UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

JAN - 6 1994

Summary of Permit Comments & Final Determination with Permit intent
DARM/BAR
1/10/94

4APT-AEB

TO: Public Commentors and Public Hearing Participants

Re: Final Outer Continental Shelf Air Permit Decision, Chevron Exploratory Operation in Destin Dome Block 97

Dear Sir or Madam:

Enclosed is the Final Determination, Response to Comments Document, and Outer Continental Shelf Air Permit OCS-FL-001 for the proposed exploratory, natural gas drilling operation by the Chevron U.S.A. Production Company in Destin Dome Block 97. Outer Continental Shelf Air Permit OCS-FL-001 will be effective 30 days from the date of service of notice of the final air permit decision. Service of notice of the decision is being accomplished through this correspondence and by the publication of notices in the Miami Herald, Orlando Sentinel, Pensacola News-Journal, Tallahassee Democrat, and Tampa Tribune. The anticipated publication date is January 10, 1994.

Appeal procedures concerning this Outer Continental Shelf air permit are outlined in Title 40 of the Code of Federal Regulations, Part 124, Section 19 (40 C.F.R. Section 124.19). If you have any questions, please contact either Mr. Scott Davis of my staff at (404) 347-5014 or Mr. Alan Dion of the Office of Regional Counsel at (404) 347-2335, ext. 2131.

Sincerely,

Bruce P. Miller for

Winston A. Smith, Director
Air, Pesticides, and Toxics
Management Division

Enclosure

OUTER CONTINENTAL SHELF AIR PERMIT
FINAL PERMIT ADMINISTRATIVE RECORD

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SECTION A

OUTER CONTINENTAL SHELF AIR PERMIT
DRAFT PERMIT ADMINISTRATIVE RECORD

SECTION B

EPA REGION IV AND/OR APPLICANT CORRESPONDENCE

EXHIBIT B1

Beals

Chevron U.S.A. Production Company
935 Gravier Street, New Orleans, LA 70112

Gulf of Mexico
Production Business Unit

New Orleans, LA
October 29, 1993

Outer Continental Shelf Air Permit
Destin Dome Block 97

Mr. Winston A. Smith, Director
Air, Pesticides and Toxics Management Division
U.S. Environmental Protection Agency
Region IV
345 Courtland Street, NE
Atlanta, GA 30365

Attention: Mr. Scott Davis

Per our conversation, enclosed is a copy of the information that we supplied to Ms. Gail Carmody of the U.S. Fish and Wildlife Service in response to her letter of September 21, 1993 to the U.S. Environmental protection Agency regarding potential air quality impacts from Outer Continental Shelf Activities to federally listed threatened, endangered, and candidate species. This letter was prepared in regard to Chevron's proposed activity in Destin Dome Block 97.

Upon Mr. Brian Beals request, I have enclosed a copy of an H2S Contingency Plan. The attached plan has been proposed for a similar Norphlet drilling operation located in federal waters off of the coast of Alabama, specifically in Mobile Block 863. This plan has not yet been submitted for approval as we are still planning our operations for the MO 863 well. As you may note, H2S Contingency Plans for the drilling of a deep Norphlet well are not enacted at the beginning of the well, however, well above the top of the affected formation. As I advised over the telephone, we have not yet put together a plan specifically for the Destin Dome drilling operation, such plans are rig specific. The H2S Plan to be proposed for the Destin Dome 97 drilling operation will be similar in form and content to that enclosed; however, as the requirements of an H2S Plan are well established by federal regulations. The enclosed H2S Contingency Plan is provided for information only and should not be included as part of the administrative record for the Destin Dome 97 well, as it is not designed to support the proposed Destin Dome drilling operation.

If you need any additional information, please contact me.

Sincerely,

S. M. Fury

Continental Shelf Associates, Inc.

"Applied Science and Technology"

759 Parkway Street
Jupiter, Florida 33477-9596
Telephone: (407) 746-7946
Telefax: (407) 747-2954

28 October 1993

Ms. Lorna Patrick
U.S. Fish and Wildlife Service
1612 June Avenue
Panama City, Florida 32405

Dear Ms. Patrick:

As we discussed, please find enclosed one copy of the report entitled "Background Information Concerning Listed and Candidate Endangered and Threatened Species Discussed in the Letter to Brian L. Beals (U.S. Environmental Protection Agency) From Gail A. Carmody (U.S. Fish and Wildlife Service) Dated September 21, 1993." If you have any questions concerning the report, please feel free to contact me.

Sincerely,

David A. Gettleson, Ph.D.
President, Scientific Director

Enclosure

Continental Shelf Associates, Inc.

"Applied Science and Technology"

759 Parkway Street
Jupiter, Florida 33477-9596
Telephone: (407) 746-7946
Telefax: (407) 747-2954

TO: Lorna Patrick, U.S. Fish and Wildlife Service

FROM: Stephen Viada

DATE: 29 October 1993

RE: Requested sea turtle information

Pursuant to our telephone conversation, I have included information from my letter to KBN which included a risk assessment of the listed and candidate species relative to the proposed activities. The following material pertains only to the issue of sea turtles in proximity to platforms generating air emissions:

Sea turtles are air-breathing reptiles which spend only short periods (less than 4 percent) of their total time on the surface (Byles, 1989; Lohoefener et al., 1990). Although sea turtles occur near offshore oil and gas structures, aerial survey data within the Gulf of Mexico suggest that the turtles generally do not appear to congregate around or to be associated with these structures. The short amount of time that the turtles are expected to spend in the vicinity of the structure effectively reduces the probability of negative impacts resulting from inhalation of emissions generated during OCS activities. The emissions are not likely to adversely affect sea turtles in the area. Loggerhead sea turtles and a small number of green sea turtles nest on beaches shoreward of the proposed activities. The very low concentrations of emissions that reach shore are not likely to adversely affect the nesting adults, eggs, and juveniles.

Byles, R.A. 1989. Satellite telemetry of Kemp's ridley sea turtle, *Lepidochelys kempi*, in the Gulf of Mexico. In: Proceedings of the Ninth Annual Workshop on Sea Turtle Conservation and Biology, February 7-11, 1989, Jekyll Island, Georgia. NOAA Tech. Mem. NMFS-SEFC-232. Miami, FL. 306 pp.

Lohoefener, R., W. Hoggard, K. Mullin, C. Roden, and C. Rogers. 1990. Association of sea turtles with petroleum platforms in the north-central Gulf of Mexico. U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 90-0025. 90 pp.

Please let me know if additional information is needed to address this subject. Thank you very much for the information on bald eagle nesting sites and your patience with my frequent queries.

October 28, 1993

Gail A. Carmody
Project Leader
United States Department of the Interior
Fish and Wildlife Service
1612 June Avenue
Panama City, FL 32405-3721

Re: Air Permit Application for Outer Continental Shelf--Destin Dome Block 97

Dear Ms. Carmody:

The following biological information is presented in response to the U.S. Fish and Wildlife Service (USFWS) letter of September 21, 1993, to the U.S. Environmental Protection Agency (EPA) (G.A. Carmody letter to B.L. Beals) regarding potential air quality impacts from Offshore Continental Shelf (OCS) activities to federally listed threatened, endangered, and candidate species. An air quality risk analysis was conducted on the species listed in your letter of September 21, 1993 with regard to Chevron's proposed activity in Destin Dome Block 97. Based on this risk analysis, it is determined that the subject action under the permit will not likely adversely affect any of the identified species. Table 1 presents a summary of this analysis. This conclusion is based on two facts: either the species of concern do not occur in the area potentially influenced by air emissions from the proposed facility, or the predicted levels of emissions are well below the levels reported to affect plants and animals.

Destin Dome Area Block 97 is located in the northern Gulf of Mexico Outer Continental Shelf (OCS), within the Eastern Gulf of Mexico Planning Area. The OCS source is approximately 30 statute miles [50 kilometers (km)] from the shore, south-southwest of Pensacola, Florida. Breton National Wildlife Refuge is approximately 90 miles (140 km) west of the proposed drilling site and St. Marks National Wildlife Refuge is located approximately 163 miles (307 km) east of the proposed site. Big Cypress Preserve and Everglades National Park in south Florida are located approximately 450 miles (724 km) south-southeast of the site.

The primary effects to animals from air pollutants can be either direct effects, from inhalation of pollutants or ingestion of food or water contaminated by air pollutants, or indirect effects, from damage or injury to essential habitat components (Newman, 1980; Newman and Schreiber, 1988). In general, such effects are the result of acute exposure and are localized to within several miles of an emission source. Primary pollutants such as SO_2 can also cause effects to plants. These effects are generally local in nature. Injury to vegetation can also occur at greater distances from secondary air pollutants, i.e., acid deposition and ozone (EPA, 1982).

This risk analysis was conducted by evaluating two factors: (1) the exposure potential of the species of concern to the predicted air emissions, and (2) the sensitivity of those species that have the potential to be exposed to air emissions from the proposed facility.

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street, Gainesville, Florida 32605, 904-331-9000, FAX 904-332-4189
5650 West Cypress Street, Suite I, Tampa, Florida 33607, 813-287-1717, FAX 813-287-1716
1801 Clint Moore Road, Suite 105, Boca Raton, Florida 33487, 407-994-9910, FAX 407-994-9393
6821 Southpoint Drive North, Suite 216, Jacksonville, Florida 32216, 904-296-9663 FAX 904-296-0146
One Church Street, Suite 801, Rockville, Maryland 20850, 301-738-1100, FAX 301-738-1105

Animals and plants may have no exposure potential because they are either geographically or ecologically isolated from contact with air pollutants. In the case of the proposed facility, the furthest distance of measurable air emissions based on the modeling results is very conservatively estimated to be 200 miles (321 km). All plants and animals found in South Florida, including in the Florida Keys [see Table 1 and Background Information Concerning Listed and Candidate Endangered and Threatened Species Discussed in the Letter to Brian L. Beals (U.S. Environmental Protection Agency) from Gail A. Carmody (U.S. Fish and Wildlife Service) Dated September 21, 1993], which are located at least 450 miles (724 km) from the facility, are considered to have no exposure to air emissions from the proposed facility. Therefore, these species are not affected by emissions from the facility.

There are other animals and their habitats that occur in upland, wetland, and coastal habitats of the Florida Panhandle and southern Alabama [see Background Information Concerning Listed and Candidate Endangered and Threatened Species Discussed in the Letter to Brian L. Beals (U.S. Environmental Protection Agency) from Gail A. Carmody (U.S. Fish and Wildlife Service) Dated September 21, 1993]. These species have the potential for exposure (Table 1). Of these animals, there are some species that spend all or most of their lives in water, i.e., Gulf sturgeon and sea turtles, and are ecologically isolated in the water from exposure to air emissions from the proposed facility. Any deposition of air emissions in the Gulf would be instantaneously diluted to immeasurable and non-toxic amounts. Therefore, these animals are not affected by air emissions from the proposed facility.

For those animals and plants that are in the range of potential exposure and not ecologically isolated, air quality modeling was conducted to determine maximum air pollutant concentrations at several locations, including Breton and St. Marks, which are Class I Areas (see Permit Application for Outer Continental Shelf Destin Dome Area Block 971) and at the nearest shore area. This information was compared to reported effect levels for animals and plants. The modeling results are presented in Table 2 and include the predicted maximum air pollutant concentrations compared to the lowest observed effect levels for plants and animals. As Table 2 shows, the predicted concentrations are well below the lowest observed effect levels for plants and animals. Therefore, no effect to these species or their habitats is expected.

In conclusion, the predicted air emissions from the proposed facility will not likely adversely affect any of the endangered, threatened, and candidate species listed in the above-referenced letter to EPA or their habitats. Please review this information and call me if you have any questions.

Sincerely,

James R Newman/cab

James R. Newman, Ph.D.
Principal Scientist

cc: L. Patrick
S. Fury (Chevron)
R. Hammer (CSA)
K. Kosky
File (2)

13128A1/1

Table 1. Potential Air Quality Risks from Predicted Air Emissions Associated with the Exploratory Operation in Destin Dome Block 97 to Federally Listed Endangered, Threatened, and Candidate Species that Are Likely to Occur in the Eastern Gulf of Mexico (Page 1 of 2)

Scientific Name Common Name	Status	Exposure	Potential Effect	Comment
Bird				
Ammodramus maritima Cape Sable sparrow	E	none	none	geographically isolated
Charadrius alexandrinus tenuirostris southeastern snowy plover	C	potential	none	no effect concentrations
Charadrius melodus piping plover	T	potential	none	no effect concentrations
Falco peregrinus tundrius Arctic peregrine falcon	T	potential	none	no effect concentrations
Haliaeetus leucocephalus bald eagle	E	potential	none	no effect concentrations
Mycteria americana wood stork	E	potential	none	no effect concentrations
Sterna dougallii roseate tern	T	none	none	geographically isolated[a]
Fish				
Acipenser oxyrinchus desotoi Gulf sturgeon	T	none	none	ecologically isolated
Invertebrate				
Orthalicus reses reses Stock Island tree snail	T	none	none	geographically isolated
Papilio aristodemus ponceanus Schaus swallowtail butterfly	E	none	none	geographically isolated
Mammal				
Felis concolor coryi Florida panther	E	none	none	geographically isolated
Microtus pennsylvanicus dukecambelli Florida salt marsh vole	E	none	none	geographically isolated
Neotoma floridana smalli Key Largo woodrat	E	none	none	geographically isolated
Odocoileus viginianus clavium Key deer	E	none	none	geographically isolated
Peromyscus gossypinus allapaticola Key Largo cotton mouse	E	none	none	geographically isolated
Peromyscus polionotus allophrys Choctawhatchee beach mouse	E	potential	none	no effect concentrations
Peromyscus polionotus ammobates Alabama beach mouse	E	potential	none	no effect concentrations
Peromyscus polionotus leucocephalus Santa Rosa beach mouse	C	potential	none	no effect concentrations
Peromyscus polionotus peninsularis St. Andrew beach mouse	C	potential	none	no effect concentrations

Table 1. Potential Air Quality Risks from Predicted Air Emissions Associated with the Exploratory Operation in Destin Dome Block 97 to Federally Listed Endangered, Threatened, and Candidate Species that Are Likely to Occur in the Eastern Gulf of Mexico (Page 2 of 2)

Scientific Name Common Name	Status	Exposure	Potential Effect	Comment
Mammal (continued)				
Peromyscus polionotus trissyllepsis Perdido Key beach mouse	E	potential	none	no effect concentrations
Sylvilagus palustris hefneri Lower Keys rabbit	E	none	none	geographically isolated
Trichechus manatus latirostris Florida Manatee	E	none	none	geographically isolated[a]
Reptile				
Caretta caretta loggerhead sea turtle	T	none	none	ecologically isolated
Chelonia mydas green sea turtle	E	none	none	ecologically isolated
Crocodylus acutus American crocodile	E	none	none	geographically isolated
Dermochelys coriacea leatherback sea turtle	E	none	none	ecologically isolated
Eretmochelys imbricata hawksbill sea turtle	E	none	none	ecologically isolated
Lepidochelys kempii Kemp's (Atlantic) ridley sea turtle	E	none	none	ecologically isolated
Plant				
Cereus robinii Key tree-cactus	E	none	none	geographically isolated
Euphorbia garberi Garber's spurge	T	none	none	geographically isolated

Note: C = candidate species.
E = endangered.
T = threatened.

[a] Within the species' normal range.

Table 2. Total Predicted Maximum Ambient Air Quality Concentrations from the Proposed Project as Compared to Representative Reported Animal and Plant Effect Levels

Pollutant	Averaging Time	Concentration (μg/m3)							
		Breton NWR		St. Marks NWR		Shoreline		Reported Effect Levels	
		ISCST	OCD	ISCST	OCD	ISCST	OCD	Animals	Plants
Particulates (PM10)	24-Hour	0.20	0.03	0.04	0.01	0.98	0.12	120[a]	No direct effects reported
Sulfur Dioxide	1-Hour	18.25	1.22	2.17	0.15	87.52	6.86	427[a]	790 - 1,570[c]
	3-Hour	6.08	0.53	0.85	0.08	29.18	2.26	—	
	24-Hour	0.78	0.11	0.16	0.03	3.83	0.49	267[a]	
	Annual	0.00	0.00	0.00	0.00	0.01	0.00	13 - 157[a]	
Nitrogen Dioxide	1-Hour	50.58	1.81	6.35	0.48	244.09	17.05	—	>500[d]
	Annual	0.20	0.01	0.20	0.01	0.03	0.03	1917[b]	- 750
Carbon Monoxide	1-Hour	98.30	3.72	12.34	0.92	503.72	32.37	58,000[b]	No effects reported
Lead	24-Hour	3.52E-06	4.63E-07	8.39E-07	1.39E-07	1.71E-05	2.27E-06	120[a]	No direct effects reported

Notes: ISCST = Industrial Source Complex Short-Term model.
OCD = Offshore and Coastal Dispersion model.

[a] Newman and Schreiber, 1988.
[b] Newman, 1975.
[c] EPA, 1982.
[d] EPA, 1980

REFERENCES FOR TABLE 2

Newman, J.R. 1975. Animal Indications of Air Pollution: A Review and Recommendations. Corvallis Environmental Research Laboratory, U.S. Environmental Protection Agency. CERL-006.

Newman, J.R. 1980. Effects Of Air Emissions On Wildlife Resources. Biological Services Program. U.S. Fish and Wildlife Service, Washington, D.C. FWS/OBS-80/40.1.

Newman, J.R. and R.K. Schreiber. 1988. Air Pollution and Wildlife Toxicology: An Overlooked Problem. Environmental Toxicology and Chemistry 7:381-390.

U.S. Environmental Protection Agency (EPA). 1980. Air Quality Criteria for Oxides of Nitrogen. U.S. Environmental Protection Agency, Research Triangle Park, NC.

U.S. Environmental Protection Agency (EPA). 1982. Air Quality Criteria for Particulate Matter and Sulfur Oxides. Volume 3. U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA/600/21.

BACKGROUND INFORMATION CONCERNING LISTED AND CANDIDATE ENDANGERED AND THREATENED SPECIES DISCUSSED IN THE LETTER TO BRIAN L. BEALS (U.S. ENVIRONMENTAL PROTECTION AGENCY) FROM GAIL A. CARMODY (U.S. FISH AND WILDLIFE SERVICE) DATED SEPTEMBER 21, 1993

28 October 1993

Prepared by:

Continental Shelf Associates, Inc.
759 Parkway Street
Jupiter, Florida 33477
Telephone: (407) 746-7946

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Continental Shelf Associates, Inc. prepared the following report which provides background information concerning listed and candidate endangered and threatened species discussed in the letter to Brian L. Beals (U.S. Environmental Protection Agency) from Gail A. Carmody (U.S. Fish and Wildlife Service) dated September 21, 1993. In that letter, various species of concern were discussed. In this report, a paragraph and figure are provided for each species. Listed endangered and threatened species are discussed first, followed by candidate species.

LISTED SPECIES

Key deer (*Odocoileus virginianus clavium*)

The Key deer is the smallest eastern race of whitetail deer. Restricted to the lower Florida Keys, it once ranged from Key West to Duck Key. The majority of Key deer occur within the boundary of the National Key Deer Refuge (Big Pine Key) (**Figure 1**). Hardwood and pinewood habitats are preferred, although the availability of fresh water is critical for the Key deer's distribution. The cause of the near demise of this subspecies is believed to be hunting pressure (Klimstra, 1992). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in Florida.

Florida manatee (*Trichechus manatus latirostris*)

The Florida manatee is one of three subspecies of similar marine mammals. It is a migratory animal restricted to Florida during winter, but which moves as far north as the Suwannee River on the Gulf coast to coastal Georgia during summer (**Figure 2**). Florida manatees occupy coastal, estuarine, and some riverine habitats. The primary habitat requirements are access to vascular aquatic plants and fresh water, proximity to channels 1-2 m deep, and access to warm water refugia during winter months. The greatest chronic threat to manatee populations appears to be accidental mortality due to collisions with boats. Habitat destruction or alteration are also threats (O'Shea and Ludlow, 1992). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in both Florida and Alabama.

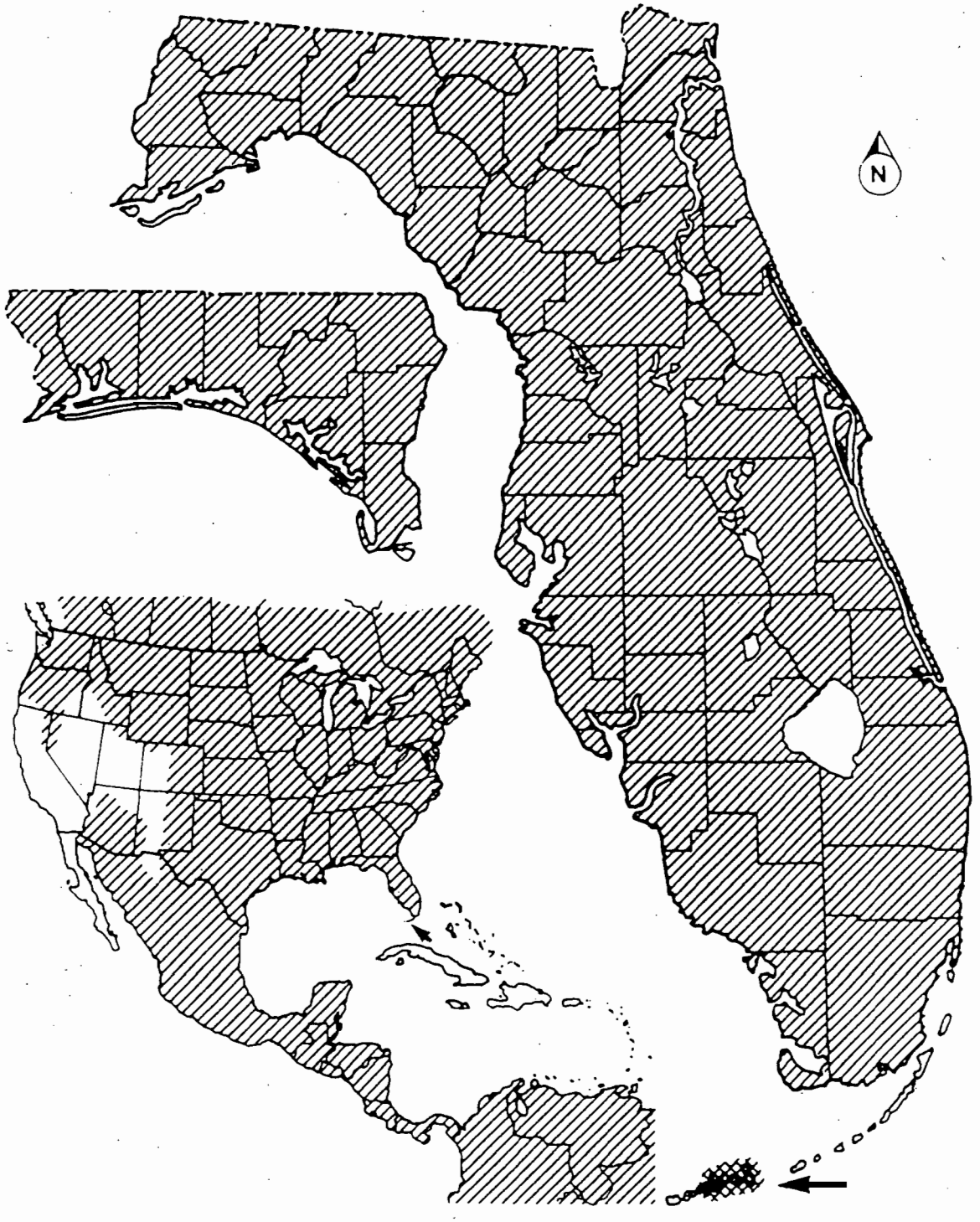

Figure 1. Distribution map of the Key deer (*Odocoileus virginianus clavium*). Hatching represents the species; crosshatching represents the subspecies (From: Klimstra, 1992).

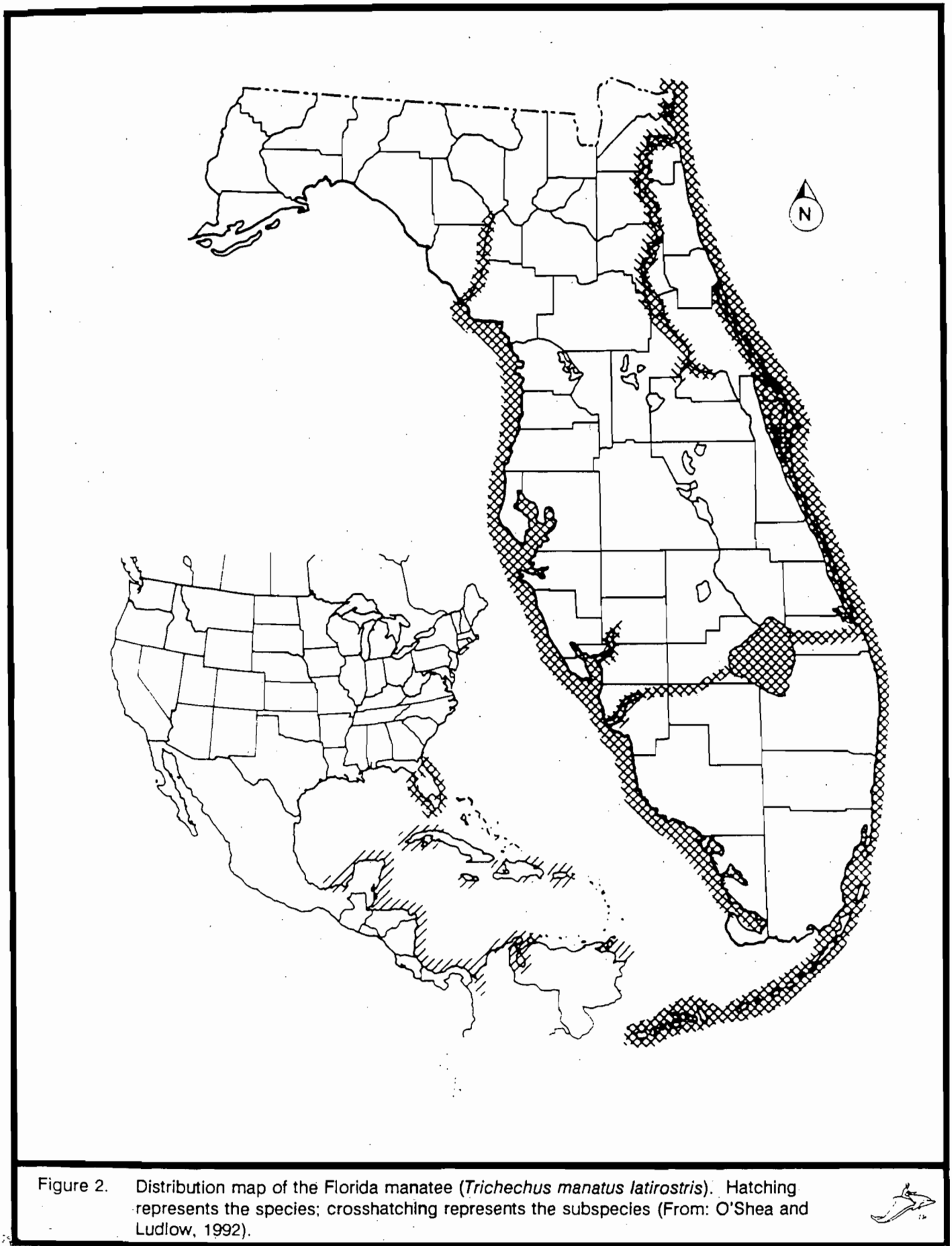

Figure 2. Distribution map of the Florida manatee (*Trichechus manatus latirostris*). Hatching represents the species; crosshatching represents the subspecies (From: O'Shea and Ludlow, 1992).

Choctawhatchee beach mouse (*Peromyscus polionotus allophrys*)

The Choctawhatchee beach mouse is a small-sized representative of the genus *Peromyscus*, and a subspecies of a more common inland species (*P. polionotus*) which ranges throughout the southeastern United States. The Choctawhatchee beach mouse is endemic to coastal areas of northwest Florida. Present distribution appears to be two or possibly three disjunct populations between the entrances to Choctawhatchee and St. Andrew Bays (**Figure 3**). Habitat for this subspecies consists of vegetated primary or secondary sand dunes, though individuals are known to occupy older scrub dunes found adjacent to and immediately inland of these areas. The major threat to this subspecies is habitat loss resulting from real estate development and storm damage (Holler, 1992a). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in Florida.

Perdido Key beach mouse (*Peromyscus polionotus trissyllepsis*)

The Perdido Key beach mouse is a small-sized representative of the genus *Peromyscus*. Like the Choctawhatchee beach mouse, it is a subspecies of the more common inland species, *P. polionotus*. The Perdido Key beach mouse is the most endangered of five recognized subspecies of beach mice, and is found only in coastal areas along Perdido Key (Florida and Alabama). It currently remains as two disjunct populations between the entrances to Perdido and Pensacola Bays (**Figure 4**). Habitat for this subspecies is similar to that of the Choctawhatchee beach mouse, consisting of sand dunes along the Gulf coast beaches. Similarly, the major threat to this subspecies is habitat loss from real estate development and storm damage (Holler, 1992b). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in both Florida and Alabama.

Alabama beach mouse (*Peromyscus polionotus ammobates*)

The Alabama beach mouse is a small-sized subspecies of *Peromyscus polionotus* restricted to disjunct tracts of mature coastal barrier sand dunes along the Alabama Gulf coast from Fort Morgan State Park to the Romar Beach area (**Figure 5**). The beach mice burrow mainly on the lee side of primary dunes and in other secondary and interior dunes where the vegetation provides suitable cover. Tropical storms and loss of habitat are considered to be primary factors for the decline of this subspecies (USFWS, 1985). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in Alabama.

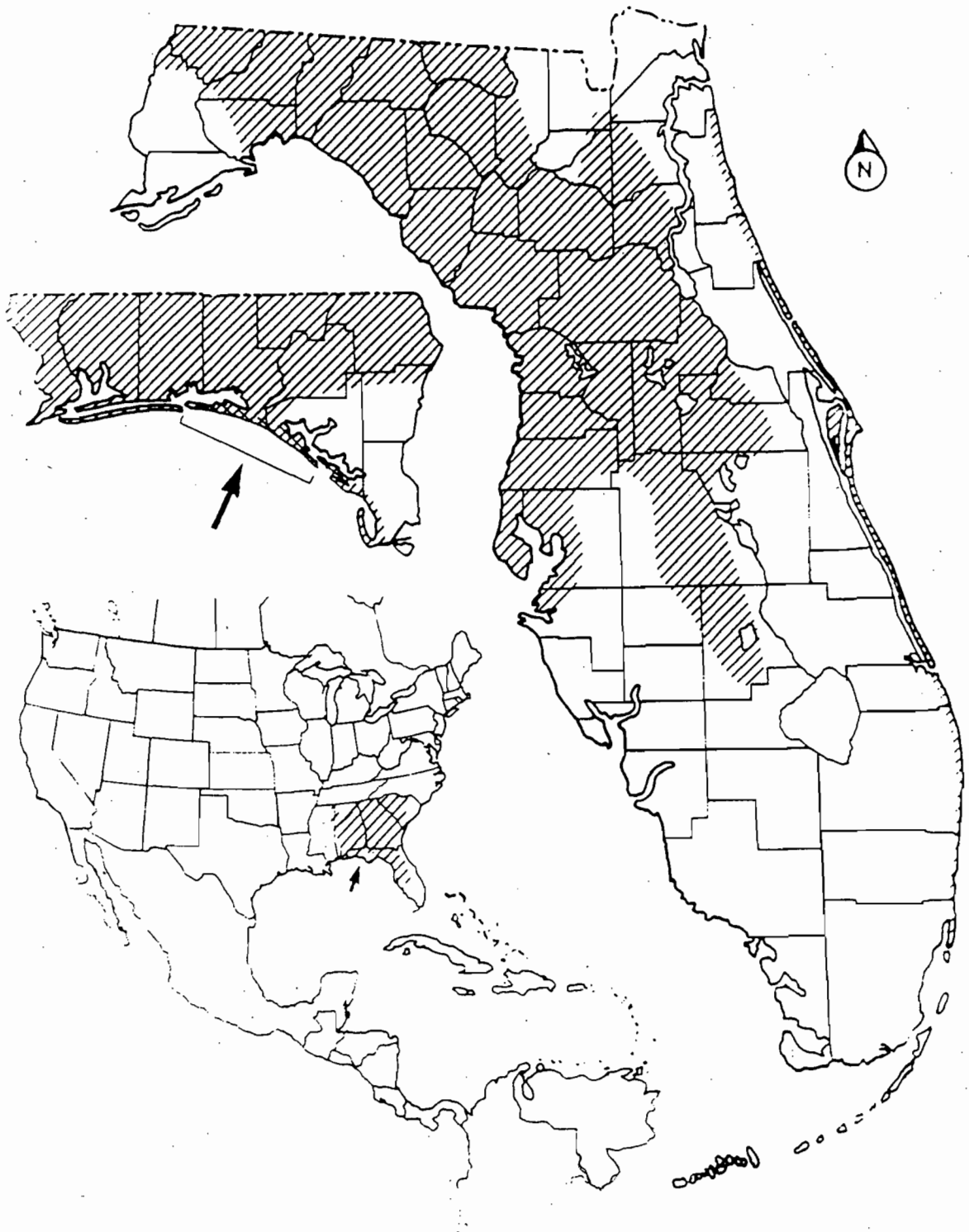

Figure 3. Distribution map of the Choctawhatchee beach mouse (*Peromyscus poliontus allophrys*). Hatching represents the species; crosshatching and bracket represent the subspecies (From: Holler, 1992a).

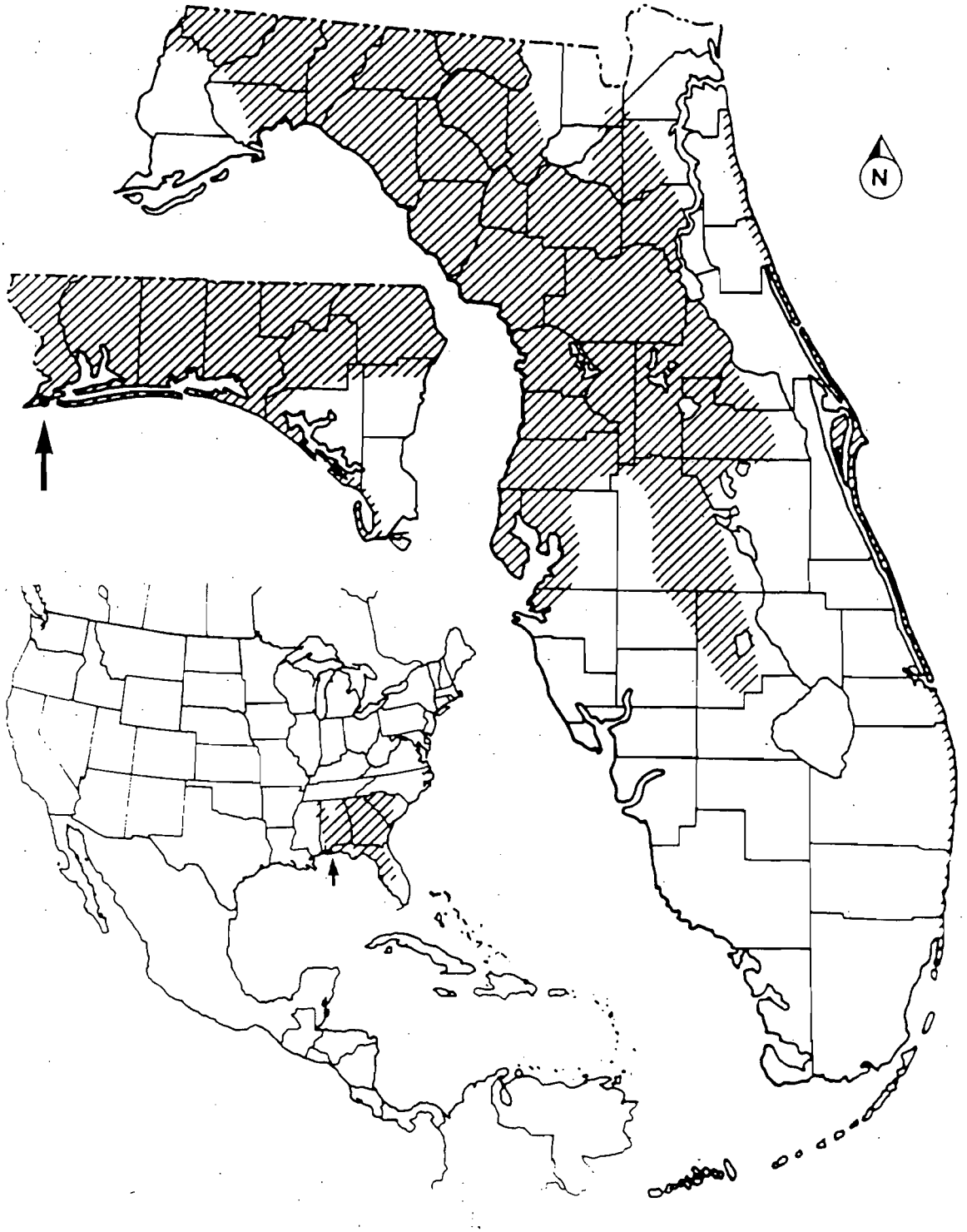

Figure 4. Distribution map of the Perdido Key beach mouse (*Peromyscus polionotus trissyllepsis*). Hatching represents the species; dot indicated by arrow represents the subspecies (From: Holler, 1992b).

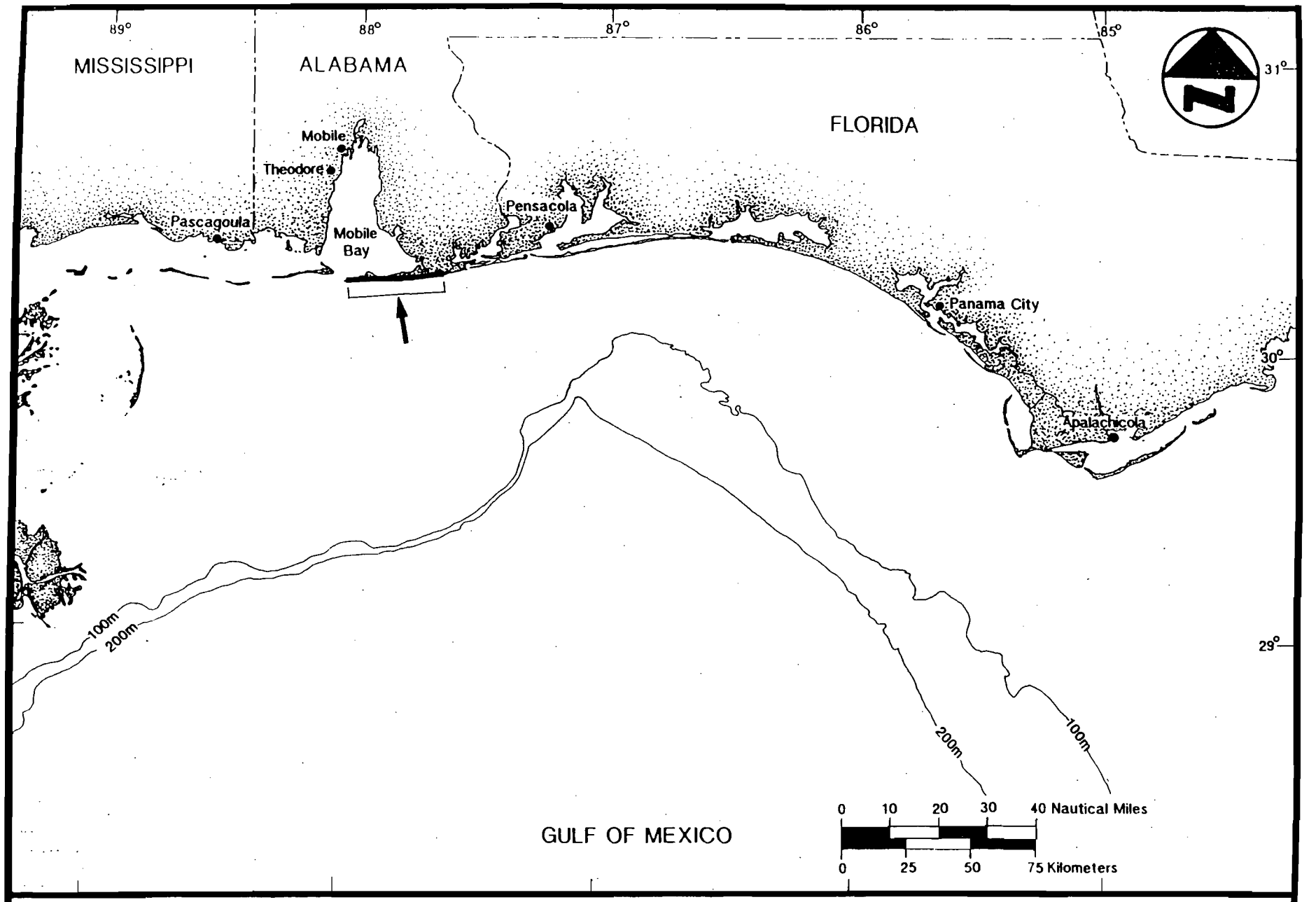

Figure 5. Distribution map of the Alabama beach mouse (*Peromyscus polionotus ammobates*) (Adapted from: USFWS, 1985).

Bald eagle (*Haliaeetus leucocephalus*)

H. leucocephalus leucocephalus is the southern subspecies of bald eagle (*H. leucocephalus*), formerly distributed across the continent from northern California to Virginia. The range is difficult to define, as the southern and northern subspecies broadly intergrade across the middle of the United States. The southern year-round range includes the Gulf of Mexico and the South Atlantic states (**Figure 6**). The preferred habitat of this subspecies is primarily riparian, associated with the coast or with lake and river shores. The bald eagle is an opportunistic feeder within its habitat and will take virtually any vertebrate prey. The main cause for the decline in bald eagle populations has been the presence of persistent pesticides, particularly DDT. Other threats include destruction of coastal nesting habitat and disturbance of nesting pairs by man (Robertson, 1978a). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in both Florida and Alabama.

Arctic peregrine falcon (*Falco peregrinus tundrius*)

The peregrine falcon is a migratory species which has been separated into three subspecies. The Arctic peregrine falcon (*F. p. tundrius*) nests in tundra areas of North America and Greenland, and migrates south to the Gulf coast, West Indies, and Central and South America (USFWS, 1980). The winter range of the Arctic peregrine falcon includes the states along the Gulf of Mexico up to the mid-Atlantic states (**Figure 7**). Migrating falcons often stage along coastal areas of the Gulf of Mexico and hunt above beaches, flats, and wetlands. Peregrines feed almost exclusively on various bird species. Similar to the bald eagle and brown pelican, the peregrine falcon has undergone drastic reductions in numbers due to persistent pesticides which it ingests through its prey (Ogden, 1978a). The U.S. Fish and Wildlife Service currently lists this subspecies as threatened in both Florida and Alabama.

Piping plover (*Charadrius melodus*)

The piping plover is found within central and eastern North America, and migrates from summer nesting areas within the northern U.S. and Canada to coastal areas of the Gulf of Mexico and the West Indies during winter (**Figure 8**). Preferred habitat includes coastal sandflats and mudflats in close proximity to large inlets or passes. Populations of piping plovers were dramatically reduced in the early 1900's from uncontrolled hunting; today, expanding recreational use of specific nesting and wintering habitat have brought about the present decline in numbers (Woolfenden, 1978a). The U.S. Fish and Wildlife Service currently lists this species as threatened in both Florida and Alabama.

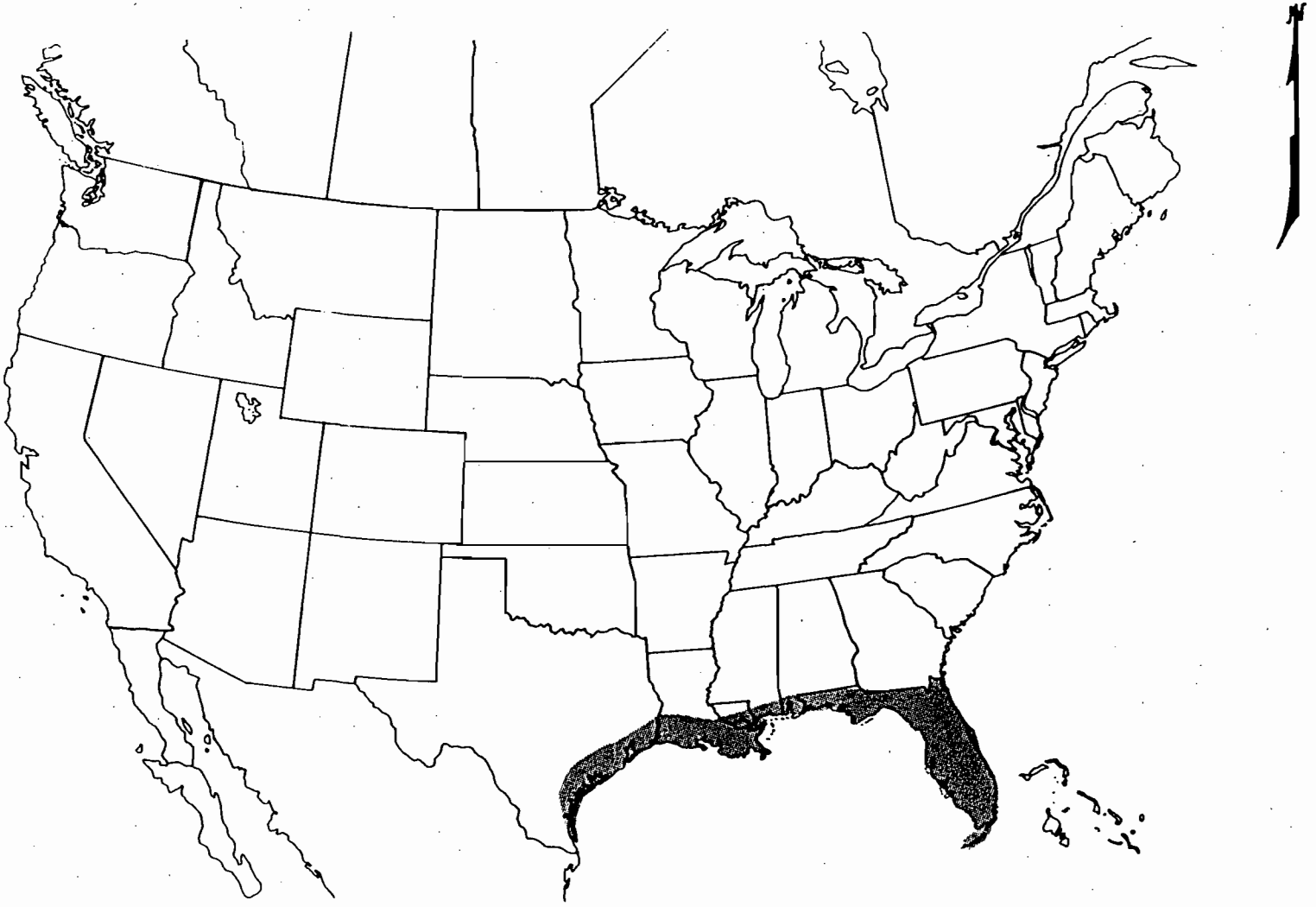

Figure 6. Southern year-round range of the southern bald eagle (*Haliaeetus leucocephalus leucocephalus*) (Adapted from: National Geographic Society, 1987).

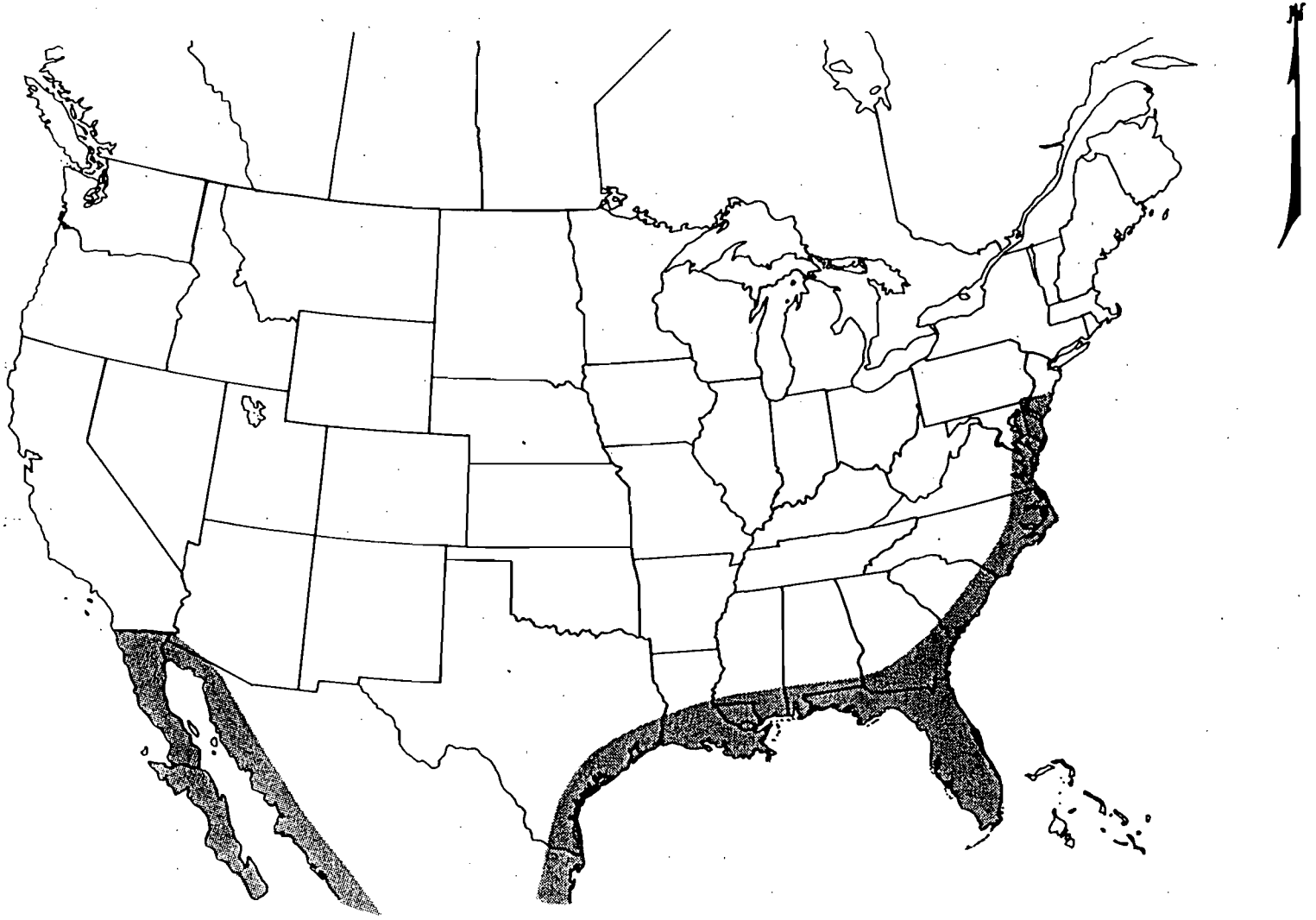

Figure 7. Winter range of the Arctic peregrine falcon (*Falco peregrinus tundrius*) (Adapted from: National Geographic Society, 1987).

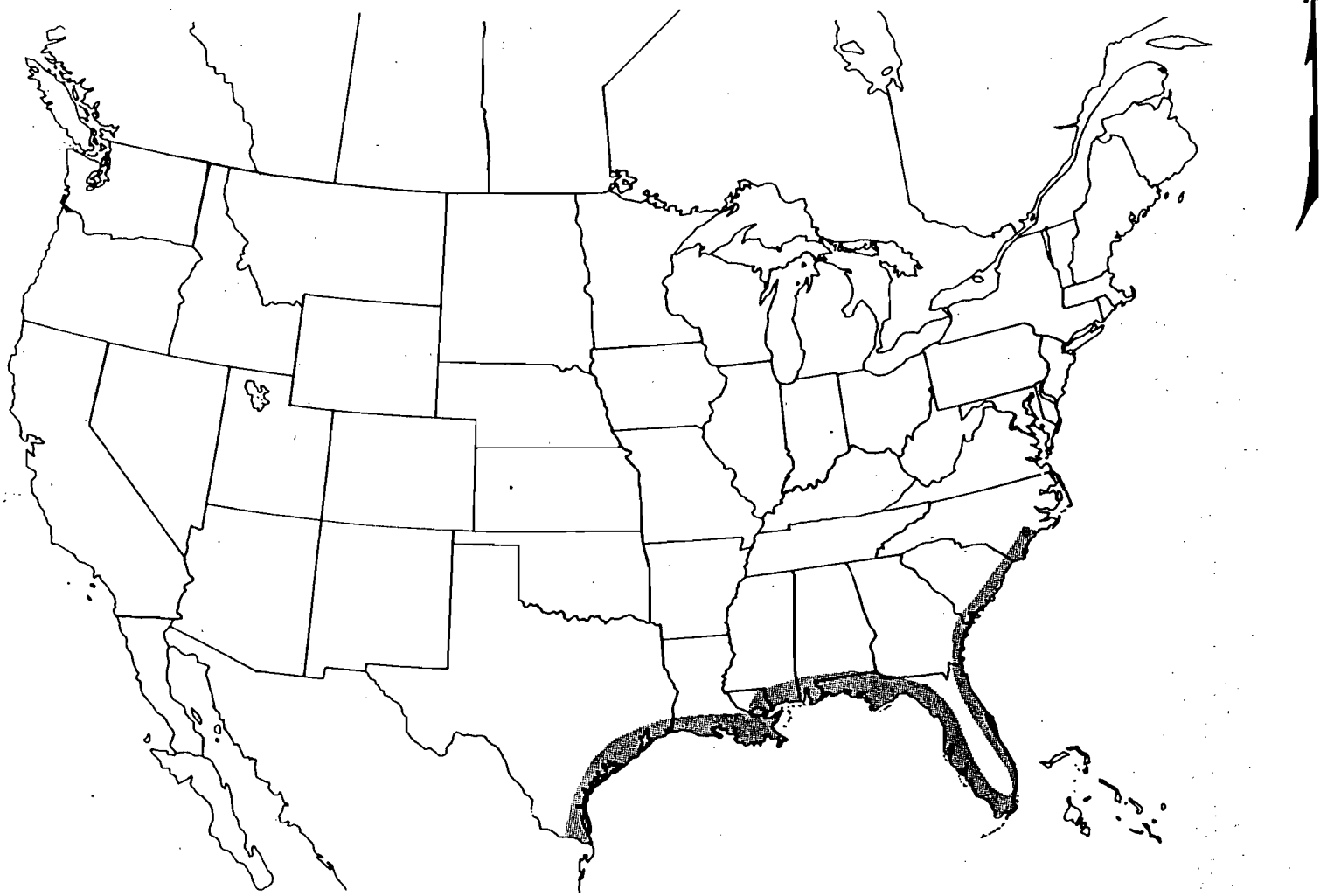

Figure 8. Southern year-round range of the piping plover (*Charadrius melodus*) (Adapted from: National Geographic Society, 1987).

Wood stork (*Mycteria americana*)

The wood stork is the only true stork (Ciconiidae) native to North America. They are birds of fresh water and brackish wetlands, primarily nesting in cypress or mangrove swamps and feeding in fresh water marshes, flooded pastures, and ditches. It nests in Florida and southeastern Georgia, and from Mexico south through Central and South America. Post-breeding dispersal carries storks north to Arkansas and Tennessee; Florida populations move northward to North Carolina, though this dispersal has been much reduced in recent years (**Figure 9**). The wood stork is a highly colonial species, nesting and feeding in large groups. The primary food is small fish, which are captured by means of a specialized feeding technique which generally requires higher concentrations of fish than required by other waders. Habitat destruction and alteration of the hydrology of the watersheds in which it feed have been the main reasons for its decline (Ogden, 1978b). The U.S. Fish and Wildlife Service currently lists this species as endangered in Florida.

Roseate tern (*Sterna dougallii dougallii*)

The roseate tern is a medium-sized tern which nests in scattered coastal colonies from Nova Scotia to Virginia, and in the Florida Keys (**Figure 10**). Western Atlantic populations winter from South Florida through the West Indies to Brazil. Roseates nest on the ground in barren or sparsely vegetated coastal sites, and feed over adjacent water, often very near shore. Nesting colonies in Florida are small and nesting success tends to be poor (Robertson, 1978b). It is a casual visitor in the Gulf of Mexico. The U.S. Fish and Wildlife Service currently lists this subspecies as threatened in Florida.

American crocodile (*Crocodylus acutus*)

The American crocodile is a large reptile which occurs primarily in coastal swamps and rivers in extreme southern Florida, on the islands of Cuba, Jamaica, and Hispaniola, along the coasts of Yucatan to Venezuela, and along the Pacific coasts from Mexico to Peru (**Figure 11**). In Florida, the present range appears to be southern Biscayne Bay to Sanibel Island. Presently, the greatest cause of mortality to crocodiles is from collisions with vehicular traffic along U.S. Highway 1, which cuts through the crocodile's breeding range (Moler, 1992). The U.S. Fish and Wildlife Service currently lists this species as endangered in Florida.

Kemp's (Atlantic) ridley sea turtle (*Lepidochelys kempii*)

The Kemp's, or Atlantic, ridley turtle is a small sea turtle which is associated with a wide range of coastal benthic habitats, usually mud or sand bottoms, that support high concentrations of invertebrates. Adults are generally

Figure 9. Distribution map of the wood stork (*Mycteria americana*) (From: Ogden, 1978b).

Figure 10. Breeding range of the roseate tern (*Sterna dougallii dougallii*) (From: Robertson, 1978b).

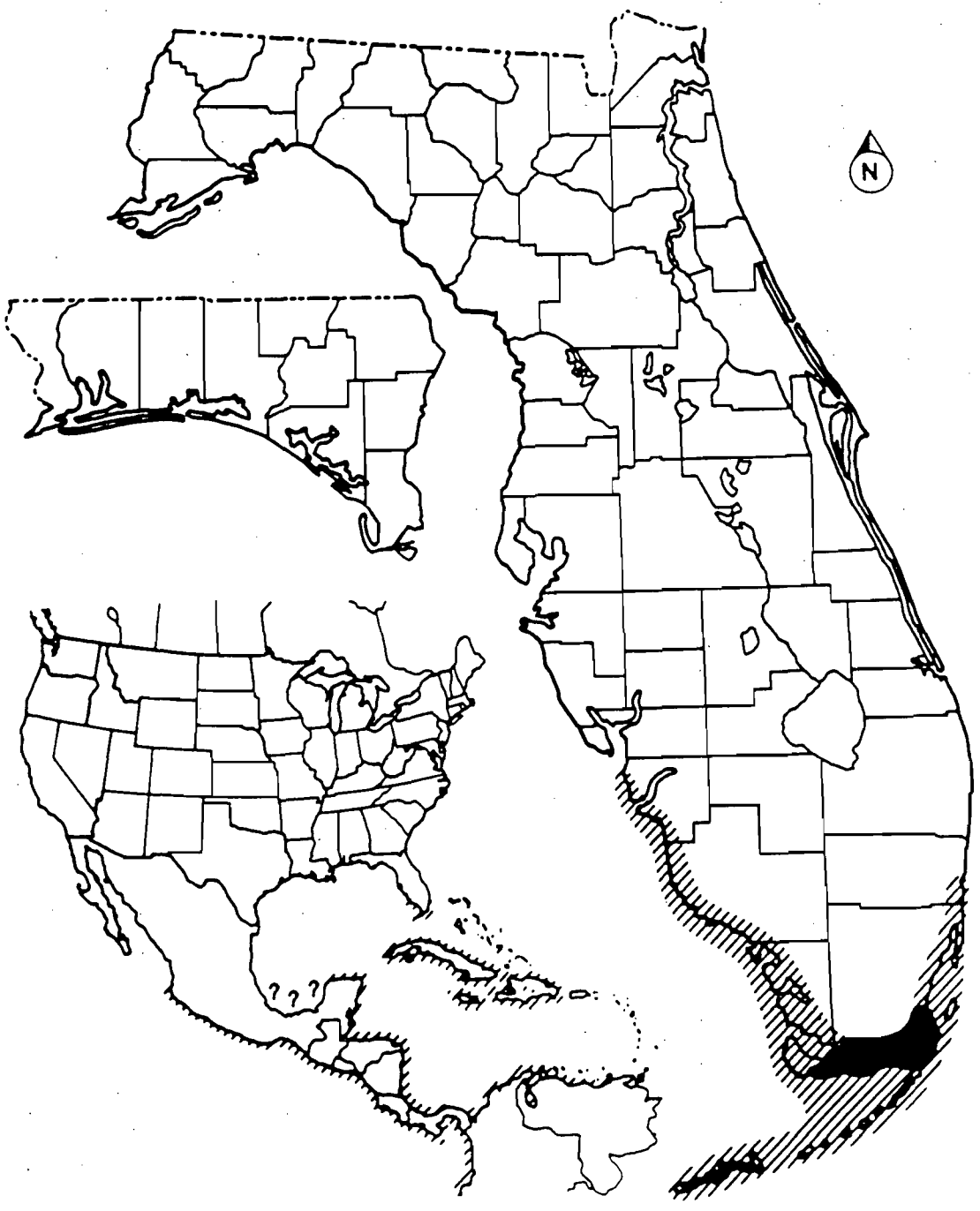

Figure 11. Distribution map of the American crocodile (*Crocodylus acutus*). Hatching indicates distribution; blackened areas indicate known nesting distribution (From: Moler, 1992).

believed to be restricted to coastal waters of the Gulf of Mexico, though juveniles range widely throughout the Gulf and within the North Atlantic as far north as Nova Scotia (**Figure 12**). Nesting occurs along a very small area of coast in Mexico, historically in a synchronized, aggregated event. Extensive exploitation of eggs and adults, as well as incidental drownings of adults in shrimp trawls has decimated populations (Ogren, 1992). The U.S. Fish and Wildlife Service currently lists this species as endangered in both Florida and Alabama.

Green sea turtle (*Chelonia mydas*)

The green sea turtle generally ranges throughout the tropics and subtropics, worldwide. In U.S. Atlantic waters, green sea turtles are found from New England to Texas (**Figure 13**). Nearly all nesting in the United States occurs in Florida, mostly along the beaches of the eastern and southeastern coast. It is the only herbivorous sea turtle. The green sea turtle has been exploited commercially for food, skins, and oil more than any other sea turtle species, causing a decline in its numbers. The commercial harvest in the Gulf of Mexico collapsed around the turn of the century. Feeding habitat is generally within rather shallow, coastal waters, where seagrasses and algae are abundant (Ehrhart, 1992). The U.S. Fish and Wildlife Service currently lists this species as endangered in Florida and threatened in Alabama.

Hawksbill sea turtle (*Eretmochelys imbricata*)

The hawksbill turtle is a small- to medium-sized sea turtle. It has a circumtropical range, being widely distributed throughout the Caribbean and western Atlantic. It normally occurs from Florida southward to Brazil (**Figure 14**). Hawksbills are typically associated with coral reefs and other hard bottom habitats, feeding almost exclusively on demosponges which are common constituents of these areas. The number of surviving individuals is extremely low, as a result of centuries of exploitation for food and tortoise shell (Meylan, 1992). The U.S. Fish and Wildlife Service currently lists this species as endangered in both Florida and Alabama.

Leatherback sea turtle (*Dermochelys coriacea*)

The leatherback is the largest of all sea turtles. It is an extremely wide-ranging species which nests on tropical, often mainland shores of the Atantic, Indian, and Pacific Oceans; non-breeding individuals range into temperate and sub-polar waters (**Figure 15**). Seasonally, they enter coastal and estuarine habitats. Its diet consists primarily of jellyfish, captured at the surface or in the water column. The leatherback is unique, both morphologically and physiologically, and its diving ability is unmatched by any other reptile (Pritchard,

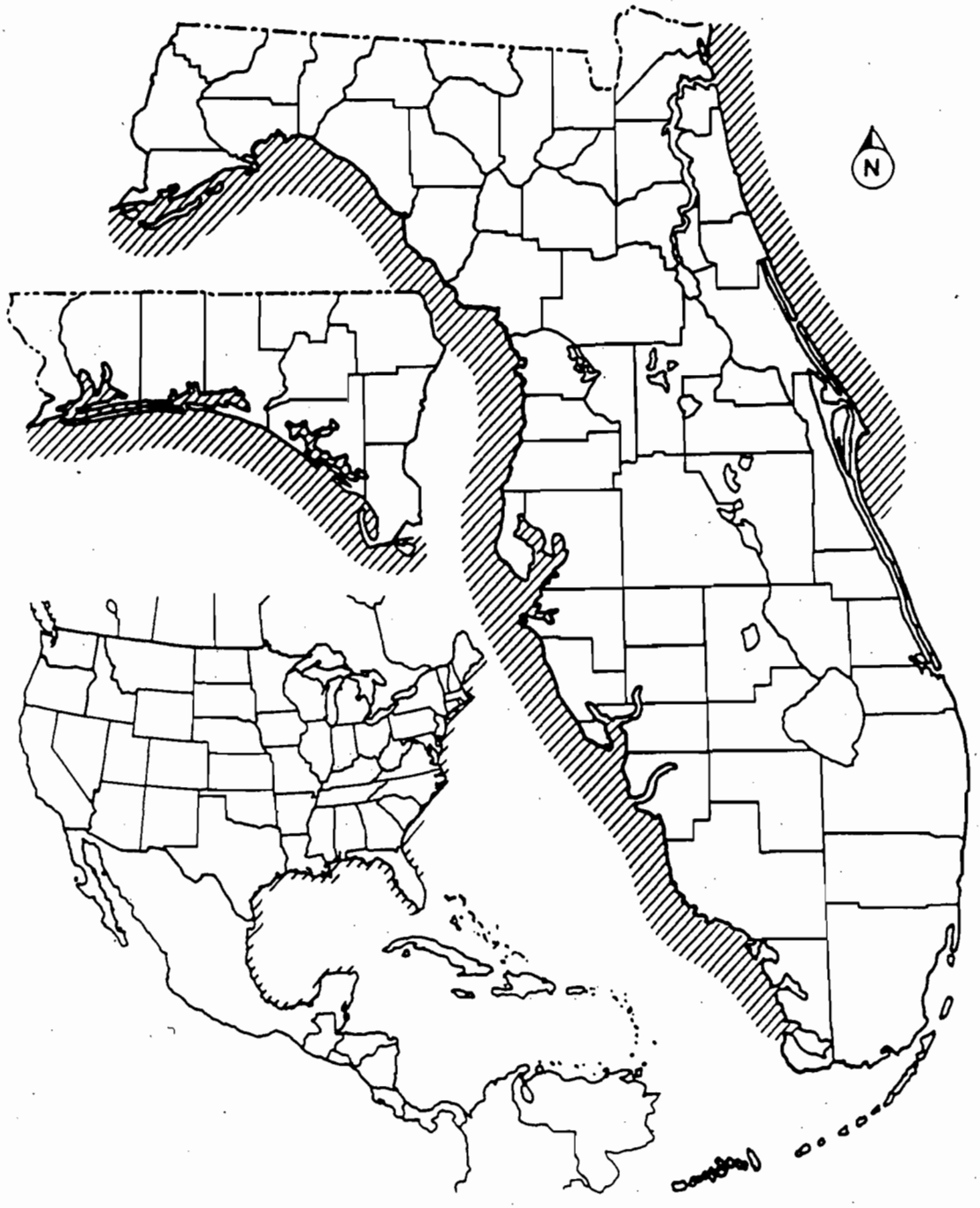

Figure 12. Distribution map of the Kemp's (Atlantic) ridley sea turtle (*Lepidochelys kempii*) (From: Moler, 1992).

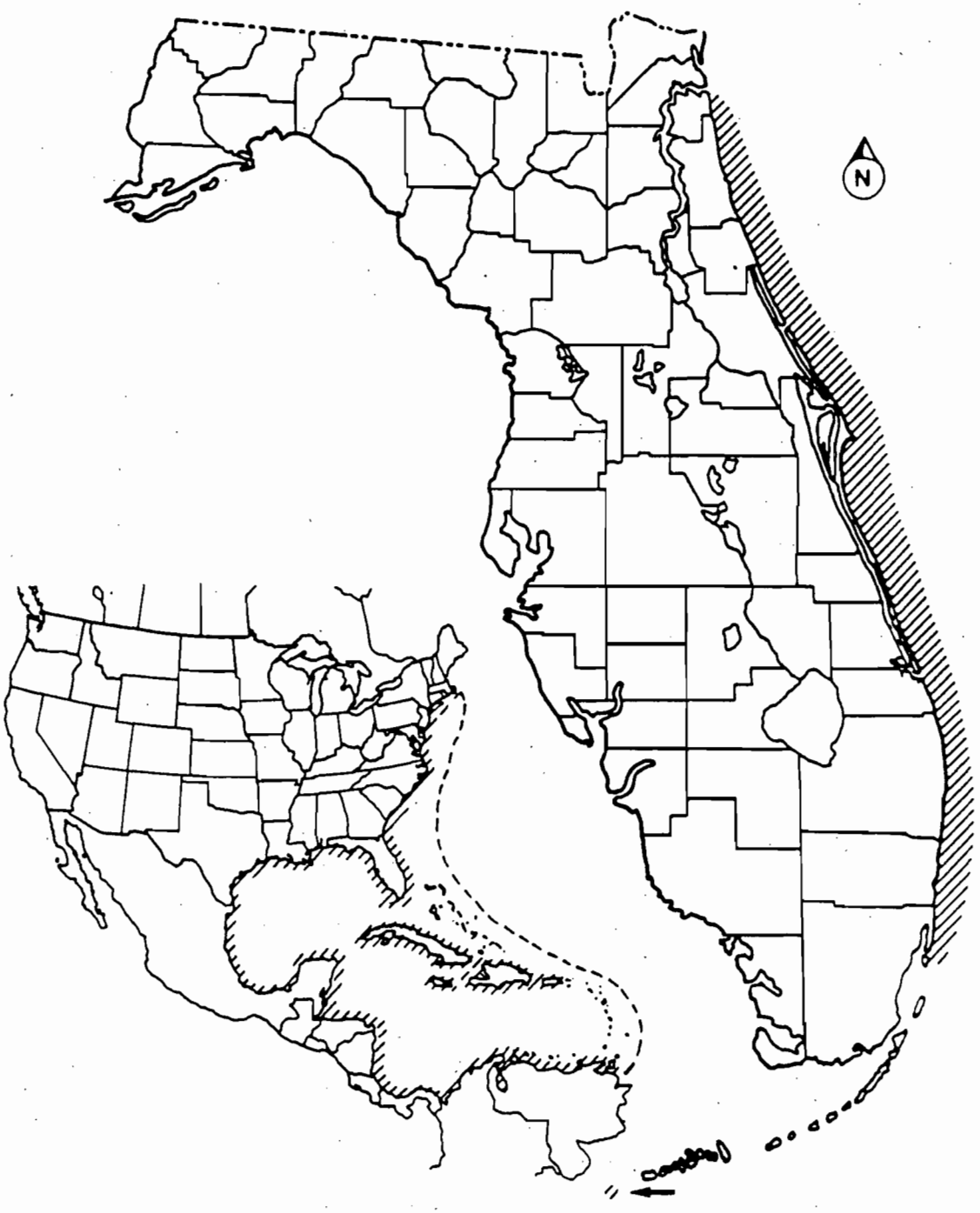

Figure 13. Distribution map of the green sea turtle (*Chelonia mydas*). Inset map shows total distribution; Florida map shows Florida nesting distribution (From: Moler, 1992).

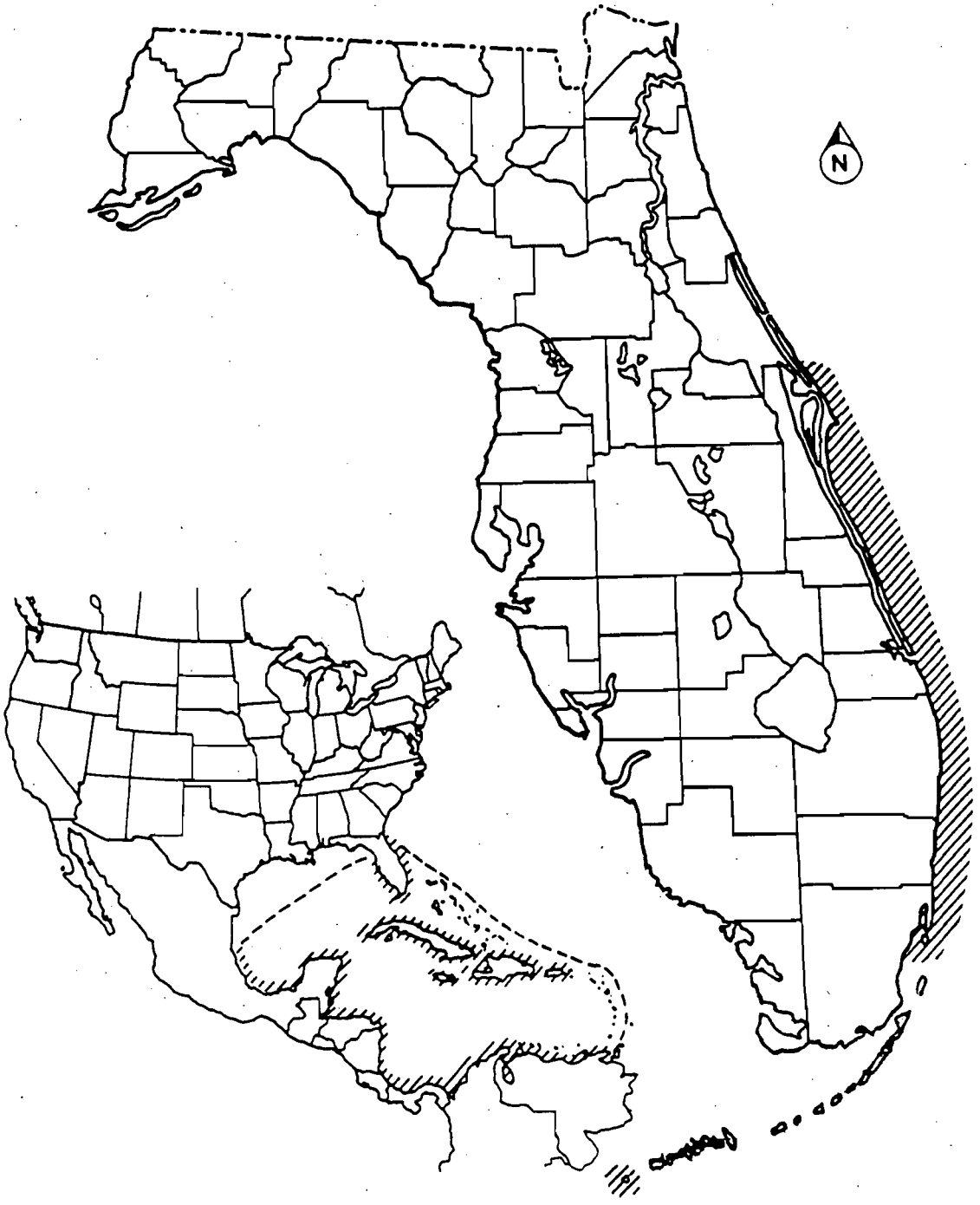

Figure 14. Distribution map of the hawksbill sea turtle (*Eretmochelys imbricata*). Inset map shows total distribution; Florida map shows Florida nesting distribution (From: Moler, 1992).

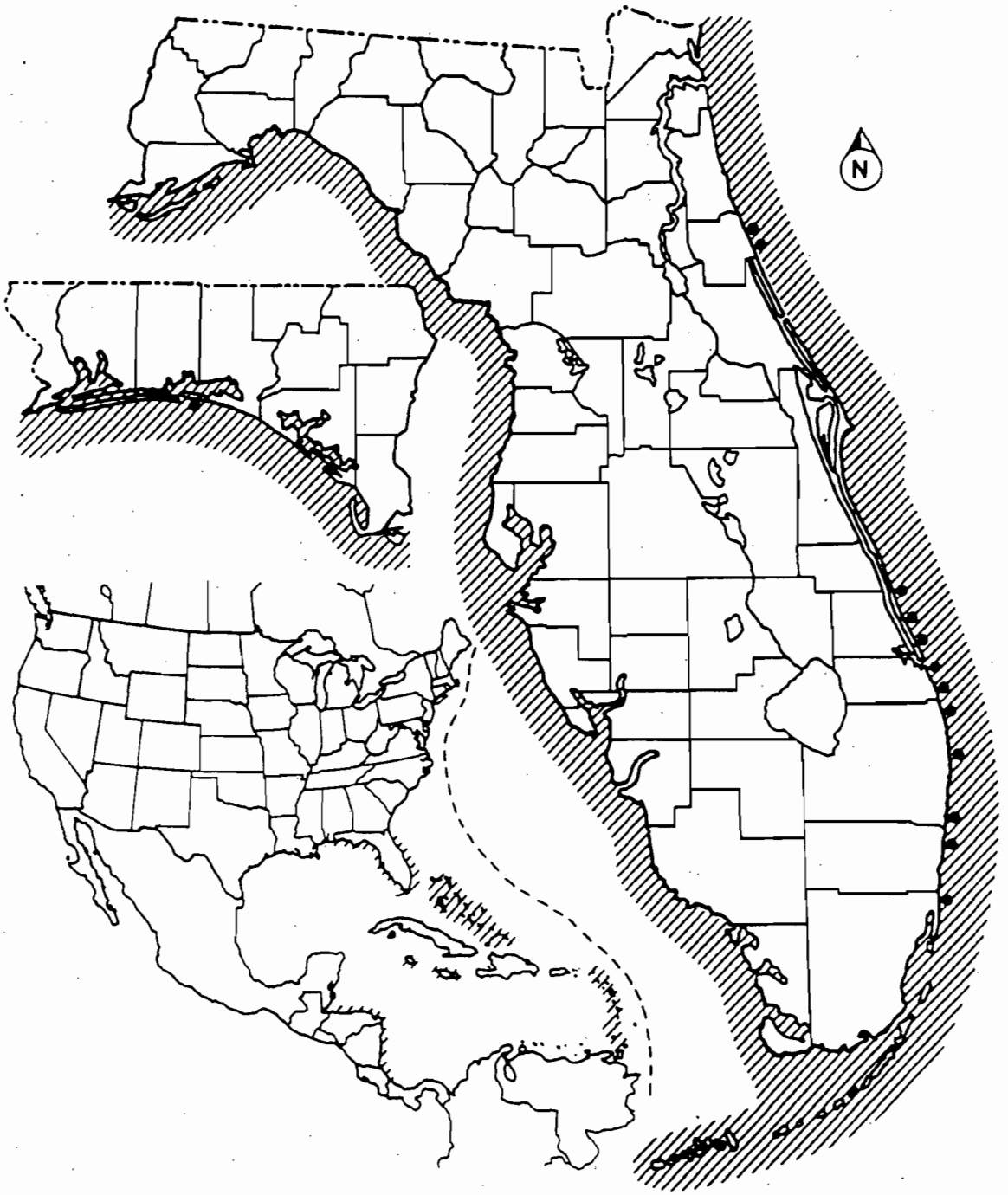

Figure 15. Distribution map of the leatherback sea turtle (*Dermochelys coriacea*). Dots indicate nesting records (From: Moler, 1992).

1992). The U.S. Fish and Wildlife Service currently lists this species as endangered in both Florida and Alabama.

Loggerhead sea turtle (*Caretta caretta*)

The loggerhead is a medium to large species of sea turtle which occurs circumglobally within tropical to temperate waters (**Figure 16**). Nesting occurs in temperate and subtropical regions, including scattered nesting on beaches throughout the Gulf of Mexico. The loggerhead nests farther north (in the Northern Hemisphere) than any other sea turtle. Its habitat varies with season and as a function of the animal's life stage, and ranges from estuaries to offshore waters of the continental shelf. The loggerhead is omnivorous, but its diet consists primarily of invertebrates such as mollusks, crustaceans, and horseshoe crabs (Dodd, 1992). The U.S. Fish and Wildlife Service currently lists this species as threatened in both Florida and Alabama.

Gulf sturgeon (*Acipenser oxyrinchus desotoi*)

This subspecies of the Atlantic sturgeon is generally restricted to the eastern Gulf of Mexico, from the lower Mississippi River eastward to the west coast of Florida (**Figure 17**). It once bred in most large tributaries to the eastern Gulf east to the Suwannee River. Today, the most stable population occurs only within the Suwannee. The Gulf sturgeon is an anadromous species which spends the majority of its adult life in salt or brackish water. During certain years, it moves into fresh water to spawn. Recent catches or sightings (i.e., since 1987) are known from all major rivers from Lake Ponchartrain to the Apalachicola River. It frequently enters the open Gulf, where it may make lengthy coastal migrations, and has been found at depths of 46 m. Adults feed mostly on benthic invertebrates. The decline of this subspecies is believed to have resulted from overfishing and habitat destruction, primarily the damming of coastal rivers and the degradation of water quality (Gilbert, 1992). The U.S. Fish and Wildlife Service currently lists this subspecies as threatened in both Florida and Alabama.

Key Largo cotton mouse (*Peromyscus gossypinus allapaticola*)

The Key Largo cotton mouse is the largest subspecies of cotton mouse from peninsular Florida. The historic distribution of this subspecies included the tropical hardwood forest on Key Largo and Plantation Key, Florida (**Figure 18**). Presently, the subspecies is restricted to the northern half of Key Largo. Its habitat requirements are older stands of dry, tropical, deciduous forest, though optimal habitat for this subspecies is unknown. Destruction of the deciduous forest habitat in the upper Keys is responsible for the decline of the Key Largo cotton mouse (Humphrey, 1992a). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in Florida.

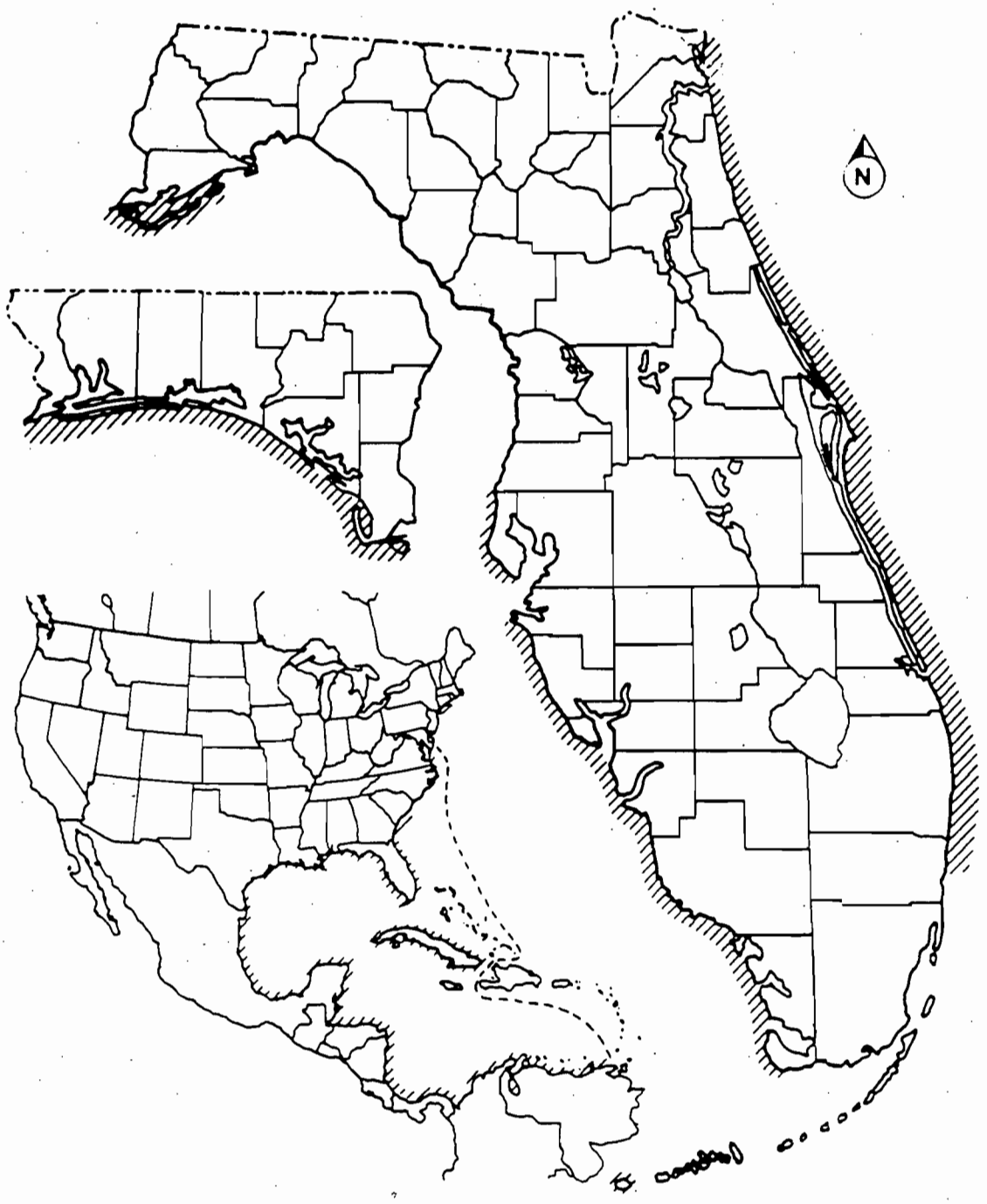

Figure 16. Distribution map of the loggerhead sea turtle (*Caretta caretta*). Hatching indicates Florida nesting distribution (From: Moler, 1992).

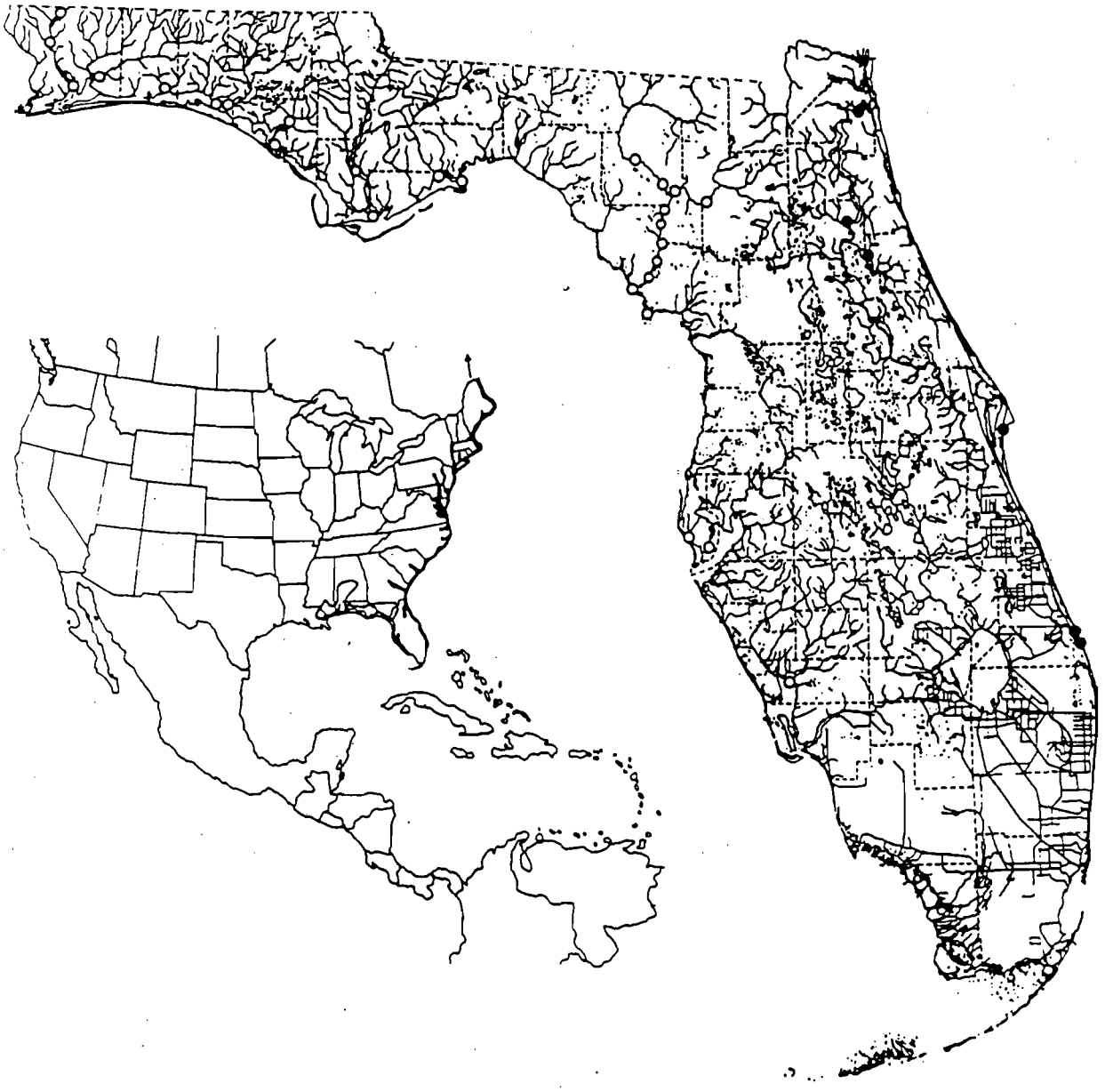

Figure 17. Distribution of the sturgeon *Acipenser oxyrinchus*. Solid dots indicate the Atlantic sturgeon subspecies (*A. oxyrinchus oxyrinchus*); open dots refer to the Gulf sturgeon subspecies (*A. oxyrinchus desotoi*) (From: Gilbert, 1992).

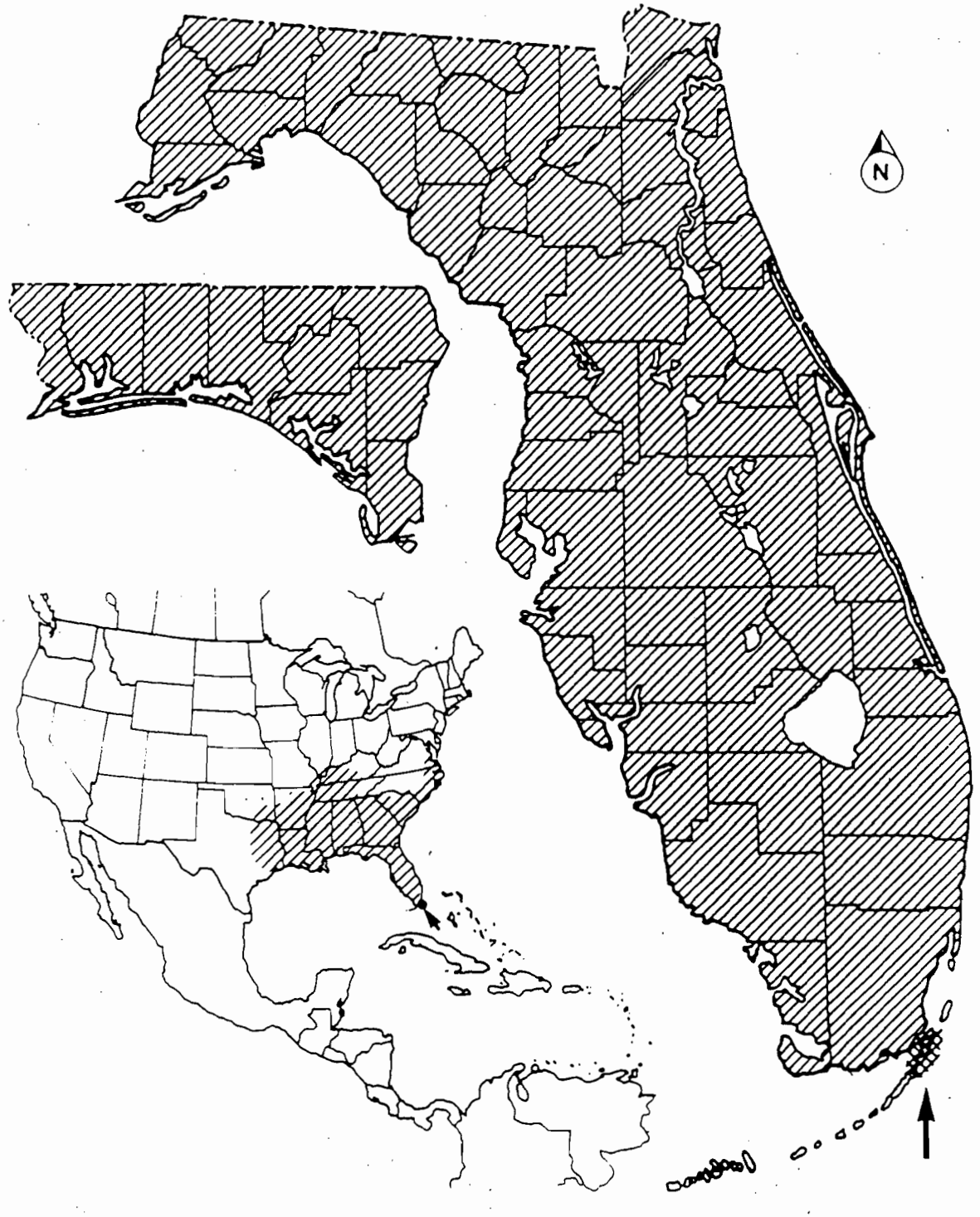

Figure 18. Distribution map of the Key Largo cotton mouse (*Peromyscus gossypinus allapaticola*). Hatching represents the species; crosshatching represents the subspecies (From: Humphrey, 1992a).

Florida panther (*Felis concolor coryi*)

The Florida race of the panther is genetically different from western races, presumably the result of isolation and reduced outbreeding opportunities. The distribution of this subspecies in Florida has been conjectural (**Figure 19**). Though considered a wilderness species, it has shown considerable flexibility adapting to human intrusions and habitat alterations. Considerable variation in the diet has been noted within the subspecies' restricted range, probably reflecting habitat quality more than actual food preferences. The alteration or destruction of preferred forested landscapes has eliminated the panther from most of its original range (Maehr, 1992). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in Florida.

Key Largo woodrat (*Neotoma floridana smalli*)

The Key Largo woodrat is a medium-sized rodent which, historically, was found within the tropical hardwood forest on Key Largo, Florida (**Figure 20**). Today, the range is restricted to forest on the northern half of the Key. Its range specificity appears to be linked to both climate and soil depth for burrows, which is directly correlated to forest age. This subspecies is threatened by continued alteration or destruction of the remaining habitat (Humphrey, 1992b). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in Florida.

Lower Keys rabbit (*Sylvilagus palustris hefneri*)

The Lower Keys rabbit has been identified as a separate subspecies and distinct from marsh rabbits inhabiting the Upper Keys and southern Florida. Its range includes several Keys from Big Pine to Boca Chica, though remaining populations are highly fragmented (**Figure 21**). It prefers marshes and low vegetative cover; alteration of this preferred habitat poses the greatest threat to existing populations (Wolfe, 1992). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in Florida.

Cape Sable sparrow (*Ammodramus maritima*)

The Cape Sable sparrow is a medium-sized seaside sparrow which inhabits fresh to slightly brackish marshes in extreme southern and southwestern peninsular Florida (**Figure 22**). It does not appear to occupy extremely dense brushy marshland or cordgrass (*Spartina bakeri*). They are extremely secretive birds, feeding principally on insects and spiders. Compared to all other seaside sparrows, it may be the most highly adapted to an environment that experiences periodic burning, and is the only species restricted to interior marshes. Habitat alteration, primarily through the introduction and invasion of brush and exotic trees,

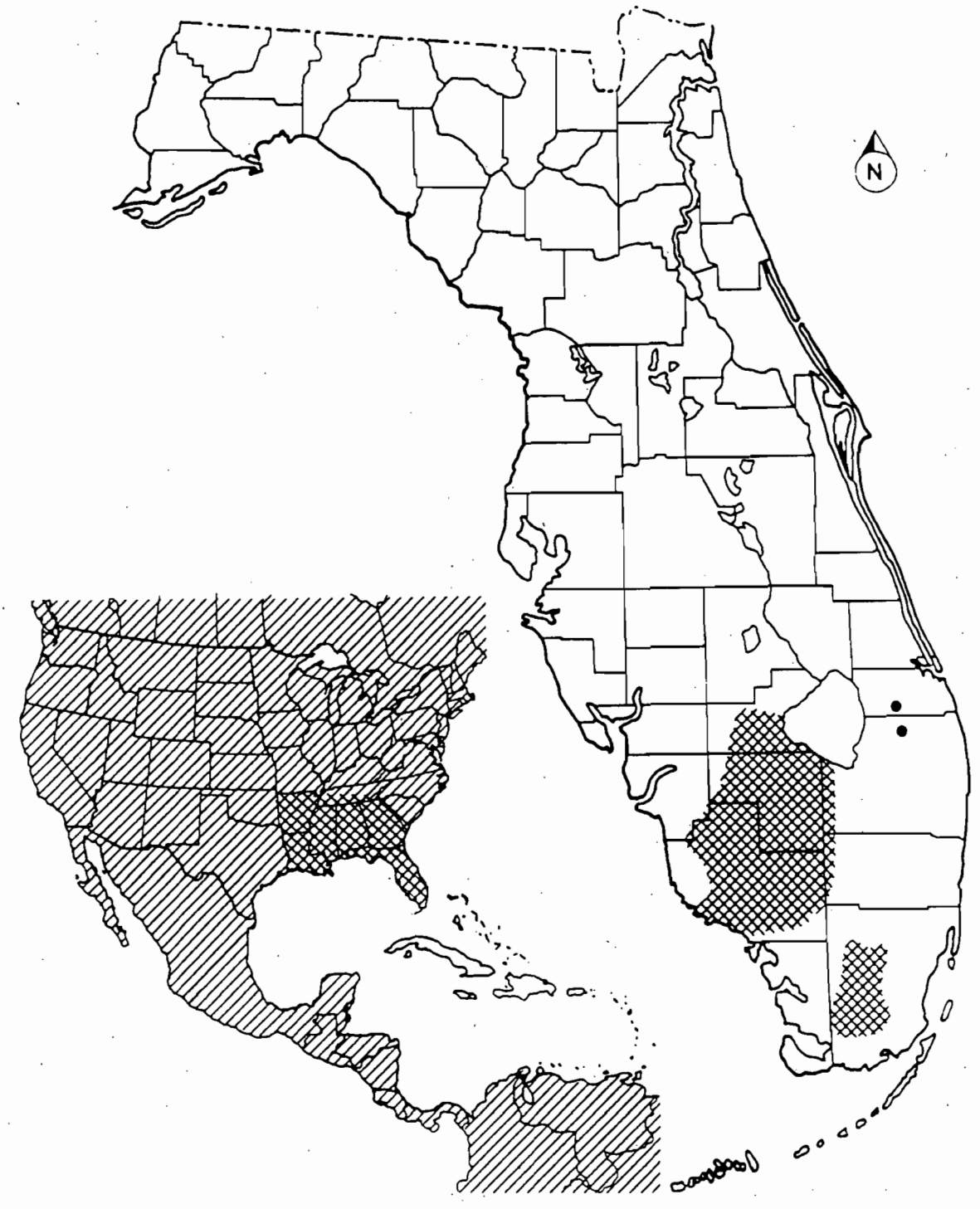

Figure 19. Distribution map of the Florida panther (*Felis concolor coryi*). Hatching represents the species; crosshatching and dots represent the subspecies. The Florida map shows the current range, whereas the inset map shows the original range (From: Maehr, 1992).

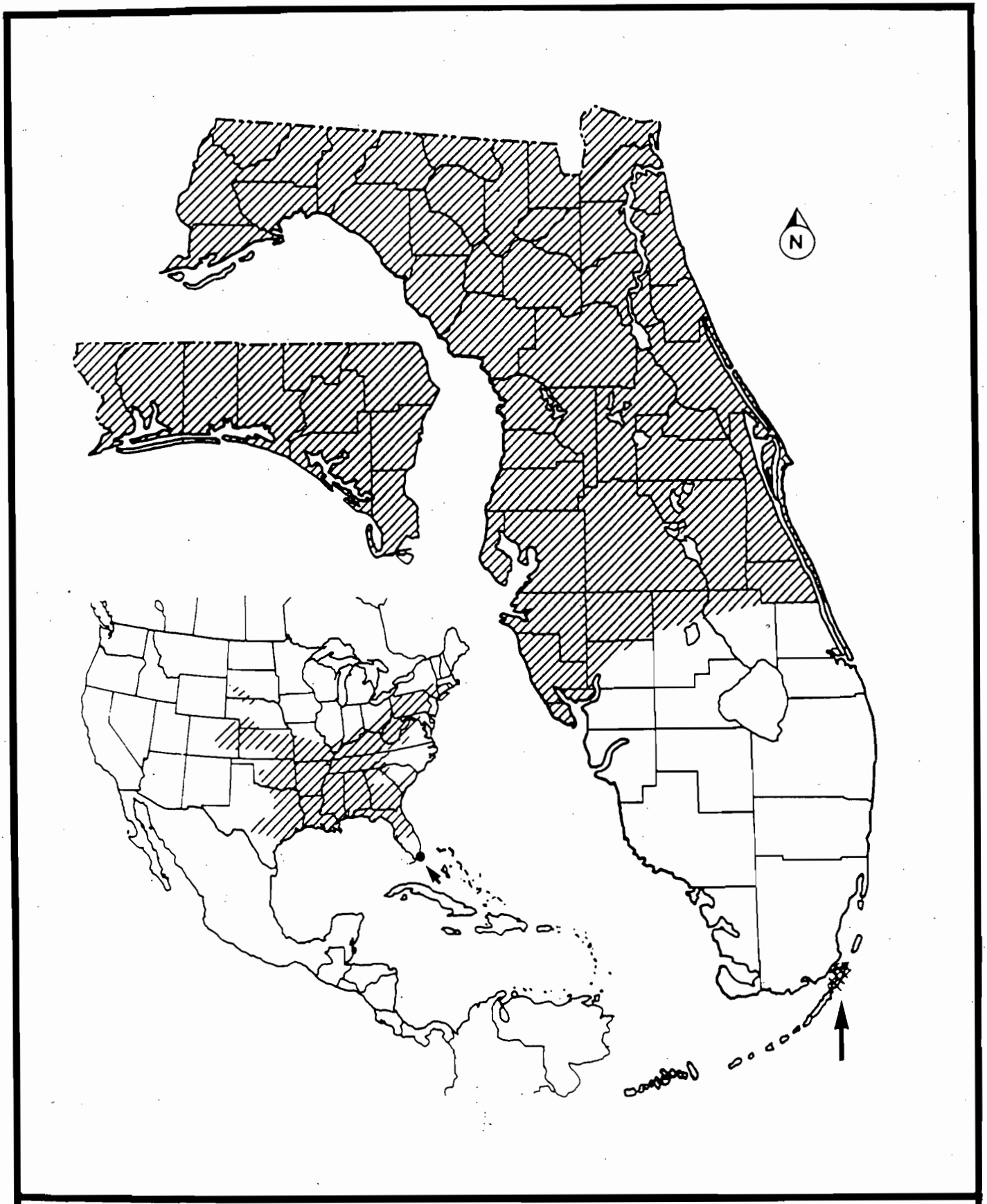

Figure 20. Distribution map of the Key Largo woodrat (*Neotoma floridana smalli*). Hatching represents the species; dot and crosshatching represent the subspecies (From: Humphrey, 1992b).

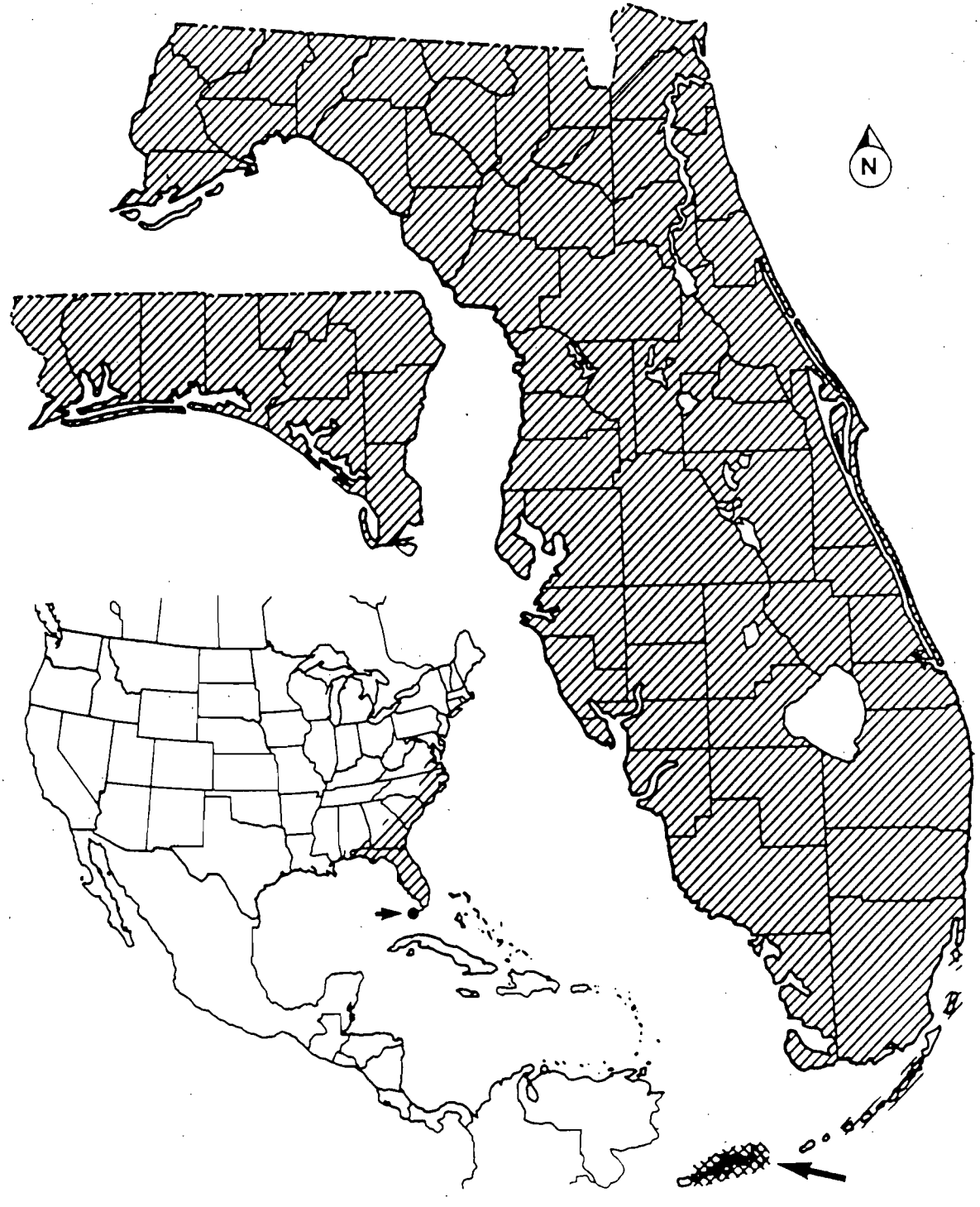

Figure 21. Distribution map of the Lower Keys rabbit (*Sylvilagus palustris hefneri*). Hatching represents the species; dot and crosshatching represent the subspecies (From: Wolfe, 1992).

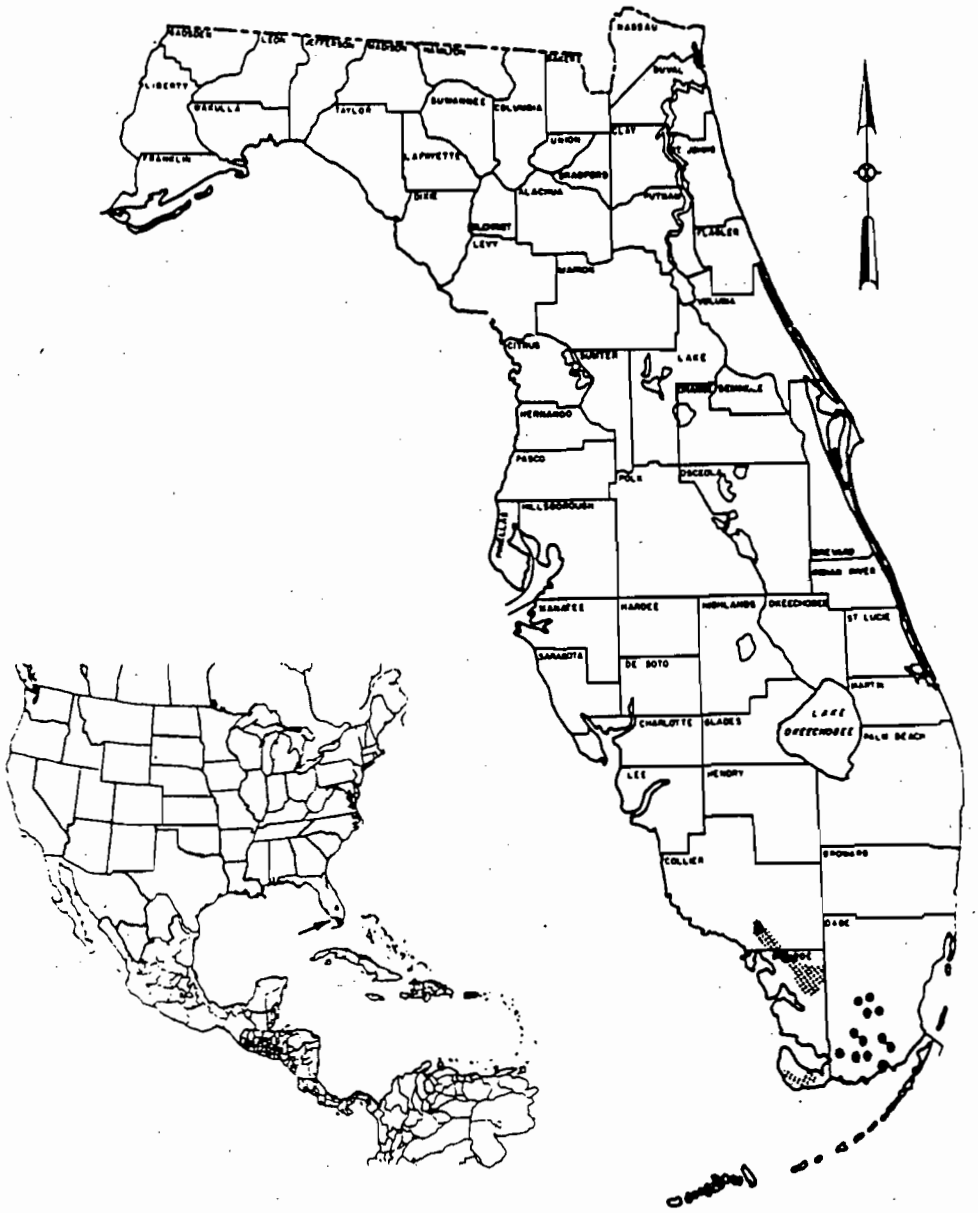

Figure 22. Distribution map of the Cape Sable sparrow (*Ammodramus maritima*). Dots indicate present range; shaded areas show historic range (From: Werner, 1978).

has been responsible for the decline of this species (Werner, 1978). The U.S. Fish and Wildlife Service currently lists this species as endangered in Florida.

Stock Island tree snail (*Orthalicus reses reses*)

The Stock Island tree snail is a large, conical snail which grazes on minute fungi and algae which grow as epiphytes on tree leaves and stems. It thrives best in mature tropical hardwood hammocks, remaining dormant during the dry season (December-May) and becoming active again at night in the wet season. This subspecies had, until recently, been restricted to Stock Island in the Florida Keys (**Figure 23**). Following the 1992 hurricane, which destroyed the hammock habitat in this area, a large number of the snails were captured by the U.S. Fish and Wildlife Service and will remain in captivity until release sites can be identified (USFWS, 1982a). The U.S. Fish and Wildlife Service currently list this subspecies as threatened in Florida.

Schaus swallowtail butterfly (*Papilio aristodemus ponceanus*)

The Schaus swallowtail butterfly occurs in the upper Florida Keys from Elliot Key to northern Key Largo and Upper Matecumbe Key (**Figure 24**). It is limited to tropical hardwood hammocks. Adults prefer shady habitat for feeding and oviposition whereas larvae are commonly found on host plants which grow in open areas. Probable causes for its decline include habitat destruction, overcollection of larvae, application of insecticides, and climatic stress from hurricanes, freezes, and droughts (USFWS, 1982b). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in Florida.

Key tree-cactus (*Cereus robinii*)

Key tree-cactus is the largest of the native Florida cacti which occur in the Florida Keys and Cuba. The Florida populations are presently known to occur at five sites on Matecumbe Key, Long Key, and Big Pine Key (**Figure 25**). The tree-cactus is found in rocky hammock communities which have largely disappeared from the Keys due to development and urbanization. Overcollection for its use as a landscaping ornamental is also considered a threat (Ward, 1992). The U.S. Fish and Wildlife Service currently lists this species as endangered in Florida.

Garber's spurge (*Euphorbia garberi*)

Garber's spurge is a prostrate herb which occurs in transitional areas between hardwood hammocks and rock pinelands, and on beach ridges in saline coastal areas. The plant's current populations are restricted to four sites in

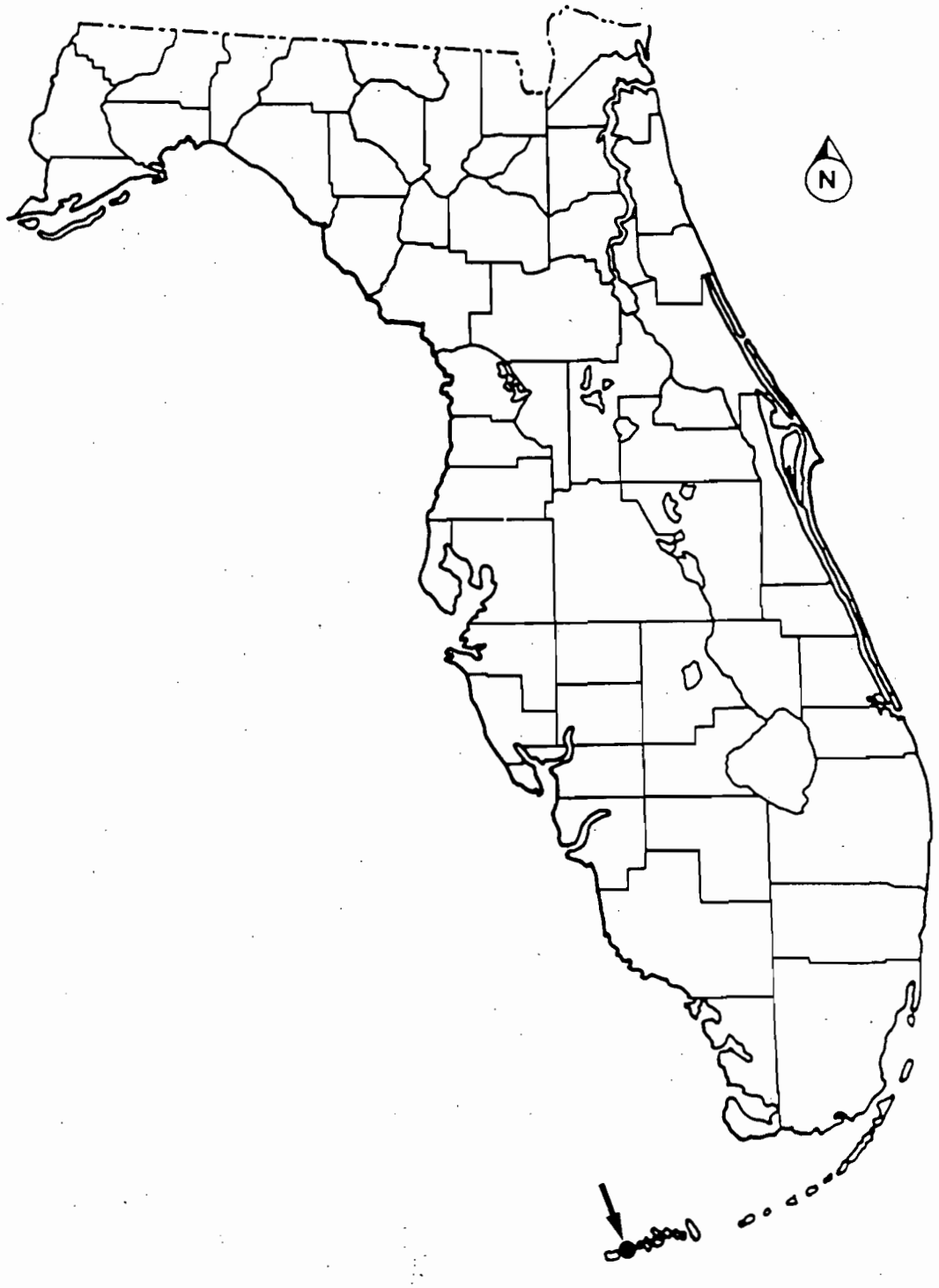

Figure 23. Distribution map of the Stock Island tree snail (*Orthalicus reses reses*) (Based upon information from: USFWS, 1982a).

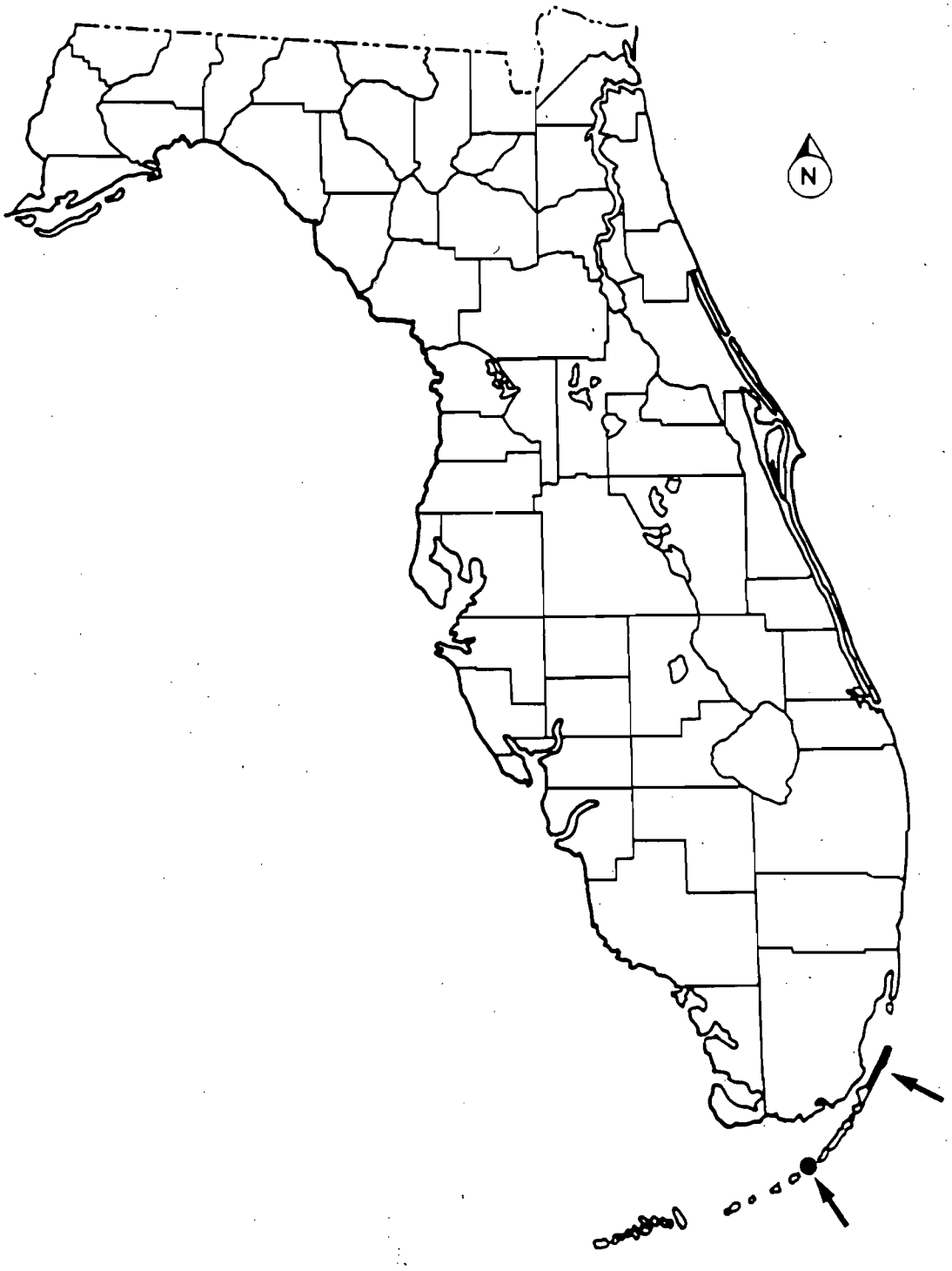

Figure 24. Distribution map of the Schaus swallowtail butterfly (*Papilio aristodemus ponceanus*) (Based upon information from: USFWS, 1982b).

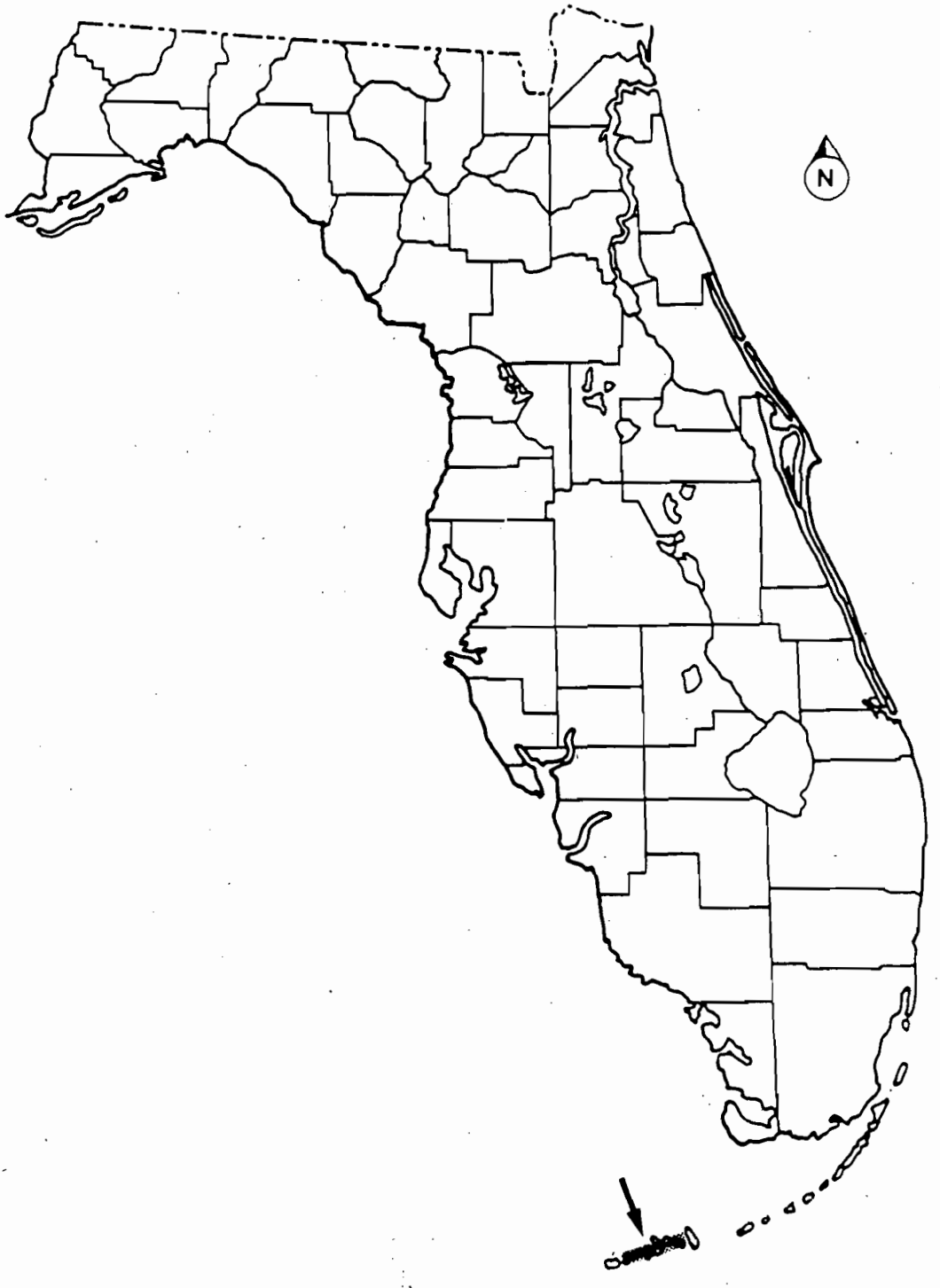

Figure 25. Distribution map of the Key tree-cactus (*Cereus robinii*) (Adapted from: Ward, 1992).

Everglades National Park (Florida), and one privately-owned site on Big Pine Key (**Figure 26**). Loss of habitat to development has been the primary factor in the decline of the species (USFWS, 1988). The U.S. Fish and Wildlife Service currently lists this species as threatened in Florida.

Florida salt marsh vole (*Microtus pennsylvanicus dukecampbelli*)

The Florida salt marsh vole is a subspecies of vole which appears to be restricted to coastal salt marsh habitats near Cedar Key (**Figure 27**). Particular habitat requirements and behavior of this subspecies are poorly understood. The coastal salt marsh habitats of the Florida Gulf coast are subject to flooding; catastrophic weather events such as hurricanes appear to represent the greatest threat to the subspecies (Woods, 1992). The U.S. Fish and Wildlife Service currently lists this subspecies as endangered in Florida.

CANDIDATE SPECIES

St. Andrew beach mouse (*Peromyscus polionotus peninsularis*)

The St. Andrew beach mouse ranges from the St. Joseph spit to the entrance of St. Andrew Bay, Florida (**Figure 28**). It occurs in well-developed, high front dunes of St. Joseph Peninsula State Park, and occasionally in older back dunes. Real estate development in these areas has caused the destruction of beach mouse habitat (James, 1992). The U.S. Fish and Wildlife Service currently lists this subspecies as a candidate for protection in Florida.

Santa Rosa beach mouse (*Peromyscus polionotus leucocephalus*)

The Santa Rosa beach mouse is one of the beach-dwelling subspecies of *Peromyscus polionotus*, and occurs only on Santa Rosa Island, a narrow barrier island along the northwest coast of Florida (**Figure 29**). Beach dune habitat, favored by the mouse, occupies a narrow strip along the Gulf and consists usually of one to three dunes paralleling the beach. Populations of other beach mice subspecies have declined following development of their coastal habitats for human uses. Increasing development of Santa Rosa Island is suspected to have resulted in the decline of this subspecies as well (Gore and Schaefer, 1993). The U.S. Fish and Wildlife Service currently lists this subspecies as a candidate for protection in Florida.

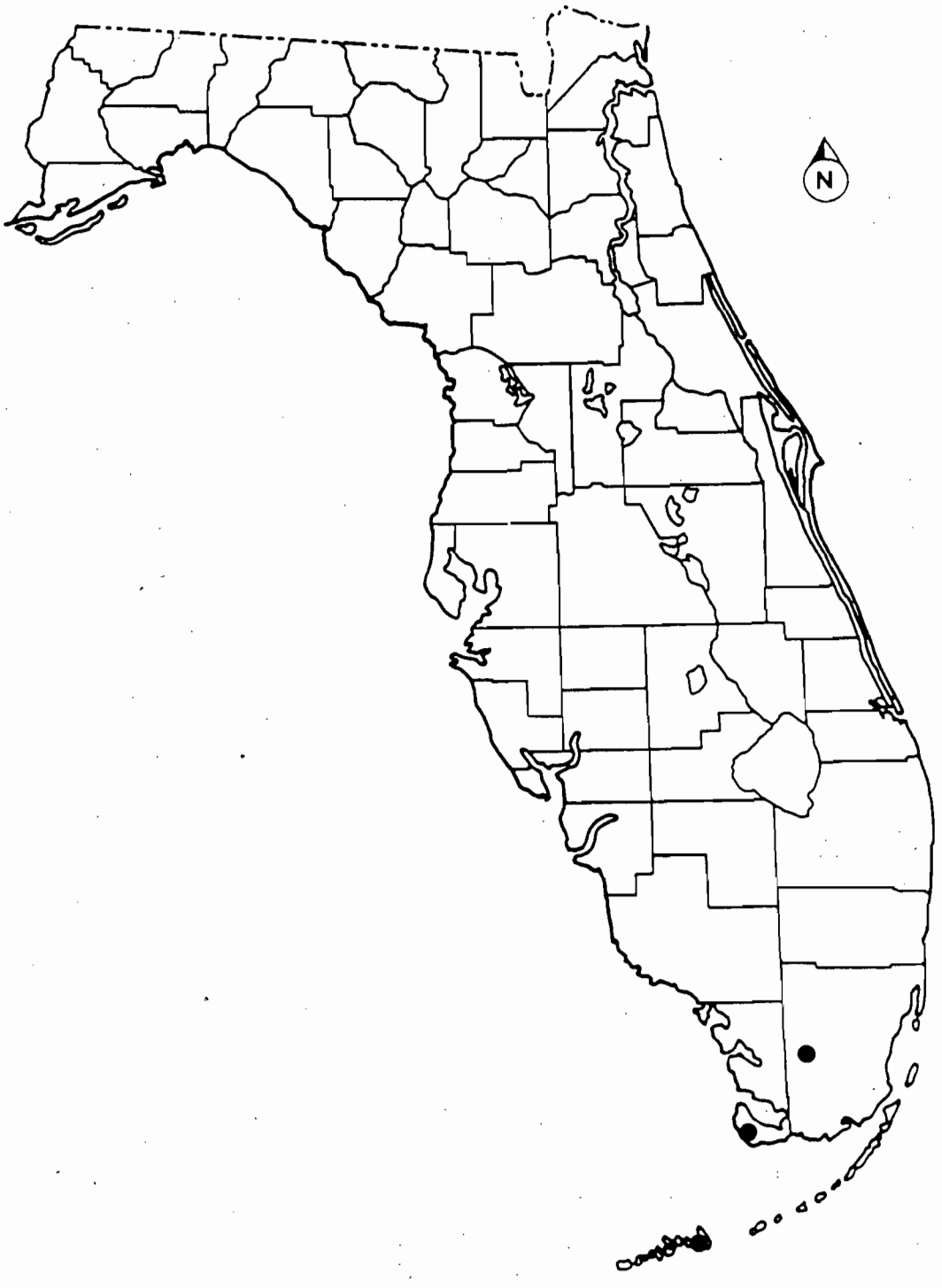

Figure 26. Distribution map of the Garber's spurge (*Euphorbia garberi*) (Adapted from: USFWS, 1988).

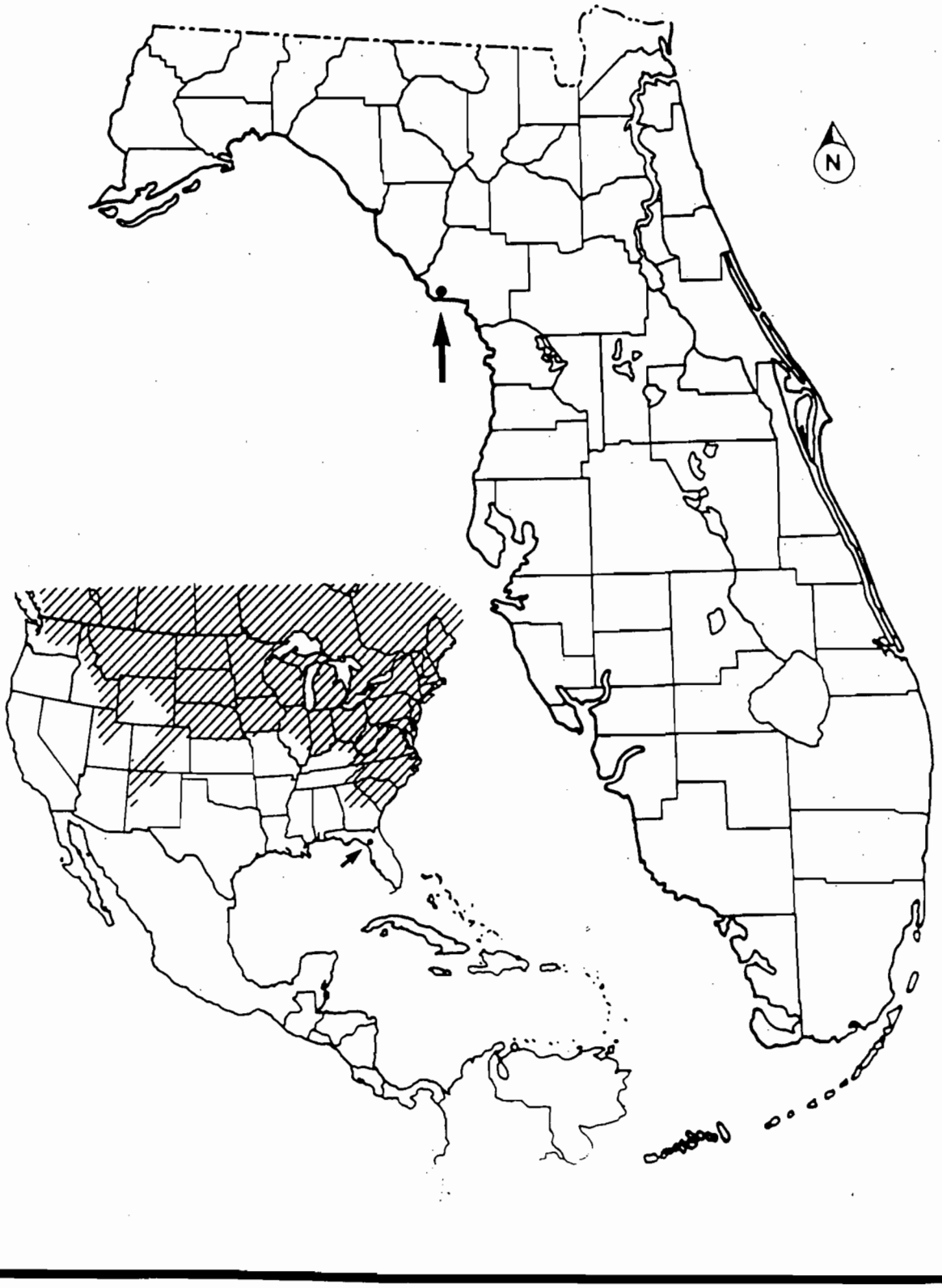

Figure 27. Distribution map of the Florida salt marsh vole (*Microtus pennsylvanicus dukecampbelli*). Hatching represents the species; the dots represent the subspecies (From: Woods, 1992).

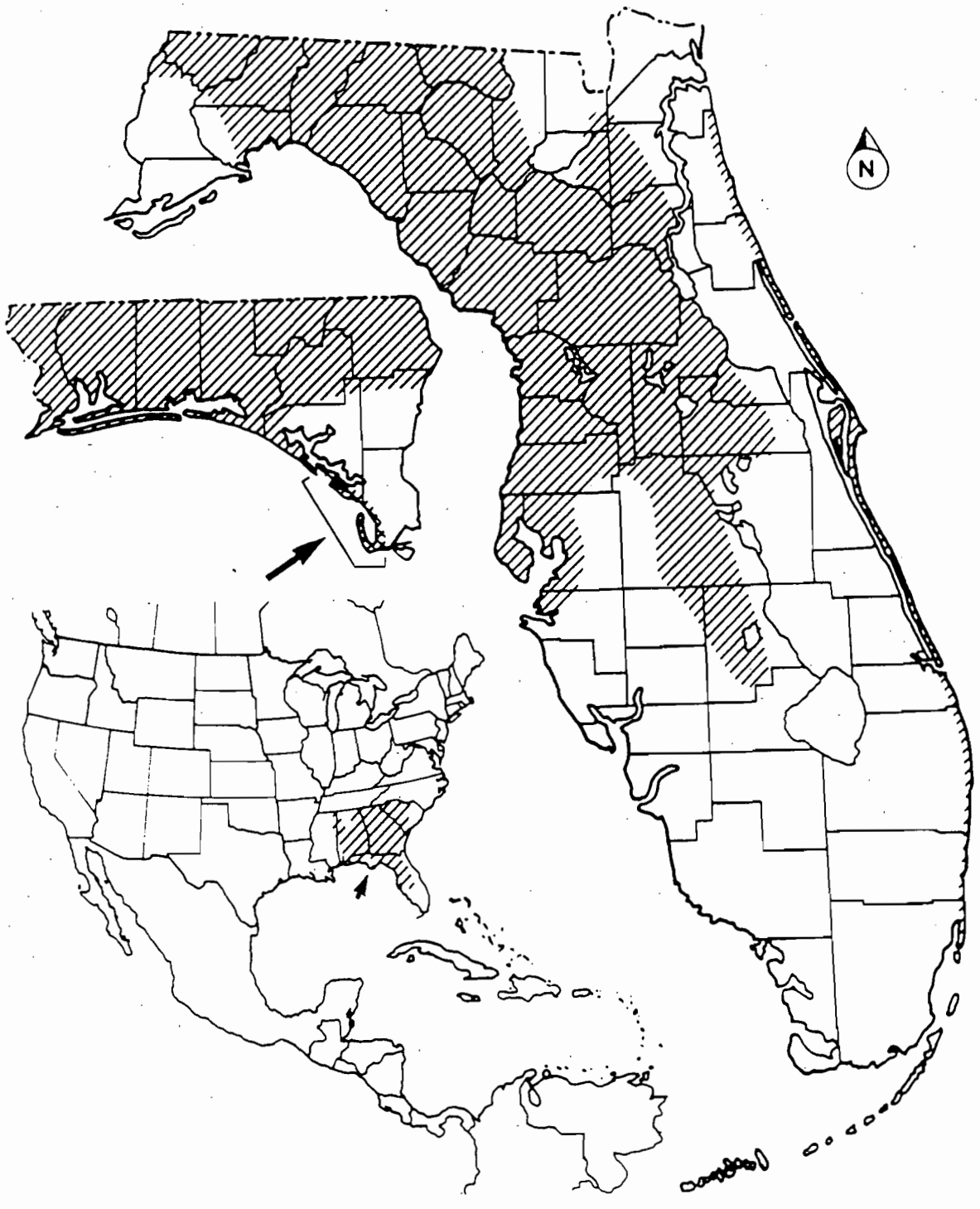

Figure 28. Distribution map of the St. Andrew beach mouse (*Peromyscus polionotus peninsularis*). Hatching represents the species; crosshatching and bracket represent the subspecies (From: James, 1992).

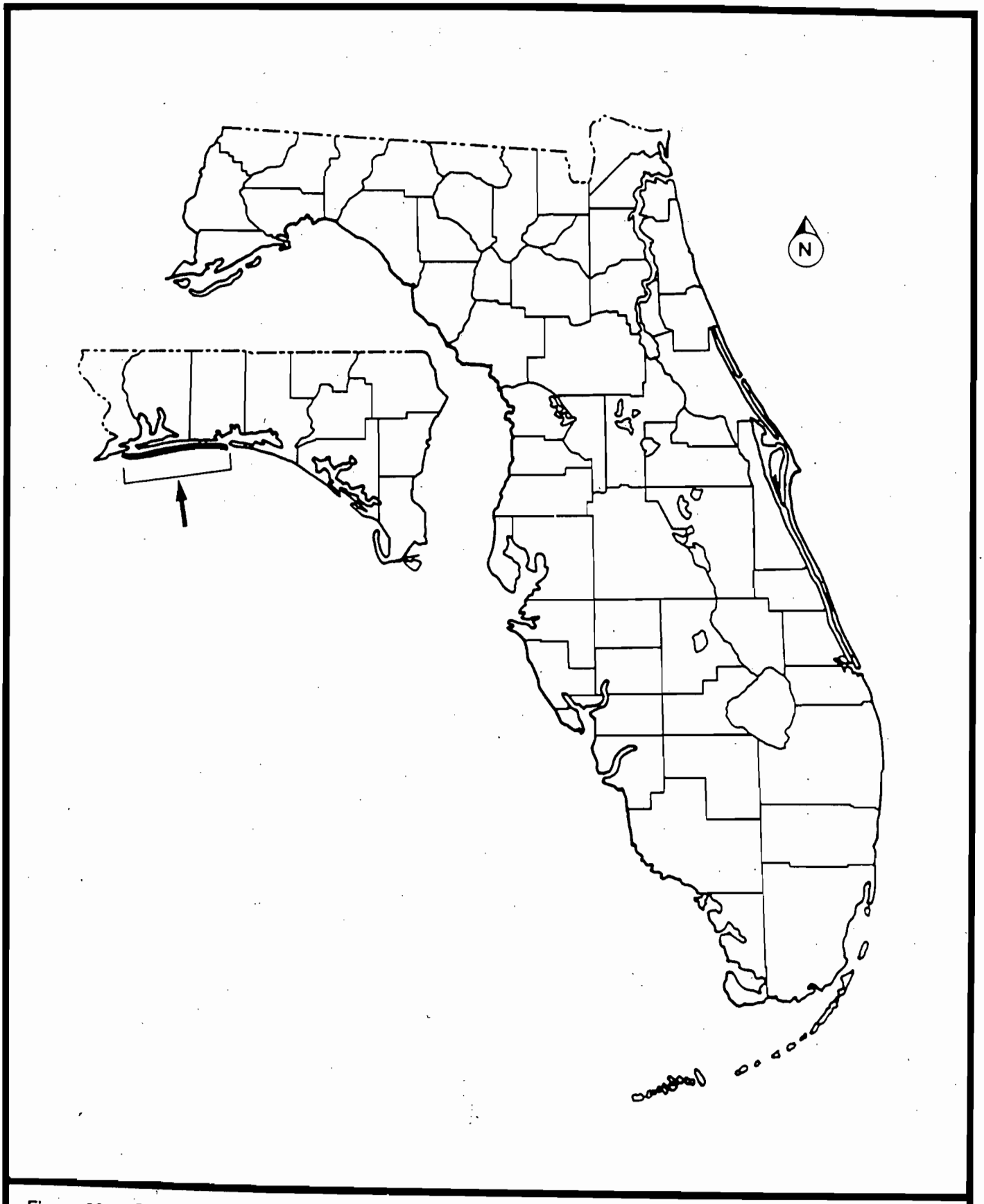

Figure 29. Distribution map of the Santa Rosa beach mouse (*Peromyscus polionotus leucocephalus*) (Adapted from: Gore and Schaefer, 1993).

Southeastern snowy plover (*Charadrius alexandrinus tenuirostris*)

The snowy plover is a small shorebird which breeds on the outer beaches and sand bars of the Gulf coast from Texas to Florida (**Figure 30**). This species requires expansive open, dry, sandy beach for breeding and both dry and tidal sand flats for foraging. Its diet includes small invertebrates from beaches and sand flats. It also nests on open sand, being the only species which uses these open habitats for both feeding and breeding. Increased use of open beach habitat has decreased the total population (Woolfenden, 1978b). The U.S. Fish and Wildlife Service currently lists this subspecies as a candidate for protection in both Florida and Alabama.

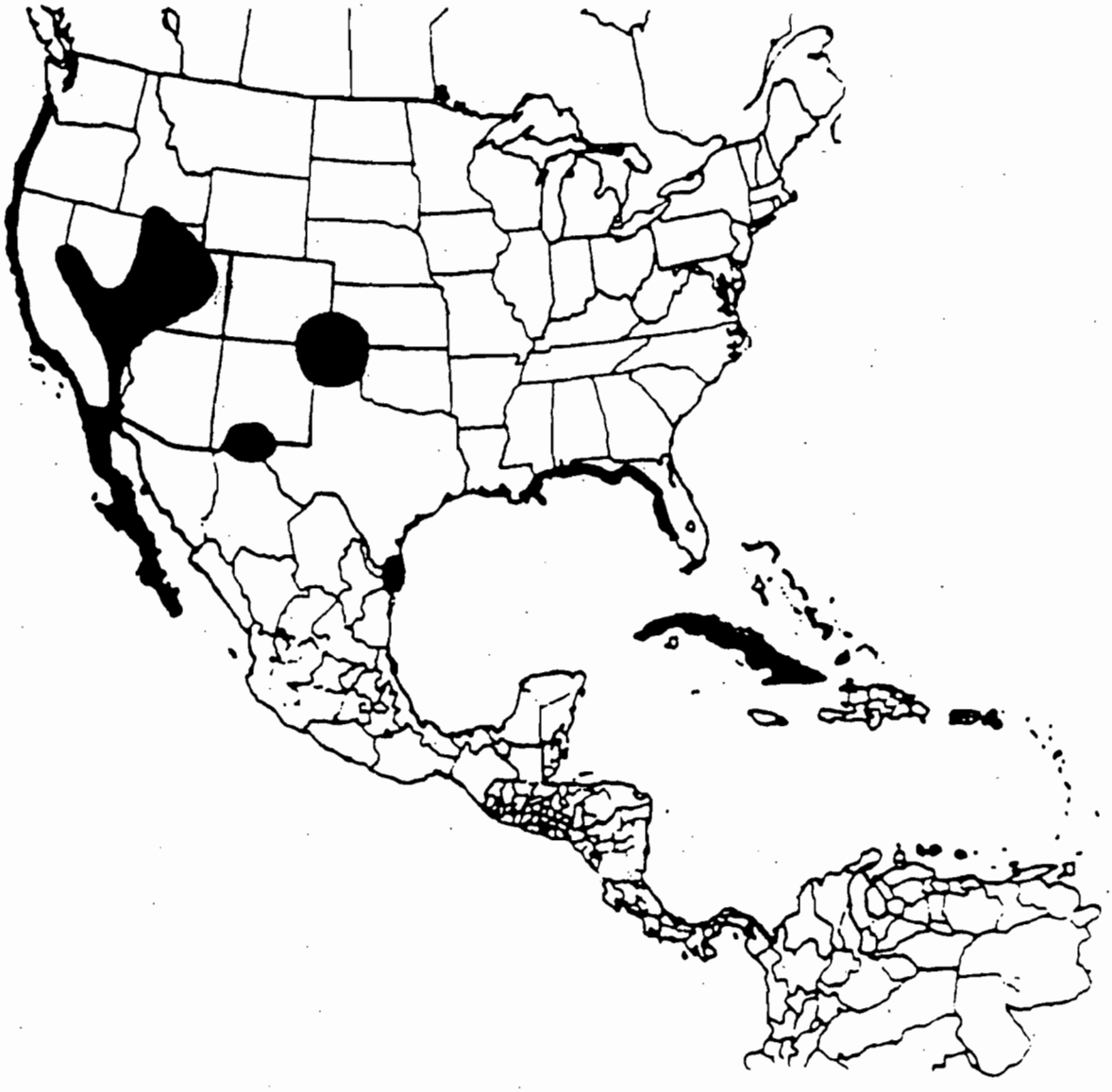

Figure 30. Distribution map of the southeastern snowy plover (*Charadrius alexandrinus tenuirostris*) (From: Woolfenden, 1978b).

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HYDROGEN SULFIDE
DRILLING/ WORKOVER/ COMPLETION
CONTINGENCY PLAN

CHEVRON U.S.A. PRODUCTION COMPANY

OCS-G 5748, #3 WELL
MOBILE BLOCK 863

PREPARED BY:

TOTAL SULFIDE SERVICES, INC.
204 South Long St.
Lafayette, LA 70506
318 233-7026

August 2, 1993

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
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INTRODUCTION

This document has been developed to provide an organized plan of action in the event hydrogen sulfide (H_2S) gas is encountered while drilling, completing or testing Chevron's Mobile Block 863 #3 Well in the Gulf of Mexico. The primary objective is to provide for the safety of well-site personnel and the general public in the vicinity of the well. This plan is intended to supplement existing Chevron and Noble Drilling Co. safety policies and procedures.

The procedures in this Plan shall become effective prior to drilling below 15,500 feet or prior to beginning workover/completion operations and will remain in effect throughout the drilling, completion and testing operations. The locations of the two required Safe Briefing Areas are defined in Section XI - Appendix "A" on page 38 of this manual.

The EMERGENCY PROCEDURES outlined within Section IV of this contingency plan shall be initiated immediately upon the detection of an accidental release of a potentially hazardous volume of hydrogen sulfide.

HYDROGEN SULFIDE
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I. DESIGNATED SAFETY PERSONNEL

The following personnel have been designated as being responsible for the overall H_2S safety program in place on the rig. The Chevron Drilling Representatives listed will be working on a 7 & 7 rotation as will the Total Sulfide Services representatives. The Total Sulfide Services representative works as an advisor and consultant to the Chevron Drilling Representatives and Noble Toolpushers and has primary responsibility only in the absence or incapacitation of all Chevron and Noble Supervisory representatives.

CHEVRON

Two On Site Drilling Representatives working 7 and 7 rotation.

TOTAL SULFIDE SERVICES, INC.

Two On-Site H_2S Safety Consultants working 7 and 7 rotation.

NOBLE DRILLING COMPANY

Contractor Safety and Training Representative

II. NORMAL PROCEDURES

A. RESPONSIBILITIES AND DUTIES

1. CHEVRON DRILLING REPRESENTATIVE

a. See that a log of arrivals and departures is kept up to date at all times of all personnel on the rig.

b. Ensure H_2S Safety Consultant completes rig-up procedures and personnel training before drilling below 15,500 feet or beginning workover/completion activities.

c. Ascertain that the procedures outlined in this plan are followed.

d. Advise the Chevron Drilling Superintendent whenever the procedures as specified herein are not followed.

e. Restrict the number of personnel on the rig to a minimum during any testing operations.

f. Ensure H_2S drills/training are performed.

2. TOOLPUSHER/ DRILLER

a. Ensure that all arrivals and departures of all personnel are properly logged.

b. Ensure that necessary non-H_2S safety equipment is provided on board the rig, and that it is properly inspected and maintained.

c. Ensure that all personnel are thoroughly trained in use of non-H_2S safety equipment and periodic drills are held to maintain an adequate level of proficiency.

3. ALL PERSONNEL (INCLUDING VISITORS):

a. Beards and sideburns may prevent a good face seal on breathing apparatus. Personnel shall not have beards, and sideburns must be trimmed as necessary to assure the seal area on a facepiece will be free of hair. Eye glasses will not be worn inside a facepiece and contact lens may not be worn at any time. Facepiece spectacle kits will be made available to personnel as needed.

b. Receive H_2S safety briefing on location and know the location of the Safe Briefing Areas and escape capsules.

c. Familiarize yourself with the rig's contingency plan.

d. Inspect and practice putting on your breathing apparatus.

e. Know the location of each Safe Briefing Area,and each escape capsule. Keep yourself "wind conscious and be prepared to quickly move upwind and to the Safe Briefing Area, as required, in the event of and H_2S Emergency.

II. NORMAL PROCEDURES

A. RESPONSIBILITIES AND DUTIES (cont'd)

4. H_2S SAFETY CONSULTANT

Daily:

a. Conduct training to ensure all personnel are familiar with the contingency procedures and the operation of emergency equipment.

b. Check pressure on 5 minute SCBA air bottles in work areas to make sure that they are charged to full volume (+/- 10%).

c. Check pressure on cascade air bottles to see that they are capable of recharging SCBA.

d. Check H_2S safety equipment for availability.

e. Check H_2S detectors to ensure they are working properly. Calibrate H_2S detection system once every 24 hours prior to entering an H_2S environment, and every 12 hours once H_2S has been detected.

f. Maintain daily contact with the Chevron Drilling Representative, reporting on the condition, maintenance and readiness of the H_2S safety equipment and drills and/or training for that day.

g. Provide H_2S monitoring at all times during and after drilling below 15,500 ft and during all workover/ completion activities. Assess any flared gases for the presence of H_2S and advise the Chevron Drilling Representative of findings.

h. Ensure that Mud Engineer performs sulfide analysis on flowline mud and/or filtrate sample as applicable; Record results.

Weekly:

i. Perform analysis of air from compressors and cascades to assure Grade D quality or better.

j. Check the following equipment to ensure that it is ready for emergency use:
   1. Respiratory equipment
   2. Resuscitators
   3. Draeger Multi-gas colormetric tube type detectors.
   4. H_2S storage box items (e.g. Draeger Tubes, etc)

k. Provide a report to the Chevron Drilling Representative documenting:
   1. Calibrations performed on the H_2S detectors
   2. Equipment rproperly located and in working order.
   3. Training/retraining personnel.
   4. List of personnel and their company.
   5. Drills including list of personnel participating and summary of actions.

   Provide copies to the Chevron Drilling Representative.

II. NORMAL PROCEDURES

A. RESPONSIBILITIES AND DUTIES (cont'd)

5. MUD ENGINEER:

a. Perform daily sulfide analysis of drilling fluid utilizing Garrett Gas Train Method.

b. Ensure that mud pH is maintained above 10.

C. Ensure that H_2S scavenger (zinc-basic carbonate) is available to treat the fluids system with 2 lbs/bbl.

6. MUD LOGGER:

a. Advise H_2S Safety Consultant of well conditions including increases in drill gas, flow gains, kicks, bottoms-up etc.

b. Advise H_2S Safety Consultant before performing calcium carbide lag-test.

HYDROGEN SULFIDE
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III. DEFINITION OF "OPERATING CONDITIONS"/ GENERAL ACTION/ SMOKING POLICY

A. NORMAL CONDITIONS -- POSSIBLE HAZARDOUS CONDITIONS

1. WARNING SIGNS/SIGNALS: None

2. ALARM: None

3. CHARACTERIZED BY: Drilling operations under control. Routine drilling operations in zones that may contain Hydrogen Sulfide. This condition will be in effect continuously from 15,500 ft. to total depth and/or upon initiating workover/completion operations, unless it is necessary to go to a Condition I, II, or III.

4. GENERAL ACTION: Remain Calm- Be Wind Conscious
   a. Remain alert for a condition change.
   b. Keep all safety equipment and monitors available and functioning properly.
   c. Perform drills for familiarization and proficiency.

5. SMOKING POLICY - SMOKING PERMITTED IN LIVING QUARTERS ONLY.

B. CONDITION I -- ALERT LEVEL-- POTENTIAL DANGER
H_2S PRESENT AT 10 TO 15 PPM

1. WARNING SIGNS: "DANGER--HYDROGEN SULFIDE--H_2S" signs on all sides of rig. Red flags to be displayed on all sides of rig.

2. ALARM: Yellow Lights.

3. CHARACTERIZED BY: Drilling workover/completions operations under control or routine operations in zones that may contain hydrogen sulfide. Poisonous gases my be present in concentrations at or above 10 ppm but less than 15 ppm. Condition I remains in effect until the H_2S concentration falls below 10 ppm or Condition II develops.

4. GENERAL ACTION: Do Not Panic- Utilize Buddy system
   a. ALL NON-ESSENTIAL PERSONNEL
      1. Remain alert for a condition change.
      2. Check safety equipment (including lifevest) for proper function and/or availability. No welding or open fires without permission of Chevron Drilling Representative. Follow instructions of supervisors.
   b. ESSENTIAL PERSONNEL (As Designated on Station Bill)
      1. Remain alert for condition change. NO SMOKING.
      2. Check safety equipment (including lifevest) for proper function and/or availability. No welding or open fires without permission of the Chevron Drilling Representative.
      3. Follow instructions of the Chevron Drilling Representative, Toolpusher and the TSSI H_2S Safety Consultant.
      4. The Chevron Drilling Rep. shall ensure notification of all vessels and helicopters in the area of any emergency condition.

5. SMOKING POLICY - NO SMOKING AT ANY TIME.

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III. DEFINITION OF "OPERATING CONDITIONS"/ GENERAL ACTIONS/ SMOKING POLICY

C. CONDITION II – WARNING LEVEL– POTENTIAL DANGER
H_2S PRESENT AT 15 TO 50 PPM

1. WARNING SIGNS: "DANGER--HYDROGEN SULFIDE--H_2S" signs on all sides of rig. 2' X 3' red flags to be displayed on all sided of rig. MY-6 Flag System.

2. ALARM: Red Lights and Intermittent (YELP) Audible Tone.

3. CHARACTERIZED BY: Critical well operations or well control problems. Poisonous gases may be present in concentrations at or above 15 ppm but less than 50 ppm. Condition I I remains in effect until the H_2S concentration falls below 15 ppm or Condition III develops.

4. GENERAL ACTION: Remain Alert, Move Upwind, & Utilize Buddy system

   a. **ALL NON-ESSENTIAL PERSONNEL**

      1. **All persons working outside living quarters** will utilize a 30 minute self-containing breathing apparatus (open cylinder valve then put on facepiece) and proceed with lifevest to recreation room and then the designated safe briefing area, if required.
         Note: In the event it becomes necessary to continue to use the self-contained breathing apparatus, every effort should be made to utilize the cascade/manifold system in the briefing area in order to conserve SCBA cylinder air.

         All persons inside the living quarters will put on their assigned 30 minute self-contained breathing apparatus (do not open cylinder valve or put on facepiece) and proceed with lifevest to recreation room and then the designated safe briefing area, if required.
         Note: In the event it becomes necessary to use the self-contained breathing apparatus, every effort should be made to utilize the cascade/manifold system in the briefing area in order to conserve SCBA cylinder air.

      2. Remain alert for a condition change and follow instructions from supervisor

   b. **ESSENTIAL PERSONNEL (As Designated on Station Bill)**

      1. Don self-contained breathing apparatus (open cylinder valve then put on facepiece) and report to your assigned station.
      2. All personnel will follow instructions of the Chevron Drilling Representative, Toolpusher, and TSSI H_2S Safety Rep.
      3. The Chevron Drilling Representative shall initiate H_2S emergency actions as necessary to correct or control the situation and ensure notification of all vessels (commercial and pleasure) and helicopters in area of emergency condition.

5. SMOKING POLICY - NO SMOKING AT ANY TIME.

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III. DEFINITION OF "OPERATING CONDITIONS"/GENERAL ACTIONS/SMOKING POLICY

D. CONDITION III– DANGER LEVEL– EXTREME DANGER
H_2S PRESENT AT 50 PPM OR ABOVE

1. WARNING SIGNS: "DANGER--HYDROGEN SULFIDE--H_2S" signs on all sides of rig. 2'X 3' Red flags to be displayed on all sides of rig. MY-6 Flag System.

2. ALARM: Yellow & Red Lights and Constant (SIREN) Audible Tone.

3. CHARACTERIZED BY: H_2S concentration greater than 50 ppm present and/or loss of well control.

4. GENERAL ACTION: Walk, Do not run-- Hold Breath, Move Upwind & Utilize Buddy System.

   a. **All persons** on the rig will immediately don a work/rescue or work/escape self-contained breathing apparatus (open valve then put on facepiece). Those in distress should be assisted by qualified personnel.
   b. Proceed to the designated safe briefing area with lifevest unless they are specifically assigned to correct or control the situation. Connect hoseline as soon as possible to manifold/cascade system in order to conserve SCBA cylinder air.
   c. All personnel will follow the instructions of the Chevron Drilling Representative, Toolpusher, and H_2S Safety Consultant.
   d. The Chevron Drilling Representative will ensure that all vessels and helicopters in the area are advised of the situation. Advise boat captain(s) to be prepared to evacuate personnel as directed.
   e. The Chevron Drilling Representative shall implement "H_2S EMERGENCY PROCEDURES" and evacuate all non-essential and essential personnel if deemed necessary.
   f. The Senior Toolpusher in conjunction with the Chevron Drilling Representative will be responsible for igniting the well in the event of severe well control problems, and will conduct all necessary operations with an absolute minimum of personnel. Detailed procedures for igniting the well are contained within section IV; D, page 20.

      If the well is ignited the burning hydrogen sulfide will be converted to sulphur dioxide which is also poisonous. DO NOT ASSUME THAT THE AREA IS SAFE AFTER THE WELL IS IGNITED.

5. SMOKING POLICY - NO SMOKING AT ANY TIME

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IV. H_2S EMERGENCY PROCEDURES

A. RESPONSIBILITIES AND DUTIES:

1. CHEVRON DRILLING REPRESENTATIVE:

Condition I - Yellow flashing lights.
H_2S concentration: 10-15 ppm.

1. Ensure that the alarm area indicated by the fixed H_2S monitor is checked and verified with a portable H_2S Detector.
2. Advise toolpusher/driller of remedial actions as needed. If flowline mud is the source of H_2S gas, drilling operations should not proceed until the well is circulated, and returns are free of H_2S.
3. Ensure that non-essential personnel proceed to the safe briefing area **(applies only to Condition II and III below)**
4. Ensure notification of all vessels (commercial and pleasure) and helicopters in area of emergency condition.
5. Notify the Chevron dispatcher to assure continuous radio watch.
6. Notify the Chevron Drilling Superintendent.

Condition II - Intermittent audible alarm and red Flashing lights.
H_2S concentration: 15-50 ppm

1-6. As in Condition I. Non-essential personnel proceed to recreation room or Safe Briefing Area.

7. Don your SCBA mask; Utilize "Buddy System"; Proceed to assigned station.
8. Ensure that all personnel in the work areas are in SCBA..
9. Ensure that the red warning flags and signs are displayed.
10. Notify the Chevron Drilling Superintendent of H_2S conditions and alert Minerals Management Service, U.S. Coast Guard and other applicable agencies that an H_2S condition exists. Refer to pages 34- 37 for appropriate phone numbers.

Condition III - Continuous audible alarm and yellow & red flashing lights.
H_2S concentration above 50 ppm or loss of well control.

1-10. As in Conditions I and II.

11. Consult with H_2S Safety Consultant and initiate H_2S EMERGENCY EVACUATION PLAN (Page18) when deemed necessary to protect personnel and the public.
12. Advise Captain(s) of support vessel(s) to proceed to a safe upwind area and to assist in evacuating personnel. Instruct Captain(s) to ensure that vessel(s) crew and passengers don air masks before approaching rig. Advise any other watercraft in the general area to remain upwind of the drilling rig.
13. Be prepared to assist Senior Toolpusher with igniting the well, if deemed necessary.

IV. H_2S EMERGENCY PROCEDURES

A. RESPONSIBLITIES AND DUTIES: (cont'd)

2. TOOLPUSHER:

Condition I - Yellow flashing lights.
H_2S concentration: 10-15 ppm.

1. Confer with the Chevron Drilling Representative and direct remedial action to suppress the H_2S and control the well.
2. Ensure that explosion-proof bug blowers (rig fans) are positioned to disperse H_2S away from workers performing their job tasks.
3. Ensure that personnel at the safe briefing area are instructed on emergency actions required.

Condition II - Intermittent audible alarm and red flashing lights.
H_2S concentration: 15-50 ppm.

1-3. As in Condition I.

4. Don your SCBA mask; Utilize Buddy System; Proceed to assigned station.
5. Ensure that the appropriate safety and emergency procedures are observed by all personnel.

Condition III - Continuous audible alarm and yellow & red flashing lights.
H_2S concentration above 50 ppm or loss of well control.

1-5. As in Conditions I and II.

6. Ensure that all persons or accounted for and provide emergency assistance as necessary.
7. Be prepared to assist with evacuation if order is issued.
8. The Senior Toolpusher will be responsible for igniting the well in the event of severe well control problems. This decision should be made only as a last resort in situations where it is clear that:
   a. Human life is endangered and/or
   b. There is no hope of controlling the well.

   He will confer with the Chevron Drilling Representative and H_2S Safety Consultant and will secure the approval of a higher Chevron/Noble authority prior to igniting the well, if at all possible. Detailed procedures for igniting well area are contained in Section IV, D, page 20.

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IV. H_2S EMERGENCY PROCEDURES

A. RESPONSIBLITIES AND DUTIES: (cont'd)

3. DRILLER:

Condition I - Yellow flashing lights.
H_2S concentration: 10-15 ppm.

1. Direct remedial action to suppress the H_2S and control the well. If flowline mud is the source of H_2S gas, drilling operations should not proceed until the well is circulated, and returns are free of H_2S.
2. Ensure that personnel in the work area are instructed on emergency actions required.
3. Check safety equipment for readiness.

Condition II - Intermittent audible alarm and red flashing lights.
H_2S concentration: 15-50 ppm.

1-3. As in Condition I.

4. Don your SCBA mask; Utilize "Buddy System"; Proceed to assigned station.
5. Shut down the mud pumps, check for flow and be ready to close BOP if needed. Rotate drill string as necessary to prevent sticking.
6. Await further instructions from toolpusher or the Chevron Drilling Representative.

Condition III - Continuous audible alarm and yellow & red flashing lights.
H_2S concentration above 50 ppm or loss of well control.

1-6. As in Conditions I and II.

7. Assist toolpusher and/or any other designated person in determining if all persons are accounted for and provide assistance as required.
8. Be prepared to secure well, if possible, and evacuate rig if necessary.

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IV. H_2S EMERGENCY PROCEDURES

A. RESPONSIBLITIES AND DUTIES: (cont'd)

4. RIG CONTRACTOR SAFETY REPRESENTATIVE

Condition I - Yellow flashing lights.
H_2S concentration: 10-15 ppm.

1. Don SCBA - It may not be necessary to open cylinder valve or put on facepiece.
2. Proceed to the recreation Room and then to the Designated Safe Briefing Area with Muster List. Ensure that all non-essential personnel are at Safe Briefing Area with 30 minute SCBA units and lifevests.
3. Activate search and rescue teams as deemed necessary.
4. Check safety equipment and lifeboats for readiness.
5. Check personnel SCBA cylinder pressures and initiate recharging of 30 minute SCBA cylinders with 1500 p.s.i. or less.

Condition II - Intermittent audible alarm and red flashing lights.
H_2S concentration: 15-50 ppm.

1-5. As in Condition I.

6. Plug in hoselines to SCBA units and put on facepieces if deemed necessary, i.e. unfavorable wind conditions. Ensure all personnel in briefing area do same.

Condition III - Continuous audible alarm and yellow & red flashing lights.
H_2S concentrations above 50 ppm or loss of well control.

1-5. As in Condition I and II.

6. Ensure that all personnel in safe briefing area plug into hoseline system and put on SCBA facepiece.
7. Continue to account for personnel arriving in briefing area.
8. If evacuation order is given, ensure that all non-essential and essential personnel are accounted for before intitiating evacuation to support vessel(s) or lifeboats.
9. Supervise implementation of H_2S Emergency Evacuation Procedure as needed.

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IV. H_2S EMERGENCY PROCEDURES

A. RESPONSIBLITIES AND DUTIES: (cont'd)

5. H_2S SAFETY CONSULTANT:

Condition I - Yellow flashing lights.
H_2S concentration: 10-15 ppm.

1. Advise personnel of Emergency Condition over PA. system and designate appropriate Safe Briefing Area.
2. Don SCBA - Verify H_2S source(s) and concentration(s) in areas indicated by the fixed H_2S monitor. Utilize "Buddy System". Advise the Chevron Drilling Representative and Toolpusher of findings.
3. If H_2S is flared, check for SO_2 inboard of the flare and in downwind areas as necessary. NOTE: If gas with unknown H_2S is flared, conduct test on flared gas to verify presence or absence of H_2S.
4. Ensure that explosion-proof bug blowers are positioned to disperse H_2S away from workers performing their job tasks.
5. Ensure that personnel at the safe briefing area are instructed on emergency actions required.
6. Display the warning signs and red flags on all sides of rig.
7. If the cascade system needs to be recharged from the upwind compressor station, maintain continuous surveillance with a portable H_2S detector during recharging.
8. Ensure that Mud Engineer performs sulfide analysis of flowline mud filtrate sample and record results.

Condition II - Intermittent audible alarm and red flashing lights.
H_2S concentration: 15-50 ppm.

1-8. As in Condition I.

9. Ensure that all personnel in the work areas are in SCBA..
10. Initiate the MY-6 flag system display.

Condition III - Continuous audible alarm and yellow & red flashing lights.
H_2S concentration above 50 ppm or loss of well control.

1-10. As in Condition I and II.

11. Ensure that all persons are accounted for and in SCBA units. Provide emergency assistance as necessary.

IV. H_2S EMERGENCY PROCEDURES

A. RESPONSIBLITIES AND DUTIES: (cont'd)

6. MUD ENGINEER:

Condition I - Yellow flashing lights.
H_2S concentration: 10-15 ppm.

1. Don SCBA - Obtain flowline mud sample and perform a sulfide check on the flowline mud filtrate. Utilize "Buddy System".
2. Take steps to determine the source and cause of the H_2S release and actions necessary to suppress the influx. Caustic and H_2S scavenger shall be added to the mud as necessary to maintain pH above 10 and to minimize soluable sulfide content.
3. Keep SCBA unit readily available at all times.

Condition II - Intermittent audible alarm and red flashing lights.
H_2S concentration: 15-50 ppm.

1-3. As in Condition I.

4. Don SCBA at all times when in work areas.

Condition III - Continuous audible alarm and yellow & red flashing lights.
H_2S concentration above 50 ppm or loss of well control.

1-3. As in Condition I and II.

4. SCBA to be donned at all times.
5. Continue to perform sulfide analysis as deemed necessary, and direct chemical treatment to suppress H_2S.
6. Be prepared to evacuate rig if order is issued.

IV. H_2S EMERGENCY PROCEDURES

A. RESPONSIBLITIES AND DUTIES: (cont

7. MUDLOGGER(S):

Condition I - Yellow flashing lights.
H_2S concentration: 10-15 ppm.

1. Remain in logging unit. Check SCBA for readiness and check SCBA communications device.
2. Continue to monitor well conditions and keep Chevron Drilling Representative, Toolpusher, Driller and H_2S Safety Consultant advised of conditions.
3. Utilize "Buddy System" and breathing equipment when obtaining mud samples.

Condition II - Intermittent audible alarm and red flashing lights.
H_2S concentration: 15-50 ppm.

1-3. As in Condition I.

4. Don SCBA; Activate SCBA communication device.
5. Remain alert

Condition III- Continuous audible alarm and yellow & red flashing lights.
H_2S concentration above 50 ppm or loss of well control.

1-5. As in Condition II.

6. Be prepared to shut-down mudlogging unit and evacuate rig if order is issued.

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

IV. H_2S EMERGENCY PROCEDURES

A. RESPONSIBLITIES AND DUTIES: (cont'd)

8. CAPTAIN(S) OF ATTENDING MARINE VESSEL(S):

Condition I - Yellow flashing lights.
H_2S concentration: 10-15 ppm.

1. Ensure that vessel and all other watercraft in area are in an upwind position. Use radio and/or bullhorn to alert other watercraft to stay clear of rig.
2. Be prepared to approach rig and take on passengers.
3. Monitor radio transmissions for further instructions.

Condition II - Continuous audible alarm and red flashing lights.
H_2S concentration: 15-50 ppm.

1-3. As in Condition I.

4. Activate vessel breathing air cascade system and don SCBA units when deemed necessary. Connect SCBA to hoseline; Do Not Utilize SCBA Bottle unless necessary.

Condition III - Continuous audible alarm and yellow & red flashing lights.
H_2S concentration above 50 ppm or loss of well control.

1-4. As in Condition I and II.

5. SCBA to be donned at all times by all persons aboard vessel unless it is clear that vessel is safely upwind and out of danger.
6. If H_2S emergency Evacuation order is given, approach rig and take on departing personnel. Use H_2S detector to assess H_2S contamination during approach. All personnel onboard vessel(s) must have SCBA donned and activated before approaching rig.
7. Once all evacuated personnel have been accounted for, navigate vessel upwind and away from rig to a distance considered safe (300 yards minimum). Stand-by to receive personnel departing rig in lifeboats.

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

IV. H_2S EMERGENCY PROCEDURES

A. RESPONSIBLITIES AND DUTIES: (cont'd)

9. GENERAL PERSONNEL AND VISITORS:

Condition I - Yellow flashing lights.
H_2S concentration: 10-15 ppm.

1. Be alert for a change in condition.
2. Check your safety equipment for readiness.
3. During an emergency, use the "buddy" system to prevent anyone from entering or being left in a hazardous area alone, even wearing SCBA.
4. If not specifically designated to control the well, be prepared to go to the recreation room and then to the appropriate Safe Briefing Area with 30-minute SCBA and lifevest. Be prepared to utilize breathing apparatus in the event of Condition II developement.
5. Report any indications of H_2S to those in the area and to a supervisor.
6. No smoking after alarm has been activated.

Note: SCBA's will be worn as deemed necessary by supervisory personnel.

Condition II - Continuous audible alarm and red flashing lights.
H_2S Concentration: 15-50 ppm.

1-6. As in Condition I.

7. Don your SCBA mask. Remain in recreation room or Safe Briefing Area and await instructions. If instructed to report to Safe Briefing Area utilize the cascade/manifold system as deemed necessary by supervisory personnel.

Condition III - Continuous audible alarm and yellow & red flashing lights.
H_2S concentration above 50 ppm or loss of well control.

1-7. As in Condition I and II

8. Provide assistance to anyone who may be injured or overcome by toxic gas. Personnel shall ensure that their breathing apparatus is properly fitted and operational before entering H_2S contaminated area.

IV. H_2S EMERGENCY PROCEDURES

B. H_2S Emergency Evacuation Plan

In the event that it becomes necessary to evacuate the rig due to a hydrogen sulfide emergency the Noble Drilling Company Evacuation Plan shall be utilized in conjunction with special procedures to accommodate the use of SCBAs (Self-Contained Breathing Apparatus). Specific training sessions shall be presented to allow all personnel to become familiar with the use of SCBAs during an evacuation. Personnel to remain aboard during a partial evacuation are detailed in Appendix "D", page 57.

Evacuation of personnel from a drilling rig during an H_2S Emergency will be a decision made by the Noble Drilling Co. Senior Toolpusher after consultation with the Chevron Drilling Representative and H_2S Safety Consultant. An effort should be made to contact the Chevron Drilling Superintendent when possible. The Chevron Drilling Representative should ensure that an attending vessel is dispatched toward the rig in the event a sustained release of H_2S occurs. In the event it becomes necessary to evacuate the rig, and no attending vessel is readily available, then the lifeboat(s) will be utilized to de-board personnel. Whenever an attending vessel is available it will be utilized as the primary means to evacuate personnel. Each attending vessel and each lifeboat should be equipped with at least one (1) flare pistol with six (6) flare shells to accommodate igniting the well, if deemed necessary by the Senior Toolpusher and Chevron Drilling Representative.

Every effort possible should be made to limit total rig personnel to 52 persons or less, since this is the maximum normal compliment of the drilling rig. If the rig population exceeds 52 persons, provisions shall be made for living quarters, breathing apparatus and related safety equipment and Hydrogen Sulfide Safety Training as described in Section V, page 21.

IV. H_2S EMERGENCY PROCEDURES

C. HELICOPTER LANDING/TAKEOFF PROCEDURES:

DISCUSSION

Helicopter flights to and from the rig will be strictly limited and are expected only on a non-routine basis, if at all. Helicopter pilots are required to establish radio contact prior to arriving at the rig. Helicopter landings will be prohibited if H_2S contamination is present in the atmosphere in concentrations exceeding 15 ppm and/or SO_2 contaminations is present exceeding 2 ppm and/or if combustible gases are present in concentrations exceeding 20% of the lower flammable limit. Exceptions will be made only in cases of extreme emergency, and only after flight crews are equipped and trained in the use of proper respiratory protection.

1. HELICOPTER LANDING PROCEDURE DURING CONDITION II AND III H_2S EMERGENCIES:

   a. Upon establishing contact, the Chevron Drilling Representative, Toolpusher, or other designated person will advise pilot of gas conditions, and verify that flight crew has proper respiratory protection.

   b. H_2S Safety Consultant will survey and monitor gas conditions (H_2S, SO_2, CH_4, etc.) in heliport area and advise Chevron Drilling Representative and Toolpusher.

   c. Pilot will be advised to circle rig or platform from a distance no closer than 1 mile and to approach from upwind direction. Chevron Drilling Representative, Toolpusher or other designated person will be responsible for advising pilot of approach directions.

   d. Pilot will be instructed to don protective breathing apparatus if deemed necessary by Chevron Drilling Representative. This decision should be made in conjunction with H_2S Safety Consultant.

      NOTE: Radio contact may not be possible once breathing apparatus are donned.

   e. Pilot will approach rig from upwind direction and land only after establishing visual contact with Chevron Drilling Representative, Toolpusher, Contractor Safety Representative or H_2S Safety Consultant.

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

IV. H_2S EMERGENCY PROCEDURES

D. PROCEDURES FOR IGNITING THE WELL:

A. RESPONSIBILITY FOR DECISION

In the event of severe well control problems, the final decision to ignite the well is the responsibility of the Senior Toolpusher. This decision should be made only as a LAST RESORT in situations where it is clear that:

1) Human Life is Endangered or
2) There is no hope of controlling the blowout under the prevailing conditions at the well site.

The Senior Toolpusher should make such a decision ONLY after consultation with the ranking Chevron U.S.A. Representative aboard the rig, if time and circumstances permit. He must not delay his decision, however, if human life or the safety of the rig is threatened.

IN ALL CASES, AN ATTEMPT SHOULD BE MADE TO NOTIFY THE Chevron, U.S.A. DRILLING SUPERINTENDENT AND THE RIG CONTRACTOR'S SUPERINTENDENT AS SOON AS POSSIBLE AND PRIOR TO IGNITING THE WELL, IF POSSIBLE.

If the well is ignited, the burning H_2S will be converted to SO_2, which is also highly toxic and heavier than air. Hence, do not assume the area is safe after the well is ignited.

B. METHODS OF IGNITION FOR LOSS OF ALL WELL CONTROL

1. The primary method of igniting the well will be a 25mm flare gun, which has a range of approximately 500 feet. Always ignite the well from upwind and do not approach the well any closer than is necessary. BEFORE FIRING the flare gun, or igniting flammable material, check the atmosphere at your location for combustible gases with an explosimeter.

2. If the above method of ignition fails, or well conditions are such that a safer or better method is apparent, then a alternate method should be used.

V. TRAINING AND DRILLS

A. TRAINING

Prior to drilling below 15,500 feet or initiating workover/completions activities all on-site personnel will receive an H_2S Safety Awareness Seminar at which time they will receive a copy of the "Operations Training Program", and will be required to sign a training roster. Any personnel or visitors arriving on the platform during periods when this plan is in effect will receive training upon arrival. On successive wells, all personnel not previously trained will receive the Awareness Seminar. Those trained previously will be evaluated for knowledge and proficiency by the H_2S Safety Representative. All personnel will be re-trained yearly. **Chevron U.S.A. personnel shall have met the Chevron Respiratory Protection Program guidelines prior to proceeding with Hydrogen Sulfide Safety/Self Contained Breathing Apparatus training.** The H_2S Safety Awareness Seminar will be performed by the H_2S Safety Consultant on-site and shall include the following information:

1. Properties and hazards of H_2S and SO_2.
2. Proper use, maintenance and location of protective breathing equipment in accordance with ANSI Z88.2.
3. Restrictions and corrective measures concerning beards, spectacles and contact lens in accordance with ANSI Z88.2.
4. H_2S detection equipment and warning alarms.
5. Location and purposes of safe briefing areas.
6. Location and meaning of warning system.
7. Evacuation procedures.
8. Ventilation equipment.
9. Emergency rescue and first aid applicable to H_2S victims.
10. Operating Conditions/ Emergency Actions/ Smoking Policies.
11. Use of Personal Flotation Devices (PFDs) in conjunction with Self-Contained Breathing Apparatus (SCBAs).

In addition to the basic training package, prior to initiating well test activities, all personnel on the rig during testing operations shall attend a special safety meeting given by the H_2S Safety Consultant specifying:

1. Assignment and instruction in use of SCBA.
2. Location of Safe Briefing Areas.
3. Location of breathing equipment and cascade systems.
4. Emergency condition procedures.
5. Need for minimum personnel outdoors.
6. Evacuation procedures.
7. "No Smoking " rules.
8. Issuance of spot checks as necessary.
9. Safety aspects of the well test routine and emergency operating procedures.

NOTE: Maintain a log of all H_2S safety equipment assigned and issued as well as the names of all personnel who attend the special safety meeting(s).

V. TRAINING AND DRILLS

B. DRILLS:

Prior to drilling below 15,500 or initiating workover/completion operations on all wells, a drill with breathing equipment shall be performed with all personnel on the platform participating. The purpose of these drills is to familiarize all personnel with the operation of the breathing equipment and maintain proficiency in its use. It is essential that every person on board the platform be able to operate the breathing equipment. In addition, personnel should understand and be able to operate other emergency H_2S safety equipment.

1. Primary weekly drills will be conducted for each person at the facility within 24 hours after duty begins and at least once during every subsequent 7-day period. These drills will coincide with the regularly scheduled contract rig crew change and will be conducted within 24 hours after the beginning ot the newly arriving rig crew's first working tour. All personnel aboard the rig during the primary weekly drill will participate.

   The drill will be initiated by the H_2S Safety Consultant in coordination with the Chevron Drilling Representative. Drill procedures are as follows:

   a) The H_2S Safety Consultant should start the drill by manually setting off the H_2S alarms to indicate a Condition I, II, or III emergency.

   b) All personnel should respond as specified under Section IV. H_2S Emergency Procedures, in accordance with the condition indicated. Rescue team members should respond as specifed under Section VII.

   c) The Toolpusher, H_2S Safety Consultant, and Chevron Driling Representative should simulate actions they would undertake in an actual H_2S emergency.

   d) The H_2S Safety Consultant shall document all actions taken during the drill and report any deficiencies in equipment or procedures to the Chevron Drilling Representative. A critique of the drill shall be submitted in the weekly report.

2. Additional drills that may become necessary due to arrival of small numbers of regularly assigned personnel and/or visitors who have had training previously will be conducted by the H_2S Safety Consultant within 24 hours after arrival. Content of such drills will be determined by the H_2S Safety Consultant. Participation in such drills may be limited to only those individuals arriving withing the last 24 hours.

   Untrained personnel or visitors who arrive are required to receive training as defined under Section V; A, page 21. The practical aspects of such training satisfies the requirments of proficiency drills, therefore no additional drill, as described above is required unless deemed necessary by the H_2S Safety Consultant.

HYDROGEN SULFIDE
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VI. SPECIAL CONSIDERATIONS

A. DRILL STRING TRIPS OR FISHING OPERATIONS:

Every effort shall be made to pull a dry drill string while maintaining well control. If it is necessary to pull the drill string wet after penetration of H_2S-bearing zones, increased monitoring of the working area shall be provided and protective breathing apparatus shall be worn if an H_2S concentration of 15 ppm is detected.

B. CIRCULATING BOTTOMS-UP FROM A DRILLING BREAK, CORING OPERATIONS, CEMENTING OPERATIONS, LOGGING OPERATIONS OR WELL CIRCULATION WHILE NOT DRILLING:

After penetration of an H_2S-bearing zone, increased monitoring of the working area shall be provided and protective-breathing apparatus shall be worn if an H_2S concentration of 15 ppm is detected.

C. GAS-CUT OR WELL KICK FROM H_2S ZONES AND/OR FLARING GAS:

1. Protective-breathing apparatus shall be worn if an H_2S concentration of 15 ppm is detected. Should a decision be made to circulate out a kick, protective-breathing apparatus shall be worn prior to and subsequent to bottoms-up and at any time during an extended kill operation that the concentration of H_2S reaches 15 ppm.

2. When flaring gas with unknown H_2S content, the H_2S Safety Consultant shall frequently test the flared gas to determine the presence or absence of H_2S.

3. When flaring gas that contains H_2S, the H_2s Safety Consultant shall frequently test the flared gas to determine H_2S levels. H_2S Safety Consultant will also frequently monitor all downwind areas for H_2S and Sulfur Dioxide (SO_2). presence with portable detector.

4. If possible only flarelines located downwind of the facility should be used to burn H_2S laden gas.

D. CORING IN AN H_2S ENVIRONMENT:

1. Coring operations shall be performed with the minimum number of personnel in the immediate vicinity of the rig floor.

2. Prior to initiation of the operation, a special safety meeting shall be conducted for all personnel who will be on the rig during the coring operations, with special emphasis on the use of personal protective-breathing apparatus, first aid procedures, evacuation procedures and the H_2S Contingency Plan.

3. The H_2S Safety Consultant will initiate increased H_2S monitoring utilizing portable detectors. Drill pipe and core barrel connections will be checked 20 stands in advance of core barrel.

4. Rig fans will be utilized to disperse H_2S away from workers.

5. Breathing equipment will be worn and used by all persons on the rig floor at least 10 stands in advance of retrieving the core barrel, and at all times while retrieving the core sample.

6. Core sample will be inspected for H_2S presence and marked for the presence of H_2S before transport.

HYDROGEN SULFIDE
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VI. SPECIAL CONSIDERATIONS

E. WELL TESTING IN AN H_2S ENVIRONMENT:

1. Well testing shall be performed with the minimum number of personnel in the immediate vicinity of the rig floor as necessary to safely and adequately perform the test and maintain related equipment and services.

2. Prior to initiation of the test, special safety meetings shall be conducted for all personnel who will be on the rig during the test, with particular emphasis on the use of personal protective-breathing apparatus, first aid procedures, evacuation procedures and the H_2S Contingency Plan.

3. "NO SMOKING" Rules shall be rigorously enforced.

4. Rig fans will be utilized to H_2S away from workers in and around the well testing area.

5. Immediately prior to opening the well, all personnel in the work areas will ensure that breathing equipment is readily available.

6. During the test, the use of H_2S detection equipment shall be intensified. The low pressure side of the separator will be checked for H_2S presence with a portable detector at least once every 30 minutes. Personnel in the work area will be advised of the presence or absence of H_2S gas frequently. All produced gases shall be vented to the flare system. Flaring of H_2S gas results in the formation of Sulfur Dioxide (SO) which is also toxic to humans. An SO_2 detector should be available for checking the SO_2 level in the flare area and/or in the immediate vicinity fo the rig floor.

7. Once H_2S has been detected, breathing units must be worn during repair or rigging down of test equipment.

HYDROGEN SULFIDE
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VII. EMERGENCY RESCUE AND FIRST AID

A. EMERGENCY RESCUE - GENERAL

During an emergency, use the "buddy" system to prevent anyone from entering or being left in a gas area alone, even wearing SCBA. Do not remove masks until area has been tested and a safe breathing environment has been confirmed.

If a sudden gas release occurs without warning, hold your breath, move quickly upwind, and put on SCBA.

Help anyone who may be injured or overcome by toxic gases. Always put on SCBA before assisting anyone affected by gas.

If affected person is incapacitated in a high concentration area, obtain assistance and attach a full body safety harness with 50' tail line. Be prepared to act fast; speed is important. Use wind direction and fans to advantage where possible.

Once the person is removed from the H_2S gas contaminated area and moved to fresh air, administer first aid.

B. FIRST AID - GENERAL

If a person is overcome by H_2S gas, immediate first aid treatment is vital. Degree of H_2S poison ing and probability of respiratory failure will vary depending on the concentration of H_2S gas, the duration of exposure and the physiological and psychological makeup of the individual.

The primary objective in managing first aid treatment for H_2S exposure is to provide the person with fresh breathing (oxygen), free of gas contamination.

The following steps are a basic guideline to follow in managing first aid treatment for a person overcome by H_2S gas:

1. Once in a fresh breathing air area, provide mouth-to mouth artificial respiration or mechanical oxygen resuscitation (only if properly trained).
   NOTE: Oxygen applied to a greasy face will burn where it is greasy.

2. Provide CPR (Cardiopulmonary Resuscitation) only if required and properly trained.

3. Once revived, treat for shock and do not leave unattended.

4. Transport to professional medical facility at once. Although the person may seem to have recovered, do not rely on their senses or appearance - all victims of H_2S gas poisoning shall receive professional care as soon as possible. It is important for persons working around H_2S gas areas to have proper training (American Red Cross courses or American Heart Association courses) in rescue breathing and CPR.

HYDROGEN SULFIDE
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VII. EMERGENCY RESCUE AND FIRST AID

C. FIRST-AID EQUIPMENT LOCATIONS:

An O_2 Resuscitator, Stretcher and First-Aid Kit shall be located at each of the following places:

1. TSSI Control Center or Primary Safe Briefing Area.
2. Secondary Safe Briefing Area (Safety Box).
3. Bulk Mud Room (Near Cascade).

D. RESCUE TEAMS

1. Rescue team members must realize that the primary goal of the team should be to inspect all areas of the rig for personnel who may have been overcome by H_2S. However, from a practical stand point, the potential for someone to be overcome is greatest during a Condition III release as indicated by the Flashing YELLOW & RED lights and siren, it is essential that the Rescue Teams report to their assigned SCBA units and begin a search of the below deck areas immediately.

2. During drilling, completion and/or workover activities, the three most critical areas can be defined as the shale shaker area, mud pit area and drill floor area. The trip tank area is also critical when tripping pipe. Accordingly, the H_2S Emergency Station Bill is designed to ensure that such areas are quickly evaluated after and/or during any significant H_2S release. For example, the H_2S Safety Consultants procedures during such times ensure that the shaker area and trip tank area will be check, while the Drilling Representative and Toolpusher procedures ensure the drill floor checked. In addition, the Rescue Team procedures ensure that all below deck water-tight doors will be secured to prevent migration of gas.

3. Rescue Team members must realize that in the event an unconscious victim is found, it may or may not be necessary to move the victim before administering the necessary first-aid. The determining factor will be the presence of H_2S contamination or some other threat, that poses an immediate danger to victim as well as the rescuers. Since procedures call for the mud pumps to be shut down if H_2S is detected, it is unlikely that large volumes of H_2S will continue to be released.

4. This coupled with the ventilation systems present on the rig, enhance the possibility that any gas released initially will be quickly purged from an area, such as the pit room. Persons found unconscious may have tripped or fallen when responding to the H_2S alarms, and as a result may have suffered neck or spinal injuries. In such a case, moving the victim could prove fatal. Therefore, it is essential that the Rescue Team properly determine not only the victim condition, but also the condition of the surrounding area.

E. RESCUE TEAM MEMBERS

CREW A	CREW B	CREW C	CREW D
TEAM 1	TEAM 1	TEAM 1	TEAM 1
TEAM 2	TEAM 2	TEAM 2	TEAM 2

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VII. EMERGENCY RESCUE AND FIRST AID

F. RESCUE TEAM PROCEDURES

1. CONDITION I AND II

   a. ON-DUTY TEAMS : IN THE EVENT OF A CONDITION I OR II RELEASE

      1.) Proceed to SCBA storage area ASAP and don 30 minute SCBA. Do not open cylinder valve or put on facepiece.

      2.) Check portable H_2S detectors and Clear-com devices.

      3.) Proceed to designated Safe Briefing Area.

2. CONDITION III

   a. ON-DUTY TEAMS: IN THE EVENT OF A CONDITION III RELEASE

      1.) Proceed to SCBA storage area ASAP.

      2.) Don assigned RESCUE TEAM SCBA and wait for other team members for 1 minute.
      a.) Check portable H_2S Detectors and Clear-com devices.
      b.) In the event a team member(s) is missing, proceed as a group of 3 or 2. Do not proceed alone.

      3.) Proceed in teams down to designated start point.
      a.) Secure watertight doors and hatches along way to prevent migration of gas.

      4.) Team 1 - Scan Pipe Deck and Main Deck work areas on starboard side of rig. Wait in designated area for Team 2. If Team 2 does not arrive within 1 minute, trace Team 2 route until you find Team 2. Search living quarters on way to designated safe briefing area.

      Team 2 - Scan Pipe Deck and Main Deck work areas on port side of rig. Wait in designated area for Team 1. If Team 1 does not arrive within 1 minute, search Team 1 route until you find Team 1. Search living quarters with Team 1 on way to designated safe briefing area.

      a.) If only one Team - Search all compartments on Main Deck.
      b.) Continue to secure all watertight doors and hatches to prevent gas migration.

VII. EMERGENCY RESCUE AND FIRST AID

F. RESCUE TEAM PROCEDURES (cont'd)

5.) In the event you encounter a person(s) in distress:

a.) One Team Member check to see if victim is breathing while other Team Member checks for H_2S in area.

1.) If victim is breathing and no contamination is present, alert H_2S Safety Consultant and/or Contractor Safety Representative. Continue to monitor area with H_2S detectors.
2.) If victim is not breathing and/or contamination is present remove victim to safe area ASAP.

b.) Verify potential safe area for H_2S contamination with Portable Detector, before removing mask.
c.) Check victim again for breathing and pulse (heartbeat).
d.) Administer Mouth-to Mouth Resuscitation if victim is not breathing or CPR, if victim has no heart beat.
e.) Alert Contractor Safety representative and/or H_2S Safety Consultant ASAP. Do not leave anyone in distress unattended.
f.) Obtain O_2 Resuscitator and stretcher ASAP. Typically, this equipment should be brought to scene by the H_2S Safety Consultant and Contractor Safety Rep.
1.) Replace mouth-to mouth activities with the mechanical resuscitator ASAP.
2.) Transfer patient(s) to Safe Briefing Area or Hospital Room ASAP.

NOTE: When transferring a patient, every effort must be made to utilize a route that has been verified to be gas free. If a breathing patient must be transferred through an area that could potentially be contaminated, it will be necessary to utilize an SCBA to protect the patient.

6.) Rescue Teams should meet in the Cement Room after completing their respective search activities, then proceed upstairs to the Designated Safe Briefing Area.

a.) If only one team has conducted the search, then proceed from the Bulk Mud Room to the Designated Safe Briefing Area.
b.) Report to Supervisors and be prepared to conduct additional search, rescue and/or hazard assessment activities.
c.) Check SCBA cylinder to ensure it contains a minimum of 1500 p.s.i. Recharge cylinder if necessary.

b. OFF-DUTY RESCUE TEAM: IN THE EVENT OF A CONDITION I, II or III

1. Proceed to designated Safe Briefing Area.

2. Be prepared to assist as needed.

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VIII. PROPERTIES OF H_2S AND SO_2

A. H_2S PHYSICAL PROPERTIES:

Hydrogen sulfide is, under normal conditions, a flammable, colorless gas which is heavier than air. It has a characteristic "Rotten Egg" odor at low concentrations. At higher concentrations an odor may not be detected since H_2S gas will paralyze the olfactory nerve, thus deadening a person's sense of smell.

Main physical properties are:

Specific Gravity	1.19 (Specific Gravity of Air is 1.0)
Molecular Weight	34.08
Vapor Pressure	145 psi (10 kg/cm2) at 0°C 1300 psi (91 kg/cm2) at 100° C
Explosive Limits	Lower limit is 4.3% by volume in air Upper limit is 46% by volume in air
Auto Ignition Temperature	480 ° F (250°C) to 500° F (260° C)
Solubility in Water	437 ml in 100 ml of water at 0°C 186 ml in 100 ml of water at 40° C

B. H_2S TOXIC PROPERTIES

It should be emphasized that the odor, which is detectable at low concentrations, is less detectable or nondetectable at high concentration due to olfactory nerve anesthesia. Consequently, ODOR MUST NOT BE CONSIDERED AS A SAFE MEANS OF DETECTION.

H_2S acts as a chemical asphyxiant, preventing the body from utilizing oxygen in the tissue. This can lead to respiratory failure. Sufficiently high concentrations result in immediate collapse and death.

Effects of exposure to various concentrations of H_2S are:

0.13 ppm	Minimal perceptible odor,
4.60 ppm	Easily detectable, moderate odor.
10.0 ppm	Beginning eye irritation. Safe for 8 hours exposure.
15.0 ppm	Safe for 15 minutes exposure.
27.0 ppm	Strong, unpleasant odor, but not intolerable.
50-100 ppm	Slight conjunctivitis (eye inflammation) and respiratory tract irritation after 1 hour exposure.
100ppm	Coughing, eye irritation, loss of sense of smell after 2 to 15 minutes. Altered respiration, pain in the eyes, and drowsiness after 15 to 30 minutes, followed by throat irritation after 1 hour. Several hours exposure results in gradual increases in severity of these symptoms and death may occur within the next 48 hours.
200-500 ppm	Marked conjunctivitis and respiratory tract irritation after 1 hour exposure.
500-700 ppm	Loss of consciousness and possible death after 1/2 to 1 hour exposure.
700-1000 ppm	Rapidly produces unconsciousness, cessation of respiration and death in less than 1/2 hour.
Above - 1000 ppm	Unconsciousness at once, cessation of respiration and death in a few minutes.

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VIII. PROPERTIES OF H_2S AND SO_2

C. SO_2 PHYSICAL PROPERTIES:

Sulfur dioxide is a colorless non-combustible gas with an extremely pungent odor. SO_2 is a by-product of flared H_2S gas.

Main physical properties are:

Specific Gravity	2.21 (S.G. of air is 1.00)
Molecular Weight	64.06
Vapor Pressure	2538 mm @ 21. 1°C
Explosive Limits	Non-flammable

D. SO_2 TOXIC PROPERTIES:

SO_2 gas causes irritation and inflammation of the eyes. It has a suffocating odor, and is a corrosive and poisonous material. At high concentrations it affects the upper respiratory tract and the bronchi, possibly causing edema of the lungs and respiratory paralysis.

Effects of exposure to various concentrations of SO_2 are:

0.3-1 ppm	Detectable by taste.
3-5 ppm	Detectable by odor.
8-12 ppm	Moderately irritating to eyes, throat and upper respiratory tract.
50-100 ppm	Maximum permissable concentration for term (30 min.) exposure.
150 ppm	Extremely irritating to eyes, throat and upper respiratory tract.
400-500 ppm	Immediately hazardous to life. Sense of suffocation.

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IX. SAFETY EQUIPMENT

A. FIRST AID:

1. Three first aid kit - U.S. Coast Guard Approved.
2. Three portable oxygen resuscitators with demand valve, facepiece, hose carrying case.
3. Three spare "D" size oxygen bottle.
4. Three stokes basket with nylon bridle, straps and blankets.

B. H_2S DETECTORS/ ALARMS:

1. Single-channel fixed monitors with 0-100 ppm detection range, complete with controllers, transmitters and sensors to support 12 detection points. Fixed sensors for the monitors shall be located at the following locations.

   Primary sensor locations:

   a. Bell Nipple/Flowline (2)
   b. Shaker (2)
   c. Mud Pits (2)
   d. Drill Floor
   e. Pump Room
   f. Cement Room
   g. Trip Tank
   h. Living Quarters (2)

2. Twelve sets of yellow and red flashing lights with audible alarms (with intermittent and continuous features) located at:

   a. Shaker
   b. Drill Floor
   c. Pit Room
   d. Pump Room
   e. Logging Unit
   f. Engine Room
   g. Sack Room
   h. SCR Room
   j. Quarters (3)
   j. Chevron Office

3. Three Portable Electronic H_2S Detectors with alarm.
4. Three Draeger brand colormetric tube type indicators with a minimum of 10 each low, medium and high range H_2S and SO_2 detector tubes.
5. Eighty Delmar Mini-Check personal H_2S detectors.

C. RESPIRATORY PROTECTION:

1. 9 - 8 cylinder cascade systems equipped to supply Grade D minimum breathing air to the low pressure manifold systems located throughout the rig and on marine vessels. 4 to be additionally equipped to re-charge SCBA cylinders.

   a. Safe Briefing Areas (4)
   b. Drill Floor
   c. Shale Shaker Area
   d. Pump/Pit Room Area
   e. Vessels (1 Each)

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

IX. SAFETY EQUIPMENT

C. RESPIRATORY PROTECTION: (cont'd)

2. Low pressure breathing air manifolds with airline hoses are located at:

   a. Safe Briefing Areas(12 each)
   b. Lifeboats (1 each)
   c. Cement Unit (1)
   d. Drill Floor (2)
   e. Pit Room
   f. Pump Room
   g. Engine Room
   h. Pump Room
   i. Sack Room
   j. Trip Tank (1)
   k. Vessels (12-Crew / 2 -Work))
   l. Derrick {1}
   m. Cranes {1 each}

   NOTE: ( ) indicates number of five-man manifolds.
   { } indicates number of two-man manifolds.

3. 116-30 minute NIOSH-approved MSA self-contained breathing apparatus (SCBA) with pressure-demand regulators and equipped with pigtails for connection to the cascade system. Each 30-minute SCBA is also equipped with a composite or hoop-wound cylinder. (12 located on support vessels-6 per vessel)

4. 24 - 5 minute NIOSH-approved MSA self-contained breathing apparatus (SCBA) with pressure-demand regulators and equipped with pigtails for connection to the cascade system.

5. Two compressors to recharge cascade bottles. Each provides Grade "D" or better air. Each is able to recharge at a rate of 7 cfm or better.

D. COMMUNICATIONS:

1. A minimum of two megaphone voice gun with spare batteries.

2. Materials to write messages when verbal communication is not possible (note pads, chalkboards, etc.)

3. Ten clear com communication devices for use with SCBAs for supervisory personnel.

4. Six Portable Radios with chargers.

E. WARNING SIGNS / FLAGS:

1. Three red condition flags each 2' X 3'. One or more are to be displayed on each side of the rig as necessary.

2. Four warning signs each 4' X 8' yellow with black lettering to read: "DANGER-HYDROGEN SULFIDE-H_2S". One is to be displayed on each side of the platform as necessary.

3. Two signs in each of the primary and secondary "SAFE BRIEFING AREAS".

4. 3 Sets MY-6 Flag System.

IX. SAFETY EQUIPMENT

E. WARNING SIGNS/ FLAGS: (cont'd)

4. Notices of the location of safe briefing areas, definition of conditions, alarms and actions required of general personnel are posted at the following locations:

   a. Galley
   b. TV Room
   c. Rig Floor
   d. Mud Pit Room
   e. Shale Shaker Area
   f. Sack Room
   g. Engine Room
   h. Living Quarters (3)
   i. SCR Room
   j. Briefing Areas (2)
   k. Each Marine Vessel

F. MISCELLANEOUS EQUIPMENT:

1. Wind socks with brackets, holders, and poles shall be mounted on the rig at the safe briefing area and other points as necessary to provide personnel with an indication of the safe, upwind direction to move in the event of an H_2S alarm or release.
2. Two explosion proof bug blowers (rig fans) each with at least 36" diameter blades.
3. One flare guns with twelve shells each.
4. Two explosimeters.
5. Three 150' safety lines with harnesses.
6. Two Portable Falshing Lights

G. GENERAL NOTES:

1. To ensure compatibility Hansen H. K. Series stainless steel quick connects are used for all manifold outlets, hoselines, 5-minute SCBA and 30-minute SCBA. SCBA fittings are one-quarter inch Hansen plug (male) LL2-K16 and Hansen socket (female) LL2-H16. All sockets are equipped with a protective "cap" or "plug" which shall be in place when the hoseline is not connected to SCBA.

2. 207 breathing-air hoselines are provided for quick connects on the rig. Their lengths will be determined based on their location and intended use. 72 breathing-air hoselines are provided for marine vessels.

3. Cascade bottle racks are to be looped together with the two breathing-air compressors to ensure that air can be diverted from one bottle rack to another for additional air supply in the event that either one or both of the compressors could not be used.

4. Isolation valves are to be provided to prevent loss of the loop system should one or more of its components fail.

5. The looped cascade breathing-air system has sufficient capacity to supply a minimum of four hours of breathing-air for total rig population.

6. All personnel working on marine vessels serving the rig are provided self-contained breathing apparatus and a cascade system compatible with the rig breathing-air system.

7. All signs, flags, and wind socks displayed on the rig are illuminated so that they can be clearly seen at night.

8. Helicopters providing service to the rig site shall be equipped with a suitable breathing apparatus for the pilot.

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

X. TELEPHONE LIST

A. CHEVRON U.S.A.

Drilling Superintendent:

Moss Bannerman	935 Gravier Street New Orleans, LA 70112	504/592-6172 (Office) 504/892-3120 (Home)

Special Projects Manager:

Herman Colligan	Same	504/592-6190 (Office)

Operations Advisor:

E.A. "Nick" Nichol, Jr.	Same	504/592-6181 (Office) 504/394-3395 (Home)

Drilling Engineers:

Mike Cavanaugh	Same	504/592-6175 (Office) 504/393-8795 (Home)
Jason Kirksey	Same	504/592-6171 (Office) 504/674-1716 (Home)

Environmental, Safety, Fire and Health Representative

Sandi Fury	Same	504/592-6095 (Office) 504/362-9405 (Home)

Chevron Base:	Fuel Services, Inc. Pascagoula, MS	601/762-4611 601/762-0636 (Dock)

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

X. TELEPHONE LIST

B. CONTRACT DRILLING COMPANY:

Noble Drilling Co. (U.S.) P.O. Box 80338 Lafayette, LA 70598-0338		318/266-4200
Bill Jennings - Operations Manager		318/266-4201 (Office)
Leonard Jones - Rig Superintendent		318/266-4222 (Office) 318/269-9042 (Home)
Kenneth Delaney		318/266-4203 (Office) 318/234-5342 (Home)

C. H_2S SAFETY COMPANY:

Total Sulfide Services, Inc. 204 S. Long Street Lafayette, LA 70506	Lafayette	318/233-7026	
David King Operations Supervisor	Mobile	205/380-0726 205/342-3715	O H
Jack Ray Operations Manager	Lafayette	318/981-9177	H
Paul Sewall, III Manager	Abbeville	318/937-8214	H

D. MEDICAL EMERGENCY

HELICOPTERS

South Flight Air Medical Service University of South Alabama Medical Center Mobile, AL		205/471-7100
Coast Guard		205/690-2211 (Primary No.) 205/690-2210 (Backup No.)
Naval Air Sea Rescue (HC-16)	Pensacola	904/471-1541
Chevron, USA	Venice, La	504/534-6324

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

X. TELEPHONE LIST

D. MEDICAL EMERGENCY, (cont'd)

HOSPITALS

University of So. Ala. Medical Center 2451 Fillingham Street	Mobile	205/471-7300 (Trauma UInit) 205/471-7000 (Back-up No.) 155.340 VHF (Radio Freq.)
	Hospital Coordinates	3042.4N - 8805.9W
Springhill Memorial 3719 Dauphin Street	Mobile	205/460-5333 155.340 VHF (Radio Freq.)
	Hospital Coordinates	3041.3N - 8807.53W
Providence Hospital 6801 Airport Blvd.	Mobile	205/633-1900 155.340 VHF (Radio Freq.)
	Hosptal Coordinates	3040.45 N - 8812.00W
Singing River Hospital	Pascagoula	601/938-5000 601/938-5154

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

X. TELEPHONE LIST

E. GOVERNMENTAL CIVIL & PRIVATE, (cont'd)

MINERAL MANAGEMENT SERVICES

Don Howard District Supervisor	New Orleans	504/736-2504 (Office) 504/764-2168 (Home)
Jack Leezy Chief- Inspectors	New Orleans	504/736-2503 (Office) 504/725-1752 (Home)
Robert C. Lanza Chief Workover/Completions Technician	New Orleans	504/736-2504 (Office) 504/738-7240 (Home)
Steven Ledet Production Engineer	New Orleans	504/736-2502 (Office) 504/448-3015 (Home)
Lars Herbst Drilling engineer	Metarie	504/736-2506 (Office) 504/832-5179 (Home)

F. UNITED STATES COAST GUARD

National Response Center	Washington, D.C.	800/424-8800
Marine Safety Officer	Mobile, AL	205/690-2286
Search & Rescue	Mobile, AL	205/690-2211

G. WEATHER SERVICE

Municipal Airport 205/639-6625
Mobile, AL

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

XI. APPENDICES

A. RIG DRAWINGS / BRIEFING AREA LOCATIONS, MY-6 FLAG SYSTEM

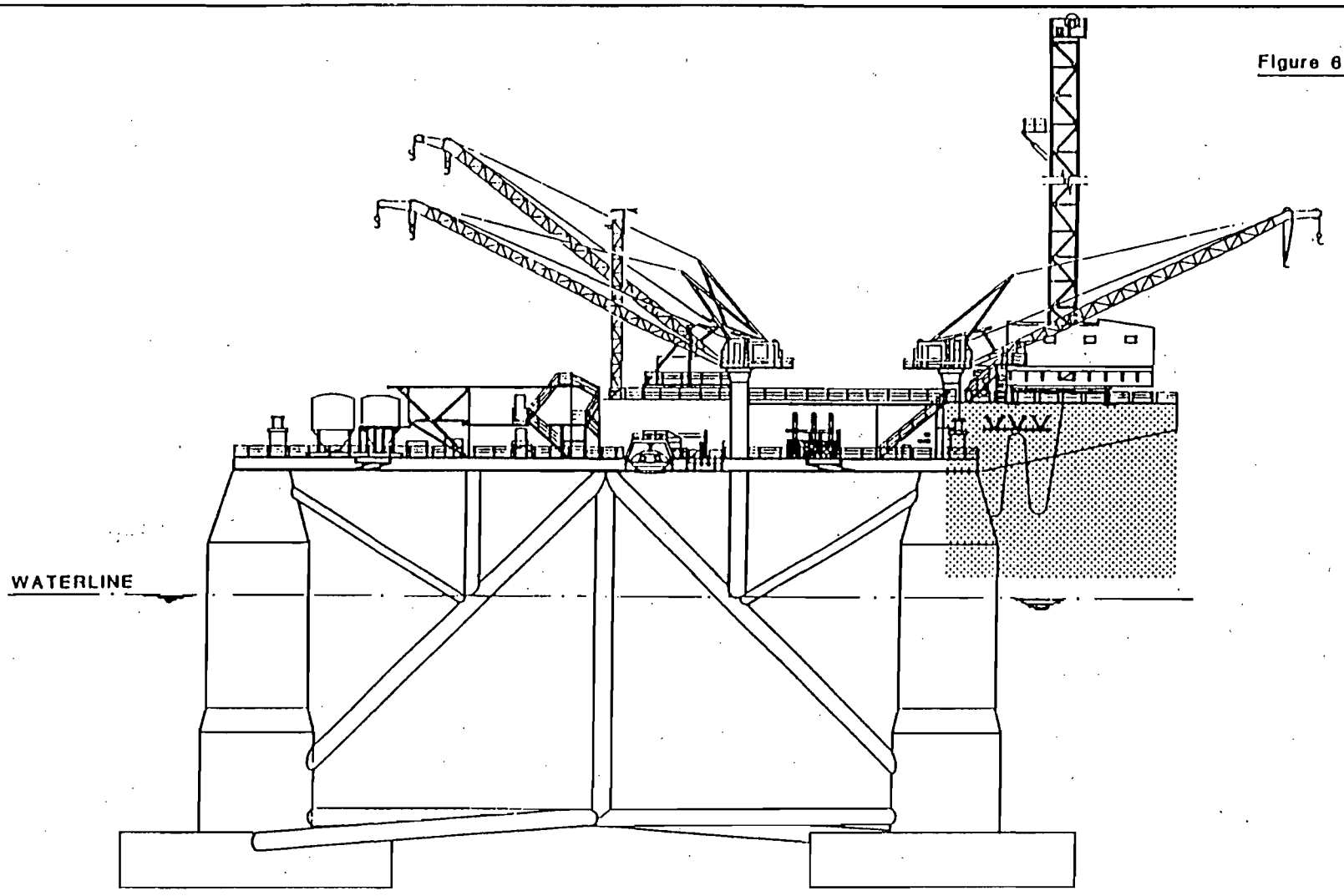
PLEASE SEE ATTACHED RIG DRAWINGS FOR NOBLE RIG "PAUL WOLFF' AND MY6 FLAG DESIGNATION.

TWO AREAS WIL BE DESIGNATED AS "SAFE BRIEFING AREAS". THE PRIMARY AREA WILL BE LOCATED ON THE PORT SIDE FORWARD OF THE LIFE CRAFT. IF THE PRIMARY AREA CANNOT BE USED DUE TO WIND CONDITIONS, THE SECONDARY AREA WHICH WHICH WILL BE LOCATED ON THE STARBOARD SIDE FORWARD OF THE LIFE CRAFT WILL BE USED.

SEE PAGES 31-33 FOR EQUIPMENT PLACEMENT DETAILS.

NOBLE DRILLING RIG "PAUL WOLFF"

Figure 6-15

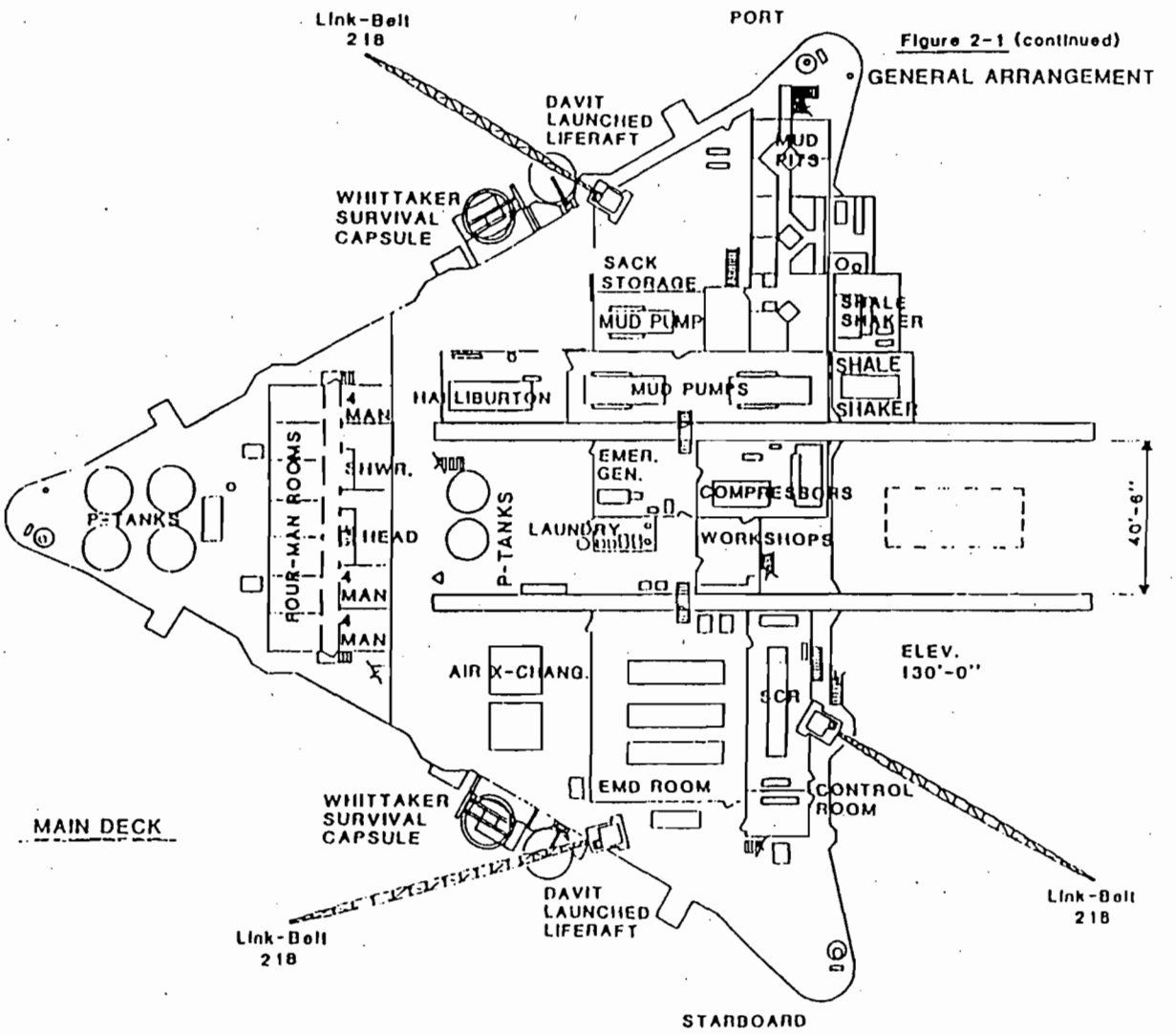


SIDE ELEVATION

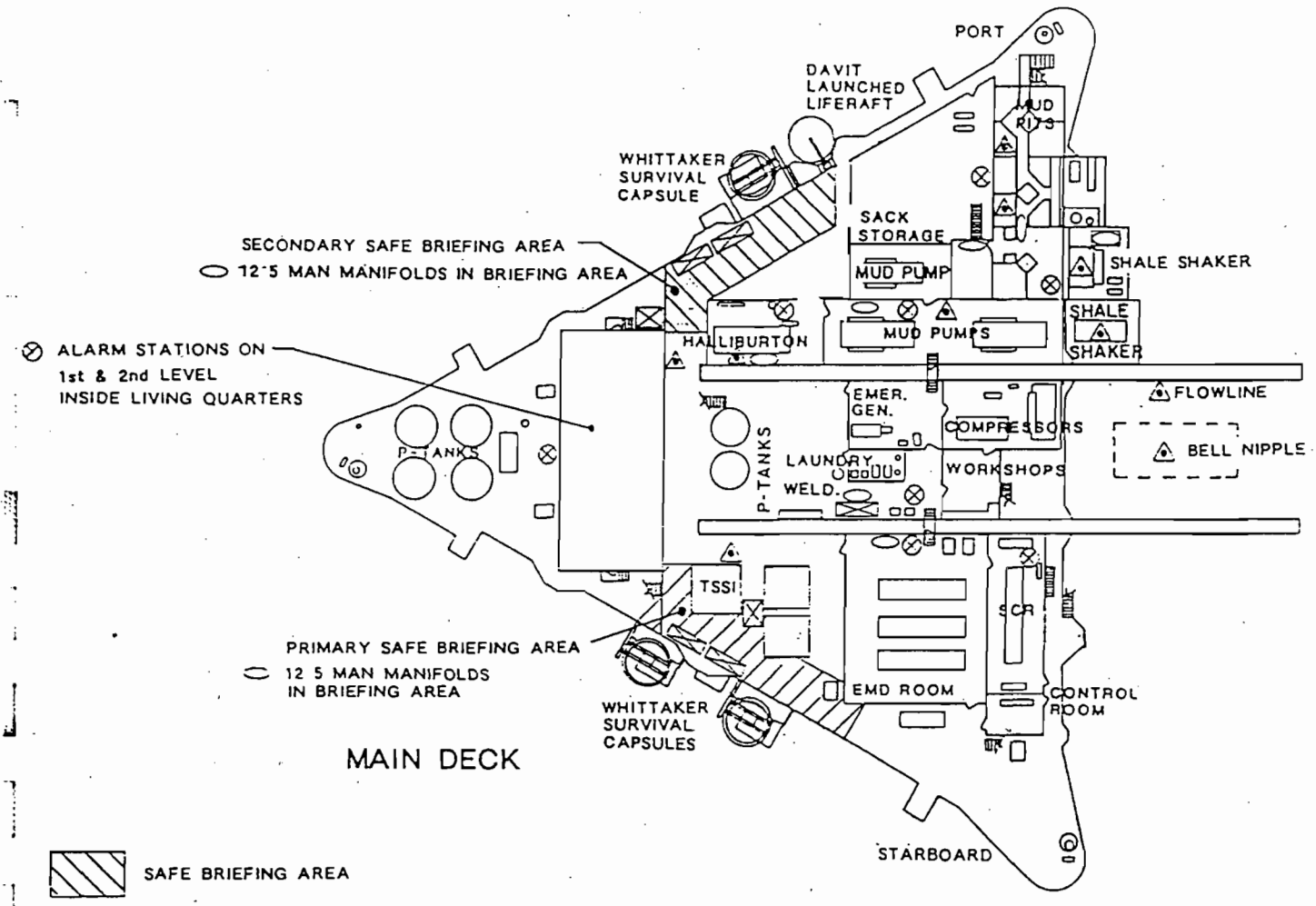
NOBLE DRILLING RIG "PAUL WOLFF"

QUARTERS
2nd Level

Figure 2-1 (continued)
GENERAL ARRANGEMENT

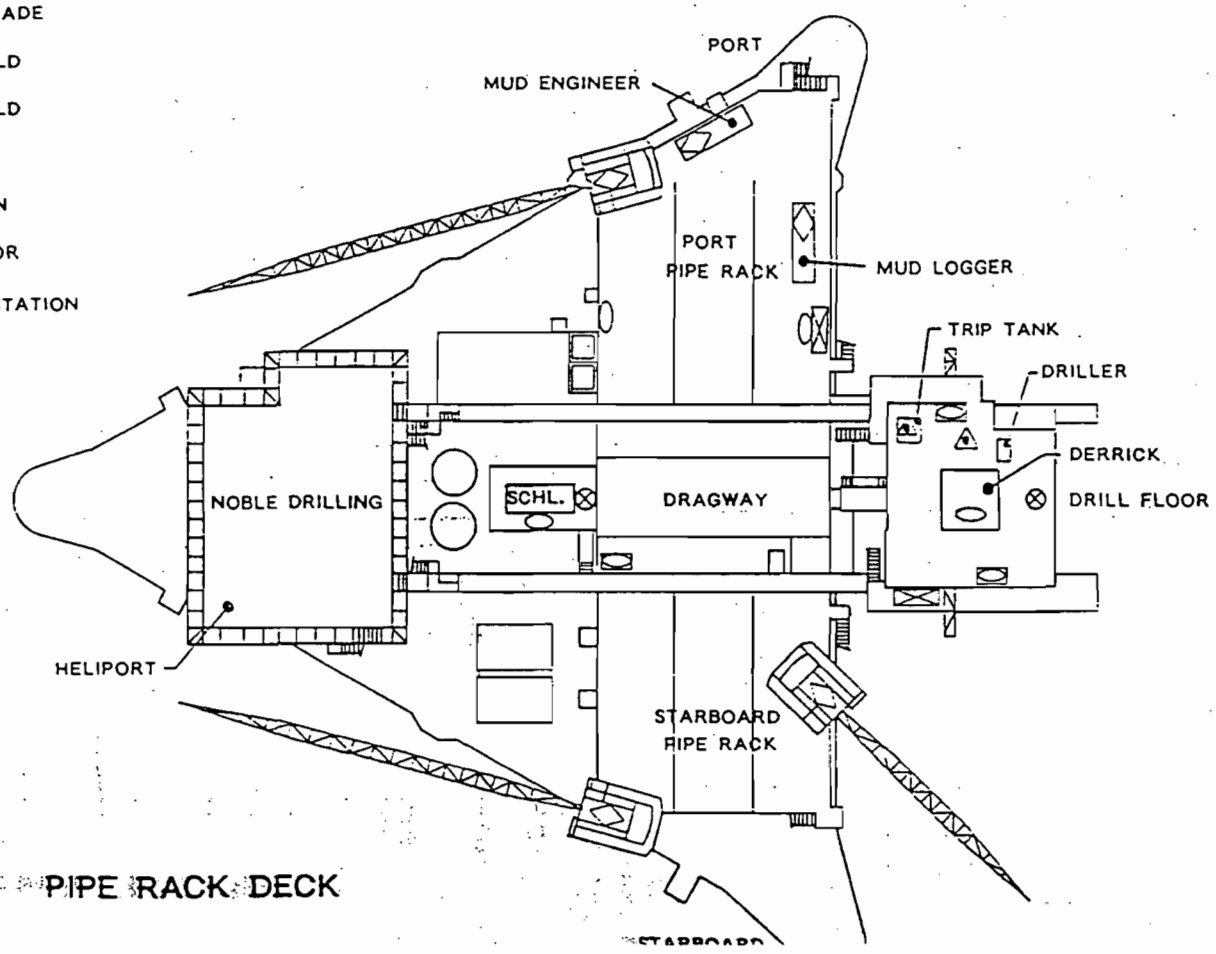


NOBLE DRILLING RIG "PAUL WOLFF"



MAIN DECK

- SAFE BRIEFING AREA
- 8 BOTTLE CASCADE
- 5 MAN MANIFOLD
- 2 MAN MANIFOLD
- H_2S SENSOR
- ALARM STATION
- AIR COMPRESSOR
- 5 MAN WORK STATION

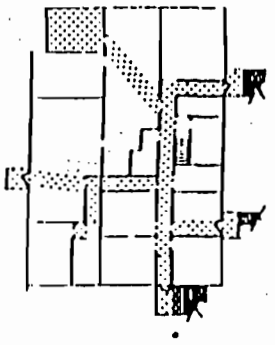


PIPE RACK DECK

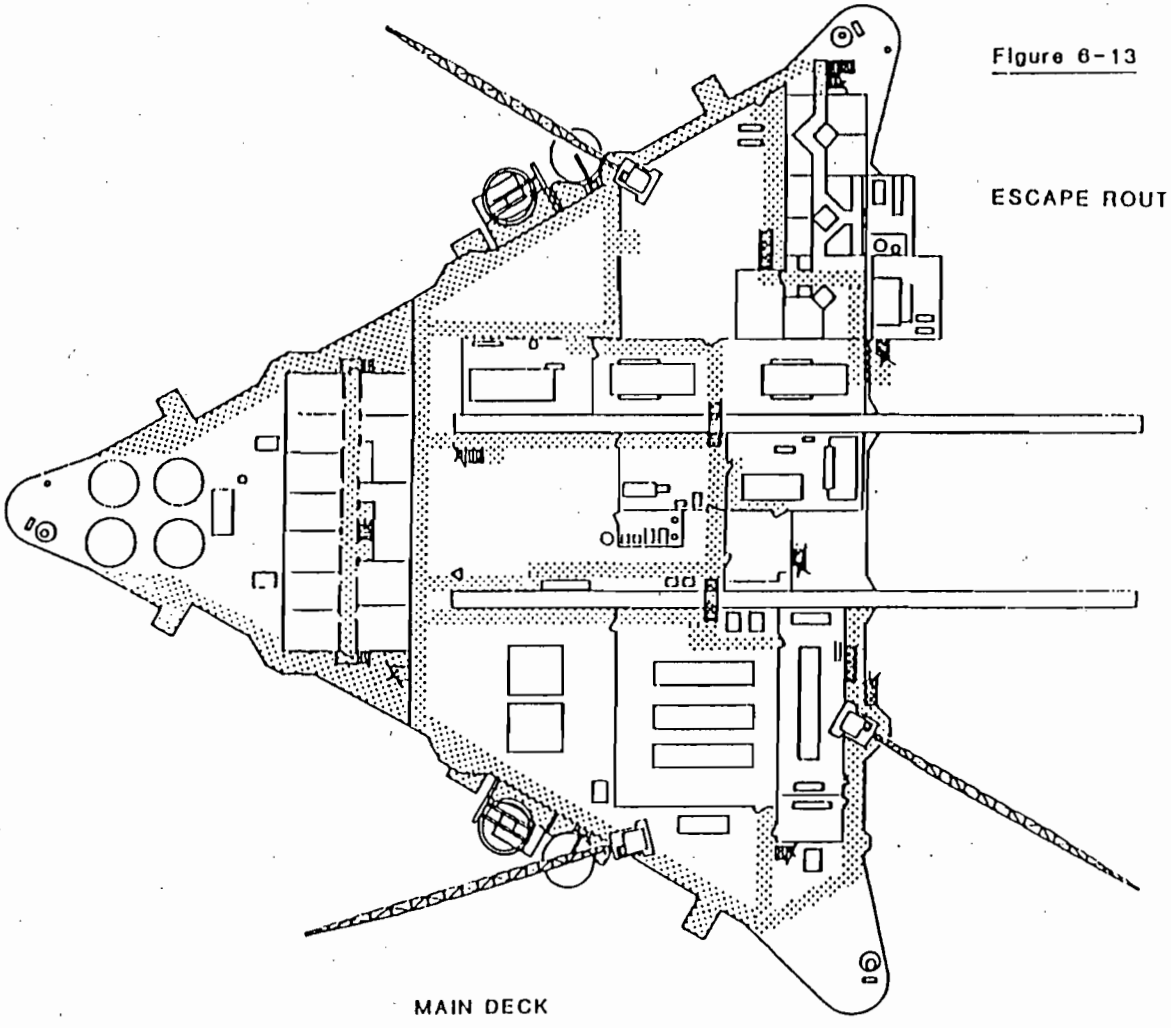
NOBLE DRILLING RIG "PAUL WOLFF"

Figure 6-13

ESCAPE ROUTES

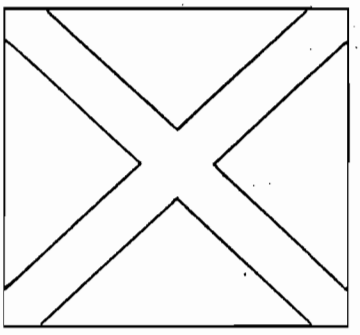


QUARTERS - SECOND LEVEL



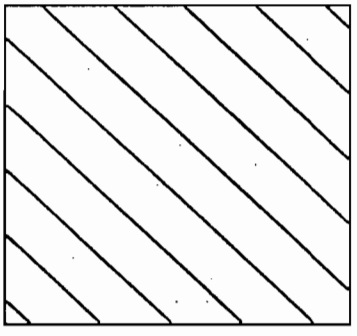
MAIN DECK

INTERNATIONAL MARITIME CODE DESIGNATION - MY6 FLAG SYSTEM



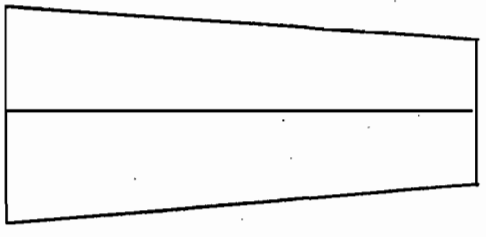
WHITE CROSS ON ROYAL BLUE BACKGROUND

M



ALTERNATING RED AND YELLOW STRIPES

Y



6

TOP HALF BLACK
BOTTOM HALF WHITE

MY6 - DO NOT APPROACH

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

XI. APPENDICES

B. SAFETY EQUIPMENT LIST

RESPIRATORY SAFETY SYSTEM - DRILLING RIG

QUANTITY	DESCRITPTION
104	30- Minute Pressure Demand SCBAs with hoseline connector
24	Hoseline Work/Escape Units with Escape Cylinder
7	8-Cylinder Cascade Units of Breathing Air (2400 cu. ft. each)
2	2-Cylinder Cascade Units of Breathing Air (600 cu. ft. each)
10	100' Low Pressure Hoselines with connections
34	50' Low Pressure Hoselines with connections
23	35' Low Pressure Hoselines with connections
140	8' Low Pressure Hoselines with connections
4	High Pressure Recharge Lines for SCBA recharge
1	Tubing harness (stainless steel) for recharging cascade system
48	5-Man Reserve Manifolds
2	3-Man Reserve Manifolds
3	Oxygen Resuscitator with spare cylinder
2	Breathing Air Compressors
10	Clear-Com Voice Amplification Systems

DETECTION AND ALARM SYSTEM - DRILLING RIG

1	TSSI RXAA Fixed H_2S Detection System with 12 Channels
15	Controllers for Detection System (12 Active - 3 Spare)
15	Sensors for Detection System (12 Active - 3 Spare)
1	Monitor Rack for above system
10	Explosion Proof Central Alarm Stations (dual lights and sirens)
3	Indoor Central Alarm Stations (dual lights and sirens)
5	Single Light and Growler Alarms
1	Remote Enunciator Panel
2	Combustible Gas Detectors
3	Portable Electonic H_2S Indicators with alarm
3	Manual Pump Type Detectors
6	Boxes H_2S detector tubes - Low Range
6	Boxes H_2S detector tubes - High Range
6	Boxes SO_2 detector tubes - Mid Range
1	Permeation Tube type calibrator for detection system

XI. APPENDICES

B. SAFETY EQUIPMENT LIST

ADDITIONAL SAFETY RELATED ITEMS - DRILLING RIG

QUANTITY	DESCRITPTION
2	Windsocks with pole and bracket
2	Megaphones (Bullhorns) with batteries and spare batteries
1	Portable Rig Fan (Bug Blower) - B 400 48"
1	Portable Rig Fan (Bug Blower) - B-250 36"
6	Portable Radios with charger
4	4' X 8' Danger Hydrogen Sulfide Signs
3	Red Warning Flags with poles
3	Sets MY-6 Flags with poles
4	Primary and Secondary Safe Briefing Area Signs
12	Operating Condition Signs
1	Flare Pistol with Shells
4	Marker Boards with erasers and markers
3	Notepad and Pencil Sets
80	Del-Mar Mini Checks
2	Portable Flashing Lights (Yellow)
8	25' Sets Streamers
3	Flashlights with batteries and spare batteries
3	Safety Harnesses with 150' Line
3	Stokes Litter Baskets
3	24-unit First Aid Kit

SAFETY RELATED ITEMS - WORK BOAT

6	30-Minute Pressure Demand SCBAs with hoseline connector
1	8-Cylinder Cascade of Breathing Air (2400 cu. ft.)
1	12-Man reserve Manifold
1	Oxygen Resuscitator with spare cylinder
12	8' Low Pressure hoselines with connections

SAFETY RELATED ITEMS - CREW BOAT

6	30-Minute Pressure Demand SCBAs with hoseline connector
1	8-Cylinder Cascade of Breathing Air (2400 cu. ft.)
5	12-Man reserve Manifold
1	Oxygen Resuscitator with spare cylinder
60	8' Low Pressure hoselines with connections

DRILLING REPRESENTATIVE'S CHECK LIST: HARDWARE**

ITEMS TO BE READY BY COMPLIANCE DEPTH

ITEM	QUANTITY	DESCRIPTION	DATE CHECKED OK	REMARKS	DATE CHECKED OK	REMARKS
1	1	Choke Manifold as required				
2	1	Degasser				
3	-	All choke manifold lines targeted at 90 degree turns				
4	2	Inside blowout preventers for each size drill pipe for H2S Service				
5	2	Safety Valves for each size drill pipe and kelly valves for H2S Service				
6	1	Remote Control for hydraulic choke				
7	-	Inside of BOP stack must be trimmed for H2S Service				

**For more information on the safety equipment items for the drilling rig and support vessels, see Appendix B " Safety Equipment List"

DRILLING REPRESENTATIVE'S CHECK LIST: SAFETY EQUIPMENT

ITEMS TO BE READY BY COMPLIANCE DEPTH

ITEM	QUANTITY	DESCRIPTION	DATE CHECKED OK	REMARKS	DATE CHECKED OK	REMARKS
1	2	Designated "Safe Briefing Areas"				
2	1	H2S Safety Equipment Package (see pp. 43-44)				
3	3	Sets MY-6 Flags				
4	12	Continuous type H2S detectors located as follows:				
	1.	Bell Nipple/Flowline				
	2.	Shaker				
	3.	Mud Pits				
	4.	Rig Floor				
	5.	Pump Room				
	6.	Cement Room				
	7.	Trip tank				
	8.	Living Quarters				
	9.	Other				
5	-	Zinc Carbonate or Zinc Oxide or Equivalent				

DRILLING REPRESENTATIVE'S CHECK LIST: SAFETY EQUIPMENT

ITEMS TO BE READY BY COMPLIANCE DEPTH

ITEM	QUANTITY	DESCRIPTION	DATE CHECKED OK	REMARKS	DATE CHECKED OK	REMARKS
6	6	Portable Radios - placed as follows:				
		1. Toolpusher's Office				
		2. Drilling Rep. Office				
		3. Cont. Safety Rep.				
		4. Rig Floor				
		5. H2S Safety Tech				
		6. Dispatcher's Office				
7	2	Electric Fans				
		1. Rig Floor				
		2 Shale Shaker Area				
8	1	Forced Air Control Switch in Mudlogging Unit				

SAFETY EQUIPMENT CHECK LIST - RIG CONTRACTOR

Provided, Installed, and maintained by Rig Contractor

ITEM	QUANTITY	DESCRIPTION	DATE CHECKED OK	REMARKS	DATE CHECKED OK	REMARKS
1	-	H2S Service trim for all valves on choke manifold				
2	-	H2S Service trim for hand adjustable chokes				
3	6	Portable Radios				
4	1	Stretcher				
5	2	H2S Servicetrim for BOP Stack				

SAFETY EQUIPMENT CHECK LIST - MUDLOGGER

To be checked and maintained by Mudlogger

ITEM	QUANTITY	DESCRIPTION	DATE CHECKED OK	REMARKS	OK	DATE CHECKED REMARKS
1	-	Self-Contained Breathing Apparatus (Pressure -Demand) for all mudloggers				
2	1	Switch inside mudlogging unit that controls the forced air duct into the unit				
3	1	Multi-Gas detector				

SAFETY EQUIPMENT CHECK LIST - HYDROGEN SULFIDE SAFETY TECHNICIAN

To be checked and maintained by the H2S Safety technician

ITEM	QUANTITY	DESCRIPTION	DATE CHECKED OK	REMARKS	DATE CHECKED OK	REMARKS
1	12	Continuous type H2S gas detection units as described in this plan				
2	18	H2S Alarms units				
3	-	Self-Contained Breathing Apparatus (Pressure -Demand) for all H2S Safety Techs.				

SAFETY EQUIPMENT CHECK LIST - MUD ENGINEER

To be checked and maintained by the Mud Engineer

ITEM	QUANTITY	DESCRIPTION	DATE CHECKED OK	REMARKS	DATE CHECKED OK	REMARKS
1	1	Self-Contained Breathing Apparatus (Pressure -Demand) for all mud engineers				
2	-	100% zinc basic carbonate or zinc oxide or equivalent				
3	1	Garrett gas train unit				
4	1	Hot roll test unit				

XI. APPENDICES

C. MMS COMPLIANCE CHECK LIST

PLEASE SEE ATTACHED MINERALS MANAGEMENT SERVICE FORM "H" - HYDROGEN SULFIDE INSPECTION CHECK LIST

HYDROGEN SULFIDE INSPECTION FORM H

RIG ID NO_____ DATE OF INSP____/____/____ DISTRICT _____ TYPE INSP_____

RIG NAME_____ TOOLPUSHER_____ OP REP_____

LINE NO.	INC NO.	ITEM	ENF ACT	ENFORCEMENT ACTION(S) DATE MO/DA/YR	TIME HR	DATE MO/DA/YR	TIME HR	HRS DWN	COMMENT(S)

INC #		ACK	AY	AN	ANA	Authority
H-100	Is a copy of the approved H2S contingency plan available in the field area until operations are completed?	W/S				67(h)(1)
H-101	Are at least two safe briefing areas established?	S				67(h)(1)(iv)
H-102	Are all personnel informed of the hazards of H2S and of SO2 resulting from burning H2S and instructed in the provisions for personnel safety contained in the H2S contingency plan?	C				67(h)(2)(i)
H-103	Are all personnel instructed in the use of safety equipment which they may be required to use?	C				67(h)(2)(ii)
H-104	Are all personnel informed of the location of protective breathing equipment, H2S detectors and alarms, ventilation equipment, briefing areas, warning systems, evacuation procedures, and the direction of the prevailing winds?	C				67(h)(2)(iii)
H-105	Are all personnel informed of the restrictions and corrective measures concerning beards, spectacles, and contact lenses in conformance with ANSI Z88.2?	C				67(h)(2)(iv)
H-106	Is safety information prominently posted on the facility?	W				67(h)(2)(v)
H-107	Is safety information prominently posted on vessels serving the facility?	W				same
H-108	Does each person receive a training session upon arrival at the facility?	W				67(h)(2)(vi)
H-109	Does each person participate in a drill within 24 hours after duty begins?	W				same
H-110	Has a weekly H2S drill and training session been held?	W				same
H-111	Are records of the attendance at the weekly drills and training sessions maintained at the facility?	W				same
H-112	Have all personnel been instructed in basic first-aid procedures applicable to victims of H2S exposure?	C				67(h)(2)(vii)
	IS THE FOLLOWING EQUIPMENT READILY AVAILABLE FOR USE:					
H-113	A first-aid kit of appropriate size and content for the number of personnel on the facility?	W				same
H-114	Resuscitators complete with face masks, oxygen bottles, and spare oxygen bottles?	S				67(h)(2)(vii) & 67(h)(7)(v)
H-115	At least one litter or equivalent device?	W				67(h)(2(vii)
H-116	Are personnel informed of the meaning of all warning signals?	C				67(h)(2)(viii)
H-117	Is wind-direction equipment installed?	S				67(h)(3)(i)
H-118	Are operational danger signs and rectangular red flags available for use?	W				67(h)(3)(ii)
H-119	Are a public address system and a siren, horn or other similar warning device with a unique sound used only for H2S warnings installed?	S				67(h)(4)
H-120	DOES THE FACILITY HAVE AN H2S-DETECTION AND H2S-MONITORING SYSTEM WHICH ACTIVATES AUDIBLE AND VISUAL ALARMS WHEN THE ATMOSPHERIC CONCENTRATION REACHES 20PPM AND IS CAPABLE OF SENSING A MINIMUM OF 10 PPM OF H2S WITH SENSING POINTS AT THE FOLLOWING LOCATIONS:					67(h)(5)(i)
	A. Bell nipple?					
	B. Shale shaker?					
	C. Mud pit area?					
	D. Driller's station?					
	E. Living quarters?					
	F. Other areas where H2S might accumulate?					

DOC #		CK	Y	N	NA	Authority
H-126	Is the H2S-detection and H2S-monitoring equipment calibrated?	S				67(h)(5)(ii)
H-127	Are H2S-detection ampoules or other comparable H2S-monitoring devices available for use by all personnel?	S				67(h)(5)(iii)
H-128	Are pressure-demand-type respirators immediately accessible to all personnel on the facility?	S				67(h)(6)(i)
H-130	Is protective-breathing equipment stored at locations that are quickly and easily accessible to all personnel?	S				67(h)(6)(ii)
H-131	Are all breathing-air bottles labeled as containing breathing-quality air for human use?	C				67(h)(6)(iii)
H-132	Do vessels attendant to facilities carry appropriate protective-breathing equipment for each crew member?	C				67(h)(6)(iv)
H-133	Do helicopters attendant to facilities operating in known H2S zones carry pressure-demand-type respirators for the flight crews?	C				67(h)(6)(v)
H-134	Do facilities operating in unknown H2S zones store pressure-demand-type respirators immediately accessible to the heliport for the use of flight crews?	C				same
H-135	Are all members of flight crews trained in the use of the particular type(s) of respirator equipment made available?	C				same
H-136	Is a system of breathing-air manifolds, hoses, and masks provided on the facility and in the briefing areas?	S				67(h)(6)(vi)
H-137	Is a cascade air-bottle system provided for the breathing-air manifolds and to refill individual protective-breathing apparatus bottles?	S				same
H-138	If the cascade air-bottle system is recharged by a high-pressure compressor suitable for providing breathing-quality air, is the compressor suction located in an uncontaminated atmosphere?	S				same
	IS THE FOLLOWING PERSONNEL-SAFETY EQUIPMENT AVAILABLE:					
H-139	Portable H2S detectors?	S				67(h)(7)(i)
H-140	Retrieval ropes with safety harnesses to retrieve incapacitated personnel from contaminated areas?	W				67(h)(7)(ii)
H-141	Chalkboards and/or note pads for communication purposes located:					67(h)(7)(iii)
	A. on the rig floor;	W				
	B. shale-shaker area;	W				
	C. the cement-pump rooms;	W				
	D. well-bay areas;	W				
	E. production processing equipment area;	W				
	F. gas compressor area; and	W				
	G. pipeline-pump area?	W				
H-142	Bull horns and flashing lights?	S				67(h)(7)(vi)
H-144	Are all ventilation devices explosion-proof and situated in areas where H2S or SO2 may accumulate?	C/S				67(h)(8)
H-145	Are movable, multidirectional ventilation devices capable of dispersing H2S or SO2 vapors away from working personnel provided in work areas?	C				same
H-146	If water-base, well-control fluids are used, and if H2S is detected by air sensors, has the Garrett-gas-train test or comparable test techniques for soluble sulfides been conducted?	W				67(i)(2)
H-147	Are sufficient quantities of additives for the control of H2S, well-control fluid Ph, and corrosion of equipment maintained on the facility?	S				67(i)(3)
H-148	Prior to drilling into a known H2S-bearing zone, are scavengers for circulation throughout the system available on the facility?	S				67(i)(3)(i)
H-149	Is the Ph of water-based well-control fluids maintained at a minimum of 10 prior to drilling into and during drilling, completion, or workover operations in a known H2S zone?	W				67(i)(3)(ii)
H-150	Is a degasser and a closed flare system installed to collect and burn gases removed from well-control fluids when operating in a zone known to contain H2S?	W				67(i)(4)
H-151	Is a safety meeting conducted for all personnel who will be on the facility prior to well testing in a zone known to contain H2S?	C				67(k)(1)
H-152	Are all gases produced during testing burned through the flare system when testing in a zone known to contain H2S?	S				67(k)(3)
H-153	Are flare line outlets located on the downwind side and as far from the facility as is feasible when operating in a known H2S zone?	S				67(m)(7)

3

INC #		#CK	#Y	#N	#NA	Authority
H-154	When operating in a known H2S zone, is the flare outlet equipped with an automatic ignition system including a pilot-light gas source or an equivalent system?	S				67(m)(7)
H-155	When operating in a known H2S zone, is an alternate method available for igniting the flare?	W				same
H-156	When operating in a known H2S zone, are all vents from production process equipment, tanks, relief valves, burst plates, and similar devices piped to the H2S flare system?	S				same
H-157	When operating in a known H2S zone, is gas containing H2S not used for instrument or fuel gas?	S				67(m)(10)
H-158	When operating in a known H2S zone, is produced water disposed of by means other than subsurface injection treated for removal of H2S?	S				67(m)(13)
H-159	When operating in a known H2S zone, are H2S levels continuously monitored in the work areas when pulling a wet string of drill pipe, circulating bottoms-up, cementing, logging, or circulating to condition well-control fluids?	W/S				67(m)(1)
H-160	When operating in a known H2S zone, is protective breathing equipment worn by personnel in the work area at least 10 stands in advance of retrieving the core barrel during conventional coring operations?	W/S				67(m)(2)
H-161	When operating in a known H2S zone, are all cores to be transported sealed and marked for the presence of H2S?	W/S				same
H-162	When operating in a known H2S zone, is well-control fluid in use for logging operations conditioned and treated to minimize the effect of H2S on logging equipment?	W/S				67(m)(3)
H-163	When operating in a known H2S zone, during stripping operations, are displaced well-control fluid returns monitored?	W/S				67(m)(4)
H-164	When operating in a known H2S zone during stripping operations, is protective breathing equipment worn by personnel in the work area when the atmospheric concentration of H2S reaches or exceed 20 ppm or if the well is under pressure?	W/S				same
H-165	When operating in a known H2S zone, is protective breathing equipment worn by personnel in the work area prior to and subsequent to bottoms-up when circulating out a kick and during extended kill operations?	W/S				67(m)(5)
H-166	When operating in a known H2S zone, is an effective means of monitoring and controlling corrosion caused by acid gases used in both the downhole and surface portions of a production system?	S				67(m)(8)
H-167	When operating in a known H2S zone, are lubricators which may be exposed to fluids containing H2S made of H2S-resistant materials?	W/S				67(m)(9)
H-168	When operating in a known H2S zone, are metals used for sensing lines and safety-control devices which are exposed to H2S bearing fluids constructed of H2S corrosion resistant materials or coated with appropriate materials so as to resist corrosion?	W/S				67(m)(11)
H-169	When operating in a known H2S zone, are all seals which may be exposed to fluids containing H2S made of H2S-resistant material?	W/S				67(m)(12)

XI. APPENDICES

D. KEY PERSONNEL TO REMAIN ABOARD DURING PARTIAL EVACUATION

This is a suggested list of minimum personnel to remain on location ; however, wellsite conditions may dictate that an alternative list be followed.

Rig Crew On-Duty:

- 1 - Driller
- 3 - Floormen
- 1 - Derrickman
- 1 - Motorman
- 1 - Mudman

Other Personnel

- 1-2 - H_2S Safety Technicians
- 1 - Crane Operator
- 4 - Roustabouts
- 1 - Electrician
- 1 - Rig Mechanic
- 1 - Mud Engineer
- 1 - Cementer
- 1 - Motorman
- 1 - Drilling Contractor Safety Representative

Supervisory Personnel:

- 2 - Chevron Drilling Representatives
- 2 - Contractor Toolpushers

NOTE: Once the emergency is clearly defined, the above personnel should then be transferred to the support vessels if not needed.

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

XI. APPENDICES

E. RULES AND REGULATIONS FOR DRILLING WHEN HYDROGEN SULFIDE MAY BE ENCOUNTERED

PLEASE SEE ATTACHED TAKEN FROM 30 CFR Ch. II

30 CFR CH. II

HYDROGEN SULFIDE REGULATIONS

§ 250.67 Hydrogen sulfide.

(a) *General requirements and applicability.* (1) The lessee shall take all necessary and practicable precautions and measures to protect personnel from the toxic effects of H_2S and to mitigate the adverse effects of H_2S to property and the environment.

(2) The requirements of this section apply, as appropriate, to drilling, well-completion, well-workover (including well-servicing), and production operations in zones known to contain H_2S and to drilling, well-completion, and well-workover operations in zones where the presence of H_2S is unknown. The requirements are not applicable to operations in zones where the absence of H_2S has been confirmed.

(b) *Definitions.* As used in this section, terms shall have the meanings given below:

"Facility" means a vessel, a structure, or an artificial island used for drilling, well-completion, well-workover, and/or production operations.

"Well-control fluid" means drilling mud, completion fluid, or workover fluid as appropriate to the particular operation being conducted.

"Zones known to contain H_2S" means geologic formations where prior drilling operations or logging, coring, testing, or producing operations have confirmed that H_2S-bearing zones will be encountered that could potentially result in atmospheric concentrations of 20 parts per million (ppm) or more of H_2S.

"Zones where the absence of H_2S has been confirmed" means one of the following:

(1) Geologic formations where prior drilling operations or logging, coring, testing, or producing operations have indicated that H_2S-bearing zones have not been encountered that could potentially result in atmospheric concentrations of 20 ppm or more of H_2S;

(2) Geologic formations where analysis of produced gas samples have indicated the absence of H_2S in concentrations that could potentially result in atmospheric concentrations of 20 ppm or more of H_2S; or

(3) An area in a geological province in which there has been no prior drilling but from prior drilling in the surrounding areas, it can be shown by correlation of geological and seismic data that equivalent stratigraphic units exist with an absence of H_2S throughout the area to be drilled.

"Zones where the presence of H_2S is unknown" means geologic formations where neither the presence nor absence of H_2S has been confirmed.

(c) *Request for classification of probability of encountering H_2S during operations.* Prior to beginning operations in an area, the lessee shall submit to the Regional Supervisor for approval a request for determination as to whether the proposed operations will be in areas classified as "Zones known to contain H_2S," "Zones where the presence of H_2S is unknown," or "Zones where the absence of H_2S has been confirmed." The classification request shall be supported by a recommendation drawn from available information such as geologic and geophysical data and correlations, well logs, formation tests, cores, and analyses of formation fluids. The classification shall be updated when additional data indicate there is cause for a change in an approved classification.

(d) *Drilling, well-completion, and well-workover operations in zones known to contain H_2S.* Drilling, well-completion, and well-workover operations in zones known to contain H_2S shall be conducted in accordance with the requirements of this paragraph (d) and of paragraphs (h), (i), (j), (k), (l) (1) through (5), and (m) (1) through (13) of this section.

(e) *Drilling and well-completion operations in zones where the presence of H_2S is unknown.* When drilling or completing in zones where the presence of H_2S is unknown, only the requirements of paragraph (h) of this section shall apply. In the event that H_2S is encountered that could potentially result in atmospheric concentrations of 20 ppm or more of H_2S, the requirements of paragraph (d) of this section shall apply.

(f) *Production operations in zones known to contain H_2S.* Production operations in zones known to contain H_2S shall comply with the requirements in paragraphs (h), (l) (1) through (6), and (m) (7) through (16) of this section.

(g) *Simultaneous operations.* Any combination of drilling, well-completion, well-workover, and production operations conducted simultaneously shall comply with all the requirements in this section applicable to each individual operation and in conformance with the coordinated H_2S Contingency Plan as required in paragraph (h)(1) of this section.

(h) *Personnel safety and protection.* The following measures shall be implemented for personnel safety and protection.

(1) *H_2S Contingency Plan.* An H_2S Contingency Plan shall be submitted for approval to the District Supervisor prior to the commencement of operations and, as applicable, encompass simultaneous drilling, well-completion, well-workover, and production operations. A copy of the approved plan shall be made available in the

field area until operations are completed. The H_2S Contingency Plan shall include the following:

(i) Safety procedures and equipment, training, drills, and smoking rules.

(ii) Identity of the job position, title of the person responsible for the overall safety of personnel, and a description of the organization and assignments of functions, duties, and responsibilities of other identified job positions.

(iii) Duties, responsibilities, and operating procedures to be initiated when the concentration of H_2S in the atmosphere reaches the following:

(A) 10 ppm level,

(B) 20 ppm level, and

(C) 50 ppm level.

(iv) Designation of briefing areas as locations for assembly of personnel during conditions of 20-ppm and 50-ppm concentrations of H_2S. At least two briefing areas shall be established on each facility. The briefing area that is upwind of the H_2S source at any given time shall be the designated briefing area.

(v) Procedures for the evacuation of personnel which shall be comprehensive and provide for the deboarding and safe evacuation of all personnel from the facility. The procedures shall address the positioning of all vessels attendant to the facility, their reactions to an emergency, and the provisions for protective-breathing equipment for personnel.

(vi) Agencies to be notified in case of an emergency.

(vii) A list of medical personnel and facilities including addresses and telephone numbers.

(2) *Training Program.* An onsite H_2S-safety training program shall be established that includes the following:

(i) All personnel whether regularly assigned, contracted for, or employed on an unscheduled basis shall be informed of the hazards of H_2S and of SO_2 resulting from burning H_2S and instructed in the provisions for personnel safety contained in the H_2S Contingency Plan.

(ii) All personnel shall be instructed in the proper use of safety equipment which they may be required to use.

(iii) All personnel shall be informed of the location of protective-breathing equipment, H_2S detectors and alarms, ventilation equipment, briefing areas, warning systems, evacuation procedures, and the direction of the prevailing winds.

(iv) All personnel shall be informed of the restrictions and corrective measures concerning beards, spectacles, and contact lenses in conformance with American National Standard Institute (ANSI), Practices for Respiratory Protection (ANSI Z88.2).

(v) Safety information shall be prominently posted on the facility and on vessels serving the facility.

(vi) A drill shall be conducted for each person at the facility within 24 hours after duty begins and at least once during every subsequent 7-day period. A training session shall be conducted for each person upon arrival at the facility and at least once during every subsequent 7-day period. Records of attendance for drilling, well-completion, and workover operations shall be kept at the facility until operations are completed. Records of attendance for production operations shall be maintained at the facility or at the nearest field office for a period of 1 year. Drills and training may be conducted in conjunction with other safety meetings or with rig/facility abandonment drills.

(vii) Personnel shall be instructed in basic first-aid procedures applicable to victims of H_2S exposure. During all drills and training sessions, procedures for rescue and first aid for H_2S victims shall be addressed. Each facility shall have the following equipment readily available, and personnel shall be instructed as to the location and use of the following items:

(A) A first-aid kit of appropriate size and content for the number of personnel on the facility;

(B) Resuscitators complete with face masks, oxygen bottles, and spare oxygen bottles; and

(C) At least one litter or an equivalent device.

(viii) Personnel shall be informed of the meaning of all warning signals.

(3) *Visual warning system.* Visual warning systems shall comply with the following:

(i) Wind-direction equipment shall be installed at prominent locations to indicate to all personnel, on or in the immediate vicinity of the facility, the wind direction at all times to determine safe upwind areas in the event that H_2S or SO_2 is present in the vicinity; and

(ii) Operational danger signs shall be displayed from each side of the facility and a sufficient number of rectangular red flags shall be hoisted in a manner visible to vessels and aircraft and shall comply with the following:

(A) Each sign shall be of a minimum width of 8 feet and a minimum height of 4 feet and shall be a high-visibility yellow color with black lettering of a minimum of 12 inches in height reading as follows:

DANGER—HYDROGEN SULFIDE—H_2S

(B) Each red flag shall be of a minimum width of 3 feet and a minimum height of 2 feet.

(C) All signs and flags shall be illuminated at night and under conditions of poor visibility.

(D) Only signs shall be displayed when cases where the concentration in the atmosphere reaches 20 ppm. Visual alarms shall be activated when atmospheric concentration reaches 20 ppm. Signs and flags shall be displayed when the concentration in the atmosphere reaches 50 ppm.

(E) On facilities with wells capable of producing H_2S, warning signs differentiated from those required under paragraph (A) above shall be permanently installed at the heliport and at boat landings.

(4) *Audible warning system.* A public address system and a siren, horn, or other similar warning device with a unique sound used only for H_2S warnings shall be installed at appropriate locations on the facility. The warning devices (audible and visual) shall be suitable for the electrical classification of the area and shall be activated by the H_2S-detection and H_2S-monitoring equipment when the atmospheric concentration reaches 20 ppm. When the warning devices are activated, the designated responsible persons shall inform personnel of the level of danger and issue instructions on the initiation of appropriate protective measures.

(5) *H_2S-detection and H_2S-monitoring equipment.* (i) Each facility shall have an H_2S-detection and H_2S-monitoring system which activates audible and visual alarms when the atmospheric concentration reaches 20 ppm. The detection systems shall be capable of sensing a minimum 10 ppm of H_2S in the atmosphere with sensing points located at the bell nipple, shale shaker, well-control fluid pit area, driller's station, living quarters, and all areas as appropriate including those which are low, poorly ventilated, or confined where H_2S may accumulate.

(ii) The H_2S-detection and H_2S-monitoring equipment shall be calibrated at least once every 24 hours when drilling approaches a potential H_2S-bearing zone and at least once every 12 hours when drilling, well-completion, and/or well-workover operations are being conducted in an H_2S environment. The H_2S detectors for production operations shall be calibrated at a frequency such that no more than 7 days shall elapse between calibrations. The calibration shall be conducted by a person trained to calibrate the particular H_2S-detection and H_2S-monitoring equipment being used. All calibrations shall be recorded in the driller's or production operations report as applicable.

(iii) H_2S-detection ampoules or any other comparable H_2S-monitoring devices capable of detecting 20 ppm shall be available for use by all personnel. After H_2S has been initially detected, poorly ventilated areas which are not equipped with fixed H_2S monitoring/detection equipment shall be promptly surveyed and evaluated with appropriate frequency using a portable H_2S-detection instrument.

(6) *Protective-breathing equipment.* Protective-breathing equipment and its use shall conform to the following:

(i) Personnel on a facility operating in known or unknown H_2S zones shall have immediate access to pressure-demand-type respirators. The design, selection, use, and maintenance of these respirators shall conform to ANSI Z88.2, Practices for Respiratory Protection. Accessory equipment such as voice-transmission devices and spectacle kits shall be made available as needed.

(ii) The storage location of protective-breathing equipment shall be quickly and easily accessible to all personnel.

(iii) All breathing-air bottles shall be labeled as containing breathing-quality air for human use.

(iv) Vessels attendant to facilities operating in known or unknown H_2S zones shall carry appropriate protective-breathing equipment for each crew member. The District Supervisor may require additional protective-breathing equipment on certain vessels attendant to the facility.

(v) Helicopters attendant to facilities operating in known H_2S zones shall carry pressure-demand-type respirators for the flight crews. Facilities operating in unknown H_2S zones shall store pressure-demand-type respirators immediately accessible to the heliport for the use of flight crews. All members of flight crews shall be trained in the use of the particular type(s) of respirator equipment made available.

(vi) As appropriate to the particular operation(s) (drilling, well-completion, or well-workover operation or any combination thereof), a system of breathing-air manifolds, hoses, and masks shall be provided on the facility and in the briefing areas. A cascade air-bottle system shall be provided for the breathing-air manifolds and to refill individual protective-breathing apparatus bottles. The cascade air-bottle system may be recharged by a high-pressure compressor suitable for providing breathing-quality air provided the compressor suction is located in an uncontaminated atmosphere.

(7) *Additional personnel-safety equipment.* The following additional personnel-safety equipment shall be available:

(i) Portable H_2S detectors;

(ii) Retrieval ropes with safety harnesses to retrieve incapacitated personnel from contaminated areas;

(iii) Chalkboards and/or note pads for communication purposes located on the rig floor, shale-shaker area, the cement-pump rooms, well-bay areas, production processing equipment area, gas compressor area, and pipeline-pump area;

(iv) Bull horns and flashing lights; and

(v) Resuscitators.

(8) *Ventilation equipment.* All ventilation devices shall be explosion-proof and situated in areas where H_2S or SO_2 may accumulate. Movable ventilation devices shall be provided in work areas and be multidirectional and capable of dispersing H_2S or SO_2 vapors away from working personnel.

(9) *Notification of regulatory Agencies.* The MMS and U.S. Coast Guard shall be notified as soon as possible in the event of a non routine release of H_2S which results in an atmospheric concentration of 20 ppm and 50 ppm levels.

(i) *Drilling, completion, and workover fluids program when operating in zones known to contain H_2S.*—(1) *Well-control fluid base.* Either water- or oil-base muds may be used in drilling formations containing H_2S.

(2) *Well-control fluid testing.* If water-base, well-control fluids are used, and if H_2S is detected by air sensors, either the Garrett-Gas-Train test or comparable test techniques for soluble sulfides shall be conducted immediately to confirm the presence of H_2S. If the concentration detected by air sensors is in excess of 20 ppm, personnel conducting the tests shall don protective-breathing equipment conforming to paragraph (h)(6)(i) of this section.

(3) *Additives.* Sufficient quantities of additives for the control of H_2S, well-control fluid pH, and corrosion of equipment shall be maintained on the facility.

(i) *Scavengers.* Prior to drilling into a known H_2S-bearing zone, scavengers for control of H_2S shall be available on the facility. When H_2S is detected, scavengers shall be added as needed. Drilling shall be suspended until the scavenger is circulated throughout the system.

(ii) *Control of pH.* Additives for the control of pH shall be added to water-base well-control fluids in sufficient quantities to maintain a pH of at least 10.0.

(iii) *Corrosion inhibitors.* Additives for the control of corrosion shall be added to the well-control fluid system as needed.

(4) *Degassing.* Well-control fluids containing H_2S shall be degassed at the optimum location for the particular facility. The gases so removed shall be collected and burned in a closed flare system conforming to paragraph (m)(7) of this section.

(j) *Kick detection and well control.* In the event of a kick, the disposal of the well-influx fluids shall be accomplished by one of the following alternatives giving consideration to personnel safety, possible environmental damage, and possible facility well-equipment damage:

(1) Contain the well-fluid influx by shutting in the well and pumping the fluids back into the formation.

(2) Control the kick by using appropriate well-control techniques to prevent formation fracturing in an open hole within the pressure limits of the well equipment (drill pipe, work string, casing, wellhead, BOP system, and related equipment). The disposal of H_2S and other gases shall be through pressurized or atmospheric mud-gas separator equipment depending on volume, pressure, and concentration of H_2S. The equipment shall be designed to recover well-control fluids and to vent to the atmosphere and burn the gases separated from the well-control fluid. The well-control fluid shall be treated to neutralize H_2S and restore and maintain the proper quality.

(k) *Well testing in a zone known to contain H_2S.* (1) Prior to initiation of a well test, safety meetings shall be conducted for all personnel who will be on the facility during the test. The meetings shall emphasize the use of personnel protective-breathing apparatus, first-aid procedures, and the Contingency Plan. Only competent personnel who are trained and are knowledgeable of the hazardous effects of H_2S shall be engaged in these tests.

(2) Well testing shall be performed with the minimum number of personnel in the immediate vicinity of the rig floor and with the appropriate test equipment to safely and adequately perform the test. During the test, H_2S levels shall be continuously monitored.

(3) All produced gases shall be vented and burned through a flare which meets the requirements of paragraph (m)(7) of this section. Gases from stored test fluids shall be vented into the flare outlet.

(4) Downhole test tools and wellhead equipment shall be suitable for H_2S service.

(5) Tubulars suitable for H_2S service shall be used for well testing. Drill pipe shall not be used for well testing without the prior approval of the District Supervisor. Water cushions shall be thoroughly inhibited in order to prevent H_2S attack on metals. The test string shall be flushed with fluid treated for this purpose after completion of the test.

(6) All surface test units and related equipment shall be designed for H_2S service.

(l) *Metallurgical properties of equipment for use in a zone known to contain H_2S.*—(1) *General provisions.* Equipment used in H_2S environments shall be constructed of materials whose metallurgical properties resist or prevent sulfide stress cracking (also known as hydrogen embrittlement, stress corrosion cracking, and/or H_2S embrittlement). The metallurgical properties of the materials shall conform to National Association of Corrosion Engineers (NACE) Standard MR-01-75, Material Requirement, Sulfide Stress Cracking Resistant Metallic Material for Oil Field Equipment.

(2) *Tubulars and other equipment.* Casing, tubing, drill pipe, couplings, flanges, and related equipment shall be designed for H_2S service as specified in Table 4, Acceptable API and American Society of Testing and Materials Specifications for Tubular Goods of NACE Standard MR-01-75. Approval of the District Supervisor is required prior to commencing field welding on such casing (except conductor and surface strings).

(3) *Wellhead, BOP System Components, and pressure-control equipment.* The BOP system components, wellhead, pressure-control equipment, and related equipment exposed to H_2S-bearing fluids shall conform to NACE Standard MR-01-75. However, the BOP system components manufactured prior to April 1978, which are not in compliance with NACE Standard MR-01-75, may be used in an H_2S environment provided the BOP system components incorporate the manufacturer's own design considerations for H_2S service.

(4) *Downhole well-security equipment.* Temporary downhole well-security devices such as retrievable packers and bridge plugs shall be designed for H_2S service.

(5) *Production equipment.* Equipment used when producing zones bearing H_2S shall be constructed of materials capable of resisting or preventing sulfide stress cracking.

(6) *Installation or modification.* The use of welding shall be kept to a minimum during the installation or modification of the produc-

ing facility. Weldments shall be annealed and stress relieved according to the requirements of NACE Standard MR-01-75.

(m) *General requirements when operating in an H_2S zone*—(1) *Additional precautions after penetration of an H_2S-bearing zone.* The H_2S levels shall be continuously monitored in the work areas in addition to monitoring requirements in paragraph (b)(5)(i) of this section during the following operations:

(i) When it is necessary to pull a wet string of drill pipe or workover string,

(ii) Circulating bottoms-up after a drilling break,

(iii) Cementing operations,

(iv) Logging operations, and

(v) Circulating to condition mud or other well-control fluid.

(2) *Coring operations.* When conventional coring operations are conducted in H_2S-bearing zones, protective-breathing equipment shall be worn by those personnel in the working area at least 10 stands in advance of retrieving the core barrel. Cores to be transported shall be sealed and marked for the presence of H_2S.

(3) *Logging operations.* Well-control fluid in use for logging operations shall be conditioned and treated to minimize the effects of H_2S on the logging equipment.

(4) *Stripping operations.* Displaced well-control fluid returns shall be monitored, and protective-breathing equipment shall be worn by those personnel in the working area when the atmospheric concentration of H_2S reaches or exceeds 20 ppm or if the well is under pressure.

(5) *Gas-cut well-control fluid or well kick from H_2S-bearing zone.* Should a decision be made to circulate out a kick, protective-breathing equipment shall be worn by those personnel in the working area prior to and subsequent to bottoms-up and during an extended-kill operation.

(6) *Drill-string and workover-string design and precautions.* Drill- and workover-strings shall be designed consistent with the anticipated depth, conditions of the hole, and reservoir environment to be encountered. Care shall be taken to minimize exposure of the drill- or workover-string to high stresses as much as is practical and consistent with well conditions. Proper handling techniques shall be taken to minimize notching and stress concentrations. Precautions shall be taken to minimize stresses caused by doglegs, improper stiffness ratios, improper torque, whip, abrasive wear on tool joints, and joint imbalance.

(7) *Flare system.* The flare outlet shall be of such diameter to allow easy nonrestricted flow of gas. Flare line outlets shall be located on the downwind side and as far from the facility as is feasible, taking into account the prevailing wind directions, the wake effects caused by the facility and adjacent structure(s), and the height of all such facilities and structures. The flare outlet shall be equipped with an automatic ignition system including a pilot-light gas source or an equivalent system. Alternate methods shall be available for igniting the flare. All vents from production process equipment, tanks, relief valves, burst plates, and similar devices shall be piped to the flare system used for H_2S.

(8) *Corrosion mitigation.* An effective means of monitoring and controlling corrosion caused by acid gases (H_2S and CO_2) shall be used in both the downhole and surface portions of a production system. Specific corrosion monitoring and mitigating measures shall be taken in areas of unusually severe corrosion where accumulation of water and/or higher concentrations of H_2S exist.

(9) *Wireline lubricators.* Lubricators which may be exposed to fluids containing shall be of H_2S-resistant materials.

(10) *Fuel and/or instrument gas.* Gas containing H_2S shall not be used for instrument gas. No gas containing H_2S shall be used for fuel gas without the prior approval of the District Supervisor.

(11) *Sensing lines and devices.* Metals used for sensing line and safety-control devices which are necessarily exposed to H_2S-bearing fluids shall be constructed of H_2S-corrosion resistant materials or coated with appropriate materials so as to resist H_2S corrosion.

(12) *Elastomer seals.* All seals which may be exposed to fluids containing H_2S shall be of H_2S-resistant materials.

(13) *Water disposal.* Produced water disposed of by means other than subsurface injection shall be treated for removal of H_2S.

(14) *Deck drains.* Open deck drains shall be equipped with traps or similar devices to prevent the escape of H_2S gas into the atmosphere.

(15) *Sealed voids.* Precautions shall be taken to eliminate sealed spaces in piping designs (e.g., slip-on flanges, reinforcing pads) which can be invaded by atomic hydrogen when H_2S is present.

Subpart E—Well-Completion Operations

§ 250.70 General requirements.

Well-completion operations shall be conducted in a manner to protect against harm or damage to life (including fish and other aquatic life), property, natural resources of the OCS including any mineral deposits (in areas leased and not leased), the national security or defense, or the marine, coastal, or human environment.

§ 250.71 Definition.

When used in this subpart, the following term shall have the meaning given below:

"Well-completion operations" mean the work conducted to establish the production of a well after the production-casing string has been set, cemented, and pressure-tested.

§ 250.72 Equipment movement.

The movement of well-completion rigs and related equipment on and off a platform or from well to well on the same platform, including rigging up and rigging down, shall be conducted in a safe manner. All wells in the same well-bay which are capable of producing hydrocarbons shall be shut in below the surface with a pump-through-type tubing plug and at the surface with a closed master valve prior to moving well-completion rigs and related equipment, unless otherwise approved by the District Supervisor. A closed surface-controlled subsurface safety valve of the pump-through type may be used in lieu of the pump-through-type tubing plug, provided that the surface control has been locked out of operation. The well from which the rig or related equipment is to be moved shall also be equipped with a shut-in back-pressure valve prior to removing the blowout preventer (BOP) system and installing the tree.

§ 250.73 Emergency shutdown system.

When well-completion operations are conducted on a platform where there are other hydrocarbon-producing wells or other hydrocarbon flow, an emergency shutdown system (ESD) manually controlled station shall be installed near the driller's console or well-servicing unit operator's work station.

§ 250.74 Hydrogen sulfide.

When a well-completion operation is conducted in zones known to contain hydrogen sulfide (H_2S) or in zones where the presence of H_2S is unknown (as defined in § 250.67 of this part), the lessee shall take appropriate precautions to protect life and property on the platform or completion unit, including, but not limited to operations such as blowing the well down, dismantling wellhead equipment and flow lines, circulating the well, swabbing, and pulling tubing, pumps, and packers. The lessee shall comply with the requirements in § 250.67 of this part as well as the appropriate requirements of this subpart.

HYDROGEN SULFIDE
DRILLING/WORKOVER/COMPLETION
CONTINGENCY PLAN

IX. APPENDICES

F. H_2S SAFETY CONTRACTOR REPORTING FORMS

PLEASE SEE ATTACHED FORMS:

H_2S Detection System Calibration Data
Equipment Inspections and Maintenance
Daily Service Report
Training Class Log

TOTAL SULFIDE
SERVICES, INC.

P. O. BOX 91308
LAFAYETTE, LOUISIANA 70509
318/233-7026

2476-B PALMA DRIVE
VENTURA, CALIFORNIA 93003
805/644-7187

ROUTE 4, BOX 474 C
BAKERSFIELD, CALIFORNIA
805/589-0370

TYPE OF OPERATION	OPERATOR	DATE
PRESENT ACTIVITY	LEASE	TSSI REPRESENTATIVE
RIG NAME & NUMBER	LOCATION (STATE, COUNTY)	COMPANY REPRESENTATIVE

EQUIPMENT INSPECTIONS AND MAINTENANCE

BREATHING AIR EQUIPMENT

Daily - Pressure Inspection-Visual

☐ Check of B/A Cascade System

Cascade 1 _____/_____ psi
Cascade 2 _____/_____ psi
Cascade 3 _____/_____ psi
Cascade 4 _____/_____ psi
Cascade 5 _____/_____ psi
Cascade 6 _____/_____ psi
Cascade 7 _____/_____ psi
Cascade 8 _____/_____ psi
Cascade 9 _____/_____ psi
Cascade 10 _____/_____ psi
Cascade _____/_____ psi
Cascade _____/_____ psi

☐ Pressure check of S.C.B.A. units on rig floor
☐ Pressure check of SCBA units in derrick
☐ Pressure check of SCBA units at shaker
☐ Pressure check of SCBA units at mud pits
☐ Pressure check of SCBA units at pump room
☐ Pressure check of other _____.
☐ Pressure check of other _____.
☐ Pressure check of other _____.
☐ Pressure check of other _____.
☐ Pressure check of other _____.
☐ Pressure check of other _____.
☐ Recharged cascade system (as needed)

Weekly - Functional Inspection

☐ SCBA units on rig floor
☐ SCBA units in derrick
☐ SCBA units at shale shaker
☐ SCBA units at mud hopper
☐ SCBA units-in Primary Brief Area
☐ SCBA units-in Secondary Brief Area
☐ SCBA units-other _____
☐ O_2 Resuscitator-primary
☐ O_2 Resuscitator-other _____
☐ Sanitized masks as needed.
☐ SCBA units-Drilling Foreman
☐ SCBA units-Toolpusher
☐ SCBA units-TSSI
☐ SCBA units-Mudlogger
☐ SCBA units-Mud Engineer
☐ SCBA units-other _____.
☐ SCBA units-other _____.
☐ O_2 Resuscitator-secondary.

COMMENTS: _____

Monthly - Functional Inspection

☐ SCBA units on rig floor
☐ SCBA units in derrick
☐ SCBA units at shale shaker
☐ SCBA units at mud hopper
☐ SCBA units-in Primary Brief Area
☐ SCBA units-in Secondary Brief Area
☐ SCBA units-other _____
☐ O_2 Resuscitator-primary
☐ O_2 Resuscitator-other _____
☐ Sanitized masks as needed.
☐ SCBA units-Drilling Foreman
☐ SCBA units-Toolpusher
☐ SCBA units-TSSI
☐ SCBA units-Mudlogger
☐ SCBA units-Mud Engineer
☐ SCBA units-other _____.
☐ SCBA units-other _____.
☐ O_2 Resuscitator-secondary.

COMMENTS: _____

COMPRESSOR AIR CHECK:

O_2 _____.
H_2O vapor _____.
CO _____.
CO_2 _____.
Hydrocarbons _____.

CASCADE AIR CHECK:

O_2 _____.
H_2O vapor _____.
CO _____.
CO_2 _____.
Hydrocarbons _____.

Other equipment maintenance: _____

CLASSES AND BREATHING EQUIPMENT DRILLS

Drilling Foreman: _____ Days since last drill: _____
Toolpusher: _____ Days since last drill: _____
Mudlogger: _____ Days since last drill: _____
Others: _____ Days since last drill: _____

Daylight Crew:	Evening Crew:
_____	_____
_____	_____
_____	_____
Days since last drill: _____	Days since last drill: _____
Others:	Others:
_____	_____
_____	_____
_____	_____
Days since last drill: _____	Days since last drill: _____

H_2S DETECTION DATA

Time: _____ Depth: _____
Maximum H_2S @ Shaker: _____ PPM
Maximum H_2S @ Bell Nipple: _____ PPM
Maximum H_2S @ Cellar: _____ PPM
Maximum H_2S @ Drill Floor: _____ PPM
Maximum H_2S @ _____: _____ PPM
Maximum H_2S @ _____: _____ PPM
Rig Acitvity: _____
Action Taken: _____

Time: _____ Depth: _____
Maximum H_2S @ Shaker: _____ PPM
Maximum H_2S @ Bell Nipple: _____ PPM
Maximum H_2S @ Cellar: _____ PPM
Maximum H_2S @ Drill Floor: _____ PPM
Maximum H_2S @ _____: _____ PPM
Maximum H_2S @ _____: _____ PPM
Rig Acitvity: _____
Action Taken: _____

DRILLING FLUID ANALYSIS

Time: _____ Depth: _____
Mud Weight _____ In _____ Out _____
pH in: _____ pH out _____
Gas Cutting: _____
Total Sulfides: _____
Soluble Sulfides: _____
Soluble Carbonates: _____
Whole Mud Scavenging Cap: _____
Chemical Pretreatment: _____
Recommendations: _____

Time: _____ Depth: _____
Mud Weight _____ In _____ Out _____
pH in: _____ pH out _____
Gas Cutting: _____
Total Sulfides: _____
Soluble Sulfides: _____
Soluble Carbonates: _____
Whole Mud Scavenging Cap: _____
Chemical Pretreatment: _____
Recommendations: _____

P. O. BOX 91308
LAFAYETTE, LOUISIANA 70509
318/233-7026

TOTAL SULFIDE SERVICES, INC.

3637 ARUNDELL CIRCLE
VENTURA, CALIFORNIA 93003
805/644-7187

TYPE OF OPERATION	OPERATOR	DATE
PRESENT ACTIVITY	LEASE	TSSI REPRESENTATIVE
RIG NAME & NUMBER	LOCATION (STATE, COUNTY)	TSSI REPRESENTATIVE

H_2S DETECTION SYSTEM CALIBRATION DATA

SYSTEM 1 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 2 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 3 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 4 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 5 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 6 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 7 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 8 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 9 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 10 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 11 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

SYSTEM 12 Date _____

Location _____ Time _____
Initial Reading ____ PPM @ ____ PPM
____ PPM @ ____ PPM
Low Alarm Time ____ Sec @ ____ PPM
Type of System ____ Ambient ____ SD
____ RXAA ____ TACAA
Recalibration ____ PPM @ ____ PPM
____ PPM @ ____ PPM
____ Days Since Last Cal. Check
Cont # ____ Trans ____ Sensor ____
Comments: _____

TOTAL SULFIDE
SERVICES, INC.

P. O. BOX 91308 — LAFAYETTE, LOUISIANA 70509
PHONE 318/233-7026

DAILY SERVICE REPORT

COMPANY: _____ DATE: _____
AREA/LEASE: _____
OPERATION: _____

EQUIPMENT MAINTENANCE: _____

RIG CLASSES AND H_2S PROCEDURE DRILLS

Rig No. _____ Rig No. _____
Pusher: _____ Pusher: _____
Crew: _____ Crew: _____
Others: _____ Others: _____

Rig No. _____ Rig No. _____
Pusher: _____ Pusher: _____
Crew: _____ Crew: _____
Others: _____ Others: _____

CALIBRATIONS AND BREATHING EQUIPMENT INSPECTIONS

RIG NAME/NUMBER	H_2S MONITOR CAL.	SCBA/RESUS INSP.

TOTAL SULFIDE
SERVICES, INC.

P. O. BOX 91308 — LAFAYETTE, LOUISIANA 70509
PHONE 318/233-7026

COMPANY	LOCATION	LEASE	DATE

RIG, PLANT, FACILITY OR OTHER	INSTRUCTOR

TOPICS DISCUSSED

EQUIPMENT DISCUSSED

EQUIPMENT DEMONSTRATED

SECTION NO.	FILM SHOWN

	NAME (Print)	SOCIAL SECURITY NO.	COMPANY	SIGNATURE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

EXHIBIT B2

Chevron

October 29, 1993

Chevron U.S.A. Production Company
935 Gravier Street
New Orleans, LA 70112

Gulf of Mexico Production Business Unit

Mr. Winston A. Smith
Director
Air, Pesticides, and Toxic Management Division
U. S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365

EPA Air Permit
Destin Dome Block 97

Dear Mr. Smith:

At this time, several members of my staff have had conversations with EPA staff concerning the hearing scheduled for November 3 as well as the procedure for the issuance of the air permit for Destin Dome. Chevron would like to express its opinion about procedure at the hearing and the effective date of the final permit. We will reserve substantive and additional comments on the air permit for a later date.

With regard to the hearing, Chevron would request that it be allowed to have an adequate amount of time at the hearing to present its position on the air permit as well as others who might be interested in supporting our activity. We would hope that the hearing examiner would give deference to speakers who are interested in speaking on the substance of the air permit rather than those merely professing their opposition to all drilling off the coast of Florida no matter how benign. In the past, certain groups have abused the hearing process and turned the proceeding into a farce to present their own personal views regardless of the purpose of the hearing or the legality of the permittee's activity. Chevron would hope this type of activity is discouraged in favor of relevant comments.

I have attached two recent news articles and one letter from an environmental group and their content makes clear individuals are attempting to incite the public with false facts about the project. They are using this hearing to stop drilling and are not concerned with the validity and benign nature of the air emissions for this project. As you have stated in the notice: "EPA will hold a public hearing for the purpose of allowing the public to contribute to the decision-making process by clarifying any significant air issues affecting the draft permit." EPA should make it clear to those attending the hearing its purpose and limit comments to air emission issues.

Secondly, Chevron would like to address in a preliminary way the timing of the issuance of the final permit. Chevron has been prepared to drill this well for nearly three years now. In February of 1991, Florida objected to Chevron's project and we were required to proceed

through an unnecessary, lengthy process that led to the Department of Commerce rejecting Florida's objection and finding Chevron's activity permissible under current law. Because of amendments to the Clean Air Act in the interim in 1992, Chevron was required to apply for and receive a permit for the activity prior to drilling. This was required even though the EPA, in 1991, found the activity to be well within the guidelines for exempt activity (see attached letter).

While Chevron is not attempting to lay blame on anyone or any agency, any further, unnecessary delay in this process, no matter how small is unwarranted. Given the real issues in this hearing permit process, Chevron urges the hearing examiner to close the hearing timely and require any comments to be submitted no later than the closing of the record on November 8, 1993. Chevron would further ask that if at the close of the record there has not been a presentation of credible evidence against the application, the EPA expeditiously process final review and issue the permit effective immediately.

Very truly yours,

Herman Colligan

DLD/paf:062
Attachment

cc: Mr. Scott Davis

OUR OPINION

If you don't want oil rigs, then make your voice heard

The federal government may soon give Chevron everything it needs to begin drilling an exploratory well off Pensacola, but there is still time to speak out.

The case against drilling for oil in Florida's Gulf Coast waters is obvious. There is not all that much oil to be found, according to estimates. There may be more natural gas than oil, and we've got plenty of natural gas already. The oil rigs would pollute the Gulf routinely as well as pose the threat of an oil-spill disaster.

Just as obvious is the need for Floridians to let the federal government know that they don't want the oil rigs. Time for such comment is running short, with the last public hearing coming up in about a week. (See accompanying box for information.)

In the closing days of the Bush administration the Interior Department granted Chevron permission to drill off the Panhandle. To the surprise of some environmentalists, that decision has not been overruled by President Clinton's Interior secretary, Bruce Babbitt. The door is still open for Babbitt to do so, but as time goes by that becomes less likely. It appears he needs a little prodding, and a flood of letters from North Florida residents may help him make up his mind. (We've included Babbitt's address in the box.)

Meanwhile, the Environmental Protection Agency must give Chevron a clean-air permit before drilling can begin, the last procedural hurdle the oil company faces. Why a clean-air permit? Because oil rigs are polluters. The big platforms are massive industrial complexes, and they generate their own power to get the work done. Like other power plants, they now have to meet clear-air rules.

SPEAK OUT

The EPA public hearing on granting a clean-air permit to Chevron will be Nov. 3 in Pensacola in the Saenger Theater, 118 S. Palafox St. There will be two sessions, one from 1 to 5:30 p.m., another from 7 to 11 p.m. For information, call Nikola at the Florida Public Interest Research Group, 224-5304. In addition, calls or letters can be effective:

- **INTERIOR SECRETARY BRUCE BABBITT,** 18th and C Street NW, Washington, D.C., 20240.
- **PRESIDENT CLINTON,** The White House, Washington, D.C., 20500, (202) 456-1111.
- **REP. PETE PETERSON,** 426 Cannon House Office Building, Washington, D.C., 20515, (202) 225-5235, or 561-3979 in Tallahassee.
- **SEN. BOB GRAHAM,** 524 Hart Senate Office Building, Washington, D.C., 20510, (202) 224-3041, or P.O. Box 3050, Tallahassee 32315.
- **SEN. CONNIE MACK,** 517 Hart Senate Office Building, Washington, D.C., 20510, (202) 224-5274.

Pensacola already has a pollution problem, so there is a chance that the EPA will deny the permit. That's why people opposed to the drilling should go to the public hearing. All of the environmental officials in Washington, including those in Babbitt's office, will be watching to see what Floridians have to say.

There are good environmental reasons why drilling off the Florida coast is not a good idea. But the decision is as much politics as it is science and good policy, and in politics it is often the numbers that count. Every letter to Babbitt's office makes a difference, every call to the House and Senate is important and every concerned voice needs to be heard at the public hearing in Pensacola next month. If you don't want the oil rigs, you need to let Washington know.

LETTERS

Allowing drilling off the coast would be environmental suicide

Just in case you have never experienced some of the effects of offshore drilling, here is a brief description:

Santa Barbara had an oil spill from a rig in the early '70s. Today, better than 20 years later, there is still "tar" on the beaches. To swim in the water is to have thick crude oil in your hair.

This does not wash out easily. The local secret is to use gasoline to rid your feet and hair of the unwanted "tar." Those that bathe in gasoline rarely derive a thrill from the experience. The smell of the beach is far from the pleasant salty air that one used to expect.

Many a romantic evening was enjoyed on those beautiful beaches. Now many a disgusted tourist vows to never return. Pensacola would be no different, other than a newfound reputation for "those world-famous dalmatian beaches!"

Understand that the above-mentioned scenario reflects the aesthetic consequences of this heinous practice. More compelling would be the economic and wildlife consequences, to name just a few. If you oppose this sort of environmental suicide, please write your congressman, Interior Secretary Bruce Babbitt, President Clinton or any public official that will listen.

— Tim Handley
Pensacola Beach

customers will be returning after they have visited Biloxi a couple of times and come back shirtless.

— George Williams
Niceville

Misplaced comments

On Sept. 26 I was down at the Seafood Festival handing out brochures for the Veterans Memorial Park. I was inviting people down to see the park.

When I offered a man a brochure he did not take it. He made no comment, then he walked about 15 feet away and began hollering over the crowd. I turned and faced him. He began saying, "I am sick and tired of all you crying Vietnam veterans that came back."

I then asked him if he had ever been in the military. He said yes, "I pulled 38 months tour of duty in Vietnam." So I told him I was there from '64 to all of '65. Then he started hollering again, repeating over and over, "crying Vietnam veterans." I then told him that everyone has their own opinions. He turned and walked off.

If he happens to read this I would like to invite him down to the Vietnam Veterans Memorial on Veterans' Day. Then have him give us veterans along with the 58,204 names on the wall an explanation for his comment.

I am a member of numerous veterans' groups here in town. I know a lot of veterans, most of which have fought honorably and ask nothing of anyone in return. The only crying done by veterans is for his fallen comrades who never returned.

— Frank H. Smith Jr.
Cantonment

Gun control needed

This letter is in response to J. Ray Godwin's letter complaining about the Brady Bill and the efforts to pass a national gun policy.

[illegible] legislation and

Mr. Godwin, people like you and the NRA have contributed to the proliferation of illegal gun ownership by continuing to "stonewall" efforts to control gun sales. Had legislation been passed years ago, guns would not now be in the hands of so many children.

Major problems are created for society to deal with every day because of guns.

- 100,000 suburban students bring guns to school every day!
- Counties around Atlanta just agreed to spend large amounts of taxpayers' money (which could go [illegible]on) to install metal detectors in [illegible]
- [illegible]bers of guns are [illegible]d through the mail (without verifying who is buying them) from gun dealers in states like South Carolina and Virginia — all done legally! They have be resold on the street of cities in other states from unauthorized dealers illegally!
- Too many weapons are automatic, machine-gun-style weapons needed only by the military.
- Young children are killing with guns! Guns are as easy to ge as a carton of milk.

Mr. Godwin, when is legislatio to control guns in the interest of national public safety needed if not now? Now is the time! I will write to legislators begging for it.

— Fay D. Walk
Pensac

BRIEFLY

Environmental group hosts fund-raiser on Oct. 21

GULF BREEZE — Gulf Coast Environmental Defense will have a fund-raiser reception Oct. 21 at ita campaign office in Harbourtown shopping center.

The reception will be from 6 to 8 p.m. in the campaign office above Naturally Delicious.

Among its current environmental issues, the group is challenging an air emissions permit for a Chevron USA Inc. gas well planned off the coast of Pensacola Beach.

The Environmental Protection Agency is gathering public comments on the air permit, which will regulate emissions from the rig's diesel generators.

A puhlic hearing on the permits is scheduled from 1 to 5:30 p.m. and 7 to 11 p.m. Nov. 3 at the Saenger Theatre on Palafox Street in Pensacola.

For more information call: 934-9873.

Florida PIRC

420 East Call St., Tallahassee, FL 32301

October 22, 1993

Dear Save Our Shores Activist:

In two weeks EPA will hold a public hearing on a Chevron permit to drill off Pensacola. Over the next several months the new administration, through the Department of the Interior (DOI), will finalize its position on drilling and leasing off the entire Florida coastline. If we are to win protection for our coast we must redouble our efforts now!

Despite requests from environmental leaders, the Governor, the Cabinet and the Florida House of Representatives, DOI Secretary Bruce Babbitt has yet to commit to protecting Florida's coast. His official posture is that he is still studying the issue; however, his staff seem to be testing the waters for a pro-drilling platform for Florida. Needless to say this is not the response we expected from the "environmental" Clinton/Gore administration.

The core of our opposition seems to be the insider influence of the gas industry lobby, which is well positioned in the new administration. They argue that drilling off Florida could be a key component of the Clinton administration plan to encourage gas as a preferable fuel to oil. This argument does not hold water when you consider that less that 1% of the nation's gas reserves are predicted to lie off our coast. In fact, the vast majority of the nation's gas reserves are onshore. Risking Florida's coast to find gas will not dramatically change the amount of gas supplies available to the nation. It could however have dramatic impacts on our coastal environment and economy. Gas may be cleaner as a fuel, but it is not cleaner to extract and transport. Routine pollution and the risk of catastrophe accompany all drilling, both gas and oil.

On November 3rd, EPA will hold a public hearing on a proposed air emissions permit for a Chevron rig 27.5 miles off Pensacola. This is the final permit Chevron is required to obtain before putting up the rig. It is also the only opportunity for the public to send a message to the new administration about their overall drilling policy before decisions are made. Because of this we are encouraging people to make general comments against drilling, as well as specific air emission comments. We will be preparing formal comment on the permit to present at the public hearing.

<u>Please plan to attend and testify at the Nov. 3rd EPA Public Hearing in Pensacola at the Saenger Theater, 118 S. Palafox St., at 7:00 PM.</u>

As always we have fact sheets, postcards, petitions, bumper stickers, T-shirts, sample letters, and a 36 page report documenting the case against drilling. If you would like them, give us a call at (904) 224-8304.

I look forward to seeing you at the hearing!

Sincerely,

Ann Whitfield

Ann Whitfield
Executive Director

enclosures

with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 94-553 Filed 1-10-94; 8:45 am]

BILLING CODE 6717-01-M

ENVIRONMENTAL PROTECTION AGENCY

[FRL-4824-8]

Final Outer Continental Shelf Air Permit Decision

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of final Outer Continental Shelf air permit.

SUMMARY: The United States Environmental Protection Agency (EPA) hereby gives notice of the final Outer Continental Shelf air permit decision for the Chevron U.S.A. Production Company, Inc., Destin Dome Block 97 Exploratory Well. Destin Dome Block 97 is located approximately 29 miles offshore of Pensacola, Florida. After due consideration of the facts applicable to this Outer Continental Shelf source as they appear in the Administrative Record and the requirements expressed in the Clean Air Act and appropriate regulations, the Regional Administrator has determined that the Outer Continental Shelf air permit, OCS-FL-001, should be issued with the revisions incorporated since the preliminary determination announced by the previous public notice for this permit (Public Notice Date: October 3, 1993). This action constitutes EPA's final permit decision in accordance with Title 40, Code of Federal Regulations (40 CFR) § 124.15(a). The permit will become effective as specified in this notice, provided that no timely request for review under 40 CFR 124.19 is received by EPA.

Any person who filed comments on the draft Outer Continental Shelf permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision. The petition shall include a statement of the reasons supporting that review, including a demonstration that any issues being raised were raised during the public comment period (including any public hearing) to the extent required by 40 CFR Part 124 and when appropriate, a showing that the condition in question is based on a finding of fact or conclusion of law which is clearly erroneous, or an exercise of discretion or an important policy consideration.

EFFECTIVE DATE: This action is effective February 9, 1994. The date of service of notice of this final permit decision was January 10, 1994.

The petition must be submitted to the Regional Administrator by February 9, 1994.

ADDRESSES: Send petitions addressed to Mr. John L. Hankinson, Jr., Regional Administrator, at the EPA address in this notice (Attention: R. Scott Davis/APTMD). Copies of the documents relevant to this action are available for public inspection during normal business hours at the following locations:

Region IV Library, Environmental Protection Agency, 345 Courtland Street NE, Atlanta, GA 30365.

Air Resources Management Division, Florida Department of Environmental Protection, 111 South Magnolia Drive, Tallahassee, Florida 32399.

West Florida Regional Library, 200 West Gregory, Pensacola, Florida 32501-4878.

Orange County Library, 101 East Central Boulevard, Orlando, Florida 32801.

FOR FURTHER INFORMATION CONTACT: R. Scott Davis, Air, Pesticides, and Toxics Management Division, U.S. EPA Region IV, 345 Courtland Street, NE, Atlanta, GA 30365. Telephone (404) 347-5014.

Dated: January 5,1994.

Patrick M. Tobin,

Acting Regional Administrator.

[FR Doc. 94-617 Filed 1-10-94; 8:45 am]

BILLING CODE 6560-50-P

[FRL-4824-7]

National Drinking Water Advisory Council Request for Nominations

The U.S. Environmental Protection Agency (EPA) invites all interested persons to nominate qualified individuals to serve as members of the National Drinking Water Advisory Council. This Advisory Council was established to provide practical and independent advice, consultation and recommendations to the Agency on the activities, functions and policies related to the implementation of the Safe Drinking Water Act as amended. The Council consists of fifteen members, including a Chairperson. Five members represent the general public; five members represent appropriate state and local agencies concerned with water hygiene and public water supply; and five members represent private organizations or groups demonstrating an active interest in the field of water hygiene and public water supply. Each member holds office for a term of three years and is eligible for reappointment. On December 15 of each year, five members complete their appointment. This notice solicits names to fill the five vacancies as of December 16, 1993.

Any interested person or organization may nominate qualified individuals for membership. Nominees should be identified by name, occupation, position, address and telephone number. Nominations must include a current resume providing the nominee's background, experience, and qualifications.

Persons selected for membership will receive compensation for travel and a nominal daily compensation while attending meetings.

Nominations should be submitted to Charlene E. Shaw, Designated Federal Official, National Drinking Water Advisory Council, U.S. Environmental Protection Agency, Office of Ground Water and Drinking Water (4601), 401 M Street SW, Washington, DC 20460, no later than 30 days after publication of this notice in the Federal Register. The agency will not formally acknowledge or respond to nominations.

Dated: January 5, 1994.

James R. Elder,

Director, Office of Ground Water and Drinking Water.

[FR Doc. 94-618 Filed 1-10-94; 8:45 am]

BILLING CODE 6560-50-M

[FRL-4822-7]

Environmental Information and Assessment Committee of the National Advisory Council for Environmental Policy and Technology; Public Meeting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of public meeting.

SUMMARY: Under the Federal Advisory Committee Act, PL 92463, EPA gives notice of a one-day meeting of the Environmental Information and Assessment (EIA) Committee of the National Advisory Council for Environmental Policy and Technology (NACEPT). NACEPT provides advice and recommendations to the Administrator of EPA on a broad range of environmental policy issues, and the EIA Committee examines issues associated with the gathering, dissemination, and use of

Department of Environmental Regulation

Routing and Transmittal Slip

To: (Name, Office, Location)

1. Clair Fancy
2. John
3. ~~Preston~~ } FYI
4. Patty - File

Remarks:

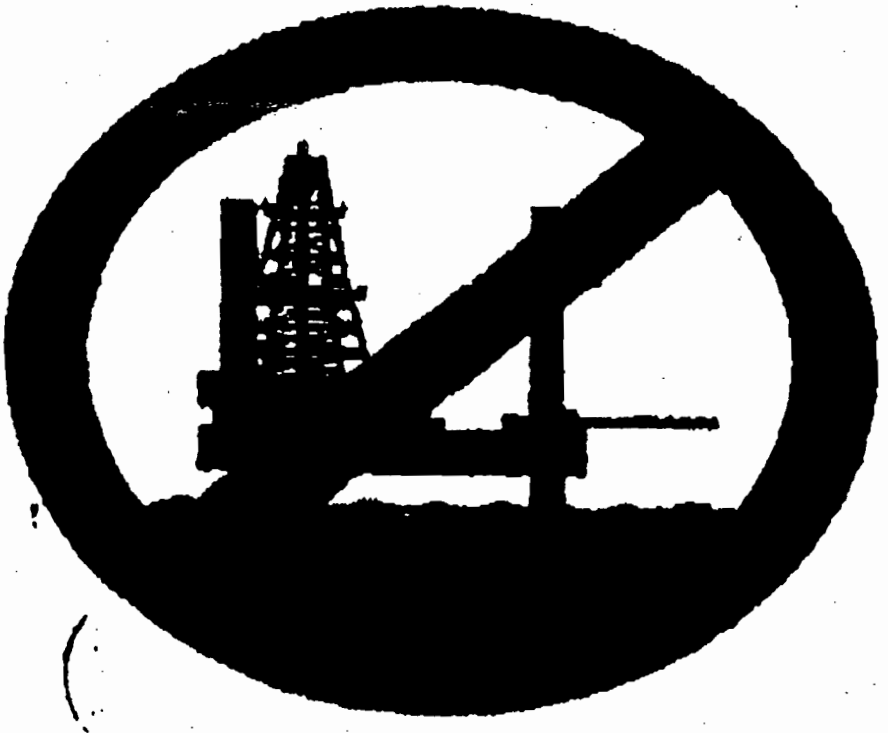
FYI

From: Roy

Date 1-24-93

Phone

STOP CHEVRON
STOP OFFSHORE DRILLING



Let Your Voice Be Heard!

CHEVRON AIR PERMIT PUBLIC HEARING

Wednesday, November 3rd

Saenger Theater

118 S. Palafox St., Pensacola

7:00 PM Also from 1:00 - 5:30 PM

For more info: In Pensacola call Angela with Gulf Coast Environmental Defense at 904-934-9873
In Tallahassee call Nikole with Florida PIRG at 904-224-5304

Printed on Recycled Paper

EXHIBIT B3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

4APT-AEB

NOV - 1 1993

Ms. Gail A. Carmody
Project Leader
Field Office
Fish and Wildlife Service
1612 June Avenue
Panama City, Florida 32405-3721

Re: Chevron USA Outer Continental Shelf Air Permit

Dear Ms. Carmody:

Thank you for your letter of September 21, 1993, concerning the Environmental Protection Agency (EPA) Region IV's administration of the Outer Continental Shelf (OCS) air permit program. In particular, EPA is considering the permit application by the Chevron USA Production Company for the Destin Dome Block 97.

It is Region IV's understanding that the U.S. Fish and Wildlife Service (FWS) has determined that this proposed project will not jeopardize any listed species or critical habitat, pursuant to the Endangered Species Act (ESA). As one of the bases for this understanding, I offer the June 22, 1987 letter (Exhibit A) from David Allen, Acting Regional Director of FWS, to the Director of the Mineral Management Service concerning OCS leasing sales 116 in the eastern Gulf of Mexico, which includes the Destin Dome 97. Mr. Allen's letter included a list of endangered species and critical habitats, and stated that "formal consultation for these sales need not be initiated at this time." However, he added that formal consultation must be initiated if, among other things, "a new species is listed or critical habitat is designated which may be affected by these proposed Outer Continental Shelf sales."

The only new species added that EPA is aware is the Gulf sturgeon, as noted in your April 23, 1993 letter to Heinz Mueller, Chief of the Environmental Policy Section for Region IV (Exhibit B). With respect to any effect on the Gulf sturgeon by OCS leases in general or the Chevron permit in particular, I refer to the August 1990 Final Environmental Impact Statement prepared by the Mineral Management Service for the relevant sales areas of the Gulf of Mexico (Exhibit C). This study concludes that impacts on the Gulf sturgeon are estimated to be low (p. II-55). This determination is consistent with your April 23, 1993 letter to Heinz Mueller which described the Gulf sturgeon as benthic feeders that have not been caught in federal waters, and with the December 7, 1990 memorandum from the Acting Project

Leader for your office, which noted the absence of live bottom habitats in Block 97 (Exhibit D).

Furthermore, EPA Region IV has received other correspondence which indicate no impact from the proposed exploration well at Destin Dome 97. An August 17, 1993 letter from James W. Pulliam, Jr., the Regional Director for FWS, stated that the Chevron air permit should not have any significant impact on the nearest wilderness area (Exhibit E). A December 3, 1990 letter from Andreas Mager, Jr., the Assistant Regional Director for the Habitat Conservation Division of the National Oceanic and Atmospheric Administration's Southeast Regional Office, indicated no objection to the proposed drilling of well A (Exhibit F). Likewise, the December 7, 1990 letter from then Acting Project Leader Jay Tioxell had no objection to the proposed operations at Destin Dome 97.

In conclusion, it is the opinion of EPA Region IV that FWS has determined that there are no listed or proposed species or critical habitat in the area of project influence, and consequently that there would be no adverse effects on such species or habitats resulting from the issuance of the Chevron OCS air permit. Therefore, pursuant to your September 21, 1993 letter, there is no consultation required under Section 7 of the ESA in this case. As requested on the second page of your September 21, 1993 letter, the information on which such determination is based is included with this letter.

Please be aware that public comments on this permit application close on November 8, 1993, and that EPA Region IV intends to make a determination concerning the issuance of this permit shortly thereafter. If you have any questions on this matter please feel free to contact Mr. Scott Davis of my staff at the above address, or telephone 404/347-5014. Thank you for your time and consideration in this matter.

Sincerely yours,

Bruce P. Miller for

Winston A. Smith, Director
Air, Pesticides and Toxics
Management Division

Enclosures

United States Department of the Interior

FISH AND WILDLIFE SERVICE
75 SPRING STREET, S.W.
ATLANTA, GEORGIA 30303

3

B-

June 22, 1987

Memorandum

To: Director, Minerals Management Service, Reston, Virginia

From: Acting Regional Director, FWS, Atlanta, Georgia (AWE/SE)

Subject: Section 7 Consultation on Outer Continental Shelf Oil and Gas Leasing and Exploration in the Gulf of Mexico

We have reviewed the information that was provided on the proposed Outer Continental Shelf leasing sales 113 in the Central Gulf, 115 in the Western Gulf, and 116 in the Eastern Gulf of Mexico. This memorandum addresses only the Central and Eastern Gulf sales. Our Southwestern Regional Office in Albuquerque, New Mexico, will respond to your request regarding the Western Gulf lease sale. We concur that sales 113 and 116 do not represent a substantive modification of the proposed actions considered in earlier Regionwide consultations (April 10, 1979; June 30, 1982, and the October 25, 1982, amendment to the June 30, 1982, opinion).

We have also considered the impact of your activity concerning the recently listed piping plover (Charadrius melodus) and the Interior least tern (Sterna antillarum athalassos). However, your action is not likely to adversely affect these species.

Therefore, we concur that formal consultation for these sales need not be initiated at this time. However, the Minerals Management Service is reminded that formal Section 7 consultation must be initiated if deferral areas in sale 116 are changed; if new information reveals impacts on listed species or their habitat for these Outer Continental Shelf sales that were not considered in this review; if those proposed Outer Continental Shelf sales are subsequently modified; or if a new species is listed or critical habitat is designated which may be affected by these proposed Outer Continental Shelf sales.

Daniel B. Allen

cc:
Jackson E. Lewis
Minerals Management Service
Mail Stop 644
12203 Sunrise Valley Drive
Reston, Virginia 22091

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Field Office
1612 June Avenue
Panama City, FL 32405-3721
Tel: (904) 769-0552
Fax: (904) 763-2177

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

April 23, 1993

Mr. Heinz J. Mueller, Chief
Environmental Policy Section
Federal Activities Branch
U.S. Environmental Protection Agency
345 Courtland St, NE
Atlanta, Georgia 30365

Re: FWS Log. No. 4-P-93-065

Dear Mr. Mueller:

Thank you for your letter of March 17, 1993, regarding consultation under the Endangered Species Act for issuance of a New Source National Pollutant Discharge Elimination System Permit (NPDES) for wastewater discharges from oil and gas industry activities in the eastern Gulf of Mexico. The U.S. Environmental Protection Agency (USEPA), Region IV, is currently preparing a Supplemental Environmental Impact Statement (SEIS) on the proposed action. According to your agency, "The area of coverage for the permitting activity is in Federal jurisdictional waters, i.e., outside of three miles from state coastlines, and is generally that area of the Gulf of Mexico east of 87.5 degrees longitude, with a small area off the coast of Alabama and Mississippi included."

You have requested a list of federal endangered or threatened species that could be impacted by this permitting action. Enclosed is a table of listed and candidate species under the jurisdiction of the Fish and Wildlife Service (Service) that could be impacted by the action. However, our initial evaluation of the proposed action indicates only the Gulf sturgeon *Acipenser oxyrinchus desotoi* may be affected by the action.

The Gulf sturgeon was listed as a federally threatened species on September 30, 1991, with an effective date of October 30, 1991 (Federal Register Vol. 56, No. 189). The Gulf sturgeon is a subspecies of the Atlantic sturgeon and is known to occur in most major rivers from the Mississippi River east to the Suwannee River, and in marine waters of the central and eastern Gulf of Mexico south to Florida Bay (Barkuloo 1988). Sturgeon in Alabama, Mississippi, and Louisiana can be described as rare;

recent specimens have been obtained from Lake Ponchartrain, Pearl River, Pascagoula River, and the Mobile River. The current population status of the Gulf sturgeon can be described as uncommon to rare in Florida Gulf coast rivers other than the Suwannee River. In the Suwannee River, Gulf sturgeon are more abundant, but still uncommon. The Suwannee River probably has the healthiest population of Gulf sturgeon remaining in the Gulf. No catches of Gulf sturgeon have been recorded in federal waters in the Gulf of Mexico. There has been no effort to specifically catch the sturgeon during their offshore migration. Critical habitat is not designated for the Gulf sturgeon (Barkuloo 1988).

The sturgeon virtually disappeared throughout much of its range at the turn of the century. The declines were attributed to damming of rivers and other forms of habitat destruction, over-exploitation, and deterioration of water quality (Barkuloo 1988).

Adult Gulf sturgeon are anadromous. They spend about eight months per year in rivers, and make winter migrations to estuarine and marine waters for the remainder of the year. Until year three or four, young sturgeon inhabit riverine and low-salinity estuarine areas year-round (Barkuloo 1988).

Sturgeon are opportunistic, benthic feeding, secondary carnivores that, because of morphological adaptations for sensing foods and feeding, have diets restricted to macroinvertebrates. Preliminary investigations on Gulf sturgeon feeding habits reveal that while inhabiting riverine and estuarine areas, young sturgeon feed on about 20 soft-bodied invertebrate species, including amphipod and isopod crustaceans, oligochaete and polychaete worms, and chironomid and certoponid larvae. After age five or six, they are believed to feed almost entirely in marine or estuarine waters during the winter months and live off stored body fat while in rivers.

The Gulf sturgeon would be most vulnerable to oil and gas discharges permitted under a NPDES permit during the winter marine migrations. Since the sturgeon is a benthic feeder, ingestion of contaminated sediments, organisms, or vegetation could occur once the discharged material has settled to the sea floor. The ability to sense and avoid this material by sturgeon is unknown. Further, since the sturgeon is a benthic feeder, it could be attracted to offshore structures. However, it has not been documented how far offshore Gulf sturgeon migrate in winter.

The adult sturgeon does little or no feeding in fresh water, and therefore, its growth and reproductive potential depend entirely on the resources accumulated by feeding during winter migrations. Consumption of contaminated food sources could lead to general body deterioration, lower reproductive potential, and lower viability of offspring. Information is also lacking on whether sturgeon aggregate during the winter migrations. Data suggests,

however, that adults tend to enter and leave the freshwater system within a very narrow time period. (They begin entering when temperatures increase to about 16 to 23°C and begin leaving when temperatures decrease to 19°C).

There is a major gap in information on the Gulf sturgeon's migratory habits. The offshore marine habitats have not been located due to researcher's inability to locate or track these fish in salt water for extended periods of time.

Section 7(a)(2) of the Endangered Species Act of 1973 (Act), as amended, requires federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or destroy or adversely modify critical habitat. The federal agency responsible for authorizing, funding, or implementing an action is required to determine whether listed species, proposed species, critical habitat, or proposed critical habitat may be present in the area that would be influenced by that action. If such species or habitat may be present, the federal agency is required to determine whether the action may affect such species or habitat. To make such a determination, the following information should be considered and summarized in a biological information report:

1. The results of an on-site inspection of the areas affected by the action.

2. The views of recognized experts on the species at issue.

3. A review of the literature and other information.

4. An analysis of the effects of the action on the species and habitat, including consideration for the cumulative effects, and the results of any related studies.

5. An analysis of alternative actions considered by the federal agency for the proposed action.

If a determination is made that listed species or critical habitat may be affected, the federal agency must request, in writing, formal consultation with the Fish and Wildlife Service. If the proposed action is likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat, the federal agency must confer with the Fish and Wildlife Service.

Consultation may be informal if the proposed action can be implemented in a way that is not likely to adversely affect listed species or critical habitat. Coordination with the Service to explore this possibility, prior to a consultation request, is encouraged.

If the federal agency determines that no listed species, proposed species, critical habitats, or proposed critical habitats occur in the area of project influence, the project is not likely to adversely affect such species or habitats, or there would be no effect on such species or habitats, this office requests the opportunity to review the information on which such a determination is based, and to concur with those determinations.

Section 7(d) of the Act underscores the requirement that the federal agency and permit or license applicant shall not make any irreversible or irretrievable commitment of resources during the consultation period which, in effect, would deny the formulation or implementation of reasonable alternatives regarding their actions on listed species.

We appreciate the opportunity to coordinate with the EPA during this early planning stage and look forward to continued coordination concerning the proposed action. The contact in this office regarding this matter is Ms. Lorna Patrick.

Sincerely,

Gail A. Carmody
Project Leader

Enclosure

cc:
FWS, Jacksonvill FO, FL
FWS, Vero Beach FO, FL
FWS, Daphne FO, AL
Tucker, FL GOV, Tallahassee, FL
MS Coastal Management, Biloxi, MS
Mink, AL Geological Survey, Tuscaloosa, AL
Carlton, ADEM, Mobile, AL

LAP/kh/bioopinions/npdesgom.esa

once during the lease life, and resultant losses would recover within one generation. The impact from this factor is considered low.

While the level of impacts from the sale-related activities varies, those activities having the greatest impacts most accurately represent the effect of the sale on the species because of its limited ability to sustain its population and recover from adverse impacts.

Conclusion

The impact of the proposed sale on the piping plover is low.

(e) Florida Manatee

Several impact-producing factors may have adverse impacts on the Florida manatee.

Anchoring, pipe and structure emplacement, dredging, produced waters, domestic-sanitary waste, and some oil-spill impacts result in disturbance of the sea grasses utilized by the Florida manatee. Recovery from damage caused by such activities would take six months to two years. The impact level from this factor is considered low.

Contact with, ingestion of, or displacement by spilled oil resulting from the proposed action could have adverse impacts on manatees. Interactions are estimated to be unlikely but could result in losses that would require one or two generations to recover. The impact from this factor is considered low.

Vessel traffic associated with the proposed action could collide with or displace manatees. Such interactions could cause or be indirectly related to their mortality. These interactions are estimated to occur once during the lease life. Recovery could be accomplished in two to three generations. The impact level from this factor is considered moderate.

The entrapment in or ingestion of trash and debris that is generated as a result of the proposed action could cause the drowning or starvation of manatees. These interactions are estimated to occur once during the lease life and result in losses that would require one generation to recover. The impact level from this factor is considered very low.

While the level of impacts from the sale-related activities varies, those activities having the greatest impacts most accurately represent the effect of the sale on the species because of its limited ability to sustain its population and recover from adverse impacts.

Conclusion

The proposed sale is estimated to have a moderate impact on Florida manatees.

(f) Gulf Sturgeon

Operational discharges (drilling muds and cuttings) may reduce the Gulf sturgeon's food sources by death or displacement resulting from sedimentation, turbidity, or ingestion. Such interactions could occur once during the lease life and could result in a population decline that would take one to two generations to recover. The impact level of this factor is considered low.

While the level of impacts from the sale-related activities varies, those activities having the greatest impacts most accurately represent the effect of the sale on the species because of its limited ability to sustain its population and recover from adverse impacts.

Conclusion

The impact of the Base Case scenario on the Gulf sturgeon is estimated to be low.

United States Department of the Interior
FISH AND WILDLIFE SERVICE

Field Office
1612 June Avenue
Panama City, Florida 32405-3721

December 7, 1990

Memorandum

To: Regional Director, Gulf of Mexico Outer Continental Shelf Region, Minerals Management Service, New Orleans, Louisiana attn: Ms 5231

From: Acting Project Leader, Fish and Wildlife Service Field Office, Panama City, Florida

Subject: Initial Plan of Exploration, Chevron U.S.A., OCS-G 8336, Block 97, Destin Dome Area, Control No. N-3912

The Fish and Wildlife Service has reviewed the subject document in accordance with 655 DM 1. The document covers the exploratory drilling of well A in block 97, Destin Dome Area.

Review of the Plan indicates the absence of live bottom habitats in Block 97. The Oil Spill Contingency Plan indicates that although the drillsite is seaward of the Oil Spill Stipulation B Zone, the Stipulation B requirements will be implemented for this activity. Therefore, we have no objection to the proposed operations.

We appreciate the opportunity to provide comments.

cc:
NMFS, Galveston, TX (Environmental Assessment Branch)
John de Mond, LA DNR, Baton Rouge, LA (attn: Bill Pittman)
Ken Graham, MMS, New Orleans, LA

United States Department of the Interior

FISH AND WILDLIFE SERVICE
75 Spring Street, S.W.
Atlanta, Georgia
30303

August 17, 1993

Mr. Brian L. Beals, Chief
Source Evaluation Unit
Air Enforcement Branch
Environmental Protection Agency
345 Courtland Street, NE.
Atlanta, Georgia 30365

Dear Mr. Beals:

We have reviewed the material that you forwarded to us regarding the Chevron USA Production Company's Outer Continental Shelf (OCS) air permit application for a proposed exploratory natural gas drilling project to be operated on a temporary basis (210 days). The proposed project is located approximately 200km northeast of Breton Wilderness Area (WA), a Class I air quality area administered by the Fish and Wildlife Service. We understand that the proposed project is not subject to Prevention of Significant Deterioration/New Source Review as projected emissions are less than 250 tons per year. However, Environmental Protection Agency OCS air regulations in 40 CFR 55.6(b)(7) require that notification be given to the responsible Federal Land Manager if a proposed project's emissions may affect a Class I area.

Because of the relatively great distance to the wilderness area, the relatively low emissions, and the temporary nature of the proposed project, the proposed project should not significantly impact any sensitive resources at Breton WA.

Thank you for providing us the opportunity to comment on Chevron USA's permit application. If we can be of further assistance, please contact Ms. Ellen Porter of our Air Quality Branch in Denver at 303/969-2071.

Sincerely yours,

James W. Pulliam, Jr.
Regional Director

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
9450 Koger Boulevard
St. Petersburg, FL 33702

December 3, 1990

Mr. Kent E. Stauffer
Chief, Plans and Pipeline Section
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Dear Mr. Stauffer:

The National Marine Fisheries Service has reviewed the Initial Plan of Exploration for Lease OCS-G 8336, Block 97, Destin Dome submitted with your letter dated November 27, 1990 (MS 5231; Control No. N-3912). Based upon our review of the material submitted to us, we have no objection to the proposed drilling of Well A.

Should you have any questions, please contact Dr. Ed Keppner of our Panama City Area Office at 904/234-5061.

Sincerely yours,

Edwin J. Keppner

for Andreas Mager, Jr.
Assistant Regional Director
Habitat Conservation Division

EXHIBIT B4

Chevron

Chevron

November 5, 1993

VIA EXPRESS MAIL

Chevron U.S.A. Production Company
935 Gravier Street
New Orleans, LA 70112

Gulf of Mexico Production Business Unit

Mr. Winston A. Smith
Director
Air, Pesticides, and Toxic Management Division
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365

EPA Air Permit
Destin Dome Block 97

Dear Mr. Smith:

Please accept this letter as Chevron's final comments with regard to the Air Permit for the Destin Dome Block 97 exploratory well. In my estimation, the preparation and filing of our original application in May of 1993 to the date of the public hearing on November 3, 1993 has allowed for ample input from the citizens of the United States and Florida. I have a great deal of respect for the regulatory process. If the natural gas resources which Chevron expects to find are allowed to eventually be produced, the net effect of the emissions from the drilling of this well will have only a positive effect on the air quality of the United States. This is supported by the comments I filed into the record at the public hearing as well as the numerous comments of others that supported this project.

As you are aware and was pointed out to the general public who attended the hearing in Pensacola, this Air Permit is only a small portion of the safeguards which governmental agencies are required to implement to allow a company like Chevron to drill a well in the federal waters of the United States. Since November 1982 to the present day, the public has been informed on numerous occasions by Notices in the Federal Register, public hearings, proceedings before the Department of Commerce, and now finally, this Air Permit, of the federal government's intentions to allow exploration of oil and gas reserves in federal waters off the state of Florida. The public has had an opportunity to participate on numerous occasions and the federal and state actions have assured and concluded that the activities proposed by Chevron involving drilling off the coast of Florida are not likely to result in environmental degradation to the federal waters, state waters, air quality or species off the coast of Florida.

The Air Permit is sound, based on science and will afford protection to all citizens of the United States as well as Florida from any substantial degradation to air quality. From the filing of the application in May, Chevron has provided substantial information to assure that the emissions from the project are below amounts necessary to classify this project as a minor source. Other agencies, such as Minerals Management Service, the U.S. Fish and Wildlife Service, the National Park Service and the state of Florida, have been involved and consulted in the process of preparing this permit. It is now time to go forward, issue the permit effective immediately and allow the activity to take place.

There has been some discussion with your staff concerning the regulations and how they apply to the effective date of the permit when issued. [40 CFR 124.15, Issuance and Effective Date of Permit succinctly states when a permit will be become effective.]

(b) **A final permit decision (or a decision to deny a permit for the active life of a RCRA hazardous waste management facility or unit under § 270.29) shall become effective 30 days after the service of notice of the decision unless: ...**

(3) **No comments requested a change in the draft permit, in which case the permit shall become effective immediately upon issuance.**

Chevron would like to point out that this language and the process thus far emphatically support for the issuance of a permit effective immediately. While Chevron has not attempted to review the written comments that have been submitted into the Record, to this date, we have attended the public hearing and if it is any indication of what is contained in the written comments, there have been no requests for any changes in the draft permit conditions. Secondly, Chevron would like to point out that the draft permit as noticed states that the permit would become effective on signing and should therefore be issued effective immediately. Lastly, issuance with an immediate effective date would conform to the manner in which permits are issued currently in Florida. I would like to point out that in the state of Florida, once the permitting process has run its course, as it has here, the permit issues effective immediately.

In summary, based on the regulatory requirements for an immediate effective date, the exhaustive record on this project in general, as well as the specific permit process for this Air Permit, I would urge the U.S. Environmental Protection Agency to issue this permit expeditiously and effective immediately.

Sincerely,

H. J. Colligan/OLO

H. J. Colligan
/alw:068

c.c.: Mr. Scott Davis

EXHIBIT B5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

NOV 16 1993

4APT-AEB

Mr. Marc Chytilo
Chief Counsel
Environmental Defense Center
906 Garden Street, Suite 2
Santa Barbara, California 93101

RE: Draft Outer Continental Shelf Air Permit for the Chevron U.S.A. Production Company

Dear Mr. Chytilo:

This letter is in response to your correspondence, dated November 1, 1993, requesting an extension of the public comment period for the above referenced proposed air permit. According to your correspondence, you would like to comment on specific air quality issues related to the draft air permit for the proposed exploratory drilling operation for Destin Dome Block 97 (Reference OCS-FL-001).

According to 40 C.F.R. § 124.13, the comment period may be extended by the Regional Administrator to give commenters the opportunity to make supporting materials, not already included in the administrative record, available to EPA for any reasonable issues and arguments raised. In accordance with these regulations, the deadline for EPA Region IV to accept any supporting material from you will be November 30, 1993.

Please submit your information to:

Mr. Winston A. Smith, Director
Air, Pesticides, and Toxics Management Division
U.S. EPA, Region IV
345 Courtland Street, NE
Atlanta, GA 30365
Attn.: Mr. Scott Davis

If you have any questions, please contact Mr. Scott Davis at (404) 347-5014.

Sincerely,

Patrick M. Tobin
Acting Regional Administrator

EXHIBIT B6

Chevron

December 6, 1993

Chevron U.S.A. Production Co.
Special Projects Group
935 Gravier Street
New Orleans, LA 70112

Outer Continental Shelf Air Permit
Destin Dome 97

U. S. Environmental Protection Agency, Region IV
Air, Pesticides and Toxics Management Division
345 Courtland Street
Atlanta, Georgia 30365

Attention: Mr. Scott Davis

Dear Mr. Davis:

In response to our recent telephone conversation, I have put together the following information relevant to the flaring of natural gas expected during the well testing operations associated with the proposed Destin Dome 97 drilling operations.

Well Testing Procedure

Chevron's air permit application reflected that the well's performance will be assessed utilizing a 4 point isochronal well test. The well testing period is expected to span a period of approximately 7 days and will occur near the completion of our offshore activities. The actual cumulative flowing hours for the well over the duration of the test, however, are expected to be far less than the 7 days described above as the testing procedure calls for multiple periods of flowing the well followed by periods of like duration during which the well will be shut in and downhole characteristics monitored. The actual time required for each individual period in which the well will be flowed and the gas flared will depend on the well's reservoir characteristics.

Measurement of Gas Volumes Produced and Flared

Gas measurement devices will be utilized to measure the volume of natural gas produced and subsequently flared during the well testing program. The service company assisting Chevron with the well test will provide documentation of the charts recording the volume of gas produced during said operation along with the calculations of actual gas flowed. The natural gas flowed from the well will be produced to a test separator, measured, and routed to the flare boom where the gas will be combusted and the resultant emissions from the well testing operations generated.

Gas Composition

Throughout the flowing periods of the well, samples of the well stream will be taken at a minimum of once hourly to determine the H2S and CO2 content of the natural gas being produced and flared. H2S and CO2 will be determined with the use of Draegger or similar type calorimetric tube type indicators. Once the well has stabilized a gas sample will be obtained for further compositional analysis by a laboratory. Gas composition will be documented along with the volume of the natural gas produced and flared.

Flare Equipment

The equipment proposed to be utilized for the Destin Dome 97 well test includes the following:

Flare Boom: manufactured by Schlumberger (Model No. U160).

Flame Retention Ring (located at the end of the flare boom): manufactured by the John Zink Co. of Tulsa Oklahoma; no model number available. Combustion efficiency due to the use of the flame retention ring is expected to be in excess of 99% (reference tables from excerpt of Flare Efficiency Study performed for the Chemical Manufacturer's Association which have been attached).

Pilot: manufactured by the John Zink Co. (Model No. CK20). Fuel consumption required by the pilot to ignite the flare is estimated at 70 scf/day. Propane will be utilized as the fuel to ignite the pilot.

In closing, I would like to emphasize that the flaring of natural gas associated with Chevron's drilling operations in Destin Dome Block 97 is expected to be limited to the period in which the well will be flowed and tested. This period is expected to be short in duration as described above. The documentation developed during the well testing program should suffice in providing adequate information relative to the emissions generated from the well flaring operations associated with the proposed OCS drilling activity. If you have any questions or if additional information is necessary, please give me a call at (504) 592-6095.

Sincerely,

S. M. Fury

A REPORT ON

A

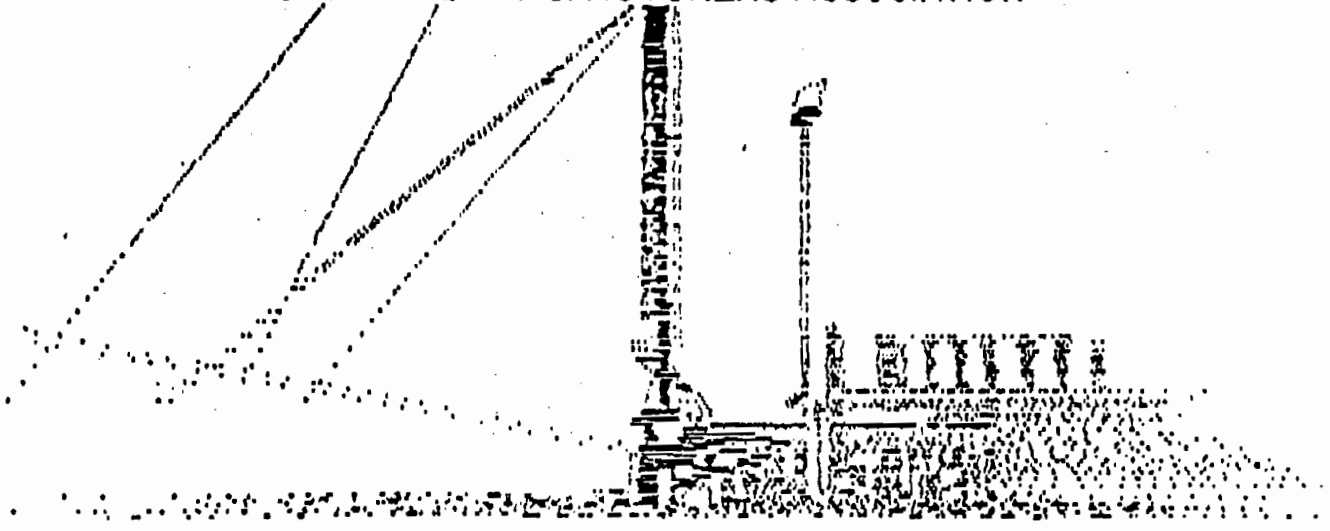
FLARE EFFICIENCY STUDY

VOLUME I

FOR

CMA

CHEMICAL MANUFACTURERS ASSOCIATION



PREPARED BY

ENGINEERING-SCIENCE

DESIGN • RESEARCH • PLANNING

3109 NORTH INTERREGIONAL, AUSTIN, TEXAS 78722 • 512/477-8901

OFFICES IN PRINCIPAL CITIES

ES

Extract from Test Results of a flare efficiency study commissioned by the Chemical Manufacturers Association (CMA) and conducted by Engineering-Science during 1982 at the test facilities of John Zink Company.

STEAM ASSISTED FLARES

Test Run #	(1) Combustion Efficiency (%)	(2) Hydrocarbon Destruction Efficiency (%)	(3) NOx Produced lb/MMbtu	(3) CO Produced lb/MMbtu
2	99.82	99.999	0.06	0.13
3	99.82	99.998	0.08	0.18
1	99.96	100.000	0.07	0.05
5	99.94	100.000	0.04	0.05
7	99.84	99.999	0.06	0.18
17	99.84	100.000	0.05	0.20
50	99.45	99.981	0.02	0.41
51	99.66	99.959	0.02	0.72
23	100.00	100.000	0.10	0.05
54	99.90	100.000	0.12	0.10
4	99.80	99.991	0.07	1.59
8	98.81	99.992	0.07	1.74
56	99.70	99.994	0.06	0.47
#11	99.82	99.996	0.15	0.17
57	99.90	99.997	0.12	0.10
#16	99.75	99.993	0.12	0.30
59b	98.64	99.514	0.03	0.90
60	98.92	99.962	0.07	0.58
average	99.64	99.965	0.07	0.44

AIR ASSISTED FLARES

Test Run #	Combustion Efficiency (%)	Hydrocarbon Destruction Efficiency (%)	NOx Produced lb/MMbtu	CO Produced lb/MMbtu
28	99.94	99.999	0.20	0.05
31	99.17	99.974	0.11	0.48
29b	99.97	100.000	0.13	0.08
32a	98.94	99.951	0.12	0.98
64	99.74	100.000	0.09	0.37
63	99.37	99.982	0.07	0.55
65	99.57	99.998	0.12	0.60
average	99.53	99.986	0.12	0.44

Notes:

- The derived results reported are from the test runs where the equipment was operated to the design criteria of E.P.A's 40 CFR 60.18 and in accordance with good practice.

#: Average of multiple runs

1. Direct from Executive Summary of CMA report.
2. From Tables 2.39 and 2.40 of CMA report (n.b. efficiencies calculated to be greater than 100% are here reported as 100.000%)
3. Derived (by John Zink Co.) from raw test data in report

EXHIBIT B7

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

JAN - 6 1994

4APT-AEB

Ms. Sandi M. Fury
ESF&H Representative
Chevron U.S.A. Production Company
935 Gravier Street
New Orleans, Louisiana 70112

Re: Outer Continental Shelf Air Permit,
Exploratory Operation in Destin Dome Block 97

Dear Ms. Fury:

Enclosed is the Final Determination, Response to Comments Document, and Outer Continental Shelf Air Permit OCS-FL-001 for your proposed exploratory, natural gas drilling operation in Destin Dome Block 97. Outer Continental Shelf Air Permit OCS-FL-001 will be effective 30 days from the date of service of notice of the final air permit decision. Service of notice of the decision is being accomplished by the publication of notices in the Miami Herald, Orlando Sentinel, Pensacola News-Journal, Tallahassee Democrat, and Tampa Tribune. The anticipated publication date is January 10, 1994.

Appeal procedures concerning the Outer Continental Shelf air permit are outlined in 40 C.F.R. Section 124.19. Within 30 days of this Outer Continental Shelf final permit decision, any person who filed comments on the draft air permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft air permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision.

If you have any questions or comments, please contact either Mr. Scott Davis of my staff at (404) 347-5014 or Mr. Alan Dion of the Office of Regional Counsel at (404) 347-2335, ext. 2131.

Sincerely,

Bruce P. Miller for

Winston A. Smith, Director
Air, Pesticides, and Toxics
Management Division

Enclosure

EXHIBIT B8

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

JAN - 6 1994

4APT-AEB

TO: Public Commentors and Public Hearing Participants

Re: Final Outer Continental Shelf Air Permit Decision, Chevron Exploratory Operation in Destin Dome Block 97

Dear Sir or Madam:

Enclosed is the Final Determination, Response to Comments Document, and Outer Continental Shelf Air Permit OCS-FL-001 for the proposed exploratory, natural gas drilling operation by the Chevron U.S.A. Production Company in Destin Dome Block 97. Outer Continental Shelf Air Permit OCS-FL-001 will be effective 30 days from the date of service of notice of the final air permit decision. Service of notice of the decision is being accomplished through this correspondence and by the publication of notices in the Miami Herald, Orlando Sentinel, Pensacola News-Journal, Tallahassee Democrat, and Tampa Tribune. The anticipated publication date is January 10, 1994.

Appeal procedures concerning this Outer Continental Shelf air permit are outlined in Title 40 of the Code of Federal Regulations, Part 124, Section 19 (40 C.F.R. Section 124.19). If you have any questions, please contact either Mr. Scott Davis of my staff at (404) 347-5014 or Mr. Alan Dion of the Office of Regional Counsel at (404) 347-2335, ext. 2131.

Sincerely,

Bruce P. Miller for

Winston A. Smith, Director
Air, Pesticides, and Toxics
Management Division

Enclosure

SECTION C

WRITTEN COMMENTS RECEIVED BY EPA REGION IV

EXHIBIT C1

(All postcards received by EPA Region IV are on file and available for review at the EPA Region IV Offices in Atlanta, Georgia.)

Dear EPA Administrator Carol Browner:

President Bill Clinton and Vice President Al Gore promised to protect Florida from offshore drilling. Now you have a chance to make good on that promise.

Don't issue an air permit for Chevron that:

- Allows emissions of gases that cause acid rain and global warming.
- Sets a dangerous precedent for other rigs off our coast.
- Doesn't take cumulative environmental impacts into consideration.

As a Floridian you know better than most people in Washington that our coastline can ill-afford drilling. We're counting on you to take the lead in proving that the Clinton administration will keep its promise to protect our coast.

Sincerely,

Name(Print)_____ Phone_____

Address_____ City_____ Zip_____

Printed on Recycled Paper

EXHIBIT C2

(All postcards received by EPA Region IV are on file and available for review at the EPA Region IV Offices in Atlanta, Georgia.)

Dear Interior Secretary Babbitt:

President Bill Clinton and Vice President Al Gore promised to protect our coast from offshore drilling. Its time for you to make good on that promise.

It is not worth risking our coastal ecosystems, beautiful beaches, and tourist-based economy to increase the nation's gas supplies by less then 1%. We can do better by increasing energy efficiency and renewables. Drilling off Florida will not solve our nation's energy problems, but it could devastate our coastline.

I urge you to suspend the Chevron drilling permit to drill off Pensacola granted by the Bush Administration and suspend any further leasing or drilling off our coast.

Sincerely,

Name(Print)_____ Phone_____

Address_____ City_____ Zip_____

Printed on Recycled Paper

_____

_____

_____

Place Postage Here

SAVE OUR SHORES CAMPAIGN
FLORIDA PIRG

Secretary Bruce Babbitt
Department of the Interior
18th and C Streets, N.W.
Washington, DC 20240

EXHIBIT C3

(All postcards received by EPA Region IV are on file and available for review at the EPA Region IV Offices in Atlanta, Georgia.)

BEST AVAILABLE COPY

Dear Interior Secretary Babbitt:

Floridians are united in opposing offshore oil and gas drilling. Please heed our wishes, stand up to the big money oil and gas industry and protect our coast from offshore drilling.

Florida has a very sensitive coastline, made up of coral reefs, beaches, wetlands, bays, estuaries, marshes and ecosystems not compatible with proposed oil and gas drilling. Oil companies have already leased 305 tracts off our coast, most clustered near the fragile Florida Keys and the beautiful beaches of the Florida Panhandle.

Therefore I urge you to:

- reverse the Bush Administration approval of the Chevron drilling permit off Pensacola Beach,
- place a 5-year ban on drilling off the Florida Panhandle and
- study Committee to assess the environmental impact of drilling off the coast of Florida,
- cancel the 73 existing leases off the Keys, and
- ban any further oil and gas leasing off the Florida coast.

Name (Print) [illegible] Phone [illegible]

Address [illegible] City North Fort [illegible]

SAVE OUR SHORES CAMPAIGN
FLORIDA PIRG

Secretary Bruce Babbitt
Department of the Interior
18th and C Streets, N.W.
Washington, DC 20240

EXHIBIT C4

(All petitions received by EPA Region IV are on file and available for review at the EPA Region IV Offices in Atlanta, Georgia.)

FLORIDA PIRG **SAVE OUR SHORES** PETITION

Dear President Clinton:

We the undersigned urge you to protect Florida's coast from offshore oil and gas drilling.

Florida's fragile and beautiful coastal environment is not compatible with oil and gas drilling. The crystal clear waters of the Florida Keys is home to the only living coral reef north of the Equator. Our beaches are world famous, and the estuaries and marshes of the Florida Panhandle support a multi-million dollar commercial and recreational seafood industry.

As a candidate you criticized President Bush for not protecting Florida's entire coast from oil and gas drilling. WE THEREFORE URGE YOU TO SUPPORT THE FOLLOWING:

- **A permanent ban on oil and gas drilling and leasing in the Eastern Gulf of Mexico in order to protect the entire coast of Florida,**
- **Cancellation and buy back of the 295 existing leases off the coast of Florida,**
- **Reconsider the Bush Administration decision to approve a Chevron drilling drilling permit for oil and gas drilling off Pensacola Beach.**

Thank you for your time and support

Name (Print)	Address	City	Zip	Phone
PETER KING	2617 N 12 AVE	PENSACOLA	32503	
[illegible] Thorell	2299 Scenic Hwy	Pens, FL	32503	433-895
[illegible]	2110-A N 20th Ave			
[illegible] McGee	316 S Baylen St	PNS FL	32501	
Hilda M. Ratcliff	9854 Poppy Cir.	Navarre FL	32566	
Robert D Ratcliff	9854 Poppy Cir	Navarre FL	32566	
Daniel W. Bogan	2906 E. Jackson, Apt B,	P'cola FL	32503	433-1166
Scott [illegible]	9625 Soldiers Crk. Dr.	Lillian, AL	3654[illegible]	
[illegible]	270 STILLMAN ST,	PENSACOLA FL	32505	
Marianne Chandler	270 Stillman ST.	Pensacola, Fla.	32505	

Printed on Recycled Paper

Return to: Florida PIRG, 420 E. Call St. Tallahassee, FL 32303 (904)-224-5304
or Gulf Coast Environmental Defense, PO Box 732, Gulf Breeze, FL 32562

EXHIBIT C5

(All resolutions received by EPA Region IV are on file and available for review at the EPA Region IV Offices in Atlanta, Georgia.)

Zulays Imports
.925 Silver & Ethnic Jewelry

WILLIAM WILL
(904) 934-3869

182 Camelia St.
Gulf Breeze, FL 32561

RESOLUTION

WHEREAS, Florida as a peninsular state, has a very delicately balanced ecological system of coral reefs, beaches, wetlands, bays, estuaries and marshes; and

WHEREAS, preservation and conservation of our natural resources are critical to Florida's environmental economic future; and

WHEREAS, offshore drilling, pipeline construction and installation cause significant damage to seagrass, coral reefs, mangroves, beaches and wetlands; and

WHEREAS, the detrimental effects of offshore oil and gas drilling will negatively impact the state of Florida.

NOW, THEREFORE, BE IT RESOLVED that

William G. Will 6/24/93 urges President Bill Clinton, Governor Lawton Chiles, the United States Congress and the Florida Congressional Delegation to support a permanent ban on oil and gas drilling and leasing in the Eastern Gulf of Mexico, cancellation and buy back of the 295 existing leases off the Florida coast, and reconsider the Bush Administration to approve a Chevron drilling permit for oil and gas drilling off of Pensacola Beach.

June 1993

EXHIBIT C6

(All resolutions received by EPA Region IV are on file and available for review at the EPA Region IV Offices in Atlanta, Georgia.)

SPORTS
REHABILITATION & PHYSICAL THERAPY CLINIC
OF PENSACOLA

RESOLUTION

WHEREAS, Florida as a peninsular state has a very delicately balanced ecological system of coral reefs, wetlands, bays, estuaries and marshes; and

WHEREAS, preservation and conservation of our natural resources are critical to Florida's environmental and economic future; and

WHEREAS, offshore drilling pipeline construction and installation cause significant damage to seagrass, coral reefs, mangroves, beaches and wetlands; and

WHEREAS, the detrimental effects of offshore oil and gas drilling will negatively impact the state of Florida.

NOW, THEREFORE, BE IT RESOLVED that Tracy L. Jones urges President Bill Clinton and Interior Secretary Bruce Babbitt to:

* Complete the studies necessary to assess the social, economic and environmental impacts of oil and gas activities off the Florida Panhandle;
* Institute a ban of at least three years on drilling or development on existing leases off the Panhandle until all studies are completed;
* Cancel, and if necessary, buy back the 73 existing leases off the Florida Keys as part of the 10-year drilling ban established by the federal government in 1990;
* Reconsider a previous decision to approve an exploratory drilling permit for Destin Dome Block 97, 27.5 miles off Pensacola Beach; and
* Adopt a permanent ban on any further leasing off the Florida Coast.

Signature Tracy L. Jones, P.T.

Business Sports Rehab and PT of Pensacola

Address 1717 N. "E" Street

Pensacola State FL Zip 32561

Telephone 934.0364 July 1993

Please Return To: GCED, P.O. Box 732, Gulf Breeze, FL 32562

EXHIBIT C7

(All resolutions received by EPA Region IV are on file and available for review at the EPA Region IV Offices in Atlanta, Georgia.)

Florida PIRG

420 East Call St., Tallahassee, FL 32301

RESOLUTION URGING THE CURTAILMENT OF OIL AND GAS DRILLING OFF THE FLORIDA COAST.

Whereas, Florida has a very delicately balanced ecological system of coral reefs, beaches, dunes, mangroves, wetlands, bays, estuaries, and marshes: and,

Whereas, preservation and conservation of our natural resources are critical to Florida's environmental and economic future; and,

Whereas, offshore drilling brings routine pollution and the risk of a catastrophic oil spill, and pipeline construction and installation cause significant damage to seagrass, coral reefs, mangroves, beaches and wetlands; and,

Whereas, offshore oil and gas drilling off the coast of Florida will not solve our nations energy problems but could damage our environment and economy,

Now, be it resolved by the undersigned that I/ we urge President Clinton, Interior Secretary Bruce Babbitt, and Environmental Protection Agency Administrator Carol Browner to:

reverse approval of Chevron's drilling permit off Pensacola beach; and,

place a three year ban on drilling off the Florida Panhandle and set up a study committee to assess the environmental impact of drilling off the coast of Florida; and,

cancel and buy back, if necessary, the 73 existing leases off the Florida Keys; and,

ban further leasing off the Florida Coast.

Name signed Paul R. Elliott

Name printed Paul R. Elliott Date 11/1/93

Title Professor

Organization Affiliation FPIRG

Campus F.S.U.

Address 237 Conradi, Bio Sci., FSU

Phone: Office 644-6507 Home 878-9955

EXHIBIT C8

10/26

CITIZENS ASSOCIATION OF BONITA BEACH
CABB
P.O. BOX 1821
BONITA SPRINGS, FLORIDA 33959

OCTOBER 20, 1993

MR. PATRICK TOBIN, REGIONAL ADMINISTRATOR
ENVIRONMENTAL PROTECTION AGENCY
345 COURTLAND ST., N. E.
ATLANTA, GA 30365

DEAR MR. TOBIN:

RE: NATURAL GAS/OIL EXPLORATION/LEASING/DRILLING OFF-SHORE FLORIDA

THIS LETTER IS BEING SENT ON BEHALF OF OUR MEMBERSHIP WHICH TOTALS APPROXIMATELY 1,600 PLUS OTHER MEMBERS OF SOUTHWEST FLORIDA AND THOSE WHO VISIT HERE.

WE ARE STRICTLY OPPOSED TO ANY DRILLING FOR EITHER NATURAL GAS OR OIL OFF-SHORE ANYPLACE IN THE STATE OF FLORIDA. BECAUSE OF THE PRISTINE BEACHES, THE ENDANGERED SPECIES, AND THE ENTIRE ECONOMY OF THE STATE OF FLORIDA (WHICH IS BASED UPON TOURISM) IT WOULD BE A TRAGIC MISTAKE TO EVER CONSIDER TURNING THE EASTERN GULF OF MEXICO INTO THE INDUSTRIAL COMPLEX THAT THE CENTRAL AND WESTERN GULF HAVE DEVELOPED INTO.

WE UNDERSTAND THAT CHEVRON USA INC. IS REQUESTING A PERMIT TO DRILL FOR NATURAL GAS 27 MILES OFF PENSACOLA. ALTHOUGH THE FOCUS IS ON AIR QUALITY, THE REAL ISSUE, INSOFAR AS WE ARE CONCERNED, IS OFFSHORE DRILLING. IF ANY PERMITS ARE ISSUED, ONE THING WILL LEAD TO ANOTHER AND SOON THE MAP WILL BE FILLED WITH EXISTING WELLS, OR LEASES, OFF OUR PRISTINE GULF COAST.

TO DATE WE HAVE SUPPLIED TO WASHINGTON BY WAY OF OUR REPRESENTATIVE PORTER GOSS FROM THIS AREA OVER 25,000 SIGNATURES GATHERED NOT FROM JUST FLORIDIANS BUT FROM PEOPLE THROUGHOUT THE UNITED STATES WHO DO **NOT** WANT THE FLORIDA SHORELINE TO BECOME WHAT TEXAS, MISSISSIPPI AND LOUISIANA HAVE DEVELOPED INTO (THOSE PEOPLE NOW VACATION IN FLORIDA).

THE FLOODING WHICH OCCURRED IN THE MISSISSIPPI RIVER AREA EARLIER THIS YEAR HAS RESULTED IN FRESH WATER BEING FOUND IN THE GULF STREAM IN THE AREA OF THE FLORIDA KEYS. THIS IS A PERFECT EXAMPLE OF WHAT ANY SPILL--OR ANY ACCIDENT--OR ANY CARELESS DISPOSAL OF ANY POLUTION--FROM ANY TYPE WELL COULD CREATE AND WE ARE VEHEMENTLY OPPOSED TO ANY DRILLING.

IF NATURAL GAS IS DESIRED, THEN LET THEM USE THAT WHICH IS OFTEN BURNED OFF WHEN OIL WELLS ARE DRILLED THAT ALREADY EXIST. GAS COULD AND SHOULD REPLACE OIL WHENEVER POSSIBLE, BUT IT IS ALREADY IN ABUNDANT QUANTITIES AND THERE IS NO

NEED TO TAKE ANY CHANCES IN DESTROYING THE ENVIRONMENT OF FLORIDA. PLEASE CONSIDER OUR APPEAL.

VERY TRULY YOURS,

Marjorie F. Ward

MFW

MARJORIE F. WARD
PRESIDENT

David W. Ward

DAVID W. WARD
VICE PRESIDENT

Robert Bachelor
101 Windlake Court
Niceville, FL 32578

November 5, 1993

Mr R Scott Davis
Environmental Protection Agency
Region 4
345 Courtland Street NE
Atlanta 30365

Dear Mr Davis:

We are writing to express our view against off-shore drilling in the area of the Florida panhandle. We have read that the EPA is considering granting an air polution permit to the Chevron Oil Company for an off-shore natural gas drilling rig. We hope that you will not approve Chevron's request as we fear this will open the door to many other gas and oil rigs in our Gulf of Mexico waters.

We have very beautiful waters and beaches in the Florida panhandle. The adverse effect of a potential accident or spill on our waters and beaches far out weigh the gain from this drilling. In the case of this permit, there can be no absolute assurance that the drilling will not strike oil in addition to natural gas. If that were to occur, we will be faced with possibility of an oil spill.

And just what is the potential gain? According to the newspapers, only a five year supply of natural gas will be produced by this well. This is not worth the risk to our beaches and waters.

If memory serves, there is a ban on drilling this close to other portions of the Florida coastline and, for some reason, the panhandle region was omitted from this legislation. We don't know why the state or federal lawmakers acted in this way but their oversight should not be considered as an open invitation to the oil companies.

We urge you to disapprove the Chevon permit and any other pending off-shore related drilling permits in this vicinity of Florida. Help us to protect our beaches and emerald green waters!

Sincerely,

Robert R Bachelor and Charlotte F Bachelor

Robert R Bachelor and Charlotte F Bachelor

cc: Senator Graham
Senator Mack
Congressman Hutto

11/08 Harper
Spears

November 2, 1993

Mr. Patrick Tobin
Regional Administrator
Environmental Protection Agency
345 Courtland St., N.E.
Atlanta, Georgia 30365

Dear Mr. Tobin:

I earnestly solicit you to deny Chevron USA's request for an air-quality permit, which will clear the way for them to drill less than 30 miles off the shores of Pensacola, Florida.

The "normal" discharges from an oil rig pollute the water and are toxic to marine life; and a spill would be disastrous to the pristine beaches of our state. The beauties of Florida are a more precious - and more fragile - natural resource of the country than the small amount of oil that may be dredged up from offshore wells.

Please, Mr. Tobin, remember that PROTECTION is the middle name of your agency; and remember as well that tourism, recreation, sea birds, and the fishing industry are all in peril awaiting your decision.

Sincerely,

Richard C. Allen

RICHARD C ALLEN
35 PALMETTO DR
FORT MYERS FL 33908

RECEIVED
NOV 8 1993

11/02 Harper Speech

M. E. Carter

6102 Augusta Dr., #111
Seven Lakes
Fort Myers, FL 33907

Environmental Protection Agency, Atlanta, Ga.

Gentlemen:

This is to let you know that I do NOT support any off-shore drilling in the Gulf of Mexico, including that for natural gas which Chevron USA/NC., is negotiating.

I strongly oppose gulf drilling and hope you will consider my opinion in your deliberations.

Sincerely,

M. E Carter

9/13/93

NOV 1 1993

I Just wanted to write you a short letter to urge you to avoid offshore drilling. I have been a Florida resident for 13 years now and have enjoyed the thousands of miles of Florida beach. Lately though I have had several experiences with seaweed oil on the east coast beaches and I do not want to see anymore. No matter what guarantee oil companies give us there will be accidents. It's simply not worth it!

Thank you
Mark G. Bogoh
087-60-0117
10861 Heather Ridge Cir #308
Orlando Fl. 32817
(407) 679-1724

Air

Harper
Sq. 88

349 Seabee Ave.
Naples, Fl. 33963

Oct. 25, 1993

Dear Patrick Tobin,

After vacationing many places we chose Naples and moved down 20 years ago, we have never seen a beach so clear and the waters clear to snorkle.

They have dredged Wiggins pass several times and it took weeks before the waters cleared, what would our waters look like if they drilled out there in the Gulf?

Its bound to happen, a spill + boat collision, vibration to drive our fish away, plus.

Please stop the drilling.

Sincerely
Mr. & Mrs. Charles Stadler

Oct. 25/93
Air

Gentlemen:

Please.....NO GULF DRILLING!!!!!

WE STRONGLY OPPOSE ANY DRILLING OFF THE FLORIDA COAST. WE HAVE SEEN THE ATROCIOUS DAMAGE DONE IN LOUISIANA AND TOURIST TRADE TO SOUTHERN TEXAS.

FLORIDA DEPENDS WHOLLY ON TOURIST TRADE AND WE DEPEND ON YOUR ENVIRONMENTAL PROTECTION OF OUR SERENE GULF COAST.

Mr. & Mrs. Ed Kaufman

915 Vassar
St. Orlando
Fl 32804

Dear Mr Davies,
I heard about the drilling
in a atoll that a reach.
I am very disapointed that
someone could possibly
destroy a ocean by drilling.
The ocean has a purpose
to be there beacuse
animals live in it and
you can spend hours
on the beaches. Think it
at this way would you
like someone coming and
drilling on you just
to get oil. When I grow
up I want my children
to come to the ocean
and see the light!

Sincerely,

Jessica
Johnson

Mr Davis, 9/13/93

As a resident of Florida for the entire 18 years of my life, I am greatly concerned with the proposed oil drilling in the Gulf of Mexico. With the allready-present pollution from our cars, factories, and current oil drilling, I find it a very wise decision to prohibit Chevron or anyone else from setting up more wells. Please do everything in your power to see to the insurance and safety of Florida and the rest of the world. Let's not open any more doors for accidents like the Valdez incident that destroyed Alaska just some short time ago. Thank you.

Sincerely,

Jason Scruggs
10837 Heather Ridge Cir Apt 208
Orlando, FL 32817

Ever September 13, 1993

Dear (Vice President Al Gore, Interior Secretary Bruce Babbitt, and Governor Lawton Chiles):

Please do everything in your power to stop oil-drilling off Florida's coast. To only extract oil that would last for three days is not cost efficient. Seeing how we the U.S. are trying to be more cost efficient, it would be idiotic to ~~dill~~ oil drilling off Florida's coast. Instead of promoting the destruction of the planet, why not promote more technology that allows more jobs.

Thank you,

Mickey M. Payne
10827 Heather Ridge Cr #207
Orlando, FL 32817

Mr. Scott Davis,

I feel it is very poor for Chevron to attempt to drill off the Florida Coastline for such an obsolete amount of oil. I am deeply opposed being a natural Floridian that they can endanger such a beautiful part of the country for what? Let them dig elsewhere instead of here. It's my earth too!

Sincerely,
Shawn Kelly
10811 Danielle Dr.
Largo, Fl. 34649

Attention Scott Davis,

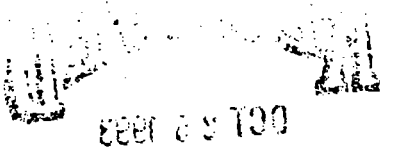
As a lifelong resident of coastal Florider, I am quite alarmed to hear that the way has already been cleared for oil drilling off of the Florida coast.

Even for those only concerned with bringing revenue to Florida, we long time residents feel that there is enough potential for clean environmentally sound industry to keep our economy healthy without sacrificing our State's natural beauty

I specifically would like to remind you of our already tenuous tourist industry. The sight of oil derricks and the feel of the sticky tar they produce would equal a death toll for this industry, our broadest tax base.

Sincerely
[illegible]
234 Malibu Ln
Indialantic, Fl 32903

EPA Administrator Scott Davis
U.S. EPA Region 4
345 Courtland St. N.E.
Atlanta, GA 30365



Dear Mr. Davis,

We are writing to urge you to help prevent oil-drilling off Florida's coast. Some oil spills would be inevitable, and a major spill would be disastrous as we have seen in other parts of the world. Everyone needs to think of the risk and ask themselves if it is worth it. We do not think it is.

Thank-You,

Scott and Jennifer Brown

Scott and Jennifer Brown
3050 Curry Woods Dr.
Orlando, FL. 32822

BEALS

J. David Peppers ASLA
CONSULTANT
LAND PLANNING • LANDSCAPE ARCHITECTURE

OCTOBER 10, 1993

MR SCOTT DAVIS
U.S. EPA REGION 4
345 COURTLAND ST. N.E.
ATLANTA, GA. 30365

RE: OFF SHORE OIL DRILLING - FLORIDA

DEAR MR. DAVIS:

IT SEEMS THAT THE POTENTIAL ENVIRONMENTAL RISKS FAR OUTWEIGH QUESTIONABLE PROFITABILITY OF ALLOWING OIL DRILLING OFF THE COAST OF FLORIDA.

PLEASE STOP THIS "BARGE CANAL" LOGIC BEFORE IRREVOCABLE DAMAGE ENSUES. CLEAN, RENEWABLE ENERGY SOURCES ARE NO LONGER A DREAM; THEY WILL QUICKLY REACH ECONOMIC COMPETITIVENESS IF OUTDATED ENVIRONMENTALLY DESTRUCTIVE AVENUES ARE NOT ALLOWED TO PROLIFERATE.

I APPRECIATE YOUR HELP IN THIS MATTER.

SINCERELY,

P.O. Box 540840 • Orlando, FL 32854 • (407) 425-2832

October 13, 1993

To Mr. Scott Davis

This letter is written to you to address the issue of drilling permits issued to the Chevron Corp. to drill for oil in the Gulf of Mexico, just off the Florida coastline by Pensacola, Florida.

I would hate to see an environmental accident occur so close to an area of our country that has long been a refuge area for migatory birds and many kinds of sealife. It seems we have little reguard for the other life forms we share our world with.

Please reconsider the issuance of such permits for so little gain. The real gain to all of us would be to keep this area save and secure from environmental harm for all of us to enjoy; wildlife, seafife and man alike!

Sincerely,

Kathleen M. Shaw

(Kathleen M. Shaw)

Steve Shaw

Dale S.

Jacob E. Mehath

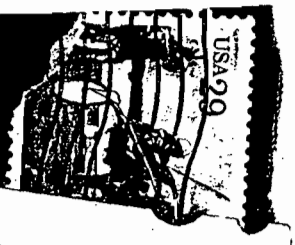
Mrs. Sharon Woodall

Marian Hopkins

915 Bassor Street
Orlando, Florida 32804
September 8, 1993

Dear Mr. Davis,

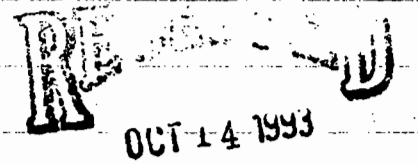
I think drilling on the Pensacola coast is a bad idea because of all the negative effects it may cause. It may cause oil spills, which would be killing water life, making the water dirty & undesirable to swim in. It may also cause more on shore drilling in Florida and other states.
Oil spills were learned are very bad for the ocean life. So why would we drill right by an ocean? We already have enough problems with pollution, lets not cause more for our greed.
If we start drilling just like anything you start, it will cause a chain and there will be more drilling and a higher precent of environmental problems from this.



I think drilling on the ocean coast is a bad idea and we should find a safer area to drill at.

Sincerely,

Nikki Wojcik



Oct. 12, 1993 29

Dear Mr. Davis,

Please stop offshore oil drilling in Florida. We are counting on our elected officials.

Thank you,

Susan [illegible]

1218 N. Westmoreland Dr.
Orlando, FL. 32804
407-843-5074

Orlando, FL 32804

920 Maxwell

Dear Mr. Davis

I'm writing about Pennsacola Off Shore oil drilling

I don't want you to drill because I love fish. I love to swim in the ocean.

Jessica Wolf (9)

P.S. I love the ocean.

Thank you for your mice

10/13

October 5, 1993

Patrick Tobin, Regional Administrator
Environmental Protection Agency
345 Courtland St. N.E.
Atlanta, GA 30365

Dear Mr. Tobin:

I wish to give my opinion on the question of granting Chevron an air-quality permit to begin offshore drilling for natural gas.

I am dead against any offshore drilling anywhere near Florida. This state makes billions off tourism and commercial fishing. And, of course, Florida's long coastlines are a large part of what makes it a desirable place to live - the beaches, fishing, boating, etc. are continually enjoyed by millions of residents as well as millions of tourists (who are largely responsible for the economy of this state, with the large sums they spend here). And the commercial fishing industry, which of course is traditionally a big employer, helps to feed the whole country.

All of the above, and the environment too, would of course be flattened by one big drilling disaster, but could as steadily be eroded by our water getting just a little big dirtier all the time. The big disasters get the headlines, but slowly but steadily declining quality could lead to the same horrible results with less drama but equal disaster.

I'm sure that we have Chevron's solemn assurance that the drilling would be conducted with perfect safety for the environment. Just as, I am sure, Alaska was solemnly assured that drilling would be perfectly clean and safe there as done by Exxon.

Well, we've seen how that turned out, haven't we? Exxon created a real disaster that will haunt Alaska for God knows how long, and got away with paying a minimum amount to boot. And we are supposed to risk the same thing here? I don't think so.

The money from tourists and fishing are, to put it crudely, all that lifted this state out of the dark ages. If the money from those sources vanished, not only could ordinary people not sustain themselves financially, but they would have little incentive to continue living here if the coastal environment so many of us moved here to enjoy year-round was turned into a mess by Chevron.

We are talking about this state turning into something equivalent to a steel-mill town after the steel mills close. We're talking about a big slum with palm trees, and families getting ready to live in their cars while they drive off someplace, God knows where, to look for a job.

As if disaster for the people isn't enough, what about the environment? The Gulf of Mexico, Florida Bay, the Keys, the ocean off the East Coast - this is a rich, fragile, and unique collection of bodies of water. Endangered species like the manatee and the Roseate Spoonbill flourish here - imagine what would happen to them if one tipsy captain made a mistake?

Is it worthwhile to risk all the above for offshore drilling? I can't see, by any yardstick, that it is.

I would like a reply to this letter, please, Mr. Tobin. Please send your response to:

Bonnie McLaughlin
261 Fairweather Ln.
Ft. Myers Beach, FL 33931

I am sure that you have heard from many of my fellow citizens here also, none of whom is willing to live in somewhere resembling a badly polluted area of the Third World so that Chevron can make big bucks.

Very sincerely yours,

Bonnie McLaughlin

DRAFT

Scott Davis
U.S. EPA Region 4
345 Courtland St. N.W
Atlanta, Ga. 30365

RE: Drilling for oil off Florida coast

Dear Scott Davis,

I have lived in Florida all of my life and it compares to none of the other 50 States in America. I believe that Pensacola Beach is the most beautiful beach in the state. It's natural beauty and rustic "old Florida" charm sets it apart from any of the developed commercial beaches. If you have ever had the pleasure to sit on Pensacola Beach and absorb the incredible surroundings as I have on many occasions that nothing is worth risk of losing that incredible natural treasure.

As EPA Administrator you have the ability to protect and save all of the Florida coastline from off shore drilling and I am asking you to continue to keep any and all oil companies from drilling off shore. Even if we were lucky to never have an oil spill, like the spill still be cleaned in Tampa Bay, the waste that is created from such drilling is destructive enough. The fact that one off shore drilling site is created indicates to oil companies that there is room for more.

I am against any and all drilling and I am asking you to join me and keep Florida safe.

Sincerely,

Robert F Heffernan

Robert F. Heffernan
2913 E. Central Blvd.
Orlando FL 32803

Dear Mr. Davis,

I want to <u>oppose</u> the Chevron drilling off the coast of Florida.

Sincerely,

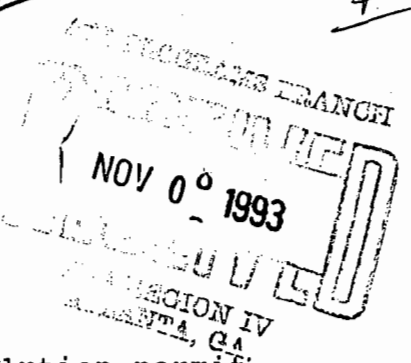
LeAnne Snyder

Beals

Davis

Karen E. Witusik
5507 Grant Street
Hollywood, FL 33021

November 4, 1993



Dear Environmental Protection Agency:

Please do not grant Chevron an air pollution permit for its rig for offshore drilling on Pensacola Beach. This is a clean and beautiful area and should be kept that way.

As a Florida resident, I enjoy the beaches and the marine life. Emissions from the three diesel engines aboard the rig and exhaust from supply boats will cause irreversible damage to the air. The water will also be damaged and much of the marine life will die.

If the EPA is what it stands for it will not allow this to occur. Again, please vote against any permits to drill where people and marine life are abundant.

Sincerely,

Karen E. Witusik

Karen E. Witusik

Submitted at 11/3 Hrg
932-6909
432-2336

C. V. FORD, JR.
ATTORNEY AT LAW
POST OFFICE BOX 386
GULF BREEZE, FLORIDA 32562

June 11, 1993

Ms. Jamie Williams
Gulf Coast Environmental Defense
Post Office Box 732
Gulf Breeze, Florida 32562

RE: Offshore Drilling.

Dear Jamie:

Enclosed you will find my signed Resolution in opposition to offshore drilling anywhere near Florida.

My opposition, however, goes much farther. I am both personally and as an elected City Councilman of Gulf Breeze opposed to offshore drilling at any site adjacent to the North American Continent.

The difficulties of containment to avoid pollution are just too great for rational people to believe that there is safety in offshore drilling of sites wherever located, domestic or foreign. It is my belief that use of underwater energy resources must be forfeited in order to preserve the quality of the earth's water, the creatures who inhabit it, the humans who share it's use, and ultimately the food chain which is dependent on its quality.

Best wishes to you in your continued efforts to preserve our quality of life and the ecosystems which support it.

Sincerely,

C. V. FORD, JR.
Executive Director

CVFJR/paf
Enclosure

Submitted at 4/3 Hear.

Avia Construction Company

5005 CHALLENGER WAY
PENSACOLA, FLORIDA 32507
904-492-6684

A.R. (BOB) BOCCANFUSO
PRESIDENT

ROBERTA CAROTHERS
VICE PRESIDENT

June 24, 1993

Dear Representative Earl Hutto:

I am writing this letter in protest of any potential offshore drilling in the Florida Panhandle. As a local businesswoman, my concerns are the probable impact upon the retirees relocating here and tourism dollars. It is a known fact that both of these groups migrate to the panhandle of Florida because of our pristine, white beaches and clean air.

My concerns as a local citizen are that my children and grandchildren can enjoy the same beautiful environment that I was able to enjoy as a child and throughout my adult years.

Time is of the essence! We can save our environment, economy, and lifestyle now, with preventive measures. One need look no further than the economic impact on other areas that have had oil spills or other unforeseen incidences related to rig drilling.

Please do not turn your back on this issue. It is important to all of us in the Panhandle. Thank you for your service.

Sincerely yours,

Roberta Carothers V. Pre

Roberta Carothers

Rec. 10/01

Sept. 28, '93

My dear Ms. Tobin -

Can the state of Florida buy out the federal grants in the gulf? and isn't that the only solution?

Hopefully,

Alice Cobb

4150 Estero Blvd.
Ft. Myers Beach

1401 Rec.

238 Delaware Road
Lehigh Acres, Fl. 33936
September 28, 1993

Dear Mr. Dobis,

Please, No drilling for gas or oil off the gulf coast. It is important that we keep our natural habitat from becoming polluted.

Thankyou for your consideration.

Mrs. Kathleen M. Greene

10/01 rec.

September 28, 1993

Mr. Patrick Tobin
Reginal Adminstrator
Environmental Protection Agency
Atlanta, Georgia 30365

Dear Mr. Tobin:

As a 16 year resident of Florida, I am writing to protest any granting of permission for drilling off the coast of Florida, or the granting of any request by the oil companies for approval of any permits relating to drilling on the Florida Coasts.

I have been a registered voter for 25 years and I certainly hope that my votes have counted toward making this country a better place to live. Florida is one of the last unmolested areas in this continental United States and I do not wish it's environment to be hurt by big money companies. I feel this is the last stronghold for clean air and environment for my children and grandchildren, et al.

Please do not allow this drilling to ever take place. Thank you.

Sincerely,

Linda Schroll
7520 Garry Road
Fort Myers, Florida 33912

Rec. 10/04

617 SW 22nd St
Cape Coral Fl 33991
Sept. 28th, 1993

Patrick Tobin
Regional Administrator
Environmental Protection Agency
345 Courtland St. N.E.
Atlanta GA 30365

Dear Mr. Tobin,

RE: Chevron USA Inc.'s request to drill for natural gas 27 miles off Pensacola, Florida

This letter is to state my opinion on Chevron's request for an air-quality permit which will allow them to drill for natural gas off the coast of Pensacola, Florida. Though your focus is air quality, the real issue is offshore drilling. **I do not support any drilling in the Gulf,** as any problems that can arise will affect all of us in the Gulf not just Pensacola. **Pollution in Pensacola can have fallout in Fort Meyers. This would be tragic for our environment** as well as our economy, since tourism is a large contributor to the area's income.

I would appreciate if when you make your decision that some thought is given to my feelings as well as those of my fellow neighbours who have to live here in the Gulf.

Thank you for your consideration.

Sincerely,

Cecile Johnson-Stevens

Cecile Johnson-Stevens

Rec. 10/04 rec.

September 28, 1993

Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, GA 30365

Attn: Mr. Patrick Tobin,
Regional Administrator

Ref: STOP Chevron's Request to Drill For Gas
Off the Coast of Florida

It is with the greatest concern that I write on behalf of our family to insist that this action NOT BE ALLOWED!

Indeed, we do not support ANY drilling in the Gulf (or elsewhere in in the waters off the Coasts of Florida).

We are all aware -- as well you should be -- of the hazards & dangers of offshore drilling. It would, in the long term, kill this beautiful State -- its beaches; its waters; its marine and animal life; its fragile beauty and, yes!, its people! The eventual outcome on Florida's tourism and economy would be disastrous!

PLEASE! STOP IT! BEFORE IT GETS STARTED!!

Imploringly yours,

Irene G. Messerall

Irene G. Messerall
319 Fleetwood Avenue
Lehigh Acres FL 33936

Martinette F. Graham

MARTINETTE F. GRAHAM
319 Fleetwood Avenue
Lehigh Acres FL 33936

10/04 no return address

September 28, 1993

Mr. Patrick Tobin
Regional Administrator
Environmental Protection Agency
345 Courtland Street, Northeast
Atlanta, Georgia 30365

Re: Offshore Drilling

Dear Mr. Tobin:

No Offshore Drilling! Isn't the debris and pollution floating in the Gulf Stream from the flooding Mississippi River enough evidence to convince you that when, not if, oil spills occur in the Gulf of Mexico, the damage will be incalculable?

It has been 20 years since the oil crisis in the 70's, but the United States, nor any of its thousands of bureaucratic agencies, including the EPA, has done much of anything to research or promote alternative power sources, in particular solar power. Their only answer to the problem was to promote conservation, the use of nuclear power with all its inherent dangers and to drill for oil no matter the consequences.

Did we learn nothing from the oil crisis other than to destroy our natural resources--beautiful Gulf beaches and waterways--by drilling for oil? Surely, there are people in government who are interested in protecting our resources and preserving them for our children and grandchildren. Or, is everyone in government interested in only how much they can benefit personally and financially from promoting the oil interests? That's the way it looks to us folks down here in the real world.

Please do the right thing. Don't allow offshore oil drilling.

Sincerely,

Carol A. Arnold

Carol A. Arnold

Rec. 10/01

M. R. Dellafera
1223 S.E. 21st Street
Cape Coral, FL 33990

10/1/93

Patrick Tobin,
Regional Administrator
Environmental Protection Agency
345 Courtland St., N.E.
Atlanta, GA 30365

Dear Mr. Tobin:

As the flood waters of the Mississippi intermingle with the Gulf Stream & advance northerly, it is apparent that any pollution in the Gulf spreads its effects for thousands of miles. Hence, I'm apposed to proposed drilling by Chevron for oil or gas off Pensacola.

Yours truly,
Mary Dellafera

Air

1052 Fish Crow Road
Sanibel, Florida 33957

BEALS

September 29, 1993

Mr. Patrick Tobin, Regional Administrator
Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Dear Mr. Tobin:

Chevron USA, Inc. has requested an air quality permit from your agency as a prerequisite to their request to drill for natural gas in the Gulf of Mexico.

Please deny this air quality permit. As concerned residents of Florida, we are very much opposed to any drilling in the Gulf.

Thank you for your cooperation in this matter.

Very truly yours,

Harry D. Bertossa

Audrey G. Bertossa

c: file

265 Yorkshire Ave. S.W.
Ft. Myers, FL 33908

September 27, 1993

Patrick Tobin,
Regional Administrator
Environmental Protection Agency
345 Courtland St. N.E.
Atlanta, GA 30364

Dear Sir:

We are writing to add our names to the list of people who are very much opposed to ANY drilling off any coast of the Gulf of Mexico.

No matter how "safe" you may say it is - just look at all the freak accidents which have made a mess out of some of the beaches! And this could happen way up there and we could also be included in the bad effects, even though we live way down in Fort Myers.

So - please - if you are to protect our environment - please do not allow any off-shore drilling!!!!

Sincerely,

Evelyn & Bill Giesel

9/29/93

Dear Mr Tobin:

OUR ENVIRONMENT IS SACRED. DO NOT ALLOW CHEVRON'S REQUEST for an AIR-QUALITY PERMIT to BE GRANTED.

THE DRILLING puts our ENTIRE WEST FLORIDA COASTLINE AT RISK. WE have MORE WILDLIFE ALONG OUR SHORELINE than MOST STATES. TO TAKE THE chance of an OILRIG ACCIDENT that COULD DESPOIL OUR PRESTINE coastal AREAS IS THE WORST POSSIBLE CHOICE. THE RAMIFICATIONS ARE TOO HORRIBLE to IMAGINE.

THIS IS OUR STATE – IT DOESN'T BELONG to CHEVRON. WE LIVE HERE & WORK HERE. WE CHOSE FLORIDA for ITS CLEAN and UNBLEMISHED ENVIRONMENT. WE, COLLECTIVELY, HAVE MADE a MESS of OUR LAND-MASSES and NOW SPEND BILLIONS of our TAX DOLLARS to RECTIFY IT.

II

WE'VE BEEN USING OUR OCEANS as DUMPING GROUNDS for HUNDREDS of YEARS EVERY SUBSTANCE KNOWN to MAN. PLEASE DO NOT ALLOW the CHANCE of MORE POLLUTION of our WATERS.

LET NATURE WIN for A CHANGE.

SINCERELY,

RUTH & PAUL GALLAGHER
PO BOX 12
CAPE CORAL FL 33910-0012

Air

774 SAND DOLLAR DRIVE
SANIBEL ISLAND, FLORIDA 33957

30 September

Dear Mr. Tobin -

Deny Chevron's request to drill for gas off Pensacola. coast. There should be no drilling in the Gulf, under any circumstances. The Gulf is one of our nation's treasures & a problem anywhere could ruin it for generations.

Do not allow such a risk. Do not allow drilling in the Gulf of Mexico.

Thank you. A Concerned Citizens

Tom + Beth Gillis

Air

14922 Bonaire Cr.
Ft. Myers, FL 33908
September 30, 1993

Mr. Patrick Tobin, Regional Adm.
Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Dear Mr. Tobin:

Chevron USA, Inc. has requested an air quality permit from your agency as a prerequisite to their request to drill for natural gas in the Gulf of Mexico.

We ask you to deny this air quality permit. As concerned residents of Florida, we are very much opposed to any drilling in the Gulf.

Thank your for your cooperation in this matter.

Very truly yours,

Raymond A. Roussel

Raymond A. Roussel

Joyce E. Roussel

Joyce E. Roussel

Dear Scot Davis, Sept 29, 1993

I am writing this letter in regard to Chevrons drilling off the coast of Florida. Please do everything in your power to stop oil drilling off our coast. America needs clean renewable energy, not more oil spills. We are counting on you to protect our coasts.

Sincerely,

Jennifer Huddle
350 Valaraja Trail
Apt 2107
Orlando, FL 32826

EXHIBIT C9

Submitted at NB Hearing

Santa Rosa County Democratic Executive Committee

Chairman
(904) 957-4242
David Adams

Vice Chairman
(904) 623-0330
Louise Conerly

Post Office Box 705
Milton, Florida
32572-0705

Secretary
(904) 994-7792
Ronald Mayhew

Treasurer
(904) 623-9051
Delores Baxley

RESOLUTION

The Democratic Executive Committee of Santa Rosa County hereby resolves to oppose any and all offshore drilling for oil or natural gas off the coast of Northwest Florida. We, further, strongly urge elected Democratic officials at the local, state, and national levels to do whatever they can to support a permanent ban on all offshore drilling in the eastern Gulf of Mexico.

This resolution was passed by a unanimous vote of the Santa Rosa County Executive Committee at its June 24, 1993 meeting in Milton, Florida.

Michael V. Robertson
Publicity Chairman

M V Robertson