MINISTRY OF PETROLEUM AND MINERAL RESOURCES
DIRECTORATE GENERAL OF MINERAL RESOURCES

EXPLANATION

MINERAL OCCURRENCES

RB 9m — Mineral occurrence number (See index card, Appendix 3)

○ Hematite

● Quartz vein with gold and subordinate Cu, Pb, Zn

◑ Hematite with gold

⚒ Ancient working

ROCK SAMPLES

✕ RB 1034 — Thin section number

RB 1079 — Chemical analysis

RB 1171 — Spectrographic analysis

MAP SYMBOLS

o — Water well (Bi'r)

ANALYSES

Sample number and rock type	131E-RB 1079 Hematite	131B-RB 1131 Siliceous rock with hematite	131A-RB 1153 Ferrugineous chert	131B-RB 1165 Hematite in serpentinite	131A-RB 1172 Quartz from ancient workings	131A-RB 1173 Quartz from ancient workings	131A-RB 1174 Quartz from ancient workings	131A-RB 1175 Quartz from ancient workings	131A-RB 1176 Quartz from ancient workings	131A-RB 1177 Quartz from ancient workings	131A-RB 1178 Hematite	131E-LJ 3 Quartz	131A-LJ 252 Hematite	131A-LJ 252 Hematite	131A-LJ 567 Andesite with hematite	131A-RB 1171 Granite	131B-RB 1179 Greisen	131A-LJ 239 Skarn
	CHEMICAL ppm													CHEMICAL %		SPECTROGRAPHIC ppm		SPECTROGRAPHIC %
Ag		< 5	5	5	< 5	5	< 5	5	< 5	< 5	5	10	< 5			< 1	< 1	< 0.0002
Al																		7
As												< 25				< 500	< 500	
Au		< 0.5	< 0.5	< .05	7	10	1	3	3	2	< 0.5	< 0.5	11			< 20	< 20	
B																< 50	< 50	
Ba																800	500	0.02
Be																< 5	< 5	
Bi																< 20	< 20	< 0.001
Ca																		> 10
Cd																< 100	< 100	
Co												< 25				< 20	< 20	< 0.001
Cr																700	700	0.007
Cu	50	80	50	650	50	250	245	80	860	500	50			< 0.02	< 0.005	15	20	0.002
Fe																		10
Ga																		0.002
Hg												100						
La																< 100	< 100	< 0.01
Mg																		0.5
Mn																500	100	0.2
Mo													30			< 10	< 10	< 0.001
Na																		1
Nb																< 20	< 20	
Ni		240	60	745							200				< 0.005	20	20	< 0.001
Pb	< 50	< 40	50	< 40	40	400	450	260	300	< 40	320			< 0.05	< 0.005	< 20	< 20	< 0.005
Sb																< 200	< 200	
Sc																< 10	< 10	< 0.001
Si																		25
Sn																< 20	< 20	< 0.001
Sr																200	200	0.02
Ti																		0.2
V																70	< 20	0.015
W													< 10			< 100	< 100	
Y																< 20	< 20	< 0.002
Zn	< 50	30	30	30	< 25	1400	30	30	< 25	40	< 25			< 0.05	< 0.0075	< 500	< 500	< 0.02
Zr																100	< 20	0.01

ELEMENTS

KINGDOM OF SAUDI ARABIA

45°00' 45°10' 45°20' 45°30'
22°30' 22°20' 22°10' 22°00'

WĀDĪ BURDĀN
WĀDĪ AL KHUSHAYBIYAH
WĀDĪ 'ARAQAH
JABAL AL KUTAYNNAH
Bi'r Kutaynnah
JABAL AL'UWAYJĀ'
Bi'ro Umm Sulaym
SULAYM
UMM
WĀDĪ
WĀDĪ UMM ASH SHUBRŪM
JABAL UMM UṢBA'
Bi'r Sulaba
WĀDĪ AL 'AFĪN
WĀDĪ UMM RAML
WĀDĪ ṢULAYB
JABAL 'URAY'IAH
WĀDĪ YAFFAH
JABAL ḌAB'
WĀDĪ SHIRYĀN
WĀDĪ AS SAWADAH GHAMRAH
Bi'r Ghamrah

RB 7m RB 1153
RB 15m RB 1177
RB 10m
RB 11m
RB 12m RB 174
RB 14m RB 1176
RB 1167 RB 1168
RB 9m RB 1171 RB 1172
RB 1173
RB 13m RB 1175
RB 1167
RB 1179 RB 1178
RB 8m RB 1165
RB 1160
RB 1142
RB 1143
RB 1137
LJ 239
RB 1128
RB 1126
RB 1131
RB 1133
RB 1110
RB 1118
LJ 567
LJ 252
A B
E F
RB 1097
RB 1084
RB 1082
RB 1080
LJ 3
RB 1079
RB 1034
RB 1041
RB 1036
RB 1037
RB 1149
RB 1049
RB 1071
RB 1046
RB 1043
RB 1069
RB 1039
RB 1064
RB 1065
RB 1040
RB 1055
RB 1056
RB 1052
RB 1101
RB 1102
RB 1105
RB 1061
RB 1060
RB 1053
RB 1063

Aerial photography 1956 and controlled mosaic 1959
Aero Service Corporation, Philadelphia Penn., U.S.A.

SCALE 1:100 000

2 0 2 4 6 8 10 KILOMETERS

2 0 2 4 6 8 10 MILES

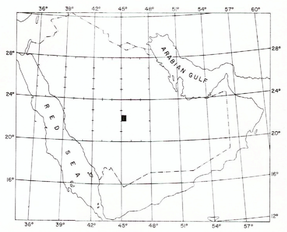
Photomosaic 131 West

45°00' 46°00'
23°00' 23°00'
A B
C D
22°00' 22°00'
45°00' 46°00'

Quadrangle 22/45 C
UMM SULAYM

Geologist : R. BROSSET

B.R.G.M. Report 74 JED 9 – Appendix 2



INDEX MAP

MINERAL EXPLORATION MAP OF THE UMM SULAYM QUADRANGLE (22/45C)

1973