Vessel: M/T "BOW TRIUMPH" Location/ Port: CHARLESTON SC Date: 05 SEPT '22

Ref: SOLAS 1974/78 CHAPT. V, REG. 26/US 33 CFR 164.25 and 33 CFR 157.435.
If more than **12 hours** have passed since the last test/checks, the following equipment should be checked, tested and ready for use

1. Have departure drafts been visually checked and logged? ✓
2. Has a passage plan, including UKC calculations for the intended passage or berth shift been prepared? ✓
3. Is correct passage plan loaded into the ECDIS and is the seabuoy/seabuoy plan identified and ready to load? ✓
4. Are the safety settings set to correspond with actual draft/UKC? ✓
5. AIS settings: Navigational status, Destination, draft, ETA? ✓
6. Are the latest weather reports/navigational warnings available? ✓
7. VDR, course and engine recorder checked (where applicable)? ✓
8. Synchronization of clocks between the bridge and the engine room? ✓
9. Echo sounder ready for recording? ✓
10. Electronic navigational position fixing aids, including AIS (change low power to high power if sailing for sea)? ✓
11. Magnetic Compass/Gyro Compass/Repeaters? GC · 000° / MC · 000° ✓
12. Rudder/RPM/Pitch indicators/Repeaters? ✓
13. Radar's and associated plotting aids? ✓
14. Window wiper/clear view screen? ✓
13. Navigation lights/Searchlights/Signaling lamp (Aldis)? ✓
14. Ship's whistle(s)? ✓
15. GMDSS equipment checked/tested and recorded in GMDSS logbook (N/A for shifting *in* port). ✓
16. Steering Gear, Primary & Secondary? ✓
    Each Remote Steering Control? ✓
    Each Steering Position on Nav Bridge? ✓
    Main Steering Gear from alternate power supplies? ✓
    Rudder indicators in relation to the actual rudder? ✓
    Remote Control System Power Failure Alarm? ✓
    Remote Steering Power Unit Failure Alarm; and automatic isolating arrangements and other automatic equipment? ✓
    Full Movement of the Rudder? ✓
17. Verify that the Emergency Generator, and Emergency Batteries have been checked/tested. ✓
18. Bow Thruster? ✓
19. Main propulsion machinery. Full movement of ~~CPP~~ tested ahead and astern in both main and backup mode? ✓
20. Verify with the officer-in-charge of the Mooring Stations that Mooring Equipment, Anchor Releasing Mechanism, Emergency Towline/s have been checked. ✓
21. Pilot information card filled in? ✓
22. Engage BNWAS and make entry in Deck Logbook. (N/A for shifting *in* port). NA
23. Bridge Team Meeting has been conducted? Enter in the Deck Logbook the names of team leader (Master or Responsible Mate) and Team Members ✓

CHARLESTON, SC / 05 SEPT '22
Port/Date

[redacted]
Signature

ODFJELL

PASSAGE PLAN - General notes, part 1

Date prepared: 05.09.2022

Ship:	BOW TRIUMPH	***Total distance:***	6.7 NM	***Departure draught:***	FWD: 8.1 m, AFT: 8.4 m
Owner:	Goldex Fortune LTD	***Average speed:***	7.7 kn	***Arrival draught:***	FWD: 8.1 m, AFT: 8.4 m
Route:	**Charleston BP Cooper - Odfjell**	***Sailing time:***	0 days 00:52 hrs	***Dep. Air draught:***	43.6 m
Voyage no:	202204			***Arr. Air draught:***	43.6 m
Departure time, LT:	05.09.2022 16:00	***Arrival time (ETA), LT:***	05.09.2022 16:52	***Min clearance, under keel:***	0.5 m
Departure time, UTC:	05.09.2022 20:00	***Arrival time (ETA), UTC:***	05.09.2022 20:52		

Tidal information:

DEPARTURE PORT:

	H.W.	L.W.	Rise (m)
Time, UTC:	08:38	03:12	1.0
Time, UTC:	22:13	15:07	1.5
Standard port:	General Dynamics Pier		

ARRIVAL PORT:

	H.W.	L.W.	Rise (m)
Time, UTC:	07:40	01:59	1.2
Time, UTC:	20:44	13:58	1.8
Standard port:	Clouter Creek		

Departure port information:

Name of berth:	Charleston BP Cooper
VHF channel Port Control:	13 16 18A; 11 14 VHF channel Pilots: 13 16 18A; 11 14
Pre-departure notice to:	Charleston Pilots VHF ch. 13 16 18A; 11 14
Draught restrictions:	Maximum Draft at Berth is 10.67m
Air Draught restrictions:	See Additional Notes
Other restrictions:	See Additional Notes
Change of pilot during outward pilot passage, at WPT no / pos:	Nil
Guide to Port Entry, vol/page:	DNV Navigator / e-NP69 Loadline zone: Summer

Voyage specifications:

Commencement of Sea passage at WP:	**Time, UTC:**	**Local time**
End of Sea passage at WP:	**Time, UTC:**	**Local time**

	Distance: NM	**Sailing time:** days:hrs:min	**Avg. Speed** kn
Pilot departure:	0		0.0
Sea passage:	0		0.0
Pilot arrival:	0		0.0

Arrival port information:

Name of berth:	Charleston Odfjell
VHF channel Port Control:	13 16 18A; 11 14 VHF channel Pilots: 13 16 18A; 11 14
Pre-arrival notice to:	Charleston Pilots VHF ch. 13 16 18A; 11 14
Draught restrictions:	Maximum Draft at Berth is 12.19m
Air Draught restrictions:	See Additional Notes
Other restrictions:	See Additional Notes
Change of pilot during inward pilot passage, at WPT no / pos:	Nil
Guide to Port Entry, vol/page:	DNV Navigator / e-NP69 Loadline zone: Summer

Route: **Charleston BP Cooper - Odfjell** ***Date prepared:*** 05.09.2022

PASSAGE PLAN - General notes, part 2

DATABASE UPDATE INFORMATION:

Database name	Update date
ADLL Areas 1 & 2, 3, 4, 5, 6, 7, 8, 9, 10	Week 35/2022
ADRS1345 Areas 1, 2	Week 35/2022
ADRS2 Areas 1, 2	Week 35/2022
ADRS6 Areas 1 & 2, 3, 4, 5, 6, 7, 8, 9, 10	Week 35/2022
AENP catalog and NMs	Week 35/2022
ATT Areas 1-4, 5, 6, 7, 8, 9, 10	Week 35/2022
ENC database	Week 35/2022

EMERGENCY ANCHORAGES:

This passage plan has been prepared in accordance with the applicable requirements under the STCW convention, and good navigation practices. Information regarding weather and other local conditions have been obtained from up-to-date publications and broadcasted navigational warnings. Courselines, wheel over positions, safety distances, no-go areas and parallel lines for parallel indexing as appropriate are laid down in the largest scale charts available for the passage.

2nd Officer: Collinne Fritz B. Rama 3rd Officer: Lloyd M. Descano 3rd Officer: J.P Viado / J.M Alcarde Chief Officer: Willamson F. Gautier Master: Eduardo P. Gayanilo

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PASSAGE PLAN, part A

Ship:	BOW TRIUMPH	***Total distance:***	**6.7** NM	**Nav. Watch level(*):**	
Route:	**Charleston BP Cooper - Odfjell**	***Average speed:***	**7.7** kn	According to company procedure.	
Voyage no:	202204	***Sailing time:***	**0** days **00:52** hrs		
		Arrival time (ETA), LT:	05.09.2022 16:52		
		Arrival time (ETA), UTC:	05.09.2022 20:52		
		Deepest draught:	8.4 m		

WP No	WP name	Position	Course (to next WP)	Dist. (to next WP)	Leg speed (to next WP)	Under Keel Clearance calculations (at chart datum) all values in metres				Security Level	Nav. Watch level	Leg sailing time (to next WP)	Arrival time at WPT (UTC)	Dist. sailed	Dist. to go	Time to go (to destination)	Max interval between position verification
			deg	NM	kn	Passage type	W.Depth	Initial UKC (W.Depth-Static draught)	Full UKC		(*)	days:hrs:min	date - time	NM	NM	days:hrs:min	
1	BP Cooper Terminal	32°57.6540'N 079°54.9970'W	213.4° RL	0.3	4.5	Pilotage/fairway/channel	11.34	2.8	2.76	1	E1, E3, E4	00:03	05.09.2022 20:00	0	6.7	00:52	once/hour
2	Off BP Cooper	32°57.3790'N 079°55.2120'W	242.9° RL	0.4	7.7	Pilotage/fairway/channel	11.86	3.4	2.94	1	E3, E4	00:03	05.09.2022 20:03	0.3	6.4	00:48	once/hour
3	Cooper River By 82	32°57.1950'N 079°55.6390'W	217.7° RL	0.2	7.7	Pilotage/fairway/channel	11.29	2.7	2.35	1	E3, E4	00:01	05.09.2022 20:06	0.7	6.0	00:45	once/hour
4	Cooper River By 80	32°57.0341'N 079°55.7863'W	170.9° RL	0.2	7.7	Pilotage/fairway/channel	10.7	2.1	1.74	1	E3, E4	00:01	05.09.2022 20:08	0.9	5.8	00:43	once/hour
5	Oil Jetty	32°56.8602'N 079°55.7534'W	152.0° RL	0.3	7.7	Pilotage/fairway/channel	10.41	1.9	1.47	1	E3, E4	00:02	05.09.2022 20:10	1.1	5.6	00:42	once/hour
6	Snow Point	32°56.5380'N 079°55.5500'W	208.4° RL	0.3	6.7	Pilotage/fairway/channel	11.59	3	2.82	1	E3, E4	00:02	05.09.2022 20:12	1.4	5.3	00:39	once/hour
7	Cooper River By 73	32°56.2668'N 079°55.7236'W	242.1° RL	0.4	6.7	Pilotage/fairway/channel	9.74	0.6	0.91	1	E3, E4	00:03	05.09.2022 20:15	1.7	5.0	00:37	once/hour
8	Wharf Alpha	32°56.0860'N 079°56.1280'W	223.0° RL	0.2	6.7	Pilotage/fairway/channel	9.74	0.6	0.91	1	E3, E4	00:01	05.09.2022 20:19	2.1	4.6	00:33	once/hour

WP No	WP name	Position	Course (to next WP)	Dist. (to next WP)	Leg speed (to next WP)	Under Keel Clearance calculations (at chart datum) all values in metres				Security Level	Nav. Watch level	Leg sailing time (to next WP)	Arrival time at WPT (UTC)	Dist. sailed	Dist. to go	Time to go (to destination)	Max interval between position verification
			deg	NM	kn	Passage type	W.Depth	Initial UKC (W.Depth-Static draught)	Full UKC		(*)	days:hrs:min	date - time	NM	NM	days:hrs:min	
9	Wood Point	32°55.9050'N 079°56.3280'W	145.8° RL	0.8	6.7	Pilotage/fairway/channel	10.52	1.5	1.69	1	E3, E4	00:07	05.09.2022 20:20	2.3	4.4	00:31	once/hour
10	Cooper River By 70	32°55.2314'N 079°55.7843'W	181.5° RL	0.5	9.1	Pilotage/fairway/channel	11.22	2.1	1.9	1	E3, E4	00:02	05.09.2022 20:27	3.1	3.6	00:24	once/hour
11	Cooper River By 67/68	32°54.7762'N 079°55.7983'W	215.8° RL	0.2	9.1	Pilotage/fairway/channel	11.22	2.1	1.9	1	E3, E4	00:01	05.09.2022 20:30	3.6	3.2	00:21	once/hour
12	Cooper River By 65/66	32°54.5722'N 079°55.9727'W	260.7° RL	0.8	9.1	Pilotage/fairway/channel	12	3	2.61	1	E3, E4	00:05	05.09.2022 20:32	3.8	2.9	00:19	once/hour
13	Cooper River By 62	32°54.4457'N 079°56.8926'W	246.4° RL	0.4	9.1	Pilotage/fairway/channel	13.5	5.1		1	E3, E4	00:02	05.09.2022 20:37	4.6	2.1	00:14	once/hour
14	Cooper River By 60	32°54.2949'N 079°57.3013'W	220.8° RL	0.6	9.1	Pilotage/fairway/channel	13.8	5.4		1	E3, E4	00:03	05.09.2022 20:40	5.0	1.7	00:12	once/hour
15	Cooper River By 58	32°53.8584'N 079°57.7482'W	194.5° RL	0.7	9.1	Pilotage/fairway/channel	14.17	5.1	5.08	1	E3, E4	00:04	05.09.2022 20:43	5.6	1.2	00:08	once/hour
16	Cooper River By 56	32°53.1376'N 079°57.9693'W	184.9° RL	0.4	9.1	Pilotage/fairway/channel	14.7	6.2		1	E3, E4	00:02	05.09.2022 20:48	6.3	0.5	00:03	once/hour
17	Approach Odfjell	32°52.8270'N 079°58.0010'W	225.2° RL	0.1	4.5	Pilotage/fairway/channel	14.7	6.2		1	E3, E4	00:01	05.09.2022 20:50	6.6	0.1	00:01	once/hour
18	Odfjell Terminal	32°52.7800'N 079°58.0570'W				Pilotage/fairway/channel	12.78	3.7	4.23	1	E1, E3, E4		05.09.2022 20:52	6.7	0	00:00	once/hour

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PASSAGE PLAN, part B

Route:	**Charleston BP Cooper - Odfjell**	***Deepest draught departure, m:***	8.4	**Position verification methods (**):**	
Voyage no:	202204	***Deepest draught arrival, m:***	8.4	**VB** Visual Bearing	**CO** Celestial Observation
		Air draught departure, m:	43.6	**R** Radar Fix	**GNSS** GNSS fix
		Air draught arrival, m:	43.6	**PI** Parallel Indexing	

WP No	Position	Landmark bearing/distance at course alteration			Course (to next WP)	XTD		Pos. ver method	Parallel Index / Leg Reference object			Remarks (Current, Depth/ Air draught restrictions, Navigational warnings, etc)
		Object	Brg	Dist	deg	Stbd	Port	(**)	Object	Brg	Dist	
1	32°57.6540'N 079°54.9970'W	Amoco North Breas	25.8	0.033	213.4°	0.02	0.02	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel. Berth Maximum Draft is 10.67m.
2	32°57.3790'N 079°55.2120'W	Cooper River Lighte	267.3	0.071	242.9°	0.02	0.02	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
3	32°57.1950'N 079°55.6390'W	Cooper River Lighte	19.7	0.072	217.7°	0.02	0.02	VB,R,GNSS	Red Bank P.I Red Bank NLT	217.7 217.7	0.058 0.022	Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
4	32°57.0341'N 079°55.7863'W	Cooper River Lighte	159.3	0.044	170.9°	0.02	0.02	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel. Red Bank P.I - 0.058NM / 0.036NM
5	32°56.8602'N 079°55.7534'W	Cooper River Lighte	6.5	0.151	152.0°	0.02	0.02	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
6	32°56.5380'N 079°55.5500'W	Cooper River Lighte	51.5	0.051	208.4°	0.02	0.02	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.

WP No	Position	Landmark bearing/distance at course alteration			Course (to next WP)	XTD		Pos. ver method	Parallel Index / Leg Reference object			Remarks (Current, Depth/ Air draught restrictions, Navigational warnings, etc)
		Object	Brg	Dist	deg	Stbd	Port	(**)	Object	Brg	Dist	
7	32°56.2668'N 079°55.7236'W	Cooper River Lighte	247	0.146	242.1°	0.02	0.02	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
8	32°56.0860'N 079°56.1280'W	Cooper River Pier A	288.8	0.17	223.0°	0.02	0.02	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
9	32°55.9050'N 079°56.3280'W	Cooper River Light	139.4	0.157	145.8°	0.02	0.02	VB,R,GNSS	Wood Point P.I	145.8	0.084	Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
									Wood Point NLT	145.8	0.055	
									Wood Point NMT	145.8	0.022	
10	32°55.2314'N 079°55.7843'W	Cooper River Light	123.8	0.117	181.5°	0.025	0.025	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel. Wood Point P.I - 0.084NM / NLT - 0.029NM / NMT - 0.106NM
11	32°54.7762'N 079°55.7983'W	Cooper River Light	161.4	0.136	215.8°	0.03	0.03	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
12	32°54.5722'N 079°55.9727'W	Cooper River Range	98	0.232	260.7°	0.02	0.02	VB,R,GNSS	Clouter P.I	260.7	0.114	Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
									Clouter NLT	260.7	0.04	
13	32°54.4457'N 079°56.8926'W	Cooper River Lighte	107.6	0.084	246.4°	0.032	0.032	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel. Clouter P.I - 0.114NM / NLT - 0.074NM
14	32°54.2949'N 079°57.3013'W	Cooper River Lighte	188.4	0.108	220.8°	0.03	0.03	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.

WP No	Position	Landmark bearing/distance at course alteration			Course (to next WP)	XTD		Pos. ver method	Parallel Index / Leg Reference object			Remarks (Current, Depth/ Air draught restrictions, Navigational warnings, etc)
		Object	Brg	Dist	deg	Stbd	Port	(**)	Object	Brg	Dist	
15	32°53.8584'N 079°57.7482'W	Cooper River Lighte	178.1	0.164	194.5°	0.027	0.027	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
16	32°53.1376'N 079°57.9693'W	Cooper River Lighte	143.5	0.086	184.9°	0.03	0.03	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC. NO GO AREA Outside buoyed Channel.
17	32°52.8270'N 079°58.0010'W				225.2°	0.02	0.02	VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC.
18	32°52.7800'N 079°58.0570'W	Odfjell Berth	277.7	0.013				VB,R,GNSS				Follow SMM 170709 Navigation with pilot. Monitor other vessels movement. Navigate within the fairway or channel. Monitor UKC.

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PASSAGE PLAN, part C

Route:	**Charleston BP Cooper - Odfjell**	***Deepest draught departure, m:***	8.4
Voyage no:	202204	***Deepest draught arrival, m:***	8.4
		Air draught departure, m:	43.6
		Air draught arrival, m:	43.6

WP No	WP name	Position	Passage type	CATZOC	Shallow Contour	Safety Depth	Safety Contour	Anti Grounding Cone / Look ahead setting
1	BP Cooper Terminal	32°57.6540'N 079°54.9970'W	Pilotage/fairway/channel	zone of confidence A2	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
2	Off BP Cooper	32°57.3790'N 079°55.2120'W	Pilotage/fairway/channel	zone of confidence A2	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
3	Cooper River By 82	32°57.1950'N 079°55.6390'W	Pilotage/fairway/channel	zone of confidence A2	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
4	Cooper River By 80	32°57.0341'N 079°55.7863'W	Pilotage/fairway/channel	zone of confidence A2, B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
5	Oil Jetty	32°56.8602'N 079°55.7534'W	Pilotage/fairway/channel	zone of confidence A2, B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
6	Snow Point	32°56.5380'N 079°55.5500'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
7	Cooper River By 73	32°56.2668'N 079°55.7236'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
8	Wharf Alpha	32°56.0860'N 079°56.1280'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
9	Wood Point	32°55.9050'N 079°56.3280'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
10	Cooper River By 70	32°55.2314'N 079°55.7843'W	Pilotage/fairway/channel	zone of confidence A2, B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
11	Cooper River By 67/68	32°54.7762'N 079°55.7983'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
12	Cooper River By 65/66	32°54.5722'N 079°55.9727'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
13	Cooper River By 62	32°54.4457'N 079°56.8926'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm

WP No	WP name	Position	Passage type	CATZOC	Shallow Contour	Safety Depth	Safety Contour	Anti Grounding Cone / Look ahead setting
14	Cooper River By 60	32°54.2949'N 079°57.3013'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
15	Cooper River By 58	32°53.8584'N 079°57.7482'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
16	Cooper River By 56	32°53.1376'N 079°57.9693'W	Pilotage/fairway/channel	zone of confidence B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
17	Approach Odfjell	32°52.8270'N 079°58.0010'W	Pilotage/fairway/channel	zone of confidence A2, B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm
18	Odfjell Terminal	32°52.7800'N 079°58.0570'W	Pilotage/fairway/channel	zone of confidence A2, B	9	10	10	Ahead 3 minutes, port/stbd 0.1nm

Ship:	BOW TRIUMPH
Route:	Charleston BP Cooper - Odfjell
Voyage no:	202204

CHARTS AND PUBLICATIONS, NAV. WARNINGS & WEATHER FORECASTS, REPORTINGS

WP No	WP Name	ENC Cells	T & P Notices in force	ADLL Area	ADRS2 Area	ADRS6 Area	ADRS1345 Area	ATT Area	e-NP Sailing Directions	NAVTEX		Navarea Warnings	Reporting	
										Name	Id		Report to	Channel / Tlph. No
1	BP Cooper Termina	US1GC09M, US2EC02M, US3SC10M, US5SC15M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22	Charleston Pilot	VHF Ch 13 16 18A; 11 14
										Portsmouth ((	N			
2	Off BP Cooper	US1GC09M, US2EC02M, US3SC10M, US5SC15M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
3	Cooper River By 82	US1GC09M, US2EC02M, US3SC10M, US5SC15M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
4	Cooper River By 80	US1GC09M, US2EC02M, US3SC10M, US5SC15M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E			
										Portsmouth ((	N			
5	Oil Jetty	US1GC09M, US2EC02M, US3SC10M, US5SC15M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
6	Snow Point	US1GC09M, US2EC02M, US3SC10M, US5SC14M, US5SC15M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
7	Cooper River By 75	US1GC09M, US2EC02M, US3SC10M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
8	Wharf Alpha	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
9	Wood Point	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
10	Cooper River By 70	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
11	Cooper River By 67	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			

WP No	WP Name	ENC Cells	T & P Notices in force	ADLL Area	ADRS2 Area	ADRS6 Area	ADRS1345 Area	ATT Area	e-NP Sailing Directions	NAVTEX		Navarea Warnings	Reporting	
										Name	Id		Report to	Channel / Tlph. No
12	Cooper River By 65	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
13	Cooper River By 62	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
14	Cooper River By 60	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
15	Cooper River By 58	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E			
										Portsmouth ((	N			
16	Cooper River By 56	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22		
										Portsmouth ((	N			
17	Approach Odfjell	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E			
										Portsmouth ((	N			
18	Odfjell Terminal	US1GC09M, US2EC02M, US3SC10M, US4SC11M, US5SC14M	2682(P)/16	9	2	9	2	9	e-NP69 East Coast of the United States 2	Charleston	E	622/22	Charleston Pilot	VHF Ch 13 16 18A; 11 14
										Portsmouth ((	N			

ODFJELL

Additional passage information

Ship:	BOW TRIUMPH	***Deepest draught departure, m:***	8.40
Route:	**Charleston BP Cooper - Odfjell**	***Deepest draught arrival, m:***	8.40
Voyage no:	202204	***Air draught departure, m:***	43.60
		Air draught arrival, m:	43.60

Environmental information:

1. The majority of the United States is encompassed by either the North American ECA or the U.S. Caribbean Sea ECA. Since January 1, 2015, both ECAs have a fuel oil sulfur cap of 0.10% m/m. On January 1, 2020, the fuel oil sulfur cap of 0.10% m/m will remain in effect for the majority of U.S. ports although a few U.S. ports outside of ECA will need to ensure compliance with the 0.50% m/m sulfur content requirement of marine fuel oil globally. Additionally, with the March 1, 2020 implementation of a carriage ban on high sulfur fuel, the Coast Guard may expand the examination to verification of the fuel within bunker tanks.
2. The Oil Pollution Act of 1990 (OPA-90) and the international treaty, MARPOL 73/78, require owners/operators of certain vessels to prepare Vessel Response Plans (VRP) and/or Shipboard Oil Pollution Emergency Plans (SOPEP) approved by the U.S. Coast Guard. In addition, for certain vessels carrying noxious liquid substances, MARPOL 73/78 requires owner/operators to prepare and submit Shipboard Marine Pollution Emergency Plans (SMPEP), effective January 1, 2003.
3. To help reduce incidents of ships striking North Atlantic Right Back Whales, which are an endangered species, speed restrictions are in place from approximately mid November to mid April each year, in specified Seasonal Management Areas (SMAs) along the coast of Florida up to Nova Scotia. One of these areas covers 20nm from the shore around the port of Charleston. Intentionally approaching within 457m (500 yards) of Right Whales is prohibited and is a violation of Federal Law.

Security related information:

Charleston SC, USA is Security Level 1

Vertical obstacles & Overhead clearances

WP No	Tidal Station	HAT (m)	HHW (m)	Objects						
				Position	Passing time (UTC)	Type	V.clearance (m)	HoT (m)	OHC (m)	Name
15	Clouter Creek	2.20	1.70	32°53.5172'N 079°57.8412'W	05-09-2022 20:46	Cable, overhead	55.40	1.84	12.16	
				32°53.4671'N 079°57.8351'W	05-09-2022 20:46	Bridge	47.20	1.84	3.96	

Ship:	BOW TRIUMPH
Route:	**Charleston BP Cooper - Odfjell**
Voyage no:	202204
Departure time, LT:	05.09.2022 16:00

ADDITIONAL NOTES

CHARLESTON (USCHS) TIME ZONE: GMT -4 (DST) ECDIS Route Name: Charleston BP Cooper – Odfjell

Approaches
Charleston is approached on the alignment of leading lights through Fort Sumpter Range and entered between Fort Moultrie on the SW end of Sullivans Island and Cummings Point (32°44.5'N 079°52.0'W), the N end of Morris Island 1nm SW.
The Inner harbour has been dredged to a depth of 13.7m MLW and the entrance channel to 14.3m.
The channel has a minimum width of 152m, maximum 304m, with a turning basin of 426m. The North Charleston, Wando and Columbus Street turning basins are also 426m wide.

Pilot
Pilotage is compulsory and available from Charleston Branch Pilots Association throughout 24 hours, subject to tides.
Vessels should call the Pilot Office on VHF Ch 16, three hours before arrival at Lt buoy 'C'.
Pilot boards in the following positions:
Pilot Station Alpha: vessels over 10.6m draught; in the vicinity of Lightbuoy 'C' (32°37.08'N 079°35.50'W).
Pilot Station Bravo: vessels of 10.6m draught and under: in the vicinity of Lightbuoy No 6 (32°39.30'N 079°40.09'W).

Anchorages
Four USCG designated anchorage areas:
Anchorage area 'A': Adjacent to the western edge of Folly Island Channel SW of Rebellion Reach will accommodate approx 4 vessels.
Anchorage area 'B': Adjacent to the S edge of S channel will accommodate approx 4 vessels.
Anchorage area 'C': Has a radius of 228m. It is located on the SE waterfront of Charleston.
Anchorage area 'D': Has a radius of 213m. It is located on the E waterfront of Charleston.

Tidal range and flow
The harbour has a maintained depth of 13.7m (45ft) at MLT throughout the main shipping channel and 14.3m (47ft) in the entrance channel. However, 1.5m (5ft) to 1.82m (6ft) tidal lift provides even deeper access for several hours during the day before and after High Tide. A dredging project is nearing its end to make these channels deeper.
Average range 1.5m-1.8m; average current 1.5kts.
At Lightbuoy 'C' (23°37.1'N 079°35.5'W), the tidal stream is rotary, turning clockwise. The maximum rate of the ingoing streams occurs about 3.75 hours before HW at Charleston, when it sets about 270°at an average rate of 0.25kts. The maximum rate of the outgoing stream occurs about 3 hours after HW at Charleston.
Between the jetties the tidal streams generally follow the direction of the channel near its axis. Outside the entrance it branches from the main outgoing stream setting through the openings between the outer part of the jetties and the coast at a rate of 2kts. The maximum rate of the outgoing stream is about 3kts between the outer part of the jetties, and between Fort Moultrie and Fort Sumter (32°45.0'N 079°52.05'W).
At the entrance to Charleston Harbour, between the jetties, slack water before ingoing stream occurs about 5.5 hours before HW at Charleston, slack water before the outgoing stream, about 0.5 hours after HW there.
The outgoing stream in South Channel attains a maximum rate of 2kts. The rate of the ingoing stream is less than the outgoing, depending on the flow in the river caused by precipitation.

Dock density
1015-1025.

Weather
Prevailing winds: W'ly.
The temperate climate is modified by its exposure to the ocean. This is not noticeable in winter, when the minimum temperatures are often 5.6°C to 8.4°C warmer on the peninsula than at the airport.
Summers are warm and humid although sea breezes keep 37.8°C readings a rarity.
This is the rainiest season but most of the precipitation falls as brief, heavy showers or thunderstorms. Prevailing winds are generally S'ly in summer and spring, compared to the more frequent N'ly of autumn and winter. Gales are infrequent and are most likely associated with local spring storms or hurricanes, which may also produce severe thunderstorms or hurricanes. From late Sept to early Nov weather is often sunny and pleasant except for the threat hurricanes, which also exists in summer.
Charleston Harbour offers few of the characteristics of a haven during hurricanes force winds. Large vessels should proceed to sea or seek shelter elsewhere when a hurricane threatens. During a severe tropical storm (50 to 63kts) anchorage for deep draught vessels is available in the triangle W of the confluence of Rebellion Reach (of the main channel) with South Channel. Use of this anchorage is not recommended because of the restricted scope while riding at anchor, the hazards of collision, and the difficulty of leaving if necessary.
The topography of the entire harbour area is nearly flat and at sea level provides little shelter from wind and tide.
Smaller vessels and small craft should stay fast or seek shelter along the W side of Cooper River, N of Battery (32°46'N 079°56'W).

Restrictions
BRIDGES: Lower Cooper River Bridge airdraught 56.6m MHW.
Upper Cooper River Bridge (North Charleston Terminal only), airdraught 45.7m MHW.

Odfjell Terminal
Berth Length - 215m (Incl. Dolphins) / Max Size - Draught(HW): 12.20m, LOA: 198.00m, 75,000DWT, Beam: 32.20m.

POSITION VERIFICATION:
During Coastal Passage / Approaching, Anchoring and Berthing/Unberthing – The ships position shall be verified by other means as frequently as practicable, but at a minimum of once per hour.
Verification methods via Visual bearings, radar range/bearings, Electronic aid and DRs.

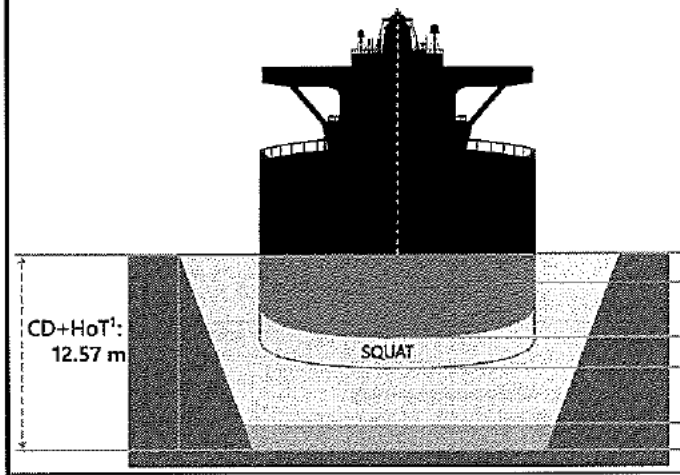
OTHERS:
1. Navigate within the buoyed channel and monitor UKC.
2. Monitor all navigational/meteorological warnings/messages from VHF, INM-C, NAVTEX and BVS8 which may affect the ship's route.
3. Navtex Stations to be configured as per route plan. Inm-C to Navarea IV.
4. See Local Agents' port information guidelines for additional details.
5. Dont't hesitate to call the Master when in doubt.

ODFJELL

SQUAT/UKC calculation - BP Cooper Terminal (Pilotage/fairway/channel)

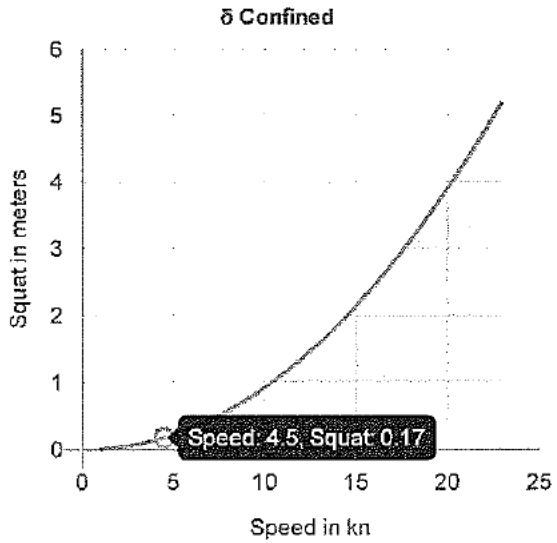
Ship: BOW TRIUMPH ***Owner:*** Goldex Fortune LTD

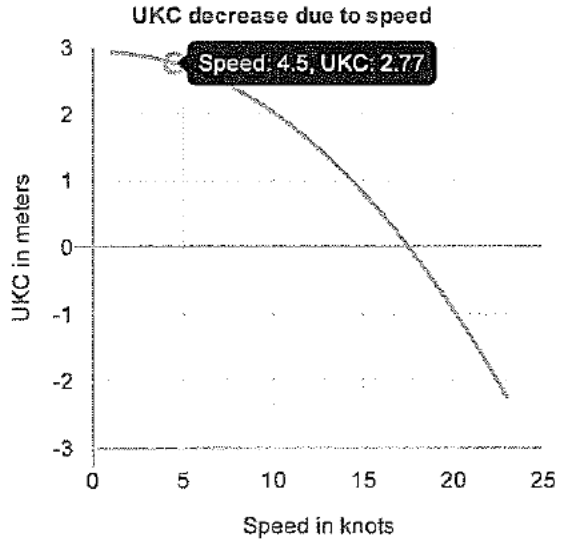
Route: Charleston BP Cooper - Od ***Voyage no:*** 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.17 m
Under Keel Clearance:	2.76 m
Env. corrections incl. CATZOC:	1.23 m

Tidal station:	General Dynamics Pier	Chart Datum:	11.28	m
Scheduled passing time:	05-09-2022 20:00 UTC	HoT[1] (from ATT as optimal):	1.29	m
CATZOC zone of confidence:	A2	Total waterdepth:	12.57	m





Water depth calculation		
Depth according Chart datum:	11.28	m
Height of tide (HoT[1]), at WP:	1.29	m
Total waterdepth prior to additional correction:	12.57	m
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: **A2**	1.23	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	-1.23	m
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	0.00	m
Depth actual at passing time:	11.34	m

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	170.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	4.50	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	0.17	m
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	8.57	m

UKC calculation		
Calculated waterdepth (including corrections):	11.34	m
Vessels dynamic draught:	8.57	m
UKC - Under Keel Clearance:	2.76	m
Minimum UKC required by company:	0.50	m
Company UKC value fulfilled:	YES	

Notes

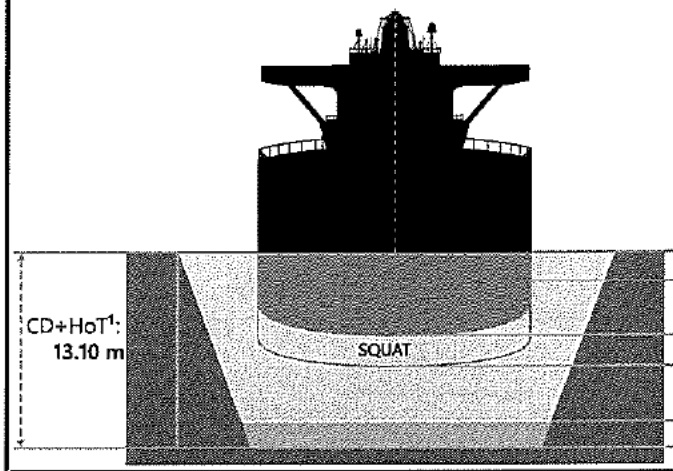
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Off BP Cooper (Pilotage/fairway/channel)

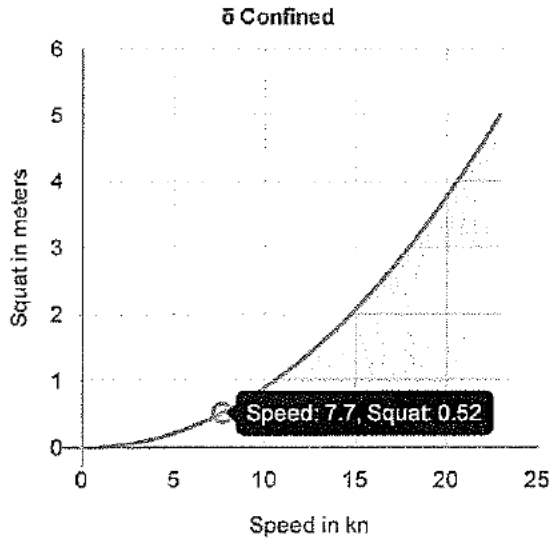
Ship: BOW TRIUMPH ***Owner:*** Goldex Fortune LTD

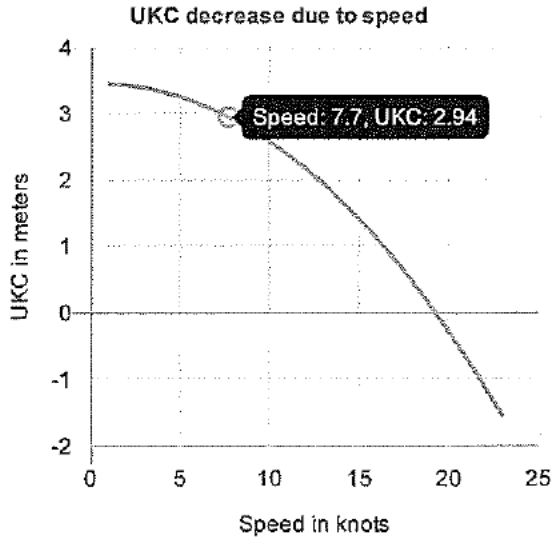
Route: Charleston BP Cooper - Od ***Voyage no:*** 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.52 m
Under Keel Clearance:	2.94 m
Env. corrections incl. CATZOC:	1.24 m

Tidal station:	General Dynamics Pier	Chart Datum:	11.80	m
Scheduled passing time:	05-09-2022 20:03 UTC	HoT[1] (from ATT as optimal):	1.30	m ☐
CATZOC zone of confidence:	A2	Total waterdepth:	13.10	m





Water depth calculation		
Depth according Chart datum:	11.80	m
Height of tide (HoT[1]), at WP:	1.30	m
Total waterdepth prior to additional correction:	13.10	m
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: **A2**	1.24	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	-1.24	m
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	0.00	m
Depth actual at passing time:	11.86	m

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	170.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	7.70	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	0.52	m
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	8.91	m

UKC calculation		
Calculated waterdepth (including corrections):	11.86	m
Vessels dynamic draught:	8.91	m
UKC - Under Keel Clearance:	2.94	m
Minimum UKC required by company:	0.50	m
Company UKC value fulfilled:	YES	

Notes

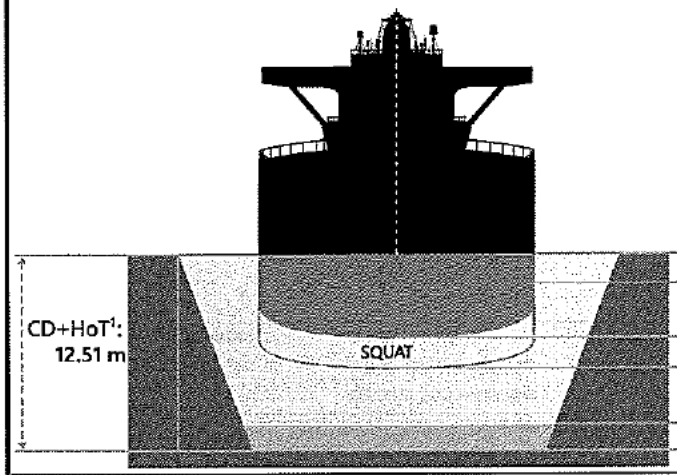
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Cooper River By 82 (Pilotage/fairway/channel)

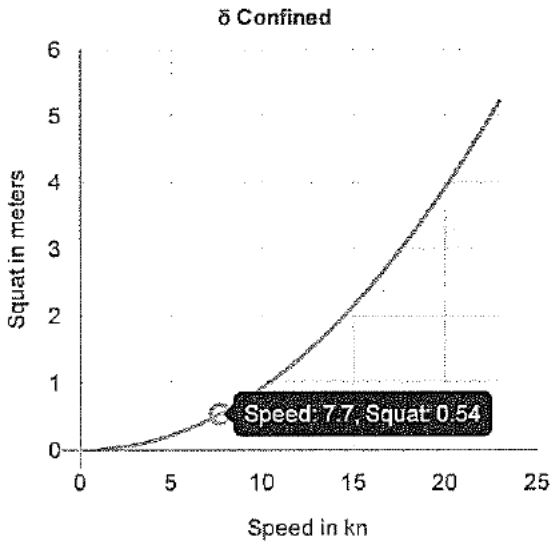
Ship: BOW TRIUMPH *Owner:* Goldex Fortune LTD

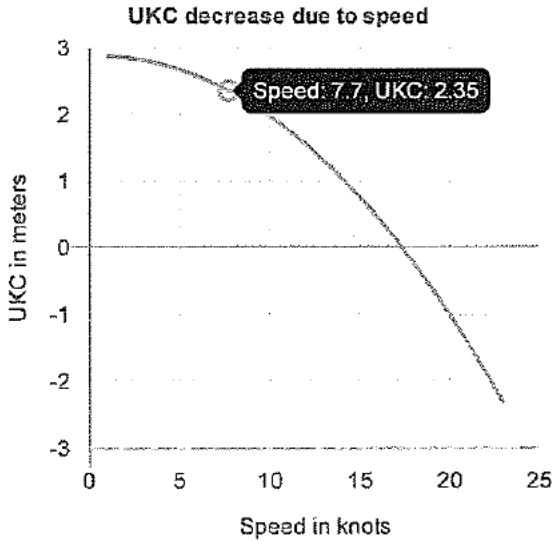
Route: Charleston BP Cooper - Od *Voyage no:* 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.54 m
Under Keel Clearance:	2.35 m
Env. corrections incl. CATZOC:	1.22 m

Tidal station:	General Dynamics Pier	Chart Datum:	11.20	m
Scheduled passing time:	05-09-2022 20:06 UTC	HoT[1] (from ATT as optimal):	1.31	m
CATZOC zone of confidence:	A2	Total waterdepth:	12.51	m





Water depth calculation		
Depth according Chart datum:	11.20	m
Height of tide (HoT[1]), at WP:	1.31	m
Total waterdepth prior to additional correction:	12.51	m
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: **A2**	1.22	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	-1.22	m
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	0.00	m
Depth actual at passing time:	11.29	m

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	170.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	7.70	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	0.54	m
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	8.94	m

UKC calculation		
Calculated waterdepth (including corrections):	11.29	m
Vessels dynamic draught:	8.94	m
UKC - Under Keel Clearance:	2.35	m
Minimum UKC required by company:	0.50	m
Company UKC value fulfilled:	YES	

Notes

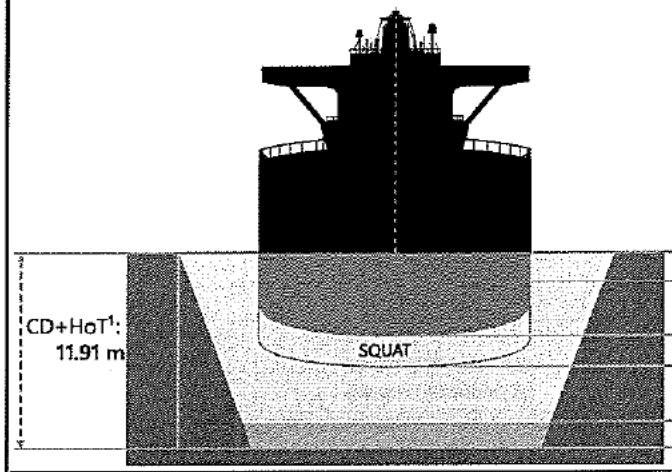
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Cooper River By 80 (Pilotage/fairway/channel)

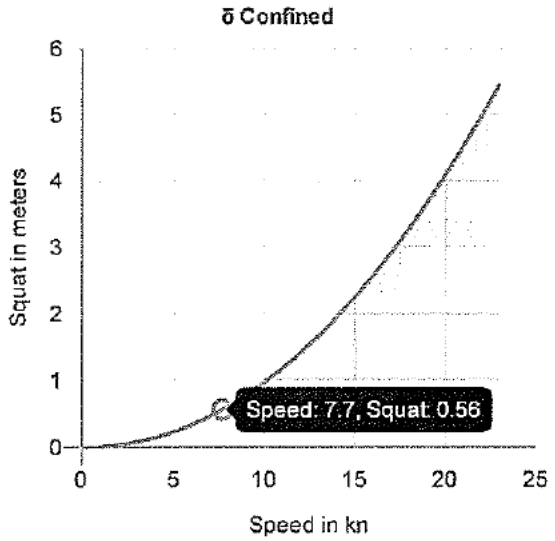
Ship: BOW TRIUMPH ***Owner:*** Goldex Fortune LTD

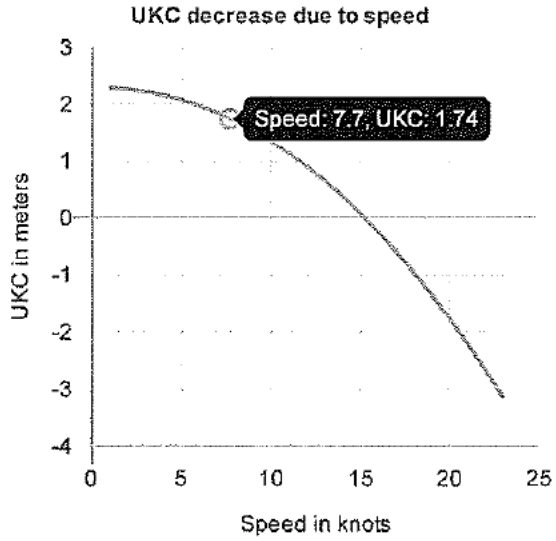
Route: Charleston BP Cooper - Od ***Voyage no:*** 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.56 m
Under Keel Clearance:	1.74 m
Env. corrections incl. CATZOC:	1.21 m

Tidal station:	General Dynamics Pier	Chart Datum:	10.60	m
Scheduled passing time:	05-09-2022 20:08 UTC	HoT¹ (from ATT as optimal):	1.31	m
CATZOC zone of confidence:	A2, B	Total waterdepth:	11.91	m





Water depth calculation		
Depth according Chart datum:	10.60	m
Height of tide (HoT¹), at WP:	1.31	m
Total waterdepth prior to additional correction:	11.91	m
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: **A2, B**	1.21	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	-1.21	m
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	0.00	m
Depth actual at passing time:	10.70	m

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	170.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	7.70	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	0.56	m
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	8.96	m

UKC calculation		
Calculated waterdepth (including corrections):	10.70	m
Vessels dynamic draught:	8.96	m
UKC - Under Keel Clearance:	1.74	m
Minimum UKC required by company:	0.50	m
Company UKC value fulfilled:	YES	

Notes

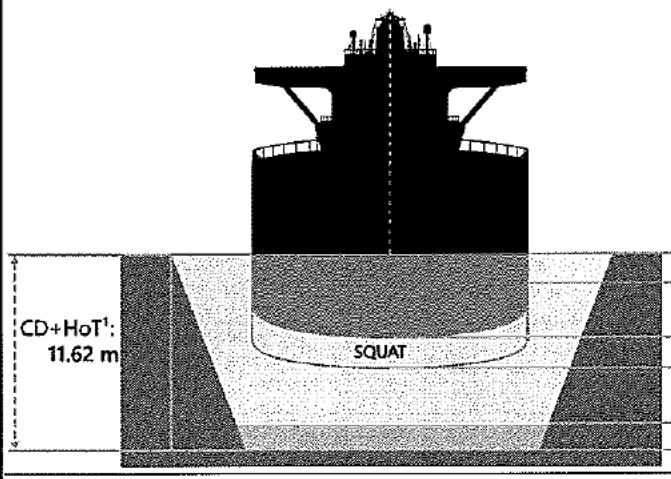
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Oil Jetty (Pilotage/fairway/channel)

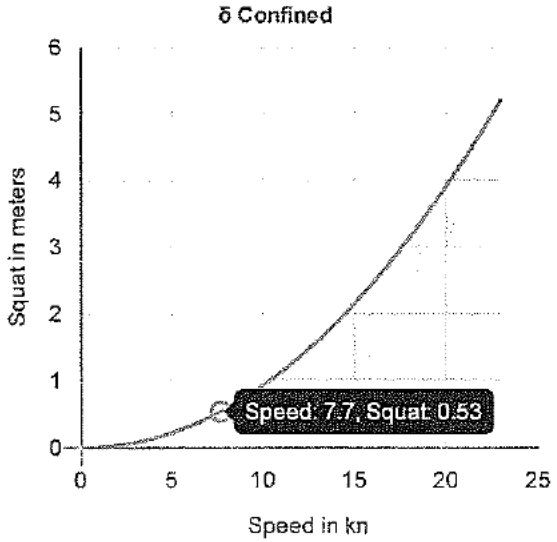
Ship: BOW TRIUMPH *Owner:* Goldex Fortune LTD

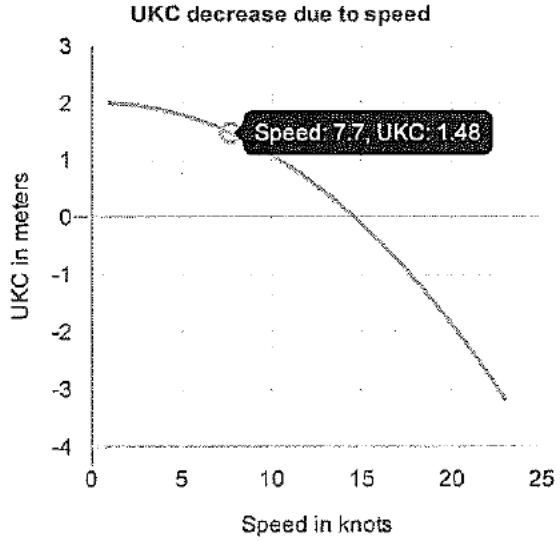
Route: Charleston BP Cooper - Od *Voyage no:* 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.53 m
Under Keel Clearance:	1.47 m
Env. corrections incl. CATZOC:	1.21 m

Tidal station:	General Dynamics Pier	Chart Datum:	10.30	m
Scheduled passing time:	05-09-2022 20:10 UTC	HoT[1] (from ATT as optimal):	1.32	m
CATZOC zone of confidence:	A2, B	Total waterdepth:	11.62	m





Water depth calculation		
Depth according Chart datum:	10.30	m
Height of tide (HoT[1]), at WP:	1.32	m
Total waterdepth prior to additional correction:	11.62	m
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: **A2, B**	1.21	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	-1.21	m
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	0.00	m
Depth actual at passing time:	10.41	m

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	185.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	7.70	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	0.53	m
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	8.94	m

UKC calculation		
Calculated waterdepth (including corrections):	10.41	m
Vessels dynamic draught:	8.94	m
UKC - Under Keel Clearance:	1.47	m
Minimum UKC required by company:	0.50	m
Company UKC value fulfilled:	YES	

Notes

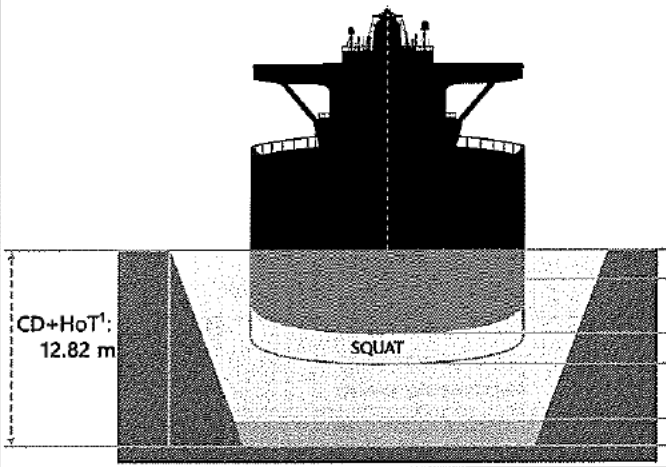
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Snow Point (Pilotage/fairway/channel)

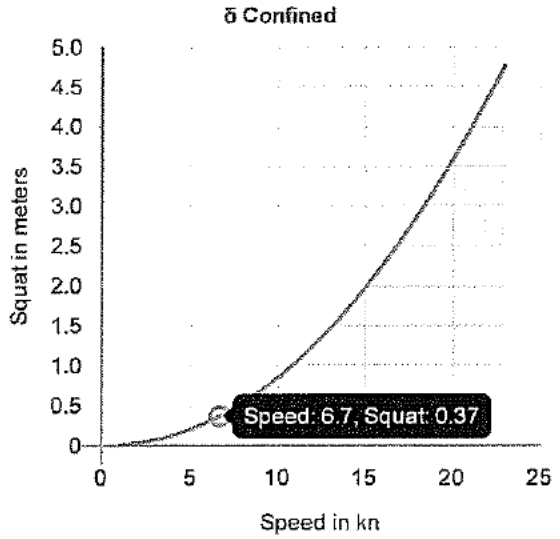
Ship: BOW TRIUMPH *Owner:* Goldex Fortune LTD

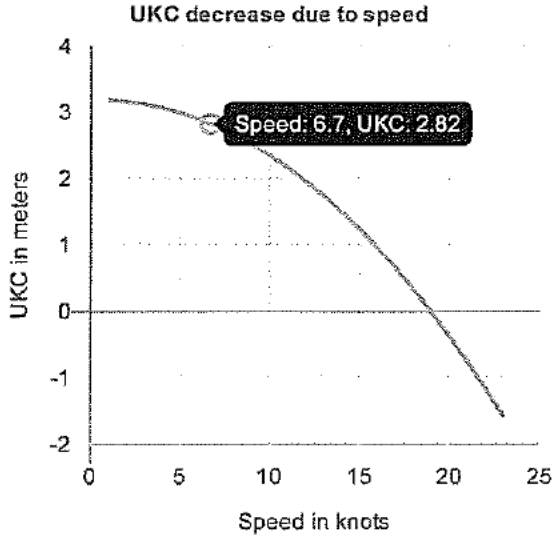
Route: Charleston BP Cooper - Od *Voyage no:* 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.37 m
Under Keel Clearance:	2.82 m
Env. corrections incl. CATZOC:	1.23 m

Tidal station:	General Dynamics Pier	Chart Datum:	11.50 m
Scheduled passing time:	05-09-2022 20:12 UTC	HoT[1] (from ATT as optimal):	1.32 m
CATZOC zone of confidence:	B	Total waterdepth:	12.82 m





Water depth calculation	
Depth according Chart datum:	11.50 m
Height of tide (HoT[1]), at WP:	1.32 m
Total waterdepth prior to additional correction:	**12.82 m**
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:	m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:	m
Accuracy of hydrographic data, CATZOC's: **B**	**1.23** m
Reduced depths over pipelines and other obstructions:	m
Total of environmental corrections:	**-1.23 m**
The vessels size and handling characteristics and increase in draught due to heel/list:	m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:	m
The reliability of draught observations and calculations, including bending moments:	m
Total of corrections due to vessels operational condition:	**0.00 m**
Depth actual at passing time:	**11.59 m**

Squat	
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$
Channel/Canal/Fairways width of influence:	185.00 m
Vessels Displacement:	35395 t
Planned Leg speed:	6.70 kn
Meteorological/Tidal/Oceanographical influence on vessels speed:	kn
Increasement of draught due to squat effect (δ_{max}):	**0.37 m**
Vessels maximum static draught:	8.40 m
Vessels dynamic draught:	**8.77 m**

UKC calculation	
Calculated waterdepth (including corrections):	**11.59 m**
Vessels dynamic draught:	**8.77 m**
UKC - Under Keel Clearance:	**2.82 m**
Minimum UKC required by company:	**0.50 m**
Company UKC value fulfilled:	**YES**

Notes

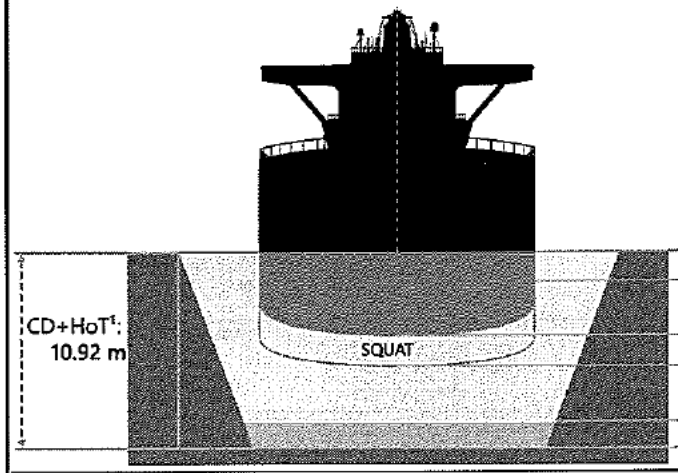
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Cooper River By 73 (Pilotage/fairway/channel)

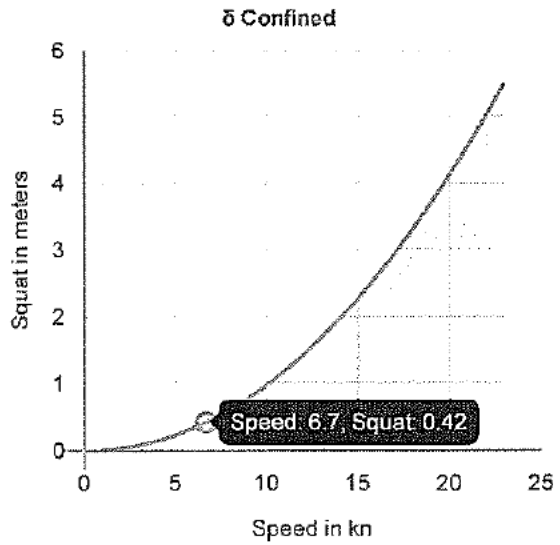
Ship: BOW TRIUMPH *Owner:* Goldex Fortune LTD

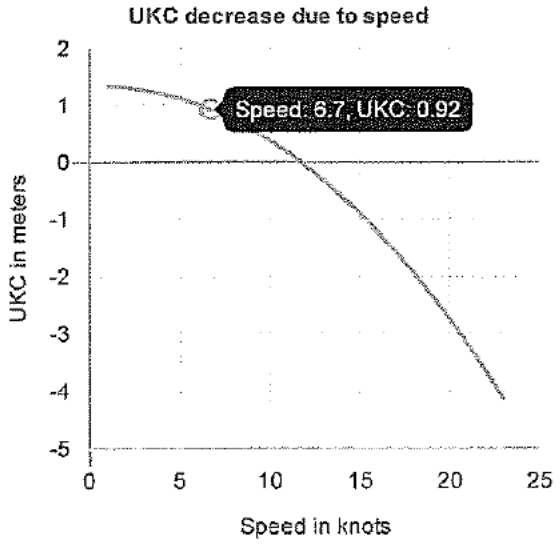
Route: Charleston BP Cooper - Od *Voyage no:* 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.42 m
Under Keel Clearance:	0.91 m
Env. corrections incl. CATZOC:	1.18 m

Tidal station:	Clouter Creek	Chart Datum:	9.10	m
Scheduled passing time:	05-09-2022 20:15 UTC	HoT[1] (from ATT as optimal):	1.82	m
CATZOC zone of confidence:	B	Total waterdepth:	10.92	m





Water depth calculation		
Depth according Chart datum:	9.10	m
Height of tide (HoT[1]), at WP:	1.82	m
Total waterdepth prior to additional correction:	**10.92**	**m**
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: **B**	1.18	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	**-1.18**	**m**
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	**0.00**	**m**
Depth actual at passing time:	**9.74**	**m**

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	185.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	6.70	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	**0.42**	**m**
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	**8.82**	**m**

UKC calculation		
Calculated waterdepth (including corrections):	**9.74**	**m**
Vessels dynamic draught:	**8.82**	**m**
UKC - Under Keel Clearance:	**0.91**	**m**
Minimum UKC required by company:	**0.50**	**m**
Company UKC value fulfilled:	**YES**	

Notes

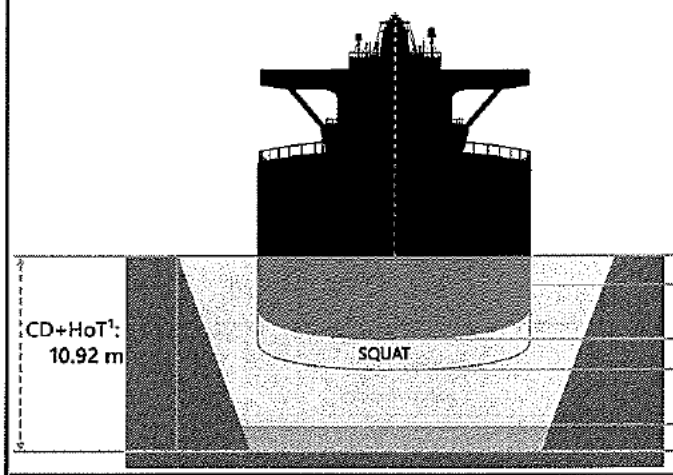
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Wharf Alpha (Pilotage/fairway/channel)

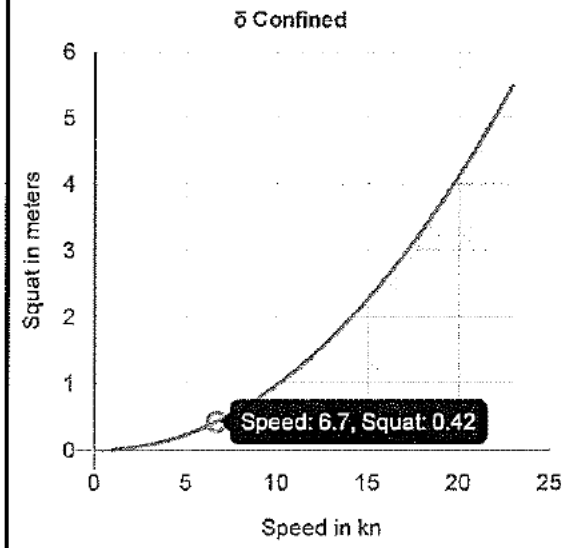
Ship: BOW TRIUMPH *Owner:* Goldex Fortune LTD

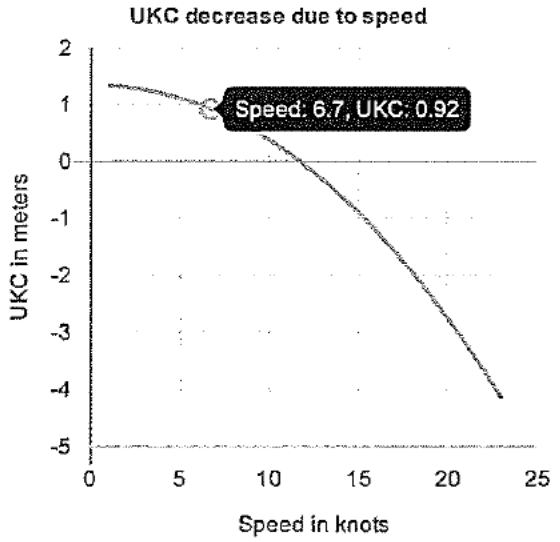
Route: Charleston BP Cooper - Od *Voyage no:* 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.42 m
Under Keel Clearance:	0.91 m
Env. corrections incl. CATZOC:	1.18 m

Tidal station:	Clouter Creek	Chart Datum:	9.10 m
Scheduled passing time:	05-09-2022 20:19 UTC	HoT[1] (from ATT as optimal):	1.82 m
CATZOC zone of confidence:	B	Total waterdepth:	10.92 m





Water depth calculation		
Depth according Chart datum:	9.10	m
Height of tide (HoT[1]), at WP:	1.82	m
Total waterdepth prior to additional correction:	10.92	m
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: B	1.18	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	-1.18	m
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	0.00	m
Depth actual at passing time:	9.74	m

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	185.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	6.70	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	0.42	m
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	8.82	m

UKC calculation		
Calculated waterdepth (including corrections):	9.74	m
Vessels dynamic draught:	8.82	m
UKC - Under Keel Clearance:	0.91	m
Minimum UKC required by company:	0.50	m
Company UKC value fulfilled:	YES	

Notes

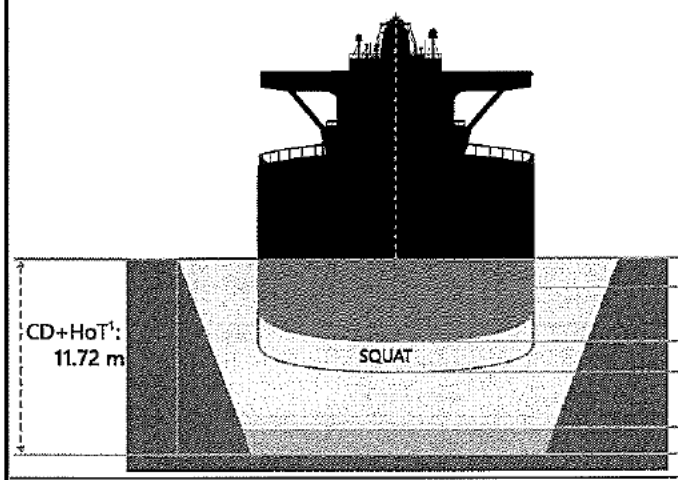
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Wood Point (Pilotage/fairway/channel)

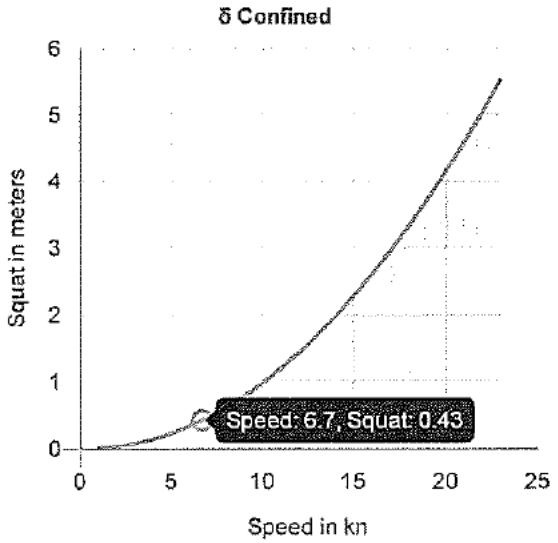
Ship: BOW TRIUMPH ***Owner:*** Goldex Fortune LTD

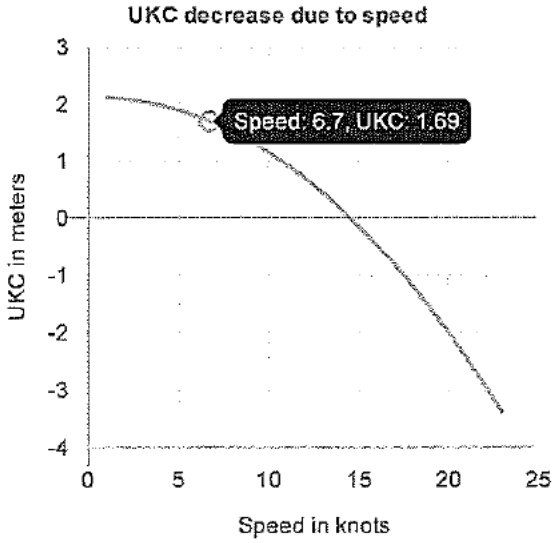
Route: Charleston BP Cooper - Od ***Voyage no:*** 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.43 m
Under Keel Clearance:	1.69 m
Env. corrections incl. CATZOC:	1.20 m

Tidal station:	Clouter Creek	Chart Datum:	9.90	m
Scheduled passing time:	05-09-2022 20:20 UTC	HoT[1] (from ATT as optimal):	1.82	m ☐
CATZOC zone of confidence:	B	Total waterdepth:	11.72	m





Water depth calculation		
Depth according Chart datum:	9.90	m
Height of tide (HoT[1]), at WP:	1.82	m
Total waterdepth prior to additional correction:	11.72	m
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: **B**	1.20	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	-1.20	m
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	0.00	m
Depth actual at passing time:	10.52	m

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	170.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	6.70	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	0.43	m
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	8.82	m

UKC calculation		
Calculated waterdepth (including corrections):	10.52	m
Vessels dynamic draught:	8.82	m
UKC - Under Keel Clearance:	1.69	m
Minimum UKC required by company:	0.50	m
Company UKC value fulfilled:	YES	

Notes

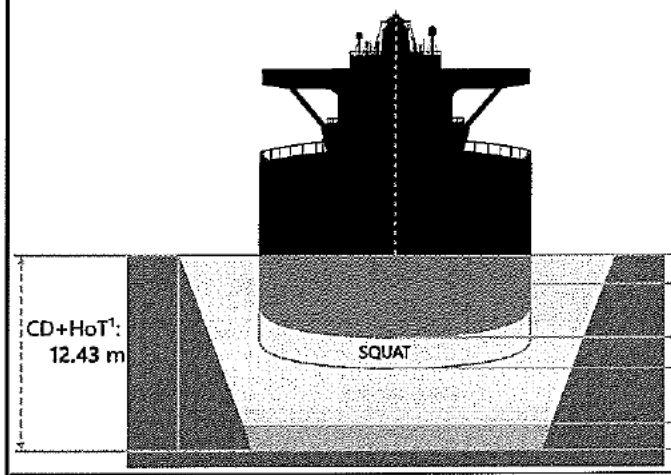
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Cooper River By 70 (Pilotage/fairway/channel)

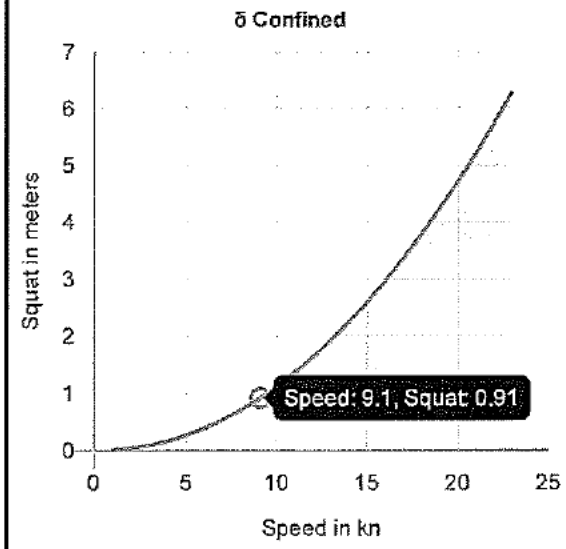
Ship: BOW TRIUMPH *Owner:* Goldex Fortune LTD

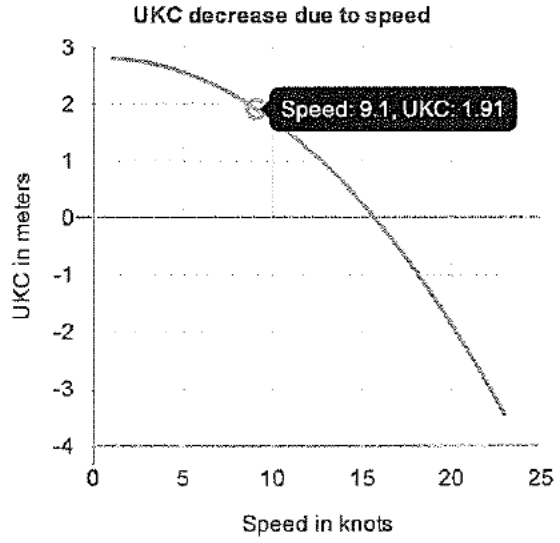
Route: Charleston BP Cooper - Od *Voyage no:* 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.91 m
Under Keel Clearance:	1.90 m
Env. corrections incl. CATZOC:	1.21 m

Tidal station:	Clouter Creek	Chart Datum:	10.60 m
Scheduled passing time:	05-09-2022 20:27 UTC	HoT[1] (from ATT as optimal):	1.83 m
CATZOC zone of confidence:	A2, B	Total waterdepth:	12.43 m





Water depth calculation	
Depth according Chart datum:	10.60 m
Height of tide (HoT[1]), at WP:	1.83 m
Total waterdepth prior to additional correction:	**12.43 m**
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:	m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:	m
Accuracy of hydrographic data, CATZOC's: **A2, B**	1.21 m
Reduced depths over pipelines and other obstructions:	m
Total of environmental corrections:	**-1.21 m**
The vessels size and handling characteristics and increase in draught due to heel/list:	m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:	m
The reliability of draught observations and calculations, including bending moments:	m
Total of corrections due to vessels operational condition:	**0.00 m**
Depth actual at passing time:	**11.22 m**

Squat	
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$
Channel/Canal/Fairways width of influence:	136.00 m
Vessels Displacement:	35395 t
Planned Leg speed:	9.10 kn
Meteorological/Tidal/Oceanographical influence on vessels speed:	kn
Increasement of draught due to squat effect (δ_{max}):	**0.91 m**
Vessels maximum static draught:	8.40 m
Vessels dynamic draught:	**9.31 m**

UKC calculation	
Calculated waterdepth (including corrections):	**11.22 m**
Vessels dynamic draught:	**9.31 m**
UKC - Under Keel Clearance:	**1.90 m**
Minimum UKC required by company:	**0.50 m**
Company UKC value fulfilled:	**YES**

Notes

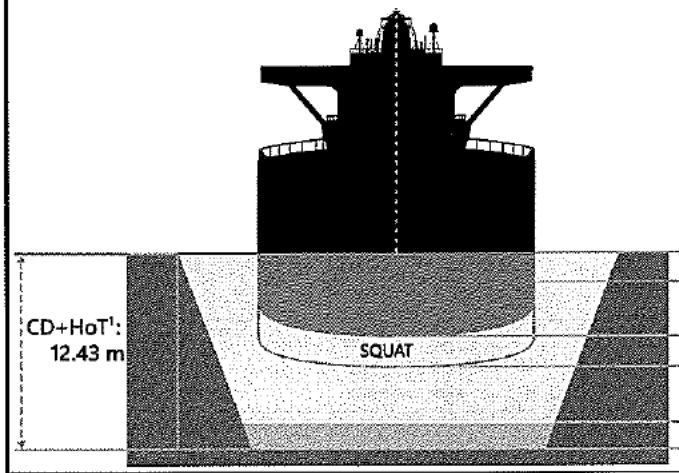
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Cooper River By 67/68 (Pilotage/fairway/channel)

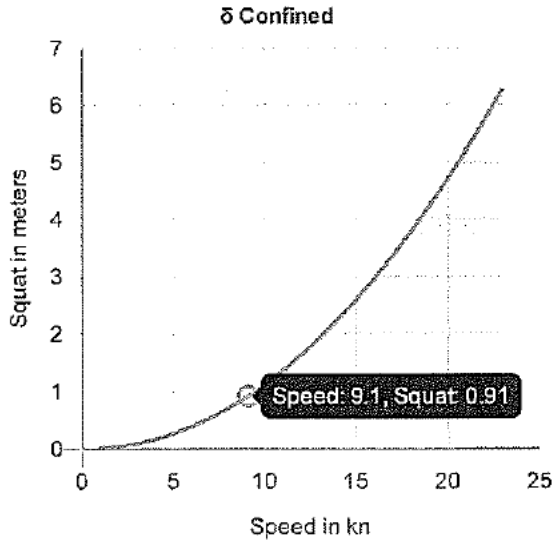
Ship: BOW TRIUMPH *Owner:* Goldex Fortune LTD

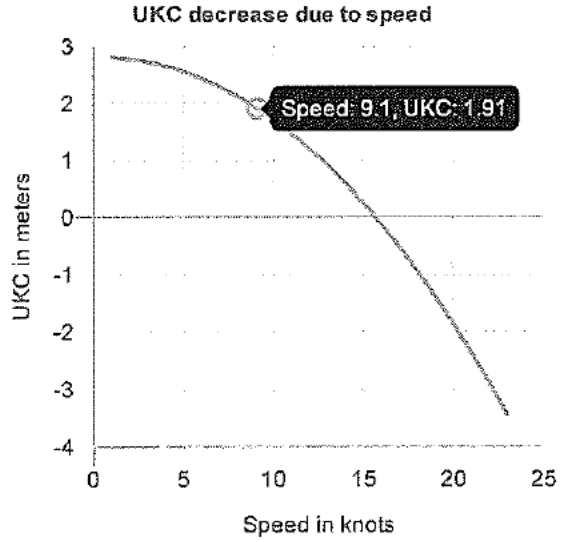
Route: Charleston BP Cooper - Od *Voyage no:* 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.91 m
Under Keel Clearance:	1.90 m
Env. corrections incl. CATZOC:	1.21 m

Tidal station:	Clouter Creek	Chart Datum:	10.60	m
Scheduled passing time:	05-09-2022 20:30 UTC	HoT¹ (from ATT as optimal):	1.83	m
CATZOC zone of confidence:	B	Total waterdepth:	12.43	m





Water depth calculation		
Depth according Chart datum:	10.60	m
Height of tide (HoT¹), at WP:	1.83	m
Total waterdepth prior to additional correction:	12.43	m
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: **B**	1.21	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	-1.21	m
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	0.00	m
Depth actual at passing time:	11.22	m

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	136.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	9.10	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	0.91	m
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	9.31	m

UKC calculation		
Calculated waterdepth (including corrections):	11.22	m
Vessels dynamic draught:	9.31	m
UKC - Under Keel Clearance:	1.90	m
Minimum UKC required by company:	0.50	m
Company UKC value fulfilled:	YES	

Notes

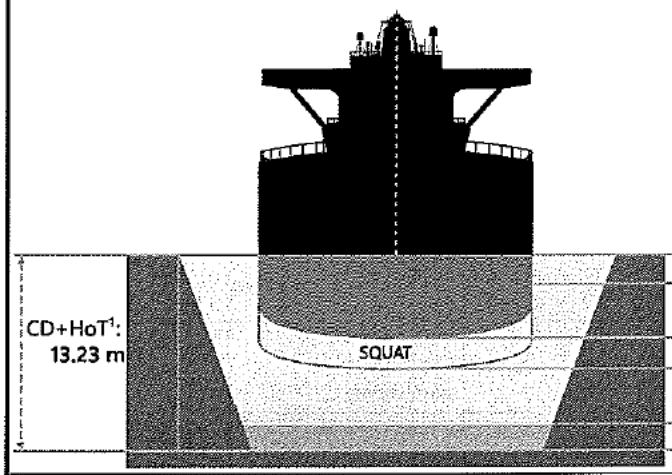
No identified overhead obstacles.

ODFJELL

SQUAT/UKC calculation - Cooper River By 65/66 (Pilotage/fairway/channel)

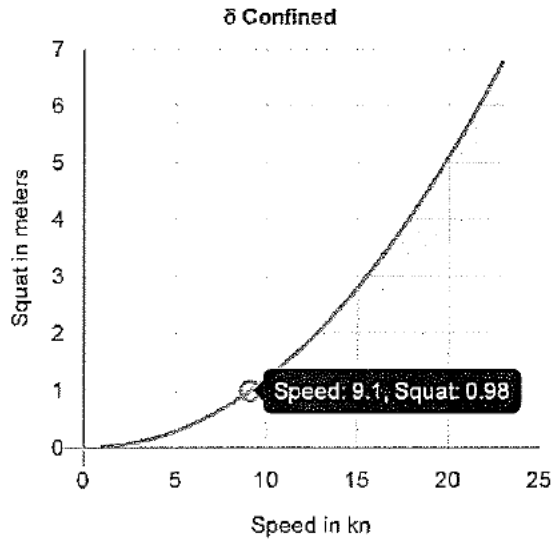
Ship: BOW TRIUMPH *Owner:* Goldex Fortune LTD

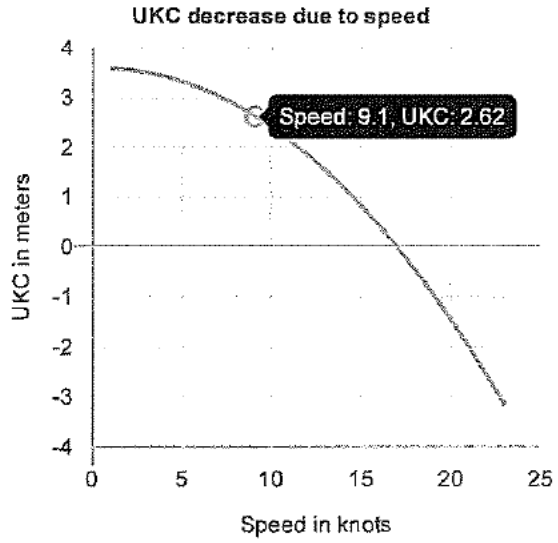
Route: Charleston BP Cooper - Od *Voyage no:* 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.98 m
Under Keel Clearance:	2.61 m
Env. corrections incl. CATZOC:	1.23 m

Tidal station:	Clouter Creek	Chart Datum:	11.40	m
Scheduled passing time:	05-09-2022 20:32 UTC	HoT[1] (from ATT as optimal):	1.83	m ☐
CATZOC zone of confidence:	B	Total waterdepth:	13.23	m





Water depth calculation		
Depth according Chart datum:	11.40	m
Height of tide (HoT[1]), at WP:	1.83	m
Total waterdepth prior to additional correction:	**13.23**	**m**
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:		m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:		m
Accuracy of hydrographic data, CATZOC's: **B**	1.23	m
Reduced depths over pipelines and other obstructions:		m
Total of environmental corrections:	**-1.23**	**m**
The vessels size and handling characteristics and increase in draught due to heel/list:		m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:		m
The reliability of draught observations and calculations, including bending moments:		m
Total of corrections due to vessels operational condition:	**0.00**	**m**
Depth actual at passing time:	**12.00**	**m**

Squat		
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$	
Channel/Canal/Fairways width of influence:	116.00	m
Vessels Displacement:	35395	t
Planned Leg speed:	9.10	kn
Meteorological/Tidal/Oceanographical influence on vessels speed:		kn
Increasement of draught due to squat effect (δ_{max}):	**0.98**	**m**
Vessels maximum static draught:	8.40	m
Vessels dynamic draught:	**9.38**	**m**

UKC calculation		
Calculated waterdepth (including corrections):	**12.00**	**m**
Vessels dynamic draught:	**9.38**	**m**
UKC - Under Keel Clearance:	**2.61**	**m**
Minimum UKC required by company:	**0.50**	**m**
Company UKC value fulfilled:	**YES**	

Notes

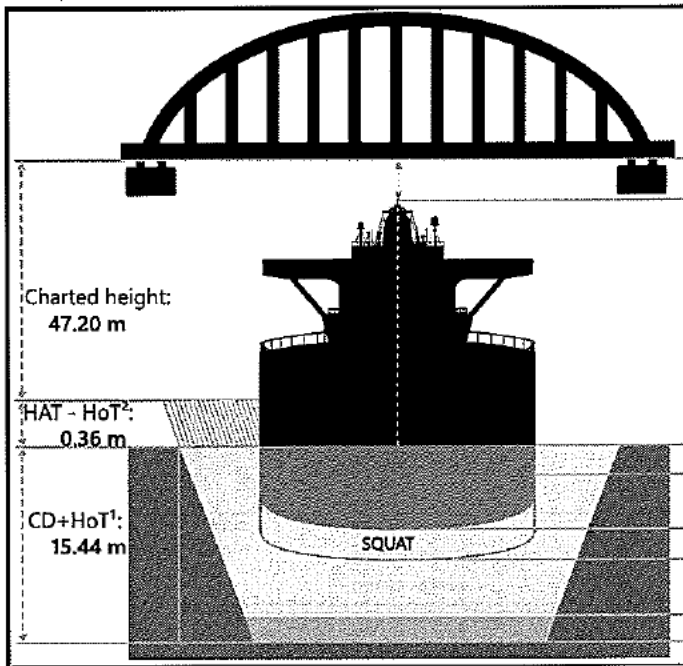
No identified overhead obstacles.

ODFJELL

OHC/SQUAT/UKC calculation - Cooper River By 58 (Pilotage/fairway/channel)

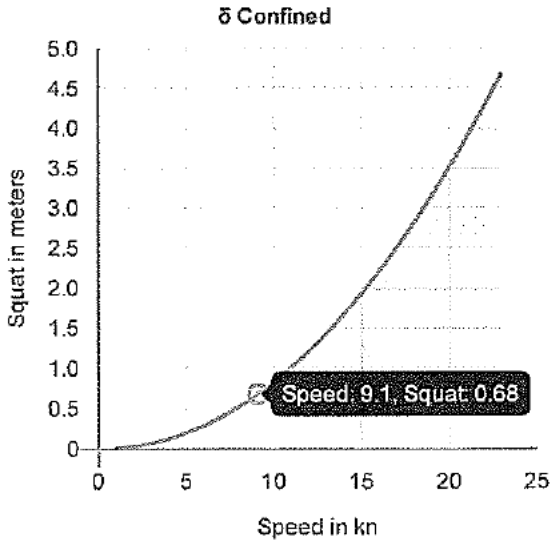
Ship: BOW TRIUMPH *Owner:* Goldex Fortune LTD

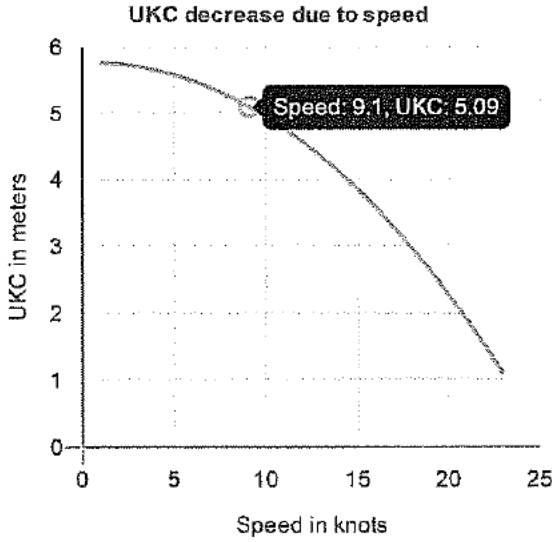
Route: Charleston BP Cooper - Od *Voyage no:* 202204



Overhead clearance:	3.96 m
Air-draught:	43.60 m
Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.68 m
Under Keel Clearance:	5.08 m
Env. corrections incl. CATZOC:	1.27 m

Tidal station:	Clouter Creek	Chart Datum:	13.60 m
Scheduled passing time:	05-09-2022 20:43 UTC	HoT¹ (from ATT as optimal):	1.84 m
CATZOC zone of confidence:	B	Total waterdepth:	15.44 m





Overhead clearance calculation (OHC) Bridge:	
Charted vertical clearance of obstruction:	47.20 m
Highest Astronomical Tide (HAT):	2.20 m
Height of tide (HoT²), at station: Clouter Creek, passing time: 05-09-2022 20:46	1.84 m
Air-draught:	43.60 m
Overhead clearance:	**3.96 m**
Minimum overhead clearance required by company:	**3.00 m**
Company overhead clearance requirement fulfilled:	**YES**

Water depth calculation	
Depth according Chart datum:	13.60 m
Height of tide (HoT¹), at WP:	1.84 m
Total waterdepth prior to additional correction:	**15.44 m**
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:	m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:	m
Accuracy of hydrographic data, CATZOC's: B	1.27 m
Reduced depths over pipelines and other obstructions:	m
Total of environmental corrections:	**-1.27 m**
The vessels size and handling characteristics and increase in draught due to heel/list:	m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:	m
The reliability of draught observations and calculations, including bending moments:	m
Total of corrections due to vessels operational condition:	**0.00 m**
Depth actual at passing time:	**14.17 m**

Squat	
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$
Channel/Canal/Fairways width of influence:	155.00 m
Vessels Displacement:	35395 t
Planned Leg speed:	9.10 kn
Meteorological/Tidal/Oceanographical influence on vessels speed:	kn
Increasement of draught due to squat effect (δ_{max}):	**0.68 m**
Vessels maximum static draught:	8.40 m
Vessels dynamic draught:	**9.08 m**

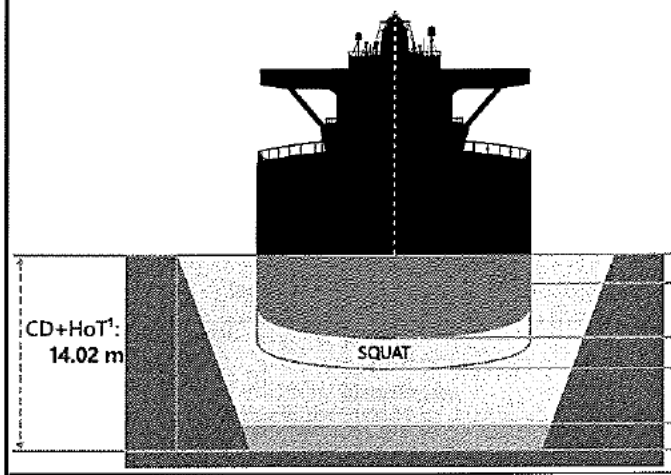
UKC calculation	
Calculated waterdepth (including corrections):	**14.17 m**
Vessels dynamic draught:	**9.08 m**
UKC - Under Keel Clearance:	**5.08 m**
Minimum UKC required by company:	**0.50 m**
Company UKC value fulfilled:	**YES**

ODFJELL

SQUAT/UKC calculation - Odfjell Terminal (Pilotage/fairway/channel)

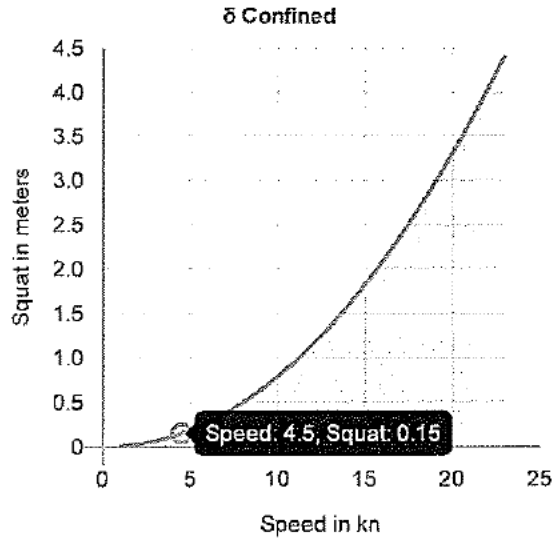
Ship: BOW TRIUMPH ***Owner:*** Goldex Fortune LTD

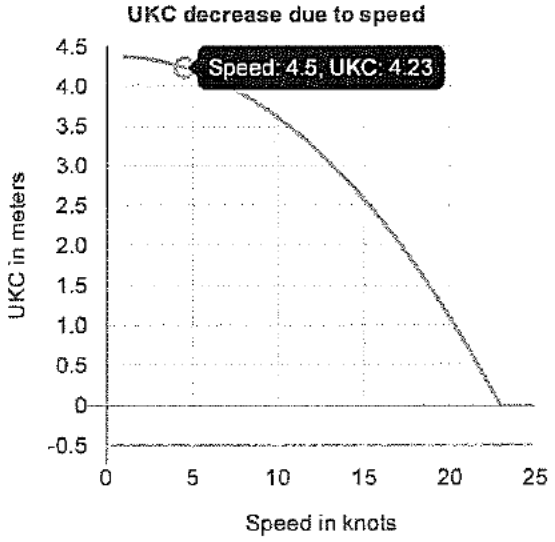
Route: Charleston BP Cooper - Od ***Voyage no:*** 202204



Environmental corrections:	0.00 m
Vessel Static draught:	8.40 m
Squat and operational conditions:	0.15 m
Under Keel Clearance:	4.23 m
Env. corrections incl. CATZOC:	1.24 m

Tidal station:	Clouter Creek	Chart Datum:	12.19	m
Scheduled passing time:	05-09-2022 20:52 UTC	HoT[1] (from ATT as optimal):	1.83	m ☐
CATZOC zone of confidence:	A2, B	Total waterdepth:	14.02	m





Water depth calculation	
Depth according Chart datum:	12.19 m
Height of tide (HoT[1]), at WP:	1.83 m
Total waterdepth prior to additional correction:	**14.02 m**
Changes in the predicted tidal height, which are caused by wind speed direction and high or low barometric pressure:	m
Nature and stability of the bottom - i.e. sand waves, siltation etc.:	m
Accuracy of hydrographic data, CATZOC's: **A2, B**	1.24 m
Reduced depths over pipelines and other obstructions:	m
Total of environmental corrections:	**-1.24 m**
The vessels size and handling characteristics and increase in draught due to heel/list:	m
Wave response allowance, which is the vertical displacement of the hull due to heave, roll and pitch motions:	m
The reliability of draught observations and calculations, including bending moments:	m
Total of corrections due to vessels operational condition:	**0.00 m**
Depth actual at passing time:	**12.78 m**
Squat	
Formula: **δ Confined**	$\delta_{max} = (C_b \times S^{0.81} \times V_c^{2.08})/20$
Channel/Canal/Fairways width of influence:	185.00 m
Vessels Displacement:	35395 t
Planned Leg speed:	4.50 kn
Meteorological/Tidal/Oceanographical influence on vessels speed:	kn
Increasement of draught due to squat effect (δ_{max}):	**0.15 m**
Vessels maximum static draught:	8.40 m
Vessels dynamic draught:	**8.55 m**
UKC calculation	
Calculated waterdepth (including corrections):	**12.78 m**
Vessels dynamic draught:	**8.55 m**
UKC - Under Keel Clearance:	**4.23 m**
Minimum UKC required by company:	**0.50 m**
Company UKC value fulfilled:	**YES**

Notes

No identified overhead obstacles.

1707C4 Passage Planning – Appraisal & Process

Vessel:	MT BOW TRIUMPH	Date:	05 SEPT '22

Each item is to be ticked when it has been taken into consideration for the compilation of the passage plan

Appraisal	Tick	Operational requirements for the passage	Tick
Adequacy and reliability of aids to Navigation	✓	Bunker calculations	✓
Adequacy and reliability of Charts and Hydrographic data	✓	Communications/GMDSS watchkeeping considerations	✓
Appropriate scale ENCs or charts available for ocean, coastal, harbour and berthing phases	✓	Draught restrictions including air draught and UKC	✓
Guides to Port Entry or equivalent	✓	Helicopter operations	✓
List of Lights	✓	Loadline requirements	✓
Local area warnings	✓	Log Book requirements	✓
NAVAREA navigation warnings	✓	Passage reporting requirements	✓
New charts and licenses ordered as appropriate	✓	Passage speed and ETA calculations	✓
Notices to Mariners	✓	Position verification intervals	✓
Planning charts	✓	Defects affecting navigation or control	NIL
List of Radio Signals	✓	Routing and reporting measures	✓
Routeing and Loadline charts	✓	Safety contours	✓
Sailing directions and pilot books	✓	Safety depths	✓
Tide tables and tidal stream atlases	✓	Security Concerns	✓
Environmental Considerations		Ship to Ship transfers	✓
Ballast Water	✓	Squat	✓
ECA limits and changeover procedures	✓	Strength and Stability	✓
Marpol Special Areas, PSSAs or national and regional requirements	✓	Watch schedules	✓
Notifications /Advice to crew onboard	✓	Anchoring locations	✓
Weather /Conditions		**Contingencies**	
Abnormal waves	✓	Emergency anchorages	✓
Currents and Tides	✓	Emergency response plans	✓
Heavy weather	✓	Notifications and reporting	✓
Ice	N/A	Plan amendments	✓
Swell	✓	**Other**	
Tropical storms	✓	Navstation configure checked and correct: -Vessel particulars	✓
Visibility	✓	Navstation Configure setting checked and updated: -Chart portrayal settings -Chart Objects -Layers	✓
Weather routeing	✓		
Winds	✓		

Officer Responsible – passage plan completed and checked	
Signature: 2/O Collinne Fritz B. Rama [redacted]	Date 05 SEPT '22
Master – passage plan checked and approved	
Signature: Capt. Eduardo P. Gayanilo [redacted]	Date 05 SEPT '22
Officer Responsible – Approved passage plan briefed to the Bridge Team	
Signature: C/O W.F. Gautier [redacted] 3/O L/M Lescano [redacted] 3/O J.P. Viado [redacted] 3/O J.M. Alcarde [redacted]	Date 05 SEPT '22

2664A Clouter Creek
32°52'N 79°56'W United States Saturday, September 3, 2022 +0500
Data Area 9. North America (E coast) & Caribbean Updated to Week 35/22
Predictions are based on CHARLESTON

9/3/2022	
5:00 PM	0.9 m
6:00 PM	0.6 m
7:00 PM	0.3 m
8:00 PM	0.3 m
9:00 PM	0.4 m
10:00 PM	0.7 m
11:00 PM	1.0 m

9/4/2022	
12:00 AM	1.3 m
1:00 AM	1.5 m
2:00 AM	1.5 m
3:00 AM	1.3 m
4:00 AM	1.1 m
5:00 AM	0.7 m
6:00 AM	0.4 m
7:00 AM	0.2 m
8:00 AM	0.1 m
9:00 AM	0.2 m
10:00 AM	0.5 m
11:00 AM	0.9 m
12:00 PM	1.3 m
1:00 PM	1.6 m
2:00 PM	1.8 m
3:00 PM	1.8 m
4:00 PM	1.6 m
5:00 PM	1.4 m
6:00 PM	1.0 m
7:00 PM	0.6 m
8:00 PM	0.4 m
9:00 PM	0.2 m
10:00 PM	0.4 m
11:00 PM	0.6 m

9/5/2022	
12:00 AM	1.0 m
1:00 AM	1.3 m
2:00 AM	1.4 m
3:00 AM	1.5 m
4:00 AM	1.3 m
5:00 AM	1.1 m
6:00 AM	0.8 m
7:00 AM	0.4 m
8:00 AM	0.2 m
9:00 AM	0.1 m
10:00 AM	0.2 m
11:00 AM	0.5 m
12:00 PM	0.9 m
1:00 PM	1.3 m
2:00 PM	1.6 m
3:00 PM	1.8 m
4:00 PM	1.8 m
5:00 PM	1.7 m
6:00 PM	1.4 m
7:00 PM	1.0 m
8:00 PM	0.6 m
9:00 PM	0.3 m
10:00 PM	0.2 m
11:00 PM	0.3 m

9/6/2022	
12:00 AM	0.6 m
1:00 AM	0.9 m
2:00 AM	1.3 m
3:00 AM	1.5 m
4:00 AM	1.5 m
5:00 AM	1.4 m
6:00 AM	1.2 m
7:00 AM	0.8 m
8:00 AM	0.4 m
9:00 AM	0.2 m
10:00 AM	0.0 m
11:00 AM	0.1 m
12:00 PM	0.4 m
1:00 PM	0.8 m
2:00 PM	1.3 m
3:00 PM	1.6 m
4:00 PM	1.8 m
5:00 PM	1.9 m
6:00 PM	1.8 m
7:00 PM	1.5 m
8:00 PM	1.1 m
9:00 PM	0.6 m
10:00 PM	0.3 m
11:00 PM	0.1 m

9/7/2022	
12:00 AM	0.2 m
1:00 AM	0.5 m
2:00 AM	0.9 m
3:00 AM	1.3 m
4:00 AM	1.5 m
5:00 AM	1.6 m
6:00 AM	1.5 m
7:00 AM	1.2 m
8:00 AM	0.9 m
9:00 AM	0.5 m
10:00 AM	0.1 m
11:00 AM	0.0 m
12:00 PM	0.0 m
1:00 PM	0.4 m
2:00 PM	0.8 m
3:00 PM	1.3 m
4:00 PM	1.7 m
5:00 PM	1.9 m
6:00 PM	2.0 m
7:00 PM	1.8 m
8:00 PM	1.5 m
9:00 PM	1.1 m
10:00 PM	0.6 m
11:00 PM	0.2 m

9/8/2022	
12:00 AM	0.0 m
1:00 AM	0.2 m
2:00 AM	0.5 m
3:00 AM	0.9 m
4:00 AM	1.3 m
5:00 AM	1.6 m
6:00 AM	1.7 m
7:00 AM	1.6 m
8:00 AM	1.3 m
9:00 AM	0.9 m
10:00 AM	0.5 m
11:00 AM	0.1 m
12:00 PM	-0.1 m
1:00 PM	0.0 m
2:00 PM	0.3 m
3:00 PM	0.8 m
4:00 PM	1.3 m
5:00 PM	1.7 m
6:00 PM	1.9 m
7:00 PM	2.0 m
8:00 PM	1.8 m
9:00 PM	1.5 m
10:00 PM	1.0 m
11:00 PM	0.5 m

9/9/2022	
12:00 AM	0.1 m
1:00 AM	-0.1 m
2:00 AM	0.1 m
3:00 AM	0.5 m
4:00 AM	1.0 m
5:00 AM	1.4 m
6:00 AM	1.7 m
7:00 AM	1.8 m
8:00 AM	1.6 m
9:00 AM	1.3 m
10:00 AM	0.9 m
11:00 AM	0.4 m
12:00 PM	0.0 m
1:00 PM	-0.1 m
2:00 PM	0.0 m
3:00 PM	0.3 m
4:00 PM	0.9 m
5:00 PM	1.4 m
6:00 PM	1.7 m
7:00 PM	2.0 m
8:00 PM	2.0 m
9:00 PM	1.8 m
10:00 PM	1.4 m
11:00 PM	0.9 m

9/10/2022	
12:00 AM	0.3 m
1:00 AM	0.0 m
2:00 AM	-0.1 m
3:00 AM	0.1 m
4:00 AM	0.6 m
5:00 AM	1.1 m
6:00 AM	1.5 m
7:00 AM	1.8 m
8:00 AM	1.8 m
9:00 AM	1.7 m
10:00 AM	1.4 m
11:00 AM	0.9 m
12:00 PM	0.4 m
1:00 PM	0.0 m
2:00 PM	-0.1 m
3:00 PM	0.0 m
4:00 PM	0.4 m

Predicted heights are in metres above Chart Datum

2664B General Dynamics Pier
33°01'N 79°55'W United States Saturday, September 3, 2022 +0500
Data Area 9. North America (E coast) & Caribbean Updated to Week 35/22

9/3/2022	
5:00 PM	1.1 m
6:00 PM	0.8 m
7:00 PM	0.5 m
8:00 PM	0.3 m
9:00 PM	0.2 m
10:00 PM	0.3 m
11:00 PM	0.6 m

9/4/2022	
12:00 AM	0.9 m
1:00 AM	1.1 m
2:00 AM	1.2 m
3:00 AM	1.2 m
4:00 AM	1.1 m
5:00 AM	0.9 m
6:00 AM	0.6 m
7:00 AM	0.3 m
8:00 AM	0.1 m
9:00 AM	0.0 m
10:00 AM	0.1 m
11:00 AM	0.4 m
12:00 PM	0.8 m
1:00 PM	1.1 m
2:00 PM	1.3 m
3:00 PM	1.4 m
4:00 PM	1.4 m
5:00 PM	1.4 m
6:00 PM	1.2 m
7:00 PM	0.9 m
8:00 PM	0.6 m
9:00 PM	0.4 m
10:00 PM	0.2 m
11:00 PM	0.3 m

9/5/2022	
12:00 AM	0.6 m
1:00 AM	0.9 m
2:00 AM	1.1 m
3:00 AM	1.2 m
4:00 AM	1.2 m
5:00 AM	1.1 m
6:00 AM	0.9 m
7:00 AM	0.6 m
8:00 AM	0.3 m
9:00 AM	0.1 m
10:00 AM	0.0 m
11:00 AM	0.1 m
12:00 PM	0.4 m
1:00 PM	0.8 m
2:00 PM	1.1 m
3:00 PM	1.3 m
4:00 PM	1.4 m
5:00 PM	1.5 m
6:00 PM	1.4 m
7:00 PM	1.3 m
8:00 PM	1.0 m
9:00 PM	0.6 m
10:00 PM	0.4 m
11:00 PM	0.2 m

9/6/2022	
12:00 AM	0.3 m
1:00 AM	0.5 m
2:00 AM	0.9 m
3:00 AM	1.1 m
4:00 AM	1.2 m
5:00 AM	1.2 m
6:00 AM	1.2 m
7:00 AM	1.0 m
8:00 AM	0.7 m
9:00 AM	0.4 m
10:00 AM	0.1 m
11:00 AM	0.0 m
12:00 PM	0.0 m
1:00 PM	0.4 m
2:00 PM	0.8 m
3:00 PM	1.1 m
4:00 PM	1.3 m
5:00 PM	1.5 m
6:00 PM	1.5 m
7:00 PM	1.5 m
8:00 PM	1.3 m
9:00 PM	1.0 m
10:00 PM	0.7 m
11:00 PM	0.3 m

9/7/2022	
12:00 AM	0.1 m
1:00 AM	0.2 m
2:00 AM	0.5 m
3:00 AM	0.8 m
4:00 AM	1.1 m
5:00 AM	1.2 m
6:00 AM	1.3 m
7:00 AM	1.2 m
8:00 AM	1.0 m
9:00 AM	0.7 m
10:00 AM	0.4 m
11:00 AM	0.1 m
12:00 PM	0.0 m
1:00 PM	0.0 m
2:00 PM	0.3 m
3:00 PM	0.7 m
4:00 PM	1.1 m
5:00 PM	1.3 m
6:00 PM	1.5 m
7:00 PM	1.6 m
8:00 PM	1.6 m
9:00 PM	1.4 m
10:00 PM	1.0 m
11:00 PM	0.6 m

9/8/2022	
12:00 AM	0.3 m
1:00 AM	0.1 m
2:00 AM	0.2 m
3:00 AM	0.5 m
4:00 AM	0.9 m
5:00 AM	1.1 m
6:00 AM	1.3 m
7:00 AM	1.4 m
8:00 AM	1.3 m
9:00 AM	1.1 m
10:00 AM	0.8 m
11:00 AM	0.5 m
12:00 PM	0.1 m
1:00 PM	-0.1 m
2:00 PM	0.0 m
3:00 PM	0.3 m
4:00 PM	0.8 m
5:00 PM	1.1 m
6:00 PM	1.4 m
7:00 PM	1.6 m
8:00 PM	1.7 m
9:00 PM	1.6 m
10:00 PM	1.4 m
11:00 PM	1.0 m

9/9/2022	
12:00 AM	0.6 m
1:00 AM	0.2 m
2:00 AM	0.0 m
3:00 AM	0.2 m
4:00 AM	0.5 m
5:00 AM	0.9 m
6:00 AM	1.2 m
7:00 AM	1.4 m
8:00 AM	1.4 m
9:00 AM	1.4 m
10:00 AM	1.2 m
11:00 AM	0.8 m
12:00 PM	0.5 m
1:00 PM	0.1 m
2:00 PM	-0.1 m
3:00 PM	0.0 m
4:00 PM	0.4 m
5:00 PM	0.8 m
6:00 PM	1.2 m
7:00 PM	1.4 m
8:00 PM	1.6 m
9:00 PM	1.7 m
10:00 PM	1.6 m
11:00 PM	1.3 m

9/10/2022	
12:00 AM	0.9 m
1:00 AM	0.4 m
2:00 AM	0.1 m
3:00 AM	0.0 m
4:00 AM	0.2 m
5:00 AM	0.6 m
6:00 AM	1.0 m
7:00 AM	1.2 m
8:00 AM	1.4 m
9:00 AM	1.5 m
10:00 AM	1.5 m
11:00 AM	1.2 m
12:00 PM	0.9 m
1:00 PM	0.5 m
2:00 PM	0.1 m
3:00 PM	-0.1 m
4:00 PM	0.1 m