

Durham E-Theses

The Saudi-Yemeni boundary: towards a peaceful resolution.

Al-Ghamdi, Ahmed Abdullah Saud

How to cite:

Al-Ghamdi, Ahmed Abdullah Saud (1996) The Saudi-Yemeni boundary: towards a peaceful resolution., Durham theses, Durham University. Available at Durham E-Theses Online: http://etheses.dur.ac.uk/1650/

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the full Durham E-Theses policy for further details.

The Saudi-Yemeni Boundary: Towards a Peaceful Resolution

Volume Two (of two volumes)

Atlas

The copyright of this thesis rests with the author. No quotation from it should be published without the written consent of the author and information derived from it should be acknowledged.

Ahmed Abdullah Saud Al-Ghamdi

Thesis submitted for Degree of Doctor of Philosophy in the Faculty of Social Science, International Boundaries Research Unit, Department of Geography, University of Durham, UK.



1996

List of Figures

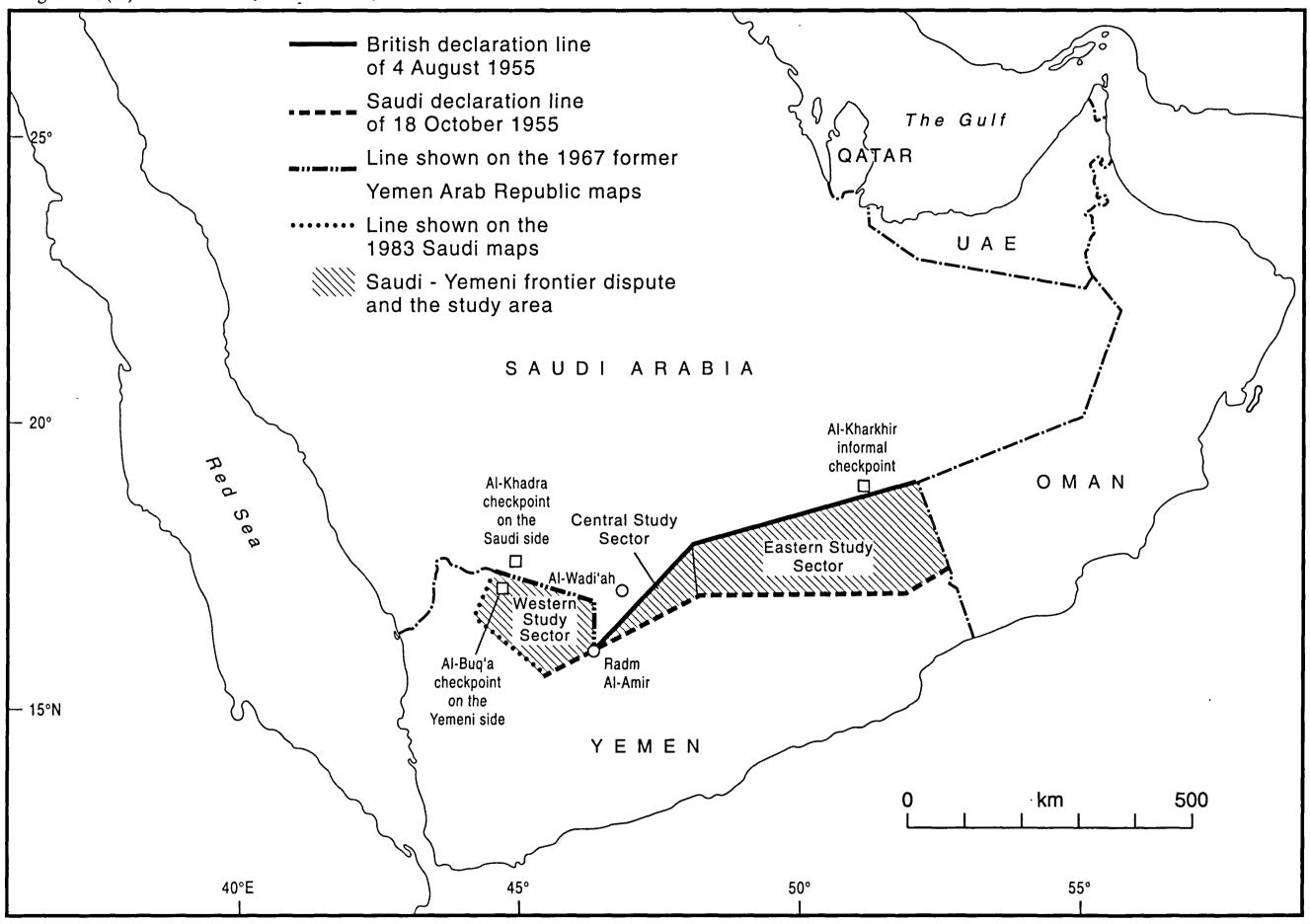
(A) and page numbers in *italics* indicate that a figure is to be found in the Atlas (Volume Two). All other figures are reproduced in the approriate place in this volume.

1.1 1.2 1.3 1.4 1.5(A)	The status of boundaries in the Middle East and North Africa, 1996 The study area Model Framework Model of the de facto border Location of study sectors and checkpoints	2 2 2 3
2.1(A) 2.2(A)	Saudi and Yemeni boundary treaties The Saudi-Yemeni frontier	
2.3(A)	Emirates boundaries sampled by the author on the Treaty of Taif boundary	
2.4(A)	Historical proposals relating to the Saudi-Yemeni frontier	
2.5(A) 2.6(A)	Disputed islands on the Saudi-Yemeni maritime boundary Yemeni oil exploration in the Red Sea	
3.1	Location of the Western Study Sector showing adjacent	10
3.2	administrative divisions Terms used to describe the frontier in the Western Study Sector	10
3.3(A)	Geology and relief of the Western Study Sector	10
3.4	Average maximum daily temperatures at Najran meteorological station for 1992 and 1993	110
3.5(A)	Population distribution in the Western Study Sector	
3.6(A)	Residence of respondents interviewed at Al-Khadra checkpoint	1
3.7	Purposes of crossings by respondents interviewed at	113
3 8(A)	Al-Khadra checkpoint Visits to relatives by respondents interviewed at Al-Khadra checkpoint	1.
3.9(A)	Visits to markets by respondents interviewed at Al-Khadra checkpoint	1
3.10(Á)	Visits to properties by respondents interviewed at Al-Khadra checkpoint	Ĩ.
3.11(A)	Roads and tracks to Al-Khadra checkpoint	1
	Oil concession blocks in the Western Study Sector	1.
	The de facto border in the Western Study Sector	10
3.14(A)	Distribution of tribes in the Western Study Sector	1
4.1	Location of the Central Study Sector	15
4.2	Terms used to describe the frontier in the Central Study Sector	152
4.3(A)	Geology and relief of the Central Study Sector	18
4.4(A)	Population distribution in the Central Study Sector	19
4.5(A)	Location of relatives and properties located in Yemen of those living close	20
4.6(A)	to the Central Study Sector in Saudi Arabia Oil concession blocks in the Central Study Sector	2.
4.7(A)	The de facto border in the Central Study Sector	22
4.8(A)	Distribution of tribes in the Central Study Sector	2.
5.1	Location of the Eastern Study Sector	166
5.2	Terms used to describe the frontier in the Eastern Study Sector	167
5.3(A)	Geology and relief of the Eastern Study Sector	24
5.4	Monthly rainfall totals at Sharurah meteorological station for 1992 and 1993	171
5.5(A)	Pasture and wells in the Eastern Study Sector	25
	Population distribution in the Eastern Study Sector	26

5.7(A) 5.8	Residence of respondents interviewed at Al-Kharkhir checkpoint Purposes of crossings by respondents interviewed at	27 178
5.9(A) 5.10(A) 5.11(A) 5.12(A) 5.13(A)	Al-Kharkhir checkpoint Visits to relatives by respondents interviewed at Al-Kharkhir checkpoint Visits to markets by respondents interviewed at Al-Kharkhir checkpoint Visits to properties by respondents interviewed at Al-Kharkhir checkpoint Roads and tracks to Al-Kharkhir checkpoint Oil concession blocks and exploration activities in the Eastern Study Sector	28 29 30 31 32
5.14(A) 5.15(A)	The de facto border in the Eastern Study Sector Distribution of tribes in the Eastern Study Sector	33 34
5.1 5.2 5.3 5.4 5.5	Models of borderland interaction Factors influencing the location of the Logical Boundary Proposed resolution to the Saudi-Yemeni boundary dispute Genealogical tree of the Hamdan bin Zaid tribe Model of boundary negotiations	212 220 221 223 236
	List of Plates	
	All the plates are to be found in this Atlas (Volume Two).	
2.1 2.2	Border mark no.31, Zibarat Alsir, Al-Tawal Emirate A number of border marks in the Surowat mountains, Zahran Al-Janub Emirate: (1) Madfa Alhinka (border mark no.41); (2) Alsabsab (border mark no.42); (3) Naleed Alkaal (border mark no.43)	35 35
2.3	Border mark no.45, Wadi Alrabidh in Almasna, Zahran Al-Janub Emirate	35
2.4	Border mark no.38, Sha'ab Alqoum, Zahran Al-Janub Emirate	<i>35</i>
2.5	Border mark no.39, Ras Jabal Alab, Zahran Al-Janub Emirate	36
2.6	Border mark no. 1, Jabal Althar, Al-Khadra Emirate	36
2.7	Border mark no.11, Ras Aqaba Nahuga, Al-Khadra Emirate	36
2.8	An example of the border marks mentioned by Philby (1952: pp.513-6)	36
3.1	Examples of 'statements' used at Al-Khadra checkpoint to identify members of the border tribes.	37
3.2	Yemenis crossing the frontier carrying goods from the Saudi side to the Yemeni side	37
3.3	The most common type of vehicle (Toyota Pickup) used by Yemenis crossing the frontier	37
4.1	'Uruq: long linear sand ridges; Shiqaq: valleys or depressions between the ridges	37
5.1	A bedouin from the UAE grazing his camels at Ibn Hamudah	38
5.2	An example of the houses at Shiqqat Al-Kharkhir built of local stone	38
5.3	One of the small farms at Shiqqat Al-Kharkhir	38
5.4	One of the ungraded tracks to Al-Kharkhir informal checkpoint	38

5.3

Figure 1.5(A). Location of study sectors and checkpoints

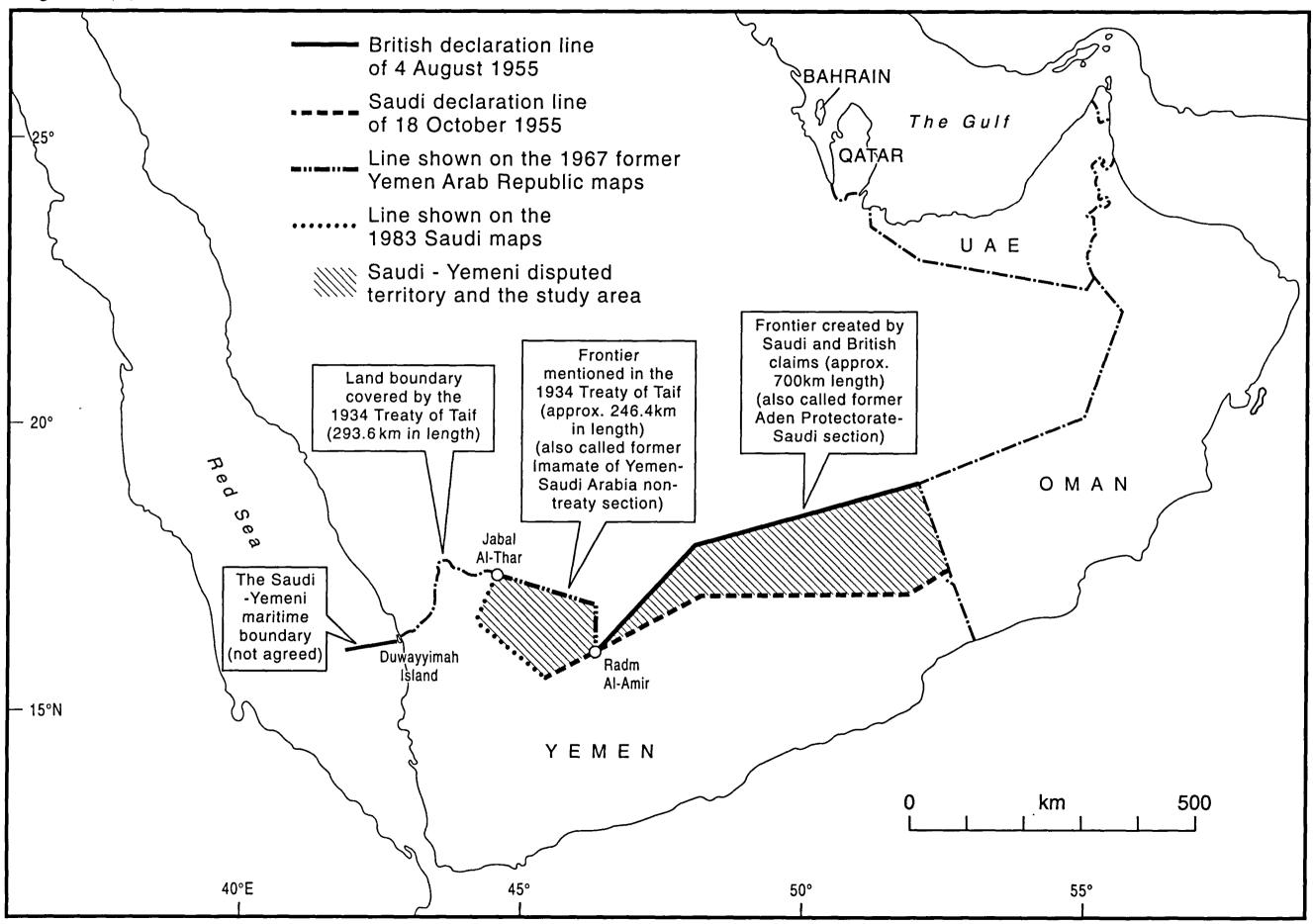


Sources: Schofield 1992-Vol. 20 pp206-7; Schofield 1993-Vol.2 p 349; MSD 1967; MPMR 1983

Figure 2.1(A): Saudi and Yemeni boundary treaties JORDAN IRAQ Old boundaries Treaty of Division of Neutral --- Boundaries agreed Hadda 1925 Treaty of Zone1969 Muhammerah 30°N 1922 Boundary not allocated Expansion of area controlled by Ibn Saud Treaty of) Disputed area Treaty of Muhammerah Amman 1965 1922 Division of Neutral The area which was controlled by Imam Idrisi Hail and Zone 1982 Al-Sauf 1921 BAHRAIN Al-Qaseem 🝾 The Gulf 1903-1906 Al-Hasa Riyadh 1913 1902 Al-Hijaz Treaty of UAE 1924-1926 Al-Kharj Riyadh 1965 and Wadi Al-Dawosir Treaty of Riyadh 1974 (unpublished) 1902-1903 Tarabah OMAN and Al-Khurmah SAUDI ARABIA - 20° Red Sea 1955 British Declaration Line Treaty of Sarwat of Asir and Najran Hafral-Batin 1921-1922 1990 Yemeni Line Treaty of San'a' 1992 1955 Saudi **Declaration Line** — 15° REPUBLIC O F YEMEN Treaty of Taif 1934 500 km 40°E 50° 55°

Sources: Schofield 1992-Vol. 6 p 37; Vol. 10 pp 68-71; Vol. 18 p xxi; Vol. 2 p 422; MFA (KSA) 1936-73 p 465; MEES 1992 pp 2-3; Hamzah 1933 pp367-400

Figure 2.2(A): The Saudi - Yemeni frontier



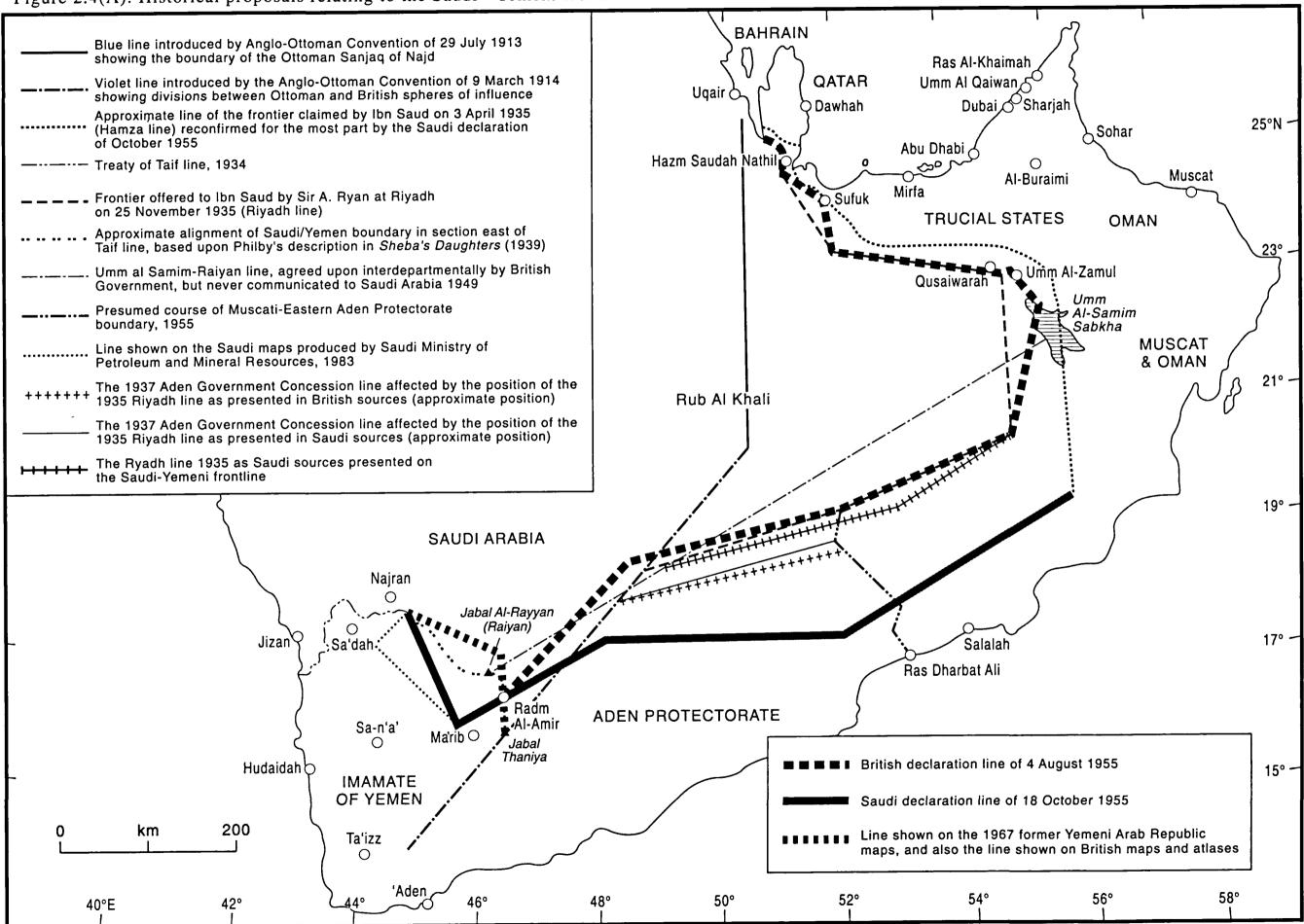
Sources: Schofield 1992-Vol. 20 pp 206-7; Schofield 1993-Vol. 2 p 349; MSD 1967 (Yemeni Map); MSD 1982 (Saudi Map); Author's Field Survey July - December 1994

0 km 500 SAUDI ARABIA Emirate of Zahran Al-Janub 'Allb Treaty of Taif Boundary Emirate of Al-Khadra - 17°N ARAB REPUBLIC OF YEMEN Emirate of (former) Al-Khubah RedSampled boundary Emirate of - 16°30' **▲** Checkpoints S e a Al-Tawal km 50 0 42°30'E 43° 43°30' 44° 44°30'

Figure 2.3(A): Emirates boundaries sampled by the author on the Treaty of Taif boundary

Source: after Al-Ghamdi 1991 p 42

Figure 2.4(A): Historical proposals relating to the Saudi - Yemeni frontier



Source: after Schofield 1994 pp 22-23 with a few modifications by the author

Figure 2.5(A): Disputed islands on the Saudi - Yemeni maritime boundary

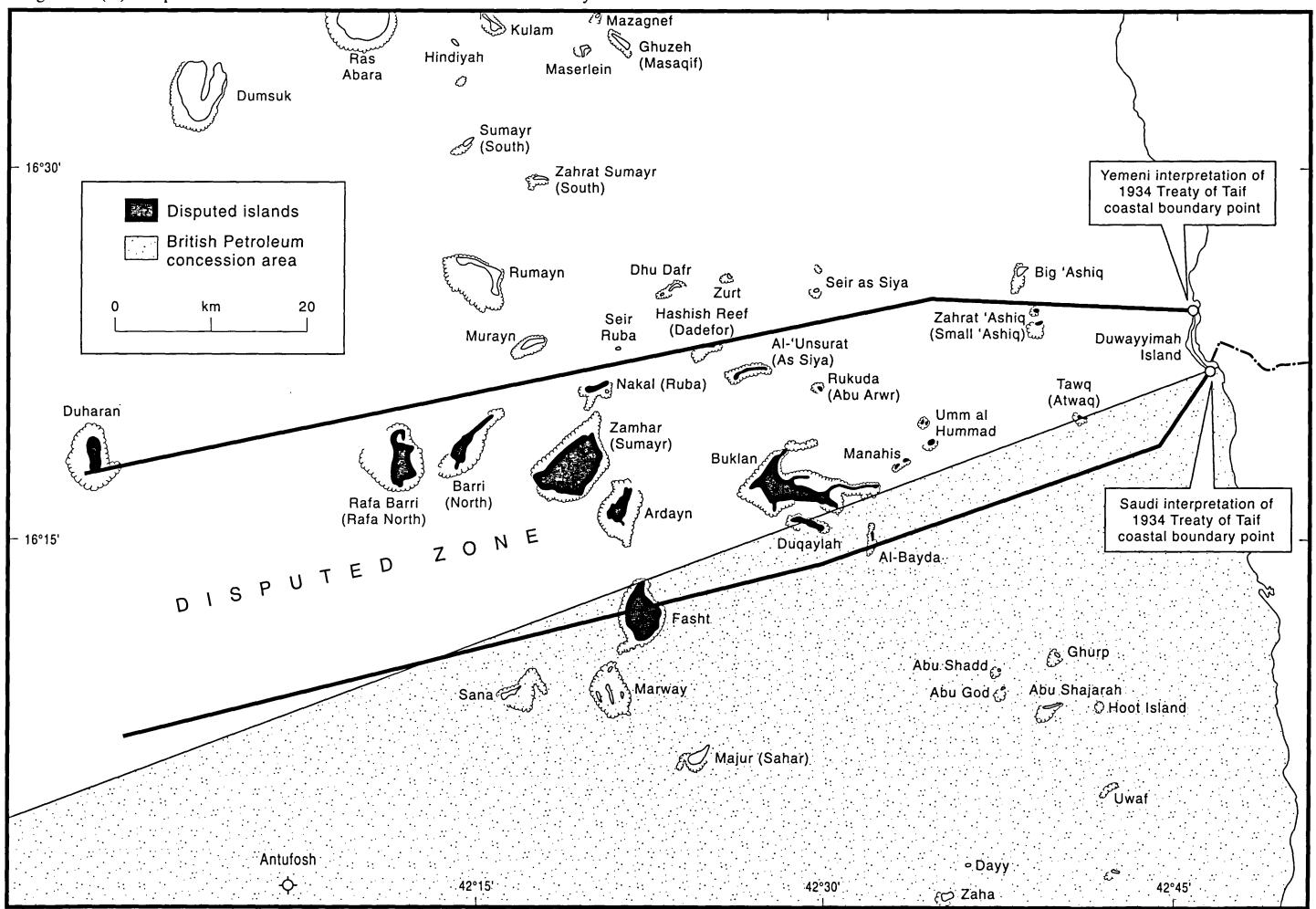
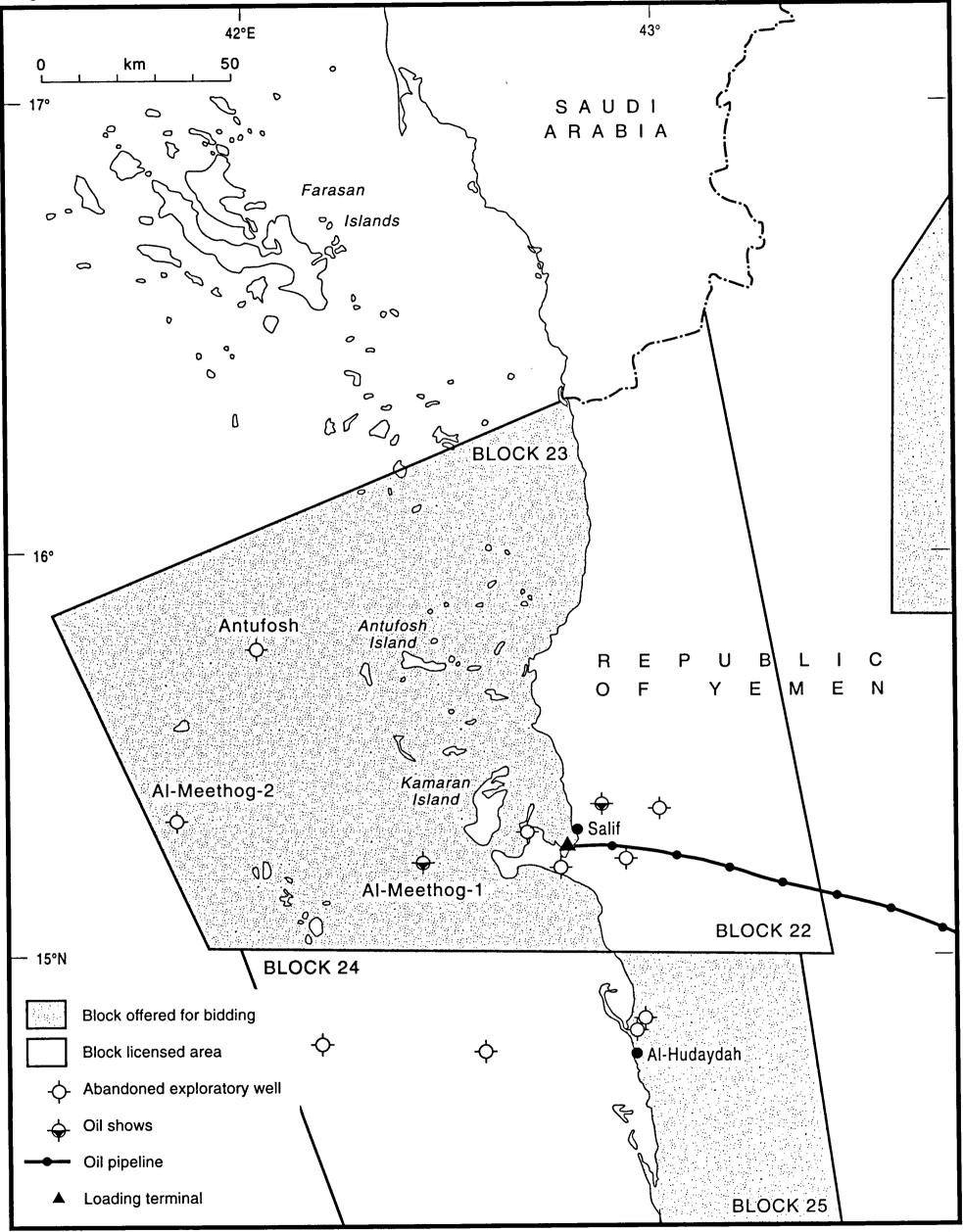


Figure 2.6(A): Yemeni oil exploration in the Red Sea



Source: Foreign Scouting Service Petroleum Activity, 1994

Figure 3.3(A): Geology and relief of the Western Study Sector Dunes 800-1200m Eolian sand Gravel Gravel Plains & Wadis and Gravel Plateau & Stones 1201-1500m Gravel and sand Wajid sandstone Mountains & Rocks 1501-2000m Wajid sandstone Granite and granodiorite Amphibolite, schist and related rocks Extrusive rocks, granite, and undivided △ Well Wadi-Na Najtan ➤ Wadi Western Study Sector Al-Khadra--checkpoint-Capital Small town Al-Bugʻa checkpoint Village Sabkha Wadi A 17° Wedf △ AÎ-Rayyan IRBERES 1691 Wagi Al Jawr Al-Hazm-Sarwah O Santay km 50 Bayhan 45°E

Source: US Geological Survey 1963; 1979; GMWRQ (K.S.A.); GMAQ (K.S.A.); MSD 1992 Rof Yemen (Saudi Map)

Figure 3.5(A): Population distribution in the Western Study Sector AL-RIYADH PROVINCE **EMIRATES** - 19°N ○ 10,000 residents 1 Al-Maiin 'ASIR 2 Al-Mwfajah o 5,000 residents PROVINCE less than 5,000 3 Shab-Bran 4 Al-Hadn less than 100 5 Al-Jarbah 6 Najran SAUDI ARABIA - Province border -- Subprovince border 7 Al-Akhdwd - 18° 8 Rijlah 9 Al-Khadra ■ 500 residents ▲ 250 bedouins ····· Wadi Western Study Sector Treaty of Taif boundary SA'DAH **GOVERNORATE** - 16° Wadi Abrad REPUBLIC OF YEMEN **NAHIYATS** 10 Nahiyat Kitaf - 15° 11 Nahiyat Suq Al-'Inan 12 Nahiyat Rajozah 13 Nahiyat Marashi 14 Nahiyat Khabb 15 Nahiyat Al-Matammah 16 Nahiyat Hazm Al-Jawf 17 Nahiyat Sirwah 18 Nahiyat Ma'rib 0 km 150 19 Nahiyat Jubah 43°E 45° 44° 46°

Figure 3.6(A): Residence of respondents interviewed at Al-Khadra Checkpoint 53° 54° 55° 51°E. Al-Riyadh Province **UAE SAMPLE** Asir Province 27°N AI-Raiyan Abu Al-Dfrah Dhabi QATARI - 19°N SAMPLE 28° Najran Province ^{Al-Raiyan}●● Al-Doha Treaty of Taif boundary Capital Abu Dhabi O Small town Administrative boundary Western Study Sector Village 24° - 18° Al-Dfrah • Al-Hasyniyah Najran SAUDI SAMPLE Al-Khadra Rijlah Al-Sharfah Al-S'aid Al-Harshaf Al-Rwikabh Al-Hadnah. Al-Sharfah Al-May'in Al-Mwsatah Dhdah 11-May in Al-Aqid Snair . Ghawih-Al-Rbaa Al-Hasyniyah Nushur _ Kitaf • Rmah Madrak 17° Wadi ... Sa'dahO Swq Swq Al-'Atfayn Salibah Wadi Khabb Saʻdah Barat Governorate Sallbah Rmah Ghawih Al-Rbaa Najran Al-Ashraf **Sha'ir** Shaharah • Mihar Al-Ghayl • Madrak Alib **Atiis** - 16° San'a' Wadi Abrad Governorate Marib Shaharah Governorate Al-Udayn Zararh YEMENI Bayt Al-Faqih Al-Mahweet, Al-Jawf Marib SAMPLE Al-Bayda' Nushur SAN'A' Governorate Al-Zahir Wadi Al-'Atfayn San'a' ∕B́arat Wadi Wasat **Atiis** 15° Al-Qaif Al-Ghayl Al-Hudaydah Governorate Dhamar Wadi Amlah Governorate Al-Ashraf **Sha'ir** Kitaf Dhamar Khabb Sallbah Al-Bayda' Al-Far'a Governorate Madrak Al-Bayda Al-Ytmah lbb Al-Mwsatah Governorate 0 150 km Shuqra 44°E 45° 47° 46° Source: Author's Field Survey October - December 1994

Figure 3.8(A): Visits to relatives by respondants interviewed at Al-Khadra checkpoint

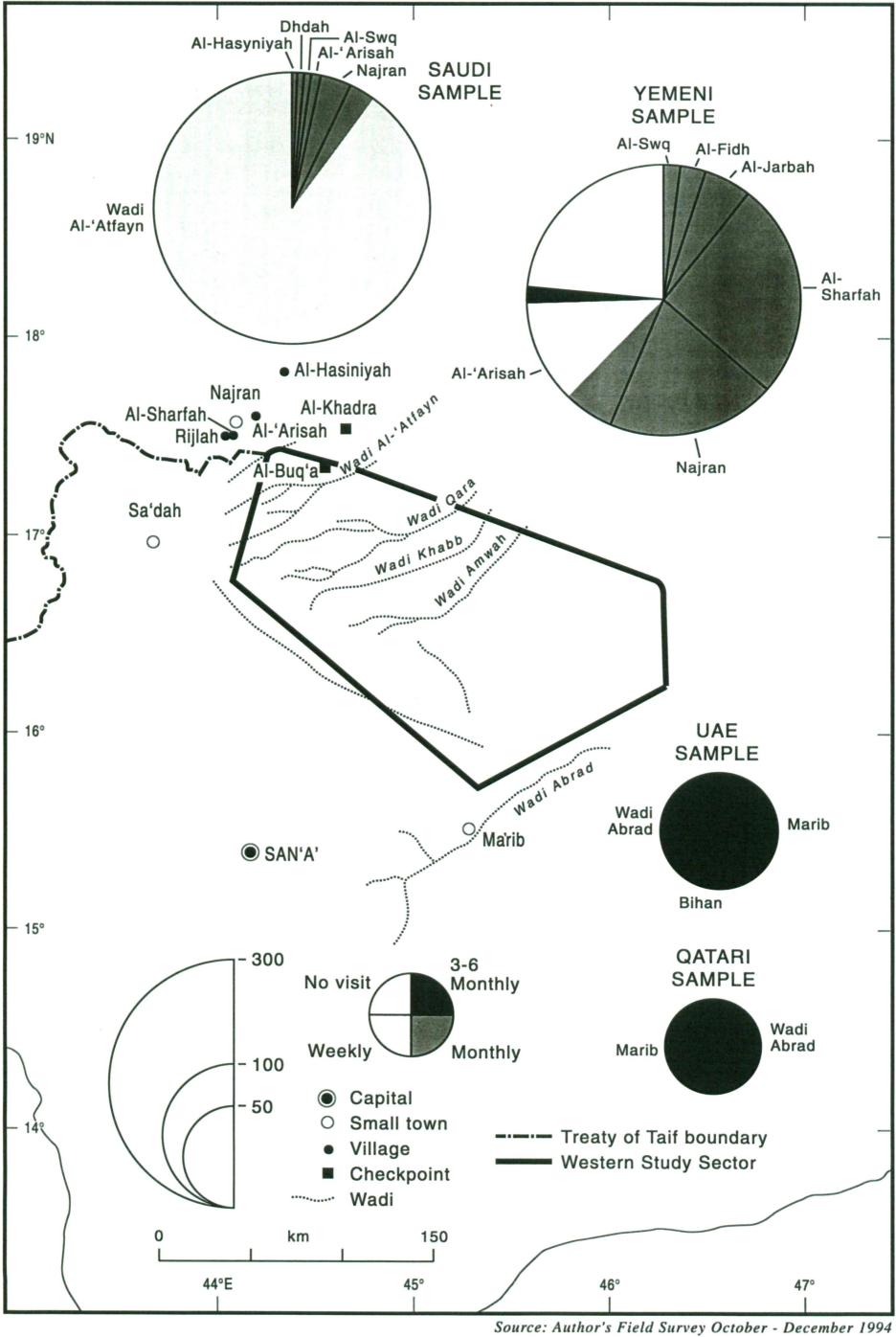
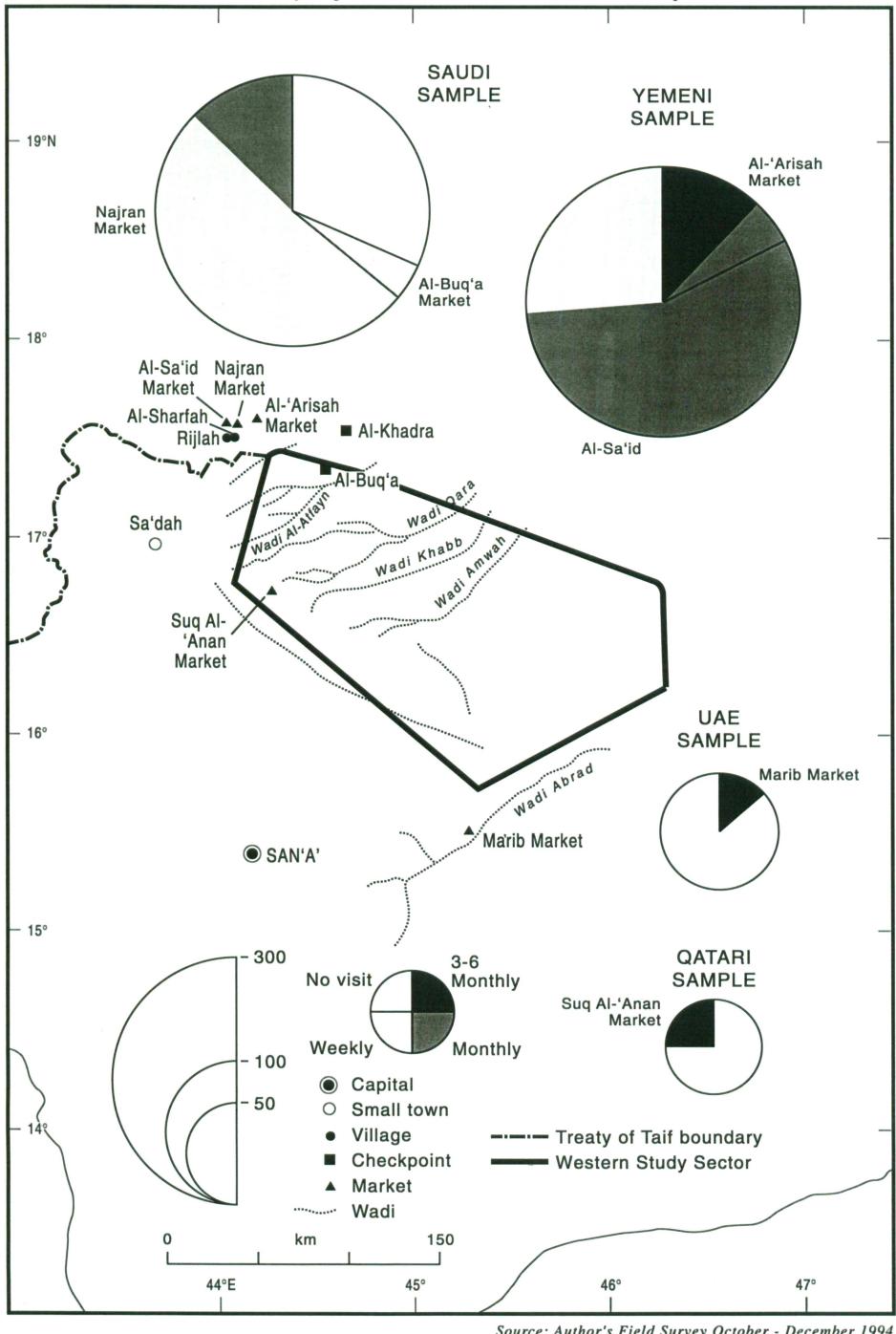
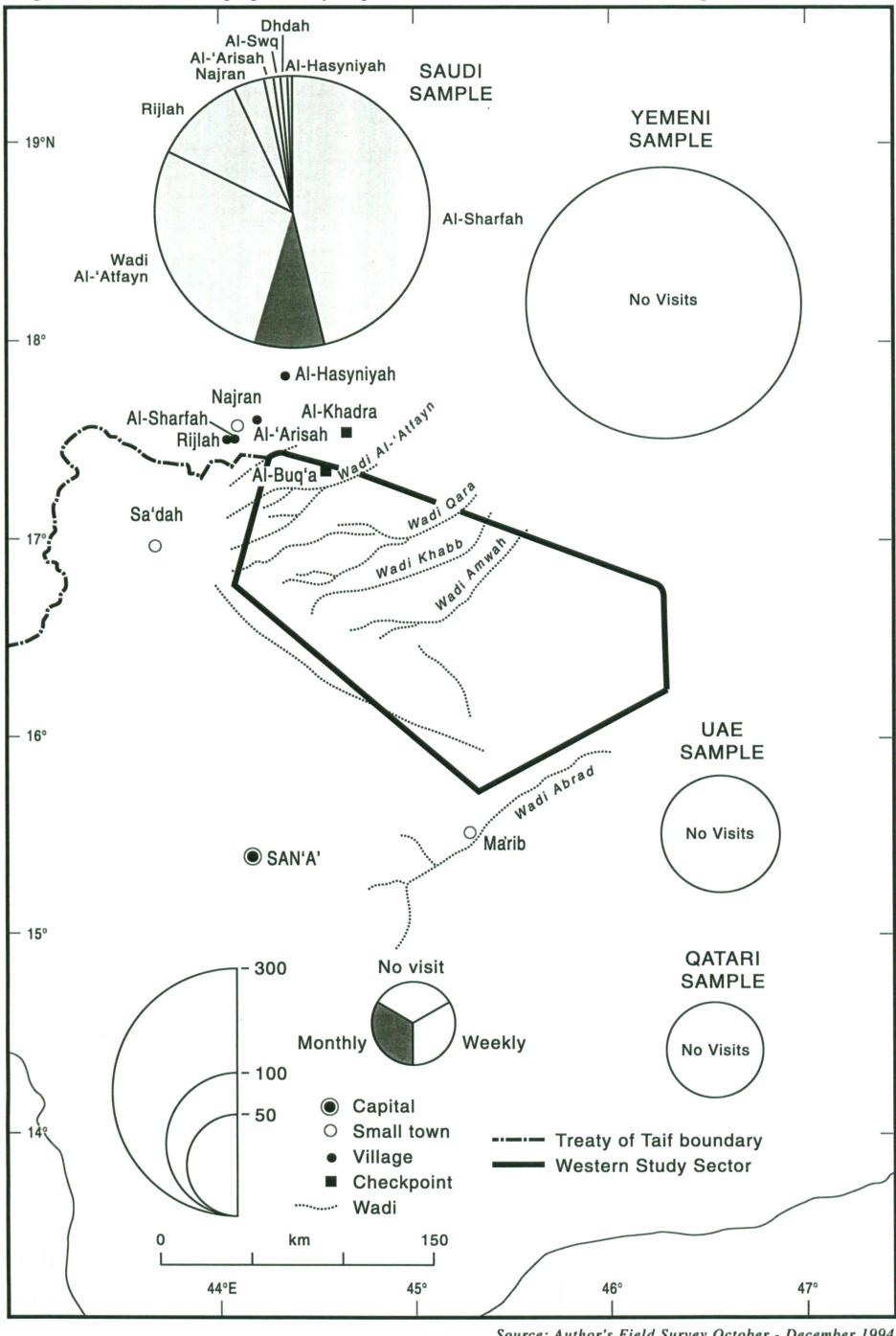


Figure 3.9(A): Visits to markets by respondents interviewed at Al-Khadra checkpoint



Source: Author's Field Survey October - December 1994

Figure 3.10(A): Visits to properties by respondents interviewed at Al-Khadra checkpoint

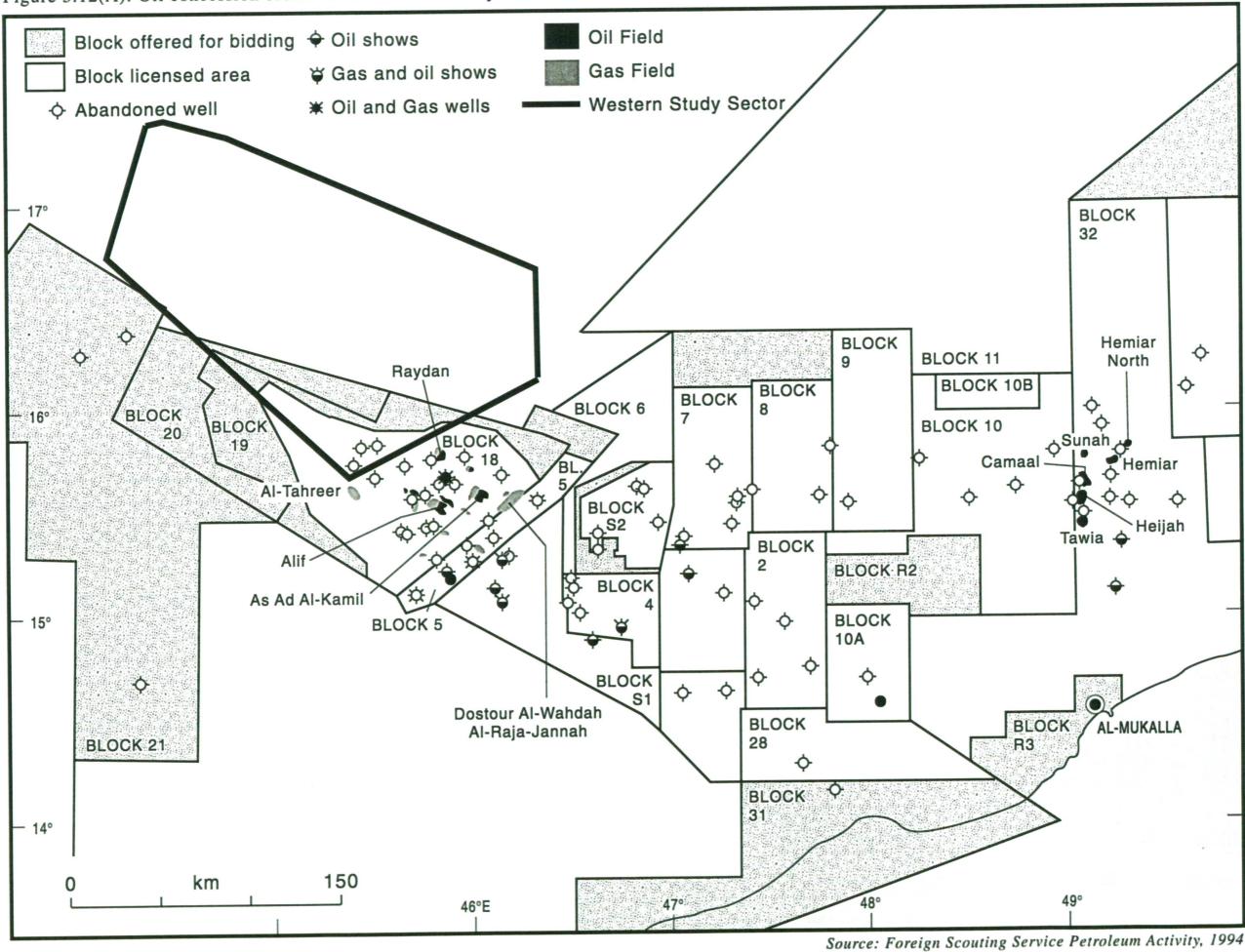


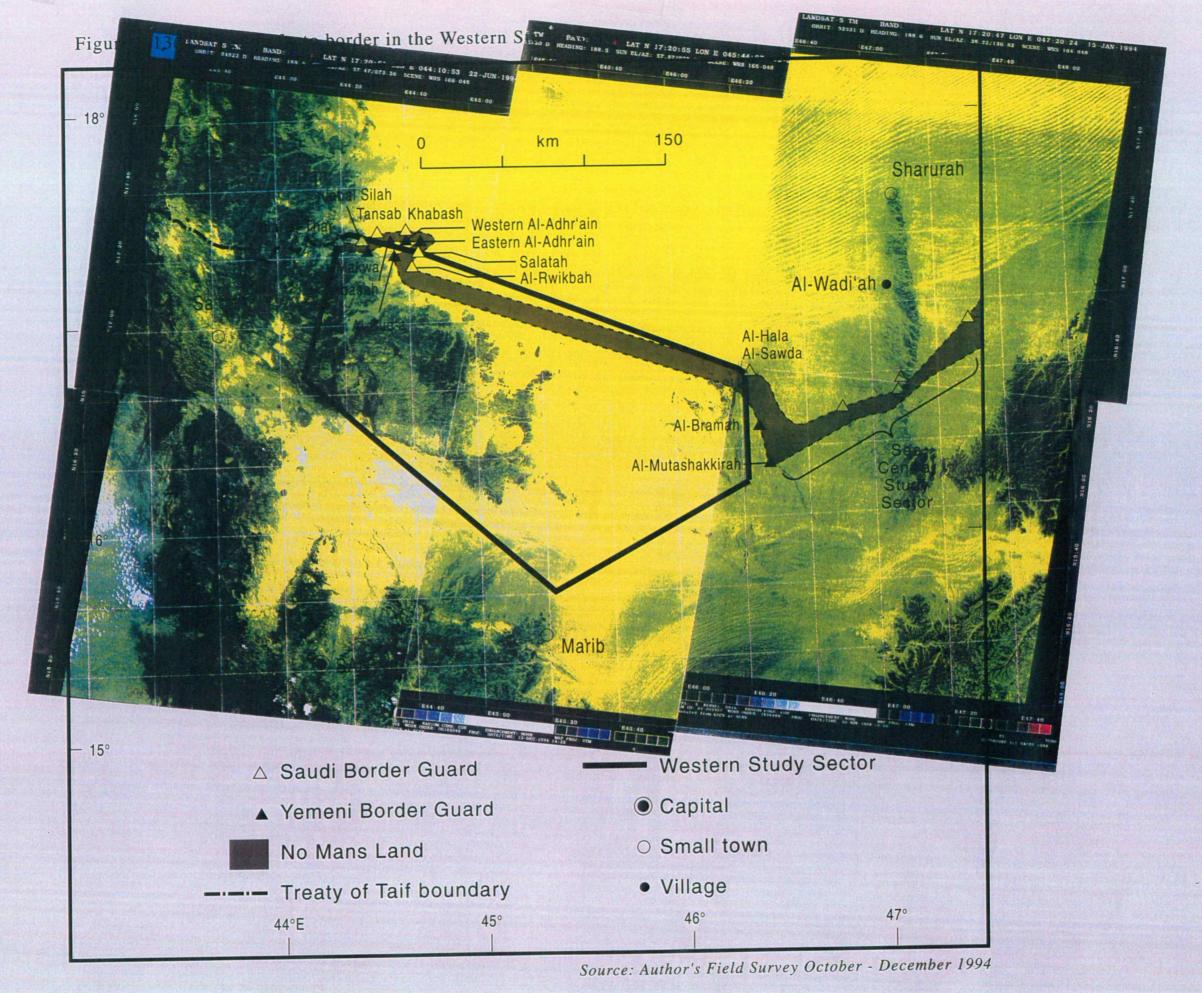
Source: Author's Field Survey October - December 1994

Figure 3.11(A): Roads and tracks to Al-Khadra checkpoint 0 150 km Dual carriageway Asphalt road バ - ク - 19°N Unpaved road Treaty of Taif boundary Western Study Sector Wadi Capital Small town Village Checkpoint ▲ Border guard post Najran Sharurah Al-Khadra Abasah Qarn Khbash Rijlah -AĪ-Buq'a Al-Sharfah Al-Wadi'ah Sadah : Zii . Ma'rib 🌉 SAN'A' li II Dhamar Shuqra 45° 46° 47°

Source: MSD 1992, Republic of Yemen (Saudi Map)

Figure 3.12(A): Oil concession blocks in the Western Study Sector





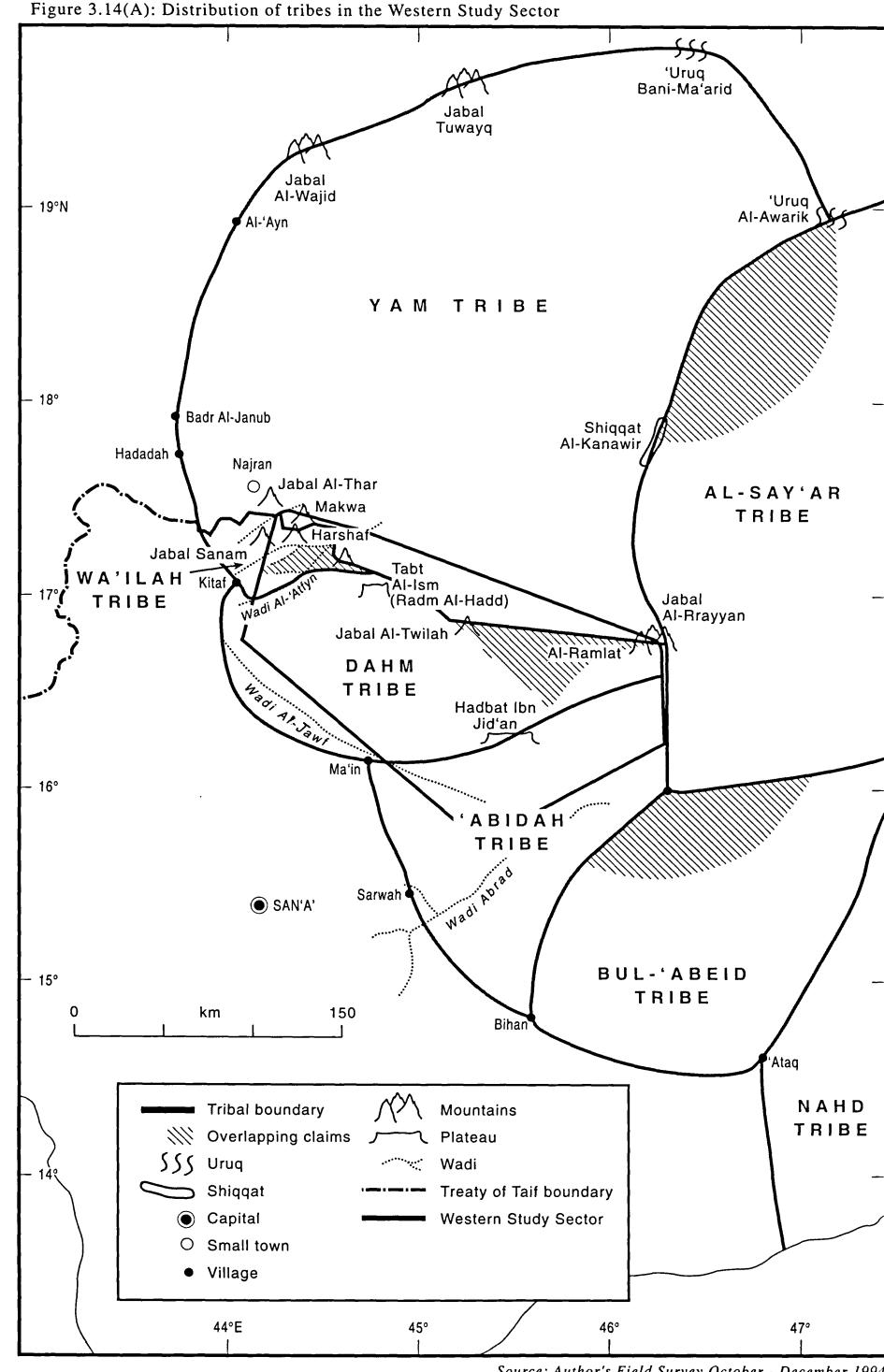


Figure 4.3(A): Geology and relief of the Central Study Sector

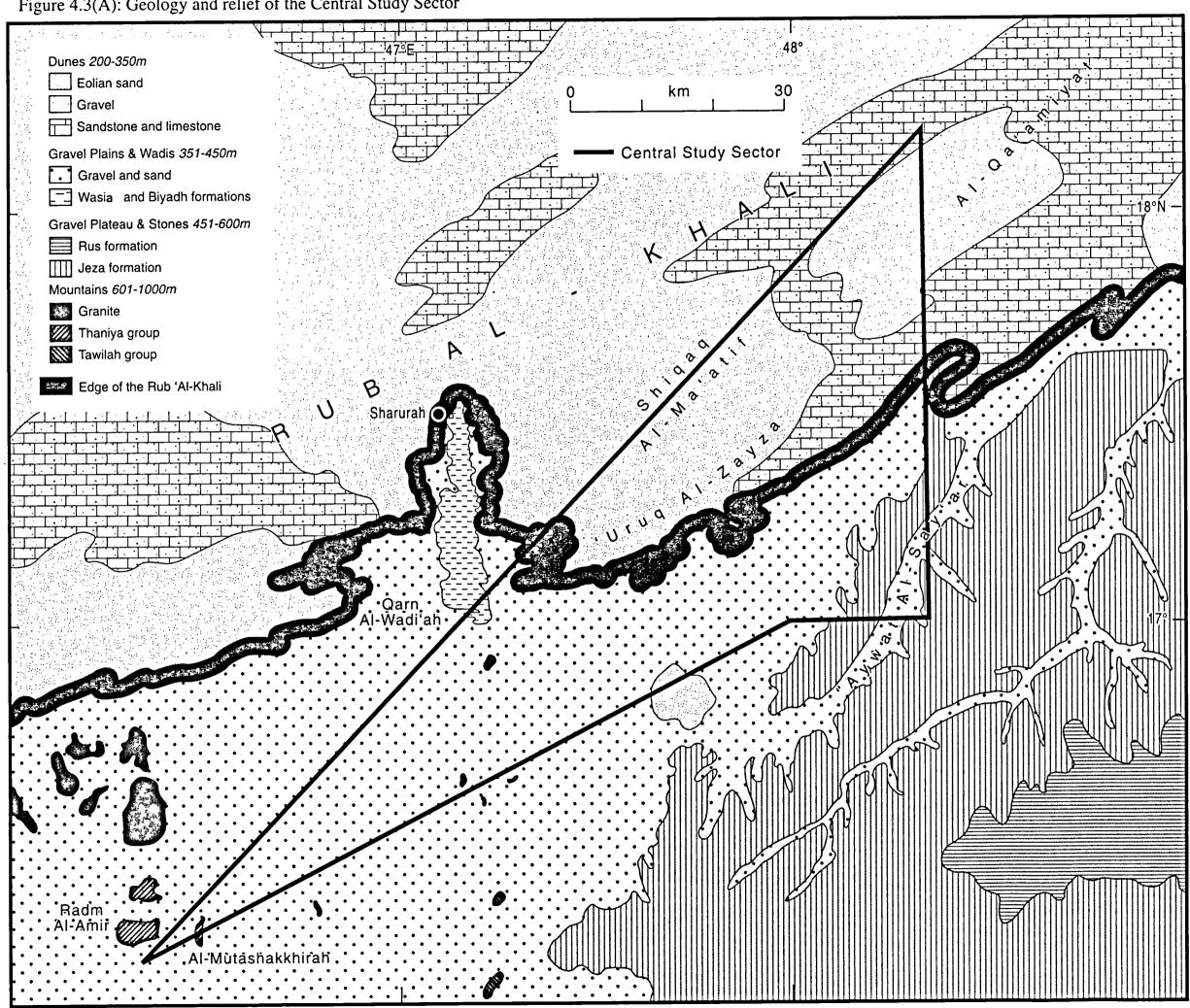
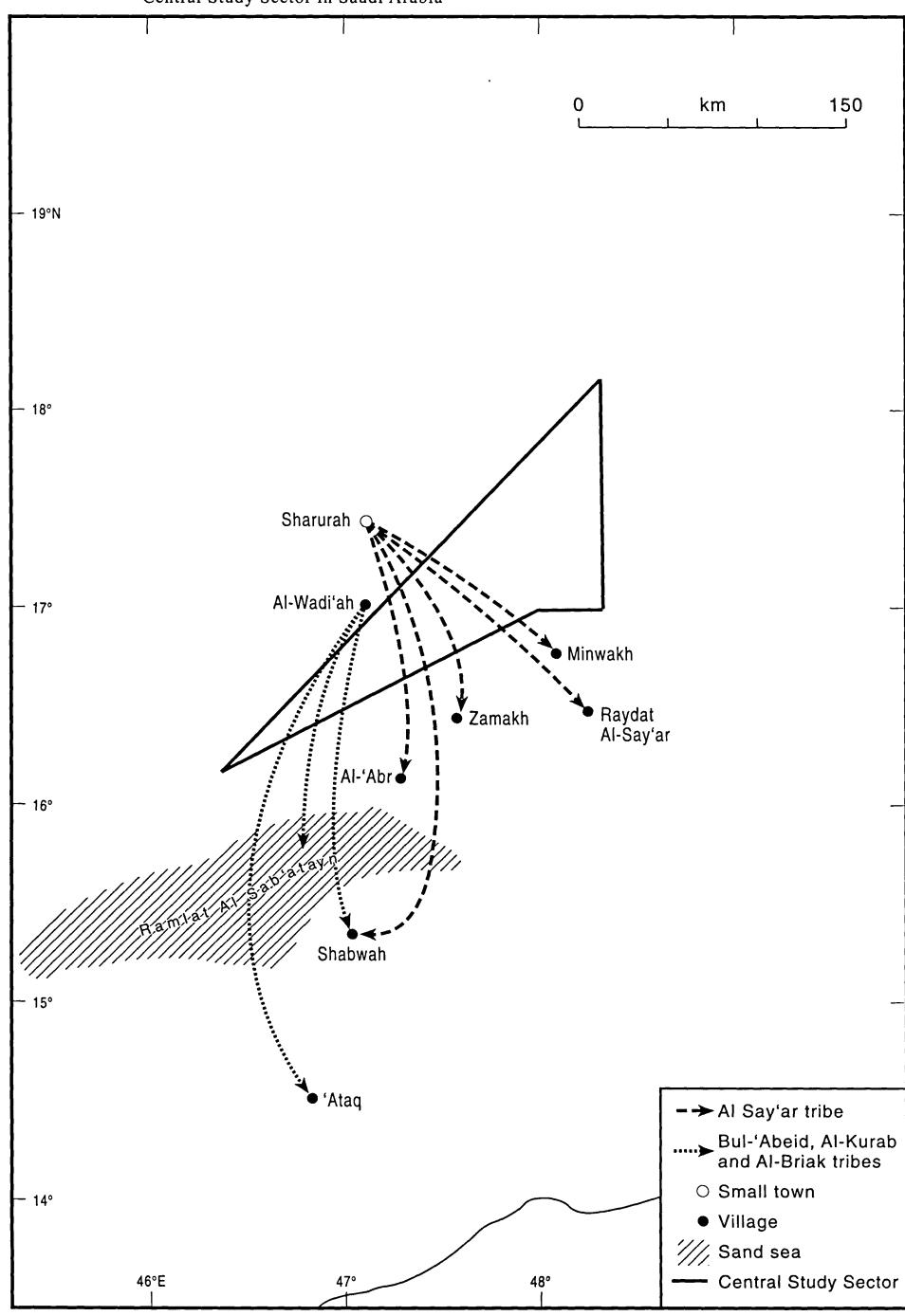


Figure 4.4(A): Population distribution in the Central Study Sector 150 km - 19°N 20-50 people (approx.) live in each Saudi-Yemeni border guard post with Majority of citizens a few Bedouin living are Bedouin living in - 18° around posts (impermanent) tents (permanent) **SHARURAH** (10,000 people) Population Al-Wadi'ah - 17° (000's)(2,000 people) 200 Raydat Δ 100 As-Say'ar 50 Zamakh Al-Abr - 16° Urban (12.6) Hadhramaut Ma'rib Governorate Governorate Rural (87.4) △ Saudi border guard posts Shabwah Governorate ▲ Yemeni border guard posts • Al-Bayda' O Small town Governorate Village **Central Study Sector** - 14° Abyan Yemeni Governorate Governorate border Al-Irqah 46°E 48°

Source: Saudi Census 1994; Yemeni Statistical Yearbook 1990

Figure 4.5(A): Location of relatives and properties located in Yemen of those living close to the Central Study Sector in Saudi Arabia



Source: Author's Field Survey, September 1994

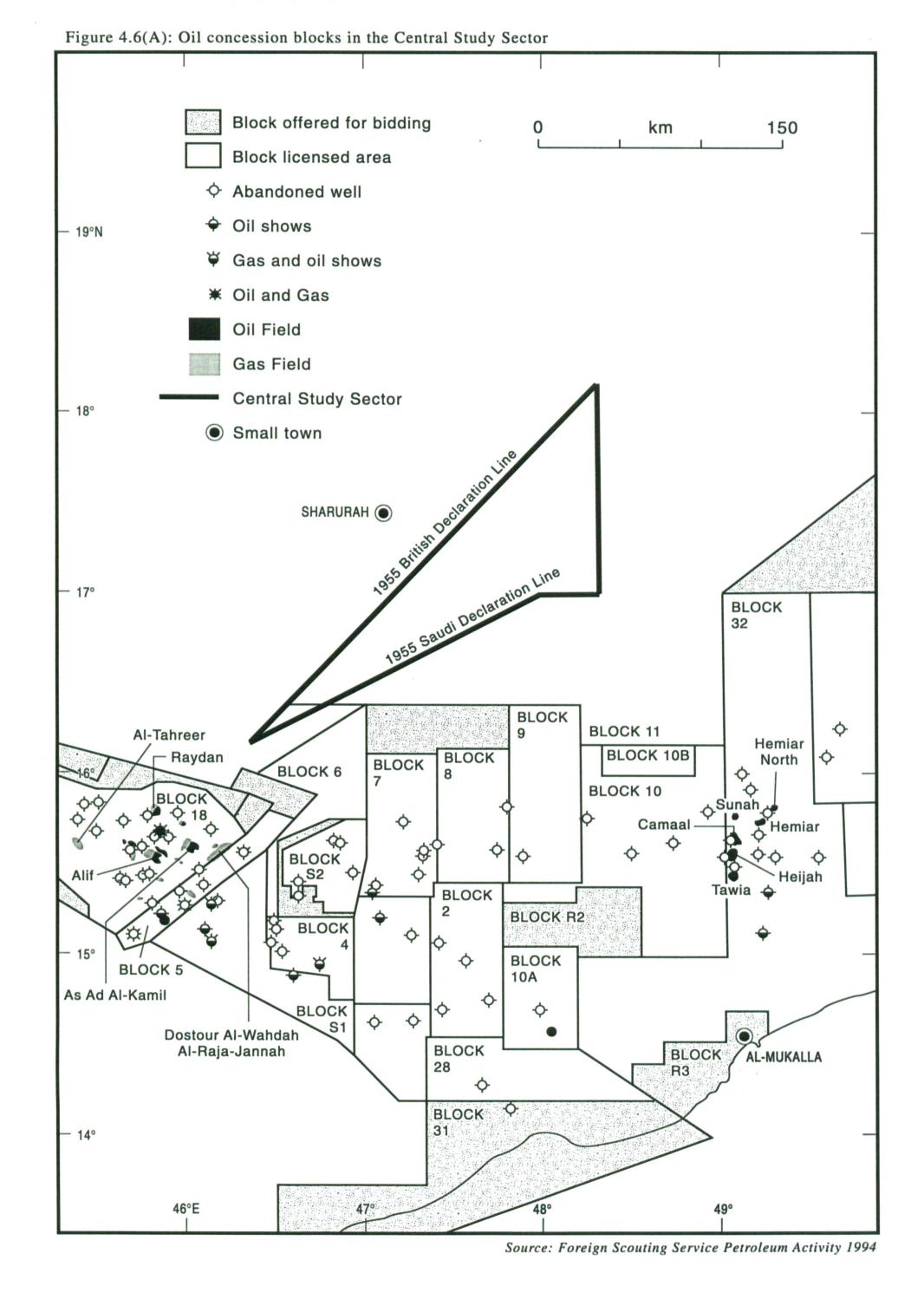
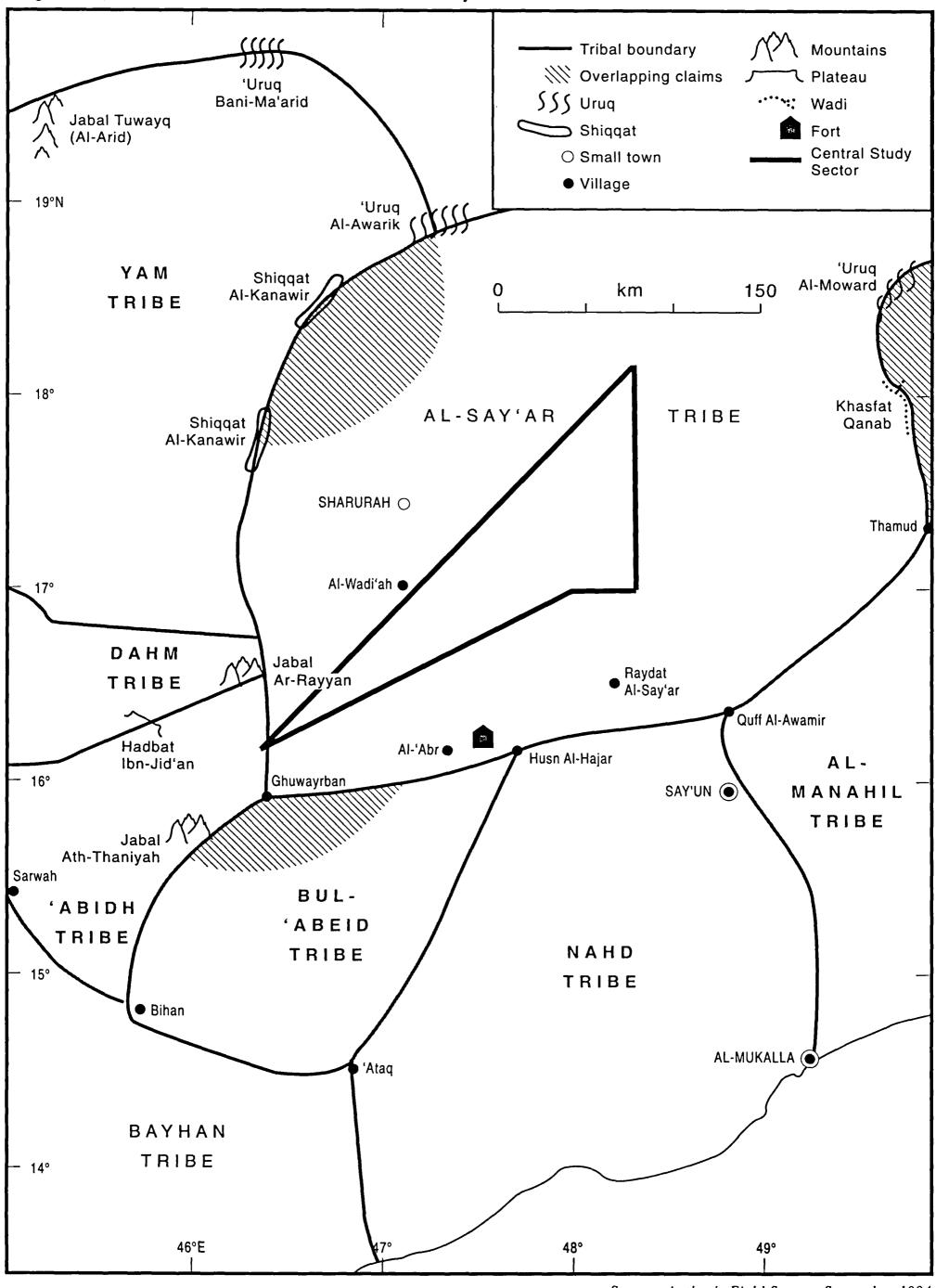


Figure 4.7(A): The de facto border in the Central Study Sector 0 km 150 Section A de-facto 19°N Section C of the de-facto tent with border is border is consistent with part of the Violet Line, part of the line shown on the and the is mostly 1967 Yemen Arab Republic dune, u d shiqqat maps, and the terrain is mostly gravel, sand 1955 British Line and mountainous Sect part of the 1955 Saudi Declaration Line, △ Al-Ma'atif and the terrain is mostly gravel, sand and mountainous Sharurah Al-Akhashim Al-Manabiz 1967 Yemeni Line Al-Halat Al-Sawda Al-Wadi'ah 20 Al-'Ari'arin 1955 Saudi Line llubah Huwaymil Al-Murassas Al-Bramah makh Al-Mahtadar Al-Mutashakkhirah 16° d posts ▲ Yemeni border guard posts Distance between border guard posts (km) [100km = 2.3 hrs]No man's land 14° O Small town Village Central Study Sector 46°E 47° 48°

Figure 4.8(A): Distribution of tribes in the Central Study Sector



Source: Author's Field Survey, September 1994

Figure 5.3(A): Geology and Refief of the Eastern Study Sector

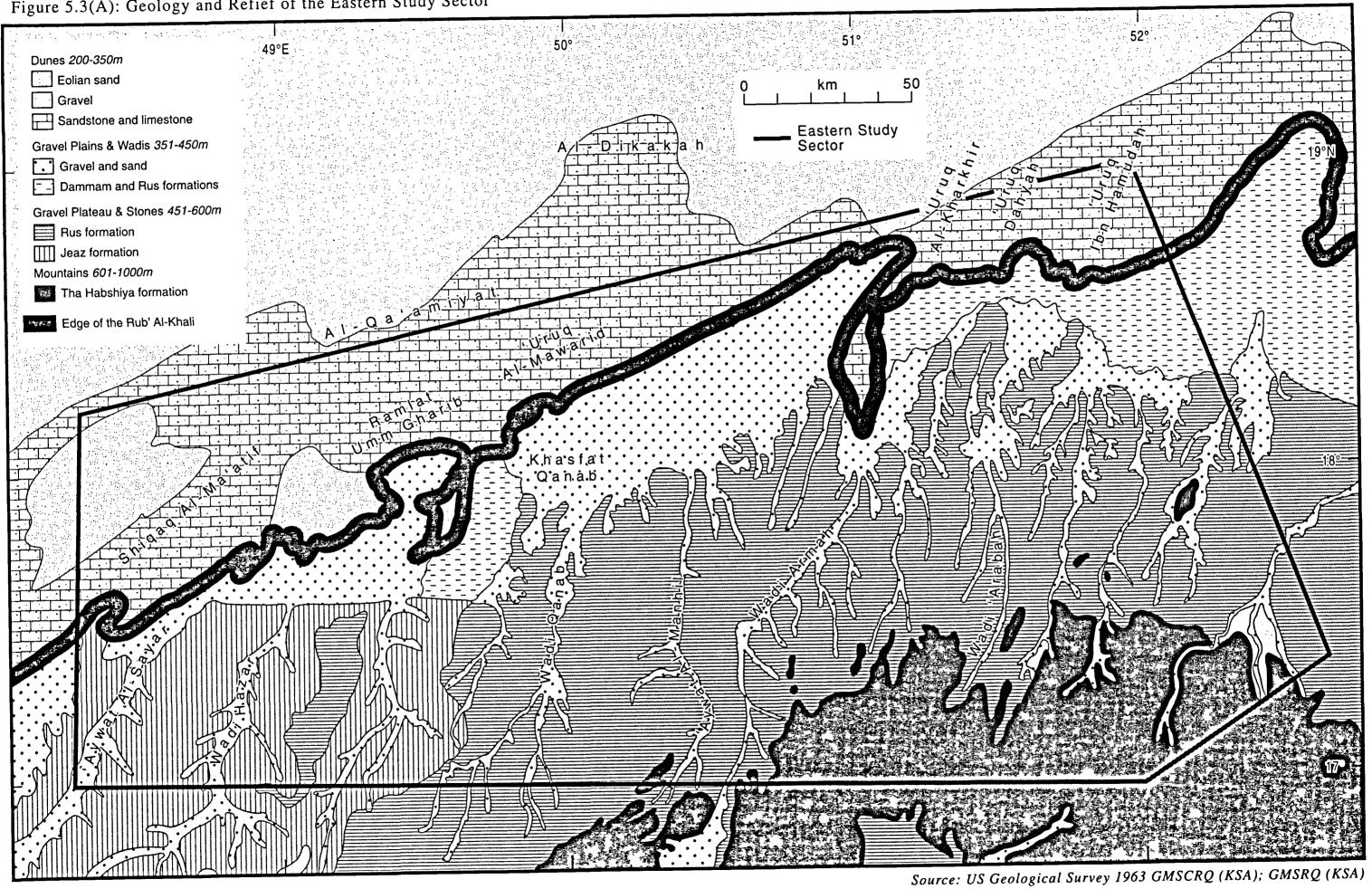


Figure 5.5(A): Pasture and wells in the Eastern Study Sector

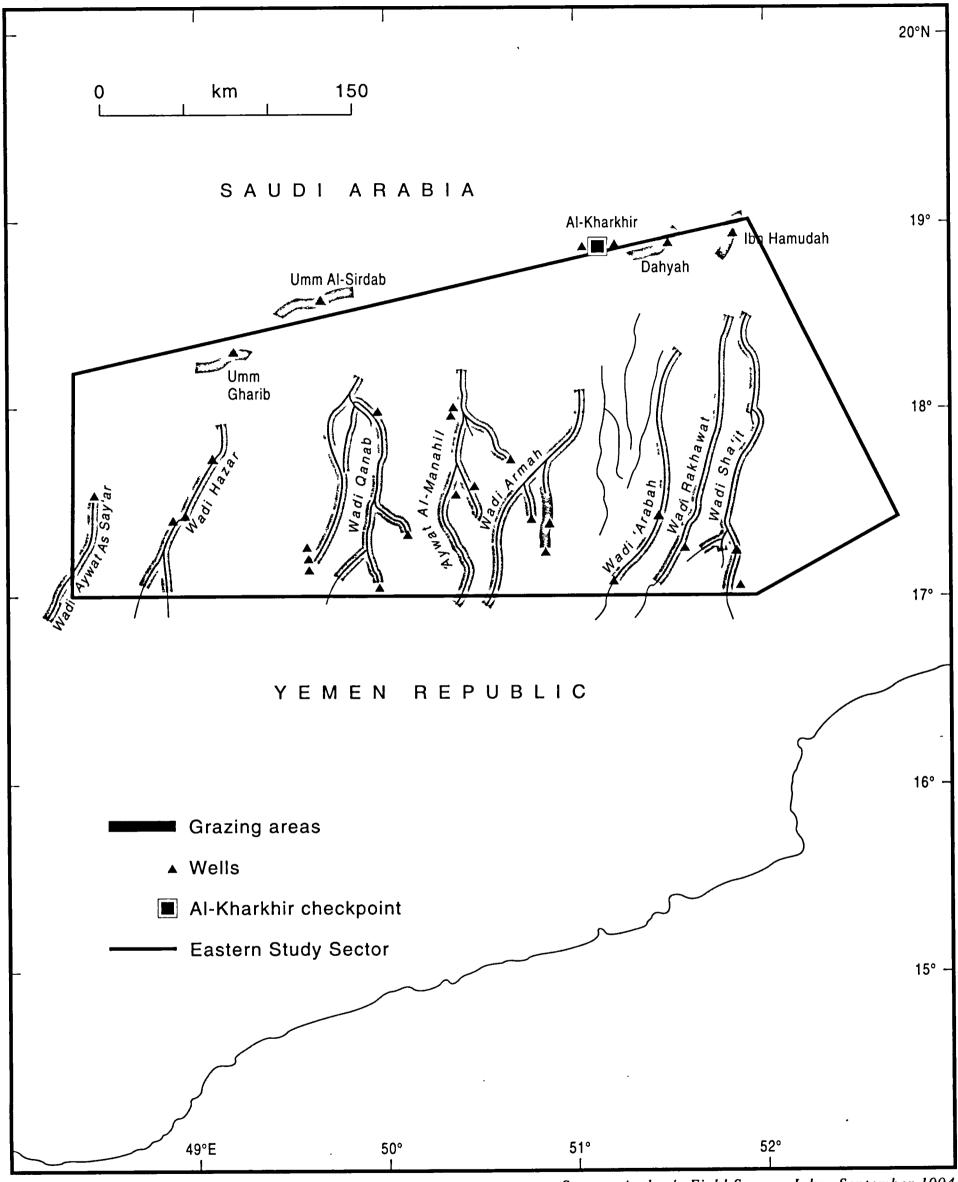


Figure 5.6(A): Population distribution in the Eastern Study Sector 0 150 20°N km 3,000 Bedouins live permanently in Shuggat Al-Kharkhir in houses, tents and camps 20-50 individuals (approx.) live in each Saudi-Yemeni Border Guard Post and a few Bedouins live around the Border Guard Posts (impermanent) Dahyah 19° Al-Kharkhir Ibn Hamuodah Umm Al-Malh Al-Qa'aidah Al-Shiqqah Al-Al-Rabba'h Tawirfah Al-Harajah ▲■ Umm Al-Sirdab / Khasfa Umm Gharib ■ Armah 🛒 Qanab ☐ Al-Mshabk 18° Wadi Rakawat ☐ Al-Ma'atif Wadi Sha'i 1Sanaw Jabal ▲ Khashm Al-Hwaq Al-Jabl Thamud Hazar 17° **HADHRAMAUT** GOVERNORATE **AL-MAHRAH** GOVERNORATE Urban Rural (40.3%)(59.7%) Urban (32.3%)16° Rural (67.7%)☐ Saudi Border Guard Post ■ Yemeni Border Guard Post Population (000's) O Village Masiin'ah 200 15° Small town 100 ▲ Well Wadi 50 -AL-MUKALLA Governorate boundary Eastern Study Sector

Source: Saudi Census 1994; Yemeni Statistical Yearbook 1990; MSD 1992 Republic of Yemen Map

52°

51°

49°E

50°

Figure 5.7(A): Residence of respondents interviewed at Al-Kharkhir checkpoint 54° 55° 53° 49° 50° 51° 52° 47°E 48° - 27°N UAE Al-Dhafrah Abu Dhabi - 26° **QATARI** Al- 🐧 Wakra AL-DOHA Raiyan ' Al-Wakra Al-Harithy Al-25° Al-Manadir Al Doha Humrah Salwah-ABU DHABI Al-Batha Aradah Al-Raiyan UAE - 24° Al-Humrah Al-Dhafrah • Al-Harithy Anadah Al-Manadir • Badit Al-Raiyan 23° Badit Al-Dhafrah Armah SAUDI Wadi Hazar 'Aywat Al-Manahil 22° Dahyah Shiqqat Al-Kharkhir 'Uruq Ibn Hamudah Sanaw - 21° Al-Harajah Upper 'Aywah Badi' Al-Ghanm Wadi Sha'it - 20° **AL-KHARKHIR** (check point)

Badi' Al-Ghanm 🔼

Khasfat Qinab

Thamud

Raydat

Thamud

Wadi 'Arabah

Armah

Wadi Qanab

YEMENI

Al-Say'ar

Al-Harajah 🔿

Ibnah

::Lbanah

Ibn Hamudah

Dahyh

Jabal' & Maharat &

Raydat Al-Say'ar

Wadi Hazar

Husn Al-'Abr

Jabal-Maharat

Source: Author's Field Survey, July - September 1994

OMAN

O Saudi residence

Yemeni residence

UAE and Qatar

Saudi residences

Yemeni residences

Eastern Study Sector

150

residences

in wadis

in wadis

km

– 19°

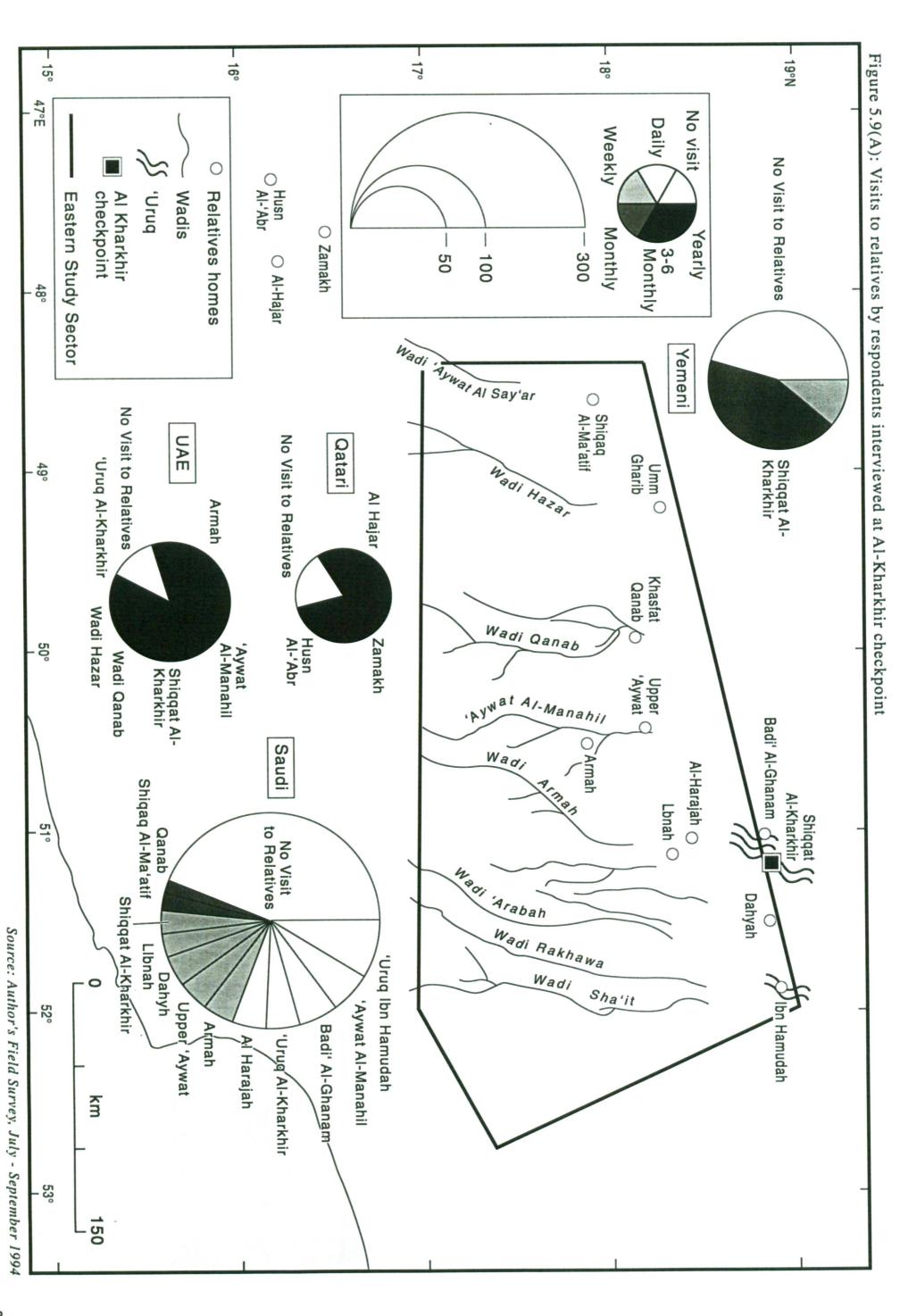
– 18°

- 17°

- 15°

Husn

16° Al-'Abr



20°N Saudi 0 150 km No markets Al-Harah Market visited Shiqqat Al-Harah Al-Kharkhir Market 19° O Ibn Hamudah Badi' Al-Ghanam Dahyah Al-Harajah O Khasfat Lbnah Upper 4 Qanab Qanab Market Armah 18° Market Wadi Rakhawt Pywat Al-Manahil Sanaw Wadi Qanab W Arabah Thamud 17° Armah Market Al-Harah Qanab Market Market No markets visited No markets visited UAE Yemeni Qatari 16° Al-Kharkhir checkpoint 300 Saudi residences Yemeni residences Market Saudi residences in Wadis Eastern Study Yemeni residences 100 -Sector in Wadis 15° 50 -No markets Daily · visited Weekly Monthly 49°E 50° 51° 52°

Figure 5.10(A): Visits to markets by respondents interviewed at Al-Kharkhir checkpoint

Source: Author's Field Survey, July - September 1994

Ibn Hamudah 20°N -Saudi Badi' Al-Ghanam 150 km Shiqqat Al-Kharkhir No Al Harajah properties visited Armah Shiqqat Dahyah Al-Kharkhir 19° Badi' Al-Ghanam O Ibn Hamudah Aywat Al-Manahil Qanab Dahyah Sanaw Llbnah Wadi' Hazar Shiqaq Al-Ma'atif Shiqqat Umm Gharib Upper 'Aywat Al-Harajah 🔿 $_{\rm Lbnah} \, \, {\scriptstyle \bigcirc} \,$ Shiqqat O Khasfat Upper Umm Gharib Qanab 'Aywat Rakhawat 18° -Wadi Sha'' Pywat Al-Manahil ShiqaqAl-Ma'atif Sanaw Qanab 4 Arabah Wadi Arwar Al Say'ar Wadi 17° UAE Qatari Yemeni 16° 300 - Saudi properties Saudi Properties on Wadis Wadis 100 15° · Eastern Study Sector 50 -No properties Daily visited Monthly Weekly 51° 52° 49°E 50°

Figure 5.11(A): Visits to properties by respondents interviewed at Al-Kharkhir checkpoint

Source: Author's Field Survey, July - September 1994

Figure 5.12(A): Roads and tracks to Al-Kharkhir checkpoint 28°N 0 100 km · 27° - 26° ■ AL-DOHA - 25° RIYADH Salwah UAE24° Batha Al-Dhafrah · 23°= 22° Eastern Province - 21° SAUDI ARABIA AL-KHARKHIR " CHECKPOINT OMAN - 19° Asphalt roads 18° Sanaw = Paved roads Sharurah ===== Tracks Thamud Province boundary Wadi'ah ■ Capital Small town Tarim Village Check point 15° Eastern Study Sector 47°E 48° 51° 52°

Source: MSD 1992 Republic of Yemen map; MSD 1983 Arabian Peninsula map

Figure 5.13(A): Oil concession blocks and exploration activities in the Eastern Study Sector 150 km Block offered for bidding − 19°N Block licensed area Abandoned Oil shows BLOCK 30 φ Gas and oil shows → Hathout Aramco 1 Φ Unknown -18° Oil Field BLOCK 12 φ. Camp Aramco 2 Eastern Study Sector • ■ Camp Camp Thamud ф BLOCK 29 BLOCK 36 - 17° BLOCK 13 BLOCK 37 **BLOCK 34 BLOCK** BLOCK 32 **BLOCK 35** 33 BLOCK 39 **BLOCK 16** BLOCK 11 $\phi \phi$ φ. Hemiar North BLOCK 10B -16° IJ Ţ-ᢕ Sunah -⇔ 2750 SEE FIGURE 4.6(A) Camaal Hemiar ф Heijah **BLOCK 14B** Tawia BLOCK 10 53° 52° 50° 48° 47°E **BLOCK 14A**

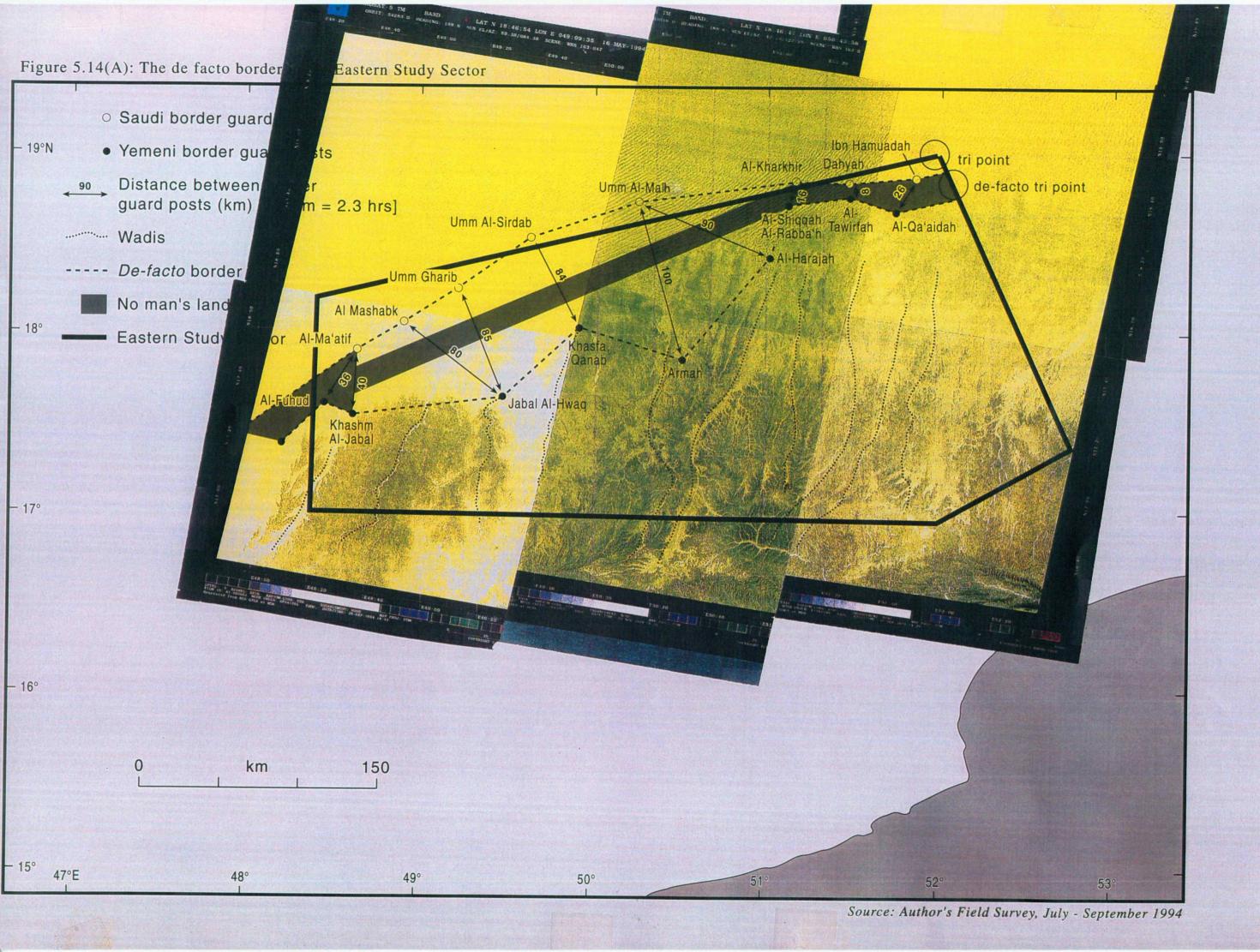
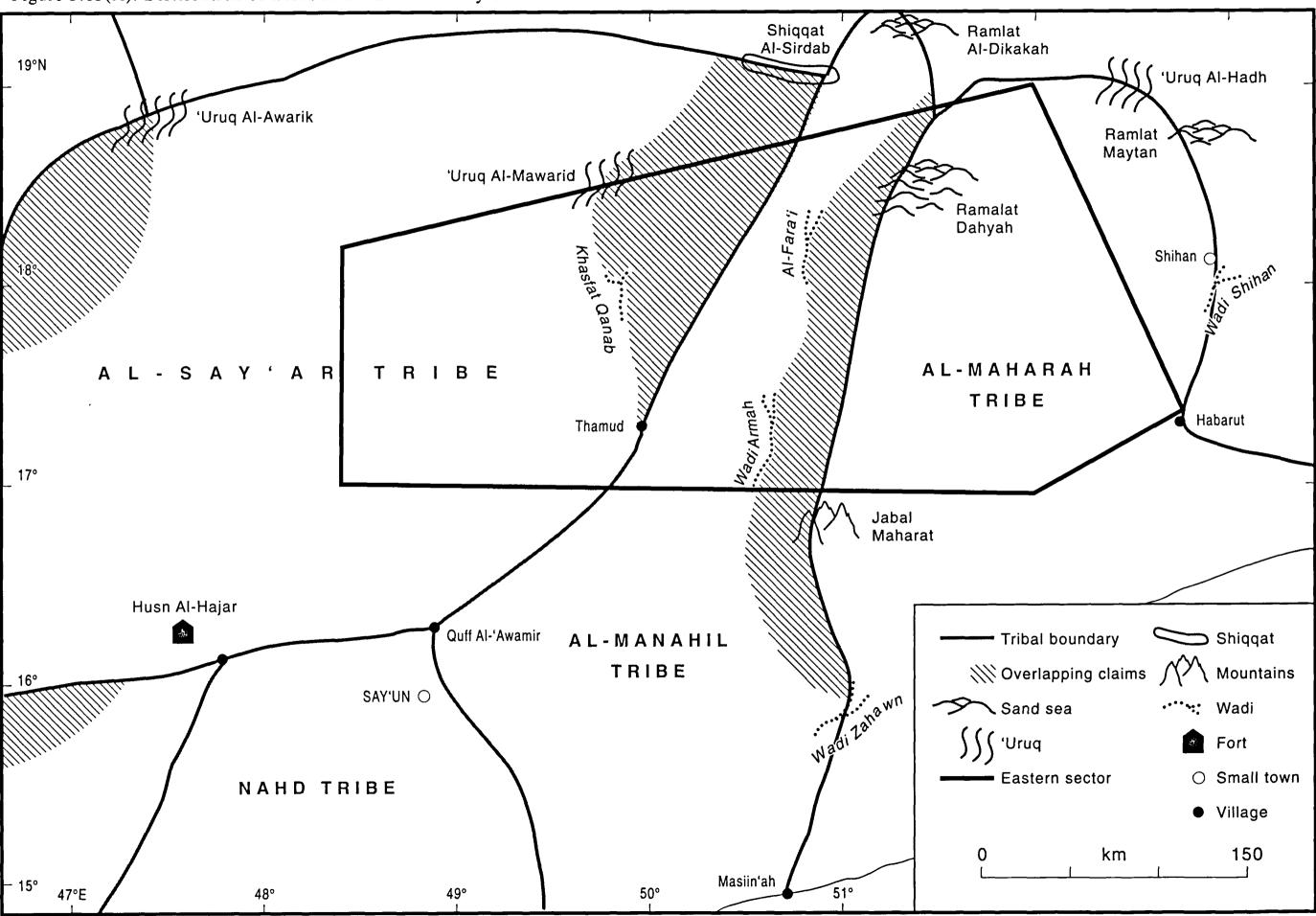


Figure 5.15(A): Distribution of tribes in the Eastern Study Sector



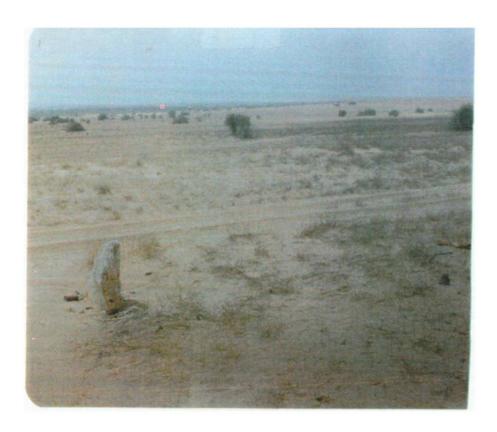


Plate 2.1 Border mark no.31, Zibarat Alsir, Al-Tawal Emirate



Plate 2.2 A number of border marks in the Surowat mountains, Zahran Al-Janub Emirate: (1) Madfa Alhinka (border mark no.41); (2) Alsabsab (border mark no.42); (3) Naleed Alkaal (border mark no.43)



Plate 2.3 Border mark no.45, Wadi Alrabidh in Almasna, Zahran Al-Janub Emirate.



Plate 2.4 Border mark no.38, Sha'ab Alqoum, Zahran Al-Janub Emirate.

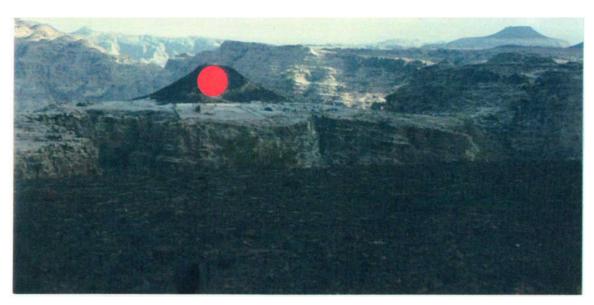


Plate 2.5 Border mark no.39, Ras Jabal Alab, Zahran Al-Janub Emirate.

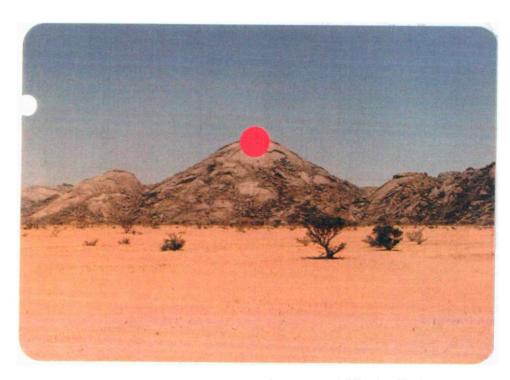


Plate 2.6 Border mark no. 1, Jabal Althar, Al-Khadra Emirate.

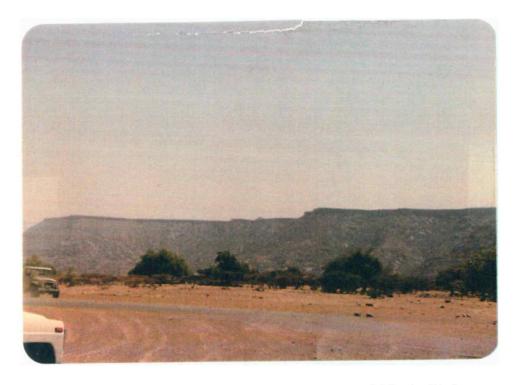


Plate 2.7 Border mark no.11, Ras Aqaba Nahuga, Al-Khadra Emirate.



Plate 2.8 An example of the border marks mentioned by Philby (1952: pp.513-6).



Plate 3.1 Examples of 'statements' used at Al-Khadra checkpoint to identify members of the border tribes.



Plate 3.2 Yemenis crossing the frontier carrying goods from the Saudi side to the Yemeni side, Al-Khadra checkpoint.



Plate 3.3 The most common type of vehicle (Toyota Pickup) used by Yemenis crossing the frontier, Al-Khadra checkpoint.



Plate 4.1 'Uruq: long linear sand ridges; Shiqaq: valleys or depressions between the ridges.