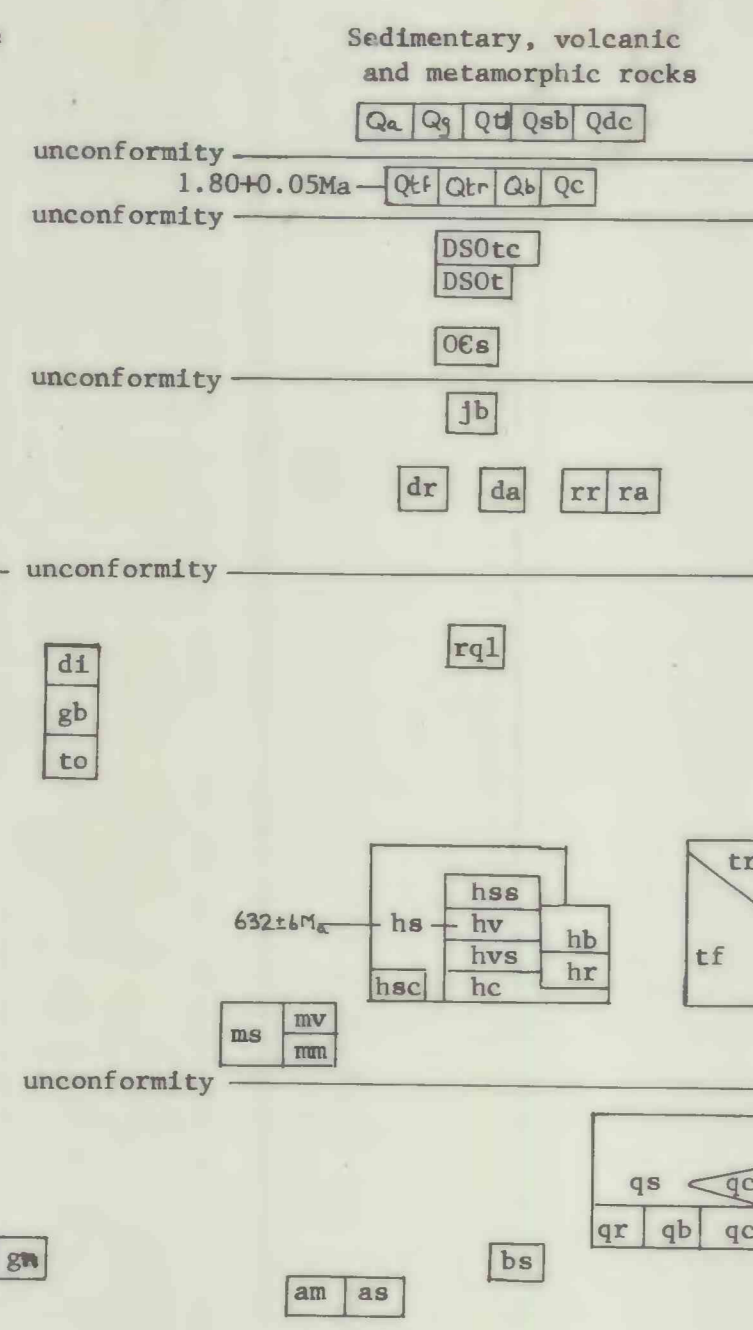


CORRELATION OF MAP UNITS



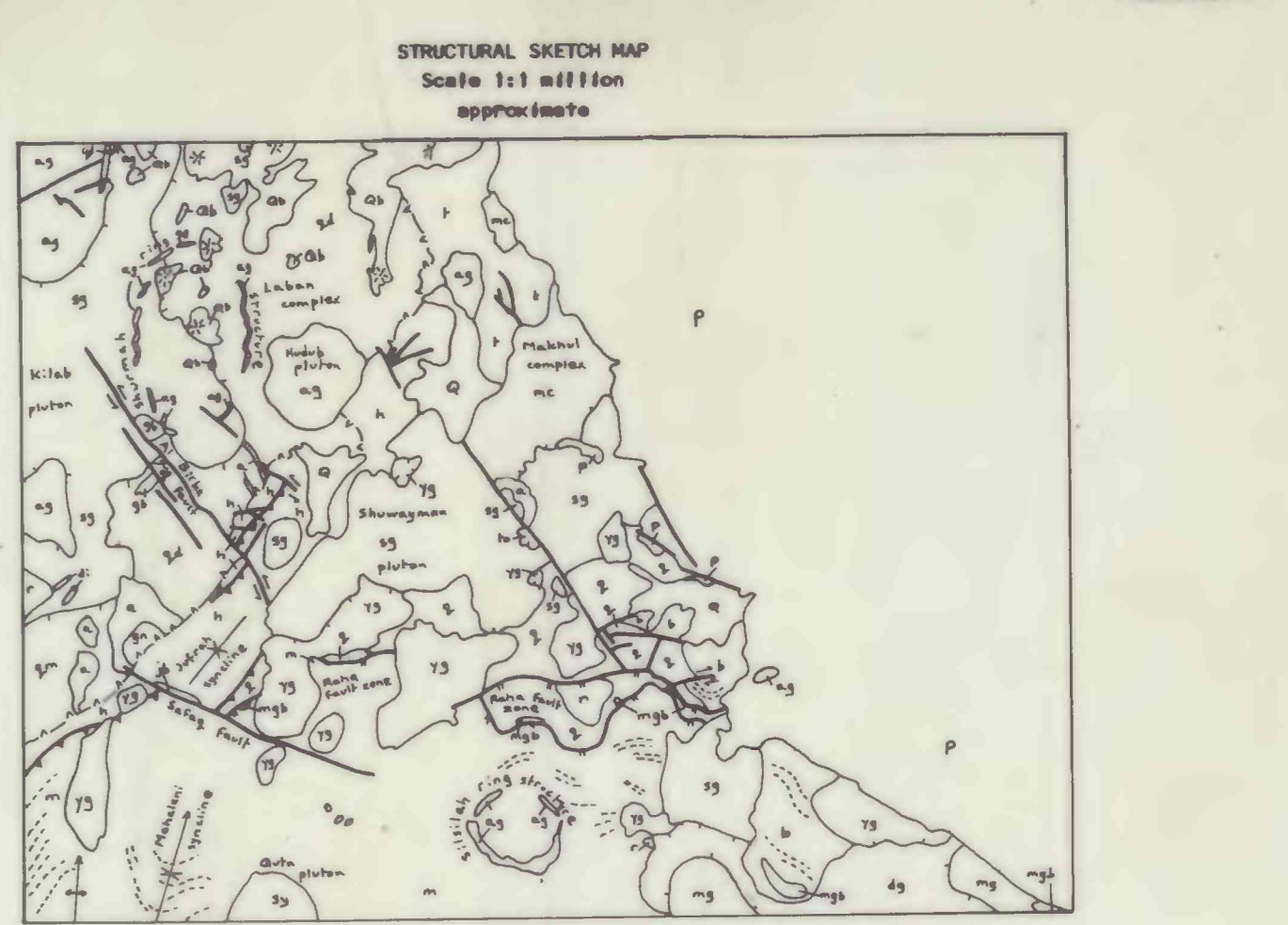
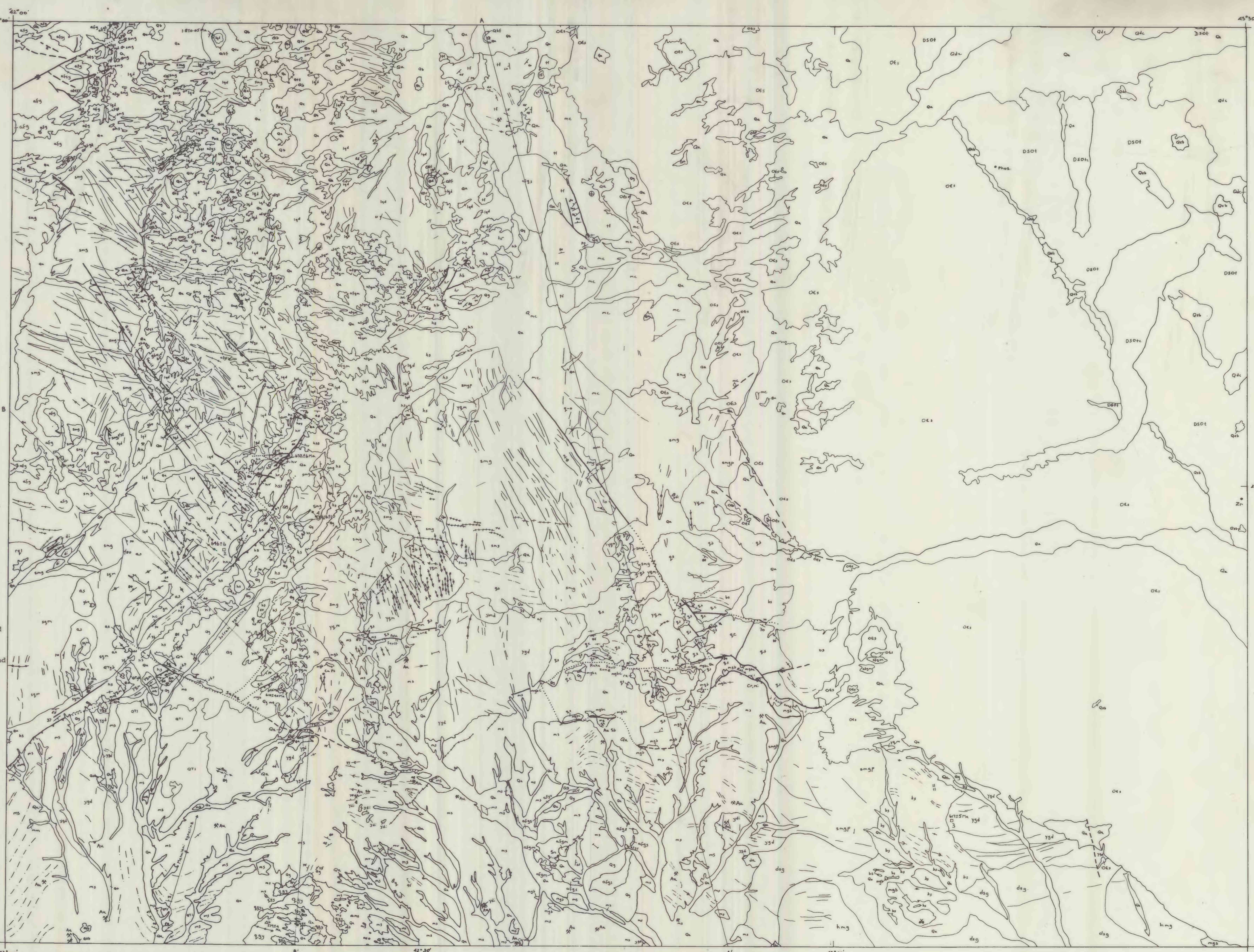
DESCRIPTION OF MAP UNITS

QUATERNARY  
CENOZOIC  
PALEOZOIC  
PROTEROZOIC

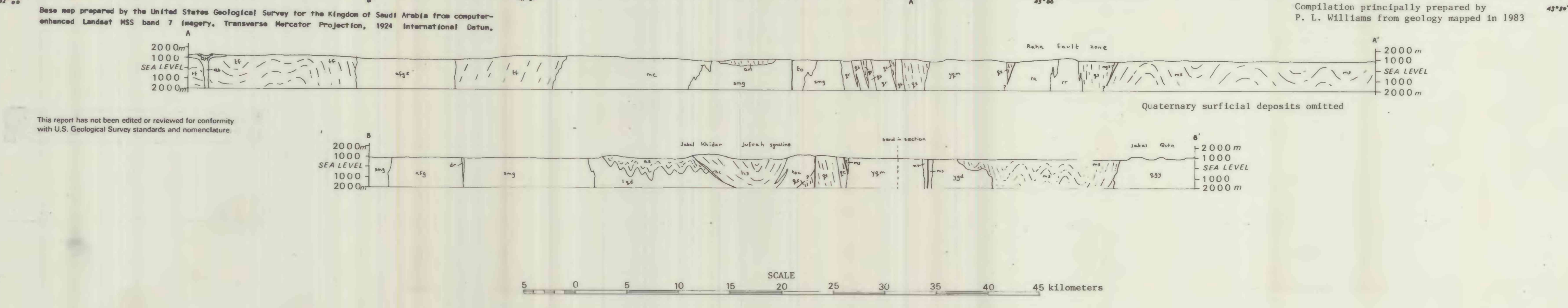
**QUATERNARY**  
Q1b - Sand, silt, clay and fine gravel in stream channels  
Q1a - Gravel and boulders in coalescing alluvial fans  
Q2 - Quartz-chip gravel  
Q3 - Sandstone  
Q4 - Sandstone  
Q5 - Sandstone  
Q6 - Sandstone  
Q7 - Sandstone  
Q8 - Sandstone  
Q9 - Sandstone  
Q10 - Sandstone  
Q11 - Sandstone  
Q12 - Sandstone  
Q13 - Sandstone  
Q14 - Sandstone  
Q15 - Sandstone  
Q16 - Sandstone  
Q17 - Sandstone  
Q18 - Sandstone  
Q19 - Sandstone  
Q20 - Sandstone

**PALEOZOIC**  
D501 - Turus formation  
D502 - Hibah formation  
D503 - Maragah formation  
D504 - Qaryun formation  
D505 - Bu'ayra formation  
D506 - Amphibolite and hornblende schist  
D507 - Gabbro  
D508 - Gabbro  
D509 - Gabbro  
D510 - Gabbro  
D511 - Gabbro  
D512 - Gabbro  
D513 - Gabbro  
D514 - Gabbro  
D515 - Gabbro  
D516 - Gabbro  
D517 - Gabbro  
D518 - Gabbro  
D519 - Gabbro  
D520 - Gabbro

**PROTEROZOIC**  
J1 - Jiblah group  
D1 - Dacite and rhyolite  
D2 - Dacite  
D3 - Dacite  
D4 - Dacite  
D5 - Dacite  
D6 - Dacite  
D7 - Dacite  
D8 - Dacite  
D9 - Dacite  
D10 - Dacite  
D11 - Dacite  
D12 - Dacite  
D13 - Dacite  
D14 - Dacite  
D15 - Dacite  
D16 - Dacite  
D17 - Dacite  
D18 - Dacite  
D19 - Dacite  
D20 - Dacite  
D21 - Dacite  
D22 - Dacite  
D23 - Dacite  
D24 - Dacite  
D25 - Dacite  
D26 - Dacite  
D27 - Dacite  
D28 - Dacite  
D29 - Dacite  
D30 - Dacite  
D31 - Dacite  
D32 - Dacite  
D33 - Dacite  
D34 - Dacite  
D35 - Dacite  
D36 - Dacite  
D37 - Dacite  
D38 - Dacite  
D39 - Dacite  
D40 - Dacite  
D41 - Dacite  
D42 - Dacite  
D43 - Dacite  
D44 - Dacite  
D45 - Dacite  
D46 - Dacite  
D47 - Dacite  
D48 - Dacite  
D49 - Dacite  
D50 - Dacite  
D51 - Dacite  
D52 - Dacite  
D53 - Dacite  
D54 - Dacite  
D55 - Dacite  
D56 - Dacite  
D57 - Dacite  
D58 - Dacite  
D59 - Dacite  
D60 - Dacite  
D61 - Dacite  
D62 - Dacite  
D63 - Dacite  
D64 - Dacite  
D65 - Dacite  
D66 - Dacite  
D67 - Dacite  
D68 - Dacite  
D69 - Dacite  
D70 - Dacite  
D71 - Dacite  
D72 - Dacite  
D73 - Dacite  
D74 - Dacite  
D75 - Dacite  
D76 - Dacite  
D77 - Dacite  
D78 - Dacite  
D79 - Dacite  
D80 - Dacite  
D81 - Dacite  
D82 - Dacite  
D83 - Dacite  
D84 - Dacite  
D85 - Dacite  
D86 - Dacite  
D87 - Dacite  
D88 - Dacite  
D89 - Dacite  
D90 - Dacite  
D91 - Dacite  
D92 - Dacite  
D93 - Dacite  
D94 - Dacite  
D95 - Dacite  
D96 - Dacite  
D97 - Dacite  
D98 - Dacite  
D99 - Dacite  
D100 - Dacite



- LEGEND**
- Q surficial cover
  - Q1b Cenozoic alkali basalt
  - Q1a Phanerozoic rocks
  - J1 Jiblah group
  - D501-505 Raha formation and other late Proterozoic felsic volcanic rocks
  - D506-507 Turus formation
  - D508-509 Hibah formation
  - D510-511 Maragah formation
  - D512-513 Qaryun formation
  - D514-515 Bu'ayra formation
  - D516-517 Amphibolite and hornblende schist
  - D518-519 Gabbro
  - D520-521 Gabbro
  - D522-523 Gabbro
  - D524-525 Gabbro
  - D526-527 Gabbro
  - D528-529 Gabbro
  - D530-531 Gabbro
  - D532-533 Gabbro
  - D534-535 Gabbro
  - D536-537 Gabbro
  - D538-539 Gabbro
  - D540-541 Gabbro
  - D542-543 Gabbro
  - D544-545 Gabbro
  - D546-547 Gabbro
  - D548-549 Gabbro
  - D550-551 Gabbro
  - D552-553 Gabbro
  - D554-555 Gabbro
  - D556-557 Gabbro
  - D558-559 Gabbro
  - D560-561 Gabbro
  - D562-563 Gabbro
  - D564-565 Gabbro
  - D566-567 Gabbro
  - D568-569 Gabbro
  - D570-571 Gabbro
  - D572-573 Gabbro
  - D574-575 Gabbro
  - D576-577 Gabbro
  - D578-579 Gabbro
  - D580-581 Gabbro
  - D582-583 Gabbro
  - D584-585 Gabbro
  - D586-587 Gabbro
  - D588-589 Gabbro
  - D590-591 Gabbro
  - D592-593 Gabbro
  - D594-595 Gabbro
  - D596-597 Gabbro
  - D598-599 Gabbro
  - D600-601 Gabbro
  - D602-603 Gabbro
  - D604-605 Gabbro
  - D606-607 Gabbro
  - D608-609 Gabbro
  - D610-611 Gabbro
  - D612-613 Gabbro
  - D614-615 Gabbro
  - D616-617 Gabbro
  - D618-619 Gabbro
  - D620-621 Gabbro
  - D622-623 Gabbro
  - D624-625 Gabbro
  - D626-627 Gabbro
  - D628-629 Gabbro
  - D630-631 Gabbro
  - D632-633 Gabbro
  - D634-635 Gabbro
  - D636-637 Gabbro
  - D638-639 Gabbro
  - D640-641 Gabbro
  - D642-643 Gabbro
  - D644-645 Gabbro
  - D646-647 Gabbro
  - D648-649 Gabbro
  - D650-651 Gabbro
  - D652-653 Gabbro
  - D654-655 Gabbro
  - D656-657 Gabbro
  - D658-659 Gabbro
  - D660-661 Gabbro
  - D662-663 Gabbro
  - D664-665 Gabbro
  - D666-667 Gabbro
  - D668-669 Gabbro
  - D670-671 Gabbro
  - D672-673 Gabbro
  - D674-675 Gabbro
  - D676-677 Gabbro
  - D678-679 Gabbro
  - D680-681 Gabbro
  - D682-683 Gabbro
  - D684-685 Gabbro
  - D686-687 Gabbro
  - D688-689 Gabbro
  - D690-691 Gabbro
  - D692-693 Gabbro
  - D694-695 Gabbro
  - D696-697 Gabbro
  - D698-699 Gabbro
  - D700-701 Gabbro
  - D702-703 Gabbro
  - D704-705 Gabbro
  - D706-707 Gabbro
  - D708-709 Gabbro
  - D710-711 Gabbro
  - D712-713 Gabbro
  - D714-715 Gabbro
  - D716-717 Gabbro
  - D718-719 Gabbro
  - D720-721 Gabbro
  - D722-723 Gabbro
  - D724-725 Gabbro
  - D726-727 Gabbro
  - D728-729 Gabbro
  - D730-731 Gabbro
  - D732-733 Gabbro
  - D734-735 Gabbro
  - D736-737 Gabbro
  - D738-739 Gabbro
  - D740-741 Gabbro
  - D742-743 Gabbro
  - D744-745 Gabbro
  - D746-747 Gabbro
  - D748-749 Gabbro
  - D750-751 Gabbro
  - D752-753 Gabbro
  - D754-755 Gabbro
  - D756-757 Gabbro
  - D758-759 Gabbro
  - D760-761 Gabbro
  - D762-763 Gabbro
  - D764-765 Gabbro
  - D766-767 Gabbro
  - D768-769 Gabbro
  - D770-771 Gabbro
  - D772-773 Gabbro
  - D774-775 Gabbro
  - D776-777 Gabbro
  - D778-779 Gabbro
  - D780-781 Gabbro
  - D782-783 Gabbro
  - D784-785 Gabbro
  - D786-787 Gabbro
  - D788-789 Gabbro
  - D790-791 Gabbro
  - D792-793 Gabbro
  - D794-795 Gabbro
  - D796-797 Gabbro
  - D798-799 Gabbro
  - D800-801 Gabbro
  - D802-803 Gabbro
  - D804-805 Gabbro
  - D806-807 Gabbro
  - D808-809 Gabbro
  - D810-811 Gabbro
  - D812-813 Gabbro
  - D814-815 Gabbro
  - D816-817 Gabbro
  - D818-819 Gabbro
  - D820-821 Gabbro
  - D822-823 Gabbro
  - D824-825 Gabbro
  - D826-827 Gabbro
  - D828-829 Gabbro
  - D830-831 Gabbro
  - D832-833 Gabbro
  - D834-835 Gabbro
  - D836-837 Gabbro
  - D838-839 Gabbro
  - D840-841 Gabbro
  - D842-843 Gabbro
  - D844-845 Gabbro
  - D846-847 Gabbro
  - D848-849 Gabbro
  - D850-851 Gabbro
  - D852-853 Gabbro
  - D854-855 Gabbro
  - D856-857 Gabbro
  - D858-859 Gabbro
  - D860-861 Gabbro
  - D862-863 Gabbro
  - D864-865 Gabbro
  - D866-867 Gabbro
  - D868-869 Gabbro
  - D870-871 Gabbro
  - D872-873 Gabbro
  - D874-875 Gabbro
  - D876-877 Gabbro
  - D878-879 Gabbro
  - D880-881 Gabbro
  - D882-883 Gabbro
  - D884-885 Gabbro
  - D886-887 Gabbro
  - D888-889 Gabbro
  - D890-891 Gabbro
  - D892-893 Gabbro
  - D894-895 Gabbro
  - D896-897 Gabbro
  - D898-899 Gabbro
  - D900-901 Gabbro
  - D902-903 Gabbro
  - D904-905 Gabbro
  - D906-907 Gabbro
  - D908-909 Gabbro
  - D910-911 Gabbro
  - D912-913 Gabbro
  - D914-915 Gabbro
  - D916-917 Gabbro
  - D918-919 Gabbro
  - D920-921 Gabbro
  - D922-923 Gabbro
  - D924-925 Gabbro
  - D926-927 Gabbro
  - D928-929 Gabbro
  - D930-931 Gabbro
  - D932-933 Gabbro
  - D934-935 Gabbro
  - D936-937 Gabbro
  - D938-939 Gabbro
  - D940-941 Gabbro
  - D942-943 Gabbro
  - D944-945 Gabbro
  - D946-947 Gabbro
  - D948-949 Gabbro
  - D950-951 Gabbro
  - D952-953 Gabbro
  - D954-955 Gabbro
  - D956-957 Gabbro
  - D958-959 Gabbro
  - D960-961 Gabbro
  - D962-963 Gabbro
  - D964-965 Gabbro
  - D966-967 Gabbro
  - D968-969 Gabbro
  - D970-971 Gabbro
  - D972-973 Gabbro
  - D974-975 Gabbro
  - D976-977 Gabbro
  - D978-979 Gabbro
  - D980-981 Gabbro
  - D982-983 Gabbro
  - D984-985 Gabbro
  - D986-987 Gabbro
  - D988-989 Gabbro
  - D990-991 Gabbro
  - D992-993 Gabbro
  - D994-995 Gabbro
  - D996-997 Gabbro
  - D998-999 Gabbro
  - D1000-1001 Gabbro



- CONTACT**
- FAULT---dashed where inferred, dotted where concealed; bar and ball indicates downthrown side; arrows indicate relative movement
  - THRUST or STEEP REVERSE FAULT---bars on upper plate
  - FAULT---with complex sense of movement
  - ANTICLINE or ANTIFORM---showing direction of plunge
  - SYNCLINE or SYNFORM---showing direction of plunge
  - FOLD AXES---showing trace of bedding
  - STRIKE AND DIP OF BEDS
  - Inclined
  - Vertical
  - Horizontal
  - Overturned
  - Dip not known, generally greater than 60°
  - Trend lines of bedding and (or) cleavage in metamorphic rocks
- STRIKE AND DIP OF FOLIATION**
- Inclined
  - Vertical
- STRIKE AND DIP OF FRACTURE CLEAVAGE**
- Inclined
  - Vertical
- MINERALIZATION**
- Ancient working
  - Quarry
  - Prospect
- COMMODITY SYMBOL**: Au gold; Sb antimony; Sn tin; Cu copper; Pb lead; Cr chromium; Ni nickel; Fe iron; Zr zirconium; Poz. pozzolan; Phos. phosphate
- RADIOMETRIC AGE DETERMINATIONS**
- Rb-Sr method
  - U-Pb method
  - K-Ar method

GEOLOGIC MAP OF THE PRECAMBRIAN ROCKS OF THE JABAL HABASHI QUADRANGLE, SHEET 26F, KINGDOM OF SAUDI ARABIA

Compiled by Paul L. Williams and Peter R. Johnson

A.H. 1404, A.D. 1984

- SOURCES OF GEOLOGIC DATA**
- A. Brinkman, R. A. Hoffman, L. F. Brown, G. F. and Pooch, A. E., 1963, Geology of the West of Riyadh quadrangle, Kingdom of Saudi Arabia; U. S. Geological Survey Miscellaneous Geologic Investigations Map I-2064, scale 1:500,000.
  - B. Pallister, J. S., 1984, Reconnaissance geology of the Harrah al-Hudayrah quadrangle, sheet 26/2A, Kingdom of Saudi Arabia; Saudi Arabian Deputy Ministry for Mineral Resources Open-File Report 1985-OF-04-4, 82 p., Also, 1985, U.S. Geological Survey Open-File Report 85-125.
  - C. Williams, P. L., 1983, Reconnaissance geology of the Samrah quadrangle, sheet 26/2C, Kingdom of Saudi Arabia; Saudi Arabian Deputy Ministry for Mineral Resources Open-File Report 1985-OF-04-3, 33 p., Also, 1984, U.S. Geological Survey Open-File Report 84-383.
  - D. du Bray, E. A., 1984a, Reconnaissance geology of the Al-Habash quadrangle, sheet 26/2B, Kingdom of Saudi Arabia; Saudi Arabian Deputy Ministry for Mineral Resources Open-File Report 1985-OF-04-5, 48 p., Also, 1984, U.S. Geological Survey Open-File Report 84-382.
  - E. du Bray, E. A., 1984b, Reconnaissance geology of the Jibal Saq quadrangle, sheet 26/2D, Kingdom of Saudi Arabia; Saudi Arabian Deputy Ministry for Mineral Resources Open-File Report 1985-OF-04-6, 20 p., Also, 1983, U.S. Geological Survey Open-File Report 83-447.