86-192-15272

N.T.S. 92F-1W
92F-2E

ASSESSMENT REPORT

GEOCHEMICAL SAMPLING

EAST & WEST IMPERIAL ~~PROPERTY~~ CLAIMS

BRITISH COLUMBIA

Nanaimo Mining Division

Lat. 49°05' Long. 124°30'

FILMED

Owner/Operator: Imperial Metals Corporation

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,272

BY: AMS CLARK
MARCH 1986

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

SUMMARY

Soil and silt sampling has located a zone of elevated gold and base metal values on the south face of the mountain. Elevated gold values in rocks have been located on the west flank. These values are all low (barely anomalous) but do warrant a further check of the outcrop and cliff-faces for pyritic zones, and an evaluation of the significance of these zones.

INTRODUCTION

Objectives

A previous regional stream-silt sampling program had indicated silt samples with anomalous values of gold, copper, arsenic, barium and zinc from streams draining the area of the claims. The program was designed to determine, using contour soil-sampling methods, the source of these anomalous stream silts.

Location

The East and West Imperial claims are situated approximately 40 kms west southwest of Nanaimo on the watershed between the Nitinat and Nanaimo Rivers (Figure 1).

Property

The property consists of 2 adjoining claims at the head of the Nanaimo River.

Name	Units	Record No.
East Imperial	20	1138(4)
West Imperial	10	1139(4)

(See Figures 2 and 3)

Access

Access is by logging road (Crown Forest Industries) from South Wellington, south of Nanaimo along the Nitinat road past Fourth Lake.

Operations

The program was undertaken from Nanaimo, on a daily basis from July 3rd to August 13, 1985.

IMPERIAL METALS CORPORATION

E & W IMPERIAL

FIGURE 1 N.T.S. 92F

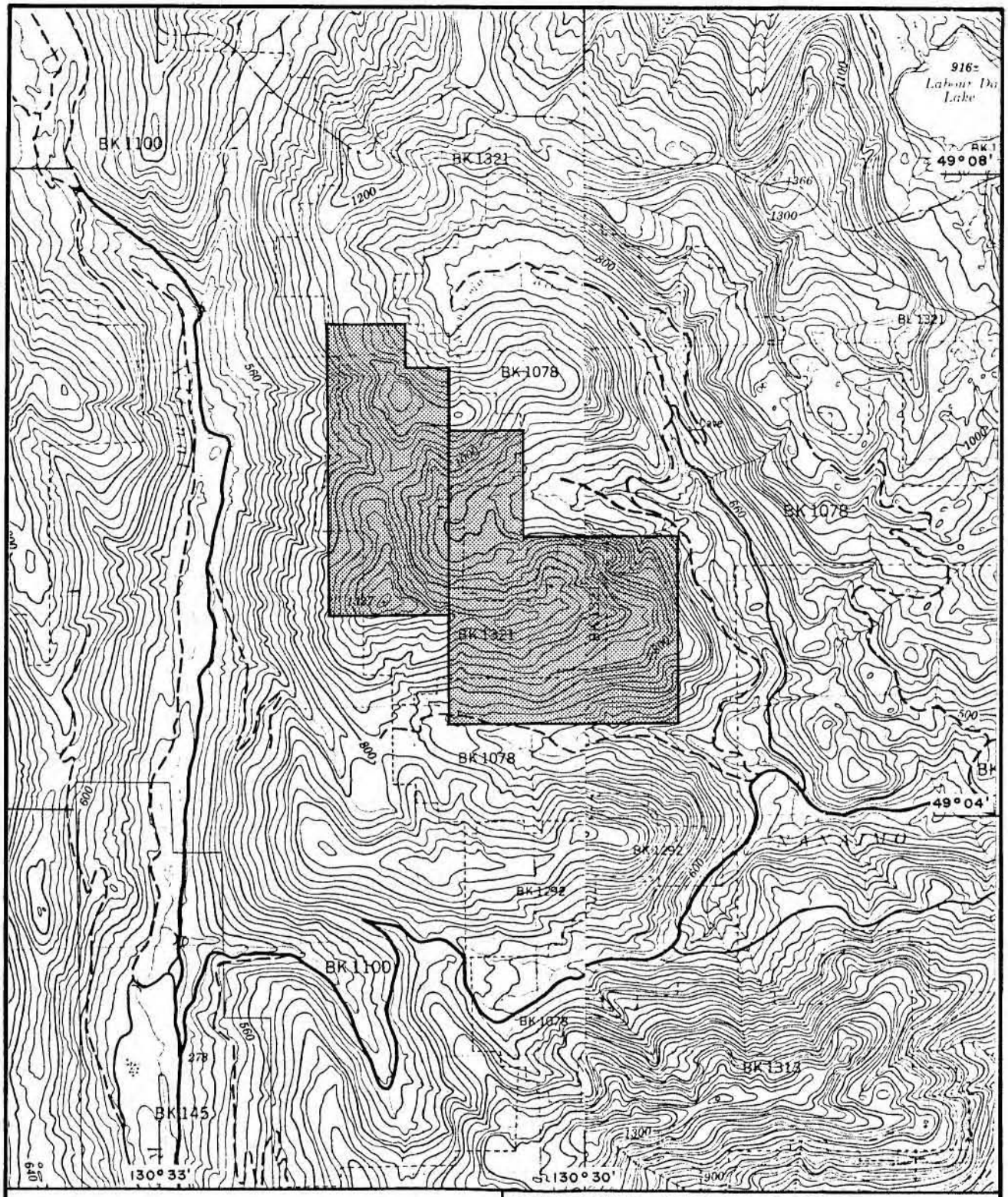
LOCATION MAP

Km 5 0 5 10 Km

SCALE: 1 : 250 000	GEOLOGIST: A. CLARK
DATE: MARCH 1985	DRAWN BY: S. HAWORTH

Physiography

Topography is steep and heavily wooded, except where logging has been completed. The claims overly the crest of a ridge and down both sides of the ridge, from about 1,330m down to about 560m above sea level.



IMPERIAL METALS CORPORATION

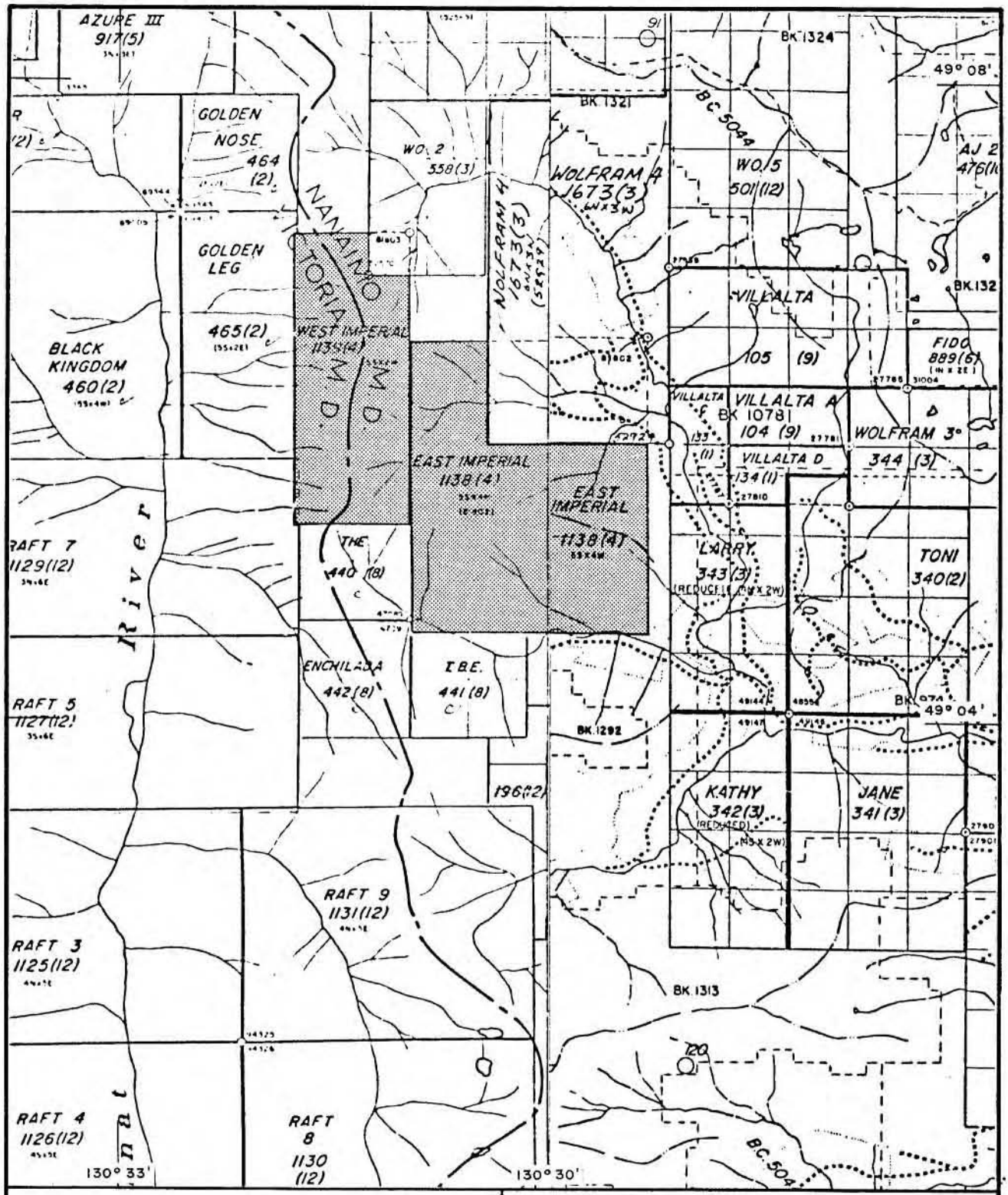
E & W IMPERIAL

FIGURE 2 N.T.S. 92F/1W & 2E

TOPOGRAPHIC MAP

Km 1 0 1 2 Km

SCALE: 1:50 000	GEOLOGIST: A. CLARK
DATE: MARCH 1985	DRAWN BY: S. HAWORTH



IMPERIAL METALS CORPORATION

E & W IMPERIAL

FIGURE 3 N.T.S. 92F/1W & 2E

CLAIM MAP

Km 1 0 1 2 Km

SCALE: 1:50 000	GEOLOGIST: A. CLARK
DATE: MARCH 1985	DRAWN BY: S. HAWORTH

DISCUSSION OF RESULTS

Sample Collection and Analysis

Samples of soil were collected from the B-horizon where this could be distinguished. The B-horizon was taken to be the first reddish soil horizon below the grey surficial horizon of soil. Where the terrain is steep and no soil horizons, as such, were developed, soils had to be collected from "pore" spaces between boulders, at depths from surface (excluding the humic horizon) to about 40 cms depth.

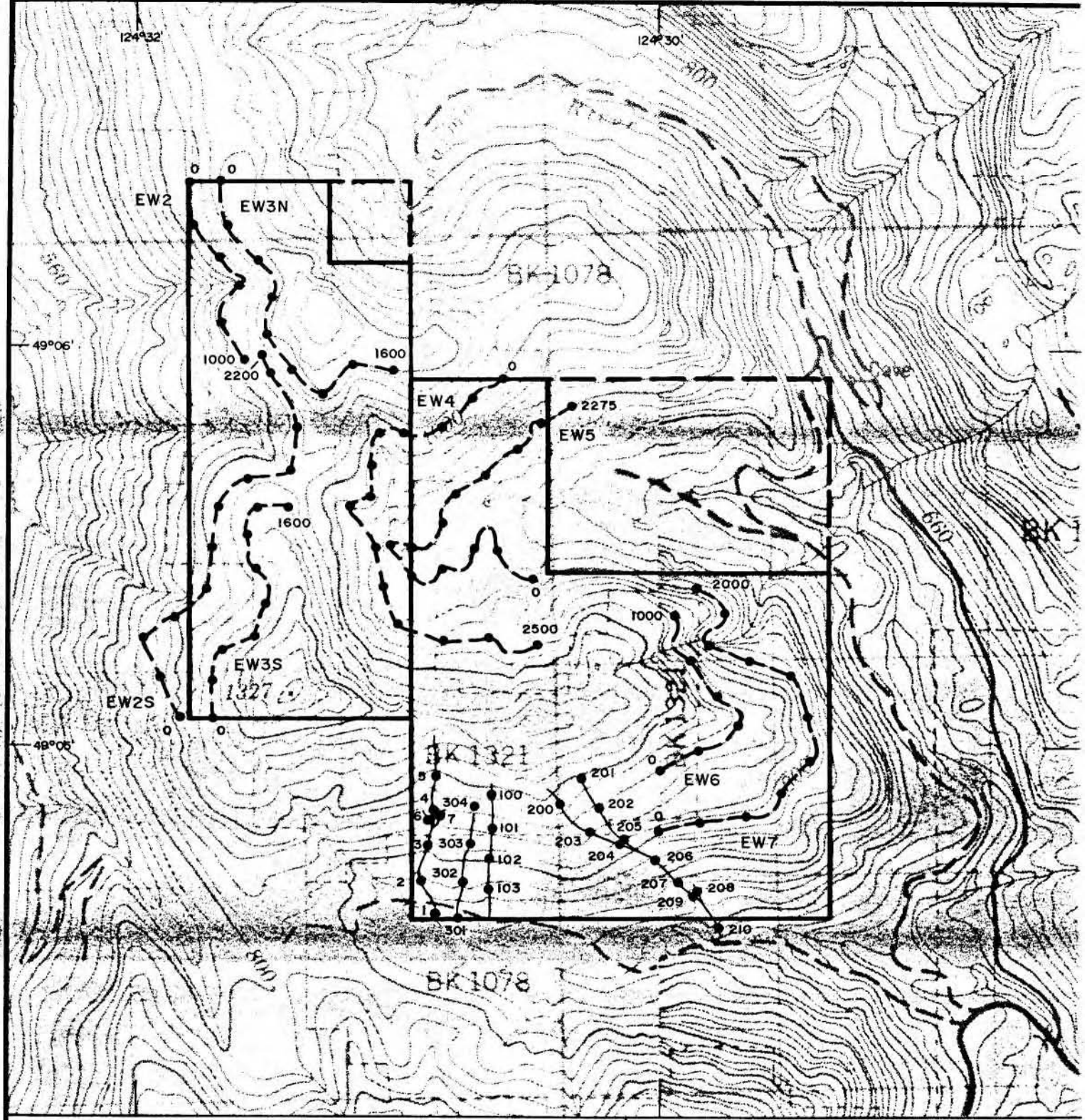
Analysis was by induction coupled plasma method for 30 elements, and by atomic absorption for gold. The method employed by the laboratory and the elements and results are given in Appendix 1. The elements considered of significance in this program (with their assumed anomalous thresholds) are:

Element	Threshold
Copper	100 ppm
Lead	50 ppm
Zinc	150 ppm
Arsenic	25 ppm
Barium	350 ppm
Gold (AA)	15 ppb

Correlation co-efficients (Appendix 2) show the normal expected correlations (Mo-Cu, Cu-Zn, etc.), but also some unusual correlations that should be checked further in the field (Mo-Sb & Pb-As).

An investigation of the frequency histograms (Appendix 3) for the main elements of interest in this survey (Cu, Pb, Zn, As, Ba and Au ppb) indicates that within this area lead and gold, which are usually taken as background below 100 ppm and 25 ppb respectively, are anomalously low with the Gaussian curve dropping to zero at about 50 ppm Pb and 15 ppb Au. Zinc and barium, on the other hand, have Gaussian curves that drop to zero at much higher values than normally expected of soils in the area - 150 ppm Zn and 360 ppm Ba respecitvley as opposed to the more usual 100 ppm Zn and 200 ppm Ba. Both curves show anomalous groupings of values well above the normal values, indicating both a higher than average background and anomalous values of zinc and barium over and above that background.

Higher (possibly anomalous) values of gold occurs predominately on the south face of the mountain in the southern part of the property in the silt samples, but only two isolated soil samples were anomalous (Figure 5). Both silts and soils on this face and to the east, are anomalous or high in arsenic, lead, zinc and barium (Figures 5 & 6). Elsewhere on the property anomalous values are scattered and do not indicate local concentrated derivation. Pyrite mineralization has been recognized on the property and in this area in intermediate and basic volcanic rocks. Rock samples collected on the western slope of the mountain facing the Nitinat River have elevated gold values (Appendix 1: R-85 sample series).



Legend

Soil Samples

Stream Samples (EWS-__)

IMPERIAL METALS CORPORATION

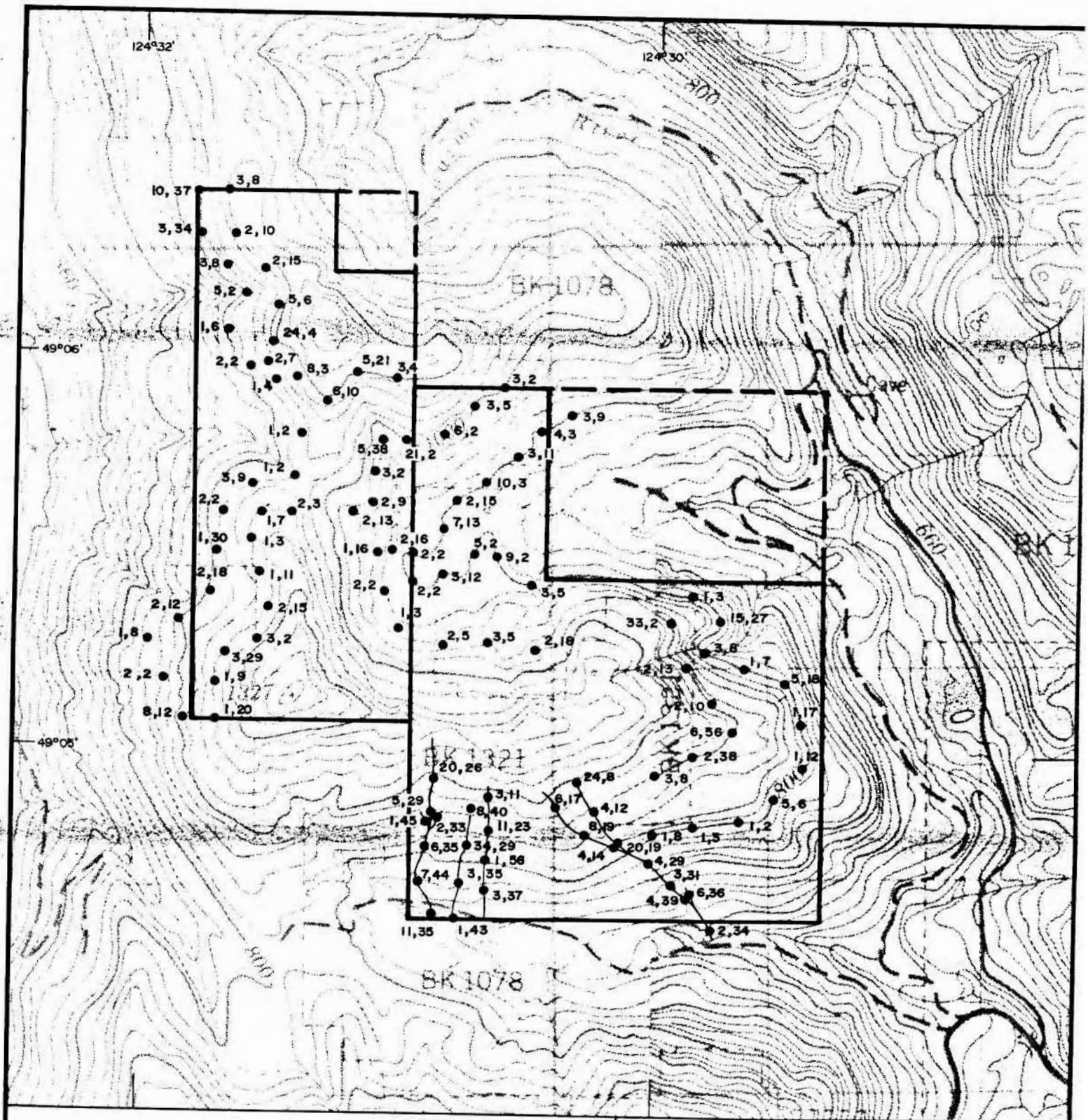
E & W IMPERIAL

FIGURE 4 N.T.S. 92F/1,2

SAMPLE LOCATIONS

Metres 500 0 500 1000 Metres

SCALE: 1:25000	GEOLOGIST: A.CLARK
DATE: APRIL 1986	DRAWN BY: S. HAWORTH



Legend

● 24, 8
Au(PPB), As(PPM)

IMPERIAL METALS CORPORATION

E & W IMPERIAL

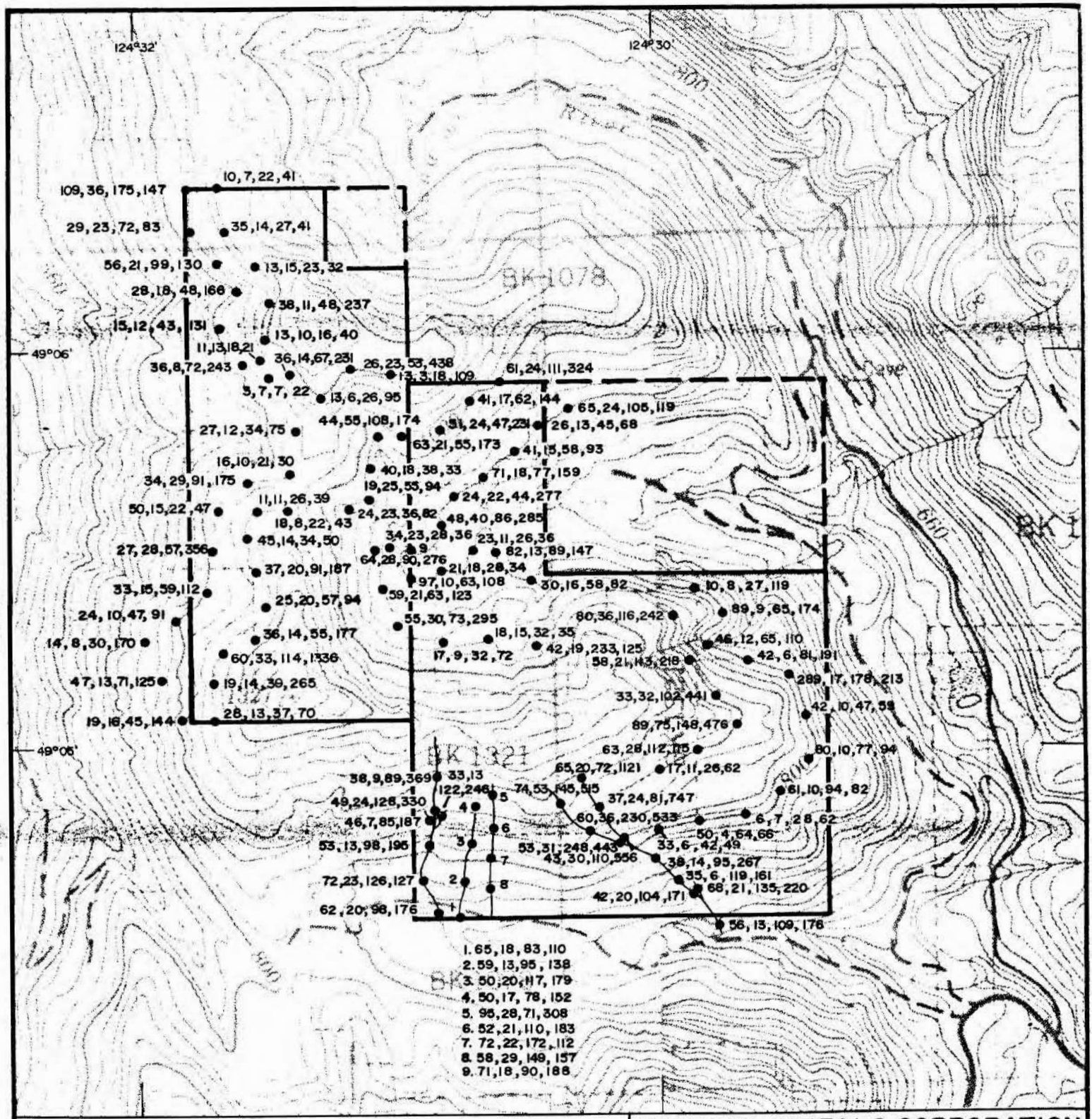
FIGURE 5 N.T.S. 92F/1,2

CONTOUR SOILS & STREAM SEDIMENT GEOCHEMISTRY: Au, As

Metres 500 0 500 1000 Metres

SCALE: 1:25000 GEOLOGIST: A.CLARK

DATE: FEBRUARY 1986 DRAWN BY:



Legend

● 53, 31, 248, 443
Cu, Pb, Zn, Ba (PPM)

IMPERIAL METALS CORPORATION

E & W IMPERIAL

FIGURE 6 N.T.S. 92F/1,2

CONTOUR SOILS & STREAM SEDIMENT GEOCHEMISTRY: Cu, Pb, Zn, Ba

Metres 500 0 500 1000 Metres

SCALE: 1:25000	GEOLOGIST: A.CLARK
DATE: FEBRUARY 1986	DRAWN BY:

RECOMMENDATIONS

A brief investigation should be made of cliff-faces and outcrop, with further rock sampling of pyritic units, to determine whether there is potential for orebody occurrence, or whether this pyrite is purely the normal "background" disseminated pyrite of basic volcanics.

STATEMENT OF COSTS

Field Technician	6 days @ $125/d	$ 750.00
Supervising Geologist	2 days @ $250/d	500.00
Board & Lodging	6 days @ $60/man-day	360.00
Transportation	6 days @ $100/truck-day	600.00
Mob/demob		100.00
Geochemical Analysis	127 samples (silt, soil & rock)	1,646.00
Reports & Maps		200.00
		$4,156.00

CERTIFICATE

I, Anthony Miles Stapleton Clark, geologist, residing at 2988 Fleet Street, in the Municipality of Coquitlam, Province of British Columbia, hereby certify that:

1. I received a Bachelor of Science degree in geology from the University of Cape Town, Cape Town, South Africa, in 1963, and a Doctor of Philosophy degree in geology from the Memorial University of Newfoundland, St. John's, Newfoundland in 1974.

2. I have been practising my profession as an exploration geologist since 1963.

3. I am a registered Professional Geologist of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.

4. I am a Fellow of the Geological Association of Canada and a Member of the Society of Economic Geologists.

5. I ~~am~~ was employed by Imperial Metals Corporation of Suite 800-601 West Hastings Street, in the City of Vancouver, Province of British Columbia, during the period of work described by this report.

6. The work described in this report was undertaken under my direct supervision.

25 day of November, 1986

Vancouver, British Columbia

A.M.S. Clark, Ph.D., FGAC, MSEG
Geologist

APPENDIX 1

Analytical Results

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN,FE,CA,P,CR,MG,BA,TI,B,AL,NA,K,W,SI,ZR,CE,SN,Y,NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SILTS AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: JULY 8 1985 DATE REPORT MAILED: July 10/85 ASSAYER.. T. Saundry DEAN TOYE OR TOM SAUNDRY, CERTIFIED B.C. ASSAYER

IMPERIAL METALS CORPORATION PROJECT - 4307 FILE # 85-1254 PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
EWS-1	2	62	20	98	.1	24	16	976	4.32	35	5	ND	1	23	1	3	2	104	.71	.11	9	39	1.03	176	.14	4	2.66	.01	.04	1	11
EWS-2	2	72	22	126	.1	28	15	897	4.48	44	5	ND	1	19	1	2	2	102	.63	.11	7	34	1.04	127	.15	4	2.27	.01	.03	1	7
EWS-3	2	53	15	98	.2	20	18	1322	4.15	35	5	ND	1	24	1	4	2	97	.61	.09	11	50	.68	195	.09	4	2.80	.01	.03	1	6
EWS-4	2	49	24	128	.1	26	20	1515	4.01	29	5	ND	1	37	1	2	3	101	1.02	.12	12	44	1.26	330	.13	15	2.85	.01	.04	1	5
EWS-5	2	38	9	89	.1	28	23	1446	3.40	26	5	ND	1	33	1	2	2	87	.91	.10	9	47	1.15	369	.10	16	2.88	.01	.02	1	20
EWS-6	2	46	7	85	.1	37	28	1319	5.03	45	5	ND	1	15	1	2	2	134	.80	.06	4	107	2.28	187	.22	21	3.04	.01	.03	1	1
EWS-7	2	33	13	122	.1	42	29	1407	4.79	33	5	ND	1	23	1	2	2	119	.86	.05	2	69	1.67	246	.22	37	3.48	.01	.02	1	2
EWS-100	2	95	28	71	.5	18	13	2186	2.82	11	5	ND	1	69	2	2	2	57	1.90	.22	57	41	.92	308	.06	7	3.93	.01	.04	1	3
EWS-101	2	52	21	110	.1	20	15	1781	4.07	23	5	ND	1	33	1	2	2	86	.76	.12	23	34	1.46	182	.11	4	2.70	.02	.05	1	11
EWS-102	2	72	22	172	.1	24	17	1057	6.10	56	5	ND	1	18	1	2	2	139	.67	.13	6	41	1.45	112	.20	2	2.71	.01	.04	1	1
EWS-103	2	58	29	149	.2	22	16	1301	4.14	37	5	ND	1	35	1	2	2	97	1.09	.11	13	34	1.17	157	.13	2	2.56	.01	.04	1	3
EWS-200	5	74	53	145	.2	21	28	5973	3.06	17	5	ND	1	22	1	2	2	56	.56	.19	10	18	.37	515	.03	2	2.11	.01	.05	1	6
EWS-201	1	65	20	72	.1	19	9	3273	1.90	8	5	ND	1	68	1	2	2	20	1.47	.13	16	11	.51	1121	.01	5	1.83	.01	.04	1	24
EWS-202	2	37	24	81	.1	12	10	1872	3.24	12	5	ND	1	28	1	2	2	54	.63	.10	14	16	.60	747	.02	2	1.67	.01	.07	1	4
EWS-203	3	60	36	230	.2	24	25	5700	1.95	19	5	ND	1	44	1	2	2	33	1.00	.20	18	12	.23	533	.03	4	2.94	.01	.03	1	8
EWS-204	3	53	31	248	.2	31	24	3895	3.81	14	5	ND	1	50	1	2	2	79	1.36	.15	15	20	.59	443	.07	5	2.93	.01	.04	1	4
EWS-205	2	43	30	110	.1	18	15	2592	2.72	19	5	ND	1	40	1	2	2	47	1.05	.13	14	12	.78	556	.05	2	1.83	.01	.05	1	20
EWS-206	2	38	14	95	.1	19	16	1501	3.87	29	5	ND	1	24	1	3	2	85	.88	.08	9	23	1.02	267	.13	15	1.91	.01	.05	1	4
EWS-207	2	35	6	119	.1	12	15	847	4.66	31	5	ND	1	18	1	2	3	136	.55	.07	4	16	1.08	161	.17	2	2.05	.01	.03	1	3
EWS-208	4	68	21	135	.1	24	17	1534	4.69	36	5	ND	1	14	1	2	2	65	.35	.13	16	21	1.01	220	.04	2	2.02	.01	.06	1	6
EWS-209	2	42	20	104	.1	9	21	1163	6.00	39	5	ND	1	23	1	2	3	157	.67	.13	6	19	1.63	171	.19	2	2.46	.01	.04	1	4
EWS-210	3	56	13	109	.1	20	18	1136	5.18	34	5	ND	1	18	1	2	2	114	.54	.12	10	21	1.33	176	.14	7	2.12	.01	.06	1	2
EWS-301	1	65	18	83	.1	21	17	945	4.73	43	5	ND	1	22	1	2	2	135	.73	.13	7	36	1.36	110	.23	2	2.55	.01	.04	1	1
EWS-302	2	59	15	95	.2	21	17	1154	3.86	35	5	ND	1	22	1	2	2	88	.72	.11	8	26	1.14	138	.14	2	2.14	.01	.04	1	2
EWS-303	2	50	20	117	.1	26	15	1468	3.85	29	5	ND	1	37	1	2	2	75	.91	.13	16	36	1.43	179	.08	2	2.53	.01	.06	1	34
EWS-304	2	50	17	78	.1	27	14	1303	4.07	40	5	ND	1	24	1	2	2	74	.75	.10	13	33	1.29	152	.12	2	2.65	.01	.04	1	6
STD C/AU-0.5	21	59	39	137	7.1	66	27	1148	3.94	41	18	7	37	50	17	15	19	61	.48	.15	36	59	.88	178	.08	38	1.72	.06	.12	11	490

(TR)

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

E & W

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-2 SOILS P3-ROCKS AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

-80 MESH

DATE RECEIVED: JULY 8 1985 DATE REPORT MAILED: July 15/85 ASSAYER: T. Saundry. DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

IMPERIAL METALS CORPORATION PROJECT - 4307 FILE # 85-1263 PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
EW2S-0	3	19	16	45	.2	1	8	213	4.43	12	5	ND	1	4	1	3	2	230	.14	.08	5	22	.10	144	.22	2	1.06	.01	.02	1	8
EW2S-200	1	47	13	71	.2	27	21	910	5.40	2	5	ND	1	15	1	2	2	164	.59	.09	7	97	1.38	125	.16	2	3.20	.01	.08	1	2
EW2S-400	1	14	8	30	.2	4	4	211	2.12	8	5	ND	2	6	1	2	2	37	.12	.06	16	12	.17	170	.01	2	1.32	.01	.04	1	1
EW2S-600	1	24	10	47	.2	7	7	228	5.54	12	6	ND	2	8	1	2	5	223	.33	.14	7	33	.24	91	.36	3	1.32	.01	.03	1	2
EW2S-800	3	33	15	59	.1	2	7	293	7.85	18	5	ND	2	6	1	2	2	166	.08	.16	10	26	.36	112	.02	2	2.40	.01	.03	1	2
EW2S-1000	2	27	28	57	.1	3	9	474	9.55	30	5	ND	1	9	1	2	2	191	.08	.24	14	34	.39	356	.13	2	2.77	.01	.04	1	1
EW2S-1200	1	50	15	72	.1	12	14	480	11.32	2	6	ND	5	6	1	2	2	196	.25	.27	17	59	1.12	47	.31	2	5.03	.01	.03	1	2
EW2S-1400	1	34	29	91	.2	9	12	715	7.62	9	5	ND	4	18	1	2	3	183	.32	.13	15	44	.87	175	.27	2	3.91	.01	.08	1	3
EW2S-1600	1	16	10	21	.1	2	6	173	7.30	2	5	ND	2	5	1	2	6	297	.26	.08	3	52	.14	30	.42	2	1.33	.01	.02	1	1
EW2S-1800	1	27	12	34	.1	12	11	465	5.08	2	5	ND	1	8	1	2	2	192	.69	.08	5	39	.49	75	.30	3	1.59	.01	.03	1	1
EW2S-2000	1	3	7	7	.3	1	2	58	1.27	4	5	ND	1	4	1	2	2	73	.08	.03	3	6	.06	22	.19	2	.26	.01	.02	1	1
EW2S-2200	1	11	13	18	.1	3	7	127	7.69	7	5	ND	2	6	1	2	2	338	.24	.08	9	35	.13	21	.28	2	1.34	.01	.03	1	2
EW3S-0	8	28	13	37	.1	4	9	285	5.36	20	5	ND	1	3	1	4	5	427	.12	.13	3	19	.12	70	.52	2	.75	.01	.02	1	1
EW3S-200	5	19	14	39	.4	4	4	283	3.28	9	5	ND	1	22	1	2	2	104	.12	.09	5	13	.19	265	.13	2	1.49	.01	.02	1	1
EW3S-400	5	60	33	114	.1	15	17	652	10.03	29	6	ND	3	7	1	2	2	188	.13	.22	23	41	.26	1336	.14	2	2.52	.01	.05	1	3
EW3S-600	1	36	14	55	.1	7	17	1385	5.34	2	5	ND	1	21	1	2	2	130	.42	.12	19	22	1.11	177	.21	4	2.97	.01	.04	1	3
EW3S-800	1	25	20	57	.1	9	11	380	6.45	15	5	ND	1	10	1	2	3	144	.26	.07	19	39	1.08	94	.09	2	3.73	.01	.05	1	2
EW3S-1000	1	37	20	91	.1	9	20	909	7.15	11	5	ND	3	12	1	2	2	148	.22	.17	22	17	1.59	187	.33	5	4.31	.01	.06	1	1
EW3S-1200	1	45	14	34	.3	12	13	511	4.06	3	6	ND	1	7	1	2	2	108	.33	.13	7	33	.25	50	.08	2	1.99	.01	.03	1	1
EW3S-1400	1	11	11	26	.1	1	7	273	7.16	7	5	ND	1	7	1	2	3	333	.47	.08	7	9	.14	39	.37	2	1.34	.01	.02	1	1
EW3S-1600	1	18	8	22	.1	5	8	239	6.08	3	5	ND	1	4	1	2	2	201	.22	.06	5	22	.60	43	.18	2	1.99	.01	.03	1	2
EW3N-0	1	10	7	22	.1	2	6	203	5.39	8	5	ND	1	19	1	2	6	249	.22	.06	6	35	.13	41	.47	2	1.10	.01	.02	1	3
EW3N-200	1	35	14	27	.1	1	7	437	9.76	10	5	ND	1	7	1	2	2	200	.07	.13	8	52	.21	41	.15	2	2.27	.01	.03	1	2
EW3N-400	1	13	15	23	.1	5	7	317	7.07	15	5	ND	1	7	1	2	4	278	.14	.08	7	34	.23	32	.38	2	1.64	.01	.02	1	2
EW3N-600	1	38	11	48	.1	8	9	2652	4.43	6	5	ND	1	30	1	2	2	109	.33	.09	9	21	.34	237	.18	9	2.03	.01	.05	1	5
EW3N-800	1	13	10	16	.1	5	4	1969	2.10	4	5	ND	1	4	1	3	2	48	.03	.05	16	11	.11	40	.03	2	.54	.01	.02	1	24
EW3N-1000	1	36	14	67	.1	5	10	969	9.24	3	5	ND	1	16	1	2	2	160	.06	.14	8	36	.67	231	.05	2	3.77	.01	.05	1	8
EW3N-1200	1	13	6	26	.2	5	4	568	4.04	10	5	ND	1	35	1	2	2	113	.15	.08	4	12	.24	95	.20	2	1.60	.01	.04	1	6
EW3N-1400	1	26	23	53	.3	5	14	4344	6.08	21	5	ND	1	12	1	4	2	80	.15	.14	5	12	.40	438	.07	5	2.29	.01	.04	1	5
EW3N-1600	1	13	3	18	.4	1	4	297	2.82	4	5	ND	1	12	1	3	2	111	.10	.04	2	10	.17	109	.17	2	1.07	.01	.03	1	3
EW4 2500	3	42	19	233	.1	10	13	338	8.58	18	5	ND	1	27	1	2	2	295	.30	.06	8	38	.44	125	.10	3	2.00	.01	.02	1	2
EW4 2300	1	18	15	32	.1	5	8	274	6.21	5	5	ND	1	9	1	3	2	225	.44	.05	6	28	.28	35	.18	2	2.36	.01	.02	1	3
EW4 2100	1	17	9	32	.1	5	8	413	5.30	5	5	ND	1	12	1	2	4	211	.41	.06	4	36	.34	72	.31	2	1.73	.01	.02	1	2
EW4 1900	1	55	30	73	.3	12	16	2210	3.57	3	7	ND	2	68	1	2	2	101	1.84	.16	18	29	.73	295	.10	7	2.46	.01	.03	1	1
EW4 1700	1	59	21	63	.3	16	19	2456	4.91	2	5	ND	1	14	1	2	2	92	.38	.47	16	46	1.29	123	.05	3	2.84	.01	.06	1	2
EW4 1500	1	64	28	90	.3	9	30	3518	4.05	16	5	ND	1	26	1	2	2	67	.48	.27	10	17	.75	276	.04	8	1.76	.01	.06	1	1
EW4 1300	1	24	23	36	.1	11	10	419	7.05	13	5	ND	1	9	1	2	2	158	.17	.08	12	31	.46	82	.17	2	2.44	.01	.02	1	2
STD C/AU-0.5	21	58	40	135	6.9	69	28	1179	3.95	39	18	7	40	53	17	15	20	60	.48	.15	38	59	.88	185	.08	38	1.69	.06	.11	12	480

IMPERIAL METALS CORPORATION PROJECT - 4307 FILE # 85-1263

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
EW4-1200N	1	19	25	55	.1	7	10	775	4.60	9	5	ND	1	9	1	2	5	137	.13	.20	17	19	.70	94	.19	2	2.14	.01	.05	1	2
EW4-1000N	1	40	18	38	.1	25	14	405	5.98	2	5	ND	1	13	1	2	2	150	.65	.05	2	85	.93	33	.17	2	2.84	.01	.03	1	3
EW4-800N	10	44	55	108	.4	11	8	572	4.28	38	5	ND	1	14	1	2	2	115	.26	.10	10	23	.08	174	.04	2	.63	.01	.06	1	5
EW4-600N	1	63	21	55	.1	4	8	1192	2.97	2	5	ND	1	7	1	2	2	33	.06	.06	7	6	.54	173	.13	4	1.86	.01	.11	1	21
EW4-400N	1	51	24	47	.2	10	14	1407	4.61	2	5	ND	1	19	1	2	2	84	.15	.09	6	20	.29	231	.06	8	2.22	.01	.06	1	6
EW4-200N	1	41	17	62	.2	6	10	637	5.10	5	5	ND	1	5	1	2	2	38	.09	.11	4	10	.52	144	.01	2	2.78	.01	.05	1	3
EW4-0N	1	61	24	111	.2	8	24	5588	5.71	2	5	ND	1	16	1	2	2	74	.26	.22	12	14	.53	324	.01	3	2.33	.01	.12	1	3
EW5-0	1	30	16	58	.2	8	9	349	6.97	5	5	ND	1	7	1	2	2	145	.12	.09	2	32	.30	82	.08	2	3.15	.01	.03	1	3
EW5-200	1	82	13	89	.1	23	29	5971	7.54	2	5	ND	1	31	1	2	2	222	.45	.21	2	38	.76	147	.12	2	2.56	.01	.04	1	9
EW5-400	1	23	11	26	.1	7	8	482	5.72	2	5	ND	1	51	1	2	8	330	.44	.07	2	27	.29	36	.70	2	1.31	.01	.02	1	5
EW5-600	1	21	18	28	.1	5	7	215	9.16	12	5	ND	2	8	1	2	2	278	.13	.16	2	31	.15	34	.40	2	1.75	.01	.03	1	3
EW5-800	1	97	10	63	.1	23	19	950	5.83	2	5	ND	1	12	1	2	4	146	.82	.12	10	37	1.60	108	.35	2	3.87	.01	.04	1	2
EW5-1000	1	34	23	28	.1	6	6	217	11.02	16	5	ND	2	8	1	2	2	225	.22	.12	2	42	.25	36	.39	2	2.28	.01	.03	1	2
EW5-1075	1	71	18	90	.3	16	20	2456	4.72	2	5	ND	1	39	1	2	2	91	.88	.24	34	26	1.67	188	.13	4	3.16	.01	.07	1	2
EW5-1275	1	48	40	86	.1	8	24	5811	7.26	13	5	ND	1	27	1	2	2	123	.51	.31	13	23	.52	285	.15	2	2.09	.01	.08	1	7
EW5-1475	1	24	22	44	.1	9	10	1397	7.21	15	5	ND	2	16	1	2	2	186	.16	.13	5	32	.33	277	.19	2	2.47	.01	.03	1	2
EW5-1675	1	71	18	77	.3	21	13	522	5.15	3	5	ND	1	8	1	2	2	98	.15	.09	4	34	.76	159	.09	2	3.52	.01	.04	1	10
EW5-1875	1	41	15	58	.2	9	9	851	5.10	11	5	ND	1	6	1	3	2	112	.11	.14	8	25	.36	93	.03	2	2.52	.01	.04	1	3
EW5-2075	1	26	13	45	.2	9	8	588	4.62	3	5	ND	1	9	1	2	2	125	.18	.10	3	27	.32	68	.08	2	1.49	.01	.04	1	4
EW5-2275	1	65	24	105	.3	23	12	548	5.23	9	5	ND	2	6	1	2	2	101	.10	.09	5	38	.71	119	.02	2	3.07	.01	.06	1	3
EW6-0	1	17	11	26	.1	3	4	310	3.69	8	5	ND	1	16	1	2	2	130	.11	.06	5	14	.22	62	.07	2	1.36	.01	.02	1	3
EW6-200	14	63	28	112	.5	43	17	533	5.84	38	5	ND	2	5	1	5	2	150	.08	.11	2	72	.31	115	.02	2	1.35	.01	.04	1	2
EW6-400	10	89	75	148	.3	35	51	5769	7.50	56	5	ND	1	9	1	3	2	143	.15	.17	10	31	.11	476	.02	2	1.88	.01	.06	1	6
EW6-600	4	33	32	102	.1	18	31	6629	4.02	10	5	ND	1	22	1	3	2	92	.49	.18	11	27	.20	441	.08	2	1.29	.02	.06	1	2
EW6-800	7	58	21	113	.1	15	17	4262	8.78	13	5	ND	1	10	1	2	2	182	.19	.14	7	17	.23	218	.01	2	2.10	.01	.07	1	2
EW6-1000	2	80	36	116	.1	19	18	5037	5.20	2	5	ND	2	6	1	2	2	46	.13	.10	12	16	.28	242	.01	2	2.78	.01	.04	1	33
EW2-0	5	109	36	175	.2	42	15	370	6.73	37	5	ND	2	7	1	3	2	91	.11	.07	13	38	.56	147	.04	3	4.32	.01	.04	1	10
EW2-200	4	29	23	72	.2	9	9	649	2.90	34	5	ND	1	5	1	4	2	67	.13	.07	15	14	.10	83	.03	2	.81	.01	.04	1	3
EW2-400	1	56	21	99	.1	25	11	555	5.95	8	5	ND	1	8	1	2	2	94	.17	.05	6	40	.81	130	.04	2	3.30	.01	.04	1	3
EW2-600	1	28	18	48	.1	1	8	1589	5.35	2	5	ND	1	15	1	2	2	93	.42	.12	5	11	.23	166	.03	2	1.91	.01	.08	1	5
EW2-800	1	15	12	43	.1	4	7	759	3.39	6	5	ND	1	8	1	3	2	71	.13	.07	5	15	.22	131	.02	2	1.55	.01	.05	1	1
EW2-1000	1	36	8	72	.1	15	24	2374	4.38	2	5	ND	1	10	1	2	2	86	.22	.13	9	35	.40	243	.06	2	3.57	.01	.03	1	2
STD C/AU-0.5	21	59	38	138	6.9	65	28	1192	3.95	40	17	7	40	53	17	16	20	58	.48	.15	40	58	.88	181	.08	38	1.72	.07	.13	13	490

IMPERIAL METALS CORPORATION PROJECT - 4307 FILE # 85-1263 PAGE 3

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R-85-1	4	1	9	130	.1	85	19	1922	6.20	43	5	ND	4	210	3	2	2	35	18.38	.03	7	4	6.29	6	.01	2	.07	.01	.04	1	56
R-85-2	1	79	7	63	.1	37	15	994	3.84	2	5	ND	4	106	1	2	2	106	12.47	.10	10	194	3.81	36	.01	2	2.89	.02	.05	1	29
R-85-3	2	105	7	72	.1	71	22	838	4.69	2	5	ND	4	134	1	2	2	78	10.35	.04	7	240	4.30	53	.01	6	2.97	.01	.07	1	14
R-85-4	1	47	12	109	.1	65	9	557	3.69	20	5	ND	1	6	1	2	2	56	.27	.03	6	40	.86	56	.07	2	1.20	.01	.06	1	10
R-85-5	1	104	4	85	.1	36	18	1006	5.33	2	5	ND	1	41	1	2	2	64	2.79	.13	10	50	1.85	122	.01	2	1.67	.01	.14	1	1
R-85-6	82	49	84	620	1.8	19	3	520	4.84	44	5	ND	1	81	5	2	2	9	3.39	.04	6	7	.48	19	.01	2	.09	.01	.04	1	32
R-85-7	2	59	17	131	.4	28	8	242	5.20	18	5	ND	1	15	1	2	3	123	.51	.27	12	50	1.08	45	.01	2	1.67	.01	.05	1	1
EW2-650-600	3	42	9	19	.1	15	3	110	1.54	4	5	ND	1	5	1	2	2	5	.06	.02	2	6	.07	79	.01	2	.14	.01	.03	1	4
EW2-700	2	124	32	29	.1	21	7	493	2.60	2	5	ND	1	9	1	2	2	28	.20	.12	4	11	.28	766	.01	2	.53	.01	.01	1	44
EW2-800	3	8	11	4	.1	3	2	589	2.76	2	5	ND	1	1	1	2	2	29	.01	.01	2	4	.01	58	.01	4	.02	.01	.01	37	21
EW7 1740	1	93	8	125	.1	22	15	2183	5.06	8	5	ND	2	60	1	2	2	51	4.73	.18	12	45	2.00	176	.01	3	2.64	.02	.16	1	2
STD C/AU-0.5	21	60	38	133	6.9	68	26	1118	3.93	39	17	7	36	49	17	15	21	59	.46	.14	37	59	.88	173	.07	37	1.72	.06	.11	12	510

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

WHOLE ROCK ICP ANALYSIS

A .1000 GRAM SAMPLE IS FUSED WITH .60 GRAM OF LIBO2 AND IS DISSOLVED IN 50 MLS 5% HNO3. SAMPLE TYPE: ROCK CHIPS

DATE RECEIVED: JULY 8 1985 DATE REPORT MAILED: July 15/85 ASSAYER. T. Saundry. DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS CORPORATION PROJECT - 4307 FILE # 85-1263 PAGE 3

SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Loi %	Sum -
R-85-3	38.25	11.05	7.85	7.87	14.39	.27	1.08	.51	.09	.14	.09	17.9	99.49

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN,FE,CA,P,CR,MG,BA,TI,B,AL,NA,K,W,SI,ZR,CE,SN,Y,NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SOILS/SILTS AU# ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: JULY 6 1985 DATE REPORT MAILED: July 12/85 ASSAYER: V. Saundry DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

IMPERIAL METALS CORPORATION PROJECT - 4309 FILE # 85-1253

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au# PPB
7EW 0	1	33	6	42	.1	10	11	281	5.68	8	5	ND	1	7	1	2	2	153	.34	.04	5	47	.59	49	.12	2	2.69	.01	.03	1	1
7EW 200	1	50	4	64	.1	24	14	412	5.63	3	5	ND	1	10	1	2	2	135	.46	.06	6	56	1.03	66	.14	9	3.44	.01	.03	1	1
7EW 400	1	6	7	28	.1	5	5	1140	1.34	2	5	ND	1	13	1	2	2	62	.84	.04	4	15	.25	62	.20	7	.96	.01	.02	1	1
7EW 600	1	61	10	94	.3	28	30	790	5.99	6	5	ND	1	10	1	2	2	143	.31	.11	7	56	1.18	82	.12	9	3.80	.01	.04	1	5
7EW 800	1	80	10	77	.6	27	14	391	6.07	12	5	ND	1	9	1	2	2	112	.19	.10	8	45	1.16	94	.01	6	3.99	.01	.05	1	1
7EW 1000	1	42	10	47	.1	18	8	246	5.86	17	5	ND	1	7	1	2	2	114	.11	.15	3	44	.61	59	.01	6	2.82	.01	.04	1	1
7EW 1200	4	289	17	178	.3	48	20	1614	4.72	18	5	ND	1	13	1	2	2	82	.31	.16	10	56	.88	213	.06	5	2.58	.01	.05	1	5
7EW 1400	1	42	6	81	.1	26	12	499	5.60	7	5	ND	1	10	1	2	2	121	.22	.09	5	41	.60	191	.06	2	3.66	.01	.03	1	1
7EW 1600	1	46	12	65	.1	27	10	425	4.87	8	5	ND	1	7	1	2	2	102	.17	.07	6	40	.75	110	.07	2	3.44	.01	.03	1	3
7EW 1800	1	89	9	65	.2	14	12	463	4.45	27	5	ND	1	6	1	2	2	63	.09	.15	20	19	.76	174	.01	5	3.09	.01	.05	1	15
7EW 2000	1	10	8	27	.2	10	5	295	2.33	3	5	ND	1	14	1	2	2	90	.41	.05	4	18	.22	119	.09	5	1.10	.01	.02	1	1
6SS-1	2	104	34	317	.1	27	22	1492	6.56	9	5	ND	1	137	2	2	2	136	1.52	.21	12	53	2.05	88	.12	2	3.87	.21	.19	1	6
6SS-3	2	81	22	195	.1	26	23	1814	5.73	6	5	ND	1	85	1	2	2	145	1.16	.19	8	67	1.99	93	.15	6	4.21	.13	.20	1	30
6SS-5	1	100	18	259	.1	25	18	1267	5.07	4	5	ND	1	110	1	2	2	118	1.65	.16	7	58	1.86	59	.13	4	3.96	.09	.13	1	9
621C	2	90	11	206	.1	18	16	869	4.09	21	5	ND	1	104	1	2	2	68	1.77	.14	6	26	1.34	27	.06	2	3.10	.03	.07	1	15
STD C/AU-0.5	20	59	39	127	6.9	70	27	1093	3.89	40	17	6	37	49	16	15	19	58	.48	.15	39	58	.88	174	.08	39	1.71	.06	.11	11	520

APPENDIX 2

Correlation Co-efficients

```
. display structure
STRUCTURE FOR FILE:   A:SOILCHEM.DBF
NUMBER OF RECORDS:    00080
DATE OF LAST UPDATE:  03/17/88
PRIMARY USE DATABASE
FLD       NAME        TYPE  WIDTH    DEC
001       MOPPM       N     005
002       CUPPM       N     005
003       PBPPM       N     005
004       ZNPPM       N     005
005       AGPPM       N     005      001
006       NIPPM       N     005
007       COPPM       N     005
008       MNPPM       N     005
009       FEPCT       N     006      002
010       ASPPM       N     005
011       UPPM        N     005
012       AUPPM       N     005
013       THPPM       N     005
014       SRPPM       N     005
015       CDPPM       N     005
016       SBPPM       N     005
017       BIPPM       N     005
018       VPPM        N     005
019       CAPCT       N     005      002
020       PPCT        N     005      002
021       LAPPM       N     005
022       CRPPM       N     005
023       MGPCT       N     005      002
024       BAPPM       N     005
025       TIPCT       N     005      002
026       BPPM        N     005
027       ALPCT       N     005      002
028       NAPCT       N     005      002
029       KPCT        N     005      002
030       WPPM        N     005
031       AUPPB       N     005
** TOTAL **            00157
. set print off
```

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
1	1.9125	2.355676	2	19.77672	.2344349
			3	14.63625	.5638503
			4	41.26422	.4439677
			5	8.884373E-02	.3579214
			6	9.172813	.3840559
			7	5.12094	.2800934
			8	532.3706	.1441609
			9	.350235	7.272225E-02
			10	17.66	.730373
			11	-1.843739E-02	-2.563781E-02
			12	0	1.701412E+38
			13	7.625008E-02	4.677193E-02
			14	-2.957657	-.1192109
			15	0	1.701412E+38
			16	.7457815	.5536708
			17	-.1025	-3.972387E-02
			18	18.18671	9.958918E-02
			19	-.103011	-.1715629
			20	8.346945E-03	5.020384E-02
			21	-.1849995	-1.329863E-02
			22	3.460312	8.748018E-02
			23	-.2412766	-.2650558
			24	105.127	.2699301
			25	-4.895623E-02	-.1508222
			26	-.7021871	-.1581085
			27	-.5779405	-.2469655
			28	2.609417E-04	.1003294
			29	3.34847E-03	7.107919E-02
			30	0	1.701412E+38
			31	-.0157814	-1.318055E-03
2	42.1625	36.26431	3	107.2612	.2684188
			4	949.1111	.663332
			5	1.085716	.2841275
			6	271.8416	.7393395
			7	138.0648	.4905375
			8	14852.21	.2612527
			9	5.769058	7.781241E-02
			10	87.46005	.2349633
			11	.4503327	4.067722E-02
			12	0	1.701412E+38
			13	.4137535	1.648629E-02
			14	19.7392	5.168137E-02
			15	0	1.701412E+38
			16	-1.076088	-5.189482E-02
			17	-7.127503	-.1794326
			18	-727.1533	-.2586546
			19	.769145	.0832117
			20	.708159	.2766791
			21	43.45249	.2029024
			22	177.5667	.291603
			23	5.623316	.401283
			24	1266.343	.2112149
			25	-1.469332	-.2940449

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
			26	15.65407	.2289632
			27	13.82736	.3838207
			28	-1.145184E-03	-.028602
			29	.2369428	.32672
			30	0	1.701412E+38
			31	40.86859	.2217246
3	17.7	11.15869	4	241.2737	.5480118
			5	.2354992	.2002869
			6	32.69248	.2889628
			7	48.54499	.5605311
			8	8544.086	.4884289
			9	5.351959	.2345972
			10	74.53249	.6507315
			11	.3225021	9.467088E-02
			12	0	1.701412E+38
			13	1.264999	.1638689
			14	10.31123	8.773668E-02
			15	0	1.701412E+38
			16	1.096249	.1718112
			17	-2.005005	-.1640384
			18	-106.3064	-.1252029
			19	2.483702E-02	8.732561E-03
			20	.2831006	.3594615
			21	18.96748	.2878381
			22	-2.932495	-.0156507
			23	-.3484144	-8.080168E-02
			24	873.5959	.4735326
			25	-.3912261	-.2544412
			26	-2.120003	-.1007723
			27	.2836266	2.558599E-02
			28	1.787603E-03	.1450969
			29	9.296274E-02	.4165884
			30	0	1.701412E+38
			31	11.23875	.1981564
4	63.1625	39.95487	5	.8982162	.2133476
			6	262.7915	.6487078
			7	186.6772	.6019915
			8	23560.27	.3761488
			9	18.7843	.2299581
			10	182.9351	.4460637
			11	.4253235	3.486959E-02
			12	0	1.701412E+38
			13	3.888756	.1406376
			14	48.95166	.1163273
			15	0	1.701412E+38
			16	1.54892	8.779768E-02
			17	-10.8275	-.2474013
			18	-527.7656	-.1703904
			19	.2257691	2.216921E-02
			20	.7606611	.2697407
			21	69.78998	.2957844
			22	147.4042	.2197101
			23	4.371933	.2831662

COL #	MEAN	STD DEV	COL #	COVARIANCE	CORRELATION
			24	2564.905	.3882883
			25	-2.246709	-.4080844
			26	8.041565	.1067551
			27	15.05075	.3786863
			28	4.855097E-03	.1100598
			29	.3119435	.3904073
			30	0	1.701412E+38
			31	30.0936	.1481863
5	.1725001	.1067054	6	.3630619	.3355843
			7	.1381872	.1686591
			8	.9081574	5.429048E-03
			9	-6.654942E-02	-.3050571
			10	.2872492	.262266
			11	3.31229E-03	.1016808
			12	0	1.701412E+38
			13	4.24999E-03	5.755221E-02
			14	.0900929	8.016559E-02
			15	0	1.701412E+38
			16	1.653129E-02	.2709417
			17	-2.399999E-02	-.2053374
			18	-2.764542	-.334203
			19	1.215525E-04	4.469233E-03
			20	7.018708E-04	9.319563E-02
			21	-1.000881E-03	-1.588356E-03
			22	7.431078E-02	4.147394E-02
			23	4.068405E-03	9.866776E-02
			24	.9327679	.0528737
			25	-4.94876E-03	-.3365758
			26	4.056251E-02	.2016305
			27	-3.954351E-03	-3.730418E-02
			28	-9.062118E-06	-7.692079E-02
			29	3.184397E-04	.1492287
			30	0	1.701412E+38
			31	-.0410316	-7.565462E-02
6	11.975	10.26728	7	45.27562	.5681691
			8	2995.717	.1861205
			9	1.064598	5.071699E-02
			10	32.98499	.31299
			11	-.0231247	-7.377644E-03
			12	0	1.701412E+38
			13	.1575003	2.216595E-02
			14	-3.452194	-3.192447E-02
			15	0	1.701412E+38
			16	.8434372	.1436656
			17	-2.327501	-.2069559
			18	-192.1111	-.241363
			19	.2437475	9.314085E-02
			20	6.633139E-02	9.153526E-02
			21	2.86499	4.725193E-02
			22	99.54938	.5774215
			23	1.725402	.434883
			24	231.8933	.1366109
			25	-.4748632	-.3356494

VAR. Y	MEAN	STD DEV	VAR. X	COVARIANCE	CORRELATION
			26	3.399376	.175615
			27	4.71492	.4622613
			28	7.532016E-04	6.644406E-02
			29	3.477845E-02	.1693816
			30	0	1.701412E+38
			31	4.374062	8.381716E-02
7	12.525	7.859487	8	8810.115	.7150501
			9	2.908707	.181021
			10	21.64	.2682456
			11	9.812928E-02	4.089796E-02
			12	0	1.701412E+38
			13	1.749992E-02	3.217382E-03
			14	16.07094	.1941471
			15	0	1.701412E+38
			16	.2378159	5.291786E-02
			17	-1.51	-.1753986
			18	-89.44519	-.1468035
			19	.4625664	.2309061
			20	.275044	.4958301
			21	12.635	.272228
			22	33.60065	.2546029
			23	1.161785	.3825332
			24	527.6878	.4061023
			25	-.2590132	-.2391666
			26	3.038128	.2050358
			27	2.64188	.3383667
			28	2.309412E-03	.2661385
			29	6.890953E-02	.4384264
			30	0	1.701412E+38
			31	2.49469	6.244906E-02
8	1214.663	1587.501	9	4.260742	1.312788E-03
			10	1090.911	6.694915E-02
			11	-12.46143	-.0257129
			12	0	1.701412E+38
			13	-130.0736	-.1183957
			14	5255.307	.3143171
			15	0	1.701412E+38
			16	83.78028	9.229614E-02
			17	-323.5149	-.1860475
			18	-32980.22	-.2679868
			19	77.13693	.1906356
			20	53.85482	.4806573
			21	1779.715	.1898403
			22	-4798.985	-.1800302
			23	18.76361	3.058723E-02
			24	104843.7	.3994672
			25	-63.93511	-.2922796
			26	293.3545	9.801595E-02
			27	-7.881348	-4.997529E-03
			28	.7017985	.4004046
			29	15.6159	.4918863
			30	0	1.701412E+38
			31	2393.2	.2965983

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
9	5.694126	2.07033	10	4.885605	.2299049
			11	4.906464E-02	7.762938E-02
			12	0	1.701412E+38
			13	.6287632	.4388419
			14	-2.44928	-.1123266
			15	0	1.701412E+38
			16	-.2169819	-.1832903
			17	.0824728	3.636759E-02
			18	88.85846	.5536469
			19	-8.202076E-02	-.1554517
			20	4.689604E-02	.3209382
			21	.7928925	6.485248E-02
			22	14.43167	.4151327
			23	9.528232E-02	.1190996
			24	61.70386	.1802708
			25	7.014543E-02	.2458854
			26	-.8845215	-.226614
			27	.9032888	.4391934
			28	-2.092458E-04	-9.154142E-02
			29	3.491342E-04	8.432656E-03
			30	0	1.701412E+38
			31	1.504852	.1430072
10	10.4	10.39426	11	-.1299934	-4.096616E-02
			12	0	1.701412E+38
			13	.5550013	7.715448E-02
			14	-20.85249	-.1904796
			15	0	1.701412E+38
			16	2.680002	.4509179
			17	-1.035	-9.090552E-02
			18	37.2876	4.627482E-02
			19	-.8047001	-.303736
			20	9.057498E-02	.1234638
			21	9.647499	.1571713
			22	5.935028	3.400473E-02
			23	-.948575	-.2361653
			24	602.0049	.3503154
			25	-.2773254	-.1936285
			26	-1.652498	-8.432678E-02
			27	-.9949779	-9.635822E-02
			28	-4.994869E-05	-4.352425E-03
			29	1.092529E-02	5.255952E-02
			30	0	1.701412E+38
			31	-.7474976	-1.414881E-02
11	5.075	.3091475	12	0	1.701412E+38
			13	9.000063E-02	.4206689
			14	1.081566	.3321782
			15	0	1.701412E+38
			16	-1.781178E-02	-.1007621
			17	7.499695E-03	2.214732E-02
			18	.3953858	1.649791E-02
			19	3.800976E-02	.4823752
			20	.0046314	.2122616
			21	.4799996	.262922

COL #	MEAN	STD DEV	COL #	COVARIANCE	CORRELATION
			22	.476883	9.186624E-02
			23	3.290892E-03	2.754771E-02
			24	14.8197	.2899522
			25	2.337277E-03	5.486776E-02
			26	6.437683E-02	.1104541
			27	2.459668E-02	8.005765E-02
			28	-9.372831E-06	-2.746032E-02
			29	-5.842895E-04	-9.450916E-02
			30	0	1.701412E+38
			31	-.1721878	-.1095822
12	0	0	13	0	1.701412E+38
			14	0	1.701412E+38
			15	0	1.701412E+38
			16	0	1.701412E+38
			17	0	1.701412E+38
			18	0	1.701412E+38
			19	0	1.701412E+38
			20	0	1.701412E+38
			21	0	1.701412E+38
			22	0	1.701412E+38
			23	0	1.701412E+38
			24	0	1.701412E+38
			25	0	1.701412E+38
			26	0	1.701412E+38
			27	0	1.701412E+38
			28	0	1.701412E+38
			29	0	1.701412E+38
			30	0	1.701412E+38
			31	0	1.701412E+38
13	1.3	.7008134	14	-.4862499	-.0658781
			15	0	1.701412E+38
			16	-2.124977E-02	-5.302828E-02
			17	5.000115E-03	6.513598E-03
			18	8.781265	.1616324
			19	-3.212482E-03	-1.798431E-02
			20	1.090005E-02	.2203693
			21	1.2575	.3038487
			22	2.457501	.208834
			23	3.603739E-02	.1330726
			24	21.67874	.1871045
			25	2.047503E-02	.2120289
			26	-.1299999	-9.839169E-02
			27	.2306121	.3312442
			28	-3.750157E-03	-4.846716E-02
			29	5.37511E-04	3.835276E-02
			30	0	1.701412E+38
			31	-7.625008E-02	-2.140629E-02
14	12.9125	10.66545	15	0	1.701412E+38
			16	-1.191719	-.1954117
			17	1.822498	.1560025
			18	-2.563355	-3.100297E-03
			19	1.795885	.6606175
			20	.1495972	.1987327

VAR(J)	MEAN	STD DEV	CUE B	COVARIANCE	CORRELATION
			21	12.13999	.1927486
			22	-13.65219	-7.623129E-02
			23	.7252236	.1759667
			24	230.5894	.1307714
			25	.2137933	.1454749
			26	5.835312	.2902037
			27	-.2275658	-2.147814E-02
			28	1.13602E-03	9.647335E-02
			29	2.309865E-02	.1082977
			30	0	1.701412E+38
			31	-3.965782	-7.315656E-02
15	1	0	16	0	1.701412E+38
			17	0	1.701412E+38
			18	0	1.701412E+38
			19	0	1.701412E+38
			20	0	1.701412E+38
			21	0	1.701412E+38
			22	0	1.701412E+38
			23	0	1.701412E+38
			24	0	1.701412E+38
			25	0	1.701412E+38
			26	0	1.701412E+38
			27	0	1.701412E+38
			28	0	1.701412E+38
			29	0	1.701412E+38
			30	0	1.701412E+38
			31	0	1.701412E+38
16	2.2375	.5790383	17	-1.999998E-02	-3.153303E-02
			18	9.143066E-02	2.036846E-03
			19	-.0270952	-.1835864
			20	-4.20934E-03	-.1029987
			21	-.3924999	-.1147847
			22	-.7190628	-7.395533E-02
			23	-6.514204E-02	-.2911332
			24	4.024841	4.204304E-02
			25	-8.493751E-03	-.1064548
			26	-.1065617	-9.761388E-02
			27	-.1787553	-.3107565
			28	9.531155E-05	.1490866
			29	-1.267187E-03	-.1094322
			30	0	1.701412E+38
			31	.1214066	4.125137E-02
17	2.4	1.109225	18	46.66248	.5426526
			19	1.417482E-02	5.013645E-02
			20	-7.424951E-03	-.0948416
			21	-.790001	-.1206035
			22	.4724961	2.536814E-02
			23	-4.907489E-02	-.1144926
			24	-36.93253	-.2013919
			25	.11205	.7331034
			26	-.3525	-.1685611
			27	-.2549744	-.2513706
			28	-4.999712E-05	-4.082498E-02

VBL A	MEAN	STD-DEV	COL B	COVARIANCE	CORRELATION
			29	-5.325012E-03	-.2400561
			30	0	1.701412E+38
			31	-.5974999	-.1059795
18	147.5625	78.50355	19	9.582138E-02	4.788822E-03
			20	-.3162632	-5.708004E-02
			21	-110.3626	-.2380588
			22	310.189	.2353136
			23	-5.907395	-.1947351
			24	-2347.416	-.1808649
			25	9.189721	-.7570067
			26	-41.39841	-.2797127
			27	-13.28061	-.1702933
			28	-6.944299E-03	-8.011975E-02
			29	-.6428805	-.4094988
			30	0	1.701412E+38
			31	116.3914	-.2916992
19	.279875	.2581115	20	2.40729E-03	.1321435
			21	.3174503	.2082669
			22	.7044964	.1625479
			23	.0350939	.3518536
			24	1.496887E-02	3.507796E-04
			25	5.732551E-03	.1611809
			26	.157247	.3231416
			27	.0139252	5.430785E-02
			28	2.626749E-05	9.217469E-02
			29	6.139838E-05	1.189491E-02
			30	0	1.701412E+38
			31	-.2872546	-.2189592
20	.11825	7.147235E-02	21	.1966753	.4659761
			22	9.220743E-02	7.683124E-02
			23	9.444456E-03	.341961
			24	4.304793	.3643064
			25	-1.056625E-03	-.1072891
			26	8.081376E-03	.0599743
			27	1.840743E-02	.2592531
			28	7.71985E-06	9.782982E-02
			29	5.944725E-04	.4159157
			30	0	1.701412E+38
			31	-2.644059E-02	-7.278412E-02
21	8.600001	5.980136	22	-8.835022	-8.798456E-02
			23	1.047449	.4532727
			24	374.87	.3791598
			25	-.1355504	-.1644988
			26	1.214998	.1077662
			27	1.920219	.3232277
			28	3.000423E-04	4.544352E-02
			29	.0402002	.3361467
			30	0	1.701412E+38
			31	3.434998	.1130105
22	30.975	17.00408	23	2.823279	.4296733
			24	-217.8565	-7.749435E-02
			25	.1828866	.0780552
			26	-6.311798E-02	-1.968874E-03

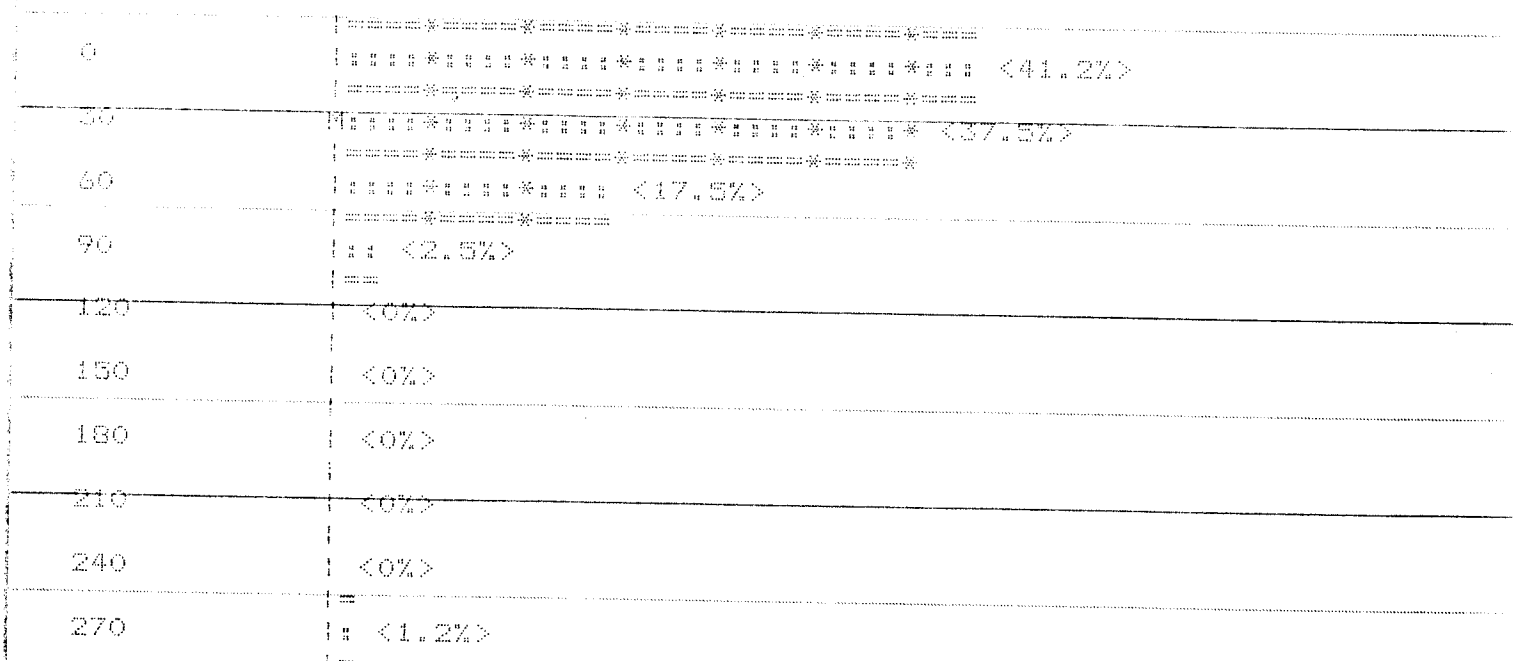
COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
			27	7.617539	.450952
			28	-4.967747E-04	-2.646105E-02
			29	-1.897121E-02	-5.578964E-02
			30	0	1.701412E+38
			31	-19.66345	-.227515
23	.5111251	.3913139	24	-2.493843	-3.854752E-02
			25	-3.688097E-03	-6.839904E-02
			26	.2242783	.3040044
			27	.2940211	.7563486
			28	-3.288784E-05	-9.000964E-02
			29	2.584996E-03	.3303286
			30	0	1.701412E+38
			31	-.1750829	-8.802824E-02
24	154.7375	167.4212	25	-5.751749	-.2493231
			26	17.73096	5.617457E-02
			27	15.34012	9.223316E-02
			28	3.578365E-02	.1935864
			29	1.109674	.3314336
			30	0	1.701412E+38
			31	58.15265	6.833807E-02
25	.1505	.1395372	26	-3.661257E-02	-.139174
			27	-2.769002E-02	-.199757
			28	-8.811709E-06	-5.719666E-02
			29	-1.024311E-03	-.367074
			30	0	1.701412E+38
			31	-.1474813	-.2079459
26	2.975	1.909172	27	.3009277	.1586667
			28	-1.21871E-04	-5.781704E-02
			29	4.52818E-03	.1186015
			30	0	1.701412E+38
			31	-.2384367	-2.457149E-02
27	2.302126	1.005991	28	-1.265109E-04	-.1139027
			29	4.898876E-03	.2435084
			30	0	1.701412E+38
			31	2.145195E-02	4.195426E-03
28	1.012499E-02	1.118053E-03	29	2.359768E-06	.1055403
			30	0	1.701412E+38
			31	-2.453029E-04	-.0431662
29	4.112498E-02	2.025123E-02	30	0	1.701412E+38
			31	1.891728E-02	.1837853
30	1	0	31	0	1.701412E+38
31	3.9625	5.147063			

OF ROWS = 80

APPENDIX 3

Frequency Histograms of Soil Sample Results

LOW LIMIT (DX = 30 SCALE = 1:1)



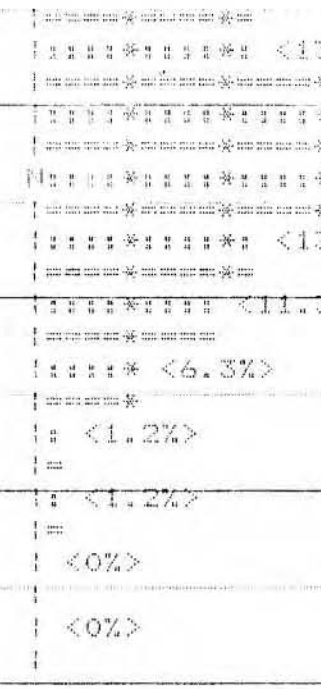
---> FREHIST (a:soilchem.dat):

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	30	33	41.2	33	41.2	
30	60	30	37.5	63	78.7	*MEDIAN*
60	90	14	17.5	77	96.2	
90	120	2	2.5	79	98.7	
120	150	0	0	79	98.7	
150	180	0	0	79	98.7	
180	210	0	0	79	98.7	
210	240	0	0	79	98.7	
240	270	0	0	79	98.7	
270	300	1	1.2	80	100	

MEAN: 42.375 S-SQUARED: 1331.859 S: 36.49465 SKEWNESS: 3.750462
S.D. OF MEAN: 4.080226

Low Outliers = 0
High Outliers = 0

LOW LIMIT (DX = 15 SCALE = 1:1)

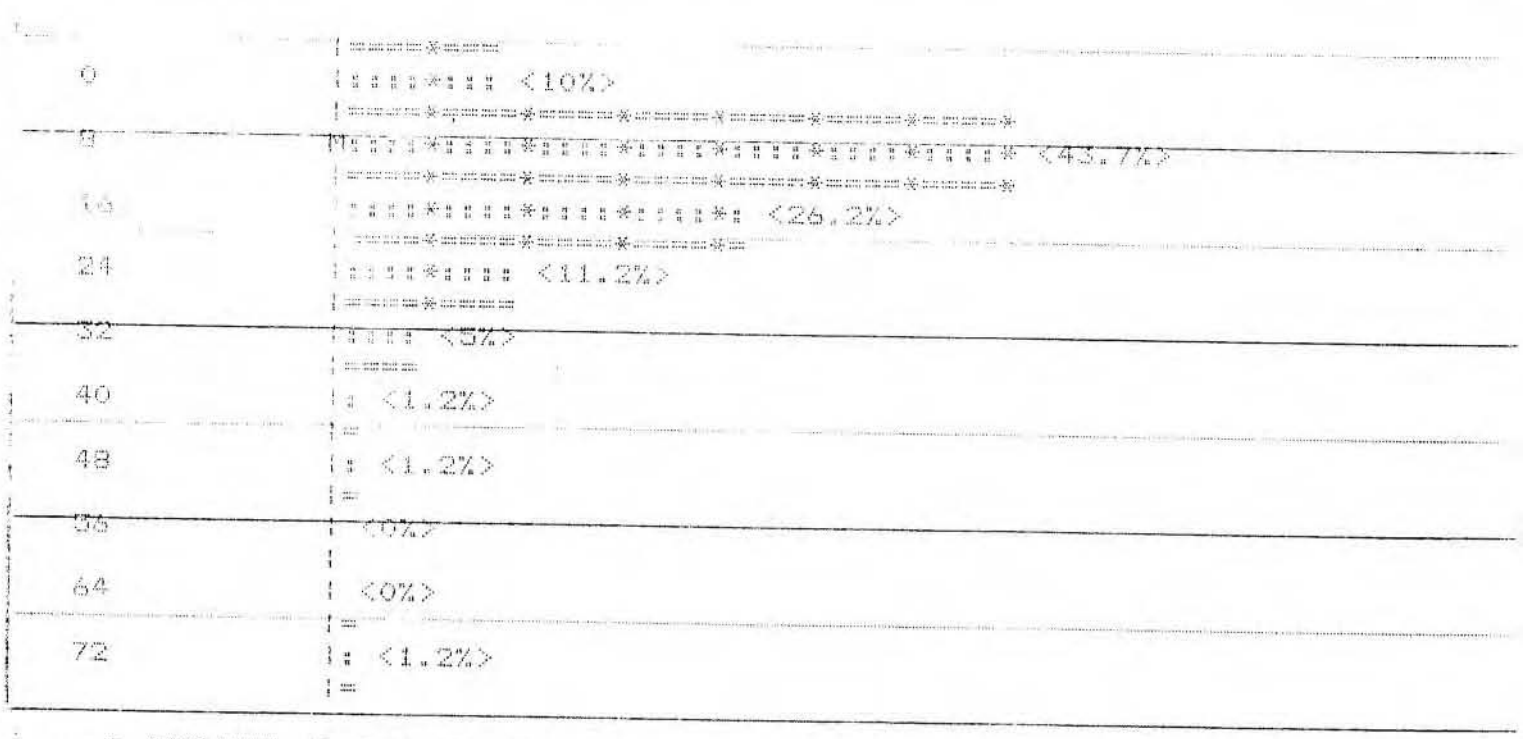


FROM	TO BELOW	FREQ	%	CUMUL	%	
0	15	11	13.9	11	13.9	
15	30	22	27.8	33	41.7	
30	45	19	24	52	65.8	*MEDIAN*
45	60	11	13.9	63	79.7	
60	75	9	11.3	72	91.1	
75	90	5	6.3	77	97.4	
90	105	1	1.2	78	98.7	
105	120	1	1.2	79	100	
120	135	0	0	79	100	
135	150	0	0	79	100	

MEAN: 39.20886 S-SQUARED: 563.852 S: 23.74557 SKEWNESS: .7313953
S.D. OF MEAN: 2.654835

Low Outliers = 0
High Outliers = 1

{DX = 8 SCALE = 1:1 }



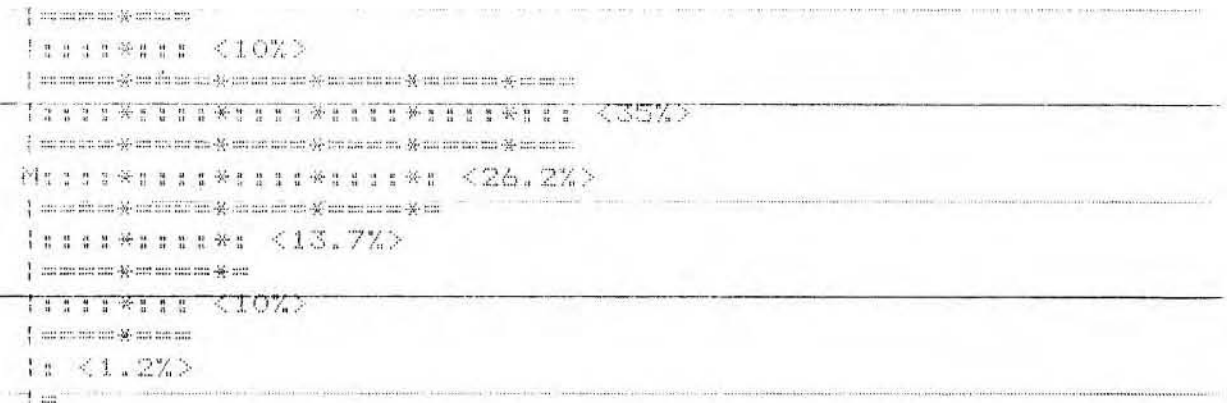
---> FREHIST (A:SOILCHEM.DAT): PAGE 1

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	8	8	10	8	10	
8	16	35	43.7	43	53.7	*MEDIAN*
16	24	21	26.2	64	80	
24	32	9	11.2	73	91.2	
32	40	4	5	77	96.2	
40	48	1	1.2	78	97.5	
48	56	1	1.2	79	98.7	
56	64	0	0	79	98.7	
64	72	0	0	79	98.7	
72	80	1	1.2	80	100	

MEAN: 18 S-SQUARED: 128.8 S: 11.34901 SKEWNESS: 2.180398
S.D. OF MEAN: 1.268358

Low Outliers = 0
High Outliers = 0

LOW LIMIT (DX = 25 SCALE = 1:1)



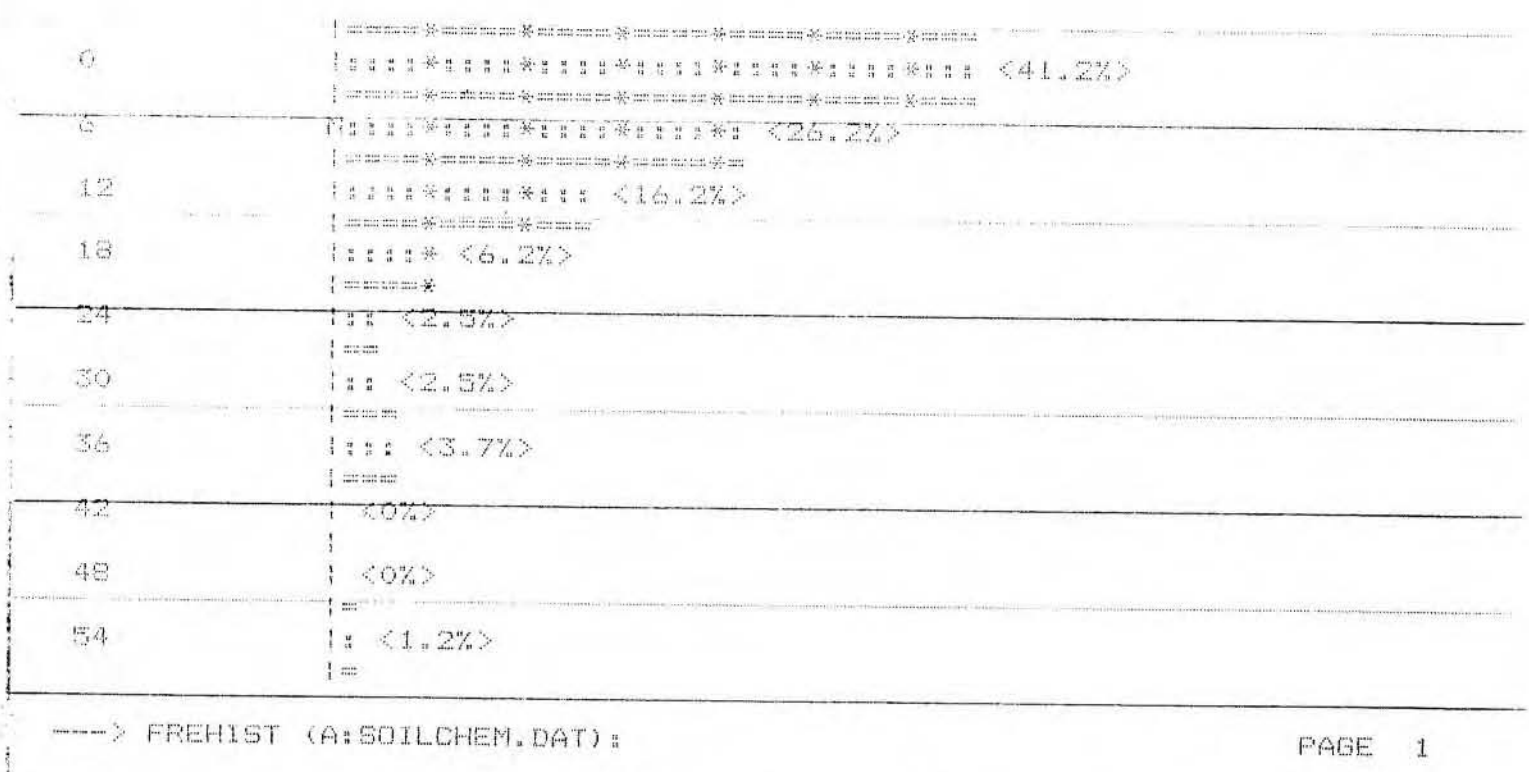
----> FREHIST (A:SOILCHEM.DAT):

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	25	8	10	8	10	
25	50	28	35	36	45	
50	75	21	26.2	57	71.2	*MEDIAN*
75	100	11	13.7	68	85	
100	125	8	10	76	95	
125	150	1	1.2	77	96.2	
150	175	0	0	77	96.2	
175	200	2	2.5	79	98.7	
200	225	0	0	79	98.7	
225	250	1	1.2	80	100	

MEAN: 63.4375 S-SQUARED: 1647.559 S: 40.59013 SKEWNESS: 1.691805
S.D. OF MEAN: 4.538115

Low Outliers = 0
High Outliers = 0

LOW LIMIT (DX = 6 SCALE = 1:1)



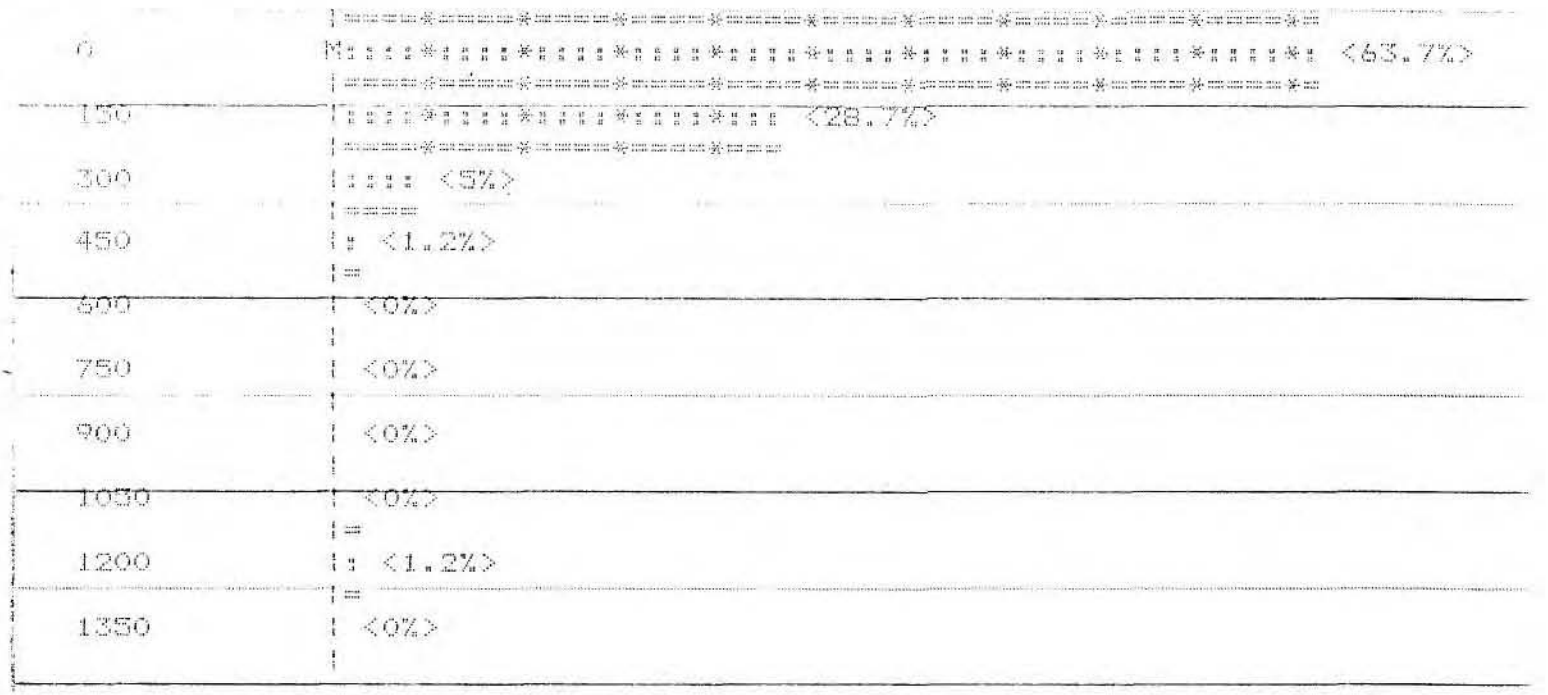
----> FREHIST (A:SOILCHEM.DAT):

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	6	33	41.2	33	41.2	
6	12	21	26.2	54	67.5	*MEDIAN*
12	18	13	16.2	67	83.7	
18	24	5	6.2	72	90	
24	30	2	2.5	74	92.5	
30	36	2	2.5	76	95	
36	42	3	3.7	79	98.7	
42	48	0	0	79	98.7	
48	54	0	0	79	98.7	
54	60	1	1.2	80	100	

MEAN: 11.025 S-SQUARED: 110.6494 S: 10.519 SKEWNESS: 1.941542
S.D. OF MEAN: 1.17606

Low Outliers = 0
High Outliers = 0

LOW LIMIT (DX = 150 SCALE = 1:1)



FROM	TO BELOW	FREQ	%	CUMUL	%	
0	150	51	63.7	51	63.7	*MEDIAN*
150	300	23	28.7	74	92.5	
300	450	4	5	78	97.5	
450	600	1	1.2	79	98.7	
600	750	0	0	79	98.7	
750	900	0	0	79	98.7	
900	1050	0	0	79	98.7	
1050	1200	0	0	79	98.7	
1200	1350	1	1.2	80	100	
1350	1500	0	0	80	100	

MEAN: 153.75 S-SQUARED: 25298.44 S: 159.0548 SKEWNESS: 4.621022
S.D. OF MEAN: 17.78287

Low Outliers = 0
High Outliers = 0

LOW LIMIT (DX = 60 SCALE = 1:1)

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	60	18	22.7	18	22.7	
60	120	24	30.3	42	53.1	*MEDIAN*
120	180	17	21.5	59	74.6	
180	240	8	10.1	67	84.8	
240	300	7	8.8	74	93.6	
300	360	2	2.5	76	96.2	
360	420	0	0	76	96.2	
420	480	3	3.7	79	100	
480	540	0	0	79	100	
540	600	0	0	79	100	

MEAN: 137.0886 S-SQUARED: 10086.46 S: 100.4314 SKEWNESS: 1.265011
S.D. OF MEAN: 11.22857

Low Outliers = 0
High Outliers = 1

---> FREHIST (A:SOILCHEM.DAT): E & W CONTOUR SOILS GOLD(ppb) HISTOGR

LOW LIMIT (DX = 3.5 SCALE = 2:1)

```
                |=======*=======*=======*=======*=======*=======
0               M:::::*:::::*:::::*:::::*:::::*:::::*:::: <73.7%>
                |=======*=======*=======*=======*=======*=======
3.5             |:::::* <13.7%>
                |=====*
7               |:::: <7.5%>
                |====
10.5            | <0%>
                |
14              | <1.2%>
                |
17.5            | <0%>
                |=
21              |: <2.5%>
                |=
24.5            | <0%>
                |
28              | <0%>
                |
31.5            | <1.2%>
                |
```

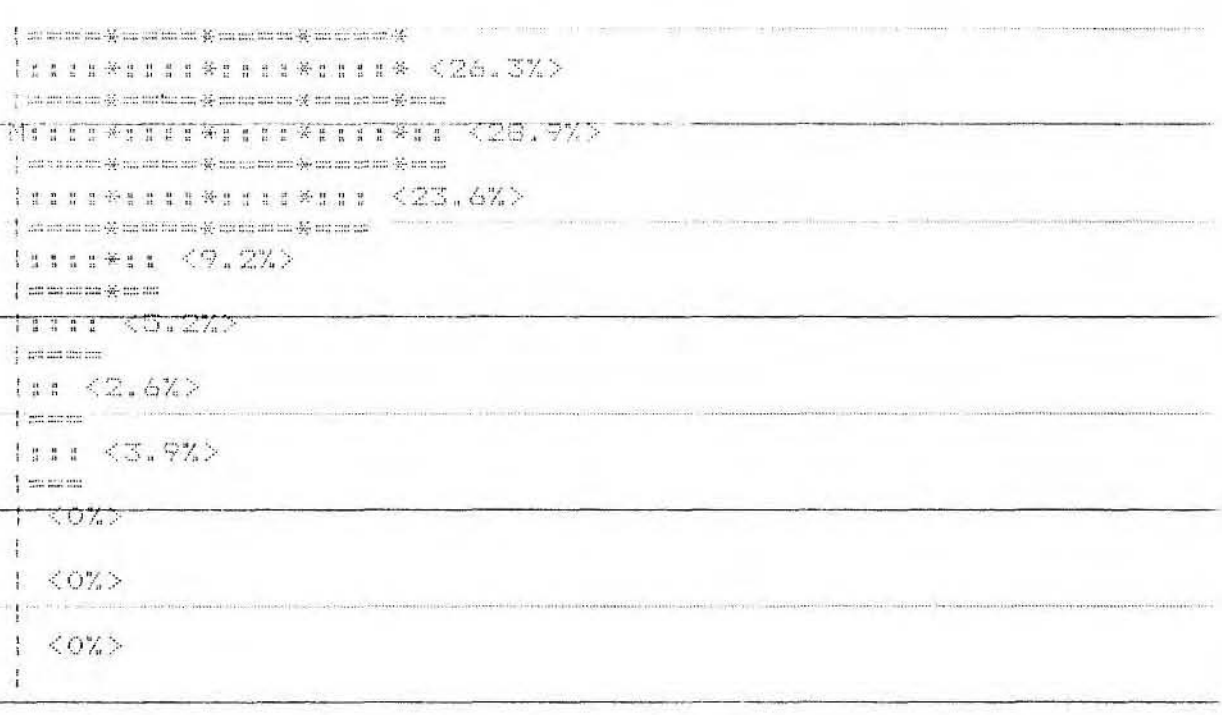
---> FREHIST (A:SOILCHEM.DAT):

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	3.5	59	73.7	59	73.7	*MEDIAN*
3.5	7	11	13.7	70	87.5	
7	10.5	6	7.5	76	95	
10.5	14	0	0	76	95	
14	17.5	1	1.2	77	96.2	
17.5	21	0	0	77	96.2	
21	24.5	2	2.5	79	98.7	
24.5	28	0	0	79	98.7	
28	31.5	0	0	79	98.7	
31.5	35	1	1.2	80	100	

MEAN: 3.85 S-SQUARED: 26.8275 S: 5.179528 SKEWNESS: 3.669346
S.D. OF MEAN: .5790888

Low Outliers = 0
High Outliers = 0

LOW LIMIT (DX = 1.5 SCALE = 1:1)



----> FREHIST (A:SOILCHEM.DAT): PAGE 1

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	1.5	20	26.3	20	26.3	
1.5	3	22	28.9	42	55.2	*MEDIAN*
3	4.5	18	23.6	60	78.9	
4.5	6	7	9.2	67	88.1	
6	7.5	4	5.2	71	93.4	
7.5	9	2	2.6	73	96	
9	10.5	3	3.9	76	100	
10.5	12	0	0	76	100	
12	13.5	0	0	76	100	
13.5	15	0	0	76	100	

MEAN: 3.177632 S-SQUARED: 5.327 S: 2.30803 SKEWNESS: 1.131247
S.D. OF MEAN: .2580455

Low Outliers = 0
High Outliers = 4

TELEX RECV CONNECTED 29-Apr-86 23:23 01

IMP METALS VCR
TEE PARLAN G
2878 86-04-30 08:16

ATTN: BETTY
EXECUTIVE SECRETARY
IMPERIAL METALS CORP
FROM: PARK LANE HOTEL
LONDON / UK

THANK YOU FOR YOUR TELEX OF TODAY, APRIL 30 AND WE NOW CONFIRM AN EXECUTIVE SUITE FOR MR ALAN C SAVAGE FOR HIS ARRIVAL MAY 5 FOR 4 NIGHTS. WE NOTE THAT HE IS AN INSTITUTE OF DIRECTORS MEMBER AND THE ROOM RATE WILL BE 112.50 UKL PER NIGHT INCLUSIVE OF VALUE ADDED TAX AND SERVICE.

WE NOTE THAT YOUR COMPANY GUARANTEES THE RESERVATION, AND WE PRESUME THAT MR SAVAGE WILL BE SETTLING HIS OWN ACCOUNT ON

LOW LIMIT (DX = 1.5 SCALE = 1:1)

----> FREHIST (A:SOILCHEM.DAT):

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	1.5	20	26.3	20	26.3	
1.5	3	22	28.9	42	55.2	*MEDIAN*
3	4.5	18	23.6	60	78.9	
4.5	6	7	9.2	67	88.1	
6	7.5	4	5.2	71	93.4	
7.5	9	2	2.6	73	96	
9	10.5	3	3.9	76	100	
10.5	12	0	0	76	100	
12	13.5	0	0	76	100	
13.5	15	0	0	76	100	

MEAN: 3.177632 S-SQUARED: 5.327 S: 2.30803 SKEWNESS: 1.131247
S.D. OF MEAN: .2580455

Low Outliers = 0
High Outliers = 4