BA 74-7-1

PHILLIPS PETROLEUM COMPANY NORWAY

2/7-10

EDDA

PHILLIPS PETROLEUM COMPANY NORWAY

INDIVIDUAL WELL RECORD

INDEX

BLOCK: 2/7 WELL: 10

FIELD: EDDA DATE WELL COMPLETED: DEC. 6, 1973

ATTACHMENT NO. 1

DRILLING PROCEDURE

1. Drill a 36 inch hole to 50 ft below the ocean floor. Drill a 26 inch hole to 100 ft below the ocean floor approximately 440 ft RKB. After reaching total depth displace hole with 150 bbls of high viscosity mud. See mud program for make up of mud.

2. Drive the 30 inch conductor pipe to ± 110 ft. The pipe should be spaced out and driven so that the final position of the National 30 inch landing hub is ± 10 ft above the ocean floor. Two 4 inch collars are to be welded into the 30 inch pipe, one collar three feet below the National hub and one collar five feet below the National hub. Remove plugs from collars before driving.

3. Gurtler, Hebert Co. will be used to weld and drive the conductor.

4. Drill a 26 inch hole to 1600 ft RKB using sea water with returns to the ocean floor. Pump in slugs of high viscosity mud as required to clean hole. See Mud Program for makeup of mud.

5. After reaching casing setting depth, circulate hole clean, pump in 600 bbls 11 ppg mud, and make short trip to 30 inch casing. Go back in hole to bottom and displace hole with 800 bbls of 11 ppg mud. Pull out of hole slowly.

6. Run and cement 20 inch casing as shown in the Cementing and Casing Program. Cut off casing and install 20 inch, 2000 psi WP casing head. Nipple up 20 inch BOP stack and test BOP's and casing to 1200 psi for 30 minutes.

7. Wait on cement for at least 8 hours before drilling out. Drill 17½ inch hole to 4000 ft RKB. Follow the procedures detailed in the Mud Program and Operational Plan.

8. Use a drill pipe float above bit in 17½ inch hole. Use standard PPCO stabilizer program. Refer to Operational Plan for drilling practices.

9. After reaching 4000 ft RKB, circulate and condition mud and hole for logging. Make full trip and circulate one complete round or until shaker cleans up. Come out of hole slowly. Run logs specified in Geological Well Program.

10. Go in hole, circulate and condition hole to run casing. Continue circulating until shaker cleans up. If required by hole condition, make short trip to 20 inch casing shoe before running casing. Come out of hole. Pull bore protector from wellhead.

C O N F I D E N T I A L

DRILLING PROSPECTUS

Well	: 2/7 - 10 AFE No. 5656
Prospect	: EDDA
Location	: 56° 28' 33,6" N 03° 05' 05,8" E
Water Depth	: 236 feet
RKB to Mean Sea Level	: ± ~~100~~ 121 feet
RKB to Sea Bottom	: 336 feet

GENERAL

An 11,000 foot exploratory well is to be drilled in block 2/7 using the jackup rig ZAPATA NORDIC under contract from Zapata North Sea Incorporated.

This well, the prospectus and attachments, and all other information concerning this well are CONFIDENTIAL. "Tight hole " Procedures will be followed and are detailed in the attachments to the prospectus. Prospectus and attachments are not to be released to anyone except the drilling contractor, without approval of the Stavanger office.

ATTACHMENTS

The attachments to the prospectus detail the work program for this well. Any deviations from the program as planned should be cleared with the Stavanger office in advance.

The attachments issued with this prospectus are:

1. Drilling Procedure
2. Well Control
3. Casing and Cementing Program
4. Well Profile
5. Blowout Preventer
6. Mud Program
7. Geological Prognosis
8. Standard Distribution
9. Tight Hole Procedure

A Test Procedure will be issued later. The Geological Prognosis includes Logging, Coring and Sampling Programs.

DAILY DRILLING REPORT

A Daily Drilling Report covering the period 0600 hours to 0600 hours is to be called to the Stavanger Office at 0630 hours daily. A brief report of operations will be called to the Stavanger Office at 1600 hours daily. Below the 13 3/8 inch casing point, all depths, formation tops and geological data should be in code.

NOTE:

Numbers which are not coded should be reported by calling one number at a time. i.e. 2 3 7 6 shall be reported at two-three-seven-six. NOT as two thousand, three hundred and seventy-six. This will help to eliminate misunderstandings.

Run and cement 13 3/8 inch casing as shown in the Casing and Cementing Program. After pumping down plug, release pressure and close 20 inch Hydril. Wait on cement 8 hours with Hydril closed.

11. Cut off casing and install wellhead. Test casing pack off through test port with 1500 psi. Nipple up BOP stack. Test BOP's and choke manifold to 5000 psi and Hydril to 2500 psi. Test casing with 2800 psi for 30 minutes.

12. Drill 12 1/4 inch hole to 8000 ft RKB. Follow the procedures detailed in the Mud Program and Operational Plan.

13. Test BOP stack and choke manifold with 2500 psi weekly. When out of hole, close and open each set of rams individually; blind rams should be left closed until ready to go in hole.

14. After reaching 8000 ft RKB, circulate and condition mud and hole for logging. Make short trip to 13 3/8 inch casing shoe. Go back in hole to total depth and circulate a minimum of one hole volume. Come out of hole slowly. Run logs as shown in Geological Well Program.

15. Go in hole, circulate and condition hole to run casing. Continue circulating until shaker cleans up. Come out of hole. Pull bore protector from wellhead. Run and cement 9 5/8 inch casing as shown in the Casing and Cementing Program. After pumping plug, release pressure and close Hydril. Wait on cement 8 hours with Hydril closed.

16. Cut off casing and install casing spool. Test casing pack-off to 3500 psi through test port. Nipple up BOP's. Test BOP stack choke manifold and casing spool with 5000 psi and Hydril with 2500 psi. Test casing with 4000 psi for 30 minutes.

17. Drill 8½ inch hole to 11,000 ± ft RKB. Follow drilling practices detailed in the Operational Plan.

18. Test BOP and choke manifold with 5000 psi and Hydril with 2500 psi weekly. When out of hole, close and open each set of rams individually; blind rams should be left closed until ready to go into hole.

19. After reaching total depth, condition mud and hole thoroughly and come out of hole. Run Logs as shown in Geological Well Program.

20. If log analysis indicates hydrocarbon bearing zones, circulate and condition hole to run 7 inch liner.

21. Run and cement 7 inch liner as shown in Casing and Cementing Program.

22. Testing Program and Plug and Abandon Procedure will be issued after log analysis.

23. A hole deviation survey should be made <u>every trip</u> out of the hole, down to 8000 ft. Intermediate surveys are to be made only if deviation is a problem. If collar assembly is stabilized according to Operational Plan, deviation should not be a problem.

ATTACHMENT NO. 2

WELL 2/7 - 10 DRILLING PROSPECTUS

WELL CONTROL

2 (a) BLOW OUT DRILL

1. After 13 3/8" casing has been cemented and tested, and before drilling the cement plug, this drill shall be initiated. If possible have the onboard off duty supervisors of the contractor on hand.

2. Circulation pressure at a reduced pump rate will be established and recorded.

3. Blow out preventor will be closed on the drill string and shut-in drill pipe pressure will be recorded. (This will be zero, but for the purpose of this drill, it will be assumed to be 300 psi or a predetermined figure).

4. Circulation at a reduced pump rate will be established through the chokes with sufficient back pressure so that the drill pipe pressure is equal to the reduced circulation pressure plus the 300 psi 'kick', plus a 100 psi safety margin (for example, if the drill pipe pressure was 400 psi at 30 strokes per minute, to control the 300 psi 'kick' with a 100 psi safety margin, the chokes would be adjusted so that the circulating drill pipe pressure would be 800 psi at 30 strokes per minute).

5. Calculate the required density of the new mud weight to contain the B.H.P. plus the 100 psi safety margin.

Object of this blow out drill

1. It will enable us to check the chokes, gauges, and equipment for performance before any emergency arises.

2. It will give realistic training with the actual equipment to the drilling contractor crews and a better knowledge of the practice of kick control.

3. It will give us an opportunity to evaluate the performance of personnel and equipment and if necessary make more training available, and repair or replace defective equipment.

2 (b) HOLE "FILL-UP" PROCEDURE

The following procedure should be followed to insure the accurate measurement of the fluid volume required to "fill-up" while tripping. It is important that the written records included in the procedure be kept on a permanent basis.

1. Open the suction valves on the slug tank and pits so that the mud level will equalize into the slug tank, No. 1 suction tank, and No. 2 suction tank.

2. Circulate bottoms up, drain the "Possum Belly" (tank in front of shale shaker) and pull the first stand slowly while observing the fluid level in the hole for swabbing. After two stands stop and observe hole for flow, continue to come out of hole until 10 stands have been pulled. Do not install the pipe wiper until it is certain that the hole is static.

3. Close the suction valve on the No. 1 suction pit open the valve on the slug tank and fill the hole. Count the number of pump strokes required, allow 2 or 3 extra strokes. Measure the inches of fluid pumped out of the slug tank and into the hole. If the hole did not take the correct amount of fluid, find out why! After each 10 stands, fill-up, open the suction valve on the No. 1 suction pit and the suction valve on the slug tank. This will allow the pits to equalize and will also allow the pit level recorders to indicate an accurate record of fill-up amount.

4. The driller on tour is to make a written record of the hole fill-up data showing depth, number of stands of pipe pulled between fill-ups, amount of fill-up, date and time of trip.

5. As soon as the bit is up in the casing, stop and check for flow regardless of record showing proper fill-up. Stop before pulling the drill collars to check for flow, and at any other time it is deemed necessary or prudent.

6. The blind and pipe rams should be closed and opened one time each trip out of the hole as an operational check. This should be done after the bit is above the rotary table.

7. The Phillips Drilling Supervisor onboard will determine the maximum rate of decent while going in hole. Avoid pressure surges set up when the bit is spudded or lowered too rapidly.

GENERAL REMARKS

1. Any time the mud is being circulated, and open hole is exposed, the mud weight and viscosity will be checked and recorded at least every 15 minutes in the pump room and at the shale shaker.

2. Suitable floor safety valves threaded, or with proper subs, to fit both drill pipe and drill collars are to be in an accessible place on the rig floor at all times when not in use.

   NOTE:
   Use the Hydril or T.I.W. type safety valve first. The Gray inside BOP will NOT be installed unless it is so ordered by Phillips Drilling Supervisor.

3. At all times, be aware of how much surface mud volume is on hand. Check the Pit Level Recorder for accuracy each tour. Measure the volume to fill hole on each 10 stands when making trip and record this figure.

4. The Phillips Drilling Supervisor is to be on the rig floor any time the hole could be swabbing, when a core is being pulled or when a diamond drill bit is being pulled.

FILL-UP VOLUMES FOR 5" D.P.

1. 10-90 foot stands of 5", 19.5 lbs/ft. drill pipe displace 6.75 bbl. therefore the hole should take 6.75 bbl. to fill when 10 stands of pipe have been pulled.

2. If the same amount of drill pipe is pulled wet, it will take 22.73 bbls to fill the hole. When the drill pipe is pulled wet the mud inside the pipe should be returned to the hole by draining the mud bucket into the drilling nipple. Then it will require 6.75 bbls. of fluid to fill hole, as the conditions are the same as when pulled dry.

2 (c) FORMATION PRESSURE TESTING

After drilling out the 20", 13 3/8", 9 5/8" and subsequent casing strings, the following procedure will be followed:

1. Clean out cement below the shoe and make ten feet of new hole.

2. Pick up into the casing and close blow out preventor.

3. Pump slowly down the drill pipe with the cementing pump pressuring up the casing and the exposed formation. Maximum pump rate is to be 0.3 bbl/min.

4. The pressure is to be built up in 50 to 200 psi stages depending on the estimate fracture pressure. When the surface pressure reaches first level, shut the pump down and check for bleed off. Increase surface pressure, shut the pump down and check again, and so on until the final pressure is reached. When approaching the final pressure it may be desirable to use 25 to 100 psi increments.

5. The final pressure to be held on surface will be advised by the Stavanger office. This pressure will be calculated from the following:

   (a) Maximum mud weight anticipated to next casing point.

   (b) Maximum pressures anticipated when cementing the next casing string.

   (c) Estimated formation fracture gradients.

6. An accurate measurement of pressure build up and volume pumped is to be taken and recorded. If the formation begins to take mud, shut the pump down immediately and record the surface holding pressure.

7. After reaching the surface pressure designated by the office, hold the pressure on the formation for five minutes. If the pressure bleeds off, record the rate of bleed off, and the final holding pressure.

8. Release the pressure, open the blow out preventor and drill ahead.

9. The results of the formation pressure test are to be reported on the Daily Drilling Report.

10. The minimum acceptable bleed off pressure at each casing point are:

Depth	Weight of mud in hole	Bleed off pressure	Equivalent mud weight
1600 ft	11.0	125	12.5 ppg
	11.5	80	
4000 ft	12.0	500	
	12.5	400	14.5 ppg
	13.0	300	
8000 ft	14.0	620	
	14.3	500	15.5 ppg
	14.5	420	

2 (d) DRILLING BREAKS

If a significant drilling rate increase occurs the following procedure should be followed.

1. Drill a maximum of 10 feet at the increased rate.

2. Notify the Phillips Drilling Supervisor.

3. Pick up off bottom, shut down pumps and check for flow or loss.

4. If well flows, close Hydril, then choke and kill lines. Record drill pipe and casing pressures.

5. If well does not flow, the Phillips Supervisor will then decide if the "break" warrants circulating out a sample or if it is OK to drill ahead.

   A drilling break where the penetration rate doubles is considered significant.

ATTACHMENT NO. 3

CASING AND CEMENTING PROGRAM

1. Casing Program

Size (in.)	Weight (lb/ft)	Grade	Threads	Optimum Torque (ft/lb)	PPCO Rating Burst (psi)	Collapse (psi)	Tension (1000 lb)
30	309		Welded				
20	133	J-55	Buttress	15,000[3]	2883	1415	952
13 3/8	68	J-55	ST&C	6,750	3271	1840	450
9 5/8	47	N-80	Buttress	11,000[3]	6090	4484	803
7	29	N-80	LT&C	5,970	7300	6626	398

Notes:

1. Use Phillips modified thread dope on all casing threads.

2. Space out all casing strings so that the casing shoe will be about 30 feet above T.D. when casing hanger is landed on hanger seat approximately 10 feet above ocean floor.

3. The following procedure should be used in making up the buttress casing strings:

   Make up the first three or four joints of each string until the casing coupling is near the mid-point of the triangle stamped on the casing. The torque required for these joints should be used for the rest of the string. About one joint in 10 should be checked to see that the final position of the coupling is some place on the triangle. If necessary the torque should be adjusted.

2. 30 inch Casing will be driven to ± 110 feet below the ocean floor. All casing joints to be butt welded with the exception of the National clamp hubs. Have hammer company keep a foot by foot driving record.

3. 20 inch Casing in 26 inch hole at 1600 feet

   A. Mechanical Accessories:

      i. Halliburton top and bottom plugs.

      ii. Halliburton float shoe. This will be installed onshore. (Note: Some shoe joints have been prepared with a float shoe and collar).

iii. Five centralizers and two stop collars:

7 feet above shoe	(bow type over stop collar)
7 feet above float collar	(bow type over stop collar)
Top of second joint	(bow type)
First coupling inside 30 inch casing	(positive)
First coupling below 20 inch hanger	(positive)

B. Running Procedure: The shoe and collar will be welded to the casing onshore. Thread locking compound should be used on first joint above float collar.

C. Cementing Procedure: Use 40 bbls. sea water behind bottom cementing plug. Cement with 1600 sacks Class 'B' cement blended with 8% bentonite mixed at 13.1 lb/gal using sea water followed by 1000 sx Class 'B' neat cement mixed at 15.6 lb/gal using sea water. Catch three wet and three dry samples of each type of cement while mixing. Release top plug, displace plug with sea water using both rig pumps at a maximum rate. Stop displacement after pumping volume of casing to float collar whether or not plug bumps.

Dry Bulk Volume of cement:

1600 sacks Class 'B' with 8% bentonite	1810 cu.ft.
1000 sacks Class 'B'	1000 cu.ft.

4. <u>13 3/8 inch Casing in 17½ inch hole at 4000 feet</u>

A. Mechanical Accessories:

i. Halliburton top and bottom plugs.

ii. Halliburton float shoe and float collar. Shoe joint will be made up on shore.

iii. Five bow-type centralizers:

7 feet above shoe over stop collar
7 feet above float collar over stop collar
Over couplings on top of joints 2,4 and 6.

iv. 25 bow-type centralizers:

one per joint for 1000 feet below 20 inch shoe.

v. 100 scratchers, 114 stop collars, 2 bow type centralizers, 2 positive centralizers, and one metal petal basket around 20 inch casing shoe as shown in attached sketch.

vi. Five positive centralizers:

One every other joint for 500 feet above 20 inch shoe.

vii. One positive centralizer: over first coupling below the casing hanger.

B. Running Procedure

Use thread locking compound on field connections on first stand and tack weld mill connections. Run casing to depth and set down 20 inch hanger. Pick up 2 to 3 feet and circulate one casing volume. Work pipe with 4 to 6 feet stroke while circulating. Displace with rig pump 20 to 30 bbl pill, mud containing 15 lb/bbl fine mica, ahead of wash. Hang casing with wellhead 18 inches offseat while cementing. Land casing while on last 20 bbl of displacement.

C. Cementing Procedure

Lead cement with 20 bbls fresh water spacer. Use 200 sacks Class B neat cement wash mixed to 13.5 lb/gal and run behind the bottom cementing plug. Cement with 3000 sacks neat Class B cement mixed at 15.6 lb/gal using fresh water. Catch three wet and three dry samples of each type cement while mixing. Release top plug and pump in 10 bbl fresh water. Displace plug with mud using both rig pumps at maximum rate to calculated casing volume. Do not overdisplace.

Dry bulk of cement:

200 sacks Class B neat (wash)	200 cubic feet
3000 sacks Class B neat	3000 cubic feet

5. 9 5/8 inch Casing in 12 1/4 inch hole at 8000 feet

A. Mechanical Accessories:

i. Halliburton top and bottom cementing plugs.

ii. Halliburton float shoe and float collar. These will be installed onshore.

iii. Five bow type centralizers:

7 ft above shoe
7 ft above float collar
top of 2, 4 and 6 joints

iv. 25 bow type centralizers:

one per joint for 1000 ft below 13 3/8 inch shoe.

v. 95 scratchers, 111 stop collars, 2 bow type centralizers, 2 positive centralizers and

one metal petal basket around 13 3/8 inch casing shoe as shown in the attached sketch.

vi. Five positive centralizers:

one every other joint for 500 ft above 13 3/8 inch shoe.

vii. One centralizer over first coupling below the 9 5/8 inch hanger.

B. Running Procedure.

Use thread locking compound on field connections. Run casing to depth and set down on hanger. Pick up two or three feet and circulate one casing volume. Displace with rig pump 20 to 30 bbl pill, mud containing 15 lb/bbl fine mica, ahead of 14.5 ppg cement slurry. Work pipe with 4 to 6 feet stroke while circulating. Land casing hanger prior to cementing.

C. Cementing Procedure

Lead cement with 10 bbls of fresh water. Use 200 sacks Class B cement mixed to 14.5 lb/gal and run behind the bottom cementing plug. Cement with sacks Class B mixed to 15.6 ppg. Catch three wet and three dry samples of cement while mixing. Release the top plug and pump in 10 bbl sea water. Displace plug with mud using rig pumps at maximum rate. Do not overdisplace.

Cement volume will be supplied after drilling and logging this section of hole. Volume will be calculated on the basis of hole diameter from caliper log so that top of cement will be at 2000 ft above the 13 3/8 inch casing.

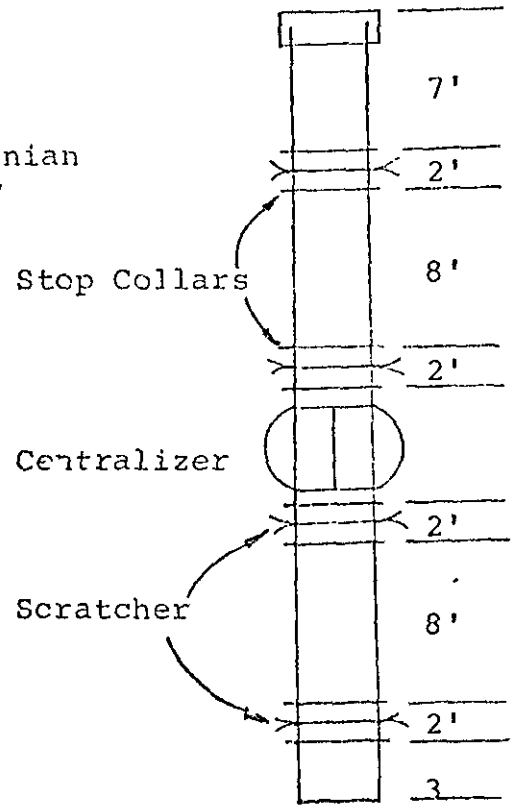
Dry bulk volume cement:

3000 sacks Class B 3000 cubic feet

6. 7 inch liner in 8½ inch hole at total depth

A. Mechanical Accessories:

float shoe
float collar
liner hanger
liner packer and tie back sleeve
running tools
scratchers and centralizers as listed below

Interval	Quantity	Estimated Total Required
Liner hanger to 100' above Danian (7600 - 10,100)	One centralizer and one stop collar each two joints	29 Centralizers (Bow typ 29 Stop Collars 5 Centralizers (close tolerance positive) 5 Stop Collars
100' above Danian to 100' below Danian		15 Centralizers 128 Stop Collars 64 Scratchers
100' below Danian to float collar (est. 400')	One centralizer and one stop collar each joint	12 Centralizers 12 Stop Collars
3' above float collar	Centralizer and two stop collars	1 Centralizer 2 Stop Collars
3' above float centralizer shoe	Centralizer and two stop collars	1 Centralizer 2 Stop Collars
Total required		5 Centralizers (positive 58 Centralizers (bow) 178 Stop Collars 64 Scratchers

B. Running Procedure

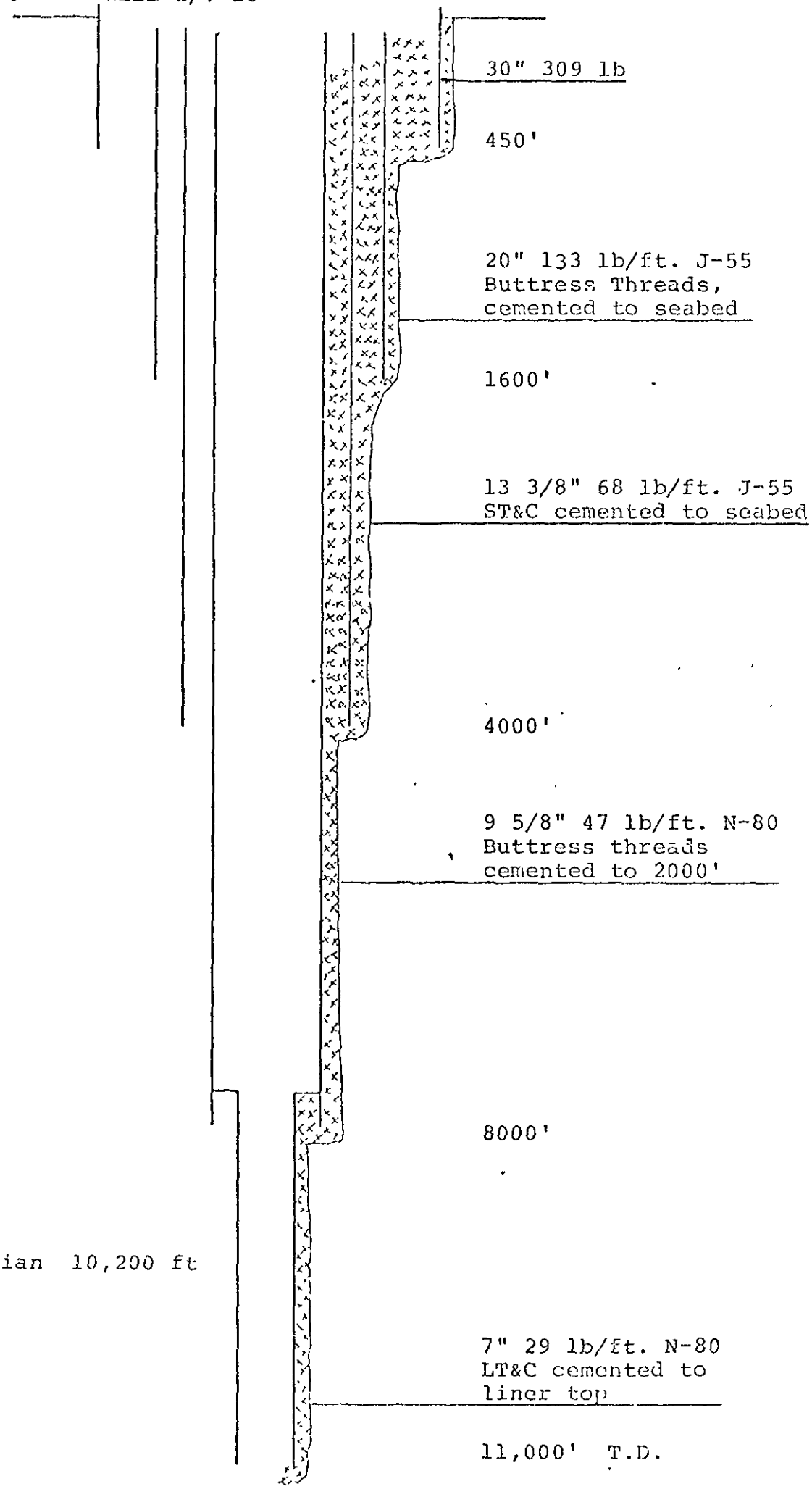
Break circulation at 9 5/8 inch shoe and circulate 10 to 15 minutes when running 7 inch liner. Run liner to setting depth. Make up cementing manifold on drill pipe. Circulate a minimum of one casing volume and continue circulating until the mud moving across the shaker is clean. Reciprocate casing 20 to 25 ft while circulating or until pipe drag increases. Set hanger before cementing.

C. Cementing Procedure

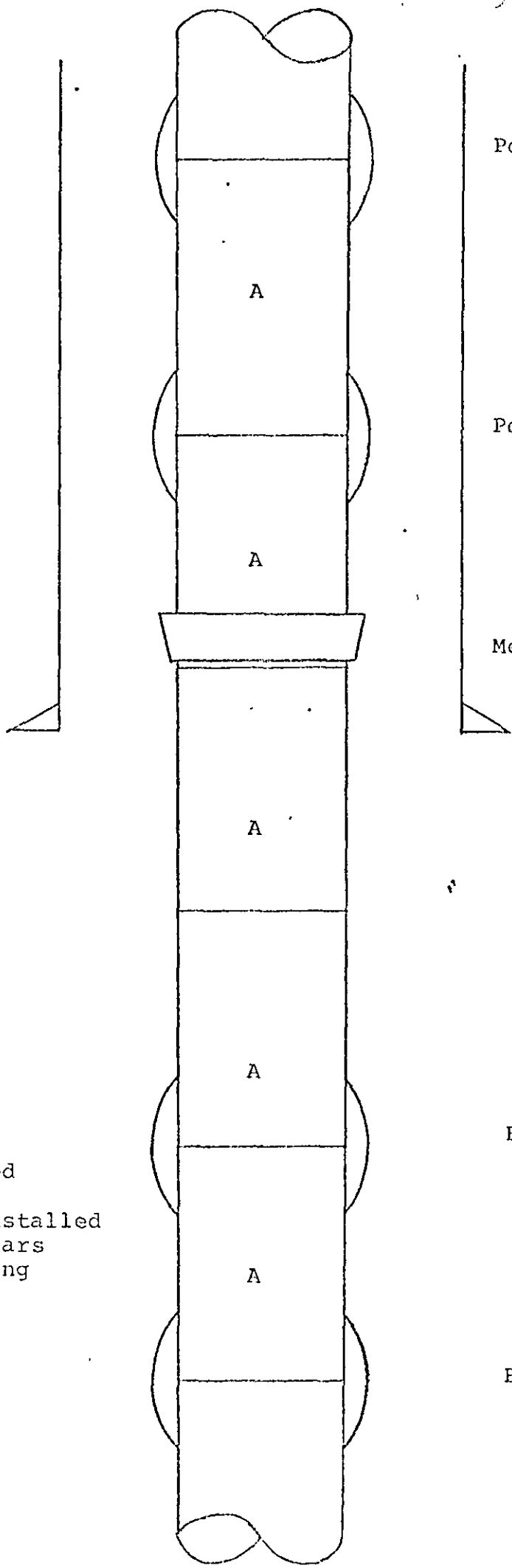
Lead cement with 10 bbls of fresh water.
Use 100 sacks Class E cement wash mixed to 14.5 ppg and run behind the bottom cementing plug. Cement liner with ___ sacks Class E cement mixed to 16.5 ppg. The sacks of cement will be calculated on the basis of hole diameter from caliper log plus 20% excess. Catch three wet and three dry samples of cement while mixing. Release plug and displace with mud using cementing unit. Pick up out of liner and reverse out.

NOTE: Thickening time for Class E cement at 10,000 ft is 4 hours 20 minutes.

ATTACHMENT NO. 4 WELL 2/7-10



13 3/8" and 9 5/8" Casing String



Positive Centralizer

Positive Centralizer

Metal Petal Basket

20" or 13 3/8"
casing shoe

Bow-type Centralizer

Each joint marked
'A' should have
19 scratchers installed
and 19 stop collars
on two ft. spacing

Bow-type Centralizer

ATTACHMENT NO. 5

WELL 2/7-10 DRILLING PROSPECTUS

BOP - WELLHEAD PROGRAM

A 20", 2000 psi Hydril will be used on the 20" casing while drilling the surface hole.

A 13 5/8", 10,000 psi Cameron Type "U" Single, a 13 5/8", 10,000 psi Cameron type "U" Double, and a 13 5/8", 5000 psi GK Hydril will be used on the 13 3/8" casing to completion. All BOP and 13 5/8" Hydril are equipped with Cameron clamp connections.

Procedure for testing the BOP stack should be similar to that outlined and used by Zapata. Safety measures and personnel involved in testing BOP stack are included in the procedure.

ATTACHMENT NO. 6

MUD PROGRAM

30 inch casing at 450 ft RKB

Drill and drive the 30 inch casing as per Drilling Procedure. Drill with sea water with returns to the sea. Pump slugs of thick mud through the hole frequently to clean and to seal off surface sands. Mix the thick mud as follows:

Material		Properties	
Sea Water		Weight	- 8.8 to 9.4 ppg.
Attapulgite clay	- 10 ppb.	Viscosity	- thick
Flosal	- 2 ppb.	Fluid loss	- No control

Run the shearing device on pit using 400 to 500 psi, to shear flosal.

20 inch casing at 1600 ft RKB - 26 inch hole

Drill the 26 inch hole with sea water with returns to the sea. Pump slugs of thick mud through the hole to clean and to seal off the surface sands. After the 26 inch hole has been drilled, pump in 600 barrels of 11.0 ppg mud prior to making wiper trip. After circulating out after the wiper trip fill the hole with 800 barrels of 11.0 ppg mud. Mix the thick mud as outlined above and increase the weight to 11.0 ppg with barite for wiper trip and to run 20 inch casing.

13 3/8 inch casing at 4000 ft RKB (17½ inch Hole)

Drill the cement with sea water. While drilling the shoe displace the hole with mud previously mixed in the pits as follows:

Material		Properties	
Sea water		Weight	- 10.5 ppg
Bentonite	- 5 ppb	Viscosity	- 38 to 45 SEC/q
Caustic	- 1 ppb	Fluid loss	- 10 to 15 cc/30
Flosal	- 2 ppb	Ph	- 10.5 to 11.5
Barite	- As needed		

While drilling the shoe, start mixing Shale Trol and caustic to bring Shale Trol concentration to ½ to 1 ppb excess at the flowline. From the 20 inch shoe to 4000 ft maintain the mud properties as follows:

Depth ft RKB	wt. ppg	viscosity sec/qt	Ph.	Shale Trol Excess - out/ppb
1600 - 3000	10.5	38 - 45	11.0	½ - 1
3000 - 4000	11.5	40 - 50	11.0	½ - 1

Lignosulfonate and lime added as needed for Rheology control.

Run centrifuge for barite recovery to prevent dumping of excess mud.

For viscosity requirements - use flosal.

9 5/8 inch casing at 8000 ft RKB - 12 1/4 inch Hole

Drill the cement and shoe with the mud in the system. Below the 13 3/8 inch casing control the mud as follows:

Depth ft RKB	wt. ppg.	Viscosity sec/qt	Fluid Loss cc/30 min	Shale Trol Excess - out/ppb
4000-4500	11.5 to 12.0	40 - 50	6 - 8	½ to 1
4500-5500	13.5 to 13.7	40 - 50	4 - 6	½ to 1
5500-8000	13.7 to 14.0	40 - 50	4 - 6	½ to 1

Run the centrifuge for barite recovery as needed. Add Lignosulfonate and Lime as needed for Rheology control.

7 inch Liner to Total Depth - 8½ inch hole.

Drill the cement and shoe with the existing mud. Convert the system to a sea water lignosulfonate mud and maintain as follows to total depth:

Material		Properties	
Barite	- As needed	Weight	- 14.3 ppg
Bentonite	- 18 - 20 ppg	Viscosity	- 40 to 50 sec/qt.
Oil	- 3 - 4 %	Oil	- 3 - 4 %
Soltex	- 4 - 5 ppb	Soltex	- 5 ppb

Maintain 4 ppb soltex to total depth.

Prehydrate bentonite before adding to system.
Control high pressure - high temperature fluid loss below 10.0 cc-250°F - from 9700 ft to total depth. Pilot tests are to be run to determine the best formulation to control the high pressure - high temperature fluid loss.

Use the Methyl-Blue test for clay content.

From below the 9 5/8 inch casing to total depth maintain 100 PPM excess nitrate ion in the mud for a mud filtrate tracer.

Packer Fluid

Condition the mud in the system to leave behind the packer for testing and completion.

Material		Properties	
Barite	- As needed	Weight	- 14.3 ppg
Bentonite	- As needed	Ph.	- 11.0 to 11.5
Caustic Soda	- As needed	YP	- 12 to 18
Flosal	- 2 ppb	Bentonite	- 15 to 20 ppb
Desco	- 1 ppb		

Check Bentonite by Methyl-Blue test. No starch or Lignosulfonate is to be added to condition for Packer fluid.

Mechanical Equipment

Rig - Shale Shakers - Use 14 or 16 mesh screens on 26 inch, 17½ inch and 12 1/4 inch hole. Use 30 mesh on the 8½ inch hole.

Milchem High Speed Shakers. - Use tap 40/40 - 30/30 - 30/30 - 30/30 mesh screens on the 26 inch, 17½ inch and 12 1/4 inch holes. Use 80/80 mesh screens on the 8½ inch hole.

Centrifuge

Run the centrifuge for barite recovery.

ATTACHMENT NO. 7

PHILLIPS PETROLEUM COMPANY NORWAY

GEOLOGICAL PROGNOSIS

SEPTEMBER, 1973

Well No: 2/7-10

Location: Shotpoint 1430 on seismic line PG 56 28 30

Prospect: EDDA

N 56° 28' 33.6"
E 03° 05' 05.8"

Classification: Wildcat

RKB: ± 100'

AFE: NW 5656

A. Projected Total Depth 11,000' Water Depth 236'

B. Anticipated Formation Tops:

Danian Limestone 10,200'

C. Principal Zones of Interest:

The Danian - Upper Cretaceaous is expected to be about 300 ft thick and should contain 100 ft of net pay.

D. Logging Program:

Run 1 - 17½" hole 1600 - 4000' - IES, BHCS-GR-CAL, (Run GR up to sea floor)

Run 2 - 12 1/4" hole, 4000 - 8000' - IES, BHCS-GR-CAL, FDC-GR*, SNP*, MML*.

*Run over potential reservoir zones only.

Run 3 - 8½" hole, 8000' - TD - IES, BHCS-GR-CAL, SNP*, FDC-GR*, MML*, HDT**.

* Run over pay section only.

** Note: Run HDT from TD 1000' above Danian.

E. Casing Program: (for details see Drilling Prospectus)

Estimated

30" at 450'
20" at 1600'
13 3/8" at 4000'
9 5/8" at 8000'
7" at T.D. if required

F. Sample Program:

1. Catch 6 sets of washed and dried cuttings from below 20" casing at ± 1600'.
   Catch samples at each connection (approx. every 30' down to 9 5/8" csg point at ± 8000'), then at 10' intervals thereafter, if possible.

   The geologist may change to 5' intervals through zones of interest. Store samples on rig until well reaches T.D. Then ship all samples at one time to Stavanger shorebase for storage and/or distribution. Samples should be sorted into six complete sets prior to shipping in order to facilitate handling.

2. Catch one set of unwashed samples and put in plastic bags to Norges Geologiske Undersøkelse starting at 4000'.
   Boxes should be marked "Kontinental Sokkelen", stored on rig until well is finished, and then shipped to Phillips shorebase in Stavanger.
   The geologist will alert shorebase when samples are due to arrive in Stavanger.

G. Anticipated Coring and Testing:

1. Conventional coring is not planned on this test. However, unexpected circumstances may alter this plan, therefore, a core barrel should be available.

2. Sidewall cores will be considered in zones of interest that were not cored conventionally.

3. DST's should be made on all significant hydrocarbon shows. Testing will be through perforations after running casing.

H. Anticipated Hole Problems:

Heaving shale and high pressure can be expected throughout most of the Tertiary.
Washouts can be expected throughout most of the section down to the Danian Limestone.

I. Daily Geological Reports:

A daily geological report will be given to the Tananger Base every morning between 8:30 and 9:00 a.m. This report should be given to F.A. Parada.

Home telephone for weekends and nights: Parada 38 347
Schriber 27 520 Room 912

J. Miscellaneous:

Detailed well site instructions will be given separately to those concerned.

ATTACHMENT NO. 8

STANDARD DISTRIBUTION

Schlumberger Logs

One field print of all well logs should be left on the rig. This print should be returned to the Tananger base at the conclusion of the well.

One field print and one sepia of all well logs should be delivered to the Tananger base to the attention of F.A. Parada.

Cutting Samples

Instructions for catching cutting samples are included in the Geologic Prognosis.

Dry samples should be packed in the cardboard boxes provided by the mudlogging contractor. Normally six sets of dried samples will be taken and a number of boxes will be required for each set. The boxes should be labeled on both ends with the sample interval, box number and set number. For example:

Interval 9350 - 10,000
Box 2
Set III

The unwashed samples for the Norges Geologiske Undersøkelser should be stored in strong cardboard or wood core boxes. These boxes should also be labeled on the end with the interval and box number. In addition the boxes should have "Kontinental Sokkelen" written on them.

Wet samples should be stored in the metal ammunition boxes provided by Robertson Research. Again the boxes should be labeled with the interval and box number and should have "Robertson Research" plainly marked on them.

When samples are sent to shore fill out the attached cutting sample record sheet in duplicate. Send one copy to M.F. Klungland, Phillips Tananger Base, and on copy to Mr. F.A. Parada, Phillips Tananger Base.

DST Sample

All samples sent to the Tananger Base for shipping or warehousing should be clearly labeled with paint and the data sheet placed in waterproof bags. The label should state contents of container, intervals and final destination of samples. All containers should be tagged inside and out so that the container does not need to be opened during transhipment. Specific sampling instructions are include in the Testing Procedure.

Set No.						Interval		Type Sample		Type Box	
I	II	III	IV	V	VI	From	To	Dry	Wet	Carboard	Stee

Set No.						Interval		Type Sample		Type Box	
I	II	III	IV	V	VI	From	To	Dry	Wet	Carboard	Stee

ATTACHMENT NO. 9

TIGHT HOLE PROCEDURE

For various reasons, it is necessary that certain information concerning the well be withheld from competitors and others.

It will be the responsibility of the Supervisor on duty at the rig to see that only necessary and authorized individuals should carry written permission signed by:

E.W. Thrall

P.W. Reynolds

or A.E. Vick

No information is to be given to any individual, not an employee of Phillips, regardless of his credentials. This includes partners, government agents and all others.

All information released concerning the well will be released only from the Stavanger Office.

In this respect, reasonable caution is to be practised during conversation with associates, friends, etc.

Below the 13 3/8" casing point, all radio and R/T conversations are to be in code when reference is made to:

Drill Stem Tests, Shows,

Depths, Formation Tops,

Lithology

November 26, 1973

REVISED TEST PROGRAM

EDDA WELL 2/7-10

39. Perforate the intervals 10,600 to 10,620 and 10,560 to 10,580 ft for fourth production test. Run wireline junk basket to top of perforations.

40. Run in hole with test string. Displace test string with drill water with first 20 bbls treated with 1 gal N-5 clay stabilizer.

41. Flow Period 1: Open well to tank on pipe rack for 15 min.

42. Shut-in Period 1: Two hours.

43. Flow Period 2: Flow well to burner for clean-up. Formation fluid that surfaces will determine remainder of test. Engineer will advise office and provide procedure.

DEAD ZONE

D-44. Attempt to breakdown formation and pump-in 10 bbls treated water cushion. Wait two hours after well dies.

D-45. Test all lines to 8500 psig. Stimulate according to HOWCO recommendation. Shut-in three hours for acid contact.

D-46. Proceed with appropriate program if well flows. Observe well 2 hours if no flow continues after stimulation, release packer, reverse out test string and condition mud. Go to Step H-45.

WATER TEST

W-44. Continue flowing well until 30 minute readings of resistivity,

chlorides and nitrate ion tracer indicate formation water is being recovered. Catch sample in T-kit. Go to Step 54.

HYDROCARBON TEST

H-44. If hydrocarbons are produced, kill well, release packer and condition mud.

H-45. Perforate the interval 10,510 to 10,530 ft RKB to add to the previous perforations. Run wireline junk basket to top of perforations.

H-46. Run in hole with test string. Displace test string with drill water with first 20 bbls treated with 1 gal N-5 clay stabilizer.

H-47. Flow well to burner to clean-up then switch to separator and flow well eight hours at maximum stabilized rate. Catch oil and gas samples in one Phillips F-kit. Catch atmospheric pressure oil sample in metal gerry can.

H-48. Shut-in Period 2: Twelve hours.

H-49. Test lines to 8500 psig. Stimulate according to HOWCO recommendation. Three hour shut-in for acid contact.

H-50. Flow Period 3: Clean-up to burner and then switch to separator for eight hour stabilized flow at maximum rates. Catch Corelab companion kit oil and gas samples.

H-51. Shut-in Period 3: Twelve hours.

H-52. Kill well, release packer and condition mud. Set retainer at 10,450 ft using drill pipe setting tool. Break down formation and mix 200 sxs neat Class E cement to a slurry weight of 16.4 lb/gal. Squeeze zone to a maximum holding pressure of 3000 psi.

H-53. Proceed to abandon well after approval from the drilling superintendent.

54. Kill well, release packer and condition mud. Set retainer at 10,540 ft using drill pipe setting tool. Break down formation and mix 200 sxs neat class E cement to a slurry weight of 16.4 lb/gal. Squeeze sone to a maximum holding pressure of 3000 psi.

55. Perforate the interval 10,510 to 10,530 ft RKB for fifth test. Run wireline junk basket to top of perforations.

56. Run in hole with test string. Displace test string with drill water with first 20 bbls treated with 1 gal N-5 clay stabilizer.

57. Flow Period 1: Open well to tank on pipe rack for 15 min.

58. Shut-in Period 1: Two hours.

59. Flow Period 2: Flow well to burner for clean-up. If zone is dead or produces water, engineer on rig will provide procedure. If well produces hydrocarbons, flow eight hours at maximum stabilized rate. Catch F-kit and gerry can oil and gas samples.

60. Shut-in Period 2: Twelve hours.

61. Stimulate well according to HOWCO recommendation. Test all lines to 8500 psig before acidizing. Leave well shut-in three hours for acid contact.

62. Flow Period 3: Flow well to burner for clean-up. Switch well to separator and flow eight hours at staple rate. Catch Corelab companion kit oil and gas samples.

63. Shut-in Period 3: Twelve hours.

64. Kill well, release packer and condition mud.

65. Set retainer at 10,450 ft using drill pipe setting tool. Break down formation and mix 200 sxs neat Class E cement to a slurry weight of 16.4 lb/gal. Squeeze zone to a maximum holding pressure of 3000 psi.

66. Proceed to abandon well after approval from the Drilling Superintendent.

COVERED BY
THIS REPORT
SHETLANDS
BERGEN
HORDALAND
N. SCOTTISH
CROMARTY
MORAY
FISHER
FORTH
N. BRITISH
TYNE
DOWSING
SEA SEARCH
FRISIAN
ENGLISH
RIJNMUND
61°
60°
59°
58°
57°
56°
55°
54°
53°
52°
51°
04°
03°
02°
01°
00°
01°
02°
03°
04°
05°
06°
07°
08°
09°
Location
Main Chains
Hi-Fix Chains
Sea Search 1
U.K.
Dutch
Norwegian
Sub-Division Of Blocks
DECCA SURVEY LTD.,
Main Cross Road,
Gt. Yarmouth,
Norfolk.

FSL/eb-475-73 November 6, 1973

Statens Oljedirektorat
Lagårdsveien 60
4000 Stavanger

Dear Sirs,

Re: [illegible] Well No. 2/7-10

Phillips Petroleum Company Norway will re-enter the Ekofisk Development Well 2/7-10 approximately 40 days following approval, after which work of interest:

1. Each productive interval will be squeeze cemented and tested to maximum pressure of [illegible] psi.

2. [illegible] will be [illegible] with cement [illegible] in the 7-inch [illegible] 9⅝-inch casing.

3. [illegible] will be [illegible] just [illegible] with [illegible] of cement on top.

4. All casing strings will be cut off below the wellhead and the upper [illegible] will be retrieved.

5. A cement plug will be placed [illegible] feet below the sea floor level to [illegible] Zone.

6. An inspection dive will be made to insure that the sea floor has been returned to its original condition.

Please give us your approval of this program.

Yours very truly,

E.K. Thrall, Manager
Ekofisk Operations.

BZP/eb-452-73 October 30, 1973

Statens Oljedirektorat
Lagårdsveien 30
4000 STAVANGER

Dear Sirs,

RE: WELL NO. 2/7-10, EDDA FIELD, NORWEGIAN NORTH SEA, BLOCK SAFETY REPORT

Please find attached to this letter one copy of the Decca Survey Report on the final location of Well No. 2/7-10, Edda Field, Norwegian Sea. Final Geographical coordinates of the well are:

Latitude: 56° 29' 33.587" N

Longitude: 03° 05' 05.774" E

Yours very truly,

E.H. Thrall, Manager
Ekofisk Operations

Attachment

VDS/sjm-404-73 October 2, 1973

Maritime Directorate,
Postboks 8123,
Oslo-dep,
OSLO. 1

Gentlemen,

Phillips Petroleum Company Norway requests your approval to bring the Zapata North Sea Inc.jack-up drilling barge NORDIC into the Norwegian Sector of the North Sea for the purpose of drilling an exploratory well in Block 2/7.

The well number is 2/7-10 and the location is 56° 28' 33.6"Nand 03° 05' 05.8"E. The NORDIC is currently located in the Danish Sector of the North Sea.

Very truly yours,

P.W. Reynolds,Manager,
Drilling and Production.

VDS/eb-403-73 October 2, 1973

Statens Oljedirektorat
Lagårdsveien 60
4000 STAVANGER

Attention: Petroleum Section

Dear Sirs:

RE: ANNOUNCEMENT OF DRILLING LOCATION PHILLIPS 2/7-10
EXPLORATORY TEST, DRILLING VESSEL "NORDIC".

This is to advise that Phillips Petroleum Company, Norway anticipates to have the drilling vessel "Nordic" on location on or about October 5, 1973. The location of well 2/7-10 is:

Geographical: 56° 28' 33,6" N
03° 05' 05,6" E

Particulars of the drilling program for this subject well are being forwarded for your approval.

Yours very truly

P.W. Reynolds

Attached copy list.

cc T J Jobin, London
Direktoratet for arbeidstilsynet
Elektrisitetstilsynet
Fiskeridepartementet
Fiskeridirektoratet
Forsvarsdepartementet
Fyrdirektoratet
Helsedirektoratet
Kommunal- og Arbeidsdepartementet
Luftfartsdirektoratet
Politimesteren i Stavanger
Etterretninger for sjøfarende
Fiskermeldinger
Sjøfartsdirektoratet
Sjøstridskreftene i Sør-Norge
Skattedirektøren
Sprengstoffinspeksjonen
Statens Stralehygieniske Institutt
Statens Utlendingskontor
Teledirektoratet
Tolldirektoratet
Sola Air Rescue Center

VDS/eb-392-73 September 25, 1973

Statens Oljedirektorat
Lagårdsveien 80
4000 STAVANGER

Dear Sirs,

RE: PHILLIPS 2/7-10 TEST, PRODUCTION LICENSE 018.

In accordance with the Royal Decree of April 9, 1965, Phillips Petroleum Company Norway, as operator for itself; Norske Fina A/S; Norske AGIP A/S and Petronord A/S, requests Oljedirektoratet approval to drill the 2/7-10 well as outlined below:

a. Geographical co-ordinates : 56° 28'33,6" N
03° 05'05,8" E

b. Drilling vessel : Zapata Nordic

Construction and equipment : Previously submitted by Zapata North Sea, Inc. and A/S Norske Shell.

Drilling contractor : Zapata North Sea Inc.

c. Estimated Total Depth : 3354M RKB

d. Expected Geological Strata : Miocene
Eocene
Palcocene
Danian
(Anticipated top at 3110 m RKB).

e. Water Depth : 72 m mean sea level.

f. Casing Program:

Diameter (inches)	Type	Weight	Depth	Volume of cement
30	1 inch wall	309 lb/ft	137 m RKB	To be driven into seabed.
20	J-55	133 lb/ft	488 m	4400 ft^3
13 3/8	J-55	68 lb/ft	1220 m	3800 ft^3
9 5/8	N-80	47 lb/ft	2439 m	2800 ft^3
7	N-80	29 lb/ft	At total depth if required	

g. Blowout Preventers:

1.	Hydril	:	One - 20 inch 2000 Psi WP One - 13 5/8 inch type GK-5000 Psi WP and camloc connection.
2.	B.O.P.	:	One - Double Cameron type U 13 5/8 inch - 10,000 Psi WP with camloc connectors, two 4 1/16 inch 10,000 Psi WP side outlets, hydraulic locks. One - Single Cameron type U 13 5/8 inch - 10,000 Psi WP with camloc connectors, two 4 1/16 inch 10,000 Psi WP side outlets, hydraulic locks.
3.	Accumulator	:	Koomey 160 gallon capacity with two remote control stations.
4.	Choke and skill manifold	:	Previously submitted by Zapata North Sea, Inc. and A/S Norske Shell.

h. Drilling Fluid Program:

1. 30 inch casing to be driven to 137 m RKB

2. 26 inch hole to 487 m RKB

   Drilling with seawater and running casing with:

Attapulgite Clay	- Flosal Mud
Weight	- 8.8 to 11 lb/gal
Viscosity	- Thick
Fluid loss -	- No control

3. 17½ inch hole to 1220 m RKB

   Drilling and Running Casing

Shale-Trol	
Weight	- 11.5 lb/gal
Viscosity	- 38 to 50 SEC/qt
Fluid loss	- 10 to 15 cc/30 min

4. 12 1/4 inch hole to 2439 m RKB

Shale-Trol	
Weight	- 11.5 to 14.0 lb/gal
Viscosity	- 40 to 50 SEC/qt
Fluid loss	- 4 to 8 cc/30 min

5. 8½ inch hole to 3354 m RKB

Sea water	- Lignosulfonate

Weight - 14,3 lb/gal
Viscosity - 40 to 50 SEC/qt
Fluid losss- Below 10 cc/30 min

i. Logging Program:

Contractor: Schlumberger

Run	Hole size	Internal RKB	Tools
1	20 inch cased 17½ inch	Sea floor to 488m 488 to 1220 m	GR IES, BHCS-GR-CAL
2	12 1/4 inch	1220 to 2439m	IES, BHCS-GR-CAL, FDC-GR, SNP, MML
3	8½ inch	2439 to total depth	IES, BHCS-GR-CAL, SNP, FDC-GR, MML, HDT, velocity survey

j. Mud Logging Program:

Contractor: Gas Analytic Service

A mud logging program with continuous gas detection on the mud stream and continuous chromatographic analysis for relative hydrocarbon percentage will be in operation from the 20 inch casing point to total depth.

k. Sample Program:

Below the 20 inch casing seat, formation samples will be caught at 30-foot drilling intervals. From 2439 m to total depth samples will be caught at 10-foot intervals. Through zones of interest samples will be caught at 5-foot intervals.

l. Coring Program:

Conventional coring is not planned for this test. However, unexpected circumstances may alter this plan. Side wall cores will be considered in zones of interest that were not cored conventionally.

m. Testing Program:

All significant hydrocarbon shows will be tested through cased hole.

n. Safety Program:

Previously submitted by Zapata North Sea, Inc. and A/S Norske Shell.

o. Seismic Profile Line:

Attached is a structural map contoured on the top of the Danian and a seismic profile line through the well location.

Yours very truly,

E.W. Thrall

Attachment

cc: T.J. Jobin, London

INDIVIDUAL WELL COMPLETION RECORD

Lease 247 North Sea Norway — Well No. 10 — AFE P- 5656

Line measurements of wells

Measurements taken from

ELEVATIONS:

Ground ____ Ft.
Derrick Floor ____ Ft.
R K B to Seabed ____ Ft.
Top Csg. Flg. ____ Ft.
Or Bench Mark ____ Ft.

COST DATA

Est. Total Mud
TOTAL PAID DRILLING CONTRACTOR:
Footage $
Day Work $

CASING						CEMENT					
Date	Size	Weight	Condition & Grade	Amount Run	Where set	No. Sacks	Kind	Depth of plug	Top in Annulus	Amount Pulled	Data pulled
1973											
Oct. 14	30"	309	1	12 jts	924	1200	Class B Neat				
Oct. 12	20"	133	J-55	40 jts	1619	1200	Class B w/8% gel				
						500	Class B neat				
Oct. 19	13 3/8	68	J-55	105	3998	200	Class B Neat				
						2800	Class B Neat				
Oct. 26	9 5/8	47	J-55	206	8025	200	Class B Neat				
						2200	Class B Neat				
Nov. 5	7"	29	J-55	91	11050	100	Class E Neat				
						750	Class E Neat				

PERFORATING AND SQUEEZE RECORD

ease 2/7 North Sea Norway — Well 10

Date	Size of Casing	Perforating To	Perforating From	No. of ft perforated	No. of Holes	Size of Holes	Gun Diameter	Gun Type	Perforating Company
1973									
Nov. 8	7"	10900	10870	30	4/ft	1/4"	4½-in	Casing	Schlumberger
Nov. 12	7"	10830	10790	40	4/ft	1/4"	4½-in	Casing	Schlumberger
Nov. 22	7"	10700	10650	50	4/ft	1/4"	4½-in	Casing	Schlumberger
Nov.25	7"	10580	10560	20	4/ft	1/4"	4½-in	Casing	Schlumberger
Nov. 29	7"	10620	10600	20	4/ft	1/4"	4½-in	Casing	Schlumberger
		10530	10510	20	4/ft	1/4"	4½-in	Casing	Schlumberger

SQUEEZE NO. 1

Date: Nov. 11, 1973
Reason: Squeeze test interval
Retainer: HOWCO EZ, 10850'
Cement: 250 sx Class E

SQUEEZE NO. 2

Date: Nov. 22, 1973
Reason: Squeeze test interval
Retainer: HOWCO EZ, 10710'
Cement: 300 sx Class E

SQUEEZE NO. 3

Date: Nov. 25, 1973
Reason: Squeeze test interval
Retainer: HOWCO EZ, 10632
Cement: 108 sx Class E

SQUEEZE NO. 4

Date: Dec. 1, 1973
Reason:
Retainer: HOWCO EZ, 10450'
Cement: 100 sx Class E

SQUEEZE NO. 5

Date: Dec. 1 1973
Reason: Cement plug from 7750' to 7450'
Retainer: HOWCO Ez, 7759'
Cement: 90 sx Class E

SQUEEZE NO. 6

Date: Dec. 2, 1973
Reason: Cement plug from 3950' to 3350'
Retainer: HOWCO EZ, 3959
Cement: 200 sx Class E

EXPLORATION RECORD

Lease _____ Well 2/7-10

Formation Name	RKB Top	Subsea Top	Remarks
Paleocene	9946 9825 121	- 9825	
Danian Limestone	10476	-10385	
Upper Cretaceous	10770	-10649	

Form 693 3-53

WELL NO. 2/7-10

Name of Log	Scale	Run No.	Interval From	Interval To
Compensated Formation Density	1/200-1/500	1	9900	11057
Proximity Log-Microlog	1/200-1/500	1	9900	11053
Sidewall Neutron Porosity Log	1/200-1/500	1	9900	11057
Interpretation	1/200-1/500	Field Print	10412	11050
Borehole Comp. Sonic Log	1/200-1/500	1	1619	4022
Borehole Comp. Sonic Log	1/200-1/500	2	3998	8032
Borehole Comp. Sonic Log	1/200-1/500	3	8012	11057
Induction Electrical Log	1/200-1/500	1	1619	4027
Induction Electrical Log	1/200-1/500	2	3998	8033
Induction Electrical Log	1/200-1/500	3	8012	11057
Continuous Dipmeter	1/200-1/500	1	9468	11052
Cement Bond Log	1/200-1/500	1	7582	10957
Cement Bond Log	1/200-1/500	2	10400	10700

01

2/7-10

SAMPLE RECORD

	Set No.						Interval		Type Sample		Type Box	
	1	2	3	4	5	6	From	To	Dry	Wet	Cardbd.	Metal
1	x	x	x	x	x	x	4030	4780	x		x	
2	x	x	x	x	x	x	4780	5410	x		x	
3	x	x	x	x	x	x	5410	6280	x		x	
4	x	x	x	x	x	x	6280	8030	x		x	
5	x	x	x	x	x	x	8030	9300	x		x	
6	x	x	x	x	x	x	9300	10500	x		x	
7	x	x	x	x	x	x	10500	11060	x		x	

At the end of the well, on this sheet, send a record of the Dry nd Wet samples ~~sent~~ off to:
Mr. F.A. Parada,
Phillips Petroleum Co.,
anager Office.

Date: [illegible] 11.1973

Signed: [illegible]

Logging Company Representative.

2/7-10

SAMPLE RECORD

	Set No.						Interval		Type Sample		Type Box	
	1	2	3	4	5	6	From	To	Dry	Wet	Cardbd.	Metal
1	x						4030	4480		x	big plastic sack	
2	x						4480	4990		x	"	
3	x						4990	5560		x	"	
4	x						5560	5950		x	x	
5	x						5950	6400		x	"	
6	x						6400	6760		x	"	
7	x						6760	7180		x	"	
8	x						7180	7660		x	"	
9	x						7660	8100		x	"	
10	x						8100	8400		x	"	
11	x						8400	8720		x	"	
12	x						8720	9060		x	"	
13	x						9060	9340		x	"	
14	x						9340	9620		x	"	
15	x						9620	9950		x	"	
16	x						9950	10200		x	"	
17	x						10200	10400		x	"	
18	x						10400	10560		x	"	
19	x						10560	10700		x	"	
20	x						10700	10940		x	"	
21	x						10940	11060		x	2	

At the end of the well, on this sheet, send a record of the Dry and Wet samples ~~sent~~ off to:
Mr. F.A. Parada,
Phillips Petroleum Co.,
Manager Office.

Date: 6.11.73.

Signed: [signature]

Logging Company Representative.

BIT RECORD

DISTR [redacted] R 7 2 3 Ve 1 [redacted] RIG 19 COU... [redacted] STATE Norway

OIL COMPANY Phillips Petroleum Co Norway LEASE/WELL NO 2/7-10 FLD./TOWN EDDA

TOOL PUSHER L.J Chrisson (PPCO) DR DR DR SEC./T'SHIP/RANGE

RIG MAKE & MODEL RECORD NO SHEET NO TOOL JOINTS MAKE 4½ IF SIZE/TYPE 5" Range 3

NO 1 PUMP MAKE & MODEL Cont Emsco D 1650 - 6½" x 18" - 3½" Rod SPUD DATE Oct. 7-73 UNDER SURF DRILL COLLARS NO OD ID LENGTH

NO 2 PUMP MAKE & MODEL " " " INTER T D DRILL COLLARS NO OD I.D LENGTH

RUN NO	SIZE MAKE	TYPE	JETS 32nds 1	2	3	BIT SER NO	DEPTH OUT 358'	FOOT AGE	HOURS	ACCUM HOURS	WT 1000 LB	RPM	VERT DEV	PUMP PRESS	NO 1 SPM	NO 1 LIN	NO 2 SPM	NO 2 LIN.	MUD WT	MUD VIS	DULL COND T	B	G	REMARKS (FAILURE MUD ETC)
1	SMITH 26"	OS	18	22	C	FH136	458	100	6	6	4/5	100	0°	500	40	7	40	7	8.8	7.5	1	1	I	Drill w/ sea H2O Displace w/ mud
RR	Smith 26"	DS	20	20		FJ126	1645	1187	36	42	12/15	175	0°	1600	65	7	64	7						Oct 11 73
2	17½	DS	24	24	20	NM492	1625	2336	18½	90½	12/22	150	¾°	2100	70	7	70	7	11.5	40				Oct. 17-73
3A	HTC 12¼	OSC3	15	18	16	48614	5951	1950	31½	122	40/45	170	0°	3300	50	7	50	7	13.7	51	5	7	I	B.T. Oct 22 73
4	HTC 12¼	OSC3	15	16	16	48617	7670	1669	36½	148½	44/45	160	½°	3500	42	7	42	7	13 8	49	7	8	I	B.T Oct. 23.73
5	HTC 12¼	OSC3	18	16	16	48016	8034	414	7	155½	36	170	½°	3500	42	7	42	7	13 9	51	5	4	IN	BT Oct. 25.73
6	SEC 8½	M44	13	13	10	356703	8050	16	½	156	20	90	-	3000	60	6½					1	1	IN	Dly Hole Test Shoe
7	SEC 8½	S44	13	10	10	368426	9315	1165	15½	171½	39/40	160	1½°	3500	46	6½			14.3	51	4	6	I	Oct. 28
RR	8½	M44	13	10	10	350763	10106	891	31	192½	30/45	134/170	-	3700	46	6½			14.3	48				Oct. 29
8	8½	M44N	10	10	10	388505	10493	387	15½	208	30/45	124/140	-	3500	46	6½			14.3	49	3	6	IN	Oct. 30
9	8½	M44L	10	10	10	387681	10722	229	13	221	45	84/90		2300	31	6½			14.3	57	6	8	IN	Oct. 31
10	8½	M44L	10	10	10	351222	10945	223	19½	240½	45	80		2300	31	6½			14.4	55	6	5	IN	Nov 1
11 (RR)	8½	J-33	12	12	12	N-477	11058'	113	5½	246	45	50		1400	31	6½			14.5	56	1	2	IN	Nov 2
12	6"	M44N	6	6	6	387015																		Dly bottle only

REED REPRESENTATIVE PHONE

GW MURPHY INDUSTRIES

Reed Drilling Tools Division

PO Box 2119 Houston Texas 77001

F-403

HOLE DEVIATION 2/7-10

Date	Depth ft	Reading degrees
October 7, 1973	448	0
October 8, 1973	1140	1
October 10, 1973	1635	0
October 17, 1973	4021	3/4
October 22, 1973	5951	0
October 23, 1973	7610	½
October 24, 1973	8024	½
October 28, 1973	9200	1 1/4

GEOLOGIC SUMMARY

2/7-10

The principal zone of interest on this well is the Danian Limestone, which produces 8 miles to the north-east at Ekofisk field, and which holds commercial quantities of oil and gas at the 2/7-4 well on the Edda structure just over a mile to the south-east. The Upper Cretaceous is a secondary objective and could contain hydrocarbons if porosity is present.

The Danian was expected to be 300 ft. thick of which 294 ft. was found, but with only 20 ft. of gross pay, which, after acidisation, yielded nothing commercial, whereas the equivalent interval in the 2/7-4 well produced commercial oil and gas on the lowest of three drill stem tests.

The Upper Cretaceous, however, was found to have 100 ft. of potential pay which correlates well with the 2/7-4 interval, and flowed commercial amounts of oil and gas, after acid, on two drill stem tests. The upper one of these compared well with the equivalent horizon in the 2/7-4, although being less productive.

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 81

1. Date Dec. 24, '73 Present operation: Waiting on weather Time 0600

2. Well 2/7 - 10 3. P T D. 4. O T D 5. Progress

6. Bit no. Size Jets Type: In: Out Hr Ftg: Cond.

Bit no: Size: Jets Type. In. Out. Hr. Ftg. Cond

Bit no: Size: Jets: Type: In: Out. Hr: Ftg. Cond:

7. B H Assembly: Well 3 2

8. Bit wt Rpm: Torque Pump psi.

9. Pump nr Liner size. Stroke Gpm: Av

10. H H. Mw. Vis: Wl. Fc. pH: Pv. Yp Oil

Sand Solids: Ca: Alk. Circulation cycle

11. Mud cost daily. Cumulative Rm = at °F

12. Rot hrs Days since spud 79 Vert dev.

13. Bumper Subs Size. No: Hrs Run: Kick Control. PSI at GPM

14. Report detail. (Past 24 hrs)

24 Waiting on weather.

BOATS: The Torgny is the standby boat, Smit Interprise, standing by, Baltic, standing by, Sula Salvator moved away at 1500 hrs. West Eagle ar. 0800 & dep. 0950, Chippty ar. 0815 & dept. 0910

D: 2800 P: 930 D: 890 JP 1200 CEMENT 0 BARITE 1400

15. Personnel on rig Contractor 31 Phillips 1 Other. 6 Total 38

16. Weather Wind SE 12 - 14 knots Waves 6 ft. Visibility Good.

17. Vessel heave Roll Pitch

18. M/v Rent Share

19. Well Cost

BEALL

Well-to originals

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 80

1. Date Dec 23 1973 Present operation: WOW to move Time 0600

2. Well 2/7-10 3. PTD 4. OTD 5. Progress

6. Bit no Size: Jets Type. In: Out Hr. Ftg: Cond.

Bit no: Size. Jets. Type In: Out Hr. Ftg: Cond:

Bit no Size: Jets. Type. In. Out. Hr: Ftg: Cond:

7. B. H Assembly: Well 3 2.

8. Bit wt. Rpm. Torque. Pump psi.

9. Pump nr Liner size: Stroke. Gpm Av.

Mw. Vis: Wl: Fc. pH. Pv. Yp: Oil

Cl: Sand Solids Ca. Alk: Circulation cycle

11. Mud cost daily Cumulative. Rm = at °F

12. Rot hrs Days since spud 78 Vert dev:

13. Bumper Subs. Size: No: Hrs Run Kick Control. PSI at GPM

14. Report detail (Past 24 hrs)

24 WOW

DW 2800 PW 615 RF 900 JF 1200 gal 0 Cmt Barite 1400

15. Personnel on rig Contractor. 31 Phillips. 1 Other. 8 (40

16. Weather Wind SSE 17-22 Waves 6-9 S Visibility Good

17. Vessel heave Roll: Pitch

18. A/v Yoyy/Shyy Torgney- Standby Baltic tug Schmidt Enterprise Tug

Decca Scanner in area - Had not recieved morning report

2-71 Go dum

BEALL

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 79

1. Date Dec. 22, '73 Present operation Waiting on weather Time 0600

2. Well 2/7 - 10 3. PTD. 4. OTD 5. Progress

6. Bit no Size. Jets. Type. In: Out Hr: Ftg: Cond.

Bit no. Size. Jets Type In: Out. Hr. Ftg: Cond:

Bit no Size Jets Type: In: Out Hr: Ftg Cond.

7. B H Assembly Well 3 2

8. Bit wt Rpm. Torque. Pump psi.

9. Pump nr Liner size Stroke Gpm Av.

10. H H Mw: Vis Wl. Fc. pH. Pv. Yp. Gl

Cl Sand Solids: Ca Alk. Circulation cycle.

11. Mud cost daily. Cumulative Rm = at °F

12. Rot hrs Days since spud 77 Vert dev.

13. Bumper Subs Size. No: Hrs Run Kick Control PSI at GPM

14. Report detail. (Past 24 hrs)

24 Waiting on weather.

Smit Enterprise & the Baltic standing by. The Torgny is the standby boat. The Decca Skanner is at the Explorer & The Gallaway Blazer is at the Blue Water III.

DY 2880 PW 612 DF 931 JF 1200 CRUDE nil BARITE 2450

15. Personnel on rig Contractor 31 Phillips 1 Other 8 Total 40

16. Weather Wind SSE 25 - 30 knots Waves 10 - 15 ft. Visibility 2 - 4 miles

17. Vessel heave. Roll Pitch

18. M/v Kent Shore

BEALL

12-71 Gardner

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 78

Date Dec. 21; '73 Present operation: Waiting on weather. Time 0600

2/7 - 10 3. PTD 4. OTD 5. Progress

Bit no: Size Jets: Type In: Out: Hr. Ftg: Cond

Bit no: Size Jets: Type In: Out: Hr. Ftg: Cond:

Bit no: Size Jets: Type In: Out: Hr: Ftg: Cond.

Bott. Assembly: Well 3 2.

Surf. Rpm Torque. Pump psi:

Pump nr Liner size: Stroke Gpm: Av.

Mw. Vis. Wl: Fc: pH. Pv: Yp Oil

Sand: Solids: Ca: Alk: Circulation cycle

Cost daily. Cumulative Rm = at °F

hrs Days since spud 76 Vert dev:

Number Subs Size. No: Hrs Run. Kick Control: PSI at GPM

Report detail. (Past 24 hrs)

24 Waiting on weather.

NOTE: A Decca boat is at the Ocean Viking. When seas calm, will survey the "Explorer" location then the "Nordic".

BOATS: The Torgany is the standby boat. The Smit Interprise is standing by. The Arsterturn arrived at 0800 hrs. and departed at 0820 for Ekofisk. The Sula Salvator is in the area.

DW 1900 PW 700 DF 959 JF 1200 - Cement, nil - Barite 2450 sx.

Personnel on rig: Contractor: 31 Phillips: 1 Other: 8 Total 40

Weather: Wind SW 22 - 27 knots Wave: SW 8 - 12 ft. Visibility 6 - 8 miles

Vessel Heave: Roll: Pitch:

Sea State:

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 77

Dec. 20, '75 Present operation . Waiting on weather. Time 0600

2/7 - 10 3. PTD 4. OTD 5 Progress

Bit no: Size: Jets: Type: In: Out. Hr. Ftg: Cond.

Bit Size Jets: Type: In: Out. Hr: Ftg. Cond

Bit no Size Jets Type In: Out. Hr: Ftg: Cond.

BHA: Assembly: Well 3 2

Rpm: Torque. Pump psi

Liner size: Stroke Gpm Av:

Mw. Vis: W/L Fc pH Pv: Yp: Oil

Sand. Solids: Ca: Alk: Circulation cycle.

Accum cost daily: Cumulative: Rm = at °F

Rot hrs Days since spud 75 Vert dev.

Drilling Subs: Size: No: Hrs Run Kick Control PSI at GPM

Report detail. (Past 24 hrs)

24 Waiting on weather

BOATS: Baltic departed 1900 hrs

Smit Enterprise arrived 0900 hrs & is standing by.

Holstentor arrived 1030 hrs & departed 1510 hrs. for "C"

DW 1900 PW 700 DP 959 JP 1200 Cement nil - Barite 2450

Personnel on rig: Contractor 38 Phillips -0- Other -0- Total 38

Weather: Wind s 20 - 37 knots Wave SSE 6 ft. Visibility 5 - 8 miles

Vessel heave: Roll: Pitch:

Boat Store:

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 76

Date Dec. 19, '73 . Present operation. Waiting on weather . Time 0300

2/7 - 10 . 3. PTD 4. OTD 5. Progress

	Size	Jets	Type	In:	Out.	Hr.	Ftg	Cond.
	Size	Jets.	Type:	In:	Out.	Hr:	Ftg.	Cond:
	Size.	Jets	Type	In:	Out.	Hr	Ftg:	Cond.

Assembly . . . . . Well 3 2

. . . . Rpm . . . Torque Pump psi: . . .

. . Liner size: . . . . Stroke . . . Gpm . Av: . . . .

. Mw: . Vis: . . Wl: . . Fc: . pH: Pv: Yp: . Oil.

. . Sand: . . . . Solids: . . . Ca: . . . . Alk: . . Circulation cycle: . .

Cost daily. . . . . Cumulative: . . . . Rm = . . . at . . . . °F

. . . . . Days since spud . . . 74 . . Vert dev: . . . . . .

Number Subs Size: . . . . Nor . . . . . Hrs Run . Kick Control . . . PSI at . . . GPM

Report detail. (Past 24 hrs)

24 Waiting on weather.

DW 1900 PW 738 DF 742 JF 155 Cement nil - Barite 1400 sx

BOATS: Borgany, Standby - Baltic, Standby.

Sula Salvator arrived 0140 offloaded 75 tons potable water & departed at 0330 hrs. for the "B" Platform.

Holstentor Arrived at 1100hrs., offloaded food container & departed at 1110 hrs. for the Gulftide.

Personnel on rig. Contractor 38 . . . Phillips -0- . . Other -0- Total 38

Weather SW 30 - 35 knots Wave SW 10 - 12 ft. Visibility 12 miles.

Vessel Motion . . . Roll. . Pitch

Mud Keep Shore

PHILLIPS PETROLEUM COMPANY - NORWAY

Daily drilling report No. 75

Dec. 18, '73 Present operation. Waiting on weather. Time 0600

2/7 - 10 3. PTD 4. OTD 5. Progress

	Size	Jets.	Type.	In:	Out.	Hr:	Ftg:	Cond
	Size	Jets:	Type	In:	Out.	Hr.	Ftg	Cond.
	Size	Jets:	Type:	In:	Out	Hr:	Ftg:	Cond.

Assembly. Well 3 2

Rpm: Torque Pump psi:

Liner size. Stroke. Gpm Av:

Mw Vis. Wl: Fc. pH. Pv: Yp. Oil.

Sand Solids Ca: Alk Circulation cycle

Cost daily. Cumulative Rm = at °F

Bot. hrs. Days since spud 73 Vert dev:

Drlg. Subs Size. No: Hrs Run. Kick Control PSI at GPM

Report detail. (Past 24 hrs)

24 Waiting on weather.

Borgany the stand by boat.

Baltic is standing by.

DP 1900 PM 576 DP 755 JP 320 Cement -0- Barite 1400

Personnel on rig Contractor 31 Phillips 1 Other 8 Total 40

Weather NW 30 - 40 knots Waves 10 - 14 ft. Visibility 6 - 8 miles

Last Survey Roll. Pitch

Next Survey

NORDIC

PHILLIPS PETROLEUM COMPANY - NORWAY

Daily drilling report No. 74

Date Dec. 17, '73 Present operation: Waiting on weather Time 0600

2/7 - 10 3. P.T.D. 4. O.T.D. 5. Progress

Bit no: Size: Jets. Type. In: Out. Hr: Ftg: Cond

Bit no. Size. Jets: Type In: Out. Hr: Ftg: Cond:

Bit no: Size: Jets. Type: In: Out. Hr: Ftg: Cond.

B.H.A. Assembly Well 3 2.

Bit wt. Rpm: Torque: Pump psi.

Pump nr Liner size: Stroke. Gpm: Av:

Mud: Mw: Vis: Wl. Fc. pH: Pv: Yp: Oil.

Cl: Sand: Solids: Ca: Alk: Circulation cycle.

Mud cost daily Cumulative: Rm = at °F

Rot. hrs Days since spud. 72 Vert dev:

Bumper Subs: Size: No: Hrs Run Kick Control PSI at GPM

Report detail (Past 24 hrs)

24 Waiting on weather.

BOATS: Baltic & Torqnay standing by.

DW 1900 PW 648 DF 767 JF 320 gals. Cement-0- Barite 1400 sx.

Personnel on rig: Contractor: 31 Philips 1 Other 8 Total 40

Weather: Wind NNW 50 - 60 knots Waves 22 - 25 max. 42 Visibility 3 miles

Vessel heave Roll. Pitch

Ashore: Kent Shore

CHASSON

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 73

1. Date 16 Dec 1973 Present operation WOW Time

2. Well 3. P.T.D. 4. O.T.D. 5. Progress

Bit no.	Size	Jets	Type	In.	Out	Hr.	Ftg	Cond.
Bit no	Size	Jets:	Type:	In	Out	Hr.	Ftg.	Cond
Bit no	Size	Jets.	Type	In	Out	Hr.	Ftg	Cond

7. BHA Assembly Well 3 2

8. Bit wt Rpm. Torque. Pump psi

9. Pump nr. Liner size. Stroke Gpm Av:

10. Mw. Vis Wl Fc. pH. Pv. Yp. Gels

Sand Solids. Ca Alk Circulation cycle.

12. Mud cost daily. Cumulative. Rm = at °F

13. Rot hrs Days since spud 71 Vert dev

14. Stamper Subs. Size: No: Hrs Run. Kick Control: PSI at GPM

15. Report detail (Past 24 hrs)

24 hrs Waiting on Weather to Move Rig.

DW 1900 PW 666 DF 866 JF 500 gal

16. Personnel on rig Contractor 31 Phillips 1 Other 8 (40

17. Weather Wind WNW 15-20 kn Waves NW 10-15 Visibility 10 miles

18. Swell Heave Roll Pitch

19. S/V Torgney standby

Baltic Arr from Viking 1520 hrs
Sula Salvotor Arr 0130 Dept A 0230
Stella Salvator Dept Stav. - engine trouble,
Location of Decca Scanner Unknown

20. Foreman Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 72 Chiasson

1. Date 15 Dec 73 Present operation WOW Time 0600
2. Well 2/7-10 3. P T D. 0 4. O T D 5. Progress

6.	Bit no	Size	Jets	Type.	In:	Out	Hr	Ftg	Cond
	Bit no	Size	Jets	Type:	In.	Out.	Hr:	Ftg	Cond.
	Bit no	Size	Jets	Type	In:	Out.	Hr	Ftg	Cond.

7. B. H Assembly Well 3 2

8. Bit wt Rpm Torque Pump psi

9. Pump nr Liner size. Stroke Gpm Av:

10. Mw. Vis Wl. Fc pH Pv. Yp. Oil

Cl. Sand Solids. Ca. Alk Circulation cycle

11. Mud cost daily: Cumulative Rm = at °F

12. Tot hrs Days since spud Vert dev.

13. Bumper Subs Size No: Hrs Run. Kick Control PSI at GPM

14. Report detail. (Post 24 hrs)

24 hrs. WOW

Decca Scanner:
Tug Norman- unable to contact by radio.
Torgny standing by.
Stella Salvator, departed for Stavanger for repairs 1640 hrs.
Baltic with Ocean Viking.

DW 2023 PW 306 DF 815 JF 850 cement same, Barite same.

15. Personnel on rig Contractor. 32 Phillips 1 Other 8 =41

16. Weather Wind NNE 30-40 Waves. 20-25' Visibility. GOOD

17. Vessel heave. Roll. Pitch

18. A/v Kent Shore

NORDIC

PHILLIPS PETROLEUM COMPANY - NORWAY

Daily drilling report No. 71

Date Dec. 14,: ' 73 Present operation. Waiting on weather. Time 0600

2/7 - 10 3. PTD 4. OTD 5. Progress

	Size	Jets.	Type	In:	Out:	Hr:	Ftg:	Cond.
Bit no.								
Bit no.	Size.	Jets:	Type	In:	Out	Hr:	Ftg:	Cond.
Bit no.	Size.	Jets.	Type	In:	Out.	Hr:	Ftg	Cond:

B. H Assembly: Well 3 2

Bit wt ..... Rpm Torque. Pump psi:

Pump nr ..... Liner size. Stroke Gpm Av:

Mw: Vis: Wl: Fc: pH. Pv Yp: Oil.

Cl Sand Solids. Co: Alk Circulation cycle.

Mud cost daily. Cumulative: Rm = at °F

Rot hrs. Days since spud. 69 Vert dev.

Bottom Subs: Size: No: Hrs Run. Kick Control PSI at GPM

Report detail. (Past 24 hrs)

24 Waiting on weather.

BOATS: Stella Salvator - Standing by. - Torgany, Standing by.
The Norman & the Baltic released to Ocean Viking at
0850 hours yesterday.

DW 2097 PW 342 DF 834 JF 1000 - Cement (Same) Barite (Same)

Personnel on rig: Contractor: 32 Phillips 1 Other. 8 Total 41

Weather: Wind WNW 35-40 knots Gusts to 50 knots. Waves: 30 - 40 ft. Visibility 10 - 12 miles

Vessel: Heave Roll. Pitch

Mooring: Kent Shore

NORDIC

PHILLIPS PETROLEUM COMPANY - NORWAY

Daily drilling report No. 70

Date Dec. 13, '73 Present operation. Waiting on weather Time 0600

2/7 - 10 3. P.T.D 4. O.T.D 5. Progress

Bit no Size: Jets: Type: In: Out. Hr. Ftg: Cond

Bit no Size: Jets: Type: In: Out: Hr: Ftg: Cond:

Bit no Size Jets: Type In: Out. Hr: Ftg: Cond:

B.H. Assembly: Well 3 2.

Bit wt Rpm. Torque: Pump psi.

Pump nr Liner size: Stroke Gpm Av:

Mud Mw: Vis: Wl: Fc. pH. Pv: Yp: Oil.

Cl Sand: Solids: Ca: Alk: Circulation cycle.

Mud cost daily. Cumulative Rm = at °F

Rot hrs. Days since spud 68 Vert dev:

Bumper Subs: Size: No: Hrs Run. Kick Control: PSI at GPM

Report detail. (Past 24 hrs)

24 Waiting on weather to move.

BOATS: Stella Salvator, Standing by.

Baltic " "

Norman " "

The Torgany is the Standby boat.

Decca Skanner enroute to Aberdeen for supplies. Do not have ETA.

DW 2353 PW 432 DF 852 JF 1100 gals. - Cement, nil, Barite 1400 sx

Personnel on rig Contractor: 32 Phillips: 1 Other. 10 Total 43

Weather Wind: WNW 40-45 knots Waves: WNW 20 - 25 ft. Visibility 6 - 8 miles

Vessel heave Roll: Pitch

Mud Kent Shore

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 69

1. Date Dec. 12; '73 Present operation. Waiting on weather. Time 0600

2. Well 2/7 - 10 3. P T D 4. O.T D 5. Progress

6. Bit no: Size Jets Type. In Out Hr Ftg: Cond.

Bit no: Size. Jets. Type In Out Hr Ftg Cond

Bit no: Size Jets. Type In Out. Hr Ftg: Cond

7. B H Assembly. Well 3 2

8. Bit wt Rpm Torque: Pump psi

9. Pump nr Liner size Stroke Gpm Av:

10. Mw. Vis: Wl. Fc pH. Pv. Yp: Oil

Cl. Sand. Solids: Ca: Alk Circulation cycle:

11. Mud cost daily. Cumulative Rm = at °F

12. Rot hrs. Days since spud 67 Vert dev

13. Bumper Subs: Size: No: Hrs Run: Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

24 Waiting on weather to move.

BOATS: Stella Salvator - Standing by. - Baltic Standing by.

Norman Standing by Decca Skanner standing by

Torgany Ar. 0330, Dec. 12th. at the Viking.

DW 2390 Pot. W 486 DF 1870 JF 1100 gals. Cement -0- Barite 1400

15. Personnel on rig Contractor 32 Phillips 1 Other. 11 Total 44

16. Weather Wind WNW 25 - 30 knots Waves. 8 - 12 ft. Visibility 8 miles

17. Vessel heave. Roll: Pitch.

18. A/v Kent Shore

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 68

Date Dec. 11, '73 Present operation. WOW Time 0600

2. Well. 2/7 - 10 3. PTD. 4. OTD 5. Progress

6. Bit no	Size	Jets	Type	In	Out	Hr.	Ftg.	Cond.
Bit no.	Size	Jets.	Type.	In:	Out.	Hr.	Ftg.	Cond:
Bit no	Size	Jets.	Type.	In.	Out.	Hr.	Ftg.	Cond.

7. B. H Assembly. Well 3 2

8. Bit wt Rpm. Torque Pump psi.

9. Pump nr Liner size. Stroke Gpm Av.

10. Mw. Vis. Wl. Fc. pH. Pv. Yp. Oil

11. Sol. Sand. Solids. Ca: Alk Circulation cycle.

12. Mud cost daily Cumulative. Rm = at °F

13. Rot hrs. Days since spud 66 Vert dev:

14. Jumper Subs Size No. Hrs Run: Kick Control PSI at GPM

15. Report detail. (Past 24 hrs)

24 Waiting on weather.

BOATS: Stella Salvator - Standing by. Baltic - Standing by

Norman - Standing by.

Romi - Departed 1445, Dec. 10th for Stavanger

Sula Salvator - Departed 1630, 10th Dec. for Stav., ETA 0730

15. Personnel on rig Contractor. 32 Phillips 1 Other. 7 Total 40

16. Weather Wind WNW 18-20 knots Waves. WSW 10'- 15' Visibility: 8 miles

17. Vessel heave Roll Pitch

18. M/v Kent Shore

DW 2391 PW 540 DF 882 JF 1520 gals.

Cemwnt -0- Barite 1400 sx.

CHASSON

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 67

Dec. 10, '73 Present operation Waiting on weather Time 0600

Well 2/7 - 10 3 P.T.D. 4. O.T.D 5. Progress

Bit no	Size.	Jets.	Type	In:	Out.	Hr:	Ftg:	Cond.
Bit no	Size.	Jets	Type.	In:	Out	Hr.	Ftg:	Cond.
Bit no	Size	Jets	Type.	In:	Out.	Hr.	Ftg:	Cond.

B. H. Assembly. Well 3 2

wt Rpm Torque: Pump psi.

Pump nr Liner size. Stroke Gpm: Av.

Mud Mw: Vis: Wl: Fc pH. Pv. Yp Oil.

Sand Solids. Ca: Alk: Circulation cycle

Mud cost daily. Cumulative: Rm = at °F

Last hrs. Days since spud 65 Vert dev.

Jumper Subs Size. No: Hrs Run. Kick Control PSI at GPM

Report detail. (Past 24 hrs)

24 Waiting on weather.

BOATS:

Stella Salvator, Standing by - Sula Salvator, Standing by - Baltic standing by - Norman, arrived 2030 hrs. on the 9th, standing by. Decca Skanner, standing by at Viking Location.

Personnel on rig Contractor 35 Phillips 1 Other. 8 Total 44

Weather. Wind SW 35 knots Waves 12 - 15 Visibility 6 - 8 miles

XXXXXXXX Romi, Standby. Roll: Pitch:

A/v Next Store

DW 2381 PW 594 DF 907 JF 1604 - Cement -0- Barite 1400 sx

CHASSON

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 66

Date 9/12/73 Present operation. WOW to move rig . . . Time 0600

Well. 2/7-10 3. PTD Plugged 4. OTD . 5 Progress

Bit no. Size Jets . . Type: In . . Out Hr Ftg. . Cond.

Bit no. Size . . Jets: . Type . In: Out. Hr. . Ftg. . Cond.

Bit no Size: Jets. . Type In: . Out. Hr. . Ftg Cond.

B. H. Assembly. . . . . Well 3 2

. wt Rpm . . . Torque. . Pump psi

. mp nr Liner size . Stroke . . . Gpm . Av: . .

. Mw . Vis . Wl: . Fc pH Pv: Yp . Oil.

. . Sand. . . . Solids . . Ca: . . Alk: . . . . . Circulation cycle .

. ud cost daily. . . . . Cumulative . . Rm = . . . at . . °F

2. t hrs . . . Days since spud 64 . Vert dev. . . . . .

3. umper Subs Size No: Hrs Run Kick Control PSI at . GPM

4. eport detail. (Post 24 hrs) ~~24 hrs. WOW to move~~
Tugs standing by: Stella Salvatore,
Sula Satvatore
Baltic

Chaisson

5. Personnel on rig Contractor 35 Phillips 1 Other 8 =44

6. Weather Wind W 8-10 kts . Waves. 6-8' Visibility 8-10 miles

7. Vessel leave Roll: Pitch

8. A/v ~~Kristiansund~~ Romi standing by
Mærsk Shipper arr. 0640 dept 0745 hrs

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 65

Date Dec. 8, '73 . Present operation. WOW to Move. . Time 0600

Well 2/7 - 10 3. PTD 4. OTD 5. Progress

Bit no. Size Jets. . . Type. In: Out. Hr . Ftg· . . Cond

Bit no Size. Jets: . . Type In . Out Hr Ftg· Cond

Bit no Size. Jets . Type. . In: . . Out. Hr Ftg· Cond·

. B. H Assembly· . . . . . Well 3 2

. . wt . . . . . Rpm· . Torque Pump psi . . .

. . mp nr . . . Liner size. . Stroke. . . . Gpm . . Av: .

. . H Mw: . Vis . Wl: . . Fc: pH. Pv: Yp· Oil:

. . Sand. . . . . Solids . . . . Ca . . Alk. . Circulation cycle . .

. . ud cost daily . . . . . Cumulative. . . Rm = . at . . . . °F

2. . t hrs . . . . . Days since spud 63 . Vert dev: . . . . .

3. . mper Subs Size. . No: . . Hrs Run Kick Control· PSI at . GPM

4. . port detail (Past 24 hrs)

7: WOW to back load equipment.

16 Back load all equipment except two burner booms (these booms will be left aboard).

1 WOW to move.

BOATS: Mærsk Shipper ETA 0600 hrs. - Johannisturm Ar. 2140 - Dept 0510 Destination Gulftide - Sula Salvator back on location 1705 hrs. Stella Salvator standing by at rig. - Baltic ar. 2115 7th Dec. Decca Skanner on location. - Holstenturn ar. 1230, Dept. 2225 Destination, "Explorer"

Personnel on rig Contractor 35 Phillips 1 . Other 8 Total 44

Weather Wind NE 30 - 40 knots Waves 8' - 12' Visibility. Good

Vessel heave Roll Pitch

A/v Kent Store

DW 1830 PW 730 DF 938 JF 1840 gals. - Cement -0-, Barite 1400 sx

CHASSON

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 64

Dec. 7; '73 Present operation: Waiting on supply boat and weather Time 0600

Well 2/7 - 10 . . 3. P.T.D . . 4. O.T.D 5. Progress

Bit no: Size Jets: Type . In: Out. Hr. Ftg. . Cond

Bit no Size Jets: Type: . In: . . Out Hr. Ftg: Cond

Bit no . Size Jets .. Type: In: . Out. Hr: Ftg: . . . Cond.

B H Assembly: . . Well 3 2

wt Rpm Torque. Pump psi

Pump nr . . . Liner size Stroke: . . Gpm . . . Av: . .

Mw: . Vis: Wl: . . Fc pH. Pv: . . .. Yp Oil.

. . Sand. . . . Solids . . ... Ca: . . . Alk . . . Circulation cycle .

Mud cost daily. . . . Cumulative . Rm = . . . at . . °F

Bit hrs . . . . . Days since spud 62 . . . Vert dev. . . . . .

Bumper Subs - Size. . No: . Hrs Run. Kick Control ... PSI at . GPM

Report detail (Past 24 hrs)

24 Waiting on supply boat and weather to back load pumping unit: riser pipe & 3 1/2" drill pipe.

NOTE: Stella Salvator standing by. Have tried to call Decca Scanner but have not heard from. Baltic's ETA is sometime this morning but have not heard from. Sula Salvator damaged 2 doors on the forecastle head in storm. She had drifted 35 miles to 35 miles ESE of the Gulftide, presently on her way back to the Nordic. Erika arrived 1145 hrs. on the 6th, presently enroute to Explorer.

Cement - nil - Barite 1400 sx

Personnel on rig Contractor. 34 Phillips. 1 Other. 16 Total 51

Weather. Wind N 20 to 30 knots Waves. 15 to 18 Visibility Good

Vessel Heave . Roll: Pitch

A/v Kent Shore

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 63

Dec. 6, '73 Present operation: Waiting on weather and supply boats Time 0600

Well. 2/7 - 10 3. PTD 4. OTD 5. Progress

Bit no Size. Jets. Type In Out. Hr. Ftg: Cond

Bit no Size. Jets. Type: In. Out. Hr. Ftg: Cond:

Bit no Size Jets Type: In Out. Hr. Ftg: Cond.

B. H Assembly: Well 3 2

Wt Rpm: Torque. Pump psi:

Pump nr Liner size. Stroke Gpm: Av:

Mw: Vis: Wl: Fc. pH. Pv: Yp: Gel.

Sand. Solids Ca: Alk: Circulation cycle

Mud cost daily: Cumulative: Rm = at °F

Bit hrs Days since spud Vert dev:

Bumper Subs Size: No: Hrs Run: Kick Control PSI at GPM

Report detail. (Past 24 hrs)

3 1/2 Rig down 13 3/8", 20" & 30" casings.
2 1/2 (SSOS) divers made sea bed inpection-Reported sea bed clear.
1 Lay down kelly and swivel.
3 Secure rig floor for move.
14 Wait on supply boats to off load materials.

NOTE: Decca Scanner is in field. Finished survey of new location. Bottom conditions OK. (Survey finished @1630)

BOATS:

Johannisturm Arr. 1900 Dept. 2050 for Nordic
Arsterturn " 0435 for Stavanger ETA 0500 6th
Erika - Standby
Sula Salvator Arr. 1200
Stella " " 1345
Baltic Estimated time of arrival, morning of 7th

Personnel on rig Contractor. 34 Phillips. 1 Other: 16 Total 51

Weather. Wind Waves. Visibility

Vessel heave Roll. Pitch.

M/v Kent Shore

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 62

Dec. 5, '73 Present operation. Laying down casing Time 0600

Well. 2/7 - 10 ... 3. P.T.D ... 4. O.T.D. 5. Progress

F no. Size. Jets . Type: . In: . Out. . Hr . Ftg: . Cond.

Bit no. Size. Jets. . Type. . In. Out Hr. Ftg: Cond:

no Size. . Jets . .. Type: . In: . Out. . Hr Ftg Cond.

B. H Assembly. . . .. Well 3 2

wt. . . . Rpm . Torque: . Pump psi:

Pump nr .. .. Liner size. .. . . Stroke .... . . Gpm . . . . Av: . .

Mw: . Vis . .. Wl: . . Fc: .. pH: . . Pv. ..... Yp: . Oil.

Sand: . . .... Solids . . Co: . . . . Alk: .. . . Circulation cycle. ... . .

d cost daily: .. . Cumulative: . . Rm = . . at .. . . .. °F

t hrs. . .. . Days since spud 60 . . . . .. Vert dev. . . . . .

Jumper Subs Size. . . . . No . . .. . Hrs Run: Kick Control .. PSI at . . . GPM

port detail. (Past 24 hrs)

1/2 Welding pad eyes on 30" pipe.

2 Rig up Dowell and layed cement plug from 750'RKB to sea bed.

1/2 Laid down 5" drill pipe.

1/2 Make up 13 3/8" spear, cut off pad eyes and pulled 30", 20" & 13 3/8" to rotary table.

1 /2 Rig up to lay down pipe. Cut holes through all casings, set on table and released spear.

18 Laying casing.

DW 1876 PW 500 DF 731 JF 1840 - Cement -0-, Barite 1400 sx.

Personnel on rig Contractor: 33 ... Phillips 1 .. Other: 16 Total 50

Weather. Wind . . Waves 4 to 6 ft. Visibility.

Vessel heave . . . Roll. . Pitch:

A/v Kent Shore

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 61

Dec. 4, '73 Present operation: Preparing to lay last cement plug Time 0600

Well 2/7 - 10 . . . 3. P.T.D . 4. O.T.D. . 5. Progress . .

Bit no. Size. Jets Type: In: . . . Out. . Hr. . Ftg: . . Cond.

Bit no Size. . Jets: . Type. . In: . Out: Hr. Ftg: . . Cond

Bit no Size Jets. . Type: In: . . . Out: Hr: . Ftg: . . Cond.

B. H Assembly: . . . . . Well 3 2.

wt . . Rpm: . . Torque: Pump psi.

Pump nr . . . Liner size: Stroke. . . Gpm: . . . Av: .

Mw: . . Vis: Wl: . . . Fc: . pH: . Pv: . . . Yp: . . Oil.

Sand. . . . Solids . . . Ca: . . Alk: . . . . Circulation cycle: . . .

Mud cost daily: . . . . Cumulative: . . Rm = ... at . . °F

Bit hrs . . . . . Days since spud . . . . Vert dev: . . . . . .

Jumper Subs Size: . . . No: . . . Hrs Run: Kick Control: . . PSI at . . . GPM

Report detail (Past 24 hrs)

1 1/2	Cutting 13 3/8" csg. at 377' & POOH. Pick up 9 5/8" spear & pulled 9 5/8" csg. Released spear.
1 1/2	Layed down 9 5/8" casing. Recovered 7 full joints & 2 pieces.
1	Nipple down 9 5/8" csg. hanger.
1 1/2	Cut off 20" & 13 3/8" casings below bradenhead. Attempted to pull 13 3/8" csg. Layed down spear & GIH w/13 3/8" cutters and cut 13 3/8" csg at 364'.
1	Cut window in 13 3/8" csg. POOH and layed down cutters.
1	Pick up 13 3/8" spear and attempted to pull 13 3/8" csg,, would not pull. Rig down spear. Pick up 20" cutters & GIH to 364'.
1 1/2	Cutting 20" csg. POOH and layed down cutters and picked up 20" spear.
1/2	Attempted to pull 20". Could not pull.
2 1/2	GIH with 30" cutters and cut 30".
1	Change out blades and GIH to 364'.
2 1/2	Cutting 30" csg & POOH w/ 13 3/8" spear.
1/2	Attempting to pull 13 3/8", 20" & 30". Could not pull.
4 1/2	Pick up 30" cutter & GIH to 364'. Cut 30" & POOH. One of the pad eyes broke off of 30" csg. when csg. was cut free.
1	Pick up 13 3/8" spear and worked 30" pipe free.
2 1/2	Welding on 30" pad eye and GIH with drill pipe to lay final plug at sea floor.

Personnel on rig Contractor: 32 Phillips: 1 Other: 17 Total 50.

Weather Wind NNW 35-45 knots Waves NNW 15-18' Visibility. 10-12 miles

Vessel heave . Roll: Pitch: .

Bl XXXXXXXXXXXX Arsterturn & Decca Scanner standby.

DW 1906 PW 576 DF 760 JF 1670

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 60

Date Dec. 3, '73 Present operation: Cutting 13 3/8" casing. Time 0600

Well 2/7 - 10 3. P.T.D. 4. O.T.D. 5. Progress

	Size	Jets	Type	In	Out	Hr	Ftg	Cond.
Bit no:								
Bit no								
Bit no								

7. B. H Assembly Well 3 2

8. Wt wt Rpm Torque Pump psi:

9. Pump nr Liner size. Stroke Gpm. Av:

10. Mw: Vis Wl. Fc pH Pv Yp: Oil.

Cl. Sand. Solids Ca Alk: Circulation cycle

11. Mud cost daily -0- Cumulative 143,526 Rm = at °F

12. Rot hrs Days since spud 58 Vert dev:

13. Bumper Subs. Size: No: Hrs Run Kick Control PSI at GPM

14. Report detail: (Past 24 hrs)

2 1/2	Laying fown 3 1/2" drill pipe
1	Laying down Howco 7" setting tools.
1	GIH w/Howco EZ Drill and set at 3,959 ft.
1/2	Mix 200 sx "E" cement at 16.6 ppg and lay plug from 3,950 to 3,350'.
3 1/2	Laying down 3 1/2" drill pipe.
2	Change out kelly.
10	Rigging down BOPs and pulling 7" pack-off assembly.
2	Rig down slings and clean drill floor.
1	Pick up 9 5/8" casing cutters and GIH and cut off at 377 ft.
2	POOH and pick up 9 5/8" spear and attempted to pull. Was unable to do so. GIH w/13 3/8" cutters and cut 13 3/8" casing.

NOTE: At 0700 hrs. - Laying down 9 5/8" casing.

15. Personnel on rig Contractor 31 Phillips 2 Other: 15 Total 48

16. Weather Wind NW 20-30 knots Waves 10'-12' Visibility 8-10 miles

17. Vessel heave Roll Pitch:

XXXXXXXXXX Torguay Dept 1715 to Eygerson ETA 1200 hrs.
Arsterturn Ar. 1425 (Standing by)
Johannisturm Ar. 1640 Dept. 1845 for Ekofisk "A"

466 2-71 Go dum

JOHN BEALL

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 59 (P&A Operations)

1. Date Dec. 2, '73 Present operation. Laying down 3 1/2" drill pipe. Time 0600
(Plug back depth)

2. Well 2/7 - 10 3. P.T.D 7,450' 4. O.T.D 5. Progress

	Size	Jets	Type	In:	Out	Hr.	Ftg.	Cond
6. Bit no								
Bit no	Size.	Jets	Type.	In.	Out	Hr:	Ftg·	Cond.
Bit no	Size	Jets.	Type.	In·	Out	Hr.	Ftg:	Cond·

7. B H Assembly· Well 3 2

8. Bit wt Rpm. Torque. Pump psi.

9. Pump nr Liner size. Stroke Gpm. Av:

SAME

10. Mud Mw: Vis· Wl. Fc: pH Pv: Yp: Oil.

Cl. Sand. Solids. Ca: Alk· Circulation cycle.

11. Mud cost daily 185 Cumulative 143,526 Rm = at °F

12. Rot hrs Days since spud 57 Vert dev.

13. Jumper Subs Size. No: Hrs Run. Kick Control PSI at GPM

14. Report detail: (Past 24 hrs)

5 1/2	DST No. 7 - Flow period No.3 (Perfs. 10510-30')
2 1/2	Kill well& rig down Howco head and lines.
6	POOH. Layed down tools and collars.
1 1/2	Pick up Howco EZ Drill & GIH with 3 1/2" drill pipe.
2	Remove excess dope from crown sheave.
2	Finish GIH with EZ Drill.
1	Rig up Dowell. Set EZ Drill at 10,450'. Broke down formation w/1,750 psi. Mixed and pumped 100 sx "E" cement at 16.4 ppg.
1	Pulled out EZ Drill and 28 stands of drill pipe.
1/2	Layed 90 sx "E" cement plug at 16.4 ppg from 7,750 to 7,450' (to 150 ft above liner)
2	Pulled 11 stands and laying down 3 1/2" drill pipe.

Anskariturm Arrived 1135 Depart 1215 Destination "A" Platform
M. Shipper " Mid-nite " 0200 " Ekofisk
Torquay Standby

DW 1,880 PW 666 DF 831 JF 1,800 - Cement 300 sx "E" & 600 sx mix.
Barite 1,400 sx.

15. Personnel on rig Contractor 32 Phillips. 2 Other. 18 Total 52

16. Weather. Wind NW 12-15 knots Waves 14' Visibility Good

17. Rig heave. Roll. Pitch·

18. M/v ~~Kem-fikre~~ Torquay - standby

NORDIC

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 58

1. Date Dec. 1, '73 Present operation: DST No. 7 Flow Period No. 3 Perfs. Time 0600
2. Well. 2/7 - 10 3 P.T.D 10,548 4. ~~XXXX~~ 10,510-30' 5. Progress

	Size	Jets	Type	In:	Out	Hr.	Ftg.	Cond.
6. Bit no								
Bit no	Size	Jets	Type:	In.	Out.	Hr.	Ftg.	Cond.
Bit no	Size	Jets	Type	In	Out.	Hr.	Ftg.	Cond.

7. B. H. Assembly Well 3 2

8. Bit wt Rpm Torque Pump psi.

9. Pump nr Liner size. Stroke. Gpm. Av.

10. Mw 14.4 Vis 52 Wl. 3.8 Fc 1 pH: 11,5 Pv. 46 Yp. 12 Oil 3 %
Cl 1M Sand 1.5 Solids 28 Ca 200 Alk. 2.0-3,4 Circulation cycle

11. Mud cost daily -0- Cumulative. 143,341 Rm = 0.42 at 52 °F

12. Rot hrs Days since spud 53 Vert dev.

13. Jumper Subs Size: No: Hrs Run Kick Control PSI at GPM

14. Report detail. (Past 24 hrs)

1/2	Finish SIP No.1, final pressure 2,960 psi.
6	Flow period No. 2 - Recovered 26.9 bbls. load water, rate 2.4 BPH at end of flow period.
1 1/2	Rig up Howco, test lines & equipment to 8,500 psi, OK. Mixed Chemicals.
1/2	Acidized well according to Howco program.
3	Well shut in for Acid contact.
12 1/2	Flow Period No. 3 - Flow pressure -0-. Well flowing in heads, BS &W 90%, chlorides 24,000 ppm.

15. Personnel on rig: Contractor 33 Phillips 2 Other 26 Total 61

16. Weather Wind NE 20-25 knots Waves: 4'-6' Visibility 12 nautical miles

17. heave Roll: Pitch

18. ~~XXXXXXXXXXXX~~ Holstentor Ar. 1530, Dept. 1540 for Ekofisk
M. Skipper Ar. 2025 hrs.

JOHN BEALL

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 57

1. Date Nov. 30, '73 Present operation. DST No.7, SI Period No. 1 (Perforations 10,510'-30') Time 0600.
2. Well 2/7 - 10 3. P.T.D. 10,548' 4. O T D 5. Progress

6. Bit no. Size Jets Type In Out. Hr. Ftg: Cond.

Bit no. Size Jets. Type In: Out Hr. Ftg Cond

Bit no Size Jets Type In Out. Hr: Ftg. Cond.

7. B H Assembly Well 3 2

8. Bit wt Rpm Torque. Pump psi

9. Pump nr Liner size. Stroke Gpm Av

0. Mw. 14.4 Vis. 52 Wl. 4 Fc 1 pH 11.5 Pv. 48 Yp. 12 Oil: 3

Cl. LM Sand 1 Solids. 28 Ca. 400 Alk 4 Circulation cycle

1. Mud cost daily. -0- Cumulative. 143,341 Rm = 0.42 at 52 °F

2. Rot hrs. Days since spud 52 Vert dev.

3. Jumper Subs Size No. Hrs Run. Kick Control PSI at GPM

4. Report detail (Past 24 hrs)

4 1/2	Flowing well , DST No. 6. Flow period No.3, Zero psi. Final flow rate, 14 BPD.
2	Open bypass and reverse out water and acid.
5	Chain out of hole and laid down tools.
2 1/2	Rig up Schlumberger & ran Howco EZ drill bridge plug at 10,548'. Close blind rams . Tested plug and 9 5/8" to 3,500 psi - OK.
2	Perforated well from 10,510'-30'
5 1/2	Pickup Howco RTTS tools and GIH.
1	Test Head and lines to 750 psi. Displace drill pipe with water. 1st 20 bbls. treated w/clay stabilizer.
1 1/2	Set packer & opened tool for DST No.7. Initial 15 minute flow, recovered 5.25 bbls. fluid. Shut in well. SITP at 0600 hrs. 2910 psi.

CLOCK NO.	DEPTH SET	CLOCKS SET
4511	10,522'	0334 hrs.
4510	10,526	0332 "
4509	10,530	0330 "

15. Personnel on rig. Contractor. 31 Phillips 2 Other 28 Total 61

16. Weather Wind Waves Visibility.

17. Vessel heave Roll. Pitch

18. ~~XXXXXXXXXX~~Jokobiturm Ar. 1320 Dept 1500 for Gulf Tide

DW 1985 PW 882 RF 893 JF 760 - Cement & Barite, same.

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 56

1. Date Nov 29, 1973 Present operation Dst No 6- Flow period No 3 Time 0600

2. Well. 2/7-10 3. PTD same 4. OTD Perfs at 10560-80 and 10600-20' RKB 5. Progress

6.	Size	Jets	Type	In	Out	Hr	Ftg	Cond.
Bit no								
Bit no	Size	Jets	Type	In:	Out	Hr	Ftg	Cond.
Bit no	Size	Jets.	Type	In	Out.	Hr.	Ftg:	Cond.

7. B H Assembly: Well 3 2

8. Bit wt Rpm Torque Pump psi

9. Pump nr Liner size. Stroke Gpm Av

0. Mud Mw 14.5 Vis Wl. Fc. pH. Pv: Yp. Oil.

Cl. Sand Solids Ca: Alk. Circulation cycle

1. Mud cost daily 0 Cumulative 143341 Rm = at °F

2. Bot hrs Days since spud 54 Vert dev.

3. Jumper Subs Size No Hrs Run Kick Control. PSI at GPM

4. Report detail. (Past 24 hrs)

10½ Waiting to offload acid. Well shut in . FSIP=3700 psi

3½ Off load acid. Prepared for acid job. Tested head and lines.

1 Acidized with 8000 gals acid as per HOWCO Program
Form BDP= 7000 psi. Max. Treat PSI= 7000 (8.5 BPM)
Min. " " 5000 (12 BPM)
21050 gal pumped into formation. Instant SIP=3750 psi. 3700 psi after 5 minutes. Finished job at 2110 hrs.

6 Opened well for clean-up. (34 BPD- flow rate).

DW 1876 PW 612 DF 921 JF 960 gal CMT + BARIE- same

5. Personnel on rig Contractor 31 Phillips 1 Other: 30 (62

6. Weather. Wind Waves Visibility

7. Swell heave Roll. Pitch.

8. M/v Richard Rickfield Torgmey

Jacobiturm Arr 1630 Dept 1930 Eko

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 55

1. Date 2/4- Nov 28 1973 Present operation Waiting to offload acid. Time 0600
2. Well 2/7-10 3. PTD 10632 4. OTD 5 Progress
6. Bit no Size Jets Type In Out Hr Ftg Cond
   Bit no Size Jets Type: In: Out. Hr Ftg Cond.
   Bit no Size Jets Type: In: Out Hr Ftg: Cond.
7. B. H Assembly. Well 3 2
8. Bit wt Rpm Torque Pump psi:
9. Pump nr Liner size. Stroke Gpm Av.
10. Mw. 14.3 Vis 52 Wl. 3.8 Fc. 1 pH. 11.5 Pv. 52 Yp. 14 Oil 2
    Cl 0000 Sand 1 Solids 28 Ca. 400 Alk 1.6 Circulation cycle 3.4
11. Mud cost daily. 2867 Cumulative: 143341 Rm = at °F
12. Rot hrs Days since spud 53 Vert dev
13. Pumper Subs Size. No. Hrs Run: Kick Control. PSI at GPM
14. Report detail (Post 24 hrs)

6 Open well - Noflow- 0 psi. Pressured annulus to 800 psi. Closed test manifold Pumped in 10 bbls water at 6 BPM at 5500 psi. z (6100 breakdown pressure). Stopped pumps pressure dropped to 3850 psi.. Opened well. Pressure bled to 0 psi after flowing 1.5 bbls.. Shut in well.

18 ~~WOW to offload acid.~~

At 0600 hrs Tubing Pressure is 2895 psi.

DW 1910 PW 680 DF 943 JF 450 gal 450 sxs E cmt. 680 E+B

15. Personnel on rig Contractor. 31 Phillips 1 Other: 29 (61
16. Weather Wind NNW 15-25 Waves 12-16 ft Visibility 10-12
17. Vessel heave Roll: Pitch
18. M/V [illegible] Torgney

[illegible] -71 Gardum

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 54

1. Date Nov. 27, '73 Present operation. DST No. 6 - Flow period No. 2 Time 0600
2. Well 2/7 - 10 3. P.T.D 4. O T D 5. Progress
6. Bit no. Size Jets Type In: Out. Hr: Ftg: Cond.
Bit no. Size. Jets Type In. Out. Hr. Ftg: Cond
Bit no Size: Jets Type In: Out Hr: Ftg: Cond:
7. B H Assembly. Well 3 2.
8. Bit wt: Rpm Torque. Pump psi.
9. Pump nr Liner size. Stroke Gpm. Av:
10. D 7915 Mw: 14.4 Vis 60 Wl 4.2 Fc: 1 pH. 11.5 Pv. 56 Yp. 16 Oil 1 %
Cl 20 Sand. 3/4 Solids 28. Ca: 440 Alk 1.1 Circulation cycle
11. Mud cost daily: 2,867 Cumulative 143,341 Rm = at °F
12. Rot hrs Days since spud 52 Vert dev:
13. Bumper Subs Size No. Hrs Run. Kick Control PSI at GPM
14. Report detail (Past 24 hrs)

3	GIH w/test tools.
3	Rig up Howco manifold swivel and lines. Pressure test same to 9,000 psi. Repair leaks in manifold. Test lines to separator to 5,000 psi, OK.
1	Displace drill pipe w/76 bbls. of fresh water. Final pressure 3,550 psi. Set packer at 10,498', tail pipe at 10,612'. Opened well for 15 minutes - Flow Period No. 1
2	Shut in period No. 1 - FSIP 850 psi.
15	Open well for Flow Period No. 2 at 1500 hrs. Well stopped flowing at 1600 hrs.

		Depth	Date
(72 hr.)	Recorder	No. 4511 10,602	0340 Nov. 26
(72 hr)	"	" 4510 10,606	0344 " "
(72 hr.)	"	" 4909 10,610	0347 " "

15. Personnel on rig Contractor. 31 Phillips 2 Other. 29 Total 62
16. Weather: Wind 25-35 mph Waves 15'-20' Visibility 7-10 miles
17. Vessel heard: ~~XXXXXX~~ Torguey Jokobiturm Roll: Ar. 1455, Dept. 1555 Pitch
18. A/v Dist 1730, PW 740, DF 964, JF

Cement - 450 sx "E" & 680 sx E &B - Barite 1700 sx

Chairman

2-71 Gu dum

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 53

1. Date Nov. 26, '73 Present operation: GIH w/test tools for DST No. 6 Time 0600

2. Well 2/7-10 3. PTD 10,632' 4. OTD 5. Progress

6. Bit no | Size | Jets. | Type. | In: | Out | Hr | Ftg. | Cond.

Bit no: Size | Jets | Type: | In: | Out. | Hr. | Ftg | Cond:

Bit no | Size | Jets | Type. | In: | Out | Hr | Ftg | Cond

7. B H Assembly. Well 3 2.

8. Bit wt | Rpm. | Torque | Pump psi.

9. Pump nr | Liner size: | Stroke | Gpm | Av:

10. SAME
Mw: | Vis. | Wl. | Fc. | pH. | Pv. | Yp | Oil.
Cl. | Sand | Solids: | Ca | Alk. | Circulation cycle.

11. Mud cost daily | Cumulative: | Rm = | at | °F

12. Rot hrs. | Days since spud 51 | Vert dev

13. Bumper Subs Size. | No. | Hrs Run | Kick Control | PSI at | GPM

14. Report detail (Past 24 hrs)

1/2	GIH
1	Rig up for squeeze job.
1/2	Test drill pipe to 8,000psi w/800 psi on annulus. Displaced drill pipe w/90 bbls. of sea waterwith 3,550 pressure differential.
1/2	Break down formation w/4,600 psi, pumped in at 3 BPM w/4,400 psi. Mixed 108 sx "E" cement (20 bbls. slurry at 16.4 ppg)
1 1/2	Stage squeezed to 3750 psi with 15 bbls. into formation.
1/2	Reversed out 10 bbls. water & 5 bbls. cement & 10 bbls. water.
1/2	Circulate and slug pipe .
4	POOH.
7 1/2	Secure pipe in derrick & laid blocks on floor and WOW. Wind 40-45 MPH & seas 30'-40'.
1	Make up cup type tester & tested BOP to 3,000 psi - Hydril to 2,500 psi.
1/2	Rig up Schlumberger.
2	Perforate from 10,560 to 10,580' and from 10,600' to 10,620'.
1 1/2	Run wireline junk basket.
1	Pick up Howco Test Tools.
1 1/2	GIH.

15. Personnel on rig Contractor. 32 Phillips 2 Other: 29 Total 63

16. Weather Wind NW 30-40 mph, max 45 Waves. NW 23'-45' Visibility. 3-5 miles

17. XXXXX Roll: Pitch:

18. XXXXXXXXXXXX Torguay - Standby

DW 1,628 PW 800 DF 988 JF 1,000 gals.
Cement - 500 sx E 680 sx E&B Barite 1,990 sx.

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 52

1. Date Nov. 25, '73 Present operation. GIH w/Howco Stinger to squeeze off DST No.5 Perforations. Time 0600

2. Well 2/7-10 3. P T D. 10,632' 4. O.T D 5. Progress

6. Bit no. Size. Jets. Type. In: Out Hr Ftg Cond

Bit no. Size. Jets Type. In: Out Hr. Ftg: Cond.

Bit no Size. Jets. Type. In: Out Hr Ftg Cond

7. B. H Assembly Well 3 2

8. Bit wt Rpm: Torque. Pump psi

9. Pump nr Liner size Stroke Gpm Av

10. Mud Mw: 14.4 Vis 53 Wl. 4.2 Fc: 1 pH: 11.5 Pv. 43 Yp. 11 Oil 1

Cl 20M Sand 1 Solids 26 Ca 400 Alk 2.2-4.8 Circulation cycle:

11. Mud cost daily 185 Cumulative. 140,470 Rm = 0.415 at 45 °F

12. Rot hrs Days since spud 50 Vert dev

13. Bumper Subs Size No: Hrs Run Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

2	DST No. 5 FP No.3, 0 psi - No flow.
2 1/2	SIP No. 3, FSIP 245 psi
2	FP No.4, 0 psi - No flow.
1 1/2	Open by pass & pulled packer loose, reversed 160 bbls. catching T kit samples as directed.
2 1/2	Circulate and condition mud.
1/2	Slug pipe and rig down test head and manifold.
3 1/2	POOH with chain.
1 1/2	Rig down test tool and set back bottom hole assembly.
2	Rig up Schlumberger and ran wireline junk basket.
2	Run cement retainer and set at 10,632'.
2 1/2	Trip in hole to top of liner.
1/2	Slip drilling line.
1	GIH

15. Personnel on rig: Contractor 32 Phillips 2 Other. 30 Total 64

16. Weather Wind 25-35. Max. 45 Waves. 18 - 23 Visibility 5 miles

17. Vessel heave. Roll. Pitch

18. M/v Kent Shore Torgney - Jacob; Turm WOW to discharge equipment at Ekofisk before off loading acid and Howco equipment.

DW 1680 PW 846 DF 1014 JF 1476

Cement 660 sx E & 680 sx mixed - Barite 1990 sx.

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 51

1. Date Nov. 24, 1973 Present operation DST No. 5 - Flow Period No. 3 Time 0600

2. Well 2/7 - 10 3. PTD 10,710 4. OTD 5. Progress

6. Bit no | Size | Jets | Type | In | Out | Hr | Ftg | Cond.

Bit no | Size | Jets | Type | In | Out | Hr | Ftg | Cond.

Bit no | Size | Jets | Type | In | Out | Hr | Ftg | Cond

7. B. H Assembly. Well 3 2

8. Bit wt | Rpm | Torque | Pump psi.

9. Pump nr | Liner size | Stroke | Gpm | Av:

10. Mw. | Vis. | Wl | Fc | pH | Pv. | Yp. | Oil | Cl | Sand. | Solids | Ca: | Alk. | Circulation cycle

11. Mud cost daily 250 Cumulative: 140,289 Rm = at °F

12. Rot hrs | Days since spud 49 | Vert dev

13. Bumper Subs Size | No. | Hrs Run | Kick Control. | PSI at | GPM

14. Report detail (Past 24 hrs)

2	Pick up Howco test tool & RTTS packer.
4 1/2	Trip in hole w/DST No. 5.
1	Rig up Howco test head & manifold tested to 8,000 psi, test line to seperator at 5,000 psi.
1/2	Displace drill pipe w/76.5 bbls sea water. Final pressure 3,950 psi.
1/2	Set packer at 10,579 & open well for Flow Period No.1. Well shut in at 1430 hrs.
2	SIP No. 1 final pressure 1130 psi.
2	Open well for Flow period No. 2, small flow for first 1/2 hr. no flow for last 1 1/2 hrs.
1	Rig up Howco line & back pressure valve for acid job. Tested lines to 9,000 psi.

15. Personnel on rig Contractor. 31 Phillips 2 Other 25 Total 58

16. Weather Wind WSW 40-50 knots Waves 20 ft. Visibility 7 miles

17. Drill Water 1,700 Rig Fuel 1,035 Pot. Water 900 Jet Fuel 1,600 gals.
Cement 600 sx E & 680 sx mixed. Barite 2,040 sx

18.

Torgay Standby
M. Skipper Ar. 1430 hrs. Dep. 1435 hrs. Destination Ekofisk.
Jacob Turm ETA 1100 hrs.

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 50

1. Date Nov. 23; '73 Present operation: Rigging down Schlumberger Time 0600

2. Well 2/7 - 10 3. P.T.D 10,710 4. O.T.D 5. Progress

6. Bit no. Size Jets Type In Out Hr. Ftg: Cond

Bit no Size Jets: Type. In. Out Hr. Ftg: Cond.

Bit no Size: Jets. Type. In: Out. Hr: Ftg: Cond.

7. B. H. Assembly Well 3 2

8. Bit wt Rpm. Torque: Pump psi:

9. Pump nr. Liner size Stroke Gpm Av:

10. H.L. 8020 Mw. 14.4 Vis. 54 Wl. 4 Fc. 1 pH 11.5 Pv. 44 Yp. 10 Oil 3(

Cl 18,000 Sand: 1 Solids 30 Ca. 400 Alk 2.6 Circulation cycle 4.8

11. Mud cost daily -0- Cumulative 140,039 Rm = 0.410 at 52 °F

12. Rot hrs. Days since spud Vert dev:

13. Bumper Subs Size. No Hrs Run: Kick Control PSI at GPM

14. Report detail (Post 24 hrs)

Hrs. Finish laying down Howco tools.

1/2 " Dress and make up Howco cement retainer and drill pipe setting tool.

1/2 " GIH w/retainer, set at 10,710'

" Test drill pipe to 7,500 psi w/1,000 psi on annulus. Displace pipe w/water & mixed 300 sx Class E at 16.4 ppg (57.7 bbls. slurry) Squeezed to 5,000 psi. Started squeeze at 1406 hrs., squeeze finished at 1510 hrs.

Hrs. Reversed out 16 bbls. of cement. (lowered flow 2 ft.)

1/2 " POOH w/chain.

4 " Rig up Schlumberger and ran CBL. - OK.

" Perforate well from 10650 to 10700 IES.

1½ " Run wireline junk basket

15. Personnel on rig: Contractor 31 Phillips 2 Other: 25 - Total 58

16. Weather Wind NW 25-30 knots Waves 8-15 Visibility. 8 miles

17. Vessel heave: Roll. Pitch:

18. W/v ~~Kent Shaw~~ Torgney - Stand by SL 11 Arr 1300 Dept 1320 STBD Maersk Shipper Enroute to Nordic

D.W. 1729 PW 970 D F 1060 [illegible] J F 1600 gal

2-71 Gardum 660 sxs "E" 650 sxs "E" + "B" mixed 2150 sxs Barite

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 49

1. Date 22 Nov 73 Present operation Breaking down RTTS tool Time 0600

2. Well 2/7-10 3. PTD 10,850 4. OTD 5. Progress

6. Bit no	Size	Jets	Type.	In.	Out	Hr.	Ftg.	Cond.
Bit no	Size	Jets.	Type.	In:	Out.	Hr.	Ftg	Cond.
Bit no	Size	Jets.	Type.	In.	Out	Hr	Ftg	Cond

7. B. H Assembly Well 3 2

8. Bit wt	Rpm	Torque.	Pump psi
1	7	30	280 287

9. Pump nr Liner size Stroke. Gpm Av.

10. Hv 8102 Mw. 14.4 Vis 60 Wl 4.2 Fc. 1 pH 11.7 Pv. 53 Yp 16 Oil. 3 (
Cl 28,000 Sand 1 1/4 Solids 31 Ca: 40 Alk. 2.5/4.2 Circulation cycle 140

11. Mud cost daily 868 Cumulative 140,039 Rm = at °F

12. Rot hrs Days since spud 47 Vert dev

13. Bumper Subs Size No: Hrs Run Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

6 DST no. 4, flow period no. 2

8 SIP no. 2 FSIP=2910 psi

½ displace drill pipe with 80 barrels of mud

2½ pulled RTTS tool loose, closed hydril and reverse circulated to balance mu
in system. Mud gas cut to 12.4 ppg for 164 bbls. Hooked up lines to DP.

½ Circulated long way and conditioned mud.

5½ Chained out of hole and breaking down test tools.

BOATS: Hohentor Arrived 1730 Departed 2115 for Stavanger
Asterturm 0001 1003 "A"
Smit Lloyd 11 1330 1450 "A"

DW 1985 PW 1024 DF 1036 JF 1600

Cement 960 class E, 680 B+E

15. Personnel on rig. Contractor. 31 Phillips 2 Other. 25 (58)

16. Weather. Wind Waves Visibility.

17. Vessel heave Roll. Pitch

18. M/v Kent Shore

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 48

1. Date Nov 21 1973 Present operation. DST No 4- Flow Period No 2 Time 0600

2. Well. 2/7-10 3. P T D. 4. O T D 5. Progress

6. Bit no Size. Jets Type In Out Hr. Ftg. Cond

Bit no Size Jets. Type In: Out. Hr. Ftg Cond:

Bit no Size Jets Type. In: Out. Hr Ftg Cond.

7. B H Assembly Well 3 2

8. Bit wt Rpm Torque Pump psi

9. Pump nr Liner size: Stroke. Gpm Av.

10. Mw. Vis Wl Fc. pH Pv. Yp Oil (same)

Cl Sand Solids. Ca Alk Circulation cycle

11. Mud cost daily. 456 Cumulative. 139176 Rm = at °F

12. Rot hrs Days since spud 46 Vert dev

13. Bumper Subs Size No: Hrs Run Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

½	Finish POOH.
2	Laid down test tools and recover Amerada BHP Bombs and Sinker Bars.
3	Read charts from gages while waiting on orders.
1½	Make up HOWCO Test tools while waiting on orders.
3½	GIH with test tools and BHA. Made dummy run with wireline tools All OK.
3	GIH to 10690 (pkr. setting depth).
1	Rig up test head, lines and flow manifold. Test all lines to 9000 psi test lines to separator to 5000 psi.
1	Displace Drill Pipe with 77 bbls water mixed with 3.3 gal HOWCO 5N.
2	Packer set at 10690' RKB. Flow period No 1. Flow rate very little.
1½	Rig up to acidize. Test lines to 9500 psi. Acidize with 4000 gal acid as per HOWCO program.
3	Shut in Period No 1 - Acid Comtact time.
2	Flow Period No 2

Recorder No.	Setting Depth
4511	10794
4510	10798
4509	10802

15. Personnel on rig: Contractor 31 Phillips. 2 26 (59 Other.

16. Weather Wind Waves Visibility

17. Swell heave Roll. Pitch

18. M/v Kent Shore/ Torgney - standby (fixed steering gear does not need relief)

DW 1187 PW 745 DF 1122 JF 1600 gal Barite - cement - same

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 47

1. Date Novæ 20, '73 Present operation POOH w/DST No.3 Test Tools Time 0600

2. Well 2/7-10 3. PTD 10,850 4. OTD 5 Progress

6.	Bit no	Size	Jets	Type:	In	Out	Hr	Ftg	Cond
	Bit no	Size	Jets:	Type:	In:	Out	Hr	Ftg	Cond.
	Bit no	Size	Jets	Type	In	Out.	Hr.	Ftg	Cond:

7. B H Assembly Well 3 2

8. Bit wt Rpm Torque Pump psi

9. Pump nr 1 Liner size. 7" Stroke 20 Gpm Av

10. Mud Mw 14.4 Vis 54 Wl 3 Fc 1 pH 11.5 Pv: 44 Yp 10 Oil 4 (
Cl 21,000 Sand 1 Solids 30 Ca. 200 Alk 2.6-48 Circulation cycle

11. Mud cost daily 998 Cumulative 139,713 Rm = .41 at 52 °F

12. Rot hrs Days since spud 45 Vert dev.

13. Bumper Subs Size: No Hrs Run Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

7 Hrs. SIP No. 6 Tried to open well at 0920 Hrs., Unable to keep burner lit because of wind.

2 1/2 Hrs. Kill well because of rough weather, 70 to 80 knot wind, 50 to 60 ft. seas, max. 66 ft.

1 Hrs. Displace drill pipe w/78 bbls. of 14.4 ppg mud, using Dowell unit. Opened by pass and reversed circulated 150 bbls. w/rig pump.

7 Hrs. WOW

2 1/2 Hrs. Circulate bottoms up and condition mud.

1/2 Hrs. Rig down test head.

3 1/2 Hrs. POOH w/RTTS tool.

15. Personnel on rig Contractor. 31 Phillips. 2 Other. 28 Total 61

16. Weather Wind 20-30 NW Waves. 25-30 WNW Visibility. Good

17. Vessel heave Roll. Pitch.

18. M/v Kent Shore Torgney

DW 2059 PW 774 DF 1140 JF 1634 Barite 2350 - Cement 400 E & 680 E+B

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 46

1. Date Nov 19, 1973 Present operation Shut in Period NO. 6 DST No 3 Time 0600

2. Well 2/7-10 3. PTD 10850 4. OTD 8102 5. Progress

6. Bit no Size Jets Type In Out Hr. Ftg Cond

Bit no Size: Jets. Type. In. Out Hr. Ftg Cond

Bit no Size Jets Type. In Out. Hr: Ftg: Cond.

7. B. H Assembly Well 3 2

8. Bit wt. Rpm. Torque Pump psi

9. Pump nr. Liner size Stroke Gpm Av

10. Mw. 14.4 Vis 55 Wl. 2.8 Fc 1 pH 11.5 Pv 42 Yp. 10 Oil 4

Cl 18000 Sand 1 Solids. 26 Ca. 400 Alk 2.6 Circulation cycle 44

11. Mud cost daily 389 Cumulative. 139715 Rm = .3 at 50 °F

12. Rot hrs. Days since spud 44 Vert dev.

13. Bumper Subs Size No Hrs Run Kick Control. PSI at GPM

14. Report detail. (Past 24 hrs)

3½ Flow period No 5 FFP= 2297 psi

8 Shut in Period No 5 FSIP= 3015 psi

8 Flow Period No 6 FFP= 1686 psi.

4½ Shut in Period No 6 SIP= 2470 at 0600 hrs.

W 2170 PW 882 DF 1158 JF 1634 gal Cmt +Barite- same

15. Personnel on rig Contractor 31 Phillips 2 Other: 28 (61

16. Weather Wind W 45-55 65 max Waves 20-25' Visibility 10

17. Vessel heave Roll Pitch

18. Standby Torgney- standby having steering gear problems- need relief boat Jacobiturm Dept 0615 "A" then escorted Rig Sailor to Eggerson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 45

1. Date Nov 18 1973 Present operation. Flowing well - Flow Period No 5 Time 0600

2. Well 2/7-10 3. P.T.D. 10850 4. O.T.D 5. Progress

	Size	Jets	Type	In	Out	Hr	Ftg	Cond.
6. Bit no								
Bit no	Size	Jets.	Type.	In	Out	Hr.	Ftg:	Cond·
Bit no.	Size:	Jets.	Type.	In.	Out	Hr:	Ftg.	Cond

7. B H Assembly. Well 3 2

8. Bit wt Rpm Torque Pump psi

9. Pump nr. Liner size Stroke Gpm. Av

10. 8102 Mw 14.4 Vis 53 Wl 3.2 Fc 1 pH 11.5 Pv 38 Yp 8 Oil 2
21000 Sand 1 Solids 26 Ca. 800 Alk 2.0-4.0 Circulation cycle

11. Mud cost daily 370 Cumulative 138326 Rm = at °F

12. Bit hrs Days since spud Vert dev.

13. Bumper Subs Size No Hrs Run Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

7 Flow period No 4. Final flowing pressure=750 psi.

12½ Shut in period No 4 Final shut in pressure= 2800 psi++

4½ Flow Period No 5.

++ Failed to get bottom hole sample because of leak in lubricator sub. Will obtain sample on next shut in.

DW 2170 PW 936 DF 1190 JF 1782 gal E Cmt 400 sxs E+B= 680sxs
Barite 2500 sxs

15. Personnel on rig Contractor 31 Phillips 2 Other: 28 (61

16. Weather Wind 20-25 mph Waves 6-9' Visibility 10 miles

17. Vessel heave. Roll Pitch

18. M/v Kent ////// Torgney Standby Maersk Explorer arr 2040 dept 2050 C
Jacobiturm 0300 On loca

1. Drilling Report No: 44 Date: 17 Nov 73 Time: 0600

2. Well No: 2/7 10 (Nordic) Slot No: - Rig No. Chaisson

3. Pres. Ops: DST no. 3, Flow period no. 4 PICo. Rep: Chaisson

4. PBD: PBTD 10,850 OTD: Progress: Rot Hrs: Days since Spud:

	Bit	Size	Jets	Type	In	Out	Hrs.	Ftg	Cond.	Wt.	RPM	Torq	PSI
5.													
BHA													
6.													
BHA													
7.													
BHA													

8. Pump No: Liner Size: SPM GPM Vel.Ft.

9. Mw 14.3 Vis. 49 Pv 25 Yp 10 WL 4.6 Fc 2 Ht/Hp at °F. Rm at °F

10. Ph 11.2 Alk 1.6 Solids 26 Sand ½ Oil 2 Chl 19,000 Ca 400 Hyd.Head psi.

11. Kick Control: psi at SPM: Bot.Up Circ.Cycle

13. Daily Mud Cost $ Cumulative $ 135,558 Cent.Hrs Cent.Eff.

14. Report Detail - 24 hours:

2 flow period no. 3 (no flow).

½ tested lines to 9500 psi.

2 acidized using 200 gal/ft.

3 shut in for acid job.

15 rigged up and tested lubricator to 5000 psi, Amerada tool stuck at 10,701, drove through restriction to R-nipple, tool pulled out of rope socket while POH, dropped sinker bars and drove tool to bottom, will retrieve by pulling tubing.

2 flow period no. 4, open pressure 2345psi, dropped to 430 psi then came back to 1200 psi.

15.

Pod No.	1	2	3	4	5	6	7	8	9	10	11	12	Total
Barite	2800												
Cement	400	680		-									
Class	E	mixed											

16. Sack Storage

Drill Water 2280 Pot.Water 576 Rig Fuel 1245 Jet Fuel 1782 gal

17. Personnel: PICo. 2, Contractor 31, Caterer other 28 Mud Co. BJ

Directional Co. Offs Baker , OCT Total 61

18.

Boat	Arrival	Present Operation	Departure	Destination	Qty
Mersk Shipper	1700	WOW			
Kent shore	1200		1320		

Original

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 43

1. Date 16 Nov 73 Present operation Flow Period No.3 Time 0600
2. Well 2/7-10 3. PTD. 10850 4. OTD 5. Progress

6. Bit no	Size	Jets	Type:	In:	Out	Hr.	Ftg	Cond
Bit no	Size	Jets.	Type	In:	Out	Hr	Ftg	Cond.
Bit no	Size	Jets	Type.	In	Out	Hr.	Ftg	Cond

7. B. H Assembly Well 3 2

8. Bit wt. Rpm Torque Pump psi

9. Pump nr Liner size. Stroke Gpm Av.

10. Mw 14.4 Vis 53 Wl 4 Fc 1 pH 11.5 Pv 36 Yp 6 Oil 2
Cl 19000 Sand 1½ Solids 28 Ca 200 Alk. 2.2-4.4 Circulation cycle

11. Mud cost daily 1950 Cumulative 137956 Rm = .302 at 54 °F

12. Rot hrs Days since spud 41 Vert dev:

13. Bumper Subs Size No. His Run Kick Control PSI at GPM

14. Report detail (Post 24 hrs)

4	4	Flow period No 2 FFP= 730 psi
8	8	Shut in period No 2 FSIP= 2520 psi.
	2	Displaced drill pipe with 75 bbls mud - bull headed into formation. Reversed out 150 bbls mud. - Well static
		Note: Winds 40-50 Knots. Seas 35-45'- Occasional 55' waves.
	7½	Well static- WOW.
	1	Displaced Drill pipe with 76½ bbls drill water
		Closed bypass tool and pressure tested annulus to 800 psi-OK
		Opened well.
	1½	Flow period No 3- No flow

DW 2335 PW 684 DF 1304 JF 1500 gal Cmt 400 sxs E 680 sxs B+E

15. Personnel on rig Contractor 30 Phillips. 3 Other 10

16. Weather Wind 20-30 NW Waves 12-15 Visibility 10

17. Vessel heave Roll Pitch.

18. M/v Kent Shore Torgney- standby

Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 42

Date Nov 15 1973 Present operation. Flowing well- flow period No 2 Time 0600

Well 2/7-10 3. PTD 10850 4. OTD 5. Progress

Bit no	Size	Jets	Type.	In.	Out	Hr	Ftg	Cond
Bit no	Size	Jets	Type.	In:	Out.	Hr.	Ftg	Cond.
Bit no	Size	Jets	Type.	In.	Out	Hr	Ftg.	Cond

B H Assembly Well 3 2

Bit wt Rpm Torque Pump ps.

Pump nr Liner size: Stroke Gpm. Av.

Mw 14.4 Vis 51 Wl. 4.2 Fc 1 pH 11.5 Pv: 42 Yp. 6 Oil 2

Cl. 19000 Sand 1½ Solids: 28 Ca 400 Alk 2-4.2 Circulation cycle

Mud cost daily 1016 Cumulative 136006 Rm = at °F

Tot hrs Days since spud 40 Vert dev

Bumper Subs Size. No. Hrs Run Kick Control PSI at GPM

Report detail (Past 24 hrs)

13 Flowing well DST No 3 FP No. 1

½ Test head and lines to 9500 psi

1½ Acidize well with HOWCO with 200 gal. acid per ft. as per program.

BDP= 5800 psi, Pumping pressure at 8 BPM = 5000 psi, SITP=3200 psi.

3 Shut in well for acid contact.

6 Flowing well- Flow Period No. 2

DW 2335 PW 684 DF 1304 JF 1500 gal Cmt 400 sxs E, 680 sxs B+E

3046 sxs Barite

15 Personnel on rig Contractor 30 Phillips. 3 Other 25 (58

16 Weather Wind. NW 30-35 kn Waves 8-12 Visibility. 10 miles

17 Vessel heave Roll Pitch

18 M/v Kent/Viola/ Torgney- standby Hohentor Arr. 1643 Dept 2345 Expl

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 41

1. Date Nov 14 1973 Present operation: DST No 3- Flow Period No 1 Time 0600

2. Well 2/7-10 3. P T D. 10850 4. O T.D . 5. Progress

6. Bit no: Size . Jets Type . In. Out Hr. Ftg Cond

Bit no: Size Jets: Type. . . In: Out Hr. Ftg: . Cond: .

Bit no Size: . Jets .. Type In. Out Hr: . Ftg. Cond:

7. B H Assembly. Well 3 2

8. Bit wt . Rpm Torque Pump psi:

9. Pump nr Liner size: . Stroke Gpm Av:

10. Mw 14.4 Vis 5.6 Wl 5.4 Fc 1 pH. 10.5 Pv 44 Yp. 8 Oil 2

Cl 18000 Sand 1½ . . Solids 28 . Ca. 600 . Alk. 1.4 . Circulation cycle. .

11. Aud cost daily 666 . . Cumulative. 134991 Rm = . . . at °F

12. Rot hrs . Days since spud . 39 . Vert dev:

13. Bumper Subs Size. No Hrs Run Kick Control PSI at GPM

14. Report detail (Post 24 hrs)

3	Circulate and condition mud.
7 ½	Chain out of hole with RTTS Tool. Found that packer rubbers had failed after 13½ hrs inthe set condition.
1½	Broke and laid down tools. Retrieved clocks and reloaded with new charts.
5	GIH with new RTTS Pkr., Slip Jt., and Bypass Tool. Cloc No 4511 set at 10798'-RKB, No. 4510 - 10802 No. 4509 - 10806' RKB.
2	Pick up and test head and lines to 9000 psi. Test line to separator to 5000 psi..- OK.
1½	Lowered flow line on bell nipple 3' because rig had settled 3'during recent storms.
½	Displaced drill pipe with 78 bbls drill water. Set packer at 10694.
3	Flow Period No 1- Well opened at 0315 hrs . Well now flowing fluid at a 114 BPD Rate. In 2:17 Hrs have recovered 9.52 BBLS of Drill water.

DW 1500 PW 414 RF 971 JF 0 Barite 3046 sxs E Cmt 400 sxs 680 sxs E+B

15. Personnel on rig Contractor 30 . Phillips 3 Other 25 (58 .

16. Weather Wind . Waves . Visibility .

17. Vessel heave Roll: Pitch.

18. M/v Kont Skare Torgney

Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 40

1. Date Nov 13 '73 Present operation. Circulating to POOH. . . . Time 0600

2. Well 2/7-10. 3. PTD 10850 4. OTD . . 5. Progress . .

6. Bit no. Size. . . Jets . Type . . In. Out Hr . Ftg . Cond.

Bit no Size . Jets Type. In Out Hr. . Ftg ... Cond:

Bit no Size . Jets . Type: Ir. Out Hr: Ftg Cond·

7. B. H Assembly . . . . . Well 3 2

8. Bit wt . Rpm. . Torque Pump psi·

9. Pump nr . Liner size· Stroke Gpm. . Av·

0. Mw: 14.4 Vis· 55 . Wl· . 5 Fc 2 pH 11.5 Pv. 47 Yp 4. Gel. 2

Cl: 20000 Sand. 1½ Solids 28 . Ca 800 Alk. 1.4-3.8 Circulation cycle

1. Mud cost daily 660. Cumulative 134325 Rm = . at °F

12. Tot hrs . . . . . Days since spud 38 . Vert dev . . ...

13. Bumper Subs Size . . No His Run: · Kick Control. PSI at .. GPM

14. Report detail (Past 24 hrs)

4 Finish trip into hole for DST No 2. Press. Recorder #4511 at 10818' Recorder #4510 at 10822 Recorder #4509 at 10826. Clocks set 0300 hrs

1½ Rig up and test head and lines to 9000 psi. Repaired leaks in Unions (rubber sels).

1 b Displace pipe with 78 bbls water(seawater).. Set packer at 10714. Open tool at 1230 with3380 initial tbg pressure.

FP No 1-(15 min.)- Pressure dropped to o psi

2 SIP No 1- (2 hrs.)- FSIP=2180 psi

11½ FP No 2

½ At 0130 hrs mud dropped in annulus . Filled annulus with 6 bbls mud. Well died. Worked slip Jt. and torqued pipe- all OK.

Closed Hydril and pressured annulus to 400 psi- held OK.

1½ Opened Hydril, pulled pkr. loose and reversed out trough 1/4" choke.

2 Finished reversing out through ½" choke. Mud cut to 9.6 Lbs/lbbs

15. Personnel on rig Contractor 31 Phillips 2 .. Other. 24 (57

16. Weather Wind . . . . Waves: . Visibility

17. Vessel heave . . Roll· . Pitch

18. M/v Kpp/Bpp Torgney- standby.

DW 2133 PW 504 RF 1000 JF 0 400 E Cmt. 3420 barites 680 B+E

Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 39

1. Date Nov 12 1973 Present operation. GIH with RTTS Tool Time 0600
2. Well 2/7-10 3. PTD 10850 4. OTD 5. Progress

6. Bit no	Size	Jets.	Type.	In	Out.	Hr	Ftg	Cond.
Bit no	Size	Jets.	Type.	In.	Out	Hr	Ftg:	Cond.
Bit no	Size	Jets	Type:	In	Out	Hr.	Ftg	Cond

7. B H Assembly. Well 3 2
8. Bit wt Rpm Torque Pump psi:
9. Pump nr. Liner size Stroke Gpm Av.
10. Mw Vis Wl: same Fc pH Pv Yp Oil.
Sand. Solids Ca. Alk Circulation cycle
11. Mud cost daily 0 Cumulative 133659 Rm = at °F
12. Rot hrs. Days since spud 37 Vert dev.
13. Bumper Subs Size: No. Hrs Run: Kick Control PSI at GPM
14. Report detail (Past 24 hrs)

1 Finish running HOWCO E-Z Drill retainer and set at 10850

5 GIH with HOWCO Stinger and 3½ Pipe.

2 Test lines to7000 psi- OK. Squeeze perfs at 10870 to 10900 to 5000psi 26.5 bbls 16.5 lbs/gal E Cmt Squeezed into formation- 250 sxs mixed. Reversed out 21 bbls cement and 20 bbls water. Formation broke at 2750 psi pumped in at 2000 . After pumping in10 bbls cement into perforations pressure increased to 3000 psi: 15 bbls-3300 (3 BPM Rate) 24 bbls- 4750,(2.5 BPM). Press broke to 4000. 26½ bbls- 5000 psi Pressure broke to 4400 psi. Pressured back up to 5000 psi.. Held OK.

5½ POOH

7½ Rig up Schlumberger to perforate. First run misfired. Perforated from 10790 to 10830. Rig down Schlumberger.

3 GIH w/ RTTS Tool with 2-72 and 1-48 hr. clocks- set at approx 0300.

15. Personnel on rig Contractor 31 Phillips 2 Other 24 57
16. Weather. Wind Waves. Visibility
17. Vessel heave Roll Pitch
18. M/v Kenny/Stiff Torgney

DW 2521 PW576 BEALL
RF 1024 JF 280

CMT E - HOWCO
250 Mixed 680SXS

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 38

Date Nov 11, 1973 Present operation Running E_Z DRill Wireline Set Retainer Time 0600

2. Well 2/7-10 3. PTD 4. OTD 5. Progress

5. Bit no	Size	Jets	Type	In	Out	Hr	Ftg	Cond:
Bit no	Size	Jets	Type	In:	Out	Hr	Ftg.	Cond.
Bit no	Size	Jets	Type.	In:	Out	Hr.	Ftg	Cond.

7. B H Assembly Well 3 2

8. Bit wt Rpm Torque Pump psi

9. Pump nr Liner size Stroke Gpm Av

10. Mw 14.4 Vis 55 Wl: 5 Fc. 2 pH. 11.5 Pv. 47 Yp 4 Oil. 2

11. 20000 Sand 1½ Solids 27 Ca: 900 Alk 1.4-3.8 Circulation cycle

12. Mud cost daily 450 Cumulative Rm = at °F

13. Bit hrs Days since spud 36 Vert dev

14. Bumper Subs Size No. Hrs Run: Kick Control PSI at GPM

15. Report detail (Past 24 hrs)

4	Flowing well DST No 1 Flow Period No 3
6	Shut in following FP No3. FSIP=3311 psi
1½	Open bypass and reverse out with 14.4 lbs mud.
2	Circulate and condition mud.
6	POOH and lay down RTTS Tool.
3	Run wire line junk basket
1½	Make up and run HOWCO Wireline Cmt. Retainer and set as per procedure.

16. Personnel on rig Contractor 31 Phillips 3 Other 23 (57

17. Weather Wind Waves. Visibility.

Vessel heave Roll Pitch.

18. M/v Kobbskodd Torgney- standby

Jacobiturm	Arr 0900	dept 2055	Expl.- Stav.
Asterturm	0100	0400	C
Petiturm	0350	0430	GT

BEALL

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 37

1. Date Nov 10, 1973 Present operation. DST NO 1, Flow period NO 3. Time 0600 Hrs.

2. Well 2/7 -10 3. PTD 4. OTD 5. Progress

6. Bit no Size. Jets. Type Ir. Out. Hr Ftg. Cond

Bit no Size Jets Type: In: Out Hr. Ftg Cond

Bit no Size Jets Type In: Out. Hr Ftg Cond

7. B H Assembly Well 3 2

8. Bit wt Rpm. Torque Pump psi.

9. Pump nr Liner size Stroke Gpm Av.

10. Mw 14.3 Vis 48 Wl: 4.8 Fc 2 pH 11.5 Pv. 26 Yp 8 Oil 2

Cl. 20,000 Sand 1½ Solids 24 Ca 1000 Alk 1.6 Circulation cycle.

11. Mud cost daily $ 321. Cumulative $ 133.209 Rm = at °F

12. Rot hrs Days since spud 35 Vert dev

13. Bumper Subs Size. No Hrs Run Kick Control PSI at GPM

14. Report detail (Post 24 hrs)

14½ Hrs. Flowing well, DST NO 1, FP NO 2.

3 Hrs. Kill well & rig up to acidize.

1 Hr. Acidize well W/ 6,000 gal acid, as per Howco program. Break Down pressure 6500 Psi. Acidizing press 2,000 psi, shut in press 2,000 Psi, 15 min. shut in press 3510 psi. Injection rate 10 bbls /min.

3 Hrs. Well shut in for acid contact, final TBG press 2780 psi.

2½ Hrs. Flowing well, FP NO 3

15. Personnel on rig Contractor 31 Phillips 2 Other 23 total 56

16. Weather Wind. Waves Visibility

17. Vessel heave Roll Pitch:

18. M/v Kent Shore Nautic stdby, Holstentor arr 1000 Hrs. Dept 1220 EKO
Asterturm " 1825 " 1905 "

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 36

1. Date Nov 9, 1973 Present operation Flow Period No 2 - Testing Well Time 0600

2 Well. 2/7-10 3. P.T.D 4. O.T.D. 5. Progress

6. Bit no Size: Jets. Type In: Out Hr Ftg. Cond.

Bit no Size Jets Type. In Out Hr Ftg. Cond.

Bit no Size Jets. Type Ir Out Hr Ftg Cond

7. B. H Assembly Well 3 2

8 Bit wt Rpm Torque Pump psi

9. Pump nr. Liner size. Stroke Gpm. Av

0 Mw Vis Wl. Fc pH. Pv Yp Oil

Sond Solids Ca. Alk Circulation cycle

1. Mud cost daily Cumulative Rm = at °F

2. Tot hrs Days since spud 34 Vert dev:

3. Bumper Subs Size No. Hrs Run Kick Control PSI at GPM

14. Report detail (Past 24 hrs) 3 Perforated well from 10870 to 10900.

2½ Run junk basket

½ Rig down Schlumberger

2 Make up 7" R TTS Pkr and Test Assbly

4 GIH w/ 7" RTTS Assbly

3 Rig up and test Halliburton test manifold and lines to8500 psi

1 Displace 3½ Pipe with 78 bbls water with first 20 bbls treated as per.

8 Set Pkr. at 10778 for FP No 1. (15 min IF.). Clocks set at 1140 hrs Nov 8. Shut in for 90 Min. for ISIP. FSIP= 2305 psi.(surface).

FP No 2. - Oil and gas to surface after 4½ hrs with flowing tbg. press. less than 100 psi.... Now cleaning up well ~~with 120-psi FTP.~~

15. Personnel on rig Contractor. 32 Phillips 3 Other. 23 (58

16. Weather Wind Waves Visibility

17. Vessel heave Roll Pitch.

18. M/v Kent/Skald Torgney standby
S.L. 11 Arr 845 Dept 1310 Nordic
Holstentor 1210 1350 Eko

Beall

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 35

1. Date Nov 8 1973 Present operation Logging well Time 0600
2. Well 2 / 7 - 10 3. P T D. 4. O T D 5. Progress
6. Bit no: Size Jets Type In: Out Hr. Ftg. Cond
Bit no Size Jets Type In. Out Hr Ftg: Cond
Bit no Size Jets Type. In: Out Hr Ftg: Cond.
7. B H. Assembly Well 3 2
8. Bit wt Rpm Torque Pump psi
9. Pump nr. Liner size Stroke Gpm Av.
10. Mw Vis. same Wl. Fc pH. Pv Yp Oil.
Cl. Sand. Solids Ca Alk Circulation cycle
11. Mud cost daily 740 Cumulative. 132888 Rm = at °F
12. Rot hrs Days since spud 33 Vert dev.
13. Bumper Subs. Size No. Hrs Run Kick Control PSI at GPM
14. Report detail (Post 24 hrs)

1	Circulate and comdition mud.
½	Test hanger(liner), casing and BOP to 3000 psi -OK (no leaks observed around flanges)
1	Raise Monkey board to handle Range 2 -3½ D. Pipe.
12½	POOH -tested each JT to7500 using gator hawk.
3	Test Choke and kill lines ,and Flopetrol lines to 5000psi.
1	lay down test equipment and rig up Schlumberger.
5	Run CBL Log- good bonding below 1 st test interval. ditto between intervals 1&2 ditto ditto 2&3 poor bonding between intervals 3&4 good bonding above test interval No 4.

Note: Did not run CBL between 10000 and 8500 but surface readout showed good bonding. Also good bonding to top of liner.

15. Personnel on rig Contractor Phillips Other
16. Weather Wind Waves Visibilty.
17. Vessel heave Roll Pitch
18. M/v Kent Sl/k/// Torgney- standby Maersk shipper Dept 0830 Expl.- Stavanger

Ekalf

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 34

1. Date November 7, 1973 Present operation Circulating with 6" bit at 11012 Time 0600

2. Well 2/7-10 3. P.T.D 11012 4. OTD 11050 5. Progress

6.	Bit no.	Size	Jets	Type	In	Out	Hr	Ftg	Cond
	Bit no.	Size	Jets	Type	In:	Out	Hr.	Ftg:	Cond:
	Bit no	Size	Jets	Type.	In.	Out	Hr:	Ftg:	Cond.

7. B H Assembly 6" bit, junk basket, scrapper, 18-4 3/4" collars. Well 3 2

8. Bit wt Rpm Torque. Pump psi.

9. Pump nr Liner size Stroke Gpm. Av.

10. Mw 14.4 Vis 50 Wl 4.6 Fc 1 pH. 11.5 Pv. 36 Yp. 8 Oil 3

Cl. 19000 Sand 1 Solids 25 Ca 1400 Alk 2-5.5 Circulation cycle 190

11. Mud cost daily 555 Cumulative 132148 Rm = .315 at 68 °F

12. Bit hrs Days since spud Vert dev.

13. Bumper Subs Size. No Hrs Run. Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

2	Finish rigging down 5" landing tools and installing 3½ rams.
2	Replace snub lines on BOP Stack
12½	GIH w/bit, BHA, and 3½ D. Pipe to Liner baffle plate at 7616'
½	Drill out baffle plate.
5½	Pick up 3½ Drill pipe and GIH to 11012'.
2	Circulate and condition mud.

Correction: Change Nov 6) 1973 Report No 25 to 33

DW 1973 PW 820 RF 1179 JF 653 gal 950sxs E Cmt 200 sxs B Cmt

15. Personnel on rig Contractor 31 Phillips 2 Other: 19 (52

16. Weather Wind NW 15-20 K N Waves. 10- 13' Visibility

Vessel heave Roll Pitch

17. M/v Kent /////// Torgney
Maersk Standby

BEALL

Original - File

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 25 33

1. Date Nov 6, 1973 Present operation. Rig Up to Run 3½" Pipe Time 0600
2. Well. 2/4-10 3. P.T.D 11050 4. O.T.D 5. Progress

6. Bit no	Size	Jets.	Type	In.	Out	Hr	Ftg.	Cond
Bit no	Size	Jets	Type	In.	Out	Hr	Ftg	Cond
Bit no	Size	Jets	Type.	In.	Out	Hr.	Ftg.	Cond.

7. B H Assembly Well 3 2

8. Wt wt. Rpm Torque Pump psi

9. Pump nr Liner size Stroke Gpm. Av

10. Mw 14.4 Vis 53 Wl Fc 1 pH 11 Pv. 26 Yp. 10 Oil. 3
Cl 18000 Sand 1 Solids. 26 Co. 200 Alk 5 Circulation cycle

11. Mud cost daily 1774 Cumulative 131593 Rm = .310 at 65 °F
12. Rot hrs Days since spud 31 NO_3=18 ppm Vert dev.
13. Bumper Subs Size. No. Hrs Run. Kick Control PSI at GPM
14. Report detail (Past 24 hrs)

½	Run liner to 11010.
3½	Install BOT Circ. head and wash liner from 11010 to 11050
	Reciprocated liner 20' while circulating.
2	Rig up Dowell. Test lines to 3000 psi. Set liner. Pumped in 20 bbls water. Mixed 100 sxs E Cmt.- 14.8 Lbs followed by 750 sxs E Cmt=-16.5 lbs/gal. Released plug. Pumped in 6 bbls. water follwed by 152 bbls Mud. Bumped plug with3000 psi.
½	Set packer with 19 rounds torque- well torqued. Pulled stinger
½	Reversed out 15 bbls Cmt and 20 bbls water.
2	Laid down 15 Jts D.Pipe and removed rubbers. Cut and slip line
5	Laid down 5" Pipe and removed rubbers. Laid down BOT Running tool.
6	Lay down D.Collars and BHA.
1	Change out kelly.
2	Install 3½ Rams in BOP. Rig up 3½ tons and handling equipment

15. Personnel on rig Contractor 29 Phillips 1 Other 20 (50
16. Weather Wind 45-65' mph Waves. 35' Visibility.
17. Vessel heave Roll Pitch
18. M/v Kent Shore //// Torgney - standby
Maersk Expl. on location Note : Skipper would not Offload bit in 15' seas.

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. ~~32~~

1. Date Nov 5, 1973 Present operation Running "" Liner Time 0600
2. Well. 2/7-10 3. PTD 11058 4. OTD 5. Progress
6. Bit no: Size Jets Type. In: Out Hr Ftg Cond
Bit no Size Jets Type. In. Out Hr Ftg Cond
Bit no Size Jets Type. In Out. Hr Ftg Cond:
7. B H Assembly Well 3 2
8. Bit wt Rpm Torque Pump psi.
9. Pump nr 1 Liner size. 6½ Stroke 42 Gpm 342 Av 350
HT/HP- 10.6
10. Mw 14.4 Vis 53 Wl 6.6 Fc 1 pH 11.5 Pv. 36 Yp. 14 Oil -
Cl. 17000 Sand 1 Solids 26 Ca: 200 Alk 5.4 Circulation cycle 203
11. Mud cost daily 148 Cumulative 129820 Rm = .316 at 81 °F
NO_3=50 ppm
12. Rot hrs 0 (246 Days since spud 30 Vert dev:
13. Bumper Subs Size No. Hrs Run Kick Control PSI at GPM
14. Report detail (Post 24 hrs)

2½	Run SSL Survey and rig down Schlumberger
3	Trip in hole and rabbit 5" drill pipe.
2½	Circulate and condition mud.
3½	POOH to run 7" Casing.
½	Pick up and service 7" Casing Hanger.
6	Rig up and run 92 jts. (3451') 7" 29Lbs N80 Buttress Csg.
½	Rig down 7" Csg running tools.
2½	Trip in hole with 7" Liner to 8000'.
1	Circulate through 7" Casing at 1000 psi.- 342 gpm.
2	Trip into hole with 7" Liner.

15. Personnel on rig Contractor 28 Phillips 1. Other. 20 (49
16. Weather Wind Waves Visibility:
17. Vessel heave Roll Pitch.
18. M/v Kent Skaug Maersk Shipper- Standby Boat
Jacobiturm Arr 0840 Dept 1500 GT

CHAISSON

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 31

Date Nov 4, 1973 Present operation. Running SSL Survey Time 0600

2/7-10 3. PTD 11058 4. OTD. 5. Progress

Bit no: RR10 Size 8½ Jets 3-10 Type M44L In. 11058 Out circulate Hr. Ftg Cond.

Bit no: Size. Jets Type. In: Out Hr. Ftg: Cond:

Bit no: Size Jets: Type In Out. Hr: Ftg: Cond

B.H.A. Assembly. same Well 3 2

B. wt. Rpm: Torque: Pump psi

Pump nr. 1 Liner size: 6½ Stroke. 32 Gpm. 254 Av. 132

HT/HP=9.6cc

Mud 14.4 Vis 52 Wl. 5.8 Fc. 1 pH 11.5 Pv 3.2 Yp 10 Oil 3

Cl. 6000 Sand 1 Solids 26 Ca: 200 Alk. 5.6 Circulation cycle. 203

Mud cost daily: Cumulative 129672 Rm = .316 at 81 °F

Rot hrs 246 Days since spud 29 Vert dev:

Bumper Subs. Size: No: Hrs Run. Kick Control: PSI at GPM

Report detail (Post 24 hrs)

2½ Finish running EDC log. Sticky hole conditions indicated. POOH. Drag spring broken.

3 GIH with drill string. No tight spots indicated.

2 Circulate and condition mud.

3½ POOH

2½ Rig up and run Gamma- Gamma Log.

2 Run Microlateral Log.

3 Run HDT Log

2 Run SSL Log.

Personnel on rig Contractor. 30 Phillips. 2 Other: 20 (54

Weather. Wind Waves. Visibility:

Vessel heave Roll. Pitch.

M/v Kvitsøy/Maersk 2325 Standby
TorgneyDept 2335 to Eggerson ETA 1500
Holstentor Arr1125 &1810 Dept. 1210 & 2200 EKO
Hohentor Arr 1330 Dept 1210 Explorer Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 30

1. Date 3/11/73 .. Present operation. Logging . . Time 0600
2. Well. 2/7-10 .. 3. PTD 11058 . 4. OTD 10945 . 5. Progress 113 .
5. Bit no 11 Size 8½ Jets 3-12 Type J-33 In. 10945 Out 11058 Hr 5½ Ftg 113 Cond T1B2 I
Bit no Size Jets. Type: In. Out Hr. . Ftg. . Cond
Bit no . Size .. Jets .. Type In: . Out . Hr Ftg. Cond.
7. B H Assembly Same as yesterday Well 3 2
8. Bit Wt 45 . Rpm 50 Torque 19% Pump psi 3100
9. Pump nr 1 Liner size 6½ . Stroke 31 . Gpm 247 . Av 128
0 [illegible]80 Mw 14.4 Vis 53 Wl 5.4 Fc 1 pH 11.5 Pv 26 Yp 10 Oil. 3%
2000 Sand 1 Solids 26 Ca 200 Alk 5 Circulation cycle. 203
1 Mud cost daily 2618. Cumulative 129,598. Rm = .36 at 83 °F
nitrate 80 ppm
2 Bit hrs 5½===246 Days since spud 28 . . Vert dev. .
3. Bumper Subs Size. No Hrs Run. Kick Control PSI at GPM
14. Report detail (Post 24 hrs) 5½ hr. Drilling
½ hr Circ
~~1 hr Made 10 stand short trip no drag.~~
½ hr Circulated & conditioned mud & hole for logs,
~~½ hr POOH, SLM no correction.~~
9½ hr. Ran I.E.S, Sonic, now running F D C.

Chaisson

15. Personnel on rig Contractor 31 Phillips. 2 . . Other 21= 54
16. Weather Wind . Waves Visibility
Vessel heave Roll Pitch
16. M/v ~~Kent Shoe~~ Torquny,,, Hohentor 1235 1245 Explorer
Johannisturm 1835 2100 GT
Hohentor 2225 Anchor due to logging.

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 29

1. Date Nov 2, 1973 Present operation Picking up Kelly Time 0600
2. Well 2/7-10 3. PTD 10945 4. OTD 10746 5. Progress 199
3. Bit no 10 Size 8½ Jets 3-10 Type M44L In 10722 Out 10945 Hr 19½ Ftg 223 Cond 6 5 IG
Bit no 11RR2 Size 8½ Jets 2-12 Type J33 In 10945 Out inc Hr Ftg Cond
Bit no Size Jets Type In Out Hr Ftg Cond
7. BHA Assembly same Well 3 2
8. Drill wt 45 Rpm 80 Torque 24% Pump psi 2300
9. Pump nr 1 Liner size 6½ Stroke 31 Gpm 247 Av 128
10. Mud Mw 14.5 Vis 58 Wl 4.6 Fc 1 pH 11.5 Pv 28 Yp 8 Oil 4
Cl 20000 Sand 1 Solids 26 Ca 200 Alk 5.4 Circulation cycle 208
11. Mud cost daily 4951 Cumulative 126980 Rm = :41 at 81 °F
Nitrate 105 ppm
12. Rot hrs 16½ (240½ Days since spud 27 Vert dev
13. Bumper Subs Size No Hrs Run. Kick Control 1200 PSI at 20spm GPM
14. Report detail (Post 24 hrs)

16½ Drilling

1 Circulate for trip

5½ Tripping for new bit

1 Slipedrilling line 50'and finish trip in hole.

LITH:10730 to 10940 Limestone occassional chalky, white, occassional gray micrite, cemented and hard.

10770- Chert, clear, brown up to 10%.

Pen. Rate- 5 to 10 ft/hr to 10800 then inc. to 30 to 60 ft/hr.

10870 to 10835- 6500 methane. 320 ethane, trace propane, cut in CCl_4 -fair , white . Fluorescence- poor, bright, light/yellow

DW 1985 PW 558 RF 1034 JF 400 gal

2000 E Cmt 1000sxs B+E mixed

4100 sxs Barite

Personnel on rig Contractor 32 Phillips 2 Other 18 (52

Weather Wind Waves Visibility.

Vessel heave Roll. Pitch

18. M/v ////// Torgney- standby
Asterturm Arr 1530 Dept 1840 EKO
Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No: 28

1. Date Nov 1, 1973 Present operation Drilling Time 0600
2. Well 2/7-10 3. P.T.D. 10746 4. O.T.D. 10528 5. Progress 218
6. Bit no 9 Size 8½ Jets 3-10 Type M44L In. 10493 Out 10722 Hr 13 Ftg 229 Cond T6B8 lock
Bit no 10 Size 8½ Jets. 3-10 Type M44L In 10722 Out Hr. Ftg Cond
Bit no Size Jets Type. In. Out Hr Ftg: Cond
7. B H Assembly same Well 3 2
8. Bit wt 45 Rpm 75-85 Torque 18 Pump psi 2300
9. Pump nr 1 Liner size 6½ Stroke 31 Gpm 247 Av 128
10. D 8055 Mw 14.4 Vis 57 Wl: 5 Fc 1 pH 11.5 Pv 26 Yp 8 Oil 3
11. Cl. 19000 Sand. 1 Solids 26 Ca 200 Alk 32 Circulation cycle 196
12. Mud cost daily 825 Cumulative 113605 Nitrate 130 ppm at 89 °F
13. Tot hrs 15 (224 Days since spud 26 Vert dev.
14. Bumper Subs Size No Hrs Run Kick Control PSI at GPM
15. Report detail (Past 24 hrs)

10	Drill to 10701.
1	Circulate out sample.
2	Drill to 10722.
1	Circulate for trip.
7	Trip for bit change - absolutely no drag.
3	Drilling.

LITH: 10550-10730 Limestone occassional chalky- White/gray, hard
Pen. rate= 15 to 30 ft/hr decreasing to 8-10 ft/hr.
Gas 200 to 300 Methane with trace of ethane.

16. Personnel on rig Contractor Phillips. Other (43)
17. Weather Wind. Waves Visibility.
18. Vessel heave Roll. Pitch
19. M/V ////// Torgney- standby
Johanisturm Dept 1800 Eko
S.L. 11 Arr 1125 Dept 1230 Eko

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 27

1. Date 31/10/73 Present operation: Drilling Time 0600
2. Well. 2/7-10 3. PTD 10528 4. OTD 10190 5. Progress 338
6. Bit no 8 Size 8½ Jets 3-10 Type M44N In 10106 Out 10493 Hr 15½ Ftg 387 Cond. T3-B6 bt
   Bit no 9 Size " Jets " Type M44L In 10493 Out Hr Ftg Cond inc
   Bit no Size Jets Type In Out Hr. Ftg Cond
7. BH Assembly Same as yesterday Well 3 2
8. Bit wt 30 Rpm 110 Torque 180 Pump psi. 3500
9. Pump nr 1 Liner size 6½ Stroke 41 Gpm 328 Av. 170
10. 6815 Mw 14.3 Vis 49 Wl 4.6 Fc 1 pH 11.5 Pv 30 Yp 6 Oil 4%
    Cl. 21,000 Sand 1.3 Solids 26 Ca 600 Alk 2.2 Circulation cycle 141
11. Mud cost daily 3771: Cumulative 122.187. Rm = .426 at 88 °F
12. Tot hrs 13½ (193) Nitrate 116 ppm Days since spud 25 Vert dev
13. Bumper Subs Size No Hrs Run Kick Control 1200 PSI at 20 SPM
14. Report detail (Past 24 hrs) 8 hr. Drilling
1 hr. Changed out Rotory blower motor.
4½ hr. Drilling.
1 hr. Circulating.
7 hr. Trip for bit change.
½ hr. Reamed 45' to bottom.
1 hr. Drilled to 10,528'.
1 hr. Circulating out samples

Lithology: Chalk & Limestone

Cement E 1400 sx
" mixed E&B 1000 sx.

Drill water 696 bbls, potable water 666 bbls, fuel 1157 bbls, jet fuel 833 gals

15. Personnel on rig Contractor 31 Phillips. 2 Other 10 =43
16. Weather Wind SSE 3 Waves 2-7 Visibility. 13 miles
17. Vessel heave. Roll Pitch
18. M/v Kent ~~Shore~~ Torquny must go in for crew change tomorrow, need relief stand by boat. Johannisturm arr 0400 hrs.

Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 26

1. Date Oct 30, 1973 Present operation. Drilling Time 0600
2. Well 2/[illegible] 10 3. P.T.D 10190 4. O.T.D 9554 10106 5. Progress 636 21
6. Bit no RR6 Size 8½ Jets 1-13 2-10 3-10 Type M44 In 9215 Out Hr 891 Ftg Cond T3B8 IG
Bit no 8 Size 8½ Jets M44n Type In 10106 Out Inc Hr. Ftg Cond:
Bit no Size Jets Type In: Out Hr Ftg Cond
7. BHA Assembly. same Well 3 2
8. Bit wt 30-40 Rpm. 150 Torque 20% Pump psi 4000
9. Pump nr 1 Liner size 6½ Stroke 42 Gpm. 336 Av 175
10. Mud Mw 14.3 Vis 58 Wl: 4.2 Fc 2 pH 11.5 Pv 48 Yp 8 Oil 3
Cl 18000 Sand 1 Solids 24 Ca 520 Alk 1.3 Circulation cycle 104
11. Mud cost daily 10146 Cumulative 117416 Rm = .425 at 95 °F
12. Rot hrs 16 (195½) Days since spud 24 Vert dev
13. Bumper Subs Size No Hrs Run Kick Control PSI at GPM
14. Report detail (Past 24 hrs)

13 Drilling
1 Circulate bottoms up
6½ Slug pipe and trip for new bit.
½ Wash and ream 56 ft to bottom.
3 Drilling

Lithology: ....9600-10200 Shale, gray, brown, medium&hard, occasional calcareous & blue. Clay, gray, soft, occasionally Calcareous 9960' more dark gray: Limestome, brown, hard, Medium, occasional Argilleous 9920' Clay, red, to brown, soft. occasional calcareous 9950' Shale, red, to brown, med, to hard and violet.

Penetration rate : 23 to 43 ft per hr.

DW 1251 .. 738PW RF 1232 JF 897 gal Barite 2670 sxs E cmt 1400 1000 sxs B+E Mixed

15. Personnel on rig Contractor 30 Phillips 2 Other 11 (43

16. Weather Wind Waves Visibility

Vessel heave Roll. Pitch Chaisson

18. M/v ~~Ferrell~~ Torgney- standby
Jacobiturm [illegible]rr 1800 Dept 1950 Explorer
Beall

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 25

1. Date Oct 29, 1973 Present operation Drilling Time 0600
2. Well 2/7-10 3. PTD 9554 4. OTD 8830 5. Progress 724
5. Bit no 7 Size 8½ Jets 2-13 1-13 Type S44 In 8050 Out 9215 Hr 15½ Ftg 1165 Cond T4B6 Few broken Teeth
Bit no 6RR Size 8½ Jets 2-10 Type M44 In 9215 Out Hr Ftg Cond
Bit no Size Jets Type In Out Hr Ftg Cond
7. BHA Assembly same Well 3 2
8. Bit wt 35-40000 Rpm 150 Torque 20% Pump psi 3500
9. Pump nr 1 Liner size 6½ Stroke 46 Gpm 366 Av 190
10. Mud Mw 14.3 Vis 55 Wl 5 Fc. 2 pH 11.5 Pv 36 Yp 18 Oil 3
Cl 22000 Sand ½ Solids 28 Ca 1000 Alk 1.4 Circulation cycle 112
11. Mud cost daily 4716 Cumulative 107000 Rm = .45 at 70 °F
12. Rot hrs 14 (179 Days since spud 23 Vert dev 9210- 1½
13. Bumper Subs Size No Hrs Run: Kick Control PSI at GPM
14. Report detail (Past 24 hrs)

HRS	
6	Drill with No 7 bit.
1	Circulate hole, slug pipe, and drop TOTCO
7	Trip for bit change.
2	Working on mud pumps.- No 1 valve out, No 2- Rod packing out.
1	Drilling with RR Bit No 6

Clarsson

DW1235 PW 790 RF 1326 JF 897 gal 497 sxs B 2000 sxs E

15. Personnel on rig Contractor 30 Phillips 2 Other 11 (43
16. Weather Wind Waves Visibility.
17. Vessel heave. Roll Pitch.
18. M/v Torgney- standby Maersk Shipper Dept 1100 Tananger
Holstentor Arr 1520 Dept 1528 Tananger
Jacobiturm Arr 2215 0545 Dept "A"

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 24

e Oct. 28 1973 Present operation Drilling Time 0600

Well 2/7-10 3. PTD. 8830 4. OTD 8050 5. Progress 780

no 6 Size 8½ Jets 2-13 1-16 Type M44 In 8034 Out 8059 Hr. ½ Ftg 16 Cond. 1,1,IG 1 broken toot

no 7 Size. 8½ Jets ½-13 ½-16 Type S44 In 8050 Out Hr. 9 Ftg 780 Cond inc

no Size Jets. Type In Out Hr Ftg Cond.

H Assembly bit, stab, sub, 1-6 3/8 collar, stab, 2-collars, stab, 3-collars stab, 3-collars, stab, 15-collars, X-over. Well 3 2

t wt 30 Rpm 120 Torque 20% Pump psi 3500

mp nr 1 Liner size. 6½ Stroke 46 Gpm 408 Av 210

Mw 14.3 Vis 55 Wl 6 Fc. 2 pH 11.5 Pv 45 Yp 20 Oil 3

23000 Sand 3/4 Solids 27 Ca 1100 Alk 1.8 Circulation cycle

Mud cost daily Cumulative Rm = .86 at 70 °F

ot hrs 9½ (165 Days since spud 22 Vert dev

Bumper Subs Size No Hrs Run. Kick Control 2300 PSI at 35 SPM

eport HRS (Past 24 hrs)

5 Drill plugs at 7972, float collar at 7973, float shoe at 8017 and Cement to 8030.

½ Drill formation to 8050

1 Pressured formation to 1200 psi. Broke back and held at 1050 psi.

3½ Circulated hole and POOH.

4½ Change BHA. GIH with 8½ bit installing rubbers on top 5600' pipe.

9½ Drilling.

Personnel on rig Contractor 30 Phillips 2 Other. 11 (43

ther Wind Waves Visibility.

Vessel heave Roll. Pitch.

M/V Torgney- Standby
Maersk Explorer Arr 0220

DW 1582 828 PW 1369 RF 897 gal JF 497 B Cmt. 400 sxs barite.

(Chaisson)

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 23

1. Date 27/10/73 . . . Present operation Testing casing . . . . . Time 0600
2. Well 2/7-10 . . . . 3. PTD 8034 . 4. OTD . . . . 5. Progress . . . .
6. Bit no 6 Size 8½ Jets 13,13,12 Type M44 In 8034 Out Hr Ftg. Cond
   Bit no Size Jets . Type In: . Out Hr Ftg . . Cond. .
   Bit no Size Jets . Type In: . Out. Hr. . Ftg Cond.
7. B H Assembly. bit,Jb, 24 DC(765'.75,000 lbs) . . . Well 3 2
8. Bit wt Rpm Torque Pump psi
9. Pump nr . . . Liner size Stroke Gpm . Av . .
10. Mw 13,9 Vis 51 . Wl . 6 Fc 1/32 pH 11.0 Pv 30 . Yp 22 Oil
    Cl 22,000 Sand 1 . Solids 26 Ca 2000 Alk 2.0 Circulation cycle .
11. Mud cost daily . . . . Cumulative. $98,200 Rm = at . °F
12. Bit hrs 0-155½ . . . . Days since spud 21 . . Vert dev: .
13. Bumper Subs Size No Hrs Run Kick Control PSI at GPM
14. Report detail (Past 24 hrs) ½ hr. Observed well, no flow.
    2½ hr. Nipped down ,picked up BOP stack, set 9-5/8" slips w/20,000 lbs made rough cut .
    9 hr. Made final cut,nipped up 9-5/8" spool,packed PP seal,tested to 3500 psi, landed and nipped up BOP stack, changed rams to 5".
    1 hr. Rigged down & prepared to test BOP.
    3½ hr. Made up test plug, replaced seals on plug,tested top &bottom rams to 5000 psi,kelly cock,all choke & kill lines w/ 5000 psi, Hydril to 1500 psi.
    3 hr. Laid down 12-1/4" BHA
    4 hr. Picked up 8½" BHA WIH to 7980'
    ½ hr. Tested casing to 3000 psi.

potable water 900 bbls
drill " 1738 "
fuel 1442 "
jet fuel 988 gals.
class B cement 497 sx
barite 5400 sx

15. Personnel on rig Contractor. 33 Phillips 1 . . Other 14 =48
16. Weather Wind SW 12-17 mph Waves SW 4-8' Visibility . Good
17. Vessel heave Torquny stand by Roll Pitch
18. M/v Ekofisk Mærsk Shipper standing by w/ barite
    Johannisturm arr 1314 hrs deptd for Alpha 1325 hrs. Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 22

1. Date Oct 26, 1973 Present operation Nippling up wellhead Time 0600
2. Well 2/7-10 3. P.T.D 8034 4. O.T.D 5. Progress
6. Bit no. Size Jets Type In: Out. Hr. Ftg. Cond.
Bit no Size Jets Type: In: Out Hr. Ftg. Cond
Bit no Size Jets Type. In: Out Hr: Ftg: Cond:
7. BH Assembly. Well 3 2
8. Bit wt Rpm Torque. Pump psi:
9. Pump nr Liner size: Stroke Gpm Av
10. Mud Mw 13.9 Vis 58 Wl. 6.0 Fc 2 pH 11 Pv 23 Yp 16 Oil: 22000 Sand 1 Solids 26 Ca. 2000 Alk 2 Circulation cycle:
11. Mud cost daily 1780 Cumulative: 98200 Rm = at °F
12. Pot hrs 155½ Days since spud 20 Vert dev.
13. Bumper Subs Size: No Hrs Run. Kick Control PSI at GPM
14. Report daily (Past 24 hrs)

HRS

2½ GIH- No fill

2 Circulate and condition hole.

3 POOH - No drag.

2 Rig up to run 9 5/8" Csg. Change top rams to 9 5/8" Rams.

8½ Run 206 jts 9 5/8" Range 3 Buttress Casing. Shoe at 8025, float at 7982, hanger at 351, scatchers and centralizers as per program.

2 Rig up Dowell- Schlumberger Lines. Circulate and reciprocate pipe.

2½ Release plug, pump 40 bbls water, mix 200 sxs 14.5 lbs B- Cmt. and 2200 sxs 15.6 lbs. B- Cmt., release top plug, pump 10 bbls water, pump 574 bbls mud with rig pump. Bumped plug with 2500 psi.. Held pressure for 5 minutes - OK. Displ. press. incr. 700 to 1800 ps Started cmt. mixing at 0222 - bumped plug at0430. Full returns.

1½ Released pressure and checked for back flow. Had normal temperature expansion. No flow in annulus. Now nippling up wellhead.

15. Personnel on rig Contractor 33 Phillips 1 Other. 13 (47
16. Weather Wind Waves. Visibility.
17. Vessel heave Roll Pitch
18. M/v Kkkkkk Torgney- standby
Jacobiturm Dept 1935 Ekofisk
Maersk Shipper Arr 1840 0430 Onlocation Dept 0150 Explorer
(Choisser)

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 21

1. Date Oct 27, 1973 Present operation GIH to Condition Hole for Running Casing Time 0600
2. Well 2/7-10 3. PTD 8034 4. OTD 7620 5. Progress 414
6. Bit no 5 Size 12 1/4 Jets 1-18 2-16 Type OSC3J In 7620 Out 8034 Hr. 7 Ftg 414 Cond 5-4-IG Broken Teeth chain in bit
Bit no Size Jets Type. In Out Hr Ftg Cond
Bit no Size Jets Type In Out Hr Ftg Cond
7. B H Assembly same Well 3 2
8. Bit wt 30 Rpm 170 Torque 30% Pump psi 3500
9. Pump nr 1&2 Liner size 7 Stroke 84 Gpm 840 Av: 165
10. Mw 13.9 Vis 51 Wl 6.2 Fc 2 pH 11 Pv 22 Yp 16 Oil -
Cl 22000 Sand 1 Solids 26 Ca 2200 Alk 2.0 Circulation cycle 84
11. Mud cost daily 4068 Cumulative 96420 Rm = Ex. Shale trol 2% at °F
12. Tot hrs 7 (155½ Days since spud 19 Vert dev 8030 ½°
13. Bumper Subs Size No Hrs Run Kick Control PSI at GPM
14. Report detail (Past 24 hrs)

HRS

7 Drill to TD.

½ Circulate and condition mud.

2 Made 25 Stand short trip with 75000 lbs Overpull on first 6 stands.

2 Circulate and condition hole for logging.

½ Slug pipe and drop TOTCO.

3 POOH. Steel line measurement at TD=8034' RKB.

8 Rig up Schlumberger and ran IES, Sonic, Gamma Ray' and Caliper Logs.

½ GIH to condition hole for running 9 5/8" CSG.

LITH: Shale and Clay.

DW 1029 PW 840 RF 1113 JF 1024 gal 3097 B Cmt. 1740 Barite

15. Personnel on rig Contractor 31 Phillips 1 Other 15 (47
16. Weather Wind Waves Visibility
17. Vessel heave Roll Pitch
18. M/v ~~Vidar~~ Torgney- standby

Hohentor Arr 1225 Dept 1235 Ekofisk
1615 1630 C"
Jacobiturm 1900 2030 Ekofisk

Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 20

Date Oct. 24, 1973 Present operation Circulate hole- preparing to drill Time 0600

2. Well 2/7-10 3. PTD 7620 4. OTD 6933 5. Progress 687

Bit no 4 Size 12 ¼ 1-18 2-16 Type OSC3J In 5951 Out 7620 Hr 26½ Ftg 1669 Cond 7,8,IG

Bit no 5 Size Ditto Type: In 7620 Out Hr Ftg: Cond:

Bit no Size Jets Type. In Out Hr Ftg Cond

7. B H Assembly same Well 3 2

Bit wt. 30-40 Rpm 190 Torque 25-30 Pump psi 3700

Pump nr 1&2 Liner size 7 Stroke 84 Gpm 840 Av .165

Mw 13.8 Vis 49 Wl. 4.9 Fc 1 pH 11 Pv. 20 Yp 10 Oil -

Cl 22000 Sand 1 Solids 25 Ca 800 Alk 2.4 Circulation cycle 73

Mud cost daily. 11002 Cumulative 92352 Rm 2.7 Shaitwal at °F

Rot hrs 12 (148½ Days since spud 18 Vert dev 7610- ½°

Bumper Subs Size No Hrs Run Kick Control PSI at GPM

Report detail (Past 24 hrs)

HRS

12 Drilling with No 4 Bit

1 Circulate and comdition mud

½ Slug pipe and drop TOTCO

2½ POOH. Had 70000 lbs drag on first 6 stands. Stabilizers and bottom collar balled up.

2 Recover totco and change bit (1-Hr.). Clean gumbo off stabilizers.

2½ GIH

1 Change swivel packing and circulate and condition hole.

2½ Circulate at reduced rate and dumping Gumbo out of Possum Belly.

LITH: Clay- Gray, Brown.

DW 1544 PW 882 RF 1162 Jf 1113 CMT-B- 3097 sxs Barite 2628 sxs

Personnel on rig Contractor 33 Phillips 1 Other 14 (48

Weather Wind Waves Visibility

Vessel heave Roll. Pitch

M/v ////Torgney- standby
Asterturm Arr 0830 Dept1818 A- platform
Hohentor Arr2300 Dept0040 Ekofisk
Chaisson)

20 12-71 Gardum

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 19

1. Date Oct 23,1973 . Present operation. Drilling . Time 0600

2. Well: 2/7-10 . 3. PTD 6933 1-16 4. OTD 5908 5. Progress 1025

6. Bit no. 3 Size 12 1/4 Jets 2-18 Type OSC3J In 4021 Out 5951 Hr 31½ Ftg 1930 Cond T5B7IG

Bit no 4 Size 12 1/4 Jets ditto Type ditto In. 5951 Out inc Hr 14½ Ftg. Cond.

Bit no Size Jets Type In: Out Hr Ftg Cond.

7. B H. Assembly. same Well 3 2

8. Bit wt. 35-40 Rpm 200 Torque 45 Pump psi. 3300

9. Pump nr 1&2 Liner size 7 Stroke 80 Gpm 800 Av. 160

10. Mud 4951 Mw 13.8 Vis 51 Wl: 5.4 Fc 1 pH: 11 Pv. 24 Yp. 14 Oil. -

Cl 23000 Sand. ½ Solids 25 Ca. 1400 Alk. 2 Circulation cycle 66

SH. TR. - 2.8

11. Mud cost daily 9330 Cumulative 81350 Rm = at °F

12. Rot hrs 15½ (136½) Days since spud 17 Vert dev 5900- 0°

13. Bumper Subs Size. No. Hrs Run Kick Control PSI at GPM

14. Report detail (Post 24 hrs)

HRS

1 Drill to 5951.

1 Circulate and condition mud.

7½ Drop TOTCO and POOH. Stabilizers balled up. Collars not balled. Very little drag during trip.

14½ Drilling

DW 809 PW 990 RF 1223 JF 1113 gal Cmt-3097 sxs B CMT. Barite 0

15. Personnel on rig Contractor. 36 Phillips 1 Other. 10 (47

16. Weather Wind Waves Visibility

17. Vessel heave Roll: Pitch

18. M/v Kodiak I. T Torgney- standby
Asterturm on location.

Chaisson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 18

1. Date 22October, 73 Present operation: Drilling Time 0600
2. Well: 2/7-10 3. P.T.D. 5908 4. O.T.D. 4350 5. Progress 1558
6. Bit no: 3 Size: 12-1/4 Jets: 2-18 1-16 Type: OSC3AJ In: 4021 Out: Hr: Ftg: Cond: inc
Bit no: Size: Jets: Type: In: Out: Hr: Ftg: Cond:
Bit no: Size: Jets: Type: In: Out: Hr: Ftg: Cond:
7. B.H. Assembly: Same as yesterday Well 3 2.
8. Bit wt: 35-40 Rpm: 190 Torque: 250 Pump psi: 3200
9. Pump nr. 1&2 Liner size: 7" Stroke: 100 Gpm: 1000 Av: 205
10. MW: 4229 Mw: 13.7 Vis: 51 Wl: 5.4 Fc: 1. pH: 11 Pv: 22 Yp: 10 Oil:
23000 Sand: tr. Solids: 24 Ca: 2400 Alk: 1.8 Circulation cycle: 48 min.
11. Mud cost daily: $21102. Cumulative: $72,282. Rm = at °F
12. Rot hrs: 24 121 Days since spud: 16 Vert dev:
13. Bumper Subs: Size: No: Hrs Run: Kick Control: 1200 PSI at 53 GPM
14. Report detail. (Post 24 hrs.) 24 hr. Drilling

Lithology: Clay-shale- trace of sandstone

Class B 3000 Barite 1494 sx

15. Personnel on rig: Contractor: 30 Phillips: 1 Other: 12 = 49
16. Weather: Wind: W 10-15 Waves: 4-5 Visibility: 12 miles
17. Heave: Roll: Pitch:
18. D/V Kelly Shoe Torquny Beall
19. Remarks

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 17

1. Date Oct 21- 1973 — Present operation Drilling — Time 0600

2. Well 2/7-10 — 3. PTD 4350 — 4. OTD 4021 — 5. Progress 329

6. Bit no 3 — Size: 12 1/4 — Jets 1-16 2-18 — Type OSC3AJ — In: 4021 — Out. — Hr inc 6½ — Ftg. — Cond:

Bit no 3A — Size: — Jets — Type. — In: — Out — Hr. — Ftg — Cond.

Bit no. — Size. — Jets. — Type — In — Out — Hr: — Ftg — Cond.

7. B H. Assembly. Bit, stab, sub, 1 collar, stab, 2- 8" collars, stab., 3-8", stab 9-8" collars, X-over, D.Pipe — Well 3 2

8. Bit wt 30000 — Rpm 190 — Torque 250 — Pump psi 3000

9. Pump nr 1&2 — Liner size 7 — Stroke 122 — Gpm 1220 — Av. 210

10. Mw: 12.1 — Vis 42 — Wl 6.2 — Fc 1 — pH 11 — Pv 18 — Yp 6 — Oil

Cl. 18000 — Sand ½ — Solids 18 — Ca. 1200 — Alk 1.6 — Circulation cycle. 41

11. Mud cost daily 608 — Cumulative 51180 — Rm = — at — °F

12. Rot hrs 6½ (97 — Days since spud 15 — Vert dev

13. Bumper Subs: Size — No. — Hrs Run — Kick Control — PSI at — GPM

14. Report detail (Past 24 hrs)

HRS.	
4½	Working on Koomey Unit and changing out unions on BOP Hoses.
1	Test Hydril to 2500 psi. and BOP to 5000 psi. Choke and Kill manifold to 5000 psi..
2½	Lay down 9½" collars.
4½	Pick up above BHA and GIH.
4½	Drill float collar and cement (Cmt top at 3956. Shoe at 3998.)
½	Drill to 4060.
½	Pump in 5 bbls mud with Hydril closed at .3 bbls/ min. rate. Pressure increased to 1000 psi.. Bled back and held at 900 psi.. Released pressure. Opened Hydril.
6	Drilling.

Lith: Clay- medium grey

15. Personnel on rig Contractor 36 — Phillips 1 — Other 12 (49

16. Weather. Wind — Waves — Visibility

17. Vessel heave — Roll. — Pitch

18. M/v Kristin Torgney
Johanisturm Arr 1330 Now offloading

John Beall

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 16

1. Date 20/10/73 . Present operation. Picking up test plug Time 0600

2. Well. 2/7-10 . 3. P.T.D 4021 4. O.T.D . 5. Progress

	Size	Jets	Type	In	Out	Hr	Ftg	Cond
6. Bit no.								
Bit no.	Size.	Jets.	Type.	In.	Out	Hr.	Ftg	Cond
Bit no.	Size.	Jets:	Type	In	Out	Hr:	Ftg.	Cond:

7. B H. Assembly . . . . . Well 3 2

8. Bit wt . Rpm . Torque Pump psi.

9. Pump nr . Liner size Stroke. . Gpm . Av:

10. Mw 11.7 Vis 43 Wl: 8.6 Fc. 1 pH: 10.5 Pv. 20 Yp 8 Oil: (

Cl. 23000 Sand. ¼ . Solids 16 Ca 1400 Alk 1.2 Circulation cycle

11. Mud cost daily nil Cumulative $50310. Rm = 3.3 at 89 °F

12. Rot hrs . Days since spud 14 . Vert dev:

13. Jumper Subs Size . No. Hrs Run. Kick Control PSI at . GPM

14. Report detail (Past 24 hrs) ½ hr. Rigged Dowell- Schlumberger cement head & lines. 1 hr. Circ casing. 2½ hr. Pumped 50 bbls sea water, mixed w/sea water 200 sx class B at 13.5 ppg, 2800 sx Class B at 16.6 ppg, pumped 10 bbls sea water behind top plug, displaced w/583 bbls mud, bumped plug w/ 2000 psi released pressure, checked float equipment, O.K. Observed flow line, Had 100% returns through out job, no water or cement to surface. 1 hr. Broke down lines and head. 1 hr removed casing tools. 3 hr. removed 20" Hydril, set slips w/ 150[illegible]0 lbs, made rough cut. 6 hr. Made final cut installed pack-off & tested w/ 1500 psi. 9 hr. Nippling up 13-3/8 BOP

15. Personnel on rig Contractor 35 Phillips 1 Other. 14 = 50

16. Weather Wind N 4-6 mph. Waves. 4-6' Visibility Good

17. Vessel heave. Asterturm arr 1630 deptd 1730 Pitch.
Hohentor 0900 1500

18. M/v Kent Shipper 0145 0345 Torquny

Beall

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 15

1. Date Oct. 19, 1973 Present operation. Landed 13 3/8" csg. on sub-sea hanger. Time 0600

2. Well 2/7-10 3. PTD. 4021. 4. OTD - 5. Progress

6. Bit no. Size Jets: Type In: Out. Hr Ftg Cond

Bit no. Size. Jets Type. In: Out Hr Ftg Cond

Bit no. Size. Jets. Type. In Out. Hr Ftg. Cond

7. B H Assembly Well 3 2

Bit wt Rpm Torque Pump psi.

9. Pump nr Liner size Stroke Gpm Av

10. Mud Mw 11.6 Vis: 45 Wl. 8.2 Fc 1 pH. 11 Pv. 20 Yp. 18 Oil

Cl 23000 Sand. ½ Solids 15 Ca. 1600 Alk 1.4 Circulation cycle

11. Mud cost daily. $ 1661 Cumulative. $ 50310 Rm = at °F

12. Rot hrs Days since spud 13 Vert dev.

13. Bumper Subs Size No Hrs Run Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

½ hr. Circulating w/17½" bit at 4021. 2 hrs, Slug pipe and POOH. 5½ hrs., Rig up schlumberger. Ran IES and sonic logs. Rig down (S) 1½ hr, GIH w/17½" bit. 2 hrs. POOH. 10½ hrs., Rig up and ran 105 JTS. 13 3/8" casing - (68 No. J55 Buttress csg).

DW 1215 PW 900 Fuel 869 JF 1200 3000 sxs "B" 4250 sxs Barite

15. Personnel on rig Contractor 35 Phillips 1 Other. 20 (56)

16. Weather Wind Waves. Visibility

17. Vessel heave. Roll Pitch

18. A/v xxxxxxx Holstentor arr. 1240 Broke mooring lines (now standing by) Asterturm arr 1540 standing by.

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 14

1. Date 18 Oct,73 Present operation Circulating to condition hole Time 0600

2. Well 2/7-10 3. P.T.D 4021 4. O.T.D 3909 5. Progress 112

6. Bit no 2 Size 17½ Jets 2-24 1-20 Type DS In: 1645 Out 4021 Hr 48½ Ftg 2376 Cond: T5B5 I

Bit no Size Jets Type In: Out Hr: Ftg Cond:

Bit no Size Jets Type In: Out Hr Ftg. Cond:

7. B. H Assembly Same as yesterday Well 3 2

8. Bit wt. Rpm Torque Pump psi.

9. Pump nr Liner size Stroke Gpm. Av

10. M.H. Mw: 11 Vis 42 Wl: 7 Fc 1 pH. 11 Pv. 18 Yp: 6 Oil:

Cl 230000 Sand. ½ Solids 14 Ca. 1400 Alk 1.5 Circulation cycle 52 min

11. Mud cost daily. $259 Cumulative. $48,649. Rm = at °F

12. Rot hrs 8½ -90½ Days since spud 12 Vert dev 3/4 at 4021'

13. Bumper Subs Size No Hrs Run Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

8½ hr. Drilling to 4021' (4½ hrs, w/ 1 pump)
½ hr Dropped survey.
3 Hr. trip to casing shoe. (30000 lbs drag)
2½ Hr. Circ & conditioned mud & hole for logging.
2 Hr. POOH
2½ hr. Rigged up Schlumberger, Log failed to go past 1660', rigged down Schlumberger.
2½ hr. WIH, reamed bridge at 1660' WIH to 4021'
2½ hr. Circulating.

15. Personnel on rig Contractor 35 Phillips 2 Other. 18 =55

16. Weather Wind Waves Visibility

17. Heave. Roll Pitch

18. M/v ~~Kvit Skog~~ Torquny, Holstentor arr 1030 dep 1055 for Hugh Gordon.

Beall

4. 471 Gaidum

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 13

1. Date 17 Oct. 73 Present operation Drilling Time 0600

2. Well: 2/7-10 3. P.T.D 3905 4. O.T.D 2950 5. Progress 955

6. Bit no 2 Size 17½ Jets 2-24 1-20 Type: DS In: 1645 Out Inc. Hr Ftg Cond.

Bit no Size Jets Type: In: Out. Hr Ftg Cond.

Bit no Size Jets Type. In: Out. Hr Ftg Cond:

7. B H Assembly. Same Well 3 2.

8. Bit wt 20-25 Rpm. 180 Torque. 450 Pump psi 2100

9. Pump nr 1 & 2 Liner size. 7 Stroke 140 Gpm 1400 Av. 121

10. H H: Mw: 11.6 Vis 39 Wl. 7.6 Fc 1 pH: 11 Pv: 16 Yp 8 Oil.

Cl 22000 Sond. 1 Solids 15 Ca 22000 Alk 1.6 Circulation cycle 49

11. Mud cost daily $ 16,615 Cumulative $ 48,390 Rm = at °F

12. Rot hrs 20 (82) Days since spud 7 Vert dev

13. Bumper Subs Size: No: Hrs Run. Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

3 hrs. Drilling to 3164

2 hrs. Clean mud ditch and flow line

1 hr Drilling

1 hr. Clean mud ditch and flow line

6 hrs. Drilling

1 hr. Clean mud ditch and flow line

10 hrs. Drilling (1½ hrs work on No.1 pumps)

DW 2200 PW 1062 F 955 "B" Cement 3000

Barite 4300 SXS

15. Personnel on rig Contractor 35 Phillips 2 Other. 18 (55)

16. Weather Wind N 14 Waves 8-10 Visibility 10 miles

17. Swell heave Roll Pitch:

18. M/v ~~Koot Shore~~ Torgney
Jacobiturn Arr 1430 - Dept 1705 Holland
Indkumturn " 1835 " 1835 Ekofisk

7-71 Gordum

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 12

1. Date Oct 16, 1973 Present operation Drilling Time 0600

2. Well: 2/7-10 3. PTD 2950 4. OTD 1645 5. Progress 1305

6. Bit no 2 Size 17½ Jets 2-24 1-20 Type DS In 1645 Out inc. Hr 20 Ftg Cond.

Bit no Size Jets Type In Out Hr Ftg Cond

Bit no Size Jets Type In Out Hr Ftg Cond

7. B. H Assembly Bit, sub 1-Collar, stab, 2-collars, stab, 3-collars, X-over Weff 3 2

8. Bit wt 20000 Rpm 170 Torque 450 Pump psi. 2100

9. Pump nr 1&2 Liner size. 7 Stroke 140 Gpm 1400 Av. 121

10. H.H. Mw. 38 Vis 12 Wl: Fc 1 pH Pv 10 Yp: 15 Oil 3

Cl 37000? Sand tr Solids. 10 Ca Alk 1.4 Circulation cycle

11. Mud cost daily. 12427 Cumulative 31775 Rm = at °F

12. Rot hrs 20 (62) Days since spud 10 Vert dev

13. Bumper Subs: Size. No: Hrs Run: Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

1 hr Drill 20" Shoe and displace water with mud.

1 hr Drill cement from 1619 to 1631. Washed from 1631 to 1645. Drilled from 1645 to 1655.

1 hr Tested formation to 50 psi. Could pump in ½ BPM. Continued at same rate to 100 psi. Pressure leveled off at 100 PSI at ½ BPM.

12 hrs Drilling

3 hrs While drilling at 100-125 FPHr. Flow line and possum belly stopped up.

6 hrs Drilling

1534 DW 1080 PW 1012 F 1100 gal JF B- Cmt-3300 sxs Barite?

15. Personnel on rig. Contractor. 34 Phillips: 2 Other. 14 (50

16. Weather Wind NE 8=10 Waves 4-5' Visibility: 12-14 mi

17. Swell heave. Roll Pitch

18. A/v K/nk/[illegible]/ Torgny Standby

4 7-71 Gardum

Buell

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 11

1. Date Oct 15, 1973 Present operation: Drilling 20" Shoe Time 0600

2. Well 2/7-10 3. P T D 1645 4. O T.D 1645 5. Progress

6. Bit no 2 Size 17½ Jets 2-3/4 1-5/8 Type ~~re-s~~ DS In 1645 Out inc Hr. Ftg Cond

Bit no Size Jets Type In Out Hr Ftg Cond

Bit no: Size. Jets. Type: In. Out Hr Ftg Cond.

7. B. H Assembly bit ,sub, stab, 1-9½ collar, stab, 2 collars, stab, 3- collars, X-over (216') Wgt 3 2.

8. Bit wt 5-15 Rpm 70 Torque. 10% Pump psi 1200

9. Pump nr 1&2 Liner size 7 Stroke 104 Gpm 1040 Av: 110

10. M.M. Mw. 10.5 Vis 40 Wl 15 Fc. 2 pH 10 Pv. 20 Yp 15 Oil -

Cl 18000 Sand.0 Solids: 10 Ca 1800 Alk 1 Circulation cycle.

11. Mud cost daily 715 Cumulative. 19348 Rm = at °F

12. Rot hrs: 42 Days since spud 9 Vert dev

13. Bumper Subs Size. No. Hrs Run Kick Control PSI at GPM

14. Report detail (Post 24 hrs)

2	hrs	Circulate while taking on cement
½	hr	Pump 1200 sx B Cmt. down 20"x30" Annulus.
6½	hrs	Make cuts on 20" and 30" Casings and install 20" Cameron Slip-on type wellhead.
6	hrs	Nipple up BOP. Pump in 80 bbls water to fill 20"x30" annulus.
4½	hrs	Rig up on floor and pick up 26" bit and BHA.
1	hr	Test Hydril BOP and 20" Csg to 1200 psi.- OK
1	Hr	GIH to top of Cmt. and circ. with water through choke lines.
1½	hrs	Tag top of Cmt at 1508' RKB and drill Cmt and float collar.
1	hr	Drilling cement and shoe.

DW 2133 PW 1008 DF 1061JF 640 Cmt 3300 sxs Barite 4400 sxs

15. Personnel on rig Contractor 35 Phillips 1 Other. 15 (51

16. Weather Wind NE 10-mph Waves 2-6' Visibility 10 mi

17. Vessel heave Roll. Pitch

18. M/v Kent/Share ////// Torgney Standby
Robin Ario Arr 0600 and again at 0940 to pick up fishing tools for Champion
Maersk Shipper Arr 1405 Dept Tananger 1530 (10 He bent men aboard)
Johanisturm Dept 2305 Leroy Chaisson

4-71 Gordum

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 10

1. Date 14 Oct 73 Present operation. waiting on cement Time 0600

2. Well: 2/7 10 3. P.T.D. 1645 4. O.T.D. 5. Progress

6. Bit no. Size Jets Type In: Out. Hr. Ftg. Cond.

Bit no. Size. Jets Type: In. Out Hr. Ftg Cond.

Bit no Size Jets. Type In: Out Hr. Ftg. Cond.

7. B H Assembly Well 3 2

8. Bit wt Rpm Torque. Pump psi:

9. Pump nr. 1 & 2 Liner size. 7 Stroke 70 Gpm 700 Av.

10. H.H. Mw 10.5 Vis 40 Wl 15 Fc. 2 pH 10 Pv 20 Yp. 15 Oil. 1

Cl 20,000 Sand 0 Solids. 10 Ca 1800 Alk 1 Circulation cycle

11. Mud cost daily. 4769 Cumulative 18,633 Rm = at °F

12. Rot hrs. 42 Days since spud 8 Vert dev.

13. Bumper Subs Size No Hrs Run. Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

2 bailing water to 185' below rotary table.
1 rig up to run 30" casing.
16 welding and running 30" drive pipe. Washed from 370' to 505' and set on old drive pipe.
5 circulated and rig up lines and weld on pad eyes while waiting on boat with cement.

Boats:
~~Austruturm arrived 0700 departed 0705 for Explorer.~~
Maersk Shipper arrived 0425 departed 0750 for platform B.
~~Hohentor arrived 1655 departed 1755 for Explorer.~~
Johannisturm arrived 0450 now off-loading cement.

15. Personnel on rig Contractor. 35 Phillips 1 Other 19 total 55

16. Weather Wind SE 8-10 Waves 6 Visibility 10 miles

17. Vessel heave Roll. Pitch

W/v Kent Shore

Beall

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 9

1. Date 13 October,73 . Present operation. bailing water from 20" casing Time 0600

2. Well 2/7-10 . 3. PTD 1645 4. OTD 5. Progress

6. Bit no Size: Jets. Type: In. Out Hr. Ftg: Cond.

Bit no Size. Jets. Type. In. Out Hr. Ftg Cond:

Bit no Size. Jets. Type. In Out Hr Ftg Cond

7. B H Assembly Well 3 2

8. Bit wt Rpm Torque Pump psi

9. Pump nr Liner size. Stroke Gpm Av.

10. Mw Vis Wl. Fc pH. Pv Yp. Oil

Cl Sand. Solids Ca Alk Circulation cycle

11. Mud cost daily Cumulative Rm = at °F

12. Rot hrs 42 Days since spud 7 Vert dev

13. Bumper Subs Size: No Hrs Run Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

1½ hr Finished 20" casing, hit a bridge at 1038'

5½ hr. Rigged up circulating head & washed from 1038' to 1144', finished running casing, total of 40 jts./Nowco float shoe, pup jt., National C-1 hanger, Shoe set at 1619', float collar at 1574', hanger at 351' RKB.

1½ hr. Rigged up cement head& lines, circulated 15 min.

3 Hr. Released bottom plug, pumped 200 bbl sea water, mixed 300 sx class B neat, 15.6 ppg, 950 sx B/8% gel 13.1ppg, 500 sx B neat 15.6ppg, released top plug, displaced with 531 bbl sea water, released pressure, float holding O K

9½ hr.WOC & building dump bailer

1 hr. Slacked off on 20", casing did not move in compression

1 Fabricating bailer, bailing at 90'

Divers report no crater around well head

Cement class B 300 sx B w/8% gel 505 sx

Barite 1400 sx Fuel 1128 bbls, pot water 618 bbls, D water 1912 bbls

15. Personnel on rig Contractor 36 Phillips 1 Other. 17 = 54

16. Weather Wind SE 6-8 knots Waves 2-4' Visibility 15 miles

17. Vessel heave Roll. Pitch:

18. M/v Kent Shore Chaisson

2-71 Gordum

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 8

Date Oct 12-73 Present operation: Running 20" Casing Time 0600

2. Well 2/7- 10 3. PTD 1645 4. OTD 5. Progress

Bit no RR2	Size 26	Jets Reg	Type DS	In.	Out	Hr	Ftg.	Cond
Bit no	Size	Jets	Type.	In.	Out.	Hr:	Ftg.	Cond.
Bit no	Size.	Jets	Type.	In:	Out	Hr	Ftg	Cond

B H Assembly 26" bit, sub, 6-9½ D.Collars 202.56' Well 3 2

Bit wt 2-8000 Rpm 140 Torque 10-50% Pump psi 600

Pump nr. 1§2 Liner size 7 Stroke. 120 Gpm 1200 Av. 50

Mw. 11 Vis. 75 Wl: Fc pH Pv Yp Oil

Cl Sand Solids. Ca. Alk Circulation cycle.

Mud cost daily 160 Cumulative. 12699 Rm = at °F

Rot hrs 42 Days since spud 6 Vert dev

Bumper Subs Size: No: Hrs Run Kick Control PSI at GPM

Report detail (Past 24 hrs)

1½ hrs Washed to 500'. Reamed to 505 (top of 30" Csg) Had excessive torque. Had difficulty getting in: top of 30" Casing. Had to roll bit into casing. Washed to 512'- No fill.

17 hrs Attempted to GIH. Hit bridge at 618. Washed and reamed from 618 to 1645' then spotted 50 bbls 11 lbs mud. Made short trip to 925. Displaced hole with 750 bbls 11 lbs viscous mud

1 hr POOH. No drag.

4½ hrs Rig up and now running 20" Surface Casing

1200 sxs B Cmt, 1600 sxs B+ 8% gel 2340 sxs Barite

DW 1691 PW 720 Fuel 1164 Jet F. 670 gal

15. Personnel on rig Contractor 37 Phillips 1 Other 22 (60

Weather Wind Waves Visibility

Vessel heave Roll Pitch.

M/v ~~Kdn//Shtr~~ Torgney- standby
Asterturm Arr 2240 Now on location
Holstentor Arr 1345 Dept to Plat. C 1850
Johanesturm Arr 1930 Dept to Tananger 2300

Leroy Chaisson

[illegible] PETROLEUM COMPANY - Norway

Daily drilling report No. 7

1. Date Oct 11 -73 Present operation Reaming at 512' RKB Time 0600

2. Well 2/7-10 RR1 3. PTD 1645 4. OTD 5 Progress

6. Bit no Run 2 Size 26 Jets DS Type 1645 In. Inc Out. Hr: Ftg Cond

Bit no Size Jets Type In. Out Hr. Ftg. Cond.

Bit no Size Jets Type In: Out Hr Ftg Cond.

7. BHA Assembly. Bit, sub, 6-9½" drill collars, X-over. Well 3 2

Reaming

8. Bit wt 0-4000 Rpm 40 Torque 10% Pump psi 400

9. Pump nr 1&2 Liner size: 7 Stroke. 90 Gpm 900 Av: 37

10. Mw. 11 Vis: 75 Wl: Fc: pH: Pv: Yp: Gl:

Sand Solids: Ca: Alk: Circulation cycle.

11. Mud cost daily 490 Cumulative 12539 Rm = at °F

12. Rot hrs Days since spud 5 Vert dev

13. Jumper Subs Size No: Hrs Run. Kick Control: PSI at GPM

14. Report detail (Past 24 hrs)

7 hrs Install pipe guides and secure same.

3 hrs Lowered Divers in basket to 160' below sea level (seas too high for bell). Divers could not see the top of 30" Drive Casing.

2 hrs Fabricate and lower 1"x240"x 40"plate with 10" ID hole using wireline tugger to top of 26" stabilizer at 17' above seabed.

½ hr Attempted to circulate and lower drill string into hole. Bit and 19' drill collars plugged with fine sand.

3½ hrs POOH. Un-plugged bit and bottom collar. Bottom joint of D. Pipe badly bent (5' above top collar). Layed down same and 26" Stab. GIH with 26" bit to365'.

3 hrs Washed to 458'.

1 hr Ran 40" plate on wire line to seabed at 358' RKB.

2 hrs Washed with bit from 458 to 500' where bit hit either junk or (possibly boulders) above top of 30"Drive Pipe.

2 hrs Worked with obstruction and cleaned out to 505 ft. Set on top of 30" at 505'. Rotated bit off and into 30". Washed to 512'. Pipe fell free inside 30" Pipe. Picked up and lowered and rotated bit into 30" several times. Preparing to CBH for clean-out.

PW 774 Fuel 1207 JF 670 gal. 1200 sxs B Cmt. 1600 sxs B+ 8% gel

15. Personnel on rig Contractor. 36 Phillips 1 Other: 21 (58

16. Weather Wind 16-28 kn Waves 12-15 Visibility. 6-8 mi.

17. Vessel heave

18. M/V Rebekah Rongrey Arc. from Drill 0040 Oct 11,1973
P. Trak Supply Dept 2230 to Zapata Expl.
S.S. 11 Dept to Zapata Exp. 0045.
Holstentor at Platform A ETA Nordic 0900
Nautic released from Nordic at 1157 Oct 10-1973 ETA Eggesca 0500

19. Time to shore

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 6

Date Oct 10 Present operation Repairing Time 0600

Well. 2/7-10 3. PTD 1645 4. OTD 1585 5. Progress 0600

Bit no	Size	Jets	Type	In:	Out	Hr.	Ftg.	Cond:
1RR	26	Reg	DS	458	1645	36	1187	inc
Bit no	Size	Jets	Type	In.	Out	Hr.	Ftg	Cond
Bit no	Size	Jets	Type:	In:	Out.	Hr.	Ftg:	Cond.

7. B H Assembly 26" bit, sub, 1-9½ collar, 26" Stab.', 5-9½ Collars, X-over (206') Well 3 2

Bit wt 12000 Rpm 175 Torque 20% Pump psi 1000

9. Pump nr. 1&2 Liner size. 7 Stroke 129 Gpm. 1260 Av: 52

H.H. Mw: 11 Vis 75 Wl: Fc: pH. Pv: Yp: Oil

Cl. Sand Solids. Ca: Alk Circulation cycle:

Mud cost daily. 5634 Cumulative 12049 Rm = at °F

Rot hrs 42 Days since spud 4 Vert dev 1635- 0°

Bumper Subs Size No Hrs Run. Kick Control: PSI at GPM

Report detail: (Past 24 hrs)

HRS.

1½ Drilled to 1645

1 Circulated with seawater and displaced with 600 bbls 11 lbs. mud.

½ Ran survey.

1½ POOH. Had 30000 lbs drag with bit at 836. GIH. Pumped in 800 bbls 11 lbs. mud. Slipped an cut 150' drill line.

19½ At 1030 AM Drive pipe fell breaking turnbuckle on tension line and split eyes on two slings, four pipe guides and cellar deck. Bit Was at 335! After pipe fell, ran bit into hole to 421 pipe bowed to aft of rig. Pick up bit to 377- pipe stayed straight.

(Winds 50 mph and seas 25' when pipe dropped)

Removed pipe guide from keyway slot and repairing same. Also making new suspension guide and sling lines and hanging same.

Present operations- Repairing cellar deck and pipe guides.

DW 1139 PW 846 Fuel 1220 JF 670 gal B- Cmt-1200 sxs
B+ 8% gel- 1600 sxs. Barite- 1880 sxs

Personnel on rig Contractor. 36 Phillips 2 Other. 23 (61

Weather Wind 20-30 mph Waves 12-14' Visibility

Vessel heave Roll: Pitch.

M/v Kent Shore

Classified

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 5

1. Date CCT ~~Sept~~ 9-73 Present operation. Drilling at1585 . . Time 0600
2. Well 2/7-10 3. PTD 1585 4. OTD 775 5. Progress 810

Bit no.1RR	Size. 26	Jets Reg	Type. DS	In. 458	Out.Inc	Hr.	Ftg:	.	Cond.
Bit no	Size	Jets	Type	In	Out	Hr.	Ftg·		Cond.
Bit no	Size	Jets	Type.	In.	Out	Hr:	Ftg:		Cond.

7. B H Assembly Bit, sub, 1-9½"D.C., Stab. , 5-9½ D.C., X-Over.(206') . Well 3 2.

Bit wt. 5-20 . Rpm 180 . . Torque 20% . . Pump psi: . 1000 .

9. Pump nr 1&2 . . Liner size· 7 . Stroke 126 Gpm 1260 . Av: 52

1 . Mw· 11 . Vis 80 Wl: . Fc· pH· Pv· Yp· Oil:

Cl . Sand· . . Solids: Ca· . Alk Circulation cycl .

1 Mud cost daily . 959 . . Cumulative. 6414 Rm = at . °F

1 Rot hrs. 40½ . . . . Days since spud 3 . . Vert dev· 1°-1156

1 Bumper Subs Size . No. Hrs Run. Kick Control· . PSI at . GPM

1 Report detail (Past 24 hrs)

10 hrs Drill to 1070. Spot 50 bbls Hi- Vis. Mud

½ hr Ran Totco Survey- Bad reading.

3 hrs Drilled to 1156 . Spot 50 bbls Hi Vis Mud.

½ hr Ran TOTCO Suvey. 1° at 1156' RKB.

10 hrs Drill to 1585' Rkb. Now drilling.

DW 1287 PW 900 F 1235 JF 750 gal. 1200 sxs B 1600 sxsB+8% gel

2693 sxs Barite

1 Personnel on rig Contractor. 34. Phillips 1 . . Other. 22 .(57

Weather. Wind WSW 35-45 knots Waves. 12-16' Visibility: 6 mi

Vessel heave· . Roll. Pitch:

M/v Kvitv/Skarv Nautic stand by
Jacobiturm Arr 2235 Dept to Zapata Exp 2240.

PHILLIPS PETROLEUM COMPANY - NORWAY

Daily drilling report No. 11

1. Date OCT. 8, 1973. Present operation. DRILLING. Time 0600

2. Mud 2/7 - .10 3. PTD 775 4. OTD 458 5. Progress 317

6. Bit no 1RR Size. 26 Jets Rec Type. DS In. 458 Out: INC. Hr 11½ Ftg 317. Cond INC

Bit no Size. Jets Type In Out Hr. Ftg. Cond

Bit no Size. Jets. Type. In Out Hr. Ftg. Cond.

7. BHA Assembly (206.66 FT) BIT SUB, 1-9½" DC, 26" STAB., 5-9½" DC, X-OVER Wgt 32

8. Bit wt 5-12,000. Rpm 150 - 160 Torque Pump psi 6500

9. Pump nr 1 & 2. Liner size. 7". Stroke 110 Gpm. 1040 Av 28

10. PH. Mw: Vis. Wl. Fc. pH. Pv: Yp. Oil:

Sand. Solids: Ca. Alk: Circulation cycle

11. Mud cost daily: Cumulative. 5455. Rm = at °F

12. Rot hrs 17½ Days since spud 2 Vert dev.

13. Jumper Subs. Size. No. Hrs Run. Kick Control. PSI at GPM

14. Report detail. (Past 24 hrs) 23 HRS

2½ HRS WELDING AND RUN 30" TO 456'. - PICKED UP HAMMER AND DRIVE TO 465' - MAX. 2.6 BPF

1½ HRS LAYED DOWN HAMMER AND GOT 30"

2 HRS W.I.H. W/ 26" BIT AND REAMED TO 458'

1½ HRS DRILLED TO 775' WITH SEA WATER - REAMED EVERY JOINT AND FLUSHED EVERY OTHER CONNECTION WITH MUD. (HAVING TROUBLE DRILLING ROCKS BUT OK)

Lime WATER 169 BARITE = 2693 SX

POTABLE WATER 846 NOTE: NEED 3500 SX BARITE

DIESEL 1270 AND SHALE TRAP

FUEL 750

600 SX CLASS B CEMENT + 8% GEL TOTAL

15. Personnel on rig Contractor. 34 Phillips: 1 Other: 21 (56)

16. Weather Wind Waves. Visibility.

Heave Roll. Pitch

17. To Kent Shore

MUDLOG INSTALLED 1800

ACCELEROMETER RELEASED AT 1730 DROP TO 1000'

18. Remarks TOXICITY AT 0400 GULL LOCATION CHECKED TO CHECK OUT

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 3

1. Date Oct. 7. 73 Present operation. Welding on jt. no. 8, 30" Time 06:00

2. Well. 2/7 - 10 3. PTD 458 4. OTD 358. 5. Progress 100

Bit no 1 Size 26 Jets reg Type: D S In 358 Out 458 Hr 6 Ftg 100 Cond Good

Bit no Size Jets. Type In. Out Hr Ftg. Cond.

Bit no Size. Jets Type In: Out. Hr Ftg Cond:

7. B H Assembly: 26"bit,bit sub, 6 x9½ D.C.s, X-over Well 3 2

Bit wt 5,000 Rpm 120 Torque 10% Pump psi 400

9. Pump nr 1 and 2 Liner size. 7" Stroke 90 Gpm 900 Av.

10. Mw: 8.8 Vis 75 Wl: Fc. pH: Pv. Yp Oil:

Cl Sand Solids. Ca Alk Circulation cycle

11. Mud cost daily: $1,194.00 Cumulative $1,194.00 Rm = at °F

12. Rot hrs 6 Days since spud 1 Vert dev.

13. Bumper Subs. Size: No: Hrs Run. Kick Control PSI at GPM

14. Report detail (Past 24 hrs)

6 hrs. Freeing up master bushings in rotary table

1 hr. Finnished rigging up floor

4 hrs. Picked up 26" bit, sub, 6 x 9½ D.C.s, cleaned and inspected all threads, picked drill pipe taged sea bed at 358 ft. R.K.B.

6 hrs. Drilling from 358 to 458 ft. 26 " hole

½ hr. Circ. and spot 150 bbls. hi-vis mud

½ hr. Survey

1 hr. P.O.O.H. ,rigged up to run 30" conductor

5 hrs. Running 30" welding on jt. no.8

D.W.1,950 bbls.-P.W.756 bbls.-F.1,307 bbls.-J.F.750 gals.-Cement "B"1200 nt class "B" W/.08%gel 1600 sx. barite 3680 sx.

15. Personnel on rig: Contractor 30 Phillips 1 Other: 21 total -52

Weather: Wind NNE 10 to 15 kts. Waves: 2 to 3 ft. Visibility. 10 mi.

12. Vessel heave: Roll Pitch:

M/v Kent Shore Hohentor Arr. 0315 hrs. Dep. 545 for Zap. Exp.
Asterturn Arr. 0600 hrs. At rig
Torgny still with Gulf

Chasson

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 2

Date Oct. 6, 73 Present operation Pulling master bushings (stuck) Time 06:00

Well. 2/7-10 . 3. PTD . 4. OTD . 5. Progress

Bit no. Size Jets. Type. In: Out. Hr. Ftg: Cond:

Bit no Size Jets Type. In: Out Hr. Ftg Cond

Bit no Size Jets Type. In: Out Hr. Ftg. Cond.

7. B H Assembly . . . . . Well 3 2

Bit wt. Rpm Torque Pump psi

9. Pump nr. . . Liner size: Stroke Gpm: . . Av: . . . .

10. Mw . . . Vis. . Wl: . Fc. . pH Pv: . Yp Oil:

Cl. . . Sand: ... Solids. . Ca: . . Alk . . Circulation cycle.

11. Mud cost daily. . . . . Cumulative. Rm = . . . at . . . °F

12. Rot hrs . . . Days since spud. . . Vert dev: . . .

13. Bumper Subs Size . . No. Hrs Run: . Kick Control PSI at . . . GPM

14. Report detail (Past 24 hrs)

4½ hrs. Under tow to new location
2 hrs. Changed tugs to make approach to location
2 hrs. Pulling onto location , jacking up to 15 ft. air gap, rig is 55 mtrs. SW of intended location
7½ hrs. Preload with 7,161,900 lbs. and dumped same
½ hr. Jacked to 70 ft. air gap
7 hrs. Skidded derrick to drill position connected service lines
1 hr. Trying to free master bushing in rotary table

Water depth 237 ft. Heading 270 deg. Air gap 70 ft. leg Pen. 18ft.

Tugs releaced at 23:00 hrs. Oct. 5,73.

D.W. 1,029 bbls.-P.W. 666 bbls.-F. 1344 bbls. J.F. 854 gals.
Cement 229 sx. class "B" neat - Barite 3680 sx.

15. Personnel on rig: Contractor 32 . . Phillips 1 . Other: 22 total 55

16. Weather Wind E 5 to 8 kts. Waves. 3 to 4 ft. Visibility 8 to 10 mi.

17. Vessel heave . . Roll. . Pitch: .

18. M/v Kent Shore Hohentor Arr. 1450 hrs. along side at 0310 hrs.
Torgny stand by is still at old location for Gulf

CHASSON

PHILLIPS PETROLEUM COMPANY - Norway

Daily drilling report No. 11

2. Date Oct. 5, 73 Present operation Under tow Time 06:00

1. Well 2/7-10 3. P.T.D 4. O.T.D 5. Progress

Bit no. Size. Jets Type: In: Out. Hr. Ftg: Cond

Bit no. Size. Jets Type: In: Out. Hr. Ftg Cond.

Bit no. Size. Jets. Type In: Out Hr Ftg. Cond.

7. B H Assembly Well 3 2.

Bit wt Rpm: Torque Pump psi:

9. Pump nr. Liner size: Stroke Gpm: Av:

Mw. Vis Wl: Fc: pH: Pv. Yp. Oil:

Cl. Sand Solids: Ca. Alk. Circulation cycle:

Mud cost daily: Cumulative: Rm = at °F

Rot hrs Days since spud Vert dev:

Bumper Subs Size. No: Hrs Run. Kick Control. PSI at GPM

Report detail: (Past 24 hrs) Took over rig at 1900 hrs. Oct 4, 1973

2 hrs. Checking jacking equipment replaced two control rectifiers

½ hr. Jacked down to 5' above water

½ hr. Connected tugs

½ hr. Jacked into water, 5' draft, checked all tanks

2½ hrs. Pulled legs, Off location at 2300 hrs.

5 hrs. Under tow, speed 3.8 kts ETA. location 1100 hrs. Oct.5, 73

D.W. 1100 bbls. P.W. 730 bbls. F. 1370 bbls. J.F. 1000 gals.

Cement 229 sx. class "B" neat Barite 3680 sx.

Tugs, Posiden,-Scaldis,-Salvator.

Smit Lloyd 18, standing by old location with divers
Mærsk shipper, enroute to old location with diving bell
Stand by Torque in route old location with decompression chamber

Personnel on rig Contractor 33 Phillips. 1 Other. 18 total 52

Weather. Wind E 15 kts. Waves: E 3 to 5 ft Visibility. 8 mi.

Vessel heave. Roll: Pitch:

M/v Kent Shore

12-71 Gordon