



sea tank co

SIR ROBERT MC ALPINE & SONS, LTD.

*BT 3018175
File TP1 contract E14*

ELF NORGE A/S

FRIGG FIELD

TREATMENT PLATFORM N° 1

TP1

MONTHLY REPORT

N°18

TP1 - A - 205 - 9 -

SCF 012

20 JULY 1975



ELF-NORGE FRIGG TREATMENT PLATFORM N°1

CONTRACTOR'S MONTHLY REPORT N°18

TO 20TH JULY, 1975

LIST OF CONTENTS

SECTION I	-	<u>DESIGN PROGRESS REPORT</u> Temporary Works & Construction Facilities
SECTION II	-	<u>SITE PROGRESS REPORT</u> A. General Report B. Progress Schedule C. Labour Report D. Plant Report
SECTION III	-	<u>PROCUREMENT PROGRESS REPORT</u> A. Bulk Items B. Prefabricated and Bought In Items
SECTION IV	-	<u>PHOTOGRAPHS</u>

SECTION I - DESIGN PROGRESS REPORT

ELF-NORGE FRIGG TREATMENT PLATFORM NO. 1

CONTRACTOR'S MONTHLY REPORT NO. 18

TO 20TH JULY, 1975

I DESIGN PROGRESS REPORT

Temporary Works & Construction Facilities

Section of Work	Percentage Complete		Comments
	Engineering	Drafting	
<u>TEMPORARY WORKS</u>			
Items 1-15 - 100% Complete			
<u>CONSTRUCTION FACILITIES</u>			
20. Sheet Pile Sea Wall	100	100	
21. Basin Excavation	100	100	
22. Basin Well Pointing	100	100	
23. Tower Crane Erection	100	100	
24. Slipform Shutters to Caisson Walls	100	100	
25. Concrete Placing Booms	100	100	
26. Causeway to Floating Jetty	100	100	
27. Floating Jetty	100	100	
28. Offshore Moorings	100	100	
29. Sea Wall Removal & Dredging	100	100	
30. Tow Out and Moor	100	100	
31. Connect Services after Tow Out	100	100	
32. Slipform Shutters to Columns	100	100	
33. Construction Hoists to Columns	95	95	
34. Dismantle Tower Cranes	90	90	
35. Clear Platform for Tow	0	0	
36. Connect Tugs and Slip Moorings	0	0	

SECTION II - SITE PROGRESS REPORT

TO 20TH JULY, 1975

II SITE PROGRESS REPORT

(A) GENERAL REPORT

1. General Comment

Satisfactory progress has been made on thickening up the base slab, placing of concrete now being 77% complete. Work has also progressed on construction of the roofs to the caisson cells with 2 No. roofs concreted and fixing of reinforcement completed to two more. Slipforming of the towers which commenced on 9th July, is also proceeding satisfactorily.

2. Photographs

An aerial photograph of the platform from the South-West, taken on the 16th July, is included at the end of the Report. It shows the progress made on construction of the caisson roofs and towers.

3. Weather

The weather during the past month has been mainly dry with warm sunny days and light to moderate winds. There were some cloudy days with showers during the second week in July, but work on the platform was not greatly affected.

4. Labour

Details of the effective Labour strength during the month are given in Part (C) of this Section.

Industrial relations during the period have been satisfactory.

5. Plant & Equipment

Details of the principle items of Plant being used on construction of the platform and its associated works are included in Part (D) of this Section.

6. Platform

Thickening up of the base slab, which is being done in three layers, has continued. The full thickening has been completed in 8 No. cells and the 1st and 2nd layers completed in the remaining 17 No. cells.

Work has also progressed on construction of the roofs to the caisson cells. A total of 12 No. soffit shutter units are now in position, the last two having been lifted up by the 400 ton barge crane on 24th June. Two of the roofs have been concreted and reinforcement fixed in two more.

Cont'd/....

II SITE PROGRESS REPORT (Cont'd)

(A) GENERAL REPORT

6. Platform (Cont'd)

Immersion Vent Pipework has been installed in the two completed roof units and the remainder of the pipework has been pre-fabricated, ready to be installed.

Slipforming of tower C2 from -64.40 level started at 16.00 hours on 9th July, and by mid-night on 20th, concreting had been completed up to -43.90 level.

Slipforming of tower C1, also from -64.40 level, started at mid-night on 10th July, and by mid-night on 20th, had been completed up to -46.20.

The objective of the present operation is to construct Tower C1 to -43.60 level and Tower C2 to -37.70.

Satisfactory progress is being maintained.

7. Materials

Delivery of bulk materials and built-in items has continued satisfactorily.

8. Programme

Progress is being monitored against the detailed programme issued on 6th June, 1975.

TO 20TH JULY, 1975

II SITE PROGRESS REPORT (Cont'd)

(B) PROGRESS SCHEDULE

1. Temporary Works & Construction Facilities

Section of Work	Percentage Complete		Progress for Month (Percent -age)	Comments
	Programmed	Actual		
<u>TEMPORARY WORKS</u>				
1. Office Accommodation				
(a) McAlpine	100	100	-	
(b) Sea Tank	100	100	-	
(c) Shell	100	100	-	
2. Camp Accommodation				
(a) Phases I & II	100	100	-	
(b) Phase III	100	100	-	
3. (a) Canteen	100	100	-	
(b) New Main Site Canteen	100	100	-	
(c) Extension to Camp Canteen	100	100	-	
4. Site Water Supply	100	100	-	
5. Electricity Supply to Site	100	90	-	Main incomin supply to be upgraded from 11,000 volts to 33,000 volts
6. Telephones	-	96	-	48 No. lines are in use on the Site. The G.P.O. are taking steps to make 50 lines available
7. Site Foul Drainage	100	100	-	
8. Wharf	100	100	-	
9. Auxiliary Concrete Batcher	100	100	-	
10. Main Concrete Batcher	100	100	-	
11. Concrete Mix Approval	100	100	-	

II SITE PROGRESS REPORT (Cont'd)

(B) PROGRESS SCHEDULE

1. Temporary Works & Construction Facilities

Section of Work	<u>Percentage Complete</u>		Progress for Month (Percentage)	Comments
	<u>Programmed</u>	<u>Actual</u>		
<u>TEMPORARY WORKS</u> (Cont'd)				
12. Reinforcement Yard	100	100	-	
13. Joiners Shop	100	100	-	
14. Fitters Shop	100	100	-	
15. Prestressing Store	100	100	-	

ELF-NORGE FRIGG TREATMENT PLATFORM NO. 1

CONTRACTOR'S MONTHLY REPORT NO. 18

TO 20TH JULY, 1975

II SITE PROGRESS REPORT (Cont'd)

(B) PROGRESS SCHEDULE

1. Temporary Works & Construction Facilities (Cont'd)

Section of Work	Percentage Complete		Progress for Month (Percent -age)	Comments
	Programmed	Actual		
<u>CONSTRUCTION FACILITIES</u>				
20. Sheet Pile Sea Wall	100	100	-	
21. Basin Excavation	100	100	-	
22. Basin Well Pointing	100	100	-	
23. Tower Crane Erection	100	100	-	
24. Slipform Shutters to Caisson Walls	100	100	-	
25. Concrete Placing Booms	100	100	-	
26. Prepare Floating Jetty	100	100	-	
27. Prepare Offshore Moorings	100	100	-	
28. Sea Wall Removal & Dredging	100	100	-	
29. Tow Out and Moor	100	100	-	
30. Connect Services after Tow Out	100	100	-	
31. Slipform Shutters to Columns	100	100	100	
32. Construction Hoists to Columns	-	-	-	
33. Dismantle Tower Cranes	-	-	-	
34. Clear Platform for Tow	-	-	-	
35. Connect Tugs & Slip Moorings	-	-	-	

TO 20TH JULY, 1975

II SITE PROGRESS REPORT (Cont'd)

(B) PROGRESS SCHEDULE

2. Permanent Structure

Section of Work	Percentage Complete		Progress for Month (Percent -age)	Comments
	Programmed	Actual		
1. Precast Skirt Sections				
(a) Make	100	100	-	
(b) Place	100	100	-	
2. Caisson Base Slab 0.50m	100	100	-	
3. Prestress Base Slab	100	100	-	
4. Vent Pipework	-	100	-	
5. Grouting Pipework	-	53	16	
6. Piezometer Pipework	-	56	16	
7. J-Tubes	-	* 95	-	*95% of McA. work complete. Risers in columns by Messrs. Brown & Root
8. Sea Bed Riser Tunnels	-	100	-	
9. Immersion Pipework (In bottom of Caisson)	-	28	17	U.I.E.
10. Immersion Vent Pipe-work (In Caisson Roof)	-	7	7	
11. Caisson Dwarf Walls	100	100	-	
12. Caisson Walls in Basin	100	100	-	
13. Complete Fillet in Basin	100	100	-	
14. Caisson Walls at Moorings	100	100	-	
15. Complete Base Slab	93	77	44	
16. Caisson Ballast Concrete	-	-	-	
17. Construct Columns (2 No.)	32	27	27	
18. Prestress & Grout Columns	-	-	-	
19. Caisson Roofs	19	14	14	
20. Immersion Module & Cabling	25	25	-	(U.I.E. Module lifted in 25th May, 1975.

ELF-NORGE FRIGG TREATMENT PLATFORM NO. 1

CONTRACTOR'S MONTHLY REPORT NO. 18

TO 20TH JULY, 1975

II SITE PROGRESS REPORT

(C) LABOUR REPORT

McAlpine Labour

	<u>Elf</u>	<u>Ardyne Point</u>
Steelfixers (including S/Fixer Labourers)	57	33
Joiners (including Joiner's Labourers)	30	39
General Labourers	103	95
Other Trades	<u>53</u>	<u>290</u>
	<u>243</u>	<u>457</u>

NOTES :

1. Elf numbers are averages of men employed on the construction of the Elf Platform.
2. Ardyne Point numbers are averages of men engaged upon completing, running and maintaining the Site facilities for the benefit of all Platforms under construction at Ardyne Point.

Sub-Contractor's Labour on Site at the 20th of the Month

Kockum	14
Tyers Welding	2
Sterling Construction	16
Terrapin	15
H.G.S. Limited	59
Colebrand	4
Kilpatrick	7
Beaver Cleaners	49
Foremost	31
Findlay	<u>5</u>
	<u>202</u>

ELF-NORGE FRIGG TREATMENT PLATFORM NO. 1

CONTRACTOR'S MONTHLY REPORT NO. 18

TO 20TH JULY, 1975

II SITE PROGRESS REPORT

(D) PLANT REPORT

Plant Return for major items of equipment in effective use.

<u>Crawler Cranes/Excavators</u>	2 No. NCK 1405
	2 No. NCK 605
	1 No. NCK Pennine
	3 No. NCK Andes
	2 No. Priestman Lion 3A
<u>Back Actor Excavators</u>	1 No. $\frac{5}{8}$ cy. Hydraulic Excavator
<u>Crawler Tractor/Dozers</u>	2 No.
<u>Wheeled Tractors</u>	3 No.
<u>Wheeled Shovel/Excavators/Loaders</u>	4 No.
<u>Dumptrucks</u>	5 No.
<u>25 Ton Mobile Crane</u>	2 No.
<u>7 Ton Mobile Crane</u>	1 No.
<u>Truckcretes</u>	6 No.
<u>Dumpers</u>	7 No.
<u>Concrete Batcher</u>	1 No. Winget 2x2cy. (Batcher No. 1)
	1 No. Winget 2x1cy. (Batcher No. 2)
<u>Tower Cranes</u>	1 No. Record 646E (Reinf. Yard)
	4 No. Record 764CDM (Elf Platform)

Also, Generators, Welding Sets, Lighting Sets, Concrete Vibrators, Mobile Concrete Mixers, Pumps, Transport Vehicles, Air Compressors, Piling Hammers and Extractors, Fuel and Water Bowsers, Chainsaws, Saw Benches, Boilers, Transformers, Battery Charger, Grabs, Rollers, Reinforcement Cutting and Bending Machines, Storage Tanks, Aggregate Screening Plant, Mobile Toilets, Boats, Aggregate Hoppers, Coaches, pontoons, Cement Silos, Concrete Pumps, Concrete Placing Booms, Cement Tankers, Road Cleaner Wagon.

SECTION III - PROCUREMENT PROGRESS REPORT

ELF-NORGE FRIGG TREATMENT PLATFORM NO. 1

CONTRACTOR'S MONTHLY REPORT NO. 18

TO 20TH JULY, 1975

III PROCUREMENT PROGRESS REPORT

(A) BULK ITEMS

MATERIAL	ORDER PLACED	TOTAL QUANTITIES DELIVERED		QUANTITY DELIVERED FOR MONTH	COMMENTS
		SCHEDULED TO MEET CONSTRUCTION PROGRAMME	ACTUAL		
Concrete Aggregate	15/1/74	50000 tonnes	67520 tonnes	2150 tonnes	
Concrete Sand	15/1/74	31250 tonnes	42050 tonnes	1070 tonnes	
Cement	7/1/74	17900 tonnes	18370 tonnes	2810 tonnes	See Note 1
Reinforcement		5310 tonnes	5483 tonnes	NIL	Delivery Complete

NOTE :

1. Cement called forward to suit consumption and storage space. 450 tonnes were in stock at the end of the month. (This is the amount currently allocated to the Elf Platform Contract out of a total Site stock of 1,500 tonnes)

ELF-NORGE FRIGG TREATMENT PLATFORM NO. 1

CONTRACTOR'S MONTHLY PROGRESS REPORT NO. 18

TO 20TH JULY, 1975

III PROCUREMENT PROGRESS REPORT (Cont'd)

(B) FABRICATED & BOUGHT-IN ITEMS

NOTE : Items listed in previous Reports as having been received are not listed below.

Item	Order Placed	Fabrication	Delivery Required	Delivery Made	Comments
<u>Caisson Wall Gussets</u>					
Threaded Couplers	3016/NE/227 (20/3/75)	C.C.L. Systems Ltd.	20/4/75	15/5/75 & 26/6/75	Delivery Complete
Threaded Couplers	3016/NE/294 (20/6/75)	F. & E. Metals Glasgow	27/6/75	1/7/75	Delivery Complete
<u>Caisson Roofs</u>					
Sockets Type 17	3016/NE/262 (7/5/75)	Avingrade Eng. Ltd.	19/5/75	16/6/75, 20/6/75 & 26/6/75	Delivery Complete
<u>Columns</u>					
Sockets Type 7	3016/NE/279 (6/6/75)	Watford Welding Co.	15/7/75	32 No. delivered 4/7/75	100 No. outstand- ing
Plates Type 18	3016/NE/281 (4/6/75)	F. & E. Metals Glasgow	15/7/75	20/6/75 & 24/6/75	Delivery Complete
2" dia. Whit- worth Studs	3016/NE/300 (27/6/75)	Wm. Galloway Ltd.	15/7/75		
Plates Type 37	3016/NE/292 (17/6/75)	Almond Eng. Ltd.	24/6/75	1/7/75	Delivery Complete
Flanged Pipes c/w Plates, Bolts & Nuts	3016/NE/298 (20/6/75)	F. & E. Metals Glasgow	1/7/75	7/7/75	Delivery Complete
Steel Plates	Reqn.C60/65 (16/7/75)		1/8/75		

Cont'd/....

III PROCUREMENT PROGRESS REPORT (Cont'd)

(B) FABRICATED & BOUGHT-IN ITEMS

Item	Order Placed	Fabrication	Delivery Required	Delivery Made	Comments
<u>Ring Beams in Columns</u>					
Threaded Couplers	Reqn.C60/50 (23/6/75)	C.C.L. Systems Ltd.	31/7/75		
Sockets Types 32 & 33	3016/NE/309 (9/7/75)	Almond Eng.	7/8/75		

SECTION IV - PHOTOGRAPHS



75/508/18

SLIPFORMING OF COLUMNS ON ELF PLATFORM

16. 7. 75