

Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.  
**SECTOR 2** — CHART INFORMATION

## SECTOR 2

### WEST COAST OF BAJA CALIFORNIA

**Plan.**—This sector describes the W coast of Baja California, with adjacent islands, from the United States boundary line to Cabo Falso. The descriptive sequence is SE.

#### General Remarks

**2.1 Winds—Weather.**—The prevailing winds along this coast are NW and may be said to blow steadily from that direction for about 8 months of the year. During November, December, January, and February, winds from SE to SW are frequent with occasional moderate SE gales. These gales are often accompanied by considerable rain. During December and January, heavy winds, which blow from a direction between N and NE, are likely to occur and usually last for 1 to 3 days.

The weather during the greater part of the year is clear and pleasant. Rains are most frequent between May and October. Fogs may occur in all seasons, but mostly during the summer months, setting in at night or in the early morning and clearing by 1000 hours. To the S of Isla Cedros, there is less fog and the weather clears earlier than to the N. Between Boca de las Animas and Bahia Magdalena, fogs are very frequent during the late fall and winter. These fogs usually form over the lagoons and small bays. They are blown seaward in the early morning by the land breeze and shoreward again by the sea breeze, clearing by about noon.

**Tides—Currents.**—The currents in the vicinity of this coast set in the direction of the prevailing winds and attain rates of 0.5 to 1 knot. Near the land, the influence of the tides is also felt and an E set should be guarded against at all times. Between Punta Abreojos and Bahia Magdalena, vessels frequently experience during the winter a NW current, with a rate of 0.7 to 1 knot, at a distance of 15 to 25 miles from the shore.

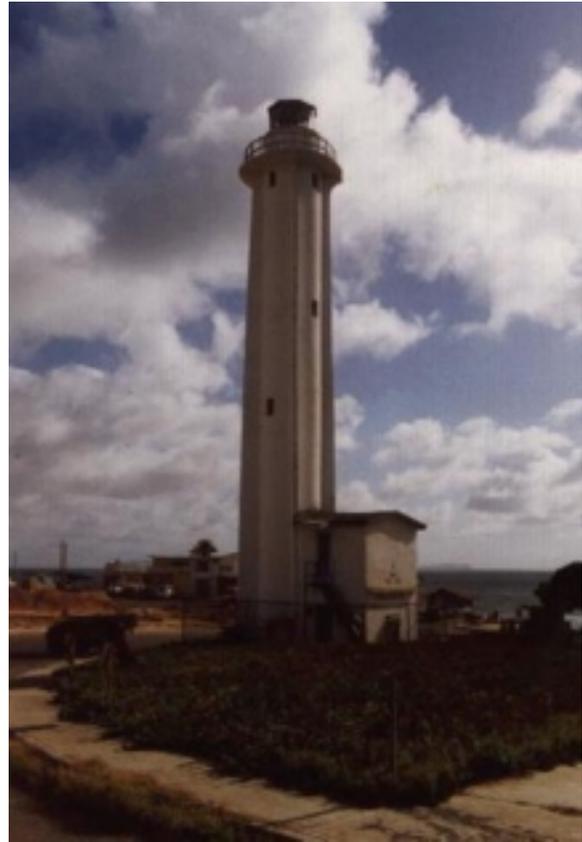
**Caution.**—Vessels are warned against the effect of the tidal currents, especially spring floods, setting across the mouths of the lagoons.

#### Boundary Monument to Ensenada

**Boundary Monument** (32°32'N., 117°07'W.), a white marble obelisk, stands near the shore at the edge of a low tableland and marks the international boundary between the United States of America and Mexico. It is 6m high and clearly visible from seaward. A stone mound, which marks a second point on the boundary, is situated 1 mile E of the monument. A conspicuous bull ring stadium stands close ESE of the monument.

A light (Tijuana) is shown from a tower, 22m high, standing in the vicinity of the monument. An aeronautical light is shown from a structure standing 6 miles ESE of the monument.

A dangerous wreck is reported to lie about 4.5 miles W of the Boundary Monument.



**Tijuana Light**

**Islas Los Coronados** (32°25'N., 117°15'W.), a group of four rocky islets, lies about 10 miles SW of the Boundary Monument.

Sur Coronado, the S most and largest islet of the group, rises to a summit, 205m high, at its S end. When viewed from the N or S, this islet appears to be wedge-shaped. Puerto Cueva, a small cove, lies near the NE point of the islet and provides shelter for fishing vessels. A light is shown from a tower, 10m high, standing in the vicinity of this cove. A racon is situated at the light.

Kelp extends up to about 2.5 miles SSE from the S end of this islet. A light is shown from a tower, 6m high, standing on the S extremity and a shoal, with a depth of 16.5m, has been reported to lie about 2 miles SSE of it.

Norte Coronado, the N most islet, lies 2.8 miles NW of the N extremity of Sur Coronado. It is 142m high and barren. The other two islets of the group lie close W of the N part of Sur Coronado. A deep passage leads between Norte Coronado and the other islets, but it is encumbered by patches of kelp and is not recommended.

The passage leading between the group and the mainland has depths of 26 to 37m and is clear and safe.

Anchorage, well sheltered from the prevailing winds, can be taken in a depth of 15m, sand, off the middle of the E side of Sur Coronado.

**Rosarito Oil Terminal** (32°22'N., 117°05'W.) (World Port Index No. 15995), with offshore berths, lies 11 miles S of the Boundary Monument, in the vicinity of the mouth of the Rio Rosario.

**Depths—Limitations.**—The port consists of two offshore berths, formed by several mooring buoys, and an SBM. The N berth is used for discharging ammonia and the S berth for the discharge of oil and gas. Berth limitations are given in the table below:

Rosarito Oil Terminal—Berth Limitations				
Berth	Depth alongside	Max. vessel size	Max. vessel length	Max. draft
No. 1	15.2m	26,500 grt	210m	10.4m
No. 2	15.2m	17,000 grt	171m	8.5m
SBM	—	35,000 grt	215m	15.2m

**Aspect.**—A conspicuous radio tower stands close N of the mouth of the Rio Rosario. A conspicuous power station is situated 2.3 miles NNW of the river mouth and four gray chimneys, each 45m high, stand in its vicinity. A prominent tank farm is situated close N of the power station and a group of radio masts stands 1.5 miles N of it.

**Pilotage.**—Pilotage is compulsory. Pilots and mooring masters can be contacted by VHF and board about 1 mile W of the berths. In bad weather, vessels may be advised to proceed to Ensenada where pilots will board at a distance of not less than 3 miles from the breakwater. Vessels are advised to approach the terminal by steering in a N direction towards Sur Coronado. When about 4 miles from the islet, vessels should steer in an ENE direction toward the offshore berths.

**Anchorage.**—Vessels can anchor in a depth of 21m about 1.5 miles NW of the SBM. The bottom is formed of sand, shells, and mud and provides a good holding ground.

**Caution.**—During the summer, the berths are exposed to the prevailing W swell, which may be heavy, and vessels must keep their engines available at short notice. Cargo operations are generally suspended when the swell reaches a height of 3m.

**2.2 Punta Descano** (32°16'N., 117°02'W.) is located 16.5 miles SSE of Boundary Monument and the coast between is backed inland by a range of prominent, high mountains. This point is formed by a bluff surmounted by a hill, 112m high.

**Bahia Descano** (32°14'N., 116°58'W.), open and exposed, lies between Punta Descano and Punta Mezquite, 8.5 miles SE. It is of no commercial importance, but provides anchorage for small coasters. Pilon de Azucar (Sugarloaf Rock), an above-water rock, is located about 4 miles SE of Punta Descano. It lies in the central part of the bay and is the only off-lying danger. A settlement, which may be identified by some sandhills close N of it, is situated 2 miles N of Punta Mezquite.

Small vessels sometimes anchor in depths of 15 to 27m off this settlement, but local knowledge is advised.

**Punta Salsipuedes** (32°03'N., 116°54'W.), low and poorly defined, is located 7 miles S of Punta Mezquite and 11 miles NW of Punta San Miguel, the N entrance point of Bahia Todos Santos.

**Bahia Todos Santos** (31°49'N., 116°42'W.), open to the W, is entered between Punta San Miguel and Cabo Punta Banda, 8 miles S.

Punta San Miquel is bold and 46m high. A light is shown from a tower, 5m high, standing on the point. The N coast of the bay between this point and Punta del Morro, 4.5 miles SE, is backed by bold cliffs, 15 to 30m high, and fronted by kelp which extends up to 1.5 miles offshore in places. A light is shown from a tower, 6m high, standing on Punta del Morro. A shoal, with a depth of 4.6m, lies about 1.2 miles SW of this light.

Puerto El Sauzal, protected by breakwaters, is a small harbor lying 2 miles ESE of Punta San Miquel. Several prominent ranch buildings stand in the vicinity of this harbor and the entrance is indicated by a lighted range.

**Punta Ensenada** (31°51'N., 116°39'W.) is a steep promontory, 113m high, located 1.7 miles ESE of Punta del Morro.

**Islas de Todos Santos** (31°51'N., 116°39'W.), consisting of two barren islets, lies in the W entrance of the bay, 3.5 miles NW of Cabo Punta Banda. The islets are surrounded by kelp and fringed by rocks, but deep and wide passages lie on either side of them. The S islet is high and the N islet is low and flat. A main light is shown from a prominent tower, 30m high, standing in the N part of the N islet. A racon is located at this light. Another light is shown from a tower, 7m high, standing on the S extremity of the S islet.

Bajo San Miguel, a detached shoal patch, lies about 2.5 miles N of the N islet. It has a least depth of 5.5m and is surrounded by kelp.

The S side of the bay is formed by a promontory which is faced by cliffs, 12 to 43m high. From the root of this promontory, the SE shore of the bay extends NNE and is fringed by a sandy beach. Estero Punta Banda, the mouth of an extensive lagoon, lies at the SE side of the bay and is obstructed by a bank on which the sea breaks continuously.

## Ensenada (31°52'N., 116°38'W.)

World Port Index No. 15990

**2.3 Ensenada** provides berthing for cargo and cruise vessels. There are also facilities for fishing vessels and yachts. The harbor is protected from the W by a breakwater, about 1 mile long, which extends SE from Punta Ensenada. It is protected from the S by a breakwater, 500m long, which extends WSW from the shore.

**Winds—Weather.**—The prevailing winds are from the NW and SW. Haze is reported to be common within the bay.

**Tides—Currents.**—The tides rise about 1.6m at springs and 1.1m at neaps.

**Depths—Limitations.**—The port can be approached via two channels. The S channel, which leads S of Islas de Todos Santos, is wide, deep, and clear of dangers except for the chain

of shoals extending about 1 mile NW from Cabo Punta Banda. The N channel, which leads between Bajo San Miguel and Punta San Miguel, is clear, but has lesser depths than the S channel.

The entrance channel has a depth of 8.8m at LW. Small craft and yachts use the E part of the harbor and fishing vessels use the S part.

The main wharf, which lies in the N part of the harbor, provides 725m of total berthage with depths of 8 to 10m alongside. A wharf used by coasters provides 480m of total berthage with depths of 4.2 to 7m alongside. The port has facilities for general cargo, container, bulk, and cruise vessels.

**Aspect.**—A light is shown from a conical tower, 12m high, standing at the head of the W breakwater. An aeronautical radiobeacon is situated 1.3 miles E of the head of the W breakwater. An airport is situated about 3 miles S of the harbor. The harbor fairway is marked by lighted buoys.

**Pilotage.**—Pilotage is compulsory. Pilots can be contacted by VHF and board about 0.8 mile seaward of the breakwater.

**Anchorage.**—Good anchorage can be taken in depths of 6 to 18m, sand and mud, within the bight lying about 4 miles E of Cabo Punta Banda, in the S part of Bahia Todos Santos. During S gales, this anchorage is considered to be the best along the coast. In suitable weather, vessels can anchor in depths of 11 to 18m to the S of the W breakwater head.



**Ensenada Petroleum Terminal**

## Ensenada to Islas San Benito

**2.4 Cabo Punta Banda** (31°44'N., 116°45'W.), the S entrance point of Bahia Todos Santos, is a bold headland located at the outer end of a long and narrow promontory. A light is shown from a tower, 6m high, standing on this point. A chain of rocky shoals extends about 1 mile NW from the point.

Banda Peak, 389m high, rises 1 mile SE of the point and forms an excellent landmark from the S.

**Punta Santo Tomas** (31°33'N., 116°42'W.), located 12 miles SSE of Cabo Punta Banda, is the low outer extremity of a square-shaped headland. This headland rises close inland to Bluff Peak, which has a prominent summit, 442m high. Vessels should stay at least 0.5 mile from the point and both sides of the headland as they are surrounded by kelp.

Rocas de la Soledad, a group of above-water rocks, lies about 1.3 miles W of Punta Santo Tomas. This group, which consists of rocks up to 6m high, is steep-to, surrounded by kelp, and may safely be passed on either side.

Anchorage can be taken in depths of 11 to 18m within a small bight lying close SE of Punta Santo Tomas. This bight is sheltered from the prevailing wind and a river flows into its S part during the winter.

**Punta San Jose** (31°28'N., 116°36'W.) is located 7 miles SE of Punta Santo Tomas. A light is shown from a tower, 10m high, standing on this point.

**Punta Colnett** (30°58'N., 116°20'W.) is located 40 miles SE of Punta Santo Tomas. The coast between is backed by a succession of broken bluffs and sandy beaches with high mountain ranges rising inland. Most dangers lie within 1 mile of the shore. The point consists of a remarkable semicircular headland with perpendicular sides which rises to a high plateau. It is visible for a considerable distance from both the N and S and is very radar conspicuous. A light is shown from a metal tower, 11m high, standing on the point.

Anchorage, well sheltered from the prevailing winds, can be taken in depths of 11 to 17m, sand, within a bay lying close SE of the point, abreast a remarkable gorge. However, this anchorage is subject to heavy squalls which sweep down from the cliffs without warning.

**Caution.**—A detached shoal, with a depth of 5m, was reported (1991) to lie about 21 miles WSW of Punta Colnett.

**2.5 Bahia de San Ramon** (30°46'N., 116°04'W.) is exposed and lies between Punta Colnett and the coastal cliffs standing opposite Isla de San Martin, 32 miles SSE. The land extending along the shore of the bay is lower than that to the N of Punta Colnett. Between Punta Colnett and the mouth of the Arroyo Santo Domingo, 19 miles SSE, the coast consists of sandy hills and bluffs with fields of kelp extending up to 4 miles offshore in places. A lagoon backs the mouth of the river. To the S of the mouth of the Arroyo Santo Domingo, the coast of the bay is low and is backed by a sandy plain which extends to the high land of the interior.

**La Encantada** (Montana Calamajue) (30°46'N., 115°21'W.), the highest mountain of Baja California, is whitish in appearance and rises 37 miles E of Bahia de San Ramon. Its summit is 3,086m high, has a jagged appearance, and is snow-capped during the winter and spring. This mountain has been reported to be visible on a clear day from a distance of over 100 miles seaward.

**2.6 Isla San Martin** (30°29'N., 116°07'W.), surrounded by kelp, is almost circular in shape and formed of volcanic origin. Two prominent high peaks stand near the center of the island with the S most being the main crater. A light is shown from a metal tower, 12m high, standing on the W extremity of the island.

Caleta Hassler, a small and sheltered cove, lies on the E side of the island and is formed by a sandspit. It provides shelter for small craft with local knowledge. The passage lying between the island and the mainland coast is deep and clear of dangers. Large vessels can anchor off the SE side of the island.

**Roca Ben** (30°26'N., 116°07'W.), a dangerous and steep-to rock, lies 2.5 miles S of Isla San Martin and occasionally breaks. A small shoal patch, with a depth of 11.9m, was reported (1929) to lie about 2 miles SW of this rock.

A dangerous rock was reported (1964) to lie, position approximate, about 6.5 miles S of Roca Ben. Breakers and discolored water were reported (1914) to occur in the vicinity of this rock.

**Cabo San Quintin** (30°21'N., 115°52'W.), the outer extremity of a long and narrow peninsula, forms the N entrance point of Bahía de San Quintin.

**Bahía de San Quintin** (30°18'N., 115°52'W.), entered S of Cabo San Quintin, is fringed by a low, sandy beach and backed by hills, up to 90m high. It is spacious and provides good shelter from the prevailing winds, but a long swell usually rolls in and makes the bay an uncomfortable anchorage. Vessels of moderate draft can anchor in the N part of this bay, outside of the bar at the entrance to Puerto San Quintin.

Puerto San Quintin, a large and shallow inlet, is entered between Punta Entrada, located 0.5 mile NNE of Cabo San Quintin, and Punta Azufre, 2 miles N. Punta Entrada is a low, rocky point and a light is shown from a pyramid, 6m high, standing in its vicinity. Punta Azufre is a low, sandy point and a light is shown from a framework tower, 10m high, standing on it. The entrance is encumbered by a bar and several shoals, which dry in places. A narrow and tortuous channel, which is marked by buoys and beacons, leads into the inlet, but local knowledge is required. The bar is reported to have a depth of 3m at HW. The city of San Quintin is situated along the E side of the inlet.

Five prominent peaks rise along the W side of the inlet. Cerro Kenton, the tallest, is 267m high. These peaks are reported to appear as islands from seaward.

**2.7 Punta Baja** (29°57'N., 115°49'W.), consisting of a sandy cliff, is located 27 miles SSE of Cabo San Quintin. It is 9m high, fronted by a kelp-covered reef, and forms the N entrance point of Bahía del Rosario. A light is shown from a metal pyramid, 8m high, standing on this point.

Bahía del Rosario, entered SE of the point, is backed by sandy bluffs and hills of moderate height. It is much encumbered by kelp and shallow water extends up to about 0.5 mile offshore. However, good anchorage can be taken by vessels with local knowledge in a depth of 9m, sand, within the bay.

Picacho San Vicente rises 3 miles inland, E of the central part of this bay. This isolated peak is 461m high and very prominent. A conspicuous white spot has been observed on the hills, 4.5 miles ENE of Punta Baja.

A large field of kelp extends S from Bahía del Rosario toward Isla de San Jeronimo and numerous shallow patches lie within it. One such patch, with a depth of 5.5m, lies 4 miles SSE of Punta Baja and the sea occasionally breaks over it. A lane of open water, about 1 mile wide, lies between the S end of the field and Isla San Jeronimo.

**Isla San Jeronimo** (Isla San Geronimo) (29°48'N., 115°48'W.), marked by a light, lies 9 miles SSE of Punta Baja.

This island is 40m high, barren, and fringed by detached rocks. An above-water rock lies at the outer extremity of a reef, which extends about 0.4 mile SW from the island, and the sea breaks heavily over it.

Anchorage can be taken by vessels with local knowledge in a depth of 13m, sand, off the E side of the island. The roadstead is sheltered from the prevailing wind, but an uncomfortable swell may be experienced at times. It is recommended that vessels approach the anchorage from the S of the island and depart to the N of it.

Arrecife Sacramento, an extensive steep-to reef, lies between 2.5 and 4.5 miles SSE of Isla San Jeronimo. Several awash and above-water rocks, on which the sea constantly breaks, lie on this reef.

A depth of 45m was reported (1981) to lie about 38 miles WSW of Isla San Jeronimo.

**Punta San Antonio** (29°45'N., 115°42'W.), a low and cliffy point, is located 13 miles SE of Punta Baja. Shoals, marked by kelp, extend up to about 0.8 mile W of this point.

**2.8 Punta Canoas** (29°26'N., 115°12'W.), formed by a sharp and perpendicular cliff, is located 33 miles SE of Punta San Antonio. The coast between consists of sand bluffs, 15 to 20m high. The point is 68m high and is backed by high hills. A rock, with a depth of 1.5m, was reported (1930) to lie about 0.3 mile SW of this point.

Punta San Carlos is located 20 miles NW of Punta Canoas. This point is fronted by a shoal area, with depths of 11 to 16m, which extends up to about 5 miles offshore and is marked by kelp.

**Puerto de Santa Catarina** (29°31'N., 115°16'W.), lying 7 miles NW of Punta Canoas, is an open roadstead from which locally mined ore is sometimes loaded from lighters. Vessels can anchor in a depth of 9m with good holding ground. The bottom consists of mud, sand, and boulders.

Pico Sombrero rises 2 miles inland, 6 miles NW of the roadstead. This peak is 560m high and forms an excellent landmark.

**San Jose** (29°16'N., 114°53'W.), near the mouth of a river, is situated 18 miles SE of Punta Canoas. A light is shown from a tower, 10m high, standing on the S side of the river entrance. Roca Acme, a rocky islet, lies about 0.3 mile off the river mouth. It is 6m high and surrounded by kelp. Sheltered anchorage can be found in a depth of 11m close S of this islet.

Between Punta Canoas and Punta Maria, 46 miles SE, the coast is backed by three distinctive ranges of mountains, with peaks up to 900m high.

Punta Blanca, a sandy bluff, is located 14 miles SE of San Jose and is fronted by several detached rocks which lie up to 0.5 mile offshore. A light is shown from a metal pyramid, 6m high, standing on this point.

**Punta Maria** (28°56'N., 114°33'W.), a low and rocky point, may be identified by a sand mound, 20m high, standing 0.5 mile N of it.

Punta Cono, a steep and double pointed headland, is located 4 miles NW of Punta Maria. A prominent red-colored hill, 51m high, rises close N of this point.

**2.9 Bahia Sebastian Vizcaino** (28°15'N., 114°38'W.), an extensive body of water with depths of over 90m in its central part, is entered between Punta Maria and the N end of Isla Cedros, 48 miles SW. With the exception of the fringing shoals, which lie within 5 miles of the shore, there are no off-lying dangers. The E shore of the bay is generally low, sandy, and marshy with high mountain ranges rising in the interior. Between Punta Maria and Morro Santo Domingo, 46 miles SSE, the shore is indented by several small, open inlets which are of little importance. Anchorage can be taken within some of these inlets, but a heavy swell is usually experienced.

Punta Negra, located 9.5 miles SE of Punta Maria, is a dark, rocky point from which the land rises steeply. A light is shown from a tower, 10m high, standing on this point.

Punta Santa Rosario, located 11 miles SE of Punta Negra, is the sharp outer extremity of a tableland that extends several miles inland. An islet lies 0.3 mile offshore, about 0.8 mile N of this point. A sandy spit, on which the sea breaks, connects the islet to the shore. A prominent building is reported to stand on the E side of this islet.

**Morro Santo Domingo** (Morro Laguna) (28°15'N., 114°07'W.), located 15 miles SSE of Punta Santa Rosario, is a dark-colored headland of volcanic origin. It is conspicuous and appears as an island when first seen from any distance. A light is shown from a tower, 10m high, standing on the point.

Puerto de Santo Domingo, a small bay, lies close SE of Morro Santo Domingo. Anchorage may be obtained, sheltered from the prevailing winds, in depths of 6 to 15m, sand, within the outer part of this bay.

The coast to the S and E of Morro Santo Domingo is indented by three large lagoons, Manuela Laguna, Estero de San Jose (Laguna del Guerrero Negro), and Laguna Ojo de Liebre (Scammon Lagoon). Only the latter lagoon has any commercial importance. Salt was previously shipped from a facility within Estero de San Jose, but the operation has been transferred to a terminal situated on the SE side of Isla Cedros.

**Laguna Ojo de Liebre** (Scammon Lagoon) (27°54'N., 114°18'W.), the S most and by far the largest lagoon, is studded with low islets and numerous sandy bars. The outermost bar, over which the sea sometimes breaks heavily, lies 6.5 miles N of the entrance and is reported to have a depth of 7.3m, but is subject to continuous change. The channel leading over this bar is about 0.5 mile long, 0.3 mile wide, and is marked by a buoy. Within the bar, depths of 6 to 16m lie within the main channel. It is reported that vessels with drafts of 5.5m have crossed the bar and entered the lagoon, but no attempt should be made to transit this area without local knowledge.

A detached shoal patch, with a depth of 3.6m lies about 5.5 miles offshore, 19 miles SW of Morro Santa Domingo.

**2.10 Punta Eugenia** (27°51'N., 115°05'W.), a dark and rocky projection, is fronted by reefs. A light is shown from a tower, 7m high, standing on this point. Monte Eugenio, a conspicuous hill, rises 6 miles SSE of the point and is 210m high.

Punta Falsa, a steep and rocky point, is located 1.5 miles NE of Punta Eugenia and a dangerous reef lies about 0.5 mile N of



**Isla Natividad Lighthouse**

it. A rock, awash, lies near the center of this reef and the sea breaks heavily over it.

**Isla Natividad** (27°52'N., 115°10'W.), fringed by rocks and kelp, lies 4 miles W of Punta Eugenia and is separated from it by Canal de Dewey. This island is barren and hilly with a peak, 150m high, rising near its center. A light is shown from a prominent tower, with a dwelling, standing in the N part. A group of buildings and a tall steel mast are situated at the SE end of the island, but are reported to be visible only from the S.

Roca Lowry, a rocky shoal, has a least depth of 2.3m and lies about 1.8 miles ESE of the S end of Isla Natividad. A shoal patch, with a depth of 10m, lies about 1.3 miles S of this rocky shoal. Another rocky shoal, with a depth of 7.6m, lies about 1.5 miles SW of the S end of the island. A dangerous wreck is reported to lie 0.8 mile offshore, about 1.8 miles NW of the S end of the island. A rock, with a depth of less than 1.8m, lies about 0.9 mile seaward of the middle of the W side of the island. Roca Maria, above-water, lies on a reef which extends 0.5 mile W from the NW end of the island.

**Canal de Dewey** (27°52'N., 115°07'W.), lying between Isla Natividad and Punta Eugenia, is 4 miles wide and can be safely navigated with caution. The W side of this passage should be avoided because of patches of foul ground and irregular depths. A clear passage, about 1 mile wide, lies at the E side of the passage, 1.5 miles offshore. This passage is mostly used by coasters and its sides are usually marked by kelp. A strong current is reported to set through this channel during springs.

**2.11 Canal de Keller** (Canal Kellett) (27°58'N., 115°13'W.) leads between the N end of Isla Natividad and Isla Cedros. This passage is 8 miles wide and deep. It is clear of dangers, but a bank, with depths of less than 18.3m, extends up to about 2.5 miles S from the S end of Isla Cedros. A shoal patch, with a depth of 9.1m, lies near the S edge of this kelp-covered bank, about 5.3 miles N of the N end of Isla Natividad. Vessels using this passage are advised to favor the S side.

**Isla Cedros** (28°11'N., 115°13'W.) is formed of volcanic origin and consists of a series of high and irregular peaks. This island is mostly barren in its S part, but is wooded in its N part. Cerro de Cedros, the summit of the island, is 1,204m high and rises in its S part. In clear weather, the island has been reported visible from a distance of 60 miles

The crests and W slopes of the peaks rising in the N part of the island are covered with cedar and pine trees, some of which attain heights of 18 to 21m.

**Punta Morro Redondo** (28°03'N., 115°11'W.), the SE extremity of the island, is formed by a rocky cliff, 9m high, and fronted by rocks, which extend up to 0.6 mile S from it. A light is shown from a metal tower, 8m high, standing on a hill that surmounts the point.

Between Puerto Morro Redondo and the N end of the island, the E coast is generally steep-to, free of kelp, and rises abruptly inland to high peaks. A light is shown from a tower, 6m high, standing on Punta Norte, the NE extremity of the island. Good and sheltered anchorage can be taken by vessels with local knowledge close SE of a point lying 3 miles SSE of the light.

Anchorage, sheltered from the prevailing winds, can be taken by vessels with local knowledge in a depth of 13m within Bahía del Sudeste, which lies close W of Punta Morro Redondo.

**Caution.**—A local magnetic anomaly, which increased the variation by 24°, was reported to exist along the E side of the island, about 2.7 miles N of Puerto Morro Redondo.

**2.12 Puerto Morro Redondo** (28°03'N., 115°08'W.) (World Port Index No. 15975), a salt loading terminal, lies 1 mile N of Punta Morro Redondo.

**Depths—Limitations.**—The main loading facility consists of a T-head pier and several mooring buoys. The berth at the head of the pier is formed by several steel dolphins and wood facings. It is 216m long and has a depth of 18.3m alongside. A fixed loader stands at the center of the pier and vessels must be shifted along the berth in order to fill the various hatches. Vessels of up to 160,000 dwt, 304m in length, and 17.3m draft can be accommodated.

The terminal also provides three inshore berths, with depths of 6 to 12.2m alongside, which can handle vessels of up to 6,500 dwt.

**Aspect.**—The terminal is well illuminated at night and a conspicuous salt stock pile stands near the root of the pier.

**Pilotage.**—Pilotage is compulsory. Pilots can be contacted by VHF and board at the anchorage or about 1 mile E of the terminal.

**Anchorage.**—Anchorage can be taken by vessels awaiting a berth in a depth of 36m, mud, about 0.8 mile NE of the pierhead.

**Caution.**—Deep-draft vessels should avoid using Canal de Keller and approach the terminal from the N.

**2.13 Cabo San Agustín** (28°05'N., 115°22'W.), the SW extremity of Isla Cedros, rises abruptly inland to Cerro San Agustín, a prominent peak, 241m high. A reef, on which the sea breaks in heavy weather, extends 1 mile SW from the cape and kelp usually extends up to 1 mile SW from it. A conspicuous reddish-colored above-water rock, lies in the vicinity of a reef about 1 mile offshore, 3 miles N of the cape.

Bahía del Sur (South Bay), entered close SE of the cape, provides good anchorage in depths of 11 to 27m to vessels with local knowledge. However, numerous rocks and kelp fields lie off the NW and SE shores of the bay and must be avoided.

The W coast of Isla Cedros is mostly formed by lines of steep cliffs. A heavy surf usually breaks along this side of the island and numerous kelp fields front the shore.

**2.14 Islas San Benito** (28°19'N., 115°34'W.), consisting of three barren islands, lies 15 miles NW of Isla Cedros and is surrounded by rocks and patches of kelp.

Benito del Oeste is the W most and largest island of the group. It is 202m high and appears as a plateau with a mound rising near the center. A light is shown from a tower, 4m high, standing in the S part of this island. A main light is shown from a prominent tower with a dwelling, 17m high, standing near the NW extremity of the island. A racon is situated at this light.

Rocas Pinaculo, two steep-to rocks, lie 1 mile W of Benito del Oeste. Benito del Centro and Benito del Este, the other two islands, lie close E of Benito del Oeste and are separated by Canal de Peck. This latter passage is narrow and deep, but should be used only by vessels with local knowledge. Benito del Este can be distinguished by four well-defined hills. Benito del Centro is low and flat with a hill, 25m high, rising near its E end.

**Caution.**—Depths considerably less than charted are reported to exist in an area lying 1 mile E of Benito del Este.

Breakers and depths of 16 to 31m, which may best be seen on the chart, have been reported to exist within 11 miles of Islas San Benito.

## Islas San Benito to Cabo San Lazero

**2.15 Punta Rompiente** (27°44'N., 115°00'W.), a steep and rocky headland, is located 8.8 miles SSE of Punta San Eugenio. A conspicuous mountain, 303m high, rises 3.8 miles NE of this point. This mountain shows two distinct peaks when viewed from the S and three distinct peaks when viewed from the W or N.

A shoal, with a depth of 7.3m, lies about 1.5 miles WNW of this point.

**Bahía Tortugas** (27°40'N., 114°53'W.), a nearly circular and well-sheltered bay, forms an excellent harbor of refuge. It is entered between Punta Kelp, located 6 miles SE of Punta Rompiente, and Cabo Tortolo, 1.8 miles SE. The entrance channel, which is about 0.8 mile wide, leads between several dangers extending from the entrance points. It is encumbered by numerous shoals and should not be transited without local knowledge.

Monte Bartolome, 265m high, is prominent and rises close N of Punta Kelp, the N entrance point. A light is shown from a framework tower, 10m high, standing on the E side of this latter point.

Cabo Tortolo, the S entrance point, is the low, rocky NW extremity of a high and narrow promontory. Several rocks, some above-water, lie on a reef, over which the sea breaks heavily, that extends 1 mile NNW from the cape. Roca Azufre, the outermost prominent rock, lies 0.6 mile NNW of the cape. This rock has two dark projecting horns that contrast markedly with its overall light color. A light is shown from a tower, 10m high, standing on Roca Atano which lies close SSE of Roca Azufre.

Anchorage can be taken anywhere within the entrance, but the N part of the bay is somewhat exposed to the ocean swell. The best anchorage lies in a depth of 11m on the E side of the reef extending from Cabo Tortolo, which acts as a natural breakwater.

A pier, 45m long, fronts a settlement at the NW side of the bay and has depths of 3 to 3.7m alongside its outer end. Several factory buildings and a conspicuous chimney stand in the vicinity of this pier.

**Punta San Pablo** (27°13'N., 114°29'W.), a dark and slate-colored bluff, is located 34 miles SE of Cabo Tortolo. The intervening coast is indented by Bahía de Thurloe and Bahía de San Cristobal. Both of these bays are exposed and have no commercial importance. Punta San Pablo is closely backed by a prominent hill and fronted by a reef, which extends up to about 0.5 mile S. A detached shoal, with a depth of 18.3m, lies about 12 miles NW of this point.

**Caution.**—It was reported (1986) that an obstruction, with a depth of 16.4m, lies about 16.5 miles NW of Punta San Pablo. Air bubbles have also been reported in this vicinity.

It was reported (1953) that a shoal, with a depth of 16.4m, lies about 23 miles WNW of Punta San Pablo.

Depths, which are considerably less than those charted, and areas of discolored water have been reported to lie up to 15 miles seaward of Bahía de San Cristobal.

**Punta San Roque** (27°09'N., 114°22'W.), 15m high, is located 3.7 miles SE of Punta San Pablo. This point is formed by a light-colored bluff which is fronted by foul ground and backed by a hill.

Vessels with local knowledge can anchor in depths of 18 to 27m within Bahía San Pablo which is free of dangers and is entered between Punta San Pablo and Punta San Roque.

**Isla San Roque** (27°09'N., 114°22'W.), a rugged island, lies 1.8 miles offshore, 3 miles SE of Punta San Roque. The passage leading between this island and the coast is foul and should not be attempted. A light is shown from a framework tower, 11m high, standing on the W side of this island.

A current, which sets E and attains a rate of 4 to 5 knots, has been reported to occur off Isla San Roque.

**2.16 Punta Asuncion** (27°08'N., 114°18'W.), located 7.5 miles SE of Punta San Roque, is a low, narrow, and sandy point with a conical mound, 20m high, rising at its outer end.

Isla Asuncion, a barren island, is located 1 mile S of the point and is connected to it by a shallow bank on which several above-water rocks lie. The island is surrounded by detached rocks and kelp. The sea breaks heavily over the shallow bank and the rocks lying in the vicinity of the point.

A detached shoal, with a depth of 10.9m, lies about 3 miles SE of Isla Asuncion.

**Punta San Hipolito** (26°58'N., 114°00'W.), located 13 miles ESE of Punta Asuncion, is a low, rocky point which is backed by barren hills, 15 to 30m high. The sea breaks over a reef which extends up to about 0.5 mile S from this point. A light is shown from a tower, 10m high, standing on the point.

Table Mountain, 410m high, rises 6 miles N of the point. It has a distinctive flat top and is very conspicuous.

Anchorage can be taken in a depth of 9m about 0.5 mile from the shore of Bahía San Hipolito which is entered close E of Punta San Hipolito.

A rocky shoal, with a depth of 6.4m, lies about 1.5 miles offshore, 4 miles NW of Punta San Hipolito.

**Punta Abreojos** (26°42'N., 113°34'W.), low and sandy, lies 28 miles ESE of Punta San Hipolito. A detached hill, 95m high, rises 3 miles N of the point and is very conspicuous from seaward. A main light is shown from a conspicuous pyramidal tower with a dwelling, 20m high, standing 2.5 miles N of the point. Another light is shown from a metal framework tower, 6m high, standing 1.5 miles ENE of the point. A light is also shown from a metal tower standing on the reef which extends up to 0.5 mile S from the point.

Roca Ballen, over which the sea breaks heavily, lies about 2 mile offshore, 4 miles W of the point. Bajos Wright, consisting of several rocks, lies centered 1 mile SSE of the point.

**Caution.**—Due to the numerous rocks and shoals lying within 1.5 miles S and 5.5 miles WSW of Punta Abreojos, vessels should give this point a wide berth.

**2.17 Bahía de Ballenas** (26°44'N., 113°24'W.), an open bay with regular depths shoaling gradually to its head, is entered between Punta Abreojos and Punta Malcomb (Punta Holcombe), 16 miles E. The shores of the bay are extremely low and sandy, except for a few bluffs at the W side. In winter, this bay is frequented by whales.

Laguna La Escondido, which is accessible only by small craft, lies near the head of the bay and its entrance is fronted by a shallow bank.

Laguna San Ignacio, a large and shallow body of water, is entered at the E side of the bay and extends 16 miles N. Extensive shoals, which partly dry, extend from the entrance points and form a bar about 1.8 miles SW of Punta Malcomb. This bar, which is about 0.4 mile wide, has a depth of 5.7m and the channel leading through it is plainly marked by breakers. Close within the bar, the depths increase, but the channel narrows. Above the entrance, only a tortuous and shallow channel leads to the head of the lagoon.

In good weather, anchorage can be taken in a depth of 9m outside the entrance of the lagoon, about 2.5 miles W of Punta Malcomb, but local knowledge is advised.

**Caution.**—Vessels should not attempt to cross the bar, which is subject to frequent and sudden changes, without local knowledge. It was reported (1982) that depths within the channel were less than charted.

**2.18 Punta Santo Domingo** (26°19'N., 112°40'W.), located 40 miles SE of Punta Malcomb, consists of a conspicuous dark cliff. This cliff is 52m high, vertical, and is backed by a tableland, 120m high. Monte Thetis, a very conspicuous peak, is 1,776m high and rises 35 miles NNE of the point. Its S slope is very abrupt and forms a gap in the mountain range.

**Punta San Juanico** (26°02'N., 112°17'W.), 15m high, is located 26 miles SE of Punta Santo Domingo. The coast between is characterized by steep-to, bold cliffs rising inland to high mountain ranges.

Bahía San Juanito, a small indentation, lies about midway between these points and provides very good anchorage, sheltered from the prevailing winds. Punta Pequena, the W entrance point, is rocky, 8m high, and rises close inland to a hill, 18m high. A light is shown from a framework tower, 8m high, standing on this point. Vessels with local knowledge can

anchor in depths up to 9m to the NE of the light. A settlement stands along the N side of the indentation.

Laguna San Juanico lies close E of Punta San Juanico and its entrance is fronted by a narrow and very shallow bar.

**Uncle Sam Bank** (25°37'N., 113°23'W.), with a least depth of 66m, lies about 64 miles SW of Punta San Juanico.

**Caution.**—When approaching from the S, vessels should not confuse Punta Pequena with Punta San Juanico which are very similar in appearance.

Several shoals, with depths of 14.9 to 29m, have been reported (1939 to 1985) to lie within about 15 miles NE of Uncle Sam Bank and may best be seen on the chart.

The coast extending between Punta San Juanico and Cabo San Lazaro, 77 miles S, is backed inland by high mountain ranges in the N part and rolling plains in the S part.

Boca de San Andreceta lies 16.5 miles SSE of Punta San Juanico and a light is shown from the vicinity of its entrance.

Boca de las Animas, lying 25 miles SSE of Punta San Juanico, is the N most of three entrances leading into a series of interconnected lagoons. A light is shown from a structure standing 4.5 miles S of this entrance. The lagoons extend S to Bahia Magdalena and lie nearly parallel with the coast. They are separated from the sea by narrow strips of sand. The entrances are fronted by shallow bars and are available only to small craft with local knowledge.

Boca de Soledad, the S most and deepest of the three entrances, lies 24 miles S of Boca de las Animas and is marked on either side by a ridge of sandy hills, 15 to 30m high. A frequently changing shoal, over which the sea breaks, extends about 3 miles seaward from the N side of this entrance.

Lights are shown from structures standing in the vicinity of the entrance and about 5 miles S of the entrance.

**Winds—Weather.**—Between Boca de las Animas and Bahia Magdalena, a complete change in the weather appears to occur. During the fall and early winter months, fogs are frequently formed over the lagoons and the bay. They are blown seaward by the E wind in the early morning, but are driven back over the land when the sea breeze arises, generally lifting about noon. Warm weather and light SW and NW winds, which are accompanied by remarkable smooth seas, generally prevail during these months.

**2.19 Cabo San Lazaro** (24°48'N., 112°19'W.), located 30 miles SSW of Boca de Soledad, is the NW extremity of a conspicuous headland. This cape, which is faced by rocky cliffs, often appears as an island when first sighted. Monte San Lazaro, the summit of the headland, is 390m high and stands close SE of the cape. A main light is shown from a tower with a dwelling, 7m high, standing on the cape. A racon is situated at the light.

A stranded wreck lies 3.8 miles NNE of the cape and has been reported to be radar conspicuous.

The currents off the cape set mainly SE and attain rates of up to 1.5 knots.

**Caution.**—**Thetis Bank** (24°56'N., 112°36'W.), with a depth of 34m, lies about 18 miles WNW of Cabo San Lazaro. The bottom in this vicinity is very uneven with many jagged rocks and less depths than charted may exist. A depth of

11.9m was reported (1923) to lie on this bank. A depth of 11m was reported (1992) to lie about

A shoal, with a depth of 18.3m, was reported (1964) to lie about 12 miles NW of Thetis Bank.

**Petrel Bank** (24°38'N., 112°47'W.) lies 21 miles SSW of Thetis Bank and is composed of fine, gray sand. This bank has depths of 18 and 73m, but it has not been thoroughly examined and may extend to the SE.

Isolated depths of 10.9m were reported to lie (1955) about 15.5 miles W and (1972) about 14.5 miles WSW, respectively, of Cabo San Lazaro.

A depth of 55m was reported (1983) to lie about 8.5 miles W of Cabo San Lazaro.

## Cabo San Lazaro to Cabo Falso

**2.20 Bahia Santa Maria** (24°44'N., 112°13'W.), a crescent-shaped indentation, is entered between Punta Hughes, located 3 miles SE of Cabo San Lazaro, and Cabo Corso (Cabo Dorso), 8 miles SE. The shores of this indentation are backed by low, sandy ridges and dunes. Anchorage, protected from the prevailing wind, can be taken in depths of 9 to 14m, sand, between 0.5 and 0.8 mile from the shore, in the NW part. A stranded wreck was reported (1975) to lie about 1.5 miles NE of Punta Hughes.

**Bahia Magdalena** (24°32'N., 112°02'W.), an extensive body of water, is entered between Punta Entrada, located 9 miles SE of Cabo Corso, and Punta Redonda, 2.5 miles SE. A navigable channel connects the SE part of this bay with Bahia Almejas. A series of lagoons, which can be entered from the NW part of this bay, extends up to about 60 miles N. The N and E shores of the bay are low, barren, and fringed by shoals which extend up to 2 miles seaward in places. The entrances of the lagoons in the NW part are encumbered by extensive shoals and sand bars through which several channels, with depths of 4 to 15m, lead.

The W side of the bay is protected by a high and narrow peninsula which is connected at its N end by a low neck to the mainland. The S side of the bay is protected by Isla Santa Margarita of which Punta Redonda is the NW extremity.

A deep and clear passage, about 2 miles wide, leads into the bay and passes between the reefs extending from both entrance points.

**Punta Entrada** (24°32'N., 112°04'W.), the NW entrance point of the bay, is fringed by reefs, on which the sea breaks, and surmounted by a dome-shaped hill, 61m high. Roca Vela (Sail Rock), a prominent above-water pinnacle rock, stands close SE of the point.

Monte Isabel, 360m high, rises 3.3 miles NW of Punta Entrada, and is very conspicuous from seaward.

A dangerous wreck lies, position approximate, about 6.8 miles NE of Punta Entrada.

**Punta Redonda** (24°31'N., 112°01'W.), the SE entrance point of the bay, consists of a rocky headland, 30m high, above which the land rises steeply to a height of 300m. A reef, on which the sea breaks heavily, extends about 0.8 mile W from this headland and a rock, awash, lies at its outer end. A light is shown from a pyramid tower, 5m high, standing on the point. It

is reported that this light structure is difficult to identify when approaching from the N, but is easily distinguished from the S.

White Bluff, a conspicuous white cliff, is located 5 miles SE of the point and is 60m high.

**Tides—Currents.**—The tidal currents in the entrance of Bahia Magdalena attain rates of 1 to 2 knots and cause tide rips. The general direction of the tidal currents in the W part of the bay is NNW or SSE. In Man of War Cove, the general direction of the tidal currents is N and S. In the E part of the bay, the flood current usually sets more to the W and the ebb current more to the S.

**Anchorage.**—Anchorage can be taken almost anywhere within Bahia Magdalena in suitable depths. The best anchorage for all seasons is in a depth of 16m about 0.5 mile E of the pier at Puerto Magdalena. Vessels may also anchor farther offshore in a depth of 24m.

During the winter, with a S wind, which is not often the case, good anchorage can be obtained in the S part of the bay and leeward of Isla Santa Margarita.

**2.21 Man of War Cove** (Caleta del Acorazado) (24°38'N., 112°07'W.), a small indentation, is entered on the W side of Bahia Magdalena and N of Punta Entrada. It has ample depths in the S and central parts, but is encumbered by shoals, with depths of less than 5m, in the N and W parts.

Puerto Magdalena, a small fishing village, is situated at the head of this indentation and is of no commercial significance. A pier, 18m long, fronts the village and has a depth of 2.4m alongside. It was reported (1995) that this pier is in poor condition.

**Puerto de San Carlos** (24°47'N., 112°07'W.) (World Port Index No. 15961), a small grain loading facility, is situated at the NW side of Bahia Magdalena. Tides rise about 1.7m at springs and 1.1m at neaps.

The facility is approached through a narrow and buoyed channel with a least depth of 8.2m. An L-shaped pier, 102m long, has a depth of 11.4m alongside and with additional dolphins provides 204m of total berthage. Vessels of up to 183m in length, 30.5m beam, and 9.1m draft can be accommodated.

Pilotage is compulsory and is available during daylight only. Vessels should send an ETA at least 24 hours in advance. Pilots can be contacted by VHF and generally board off the S entrance to the approach channel, about 7 miles NNW of Punta Entrada, which is marked by a lighted buoy.

**Canal de la Gaviota** (Marcy Channel) (24°30'N., 111°49'W.) is the narrow and deep passage which connects the SE part of Bahia Magdalena with the NW part of Bahia Almejas. The fairway is indicated by lighted ranges and has a depth of 22m. During the ebb current, the shoal banks lying along the sides of the passage are clearly marked by heavy breakers even though the sea is smooth and the swell barely perceptible.

**Bahia Almejas** (24°28'N., 111°42'W.) is a large, enclosed body of water which is protected on its seaward side by Isla Santa Margarita. The mainland shore is mostly low and barren. The bay is deep in its central part, but extensive shoals lie in its N, E, and SE parts.

Canal de Rehusa (Rehusa Channel), mostly encumbered by shoals, leads into the bay from the S and is entered close E of

the SE end of Isla Santa Margarita. The currents setting through this channel are very strong. They cause tide rips and render navigation unsuitable for anything but small boats.

**2.22 Isla Santa Margarita** (24°27'N., 111°50'W.) is high at both ends, but low in the middle. From a distance, the low part of this island appears as an opening, which has sometimes been mistaken for the entrance to Bahia Magdalena.

Monte Santa Margarita, 566m high, forms the summit of the island and rises in the SE part. Las Hermanas (The Sisters), two high and prominent peaks, stand 7 miles NW of the S extremity of the island.

Puerto Alcatraz, a fishing village, is situated in the S part of a small cove lying on the S side of Punta Cisne, the NE extremity of the island. A pier, 90 to 120m long, fronts a canning factory at the village and has depths of 3 to 9.4m alongside.

Puerto Cortes, a small Mexican naval base, is situated 2 miles SE of Puerto Alcatraz. A main pier, 290m long, extends from the shore and has depths of 5.7 to 9.4m alongside its outer end. There are also facilities for small craft. Anchorage, with good protection from SE winds, can be taken off the base in convenient depths over a bottom of sand with good holding ground.

**Punta Tosca** (Cabo Tosca) (24°18'N., 111°43'W.), the SE extremity of Isla Santa Margarita, is a bold, rocky, and prominent point. A reef, on which the sea breaks with great force, extends about 0.5 mile S from this point. A main light is shown from a tower with a dwelling, 12m high, standing on the point.

**Caution.**—An obstruction was reported (1941) to lie about 1.5 miles S of Punta Tosca.

A shoal, with a depth of 14.6m, was reported (1979) to lie about 23 miles SW of Punta Tosca.

A shoal, with a depth of 5.8m, was reported (1952) to lie about 20 miles SE of Punta Tosca.

Several unconfirmed shoal depths, 10 to 27.5m, were reported (1960) to exist in the vicinity of a position lying 30 miles SSE of Punta Tosca.

Several unconfirmed shoal depths, of which the least was 10m, were reported (1969) to exist in the vicinity of a position lying 13 miles S of Punta Tosca.

**2.23 Punta Marquez** (23°57'N., 110°52'W.), a low and rocky point, is located 50 miles ESE of Punta Tosca and sandy bluffs rise on each side of it. Isolated plateaus, 150 to 180m high, stand between 7 and 11 miles E of this point. A light is shown from a metal tower, 12m high, standing on the point.

The mouth of Arroyo Conejo, marked by a light, lies 10.5 miles NW of Punta Marquez.

**Punta Lobos** (23°25'N., 110°14'W.) is the NW extremity of Los Lobos, a high, rocky, and wide promontory. During moderate weather, anchorage can be taken in depths of 13 to 18m, sand, about 0.3 mile offshore, 0.5 mile N of the point.

A main light (Todos Santos) is shown from a tower, 10m high, standing in the vicinity of a town, 2 miles NNW of Punta Lobos.

The coast extending between Punta Tosca and Punta Lobos is mostly low, sandy, and barren with few distinguishing features. Inland, the terrain rises gradually to moderately high

hills in the N part, but shifts abruptly to sharp and clearly defined mountain ranges in the S part.

Cerro el Picacho and Cerro la Aguja, the summits of the Sierra de la Laguna range, rise 15 miles NE of Punta Lobos and are 1,960 and 1,983m high, respectively. Both of these peaks are conspicuous and appear as two steep-faced cliffs from the SW.

Sierra de San Lazaro, a very conspicuous peak, stands 28 miles SE of Punta Lobos and is 1,558m high.

**2.24 Punta Gasparino** (23°16'N., 110°09'W.), formed by a rocky bluff, is located 10 miles SSE of Punta Lobos. This point is 23m high and is fronted by numerous rocks. Palmar, a small settlement, stands within a large grove of palm trees close N of the point and 1.5 miles inland.

**Punta de la Tinaja** (23°06'N., 110°07'W.), located 9 miles S of Punta Gasparino, is a rocky bluff, 22m high, which is closely backed by a steep hill, 165m high.

Monte el Guatamote, a prominent peak, stands 4 miles E of Punta de la Tinaja and is 721m high. Calabasa, a prominent mountain, rises 3.5 miles SE of Punta de la Tinaja and is 540m high.

**Punta San Cristobal** (22°56'N., 110°04'W.), a bold bluff, is located 10.8 miles SSE of Punta de la Tinaja and is 60 to 90m high. The coast between Punta de la Tinaja and this point is bold and steep-to. To the S of the point, the terrain consists of a sandy beach backed by white bluffs.

**2.25 Cabo Falso** (22°52'N., 109°58'W.), the S most extremity of Baja California, is located 17 miles SE of Punta de la Tinaja. It is fringed by rocks and consists of a steep-to bluff, 15m high. Las Tetas (The Paps), a conical hill with a double summit, rises close N of the cape. This hill is 212m high and a conspicuous sand slide stands close E of it. A main light is shown from a tower, 6m high, standing on Las Tetas. A racon is situated at the light.

A disused light tower stands 0.5 mile from the light.



**Cabo Falso Lighthouse**

**Off-lying dangers.**—Banco San Jaime, with a least depth of 9.1m (reported 1948), lies centered 19 miles W of Cabo Falso.

Banco Golden Gate, with a least depth of 11m (reported 1992), lies centered 20 miles NW of Cabo Falso.

Banco Morgan, with a least depth of 8m (reported 1985), lies centered 48 miles W of Punta Lobos. A shoal area, with a least depth of 5.5m (reported 1985), lies centered 10 miles E of this bank.

Banco Lusitania, with a least depth of 7.3m (reported 1968), lies centered 35 miles WNW of Banco Morgan.

**Caution.**—In an area, 20 to 35 miles wide, extending between a position lying about 20 miles WSW of Cabo Falso and a position lying about 40 miles SW of Punta Tosca, there are many banks and dangerous shoal patches, with depths as shallow as 6m, which rise steeply from deep water.

Therefore, this area must be navigated with extreme caution as many other shoals may exist which are not yet charted. The positions of the various reported banks and shoal patches may best be seen on the chart.