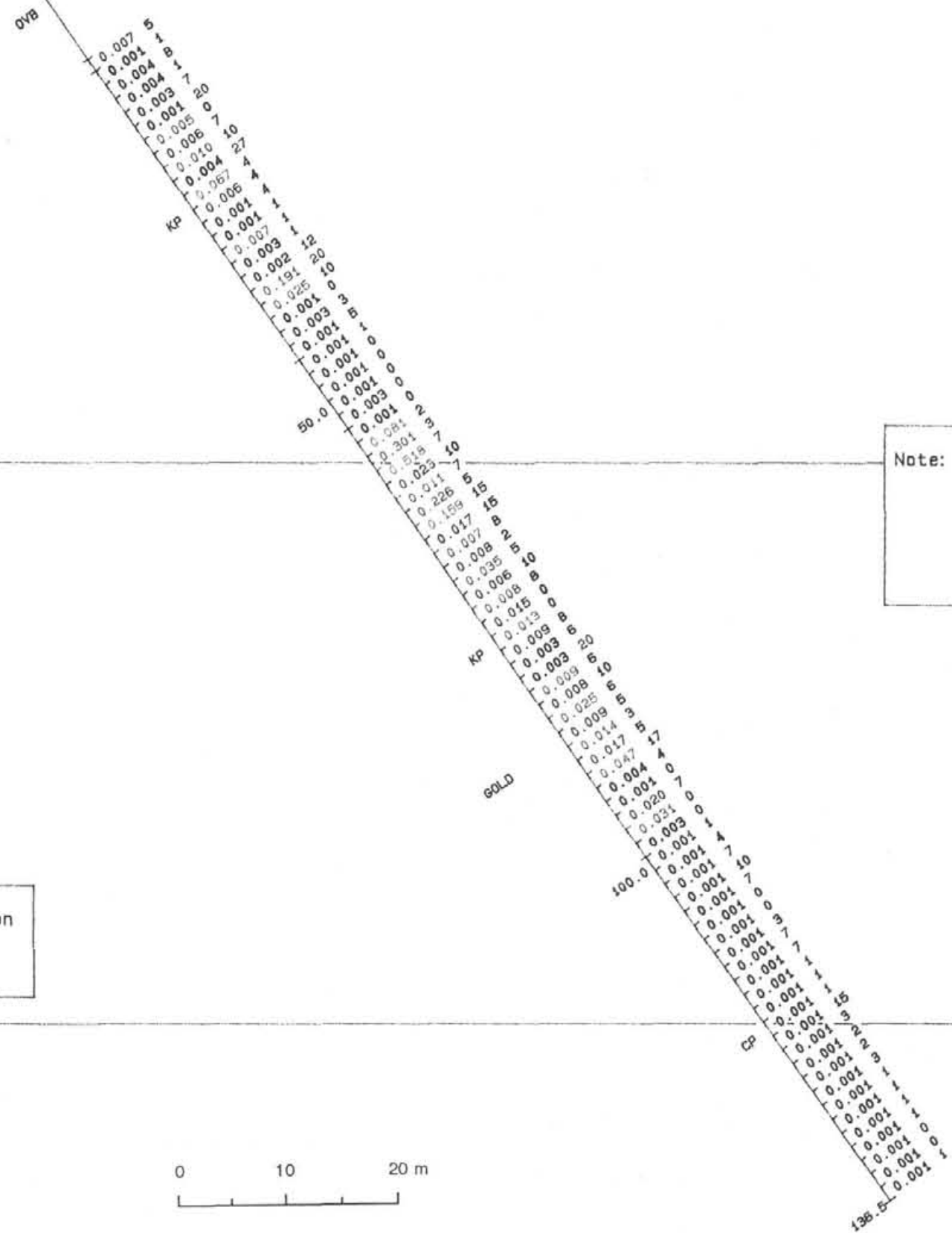
Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 10 20 m
 Scale 1:500

1500mRL

1500mRL

90135

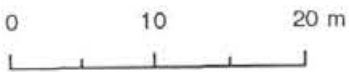


1450mRL

1400mRL

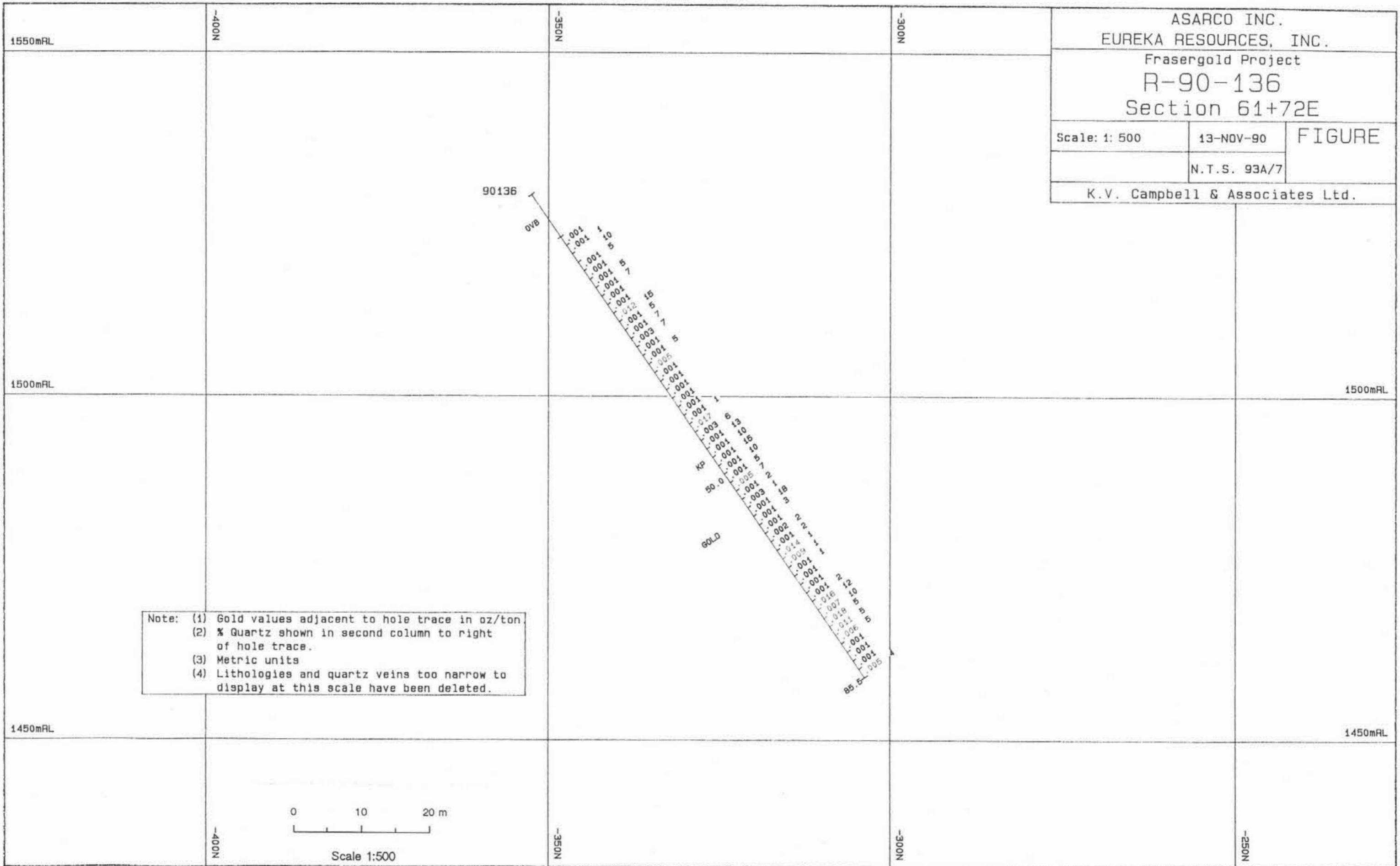
Section along drill hole plunge direction on grid azimuth of 035 degrees, facing grid northwest.

Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



Scale 1:500

ASARCO INC. EUREKA RESOURCES, INC. Frasergold Project R-90-135 Down-dip Section		
Scale: 1: 500	20-NOV-90	FIGURE
N.T.S. 93A/7		
K.V. Campbell & Associates Ltd.		



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-137
 Section 66+69E

Scale: 1: 500

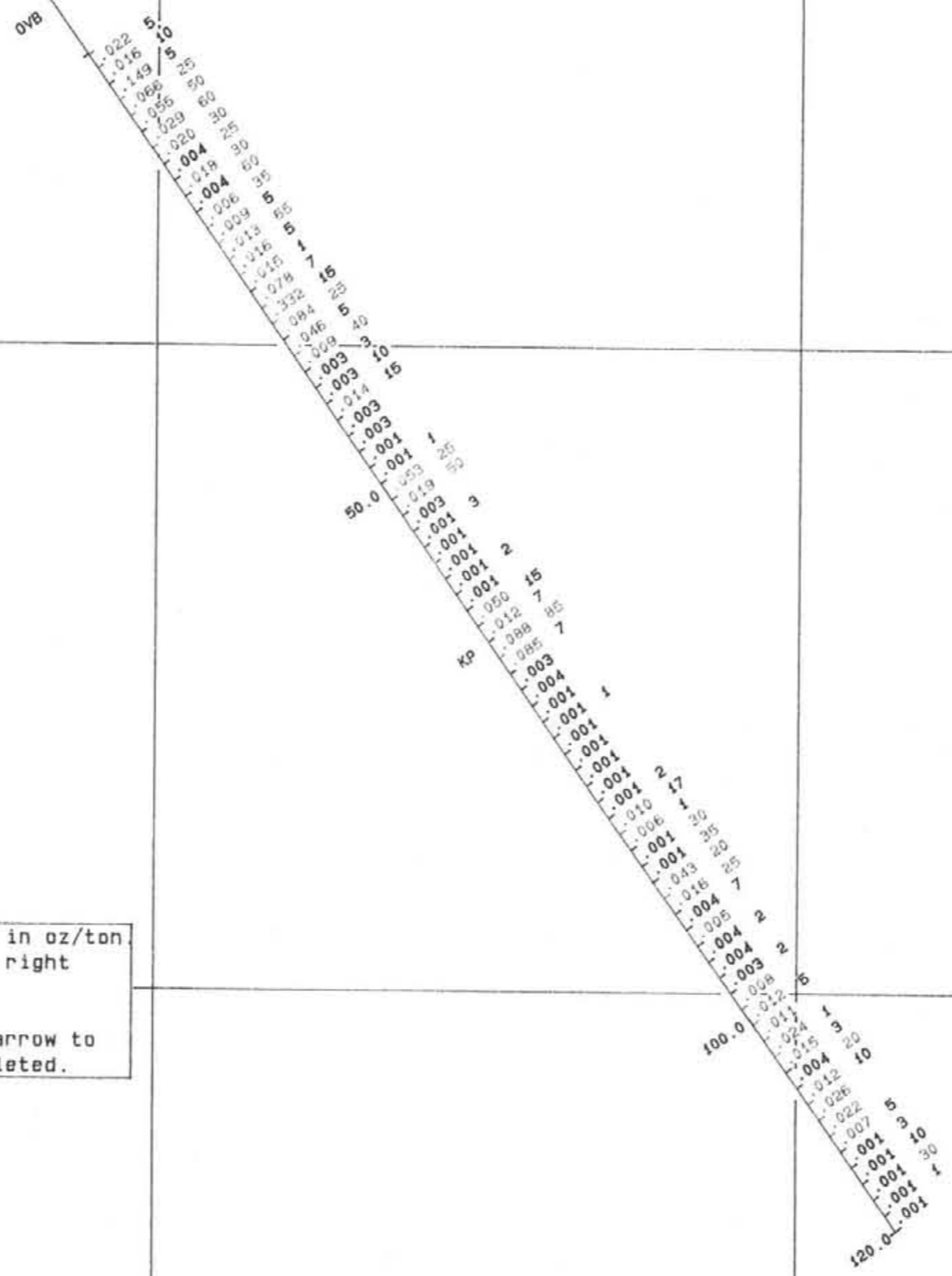
13-NOV-90

FIGURE

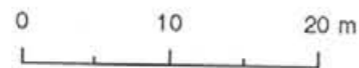
N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

90137



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

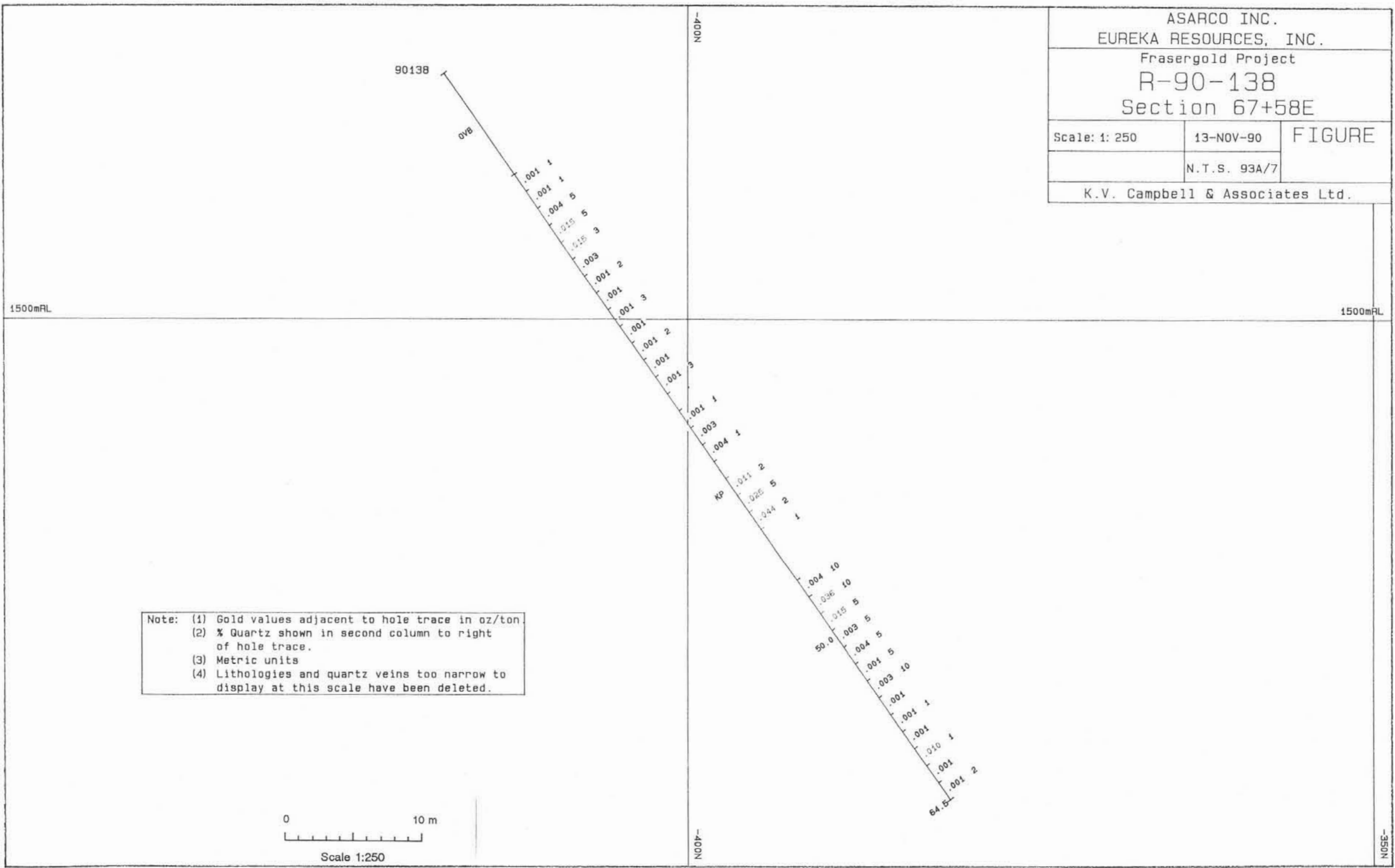


Scale 1:500

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
R-90-138
Section 67+58E

Scale: 1: 250	13-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
R-90-139
Section 68+77E

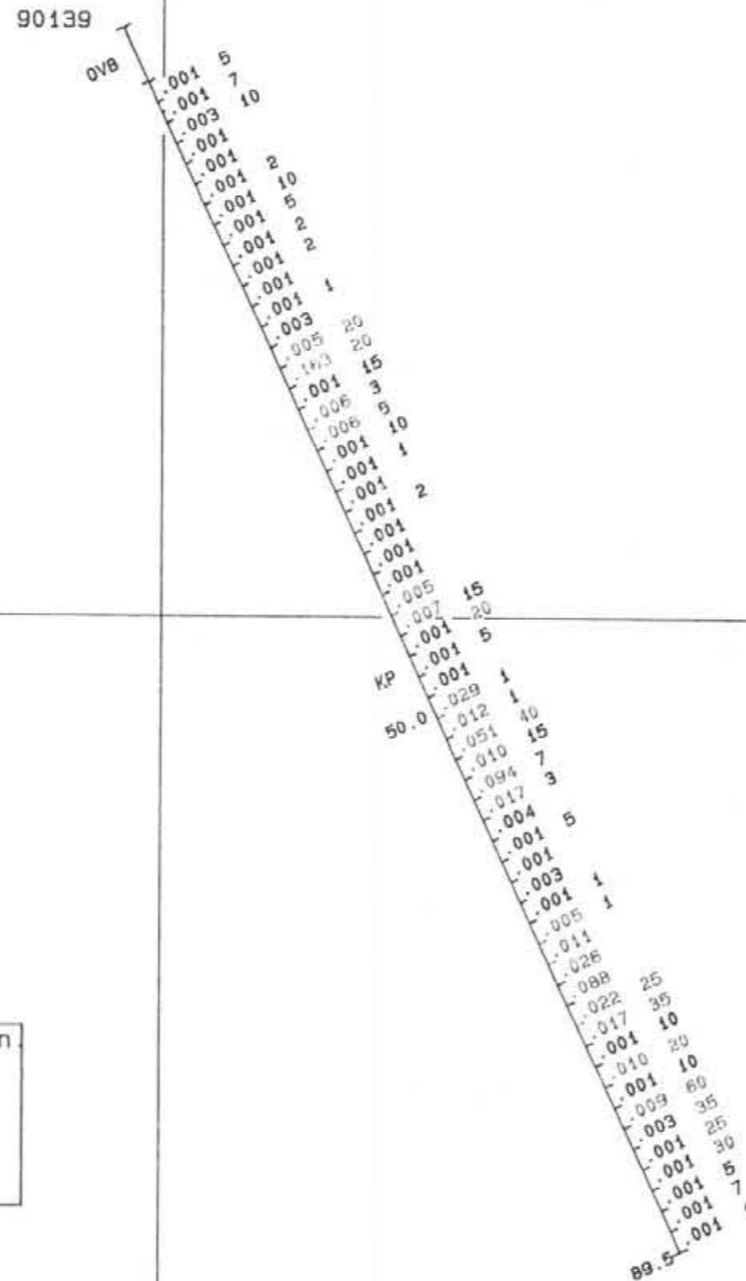
Scale: 1: 500

9-NOV-90

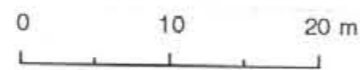
FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



Scale 1:500

-500N

-450N

-400N

-500N

-450N

-400N

-350N

1550mRL

1500mRL

1500mRL

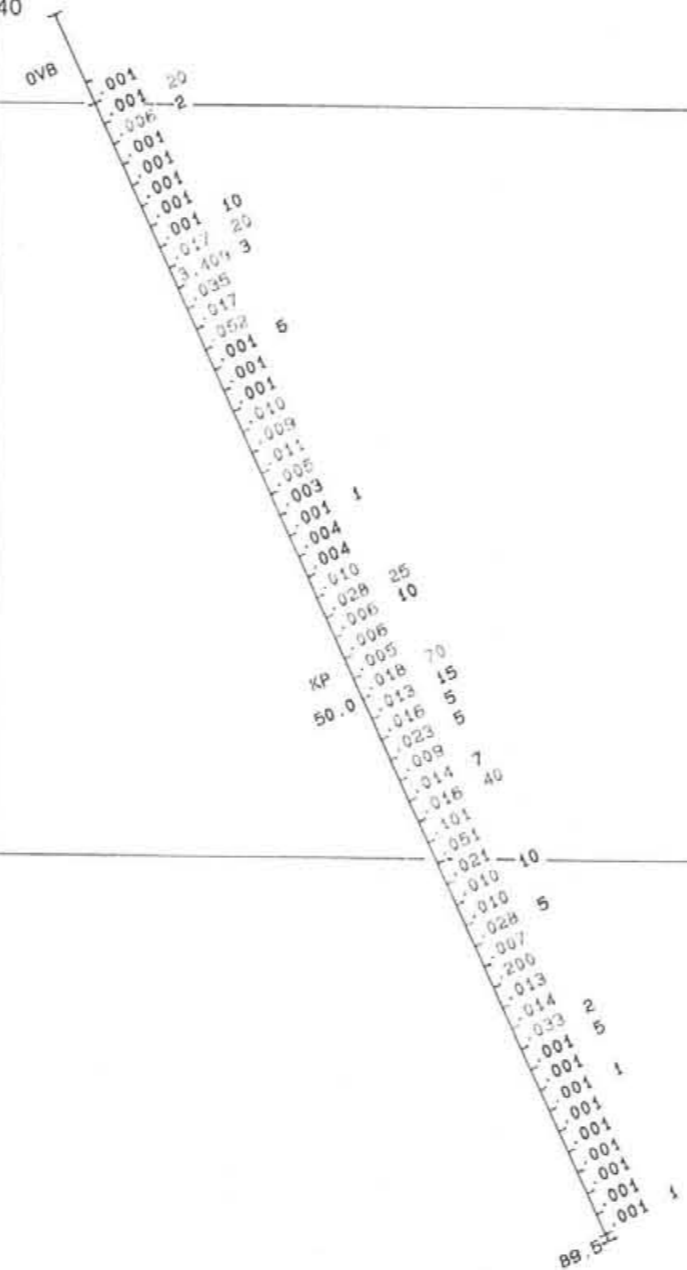
1450mRL

1450mRL

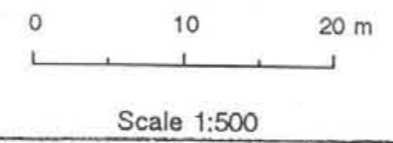
ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-140
 Section 71+12E

Scale: 1: 500	9-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		

90140



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-141
 Section 69+59E

Scale: 1: 500

9-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

90141

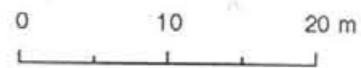
078

1550mRL

1500mRL

1500mRL

Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right
 of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to
 display at this scale have been deleted.



Scale 1:500

1450mRL

1450mRL

K

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-142
 Section 69+58E

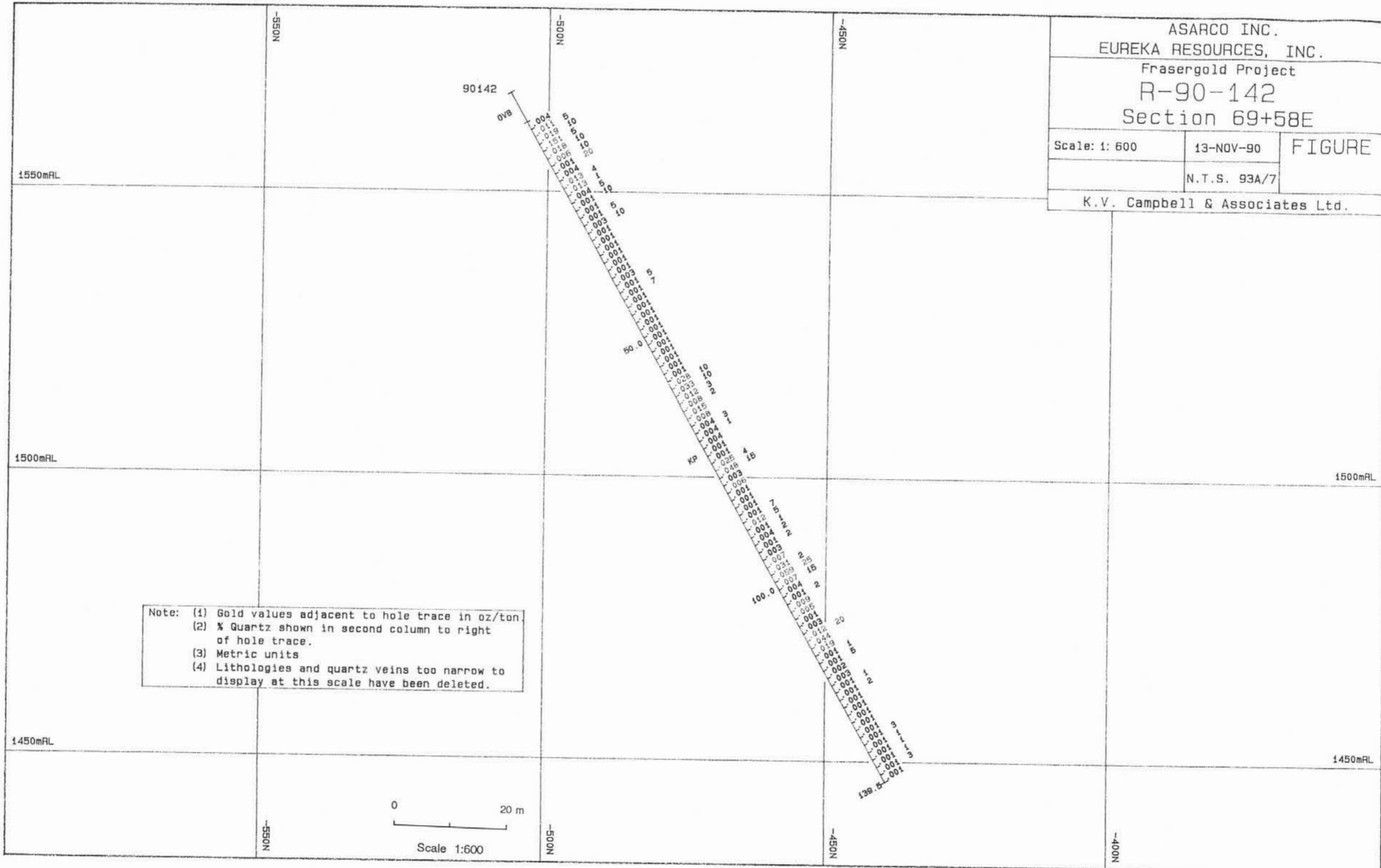
Scale: 1: 600

13-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 20 m
 Scale 1:600

1550mRL

1550mRL

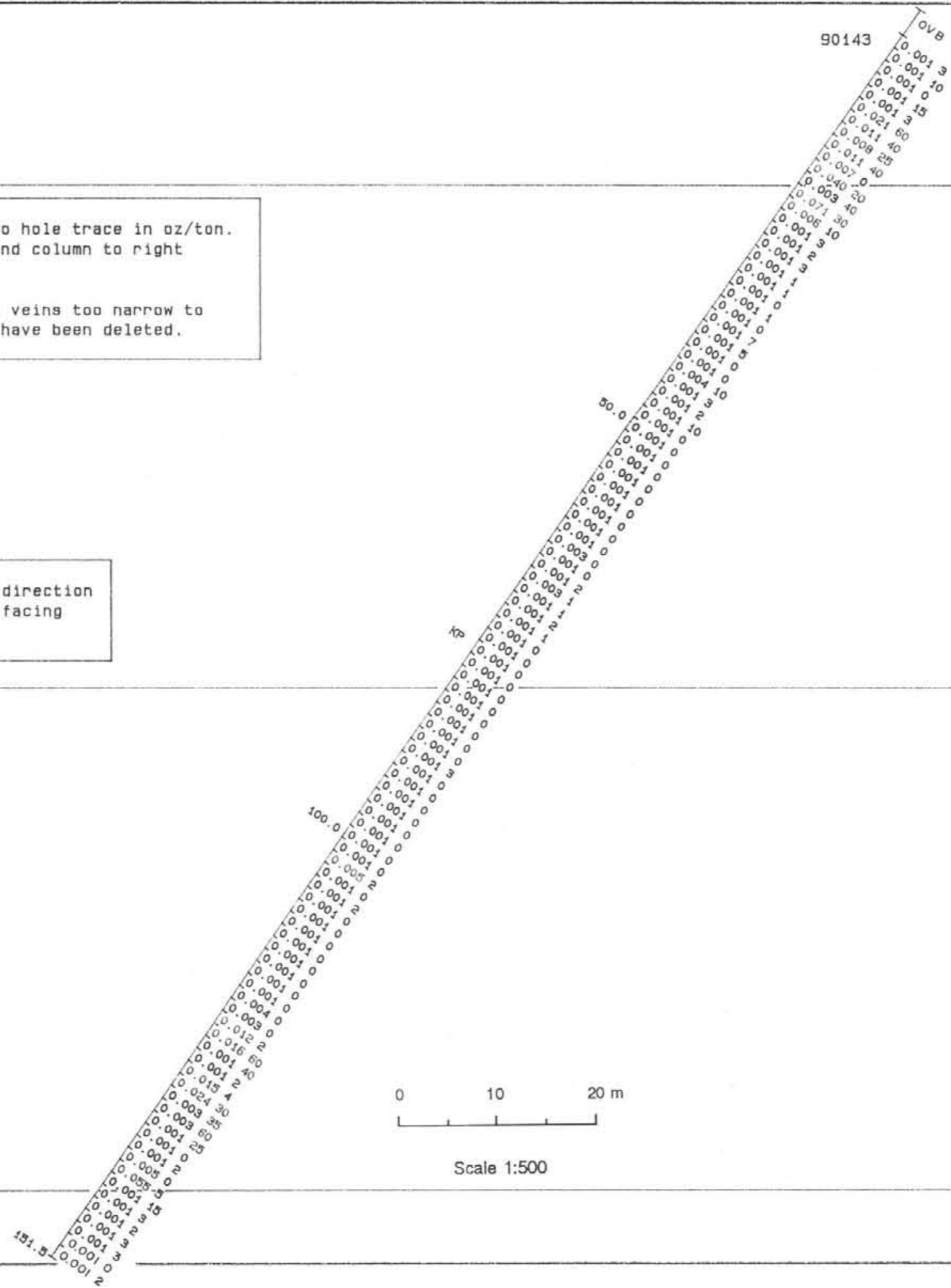
Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

Section along drill hole plunge direction on grid azimuth of 295 degrees, facing grid northeast.

1500mRL

1500mRL

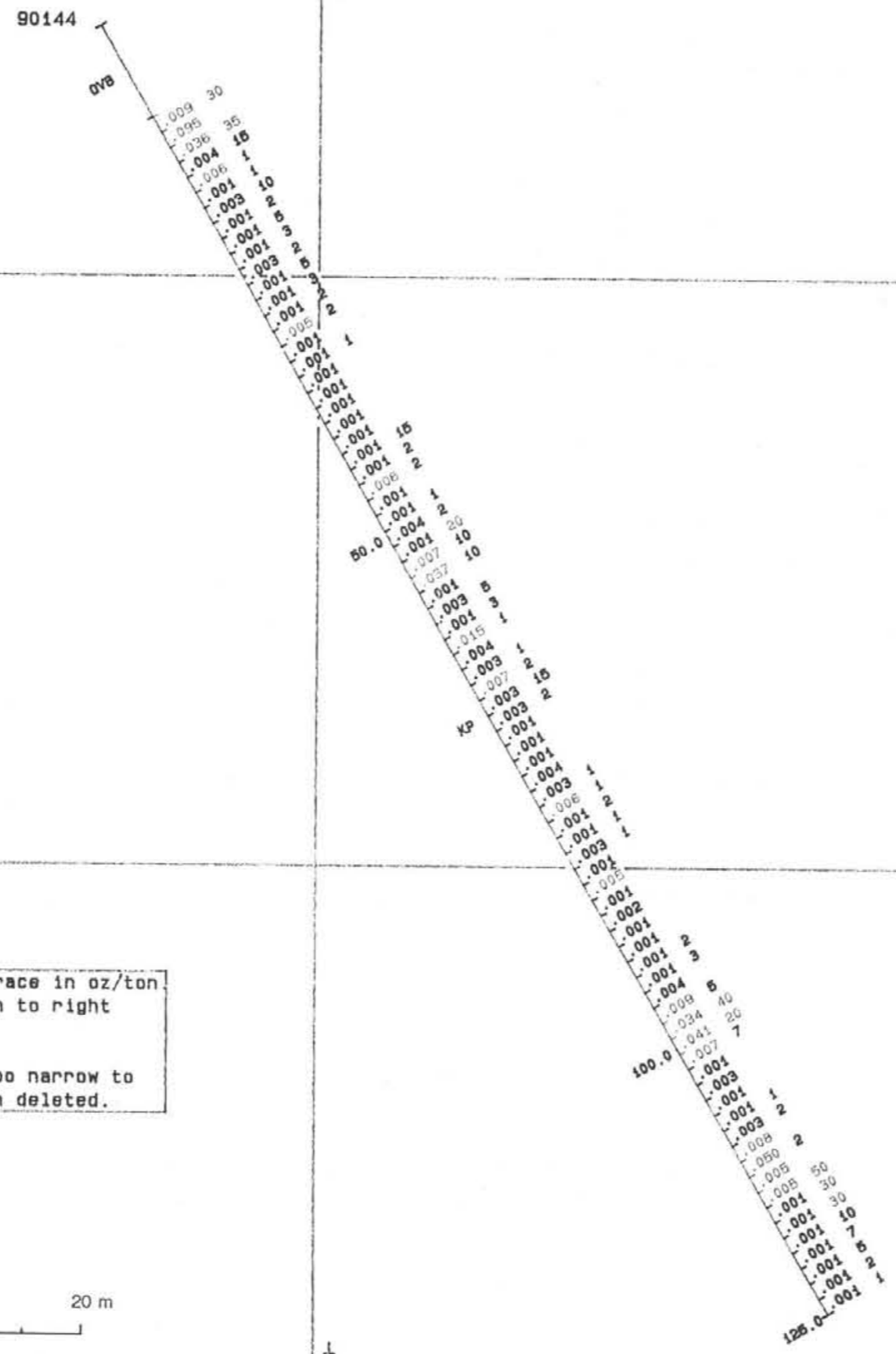
1450mRL



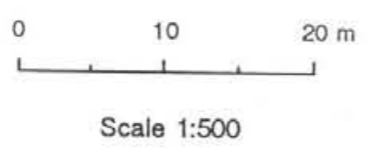
ASARCO INC. EUREKA RESOURCES, INC.		
Frasergold Project R-90-143 Down-dip Section		
Scale: 1: 500	19-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-144
 Section 70+22E

Scale: 1: 500	9-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



-550N

-500N

-450N

-550N

-500N

-450N

-400N

1550mRL

1500mRL

1500mRL

ASARCO INC.
EUREKA RESOURCES, INC.
Frasergold Project
R-90-145
Section 71+31E

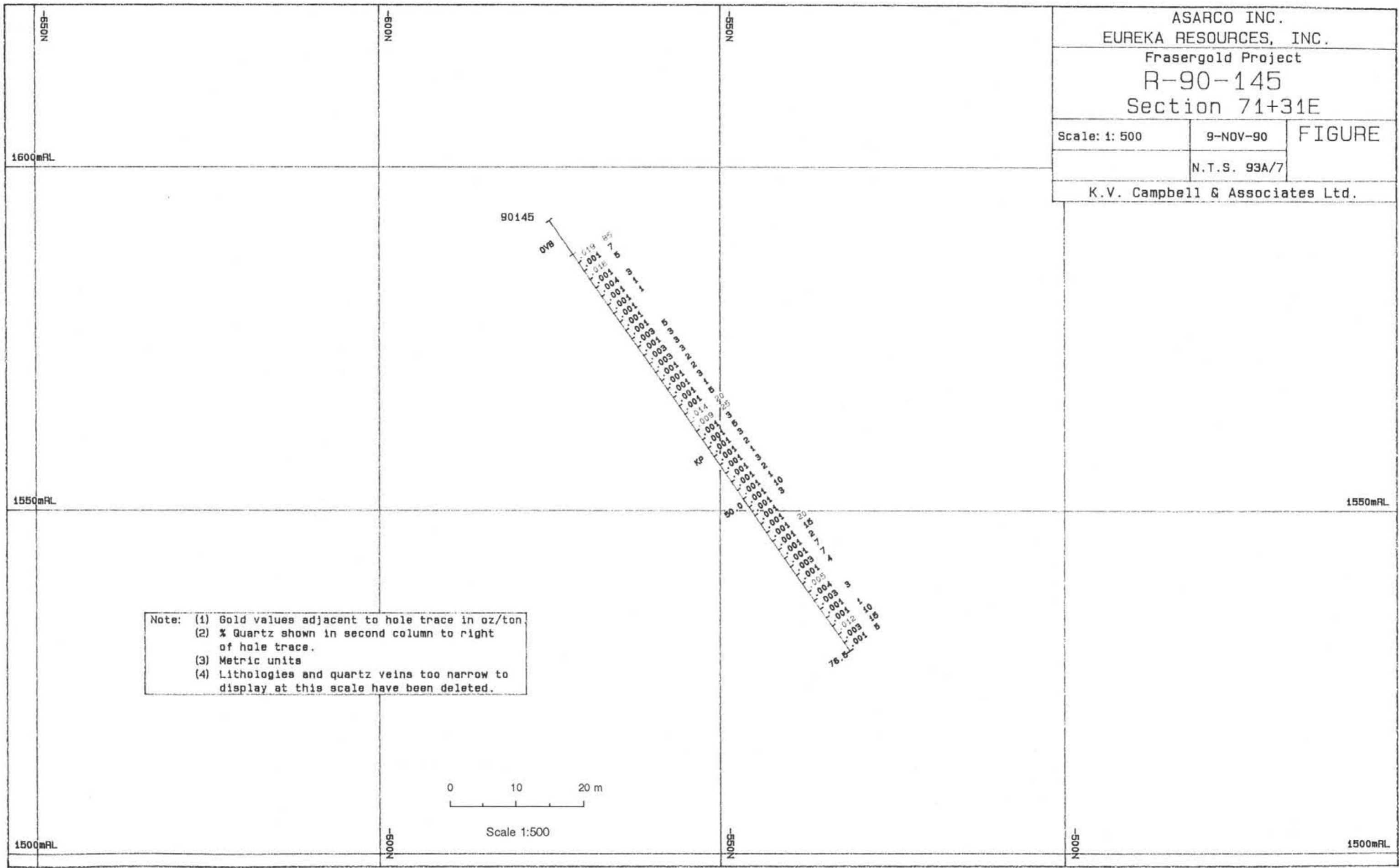
Scale: 1: 500

9-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton.
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 10 20 m

Scale 1:500

ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
R-90-146
Section 71+68E

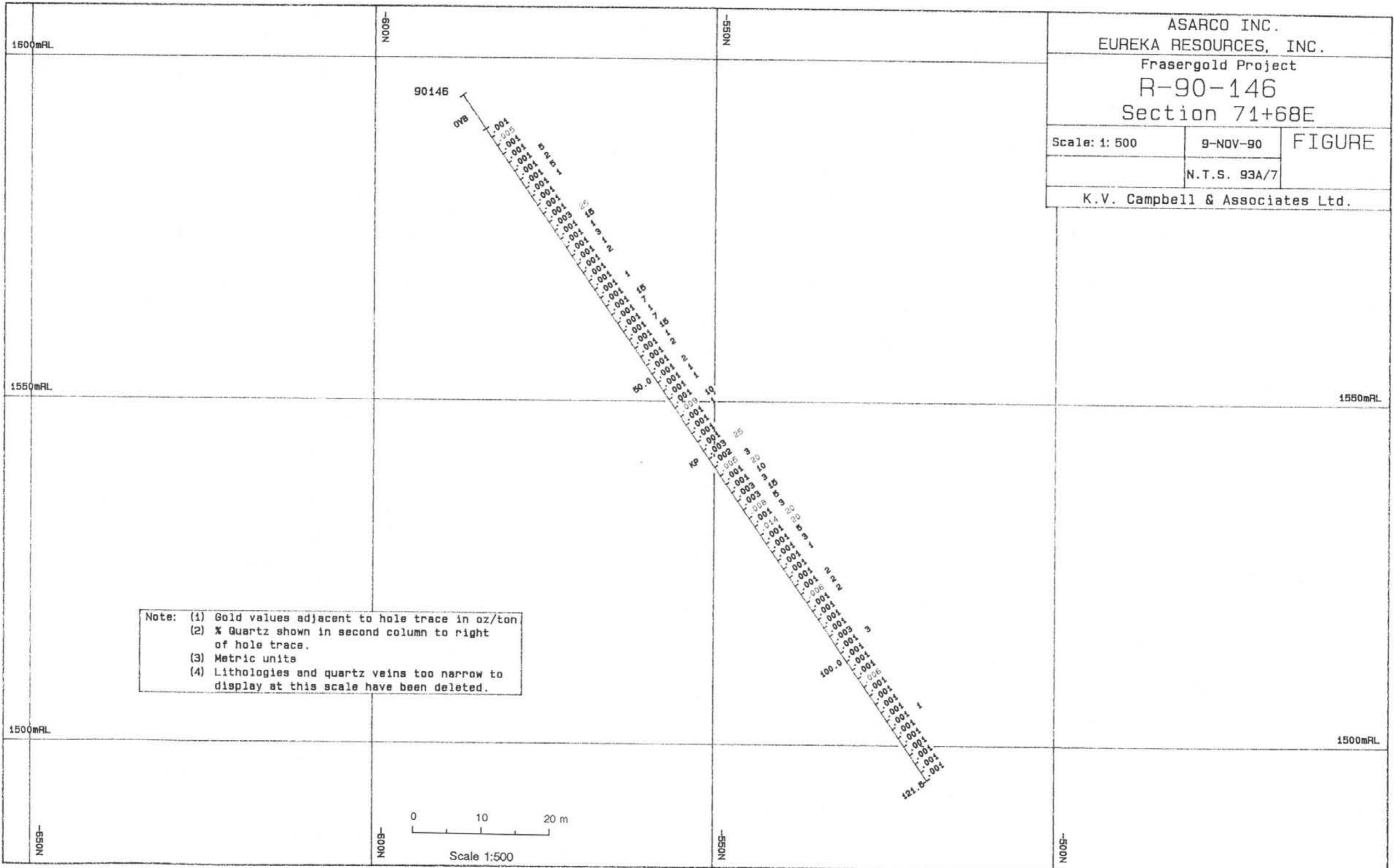
Scale: 1: 500

9-NOV-90

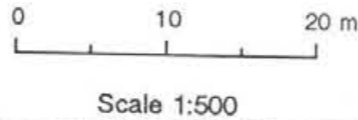
FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



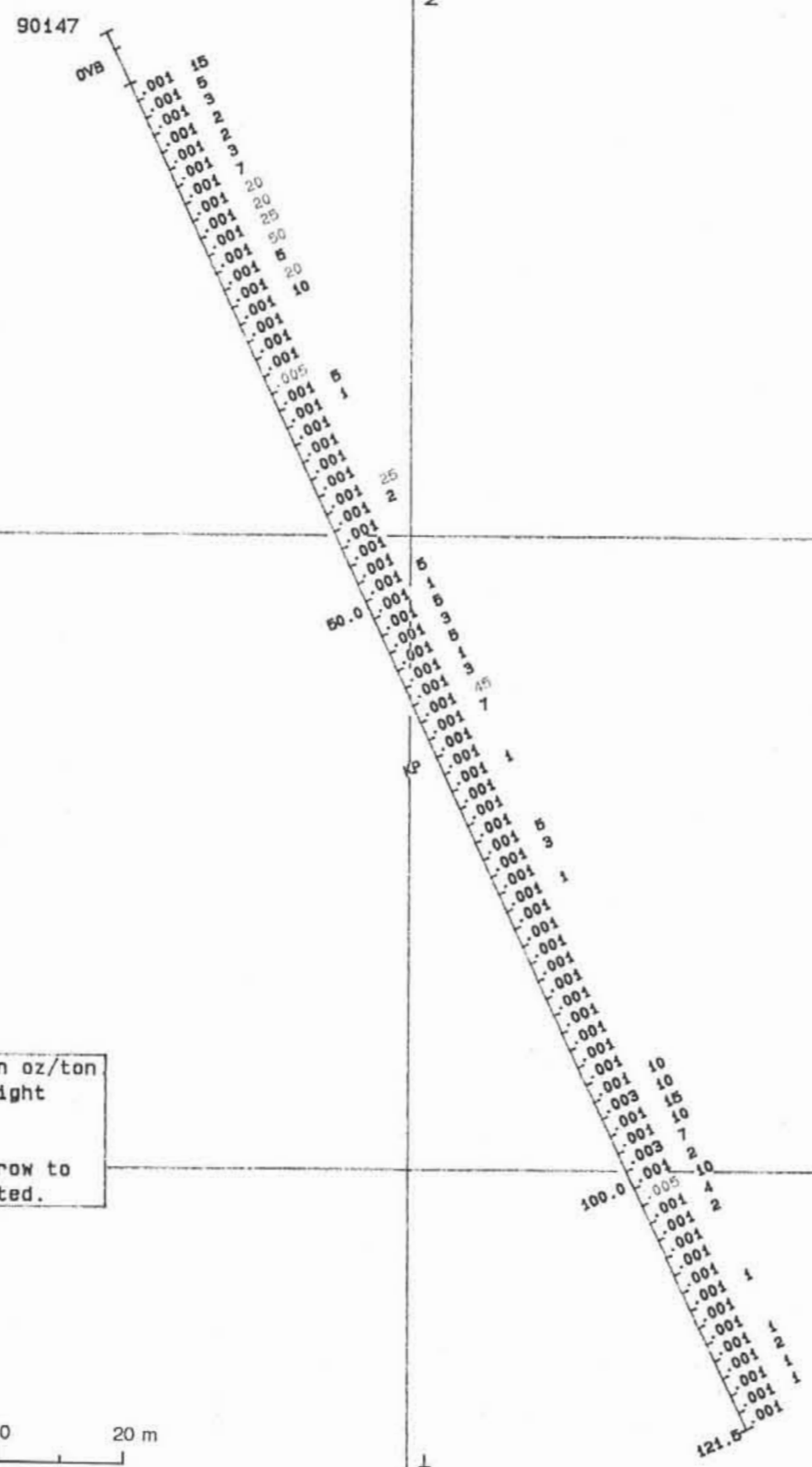
Note: (1) Gold values adjacent to hole trace in oz/ton
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



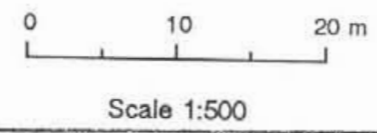
ASARCO INC.
EUREKA RESOURCES, INC.

Frasergold Project
R-90-147
Section 72+75E

Scale: 1: 500	9-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton
(2) % Quartz shown in second column to right of hole trace.
(3) Metric units
(4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-148
 Section 73+62E

Scale: 1: 500

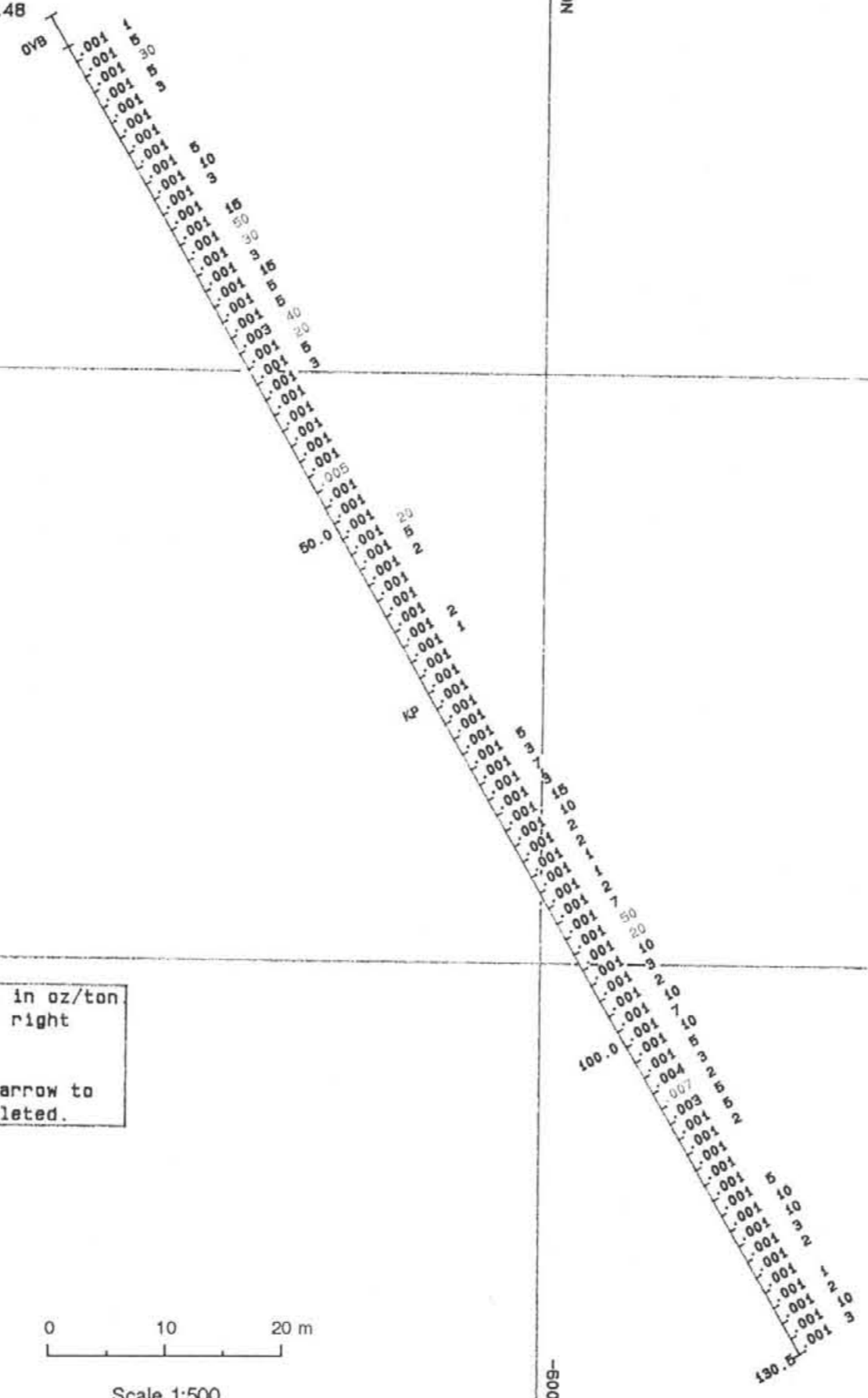
9-NOV-90

FIGURE

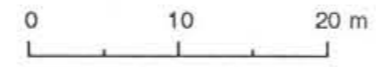
N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

90148



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



Scale 1:500

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-149
 Section 73+11E

Scale: 1: 500

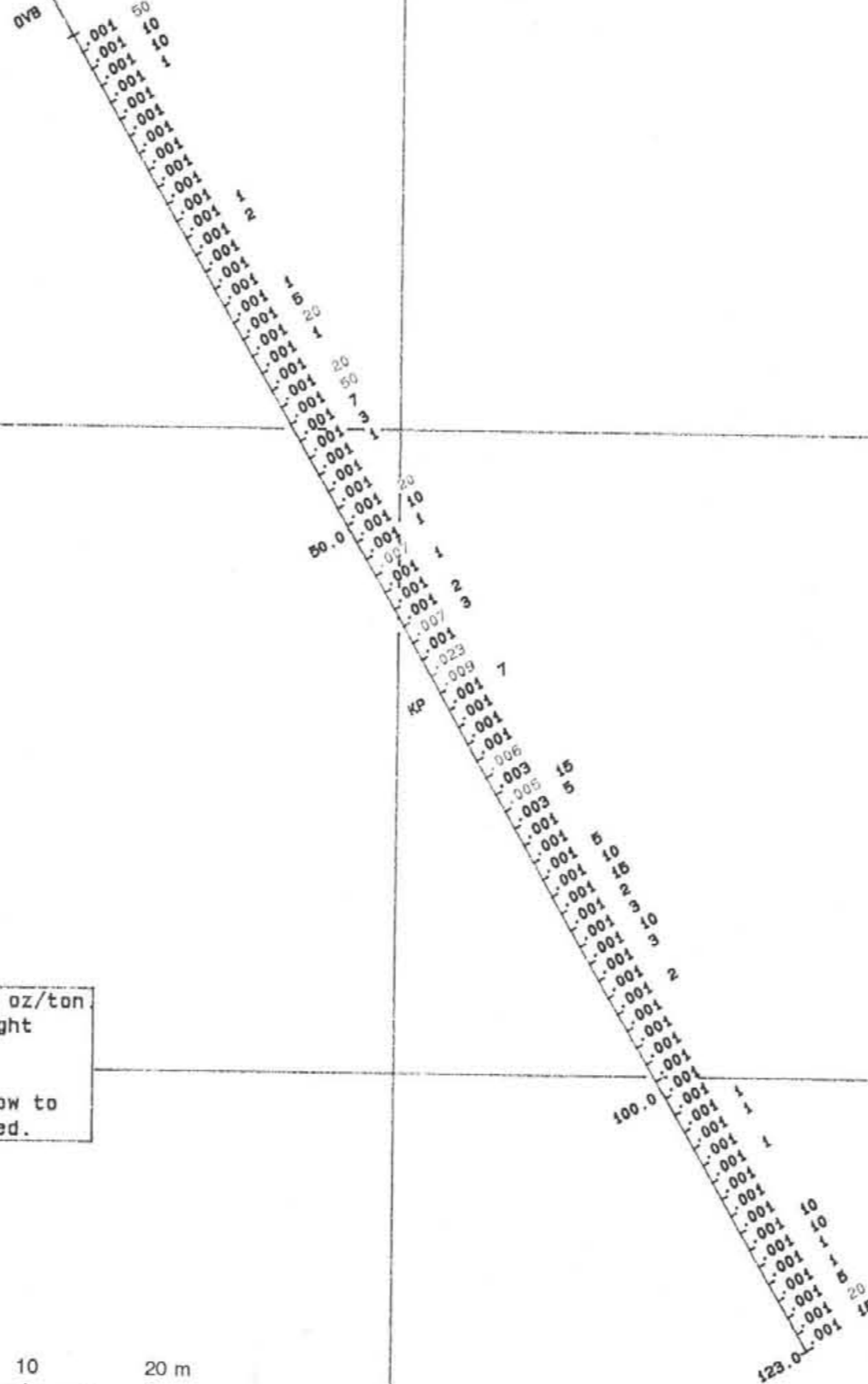
9-NOV-90

FIGURE

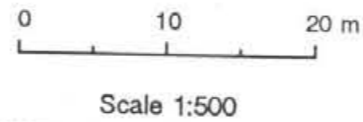
N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

90149



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-150
 Section 74+82E

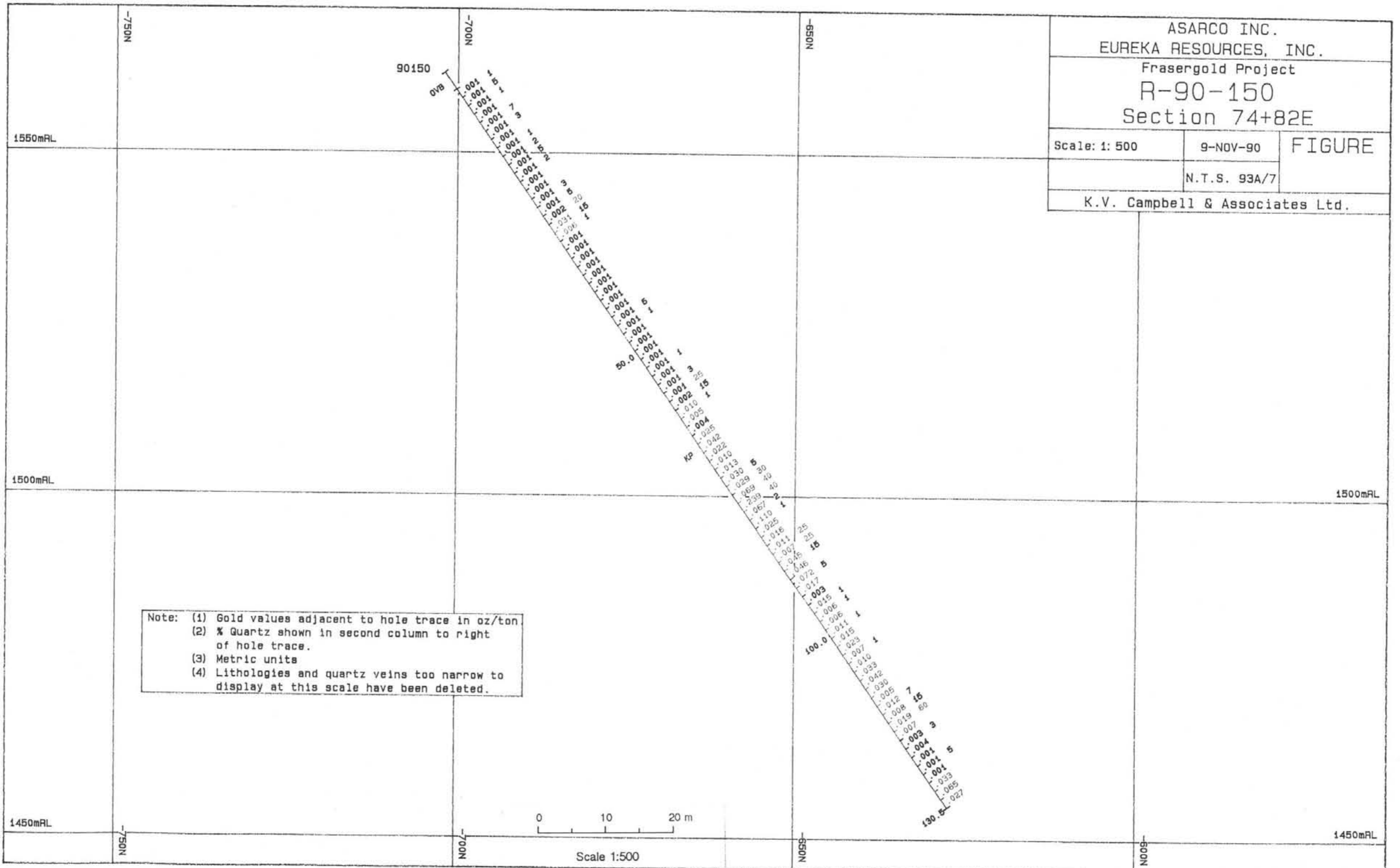
Scale: 1: 500

9-NOV-90

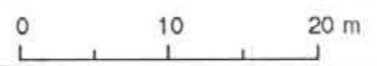
FIGURE

N.T.S. 93A/7

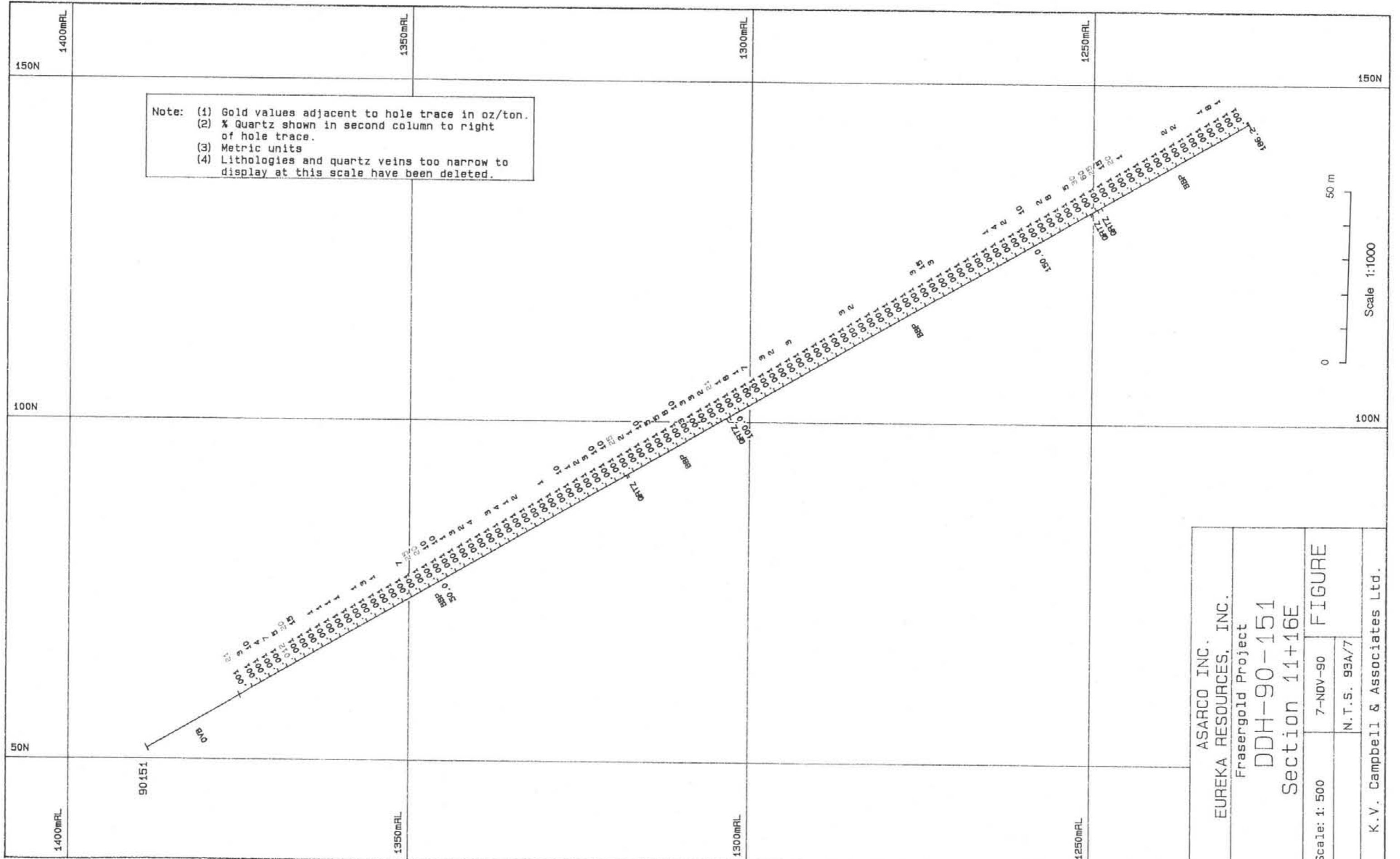
K.V. Campbell & Associates Ltd.



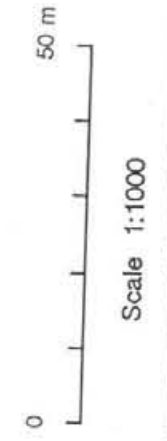
Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



Scale 1:500



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

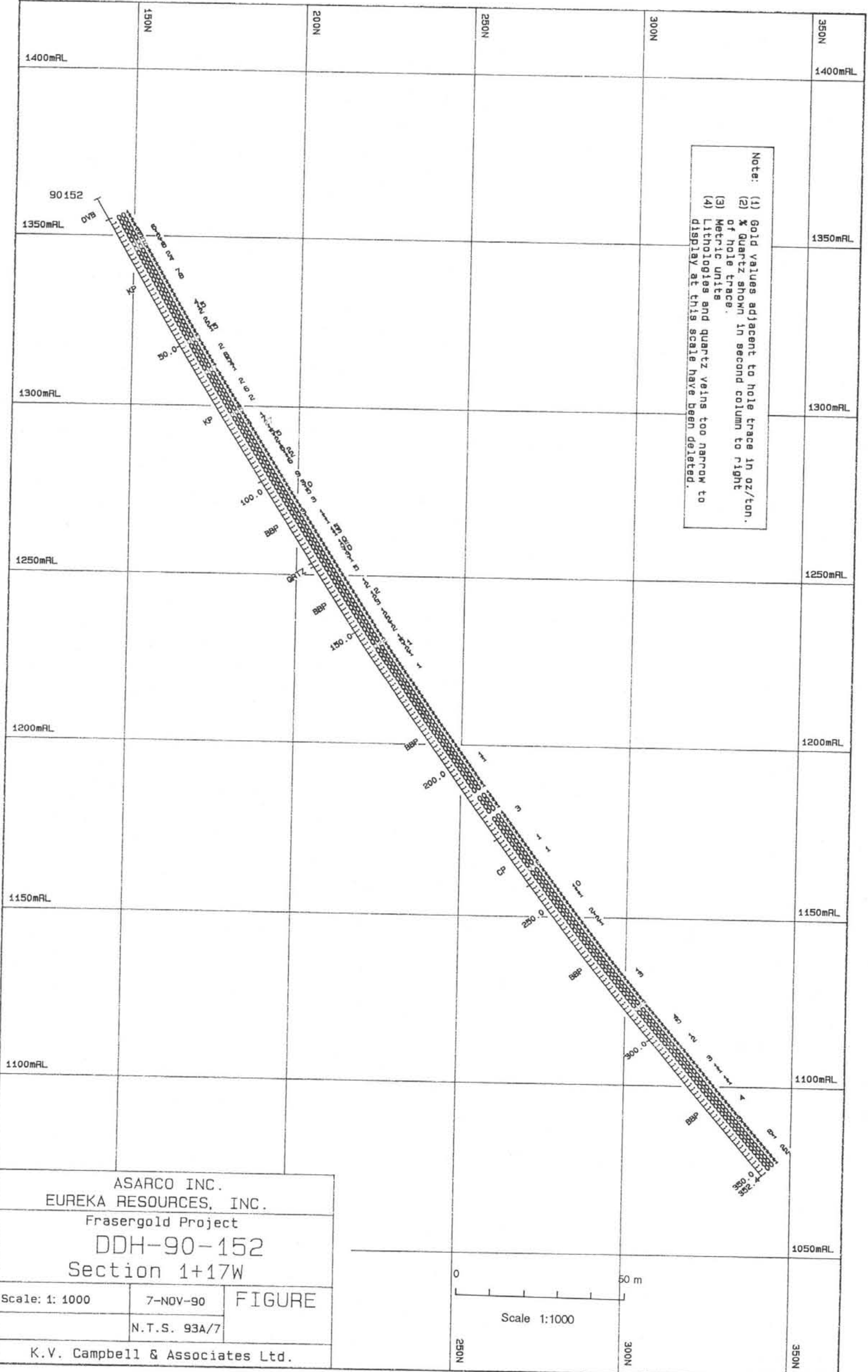


ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-151
 Section 11+16E

Scale: 1: 500	7-NOV-90	FIGURE
	N.T.S. 93A/7	

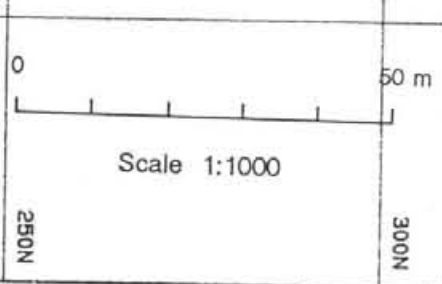
K.V. Campbell & Associates Ltd.

X



Note:
 (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

ASARCO INC.		
EUREKA RESOURCES, INC.		
Frasergold Project		
DDH-90-152		
Section 1+17W		
Scale: 1: 1000	7-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-153
 Section 6+65W

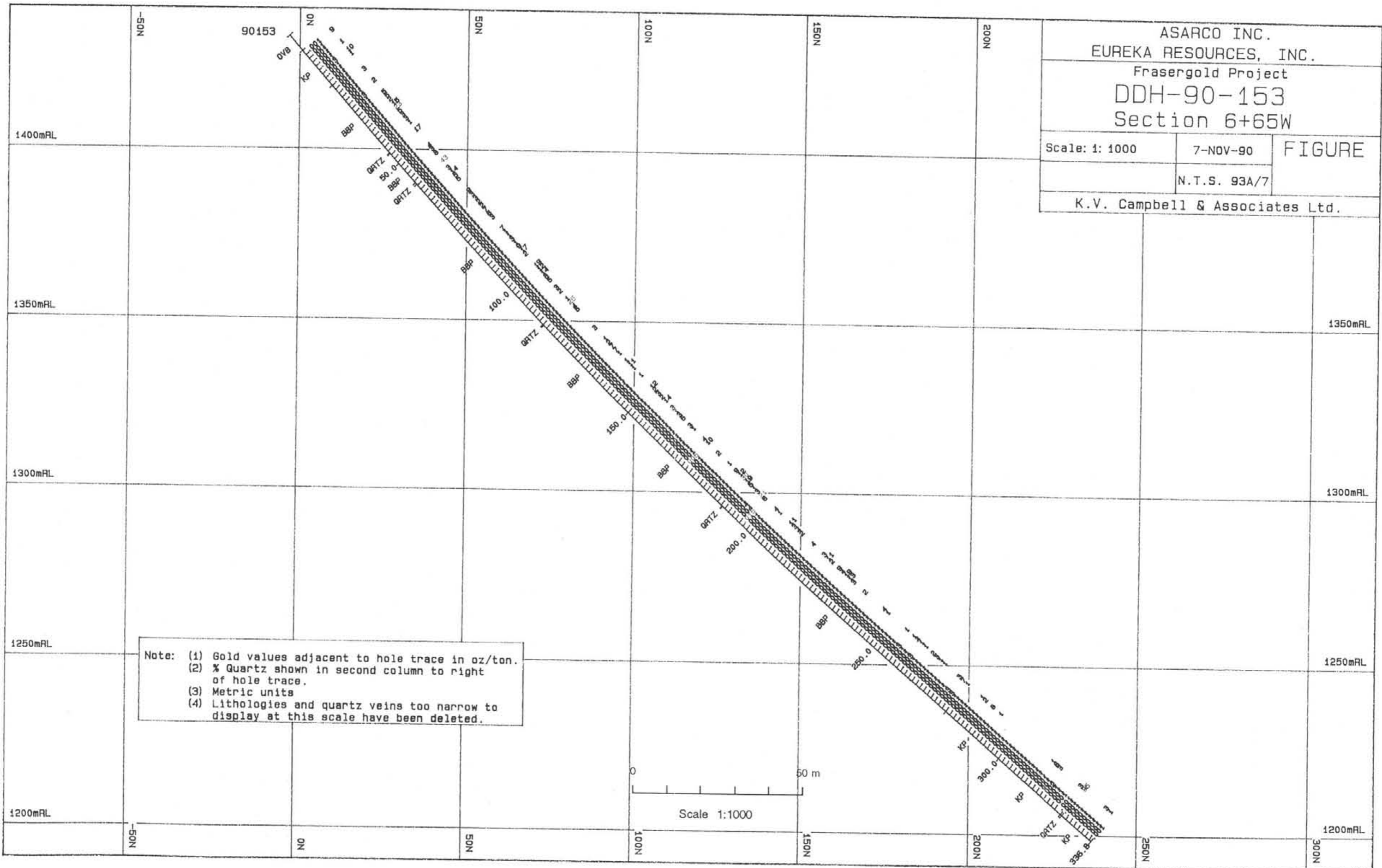
Scale: 1:1000

7-NOV-90

FIGURE

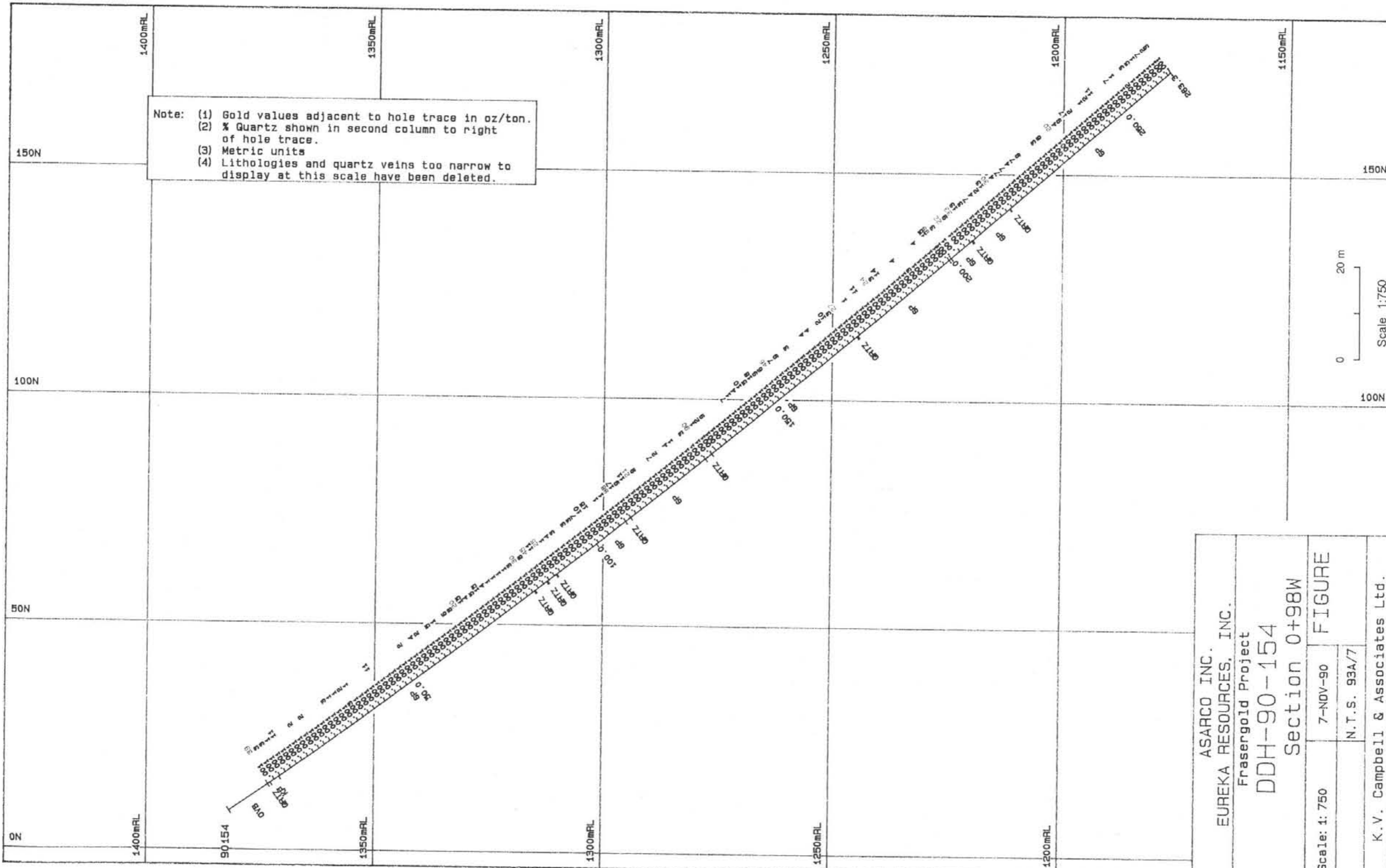
N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

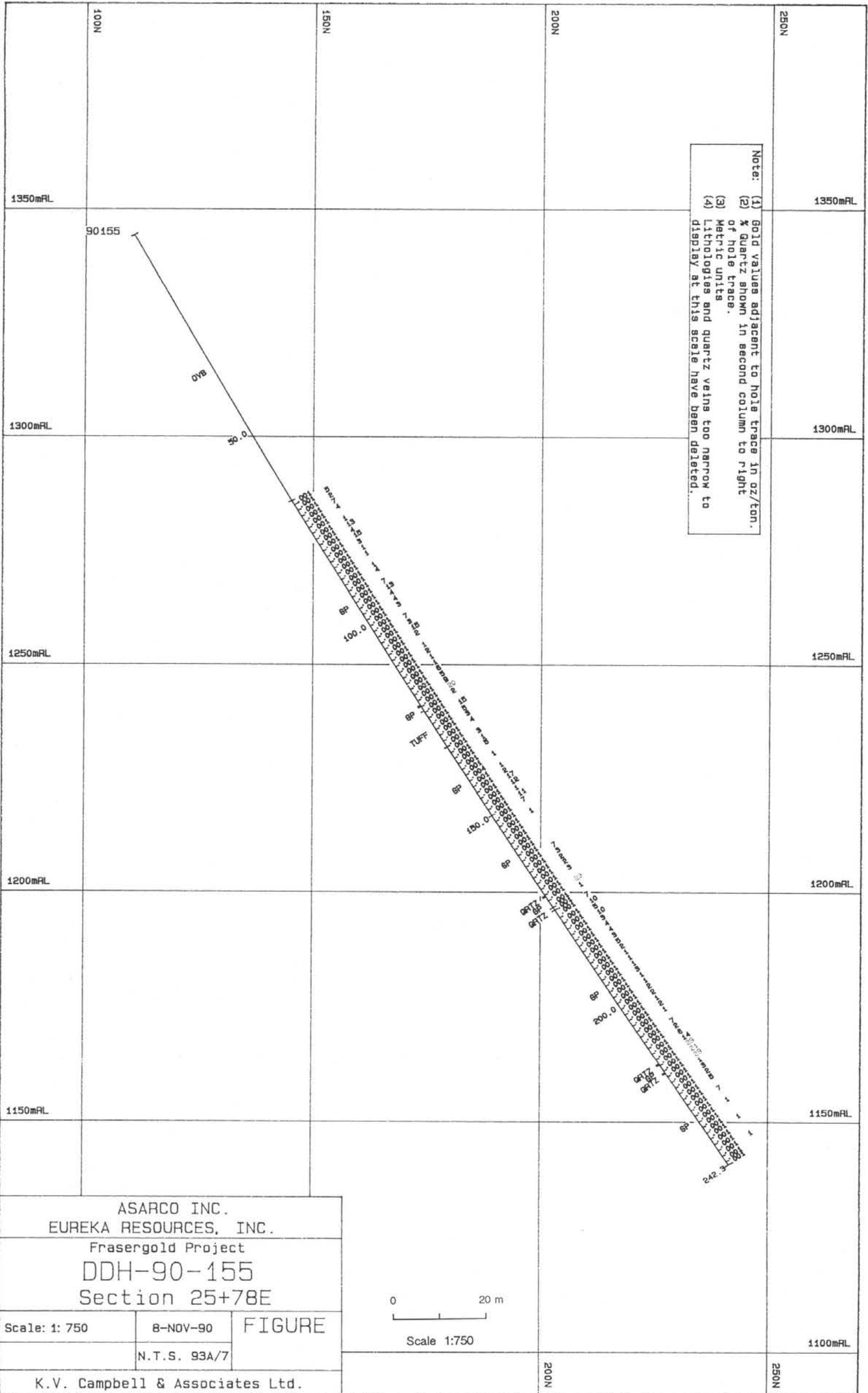


Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

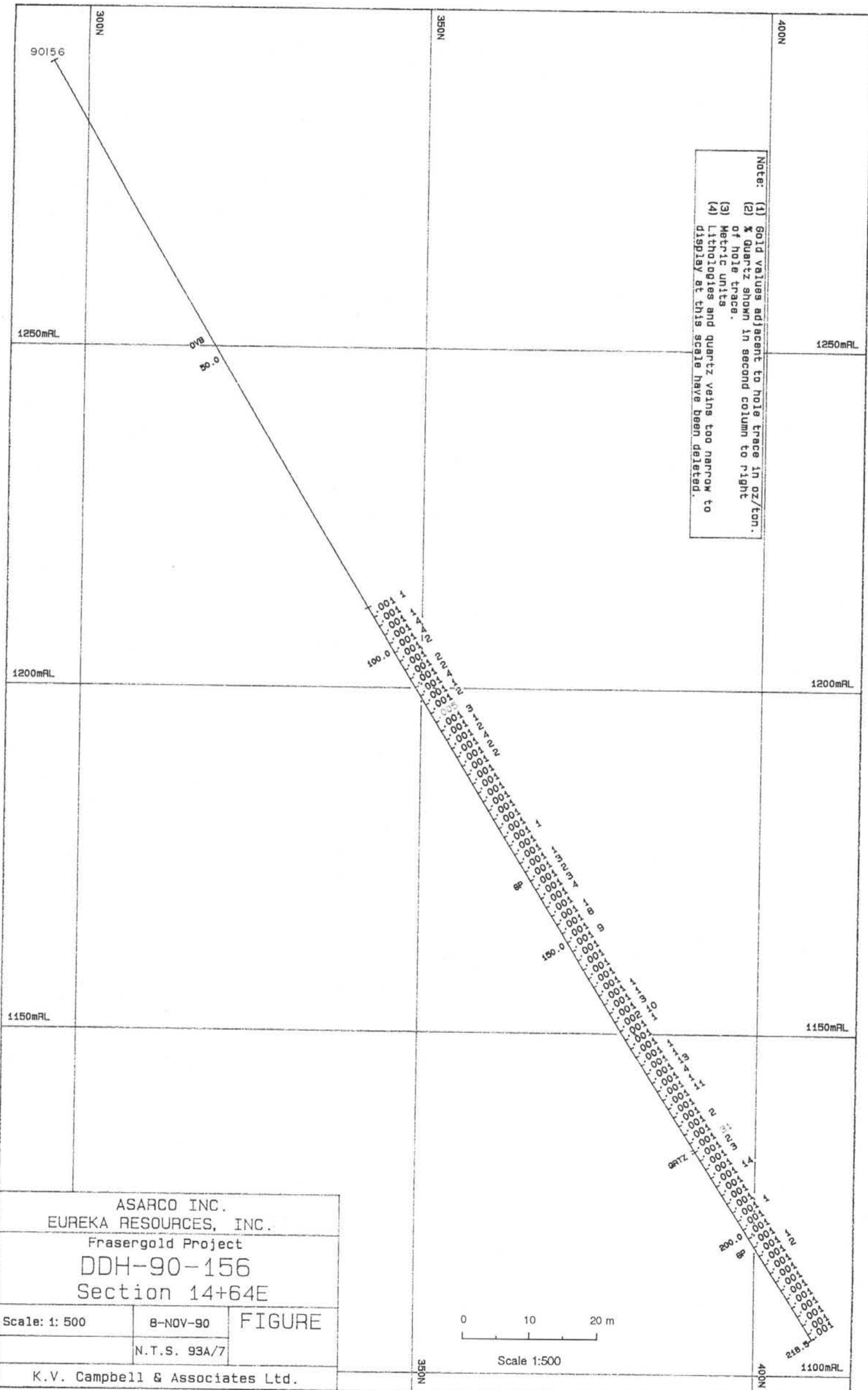
0 50 m
 Scale 1:1000



ASARCO INC. EUREKA RESOURCES, INC. Frasergold Project DDH-90-154 Section 0+98W	
Scale: 1:750	7-NOV-90 N.T.S. 93A/7
FIGURE	
K.V. Campbell & Associates Ltd.	



Note:
 (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



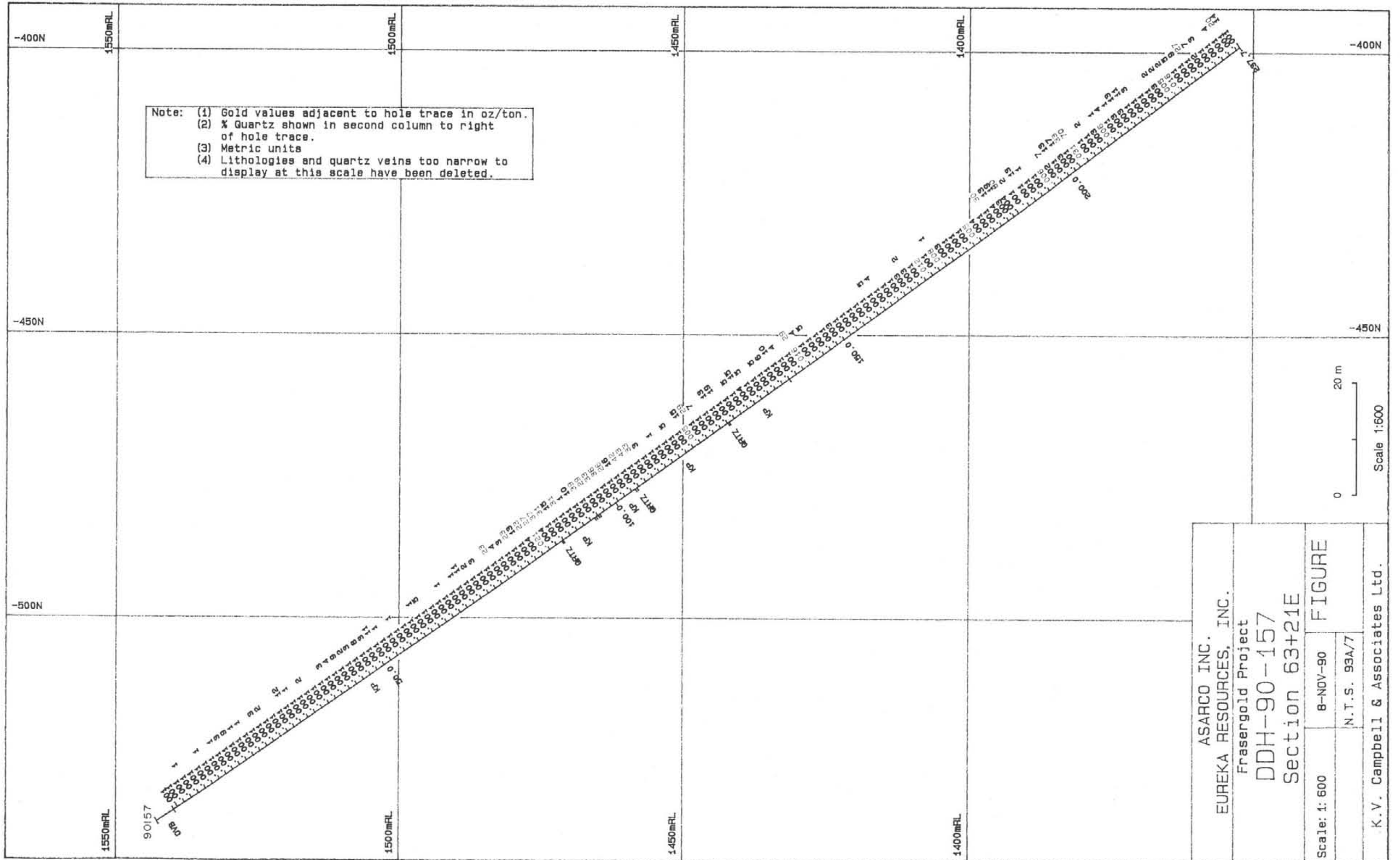
ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-156
 Section 14+64E

Scale: 1: 500 8-NOV-90 FIGURE
 N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

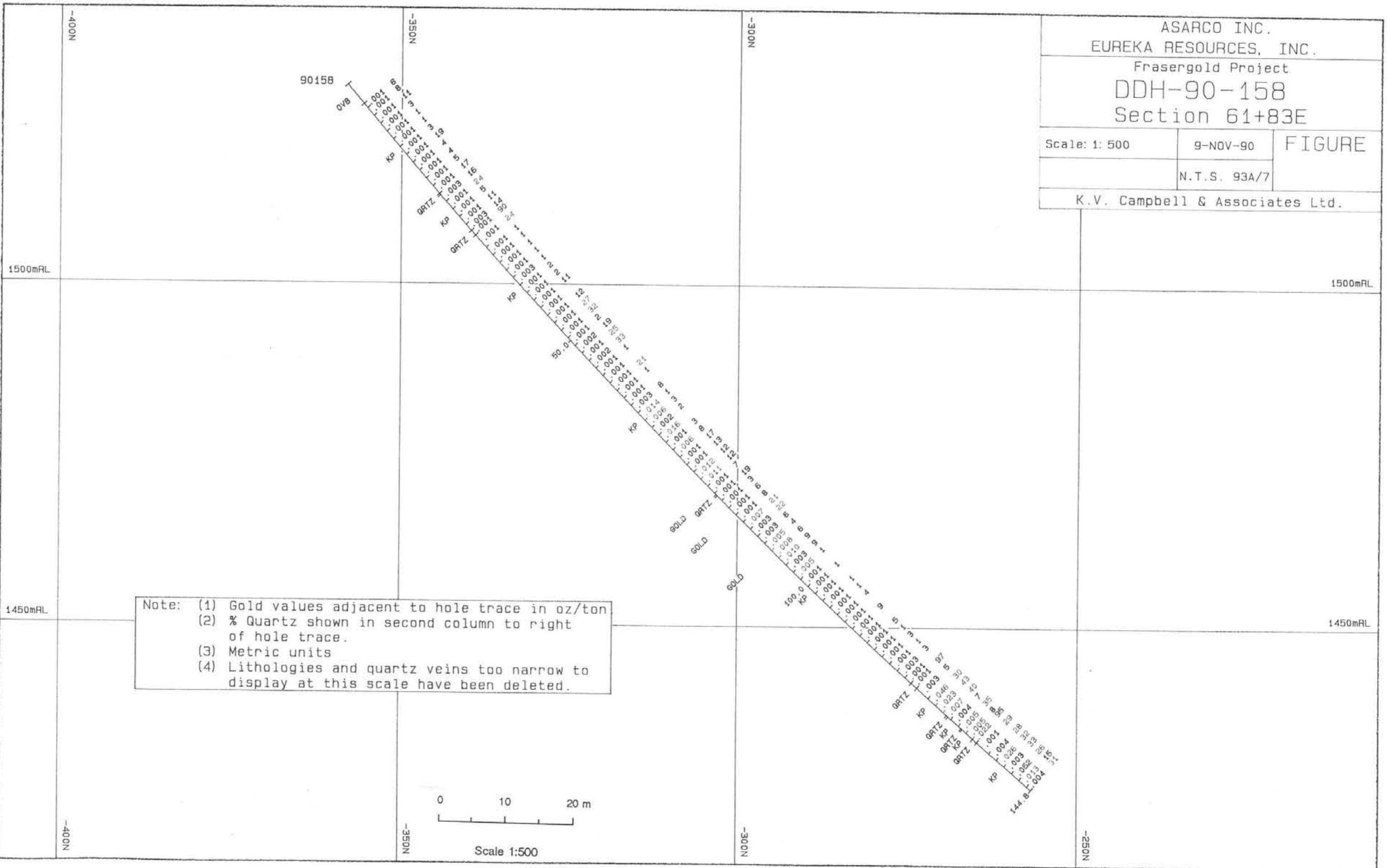
SURPAC - SURPAC MINING SYSTEMS, PERTH WA (09) 4781411

X

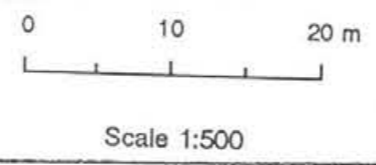


ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-158
 Section 61+83E

Scale: 1: 500	9-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 DDH-90-159
 Section 35+49E

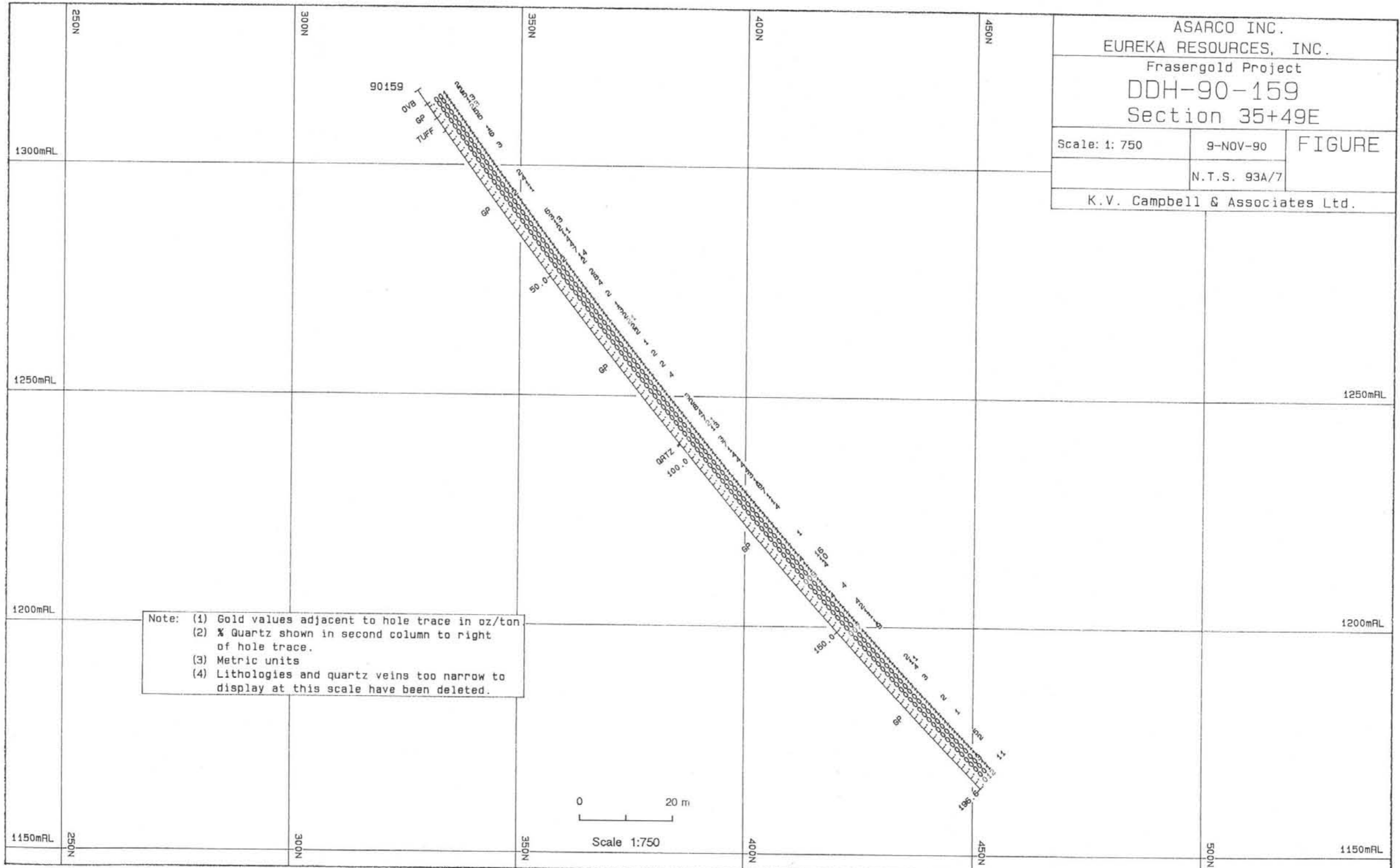
Scale: 1: 750

9-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 20 m
 Scale 1:750

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-160
 Section 74+83E

Scale: 1: 500

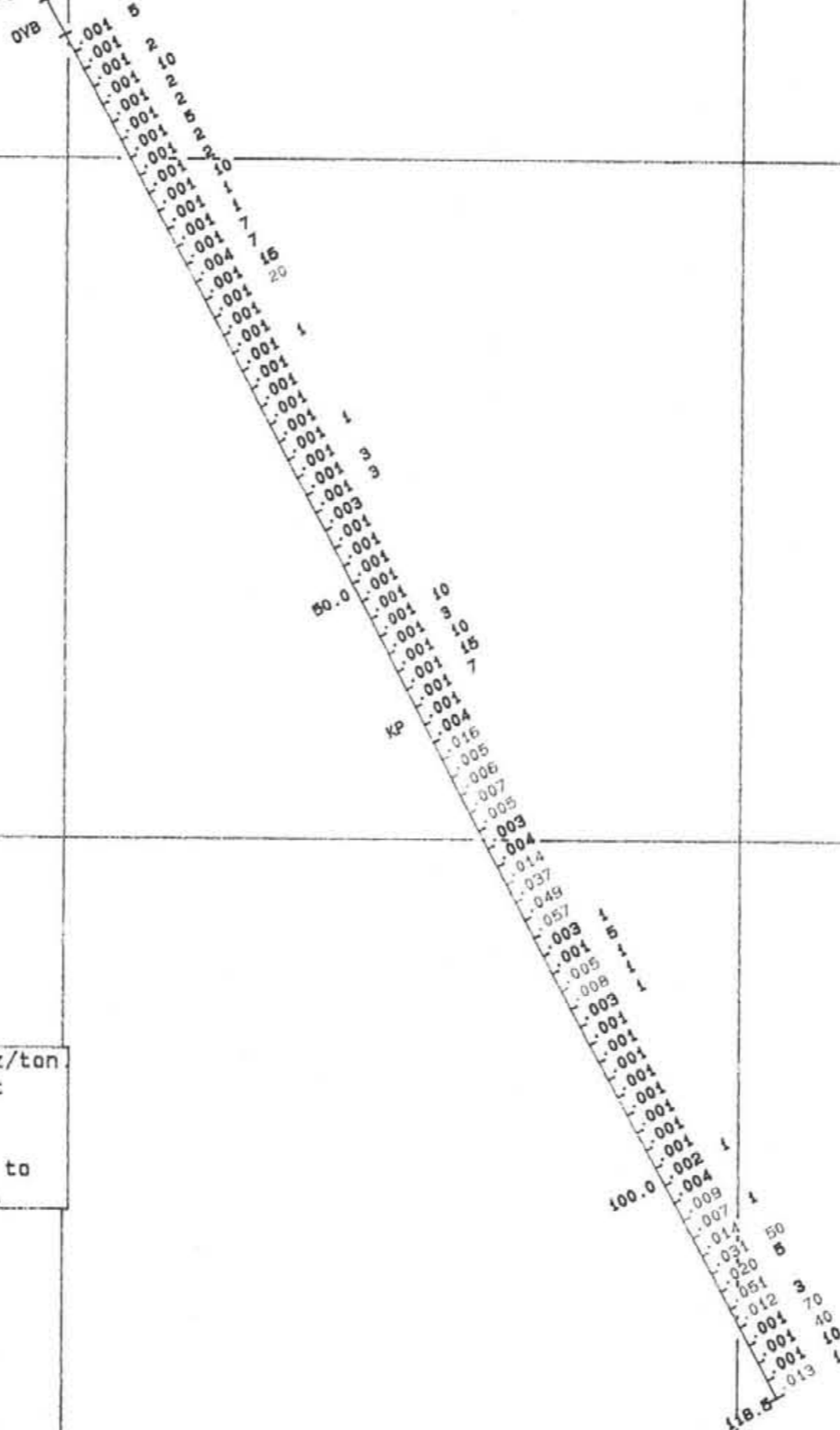
9-NOV-90

FIGURE

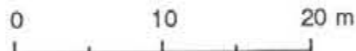
N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

90160



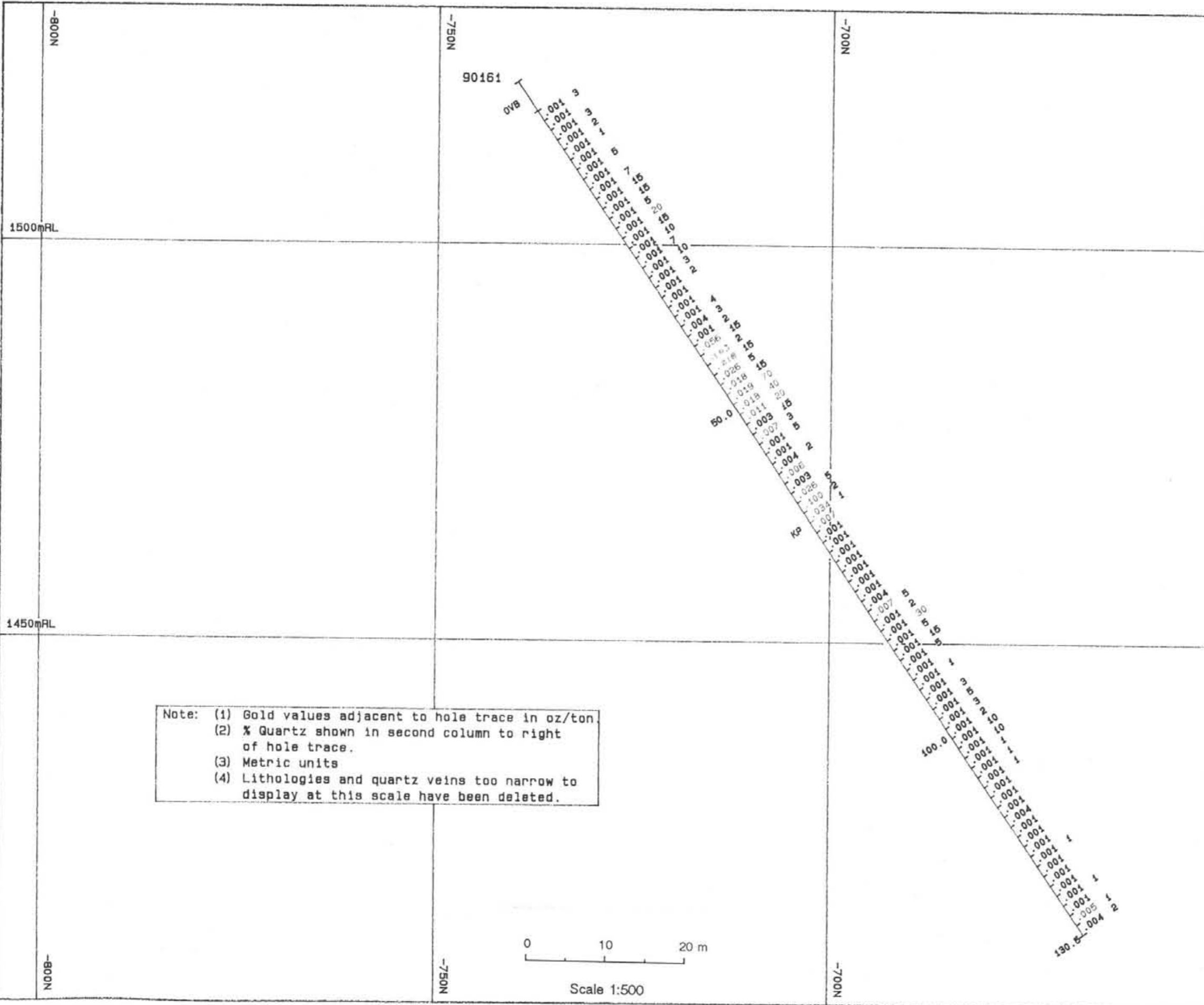
Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



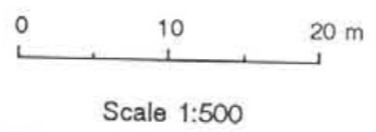
Scale 1:500

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-161
 Section 75+92E

Scale: 1: 500	9-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-162
 Section 75+86E

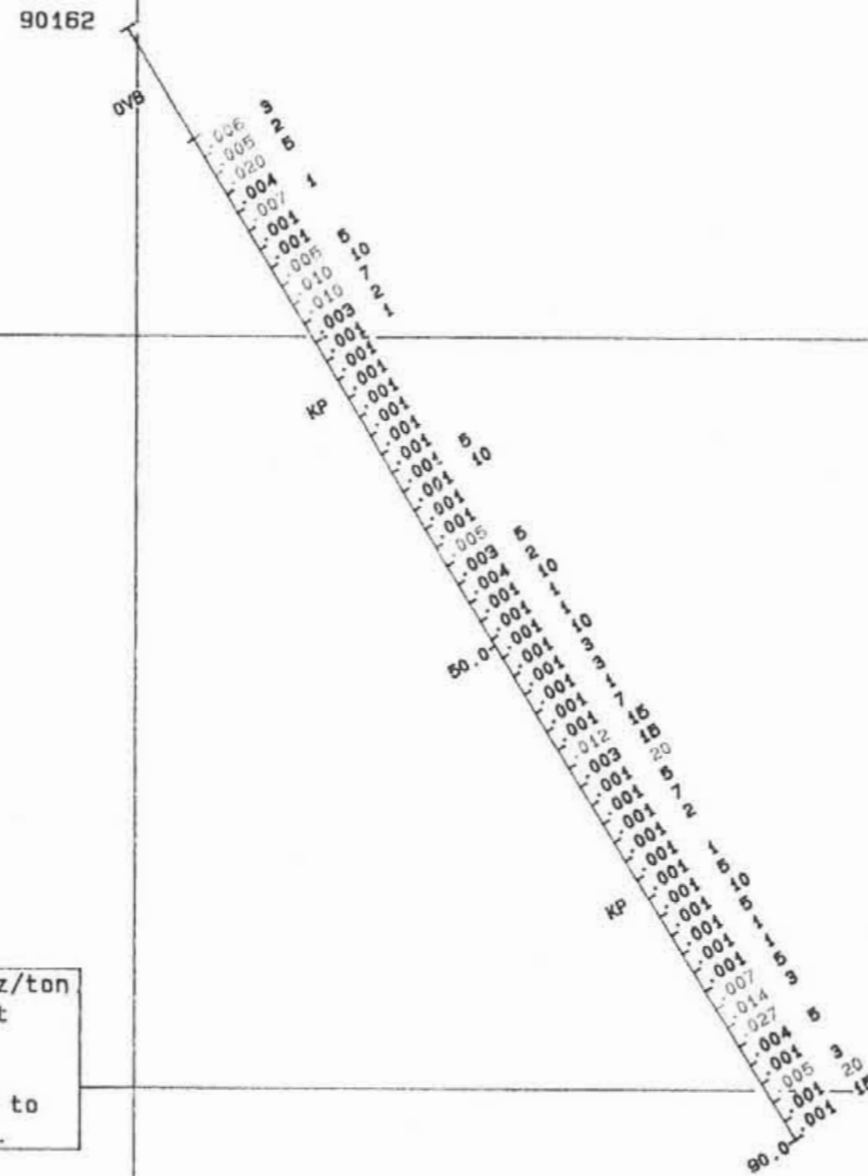
Scale: 1: 500

9-NOV-90

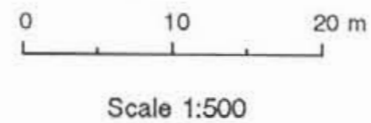
FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-163
 Section 64+93E

Scale: 1: 500

9-NOV-90

FIGURE

N.T.S. 93A/7

K.V. Campbell & Associates Ltd.

90163

078

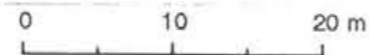
1500mRL

1500mRL

1450mRL

1450mRL

Note: (1) Gold values adjacent to hole trace in oz/ton.
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.



Scale 1:500

-500N

-450N

-400N

-500N

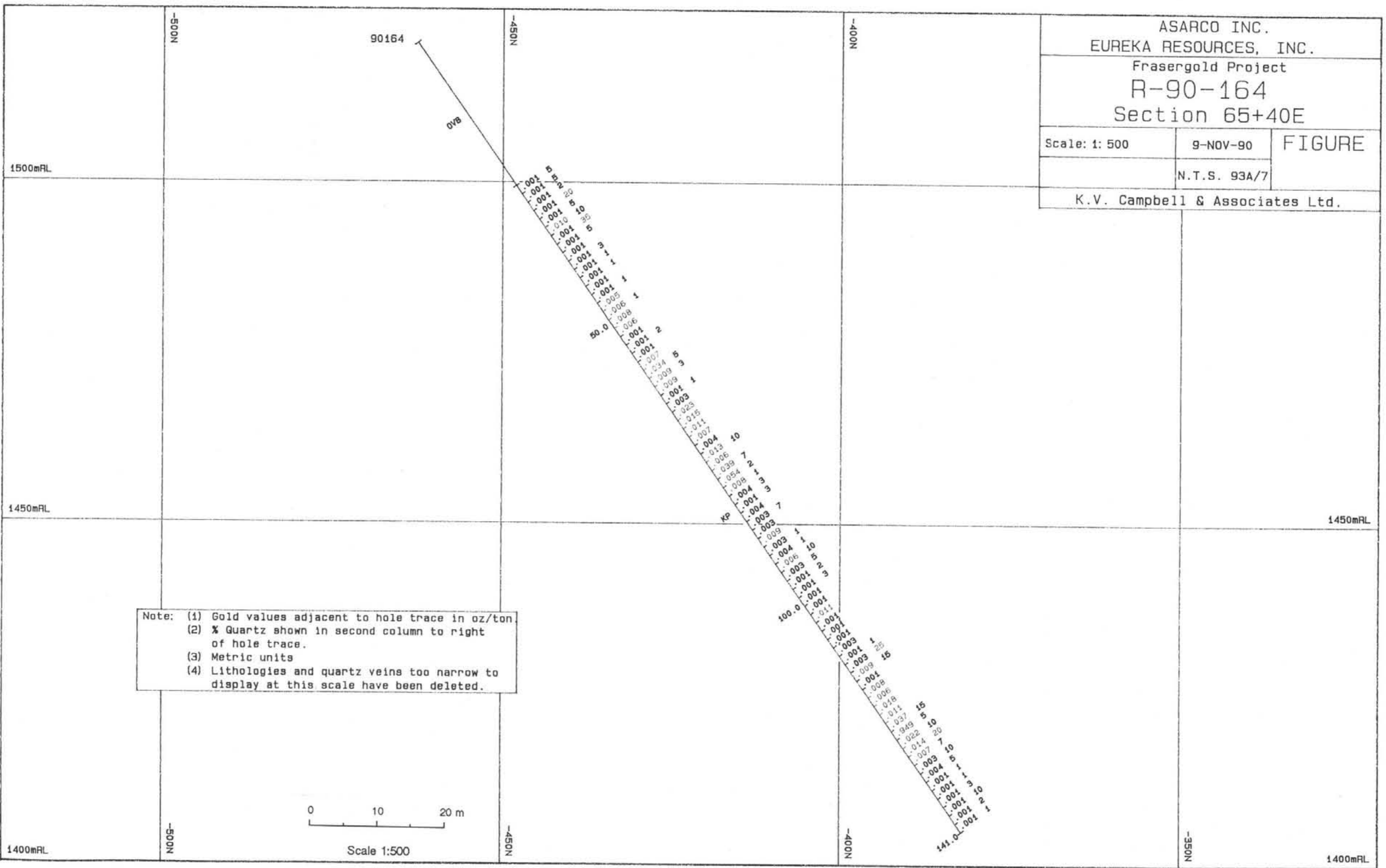
-450N

-400N

-350N

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-164
 Section 65+40E

Scale: 1: 500	9-NOV-90	FIGURE
	N.T.S. 93A/7	
K.V. Campbell & Associates Ltd.		



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 10 20 m
 Scale 1:500

ASARCO INC.
 EUREKA RESOURCES, INC.
 Frasergold Project
 R-90-165
 Section 66+24E

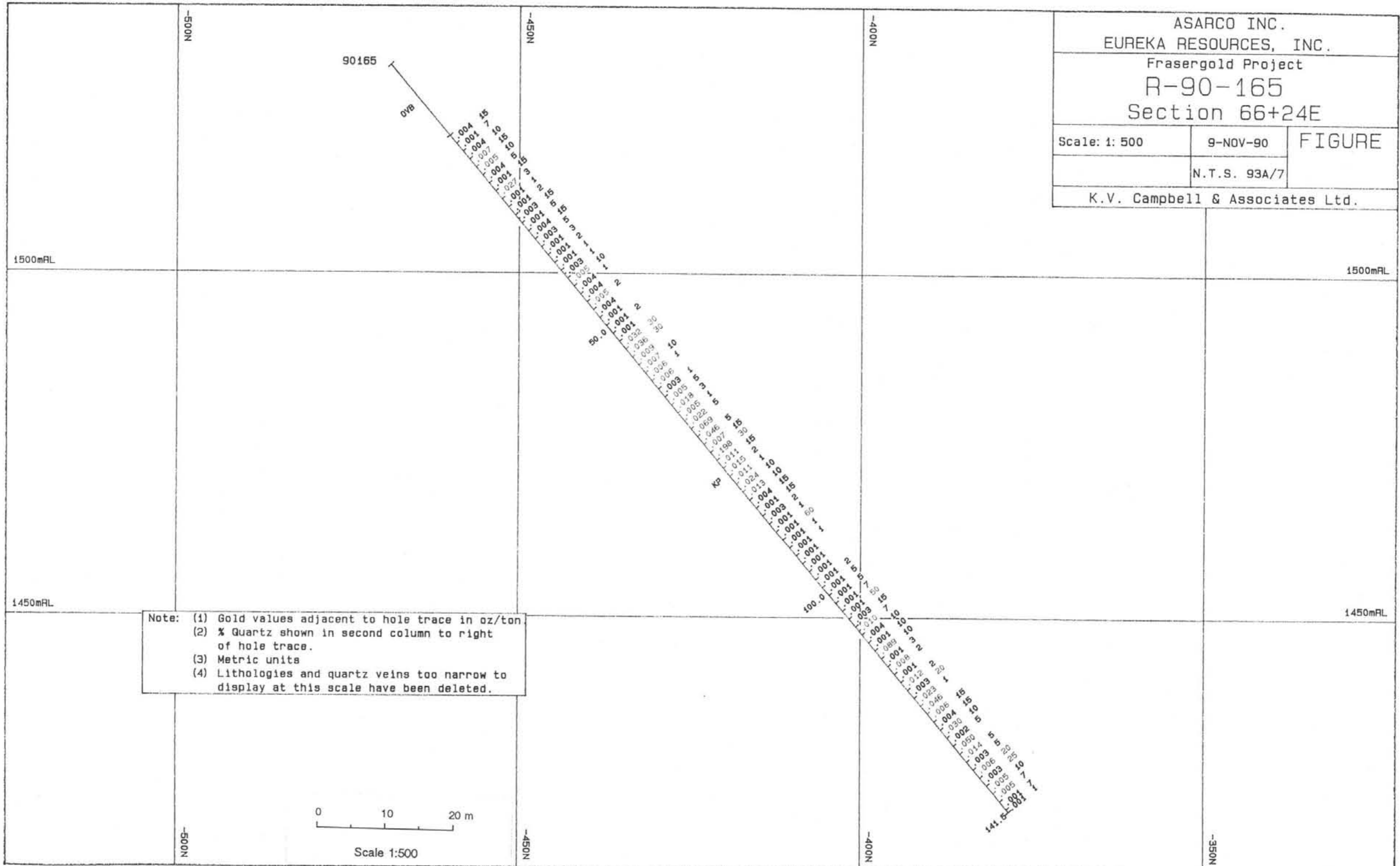
Scale: 1: 500

9-NOV-90

FIGURE

N.T.S. 93A/7

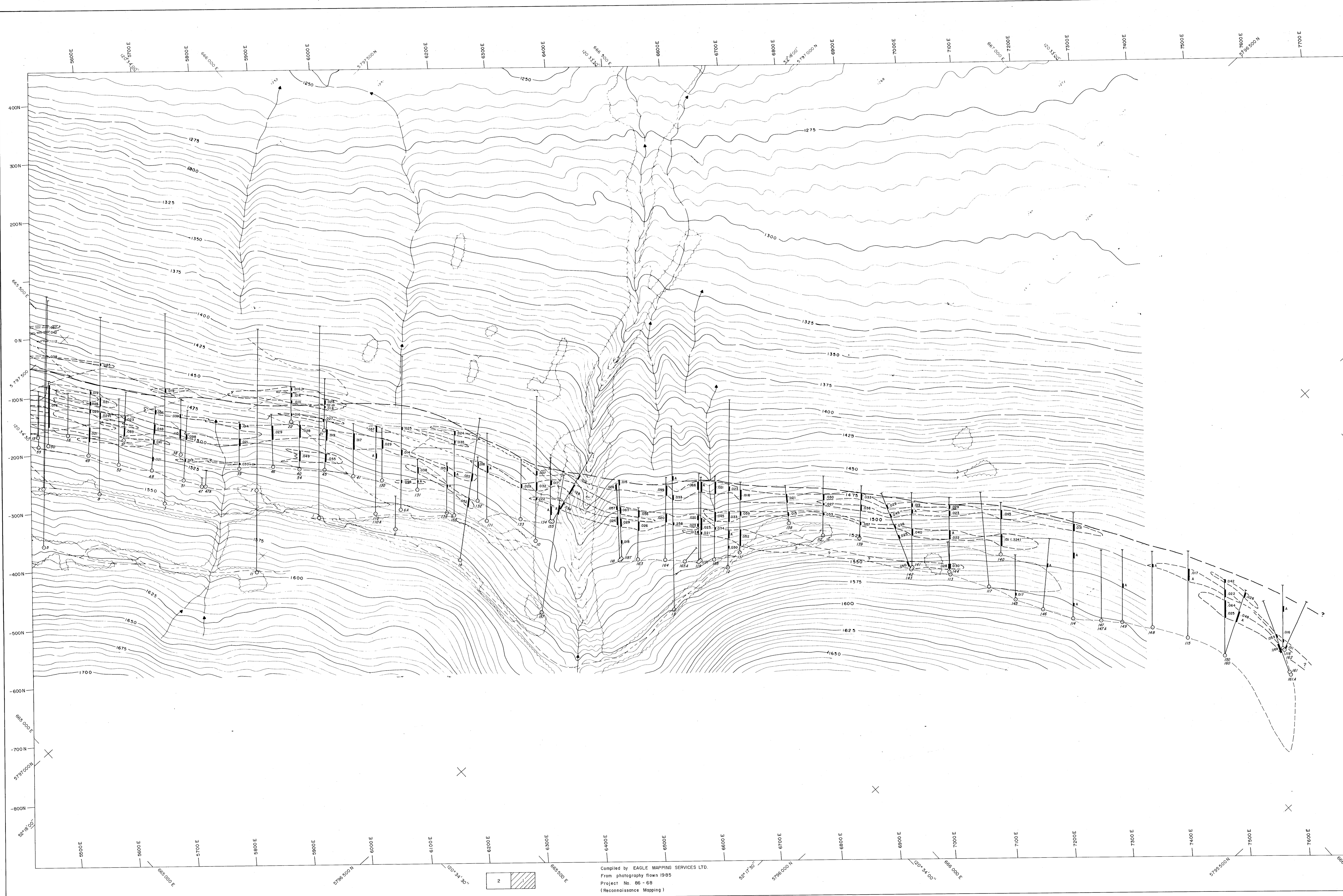
K.V. Campbell & Associates Ltd.



Note: (1) Gold values adjacent to hole trace in oz/ton
 (2) % Quartz shown in second column to right of hole trace.
 (3) Metric units
 (4) Lithologies and quartz veins too narrow to display at this scale have been deleted.

0 10 20 m

Scale 1:500



- LEGEND**
- INTERPRETED CONTACT BLACK
 - BANDED PHYLLITE/KNOTTED PHYLLITE
 - INTERPRETED ZONES OF MINERALIZATION
 - DRILL HOLE COLLAR - WITH HOLE LENGTH AND MINERALIZED ZONE PROJECTED TO SURFACE, ASSUMING A 50° - 55° DIP
 - .017 - AVERAGE GRADE REPORTED (>.015 oz/T Au)
 - A - ANOMALOUS ZONE (<.015 oz/T Au)

NOTE: Due to spacing density not all historical holes present.

GEOLOGICAL BRANCH ASSESSMENT REPORT

20,547

Part 1 of 3

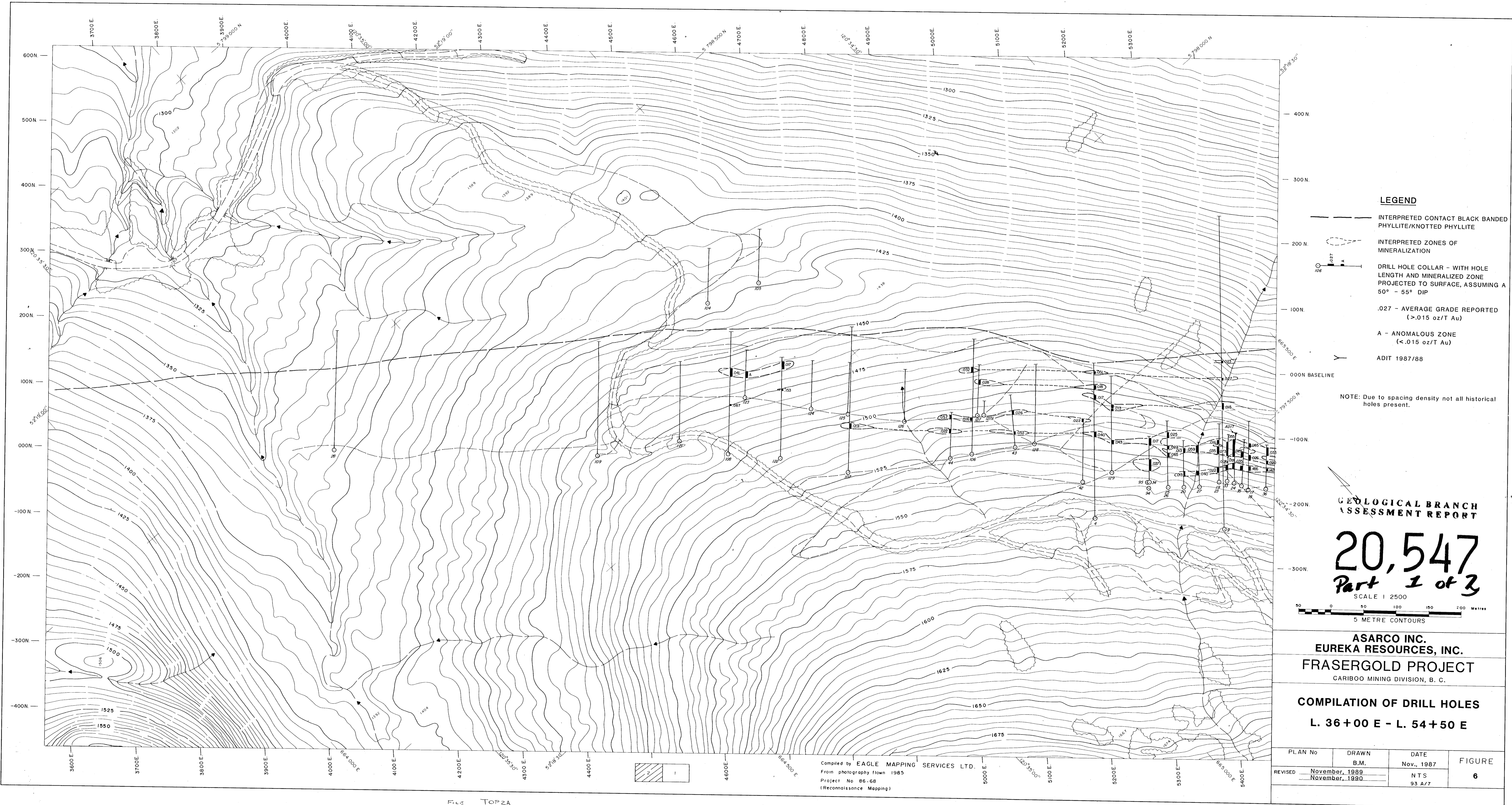
SCALE 1:2500

Metres 50 0 50 100 150 200

5 METRE CONTOURS

ASARCO INC. EUREKA RESOURCES, INC. FRASERGOLD PROJECT CARIBOO MINING DIVISION, B.C.			
COMPILATION OF DRILL HOLES L. 54 + 50 E - L. 76 + 00 E			
PLAN No.	DRAWN:	DATE:	FIGURE
	B.M.	Nov., 1987	5
REVISED	November, 1989	NTS	
	November, 1990	93 A/7	

Compiled by EAGLE MAPPING SERVICES LTD.
From photography flown 1985
Project No. 86-68
(Reconnaissance Mapping)



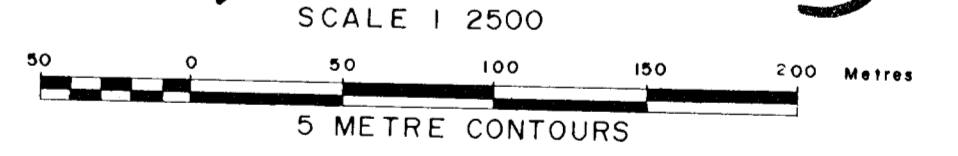
LEGEND

- INTERPRETED CONTACT BLACK BANDED PHYLITE/KNOTTED PHYLITE
- INTERPRETED ZONES OF MINERALIZATION
- DRILL HOLE COLLAR - WITH HOLE LENGTH AND MINERALIZED ZONE PROJECTED TO SURFACE, ASSUMING A 50° - 55° DIP
- .027 - AVERAGE GRADE REPORTED (>.015 oz/T Au)
- A - ANOMALOUS ZONE (<.015 oz/T Au)
- Y ADIT 1987/88

NOTE: Due to spacing density not all historical holes present.

GEOLOGICAL BRANCH ASSESSMENT REPORT

20,547
Part 1 of 3



ASARCO INC.
EUREKA RESOURCES, INC.
FRASERGOLD PROJECT
CARIBOO MINING DIVISION, B. C.

COMPILATION OF DRILL HOLES
L. 36+00 E - L. 54+50 E

PLAN No	DRAWN	DATE	FIGURE
	B.M.	Nov., 1987	
REVISED	November, 1989	NTS	6
	November, 1990	93 A/7	

Compiled by EAGLE MAPPING SERVICES LTD.
From photography flown 1985
Project No 86-68
(Reconnaissance Mapping)