Sandpiper Marine Phosphate Project Namibia - December

Latitude: 24.00 S Longitude: 13.40 E

Weather Davs

Wave Height > 6.0 ft Mean: 18.5 days Range: 14.8 - 22.2 days p50:26 days p75:22 days p90:19.5 days Wave Height > 7.0 ft Mean: 13.7 days Range: 8.9 - 18.5 days p50:21.5 days p75:18 days p90:12.5 days Wave Height > 8.0 ft Mean: 9.3 days Range: 4.2 - 14.4 days p50:15.5 days p75:11.5 days p90:7.5 days

Wind Speed > 10.0 knots Mean: 23.4 days Range: 20.8 - 25.9 days p50:24 days p75:22 days p90:20 days Wind Speed > 15.0 knots Mean: 14.7 days Range: 11.0 - 18.4 days p50:15 days p75:12.5 days p90:9.5 days Wind Speed > 20.0 knots Mean: 4.9 days Range: 2.5 - 7.3 days p50:5 days p75:3 days p90:2.5 days

Working Window

Wave Height < 6.0 ft A 1 day or longer window will statistically occur 1.9 times per month

A 2 day or longer window will statistically occur 1.1 times per month A 3 day or longer window will statistically occur 0.5 times per month

Wave Height < 7.0 ft A 1 day or longer window will statistically occur 3.3 times per month

A 2 day or longer window will statistically occur 1.9 times per month A 3 day or longer window will statistically occur 0.9 times per month

Wave Height < 8.0 ft A 1 day or longer window will statistically occur 4.2 times per month

A 2 day or longer window will statistically occur 2.8 times per month A 3 day or longer window will statistically occur 1.8 times per month

Waves

Mean Height: 6 - 8 ft

The wave heights will occasionally reach 14 - 16 ft, but rarely higher.

Mean Period: 10 - 12 sec

The wave periods will occasionally reach 18 - 20 sec, but rarely longer.

Principle Direction, from: SW WindSea/Swell: 12% / 88%

Winds

Mean Speed: 10 - 15 kts

The winds will occasionally reach 25 - 30 kts, but rarely greater.

Principle Direction, from: S

Severe Storms

Severe storms with gale force winds and extreme waves are not expected during this month.