Area H

(Amdouz) (13)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
HF-137	5	24	13
HF-138	6	26	12
HF-139	7	20	19
HF-140	3	6	9
HF-141	3	2	28
HF-142	17	6	40
HF-143	25	62	44
HF-144	65	8	103
HF-145	8	6	35
HF-146	14	26	45
HF-147	8	22	13
HF-148	3	24	9
HF-149	3	26	11
HF-150	3	24	10
HF-151	4	26	9
HF-152	3	26	8
HF-153	3	28	14
HF-154	4	24	15
HF-155	5	26	15
HF-156	5	24	14
HF-157	3	28	11
HF-158	4	28	17
HF-159	8	30	21
HF-160	3	4	14
HF-161	11	6	5
HF-162	4	26	7
HF-163	46	8	33
HF-164	19	18	35
HF-165	8	28	65
HF-166	4	30	13
HF-167	4	26	21
HF-168	21	34	24
*HF-168	21	34	25
HF-169	4	26	11
*HF-169	3	28	10

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
HF-170	5	28	10
HF-171	7	10	23
HF-172	11	14	116
HF-173	90	44	38
HF-174	12	6	30
HF-175	2	4	21
HF-176	4	6	22
HF-177	3	8	21
HF-178	2	6	14
HF-179	3	4	37
HF-180	2	8	24
HF-181	3	8	38
HF-182	2	12	57
HF-183	3	6	34
HF-184	3	8	33
HF-185	4	6	36
HF-186	5	8	28
HF-187	4	8	18
HF-188	3	6	14
HF-189	2	8	21
HF-190	2	6	13
HF-191	2	6	12
HF-192	2	8	21
HF-193	2	4	40
HF-194	3	8	104
HF-195	2	4	35
HF-196	4	2	19
HF-197	3	8	22
HF-198	4	4	20
HF-199	3	4	18
HF-200	2	4	25
HF-201	3	2	10
HF-202	2	4	7
HF-203	2	10	11
HF-204	2	16	26

* Were checked chemical analysis

Area H

(Amdouz) (14)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
HF-205	1	8	53
HF-206	2	10	54
HF-207	2	8	43
HF-208	2	6	25
HF-209	2	6	26
HF-210	2	4	35
HF-211	2	4	13
HF-212	2	4	53
HF-213	3	6	65
HF-214	2	2	15
HF-215	2	4	43
HF-216	1	2	12
HF-217	2	8	27
HF-218	1	8	59
HF-219	2	6	39
HF-220	3	6	36
HF-221	2	10	42
HF-222	2	6	43
HF-223	2	10	55
HF-224	3	12	113
HF-225	2	4	9
HF-226	3	10	40
HF-227	2	8	42
HF-228	3	10	46
*HF-228	2	10	44

Sample No.	elements analysed ppm		
	Cu	Pb	Zn

* Were checked chemical analysis

Table I-7-2 Geochemical Data of I (Igherm) Area

Area I

(Igherm) (1)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IB- 1	3	4	54
IB- 2	4	4	57
IB- 3	3	2	47
IB- 4	6	2	16
IB- 5	16	4	64
IB- 6	30	2	12
IB- 7	5	2	1
IB- 8	6	2	1
IB- 9	10	32	36
IB- 10	2	4	42
IB- 11	14	2	1
IB- 12	29	8	57
IB- 13	8	8	17
IB- 14	1200	12	18
IB- 15	20	20	10
IB- 16	13	32	10
IB- 17	19	10	11
IB- 18	2	5	24
IB- 19	6	4	41
IB- 20	3	4	66
IB- 21	6	4	50
IB- 22	4	4	39
IB- 23	5	2	40
IB- 24	4	4	47
IB- 25	23	6	52
IB- 26	380	6	100
IB- 27	14	8	93
IB- 28	48	4	45
IB- 29	29	26	96
IB- 30	53	4	48
IB- 31	55	6	22
IB- 32	4	8	115
IB- 33	4	6	50
IB- 34	12	8	180
IB- 35	9	6	6

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IB- 36	8	6	35
IB- 37	4	14	235
IB- 38	5	26	225
IB- 39	25	14	130
IB- 40	16	16	77
* IB- 40	15	16	76
IB- 41	12	12	44
IB- 42	4	10	20
IB- 43	9	12	84
IB- 44	7	12	56
IB- 45	20	20	68
IB- 46	5	6	64
IB- 47	7	6	40
IB- 48	3	4	13
IB- 49	3	4	13
IB- 50	5	4	15
IB- 51	5	6	26
IB- 52	7	6	40
IB- 53	5	6	28
IB- 54	8	8	36
IB- 55	50	8	36
IB- 56	4	6	34
IB- 57	2	6	14
IB- 58	3	6	16
IB- 59	4	8	23
IB- 60	8	8	18
IB- 61	7	6	22
IB- 62	4	6	22
IB- 63	5	6	32
IB- 64	6	6	20
IB- 65	7	8	16
IB- 66	4	4	14
IB- 67	4	4	23
IB- 68	5	6	27
IB- 69	4	8	24

* Were checked chemical analysis

Area I

(Igherm) (2)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IB- 70	4	6	22
IB- 71	3	6	13
IB- 72	5	6	22
IB- 73	6	10	32
IB- 74	7	16	150
IB- 75	23	10	14
IB- 76	7	6	3
IB- 77	3	6	3
IB- 78	9	6	27
IB- 79	7	12	85
IB- 80	15	10	42
IB- 81	5	6	9
IB- 82	9	8	9
IB- 83	1950	22	8
IB- 84	5	10	32
IB- 85	5	14	55
IB- 86	4	12	72
IB- 87	4	16	106
IB- 88	5	14	90
IB- 89	3	8	79
IB- 90	12	6	3
* IB- 90	12	6	3
IB- 91	7	12	185
IB- 92	8	10	100
IB- 93	960	10	106
IB- 94	7	10	81
IB- 95	3	14	125
IB- 96	8	10	28
IB- 97	48	14	12
IB- 98	4	28	4
IB- 99	13	68	180
IB-100	15	34	20
IB-101	9	34	19
IB-102	9	30	7
IB-103	8	28	16

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IB-104	6	30	14
IB-105	10	32	15
IB-106	9	26	25
IB-107	620	16	14
IB-108	280	28	44
IB-109	880	32	73
IB-110	280	22	26
* IB-110	260	20	24
IB-111	160	14	11
IB-112	28	48	24
IB-113	3	10	36
IB-114	6	16	235
IB-115	23	12	310
IB-116	6	12	105
IB-117	330	18	215
IB-118	2	14	132
IB-119	4	10	75
IB-120	6	14	78
IB-121	5	12	34
IB-122	4	12	90
IB-123	4	10	69
IB-124	5	10	110
IB-125	18	10	93
IB-126	1960	12	100
IB-127	13	12	92
IB-128	6	12	56
IB-129	22	6	4
IB-130	10	12	2
IB-131	225	16	135
IB-132	6	8	9
IB-133	6	10	53
IB-134	4	14	240
IB-135	5	12	215
IB-136	22	10	81
IB-137	4	14	116

* Were checked chemical analysis

Area I

(Igherm) (3)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IB-138	12	12	140
IB-139	7	12	95
IB-140	3	12	135
IB-141	2	12	101
IB-142	4	10	6
IB-143	2	6	2
IB-144	5	6	3
IB-145	14	10	9
IB-146	4	18	38
IB-147	3	14	42
IB-148	2	8	3
IB-149	4	6	1
IB-150	5	10	3
* IB-150	5	8	4
IB-151	3	6	3
IB-152	2	6	2
IB-153	4	8	3
IB-154	4	8	1
IB-155	4	4	2
IB-156	6	8	4
IB-157	4	14	3
IB-158	4	10	2

Sample No.	elements analysed ppm		
	Cu	Pb	Zn

* Were checked chemical analysis

Area I

(Igherm) (4)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IC- 1	26	12	42
IC- 2	12	2	24
IC- 3	135	20	10
IC- 4	73	18	9
IC- 5	900	14	23
IC- 6	7	8	3
IC- 7	29	20	19
IC- 8	60	22	10
IC- 9	16	22	10
IC- 10	8	20	7
IC- 11	36	28	26
IC- 12	4	14	41
IC- 13	4	10	44
IC- 14	3	6	42
IC- 15	33	26	20
IC- 16	36	24	23
IC- 17	14	22	6
IC- 18	11	18	10
IC- 19	78	28	8
IC- 20	5	6	28
IC- 21	400	4	110
IC- 22	11	4	115
IC- 23	5	6	67
IC- 24	8	6	84
IC- 25	9	10	130
IC- 26	20	6	190
IC- 27	20	4	79
IC- 28	15	6	150
IC- 29	70	6	185
IC- 30	35	2	4
IC- 31	12600	8	170
IC- 32	25	6	56
IC- 33	6400	10	72
IC- 34	80	6	53
IC- 35	440	10	165

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IC- 36	8	6	180
IC- 37	1300	14	135
IC- 38	8	6	170
IC- 39	7	6	105
IC- 40	4	6	125
IC- 41	8	10	70
IC- 42	7	2	60
IC- 43	6	8	140
IC- 44	8	6	76
IC- 45	14	10	58
IC- 46	7	8	1
IC- 47	8	4	1
IC- 48	9	8	20
IC- 49	16	2	3
IC- 50	64	4	22
IC- 51	5	2	1
IC- 52	5	2	1
IC- 53	5	2	1
IC- 54	20	2	5
IC- 55	10	2	1
IC- 56	25	2	8
IC- 57	980	2	4
IC- 58	13	2	6
IC- 59	3	6	29
IC- 60	3	4	47
IC- 61	3	6	56
IC- 62	3	6	23
IC- 63	2	4	50
IC- 64	14	6	40
IC- 65	8	4	30
IC- 66	5	6	15
IC- 67	4	6	30
IC- 68	29	12	45
IC- 69	3	2	8
IC- 70	8	2	10

* Were checked chemical analysis

Area I

(Igherm) (5)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IC- 71	2	2	3
IC- 72	3	10	54
IC- 73	2	8	50
IC- 74	2	8	61
IC- 75	5	2	2
IC- 76	3	2	5
IC- 77	2	10	42
IC- 78	3	8	13
IC- 79	3	6	16
IC- 80	10	2	2
IC- 81	6	10	72
IC- 82	76	8	86
IC- 83	5	6	70
IC- 84	5	8	68
IC- 85	30	8	80
IC- 86	5	6	65
IC- 87	8	12	59
IC- 88	4	12	107
IC- 89	3	6	57
IC- 90	2	8	103
* IC- 90	2	8	104
IC- 91	7	12	235
IC- 92	175	12	125
IC- 93	230	16	14
IC- 94	10	8	110
IC- 95	25	4	18
IC- 96	2	2	5
IC- 97	2	4	11
IC- 98	9	6	11
IC- 99	4	14	19
IC-100	4	6	7
IC-101	20	12	26
IC-102	6	110	13
IC-103	18	30	22
IC-104	5	24	5

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IC-105	6	20	9
IC-106	5	34	4
IC-107	5	22	7
IC-108	7	16	6
IC-109	4	24	10
IC-110	4	44	27
IC-111	7	48	23
IC-112	6	124	32
IC-113	4	1120	430
IC-114	4	22	6
IC-115	10	26	5
IC-116	10	26	5
IC-117	5	22	4
IC-118	4	10	9
IC-119	6	26	27
IC-120	7	4	5
IC-121	3	4	8
IC-122	2	4	2
IC-123	10	6	47
IC-124	4	4	2
IC-125	5	2	10
IC-126	2	6	36
IC-127	2	2	5
IC-128	2	4	8
IC-129	2	4	4
IC-130	2	2	4
IC-131	5	2	1
IC-132	5	10	4
IC-133	4	2	17
IC-134	2	2	1
IC-135	5	4	4
IC-136	3	2	1
IC-137	4	2	1
IC-138	5	6	105
IC-139	6	4	70

* Were checked chemical analysis

Area I

(Igherm) (6)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IC-140	6	8	48
IC-141	11	4	46
IC-142	18	18	24
IC-143	5	8	15
IC-144	2	2	1
IC-145	3	4	3
IC-146	3	4	1
IC-147	2	2	1
IC-148	2	2	1
IC-149	13	2	1
IC-150	5	2	1
IC-151	3	10	76
IC-152	40	2	37
IC-153	5	2	2
IC-154	59	2	19
IC-155	300	6	60
IC-156	6	2	12
IC-157	5	4	66
IC-158	65	2	26
IC-159	83	6	53
IC-160	23	52	44
IC-161	7	2	43
IC-162	60	8	105
IC-163	6	6	13
IC-164	20	2	44
IC-165	15	20	155
IC-166	5	2	5
IC-167	3	2	34
IC-168	4	4	32
IC-169	2	2	3
IC 170	7	30	8
IC-171	7	18	25
IC-172	58	4	65
IC-173	6	4	28
IC-174	65	8	320

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IC-175	26	12	84
IC-176	3	4	15
IC-177	22	6	16
* IC-177	21	6	15
IC-178	1	26	30
* IC-178	1	26	28
IC-179	2	4	28
IC-180	1	8	28
IC-181	1	8	10
IC-182	6	4	12
IC-183	2	2	10
IC-184	2	4	36
IC-185	2	8	36
IC-186	2	8	40
IC-187	3	6	38
IC-188	3	2	16
IC-189	2	2	2
IC-190	2	4	52
IC-191	1	2	4
IC-192	1	8	46
IC-193	2	6	128
IC-194	2	4	66
IC-195	1	4	76
IC-196	1	4	59
IC-197	1	4	32
IC-198	3	4	90
IC-199	2	6	4
IC-200	3	2	12
IC-201	6	22	40
*IC-201	6	22	38
IC-202	3	2	1
*IC-202	3	2	1
IC-203	8	4	30
IC-204	200	8	70
IC-205	13	6	64

* Were checked chemical analysis

Area I

(Igherm) (7)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IC-206	6	2	60
IC-207	22	6	56
IC-208	6	4	73
IC-209	10	8	55
IC-210	115	2	34
IC-211	5	4	50
IC-212	3	4	45

Sample No.	elements analysed ppm		
	Cu	Pb	Zn

* Were checked chemical analysis

Area I

(Igherm) (8)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
ID- 1	85	6	39
ID- 2	24	8	61
ID- 3	5	6	3
ID- 4	2	8	26
ID- 5	2	4	27
ID- 6	78	30	38
ID- 7	19	32	12
ID- 8	6	28	8
ID- 9	8	36	6
ID- 10	10	30	8
ID- 11	27	32	6
ID- 12	10750	30	350
ID- 13	950	28	101
ID- 14	27	10	61
ID- 15	420	30	76
ID- 16	13	28	7
ID- 17	4	38	5
ID- 18	6	34	5
ID- 19	10	48	8
ID- 20	4	26	4
ID- 21	2	8	15
ID- 22	20	23	15
ID- 23	720	18	67
ID- 24	5	8	106
ID- 25	3	6	59
ID- 26	4	10	83
ID- 27	2	10	97
ID- 28	2	14	23
*ID- 28	2	13	22
ID- 29	4	6	66
ID- 30	18	8	44
ID- 31	38	16	66
ID- 32	14	14	46
ID- 33	37	10	45
ID- 34	6	6	41

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
ID- 35	3	10	88
ID- 36	7	6	100
ID- 37	6	16	139
ID- 38	4	10	142
ID- 39	5	8	124
ID- 40	4	8	116
ID- 41	7	2	72
ID- 42	2	6	57
ID- 43	7	4	70
ID- 44	12	4	109
ID- 45	8	4	75
ID- 46	7	10	77
ID- 47	4	6	31
ID- 48	2	6	12
ID- 49	3	10	23
ID- 50	1	6	20
ID- 51	2	6	43
ID- 52	2	10	89
ID- 53	3	8	42
ID- 54	3	8	26
ID- 55	3	12	25
ID- 56	660	24	103
ID- 57	5	10	75
ID- 58	39	6	73
ID- 59	98	10	49
ID- 60	23	8	45
ID- 61	97	10	28
ID- 62	3	10	22
ID- 63	3	8	28
ID- 64	2	10	52
ID- 65	2	8	28
ID- 66	2	6	31
ID- 67	3	8	42
ID- 68	2	8	35
ID- 69	1	8	37

* Were checked chemical analysis

Area I

(Igherm) (9)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
ID- 70	3	10	69
ID- 71	2	8	139
ID- 72	2	12	81
ID- 73	2	4	9
ID- 74	2	2	2
ID- 75	6	8	8
ID- 76	3	8	43
ID- 77	2	10	53
ID- 78	5	2	3
ID- 79	5	2	4
ID- 80	10	8	70
ID- 81	15	14	12
ID- 82	2	6	100
ID- 83	430	4	98
ID- 84	43	26	63
ID- 85	14	10	68
ID- 86	10	14	70
ID- 87	250	4	11
ID- 88	3	2	40
ID- 89	3	6	43
ID- 90	4	6	103
*ID- 90	4	6	101
ID- 91	12	4	35
ID- 92	6	4	46
ID- 93	5	2	47
ID- 94	5	6	39
ID- 95	18	12	55
ID- 96	2600	114	8
ID- 97	2	12	30
ID- 98	1	12	20
ID- 99	3	12	74
ID-100	3	8	24
ID-101	2	12	100
ID-102	4	4	27
ID-103	8	10	82

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
ID-104	2	2	4
ID-105	1	4	4
ID-106	26	6	3
ID-107	54	2	3
ID-108	4	2	4
ID-109	12	2	4
ID-110	9	2	4
ID-111	170	6	93
ID-112	100	4	69
ID-113	10	6	14
ID-114	25	21	6
ID-115	4	8	14
ID-116	6	2	2
*ID-116	6	2	2
ID-117	58	2	3
*ID-117	57	2	3
ID-118	16	6	55
ID-119	7	6	51
ID-120	3	6	121
ID-121	3	10	65
ID-122	2	8	106
ID-123	6	6	91
ID-124	3	6	47
ID-125	5	8	75
ID-126	5	10	110
*ID-126	5	10	112
ID-127	2	2	2

* Were checked chemical analysis

Area I

(Igherm) (10)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IE- 1	36	10	34
IE- 2	1000	32	29
IE- 3	24	18	37
IE- 4	24	26	10
IE- 5	12	26	8
IE- 6	8	28	9
IE- 7	13	28	14
IE- 8	10	24	7
IE- 9	100	26	28
IE- 10	25	26	13
IE- 11	7	22	11
IE- 12	12	22	16
IE- 13	39	20	17
IE- 14	34	26	20
IE- 15	47	30	14
IE- 16	15	26	9
IE- 17	21	28	8
IE- 18	23	24	32
IE- 19	70	28	15
IE- 20	270	28	44
IE- 21	32	4	7
IE- 22	64	6	22
IE- 23	2	6	26
IE- 24	4	8	4
IE- 25	3	10	26
IE- 26	150	8	47
IE- 27	4	8	63
IE- 28	3	12	95
IE- 29	2	12	120
IE- 30	7	10	180
IE- 31	17	12	130
IE- 32	5	10	112
IE- 33	240	96	105
IE- 34	3	6	34
IE- 35	5	8	78

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IE- 36	5	10	133
IE- 37	3	10	88
IE- 38	12	8	80
IE- 39	5	8	125
IE- 40	200	10	85
IE- 41	62	10	139
IE- 42	9	10	60
IE- 43	12	6	66
IE- 44	5	8	41
IE- 45	5	8	130
IE- 46	5	10	290
IE- 47	14	8	31
IE- 48	4	10	27
IE- 49	6	8	30
IE- 50	6	8	40
IE- 51	4	10	45
IE- 52	5	10	47
IE- 53	3	8	22
IE- 54	3	12	51
IE- 55	2	6	18
IE- 56	3	6	29
IE- 57	3	8	24
IE- 58	2	6	19
IE- 59	2	8	24
IE- 60	2	6	20
IE- 61	5	8	19
IE- 62	4	6	17
IE- 63	3	8	13
IE- 64	3	6	19
IE- 65	3	2	24
IE- 66	3	2	32
IE- 67	4	2	20
IE- 68	100	2	13
IE- 69	17	8	75
IE- 70	20	8	60

* Were checked chemical analysis

Area I

(Igherm) (11)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IE- 71	5	2	43
IE - 72	14	4	27
IE - 73	37	4	85
IE - 74	8	2	9
IE - 75	1	2	8
IE - 76	4	2	9
IE - 77	9	4	29
IE - 78	8	6	35
IE - 79	7	2	120
IE - 80	6	8	78
IE - 81	9	2	79
IE - 82	140	2	72
IE - 83	1	6	49
IE - 84	2	2	38
IE - 85	2	2	28
IE - 86	4	2	58
IE - 87	17	8	58
IE - 88	310	2	45
IE - 89	10	8	62
IE - 90	60	8	110
IE - 91	3	6	85
IE - 92	5	10	66
IE - 93	2	6	19
IE - 94	2	2	3
IE - 95	3	2	4
IE - 96	4	4	2
IE - 97	4	2	5
IE - 98	3	2	6
IE - 99	3	2	24
IE - 100	2	10	125
*IE - 100	2	10	128
IE - 101	10	4	3
IE - 102	6	6	9
IE - 103	14	4	4
IE - 104	4	6	4

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IE-105	2	6	2
IE-106	2	2	42
IE-107	4	10	51
IE-108	12	14	210
IE-109	8	6	20
IE-110	3	2	20
IE-111	4	4	15
IE-112	2	2	5
IE-113	10	4	2
IE-114	8	2	3
IE-115	15	6	30
IE-116	4	10	44
IE-117	89	4	12
IE-118	4	10	5
IE-119	1	4	1
IE-120	3	8	4
IE-121	3	10	59
IE-122	5	8	110
IE-123	2	6	51
IE-124	2	8	35
IE-125	3	4	13
IE-126	2	8	22
IE-127	3	6	19
IE-128	2	10	129
IE-129	3	6	16
IE-130	3	8	30
IE-131	2	8	34
IE-132	2	8	28
IE-133	3	6	28
IE-134	4	6	2
IE-135	2	6	2
IE-136	12	8	2
IE-137	5	10	63
IE-138	4	8	66
IE-139	20	10	50

* Were checked chemical analysis

Area I

(Igherm) (12)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IE-140	7	8	44
* IE-140	8	8	43
IE-141	2	2	46
IE-142	3	4	2
IE-143	2	6	2
IE-144	2	6	8
IE-145	2	10	15
IE-146	2	8	55
IE-147	3	10	19
IE-148	2	6	62
IE-149	3	2	3
IE-150	3	6	3
IE-151	3	4	2
IE-152	4	14	130
IE-153	2	8	25
IE-154	1	6	65
IE-155	2	8	50
IE-156	1	4	9
IE-157	3	4	6
IE-158	3	10	85
IE-159	2	8	38
IE-160	2	4	16
IE-161	3	2	57
IE-162	2	2	46
IE-163	1	8	56
IE-164	2	2	33

Sample No.	elements analysed ppm		
	Cu	Pb	Zn

* Were checked chemical analysis

Area I

(Igherm) (13)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IF- 1	3	2	1
IF- 2	2	2	29
IF- 3	7	28	19
IF- 4	8	28	6
IF- 5	12	28	4
IF- 6	8	24	9
IF- 7	10	26	6
IF- 8	40	22	14
IF- 9	190	26	40
IF- 10	2	6	43
IF- 11	19	10	51
IF- 12	30	28	17
IF- 13	26	18	11
IF- 14	8	26	9
IF- 15	1	2	28
IF- 16	9	2	37
IF- 17	31	134	215
IF- 18	56	20	38
IF- 19	55	20	19
IF- 20	180	28	41
IF- 21	98	6	20
IF- 22	55	28	18
IF- 23	53	28	29
IF- 24	7500	4	27
IF- 25	6	4	37
IF- 26	7	4	71
IF- 27	96	4	54
IF- 28	44	2	45
IF- 29	51	2	55
IF- 30	32	2	43
IF- 31	6	8	76
IF- 32	1050	4	100
IF- 33	34	6	66
IF- 34	4	2	135
IF- 35	3	4	89

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IF- 36	3	6	61
IF- 37	5	4	52
IF- 38	57	6	58
IF- 39	9	4	94
IF- 40	4	10	100
IF- 41	6	8	93
IF- 42	145	6	103
IF- 43	4	6	130
IF- 44	38	8	132
IF- 45	150	6	83
IF- 46	40	2	74
IF- 47	4	2	57
IF- 48	40	4	34
IF- 49	2	8	146
IF- 50	4	8	111
IF- 51	10	6	107
IF- 52	2100	12	290
IF- 53	51	10	280
IF- 54	8	6	62
IF- 55	2	6	6
IF- 56	2	2	3
IF- 57	5	2	5
IF- 58	2	6	7
IF- 59	5	4	4
IF- 60	2	2	2
IF- 61	1	4	3
IF- 62	2	4	78
IF- 63	2	6	150
IF- 64	2	4	220
IF- 65	2	4	150
IF- 66	1	6	76
IF- 67	2	2	133
IF- 68	2	2	72
IF- 69	260	2	87
IF- 70	46	2	81

* Were checked chemical analysis

Area I

(Igherm) (14)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IF- 71	16250	2	52
IF- 72	5	4	49
IF- 73	5	4	70
IF- 74	2	2	4
IF- 75	2	8	90
IF- 76	2	6	43
IF- 77	2	4	40
IF- 78	2	8	5
IF- 79	8	4	83
IF- 80	4	6	63
IF- 81	16	8	100
IF- 82	50	4	55
IF- 83	3	8	113
IF- 84	4	2	5
IF- 85	4	2	7
IF- 86	2	2	6
IF- 87	3	2	10
IF- 88	5	2	11
IF- 89	4	8	26
IF- 90	2	4	12
*IF- 90	2	4	11
IF- 91	2	4	30
IF- 92	1	6	33
IF- 93	48	6	32
IF- 94	1	4	5
IF- 95	3	4	22
IF- 96	6	4	14
IF- 97	2	6	33
IF- 98	1	4	21
IF- 99	2	6	23
IF-100	3	4	25
IF-101	26	2	4
IF-102	1	2	5
IF-103	2	2	4
IF-104	2	2	2

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IF-105	2	2	35
IF-106	2	6	21
IF-107	4	4	45
IF-108	4	2	47
IF-109	4	8	64
IF-110	35	6	69
IF-111	6	6	59
IF-112	4	6	51
IF-113	3	4	53
IF-114	3	6	64
IF-115	4	4	66
IF-116	19	6	39
IF-117	7	24	53
IF-118	7	14	62
IF-119	58	4	52
IF-120	6	2	56
IF-121	14	2	69
IF-122	2	4	2
IF-123	2	2	17
IF-124	2	8	15
IF-125	2	4	12
IF-126	2	2	5
IF-127	2	4	6
IF-128	2	6	18
IF-129	2	2	4
IF-130	3	4	91
*IF-130	3	4	92
IF-131	2	4	8
IF-132	4	2	51
IF-133	5	2	120
IF-134	2	2	8
IF-135	2	2	9
IF-136	2	2	1
IF-137	5	8	18
IF-138	2	2	2

* Were checked chemical analysis

Area I

(Igherm) (15)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IF-139	4	2	2
IF-140	460	6	28
IF-141	2	2	4
IF-142	2	2	5
IF-143	2	4	5
IF-144	2	2	2
IF-145	2	2	3
IF-146	2	4	4
IF-147	2	6	50
IF-148	2	18	240
IF-149	2	14	86
IF-150	3	16	60
IF-151	2	10	56
IF-152	3	12	58
IF-153	3	18	49
IF-154	2	8	43
IF-155	3	8	48
IF-156	2	8	51
IF-157	3	6	36
IF-158	2	10	170
IF-159	2	12	42
IF-160	2	2	18
*IF-160	2	2	17
IF-161	2	4	6
IF-162	3	2	79
IF-163	2	4	70
IF-164	3	8	190
IF-165	3	6	74

Sample No.	elements analysed ppm		
	Cu	Pb	Zn

* Were checked chemical analysis

Area I

(Igherm) (16)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IG- 1	15	32	8
IG- 2	16	8	32
IG- 3	2	8	20
IG- 4	60	30	45
IG- 5	71	2	41
IG- 6	2	4	39
IG- 7	12	86	43
IG- 8	85	32	33
IG- 9	25	30	23
IG- 10	98	4	14
IG- 11	12	2	55
IG- 12	48	36	7
IG- 13	49	44	14
IG- 14	44	28	55
IG- 15	12	36	6
IG- 16	15	24	11
IG- 17	220	14	53
IG- 18	3900	12	24
IG- 19	23	8	33
IG- 20	10	8	24
IG- 21	3	34	7
IG- 22	13	4	30
IG- 23	17	8	69
IG- 24	24	6	73
IG- 25	300	38	14
IG- 26	1360	40	16
IG- 27	370	38	13
IG- 28	220	10	220
IG- 29	1920	10	290
IG- 30	9	6	2
IG- 31	4	8	98
IG- 32	360	4	78
IG- 33	7	8	53
IG- 34	9	10	50
IG- 35	88	8	110

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IG- 36	63	30	44
IG- 37	77	18	18
IG- 38	9	4	55
IG- 39	19	6	65
IG- 40	8	12	80
* IG- 40	8	12	78
IG- 41	5	8	76
IG- 42	7	10	85
IG- 43	6	10	44
IG- 44	8	16	76
IG- 45	5	14	103
IG- 46	40	14	62
IG- 47	3	10	63
IG- 48	5	12	66
IG- 49	5	10	86
IG- 50	17	4	77
IG- 51	8	8	99
IG- 52	7	4	69
IG- 53	72	4	80
IG- 54	12	2	137
IG- 55	5	2	100
IG- 56	37	2	61
IG- 57	25	2	370
IG- 58	25	8	1100
IG- 59	140	6	88
IG- 60	24	4	110
IG- 61	8750	4	78
IG- 62	24	2	6
IG- 63	5	2	58
IG- 64	4	6	41
IG- 65	4	2	40
IG- 66	67	2	38
IG- 67	25	20	63
IG- 68	7	2	3
IG- 69	10	2	2

* Were checked chemical analysis

Area

(Igherm) (17)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IG- 70	6	2	3
IG- 71	5	2	33
IG- 72	8	2	63
IG- 73	7	2	3
IG- 74	8	2	50
IG- 75	4	2	3
IG- 76	4	2	46
IG- 77	4	2	63
IG- 78	5	4	119
IG- 79	20	2	4
IG- 80	14	2	2
*IG- 80	14	2	2
IG- 81	10	8	14
IG- 82	11	4	1
IG- 83	2	2	1
IG- 84	290	16	30
IG- 85	28	4	31
IG- 86	10	2	27
IG- 87	28	6	22
IG- 88	8	4	1
IG- 89	6	2	1
IG- 90	480	8	87
IG- 91	8	10	21
IG- 92	6	6	47
IG- 93	4	4	26
IG- 94	3	6	60
IG- 95	4	6	71
IG- 96	5	4	64
IG- 97	20	4	67
IG- 98	5	6	77
IG- 99	15	6	141
IG-100	6	6	51
IG-101	4	8	110
IG-102	4	10	111
IG-103	12	8	67

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IG-104	5	8	88
IG-105	9	10	61
IG-106	8	6	47
IG-107	5	10	77
IG-108	5	2	140
IG-109	8	4	92
IG-110	8	2	37
IG-111	5	2	2
IG-112	5	4	57
IG-113	15	2	63
IG-114	32	2	38
IG-115	5	6	51
IG-116	6	4	53
IG-117	10	8	86
IG-118	5	8	95
IG-119	8	12	235
IG-120	380	18	175
*IG-120	390	18	170
IG-121	10	14	114
IG-122	6	4	6
IG-123	5	10	7
IG-124	4	6	65
IG-125	3	8	68
IG-126	4	12	60
IG-127	5	14	72
IG-128	6	8	71
IG-129	3	8	69
IG-130	5	12	54
IG-131	2	8	11
IG-132	8	4	5
IG-133	4	2	1
IG-134	6	6	1
IG-135	5	4	2
IG-136	5	12	151
IG-137	6	12	109

* Were checked chemical analysis

Area I

(Igherm)

(18)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IG-138	5	12	112
IG-139	4	12	119
IG-140	7	8	57
IG-141	12	6	9
IG-142	680	4	270
IG-143	12	6	89
IG-144	235	6	260
IG-145	5	2	31
IG-146	4	18	151
IG-147	8	2	47
IG-148	6	2	6
IG-149	6	6	26
IG-150	8	4	55
IG-151	4	4	11
IG-152	4	6	9
IG-153	4	8	18
IG-154	4	10	14
IG-155	28	8	14
IG-156	3	2	4
IG-157	4	8	11
IG-158	3	10	82
IG-159	2	8	43
IG-160	3	10	68
*IG-160	3	10	68
IG-161	2	6	72
IG-162	3	10	23
IG-163	3	6	102
IG-164	2	2	13
IG-165	4	4	16
IG-166	3	12	58
IG-167	2	8	33
IG-168	2	12	25
IG-169	3	8	84
IG-170	8	6	71
IG-171	2	6	8

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IG-172	3	4	49
IG-173	2	6	68
IG-174	3	6	63
IG-175	2	10	65
IG-176	4	10	62
IG-177	2	8	99
IG-178	2	10	93
IG-179	2	12	29
IG-180	3	10	106
IG-181	4	8	104
IG-182	3	8	27
IG-183	3	10	41
IG-184	4	8	69
IG-185	3	4	94
IG-186	3	6	66
IG-187	5	14	330
IG-188	3	2	78
IG-189	6	6	170
IG-190	5	10	165
IG-191	4	12	220
IG-192	3	16	220
IG-193	2	6	3
IG-194	2	6	4
IG-195	4	6	51
IG-196	52	180	39
IG-197	3	6	54
IG-198	2	4	3
IG-199	3	4	3
IG-200	5	12	54
*IG-200	5	12	56
IG-201	5	8	2
IG-202	3	2	3
IG-203	3	8	4
IG-204	1	2	1
IG-205	3	2	1

* Were checked chemical analysis

Area I

(Igherm)

(19)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IG-206	3	2	2
IG-207	2	2	2
IG-208	5	10	23
IG-209	3	12	33
IG-210	4	2	6
IG-211	3	10	52
IG-212	4	6	56
IG-213	2	6	16
IG-214	3	12	80
IG-215	4	2	5
IG-216	4	2	5
IG-217	68	2	7
IG-218	4	10	71
IG-219	3	4	5
IG-220	4	10	110
IG-221	4	10	96
IG-222	2	12	76
IG-223	3	8	116
IG-224	3	10	70
*IG-224	3	10	71

Sample No.	elements analysed ppm		
	Cu	Pb	Zn

* Were checked chemical analysis

Area I

(Igherm) (20)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IY- 1	40	10	84
* IY- 1	39	10	82
IY- 2	4	8	30
IY- 3	6	6	55
IY- 4	11	6	53
IY			
IY- 5	68	2	45
IY- 6	5	10	46
IY- 7	11	6	60
IY- 8	3	10	50
IY- 9	15	6	39
IY- 10	2	6	28
IY- 11	4	10	52
IY- 12	2	3	57
IY- 13	5	8	75
IY- 14	40	8	52
IY- 15	15	6	37
IY- 16	6	6	62
IY- 17	17	10	34
IY- 18	320	6	54
IY- 19	5	8	56
IY- 20	11	12	60
IY- 21	5	4	55
IY- 22	9	10	150
IY- 23	7	8	69
IY- 24	75	6	86
IY- 25	28	8	122
IY- 26	6	10	102
IY- 27	5	14	270
IY- 28	8	6	54
IY- 29	2	4	36
IY- 30	5	102	170
IY- 31	12	14	240
IY- 32	660	6	67
IY- 33	10	12	180
IY- 34	3	10	38

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IY- 35	5	6	63
IY- 36	180	10	16
IY- 37	7	8	76
IY- 38	3	2	19
IY- 39	5	8	107
IY- 40	7	6	31
IY- 41	8	6	99
IY- 42	3	6	65
IY- 43	5	8	151
IY- 44	4	8	175
IY- 45	2	4	48
IY- 46	18	8	58
IY- 47	390	6	47
IY- 48	18	8	2
IY- 49	4	6	34
IY- 50	62	4	10
IY- 51	240	4	2
IY- 52	5	2	1
IY- 53	5	2	2
IY- 54	12	2	2
IY- 55	1	2	3
IY- 56	1	4	67
IY- 57	2	2	3
IY- 58	2	4	74
IY- 59	2	10	50
IY- 60	2	8	84
*IY- 60	2	8	86
IY- 61	2	4	37
IY- 62	2	4	10
IY- 63	2	6	77
IY- 64	4	6	46
IY- 65	1	4	64
IY- 66	1	4	4
IY- 67	240	2	9
IY- 68	2	4	7

* Were checked chemical analysis

Area I

(Igherm) (21)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IY- 69	11	2	9
IY- 70	10	6	10
IY- 71	20	40	22
IY- 72	16	30	9
IY- 73	5	30	7
IY- 74	26	32	30
IY- 75	15	36	24
IY- 76	6	28	14
IY- 77	17	84	77
IY- 78	24	32	71
IY- 79	28	36	11
IY- 80	15	4	9
IY- 81	8	2	5
IY- 82	18	8	11
IY- 83	2	6	5
IY- 84	2	8	5
IY- 85	2	6	12
IY- 86	4	6	24
IY- 87	50	6	49
IY- 88	3	10	200
IY- 89	4	8	43
IY- 90	2	4	6
IY- 91	2	8	37
IY- 92	5	16	59
IY- 93	2	8	11
IY- 94	4	12	104
IY- 95	2	10	38
IY- 96	3	19	87
IY- 97	3	52	128
IY- 98	2	8	40
IY- 99	2	6	16
IY-100	1	10	45
*IY-100	1	10	45
IY-101	1	10	60
IY-102	2	12	95

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IY-103	1	8	70
IY-104	2	8	99
IY-105	1	10	63
IY-106	1	10	64
IY-107	1	8	90
IY-108	1	8	75
IY-109	1	8	66
IY-110	1	12	74
IY-111	2	8	41
IY-112	1	8	59
IY-113	2	8	20
IY-114	2	10	57
IY-115	1	6	75
IY-116	1	8	70
IY-117	3	14	92
IY-118	2	6	68
IY-119	2	4	65
IY-120	3	2	59
IY-121	2	6	44
IY-122	2	2	34
IY-123	2	2	48
IY-124	4	6	44
IY-125	2	2	1
IY-126	2	6	48
IY-127	3	6	64
IY-128	2	10	70
IY-129	3	12	71
IY-130	3	8	43
*IY-130	3	10	46
IY-131	2	6	44
IY-132	4	10	42
IY-133	2	8	26
IY-134	3	6	3
IY-135	2	14	42
IY-136	3	12	44

* Were checked chemical analysis

Area I

(Igherm) (22)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IY-137	2	4	2
IY-138	3	14	21
IY-139	3	10	6
IY-140	2	12	47
IY-141	3	6	5
IY-142	2	8	17
IY-143	1	2	2
*IY-143	1	2	2
IY-144	1	4	6
IY-145	1	30	8
IY-146	6	8	30
IY-147	1	4	24
IY-148	2	4	30
IY-149	1	8	22
IY-150	1	2	2
IY-151	1	8	30
IY-152	1	6	24
IY-153	1	8	34
IY-154	1	6	28
IY-155	3	4	8
IY-156	2	2	8
IY-157	1	2	6
IY-158	1	2	4
IY-159	1	8	68
IY-160	1	10	48
*IY-160	1	10	46
IY-161	11	10	28
*IY-161	11	10	29
IY-162	5	8	69
IY-163	34	6	74
IY-164	1	2	6
IY-165	2700	4	47
IY-166	8	6	102
IY-167	1	4	61
IY-168	5	8	66

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
IY-169	5	8	127
IY 170	300	6	59
IY 171	8	8	61
IY 172	4	6	75

* Were checked chemical analysis

Table I-7-3 Geochemical Data of J (Talat-n-Sous) Area

Area J

(Talat-n-Sous) (1)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JB- 1	4	2	10
*JB- 1	4	2	10
JB- 2	4	6	16
JB- 3	13	4	10
JB- 4	155	6	39
JB- 5	370	2	8
JB- 6	68	2	6
JB- 7	7	2	4
JB- 8	4	2	2
JB- 9	790	2	7
JB- 10	6	2	3
JB- 11	7	6	13
JB- 12	13	46	113
JB- 13	145	4	47
JB- 14	3	6	4
JB- 15	4	2	3
JB- 16	2	2	1
JB- 17	4	2	2
JB- 18	35	2	3
JB- 19	36	2	4
JB- 20	135	2	6
JB- 21	14	2	3
JB- 22	4	4	19
JB- 23	4	10	11
JB- 24	5	4	13
JB- 25	62	30	18
JB- 26	13	42	17
JB- 27	9	24	16
JB- 28	7	50	33
JB- 29	10	6	27
JB- 30	72	4	32
JB- 31	13	12	24
JB- 32	5	28	9
JB- 33	16	40	11
JB- 34	23	24	8

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JB- 35	16	40	24
JB- 36	4	16	26
JB- 37	1600	8	24
JB- 38	19	30	27
JB- 39	8	40	16
JB- 40	7	8	32
JB- 41	4	6	26
JB- 42	13	38	12
JB- 43	76	64	25
JB- 44	4	6	21
JB- 45	5	6	18
JB- 46	4	6	20
JB- 47	3	4	21
JB- 48	5	2	4
JB- 49	6	370	20
JB- 50	3	26	14
JB- 51	5	44	12
JB- 52	90	56	166
JB- 53	135	60	80
JB- 54	38	170	58
JB- 55	6	24	16
JB- 56	17	26	20
JB- 57	5	26	24
JB- 58	8	22	121
JB- 59	3	18	10
JB- 60	13	34	50
JB- 61	7	30	74
JB- 62	7	6	8
JB- 63	4	24	26
JB- 64	2	2	3
JB- 65	2	18	4
JB- 66	7	24	29
JB- 67	9	34	162
JB- 68	4	18	32
JB- 69	4	8	40

* Were checked chemical analysis

Area J

(Talat-n-Sous) (2)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JB- 70	4	8	39
JB- 71	12	4	44
JB- 72	27	6	31
JB- 73	5	30	19
JB- 74	7	20	14
JB- 75	4	26	12
JB- 76	10	30	44
JB- 77	4	26	9
JB- 78	6	26	24
JB- 79	6	24	16
JB- 80	8	26	17
JB- 81	3	2	7
JB- 82	7	24	27
JB- 83	5	6	20
JB- 84	3	8	27
JB- 85	11	6	42
JB- 86	36	16	61
JB- 87	7	10	27
JB- 88	3	24	8
JB- 89	5	28	10
JB- 90	5	24	7
JB- 91	220	12	33
JB- 92	13	6	34
JB- 93	59	40	32
JB- 94	40	6	41
JB- 95	67	6	36
JB- 96	3	24	11
JB- 97	3	26	14
JB- 98	3	24	9
JB- 99	400	50	34
JB-100	32	24	47
JB-101	4	14	33
JB-102	9	12	38
JB-103	4	10	43
JB-104	4	22	11

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JB-105	3	26	14
JB-106	112	72	77
JB-107	620	1400	580
JB-108	7	8	8
JB-109	7	6	7
JB-110	6	6	15
JB-111	3	4	17
JB-112	1	6	9
*JB-112	1	6	10

* Were checked chemical analysis

Area J

(Talat-n-Sous) (3)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JE- 1	86	6	37
*JE- 1	87	4	37
JE- 2	18	4	22
JE- 3	26	8	28
JE- 4	42	80	22
JE- 5	15	82	34
JE- 6	9	28	25
JE- 7	10	42	35
JE- 8	8	4	3
JE- 9	52	66	30
JE- 10	34	440	175
JE- 11	12	74	122
JE- 12	42	60	121
JE- 13	22	62	22
JE- 14	4	22	14
JE- 15	10	12	20
JE- 16	21	16	25
JE- 17	10	18	38
JE- 18	8	38	26
JE- 19	46	66	112
JE- 20	25	66	23
JE- 21	13	70	53
JE- 22	98	4	11
JE- 23	6	8	16
JE- 24	6	4	4
JE- 25	3	4	16
JE- 26	15	4	32
JE- 27	43	8	20
JE- 28	14	4	18
JE- 29	24	6	30
JE- 30	20	8	32
JE- 31	3	2	2
JE- 32	32	16	67
JE- 33	35	8	63
JE- 34	7	8	27

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JE- 35	72	24	52
JE- 36	34	10	50
JE- 37	45	14	68
JE- 38	16	20	32
JE- 39	17	26	35
JE- 40	6	4	8
JE- 41	5	26	22
JE- 42	5	20	33
JE- 43	3	26	8
JE- 44	3	8	36
JE- 45	4	24	8
JE- 46	3	16	7
JE- 47	3	20	6
JE- 48	5	24	27
JE- 49	9	36	94
JE- 50	14	24	26
JE- 51	3	6	34
JE- 52	16	20	46
JE- 53	5	26	28
JE- 54	23	140	131
JE- 55	11	14	45
JE- 56	14	16	40
JE- 57	21	20	39
JE- 58	3	6	27
JE- 59	32	20	35
JE- 60	23	12	36
*JE- 60	23	14	36

* Were checked chemical analysis

Area J

(Talat-n-Sous) (4)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JF- 1	4	2	15
*JF- 1	4	2	16
JF- 2	460	4	28
JF- 3	15	32	22
JF- 4	13	34	18
JF- 5	2	4	30
JF- 6	22	2	42
JF- 7	4	2	7
JF- 8	16	20	39
JF- 9	6	24	17
JF- 10	27	30	13
JF- 11	12	30	12
JF- 12	1	2	16
JF- 13	1	2	21
JF- 14	1	2	4
JF- 15	82	2	3
JF- 16	1	2	18
JF- 17	7	6	30
JF- 18	8	4	19
JF- 19	1	2	20
JF- 20	4	4	15
JF- 21	1	2	4
JF- 22	1	2	8
JF- 23	1	2	2
JF- 24	1	2	1
JF- 25	6	8	4
JF- 26	25	4	4
JF- 27	120	22	22
JF- 28	2200	12	40
JF- 29	39	50	27
JF- 30	3	4	5
JF- 31	4	4	6
JF- 32	165	186	44
JF- 33	7	4	4
JF- 34	115	16	31

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JF- 35	4	24	13
JF- 36	2	42	20
JF- 37	9	44	68
JF- 38	3	26	38
JF- 39	1	56	54
JF- 40	14	22	11
JF- 41	6	8	15
JF- 42	1	2	24
JF- 43	96	8	58
JF- 44	5	12	34
JF- 45	18	22	13
JF- 46	18	102	194
JF- 47	3	30	13
JF- 48	3	38	19
JF- 49	500	40	41
JF- 50	21	114	60
JF- 51	2	40	15
JF- 52	6	20	23
JF- 53	6	20	27
JF- 54	14	20	18
JF- 55	1	18	5
JF- 56	2	24	8
JF- 57	2	26	14
JF- 58	2	28	6
JF- 59	2	16	7
JF- 60	14	12	22
JF- 61	23	40	92
JF- 62	14	8	39
JF- 63	82	8	67
JF- 64	2	24	8
JF- 65	2	22	11
JF- 66	2	22	9
JF- 67	2	20	8
JF- 68	1	20	6
JF- 69	1	22	12

* Were checked chemical analysis

Area J

(Talat-n-Sous) (5)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JF- 70	1	24	9
JF- 71	1	28	18
JF- 72	1	22	9
JF- 73	1	22	10
JF- 74	2	26	11
JF- 75	3	4	4
JF- 76	49	8	26
JF- 77	19	8	23
JF- 78	5	6	57
JF- 79	1	4	24
JF- 80	2	24	32
JF- 81	8	32	176
JF- 82	4	24	30
JF- 83	2	22	25
JF- 84	2	24	12
JF- 85	5	32	14
JF- 86	2	24	8
JF- 87	2	26	9
JF- 88	2	22	22
JF- 89	2	20	16
JF- 90	34	6	29
JF- 91	8	6	32
*JF- 91	8	6	32
JF- 92	35	6	37
*JF- 92	35	4	38
JF- 93	34	12	43
JF- 94	5	30	15
JF- 95	3	24	9
JF- 96	5	28	15
JF- 97	4	30	8
JF- 98	3	28	9
JF- 99	6	32	14
JF-100	7	30	10
JF-101	8	32	19
JF-102	3	30	10

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JF-103	4	34	11
JF-104	3	32	10
JF-105	8	36	74
JF-106	3	28	18
JF-107	2	4	26

* Were checked chemical analysis

Area J

(Talat-n-Sous) (6)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JG- 1	3	14	27
*JG- 1	3	12	26
JG- 2	1	60	12
JG- 3	6800	28	107
JG- 4	19	24	19
JG- 5	5	36	15
JG- 6	16	2	60
JG- 7	2	4	12
JG- 8	3	4	26
JG- 9	1	30	20
JG- 10	11	28	54
JG- 11	5	32	22
JG- 12	34	4	10
JG- 13	5	4	11
JG- 14	15	2	7
JG- 15	21	4	5
JG- 16	11	2	6
JG- 17	3	2	13
JG- 18	2	4	11
JG- 19	2	6	7
JG- 20	4	8	18
JG- 21	4	6	10
JG- 22	7	10	15
JG- 23	3	4	30
JG- 24	6	4	4
JG- 25	90	26	12
JG- 26	6	26	54
JG- 27	31	24	23
JG- 28	790	450	250
JG- 29	4	36	22
JG- 30	185	80	122
JG- 31	15	76	38
JG- 32	7	32	25
JG- 33	36	36	27
JG- 34	29	30	33

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JG- 35	17	12	36
JG- 36	3	56	61
JG- 37	21	14	42
JG- 38	10	24	47
JG- 39	13	34	63
JG- 40	15	10	24
JG- 41	16	12	49
JG- 42	4	2	16
JG- 43	5	4	22
JG- 44	30	4	39
JG- 45	8	4	27
JG- 46	12	26	82
JG- 47	4	22	19
JG- 48	3	24	29
JG- 49	3	16	9
JG- 50	8	18	38
JG- 51	120	38	35
JG- 52	13	12	36
JG- 53	25	6	35
JG- 54	4	24	32
JG- 55	7	24	19
JG- 56	4	24	14
JG- 57	6	26	16
JG- 58	3	20	12
JG- 59	2	12	9
JG- 60	4	22	10
JG- 61	4	20	23
JG- 62	25	30	40
JG- 63	11	10	35
JG- 64	12	8	37
JG- 65	6	6	38
JG- 66	3	6	12
JG- 67	32	10	47
JG- 68	108	4	39
JG- 69	22	12	34

* Were checked chemical analysis

Area J

(Talat-n-Sous) (7)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JG- 70	20	16	72
JG- 71	95	22	32
JG- 72	37	26	86
JG- 73	58	4	35
JG- 74	19	20	71
JG- 75	9	62	74
JG- 76	32	4	56
JG- 77	11	8	35
JG- 78	18	4	24
JG- 79	84	54	71
JG- 80	3	22	13
JG- 81	3	2	4
JG- 82	3	22	10
JG- 83	5	2	27
JG- 84	3	20	13
JG- 85	4	22	20
JG- 86	3	24	15
JG- 87	3	24	9
JG- 88	3	22	19
JG- 89	3	22	12
JG- 90	4	2	6
JG- 91	3	22	12
JG- 92	32	34	95
JG- 93	22	6	50
JG- 94	8	8	42
JG- 95	71	4	45
JG- 96	3	18	15
JG- 97	8	30	23
JG- 98	8	26	24
JG- 99	4	20	7
JG-100	2	2	2
JG-101	4	20	15
JG-102	2	8	4
JG-103	2	2	5
JG-104	3	18	11

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
JG-105	3	24	52
JG-106	3	24	10
JG-107	14	4	28
* JG-107	15	4	30
JG-108	12	6	40
* JG-108	11	6	41
JG-109	11	36	27
JG-110	3	18	9
JG-111	1	32	14
JG-112	22	72	27
JG-113	3	20	10
JG-114	4	36	8
JG-115	3	22	8
JG-116	15	38	41
JG-117	22	44	106
JG-118	4	32	18
JG-119	3	32	15
JG-120	20	6	37
JG-121	9	14	39
JG-122	97	20	38

* Were checked chemical analysis

Table I-7-4 Geochemical Data of K(Assif Imider) Area

Area K

(Assif Imider) (1)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
KC- 1	49	4	54
KC- 2	10	28	22
KC- 3	6	42	33
KC- 4	4	26	17
KC- 5	19	34	48
KC- 6	8	50	22
KC- 7	20	36	40
KC- 8	73	126	33
KC- 9	9	34	13
KC- 10	75	10	92
KC- 11	10	38	22
KC- 12	14	6	175
KC- 13	18	12	33
KC- 14	4	26	20
KC- 15	5	44	63
KC- 16	32	16	81
KC- 17	11	42	27
KC- 18	10	30	32
KC- 19	4	40	24
KC- 20	45	6	18
KC- 21	8	28	34
KC- 22	6	24	32
KC- 23	12	32	17
KC- 24	37	42	13
KC- 25	22	34	27
KC- 26	10	10	55
KC- 27	14	34	13
KC- 28	18	46	18
KC- 29	1	10	49
KC- 30	6	22	36
KC- 31	4	24	50
KC- 32	3	30	35
KC- 33	6	34	28
KC- 34	4	38	23
KC- 35	9	36	8

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
KC- 36	9	30	34
KC- 37	11	26	39
KC- 38	124	14	36

* Were checked chemical analysis

Area K

(Assif Imider) (2)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
KD- 1	200	46	24
*KD- 1	200	44	25
KD- 2	10	34	33
KD- 3	88	40	97
KD- 4	58	8	40
KD- 5	5	32	24
KD- 6	8	26	30
KD- 7	10	26	11
KD- 8	4	28	10
KD- 9	25	76	21
KD- 10	10	48	35
KD- 11	7	32	23
KD- 12	15	22	27
KD- 13	30	60	30
KD- 14	10	28	34
KD- 15	6	22	21
KD- 16	26	4	56
KD- 17	8	22	76
KD- 18	11	36	47
KD- 19	8	18	24
KD- 20	22	24	30
KD- 21	8	20	29
KD- 22	20	20	24
KD- 23	14	28	27
KD- 24	250	26	24
KD- 25	16	28	18
KD- 26	29	64	39
KD- 27	5	26	44
KD- 28	23	124	71
KD- 29	15	34	34
KD- 30	28	26	40
KD- 31	16	30	38
KD- 32	23	40	35
KD- 33	19	10	75
KD- 34	64	46	22

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
KD- 35	24	28	43
KD- 36	13	28	5
KD- 37	12	60	66
KD- 38	14	6	16
KD- 39	29	20	52
KD- 40	71	34	36
KD- 41	7	26	25
KD- 42	17	12	58
KD- 43	8375	30	21

* Were checked chemical analysis

Area K

(Assif Imider) (3)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
KY- 1	2	10	86
*KY- 1	2	10	85
KY- 2	11	46	42
KY- 3	41	60	23
KY- 4	18	10	51
KY- 5	11	62	50
KY- 6	9	26	22
KY- 7	5	28	32
KY- 8	12	90	30
KY- 9	95	106	45
KY- 10	8	32	35
KY- 11	360	106	120
KY- 12	8	28	24
KY- 13	175	34	22
KY- 14	7	26	36
KY- 15	5	26	26
KY- 16	4	28	33
KY- 17	125	8	40
KY- 18	3	8	43
KY- 19	6	24	21
KY- 20	175	36	35
KY- 21	11	52	37
KY- 22	500	38	40
KY- 23	8	30	22
KY- 24	71	40	63
KY- 25	66	112	51
KY- 26	11	20	26
KY- 27	7	32	30
KY- 28	10	34	21
KY- 29	18	28	41
KY- 30	9	28	21
KY- 31	3	10	48

Sample No.	elements analysed ppm		
	Cu	Pb	Zn

* Were checked chemical analysis

Table I-7-5 Geochemical Data of L (Tizirt) Area

Area L

(Tizirt) (1)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
LC- 1	120	33	29
* LC- 1	118	32	29
LC- 2	8625	6	30
LC- 3	17	6	1
LC- 4	3	4	31
LC- 5	39	8	27
LC- 6	5	2	1
LC- 7	1425	16	80
LC- 8	11	8	91
LC- 9	500	10	120
LC- 10	4	6	61
LC- 11	6	8	105
LC- 12	11	10	67
LC- 13	18	6	45
LC- 14	5	10	54
LC- 15	11	12	66
LC- 16	8000	8	51
LC- 17	14	8	46
LC- 18	12	8	55
LC- 19	10	6	2
LC- 20	8	4	12
LC- 21	3	6	24
LC- 22	8	8	51
LC- 23	8	8	25
LC- 24	2	10	32
LC- 25	4	8	37
LC- 26	115	10	54
LC- 27	1350	6	6
LC- 28	24	14	95
LC- 29	9	12	66
LC- 30	1300	10	79
LC- 31	16	8	53
LC- 32	33	6	6
LC- 33	4	12	95
LC- 34	20	16	110

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
LC- 35	5	8	44
LC- 36	17	10	4
LC- 37	830	20	105
LC- 38	10	12	65
LC- 39	45	12	66
L			
LC- 40	1600	6	115
LC- 41	15	4	72
LC- 42	6	6	83
LC- 43	4	8	86
LC- 44	210	8	92
LC- 45	3	8	70
LC- 46	3	8	24
LC- 47	165	40	14
LC- 48	118	12	93
LC- 49	93	4	30
LC- 50	15	10	60
LC- 51	330	10	62
LC- 52	12	10	71
LC- 53	5	10	69
LC- 54	7	12	12
LC- 55	93	4	6
LC- 56	36	6	12
LC- 57	9375	10	100
LC- 58	34000	12	67
LC- 59	9375	54	180
LC- 60	580	14	7
LC- 61	46	12	2
LC- 62	370	10	98
LC- 63	45	8	60
LC- 64	520	10	110
LC- 65	32	14	90
LC- 66	470	12	91
LC- 67	30	14	95
*LC- 67	31	14	96
LC- 68	25	4	2

* Were checked chemical analysis

Area L

(Tizirt) (2)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
*LC- 68	24	4	1
LC- 69	36	6	71
LC- 70	600	4	69
LC- 71	10	4	51
LC- 72	570	8	88
LC- 73	95	4	53
LC- 74	8	6	79
LC- 75	50	6	37
LC- 76	9500	100	12
LC- 77	21	12	6
LC- 78	460	8	114
LC- 79	2000	2	1
LC- 80	8	10	76
LC- 81	28	6	44
LC- 82	5800	3	46
LC- 83	39000	4	60
LC- 84	47	6	49
LC- 85	235	8	63
LC- 86	225	10	44
LC- 87	19	8	87
LC- 88	40	6	43
LC- 89	13	2	1
LC- 90	8	4	11
LC- 91	50	2	2
LC- 92	92	2	1
LC- 93	1875	4	1
LC- 94	15	10	92
LC- 95	4	6	60
LC- 96	5	58	43
LC- 97	10	2	45
LC- 98	20	2	8

Sample No.	elements analysed ppm		
	Cu	Pb	Zn

* Were checked chemical analysis

Area L

(Tizirt) (3)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
LD- 1	30	30	65
*LD- 1	29	30	67
LD- 2	10	6	18
LD- 3	7	8	35
LD- 4	5	10	47
LD- 5	3	10	33
LD- 6	3	8	32
LD- 7	46	6	9
LD- 8	4	6	13
LD- 9	4	10	51
LD- 10	2	4	1
LD- 11	440	12	102
LD- 12	5	10	100
LD- 13	4	6	36
LD- 14	3	6	98
LD- 15	15	10	136
LD- 16	12	10	41
LD- 17	4	8	78
LD- 18	5	8	13
LD- 19	3	6	33
LD- 20	2	8	26
LD- 21	3	12	175
LD- 22	10	10	82
LD- 23	200	16	83
LD- 24	4	12	7
LD- 25	2	6	80
LD- 26	4	8	55
LD- 27	2	6	103
LD- 28	2	6	62
LD- 29	7	8	124
LD- 30	4	10	15
LD- 31	4	12	8
LD- 32	3	8	105
LD- 33	3	8	61
LD- 34	4	6	34

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
LD- 35	3	2	4
LD- 36	3	8	36
LD- 37	2	14	39
LD- 38	3	10	46
LD- 39	6	2	4
LD- 40	125	16	16
LD- 41	27	12	145
LD- 42	31	10	59
LD- 43	3	12	100
LD- 44	5	18	56
LD- 45	4	12	71
LD- 46	3	6	8
LD- 47	4	8	86
LD- 48	3	4	4
LD- 49	36	26	23
LD- 50	4	12	83
LD- 51	4	8	31
LD- 52	3	6	67
LD- 53	78	134	9
LD- 54	4	12	115
LD- 55	41	10	75
LD- 56	6	8	63
LD- 57	5	10	93
LD- 58	3	10	66
LD- 59	4	6	41
LD- 60	3	8	54
LD- 61	10	10	80
LD- 62	9	6	61
LD- 63	11	6	62
LD- 64	1040	26	45
LD- 65	31	14	122
LD- 66	4	8	58
LD- 67	80	8	76
LD- 68	6750	4	20
LD- 69	14	6	5

* Were checked chemical analysis

Area L

(Tizirt) (4)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
LD- 70	6	6	37
LD- 71	26	20	13
LD- 72	5	12	38
LD- 73	190	8	79
LD- 74	26	8	51
LD- 75	8	8	60
*LD- 75	8	8	61
LD- 76	6	8	71
*LD- 76	6	8	72
LD- 77	7	2	38
LD- 78	10	4	75
LD- 79	25	4	50
LD- 80	380	2	11
LD- 81	21	2	7
LD- 82	5	4	69
LD- 83	200	12	84
LD- 84	11	2	6
LD- 85	5300	104	165
LD- 86	8	66	63
LD- 87	79	2	4
LD- 88	6	2	71
LD- 89	6	2	65
LD- 90	11	4	4
LD- 91	3	2	3
LD- 92	4	4	70
LD- 93	8	6	88
LD- 94	3	4	55
LD- 95	10	4	61
LD- 96	21	4	81
LD- 97	60	2	63
LD- 98	3	2	2
LD- 99	8	2	4
LD-100	12	6	12
LD-101	740	2	7
LD-102	300	2	21

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
LD-103	2	6	92
LD-104	4	6	90
LD-105	3	10	108
LD-106	3	2	31
LD-107	300	6	86

* Were checked chemical analysis

Area L

(Tizirt) (5)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
LY- 1	10	8	6
*LY- 1	10	8	6
LY- 2	5	8	33
LY- 3	2	6	31
LY- 4	3	6	6
LY- 5	28	8	78
LY- 6	6	10	87
LY- 7	8	10	70
LY- 8	5	8	80
LY- 9	9	10	107
LY- 10	4	10	135
LY- 11	19	10	40
LY- 12	4	8	53
LY- 13	4	8	59
LY- 14	3	6	15
LY- 15	1250	10	110
LY- 16	7	10	69
LY- 17	5	8	118
LY- 18	4	8	72
LY- 19	2	2	5
LY- 20	39	8	77
LY- 21	10	10	38
LY- 22	3	8	34
LY- 23	4	8	19
LY- 24	15	6	76
LY- 25	4	8	96
LY- 26	4	4	66
LY- 27	11	2	13
LY- 28	4	8	137
LY- 29	33	8	67
LY- 30	31	4	61
LY- 31	3	6	73
LY- 32	870	4	64
LY- 33	118	6	58
LY- 34	18	2	9

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
LY- 35	5	4	63
LY- 36	570	8	74
LY- 37	7	6	51
LY- 38	25	14	54
LY- 39	6	10	127
*LY- 39	6	10	128
LY- 40	3	8	89
*LY- 40	3	8	90
LY- 41	3	8	96
LY- 42	46	10	57
LY- 43	68	6	49
LY- 44	2	6	55
LY- 45	1	4	34
LY- 46	3	4	23
LY- 47	5	6	18
LY- 48	5	4	2
LY- 49	4	6	89
LY- 50	16	8	72
LY- 51	11	8	85
LY- 52	7	4	74
LY- 53	7	2	2
LY- 54	29	4	4
LY- 55	130	8	66
LY- 56	27	6	58
LY- 57	68	6	93
LY- 58	9250	6	60
LY- 59	135	4	7

* Were checked chemical analysis

Table I-7-6 Geochemical Data of M(Aniloul) Area

Area M

(Aniloul) (1)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
MC- 1	210	10	440
*MC- 1	205	10	430
MC- 2	1	10	68
MC- 3	2	2	2
MC- 4	1	2	2
MC- 5	3	2	4
MC- 6	2	6	4
MC- 7	1	4	9
MC- 8	2	2	2
MC- 9	2	2	1
MC- 10	2	2	1
MC- 11	2	8	72
MC- 12	1200	10	184
MC- 13	8	4	51
MC- 14	3	6	21
MC- 15	3	6	29
MC- 16	2	10	150
MC- 17	1240	10	137
MC- 18	10	4	53
MC- 19	3	6	25
MC- 20	2	2	2
MC- 21	17	10	45
MC- 22	19	8	144
MC- 23	2	88	2
MC- 24	2	2	1
MC- 25	2	2	3
MC- 26	1	2	10
MC- 27	1	2	1
MC- 28	2	10	54
MC- 29	2	6	34
MC- 30	31	2	2
MC- 31	3	8	7
MC- 32	2	2	4
MC- 33	3	2	6
MC- 34	8	2	3

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
MC- 35	21	6	6
MC- 36	2	4	34
MC- 37	1	12	170
MC- 38	3	8	41
MC- 39	2150	6	160
MC- 40	47	4	25
MC- 41	2	6	150
MC- 42	55	6	36
MC- 43	3	4	24
MC- 44	2	8	165
MC- 45	1	6	26
MC- 46	1	2	2
MC- 47	2	2	4
MC- 48	1	2	3
MC- 49	1	2	5
MC- 50	2	2	3
MC- 51	5	28	2
MC- 52	3	8	4
MC- 53	6	6	67
MC- 54	2	8	24
MC- 55	2	2	2
MC- 56	1	2	2
MC- 57	2	2	2
MC- 58	1	2	2
MC- 59	1	20	37
MC- 60	1	10	30
MC- 61	1	8	28
MC- 62	2	2	4
MC- 63	1	4	14
MC- 64	5	6	24
MC- 65	6	10	54
MC- 66	10	8	55
MC- 67	3	70	41
MC- 68	2	8	28
MC- 69	1	4	5

* Were checked chemical analysis

Area M

(Aniloul) (2)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
MC- 70	15	4	5
MC- 71	28	6	39
MC- 72	10	2	2
*MC- 72	10	2	2

Sample No.	elements analysed ppm		
	Cu	Pb	Zn

* Were checked chemical analysis

Area M

(Aniloul)

(3)

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
MY- 1	1	6	18
*MY- 1	1	6	18
MY- 2	1	2	3
MY- 3	1	2	6
MY- 4	1	2	3
MY- 5	2	2	5
MY- 6	1	4	1
MY- 7	1	2	3
MY- 8	1	10	100
MY- 9	360	12	190
MY- 10	6	8	48
MY- 11	15	8	61
MY- 12	440	8	116
MY- 13	245	10	117
MY- 14	15	8	45
MY- 15	5	10	215
MY- 16	780	10	185
MY- 17	4	12	36
MY- 18	2	2	5
MY- 19	1	2	2
MY- 20	2	2	4
MY- 21	1	2	2
MY- 22	1	12	25
MY- 23	1	2	2
MY- 24	2	8	11
MY- 25	2	10	180
MY- 26	2	10	26
MY- 27	1	12	37
MY- 28	2	8	111
MY- 29	3	6	128
MY- 30	1	8	36
MY- 31	8	10	104
MY- 32	3	8	93
MY- 33	2	6	56
MY- 34	1	2	1

Sample No.	elements analysed ppm		
	Cu	Pb	Zn
MY- 35	4	2	4
MY 36	2	4	8
MY 37	3	2	5
MY 38	1	2	4
MY 39	4	2	8
MY 40	2	6	27
MY 41	1	2	5
MY 42	1	2	4
MY 43	2	2	5
MY 44	3	2	3
MY 45	2	2	4
MY 46	2	2	4
MY 47	1	4	5
MY 48	1	2	2
MY 49	1	2	1
MY 50	1	2	5
MY 51	1	6	37
MY 52	1	8	43
MY 53	2	6	5
MY 54	3	8	10
MY 55	1	2	13
MY 56	1	2	4
MY 57	1	2	1
MY 58	1	8	87
MY 59	1	6	82
MY 60	1	6	26
MY 61	3	4	6
MY 62	2	10	92
*MY 62	2	8	96

* Were checked chemical analysis

Table I-7-7 Logarithmic Statistical Values of Geochemical Data by Elements

Area	Elements	Mean	Min.	Max.	Counts	S	M + S	M + 2S	M + 3S
H & J	Cu (ppm)	0.807 (6)	0.0 (1)	4.556 (36000)	1187	0.6087	1.4156 (26)	2.0243 (106)	2.6330 (430)
	Pb (ppm)	1.026 (11)	0.301 (2)	3.146 (1400)	1187	0.4147	1.4405 (28)	1.8551 (72)	2.2698 (186)
	Zn (ppm)	1.337 (22)	0.0 (1)	2.763 (580)	1187	0.3541	1.6911 (49)	2.0452 (111)	2.3994 (251)
I . L & M	Cu (ppm)	0.903 (8)	0.0 (1)	4.591 (39000)	1620	0.7379	1.6405 (44)	2.3784 (239)	3.1163 (1307)
	Pb (ppm)	0.821 (7)	0.301 (2)	3.049 (1120)	1620	0.3494	1.1700 (15)	1.5194 (33)	1.8688 (74)
	Zn (ppm)	1.425 (27)	0.0 (1)	3.041 (1100)	1620	0.5821	2.0071 (102)	2.5892 (388)	3.1713 (1483)
K	Cu (ppm)	1.202 (16)	0.0 (1)	3.923 (8375)	112	0.5544	1.7559 (57)	2.3103 (204)	2.8648 (732)
	Pb (ppm)	1.438 (27)	0.602 (4)	2.100 (126)	112	0.2900	1.7277 (53)	2.0177 (104)	2.3076 (203)
	Zn (ppm)	1.507 (32)	0.699 (5)	2.243 (175)	112	0.2347	1.7413 (55)	1.9760 (95)	2.2106 (162)
Whole	Cu (ppm)	0.875 (8)	0.0 (1)	4.591 (39000)	2919	0.6860	1.5613 (36)	2.2473 (177)	2.9333 (858)
	Pb (ppm)	0.928 (8)	0.301 (2)	3.146 (1400)	2919	0.4015	1.3291 (21)	1.7305 (54)	2.1320 (136)
	Zn (ppm)	1.393 (25)	0.0 (1)	3.041 (1100)	2919	0.4297	1.8854 (77)	2.3782 (239)	2.8709 (743)

Note; S : Standard deviation
M: Mean value

Table I-7-8 Logarithmic Statistical Values of Elements by Geological Units (H and J Areas)

Formation	Rock Facies	Number of Samples	Cu					Pb					Zn				
			M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S
L. Calcareous Series	Dolomite & Chert	240	0.653 (4)	0.3116	0.965 (9)	1.276 (19)	1.588 (39)	1.334 (22)	0.2508	1.585 (38)	1.8356 (68)	2.0864 (122)	1.184 (15)	0.2994	1.483 (30)	1.783 (61)	2.082 (121)
Basal Series	Shale, Sandstone, Conglomerate & Dolomite	489	1.128 (13)	0.6499	1.778 (60)	2.580 (380)	3.230 (1698)	1.112 (13)	0.4371	1.549 (35)	1.986 (97)	2.423 (265)	1.430 (27)	0.3230	1.753 (57)	2.075 (119)	2.399 (251)
P - Ⅲ	Conglomerate, Sandstone & Shale	334	0.472 (3)	0.4085	0.953 (9)	1.361 (23)	1.770 (59)	0.807 (6)	0.2419	1.049 (11)	1.291 (20)	1.533 (34)	1.407 (26)	0.2626	1.670 (47)	1.932 (86)	2.195 (157)
	Rhyolite & It's pyroclastics	62	0.801 (6)	0.6755	1.477 (30)	2.152 (142)	2.828 (673)	0.649 (4)	0.3992	1.048 (11)	1.447 (28)	1.847 (70)	1.003 (10)	0.4046	1.408 (26)	1.812 (65)	2.217 (165)
	Andesite	26	0.600 (4)	0.3373	0.937 (9)	1.275 (19)	1.612 (41)	0.911 (8)	0.2647	1.176 (15)	1.440 (28)	1.705 (51)	1.624 (42)	0.5058	2.130 (135)	2.636 (433)	3.141 (1384)
	Dolomite																
PⅡ - Ⅲ	Conglomerate, Sandstone & Shale	4	0.437 (3)	0.5052	0.942 (9)	1.447 (28)	1.953 (90)	0.496 (3)	0.2359	0.732 (5)	0.968 (9)	1.204 (16)	1.240 (17)	0.2415	1.482 (30)	1.723 (53)	1.965 (92)
	Rhyolite	25	0.716 (5)	0.9855	1.702 (50)	2.687 (486)	3.673 (4710)	0.445 (3)	0.2303	0.675 (5)	0.906 (8)	1.136 (14)	0.715 (15)	0.4371	1.152 (14)	1.589 (39)	2.026 (106)
	Andesite	7	1.086 (12)	0.7370	1.823 (67)	2.56 (363)	3.297 (1982)	0.989 (10)	0.6286	1.618 (41)	2.246 (176)	2.875 (750)	0.978 (9)	0.4114	1.389 (24)	1.801 (63)	2.212 (163)
PⅡ	Quartzite																
	Green rock & Schist																

Note; S : Standard deviation
M : Mean value
(ppm)

Table I-7-9 Logarithmic Statistical Values of Elements by Geological Units (I, L and M Areas)

Formation	Rock Facies	Number of Samples	Cu					Pb					Zn				
			M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S
L.Calcareous Series	Dolomite & Chert	100	1.364 (23)	0.6596	2.024 (106)	2.683 (482)	3.343 (2203)	1.432 (27)	0.2700	1.702 (50)	1.972 (94)	2.242 (175)	1.169 (15)	0.3963	1.565 (37)	1.962 (92)	2.358 (228)
Basal Series	Shale, Sandstone, Conglomerate & Dolomite	50	1.198 (16)	0.8377	2.036 (109)	2.873 (746)	3.711 (5140)	0.999 (10)	0.4235	1.423 (26)	1.846 (70)	2.270 (186)	1.251 (18)	0.3810	1.632 (43)	2.013 (103)	2.394 (248)
P - Ⅱ	Conglomerate, Sandstone & Shale	525	0.630 (4)	0.6180	1.248 (18)	1.866 (73)	2.484 (30)	0.796 (6)	0.2718	1.068 (11)	1.340 (22)	1.611 (41)	1.503 (32)	0.4347	1.938 (87)	2.372 (236)	2.807 (641)
	Rhyolite & It's pyroclastics	246	0.698 (5)	0.7517	1.450 (28)	2.201 (159)	2.953 (897)	0.602 (4)	0.3730	0.975 (9)	1.348 (22)	1.721 (53)	0.700 (5)	0.5043	1.204 (16)	1.709 (51)	2.913 (818)
	Andesite	103	0.994 (10)	0.8700	1.864 (73)	2.734 (542)	3.604 (4018)	0.906 (8)	0.2445	1.151 (14)	1.395 (25)	1.640 (44)	1.921 (83)	0.4677	2.389 (245)	2.856 (718)	3.324 (2109)
	Dolomite	11	1.767 (59)	0.7503	2.517 (329)	3.268 (1854)	4.018 (10423)	1.412 (26)	0.2851	1.697 (50)	1.982 (96)	2.267 (185)	1.254 (18)	0.2752	1.529 (34)	1.804 (64)	2.080 (120)
PⅡ - Ⅲ	Conglomerate, Sandstone & Shale	490	1.088 (12)	0.6973	1.785 (61)	2.483 (304)	3.180 (1514)	0.817 (7)	0.2468	1.064 (12)	1.311 (20)	1.557 (36)	1.775 (60)	0.3078	2.083 (121)	2.391 (246)	2.698 (499)
	Rhyolite	15	1.016 (10)	0.8258	1.842 (70)	2.668 (466)	3.493 (3112)	0.837 (7)	0.4276	1.265 (18)	1.692 (49)	2.120 (132)	1.052 (11)	0.5273	1.579 (38)	2.107 (128)	2.634 (431)
	Andesite	2	1.711 (51)	1.5680	3.279 (1901)	4.847 (70307)	6.415 (2600160)	1.230 (17)	0.2129	1.443 (28)	1.656 (45)	1.869 (74)	1.995 (99)	0.0248	2.020 (105)	2.045 (111)	2.069 (117)
PⅡ	Quartzite	61	1.126 (13)	0.5864	1.712 (52)	2.299 (199)	2.885 (767)	0.520 (3)	0.2845	0.805 (6)	1.089 (12)	1.374 (24)	0.655 (5)	0.6216	1.277 (19)	1.898 (79)	2.5198 (331)
	Greenrock & Schist	14	1.322 (21)	0.5805	1.903 (80)	2.483 (304)	3.064 (1159)	0.739 (5)	0.4152	1.154 (14)	1.569 (37)	1.985 (97)	1.705 (51)	0.3269	2.032 (108)	2.359 (229)	2.685 (484)

Note; S : Standard deviation
M : Mean value
(ppm)

Table I-7-10 Logarithmic Statistical Values of Elements by Geological Units (K Area)

Formation	Rock Facies	Number of Samples	Cu					Pb					Zn				
			M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S
L.Calcareous Series	Dolomite & Chert																
Basal Series	Shale, Sandstone, Conglomerate & Dolomite	106	1.221 (17)	0.5288	1.750 (56)	2.279 (190)	2.807 (641)	1.460 (29)	0.2723	1.732 (54)	2.004 (101)	2.277 (189)	1.483 (30)	0.2227	1.706 (51)	1.928 (85)	2.151 (142)
P - Ⅱ	Conglomerate, Sandstone & Shale																
	Rhyolite & It's pyroclastics																
	Andesite	6	1.099 (13)	0.8639	1.963 (92)	2.827 (671)	3.691 (4909)	1.189 (15)	0.4216	1.611 (41)	2.032 (108)	2.454 (284)	1.852 (71)	0.1668	2.019 (104)	2.186 (153)	2.352 (225)
	Dolomite																
PI - Ⅱ	Conglomerate, Sandstone & Shale																
	Rhyolite																
	Andesite																
PI	Quartzite																
	Green rock & Schist																

Note; S : Standard deviation
M : Mean value
(ppm)

Table I-7-11 Logarithmic Statistical Values of Elements by Geological Units (Whole Area)

Formation	Rock Facies	Number of Samples	Cu					Pb					Zn				
			M	S	M + S	M - 2S	M + 3S	M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S
L.Calcareous Series	Dolomite & Chert	340	0.862 (7)	0.5485	1.4105 (26)	1.959 (91)	2.508 (322)	1.362 (23)	0.2601	1.622 (42)	1.882 (76)	2.142 (139)	1.179 (15)	0.3304	1.509 (32)	1.840 (69)	2.170 (148)
Basal Series	Shale, Sandstone, Conglomerate & Dolomite	643	1.148 (14)	0.6487	1.797 (63)	2.445 (279)	3.094 (1242)	1.160 (14)	0.4350	1.595 (39)	2.030 (107)	2.465 (292)	1.424 (27)	0.3183	1.742 (55)	2.061 (115)	2.379 (239)
P - Ⅲ	Conglomerate, Sandstone & Shale	860	0.568 (4)	0.5513	1.119 (13)	1.671 (47)	2.222 (167)	0.800 (6)	0.2604	1.060 (11)	1.321 (21)	1.581 (30)	1.466 (29)	0.3799	1.846 (70)	2.226 (168)	2.606 (404)
	Rhyolite & It's pyroclastics	308	0.719 (5)	0.7371	1.456 (29)	2.193 (156)	2.930 (851)	0.611 (4)	0.3783	0.989 (10)	1.368 (23)	1.746 (56)	0.761 (6)	0.5003	1.261 (18)	1.762 (58)	2.262 (183)
	Andesite	135	0.923 (8)	0.8067	1.730 (54)	2.536 (344)	3.343 (2203)	0.919 (8)	0.2619	1.181 (15)	1.443 (28)	1.705 (51)	1.861 (73)	0.4784	2.339 (218)	2.818 (658)	3.296 (1977)
	Dolomite	12	1.703 (50)	0.7489	2.452 (283)	3.201 (1589)	3.950 (8913)	1.377 (24)	0.2967	1.674 (47)	1.970 (93)	2.267 (185)	1.294 (20)	0.2976	1.592 (39)	1.889 (77)	2.187 (154)
PⅡ - Ⅲ	Conglomerate, Sandstone & Shale	494	1.083 (12)	0.6980	1.781 (60)	2.479 (301)	3.177 (1503)	0.815 (7)	0.2482	1.063 (12)	1.311 (20)	1.560 (36)	1.771 (59)	0.3109	2.082 (121)	2.393 (247)	2.704 (506)
	Rhyolite	40	0.828 (7)	0.9296	1.758 (57)	2.687 (486)	3.617 (4140)	0.592 (4)	0.3678	0.960 (9)	1.328 (21)	1.965 (50)	0.841 (7)	0.4948	1.336 (22)	1.831 (68)	2.325 (211)
	Andesite	9	1.225 (17)	0.8892	2.11 (129)	3.003 (1007)	3.893 (7816)	1.043 (11)	0.5597	1.603 (40)	2.162 (145)	2.722 (527)	1.204 (16)	0.5730	1.777 (60)	2.350 (224)	2.923 (838)
PⅡ	Quartzite	61	1.126 (13)	0.5864	1.892 (63)	2.389 (245)	2.975 (944)	0.520 (3)	0.2845	0.805 (6)	1.089 (12)	1.374 (24)	0.655 (5)	0.6216	1.277 (19)	1.898 (79)	2.520 (331)
	Green rock & Schist	14	1.322 (21)	0.5805	1.903 (80)	2.483 (304)	3.064 (1159)	0.739 (5)	0.4152	1.154 (14)	1.569 (37)	1.985 (97)	1.705 (51)	0.3269	2.032 (108)	2.359 (229)	2.686 (485)

Note; S : Standard deviation
M : Mean value
(ppm)

Table I-7-12 Logarithmic Statistical Values of Elements by Geological Formations (H and J Areas)

Formation	Number of samples	Cu					Pb					Zn				
		M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S
L.Calcareous Series	240	0.653 (4)	0.3116	0.965 (9)	1.276 (19)	1.588 (39)	1.334 (22)	0.2508	1.585 (38)	1.8356 (68)	2.0864 (122)	1.184 (15)	0.2994	1.483 (30)	1.783 (61)	2.082 (121)
Basal Series	489	1.128 (13)	0.6499	1.778 (60)	2.580 (380)	3.230 (1698)	1.112 (13)	0.4371	1.549 (35)	1.986 (97)	2.423 (265)	1.430 (27)	0.3230	1.753 (57)	2.075 (119)	2.399 (251)
P - Ⅱ	422	0.528 (3)	0.4676	0.996 (10)	1.463 (29)	1.931 (85)	0.790 (6)	0.2786	1.069 (12)	1.347 (22)	1.626 (42)	1.361 (23)	0.3440	1.705 (51)	2.049 (112)	2.393 (247)
PⅡ - Ⅲ	36	0.757 (6)	0.9031	1.660 (46)	2.563 (366)	3.466 (2924)	0.556 (4)	0.3945	0.951 (9)	1.345 (22)	1.740 (55)	0.824 (7)	0.4451	1.269 (19)	1.7142 (55)	2.159 (144)

Table I-7-13 Logarithmic Statistical Values of Elements by Geological Formations (I, L and M Areas)

Formation	Number of samples	Cu					Pb					Zn				
		M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S
L.Calcareous Series	100	1.364 (23)	0.6596	2.024 (106)	2.683 (482)	3.343 (2203)	1.432 (27)	0.2700	1.702 (50)	1.972 (94)	2.242 (175)	1.169 (15)	0.3963	1.565 (37)	1.962 (92)	2.358 (228)
Basal Series	50	1.198 (16)	0.8377	2.036 (109)	2.873 (746)	3.711 (5140)	0.999 (10)	0.4235	1.423 (26)	1.846 (70)	2.270 (186)	1.251 (18)	0.3810	1.632 (43)	2.013 (103)	2.394 (248)
P - Ⅲ	885	0.706 (5)	0.7098	1.416 (26)	2.126 (134)	2.835 (684)	0.762 (6)	0.3250	1.087 (12)	1.412 (26)	1.737 (55)	1.325 (21)	0.6145	1.940 (87)	2.554 (358)	3.169 (1476)
PⅡ - Ⅲ	507	1.088 (12)	0.7038	1.792 (62)	2.496 (313)	3.199 (1581)	0.820 (7)	0.2544	1.074 (12)	1.329 (21)	1.583 (38)	1.755 (57)	0.3384	2.093 (124)	2.432 (270)	2.770 (588)
PⅡ	78	1.150 (14)	0.5787	1.729 (54)	2.307 (203)	2.886 (769)	0.592 (4)	0.3512	0.943 (9)	1.294 (20)	1.646 (44)	0.868 (7)	0.7024	1.570 (37)	2.273 (187)	2.975 (944)

Table I-7-14 Logarithmic Statistical Values of Elements by Geological Formations (K Areas)

Formation	Number of samples	Cu					Pb					Zn				
		M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S	M	S	M + S	M + 2S	M + 3S
L.Calcareous Series																
Basal Series	106	1.221 (17)	0.5288	1.750 (56)	2.279 (190)	2.807 (641)	1.460 (29)	0.2723	1.732 (54)	2.004 (101)	2.277 (189)	1.483 (30)	0.227	1.706 (51)	1.928 (85)	2.151 (142)
P - Ⅲ	6	1.099 (13)	0.8639	1.963 (92)	2.827 (671)	3.691 (4909)	1.189 (15)	0.4216	1.611 (41)	2.032 (108)	2.454 (284)	1.852 (71)	0.1668	2.019 (104)	2.186 (153)	2.352 (225)
PⅡ - Ⅲ																

S : Standard deviation

Note; M : Mean value

(ppm)

Table I-7-15 Mean, Minimum and Maximum Values of Elements by Geological Units

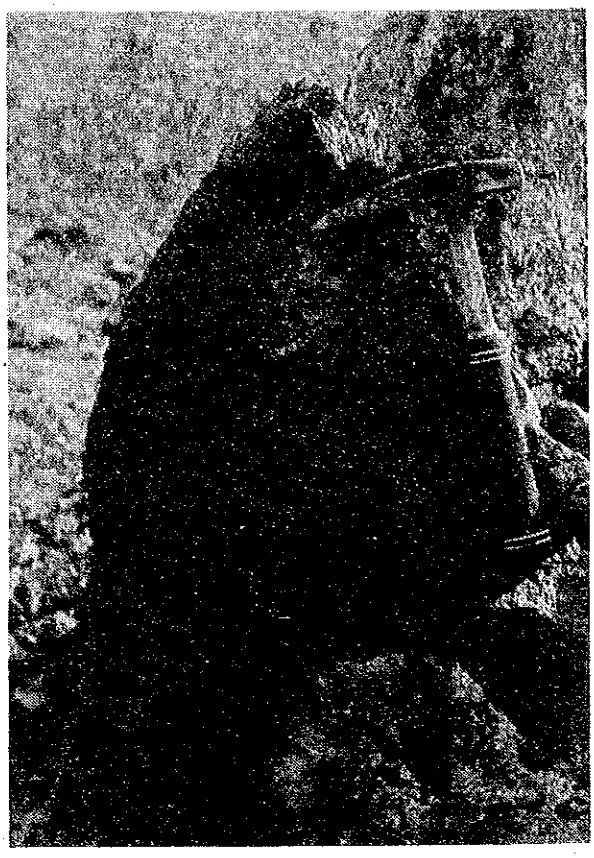
Formation	Rock Facies	Number of Samples	Cu			Pb			Zn		
			Mean	Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.
L. Calcareous Series	Dolomite & Chert	340	7	1	10,750	23	2	1,120	15	2	430
Basal Series	Shale, Sandstone, Conglomerate & Dolomite	643	14	1	36,000	14	2	1,400	27	2	580
P - Ⅲ	Conglomerate, Sandstone & Shale	860	4	1	39,000	6	2	86	29	1	240
	Rhyolite & It's pyroclastics	308	5	1	9,500	4	2	370	6	1	185
	Andesite	135	8	1	2,150	8	2	106	73	3	440
	Dolomite	12	50	3	1,360	24	4	40	20	7	65
PⅡ - Ⅲ	Conglomerate, Sandstone & Shale	494	12	1	16,250	7	2	102	59	1	1,100
	Rhyolite	40	7	1	3,400	4	2	114	7	1	54
	Andesite	9	17	3	660	11	4	186	16	4	103
PⅡ	Quartzite	61	13	1	980	3	2	21	5	1	141
	Green rock & Schist	14	21	3	300	5	2	52	51	12	155

Table I-8 Results of Chemical Analysis for Ore Minerals

Sample No.	Location	Cu	Pb	Zn	Ag
		%	%	%	g/t
B－52	H	1.68	＜0.01	0.02	
C－55	L	1.95	＜0.01	＜0.01	
C－74	L	3.18	＜0.01	0.02	
C－82	L	3.62	＜0.01	0.01	
D－12	L	0.78	＜0.01	＜0.01	
E－ 6	I	0.08	＜0.01	0.01	
E－19	H	0.44			7
E－67	J	4.74			28
E－68	J	1.56			22
E－71	J	0.02			＜1
E－72	J	0.02			＜1
E－75	J	1.24			12
E－79	J	0.42			＜1
E－80	J	1.24			5
E－84	J	6.12			212
E－85	J	1.24			159
E－87	J	7.68			286
E－88	J	2.26			107
E－91	J	1.30			53
E－94	J	0.36			14
E－96	J	11.20			770
E－97	J	8.88			850
E－100	J	10.12			850
E－101	J	1.46			45
E－103	J	0.15			8
E－107	J	6.70			129
E－108	J	4.72			75
E－109	J	1.43			25
E－111	J	3.08			22
E－113	J	1.74			26
E－114	J	2.64			34
E－116	J	4.48			159
E－117	J	1.49			27
E－130	H	4.24			22
E－131	H	1.11			13
Y－25	L	0.92	＜0.01	0.01	
Y－43	K	1.43	＜0.01	0.01	

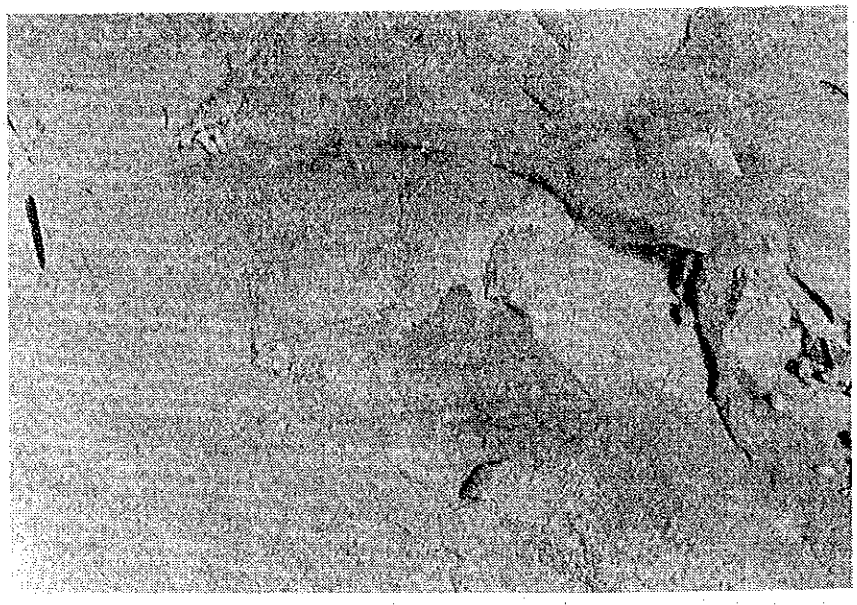
Table 1 – 9

Photographs



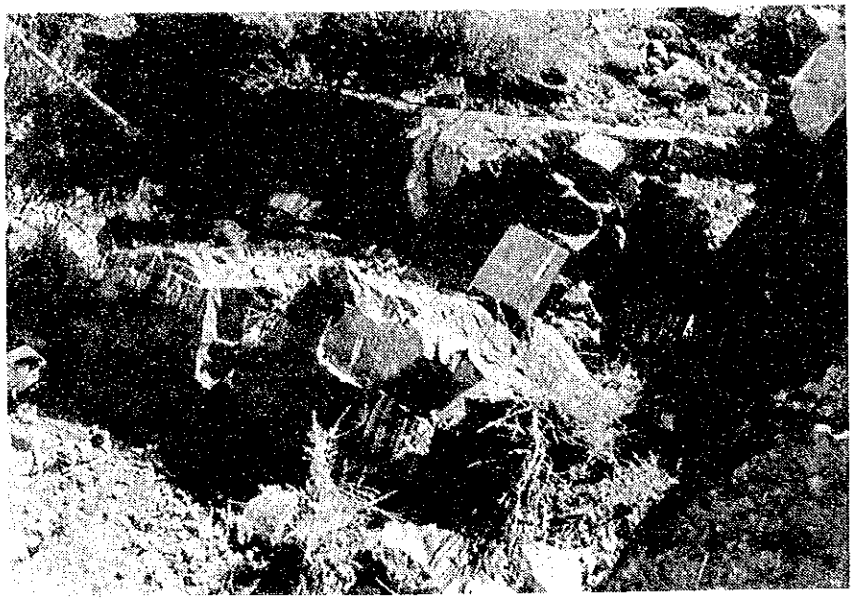
Phot. I-1.
Andesite disseminated by malachite, near Igherm village.

Phot. I-2.
Ripple mark in sandstone (P III), near Igherm village.

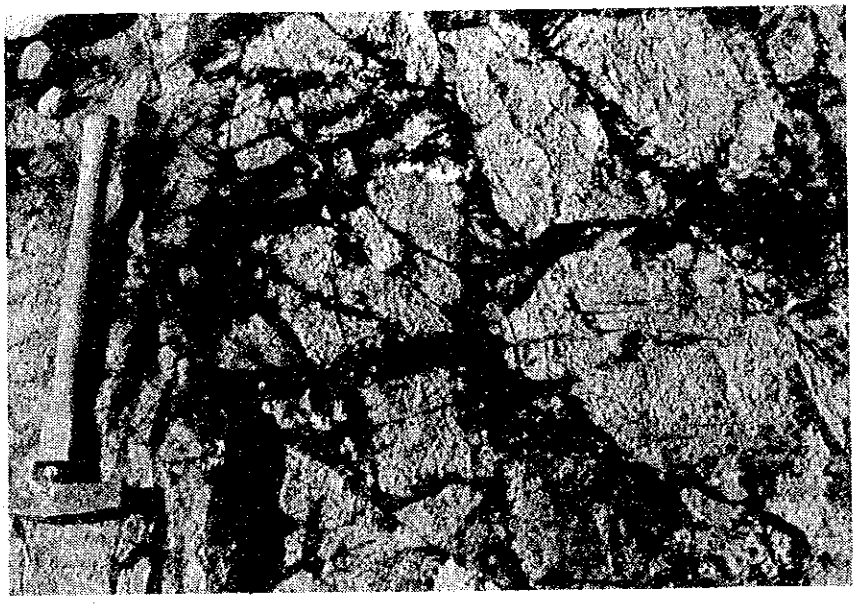


Phot. I-3.
Cross lamina in sandstone (P III), near Igherm village.

Phot. I-4.
Conglomerate composed of boulder of granite and quartzite, near Tawrit village.

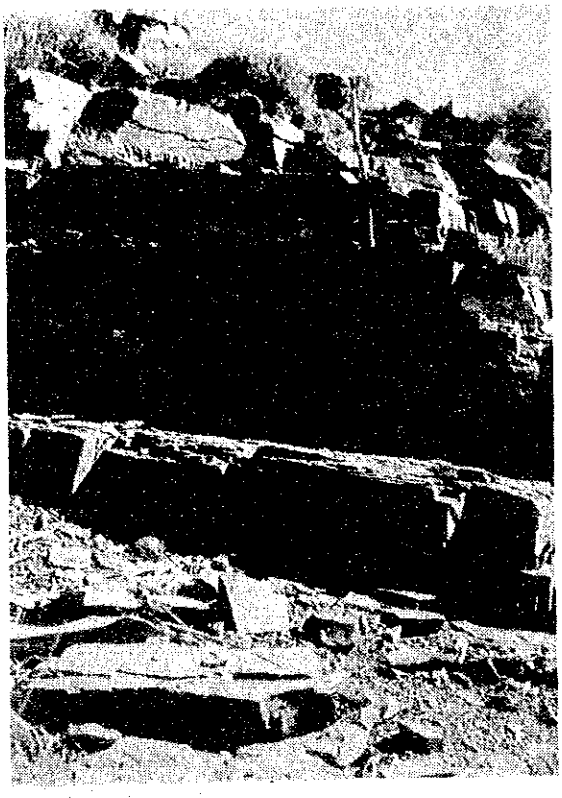


Phot. I-5.
Slate intercalated in conglomerate, near Tadenst.

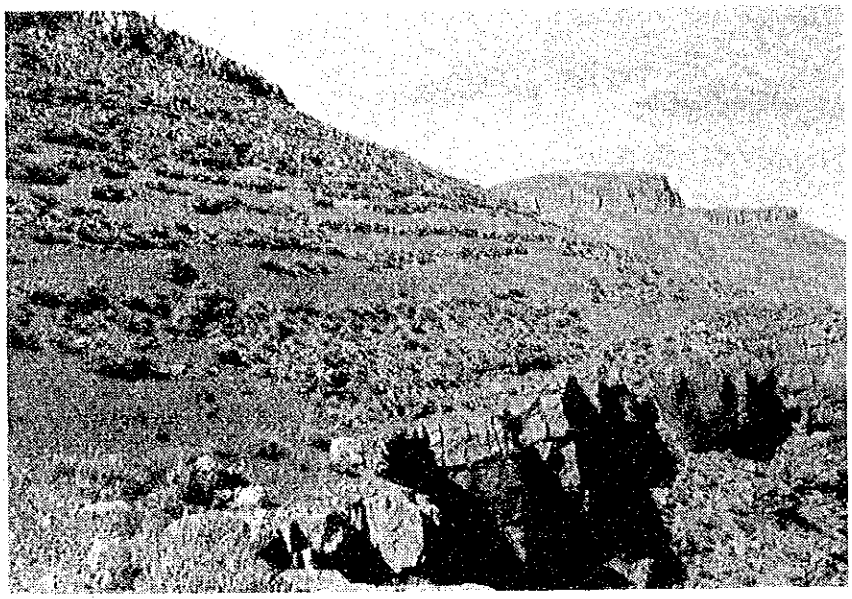


Phot. H-1.
Network hematite veinlets in dolomite of Lower Calcareous series, near Ait Addi village.

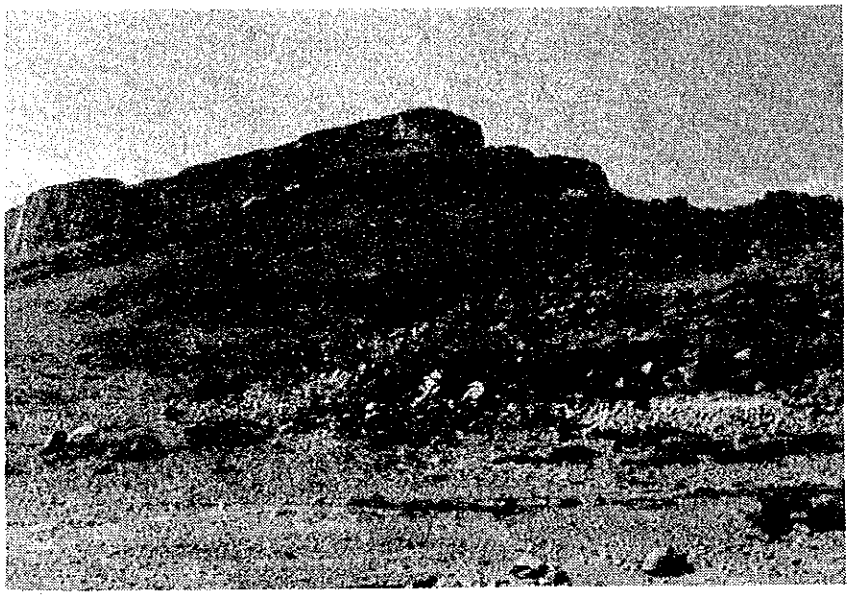
Phot. H-2.
Conglomerate (Basal series) composed mainly of well rounded pebbles of quartzite.



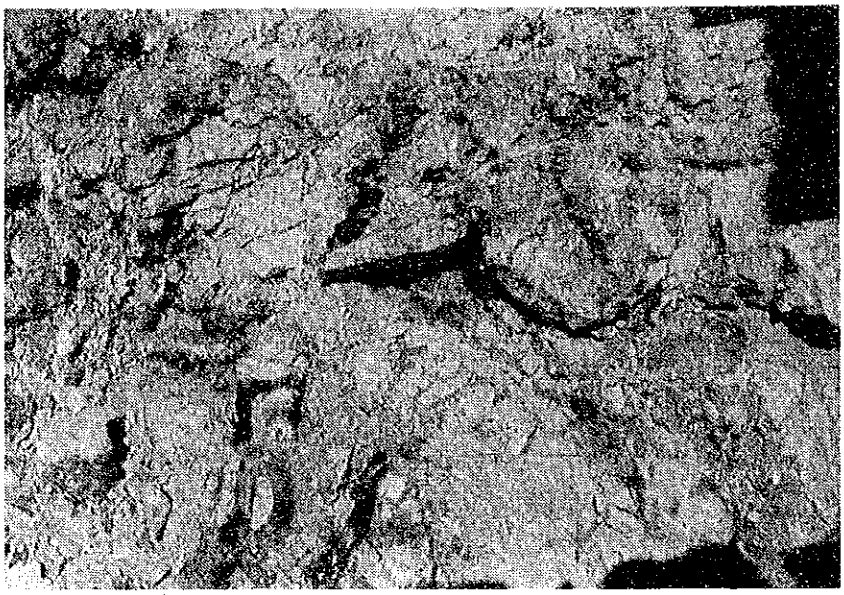
Phot. H-3.
Well bedded Shale of Basal series, near Ait Addi village.



Phot. H-4.
Occurrence of Basal series, southern part of Tazert-n-Bouydir.



Phot. H-5.
Occurrence of conglomerate, sandstone (P III), Basal Series, and dolomite (Dt), at Azerfnine.



Phot. H-6.
Occurrence of malachite, azurite and crysocolla in No. 1 trench, at Talat-n-Sous mineralized area.

Phot. K-1.
Alternation of dolomite and shale.

Phot. L-1.
Rhyolite disseminated by malachite, near Tizirt.

Table 1-10 List of Ore Deposits in Surveyed Area

No.	Area	Name	Kind of ore	Host rock: Formation	Host rock: Rock	Alteration	Related Igneous Rock	Mode of Occurrence	Scale of Mineralization	Direction of Mineralization	Amount of Unit Ore body	Unit Ore body: Scale	Unit Ore body: Thickness Width	Unit Ore body: Direction	Grade of Ore	Ore Minerals	Gangue Minerals	Structural Control	History	Note	Sample No.
1	J	Talat - n - Sous	Cu	PH-M	rhy	silic	rhy	dissm	300m × 100m	N70°E	3	100m × 100m	2～3m	N70°E	Ag 137g/t Cu 3.08%	mala, az cc, ccp	quartz	NNW & NE fracture	explored by B.R.P.M. trench 9, 270m, pit 6, 60m	B.R.P.M. rep japanese mission 1973	E-67～E-117 B-17, F-120, G-41, G-43
2	J	Ait Hsayn	Cu	PH-M	rhy		rhy	dissm	800m × 100m	N60°E	2	200m × 50m	0.3m	N60°E	Cu 0.1%	mala					
3	J	Tiouririno - 1	Cu	PH	cg			dissm	150m × 20m	E-W	1	150m × 20m	0.2m	E-W	Cu 0.7%	mala					F-116
4	J	Tiouririno - 2	Cu	B.S.	slt			dissm	10m × 2m	E-W	1	10m × 2m	0.35m	E-W	Cu 0.2%	mala					G-45
5	J	Tiouririno - 3	Cu	PH	rhy	silic	rhy	dissm	5m × 1m	E-W	1	5m × 1m	0.3m	E-W	Cu < 0.1%	mala					
6	H	Tiouririno - 4	Cu	B.S.	cg			dissm	800m × 3m	E-W	2	10m × 2m	2～3m	E-W	Cu 0.4%	mala		stratiform			E-137, F-161, F-166, F-170 F-162, F-169, G-35
7	H	Amdouz	Cu	B.S. PH	cg, dol sh			dissm	4.5km × 3m	E-W	>10	10m × 2m	2～3m	E-W N20°W	Cu 1～1.5%	mala, az cc, ccp		stratiform			
8	H	Ait Addi - 1	Cu	B.S.	ss, sh			dissm	200m × 2m	N20°W N70°～90°W	3	10m × 2m		N70°～90°W	Cu < 0.1%	mala					
9	H	Ait Addi - 2	Cu	B.S.	sh			dissm	15m × 3m	N-S	1	15m × 3m	1.3m	N-S	Cu < 0.1%	mala					F-105
10	H	Tazert - 1	Cu	PH	rhy	silic	rhy	dissm	spot	—	1	spot	—	—	Cu 3.22%	cc, mala					F-108
11	H	Tazert - 2	Cu	PH	cg, and	chl	and	dissm	10m × 1m	E-W	1	10m × 1m	0.3m	E-W	Cu < 0.1%	mala					
12	H	Tazert - 3	Cu	B.S. PH	cg, and	chl, ep	and	dissm	50m × 10m	N40°E E-W	2	50m × 10m	1.0m	N40°E E-W	Cu 1～2%	mala			explored by B.R.P.M.		F-150
13	H	Azerfaine	Cu	PH	rhy	silic	rhy	dissm	40m × 30m	N30°W	1	40m × 30m	2m	N30°W	Ag 17g/t Cu 2.63%	mala, az	quartz	NW & ENE fracture	explored by B.R.P.M.		E-130, E-131
14	K	Assif Imider	Cu	PH	and dol	ep, chl cal		dissm	50m × 800m	N20°E	1	50m × 250m	5m	N20°E	Cu 1.8%	mala, az br, cc, ccp	quartz	along shear zone	explored by B.R.P.M. trench 7, drilling 16, tunnel		Y-43
15	L	Tizirt - E - 1	Cu	PH-M	cg			dissm	1.5km × 0.8km	NNE-SSW	9	2m × 5m	1～2m	NNE-SSW	Cu 0.2 ～0.9%	mala					C-64, Y-25
16	L	Tizirt - E - 2	Cu	PH-M	cg			dissm	1.5km × 0.8km	N-S	12	2m × 5m	0.5～2m	N-S NE-SW	Cu < 0.1%	mala, cc ccp					C-70, C-79, C-80
17	L	Tizirt - E - 3	Cu	PH	ss			dissm	2m × 4m	NNE-SSW	1	2m × 4m	2m	NNE-SSW	Cu 0.14%	mala					
18	L	Tizirt - E - 4	Cu	PH	ss, rhy dol		rhy	dissm	1.5km × 1.0km	NNE-SSW	20	10m × 20m ～2m × 5m	0.5～3m	NNE-SSW	Cu 0.68%	mala, az cc, ccp					C-74, C-82, D-12 C-55
19	L	Tizirt - E - 5	Cu	B.S.	ss, sh			dissm	10m × 50m	horizontal	1	10m × 50m	3～4m	horizontal	Cu 1.95%	mala		stratiform			
20	M	Aniloul - N	Cu	PH	and	ep, chl	and	dissm	20m × 2.5km	NNE-SSW	13	2m × 5m	1～2m	NNE-SSW	Cu 0.1%	mala, cc ccp					C-43
21	I	Ait Ya'zza	Cu	L.C. (D.T.)	dol			dissm	50m × 2.5km	NNE-SSW	4	2m × 10m	1～2m	NNE-SSW	Cu 0.4%	mala, hem					C-2, C-6, D-3, E-1
22	I	Amsengarf	Cu	PH-M	cg			dissm	20m × 500m	NNE-SSW	3	2m × 5m	0.3m	NNE-SSW	Cu < 0.1%	mala					
23	I	Assoulai	Cu	PH-M	cg			dissm	50m × 300m	N-S	2	2m × 20m	1.0m	N-S	Cu 1%	mala					C-13
24	I	Tadenst	Cu	PH-M	cg			dissm	10m × 500m	N-S	3	4m × 15m	1.5m	N-S	Cu 0.3%	mala					E-5, E-6
25	I	Tifeisine - N	Cu	PH	rhy			dissm	5m × 250m	NE-SW?	2	2m × 10m	0.5m	NE-SW?	Cu < 0.1%	mala, ccp					Y-10
26	I	Tifeisine - W	Cu	PH	qte			dissm	2m × 10m	?	1	2m × 10m	0.3m	?	Cu < 0.1%	mala					
27	I	Aniloul - S	Cu	PH	and	ep, chl	and	dissm	2m × 750m	N-S	2	2m × 5m	0.5m	N-S	Cu < 0.1%	mala, ccp					G-12
28	I	Igherm - 1	Cu	B.S. L.C. (T.D.)	ss dol			dissm	10m × 2.0km	N-S	8	2m × 5m	0.5m	N-S	Cu < 0.1%	mala					B-7, B-8
29	I	Igherm - 2	Cu	PH	and	ep, chl	and	dissm	10m × 1.8km	N-S	5	2m × 5m	0.5m	N-S	Cu < 0.1%	mala					

Host Rock Formation
- LC ...Lawar Calcareous Series
- TD ...dolomite (Tamjout)
- BS ...Basal Series
- PH ...Precambrian H
- PH-M.. " H-M
- PH ... " H

Host Rock
- and ..... andesite
- sh ..... shale
- cg ..... conglomerate
- dol ..... dolomite
- qte ..... quartz
- rhy ..... rhyolite
- slt ..... siltstone
- ss ..... sandstone

Alteration
- chl ..... chlorite
- cal ..... calcite
- ep ..... epidote
- silic .... siliceous

Mode of Occurrence
- dissm .. dissemination

Ore Minerals
- az ..... azurite
- br ..... bornite
- cc ..... chalcocite
- ccp .... chalcopyrite
- hem .... hematite
- mala ... malachite

Table. I-11 Geochronological Scheme in Surveyed Area.

Age	Rock Facies	Inlier	Area	Geochronological scale (Proterozoic / Paleozoic; 2600 2400 2200 2000 1800 1600 1400 1200 1000 800 600 400 200 my)	Orogeny
					309 397 Hercynian Orogeny
Lower Cambrian	Tiyourhza granite	If	E	•541 •530	
	Tafrout granite	K	(I)		
Adoudonian (Infracambrian)	Dolomite series				580 603 Late Panafrican Orogeny (II)
	Azerbalou rhyolite	Az	H	⊛334	
PIII	Igherm rhyolite	Ig	L	⊛288	
	Igherm meta-dolerite	Ig	B	⊛325	
	Kerdous rhyolite	K	D	•580 •380	
	Touret Magon granite	K	D	⊛338 ⊛350	
	Taoulecht med grained granite	If	F	•583 •603	
	Ifni andesite	If	(I)		
				•918 ?	630 Late Panafrican Orogeny I (morrocanides)
	Oued Amorphous rhyolite	K	(I)	•574 •530 •384	
	Igherm rhyolite	Ig	I	⊛326	
PII-III	(Anezi series)	K	D		
			H	⊛379 ⊛344	
	Azerbalou rhyolite	Az	A	⊛309	
	Ifni granite	If	(I)	•647 •631 ⊛356 ⊛328	
	Ifni rhyolite	If	F		
					1000 Panafrican Orogeny (Anti-Atrasides)
PII	PII pebble in PII-III congromerate	K	D	•1480 •1519 •1430 •1035 •470	
	(Kerdous schist)	K	D		1300 1600 Tarkwaian Orogeny (Bou Azzerides)
	Tazeroualt pegmatites	K	D	•1750 •1500 •1045	
	Tahala grannite	K	(I)	•1920	
	Tasserhirt granite	K	D	•2550 •2545 •2257 •1905 •1680 ⊛1015	1800 1900 Eburnean Orogeny (Berberides)
PO	Tazeroualt two mica granite	K	D	⊛398	
	Alouzad two mica granite	If	E	▷2600 •2217 ⊛1623	
	Oued Amarphous granite	K	(I)	•1850 •1610 •1480 •1250 •930 •800 •750	
	(Kerdous series)				
					2600 Zagorides Orogeny
	Jebel Ouiharem gniess	K	(I)	•2650 ×1700 ×1300	

K : Kerdous inlier, If : Ifni inlier, Ig : Igherm inlier, Az : Azerbalou inlier.
(I): Phase I surveyed area, A, B, C, D, E, F : Phase II surveyed area.
H, I, L : Phase III surveyed area.

• Data: mainly from G. Choubert & A. Faure-Muret (1976) Rene Charlot (1976).
⊛ Data of phase I, phase II and phase III survey
△ Assumed data

APPENDICES

(GEOPHYSICAL SURVEY)

Table II-2-1 List of IP Survey Works

Explorated Area	Line	Length of Line	Electrode Spacing	Electrode Separation	Number of Measuring Stations
Talat-n-Sous	B	3.0 km	100 m	1-5	130
	C	3.1	100	1-5	135
	D	2.9	100	1-5, 6	131
	E	2.7	100	1-5, 6	120
	F	3.0	100	1-5, 6	145
	G	3.0	100	1-5, 6	145
	H	3.0	100	1-5	130
	I	3.0	100	1-5	130
	J	3.0	100	1-5	130
	K	3.0	100	1-5, 6	137
	L	3.2	100	1-5, 6	150
	M	3.4	100	1-5, 6	159
	N	3.4	100	1-5, 6	150
	P	2.6	100	1-7	154
	Q	3.0	100	1-5	130
	S	3.0	100	1-6	153
	X	3.6	100	1-7	217
Sub-Total	17 Lines	51.9 km			2,446
Assif Imider	No.1	1.5 km	100 m	1-6	63
	No.2	2.0	100	1-6	93
	No.4	2.0	100	1-5, 6	92
	No.6	2.0	100	1-6	93
	No.8	1.5	100	1-6	63
	No.9	1.5	100	1-6	63
Sub-Total	6 Lines	10.5 km			467
Total	23 Lines	62.4 km			2,913

Table II-2-2 Examination of the Reciprocity (by Party B)

Line	Station		AR_1	FE_1	AR_2	FE_2	$R=AR_1-AR_2/AR_1$	FE_1-FE_2
N	26-27	24-25	. 361	. 0.3	364	0.3	0.8%	0. %
		23-24	. 217	. 0.4	231	0.6	- 6.5	- 0.2
		22-23	. 572	. 0.6	582	0.8	- 1.7	- 0.2
J	19-20	22-23	. 707	. 0.2	721	0.3	- 2.0	- 0.1
		23-24	. 759	. 0.0	771	0.6	- 1.6	- 0.6
		24-25	. 934	. 1.0	940	0.8	- 0.6	0.2
		25-26	. 730	. 0.9	749	1.1	- 2.6	- 0.2
	18-19	22-23	. 522	. 0.2	514	0.3	1.5	- 0.1
		23-24	. 573	. 0.2	565	0.7	1.4	- 0.5
		24-25	. 669	. 1 4	654	1.2	2.2	0.2
H	19-20	17-18	. 399	. 3.4	381	4.5	4.5	- 1.1
		16-17	. 356	. 3.8	344	3.7	3.4	0.1
		15-16	. 319	. 3.6	307	4.1	3.8	- 0.2
		14-15	. 373	. 2.8	358	3.5	4.0	1.2
		13-14	. 439	. 1.0	431	2.4	1.8	0.6
	7-8	5-6	. 284	. 5.1	291	4.9	- 2.5	0.2
		4-5	. 222	. 6.3	226	5.2	- 1.8	1.1
		3-4	. 186	. 5.6	189	6.1	- 1.6	- 0.5
		2-3	. 159	. 5.1	161	5.1	- 1.3	0.0
	8-9	5-6	. 168	. 5.9	165	5.8	1.8	0.1
		4-5	. 179	. 6.6	176	5.4	1.7	1.2
		3-4	. 171	. 5.5	167	4.8	2.3	0.7
		2-3	. 162	. 5.6	159	5.9	1.9	- 0.3
						$R_T=\Sigma\|R\|$	53.3	10.2
						$\bar{R}=\frac{R_T}{K}$	2.317	0.443

K =23
n =2

Table II-2-3 Comparison of Data between Party A and Party B

Line	Station		AR_A	FE_A	AR_B	FE_B	$(AR_A-AR_B)/AR_A$	FE_A-FE_B
H	24-25	22-23	. 251	. 2.7	253	2.2	- 0.8	0.5
		21-22	. 372	. 3.1	379	2.4	- 1.9	0.7
		20-21	. 633	. 2.2	649	2.0	- 2.5	0.2
		19-20	. 717	. 1.8	743	1.8	- 3.6	0.0
		18-19	. 765	. 4.5	804	3.8	- 5.1	- 0.7
	25-26	23-24	. 300	. 0.6	294	1.3	2.0	- 0.7
		22-23	. 35	. 2.6	36.0	2.7	- 2.9	- 0.1
		21-22	. 57	. 2.9	59.	3.0	- 3.5	- 0.1
		19-20	. 106	. 2.4	112	2.1	- 5.7	- 0.3
	28-29	26-27	. 2531	. 0.9	2610	0.9	- 3.1	0.
		25-26	. 2990	. 1.3	3100	0.7	- 3.7	0.6
		24-25	.25400	. 1.3	25800	1.1	- 1.6	0.2
		23-24	. 1880	. 1.2	1950	1.1	- 3.7	0.1
		22-23	. 219	. 3.2	211	2.9	3.6	0.4
		27-28	. 1630	. 0.9	1590	0.8	2.4	0.1
		26-27	. 1810	. 0.4	1846	0.3	- 2.0	0.1
		25-26	. 2790	. 0.9	2920	0.9	- 4.7	0.0
		24-25	.22300	. 1.3	23000	1.1	- 3.1	0.2
		23-24	. 1440	. 1.2	1530	1.4	- 6.3	- 0.2
						$R_T=\Sigma\|R\|$	62.2	5.3
						$\bar{R}=\frac{R_T}{K}$	3.274	0.2737

K = 19

Table II-3-1 In-situ Measurement

Lithology	Measuring Station	Frequency Effect (%)		Resistivity (Ω-m)	
		a	b	a	b
Dolomite (Tamjout)	E (No.22)	0.2	0.2	8,370	10,000
Dolomite (Basal Series)	L (No.8)	0.8	0.9	1,130	2,610
	L (No.27)	0.8	0.9	1,620	3,180
	L (No.6)	1.0	1.0	91	109
	H (No.8)	1.4	1.7	248	232
Sandstone, Siltstone	H-Q (No.8)	0.5	0.6	474	335
	H (No.17)	1.4	1.8	353	474
	X (No.17)	0.3	0.3	269	231
Conglomerate	L (No.10)	0.8	0.5	438	235
Rhyolite	Y (No.20)	0.5	0.3	796	1,230
Andesite Lava	L (No.20)	0.1	0.4	135	227
	L (No.25)	0.1	0.0	170	225

a, b; a couple of measuring points

Table II-3-2 In-situ Measurement

Line, Station No.	Depth n = 1		Depth n = 2		Remarks
	FE (%)	AR (Ω-m)	FE (%)	AR (Ω-m)	
XX - 51					
52	0.8	717	0.6	712	
53	0.5	353	0.8	325	
54	0.3	523	0.5	716	
55	0.6	432	0.8	429	
56	0.0	320	0.1	426	
57	0.0	363	0.1	758	
58	0.0	404	0.6	513	
59	0.5	564	0.5	1,300	
60	0.2	1,820	0.4	302	J No.18
61	0.6	256	0.5	381	
62	0.7	254	0.6	208	
63	0.3	147	0.5	178	
64	0.5	113	0.6	81	
65	0.5	45	0.7	107	
66	0.1	85	0.9	175	
67	0.8	138	0.5	151	
68	0.5	163	0.8	253	
69	0.5	282	1.1	263	No. 7 Trench
70	1.0	278	0.6	230	
71	0.6	205	0.8	241	
72	0.6	386	0.5	372	
73	0.6	434	1.1	712	
74	0.6	987	0.7	544	
75	0.3	357	0.6	504	A No.18
76	0.7	647	0.6	945	
77	0.6	456	0.6	489	
78	0.5	408	0.4	492	
79	0.3	394	0.2	401	

Line, Station No.	Depth n = 1		Depth n = 2		Remarks
	FE (%)	AR (Ω-m)	FE (%)	AR (Ω-m)	
XX - 80	0.6	417	0.9	462	
81	0.4	367	0.8	332	
82	0.6	257	0.7	234	
83	0.6	131	0.5	232	
84	0.5	250	0.5	285	
85	0.0	129	0.8	153	
86	0.3	118	0.4	238	
87	0.1	159	0.6	251	
88	0.3	146	0.5	543	
89	0.3	177			
XP - 1					No.1 Pit
2	0.4	314	0.5	315	
3	0.4	412	0.4	246	
4	0.3	311	0.3	393	No.3 Pit
5	0.3	375	0.2	293	
6	0.3	275	0.7	352	
7	0.0	311	0.0	414	
8	0.0	193	0.		No.2 Pit
YP - 1					
2	0.2	240	0.6	218	
3	0.3	235	1.2	417	
4	0.2	389	0.6	480	
5	0.4	236	0.5	126	No.3 Pit
6	0.9	254	0.7	330	
7	0.6	308	0.6	367	
8	0.3	175	0.0	204	
9	0.1	154			

Line, Station No.	Depth n = 1		Depth n = 2		Remarks
	FE (%)	AR (Ω-m)	FE (%)	AR (Ω-m)	
ZP - 2					
3	0.7	146	0.7	180	
4	0.9	171	0.8	221	
5	0.8	229	1.0	213	No.2 Trench
6	0.8	161	1.0	223	
7	1.1	258	1.4	156	No.1 Pit
8	1.1	134	1.0	160	No.8 Trench
9	1.2	171			
ZZ - 1					
2	1.0	197	0.5	242	
3	0.6	173			

Note : Locations of the measuring stations XX, XP, YP, ZP and ZZ shall be refered to Fig. II-3-4.

Table II-3-3 Laboratory Measurement

Dolomite

Explored Area	Name of Sample	Locality	ARΩ-m 2.5 Hz	FE % 2.5-0.3 Hz	Note
Talat-n-Sous	L-8	near st. 8, Line L	3,110	0.1	with malachite
	L-26-0	near st. 26, Line L	11,000	0.2	with malachite
	L-28	near st. 28, Line L	13,100	0.1	with malachite
	Q-20	near st. 20, Line Q	19,400	0.1	
	R-25	near st. 25, Line R	747	0.1	with malachite
	T-1	Trench 1	20,900	0.1	with malachite
	T-9	Trench 9	2,250	0.1	with malachite, chalcopyrite
Assif Imider	3-8	near st. 8, Line 3	30,800	0.2	with azurite
	9-9	near st. 9, Line 9	26,700	0.3	with malachite
Alous	DH-No. 1	101.35 m	6,120	0.7	
		125.4	17,400	0.6	
		141.6	48,600	0.1	
		143.9	17,600	0.6	

Sandstone, siltstone, shale

Explored Area	Name of Sample	Locality	ARΩ-m 2.5 Hz	FE % 2.5-0.3 Hz	Note
Talat-n-Sous	H-8～9	between st. 8 and st. 9 Line H	857	12.9	shale
	H～G-8	between st. 8's of Line H and Line G	359	0.1	shale with muscovite
	L-6	near st. 6, Line L	4,000	0.2	sandstone
	L-26-3	near st. 26, Line L	4,760	0.1	andesitic fine sandstone
	L-28～29	between st. 28 and st. 29 Line L	9,640	0.2	sandstone with malachite
	NO-14	near st. 25, Line J	879	0.5	shale with malachite, pyrite
	X-17	near st. 17, Line X	4,060	0.2	sandstone with malachite, pyrite
Assif Imider	1-8	near st. 8, Line I	206	0.3	shale with malachite
Alous	DH-No. 1	10 m	164	25.0	sandstone with pyrite
		39.5	284	0.3	siltstone

Explored Area	Name of Sample	Locality	ARΩ-m 2.5 Hz	FE % 2.5-0.3 Hz	Note
Alous	DH-No.1	60 m	2,060	4.6	sandstone with pyrite
		75.2	2,360	4.6	sandstone with pyrite
		80	1,630	4.7	sandstone with pyrite

Rhyolitic Tuff

Explored Area	Name of Sample	Locality	ARΩ-m 2.5 Hz	FE % 2.5-0.3 Hz	Note
Talat-n-Sous	L-16	near st.16, Line L	1,270	0.1	with malachite
	L-27	near st.27, Line L	2,670	0.1	with malachite
	P ~ H-3	between st.3's of Line P and Line H	7,330	0.1	with malachite chalcocite
	T-2	Trench 2	1,180	0.1	with malachite

Andesite

Explored Area	Name of Sample	Locality	ARΩ-m 2.5 Hz	FE % 2.5-0.3 Hz	Note
Assif Imider	8-8	near st.8, Line 8	4,750	0.2	
	11-8	near st.8, Line 11	1,280	2.1	with malachite, chalcopyrite
		Mine Site	2.6	3.9	with chalcopyrite
Alous	DM-No.1	166 m	736	2.2	with hematite
		175	3,340	9.8	with hematite
		180	1,250	2.3	with hematite
		185	816	1.6	with hematite
		204	2,900	9.8	with hematite
		205	2,890	19.9	with hematite
		211	3,320	13.0	with hematite & malachite
		220.45	10,200	13.9	with hematite & malachite
		230.3	1,140	2.6	with hematite & malachite
		270	6,770	4.6	with epidote vein
		290.8	3,000	2.8	with epidote vein

Tuff

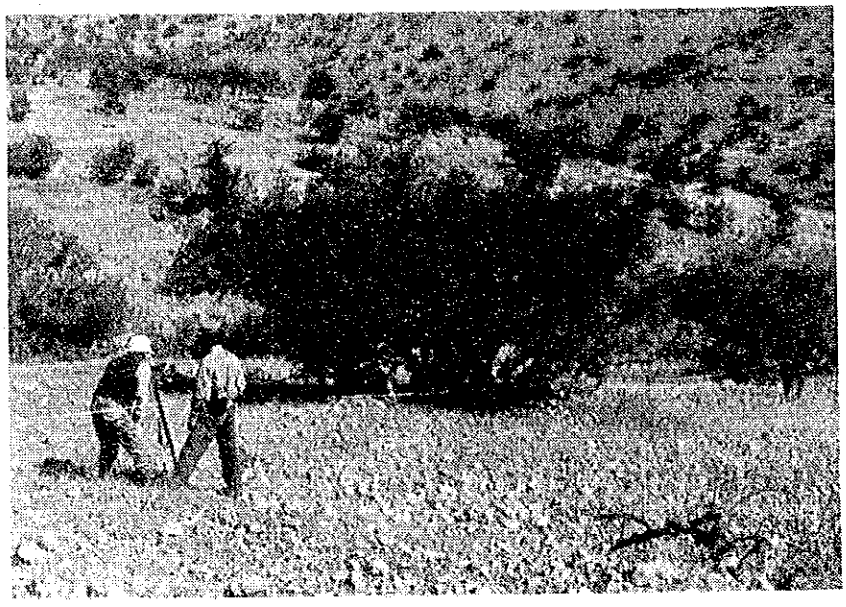
Explored Area	Name of Sample	Locality	AR m 2.5 Hz	FE % 2.5-0.3 Hz	Note
Talat-n-Sous	L-11	near st.11, Line L	1,610	0.1	andesitic
	L-19	near st.19, Line L	962	0.4	andesitic tuff breccia
	L-22-5	near st.25, Line L	10,700	0.3	andesitic tuff breccia with malachite
	L-24	near st.24, Line L	2,780	0.1	andesitic tuff breccia
	L-26	near st.26, Line L	11,300	0.5	andesitic tuff breccia
	L-26-2	near st.26, Line L	15,600	1.2	andesitic tuff with malachite
	NO-12	near st.15, Line J	1,600	0.1	andesitic tuff breccia
	NO-10	near st.15, Line Q	25,900	0.4	andesitic tuff
	NO-11	near st.17, Line J	16,000	0.6	andesitic tuff breccia
	P-3	Pit 3	2,310	0.2	andesitic tuff breccia
Assif Imider	2-8	near st.8, Line 2	3,300	0.1	andesitic tuff
Alous	DH-No.1	156 m	581	0.1	with hematite
		161.5	966	0.2	
		240	2,630	1.3	lapilli
		250	10,800	0.6	lapilli

Conglomerate

Explored Area	Name of Sample	Locality	AR m 2.5 Hz	FE % 2.5-0.3 Hz	Note
Talat-n-Sous	A-9		4,860	0.2	with malachite
	P-2	Pit 2	10,300	0.2	with malachite
Assif Imider	3-8	near st.8, Line 3	8,230	0.1	with malachite

Digging hall

Wire setting



Topographical survey

Measurement (Transmitter)