

# WUh-4, Jabal Abu Ledam, Juwayl Formation

Thickness: 25.58 m, (N 19 51 8.0) (E 44 40 22.53)  
(Scale: 24%) (Hussain Fahad Al-Ajmi 2012)

Sedimentology, Stratigraphy  
and Reservoir Quality of The  
Paleozoic Wajid Sandstone  
in the SW Saudi Arabia

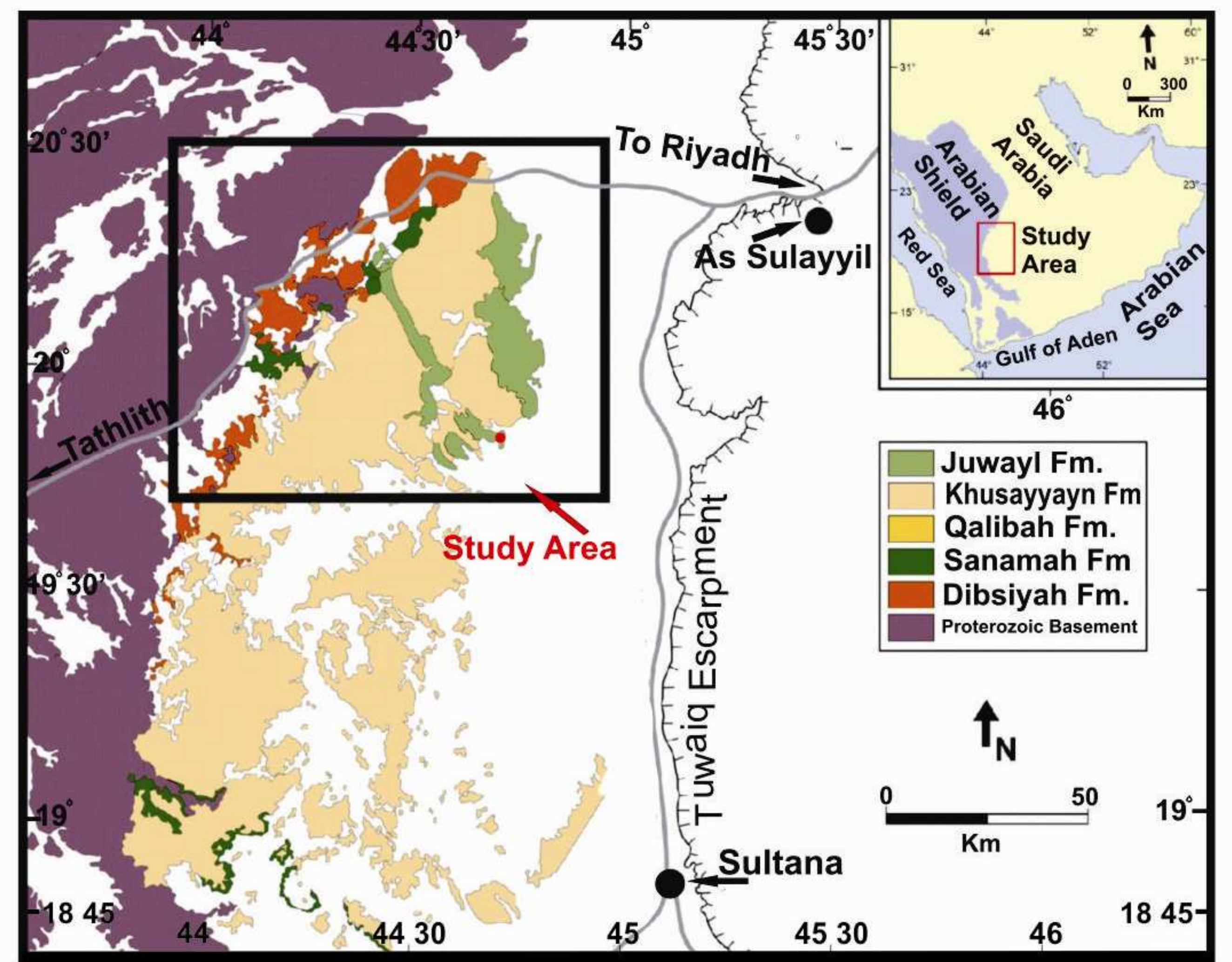
4

3

2

1

Total Depth m	Litho Facies unit	Grain size						Lithology	Sedimentary Structure	LU	Description
		C	S	Ms	Fs	Ms	FG				
22	Y							very fine, horizontal to low bidding with uni-directional ripple marks.		LU-5	sandstone, ripple drift cross bedding.
21	Y							convoluted varves		LU-4	siltstone to fine sandstone.
18+19+20	Y							sample WUh-4-18 to 25 fine and very fine sandstone intercalated with silt forming varve structure.		LU-4	siltstone to fine sandstone.
17	Y							sample WUh-4-17B medium to fine, horizontal to low bedding cross beds fining upward sandstone.		LU-7	sandstone, horizontal to low cross angle bedding
16	Y							gravelly, medium to coarse, sandstone the gravels are medium to fine.		LU-12.3	medium to coarse massive sandstone
15	Y							massive, gravelly medium to coarse sandstone.		LU-12.3	medium to coarse massive sandstone
14	Y							massive, gravelly medium to coarse sandstone.		LU-12.3	medium to coarse massive sandstone
13	Y							sample WUh-4-13 massive, medium to coarse sandstone, fining up to medium grain highly slumped and deformed.		LU-8.4	medium to coarse sandstone, fining up
12	Y							sample WUh-4-12 fine grain, horizontal to low medium scale bedding sandstone.		LU-8.5	medium to coarse sandstone, graded foresets and bioturbated
11	Y							massive, fine grain, sandstone.		LU-7	sandstone, horizontal to low cross angle bedding
10	Y							sample WUh-4-9 fine grain, horizontal to low medium scale bedding sandstone.		LU-12.4	fine to medium massive sandstone.
9	Y							sample WUh-4-8 massive, fine grained sandstone.		LU-7	sandstone, horizontal to low cross angle bedding
8	Y							sample WUh-4-7 medium grain, horizontal bedding sandstone.		LU-12.4	fine to medium massive sandstone.
7	Y							sample WUh-4-6 massive, coarse sandstone, fining up to fine sand, it is highly slumped and deformed.		LU-7.1	fine to medium horizontally bedded sandstone
6	Y							sample WUh-4-5 massive, coarse sandstone, fining up to fine sand, it is highly slumped and deformed.		LU-8.4	medium to coarse sandstone, fining up
5	Y							sample WUh-4-4 medium to coarse, fine to medium scale, 2D trough cross bedded graded bedding sandstone from fine gravel to medium and coarse grain, this unit is partially bioturbated and cut through the underlying unit.		LU-8.5	medium to coarse sandstone, graded foresets and bioturbated
4	Y							sample WUh-4-3 medium to coarse, fine to medium scale, 2D trough cross bedded graded bedding sandstone from fine gravel to medium and coarse grain.		LU-8.5	medium to coarse sandstone, graded foresets and bioturbated
3	Y							sample WUh-4-2 medium sandstone, medium scale 2D-trough cross bedding.		LU-8.6	medium to coarse sandstone, graded beds
2	Y							sample WUh-4-1 fine to medium sandstone, graded from fine gravel at the base of each set to medium and fine sand at the top, fine to medium scale 2D-trough cross beds.		LU-7	sandstone, horizontal to low cross angle bedding
1	Y									LU-9.2	medium sandstone, macro scale, 2D-trough cross beds.
	Y									LU-11.2	sandstone to pebbly sandstone, 3D-trough cross beds and channel fills, graded foresets.



Total Depth m	Litho Facies unit	Grain size						Lithology	Sedimentary Structure	LU	Description
		C	S	Ms	Fs	Ms	FG				
27 + 28 + 29	Y							medium to coarse grain, gravelly massive sandstone		LU-12.3	medium to coarse massive sandstone
26	Y							micasious, horizontal bedding, siltstone with some un-known trace fossils and fossil wood fragments.		LU-3.4	mudstone, to muddy siltstone.
25	Y							sample WUh-4-25 silt and very fine sandstone lamina, (varve sediments)		LU-4	siltstone to fine sandstone.
24	Y							fine massive, sandstone		LU-12.4	fine to medium massive sandstone.
23	Y							fine, medium scale low angle bedding sandstone.		LU-7	sandstone, horizontal to low cross angle bedding
22	Y							very fine, horizontal to low bidding with uni-directional ripple marks.		LU-5	sandstone, ripple drift cross bedding.